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UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

WIR 2009

WORLD INVESTMENT REPORT

Transnational Corporations, Agricultural Production and Development

UNITED NATIONS

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NOTE

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Transition economies: South-East Europe and the Commonwealth of Independent States.

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Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row;

A dash (–) indicates that the item is equal to zero or its value is negligible;

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A slash (/) between dates representing years, e.g., 1994/95, indicates a financial year;

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Reference to "dollars" ($) means United States dollars, unless otherwise indicated;

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates;

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PREFACE

World foreign direct investment flows fell moderately in 2008 following a five-year period of uninterrupted growth, in large part as a result of the global economic and financial crisis. While developed economies were initially those most affected, the decline has now spread to developing countries, with inward investment in most countries falling in 2009 too. The decline poses challenges for many developing countries, as FDI has become their largest source of external financing. The impact is analysed in detail in the first part of this his year's *World Investment Report*.

The *Report* also examines the role that transnational corporations (TNCs) play, and can play, in agricultural production in developing countries. There is renewed and growing interest in this sector, provoked in part by the recent food crisis and concerns about food security. The *Report* looks at this trend – including the rise of South-South investment – and at specific cases of host countries and industries in which TNCs are active in a meaningful way.

As the *Report* underscores, efforts to boost investment and agricultural productivity through TNC involvement require an integrated policy approach by governments that takes many considerations into account: the economic implications as well as environmental and social concerns, including those related to land degradation, land tenure rights, food security and the right to food, and the protection of indigenous people and other minorities.

Greater involvement by TNCs will not automatically lead to greater productivity in agriculture, rural development or the alleviation of poverty and hunger. However, with the right policies in place, it can be used to bring about such gains, in particular by strengthening the capacities of local farmers. A concerted effort is required by all development partners to support and equip host-country governments, farmers, cooperatives and others to maximize the development benefits of TNC involvement. This timely *Report* provides useful analysis and insights for all stakeholders involved in working towards that vital end.

Ban Ki-moon
Secretary-General of the United Nations

New York, July 2009

This Report is dedicated to the memory of John H. Dunning

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Peter J. Buckley and John H. Dunning served as senior economic advisers to the Report. John H. Dunning sadly passed away in January 2009 and this year's Report is dedicated to his memory. He was involved in the conception and realization of the *World Investment Reports* from the beginning, and during succeeding years played a significant role in their evolution, all the while providing guidance and advice on substantive issues related to research themes and analytical approaches. He acted – where appropriate – as a mentor to many members of the *WIR* team. His wisdom, valued advice and enthusiasm will be missed.

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TABLE OF CONTENTS

Page

Page

Page

PART TWO
TNCs, AGRICULTURAL PRODUCTION AND DEVELOPMENT

Page

Page

Boxes

Page

Box figures

Box tables

Figures

Page

Tables

Page

Annex A

Page

Annex B

ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
BIT	bilateral investment treaty
CIS	Commonwealth of Independent States
CSR	corporate social responsibility
DTT	double taxation treaty
EMU	European Monetary Union
EPA	economic partnership agreement
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
FTA	free trade area/agreement
GDP	gross domestic product
GI	geographic indication
GM(O)	genetically modified (organism)
GVC	global value chain
ICSID	International Centre for Settlement of Investment Disputes
IIA	international investment agreement
ILO	International Labour Organization
IMF	International Monetary Fund
IP(R)	intellectual property (right)
IPA	investment promotion agency
LAC	Latin America and the Caribbean
LDC	least developed country
M&A	merger and acquisition
MDG	Millennium Development Goal
NEPAD	New Partnership for Africa's Development
NGO	non-governmental organization
NIE	newly industrializing economy
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PPP	public-private partnership
R&D	research and development
SOE	State-owned enterprise
SWF	sovereign wealth fund
TNC	transnational corporation
TNI	Transnationality Index (of UNCTAD)
TRIPS	trade-related aspects of intellectual property rights (also WTO TRIPS Agreement)
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
WAIPA	World Association of Investment Promotion Agencies
WIPS	World Investment Prospects Survey (of UNCTAD)
WIR	World Investment Report
WTO	World Trade Organization

KEY MESSAGES

FDI TRENDS, POLICIES AND PROSPECTS

Global FDI flows have been severely affected worldwide by the economic and financial crisis. Inflows are expected to fall from $1.7 trillion to below $1.2 trillion in 2009, with a slow recovery in 2010 (to a level up to $1.4 trillion) and gaining momentum in 2011 (approaching $1.8 trillion).

The crisis has changed the FDI landscape: investments to developing and transition economies surged, increasing their share in global FDI flows to 43% in 2008. This was partly due to a concurrent large decline in FDI flows to developed countries (29%). In Africa, inflows rose to a record level, with the fastest increase in West Africa (a 63% rise over 2007); inflows to South, East and South-East Asia witnessed a 17% expansion to hit a new high; FDI to West Asia continued to rise for the sixth consecutive year; inflows to Latin America and the Caribbean rose by 13%; and the expansion of FDI inflows to South-East Europe and the CIS rose for the eighth year running. However, in 2009 FDI flows to *all* regions will suffer from a decline.

The agriculture and extractive industries have weathered the crisis relatively well, compared with business-cycle-sensitive industries such as metal manufacturing. In addition, there is a better outlook for FDI in industries such as agribusiness, many services and pharmaceuticals.

With regard to the mode of investment, greenfield investments were initially more resilient to the crisis in 2008, but were hit badly in 2009. On the other hand, cross-border M&As have been on a continuous decline, but are likely to lead the future recovery. Divestments were particularly significant during the crisis.

There was a marked downturn in FDI by private equity funds as access to easy financing dried up. Endowed with sizeable assets, sovereign wealth funds attained a record FDI high in 2008, though they too faced challenges caused by falling export earnings in their home countries.

Overall policy trends during the crisis have so far been mostly favourable to FDI, both nationally and internationally. However, in some countries a more restrictive FDI approach has emerged. There is also growing evidence of "covert" protectionism.

TNCs IN AGRICULTURAL PRODUCTION AND DEVELOPMENT

Foreign participation can play a significant role in agricultural production in developing countries, which are in dire need of private and public investment, thereby boosting productivity and supporting economic development and modernization.

FDI flows in agricultural production tripled to $3 billion annually between 1990 and 2007, driven by the food import needs of populous emerging markets, growing demand for biofuel production, and land and water shortages

in some developing home countries. These flows remain small compared to the overall size of world FDI, but in many low-income countries agriculture accounts for a relatively large share of FDI inflows; and the latter are therefore significant in capital formation in the industry. Moreover, FDI in the entire agricultural value chain is much higher, with food and beverages alone representing more than $40 billion of annual flows.

Contract farming activities by TNCs are spread worldwide, covering over 110 developing and transition economies, spanning a wide range of commodities and, in some cases, accounting for a high share of output.

Developed-country TNCs are dominant in the upstream (suppliers) and downstream (processors, retailers, traders) ends of the agribusiness value chain. In agricultural production, FDI from the South (including South-South flows) is equally significant as FDI from the North.

TNC participation in agriculture in the form of FDI and contract farming may result in the transfer of technology, standards and skills, as well as better access to credit and markets. All of these could improve the productivity of the industry – including the farming of staple foods – and the economy as a whole. Moreover, TNCs' contribution to food security is not just about food supply; it also includes enhanced food safety and affordability. These depend on the right policies for host countries to maximize benefits and minimize the costs of TNC participation.

Governments should formulate an integrated strategic policy and regulatory framework for TNC activities in agricultural production. This should include vital policy areas such as infrastructure development, competition, trade and trade facilitation, and R&D. It is equally important to address social and environmental concerns regarding TNC involvement.

Governments could also promote contract farming between TNCs and local farmers in the direction of enhancing farmers' predictable income, productive capacities and benefits from global value chains. To protect the interests of farmers, governments could develop model contracts for them to use or consider when negotiating with TNCs

To ensure food security in host countries as a result of export-oriented FDI in staple food production by "new investors", home and host countries could consider output-sharing arrangements.

In order to address the concern about "land grab", the international community should devise a set of core principles that deal with the need for transparency in large-scale land acquisitions, respect for existing land rights, the right to food, protection of indigenous peoples, and social and environmental sustainability.

Public-private partnerships can be an effective tool for bringing a "new green revolution" to Africa. One initiative in this regard is seed and technology centres that adapt seeds and related farming technologies to local needs and conditions, distribute them to local farmers, and build long-term indigenous capacities.

OVERVIEW

FDI TRENDS, POLICIES AND PROSPECTS

Amid a sharpening financial and economic crisis, global FDI inflows fell from a historic high of $1,979 billion in 2007 to $1,697 billion in 2008, a decline of 14%. The slide continued into 2009, with added momentum: preliminary data for 96 countries suggest that in the first quarter of 2009, inflows fell a further 44% compared with their level in the same period in 2008. A slow recovery is expected in 2010, but should speed up in 2011. The crisis has also changed the investment landscape, with developing and transition economies' share in global FDI flows surging to 43% in 2008.

The decline posted globally in 2008 differed among the three major economic groupings – developed countries, developing countries and the transition economies of South-East Europe and the Commonwealth of Independent States (CIS) – reflecting an initial differential impact of the current crisis. In developed countries, where the financial crisis originated, FDI inflows fell in 2008, whereas in developing countries and the transition economies they continued to increase. This geographical difference appears to have ended by late 2008 or early 2009, as initial data point to a general decline across all economic groups.

The 29% decline in FDI inflows to developed countries in 2008 was mostly due to cross-border M&A sales that fell by 39% in value after a five-year boom ended in 2007. In Europe, cross-border M&A deals plummeted by 56% and in Japan by 43%. Worldwide mega deals – those with a transaction value of more than $1 billion – have been particularly strongly affected by the crisis.

In the first half of 2008 developing countries weathered the global financial crisis better than developed countries, as their financial systems were less closely interlinked with the hard-hit banking systems of the United States and Europe. Their economic growth remained robust, supported by rising commodity prices. Their FDI inflows continued to grow, but at a much slower pace than in previous years, posting a 17% to $621 billion. By region, FDI inflows increased considerably in Africa (27%) and in Latin America and the Caribbean (13%) in 2008, continuing the upward trend of the preceding years for both regions. However, in the second half of the year and into 2009, the global economic downturn caught up with these countries as well, adversely affecting FDI inflows. Inflows to South, East and South-East Asia witnessed a 17% expansion to hit a high of $298 billion in 2008, followed by a significant decline in the first quarter of 2009. A similar pattern prevailed in the transition economies of South-East Europe and the CIS, with inflows rising by 26% to $114 billion in 2008 (a record high), but then plunging by 47% year-on-year in the first quarter of 2009.

Dramatic changes in FDI patterns over the past year have caused changes in the overall rankings of the largest host and home countries for FDI flows. While the United States maintained its position as the largest host and home country in 2008, many developing and transition economies emerged as large recipients and investors: they accounted for 43% and 19% of global FDI inflows and outflows, respectively, in 2008. A number of European countries saw their rankings slide in terms of both FDI inflows and outflows. The United Kingdom lost its position as the largest source and recipient country of FDI among European countries. Japan improved its outward position.

FDI flows increased to structurally weak economies in 2008, including least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing States (SIDS) by 29%, 54% and 32% respectively. However, due to the distinctive characteristics of these three groups of economies, including their dependence on a narrower range of export commodities that were hard hit by falling demand from developed countries, the current crisis has exposed their vulnerabilities in attracting inward FDI. These economies may therefore, wish to consider promoting FDI in industries which are less prone to cyclical fluctuations, such as agriculture-related industries, particularly food and beverages, as part of a diversification strategy.

Structural features of the decline in FDI

In late 2008 and the first few months of 2009, significant declines were recorded in all three components of FDI inflows: equity investments, other capital (mainly intra-company loans) and reinvested earnings. Equity investments fell along with cross-border M&As. Lower profits by foreign affiliates drove down reinvested earnings, contributing to the 46% drop in FDI outflows from developed countries in the first quarter of 2009. In some cases, the restructuring of parent companies and their headquarters led to repayments of outstanding loans by foreign affiliates and a reduction in net intra-company capital flows from TNCs to their foreign affiliates. Critically, the proportionate decline in equity investments today is larger than that registered during the previous downturn.

Since mid-2008, divestments, including repatriated investments, reverse intra-company loans and repayments of debt to parent firms, have exceeded gross FDI flows in a number of countries. For instance, divestments amounted to $110 billion in the case of FDI outflows from Germany, accounting for 40% of its gross FDI flows in 2008. In the first half of 2009, nearly one third of all cross-border M&A deals involved the disposal of foreign firms to other firms (whether based in a host, home or third country). This depressed FDI flows further. While divestments are not uncommon (affecting between one quarter and four fifths of all FDI projects), they became especially noticeable during a crisis. Indeed the motivations for divestment have been heightened during this crisis as TNCs seek to cut operating costs, shed non-core activities, and in some cases take part in industry-wide restructuring. Greenfield investments (new investments and expansion of existing facilities) were resilient overall in 2008, but have also succumbed to the crisis since late 2008.

Available cross-border M&A data by sector indicate that companies in a limited number of industries increased their FDI activities in 2008. Industries exhibiting rising cross-border M&A sales (by value) during the year included food, beverages and tobacco, buoyed by the $52 billion purchase of Anheuser Busch (United States) by Stichting Interbrew (Belgium); precision instruments; mining, quarrying and petroleum; motor vehicles and other transportation equipment; business services; other services; agriculture, hunting, forestry and fisheries; coke, petroleum and nuclear fuel; and public administration and defence. In general, the primary sector witnessed a growth of 17% in the value of M&A sales in 2008; whereas manufacturing and services – which account for the largest proportion of world inward FDI stocks – reported declines of 10% and 54% respectively.

The financial and economic crisis had varying impacts on FDI carried out by special funds, such as sovereign wealth funds (SWFs) or private equity funds. Private equity funds were hit especially hard, as the financial crisis struck at their lifeblood: easy capital, which shrank as lenders became more risk conscious. Cross-border M&As by these funds fell to $291 billion in 2008, or by 38%, from a peak of $470 billion in 2007. The main reason for the sharp decline was that the financing of leveraged buyouts – that contributed most to the dynamic growth of cross-border M&As by these funds in previous years – nearly dried up in the second half of 2008.

SWFs, on the other hand, recorded a rise in FDI in 2008, despite a fall in commodities prices, the export earnings of which often provide them with finance. Compared with 2007, the value of their cross-border M&As – the predominant form of FDI by SWFs – was up 16% in 2008, to $20 billion, a small amount in proportion to the size of FDI and other assets under their management. This increase bucked the downward trend in global FDI as a whole. However, during the course of 2008, the sharp economic downturn in developed countries and the worldwide slump in stock prices led to large losses in SWFs' investments (partly because of a high concentration of investments in financial and business services industries), which depressed the pace of growth of their cross-border M&A deals. Moreover, the large size of SWFs and their perceived non-economic intentions have aroused concerns in a number of countries. To counter this concern, in October 2008 a number of SWFs agreed on a set of Generally Accepted Principles and Practices (GAPP) – the so-called Santiago Principles. Prospects for further increases in cross-border M&As by SWFs have deteriorated dramatically, judging by data on M&As for the first half of 2009.

TNCs in international production

Today, there are some 82,000 TNCs worldwide, with 810,000 foreign affiliates. These companies play a major and growing role in the world economy. For example, exports by foreign affiliates of TNCs are estimated to account for about a third of total world exports of goods and services, and the number of people employed by them worldwide totalled about 77 million in 2008 – more than double the total labour force of Germany. However, their international stature has not insulated them from the worst global recession in a generation. The 4.8% reduction in inward FDI stock worldwide was reflected in the decline in value of gross product, sales and assets, as well as employment of TNCs' foreign affiliates in 2008, a marked contrast to huge double-digit growth rates in 2006 and 2007.

UNCTAD's *World Investment Prospects Survey (WIPS) 2009–2011* shows that TNCs' FDI plans have been affected by the global economic and financial crisis in the short term. In contrast to the previous survey, when only 40% of companies reported being affected by the crisis, in 2009 as many as 85% of TNCs worldwide blamed the global economic downturn for influencing cutbacks in their investment plans; and 79% blamed the financial crisis directly. Both of these aspects, separately and combined, have diminished the propensity and ability of TNCs to engage in FDI.

The economic and financial crisis has had a strong impact both industry-wide and at the individual company level. This is reflected in declining profits, increasing divestments and layoffs, and forced restructuring. According to UNCTAD's preliminary estimates, the rate of internationalization of the largest TNCs slowed down markedly in 2008, while their overall profits fell by 27%.

Even so, the 100 largest TNCs worldwide continue to represent a sizable proportion of total international production by the universe of TNCs. Over the three years from 2006 to 2008 these 100 companies accounted for, on average, 9%, 16% and 11% respectively, of estimated foreign assets, sales and employment of all TNCs. And their combined value-added accounted for roughly 4% of world GDP, a share that has remained relatively stable since 2000.

In terms of the sectoral composition of the top 100 list for 2007, the majority of the largest TNCs continued to be in manufacturing. General Electric, Toyota Motor Corporation, and Ford Motor Company were among the biggest manufacturers. TNCs from the services sector, however, have been steadily increasing their share among the top 100. There were 26 companies on the 2008 list, as opposed to 14 in 1993, with Vodafone Group and Electricité de France among the biggest. Primary sector TNCs — such as Royal Dutch/Shell Group, British Petroleum Company, and ExxonMobil Corporation — ranked high in the list, buoyed by swelling foreign assets. As for TNCs from developing countries, 7 featured in the list, among them large diversified companies such as Hutchison Whampoa and CITIC Group, as well as important electronics manufacturers like LG Corporation and Samsung Electronics.

The operations of the 50 largest financial TNCs were more geographically spread in 2008 than ever before; however it is not clear what the ultimate consequences of the hiatus of late 2008 and early 2009 will be. With massive government interventions in banking and financial services, some developed-country governments have become the largest or sole shareholders in several of the biggest financial TNCs. This dramatic change, together with the downfall of some of the largest financial TNCs, will strongly reshape FDI in financial services in the coming years.

FDI Prospects

Global FDI prospects are set to remain gloomy in 2009, with inflows expected to fall below $1.2 trillion. However, recovery of these flows is expected to begin slowly in 2010 to reach up to $1.4 trillion, and will gather momentum in 2011 when the level could approach an estimated $1.8 trillion – almost the same as in 2008.

In the short run, with the global recession extending into 2009 and slow growth projected for 2010, as well as the drastic fall of corporate profits, FDI is expected to be low. TNCs appear hesitant and bearish about expanding their international operations.

This is confirmed by the results of *WIPS:* a majority (58%) of large TNCs reported their intentions to reduce their FDI expenditures in

2009 from their 2008 levels, with nearly one third of them (more than 30%) even anticipating a large decrease. Considering the 44% fall in actual FDI inflows worldwide in the first quarter of 2009, compared to the same period last year, 2009 could end with much lower flows than in 2008.

The medium-term prospects for FDI are more optimistic. TNCs responding to *WIPS* expect a gradual recovery in their FDI expenditures in 2010, gaining momentum in 2011; half of them even foresee their FDI in 2011 exceeding the 2008 level.

The United States, along with China, India, Brazil and the Russian Federation (the so-called BRIC countries) are likely to lead the future FDI recovery, as indicated by the responses of large TNCs to *WIPS*. Industries that are less sensitive to business cycles and operate in markets with stable demand (such as agribusiness and many services), and those with longer term growth prospects (such as pharmaceuticals) are likely to be the engine for the next FDI boom. Furthermore, in the immediate aftermath of the crisis, when the global economy is on its way to recovery, the exit of public/government funds from ailing industries will possibly trigger a new wave of cross-border M&As.

Recent developments in investment policies at national and international levels

In 2008 and the first half of 2009, despite concerns about a possible rise in investment protectionism, the general trend in FDI policies remained one of greater openness, including lowering barriers to FDI and lowering corporate income taxes. UNCTAD's annual Survey of Changes to National Laws and Regulations related to FDI indicates that during 2008, 110 new FDI-related measures were introduced, of which 85 were more favourable to FDI. Compared to 2007, the percentage of less favourable measures for FDI remained unchanged.

The trend of scrutinizing foreign investments for national security reasons continued. Regulations to this end were adopted in some OECD countries. They expanded the scope of compulsory notification rules or enabled governments to block acquisitions of stakes in domestic companies. There was also a continuing trend towards nationalization of foreign-owned entities in extractive industries, particularly in parts of Latin America.

The most recent survey of investment policy developments in the 42 countries of the G-20 conducted by the UNCTAD secretariat shows that the overwhelming majority of policy measures specific and/or related to investment, taken by these countries in the period November 2008 to June 2009 were non-restrictive towards foreign inward and domestic outward investment. In fact, a substantial number of the policy changes surveyed were in the direction of facilitating investment, including outward investment. There were, however, also a few policy measures that restrict private (including foreign) investment in certain highly sensitive sectors, or introduce new criteria and tests for investments that cause national security concerns.

During 2008, the network of international investment agreements (IIAs) continued to expand: 59 new bilateral investment treaties (BITs) were concluded, bringing the total number to 2,676. Also, the number of double taxation treaties (DTT) increased by 75 to a cumulative total of 2,805, and the number of other international agreements with investment provisions (mostly free trade agreements containing binding obligations on the contracting parties with regard to investment liberalization and protection) reached 273 by the end of 2008. In contrast, until the end of 2008, six BITs were terminated. In parallel with the expansion of the IIA universe, the number of investor-State disputes has also continued to increase, totalling 317 at the end of 2008.

Impact of the crisis on FDI-related policies

So far, the current financial and economic crisis has had no major impact on FDI policies per se, since FDI is not the cause of this crisis. However, some national policy measures of a more general scope (national bailout programmes, economic stimulus packages) introduced in response to the crisis are likely to have an impact on FDI flows and TNC operations in an indirect manner. They may have a positive effect on inward FDI, as they could help stabilize, if not improve, the key economic determinants of FDI. On the other hand, concerns have

been expressed that country policy measures could result in investment protectionism by favouring domestic over foreign investors, or by introducing obstacles to outward investment in order to keep capital at home.

There are also signs that some countries have begun to discriminate against foreign investors and/or their products in a "hidden" way using gaps in international regulations. Examples of "covert" protectionism include favouring products with high "domestic" content in government procurement (particularly huge public infrastructure projects), de facto preventing banks from lending for foreign operations, invoking "national security" exceptions that stretch the definition of national security, or moving protectionist barriers to subnational levels that are outside the scope of the application of international obligations (e.g. in matters of procurement).

Looking to the future, a crucial question is which FDI policies host countries will apply once the global economy begins to recover. The expected exit of public funds from flagship industries is likely to provide a boost to private investment, including FDI. This could possibly trigger a new wave of economic nationalism to protect "national champions" from foreign takeovers. IIAs have a role to play in ensuring predictability, stability and transparency of national investment regimes. Policymakers should also consider strengthening the investment promotion dimension of IIAs through effective and operational provisions. Investment insurance and other home-country measures that encourage outward investment are cases in point where continued international cooperation can be useful.

All of these developments, as well as impacts of the crisis on FDI flows and TNC activities, have had different effects on the pattern of FDI by region.

Regional trends

FDI inflows into **Africa** rose to $88 billion in 2008 – another record level, despite the global financial and economic crisis. The main FDI recipients included many natural-resource producers that have been attracting large shares of the region's inflows in the past few years, but also some additional commodity-rich countries. Developed countries were the leading sources of FDI in Africa, although their share in the region's FDI stock has fallen over time. A number of African countries adopted policy measures to make the business environment in the region more conducive to FDI. However the region's overall investment climate still presents a mixed picture. In 2009, there is likely to be a decline in FDI inflows into Africa following five years of uninterrupted growth.

South, East and South-East Asia continued to register strong growth in FDI inflows in 2008 (17%), to reach a new high of $298 billion. Inflows into the major economies in the region varied significantly: they surged in China, India and the Republic of Korea; continued to grow in Hong Kong (China); dropped slightly in Malaysia and Thailand; and fell sharply in Singapore and Taiwan Province of China. Outward FDI from South, East and South-East Asia rose by 7%, to $186 billion, due mainly to large outflows from China. In contrast, FDI outflows from other major economies in the region generally slowed down in early 2009, as the crisis has largely reduced the ability and motivation of many TNCs from these economies to invest abroad. Some countries introduced changes in national policies and legislation favourable to FDI, for instance by raising or abolishing FDI ceilings or streamlining approved procedures. Available data in early 2009 point to a significant downturn in FDI flows to the region, and cast doubts about FDI growth prospects in the short term. Inflows to China and India are inevitably affected by the crisis, too, but their medium- to long-term prospects remain promising. This is confirmed by WIPS: respondents to the survey ranked China and India as first and third, respectively, among the most attractive locations for FDI.

FDI inflows into **West Asia** increased in 2008 for the sixth consecutive year. They totalled $90 billion, representing a 16% increase. This was largely due to the significant growth of inflows to Saudi Arabia, especially to real estate, petrochemicals and oil refining. In contrast, FDI growth was negative in the second and third largest recipient countries: Turkey and the United Arab Emirates. FDI outflows from West Asia declined by 30% in 2008, to $34 billion, largely due to the significant fall in the value of net cross-border M&A purchases by West Asian TNCs. The trend towards a more liberal FDI-related policy continued in 2008 in a number

of countries. Examples include reductions in the rate of tax levied on foreign companies, privatization of State-owned enterprises, liberalization of the exchange rate regime, improved access to financing by investors and investment facilitation. Since the third quarter of 2008, a sharp fall in oil prices and the steadily worsening outlook for the world economy have dampened the prospects for FDI inflows in 2009.

In **Latin America and the Caribbean**, FDI inflows increased in 2008 by 13% to $144 billion. The growth was uneven among the subregions: it was up by 29% in South America and down by 6% in Central America and the Caribbean. Natural-resource-related activities continued to be the main attraction for FDI in South America, and they are increasingly becoming a significant FDI target in Central America and the Caribbean. In contrast, FDI to the manufacturing sector declined due to a sharp drop in flows to Central America and the Caribbean. FDI outflows from Latin America and the Caribbean increased in 2008 by 22% to $63 billion, due to soaring outflows from South America, which offset the decline in outflows from Central America and the Caribbean. A number of the countries in the region took measures to strengthen national champions. In the region as a whole, FDI inflows and outflows are expected to decline in 2009, as the impacts of the economic and financial crisis spread across the region.

FDI inflows to **South-East Europe and the CIS** increased for the eighth consecutive year, reaching $114 billion – a record level – in spite of financial turmoil and conflicts in certain parts of the region. The inflows continued to be unevenly distributed, with three countries (the Russian Federation, Kazakhstan and Ukraine, in that order) accounting for 84% of the region's total. Outward FDI flows in 2008, dominated by Russian TNCs, maintained their upward trend. In 2008, countries in both subregions continued to liberalize their FDI regulations in certain industries such as electricity generation, banking, retail and telecommunications. Conversely, some natural-resource-rich countries introduced certain policy changes less favourable to foreign investors, such as strengthening their control over natural resources through legislation. The slowdown of economic growth in all the countries of the region, and the fall in commodity prices, coupled with the near-exhaustion of major privatization opportunities, is likely to lead to a strong decline in FDI.

As the economic and financial crisis and the accelerating economic downturn seriously affected all of the world's major economies, FDI flows to and from **developed countries** fell sharply in 2008, after reaching a historic peak in 2007. Inflows amounted to $962 billion, down by 29% from the previous year, and these declines occurred in all major host countries except the United States. The fall in inward FDI was more pronounced in the manufacturing and services sectors, while the consolidation process in mining and quarrying and the increasing participation of large companies from developing countries (notably from China) contributed to the rise of FDI in the primary sector in 2008. The decline of reinvested earnings, due to falling profits and the re-channelling of loans from foreign affiliates to the headquarters of TNCs, depressed FDI outflows from developed countries in 2008 by 17%, to $1.5 trillion. FDI policy environments in developed countries in 2008 were influenced by the continuing public debate about the cross-border investments of SWFs, and by concerns of new investment protectionism in developed countries in reaction to the financial and economic crisis. Some developed countries adopted or amended rules concerning the review of foreign investment on national security grounds, while others adopted measures aimed at further liberalization of their investment regimes. FDI to and from developed countries is expected to fall further in 2009 because of the continuing effects of the financial crisis and weaker economic growth in these economies.

TRANSNATIONAL CORPORATIONS, AGRICULTURAL PRODUCTION AND DEVELOPMENT

Agriculture is central to the provision of food and the eradication of poverty and hunger. Not only does it provide significant mass and rural employment, it is also a major contributor to national economic growth and a considerable foreign exchange earner for many developing countries. Given the fundamental importance of agriculture to most developing economies, its chronic neglect by many of them has been of utmost concern for some time. However, several factors, which are not mutually exclusive, have resulted in a recent upswing in domestic private and foreign participation in agricultural industries in a significant number of developing countries. Most of these factors are of a structural nature, and are expected to drive agricultural investment in the foreseeable future. In this context foreign participation, as well as domestic investment, can play a critical part in agricultural production in developing countries, boosting productivity and supporting economic development.

The main drivers of agricultural investment include the availability of land and water in target locations, combined with fast growing demand and rising imports of food crops in various countries, including both the more populous emerging countries, such as Brazil, China, India and the Republic of Korea, and land- and water-scarce developing regions, such as member States of the Gulf Cooperation Council (GCC). International demand for agricultural commodities has been further spurred by other factors, such as biofuel initiatives around the world, resulting in a spate of investments in developing countries in the cultivation of sugarcane, grains (such as maize) and oilseeds (such as soya beans), as well as non-food crops such as jatropha. These trends are intertwined with a rapid rise in food prices over the past few years and subsequent shortages in commodities such as rice, which has spawned a number of "new investors", and also triggered a number of speculative direct investments in agriculture and land.

Significance of FDI, by country, commodity and region

FDI in agriculture is on the rise, although its total size remains limited (inward FDI stock in 2007 was $32 billion) and is small relative to other industries. At the turn of the 1990s, world FDI flows in agriculture remained less than $1 billion per year, but by 2005–2007, they had tripled to $3 billion annually. Moreover, TNCs established in downstream segments of host-country value chains (e.g. food processing and supermarkets) also invest in agricultural production and contract farming, thereby multiplying the actual size of their participation in the industry. In fact, after a rapid rate of growth in the early 2000s, FDI flows in the food and beverages industry alone (i.e. not including other downstream activities) exceeded $40 billion in 2005–2007.

Although the share of FDI in agriculture remains small as a share of total FDI in developed, developing and transition economies as a whole, in some LDCs, including Cambodia, the Lao People's Democratic Republic, Malawi, Mozambique and the United Republic of Tanzania, the share of FDI in agriculture in total FDI flows or stocks is relatively large. This is also true for some non-LDCs, such as Ecuador, Honduras, Indonesia, Malaysia, Papua New Guinea and Viet Nam. The high share in these countries is due to factors such as the structure of the domestic economy, availability of agricultural land (mostly for long-term lease), and national policies (including promotion of investment in agriculture).

FDI is relatively large in certain cash crops such as sugarcane, cut flowers and vegetables. The bulk of inward FDI in developing regions is aimed at food and cash crops. There is also a growing interest in crops for biofuel production through projects related to oil-seed crops in Africa and sugarcane in South America, for instance. In terms of the main produce targeted by foreign investors in developing and transition economies, some regional specialization is apparent. For example, South American countries have attracted FDI in a wide range of products such as wheat, rice, sugarcane, fruits, flowers, soya beans, meat and poultry; while in Central American countries, TNCs have focused mostly on fruits and sugarcane. In Africa, foreign investors have shown a particular interest in staple crops such as rice, wheat and oil crops; but there is also TNC involvement in sugarcane

and cotton in Southern Africa, and in floriculture in East Africa. In South Asia, foreign investors have targeted the large-scale production of rice and wheat, while their activities in other Asian regions are concentrated more in cash crops, meat and poultry. Finally, TNCs in the transition economies are largely involved in dairy products, although more recently they are also seeking to invest in wheat and grains.

Significance of contract farming in developing countries

Contract farming is a significant component of TNCs' participation in agricultural production, in terms of its geographical distribution, intensity of activity at the country level, coverage by commodities and types of TNCs involved. In this context contract farming can be defined as non-equity contractual arrangements entered into by farmers with TNC affiliates (or agents on behalf of TNCs) whereby the former agree to deliver to the latter a quantity of farm outputs at an agreed price, quality standard, delivery date and other specifications. It is an attractive option for TNCs, because it allows better control over product specifications and supply than spot markets. At the same time it is less capital-intensive, less risky and more flexible than land lease or ownership. From the perspectives of farmers, contract farming can provide predictable incomes, access to markets, and TNC support in areas such as credit and know-how.

TNCs engaged in contract farming activities and other non-equity forms are spread worldwide in over 110 countries across Africa, Asia and Latin America. For example, in 2008 the food processor Nestlé (Switzerland) had contracts with more than 600,000 farms in over 80 developing and transition economies as direct suppliers of various agricultural commodities. Similarly, Olam (Singapore) has a globally spread contract farming network with approximately 200,000 suppliers in 60 countries (most of them developing countries).

Contract farming is not only widespread, but also intensive in many emerging and poorer countries. For instance, in Brazil, 75% of poultry production and 35% of soya bean production are sourced through contract farming, including by TNCs. In Viet Nam the story is similar, with 90% of cotton and fresh milk, 50% of tea and 40% of rice being purchased through farming contracts. In Kenya, about 60% of tea and sugar are produced through this mode.

Moreover, contract faming arrangements cover a broad variety of commodities, from livestock through staple food produce to cash crops. For example, Olam sources globally for 17 agricultural commodities (including cashew nuts, cotton, spices, coffee, cocoa and sugar). Similarly, agricultural crops make up two thirds of Unilever's (United Kingdom/Netherlands) raw materials, and include palm and other edible oils, tea and other infusions, tomatoes, peas and a wide range of other vegetables. These are sourced from 100,000 smallholder farmers and larger farms in developing countries, as well as third-party suppliers.

Contractual farming arrangements enable different types of TNCs in the downstream stages of agribusiness value chains, including food manufacturers, biofuel producers, retailers and many others, to secure agricultural inputs from local farmers in different host countries.

The universe of TNCs participating in agricultural production

The 25 largest agriculture-based TNCs (i.e. companies which are primarily located in the *agricultural production* segment of agribusiness, such as farms and plantations) differ from the top agriculture-related TNCs (i.e. those primarily in *upstream* or *downstream* stages of these value chains): the former have a significant number of developing-country firms among their ranks, while the latter do not. In terms of foreign assets, the number of agriculture-based TNCs is split almost evenly between developed- and developing-country firms, indicating that firms from developing countries are also emerging as important players in global food and non-food agricultural production. However, developed-country firms still dominate among agriculture-related TNCs. Twelve out of the top 25 agriculture-based TNCs are headquartered in developing countries and 13 in developed countries. Indeed, the top position in the list is occupied by a developing-country TNC, Sime Darby Berhad (Malaysia), while United States firms (Dole Food and Del Monte) occupy the second and third positions.

The universe of agriculture-related TNCs includes food processors/manufacturers, retailers, traders and suppliers of inputs. These TNCs are usually larger than agricultural TNCs. For example, the world's largest food and beverages TNC, Nestlé (Switzerland), controls $66 billion in foreign assets, and the largest food retailer, Wal-Mart (United States), controls $63 billion. In contrast, the largest agricultural TNC, Sime Darby (Malaysia), has only $5 billion of foreign assets. The list of the largest TNC input suppliers to agriculture comprises only developed-country firms. In food processing, 39 of the top 50 firms are headquartered in developed countries. Compared to other TNCs in agribusiness, those in food and beverages are very large: the nine largest, all headquartered in developed countries, control about $20 billion of foreign assets each; together, they represent more than two thirds of the foreign assets of the top 50 firms. Retailing and supermarket TNCs also play a major role in international agricultural supply chains. The majority of the 25 largest TNCs in this industry (22) are again from developed countries.

Apart from traditional TNCs involved in agriculture, newcomers, such as State-owned enterprises, sovereign wealth funds and international institutions, are increasingly active in agriculture. The main drivers of (or motives for) the new investors are the intertwined twins of threat and opportunity. For example, Agricapital (a State-owned fund based in Bahrain) is investing in food crops overseas to support its government's food security policies. At the same time, supplying food to the world's burgeoning markets is seen as a lucrative opportunity by other actors, thereby spurring international investment in agriculture by companies and funds such as Vision 3 (United Arab Emirates) and Goldman Sachs (United States).

The rise of South-South FDI

There are indications that South-South investment in agricultural production is on the rise, and that this trend is set to continue in the long term. Investors from developing countries became major sources of cross-border takeovers in 2008. Their net cross-border M&A purchases, amounting to $1,577 million, accounted for over 40% of the world total ($3,563 million). Examples of South-South investment projects include Sime Darby's (Malaysia) $800 million investment in a plantation in Liberia in 2009; Chinese investments and contract farming in commodities such as maize, sugar and rubber in the Mekong region, especially in Cambodia and the Lao People's Democratic Republic; the regional expansion of Zambeef (Zambia) into Ghana and Nigeria; and the expansion by Grupo Bimbo (Mexico) across Latin America and the Caribbean.

In addition to commercial investment in agriculture – a common feature of developed- and developing-country TNCs – in the wake of the food crisis, food security has also become a major driver of new investors. These include companies and funds (some State-owned or backed) from a variety of countries, especially the Republic of Korea and GCC countries. To varying degrees, the governments of these source countries have decided that investment in target host countries, giving them control over crop production and export of the output back to their home economy, is the most effective way of ensuring food security for their populations. For many of these countries, the most crucial factor or driver behind outward FDI in agriculture is not land per se, but rather the availability of water resources to irrigate the land. Most of their investment is in other developing countries.

The scale of South-South FDI driven by food security concerns is not easy to determine because many relevant deals have only recently been signed, although others are being considered or in negotiation. Of the definite larger scale investments involving land acquisitions (i.e. outright ownership and long-term leases) undertaken thus far, the largest investing countries from the South include Bahrain, China, Qatar, Kuwait, the Libyan Arab Jamahiriya, Saudi Arabia, the Republic of Korea and the United Arab Emirates. The most important developing host countries are in Africa, with Ethiopia, Sudan and the United Republic of Tanzania among the foremost FDI recipients.

The impact of TNCs in agricultural production on developing countries

A precisely quantified evaluation of the impact of TNC involvement in agriculture

on important development aspects, such as contribution to capital formation, technology transfer and foreign market access, is impeded by the limited availability of relevant hard data collected by national authorities or available from international sources. The actual impacts and implications vary enormously across countries and by types of agricultural produce. In addition, they are influenced by a range of factors, including the type of TNC involvement, the institutional environment and the level of development of the host country. A number of salient observations of TNCs' involvement in agriculture for developing countries nevertheless emerge.

Overall, TNC involvement in developing countries has promoted the commercialization and modernization of agriculture. TNCs are by no means the only – and seldom the main – agent driving this process, but they have played an important role in a significant number of countries. They have done so not only by investing directly in agricultural production, but also through non-equity forms of involvement in agriculture, mostly contract farming. Indeed, non-equity forms of participation have been on the rise in recent years. In many cases, they have led to significant transfers of skills, know-how and methods of production, facilitated access to credit and various inputs, and given access to markets to a very large number of small farmers previously involved mostly in subsistence farming.

Although TNC involvement in agriculture has contributed to enhanced productivity and increased output in a number of developing countries, there is lack of evidence on the extent to which their involvement has allowed the developing world to increase its production of staple foods and improve food security. Available evidence points to TNCs being mostly involved in cash crops (except for the recent rise of South-South FDI in this area). Such a finding reveals the development challenges for developing countries in promoting TNC participation in their agricultural industry to improve food security. However, food security is not just about food supply. TNCs can also have an impact on food access, stability of supply and food utilization and, in the longer run, their impacts on these aspects of food security are likely to prove more important for host economies.

Positive impacts of TNC involvement in agriculture are not gained automatically by developing countries. While TNCs have at times generated employment and improved earnings in rural communities, no clear trend is discernible. To the extent that TNCs promote modernization of agriculture and a shift from subsistence to commercial farming, their long-term impact is likely to accelerate the long-term reduction in farm employment while raising earnings. Only a limited number of developing countries have also been able to benefit from transfers of technologies. In particular, the R&D and technological innovations of the large TNCs are typically not geared towards the staple foods produced in many developing countries.

Apart from the potentially large benefits that developing countries can derive from TNC participation in their agriculture, past experiences and evidence indicate that governments need to be sensitive to the negative impacts that can arise. A particular concern is that of the asymmetry in the relationship between small farmers and a restricted number of large buyers, which raises serious competition issues.

Recent experiences also underscore that developing-country governments need to be aware of the environmental and social consequences of TNCs involvement in agriculture, even though there is no clear and definite pattern of impact. Case studies show that TNCs have the potential to bring environmentally sound production technologies, but their implication in extensive farming has also raised concerns, together with their impact on biodiversity and water usage. Similarly, TNCs' involvement raises significant social and political issues whenever they own or control large tracts of agricultural land.

Developing countries' strategies towards TNC participation in their agriculture industries

The expansion of agricultural production is vital for developing countries, both to meet rising food needs and to revitalize the sector. Therefore, policymakers need to promote more investment in this sector, both private and public, and domestic and foreign. Given the financial and technological constraints in many developing countries, policymakers should devise strategies for agricultural development and consider what

role TNCs could play in implementing them. The challenge is considerable, as agriculture is a sensitive industry. There is a need to reflect the interests of all stakeholders, especially local farmers, and include them, as far as possible, in the policy deliberation and formulation process.

The key challenge for policymakers in developing countries is to ensure that TNC involvement in agricultural production generates development benefits. Both FDI and contractual arrangements between TNCs and local farmers can bring specific benefits to the host country, such as transfer of technology, employment creation and upgrading the capacities of local farmers, together with higher productivity and competitiveness. Therefore, policies need to be designed with a view to maximizing these benefits.

It is equally important for policymakers to address social and environmental concerns with regard to TNC involvement. Social and environmental impacts need to be assessed carefully, and particular attention paid to possible implications for domestic agricultural development and food security in the long run. Negotiations with foreign investors should be transparent with regard to the land involved and the purpose of production, and local landholders should be encouraged to participate in the process. Policies should be designed to protect traditional land tenure rights of local farmers in order to avoid abuses of what might be considered underutilized or underdeveloped land, and to make possible local farmers' access to courts in case of dispossession. Care needs to be taken to secure the right to food for the domestic population and to protect the rights of indigenous peoples.

Promoting FDI and contractual arrangements between TNCs and farmers in agricultural production

Numerous developing countries have started to actively encourage FDI in agricultural production. A survey jointly undertaken by UNCTAD and the World Association of Investment Promotion Agencies (WAIPA) on the role of investment promotion agencies (IPAs) in attracting FDI in agricultural production revealed that the majority of respondents, in particular those in developing countries, promote FDI in this sector. Moreover, these respondents anticipate a still greater role for FDI in this area in the future. TNCs are mainly expected to make new technologies, finance and inputs available to the sector and to improve access to foreign markets for cash crops.

Overall, developing countries are relatively open to TNC involvement in agricultural production, although there are considerable differences between individual countries based on cultural, socio-economic and security-related considerations. The most frequently found restriction for foreign investment in agricultural production relates to land ownership, but in many cases foreign investors are allowed to lease land.

Aside from promoting FDI in agricultural production, host countries should pay particular attention to promoting contractual arrangements between TNCs and local farmers, such as contract farming, which would enable the latter to enhance their capacities and become part of national or international food value chains. However, in pursuing such strategies host countries should be aware that, in general, TNCs are more interested in contractual arrangements concerning the production of cash crops. This means that promoting contract farming for alleviating the food crisis remains a big challenge.

In this context, governments should address the specific obstacles to efficient cooperation between TNCs and local farmers, such as (1) lack of capacity of smallholders to supply products in a consistent and standardized manner; (2) lack of availability of adequate technology; (3) lack of capital; (4) remoteness of production and capacity for timely delivery; (5) limited role of farmer organizations; and (6) lack of adequate legal instruments for dispute settlement. Various policy options exist for tackling these bottlenecks. Among them are education and training programmes for local farmers, the provision of government-led extension services, the establishment of standards and certification procedures, the granting of financial aid, matchmaking services to connect local farmers to TNCs, support for the establishment of farmer organizations, and improving the domestic court systems to increase legal security. Governments could also consider the development of model

contracts to protect the interests of farmers in negotiating with TNCs.

Leveraging TNC participation for long-term agricultural development: an integrated policy approach

Notwithstanding some reservations about FDI in agricultural production, host countries should not underestimate the potential of this form of TNC involvement for enhancing development objectives. In particular, in light of the recent interest in outward FDI to secure domestic food supply there is potential for host countries to benefit from such investment for their own staple food needs, provided that the amount of production is shared between home and host countries. The challenge for host countries is to match inward FDI with existing domestic resources, such as abundant labour and available land, and to create positive synergies to promote long-term agricultural development and increase food security.

Key instruments for maximizing the contribution of FDI to sustainable agricultural and rural development are the domestic legislative framework and, especially as far as major land acquisitions are involved, investment contracts between the host government and foreign investors. These contracts should be designed in such a way as to ensure that benefits for host countries and smallholders are maximized. Critical issues to be considered include, in particular, (1) entry regulations for TNCs, (2) the creation of employment opportunities, (3) transfer of technology and R&D, (4) welfare of local farmers and communities, (5) production sharing, (6) distribution of revenues, (7) local procurement of inputs, (8) requirements of target markets, (9) development of agriculture-related infrastructure, and (10) environmental protection. To ensure food security in host countries as a result of FDI in staple food production by "new" investors, home and host countries could consider output-sharing arrangements. Before concluding an investment contract with foreign investors, governments should conduct an environmental and social impact assessment of the specific project. After the investment has been made, monitoring and evaluating its impact on the host country's overall development process is critical.

IIAs can be an additional means to promote TNC participation in agricultural production, but careful formulation is crucial with a view to striking a proper balance between the obligations to protect and promote foreign investment, on the one hand, and policy space for the right to regulate, on the other hand. This is particularly important in the case of agriculture, as the sector is highly regulated and sensitive, and government agricultural policies may be controversial and subject to change.

There are several other policy areas relating to a broader economic agenda that are determinants for TNC participation in agricultural production and their development impact in the host country. These therefore should be integrated into host-country strategies aimed at attracting TNCs to agricultural production. Among them are those related to infrastructure development, competition, trade and R&D.

Infrastructure development is critical as a means of trade facilitation for agricultural goods. This includes improving existing transportation systems, investing in trade facilitation, providing sufficient post-harvest storage facilities and renovating outdated water irrigation infrastructure. Given the high costs involved and the limited ODA available, policymakers may wish to require TNCs to contribute to infrastructure development when permitting large-scale projects.

Since farmers are generally the weakest link in the supply chain, competition policy can play a vital role in protecting them against potential abuses arising from the dominant position enjoyed by TNCs.

Tariffs and non-tariff barriers as well as subsidies may substantially influence TNC involvement in agricultural production. These kinds of policy measures in developed countries could discourage investment and contract farming in developing countries where the subsidizing country and the potential developing host country produce identical agricultural products or close substitutes. Reducing subsidies in developed countries could encourage FDI to poor countries.

Economies of scale is another challenge, particularly for small developing countries. In their case, regional integration can be an important instrument in making them more attractive for TNCs involved in agricultural production and exports.

Host countries should also consider the role of R&D activities and intellectual property rights for increasing agricultural production and adapting the development of seeds and agricultural products to local and regional conditions. Policies should aim at domestic capacity-building to develop strong counterparts to TNCs in the host country – private or public. In this regard, public-private partnerships (PPPs) for R&D can serve as models for fostering innovation, for adapting the development of seeds and products to local and regional conditions, for making agricultural R&D more responsive to the needs of smallholders and to the challenges of sustainability, for reducing costs, and for mitigating the commercial and financial risks of the venture through risk-sharing between the partners.

Developing home countries' FDI strategies to secure food supplies

In the wake of recent food price hikes and export restrictions by agricultural exporter countries, some food-importing countries have established policies aimed at the development of overseas food sources for their domestic food security. Despite some concerns that these policies may aggravate food shortage in host countries, they have the potential for increasing global food production and mitigating food shortages in both home and host developing countries. Past attempts by some governments to invest in overseas agriculture have not always met their expectations. Indeed, there are lessons to be learnt. In addition to outward FDI, home countries could consider whether overseas food production in the form of contract farming may be a viable and less controversial alternative to FDI. Besides focusing on agricultural production itself, another option is to invest in trading houses and in logistical infrastructure such as ports.

Developing an internationally agreed set of core principles for large-scale land acquisitions by foreign investors in agricultural production

Agriculture and food security have gained considerable importance on the international policy agenda, both at the multilateral and regional level. A major development was the establishment of the United Nations High-Level Task Force on the Global Food Security Crisis (HLTF) in April 2008. The aim of the HLTF was to create a prioritized plan of action for addressing the global food crisis and coordinate its implementation. The HLTF thus developed the Comprehensive Framework for Action (CFA) – a framework for setting out the joint position of HLTF members on proposed actions to address the current threats and opportunities resulting from food price rises; create policy changes to avoid future food crises, and contribute to country, regional and global food and nutritional security. A number of initiatives to boost agricultural productivity have also been taken at the regional level, including the Comprehensive Africa Agriculture Development Programme (CAADP) under the New Partnership for Africa's Development (NEPAD). The G-8 Summit in L'Aquila, Italy, in July 2009 made a commitment to mobilizing $20 billion over the next three years for a comprehensive strategy for sustainable global food security and for advancing by end 2009 the implementation of a Global Partnership for Agriculture and Food Security. When deciding how to make best use of these new ODA funds, consideration could be given to agricultural development strategies that combine public investments with maximizing benefits from TNC involvement. With regard to possible future international initiatives, consideration should be given to developing a set of core principles concerning major land acquisitions, including rules on transparency, respect for existing land rights, the right to food, protection of indigenous peoples and social and environmental sustainability.

Investing in a new green revolution

TNC participation in agriculture in developing countries through FDI, contract farming and other forms has helped a number of pioneering countries, including Brazil, China, Kenya and Viet Nam, meet the challenge of boosting investment in their agriculture, thereby making the industry a lynchpin for economic development and modernization. The route has not been easy, with costs and benefits arising from TNC involvement. For most developing

countries many development challenges still remain in the quest for agricultural development, food security and modernization. Among these challenges is how to build and reinforce domestic, regional and international value chains, as well as harness technology in agriculture. It is clear that for LDCs and other poor countries, in Africa and elsewhere, a "new green revolution" is urgent, and an essential question to ask is whether TNCs can play a role in its fulfilment.

This year's *World Investment Report* reveals a real and rising interest by TNCs – from the South as well as the North – for investment in developing countries' agricultural industries. Moreover, a large proportion of this interest is in poorer regions, such as Africa. TNCs vary along the value chain, but overall they have the technological and other assets available to support developing countries' strategies towards intensifying take-up of the green revolution. The *Report* also demonstrates examples of this occurring through partnerships and alliances with farmers, public research entities and others. More needs to be done, but the building blocks are in place for striking a new "grand bargain" to harness the green revolution in the service of Africa's poor and hungry, as well as the wider objectives of development. Central to this programme are, first, investing in trade and investment facilitation and, secondly, creating institutional arrangements such as PPPs to advance the green revolution in the region by encouraging and boosting critical flows of capital, information, knowledge and skills from partners to the countryside. An important initiative in this regard would be the establishment of seed and technology centres in the form of PPPs, mandated with the task of fostering channels to adapt relevant seed and farming technologies to make them suitable to local conditions, distributing seeds to farmers, and, in the longer term, building and deepening indigenous capacity.

Geneva, July 2009

Supachai Panitchpakdi
Secretary-General of the UNCTAD

PART ONE

FDI TRENDS, POLICIES AND PROSPECTS

CHAPTER I

GLOBAL TRENDS: FDI FLOWS IN DECLINE

The current global financial and economic crisis has had a dampening effect on foreign direct investment (FDI). As a result, FDI flows are expected to fall to $900–$1,200 billion in 2009, though there should be a slow recovery in 2010 and an acceleration in 2011.

In 2008 and early 2009, global FDI flows declined following a period of uninterrupted growth from 2003 to 2007. Meanwhile, the share of developing and transition economies in global FDI flows surged to 43% in 2008.

Shrinking corporate profits and plummeting stock prices have greatly diminished the value of, and scope for, cross-border mergers and acquisitions (M&As) – the main mode of FDI entry in developed countries, and increasingly in developing countries as well. Falling demand for goods and services has caused companies to cut back on their investment plans in general, including abroad – whether through cross-border M&As or greenfield projects. The latter mode of investment began falling only in 2009.

FDI initially began to decline significantly in developed countries, which experienced a 29% fall in their inflows, while flows to developing countries and to the transition economies of South-East Europe (SEE) and the Commonwealth of Independent States (CIS) continued to increase, by 17% and 26% respectively. However, in late 2008 and early 2009, the latter two groups of countries also started to feel the impact of the crisis on their inflows. A number of these economies are expecting a significant fall in FDI inflows throughout 2009.

This chapter examines global trends in FDI flows in 2008 and the first half of 2009, including why and how the financial crisis and the ensuing economic slowdown have affected FDI flows (section A). Section B then examines how the largest transnational corporations (TNCs) are dealing with the global crisis, while section C presents recent developments with respect to FDI by private equity firms and sovereign wealth funds (SWFs). Section D outlines recent policy developments with respect to FDI and policy responses to the crisis. Finally, section E considers the prospects for global FDI flows in the short and medium terms as the world's economies act to restore financial stability and economic growth.

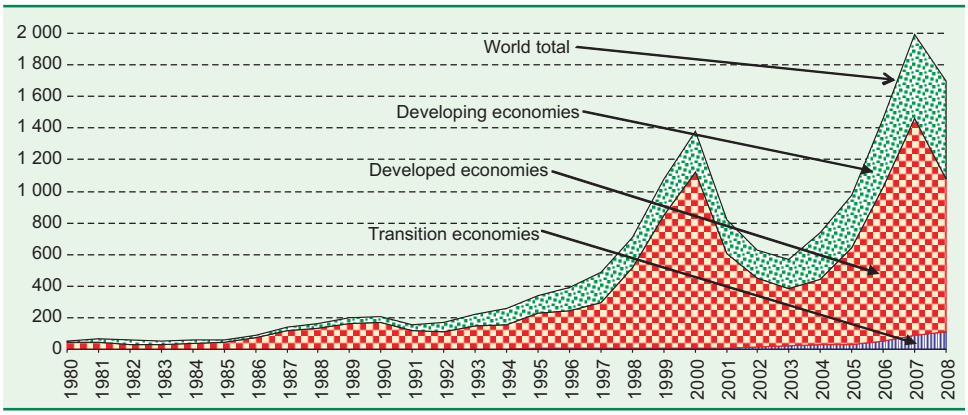
A. The financial crisis, economic downturn and FDI flows

1. Global slowdown in FDI flows, prompted by the crisis[1]

Turmoil in the financial markets and the worldwide economic downturn progressively affected global FDI in 2008 and in the first half of 2009. After uninterrupted growth in FDI activity in the period 2003–2007, global FDI inflows fell by 14% in 2008 to $1,697 billion, from a record high of $1,979 billion in 2007 (figure I.1). While the 2008 level was the second highest in history, FDI flows began gradually declining over the course of that year. In the first half of 2009, FDI flows fell at an accelerated rate.

The pattern of FDI flows has varied by groups of economies. FDI inflows and outflows of developed countries plunged in 2008, with inflows declining by 29%, to $962 billion, and outflows by 17%, to $1,507 billion. FDI flows fell further as the financial crisis entered a tumultuous new phase in

Figure I.1. FDI inflows, global and by groups of economies, 1980–2008
(Billions of dollars)



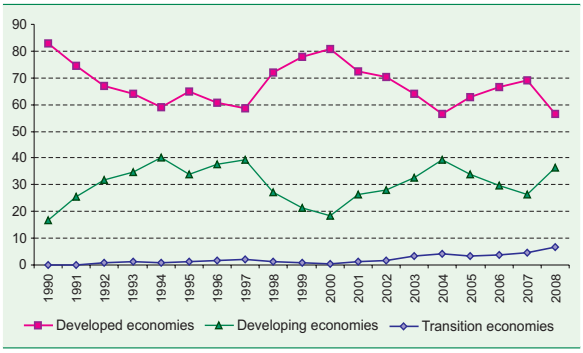
Source: UNCTAD FDI/TNC database (www.unctad.org/fdistatistics) and UNCTAD Secretariat estimates.

September 2008 following the collapse of Lehman Brothers (one of the largest financial institutions in the United States), and as major developed economies fell into, or approached, economic recession. In the first half of 2009, developed countries' FDI inflows are estimated to have dropped by another 30–50% compared with the second half of 2008.[2]

In contrast, developing and transition economies saw FDI inflows rise in 2008 to record levels for both, with their shares in global FDI inflows growing to 37% and 7%, respectively, from 27% and 5% in the previous year (figure I.2). The combined share was 43%, close to the record share attained in 1982 and 2004, which demonstrates the increasing importance of these economies as hosts for FDI during the crisis – at least in 2008.

Their inflows, however, started to decline in late 2008 as the economic downturn in major export markets began to seriously affect their economies, and as the risk premiums of their sovereign and corporate debt sharply increased. Thus the downturn in FDI inflows into developing and transition economies began almost one year after it had started in developed countries. This reflects the time lag associated with the initial economic downturn and consequent slump in demand in developed-country markets, which are important destinations for goods produced by developing-country and transition-economy firms.

Figure I.2. Shares of the three major groups of economies in global FDI inflows, 1990–2008
(Per cent)



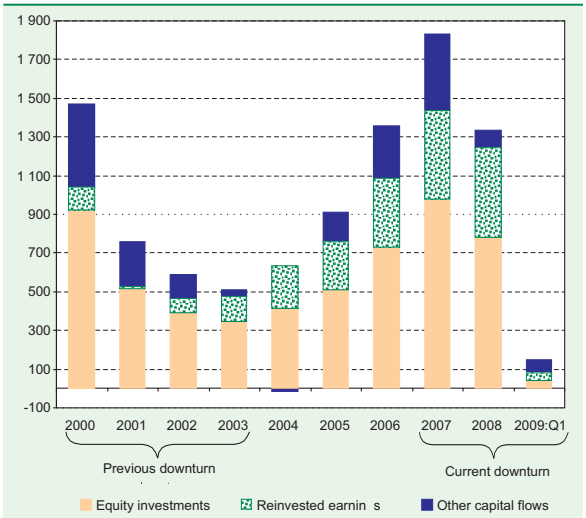
Source: UNCTAD FDI/TNC database (www.unctad.org/fdistatistics) and UNCTAD secretariat estimates.

There were declines in all three components of FDI inflows – equity, reinvested earnings and other capital flows (mainly intra-company loans) – in late 2008 and early 2009, particularly in developed countries. Equity investments fell as cross-border M&As declined. Lower profits of foreign affiliates have been driving down reinvested earnings significantly, particularly in 2009. The restructuring of parent companies and their headquarters led, in some cases, to repayments of outstanding loans by foreign affiliates. As a result, net intra-company capital flows from TNCs to their foreign affiliates declined, or turned negative, which depressed FDI flows.

The structure of the fall in FDI flows in the current downturn is similar to that of the previous downturn in 2001 (figure I.3). However, the proportionate decline in equity investments today vis-à-vis reinvested earnings and other capital flows is larger than that registered during the previous downturn. This development is striking, since the larger the proportion of the decline in FDI flows due to a fall in equity investment (as opposed to reinvested earnings and other capital flows), the longer the recovery is likely to take. This is because equity investments are relatively long term and are undertaken for the purpose of funding and expanding production facilities. They therefore require careful consideration by parent firms. Reinvested earnings and intra-company credit flows, on the other hand, are often determined by the short-term liquidity or tax-driven motivations of TNCs, and can recover rapidly, even in response to temporary government measures (e.g. tax incentives).

Although declining, FDI flows to developing countries have proved to be more resilient in 2008 and 2009 than other capital flows, such as portfolio

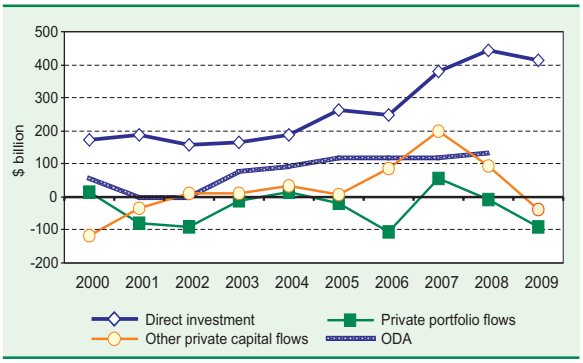
Figure I.3. Global FDI inflows by component, 2000–2009[a]
(Billions of dollars)



Source: UNCTAD FDI/TNC database (www.unctad.org/fdistatistics) and UNCTAD Secretariat estimates.

[a] For 2009, January-March only, based on 46 countries that account for roughly two thirds of global FDI inflows .

Figure I.4. Net capital flows[a] to developing countries, 2000–2009
(Billions of dollars)



Source: IMF, 2008, for net direct investment flows, net private portfolio flows and other private capital flows; and OECD/DAC for official development assistance (ODA).

[a] Data are shown in accordance with the standard balance-of-payments presentation. Thus total net capital flows are equal to the balance on financial account. For example, net FDI flows refer to FDI inflows (or direct investment flows into the reporting economy) less FDI outflows (direct investment flows abroad). Official flows refer to official borrowing.

Note: The IMF's classification of developing countries is used in this figure. It differs from UNCTAD's classification in that it includes new EU member States from Central and Eastern Europe, and excludes high-income countries such as the Republic of Korea and Singapore from developing countries.

investments and bank lending. The main reasons for this is that FDI is more of a long-term nature than other capital flows.

The positive and even relatively high economic growth rates that still prevail in several developing countries (e.g. China, India) are also a countervailing force against low export demand and low commodity prices, which exert a downward pressure on FDI. FDI inflows into developing countries are projected to fall in 2009, but should nevertheless remain relatively high overall, with expected net inflows of about $400 billion (IMF, 2008). In contrast, net flows of both portfolio capital and bank loans to developing countries are expected to turn negative (figure I.4).

Not all companies were similarly affected by the crisis. The fairly long upward trend of the world economy over the past four years or more strengthened the financial and competitive position of many TNCs. The financial crisis and the fall in stock markets also give them the opportunity to tap new markets or to acquire former competitors. In fact, the need for consolidation of the most affected financial institutions, as well as enterprises in other sectors, has encouraged FDI transactions. Examples abound (box I.1).

2. The transmission channels of the crisis

The decline in FDI flows in 2008–2009 reflects, with some time lag (particularly in developing countries), the impact of the financial crisis. The crisis began in the second half of 2007, became more serious in the last quarter of 2008, and led to a slowing down of global economic activity, especially in the major developed economies. Its negative impact on FDI has been twofold: because of reduced access to finance it has affected firms' *capacity* to invest, while their *propensity* to invest has been affected by gloomy economic and market prospects and heightened risk perceptions.

Reduced access to finance. Financial factors have adversely affected TNCs' *capacity* to invest, both internally and externally, as tighter credit conditions and lower corporate profits have curtailed TNCs' financial resources for funding overseas investment projects (as well as domestic ones). At the same time, credit has become less abundant and more expensive. For instance, spreads in corporate bonds soared dramatically in the last few months of 2008, and they still remain at a very high level.[3] Syndicated bank loans, as well as funds for leveraged buyouts (LBOs), also shrank dramatically.[4] This deterioration in the external funding environment makes it more difficult for non-financial companies to invest in foreign operations or to make cross-border M&A deals.

On the other hand, poor earnings of large companies – in a broad range of industries – in Europe, Japan and the United States, as evidenced by declared or projected profits since the fourth quarter of 2008, have reduced these companies' self-financing capabilities.[5] During the course of 2008, the corporate sector came under growing financial pressures. Liquidity for FDI purposes fell as profits

Box I.1. Examples of FDI projects in the form of cross-border M&As and restructuring

- In mining industries, particularly in the oil sector, large companies that earned record profits in 2008 due to high oil prices during the first three quarters of the year, such as ExxonMobil, Total and Shell, are in a position to acquire smaller or more fragile competitors. For instance, Shell bought the Virginia-based natural gas company Enspire Energy in December 2008. In contrast, Rio Tinto, which is in a very difficult financial situation, narrowly escaped a hostile bid by BHP in late 2008, and is still in search of fresh cash to secure its financial position.
- In chemicals, BASF is set to purchase Ciba, but will have to sell some activities to abide by European Union competition rules.
- In the automotive industry, large United States automakers, such as General Motors and Chrysler, have fallen to bankruptcy despite a massive bailout by the United States Government, and they are still fighting for survival. Fiat acquired a stake in the ailing United States car manufacturer Chrysler, while various European and Chinese car makers may buy Volvo from Ford.
- In pharmaceuticals, Sanofi is seeking mid-sized acquisitions to secure new blockbusters and to compensate for the loss of patents and the growing competition from generics. Roche has acquired full ownership of its United States subsidiary Genentech. Pfizer has purchased Wyeth for about $64.5 billion, while Merck has taken control of Schering Plough for 45.9 billion euros.
- In utilities, RWE has acquired the Dutch State-owned utility Essent, for 9.3 billion euros. Enel has increased its share in Endesa from 67% to 92%, but is also going through a period of financial distress, which could pave the way for a further major restructuring. GDF Suez has allied with Iberdrola to bid for the renewal of its nuclear power plant programme through a United Kingdom tender.
- In financial services, Japanese financial companies have recently acquired several crisis-hit United States financial companies (e.g. Nomura Holdings acquired the Asian and European operations of Lehman Brothers and Mitsubishi UFJ Financial Group took a 21% stake in Morgan Stanley). Financial companies established abroad by Icelandic firms were also bought up: Glitnir AB (a branch of Glitnir in Sweden), was acquired by HQ AB (Sweden), and DLG Ltd. and Kaupthing Singer & Friedland Premium Finance Ltd. in the United Kingdom (both of which were owned by Kaupthing Bank), were acquired by DM Plc (United Kingdom) and Close Brothers Group Plc (United Kingdom), respectively, in 2008.

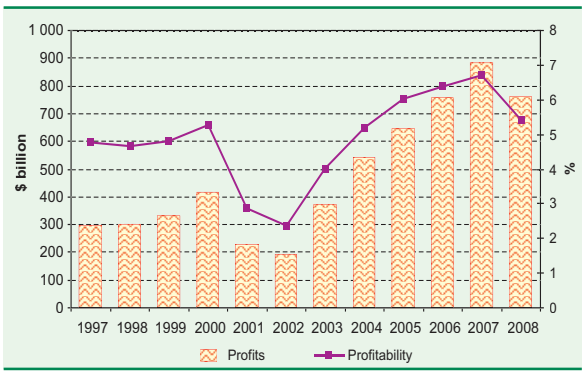
Source: UNCTAD, 2009a.

of TNCs plummeted from the high levels of 2007 (figure I.5). At the same time, a decline of about 50% in stock markets worldwide since January 2007 has reduced TNCs' ability to turn to these markets for financing purposes and for leveraging their M&A activities using stock shares.

The fall in profits has also hit foreign affiliates of TNCs which, as a result, are able to reinvest less from their earnings. While global reinvested earnings of foreign affiliates in 2008 as a whole increased marginally, from $468 billion in 2007 to $487 billion in 2008 (figure I.6), those in the first quarter of 2009 fell by roughly 40% from the same period in 2008, sharply reversing the trend of previous years and contributing further to the downward movement in FDI inflows. As in earlier periods of slow global economic growth, it is expected that the value of reinvested earnings in total FDI inflows will shrink further during the ongoing economic downturn.

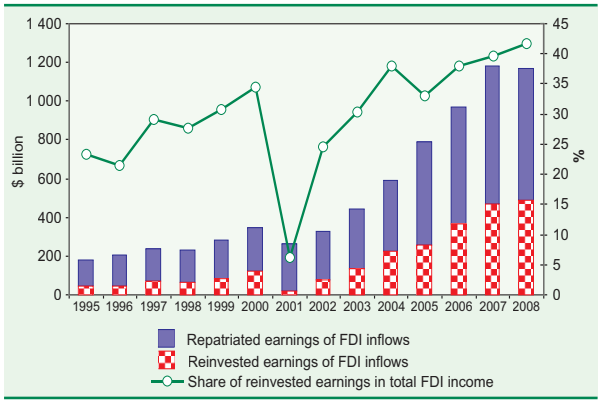
Gloomy market prospects. The depressed evolution of markets (especially in developed countries, which are experiencing the worst recession

Figure I.5. Profitability[a] and profit levels of TNCs, 1997–2008



Source: UNCTAD, based on data from Thomson One Banker.
[a] Profitability is calculated as the ratio of net income to total sales.
Note: This calculation covers 987 TNCs.

Figure I.6. Worldwide income on FDI and reinvested earnings, 1995–2008[a]



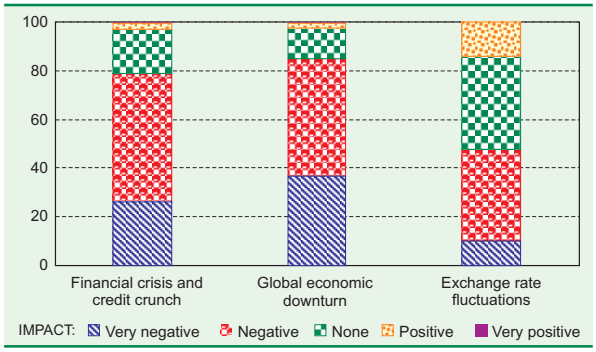
Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

since the Second World War) has also reduced firms' *propensity* to invest in further expansion of production capacity, both domestically and internationally. The latest IMF forecasts envisage a decline in world output in 2009, for the first time in 60 years. Total output in developed countries as a whole is expected to contract in 2009 by 3.8%, compared with a 0.8% rise in 2008 – the first such fall in the post-war period – while the growth rate in emerging and developing economies is likely to be lower, though still positive at 1.5%. The Organisation for Economic Co-operation and Development (OECD), the United Nations and the World Bank point to similar negative trends (table I.1).

Risk aversion. Companies' investment plans may also be scaled back due to a high level of perceived risks and uncertainties, in order to develop resilience to possible "worst-case" scenarios of financial and economic conditions. Many confidence indicators have fallen to historic lows – as exemplified, for instance, by the fall in the *Ifo World Economic Climate Index*,[6] the consumer confidence index of the Conference Board (United States) and the *Euro Zone Economic Confidence Index*. A large percentage of companies might implement cost-cutting programmes (including divestments, layoffs, and postponement or cancellation of investment projects) beyond what might be justified by the grim business outlook.

An UNCTAD survey of firms' investment prospects suggests that the investment plans of large TNCs have already been impacted significantly by the ongoing crisis (UNCTAD, 2009b).[7] Of the TNCs responding to the survey, 85% reported that the economic downturn had a "negative" or "very negative" impact on their planned investment expenditures, and 79% and 47% reported "negative" or "very negative" impacts from the financial crisis and volatile exchange rates respectively (figure I.7).

Figure I.7. Impact of various aspects of the crisis on companies' investment plans
(Per cent of responses)



Source: UNCTAD, 2009b.

Table I.1. World economic growth and growth prospects, 2008–2010

Source	Region/economy[a]	GDP (annual growth rate %) 2008	2009	2010
IMF	**World**	3.1	- 1.4	2.5
	of which:			
	Advanced economies	0.8	- 3.8	0.6
	Developing and emerging economies	6.0	1.5	4.7
World Bank	**World**	1.9	- 1.7	2.3
	of which:			
	High income countries	0.8	- 2.9	1.6
	Developing countries	5.8	2.1	4.4
United Nations	**World**	2.5	1.0 (baseline)	..
	of which:			
	Developed economies	1.2	-0.5 (baseline)	..
	Developing economies	5.9	4.6 (baseline)	..
	Transition economies	6.9	4.8 (baseline)	..
OECD	**OECD countries**	0.8	- 4.1	0.7

Source: IMF, 2009a; World Bank, 2009a; OECD, 2009 and United Nations, 2009.

[a] Each institution uses different classifications.

3. Key features of the FDI downturn and underlying factors

The previous sections noted the overall decline in FDI flows and explained the transmission channels by which the economic and financial crisis has negatively impacted FDI. This section focuses on the key features of the downturn in terms of different FDI modes. It is important to have a good understanding of its causes, as different drivers call for different policy responses by host and home governments.

FDI flows have fallen mainly for the following reasons:

- New investments to expand business abroad, either through cross-border M&As or greenfield projects, are falling; and
- Divestments[8] or other transfers of funds (e.g. repayments of debt, reverse loans)[9] from existing foreign affiliates to their parent firms are exceeding new investments by parent firms.

a. The role of divestments

Since the second or third quarter of 2008, divestments, including repatriated investments, reverse intra-company loans and repayments of debt to parent firms, have exceeded gross FDI flows to several host countries for which data were available. This phenomenon has produced negative inflows in the balance-of-payments statistics of several developed countries (table I.2). For example, in Ireland and the United Kingdom, FDI inflows in the form of other capital (intra-company loans) turned negative in 2008, although for the latter they improved

Table I.2. Selected developed countries with negative FDI inflows, by component, 2007–2009
(Millions of dollars)

FDI inflows by component	2007				2008				2009
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1
Denmark									
Total	2 119	2 094	2 839	2 622	3 652	4 499	2 594	- 178	4 076
Equity	160	4 392	2 781	- 799	77	- 932	4 452	458	158
Reinvested earnings	610	- 591	1 285	595	1 338	1 309	1 257	638	2 089
Other capital	1 349	-1 708	-1 227	2 825	2 237	4 123	-3 115	-1 274	1 830
Ireland									
Total	11 850	-1 077	8 313	5 621	-1 112	-5 251	-6 674	-6 993	1 163
Equity	2 517	-2 991	2 180	-4 307	-2 175	-3 567	-2 662	- 300	-3 081
Reinvested earnings	7 745	7 537	4 753	4 937	7 497	6 574	7 888	4 424	9 069
Other capital	1 588	-5 624	1 380	4 990	-6 434	-8 259	-11 902	-11 117	-4 825
Netherlands									
Total	13 458	9 087	-5 357	101 188	26 635	4 641	79	-34 847	4 950
Equity	1 857	24 444	-1 855	103 824	9 460	788	2 010	-41 538	573
Reinvested earnings	3 353	1 326	2 075	2 824	5 490	2 823	5 205	3 828	5 570
Other capital	8 246	-16 683	-5 579	-5 460	11 685	1 030	-7 138	2 862	-1 194
Norway									
Total	-3 212	3 899	- 658	4 404	-6 814	2 407	-2 514	6 825	172
Equity	-3 693	- 210	684	4 687	-8 334	- 62	228	3 628	-6 465
Reinvested earnings	674	674	674	674	701	701	701	701	701
Other capital	- 193	3 435	-2 015	- 958	820	1 768	-3 442	2 497	5 937
United Kingdom									
Total	27 324	47 864	26 802	94 399	45 560	27 666	-4 531	28 244	63 177
Equity	25 698	50 551	32 411	67 039	41 534	22 279	4 518	22 616	6 299
Reinvested earnings	14 881	11 527	11 277	10 913	11 490	13 463	2 794	1 676	6 002
Other capital	-13 254	-14 214	-16 886	16 448	-7 463	-8 077	-11 843	3 952	50 876
United States									
Total	18 523	85 816	99 100	67 737	57 825	101 995	64 244	92 048	33 312
Equity	19 894	49 442	57 628	28 416	42 203	44 227	53 889	109 864	22 158
Reinvested earnings	19 724	19 374	11 649	-5 953	10 077	27 618	16 101	-2 822	-10 258
Other capital	-21 094	17 000	29 823	45 274	5 545	30 150	-5 745	-14 995	21 412

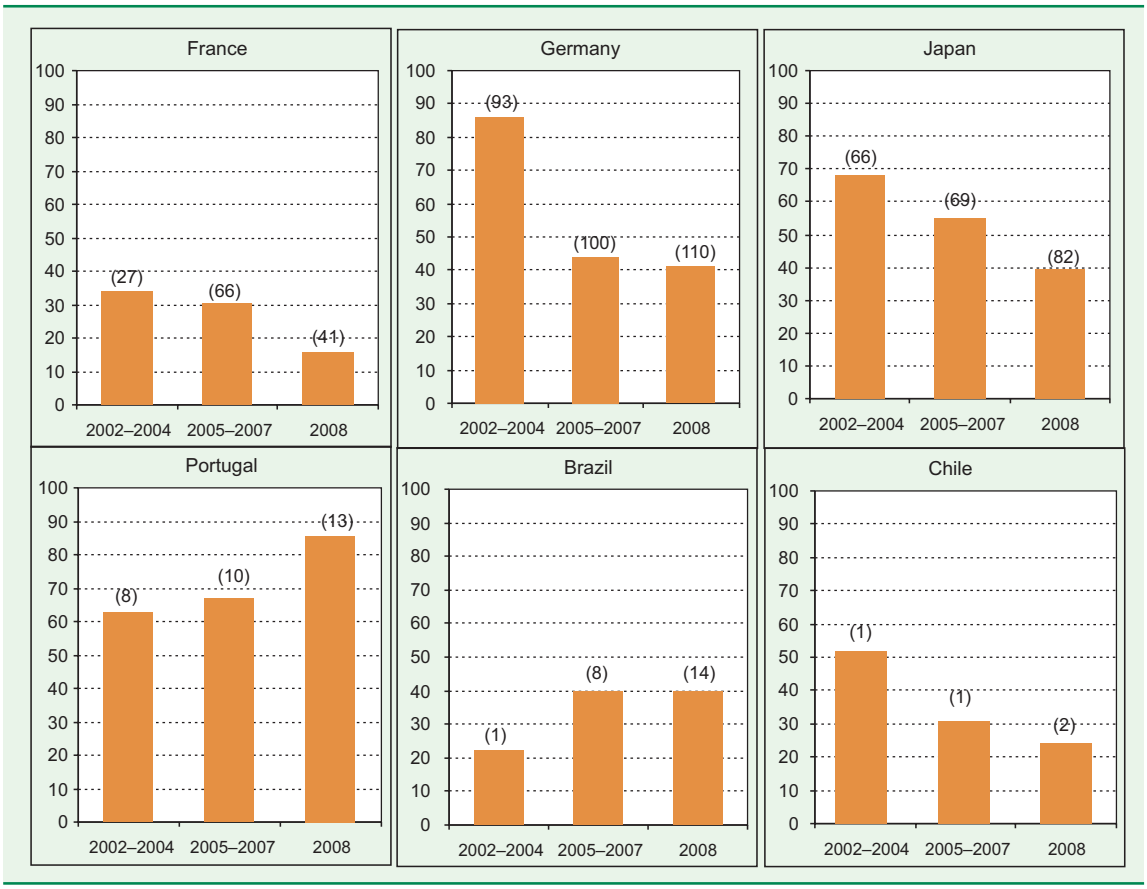
Source: UNCTAD, based on balance of payments statistics in each country.

in the first quarter of 2009. This was because foreign affiliates in these countries increased lending to their parents abroad. In Norway, negative inflows were due to large divestments of equity, a trend that accelerated in early 2009.

Generally, divestments are not uncommon: they affect between one quarter and four fifths of all FDI projects. The fact that the FDI boom during the period 2001–2007 was fuelled primarily by a surge in cross-border M&As, rather than by greenfield investments, suggests that divestments will rise later (Benito, 1997; Chow and Hamilton, 1993). During a recession or economic slowdown, parent firms are also likely to draw on funds available in their foreign affiliates, either in the form of reverse loans (loans provided to parent firms by foreign affiliates) or repayments of debts by foreign affiliates to parent firms. Evidence of the impact of the present crisis on divestments, however, remains scarce. This is due to the fact that, as the crisis deepened in late 2008, its impact on overall annual flows – those for which divestment data are currently more readily available – was limited in 2008. In most countries for which data were available divestments rose in absolute value in 2008 as compared to the 2005–2007 period, but there was not a clear increase in their share of gross FDI outflows (figure I.8). However, quarterly data suggest that the share of divestments began increasing from the fourth quarter of 2008 onwards. For instance, the share of divestments in total FDI outflows in the first quarter of 2009 reached 64% in Japan (from 39% in 2008), 116% in Brazil (from 40%), and 19% in France (from 16%).

Divestment is the result of the interplay of factors external and internal to TNCs. Some of the recent divestments represent the relocation of activities to low-cost production sites in order to cut costs in increasingly competitive world markets, particularly in those markets where economic slowdown due to the current financial and economic crisis has led to lower demand. The relocation to other host countries can be a response to general economic difficulties in the home countries of the investing firms, or it may reflect changes in the strategic positions of units within TNCs' international production systems as they restructure their international operations. Both

Figure I.8. Divestment[a] and its share in gross outward FDI[b] in selected countries, 2002–2008
(Per cent and billions of dollars)



Source: UNCTAD, based on information from Banco do Brasil, Banco Central de Chile, Banque de France, Deutsche Bundesbank, Bank of Japan and Banco de Portugal.

[a] Includes reverse equity investments and reverse loans.

[b] (Net) FDI flows plus divestments.

Note: Figures in parentheses show the value of divestments as a share of total gross investments. For example, in Portugal in 2008, an equivalent of over 80% of total new investments were divested. In other words, only less than 20% of gross investments were finally recorded as net FDI outflows.

factors have been at play during the present crisis, as the deterioration in the external environment has led to reduced investment opportunities and to poorer performance by affiliates of many TNCs.

Divestments can also be spurred by changes in the economic environment, which can affect specific industries. For example in industries associated with the product life-cycle, divestments may occur as a result of a large number of simultaneous exits when the activity reaches maturity, or they may occur if there is a restructuring of an industry, as is currently happening in the automotive, electrical and electronics industries.

Strategic considerations have been behind a large number of divestments undertaken recently. A decision to focus on core business and divest from non-core activities often leads to the closure of operations and their replacement by outsourcing or imports. Divestments also take place when TNCs merge: some operations are eliminated to avoid duplication and to achieve the cost savings that often drive mergers in the first place.[10] In addition, divestments may be driven by the poor economic performance of an individual affiliate – a common occurrence during economic downturns.[11] It then becomes difficult to separate divestments triggered by the crises from other divestments.

In some cases, foreign affiliates are closed down in a host country and part or all of their activities relocated to the home country (box I.2).

The current economic downturn has forced many TNCs to undertake internal restructuring in order to cut costs because of reduced demand or demand growth, and growing competition. In such an environment, retaining existing FDI is no less important for host countries than attracting new FDI. In order for governments to prevent divestment, there is a need to distinguish between divestment and relocation, even though for individual host countries the consequences for FDI inflows are identical.

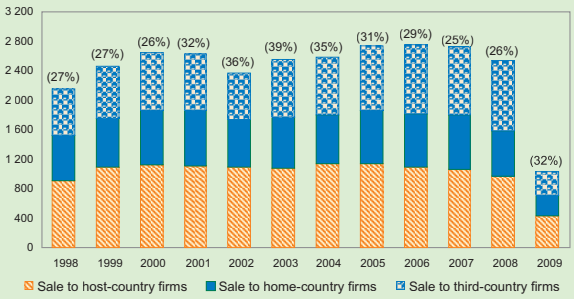
Box I.2. The impact of international restructurings on FDI flows: some puzzling evidence

In the current economic downturn, parent firms are likely to restructure their foreign operations, including through the closure of foreign affiliates, and/or relocation to third countries or back to their home country. However, the way the relocated FDI is reflected in the balance of payments depends on where the relocated FDI goes. Its impact on FDI flows can be positive, negative or nil:

- A positive impact on global FDI flows will result when a company reduces its investment at home to invest abroad, and/or sells a subsidiary in its home country to a foreign company.
- A negative impact on FDI inflows in the host economy, and on global flows, will result if a company reduces its activities abroad to relocate to its home country, and/or if it sells a foreign subsidiary to a domestic company in the host country.
- Finally, if a company decides to dispose of its activities in a foreign country and relocate to another foreign country, or sells a subsidiary abroad to another foreign company, the impact on global FDI flows will be nil.

A foreign affiliate may be sold to a firm based in the host country, the home country or a third country. In 2008, some 2,400, or 26% of the total number of cross-border M&A deals in the world, involved transactions in which foreign affiliates were purchased by other firms. The total number of these cases did not increase from that in 2007, and was even lower than in the previous downturn period of 2001–2003 (box figure I.2.1). However, of these deals in 2008, the number of deals involving the sale of a foreign company to a firm in a third country hit a record high, reaching more than 900. On the other hand, sales to domestic firms, or firms based in the same home country as the divesting company, decreased slightly.

Box figure I.2.1. Sale of foreign affiliates to firms based in host, home or third country, 1998–2009[a]
(Number of deals)



Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] Data for 2009 refer to January–June only.

Note: Figures in parentheses show the proportion of deals involving disposal of foreign affiliates to other firms (whether based in a host, home or third country) in the total number of deals.

Source: UNCTAD.

Divestment and relocation call for different policy responses, and the ability of policymakers to influence them also differs. When a country is faced with the closure of foreign affiliates in its economy due to a shift of investment to another, more locationally advantageous country, the major policy challenge for that country is to maintain its relative attractiveness for FDI. This is particularly important for investment that does not have high barriers to exit (i.e. does not involve high sunk costs).

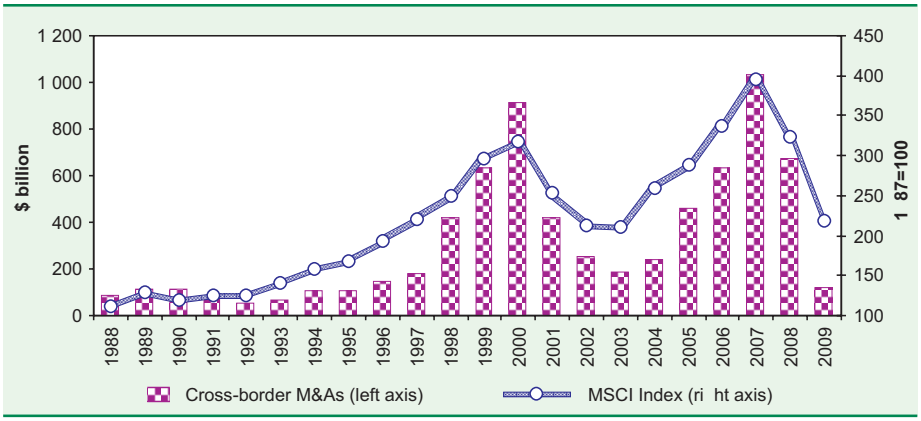
b. Mode of investment

The crisis had different impacts on cross-border M&As and greenfield projects. This suggests that these two modes of entry were adversely affected for different reasons. These differences may have distributional implications for individual host and home countries and industries in terms of the extent of the fall in FDI. To a large extent, in addition to lack of finance, the decline in the value of M&As has been driven by falling stock prices (figure I.9). In 2008, the fall in equity prices alone was equivalent to an $81 billion decline in cross-border M&As, which accounted for 18% of the total decline. On the other hand, the value of greenfield projects, which diminished following a considerable time lag, is likely to have reflected investors' responses to dimmer economic prospects and, to some extent, to financing difficulties.

(i) Large decreases in M&As

Cross-border M&As in general have been strongly affected as a direct consequence of the crisis, with a 35% decline in their value in 2008 compared with 2007. A fall was also recorded for the first half of 2009, to $123 billion (figure I.9). In particular, in 2008 there was a global reduction in the number and value of mega deals (i.e. cross-border M&As valued at more than $1 billion). The number of such deals fell by 21% and their value by 31% (table I.3). The decrease in total cross-border M&As has had a significant impact on FDI flows, as they are strongly correlated with the value of cross-border M&A transactions.

Figure I.9. Value of global cross-border M&As and MSCI World Index, 1988–2009[a]



Source: UNCTAD cross-border M&A database; and Morgan Stanley Capital International, MSCI World Index.
[a] For 2009, January–June only.

Note: The MSCI All Country World Index is a free-float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As atJanuary 2009, the MSCI index covered 46 countries: 23 developed and 23 emerging-market economies.

Several factors contributed to the decline. As mentioned earlier, the sharp fall in share prices on developed countries' stock markets – where stock-market indices plunged, on average by more than 40% in 2008 – depressed the value of M&A transactions (annex table B.4). The extent of the fall in share prices was similar in all major developed economies: in the United States, the S&P 500 Index saw a 41% drop, in the euro area the DJ Euro Stoxx 50 fell by 44%, while in Japan the Nikkei fell by 44%.[12] In developed countries, share prices of the financial services industry plummeted by 60% and the value of cross-border M&A purchases by 36%, although the number of cross-border M&As shrank by only 14%.

The financial crisis has also made equity and debt financing of M&A transactions more difficult and expensive. Whereas normally during times of falling corporate profits, companies tend to finance M&A deals with new stock, with the rapidly falling stock markets this is less feasible. Another impact of the crisis has been to reduce the cash financing of M&As, which had been the main method of funding in the boom years prior to 2008. At the same time, the cost of debt financing for cross-border M&As has risen, as bank lending conditions have deteriorated rapidly following tightening credit conditions and rising interest rate premiums for the corporate sector. One outcome of the crisis is that a number of large privatization projects have had to be cancelled (table I.4).[13]

Leveraged buyouts, which generally involve private equity funds or hedge funds, nearly dried up during the course of 2008 (section C), as banks hesitated to take the risk of extending highly leveraged loans to these funds. These funds had been among the main drivers of cross-border M&As during the period 2005–2007. The rising share of bank loans in the financing of M&As by private equity funds aggravated the decline, as private equity firms had less funds to finance M&As and as rolling over short-term debt became more difficult.

In developed countries, the number of mega deals declined from 274 in 2007 to 203 in 2008. In contrast, in developing countries, M&A activity remained strong in 2008, with 41 mega deals concluded, compared with 35 such deals in 2007. In the transition economies the number decreased: 7 in 2008 compared with 10 in 2007.

Table I.3. Cross-border M&As (valued at over $1 billion), 1987–2009 [a]

Year	Number of deals	Percentage of total	Value ($billion)	Percentage of total
1987	19	1.6	39	40.1
1988	24	1.3	53	38.7
1989	31	1.1	68	40.8
1990	48	1.4	84	41.7
1991	13	0.3	32	27.0
1992	12	0.3	24	21.0
1993	18	0.5	38	30.5
1994	36	0.8	73	42.5
1995	44	0.8	97	41.9
1996	48	0.8	100	37.9
1997	73	1.1	146	39.4
1998	111	1.4	409	59.0
1999	137	1.5	578	64.0
2000	207	2.1	999	74.0
2001	137	1.7	451	61.7
2002	105	1.6	266	55.0
2003	78	1.2	184	44.8
2004	111	1.5	291	51.5
2005	182	2.1	569	61.3
2006	215	2.4	711	63.6
2007	319	3.0	1 197	70.4
2008	251	2.6	823	68.3
2009[a]	40	1.2	171	67.2

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).
[a] For 2009, January–June only.

Table I.4. Selected cross-border M&As and privatization programmes cancelled or postponed due to the global financial crisis

Acquiring company (country)/privatization	Target company (country)	Value	Industry
Samsung Electronics (Rep. of Korea)	SanDisk (United States)	$5.9 billion	Electronics
Xstrata (United Kingdom and Switzerland)	Lonmin (United States)	$10 billion	Mining
AT&T, Vodafone, Blackstone	Huawei (only mobile handset business operations) (China)	$2 billion	Electronics
Ping An Insurance (China)	Fortis (Belgium)	€ 2.2 billion	Finance
Cancelled or postponed privatization	Punta Colonet (Mexico)	$6 billion	Ports
Cancelled or postponed privatization	Kuwait Airways (Kuwait)	-	Airlines
Cancelled or postponed privatization	La Poste (France)	-	Postal services
Cancelled or postponed privatization	TeliaSonera (Sweden)	-	Telecoms
Cancelled or postponed privatization	Nordea (Sweden)	-	Finance
Cancelled or postponed privatization	Oman Telecommunication Company (25%)	-	Telecoms
Cancelled or postponed privatization	SBAB (Sweden)	-	Finance

Source: UNCTAD, 2009a.

In terms of value, in the first half of 2009 M&A deals fell not only in developed countries, but also in developing and transition economies (figures I.10 a, b and c). In the latter economies, this was partly the result of shrinking exports and lower prices of energy and other natural resources, which made target firms less attractive.

(ii) Downturn in greenfield investments since end 2008

Greenfield investment projects (new investments and expansion of existing facilities) began to feel the impact of the crisis only in the fourth quarter of 2008. The number of such investments actually increased markedly during the first three quarters of that year, reaching over 11,000. It thus almost equalled the total for the whole of 2007[14] (annex tables A.I.1–A.I.2 for country and industry breakdown data, respectively). But from September 2008 onwards there has been a continuous decline in the monthly flow of projects.[15] As with M&As, recent announcements in various industries mention the cancellation or postponement of many projects,[16] the consequences of which will be fully felt in 2009.

Figure I.10. Value of global cross-border M&As, by quarter, 2006–2009
(Billions of dollars)

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).
[a] Net sales on the basis of the region of the immediate acquired company.
[b] South-East Europe and CIS.
Note: Net cross-border M&A sales in a host economy are sales of companies in the host economy to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of foreign companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

4. Uneven impact of the crisis on different regions and sectors

The impact of the crisis on FDI patterns in 2008 has varied by region,

and by sector/industry. Its impact on FDI also differs from the impact of the dot-com crisis in 2001 (box I.3).

a. Geographical patterns

(i) FDI inflows

FDI inflows to developed countries in 2008 shrank by 29%, to $962 billion, compared with the previous year. This was mostly due to a decline in cross-border M&A sales, which fell by 39% in value after a five-year boom (annex table B.4). In Europe cross-border M&A deals diminished by 56%,[17] and in Japan by 43%. Worldwide mega deals have been particularly badly affected by the crisis: their number fell by 21% in 2008, and their value by 31%. By contrast, the number of greenfield investments in developed countries rose in 2008 to 6,972 from 6,195 in 2007, but fell in the first quarter of 2009 at an annual rate of 16% (annex table A.I.1).

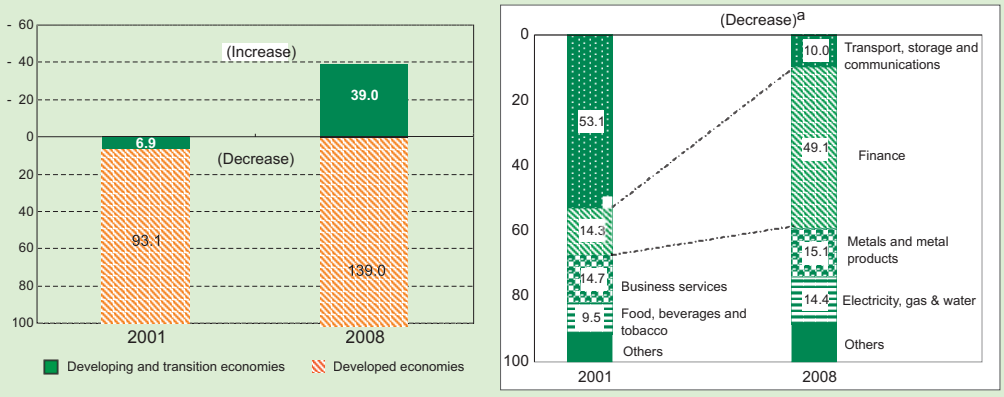
In 2008, FDI inflows into *developing countries* were less affected than those into developed countries. In the first half of 2008 developing countries seemed better able to weather the global financial crisis, as their financial systems were less closely interlinked with the hard-hit banking systems of the United States and Europe. Their economic growth remained robust, supported by rising commodity prices. FDI inflows into developing countries therefore increased in 2008, but at 17% this was a lower rate than in previous years. FDI inflows increased considerably in Africa (+27%) and in Latin America and the Caribbean (+13%), continuing the upward trend of the preceding years for both regions. Economic growth slowed down in 2008 in both regions, but less forcefully down than developed countries and, to a lesser extent, the developing countries of Asia. In 2008, there were some large cross-border M&A deals in Africa, especially in the construction industry, as illustrated by the acquisition of OCI Cement Group of Egypt by Lafarge SA (France) for $15 billion – one of the biggest M&A transactions that year (annex table A.I.3). Asia, the developing region that received the largest amount of FDI, saw a rise in inflows of 17% in 2008. However, the experience of the different subregions and economies in this region varied greatly. In South Asia, FDI inflows continued to grow considerably, rising by 49%, whereas they decreased in South-East Asia (-14%). In early 2009,

Box I.3. Downturn in FDI: comparison with the previous reversal

In the 2001 dot-com crisis, the first to be hit by the decline in FDI inflows was Germany, followed by (in order of magnitude) the United States, the United Kingdom, Canada and Hong Kong (China). In contrast, in 2008, the five countries with the largest declines were the Netherlands, the United Kingdom, Canada, Belgium and Ireland, in that order.

With regard to industries, in the 2001 downturn, telecommunications experienced the largest fall in FDI, whereas in the current downturn, finance has been the hardest hit (box figure I.3.1). These and other differences by country and industry reflect the contrasting sources and origins of the previous and current downturns.

Box figure I.3.1. Comparison of falling FDI in 2001 and 2008
(Per cent)



Source: UNCTAD FDI/TNC database (www.unctad.org/fdistatistics).

[a] Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs. The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Source: UNCTAD.

the overall picture for developing countries changed significantly, as discussed later.

In developing countries, M&A activity remained strong in 2008, with 41 mega deals concluded – six more than in 2007. In Africa and Asia, TNCs expanded their M&A transactions, which contributed to their overall rise by 13% in 2008. In the first half of 2009, however, Asia and other developing regions saw a sharp decline in exports and tumbling prices of energy and other natural resources, and their M&A transactions also fell sharply.

FDI inflows to the transition economies of South-East Europe and the CIS maintained their upward trend in 2008 to reach a new record high. This was despite the financial crisis, the sharp downturn in oil and gas prices in the second half of 2008 and regional conflicts. As in previous years, foreign investors remained eager to access the fast-growing local consumer markets of the region. FDI flows to the natural resources sector of the Russian Federation also increased. Despite stricter regulations, foreign investors continued to invest in natural-resource projects. Indeed, the Russian Federation was the target of four mega M&A deals in 2008. In 2009, however, FDI inflows into transition economies began to fall.

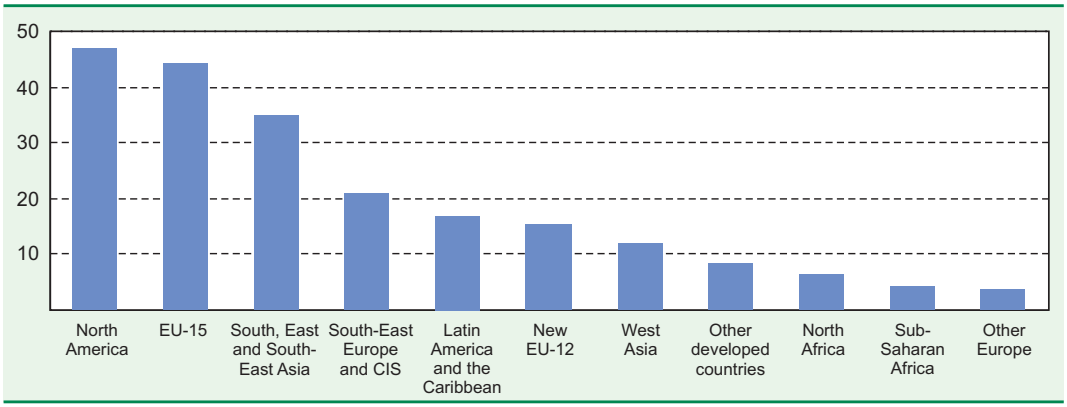
The *World Investment Prospects Survey 2009–2011* (WIPS) conducted by UNCTAD also shows that the developed economies of North America and the EU-15 – which still host the largest proportion of world FDI flows and stocks – have so far been the hardest hit by reductions in TNCs' investment plans (figure I.11). Roughly 47% of respondents reported that their investment plans in North America (the United States and Canada) have been cut due to the crisis, and another 44% indicated the same for the EU-15. WIPS also shows that among developing host regions, the subregions of East and South-East Asia are the most adversely affected by the crisis (35% of respondents), though to a lesser degree than developed countries (figure I.11).

Judging from preliminary data for the first quarter of 2009, FDI took a nosedive in all three groups of economies: developed, developing and transition (figure I.12). For the 96 countries for which quarterly data on FDI inflows were available up to June 2009 (which account for roughly 91% of global inflows), FDI inflows in the first quarter of 2009 were down by 44% as compared to the same period of 2008, and 70 countries recorded a decline. While in both developed and transition economies FDI flows fell gradually over 2008 and the first quarter of 2009, in developing countries – following the slight increase registered in 2008 – a fall was observed in the first quarter of 2009 (figure I.12). Indeed, FDI flows to the countries for which data were available for the first quarter of 2009 are on a clear downward trend. For example, China recorded a 21% decline in inflows during this period compared to the same period in 2008, and flows to Brazil and Pakistan were down by 39% and 30% respectively.

Regarding structurally weak and vulnerable economies such as the least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing States (SIDS), in addition to ODA, FDI has been an important source of funding over the past two decades for many of them (UNCTAD, 2003c, 2006e). In line with general trends in FDI flows to developing countries, those to the structurally weak and vulnerable economies rose by 43% in 2008, to $61 billion. Their share in total FDI flows to developing and transition economies also rose, from 7% to 8%.

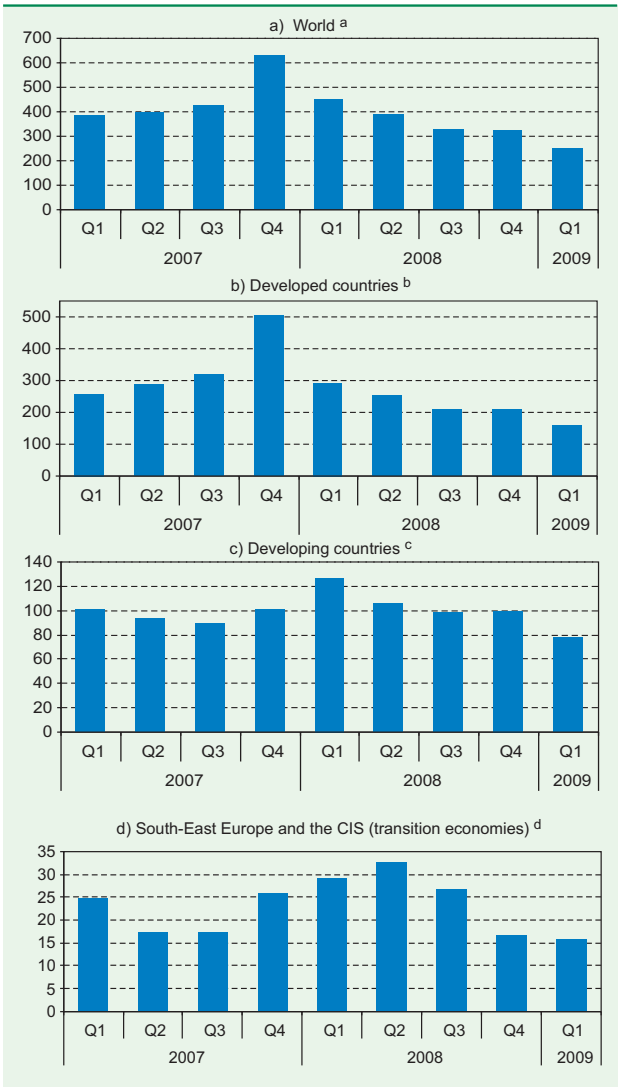
However, because these countries rely heavily on exports of a narrow range of commodities (and tourism in the case of SIDS), the global financial and economic crisis is beginning to have a strong impact on their economies in 2009 and has reduced demand for their exports. Preliminary data on FDI flows to these economies for the first quarter of 2009 indicate that the financial turmoil could have an adverse

Figure I.11. Percentage of TNCs planning to cut investments in different regions owing to the crisis
(% of respondents)



Source: UNCTAD, 2009b.

Figure I.12. FDI inflows, by quarter, 2007–2009
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Total for 96 countries accounting for 91 % of world inflows in 2007–2008.
[b] Total for 35 countries accounting for almost all of developed country inflows in 2007–2008.
[c] Total for 49 countries accounting for 74 % of developing country inflows in 2007–2008.
[d] Total for 12 countries accounting for 95 % of South-East Europe and CIS (transition economies) inflows in 2007–2008.

impact on the sustainability of those flows. For example, in the first quarter of 2009 there was a 15% year-on-year decline in FDI inflows into LDCs.

The three groups of economies showed similar growth rates of FDI inflows in 2008: 29% in 49 LDCs, 32% in 29 SIDS and 54% in 31 LLDCs. Those flows continue to focus on a few countries in each group: Angola and Sudan among LDCs, Madagascar among SIDS, and Kazakhstan among LLDCs. Angola, for example, accounted for about half of FDI inflows to all LDCs. Furthermore, their FDI inflows mainly target natural resource exploitation, a form of investment that generally does not lend itself to broad-based and sustainable economic growth.

As the major investors in these economies are from developing countries, their declining FDI in 2009 (figure I.13) poses a particular challenge, accentuated by reduced financial flows from both official and other private sources during the crisis. Moreover, since these economies will face stiffer competition from other developing countries in attracting investments, they risk being further marginalized in global FDI. These economies may wish to target FDI in industries that are less prone to cyclical fluctuations, such as agriculture-related industries including food and beverages, as part of a diversification strategy.

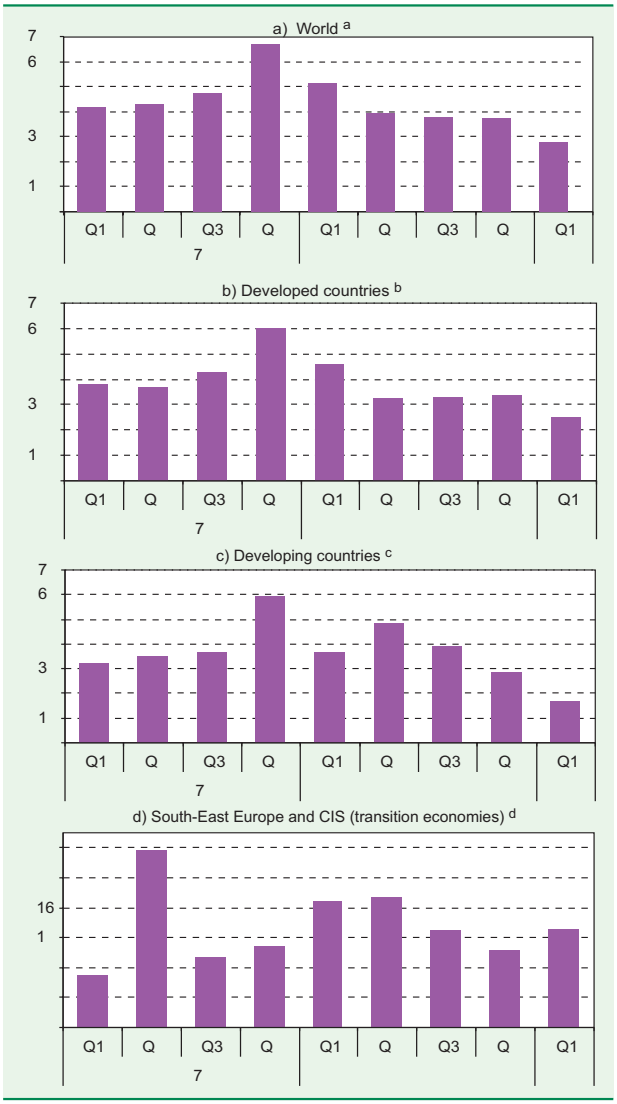
(ii) FDI outflows

Outflows of FDI from developed countries as a group declined in 2008, but with some notable exceptions, as discussed later. While such flows increased substantially to a record level in 2007, the financial crisis and the economic recession in many developed countries reduced the capacity of, and propensity for, TNCs to invest abroad in both 2008 and early 2009.

FDI outflows from the United States fell, although reinvested earnings (one of the three components of FDI) of United States TNCs' foreign affiliates were strong in 2008. FDI outflows from the euro area also declined, as did those from the United Kingdom, where TNCs cut their investments abroad by 60% in 2008, reflecting their deteriorating financing capabilities. Only Japanese TNCs were able to increase their FDI outflows significantly, a feature which continued into early 2009. Japanese companies have been increasing their foreign acquisitions, taking advantage of the price cuts of target firms caused by the global financial crisis and economic slowdown. The Japanese corporate sector is still in a relatively strong position in terms of cash and a healthy debt-to-equity ratio. The value of cross-border M&As by Japanese companies in 2008 reached $54 billion – a record level. These large cross-border investments have brought Japan back into the group of countries with the largest outflows of FDI.

FDI outflows from developing countries rose by 3% in 2008, but began to decline in the first half of 2009. Asian economies, especially China, continued to dominate as FDI sources. Meanwhile, TNCs from some West Asian countries, along with SWFs from this subregion, continued to invest abroad (section C). As a result, the share of developing countries in global outward FDI, and in FDI to both developed and LDCs has increased. Developing-country TNCs now account for a larger share of outward FDI

Figure I.13. FDI outflows, by quarter, 2007–2009
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Total for 79 countries accounting for 93% of world outflows in 2007–2008.
[b] Total for 35 countries accounting for almost all of developed country outflows in 2007–2008.
[c] Total for 34 countries accounting for 54% of developing country outflows in 2007–2008.
[d] Total for 10 countries accounting for 99% of South-East Europe and CIS (transition economies) outflows in 2007–2008.

than ever before − 16% of global FDI outflows in 2008, compared with 13% in 2007 (annex table B.1). FDI outflows from transition economies grew considerably in 2008, accounting for 3% of the world total (annex table B.1), and they remained stable in the first quarter of 2009 (figure I.13).

Overall, global FDI outflows for the first quarter of 2009 fell by 46% over the same period of 2008 for 79 countries (accounting for about 93% of global FDI outflows) for which such data were available. The majority of these countries (56 out of 79 countries), including major investors such as France, Germany, Japan and the United States experienced a decline in FDI outflows in the first quarter of 2009 (figure I.13).

b. Sectoral and industrial patterns of FDI

Both inflows and outflows of FDI in 2008 exhibited some marked differences by sector (primary, manufacturing and services) and by industry. While FDI activity in most industries declined substantially in 2008, there were a few exceptions, notably in the primary sector and in the food, beverages and tobacco industry, where FDI transactions increased. In the absence of data on FDI broken down by sector/industry for 2008 (annex tables A.I.4 – A.I.7 for 2009), data on cross-border M&As with that breakdown are examined as indicative of overall trends. Overall, there was a decline in M&A activity in both manufacturing and services, but with a relative shift to non-financial services, and to food, beverages and tobacco. The value of M&As in the primary sector rose both in absolute terms and as a share of total M&As. In 2008, of 26 industries in the classification of data on M&As, there were only 9 that generated higher investments via cross-border M&As than in the previous year, and only 13 in which investors concluded a higher value of such M&As (table I.5). This is consistent with the earlier observation that the overall value of cross-border M&As fell. It suggests that firms, regardless of the industries in which they operate, are more selective in choosing the activities in which they invest during a downturn. Food-related industries were the most active in terms of purchases of foreign companies, and among the most active in terms of M&A sales (table I.5).

In 2008, the value of cross-border M&As in the primary sector increased by 17%. Rising prices of oil and other commodities in the first half of 2008 triggered a further increase in the value of cross-border M&A investments in the mining, quarrying and petroleum industry group, to $83 billion (table 1.5). The increase in FDI in the primary sector was also reflected in the growing number of greenfield investments, which reached 1,022 in 2008 compared with 611 in 2007 (annex table A.I.2).

In manufacturing – which accounts for nearly one third of estimated world inward FDI stocks – the value of cross-border M&A sales fell by 10% in 2008. The decline was very uneven by industry. Textiles and clothing, rubber and plastic products, as well as metals and metal products, saw an average fall of 80%, while in industries, such as machinery and equipment, the decrease was much less dramatic. In contrast, cross-border M&A sales in the food, beverages and tobacco industry rose considerably, to $112 billion – a 125% increase (table 1.5). Several large TNCs

Table I.5. Industries with a rise in cross-border M&As in 2008
(Millions of dollars)

Industry	2007	2008	Increases
Net sales [a]			
Agriculture, hunting, forestry and fisheries	2 421	2 963	542
Mining, quarrying and petroleum	70 878	83 137	12 260
Food, beverages and tobacco	49 902	112 093	62 191
Coke, petroleum and nuclear fuel	2 663	3 086	424
Motor vehicles and other transport equipment	3 048	11 940	8 892
Precision instruments	- 17 036	23 028	40 063
Business services	100 359	102 628	2 269
Public administration and defense	29	30	1
Other services	2 216	4 767	2 551
Net purchases [b]			
Agriculture, hunting, forestry and fisheries	- 1 880	5 302	7 182
Food, beverages and tobacco	30 794	77 406	46 612
Textiles, clothing and leather	- 2 361	416	2 777
Publishing and printing	- 6 308	9 535	15 843
Rubber and plastic products	- 1 588	206	1 793
Non-metallic mineral products	15 334	22 198	6 864
Motor vehicles and other transport equipment	533	12 081	11 547
Precision instruments	- 9 823	7 817	17 640
Hotels and restaurants	- 11 617	- 12	11 605
Trade	- 3 460	1 674	5 134
Business services	10 421	23 976	13 555
Community, social and personal service activities	- 9 066	- 4 206	4 860
Other services	- 2 560	2 914	5 474

Source: Annex table B.6.

[a] Net sales in the industry of the acquired company.

[b] Net purchases by the industry of the acquiring company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs. The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

took the opportunity to improve their competitive position in foreign markets. Four mega deals of more than $10 billion each drove the increase in the value of cross-border M&As in this industry. Stichting Interbrew (Belgium) acquired Anheuser Busch, a United States brewery, for $52 billion, and British Imperial Tobacco bought Altadis, a Spanish cigarette company, for $18 billion (annex table A.I.3).

In the services sector – which accounts for around three fifths of world FDI stock – cross-border M&A deals declined by 54% in 2008. Most of the larger services were hit to a similar extent, with the exception of business services, where such deals grew by 2%. In financial services, the value of cross-border M&As declined by 73% in 2008. Nevertheless, there were several large cross-border acquisitions in the North American and European banking sectors. Very low stock prices offered the chance to step into markets that had formerly been difficult to enter. In Europe there were two very large M&A transactions involving intra-European targets and acquirers. The banking operations of Belgian/Dutch bank Fortis SA/NV were acquired by BNP Paribas, and Banca Antonveneta, an Italian affiliate of Banco Santander SA, was bought by the Italian BMPS for $13.2 billion. In the United States, several large banks that were on the brink of collapse were acquired by other United States institutions, supported by government funding. Foreign banks took the opportunity to acquire equity stakes in several large banks in the United States. Toronto Dominion Bank (Canada) and the Japanese Mitsubishi UFJ Financial Group increased their holdings in the United States Commerce Bancorp (for $8.6 billion) and in Morgan Stanley (for $7.8 billion) respectively. Japanese banks, with relatively abundant funds at home, are gradually returning to the international banking scene as major investors. This is similar to the 1980s, but with a greater focus on international banking services for non-Japanese clients, which is a departure from their strategies of the 1980s.

B. How the largest TNCs are coping with the global crisis[18]

Today there are some 82,000 TNCs worldwide, with 810,000 foreign affiliates in the world (annex table A.I.8). These companies play a major and growing role in the world economy. For instance, exports by foreign affiliates of TNCs are estimated to account for about one third of total world exports of goods and services. And the number of people employed by them worldwide, which has increased about fourfold since 1982, amounted to about 77 million in 2008 (table I.6) – more than double the total labour force of a country like Germany.

The largest TNCs contribute to a significant proportion of total international production by all TNCs, both in developed and developing economies. Over the three-year period 2006–2008, on average, the 100 largest non-financial TNCs[19] accounted for 9%, 16% and 11%, respectively, of the estimated foreign assets, sales and employment of all TNCs in the world (table I.6). They also accounted for about 4% of world GDP, a share which has remained relatively stable since 2000.[20] This section analyses the major trends and recent developments with respect to the largest TNCs, and examines the impacts of the ongoing financial and economic crisis on these firms and their international activities.

Over the past 15 years, the largest TNCs have undergone a steady process of internationalization. Also there has been a progressive increase in the proportion of companies operating in the services sector, and of firms based in developing countries. These largest TNCs are presently being strongly affected by the ongoing economic and financial

Table I.6. Selected indicators of FDI and international production, 1982–2008

Item	Value at current prices (Billions of dollars)				Annual growth rate (Per cent)							
	1982	1990	2007	2008	1986–1990	1991–1995	1996–2000	2004	2005	2006	2007	2008
FDI inflows	58	207	1 979	1 697	23.6	22.1	39.4	30.0	32.4	50.1	35.4	-14.2
FDI outflows	27	239	2 147	1 858	25.9	16.5	35.6	65.0	-5.4	58.9	53.7	-13.5
FDI inward stock	790	1 942	15 660	14 909	15.1	8.6	16.0	17.7	4.6	23.4	26.2	-4.8
FDI outward stock	579	1 786	16 227	16 206	18.1	10.6	16.9	16.8	5.1	22.2	25.3	-0.1
Income on inward FDI	44	74	1 182	1 171	10.2	35.3	13.3	33.4	32.8	23.3	21.9	-0.9
Income on outward FDI	46	120	1 252	1 273	18.7	20.2	10.3	42.3	28.4	18.4	18.5	1.7
Cross-border M&As [a]	..	112	1 031	673	32.0[b]	15.7	62.9	28.4	91.1	38.1	62.1	-34.7
Sales of foreign affiliates	2 530	6 026	31 764[c]	30 311[c]	19.7	8.8	8.1	26.8	5.4[c]	18.9[c]	23.6[c]	-4.6[c]
Gross product of foreign affiliates	623	1 477	6 295[d]	6 020[d]	17.4	6.8	6.9	13.4	12.9[d]	21.6[d]	20.1[d]	-4.4[d]
Total assets of foreign affiliates	2 036	5 938	73 457[e]	69 771[e]	18.1	13.7	18.9	4.8	20.5[e]	23.9[e]	20.8[e]	-5.0[e]
Exports of foreign affiliates	635	1 498	5 775[f]	6 664[f]	22.2	8.6	3.6	21.3[f]	13.8[f]	15.0[f]	16.3[f]	15.4[f]
Employment by foreign affiliates (thousands)	19 864	24 476	80 396[g]	77 386[g]	5.5	5.5	9.7	12.2	8.5[g]	11.4[g]	25.4[g]	-3.7[g]
GDP (in current prices)	11 963	22 121	55 114	60 780[h]	9.5	5.9	1.3	12.6	8.4	8.2	12.5	10.3
Gross fixed capital formation	2 795	5 099	12 399	13 824	10.0	5.4	1.1	15.4	11.8	10.9	13.8	11.5
Royalties and licence fee receipts	9	29	163	177	21.1	14.6	8.1	23.7	10.6	9.1	16.1	8.6
Exports of goods and non-factor services	2 395	4 414	17 321	19 990	11.6	7.9	3.7	21.3	13.8	15.0	16.3	15.4

Source: UNCTAD, based on its FDI/TNC database (www.unctad.org/fdi statistics), UNCTAD, *GlobStat*, and IMF, *International Financial Statistics*, June 2009.

[a] Data are available only from 1987 onwards.

[b] 1987–1990 only.

[c] Data for 2007 and 2008 are based on the following regression result of sales against inward FDI stock (in $ million) for the period 1980–2006: sales=1 471.6211+1.9343* inward FDI stock.

[d] Data for 2007 and 2008 are based on the following regression result of gross product against inward FDI stock (in $ million) for the period 1982-2006: gross product=566.7633+0.3658* inward FDI stock.

[e] Data for 2007 and 2008 are based on the following regression result of assets against inward FDI stock (in $ million) for the period 1980–2006: assets= -3 387.7138+4.9069* inward FDI stock.

[f] Data for 1995–1997 are based on the following regression result of exports of foreign affiliates against inward FDI stock (in $ million) for the period 1982-1994: exports=139.1489+0.6413*FDI inward stock. For 1998–2008, the share of exports of foreign affiliates in world export in 1998 (33.3 %) was applied to obtain the values.

[g] Based on the following regression result of employment (in thousands) against inward FDI stock (in $ million) for the period 1980–2006: employment=17 642.5861+4.0071* inward FDI stock.

[h] Based on data from IMF, *World Economic Outlook*, April 2009.

Note: Not included in this table are the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and of the sales of the parent firms themselves. Worldwide sales, gross product, total assets, exports and employment of foreign affiliates are estimated by extrapolating the worldwide data of foreign affiliates of TNCs from Austria, Canada, the Czech Republic, Finland, France, Germany, Italy, Japan, Luxembourg, Portugal, Sweden and the United States for sales; those from the Czech Republic, Portugal, Sweden and the United States for gross product; those from Austria, Germany, Japan and the United States for assets; those from Austria, the Czech Republic, Japan, Portugal, Sweden and the United States for exports; and those from Austria, Germany, Japan, Switzerland and the United States for employment, on the basis of the shares of those countries in worldwide outward FDI stock.

crisis, both at company and industry levels, as evidenced by declining profits, divestments and layoffs, restructurings and some bankruptcies. According to preliminary estimates, the increase in their overall degree of internationalization seems to have slowed down markedly in 2008. However, an UNCTAD survey (UNCTAD, 2009b) shows that, despite a temporary setback in their investment plans in the short term, large TNCs expect to continue to internationalize and increase their FDI expenditures in the medium term, with a growing focus on emerging markets (see section E).

In addition to the 100 largest TNCs worldwide, two other important categories of top-ranking firms are considered in this section: (i) the top non-financial TNCs from developing countries, which have grown in relative importance over the past few years (subsection 2); and (ii) the top financial TNCs, which are presently going through a major restructuring process triggered by the devastating impacts of the crisis (subsection 3). In addition, non-listed companies (mainly government- or family-owned), which are not necessarily included in the traditional UNCTAD list of the largest TNCs due to paucity of data, but which also play an important role in international production, are considered in box I.4.

1. The 100 largest non-financial TNCs[21]

a. A slowdown of internationalization in 2008

Data on the world's 100 largest TNCs (annex tables A.I.9 and A.I.10) show a recent slowdown in their rate of internationalization. While their Transnationality Index (TNI)[22] continued to increase in 2007 (figure I.14), due especially to the rapid growth of foreign sales (table I.7), this did not happen in 2008. Preliminary estimates for 2008[23] show that the ratio of both foreign assets and sales to total assets and sales did not increase compared to 2007, while

Table I.7. Snapshot of the 100 largest TNCs worldwide, 2006–2007/2008

Variable	2006	2007	2006–2007 % change	2008	2007–2008 % change
Assets ($ billion)					
Foreign	5 245	6 116	16.6	6 094	-0.4
Total	9 239	10 702	15.8	10 687	-0.1
Foreign as % of total	57	57	0.4[a]	57	-0.1 [a]
Sales ($ billion)					
Foreign	4 078	4 936	21.0	5 208	5.5
Total	7 088	8 078	14.0	8 518	5.5
Foreign as % of total	58	61	3.6[a]	61	0.0 [a]
Employment (thousands)					
Foreign	8 582	8 440	-1.66	8 898	5.4
Total	15 388	14 870	-3.4	15 302	2.9
Foreign as % of total	56	57	0.98[a]	58	1.4 [a]

Source: UNCTAD/ Erasmus University database.

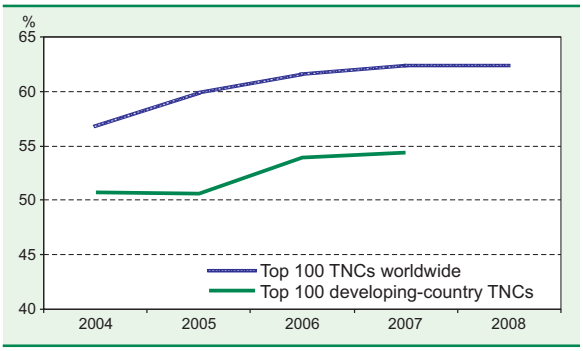
[a] In percentage points.

Note: 2007 and 2008 data represent companies from the 2007 top 100 TNCs list. Projected 2008 data are based on the rates of change observed in 90 of the top 100 TNCs with 2008 data, applied to 2007 totals. A top 100 list for 2008 will appear in WIR 2010.

foreign employment increased only slightly more than total employment (table I.7). Consequently, the overall TNI in 2008 remained almost at a standstill for the largest TNCs for which data were available (table I.7 and figure I.14).

The analysis of TNI by industry and home region is limited to 2007, as non-availability of data for some TNCs (e.g. Japanese TNCs) for 2008 causes a bias in certain industries and regions. The presence of companies from the services sector in the list of the top 100 has continued to increase: from 14 in 1991 to 24 in 1998 and finally to 26 in 2007.[24] Many of them operate in telecommunications and utilities. However, the majority of the 100 largest TNCs still belong to the manufacturing sector (table I.8). No agricultural company presently features among the list of top TNCs, although no less than nine companies in the top 100 list belong to the food, beverages and tobacco industries.

Figure I.14. Average TNI for the 100 largest TNCs worldwide and from developing countries, 2004–2008



Source: UNCTAD.

Note: Average TNI in 2008 is based on the percentage change between 2007 and 2008 of the average TNI values for 90 of the top 100 TNCs worldwide in 2007.

The largest TNCs in the various industries display very different levels of internationalization. For instance, the TNI for the top companies in the pharmaceuticals, telecommunications and food and beverages industries is higher than that for companies in motor vehicles, petroleum or utilities (table I.8).[25]

The 2007 data also confirm the trend towards a growing role of companies from developing countries. In particular, the number of firms in the top 100 list from developing economies has increased significantly, from none in 1993 to six in 2006 and seven in 2007. In 2007, three of them were from the Republic of Korea, and one each from China, Hong Kong (China), Malaysia and Mexico.

The degree of internationalization of companies among the top 100 varies widely by country: for instance, the value of the TNI in 2007 was above the

Table I.8. TNI values for the 100 largest TNCs worldwide and from developing countries, by selected industries, 2007

Industry	Top 100 TNCs		Top 100 TNCs from developing countries	
	2007	TNI [a]	2007	TNI [a]
Motor vehicles	13	56.0	3	39.3
Petroleum expl./ref./distr.	10	56.2	9	24.0
Electrical & electronic equipment	9	57.7	19	59.9
Food & beverages & tobacco	9	68.1	7	60.5
Pharmaceuticals	9	63.6	1	50.4
Utilities (electricity, gas and water)	8	55.5	2	41.6
Telecommunications	8	70.3	7	47.7
All industries	**100**	**62.4**	**100**	**54.4**

Source: UNCTAD/Erasmus University database.

[a] TNI is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

Note: Due to differing reporting periods of the top TNCs, comparable industry data for 2008 are not yet available.

Table I.9. TNI values for the top 100 largest TNCs worldwide, by selected countries, 2006−2007

Region/economy	Average TNI [a]		Number of TNCs
	2006	2007	2007
EU-27	64.2	66.4	57
of which:			
France	63.8	63.6	14
Germany	54.8	56.5	13
United Kingdom	72.8	74.1	15
Japan	52.1	53.9	10
United States	57.8	57.1	20
World	61.6	62.4	100

Source: UNCTAD/Erasmus University database.

[a] TNI is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

Note: Due to differing reporting periods of the top 100 TNCs, comparable regional data for 2008 are not yet available.

Box I.4. The top non-listed companies

The 150 largest non-listed companies employed upwards of 13 million people worldwide in 2006,[a] a figure lower but comparable to the total of the largest 150 listed companies that are responsible for 19 million jobs. Lack of data, however, makes it difficult to assess precisely the level of internationalization and the dynamics of non-listed companies, as they tend to disclose only a very limited amount of information.

By sector, State-owned oil and gas companies play an important role among the top non-listed companies. Saudi Aramco was the largest non-listed company worldwide. With $781 billion in assets in 2007, it is substantially bigger than the largest listed TNC in the same industry, ExxonMobil. There are also some significant private equity firms among the top unlisted firms. Due to many acquisitions in the United States and Europe, their assets increased substantially during the 2006–2008 period. The top non-listed private equity firms were Kohlberg Kravis Roberts and the Carlyle Group.[b]

By country of origin, many of the largest non-listed TNCs are Asian State-owned companies, operating mainly in the oil, gas and utilities sector. In major fast-growing emerging economies, such as China, non-listed companies tend to play an even more important role than in developed countries. For instance, in 2005, the import and export volume of China's non-listed companies accounted for 16% of the country's total trade.[c]

Information about the internationalization of non-listed companies is scarce. This is particularly true for State-owned oil and gas companies, which probably have most of their assets concentrated in the home country. However, the few private companies for which data were available already seem to have a large presence abroad. Examples are firms such as Mars, GMAC Financial Services, Murdock Holding Companies or Glencore, each of which are present in more than 40 countries.

The financial crisis did not leave private companies unaffected. In the financial sector, for example, GMAC, a global financial company with major business activities in mortgage and auto lending obtained the official status of a bank holding company which made it eligible for State help. The United States Government acquired a 35.4% stake in GMAC after providing $12.5 billion in aid in December 2008.[d]

Not all non-public financial companies have suffered from adverse impacts of the crisis. One of the few beneficiaries is the German Sparkassen-Finanzgruppe. Its conservative strategies compared to those of other banks attracted large amounts of new capital transferred to it by clients who began to fear for the safety of their savings in other financial institutions that were suffering heavy losses. Non-listed oil and gas TNCs have been affected by the economic crisis in much the same way as their listed counterparts. However, some – mainly State-owned – oil and gas TNCs are weathering the crisis in different ways. For example, in March 2009 Kuwait Petroleum Corporation announced nearly $80 billion in new investments for the coming five years.[e] Pemex (Mexico), on the other hand, is suffering from a weakening currency that is hurting its ability to maintain its capital expenditures at their current levels.[f] The company recently asked the Mexican Government to make up the difference. Since many non-listed oil and gas companies are State-owned, they are under added pressure to help finance their countries' budgets. This may undermine their ability to finance investments in the short term.[g]

Source: UNCTAD.

[a] "Hidden value: how unlisted companies are eclipsing the public equity market", *Financial Times,* 15 December 2006.
[b] Six of the top 30 companies in the *Financial Times*' list of non-public companies are private equity firms.
[c] *People's Daily online* (11 February 2006), China.
[d] http://blog.taragana.com/n/gmac-financial-services-prices-45-billion-debt-offering-71458/.
[e] http://www.arabianoilandgas.com/article-5115-kuwait_petroleum_corp_reveals_80bn_plans.
[f] http://www.reuters.com/article/usDollarRpt/idUSN2649419020090526.
[g] "National oil groups' shares hit harder by downturn", *Financial Times,* 26 February 2009.

world average for TNCs from the United Kingdom, and below average for TNCs from Germany, Japan and the United States (table I.9).

The list of top 100 TNCs prepared by UNCTAD for the *World Investment Reports (WIRs)* contains, for statistical reasons, mainly listed companies, as their data are publicly available. Therefore it largely ignores the many non-listed companies (mainly State- or family-owned) that constitute an important proportion of the corporate sector in many countries. If these TNCs were taken into account, a number of non-listed companies would feature among the top 100 TNCs, both worldwide[26] and from developing countries (box I.4).

b. The impact of the global crisis on the top 100 TNCs

The ongoing economic and financial crisis, which erupted in the latter half of 2007, has resulted in a period of major turbulence for the world's top 100 TNCs. While their activities continued to grow during the first half of 2008, albeit moderately, they experienced setbacks towards the end of that year. Particularly affected were industries that are sensitive to the business cycle, such as automotive and transport equipment, electronic equipment, intermediate goods and mining. The downturn became worse during the first months of 2009. By then, other industries, such as food and beverages, utilities and telecommunication

services, also began to feel the adverse effects of the crisis, though to a lesser extent. Confronted by declining profits and growing overcapacities, many TNCs announced major cost-cutting programmes, including layoffs, divestments, and a reduction of investment expenditures. In some of the most affected industries, such as automotives, the crisis also triggered a wave of major restructurings (as mentioned in section A above).

Activity indicators for the top 100 TNCs show that the impact of the crisis was only marginal in 2008 as a whole (annex tables A.I.9-A.I.10). Their total sales increased from their 2007 sales figures by 12% in current dollar terms, representing additional revenue of about $901 billion, and their total employment also rose by 4%.[27] A handful of TNCs in the automotive industry (especially General Motors, Chrysler, Toyota, Nissan and Honda), which had already faced a depressed market even before the crisis began, recorded declining sales in 2008.

There are three major reasons for these apparently paradoxical results. First, the financial crisis, which deepened in September 2008, started affecting the activities of the largest TNCs only from the last quarter of 2008, thus limiting the apparent impact on activity indicators for the year as a whole (figure I.15). For instance, despite a sharp fall in demand for commodities (and subsequently in prices) at the end of 2008, many oil and even some mining companies, such as Total, ExxonMobil and BHP Billiton, outperformed the previous year's results in terms of sales and profits for the whole year because of favourable market conditions in the first three quarters of 2008.

Second, in many industries such as utilities, food and beverages and business services, the market remained relatively stable until the end of the year. For instance, sales for the fourth quarter of 2008 by E.ON, InBev and Vivendi Universal were higher than those observed for the same period in 2007.

Third, the largest TNCs continued to acquire other companies, with direct consequences for the apparent growth in volume of their activity. In 2008, they undertook 21 major cross-border M&A purchases valued at more than $3 billion (annex table A.I.3).

However, what did turn negative was their net income, which declined by 27% overall.[28] There were a number of causes of this downturn. First, as a direct consequence of the financial crisis, the cost of borrowing increased in the last months of 2008. The spread on corporate bonds, for instance, reached a historic high at the end of 2008.[29]

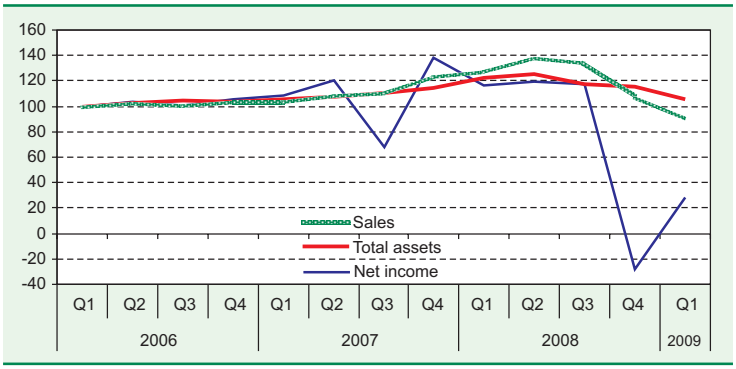
Second, companies' results reflected heavy losses in the value of their assets and real estate property as a result of falling stock markets and real estate markets.[30] At the end of 2008, the value of the total assets of the largest TNCs was 0.9% lower than the previous year.[31] Provisions were also made to cover the costs of cost-cutting plans, especially with respect to layoffs (see below). Thus, some companies, such as Cemex, Dow Chemical, Rio Tinto, Alcoa and Xtrata, which in the past had implemented very ambitious development plans – especially through M&As – were suddenly confronted with high levels and costs of debt, lower asset values and a slowdown in their markets and revenues.

Third, for some of the largest TNCs, which had already experienced a slowdown of activity before the crisis erupted, yearly profits declined significantly in 2008, turning into heavy losses for a number of them. Those particularly hard hit were many automobile companies such as Ford, General Motors, Nissan and Toyota.

Fourth, some companies – especially those directly involved in processing commodities into manufactured goods – were faced with higher prices of inputs, which they were unable to pass on in their selling prices due to tightening market conditions. This resulted in a squeeze on margins, and therefore on profits.

Negative consequences of the economic and financial crisis on the largest TNCs' activities and their financial results have continued to unfold and deepen, particularly from the beginning of 2009. This is especially true for TNCs engaged in commodities, intermediate goods and automotives. For instance, sales in the first quarter of 2009, as compared to the same period last year, were down by 49.3% for ArcelorMittal, 49% for Royal Dutch/Shell, 47% for General Motors, 47% for Chevron, and 46% for ExxonMobil.[32]

Figure I.15. Quarterly evolution of sales, total assets, and net income for selected TNCs among the 100 largest, 2006–2009
(Index: 100 = 2006 1st quarter)



Source: UNCTAD, based on Bloomberg.

Note: Based on data for 62 of the top 100 TNCs that reported quarterly data for the entire period.

In order to improve their balance sheets and arrest their deteriorating profits, TNCs have been extensively curtailing expenditures and taking steps to reduce their debt.

This is being done through three major channels:

- Large cuts in operating expenditures, especially through layoffs. Plans for large job cuts have been announced by many of the top 100 TNCs since September 2008.[33]
- Scaling down investment programmes. Many planned acquisitions or greenfield projects of the top TNCs have been cancelled, reduced or postponed due to the combined impact of a setback in market expectations and reduced internal and external financial resources.[34]
- Divestments of some corporate units and assets. These operations are meant not only to curtail operating costs, but also to generate cash in order to reduce debt ratios, and/or simply beef up available cash that had diminished due to faltering sales. This has led, in particular, to a rising number of sales of non-strategic affiliates.[35]

Another consequence of the crisis is an acceleration of industry restructurings due to two main factors. First, some companies suffering from an already fragile financial situation before the crisis might be affected by the current turmoil to the point that they go bankrupt or have no other choice than to be acquired to survive. Others might become vulnerable to such hostile bids due to the presently low market value of their stocks. Such companies as Chrysler or Endesa have already changed owners (table I.10). Others (e.g. Volvo among others) might also go through major changes in ownership in the coming months.

Table I.10. Examples of recent restructurings by some of the 100 largest non-financial TNCs

Daimler Chrysler AG	A de-merger took place in May 2007 between Daimler and Chrysler. The latter was then sold to a consortium of United States investors led by the investment fund, Cerberus. After filing for bankruptcy in April 2009, Chrysler's capital was restructured. Major owners will be the United Auto Workers (a trade union) and the Italian auto maker Fiat. The United States Federal Government and the Governments of Canada and its Province of Ontario will also own some stakes.
Suez	Suez merged with GDF (France) in July 2008. Total foreign assets of the two companies amounted to more than $110 billion in 2007, placing the new group 12th among the largest non-financial TNCs.
General Motors	GM filed for bankruptcy in June 2009. According to the rescue plan, it will be owned 60% by the United States Federal Government, 17% by the United Auto Workers, and 12% by the Governments of Canada and Ontario Province.
Endesa	In February 2009, the Italian group Enel, which already owned 67% of Endesa, acquired an additional 25% share in Endesa from the Spanish construction company Acciona.

Source: UNCTAD.

Second, and conversely, companies less affected than others by the crisis, and having substantial cash reserves, could seize takeover opportunities triggered by the crisis to increase their market share or critical mass.[36] Some large TNCs have undertaken major acquisitions (e.g. Enel, Suez, Roche and Fiat).

Consequently, the crisis might accelerate underlying trends towards restructuring and concentration in many industries. This is likely to have major consequences for the size and ranking of the top 100 TNCs. Regarding their internationalization level, these opposing factors seem to have balanced each other, as the average TNI of the top TNCs remained practically unchanged between 2007 and 2008 (figure I.14).

However, it should be emphasized that the impact of the crisis on the largest TNCs has differed widely by industry and country, and even by individual firm. On the one hand, firms in many business-cycle-sensitive industries such as automotive and other transport materials, construction, electrical and electronic equipment, and intermediate goods, as well as those in the financial sector, have been among the worst hit by the crisis. On the other hand, those in some less cyclical industries, with more stable demand patterns, have been less affected. For example, among the 100 largest TNCs, many in oil and gas (ExxonMobil, Chevron, British Petroleum, Royal Dutch Shell, GDF Suez, Total), in food, beverages and tobacco (Nestlé, SAB-Miller, Coca-Cola, Kraft Foods, British American Tobacco), in telecommunication services (Deutsche Telekom, TeliaSonera), in utilities (Endesa, RWE, EDF) and in pharmaceuticals (Roche, AstraZeneca, Johnson & Johnson), as well as in consumer goods (Unilever, LVMH) and retailing (Wal-Mart) continued to register large profits, and some even growing profits, in 2008.

2. The top 100 TNCs from developing economies

a. A growing role in the world economy

Reflecting the overall strengthening of emerging economies, the relative size of the top TNCs from developing countries, compared to their counterparts from developed countries, has grown rapidly over the past 15 years. This trend continued in 2007, when the assets of the 100 largest TNCs

Table I.11. Snapshot of the 100 largest TNCs from developing economies, 2006–2007

Variable	2006	2007	% Change
Assets ($ billion)			
Foreign	571	767	34.3
Total	1 694	2 186	29.0
Foreign as % of total	34	35	1.4[a]
Sales ($ billion)			
Foreign	605	737	21.8
Total	1 304	1 617	24.0
Foreign as % of total	46	46	-0.8[a]
Employment (thousands)			
Foreign	2 151	2 638	22.6
Total	5 246	6 082	15.9
Foreign as % of total	41	43	2.4[a]

Source: UNCTAD/ Erasmus University database.

[a] In percentage points.

Note: Due to differing reporting periods, an insufficient number of TNCs from the developing list have reported 2008 data to present a 2007–2008 comparison.

from developing countries rose by 29% from their level in 2006, while those of the top 100 TNCs worldwide increased by only 16% (table I.11). As a result, while the total assets and employment of the top 100 non-financial companies from developing countries amounted to only 18% and 34% of assets and employment, respectively, of the top 100 non-financial TNCs worldwide in 2006, these figures rose within just one year to 20% and 41% respectively.

This dynamism of TNCs from developing countries is largely due to the appearance of new players. Over the past 10 years, the composition of the list of top 50 TNCs from developing economies has changed considerably: only 20 of those present in the *WIR99* list are in the *WIR09* list, while 30 new companies have appeared.

As noted above (section B.1), seven companies from developing economies already rank among the top 100 TNCs, as against none in 1993. With foreign assets of $83 billion in 2007, Hutchison Whampoa (Hong Kong, China) remained in the lead among the top 100 developing-economy TNCs, accounting for almost 11% of their total foreign assets. It was followed by Cemex (Mexico), LG Corp (Republic of Korea), Samsung Electronics (Republic of Korea), Petronas (Malaysia), Hyundai Motor (Republic of Korea) and CITIC (China) (annex table A.I.11).

The internationalization of the 100 largest TNCs based in developing economies, as measured by their TNI, remains substantially lower than that of the world's 100 largest TNCs (figure I.14): 54% as against 62% in 2007. However, the gap between the two has been noticeably reduced since 1993, due to the rapid internationalization of the largest firms from the developing world.

In terms of the nationality of firms, Asia remains by far the major home region, even increasing its lead over time. Hong Kong (China) and Taiwan Province of China dominate both the 2007 and 2008 lists. Singapore and China have maintained their rankings with 11 companies each. Other important home countries are South Africa (9), Malaysia (6), the Republic of Korea and Mexico (5 each).[37] Companies from East Asia are, on average, more internationalized than others (table I.12).

An analysis by industry shows a very diverse pattern of activities. Companies from the electrical/ electronic and computer industries still dominate the 2007 list of the 100 largest TNCs from developing countries, with 19 entries. They are followed by TNCs in petroleum industries (9), telecoms (7), food and beverages (7), and transport and storage (6). There are also a larger number of diversified TNCs (12), a figure much higher than for the 100 largest TNCs worldwide (5).

Table I.12. TNI values for the 100 largest TNCs from developing countries, by region, 2007

Region	Average TNI [a]	
	TNI	Number of TNCs
Africa (South Africa)	47.6	9
South-East Asia	49.9	19
South Asia	47.4	2
East Asia	59.2	57
West Asia	56.1	4
Latin America and the Caribbean	40.9	9
Total	**54.4**	**100**

Source: UNCTAD/Erasmus University database.

[a] TNI is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

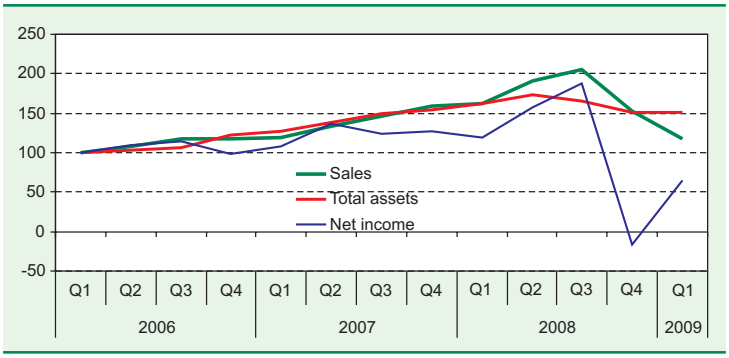
Note: Due to differing reporting periods, an insufficient number of TNCs in the developing-country list have reported 2008 data to enable a 2007–2008 comparison.

The degree of internationalization of the top developing-country TNCs varies widely by industry. For instance, the average TNI for developing countries' largest TNCs in the electrical and electronics and computer industries is slightly higher than that of their counterparts worldwide, while in telecommunications, petroleum and motor vehicles it is much lower.

b. The impact of the global crisis on developing-country TNCs

The decline in exports to developed countries since the last quarter of 2008, as a direct consequence of the crisis, has had a considerable impact on the largest TNCs from developing countries. Their sales began to fall markedly from that period, and their profits for the whole year fell by 28.9% (figure I.16).[38] But many of them also benefited from growth in their domestic markets, especially in Asia, despite a slowdown. Those with abundant cash at their disposal may take advantage of the present low prices of assets

Figure I.16. Quarterly evolution of sales, total assets, and net income for selected TNCs among the 100 largest from developing countries, 2006–2009
(Index: 100 = 2006 1st quarter)



Source: UNCTAD, based on Bloomberg.

Note: Based on data from 28 of the top 100 developing-country TNCs that reported quarterly data for the entire period.

to make new acquisitions in order to strengthen their presence in developed-country markets and foster their technological capabilities.

However, the situation varies widely by activity and company. Companies in the petroleum and gas industries saw their revenues shrink in 2008, as many commodity prices fell from their previous highs. However, these companies are still undertaking investments in order to acquire new sources of energy. Chinese energy TNCs, for example, are taking advantage of low asset prices by continuing to seek acquisitions abroad.

Producers of metals and metal products posted sharp declines in sales in early 2009. For example, the Brazilian company, Metalurgica Gerdau SA, reported significantly lower sales, production and profits in early 2009, and has postponed previously announced investment plans. But there are also a handful of companies that are reporting better results and prospects: for example, Gold Fields Limited (South Africa), supported by high global demand for gold, reported favourable prospects.

Electrical and electronics manufacturers are also facing a decline in demand, mainly in their western markets. Some of them are carrying out aggressive innovation and technology diversification strategies that might alleviate the consequences of this downturn. For example, Quanta Computer (Taiwan Province of China) has announced a major investment in touchscreen technology, which is used extensively in the growing smart-phone market worldwide. Furthermore, as the largest notebook manufacturer contracted by Acer Inc (Taiwan Province of China), it expects to benefit from Acer's sales forecast for continued growth. Lenovo (China) has decided to focus on China, with its large domestic market, as well as on other emerging markets, while attempting to stabilize its high-end markets overseas.

In telecommunications, the situation seems better. Companies such as Qatar Telecom, América Móvil (Mexico) and Zain (Kuwait) have posted good results, and even significant growth in sales. All of them are aiming to expand their international presence. Some diversified groups, especially those well positioned in East Asia and China, have demonstrated quite a resilience to the present economic downturn. For example, Hutchison Whampoa saw its revenue rise 8% in 2008 to more than $30 billion, although its profits fell by 42%. Despite a more cautious expansion strategy, it is still examining potential new investments, especially land and property deals in China, in addition to some in its home economy. On the other hand, firms such as Capitaland Limited, a Singaporean real estate company, has cancelled its planned building of 12 malls in China.

3. The top 50 financial TNCs

As the effects of the current financial and economic crisis continue to ripple throughout the global economy, the world's largest financial TNCs find themselves in an unusual state of flux. The collapse of the subprime mortgage market in the United States and subsequent credit writedowns of more than $1 trillion laid bare a number of serious systemic problems within the international financial system. Most notably, by revealing the lack of transparency in the true valuation of a number of financial institutions' assets, this series of writedowns precipitated a severe erosion of confidence that threatened to undermine the stability of the system. While the situation has improved marginally in 2009, the potential for additional shocks remains high. Recent estimates suggest that total write-downs on United States-originated assets may amount to $2.7 trillion globally, with additional write-downs of $1.3 trillion on other assets due to the economic downturn, putting a further strain on both banks and governments (IMF, 2009b). In this tumultuous environment, the health of the world's largest financial TNCs and their prospects for further internationalization will continue to be tested.

a. Internationalization of the top 50 financial TNCs in 2008

Even though battered by the events of 2007 and 2008, many of the largest financial TNCs ended the

year at a high point in terms of internationalization. Measured by UNCTAD's Geographical Spread Index (GSI), Citigroup (United States) had the largest geographical spread among the financial TNCs in 2008, even after suffering severe setbacks and becoming partially State-owned. European financial groups continue to dominate the top 50 list, with 36 entries, propelled higher in the rankings because of their ownership of affiliates in many countries. This is partly due to the continent's open markets and the euro zone. North American financial TNCs – with 11 entries – were decimated by the events of the past year. This might result in a future decrease in their overall internationalization, with large groups such as Citigroup facing the possibility of being broken up into smaller companies. Financial TNCs in Japan and China, which have significant assets and could benefit from the crisis, continue to show lower levels of internationalization than their developed-country peers. Mitsubishi UFJ Financial Group (Japan) was once again the most internationalized Asian bank, ranking 38th (annex table A.I.12).

b. The impact of the global crisis on the top 50 financial TNCs

While there was a lull in mid-2008, after the near collapse and subsequent rescue of both Northern Rock (United Kingdom) and Bear Stearns (United States), the effects of tightening credit markets and continued asset write-downs abruptly accentuated the crisis in September 2008. During that month, and in the months that followed, some of the largest financial TNCs in the world collapsed, and were either bailed out by their governments, or, in the case of Lehman Brothers (United States), allowed to fail, with far-reaching consequences. Among other institutions which failed, or were nationalized or bailed out at that time, were American International Group (United States), Fortis (Belgium), and Dexia (Belgium). Prominent Wall Street banks, such as Merrill Lynch (United States, which was sold to Bank of America), Goldman Sachs (United States) and Morgan Stanley (United States) did not fail, but ceased to operate as investment banks, opting instead to convert to commercial banks.

There were a number of bank failures in some other countries as well. For example, by October 2008, most of Iceland's financial sector fell into government hands. In 2009, government rescue programmes had been implemented in many developed countries to bolster, and in some cases take control of, their respective financial sectors. In the United States, the Troubled Asset Relief Program (TARP) allowed the Government to inject, initially, $125 billion worth of capital into the country's largest banks, which were among the largest financial TNCs in the world. Subsequent capital injections resulted in the Government becoming the largest single shareholder in a number of banks, including Citigroup. European governments were also active in providing capital. For example, Crédit Agricole, BNP Paribas and Société Générale all received capital from the French Government.

As the economic situation continued to deteriorate globally, financial TNCs saw their profits fall and were forced to take strong action to maintain their companies as ongoing concerns. Large layoffs were planned by several of the largest financial TNCs, along with announcements of divestments of foreign operations or liquidations of equity positions throughout the year. By early 2009, several of the largest financial TNCs in the world had sold, or were in the process of selling, large equity positions around the globe: Royal Bank of Scotland (United Kingdom) sold its entire stake in Bank of China (China) for roughly $2.3 billion; UBS (Switzerland) sold 3.4 billion shares of Bank of China, valued at $900 million; Bank of America reduced its position in China Construction Bank by selling a $7.3 billion block of shares; and Allianz (Germany) and American Express (United States) jointly announced the sale of $1.9 billion of shares in Industrial and Commercial Bank of China (China).[39] Divestments were also becoming a frequent occurrence by early 2009. Citigroup sold its Japanese trust banking unit to Mitsubishi UFJ Financial Group (Japan) for about 25 billion yen ($282 million). However, the expected dissolution of American International Group, among other failed or nationalized TNCs, failed to materialize by mid-2009. This has created the potential for several acquisition targets to come onto the market later in the year and in 2010. To improve their operating budgets, many large transnational financial institutions began employee retrenchments at home and abroad. Goldman Sachs, Deutsche Bank, Morgan Stanley, Citigroup, Nomura, UBS and Credit Suisse all announced layoffs in their overseas operations.[40]

M&As, though difficult to finance in this environment, did not cease. They continued mainly for two motives: survival and strategic gain. Though not strictly FDI related, Merrill Lynch, which faced potential collapse, found it expedient to be acquired by Bank of America in the United States, marking its exit from future lists of top 50 financial TNCs. Santander (Spain) made several strategic acquisitions during 2008, such as Alliance & Leicester (United Kingdom) and Bradford & Bingley (United Kingdom). Santander also acquired the outstanding shares of Sovereign Bancorp (United States) that it did not already hold, thus gaining its first retail presence in the United States. Nomura (Japan) and Barclays (United Kingdom) both picked assets from the stricken Lehman Brothers and thus extended their

operations. Mitsubishi UFJ Financial Group (Japan) took a 21% stake in United States investment bank Morgan Stanley.

4. Conclusion

Faced with the worst global recession in decades, the world's largest TNCs are struggling in 2009. The sharp fall in profits registered by many of them in 2008 was only a harbinger of the many difficulties they are now facing. As global demand continues to weaken, and threatens to remain depressed throughout 2009, many of the largest TNCs will find their revenues falling beyond what they had anticipated a year ago. This will have a strong impact on their propensities and capabilities to invest abroad. And, given the global dimensions of the current economic situation, this applies to all TNCs in nearly every region of the world and in nearly every industry.

However, the current economic crisis should not be seen only as a negative force for the largest TNCs, both financial and non-financial. It also creates an opportunity for them to expand into additional markets at a relatively low cost. Many of the largest TNCs could promote their internationalization strategies with the aim of maximizing efficiencies across markets and geographies. Moreover, in the current situation, TNCs from developing economies could gain strength if they manage to successfully nurture domestic and foreign demand for their products. Their strong growth so far, as a result of the internal dynamics of their home-country markets, could gather momentum if demand for their products in the wider global market picks up when conditions improve.

C. FDI by special funds

1. Declining FDI by private equity funds

FDI by private equity funds and other collective investment funds has also been adversely affected by the financial crisis. Cross-border M&As by these funds fell to $291 billion in 2008, or by 38% from the peak of $470 billion in 2007 (table I.13). The number of transactions went down by 9%, to 1,721. The sharp drop in the value of cross-border M&As by private and collective investment funds was associated with a strong decline in large-scale investments (table I.13). In 2009 this trend has even accentuated: in the first half of 2009, both the value and number of these deals further declined, by 78% and 17% respectively.

Cross-border M&As by private equity and hedge funds were hit harder by the financial market crisis than those by other investors. While their share in the total value of all cross-border M&As for the year declined slightly from 28% in 2007 to 24% in 2008, it fell dramatically in the fourth quarter of 2008 to only 11%. This trend continued well into the first half of 2009 (table I.13). The main catalyst for this sharp decline was that the financing of LBOs – which contributed most to the dynamic growth of cross-border M&As by these funds in previous years (*WIR08*: 20) – nearly dried up in the second half of 2008. This was largely due to the increasing risk consciousness of financial institutions in Europe and North America, which caused them to halt loans for large and highly leveraged M&A buyout transactions. In addition, even though private equity funds were able to raise $554 billion in 2008 as a whole,[41] (making it their second strongest fund-raising year), their fund-raising in the second half of that year dropped by 40%, compared to that in the first half (Private Equity Intelligence, 2009:8).

The relative importance of private equity funds and other collective investment funds is likely to be

Table I.13. Cross-border M&A purchases by private equity firms and hedge funds, 1996–2009
(Number of deals and value)

Year	Number of deals		Value	
	Number	Share in total cross-border M&As (%)	$ billion	Share in total cross-border M&As (%)
1996	715	12.2	44.0	16.6
1997	782	11.6	55.4	14.9
1998	906	11.3	77.9	11.2
1999	1 147	12.7	86.9	9.6
2000	1 208	12.0	91.6	6.8
2001	1 125	13.9	87.8	12.0
2002	1 126	17.2	84.7	17.5
2003	1 296	19.6	109.9	26.7
2004	1 626	22.0	173.2	30.5
2005	1 724	19.5	205.8	22.1
2006	1 693	17.7	285.5	25.4
2007	1 890	17.6	469.9	27.6
Q1	*451*	*16.7*	*73.3*	*25.3*
Q2	*520*	*19.2*	*183.2*	*37.8*
Q3	*439*	*16.6*	*115.6*	*29.5*
Q4	*480*	*18.1*	*97.7*	*18.3*
2008	1 721	17.7	291.0	24.1
Q1	*440*	*17.1*	*127.1*	*35.5*
Q2	*414*	*16.3*	*69.9*	*23.6*
Q3	*446*	*18.3*	*60.4*	*24.3*
Q4	*421*	*19.2*	*33.5*	*11.1*
2009	711	21.7	43.6	17.2
Q1	*362*	*20.5*	*34.9*	*23.1*
Q2	*349*	*23.3*	*8.7*	*9.6*

Source: UNCTAD cross-border M&As database.

Note: Private equity firms and hedge funds refer to acquirers whose industry falls in the category "investors not elsewhere classified". This classification is based on the Thomson Finance database on M&As. Data show gross cross-border M&As purchases of companies by private equity firms and hedge funds (i.e. without subtracting cross-border sales of companies owned by private equity firms and hedge funds).

negligible as long as the financial crisis continues. Several large LBOs collapsed in the latter half of 2008 and 2009,[42] and it is expected that a large number of private equity firms will succumb to the crisis. The surviving firms may therefore concentrate increasingly on smaller transactions in small and medium-sized enterprises (SMEs). For instance, the average value of cross-border M&As in 2008 was less than $200 million, 32% lower than in the previous year. In the last quarter of 2008, it was only $80 million (table I.13). Private equity firms are also looking for more deals in infrastructure and energy-related industries, which are benefiting from economic stimulus packages initiated by various governments. Because of their sheer size, such transactions often take the form of joint deals with private or public companies. Distressed debt financing and special parts of private equity are also growing. These trends combined suggest that these funds are not targeting large companies as much as before, which may depress the total value of their cross-border M&As well into the future.

2. FDI by sovereign wealth funds on the rise despite the crisis

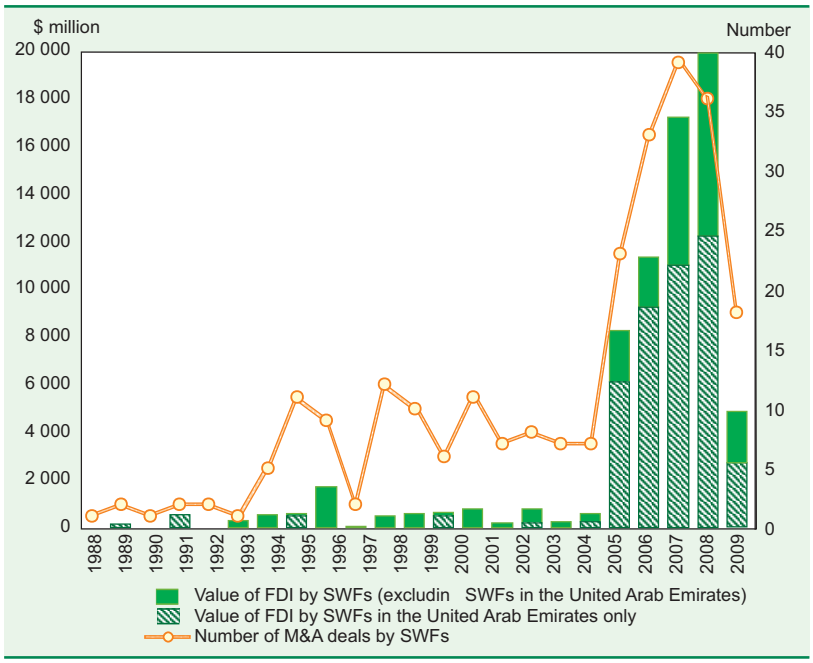
SWFs, which are relatively new investors, registered a record $20 billion in FDI in 2008, a rise of 16% over the previous year (figure I.17). Their assets under management at the end of the year totalled $3.9 trillion, despite the fall in oil prices. Since 2005, SWFs have embarked on a conspicuous quest to participate in FDI or cross-border M&As. Indeed, fuelled by higher export surpluses in merchandise trade, and rising incomes from the export of oil and other natural resources, they have generated rapidly growing foreign-exchange reserves for their home countries. Several SWFs have also started to diversify their asset portfolios by investing in equity capital abroad, including FDI (*WIR08*: 20ff.; IWG, 2008a). This increase bucked the downward trend in global FDI as a whole. However, during the course of the calendar year 2008, the sharp economic downturn in developed countries and the worldwide slump in stock prices led to large losses in SWFs' investments and depressed the pace of growth of their cross-border M&A investments.

Cumulative cross-border M&A investments by SWFs over the past two decades totalled $65 billion by the end of 2008, of which $57 billion was invested only in the past four years. Although this level of investment is still low compared with the total volume of these funds' assets (accounting for just 1.7% of assets), FDI is a much larger component of these funds than in the past.

FDI by SWFs has been largely concentrated in developed countries, which as a group have received nearly three quarters of SWFs' total FDI outflows over the past two decades. The United Kingdom, the United States and Canada, in that order, have been the most preferred destinations. In 2008 alone, SWFs invested large amounts of equity capital in the United States and Sweden through cross-border M&As: $4.8 billion and $4.6 billion respectively. For instance, Temasek (Singapore) acquired an 11% stake in Merrill Lynch (United States) for $4.4 billion, and Dubai International Financial Centre (DIFC) acquired a 69% stake in OMX AB, a Swedish financial markets group.[43]

In terms of sectoral distribution, SWFs' investments have been highly concentrated in financial and business services. During 1987–2008, financial services accounted for 26% (by value) of SWFs' total cross-border M&As, and business services for 15% (figure I.18). The largest investments were made by SWFs of the United Arab Emirates and by

Figure I.17. FDI[a] by sovereign wealth funds, 1987–2009[b]



Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] Cross-border M&As only; greenfield investments by sovereign wealth funds (SWFs) are assumed to be extremely limited. Data show gross cross-border M&A purchases of companies by SWFs (i.e. without subtracting cross-border sales of companies owned by SWFs).

[b] For 2009, preliminary data for January-June only. Transaction values for some deals were not available.

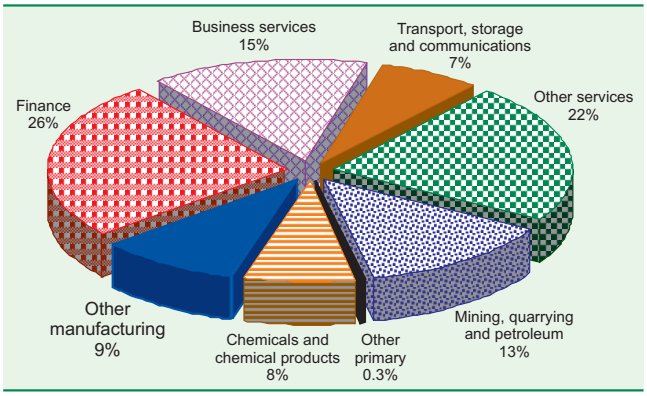
Singapore's Temasek. This pattern of investments has led to an increased concentration of risk (Deutsche Bank Research, 2008: 8). For example, investments in the financial sector contributed the most to the massive losses that SWFs had to bear in 2008, and provoked criticism in the home countries of the funds (e.g. China).[44] Compared with the services sector, the shares of the manufacturing and primary sectors were very low: 17% and 14% respectively. However, in 2008, SWFs extended their investments abroad in mining, quarrying and petroleum industries. Thus the share of these industries rose to over one fifth of SWFs' total FDI flows in 2008, making them the second largest recipients after financial services (at 51%).

In 2008, SWFs (with some exceptions, such as the Qatar Investment Authority) reacted to the financial crisis by pulling out of financial services, which nevertheless remains the largest recipient industry. This was a departure from their earlier focus, typified by capital injections into United States and European global banks, which ended up causing them to suffer heavy losses in 2008. While SWFs do not necessarily need to raise funds, and tend to have long time horizons in their investments, the financial crisis has started to affect their home economies. A number of them are withdrawing their investments in anticipation of further reductions in the value of their investments, and some of them are re-routing their funds for use in their domestic economies to restore investor confidence. Meanwhile, some host countries have attempted to prevent foreign takeovers by SWFs in certain industries for reasons of economic security (*WIR08*).

In recent years, growing investments by SWFs in developed countries have provoked mixed reactions in those host countries. On the one hand, the entry of SWFs has been welcomed, as they have helped to ease the capital shortages of their target firms. In particular, the large-scale investments of several SWFs in the North American and European financial sectors contributed, for a while, to the stabilization of their banking systems (*WIR08*). Most of these investments were portfolio investments, as SWFs only acquired minority stakes of less than 10%. In several cases of larger investments, SWFs did not acquire even voting rights. On the other hand, SWFs' investments have also provoked harsh policy reactions in many developed host countries, and a tightening of investment rules (*WIR08*: 25–26). One outcome has been that investing countries and host countries have responded to growing protectionist sentiments by combining their efforts to develop guidelines for an investor-friendly framework, including requiring greater transparency of investments by SWFs (box I.5).

Prospects for further increases in cross-border M&As by SWFs in 2009 have deteriorated dramatically. As noted above, the asset portfolios of these funds have lost considerable value since the onset of the financial market crisis. According to some estimates, the total value of their assets may have fallen by 25–30% in 2008.[45] The steady flow of foreign exchange reserves that were channelled into the funds by home governments and central banks has slowed since the second half of 2008 due to the falling prices of oil and other natural resources and to shrinking export surpluses. Many emerging-market and transition economies have lost substantial amounts of foreign-exchange reserves since 2008. In response, SWFs are starting to invest more in their home-country domestic markets – either directly or indirectly – to support their banking industries, to boost expenditures by their firms, and, in some cases, to avoid foreign takeovers of some domestic firms.

Figure I.18. Cumulative FDI[a] by SWFs, by main target sectors and top five target industries, 1987–2008



Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).
[a] Cross-border M&As only; greenfield investments by SWFs are assumed to be negligible.

3. FDI by private equity funds and sovereign wealth funds compared

Private equity funds and SWFs gained a significant share in cross-border FDI during the previous M&A boom in 2003–2007. Both funds drew widespread attention in international financial markets, which focused on their investment behaviour and the effects of their investments on host countries. Discussion on these issues led to some political disputes. The crisis in financial markets has seriously affected both funds, initially private equity funds, followed with some time lag by SWFs. It is useful for policymakers to have a good understanding of these funds' role in FDI transactions and the differences between them in terms of their investment patterns and performance.

Private equity funds invest in venture capital, growth capital, distressed capital, and

Box I.5. Guidelines on cross-border investments by SWFs

Increased FDI by SWFs in developed countries has raised concerns about the possible detrimental effects of investments by the funds. The main point of criticism is that many of the investing SWFs that are domiciled in China, the Russian Federation and the West Asian countries lack a reasonable degree of transparency and accountability (Truman, 2007a).[a] This perceived lack of transparency, and the fear that SWFs could be pursuing political rather than economic goals, has provoked reactions from recipient countries.

In principle, the rise of FDI by SWFs should not precipitate the erection of new barriers to international capital flows and to FDI. This view has been reiterated in various declarations within developed-country forums. In October 2007, the Group of Eight (G-8) declared that "SWFs are increasingly important participants in the international financial system and our economies can benefit from openness to SWF investment flows" (Group of Eight, 2007). In February 2008, the European Commission urged a common European approach to SWFs that should strike the right balance between addressing concerns about SWFs and maintaining the benefits of open capital markets (Commission of the European Communities, 2008). Yet, at least 11 developed countries have approved, or are seriously planning, new rules to restrict certain types of FDI, or to expand government oversight of cross-border investments (Marchick and Slaughter, 2008: 2).

Countries that own SWFs have responded to these criticisms and to the policy reactions of recipient countries by taking steps themselves. The fear of further discriminatory measures being applied, that were already under way, led to the establishment of the International Working Group of Sovereign Wealth Funds (IWG) on 1 May 2008. With the help of the International Monetary Fund (IMF), which facilitated and coordinated their work, IWG members agreed on Generally Accepted Principles and Practices (GAPP) – the so-called Santiago Principles – in October 2008. The GAPP seeks to ensure that SWFs bring economic and financial benefits to home countries, recipient countries and the international financial system (IWG, 2008b). These principles represent a collaborative effort by SWFs from developed, developing and transition economies to establish a comprehensive framework for providing a clearer understanding of their operations. Voluntary adoption by all members would signal a strong commitment to the GAPP, enhance the stabilizing role that SWFs can play in financial markets and help maintain the free flow of cross-border investments. The EU and the OECD have reacted very positively to the Santiago Principles (Almunia, 2008; OECD, 2008a).

In June 2008 the ministers of OECD countries stated that recipient countries should not erect new protectionist barriers to foreign investments, and that they should not discriminate between investors. Accordingly, the OECD and its member countries adopted a declaration expressing their commitment to preserve and expand an open international investment environment for SWFs. In this context, they also endorsed guidelines, developed under the auspices of the OECD Investment Committee, to ensure that investment measures to safeguard national security are not a form of disguised protectionism (OECD, 2008b).

Source: UNCTAD.

[a] Truman (2007b) and the Sovereign Wealth Fund Institute (2009) have developed indices that measure the transparency of SWFs.

buyouts, among other forms. In recent years, cross-border M&As by private equity funds and other collective investment funds have extended across all sectors, and originated mainly in North America and Europe. While there is little doubt that venture capital financing may spur economic growth by providing capital to firms that otherwise would have only limited possibilities to raise capital or loans, the effects of private equity investments in the form of LBOs are not clear. Some contend that LBOs can improve economic welfare by increasing efficiency and productivity (United States, GAO, 2008); but other studies have found that the performance of private equity funds, as reported by industry associations and previous research, has been overstated (Phalippou and Gottschalg, 2009). The collapse of cross-border LBOs by private equity funds in the second half of 2008 depressed the performance of those funds in 2009, seriously affecting their fund-raising capabilities. This, combined with the hesitant lending policy of the financial sector, will further depress cross-border M&As by private equity funds and other collective investment funds in the near future.

SWFs have some similarities with private equity funds, but there are also large differences in their investment behaviour and the financing of FDI. There are over 50 such funds in more than 40 countries, but "there is no such thing as an average SWF".[46] Some funds are new (e.g. China Investment Corporation, established in 2007), while others are very old (e.g. Kuwait Investment Authority, founded in 1953). Some SWFs are very big (e.g. Abu Dhabi Investment Authority, with assets of more than $500 billion), and others are very small in size (e.g. Sao Tome and Principe, with assets of $20 million). Some are passive investors, while others are active investors (e.g. Singapore's Temasek Holdings). Their growth has reflected rising oil and non-oil commodity prices and the fast growing current-account surpluses of their home countries. During 2008, like other large asset funds, SWFs were hit by the financial market crisis, the value of their assets falling by nearly 30%.[47]

Despite the sharp decline in their assets, their more hesitant investment strategy since the second half of 2008, and in some cases a tendency to increase investments at home (Federal Reserve Bank of San Francisco, 2009: 4), SWFs could undertake more cross-border FDI in the near future. Worldwide, SWFs have more readily available financing for investment at their disposal than private equity funds. Unlike private equity funds, they are not under pressure to produce high short-term returns, they do not need co-financing by bank loans, and their investment horizon is longer than that of private equity funds and other collective investment funds.

The effects of SWFs on acquired firms are difficult to assess for a number of reasons. First their FDI is relatively recent. Second, their investments have not produced an above-average yield by spurring the efficiency of the firms they have acquired in the short term, since most of the acquired firms were in financial distress at the time of the investment or acquisition. In the long run, however, the performance of these firms is not certain; it depends on the quality of governance by SWFs and on various ancillary costs, including those of monitoring the operation and management of the target firms (Chhaochharia and Laeven, 2008; Fotak, Bortolotti and Megginson, 2008).

D. NEW DEVELOPMENTS IN FDI POLICIES

1. Developments at the national level

UNCTAD's 2008 survey of Changes to National Laws and Regulations related to FDI indicates that 110 new FDI-related measures were introduced by a total of 55 countries (table I.14). Of these, 85 measures were more favourable to FDI. Compared to the previous year, the percentage of less favourable measures for FDI has remained unchanged and stands at 23 per cent (table I.14).

From a regional perspective, South, East and South-East Asia and Oceania had the highest share of regulatory changes (25 per cent), followed by developed countries (20 per cent) (figure I.19). In all regions, the number of changes more favourable to FDI clearly exceeded those that were less favourable. They accounted for 75 per cent of the 16 measures adopted in Africa, 79 per cent of the 28 measures adopted in South, East and South-East Asia and Oceania, 80 per cent of the 15 measures adopted in the Commonwealth of Independent States (CIS), 91 per cent of the 22 measures in the developed countries, 55 per cent of the 20 measures adopted in Latin America, and 89 per cent of the 9 measures taken in West Asia and the SEE countries combined.

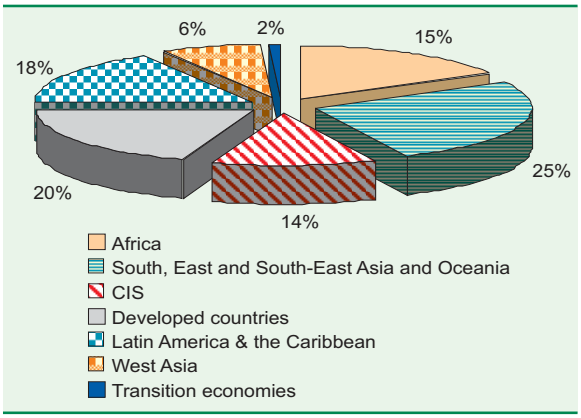
Out of the 110 new measures adopted during the review period, 33% introduced more favourable entry regulations, and another 44% of all measures improved the treatment or operations. Only 13% and 10% were less favourable in entry and treatment or operations, respectively (figure I.20).

a. Major policy trends

Investment liberalization continued during the review period in numerous countries. Several countries lowered existing obstacles to foreign investment, thereby continuing the trend of more openness towards FDI. Measures in this regard included raising FDI ceilings or the level of the general review threshold. In other cases, the acquisition of residential real estate by foreign investors was eased (chapter II). As in previous years, the trend towards lowering taxes on foreign investments (identified in *WIR08*) continued in the review period.

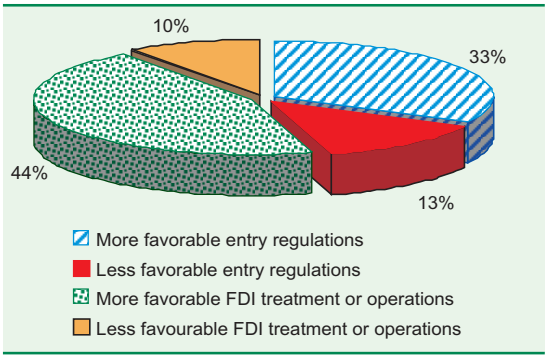
At the same time, various countries took new steps to regulate FDI. The trend of scrutinizing foreign investments for national security reasons continued in

Figure I.19. Regional distribution of FDI-related measures in 2008



Source: UNCTAD.

Figure I.20. Nature of FDI-related measures in 2008



Source: UNCTAD.

Table I.14. National regulatory changes, 1992–2008

Item	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Number of countries that introduced changes	43	56	49	63	66	76	60	65	70	71	72	82	103	92	91	58	55
Number of regulatory changes	77	100	110	112	114	150	145	139	150	207	246	242	270	203	177	98	110
More favourable	77	99	108	106	98	134	136	130	147	193	234	218	234	162	142	74	85
Less favourable	0	1	2	6	16	16	9	9	3	14	12	24	36	41	35	24	25

Source: UNCTAD database on national laws and regulations.

several countries. Some countries in Latin America took further steps to nationalize strategic industries, particularly extractive industries (chapter II).

b. Policies introduced in response to the financial crisis and their potential impact on FDI

So far, the current financial and economic crisis has had no major impact on FDI policies per se. Although numerous countries have adopted FDI-related legislation since the beginning of the crisis, it is difficult to determine whether and to what extent these measures were taken in response to the crisis. Also, while some new legislation is likely to have a positive effect on FDI flows, other regulations might produce the opposite result. Moreover, the crisis has had a considerable psychological effect inasmuch as it has triggered large public support for a stronger role of the State in the economy in numerous countries. It cannot be ruled out that State involvement will continue beyond the actual crisis, with longer term effects on FDI policies in the future (UNCTAD, 2009a).

(i) National policy measures

Many countries have adopted bailout programmes and individual rescue packages to support ailing companies, particularly those in the financial sector. Numerous countries – both developed and developing – have adopted economic stimulus packages, including public investment programmes, cuts in taxes and interest rates, and provision of low-interest loans. These measures may have a positive effect on inward FDI, provided they are designed and implemented in a non-discriminatory manner and open to participation by foreign investors.

Fears have been expressed that these government actions could result in investment protectionism by favouring domestic over foreign investors, or by introducing obstacles to outward investment in order to keep capital at home. There are no signs yet of a general trend towards more restrictive FDI policies in response to the crisis. However, some protectionist tendencies have emerged, as some countries have begun to discriminate against foreign investors and/or products in a "hidden" way using gaps in international regulations. Examples of "covert" protectionism include favouring products with high "domestic" content in government procurement – particularly in huge public infrastructure projects, de facto preventing banks from lending for foreign operations, invoking "national security" exceptions that stretch the definition of national security, or moving protectionist barriers to sub-national levels that are outside the scope of the application of international obligations (e.g. in procurement issues).

Looking to the future, a crucial question is which FDI policies host countries will apply once the global economy begins to recover. The expected exit of public funds from flagship industries is likely to provide a boost to private investment, including FDI. This could possibly trigger a new wave of economic nationalism to protect "national champions" from foreign takeovers.

(ii) Policy implications for developing countries

One major challenge for developing countries is to be able to continue to attract FDI during the crisis, especially investment that serves their long-term development goals and enhances competitiveness. Retaining existing investment is particularly important, since TNCs in financial difficulty may consider closing foreign affiliates or transferring them to other locations. Some developing countries, especially the more rapidly emerging countries, also need to consider the impact of the crisis and the evolving policy environment on their outward investment flows. Such flows have become an increasingly important aspect of their development strategies. In particular, divestment strategies of companies in financial difficulty in developed countries offer an opportunity for developing-country firms to purchase such foreign companies at an attractive price, and to acquire crucial technology, brands and other assets (UNCTAD, 2009a).[48]

2. Developments at the international level

During 2008, the network of IIAs continued to expand, although the number of bilateral investment treaties (BITs) concluded in 2008 (59) was lower than

in 2007 (65). The number of newly concluded double taxation treaties (DTTs) (75) and other international agreements with investment provisions (16) exceeds those concluded in 2007 (69 and 13, respectively). Moreover, the first six months of 2009 already saw the conclusion of 25 BITs and 6 other IIAs – a development that further strengthens and expands the current international investment regime. This also points to a continued reliance – in spite of the ongoing global economic and financial crisis – on the conclusion of IIAs as a means to promote foreign investment.

In parallel to the sustained expansion of the IIA regime, the number of investor-State disputes has also continued to increase. With numerous awards on key substantive issues, investor-State tribunals have contributed substantially to the increasing body of international investment law.

a. Bilateral investment treaties

In 2008, 59 new BITs were concluded. Developing countries were involved in 46, and developed countries in 38 new BITs. The total number of BITs rose to 2,676 at the end of 2008 (figure I.21).

In terms of regions, countries from developing Asia and the Oceania led, with the conclusion of a total of 31 BITs in 2008, half of which were with developed countries. Compared with 2007, the number of BITs Asian countries concluded with Latin American partners rose to 4. Overall, countries in the Asia-Oceania region are now party to 41% of all BITs.

African countries signed 12 new BITs in 2008, 8 of which were concluded with developed countries in Europe; Spain alone accounted for 3 of these. With a total of 715 BITs, African countries are now party to 27% of all BITs. The transition economies of South-East Europe (SEE) and the CIS signed 19 BITs, 11 of them with developed countries (all of them European partners). These transition economies are now party to 613 BITs, which account for 23% of all BITs. Latin America and the Caribbean, with 8 new BITs in 2008, followed at a slower pace. This region is now party to 483 BITs, or 18% of all BITs.

The number of BITs *between developing countries* also continued to grow. Of the 59 new BITs signed during the year, 13 were among developing countries. This points to the continuing importance of South-South cooperation on investment issues. At present 26% of all BITs are South-South treaties (figure I.22).

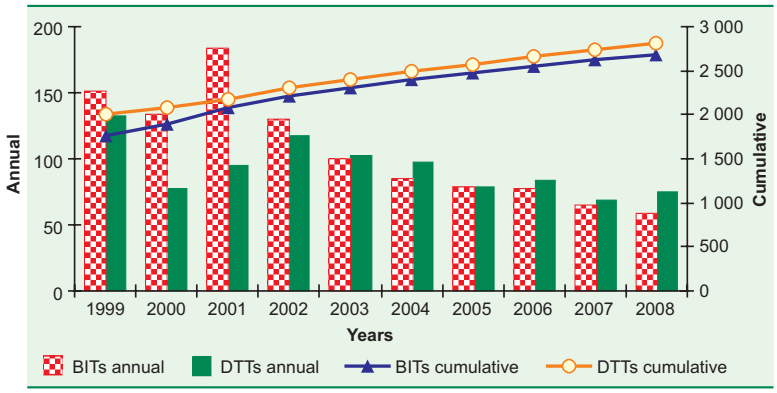
Three other notable developments shaped the evolution of the BITs network in 2008. One relates to the *termination of BITs*, a process involving mutual agreement between the signatory countries. Until the end of 2008, six BITs were terminated, and others are in the process of termination. For example, in 2008, the Czech Republic initiated the process for termination of 23 BITs which it had concluded with individual EU countries. One reason for the termination of BITs between EU member countries is to eliminate overlapping rules governing intra-EU investment flows. The current overlaps between BITs and EU law are due to the fact that, at the time of signature of the BITs in question, European rules for intra-EU investment did not apply between EU members and those countries that only later became EU members. Similarly, the termination might be related to the conclusion of a free trade agreement (FTA) that includes investment rules between the same treaty partners (e.g. the 2004 FTA between Morocco and the United States).

A second development relates to the *denunciation of BITs*, which is a unilateral act of withdrawal from an agreement. The denunciation of 11 BITs occurred in 2008. Ecuador denounced nine BITs, mainly with neighbouring Latin American countries. The other denounced BITs are the one between El Salvador and Nicaragua and the one between the Bolivarian Republic of Venezuela and the Netherlands. Among the reasons likely to motivate such a development could be a general reluctance towards BITs, questions about the effects that BITs have on a country's economic development, as well as the objective of ensuring compatibility between IIAs and domestic investment laws, including – as in the case of Ecuador and Bolivia – the country's constitution.[49]

A third development relates to the *renegotiation of BITs* – the continuation of an earlier trend, though on a smaller scale. In 2008, eight BITs were renegotiated. Again, the Czech Republic was particularly active: it concluded five protocols on amendments to its original BITs, a process reported as renegotiation of BITs. These renegotiations are based on Article 307 of the EC Treaty and aim at bringing the country's BITs into conformity with EU law.[50] Notably, in March 2009, the European Court of Justice (ECJ) ruled against two EU members (Austria and Sweden), because of their failure to adopt appropriate measures to eliminate incompatibilities between BITs entered into with third countries prior to accession of the member States to the EU and the EC Treaty.[51]

With the completed renegotiation of eight EU BITs,[52] the number of renegotiated BITs had reached a total of 132. While this is a continuation of an earlier trend on a lower scale, the fact that numerous renegotiations are ongoing, suggests an acceleration of this trend in the future. It remains to be seen, whether, in this context, countries will take renegotiations as an opportunity to re-balance some of the agreements, going beyond issues related to compatibility with

Figure I.21. Number of BITs and DTTs concluded, annual and cumulative, 1999–2008



Source: UNCTAD (www.unctad.org/iia).

EU law. Such a tendency has already emerged with respect to the introduction of new model BITs, and might be strengthened in light of the current global financial and economic crisis (see section 2.e).

With respect to a possible increase in investment protectionism in response to the financial crisis, IIAs have a role to play in ensuring predictability, stability and transparency of national investment regimes. Policymakers should also consider strengthening the investment promotion dimension of IIAs through effective and operational provisions. Investment insurance and other home-country measures encouraging outward investment are cases in point where continued international cooperation can be useful.

b. Double taxation treaties

In 2008, 75 new DTTs were concluded, bringing the total to 2,805 (figure I.21). Developed countries were parties to 63 of these new DTTs, and 18 of them were concluded between developed countries only. Ireland and the Netherlands were the most active, each concluding six DTTs in 2008. Developing countries as a group were involved in 39 of the new DTTs, led by Qatar and Viet Nam with 4 DTTs each. Five of the DTTs signed in 2008 were among developing countries only, amounting to 16% of all DTTs concluded in 2008. Those between developed and developing countries still account for the largest share: 38% of all the DTTs (figure I.23).

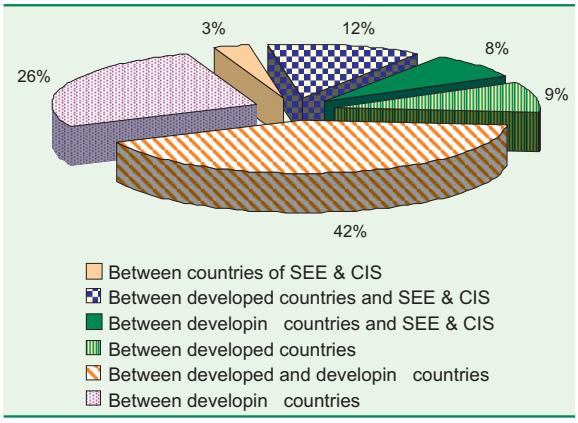
c. International investment agreements other than BITs and DTTs[53]

In 2008, 16 international agreements with investment provisions were concluded, bringing the total number of such agreements to 273 by the end of 2008 (figure I.24). Most of them were free trade agreements (FTA), establishing binding obligations on the contracting parties with regard to investment liberalization and protection. The scope of the investment chapters in the new FTAs is comparable to provisions found in BITs, including provisions for investor-State dispute settlement.

Canada and Singapore were the most active, concluding three new FTAs each with investment provisions. China, the members of the European Free Trade Association (EFTA),[54] Colombia, Peru and the United States concluded two new agreements each. Significant examples include the FTAs concluded by Canada with Colombia and Peru, which contain substantive chapters covering investment liberalization and protection. At the same time, the European Community (EC) concluded an Economic Partnership Agreement (EPA) with 15 CARIFORUM States, involving a total of 42 countries[55] and setting out important rules for investment liberalization.

In Asia, countries continued to conclude a number of FTAs; China concluded two agreements with New Zealand and Singapore. While the China-New Zealand FTA includes a full investment protection chapter, the FTA with Singapore incorporates the provisions of the China-ASEAN investment agreement upon its conclusion. The Association of Southeast Asian Nations (ASEAN) signed an agreement with Japan, which includes general investment cooperation provisions. The FTA also establishes a Sub-Committee on Investment to discuss and negotiate more substantive investment provisions. Furthermore the Gulf Cooperation Council (GCC) concluded its first comprehensive FTA with Singapore and individual GCC member

Figure I.22. Distribution of BITs concluded at end-2008, by country group
(Per cent)



Source: UNCTAD (www.unctad.org/iia).

countries. The parties agreed that investment issues will be dealt with through BITs between Singapore and individual GCC member countries.

In Africa, countries relied on regional integration organizations to negotiate FTAs and framework agreements. The United States concluded a Trade and Investment Framework Agreement (TIFA) with the East African Community (EAC) and a Trade and Investment Cooperative Agreement with the Southern African Customs Union (SACU). These agreements establish an institutional framework to monitor trade and investment relations between the parties and to consider ways to promote investment (see annex table A.I.13).

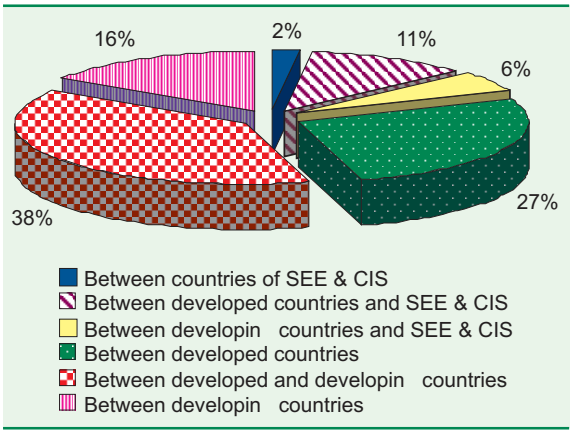
d. Investor-State dispute settlement

In parallel with the expanding IIA regime, the number of investor-State disputes has remained relatively high. The cumulative number of known treaty-based cases had reached 317 by end 2008 (figure I.25).[56] In 2008, at least 30 new treaty-based investor-State dispute cases were filed, 21 of them with the International Centre for Settlement of Investment Disputes (ICSID). While this was lower than in 2007, when 35 new cases were filed, it is nonetheless considerably higher than those filed before 2002. Since ICSID is the only arbitration facility to maintain a public registry, the actual number of treaty-based cases is likely to be higher.

The rise in disputes continues to affect many countries. In fact, at least 77 governments – 47 in developing countries, 17 in developed countries and 13 in transition economies – were involved in investment treaty arbitration by the end of 2008. Argentina still tops the list with 48 claims lodged against it, two of which were brought in 2008. Mexico is second, with 18 known claims, followed by the Czech Republic (15) and Ecuador (14). Countries with a relatively large number of new known cases in 2008 included: Ecuador (4), Ukraine (4) and Georgia (3). Three countries faced arbitration for the first time in 2008: Gabon, Senegal and Uzbekistan.

As many as 92% of known claims (317) were initiated by investors from developed countries, whereas by the end of 2008, there were 20 cases filed by investors from developing countries and 9 from transition economies. Of the 96 cases concluded by end 2008, 51 were decided in favour of the State, and 45 in favour of the investor, although four of these cases are still pending before an ICSID annulment committee. At the same time, 48 cases were discontinued following settlement, 142 cases were still pending and for 31 cases the status was unknown.

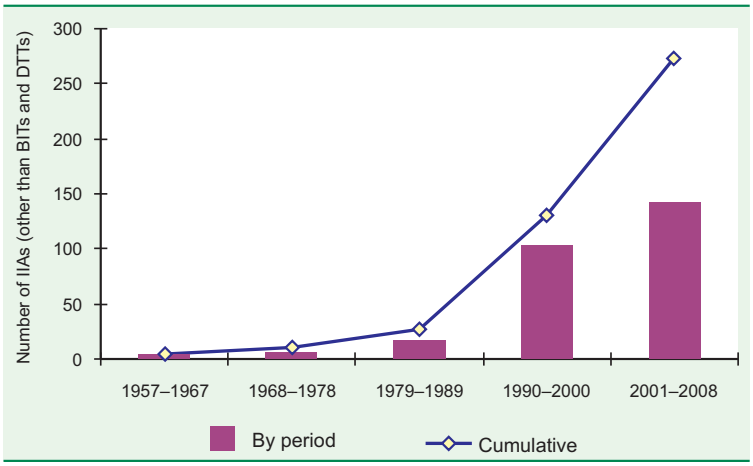
Figure I.23. Distribution of DTTs concluded at end-2008, by country group
(Per cent)



Source: UNCTAD (www.unctad.org/iia).

The large majority of cases were initiated on the grounds of violating a BIT provision. The BIT between Argentina and the United States leads with 18 claims, followed by the BIT between Ecuador and the United States and that between the Republic of Moldova and the Russian Federation, with nine claims each. With regard to regional and plurilateral international investment agreements, the North American Free Trade Agreement (NAFTA) alone was used in 48 claims while the Energy Charter Treaty (ECT) was used for at least 20 claims.[57] The Central American Free Trade Agreement (CAFTA) has been used in at least two claims since its entry into force. This shows that investors are increasingly using investment chapters of free trade agreements (FTAs) for filing claims against host States.

Figure I.24. Number of IIAs concluded at end-2008, cumulative and per period



Source: UNCTAD (www.unctad.org/iia).

e. International investment agreements and the financial crisis

The financial crisis raises a series of novel issues for IIA negotiators. On the one hand, IIAs could serve as a tool to counter declining FDI inflows or the risk of investment protectionism. On the other hand, there are concerns that governments may be constrained by IIAs in implementing emergency measures in response to the crisis. Finally, the emerging consensus on the need for more global regulation of the financial sector raises the issue of how to ensure coherence between the international financial system and the international investment regime. These issues are discussed in this subsection.

(i) Investment protectionism and IIAs

To some extent, IIAs can serve as a bulwark against the risk of investment protectionism. IIA provisions on non-discrimination, for example, prohibit contracting parties from favouring domestic over foreign investors. Provided that the non-discrimination clause extends to the pre-establishment phase, it may also protect foreign investors against unjustified entry restrictions. Effective safeguards against such potentially protectionist behaviour are particularly important for emerging economies that are increasingly investing abroad through their State-owned enterprises and SWFs.

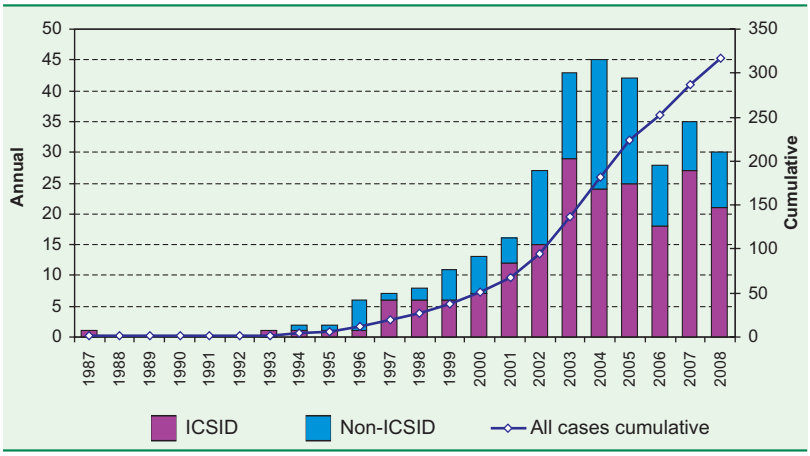
However, IIAs are less effective in preventing restrictions on outward FDI, because they generally lack legally binding rules in this area. The question therefore arises as to whether IIA negotiators would want future IIAs to offer protection against governments' restrictions on outward FDI.

At the international level, various initiatives have been taken to avoid recourse to investment protectionism. At the Group of Twenty (G-20) Summit on Financial Markets and the World Economy, held in Washington, D.C., on 14 November 2008, leaders renewed their political commitment to an open global economy. Their declaration stated that "within the next 12 months, we will refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing World Trade Organization (WTO) inconsistent measures to stimulate exports."[58] This commitment was reaffirmed at the G-20 Summit in London, held on 2 April 2009, where leaders committed to "minimise any negative impact on trade and investment of our domestic policy actions including fiscal policy and action in support of the financial sector."[59] They further pledged: "We will not retreat into financial protectionism, particularly [through] measures that constrain worldwide capital flows, especially to developing countries."[60] UNCTAD, in collaboration with other relevant organizations, regularly monitors policy developments in the area of FDI (box I.6).

(ii) Emergency measures in response to the crisis

The financial crisis also highlights the relevance of national security exceptions in IIAs. In the context of Argentina's financial crisis in the early 2000s, several arbitration awards confirmed that the scope of "essential security" exceptions is not necessarily limited to military threats, but may also cover emergency measures taken in times of major economic crises.[61] Tribunals disagreed, however, on the degree of severity of an economic crisis that would justify invocation of the national security exception. Questions also remain about whether or not such a clause is self-judging,[62] and whether a national security exception extends to the protection of strategic industries.

Figure I.25. Known investment treaty arbitrations, cumulative and newly instituted cases, 1987–end 2008



Source: UNCTAD (www.unctad.org/iia).

(iii) Regulation of the financial system and IIA provisions

The financial crisis has given rise to calls for stricter regulation of international financial markets. As more State intervention might undermine investor rights, questions arise about how to ensure coherence between the international financial system and the IIA universe. This encompasses three main issues.

The first relates to the definition of "investment" in

Box I.6. Investment policy developments in G-20 countries

An UNCTAD review of national and international investment policy developments taken by G-20 member States (including the member countries of the EU[a]), shows that in response to the crisis, these countries have mostly refrained from taking policy measures that are restrictive towards foreign inward and domestic outward investment (UNCTAD, 2009c). In fact, a substantial number of the policy changes surveyed were in the direction of facilitating investment.

UNCTAD found that 39 of the 42 countries surveyed undertook 167 policy measures in the investment area (in the period between October 2008 and June 2009). Forty (24%) specifically addressed foreign investment and 127 (76%) were part of the general legal framework that also applies to foreign investments. Among the measures specific to foreign investment, 8 countries took measures concerning the entry of foreign investors (15 measures altogether). Five countries undertook measures aimed at facilitating investment flows (9 measures), and 7 enacted laws and regulations that concern the operation of foreign affiliates (7 measures). Three countries changed their relevant tax laws (9 measures). There were a few policy measures that restricted private (including foreign) participation in certain highly sensitive sectors, or introduced new criteria and tests, such as a national security test for investments that raise national security concerns.

Among the measures related to investment, 11 countries enacted laws and regulations that concern the general legal framework for the operation of companies, including foreign affiliates (17 measures). Furthermore, 7 countries adopted new taxation measures (7 measures) and 33 enacted State aid measures and/or stimulus packages in response to the crisis (98 measures).

Investment policy developments also occurred at the international level, where G-20 member countries concluded 27 BITs, 36 DTTs and 11 other IIAs between October 2008 and June 2009.

Overall, recent policy developments paint a comforting picture. However, economic stimulus packages could give rise to "covert" protectionism (i.e. using gaps in international regulations to discriminate against foreign investors and products). Furthermore, protectionist pressures could still arise from the spreading of the crisis to less-affected economic sectors and countries, and a new wave of economic nationalism could occur in the aftermath of the crisis, when the exit of the State from bailed out flagship industries might lead to the protection of "national champions" from foreign takeovers (UNCTAD, 2009c).

This UNCTAD review is intended to contribute to a joint effort by WTO, UNCTAD, OECD and IMF to respond to the 2 April 2009 G-20 Leaders' request for quarterly reporting on their adherence to an open trade and investment regime and avoidance of a retreat into protectionism. The summit called upon international bodies to monitor and report publicly on G-20 members' adherence to this pledge.

Source: UNCTAD, 2009c.

[a] The European Union is the 20th member of the G-20, represented by the rotating Council presidency and the European Central Bank.

IIAs. Since most IIAs include portfolio investment in their definition, they cover a vast number of financial products that potentially could become the target of State regulation. Recent IIAs between some countries have shown a trend towards narrowing the scope of the term "investment". This has been achieved, for instance, through (i) a negative list that excludes specific kinds of capital commitments from the definition of investment,[63] or (ii) limiting the term "investment" to cover only assets that contribute to economic development in the host country.[64] Both approaches could potentially exclude purely speculative forms of short-term portfolio transactions from the definition of investment.

Second, national bailouts and rescue packages in response to the crisis have sometimes resulted in the partial or total nationalization of domestic financial institutions. If foreign investors hold shares in these companies, they may be entitled to compensation under the expropriation provisions of IIAs. In addition, foreign investors might have the possibility to challenge stricter State control over the financial sector "as regulatory takings" in the context of investor-State disputes. This risk may give new momentum to discussions about the possible need to clarify the relationship between "normal" regulatory activities of a country and regulatory actions for which investors have to be compensated.[65]

A third set of issues relates to the specificities of financial sector regulation. IIA negotiators wishing to emphasize the rights of financial regulators could clarify in the agreement that contracting parties are not prevented from adopting or maintaining measures for prudential reasons. Such "prudential carve-out provisions" have already been included in a number of IIAs.[66] Another consideration relates to dispute settlement. Recognizing the special nature of investment disputes involving financial matters, some IIAs grant financial authorities a stronger role in the conduct of such proceedings.[67]

E. Prospects

As a result of the worst global recession in a generation, FDI appears set to continue falling in the short term. TNCs seem hesitant – or unable – to maintain their FDI expenditures at former levels in at least 2009 and 2010. According to IMF forecasts, world GDP is set to fall by more than 1% in 2009, aggravating the difficulties already faced by many

companies (IMF, 2009a). Mirroring this trend, the profits of many TNCs are falling at double-digit rates.[68] This has resulted in a climate of widespread pessimism among business executives worldwide. PricewaterhouseCoopers' *12th Annual Global CEO Survey Report*, released in January 2009 (PwC, 2009), showed a dramatic fall in respondents' confidence as compared to the year before. Only 34% of the CEOs were optimistic about their growth prospects for the three years ahead – the lowest level since the survey was started in 2003.

In this environment, it is not surprising that the prospects for FDI in 2009 and beyond, as revealed by UNCTAD's *World Investment Prospects Survey 2009–2011* (WIPS), have been adversely affected by the economic and financial crisis. As with other studies, the UNCTAD survey found that business executives are very apprehensive about the short-term evolution of their business environment. Roughly 90% of them declared being pessimistic or very pessimistic about 2009. They also expressed concern for their own company, albeit to a lesser extent. However, they seemed less negative about prospects in the medium term. Some 45% of them reported being "optimistic" or "very optimistic" about the global business environment in 2011, as compared to 10% for 2010 and nil for 2009.

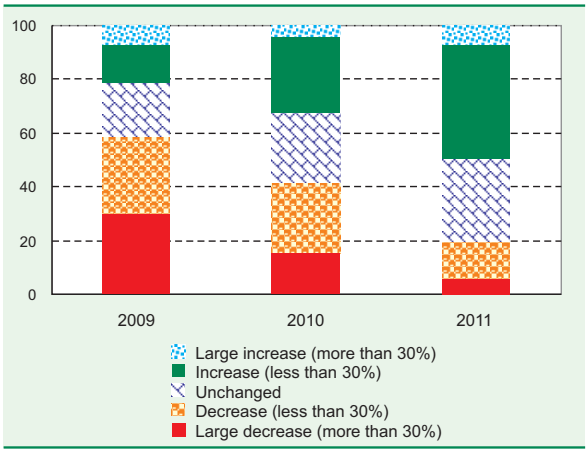
Among the looming global risks that could potentially affect TNCs' FDI plans for the next three years, respondents to WIPS considered three as especially threatening: a deepening of the global economic downturn, an increase in financial instability, and a rise in protectionism involving a change in foreign investment regimes.

These economic prospects and negative sentiments imply that there will most likely be a continued decline in FDI in the short term. According to *WIPS*, big TNCs clearly plan to reduce their FDI expenditures in 2009. About 58% of respondents mentioned that they intended to reduce their FDI abroad in 2009, with nearly one third expecting a large decrease (more than 30%) from 2008 levels (figure I.26). This appears to be largely confirmed by data on FDI flows for the first quarter of 2009 as noted above (section A.4). If this trend continues, world FDI flows could amount to only $900–$1,200 billion in 2009 (figure I.27).

Nevertheless, responses to the survey also suggest that a progressive rebound of FDI could be expected by 2011. The exit of government funds from ailing industries that were poured during the crisis will possibly trigger a new wave of cross-border M&As. It also appears that TNCs intend to continue internationalizing, and that they are generally more optimistic about the medium term outlook for the global economy. With this in mind, there should be a slow recovery in FDI in 2010, before gaining momentum in 2011 (figure I.27). Half of the respondents to the UNCTAD survey forecast that their FDI expenditures in 2011 will be higher than their 2008 level, against only 33% in 2010 and 22% in 2009. The level of FDI inflows in 2010 would be 20–30% lower than the level of 2008, to reach an estimated $1.1–1.4 trillion, and only in 2011 would the level be almost the same as that in 2008, to reach an estimated $1.5–1.8 trillion (figure I.27).

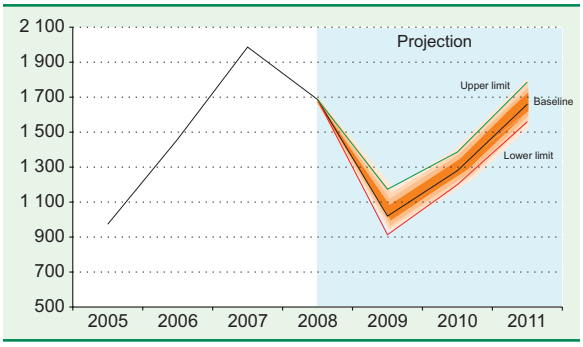
However, these general trends belie sentiments that vary widely by home region of TNCs. The "decrease-then-rebound" pattern in TNCs' investment plans for 2009–2011 appears to be uniform across all

Figure I.26. Changes in respondent companies' FDI expenditure plans as compared to 2008
(Per cent of responses)



Source. UNCTAD, 2009b.

Figure I.27. Global FDI flows, 2005–2008, and projections for 2009–2011



Source. UNCTAD estimates, based on the results of *WIPS*.
Note: Estimates for 2009, 2010 and 2011 are based on the results of WIPS, taking into account data on the first quarter of 2009 for FDI flows and the first half of 2009 for cross-border M&As for the 2009 estimates. For example, for 2010, total FDI inflows in 2008 were split into five groups corresponding to the share of respondents' forecast for 2010 (grouped by large increase, increase, no change, decrease and large decrease (figure I.26)). Next, FDI inflows of each group in 2010 were calculated by applying the average of respondents' forecasts of their investments for their group. Finally, the results were added up to a single forecast value for 2010. The same methodology was applied for 2009 and 2011. In addition to the baseline scenario, two less likely scenarios: 25% upper and lower ranges to the respondents' forecasts average of their investments for their group are included in the figure.

home regions, but European TNCs, which already witnessed a strong pullback in outward FDI in 2008, seemed slightly less optimistic than average. In contrast, TNCs from developing countries, whose FDI outflows were relatively resilient in 2008, showed greater optimism about the coming three years than companies from other regions. Japanese TNCs, after posting a very strong year in 2008, did not show much appetite for further increasing their FDI until 2011. North American TNCs, on the other hand, seemed quite eager to resume FDI expenditure after a setback in 2008 and, most probably, in 2009.

Viewed by industry, FDI prospects also seem to vary. Companies in business-cycle-sensitive industries that have been severely affected by the crisis, such as automotives, metals and chemicals, were among those expressing the most negative views concerning their FDI prospects. On the other hand, some activities that are less dependent upon business cycles and more on stable demand, such as agri-food and many services, or those supplying markets with quick growth prospects in the medium term, such as pharmaceuticals, seem to have been less affected by the crisis, and more optimistic about future FDI prospects.

In terms of the countries that attract FDI the most, results from *WIPS* were largely in line with the results of previous years, and with surveys carried out by other organizations. The list of the 15 most favoured investment locations continues to be topped by China, followed by the United States, India, Brazil and the Russian Federation. This mirrors, by and large, the results of a survey conducted by Ernst & Young (2009), which found China, India, the Russian Federation and Brazil among the six most attractive regions for the coming three years. A survey of Japanese manufacturing TNCs conducted by the Japan Bank for International Cooperation (JBIC, 2009) also found China, followed by India, the Russian Federation and Brazil, as the most promising countries over the coming three years. According to *WIPS,* TNCs are mainly interested in these countries due to the long-term potential growth of their markets and, to a lesser extent, availability of cheap labour.

In conclusion, the outlook for global FDI seems quite grim in the short term due to the impact of the ongoing economic and financial crisis. However, a strong commitment by the largest TNCs to expanding their operations abroad, as well as their relative optimism for the medium-term evolution of their business environment, leaves open the possibility for a rebound in FDI by 2011.

Notes

1 This subsection documents overall trends in worldwide FDI inflows and outflows in 2008 and the first half of 2009 as indicated by balance-of-payments data, supplemented by data on cross-border M&As and greenfield projects, and examines why FDI flows have fallen.

2 This estimate is based on FDI flow data for the first quarter of 2009 (figures I.12 and I.13) and cross-border M&A data for the first half of 2009 (annex table B.4–B.6).

3 Bond spreads continued to be maintained at an unsustainable level in mid-2009 ("Corporate bond, swaps spreads 'Unsustainable' Barclays says", *Bloomberg*, 21 May 2009).

4 According to Dealogic, syndicated loans in the world fell by half in 2008 and were less than half of what they were in the same period in 2008, reaching $620 billion in the first five months of 2009. Syndicated loans for leveraged buyouts (LBOs) were particularly badly affected, declining more than 60% in 2008.

5 For example, losses of S&P 500 companies amounted to $182 billion in the fourth quarter of 2008, the first negative figure since 1935. More than a quarter of these companies published losses for the entire year 2008. In Europe the 310 companies of the DJ Stoxx 600 lost 2.2 billion euros during the fourth quarter of 2008, as against $75.1 billion in profits in the same period a year earlier. Almost one third (90) of the companies are expected to publish negative results for the whole year 2008 (*Les Echos*, 18 March 2009). Similarly, 541 Japanese manufacturing companies listed on stock markets are projected to register a reduction of more than 20% in their profits in 2008 (*Nikkei*, 2 November 2008).

6 The *Ifo World Economic Climate Index*, published quarterly by the German Ifo Institute for Economic Research since 1987, fell to its lowest historic level in March 2009, though it rose in the second quarter for the first time since 2007.

7 The survey, entitled *World Investment Prospects Survey* (WIPS), provides an outlook on future trends in FDI by the largest TNCs. The 2009–2011 survey is the most recent in a series of similar surveys that have been carried out regularly by UNCTAD since 1995, as part of the background work for its annual *World Investment Reports*.

8 Divestment is the partial or complete dismantling of ownership relationships across national borders, either as a result of a strategic decision concerning the geographic scope of the TNC's value added activities (i.e. the concentration of resources at national, regional or global levels), or a change in a foreign servicing mode (e.g. from local production to exports or licensing), or a complete withdrawal from a host country.

9 FDI statistics on a balance-of-payments basis are reported net, and are generally unable to indicate the magnitude of divestments.

10 Indeed, according to a survey of 384 Japanese affiliates in 2006, some 62% of them were closed due to internal factors such as restructuring and redeployment of resources (Japan, METI, 2008: 199–200).

11 A divestment may also be made, quite independently of an economic downturn, when a TNC decides to change its mode of servicing a foreign market (e.g. from FDI to export or licensing). As a result of the internal restructuring that follows, some foreign affiliates may lose their synergies with the rest of the TNC, and although they might be profitable on their own, their existence no longer fits in with the strategic direction of the TNC as a whole. Such developments very often lead to divestments. There can also be forced divestment, which is the seizure of foreign-owned property through nationalization, expropriation or confiscation.

12 ECB, *Monthly Bulletin*, June 2009.

13 The following are some examples of cancellations due to the global financial crisis: the Swedish Government has halted its $26 billion privatization programme, two years before its scheduled completion (*The Local*, 30 January 2009); the French Government is postponing privatization of the State-owned company, La Poste (*Financial Times*, 4 November 2008); in Mexico, the Government has pushed back the bidding deadline for Punta Colonet, a $6 billion port project (*La Jornada*, 24 June 2009). In Kuwait, the privatization of Kuwait Airways Corporation might be postponed (Kuwait News Agency, 23 October 2008). The Greek Government may have trouble meeting its 2009 privatization goals in the current economic climate, adding pressure to an economy already burdened by high debt levels (Reuters, 16 February 2009).

14 Unlike the data for cross-border M&As and FDI flows and stocks used in this report, data for greenfield investment projects are on an announcement basis, and not on an actual or implementation basis.

15 Data from fDi Markets, fDi Intelligence (www.fdimarkets.com).

16 For example, Hutchison Whampoa (Hong Kong, China), the largest TNC from the developing world and a leading conglomerate in infrastructure industries globally (*WIR08*), announced in 2008 that it would suspend all new investments in its global operations.

17 In the Netherlands and the United Kingdom, cross-border M&A sales fell by $170 billion and $45 billion respectively, in 2008, as both those countries had fewer mega deals of a magnitude that had pushed up the value of total M&A transactions in 2007. This reduction in both countries was responsible for 61% of the decline in the value of M&A transactions in developed countries in 2008 and for most of it in Europe.

18 Following the practice of previous *WIRs*, the section on the largest TNCs analyses data two years before the reference year. Thus, for example, *WIR08* analysed data for 2006. However, *WIR09* seeks to analyse data for both 2007 and 2008, in the light of the exceptional and dramatic changes caused by the financial crisis.

19 "Top" or "largest" TNCs in the discussion in section B.1 refer only to non-financial TNCs.

20 This calculation is based on the size of the TNCs, measured by the share of their value added (e.g. the sum of salaries and benefits, depreciation and amortization, and pre-tax income) in a country's GDP.

21 While the ranking used in UNCTAD's list of the largest TNCs is based on foreign assets, ranking the companies by foreign sales or by foreign employment would give a different picture. If ranked by sales, petroleum TNCs would occupy the top four positions in the list, and three automobile manufacturers would be in the top 10. Ranking the companies by foreign employment gives yet another picture, with two retail companies and two electrical and electronic equipment companies in the top five positions.

22 The degree of international involvement of firms can be analysed from a number of perspectives: their operations, stakeholders and the spatial organization of management. Given the range of perspectives and dimensions that can be considered for each, the degree of transnationality of a TNC cannot be fully captured by a single, synthetic measure. UNCTAD's Transnationality Index (TNI) was introduced in 1995 as a response to the academic debate on the ways to measure transnationality. It is a composite of three ratios: foreign assets to total assets, foreign sales to total sales, and foreign employment to total employment. The conceptual framework underlying this index helps assess the degree to which the activities and interests of companies are embedded in their home country and abroad.

23 Data for TNI in 2008 were calculated only for the 90 companies of the 2007 list of largest TNCs for which data on foreign components (i.e. foreign sales, employment and assets) were available at end June 2009.

24 This number would rise to 28 if two companies classified as "diversified" in this list, but operating mainly in the services sector (Vivendi and Hutchinson Whampoa), were also taken into account.

25 However, within the same industry, internationalization levels may vary considerably. For instance, in the motor vehicles industry, Honda's TNI reaches 82.3%, while it is only 27.9% for Hyundai.

26 Some non-listed companies for which information on international sales, employment and assets were available are also included in the list of largest TNCs from developing countries, for example Petroliam Nasional Berhad (Petronas).

27 Based on 2007 and 2008 data from Bloomberg for 94 TNCs.

28 BHP Billiton reported a 57% plunge in profits for the second half of 2008. Profits of Xstrata fell by 35% in 2008, as rising costs eroded earnings. Hitachi lost 8 billion yen in 2008, with especially bad results in its semiconductors business. Hyundai, the fifth largest car manufacturer in the world, announced a fall of 14% in its 2008 profits, and Toyota reported a loss of 2.9 billion euros in 2008. PSA lost 400 million euros in 2008 (*Source*: UNCTAD, based on various press accounts).

29 In the United States, the spread of AAA corporate bonds over Treasury peaked to more than 1,000 points at the end of 2008, and was still at around 600 points in April 2009, compared with less than 200 points at the beginning of 2007 (IMF, 2009c: 2).

30 Many companies in the oil and mining industries, in particular, have written off the value of their inventories and assets as the result of a sharp fall in demand and prices.

31 Based on 2007 and 2008 data for 94 TNCs from Bloomberg. The data differ from those in table I.7 owing to the different number of companies covered.

32 Results based on Bloomberg in United States dollars.

33 These plans included, among others, 20,000 job cuts at Nissan, 19,000 at Anglo-American, 16,000 at Sony, 15,000 at Alcoa, 11,600 at United Technologies, 10,000 at GSK, 8,300 at Pfizer, 7,400 at Astra Zeneca, 7,000 at Hitachi, 6,400 at HP, 6,000 at BHP Billiton, 6,000 at Philips Electronics, 6,000 at Renault, 5,000 at IBM, 4,800 at Honda, 3,500 at Azko Nobel, 3,300 at Holcim and 3,000 at Daimler. As part of its rescue plan, General Motors may close 14 factories worldwide, involving several thousand job cuts. Other large TNCs, not listed among the top 100, also announced planned job cuts: 20,000 at Caterpillar, 20,000 at NEC, 15,000 at Panasonic, 12,000 at ATT, 11,000 at PSA, 10,000 at Pionnier, 10,000 at Boeing, 9,000 at Dell, 6,000 at Intel and 5,000 at Microsoft, among others. (*Source*: UNCTAD, based on various press accounts).

34 France Telecom, for example, although still holding large amounts of cash and keeping debt under control, will stick to a low-risk strategy in its new three-year business plan, with no major acquisitions planned. Hutchison Whampoa has bought back $5 billion of its debt to reduce interest payments, and has announced a very conservative investment strategy. Anglo American will slash its capital expenditures by more than half in 2009, to $4.5 billion. Statoil is to cut spending on exploration for new sources of oil and gas by about 13% in 2009 as oil prices fall, and it will take advantage of the potential cost savings made possible from its merger in 2007 with Norsk Hydro. Other large TNCs, such as E.ON, Veolia, Lafarge, Saint-Gobain, WPP, Metro and ThyssenKrupp, have also announced cost-cutting measures and a reduction in their investment plans. (*Source*: UNCTAD, based on various press accounts).

35 Cemex, for example, announced that it plans to cut costs by $900 million and sell assets in Austria, Australia, Hungary and other locations to ease high indebtedness. Rio Tinto, hit by the global fall in commodity markets and saddled with $39 billion in debt, is searching for fresh cash. It is trying to sell assets, such as the recent sale of potash assets to the Brazilian company, Vale, and the failed attempt to sell $15 billion in assets to the Chinese company, Chinalco. Dow Chemicals might divest $4 billon worth of assets in 2009 (*Source*: UNCTAD, based on various press accounts).

36 Among the cash-rich companies and institutions, there are two types that might play a particularly active role in triggering a structural change in the balance of power between economies: new TNCs from emerging economies and SWFs from, among others, oil-exporting countries. In the coming months, these two categories could take part in major takeover operations involving ailing TNCs in developed countries (UNCTAD, 2009a).

37 In 2007, 16 new companies appeared in the list of top 100 TNCs from developing economies. Among them, five were from Hong Kong (China), and two each were from China, Taiwan Province of China and Kuwait. Four new companies entered the top 50: Tata Steel Ltd. (India), Zain (Kuwait), Wilmar International Ltd (Singapore) and Qatar Telekom (Qatar).

38 Based on 2007 and 2008 data from Bloomberg for 28 TNCs.

39 http://www.usatoday.com/money/industries/banking/2009-05-14-bank-america-china-stock_N.htm and http://www.ft.com/cms/s/0/14ee5830-33b1-11de-88cd-00144feabdc0.html

40 http://www.businessweek.com/globalbiz/content/nov2008/gb20081124_461696.htm; http://www.independent.co.uk/news/business/news/nomura-and-credit-suisse-to-lay-off-1650-staff-in-london-1052790.html.

41 IFSL (International Financial Services London) estimated this at $700 billion in 2008. The same institute estimated that hedge funds raised $1.7 trillion, although these funds are devoted mainly to portfolio investments and are seldom used for FDI.

42 Standard & Poors estimates that about 100 European companies with a rating of BB+ or worse are not able to fulfil their debt obligations in 2009 (*Source*: "LBO-Firmen droht Massensterben", *Financial Times Deutschland*, 14 April 2009).

43 OMX AB was bought by Nasdaq in February 2008, shortly after an investment by DIFC.

44 For example, Zhang Hongli, vice-executive president of the China Investment Corp, said that "as far as possible we will refrain from making investments" (quoted in "China SWF to slow investment", *The Straits Times*, 6 January 2009).

45 "Sovereign wealth funds lose their gloss", *Financial Times*, 28 February 2009.

46 "The rise of state capitalism", *The Economist*, 18 September 2008.

47 *Financial Times*, 28 February 2009, op. cit.

48 For instance, it has been reported that two Chinese car manufacturers, Chery and Geely, are interested in buying Volvo from Ford. Mahindra & Mahindra, an Indian producer of utility vehicles, is in the running to buy LDV, an ailing British truck manufacturer. Vale, Brazil's mining giant, recently picked up a clutch of assets from Rio Tinto, its debt-ridden Anglo-Australian rival (*The Economist*, 28 March 2009: 18).

49 See Articles 255 ff of the "Nueva Constitución Política del Estado" (October 2008) of the Plurinational State of Bolivia. In Ecuador, Article 416 of the 2008 Constitution promotes a new international trade and investment system, based on, among others, justice, solidarity and complementarity. Article 422 stipulates that the State cannot enter into contracts or join such international instruments which result in the transfer of its sovereign jurisdiction over contractual or commercial disputes between the State and natural or private juridical person to international arbitration authorities. Similar considerations are also addressed by Ecuador's Inter-institutional Consultative Committee, which is mandated to evaluate the impact of existing IIAs and to design a new model BIT that is in conformity with domestic investment laws, as well as to develop policy recommendations aimed at promoting development through FDI (Resolution No. 290 of the Council of International Trade and Investment, available at: http://www.mmrree.gov.ec/mre/documentos/novedades/boletines/boletines%20promocion/2005/resolucion_290_comexi.pdf).

50 Communications with the Government of the Czech Republic through e-mails dated, 2 November 2008; and 15 May 2009.

51 ECJ Cases C-205/06; C-249/06, March 2009.

52 This figure includes the five protocols concluded by the Czech Republic.

53 Examples of such agreements include closer economic partnership agreements, regional economic integration agreements or framework agreements on economic cooperation.

54 Including Iceland, Liechtenstein, Norway and Switzerland.

55 The 15 CARIFORUM States are: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

56 This number does not include cases that are exclusively based on investment contracts (State contracts) and cases where a party has so far only signalled its intention to submit a claim to arbitration (notice of intent), but has not yet commenced the arbitration.

57 Members of the ECT are the EU and its member states, most SEE and CIS countries, and Japan.

58 Paragraph 13 of the Declaration of Summit on Financial Markets and the World Economy.

59 Paragraph 22 of the Leader's Statement, London Summit of the Group of Twenty, 2 April 2009.

60 Ibid.

61 The relevant cases are: *CMS Gas Transmission Company v. The Argentine Republic*, ICSID Case No. ARB/01/08, Award of 12 May 2005; *LG&E Energy Corp./LG&E Capital Corp./LG&E International Inc. v. The Republic of Argentine*, ICSID Case No. ARB/02/1, Award of 3 October 2006; *Enron Corporation Ponderosa Assets L.P. v. The Argentine Republic*, ICSID Case No. ARB/01/03, Award of 22 May 2007; *Sempra Energy International v. The Argentine Republic*, ICSID Case No. ARB/02/16, Award of 28 September 2007; *Continental Casualty Company v. The Argentine Republic*, ICSID Case No. ARB/03/9A, Award of 5 September 2008.

62 Meaning that either country has the right to decide on its own terms whether a particular event falls within the scope of the clause.

63 For example, as far as debts are concerned, the 2004 United States model BIT includes a footnote explaining that "[s]ome forms of debt, such as bonds, debentures, and long-term notes, are more likely to have the characteristics of an investment, while other forms of debt, such as claims to payment that are immediately due and result from the sale of goods or services, are less likely to have such characteristics." In a similar vein, a footnote could clarify that certain forms of capital commitments do not generally constitute an investment.

64 This approach is based on some recent ICSID awards, in which tribunals have interpreted Article 25 of the ICSID Convention as establishing the jurisdiction of the Centre only with regard to investments contributing to economic development in the host country. See, for example, the ICSID cases *SGS (Switzerland) v Pakistan*, decision on jurisdiction, para 133 and footnote 153; and the *Salini (Italy) v Morocco* decision at para 52.

65 For instance, the BIT between the United States and Uruguay (2005) observes in an annex: "Except in rare circumstances, non-discriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety and the environment, do not constitute indirect expropriations."

66 A case in point is the 2004 Canadian model Foreign Investment Promotion and Protection Agreement (FIPA) (article 10). It stipulates, *inter alia*, that "[n]othing in this Agreement shall be construed to prevent a Party from adopting or maintaining reasonable measures for prudential reasons, such as (a) the protection of investors, depositors, financial market participants, policy-holders, policy-claimants, or persons to whom a fiduciary duty is owed by a financial institution." Prudential carve-outs are also a standard feature of international trade agreements covering trade and commercial presence in financial services.

67 An example is the 2004 United States model BIT which allows the BIT parties to participate jointly and directly in the decision-making process of the tribunal in order to ensure that the necessary financial expertise is taken into account. For this reason, Article 20(3) of the 2004 model creates special procedures applicable to disputes involving either of the two financial services exceptions in the United States model BIT. Where the host country invokes either exception in investor-State arbitration, it shall, within 120 days of the submission of the claim to arbitration, transmit to the "competent financial authorities" of both BIT parties, and to the tribunal, a written request for a joint determination on the issue of the extent to which either exception is a valid defence. The competent financial authorities shall attempt in good faith to make the determination. Any such determination shall be binding on the tribunal. The model BIT also calls for arrangements to ensure that the arbitrators have expertise or experience in financial services.

68 *S&P Index Service*, 1st Quarter 2009.

CHAPTER II
REGIONAL TRENDS

INTRODUCTION

This chapter examines geographical, sectoral and industry patterns of FDI flows and cross-border mergers and acquisitions (M&As) in the six major regions and subregions of the world. Significant changes occurred in all of them in 2008 and the first quarter or half of 2009. The chapter also analyses prospects for FDI flows to and from each region and subregion, taking into consideration the underlying policy developments in each of them.

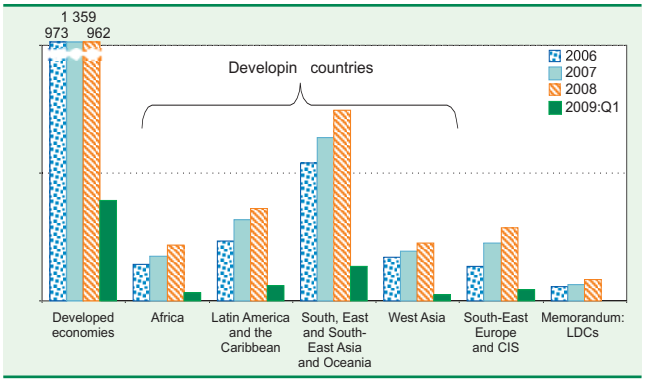
In 2008, inward FDI flows into developed countries declined, while those to developing countries and transition economies continued to increase, though at a slower rate than in 2007 (figure II.1). Despite the financial crisis, developing and transition economies attracted record FDI flows in 2008, as a result, the share of these economies in global FDI inflows increased to 43% – the second highest percentage ever. The least developed countries (LDCs) also saw their share rise to 2%. Among developing regions, South, East, South-East Asia and Oceania, taken together as a region, remained the largest recipient, accounting for almost half of the total inflows of developing economies, while Africa recorded the greatest increase in inward FDI (by 27%).

However, data for FDI inflows in the first quarter of 2009 reveal a different picture: in developing and transition economies in virtually all regions and subregions, they declined dramatically (by more than 40%, on average, from their level in the first quarter of 2008). Meanwhile, developed countries experienced further reductions.

In 2008, FDI outflows fell not only from developed countries, but also from Africa and West Asia. In the first quarter of 2009, there was also a downturn in outward FDI from other subregions such as South, East and South-East Asia. In addition, outflows from Latin America and the Caribbean, as suggested by cross-border M&A data, turned negative as TNCs from the region divested more than they invested during that period (annex table B.4).

Judging from cross-border M&A data by sector and industry (as sectoral/industry data on FDI flows for 2008 were not available), there was a relative decline in the share of services in global inward FDI while the share of the manufacturing sector increased in all regions. The share of the primary sector rose significantly in developed countries, while it fell in developing countries and transition economies (table II.1).

Figure II.1 FDI inflows by region, 2006 to first quarter of 2009
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Note: For the first quarter of 2009, FDI inflows for each region were estimated on the basis of available data weighted by their regional share in global FDI inflows for 2008.

Table II.1. Cross-border M&A sales, by sector and by groups of economies, 2007–2009
(Millions of dollars)

Group of economies	2007				2008				2009: first half			
	All industries	Primary	Manu-facturing	Services	All industries	Primary	Manu-facturing	Services	All industries	Primary	Manu-facturing	Services
World	1 031 100	73 299	336 310	621 491	673 214	86 101	302 582	284 531	123 155	10 004	22 698	90 453
Developed economies	903 430	55 806	311 264	536 360	551 847	80 514	261 139	210 194	102 313	8 294	18 967	75 051
Developing economies	96 998	9 268	22 859	64 871	100 862	3 186	38 273	59 403	19 837	1 541	3 371	14 925
South-East Europe and CIS (transition economies)	30 671	8 225	2 187	20 259	20 505	2 401	3 169	14 934	1 005	168	360	477

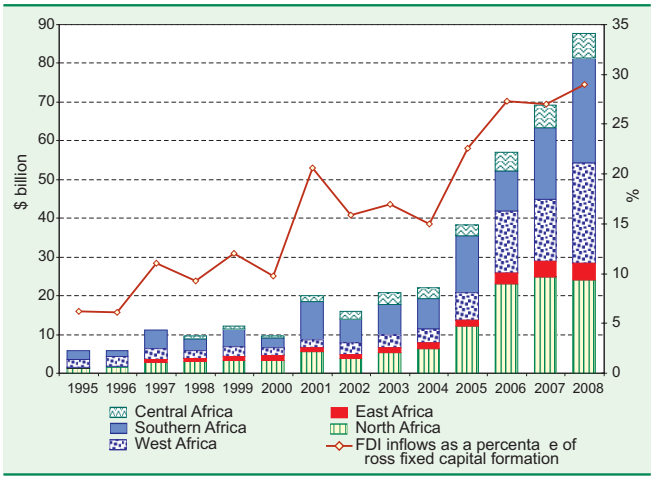
Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

A. Developing countries

1. Africa

In Africa, FDI inflows rose to another record level of $88 billion in 2008 (figure II.2), despite the global financial crisis, resulting in an increase of FDI stock in the region to $511 billion (annex table B.2). Cross-border M&As were an important contributory factor in the increased inflows, more than doubling their level of 2007 (annex table B.4). TNCs, mainly from Europe and to a lesser extent Asia, stepped up M&As of firms in the region in early 2008, particularly in the manufacturing sector. Inflows as a share of Africa's gross fixed capital formation grew to 29% in 2008, from 27% in 2007 (figure II.2). In contrast, divestments by some African firms abroad reduced FDI outflows from the region. A number of policy measures adopted by several African countries continued to make the business environment more conducive to FDI – both inward and outward. However, the sharp decline in commodity prices and the slowdown in global economic growth in the second half of 2008 may signal a possible reversal of the trend towards rising FDI in 2009, breaking the region's six years of consecutive growth in inflows as TNCs cancel or postpone new projects.

Figure II.2. Africa: FDI inflows, by value and as a percentage of gross fixed capital formation, by region, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex tables B.1. and B.3.

a. Geographical trends

i. Inward FDI: flows continued to rise in most subregions

FDI inflows increased in four of the five subregions of Africa in 2008. North Africa attracted 27% of the FDI to the region in 2008, compared with 36% in 2007; and the 47 countries of sub-Saharan Africa attracted 73% in 2008, up from 64% in 2007. The distribution of inflows among the top host countries changed little from the previous year. The six countries of North Africa continued to perform well in terms of inward FDI, while large inflows to Nigeria, Angola and South Africa, plus good performances in Congo, Ghana, Guinea and Madagascar (each receiving more than $1 billion worth of inflows in 2008) boosted overall FDI flows to sub-Saharan Africa. Inflows rose in 29 countries, and fell in the other 24 (annex table B.1). The decline was due to TNCs cancelling or postponing projects as a result of the global financial crisis. The main FDI recipients included many natural-resource producers that have been attracting large shares of the region's inflows in the past few years, as well as new commodity-rich host countries. Developed countries remained the main sources of FDI in the region, although the share of developing countries, especially from Asia, has been increasing over time.

The record rise of FDI inflows to the region in 2008 was partly due to favourable global commodity markets (at least during the first half of the year) and good returns on investment related to the high commodity prices. TNCs, including firms from within the region (sub-section a.ii), took advantage of this situation to expand their regional operations, opening a variety of exploration projects in new locations and injecting large volumes of capital into greenfield projects. They also undertook a record level of cross-border M&As.

Some FDI inflows were in the form of cross-border M&As, which doubled in value in the first half of 2008, before the fall in commodity prices and the onset of the global financial crisis. The total value of cross-border M&A sales in Africa reached its highest level: $21 billion in 2008, compared with $8 billion in 2007 (table II.4). Most of the M&A sales were in the manufacturing sector, and were concentrated in two countries: Egypt and South Africa. For example in Egypt, Lafarge SA (France) concluded a deal to acquire OCI Cement Group for $15 billion though it was not paid fully in that year (table II.2) The other African countries that hosted the top 10 cross-border M&A sales in the region in 2008 were Equatorial Guinea, Ghana, the Democratic Republic of the Congo and Nigeria (table II.2).

In the second half of 2008, liquidity constraints faced by TNCs in many countries led to fewer cross-borders M&As in the region, most of them at significantly lower prices. At the peak of the crisis, cancellations of some cross-border M&A deals and a slowdown in the number of new projects occurred. The total number of announced cross-border deals and greenfield ventures fell significantly in the final months of the year, with some major project cancellations.[1] Data on FDI flows for the first quarter of 2009 indicate a 67% fall from the same period of 2008 (table II.3).

The total number of greenfield FDI projects in the region rose to 820 in 2008, from 381 in 2007 (annex table A.I.1), although in the latter half of the year the number started to decline, partly because of fewer new mining projects.[2] Nevertheless, natural-resource-related projects attracted more FDI in 2008. Many projects that began in the region in the first half of 2008, when global economic prospects looked good, were concentrated in natural-resource exploitation.

Despite the global economic slowdown that took place in the second half of 2008, more African countries, including LDCs (box II.1), registered higher growth in their FDI inflows in 2008 as a whole than in 2007. The ratio of FDI to gross fixed capital formation remained high for many African countries, illustrating the relative importance of FDI in total investment in those economies. However, the ratio has to be seen against a low level of overall investment in the economies. The sustained and slightly larger FDI inflows to Africa in 2008 led to an increase in the region's share of global FDI to 5.2%, as compared with 3.5% in 2007, and raised its FDI stock by 20%.

The main elements in the performances of the subregions are outlined below.

North Africa.[3] Sustained efforts at policy reforms, including privatizations by host countries, and intensified search for natural-resource reserves by TNCs, at least in the first half of 2008, drove FDI inflows to the North African subregion to $24 billion, although this was slightly lower than in 2007. In Algeria, Sudan and Tunisia there was an increase in FDI inflows, which was driven by investments in their oil and gas industries, in addition to privatizations of public companies engaged in the oil industry. On the other hand flows to Egypt, the Libyan Arab Jamahiriya and Morocco declined. As in the past, Egypt remained among the largest recipients in the region, despite falling inflows from $12 billion in 2007 to $9 billion in 2008. In 2008, Edison International (Italy) secured a 40% stake in a mature gas field in Egypt for $1.4 billion, with a commitment to participate in an investment of $1.7 billion in additional exploration and development work. The deal marks the first time that Egypt has opened up to tenders for concession rights in an existing gas field.[4] A combination of lower greenfield FDI and reduced cross-border M&As is likely to lead to a fall in FDI inflows to the subregion in 2009.

West Africa.[5] FDI inflows to the West African subregion increased significantly, to $26 billion in 2008 from $16 billion in 2007. This was mainly the result

Table II.2. Africa: top 10 cross-border M&A sales,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	15 018	OCI Cement Group	Egypt	Cement, hydraulic	Lafarge SA	France	100
2	5 617	Standard Bank Group Ltd	South Africa	Banks	ICBC	China	20
3	2 200	Devon Energy Corp	Equatorial Guinea	Crude petroleum and natural gas	Undisclosed	Equatorial Guinea	100
4	900	Ghana Telecommunications Co Ltd	Ghana	Radiotelephone communications	Vodafone Group PLC	United Kingdom	70
5	732	DRC Resources Holdings Ltd	Congo, Democratic Republic of	Ferroalloy ores, except vanadium	Central African Mining & Expl	United Kingdom	50
6	700	Alstom SA (Pty) Ltd	South Africa	Power, distribution, and specialty transformers	Investor Group	United Kingdom	100
7	670	Egyptian Container Handling Co	Egypt	Marine cargo handling	Undisclosed	United Arab Emirates	90
8	626	OML 125	Nigeria	Crude petroleum and natural gas	Oando PLC	Nigeria	50
9	513	Lafarge Titan Egypt	Egypt	Cement, hydraulic	Titan Cement Co SA	Greece	50
10	475	Banco de Fomento Angola	Angola	Banks	Unitel SA	Angola	50

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] In the immediate host country.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company

Table II.3. Africa: FDI flows of selected countries,[a] 2008–2009, by quarter
(Millions of dollars)

Country	FDI inflows					FDI outflows				
	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1
Cape Verde	73	50	46	44	24	-	-	-	-	-
Egypt	3 482	1 985	1 655	2 373	1 211	214	702	700	305	75
Gambia	17	17	15	15	11	..	..	..	..	..
Ghana	132	205	1 361	422	372	2	1	1	1	8
Lesotho	54	53	53	41	43	..	..	..	..	..
Mauritius	60	70	122	126	39	19	15	7	12	6
Seychelles	66	71	168	59	44	2	3	3	2	2
South Africa	5 642	793	2 879	328	1 175	940	360	1 496	-5 113	439
Tunisia	659	714	618	771	304	..	..	..	..	..
Uganda	209	209	211	159	183	..	..	..	..	..
Zimbabwe	15	-	37	-	15	2	2	3	2	-
Total	*10 408*	*4 165*	*7 164*	*4 339*	*3 422*	*1 179*	*1 082*	*2 209*	*-4 792*	*531*

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Only those countries were selected for which data were available for the first quarter of 2009 (as of July 2009).

of an increase in new projects in Nigeria's oil industry, and investments in project upgrades, especially in the mining industry, by existing TNCs in Burkina Faso, Mali and Nigeria. Large cross-border M&As also took place in some other countries of the region. For example, Vodafone Group (United Kingdom) acquired a 70% stake in Ghana Telecommunications Co Ltd. for $900 million.[6] Payments, partly or wholly, for acquisitions of firms prior to 2008, and progressive expansion of projects by TNCs were a major part of the FDI inflows. In Nigeria, a consortium of foreign TNCs (Bg International Ltd, Chevron Nigeria Ltd, and Shell Gas and Power Development) continued their construction of the OK-LNG plant in Olokola Free Trade Zone. Chinese energy company CNOOC Ltd made further payments for a 45% stake in an offshore oilfield in Nigeria, which it had purchased in 2006 for $2.3 billion. Large FDI inflows to the subregion are expected to slow down in 2009, judging by data on cross-border M&As in the first half of 2009.

East Africa.[7] In East Africa, FDI inflows amounted to $4 billion – almost the same as in 2007. This represents 5% of total inflows into Africa, making it the lowest recipient among African subregions. FDI inflows increased in seven countries: Comoros, Djibouti, Madagascar, Mauritius, Seychelles, Uganda and the United Republic of Tanzania. Madagascar, Uganda and the United Republic of Tanzania received large inflows of FDI, particularly through cross-border M&As. These were mainly in expansion projects relating to several natural resource exploitation ventures that were already ongoing, and mostly before the onset of the global financial crisis and deteriorating economic prospects. In 2009, there is likely to be a levelling off or decline in FDI inflows to the subregion.

Central Africa.[8] The Central African subregion attracted almost the same amount of FDI inflows as in 2007 – $6 billion. With a share of 7% of FDI inflows into Africa, the subregion ranked fourth among FDI recipients in 2008. Congo was the leading destination with $2.6 billion. It was followed by Equatorial Guinea, where FDI inflows remained high ($1.3 billion) despite the fact that some TNCs, such as the United Kingdom-based Devon Energy Corporation, divested their interests in the country in 2008 due to disagreements.[9] The financial crisis and dampened global economic prospects are likely to reduce inflows to the subregion in 2009.

Southern Africa.[10] A major recovery of FDI inflows to Angola and South Africa drove FDI inflows to this subregion to their highest level ever: $27 billion in 2008, compared with $19 billion in 2007. Southern Africa accounted for 31% of the inflows to Africa, making it the leading recipient in 2008. As in the past, cross-border M&As were a very important component of these inflows. FDI inflows to South Africa surged, partly as a result of further payments by the State-run Industrial and Commercial Bank of China (ICBC) of $5.6 billion (table II.2) for a 20% stake in Standard Bank. This represents South Africa's biggest FDI deal since independence, beating the tie-up between Barclays and Amalgamated Banks of South Africa (ABSA) in 2005 (in South African rand value). Prospects remain good for further inflows to the subregion, with many countries there set to remain among the top 10 FDI recipients in Africa.

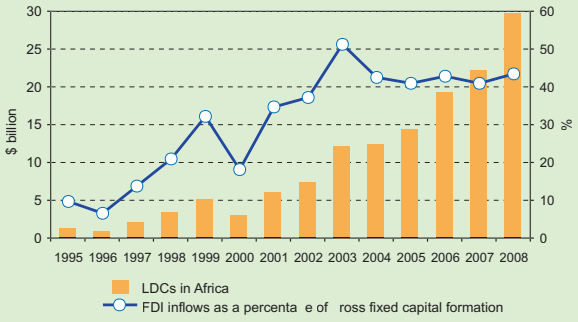
The top 10 recipient countries in Africa accounted for nearly 82% of the total FDI inflows to that region in 2008. They received inflows totalling $71 billion, up from $55 billion in 2007. Policy changes played a role, as did their larger markets and cross-border M&As. Each of the top 10 attracted inflows in excess of $1 billion, and in 4 of them (Angola, Egypt, Nigeria and South Africa), inflows were higher than $9 billion in 2008 (figure II.3). In Nigeria, the largest FDI recipient in Africa in 2007 and 2008, Chinese involvement grew further.

Box II.1. Inward FDI in African LDCs:[a] eight consecutive years of growth

In 2008, FDI inflows to the 33 African LDCs increased throughout the first six months, before a slowdown during the latter part of the year. Nevertheless, for the year as a whole, the group registered a net increase in inflows, from $22 billion in 2007 to $30 billion (box figure II.1.1) – the eighth consecutive year of growth. This latest increase also raised the share of LDCs in Africa's total FDI inflows slightly, to 34% in 2008 as compared with 32% in 2007, although the amount of FDI received by the group remains very low. Most of the inflows took place in the early part of 2008, as TNCs responded to the continued rise in global commodity prices. A large share of the inflows was in the form of greenfield and expansion projects prospecting for reserves of base metals and oil, in addition to some investments in infrastructure development. In infrastructure development, for instance, Eskom of South Africa continued to inject capital into the Grand Inga Dams project in the Democratic Republic of the Congo.

Given their concentration in the extractive industries, FDI inflows to the group were not evenly distributed: they were largely concentrated in a few natural-resource-rich countries. The main recipients among the LDCs of Africa in 2008 included: Angola, Sudan, Madagascar, Guinea, Equatorial Guinea and the Democratic Republic of the Congo, in that order. A large proportion of the inflows to these countries targeted petroleum exploitation and other mining activities. Among the LDCs in Africa, Angola and Sudan were among the top 10 recipients in the region as a whole in 2008. Angola's high FDI inflows were due to an expansion of investment in oil exploration and exploitation activities.

Box figure II.1.1. African LDCs: FDI inflows, by value and as a percentage of gross fixed capital formation, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex tables B.1 and B.3.

The main sources of FDI to African LDCs have remained the traditional developed-country investors, particularly France, the United Kingdom and the United States. In 2008, in countries such as Madagascar and Uganda, FDI from the developing countries of Asia and Africa, particularly China, grew through cross-border M&As. South African TNCs also expanded their activities in Angola, the Democratic Republic of the Congo, Mozambique and Zambia; many of the South African TNCs, such as Eskom, were engaged in infrastructure development and other service industries.[b]

Only one African LDC (Eritrea) continued to register negative FDI inflows in 2008, unlike its performance in the 1990s. Generally, many African LDCs, particularly those that had been hurt by civil wars, such as Angola and Uganda, are now witnessing a stable political situation. They have also achieved macro-economic stabilization and embarked on deregulation of their economies, as well as privatization, introduction of business facilitation measures, and revised and improved legal frameworks for FDI. In addition, with the slowdown in the global economy, TNCs are rethinking their investment strategies, investing some of their assets in the manufacturing sector which had been neglected for years, mainly to supply local regional markets. This change in strategy was obvious in the surge in cross-border M&A purchases of African manufacturing production units in 2008, including in the LDCs.[c]

Market access initiatives, such as the Generalized System of Preferences (GSP), Everything but Arms (EBA) and the African Growth and Opportunity Act (AGOA), are supposed to help African LDCs attract FDI into the manufacturing sector, even though constraints relating to domestic costs and capacities in many of the countries remain an impediment to exploiting these opportunities adequately. Some investments aimed at taking advantage of preferential market access initiatives (e.g. textile exports to the United States under AGOA, for instance) continued to be withdrawn in 2008 because with the expiration of the Multi-fibre Arrangement in 2005, the costs of production in the host economies outweighed the advantages, while some production locations, in Asia for instance, proved more competitive (UNCTAD, 2008a: 6).[d]

Source: UNCTAD.

[a] The 33 African LDCs are: Angola, Benin, Burkina Faso, Burundi, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Uganda, the United Republic of Tanzania and Zambia (Cape Verde graduated out of LDC status in 2008).

[b] "Eskom considers alternatives", *The Sunday Independent,* 4 January 2008.

[c] The following are examples of cross-border M&As in African LDCs: Sino Union Petroleum & Chemical International (Hong Kong, China) merged with a paints, varnishes, lacquers and allied products company, the Madagascar Energy International (Madagascar); Norfund SA (Norway) acquired a majority stake in a pesticide and agrichemicals company SOPRWA (Rwanda); Dimension Data PLC (South Africa) acquired a majority stake in a pre-packaged software company, Dimension Data PLC (Angola); and Barry Callebaud AG (Switzerland) acquired a chocolate and cocoa products company, Biolands (United Republic of Tanzania).

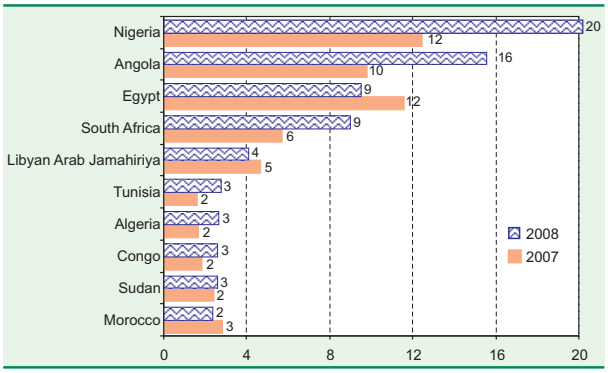
[d] See also "Footloose Industry and Labour Rights", *AfricaFocus Bulletin*, 27 January 2008.

ii. Outward FDI: a few countries dominated

FDI outflows from Africa declined by 12%, to $9 billion in 2008 (figure II.4) mainly due to large divestments by South African TNCs: in 2008, the Rubert family (South Africa) divested its participation in British American Tobaco (BAT) through its controlled affiliates, Richemont and Remgro.[11] The Libyan Arab Jamahiriya accounted for the largest share of the outflows from the region in 2008, with a share of about 63%. As part of efforts to diversify their revenue base through investments in non-commodity industries, Libya Africa Investment Portfolio launched activities abroad in the energy, information and communication technology (ICT) and tourism industries.[12] TNCs from Angola and Egypt were also very active in 2008, as they used FDI as one of the means of competing for global markets, often in the form of acquisitions of major assets abroad.

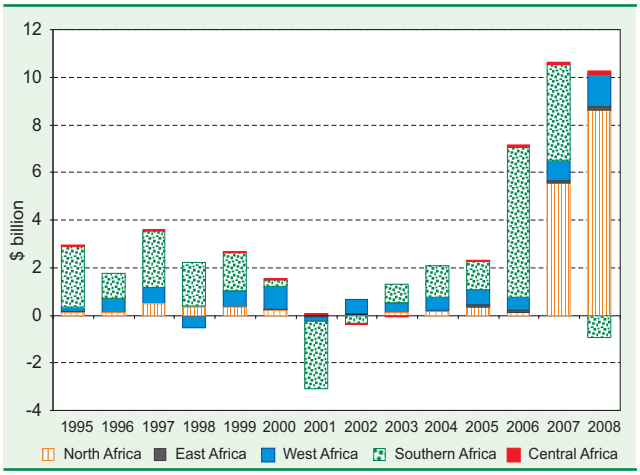
In 2008, African outward FDI targeted mainly the services sector. This is most visibly reflected in the pattern of cross-border acquisitions by African TNCs, which almost doubled to $6.8 billion in 2008 from $3.8 billion in 2007 (section b). Nigerian TNCs have also expanded their activities in the region: Dangote group (Nigeria) purchased a substantial minority stake in Sephaku Cement (South Africa) for $383 million (table II.5); Altech Stream Holdings (South Africa) acquired a 51% stake in Ugandan Internet service provider Infocom for $85 million, and Sonangol (Angola) invested in several ventures outside Angola, mainly in Portugal, where it acquired a 50% stake in Banco Millennium Angola (BMA), a subsidiary of Portugal's Banco Millennium BCP.

Figure II.3. Africa: top 10 recipients of FDI inflows, 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.
[a] Ranked by the magnitude of 2008 FDI inflows.

Figure II.4. Africa: FDI outflows, by subregion, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.

African TNCs also set a new record of mega cross-border acquisitions concluded in 2008, particularly in the services sector (table II.5). The share of the banking industry was particularly pronounced, though overall outflows slowed down in the second half of the year. A number of intraregional cross-border M&As were also postponed or cancelled in 2008, particularly in the mining industry, as a result of the global financial crisis.

The leading home economies for outward FDI from the region in 2008 were the Libyan Arab Jamahiriya, followed by Angola, Egypt and Guinea. Due to negative flows, South Africa was not among the largest outward investors in Africa in 2008 (annex table B.1). Outward FDI from all of these countries focused primarily on natural resource exploitation and the services sector.

b. Sectoral analysis: FDI focused on manufacturing

The main focus of FDI inflows to the region, particularly in the first half of 2008 – before the spreading of the economic crisis – was on the manufacturing and services sectors, judging by the data on cross-border M&As. The share of manufacturing in cross-border M&As shot up to about 75% of the total, or nearly $16 billion in 2008, from less than $1.4 billion in 2007, largely because of the above-mentioned $15 billion deal in Egypt (table II.2). Although the region, in particular sub-Saharan Africa, has not shown an established upward trend in TNC activity in the manufacturing sector, this rise contrasts with stagnating manufacturing activities in other regions of the world, and partly reflects concerted efforts by African recipient countries to

Table II.4. Africa: value of cross-border M&A sales and purchases, by region/economy, 2007–2009[a]
(Millions of dollars)

Region/economy	Net sales of companies in Africa[b]			Net purchases by African companies worldwide[c]		
	2007	2008	2009[a]	2007	2008	2009[a]
World	7 906	20 901	3 332	9 914	8 214	186
Developed economies	3 462	13 093	2 780	9 405	7 361	18
Europe	- 658	15 918	1 821	3 727	6 714	38
European Union	-1 336	15 855	1 811	1 363	6 714	38
France	1 547	14 208	1 857	40	4 141	39
Netherlands	-	40	-	70	- 779	-
United Kingdom	-5 301	2 078	- 15	1 097	2 131	- 1
North America	3 965	-2 619	956	6 012	420	- 65
Canada	1 046	51	- 102	5 864	15	- 65
United States	2 919	-2 670	1 058	149	405	- 0
Developing economies	3 923	7 698	536	344	853	168
Africa	22	504	25	22	504	25
Nigeria	-	383	-	280	- 4	-
South Africa	99	81	25	-	386	-
Asia and Oceania	4 056	7 194	577	732	174	143
Kuwait	1 210	- 65	-	-	125	-
United Arab Emirates	1 900	817	180	-	-	-
China	209	5 617	-	-	-	-
South-East Europe and CIS	250	15	-	165	-	-
Russian Federation	250	15	-	165	-	-

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).
[a] For 2009, January–June only.
[b] Sales to the region/economy of the ultimate acquiring company.
[c] Purchases in the region/economy of the immediate acquired company.
Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

shift towards higher value-added production and services.

Primary sector. In the primary sector, many TNCs in the region held on to their greenfield projects, following the exuberance from the rise in global commodity prices of the past few years, the intensified search for natural resource reserves, and subsequent project profitability in the region. In contrast, both the number and value of cross-border M&As in the sector fell rapidly in 2008: indeed selling off foreign affiliates (divestments) exceeded even new acquisitions (-$2 billion) which were down from about $4 billion in 2007 (table II.6), as commodity prices declined in late 2008. Nevertheless, the primary sector received the lion's share of the FDI inflows to the region, mostly in the form of increased equity investments in greenfield or expansion projects in the first half of 2008, when commodity prices were high and global economic prospects seemed good.

As in the past, African host governments failed to attract or induce much investment in the activities that are crucial for development (see for instance, *WIR07*; Jordan, 2007). In general, downstream activities and diversification efforts related to inflows in the primary sector remain marginal. A major policy challenge for these countries is to reverse this trend.

Manufacturing. In 2008, TNCs shifted their focus to Africa's manufacturing sector, more than doubling the value of their total cross-border M&As to reach their highest level ever – about $16 billion – in sharp contrast to the decline of such deals in the 1990s and their low levels earlier in the 2000s. The bulk of M&A activities were largely confined to non-metallic minerals (table II.2). Some countries, such as Algeria, Nigeria and South Africa, attracted sizeable greenfield FDI (though small by global standards) in other industries such as chemicals and chemical products, textiles, clothing and leather, and transport vehicles and other transport equipment.[13] African TNCs, for their part, made acquisitions abroad of about $1.6 billion in the sector.

Services. In the services sector, the finance industry, in particular, saw continued growth of FDI inflows in 2008. Cross-border M&As in services rose to more than $7 billion, from about $3 billion in 2007, though this was well short of the $14 billion worth of deals in 2006. Small foreign TNCs operating in

Table II.5. Africa: top 10 cross-border M&A purchases,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	4 141	Lafarge SA	France	Cement, hydraulic	NNS Holding	Egypt	13
2	1 906	Tradus PLC	United Kingdom	Catalog and mail-order houses	Naspers Ltd	South Africa	100
3	1 082	M-real Corp	Finland	Paper mills	Sappi Ltd	South Africa	100
4	700	Gateway Telecommunications PLC	United Kingdom	Radiotelephone communications	Telkom SA Ltd	South Africa	100
5	383	Sephaku Cement	South Africa	Cement, hydraulic	Dangote Group	Nigeria	45
6	340	Gavilon Group LLC	United States	Security and commodity services, nec	Orascom Constr Ind SAE	Egypt	20
7	299	National Australia Bank Ltd	Australia	Truck rental and leasing, without drivers	Super Group Ltd	South Africa	100
8	282	Nuffield Hospitals	United Kingdom	General medical and surgical hospitals	Netcare Ltd	South Africa	100
9	276	Datacraft Asia Ltd	Singapore	Computer facilities management services	Dimension Data PLC	South Africa	45
10	153	Strides Latina	Brazil	Pharmaceutical preparations	Aspen Pharmacare Holdings Ltd	South Africa	50

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).
[a] From the ultimate home country.
Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Table II.6. Africa: value of cross-border M&A sales and purchases, by sector/industry, 2007–2009[a]
(Millions of dollars)

Sector/industry	Net sales of companies in Africa[b]			Net purchases by African companies worldwide[c]		
	2007	2008	2009[a]	2007	2008	2009[a]
Total	7 906	20 901	3 332	9 914	8 214	186
Primary	3 837	- 2 055	2 430	5 328	- 261	- 36
Mining, quarrying & petroleum	3 837	- 2 055	2 430	5 328	- 261	- 36
Secondary	1 367	15 639	393	810	1 649	82
Wood and wood products	- 1 438	-	-	351	1 082	-
Non-metallic mineral products	831	15 469	145	466	339	-
Metals and metal products	250	104	248	55	7	44
Services	2 702	7 316	509	3 776	6 827	140
Trade	- 396	32	-	- 267	299	-
Transport, storage and communications	335	1 665	644	250	- 156	-
Finance	2 595	5 613	6	1 099	7 168	179
Business services	91	- 157	- 77	122	12	- 39
Health and social services	-	152	5	2 363	282	-

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Net sales in the industry of the acquired company.

[c] Net purchases by the industry of the acquiring company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

the region in geological surveys and related business services also engaged in cross-border M&As.

Economic growth and strategic national reforms have contributed to the wave of expansion of FDI by the region's TNCs in the services sector, particularly in financial services. The main home countries of participating TNCs included Egypt, Kenya, the Libyan Arab Jamahiriya, Nigeria and South Africa. In Nigeria specifically, reforms by the central bank encouraged banking consolidation, which resulted in the rapid expansion of Nigerian banks into other African countries such as Benin, Ghana, Gambia, Côte d'Ivoire, Liberia, Sierra Leone and Togo. In particular, M&As have driven the expansion of Ecobank Transnational International (ETI) (Nigeria) into 24 countries.

c. Policy developments

In 2008, more African governments demonstrated stronger commitment to maintaining a policy environment crucial for attracting stable and increasing FDI inflows, although the region's investment climate still presents a mixed picture. Many African countries have put in place policy incentives to attract more FDI and strengthen institutional support for their regulatory changes, thanks to greater stability and the drive to benefit from surging commodity prices.

Several African countries adopted policy measures that seek to promote private investment, including FDI. Burundi adopted a new investment code which aims to attract foreign investors. Egypt decided to establish various free industrial zones;[14] Kenya privatized a number of utilities. Mauritius enacted competition legislation, introducing restrictions on monopolies and collusion.[15] On the other hand, Zambia introduced a new tax regime which raises the tax rate in the mining industry from 31.7% to 47%.

Policy developments were not limited to unilateral measures. African countries signed 12 new BITs in 2008, bringing the total number of BITs involving African countries to 715 by end 2008. The Libyan Arab Jamahiriya was the most active, with two new BITs signed with Albania and the Russian Federation. As far as DTTs are concerned, African countries concluded eight new agreements in 2008, bringing the total number of DTTs for the region to 467. Again, the most active was the Libyan Arab Jamahiriya, with three new agreements concluded with Belarus, Ukraine and the United Kingdom. Morocco concluded two new agreements with the Islamic Republic of Iran and Latvia.

In terms of other IIAs, the Southern African Customs Union (SACU) and the United States concluded a trade, investment and development cooperative agreement, and the East African Community (EAC) and the United States concluded a Trade and Investment Framework Agreement (TIFA). Both agreements establish an institutional framework between the parties to monitor trade and investment relations. Also the Economic Partnership Agreement (EPA) between Côte d'Ivoire and the European Community (comprising the EU-27) contains a commitment to cooperate on investment-related issues. In addition, the Africa-India Summit resulted in April 2008, *inter alia,* in the conclusion of an Africa-India Framework for Cooperation Agreement, which recognizes the need to foster an environment for mutually beneficial economic development by reinforcing efforts to promote FDI.[16]

At the subregional level, the Economic Community of West Africal States (ECOWAS) adopted three Acts: (i) the Supplementary Act A/SA.3/06/08 Adopting Community Rules on Investment and the Modalities for their implementation within ECOWAS, (ii) the Supplementary Act A/SA.1/06/08 Adopting Community Competition Rules and the Modalities of their Application within ECOWAS, and (iii) the Supplementary Act A/SA.2/06/08 on the establishment and function of the Regional Competition Authority for ECOWAS. These Acts aim to foster the creation of a single economic space within which business and labour can operate, in order to stimulate greater productive efficiency, higher

levels of domestic and foreign investment, increased employment, and growth of intraregional trade and extraregional exports.

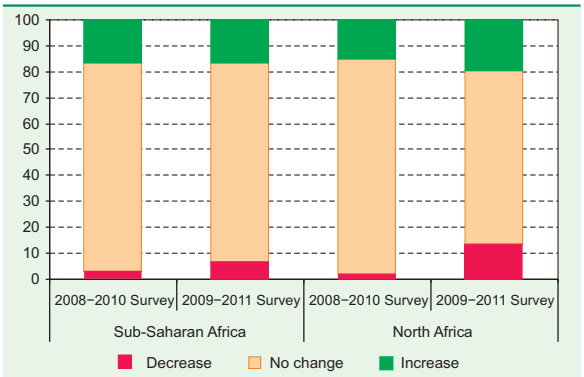
d. Prospects: the global economic slowdown could hurt FDI growth, especially in LDCs

In 2009, Africa is expected to see a break in FDI inflows, after a half decade of consecutive annual growth. The main reasons are the slowdown in the global economy, falling global commodity prices and a worsening of the financial crisis in many developed and fast-growing developing economies. The most seriously affected are likely to be Africa's LDCs, where many new natural-resource exploration and exploitation projects that were started in response to the surge in global commodity prices are being postponed or cancelled. The economic downturn and the drastic drop in oil prices have caused share prices of most energy companies to plunge, forcing many of them to cut capital spending to maintain liquidity. If commodity prices remained low, several smaller oil and natural gas TNCs in the region could become prey to hostile buyers.

The global financial crisis is also expected to push struggling TNCs in the region to reduce FDI activities, as illustrated by a number of recent examples of project postponements or cancellations. Few cross-border M&As in Africa are expected in 2009, and possibly beyond, because of a lack of available credit and investors' current aversion to debt.

The net effect of the global financial crisis and economic downturn is expected to dampen FDI inflows to all the subregions of Africa, except Southern Africa where consolidation of activities in certain industries is expected to lead to more inflows, particularly to South Africa. Judging by data on FDI inflows for the first quarter of 2009 (table II.3) and by cross-border M&As for the first half of 2009 (table II.4), FDI flows for the entire year are likely to fall and continue their downward trend in 2009. UNCTAD's latest *World Investment Prospects Survey* suggests that TNCs may increase their FDI in the region only towards the end of 2011 (figure II.5).

Figure II.5. Africa: comparison of the results of *WIPS 2009–2011* with *WIPS 2008–2010*
(Percentage of respondents)



Source: UNCTAD, 2009b.

2. South, East, South-East Asia and Oceania

The global economic and financial crisis spread to South, East and South-East Asia with a moderate time lag, affecting the region's exports as well as economic growth. A sharp fall in external demand has caused exports to plunge, and economic growth has slowed down in many countries in the region. Particularly in the newly industrializing economies (NIEs), GDP started to fall significantly in the fourth quarter of 2008, and a deep recession is inevitable. For the region at large, FDI inflows grew considerably in 2008, although slower than in the previous two years. Nevertheless, the 17% growth rate for the year as a whole does not reflect the current situation in a number of Asian economies, as the crisis started to have an impact on FDI inflows mainly in the last quarter of the year. As a result, the region is facing a downturn in FDI inflows in 2009.

Outward FDI from China flourished in 2008, driving total outflows from the region to $186 billion in 2008. However, due to the negative impact of the global crisis on Asian TNCs, FDI outflows from the region will slow down in 2009, although to a lesser degree than in many other parts of the world.

a. Geographical trends

(i) Inward FDI: divergent trends against the backdrop of crisis

Despite the impact of the global financial and economic crisis on host economies in South, East and South-East Asia and on the major home countries of TNCs investing in the region, total FDI inflows to the region in 2008 still rose by 17%, reaching $300 billion. As many as 14 countries saw a rise in inflows. Part of this increase was due to the growth in cross-border M&As (especially intraregional ones), the net value of which climbed to $51 billion (table II.7 and annex table B.4).

However, FDI inflows started to fall in 2009 in all major host economies, including China, Hong Kong (China) and India (table II.8);[17] and the value of cross-border M&A sales in the region dropped sharply in the first half of 2009, to $16 billion (table II.7). Like other developing regions, South, East and South-East Asia cannot escape the shock of the global financial crisis. In particular, since the region's economies are

heavily dependent on exports, falling external demand has slowed down economic growth since the last quarter of 2008. This in turn is dragging down FDI and does not bode well for short-term FDI prospects in the region.

Inflows to Oceania declined by an estimated 30% to $881 million. FDI data (or estimations) for 2008 show that among the 19 island States in this subregion,[18] only 5 registered FDI growth. During the past few years, growth in FDI flows to a few major FDI recipients in the subregion has been driven by high mineral prices and investments in extractive industries. Thus, the falling commodity prices due to the global financial crisis and economic recession have inevitably slowed down inflows to these economies and weakened FDI prospects.

FDI inflows to East Asia, South-East Asia and South Asia in 2008 amounted to $187 billion, $60 billion and $51 billion respectively (figure II.6). In 2007, the rate of growth of inflows to the three subregions was quite similar, but in 2008 growth rates varied considerably: 49% in South Asia, 24% in East Asia, and -14% in South-East Asia.

The performance of major economies in the region in attracting FDI also varied significantly. Inflows to the two largest emerging economies, China and India, continued to increase in 2008 (figure II.7). Among the four Asian NIEs, inflows to the Republic of Korea boomed and they continued to grow in Hong Kong (China), but they declined sharply in Singapore and Taiwan Province of China. In Malaysia and Thailand FDI inflows fell slightly. A number of other South-East Asian countries, including Indonesia and Viet Nam, have demonstrated a capacity to maintain growth in FDI, despite the crisis.

One of the striking features of FDI flows to the region during the past few years has been the steadily growing importance of China and India as host economies. With its inflows surging to a historic high ($108 billion) in 2008, China became the third largest FDI recipient country (after the United States and France) in the world. India ranked 10 places behind, but was catching up. And these two largest emerging economies ranked numbers one and three, respectively, as the most preferred FDI locations in UNCTAD's *World Investment Prospects Survey 2009–2011*. Their strong performance, even during the current crisis, has reshaped the landscape of FDI flows to the region as well as to the world at large.

- *China*. The pattern of inflows changed dramatically during the course of the year: from a surge in the first half of 2008 to a sharp decline in the second half. From January to June, the influx of "hot money" was one of the factors that caused inflows to rise sharply;[19] but they slowed down after July, and especially in the fourth quarter, due to the evolving global financial crisis and the deteriorating world economic situation. Rising production costs during the past few years,[20] coupled with shrinking demand from developed countries, have adversely affected many small and medium-sized enterprises (SMEs), including foreign affiliates based in the major manufacturing hubs (especially the Pearl River Delta). Many of them have shut down, sending a huge number of migrant workers back home to rural areas.[21] In terms of the geographic pattern of FDI inflows, there has been a rise of investment in western

Table II.7. South, East and South-East Asia: value of cross-border M&A sales and purchases, by region/economy, 2007–2009[a]
(Millions of dollars)

Region/economy	Net sales of companies in South, East and South-East Asia[b]			Net purchases by South, East and South-East Asian companies worldwide[c]		
	2007	2008	2009[a]	2007	2008	2009[a]
World	45 328	50 796	15 857	54 180	68 759	8 654
Developed economies	38 109	26 716	7 316	52 278	44 419	989
Europe	21 870	9 130	1 381	21 850	27 809	1 027
European Union	20 622	10 043	1 369	19 994	24 247	1 024
Netherlands	1 837	17	- 599	569	1 152	-
United Kingdom	12 264	2 912	1 157	15 953	19 144	28
Other developed Europe	1 248	- 913	12	1 856	3 562	3
Norway	7	- 943	-	1 458	3 539	3
North America	8 856	8 295	1 156	17 801	12 598	- 71
Canada	268	172	265	2 287	3 696	128
United States	8 588	8 123	891	15 514	8 902	- 198
Other developed countries	7 384	9 291	4 779	12 627	4 013	32
Australia	1 340	356	185	7 421	5 691	- 111
Japan	5 998	8 941	4 594	2 371	-1 355	142
Developing economies	2 375	22 551	8 240	2 891	24 315	7 574
Africa	218	284	143	571	6 134	64
South Africa	97	13	3	77	5 650	59
Latin America and the Caribbean	787	231	665	932	512	1 019
Asia and Oceania	1 370	22 036	7 432	1 388	17 669	6 491
West Asia	1 308	7 394	793	1 323	2 700	0
Turkey	-	695	-	1 280	2 712	-
United Arab Emirates	582	3 176	- 91	44	- 89	0
South, East and South-East Asia	61	14 953	6 467	61	14 953	6 467
China	-2 712	6 646	834	3 287	311	3 024
Hong Kong, China	-8 012	- 17	1 502	-1 221	4 153	- 106
India	1 999	185	139	-12 316	1 877	14
Malaysia	1 351	6 079	2 659	2 209	1 064	62
Singapore	5 811	506	1 729	2 601	5 668	3 734
South-East Europe and the CIS	132	840	-	- 989	25	92

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Sales to the region/economy of the ultimate acquiring company.

[c] Purchases in the region/economy of the immediate acquired company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Table II.8. South, East and South-East Asia and Oceania: FDI flows of selected economies,[a] 2008–2009, by quarter
(Millions of dollars)

Country	FDI inflows					FDI outflows				
	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1
Cambodia	224	272	186	133	87	6	6	6	6	-
China [b]	27 414	24 974	21 986	18 022	21 777	..	..	..	..	..
Hong Kong, China	19 588	14 806	11 097	17 513	11 792	12 381	25 084	6 938	15 518	4 558
India	14 197	11 891	8 782	6 684	6 256	..	..	..	..	..
Indonesia	1 460	2 040	1 921	2 498	3 511	1 730	1 436	1 517	1 217	814
Korea, Republic of [c]	- 674	- 212	1 633	1 454	- 63	4 116	2 702	3 916	2 061	1 132
Lao People's Democratic Republic	72	37	55	64	58	..	..	..	..	..
Malaysia	1 045	5 342	256	1 410	828	1 973	4 448	5 774	1 864	- 130
Pakistan	983	2 104	1 117	1 234	691	5	36	5	- 11	- 6
Papua New Guinea	13	- 51	6	2	359	-	-	-	-	1
Philippines	266	434	555	265	44	- 6	77	102	64	52
Singapore	8 268	3 649	3 561	7 246	3 220	2 656	751	4 012	1 509	1 478
Solomon Islands	15	19	18	23	17	3	3	3	3	3
Taiwan Province of China	597	1 107	989	2 739	263	3 165	2 623	2 174	2 331	980
Thailand	2 959	2 230	2 545	2 357	2 324	541	1 215	186	893	573
Vanuatu	7	9	3	14	5	-	-	- 1	-	-
Total	76 433	68 651	54 709	61 658	51 169	26 570	38 381	24 633	25 454	9 456

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Only those economies were selected for which data were available for the first quarter of 2009 (as of July 2009).
[b] Data exclude the financial industry.
[c] Data are from the Bank of Korea.

China, driven by both proactive government policies and foreign firms' efforts to reduce costs (box II.2). In 2009, while inflows are likely to decline overall, FDI seeking to tap the large Chinese market is expected to remain strong.

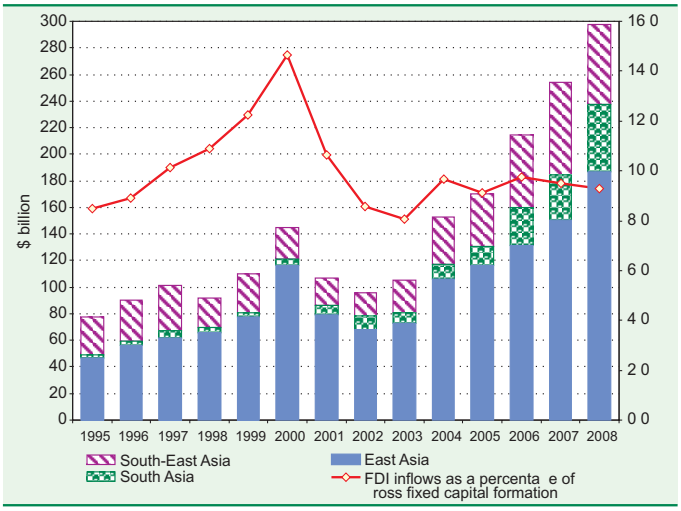
- *India*. In recent years, leading TNCs in many manufacturing and service industries, ranging from steel and automotives to retail (*WIR07*), have speeded up their market entry and expansion in India. Accordingly, FDI flows to the country in 2008 surged, continuing the trend of the previous two years, to reach a record $42 billion. However, as some large TNCs are reconsidering their global expansion plans in response to the global financial crisis and economic recession, their investment projects in India may be affected.[22]

Among the Asian NIEs, Singapore and Taiwan Province of China were hit the hardest by the global financial crisis, with economic growth and FDI inflows declining significantly. On the other hand, the Republic of Korea saw a surge in inflows.

- *Republic of Korea*. Following a continous decline in FDI inflows during the period 2005–2007, to $2.6 billion, FDI resumed growth and surged to $7.6 billion in 2008. Even before the global financial crisis the economic performance of the country had been weakening. The massive debts of its firms and households, and a heavy reliance on exports suggest serious troubles ahead due to the crisis.[23] However, a large stimulus plan by the Government and a weakening won may help the economy maintain positive growth in the coming years and the recovery in FDI may continue.
- *Singapore*. As one of the region's most open economies and its financial and logistics centres, Singapore has been shaken by the global financial crisis, slipping into economic recession. As a result, it saw its FDI inflows drop by 28% in 2008, to $23 billion.

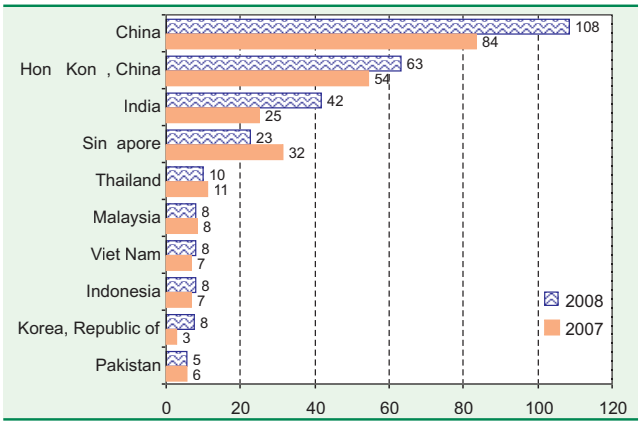
Some countries in South-East Asia saw lower FDI inflows: inflows to Malaysia and Thailand dropped by 4% and 10% respectively. While a number

Figure II.6. South, East and South-East Asia: FDI inflows, by value and as a percentage of gross fixed capital formation, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex tables B.1. and B.3.

Figure II.7. South, East and South-East Asia: top 10 recipients of FDI inflows,[a] 2007–2008
(Billion of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.

[a] Ranked by the magnitude of 2008 FDI inflows.

of other countries in the subregion were successful in attracting greater FDI inflows to promote their economic development.

- *Indonesia*. FDI inflows rose by 14% in 2008, reaching around $8 billion. Political stability, buoyant domestic demand and sound economic fundamentals should help boost economic growth and FDI prospects in the country.[24]
- *Viet Nam*. In 2008, FDI inflows to the country totalled a record $8 billion, up nearly 20% from last year, and there has been no sign of a weakening in the first half of 2009. In UNCTAD's *World Investment Prospects Survey 2009–2011*, Viet Nam ranked 11th among the most preferred investment locations for foreign investors in 2009, down from 6th position in the previous survey, perhaps due to high inflation and macroeconomic instability. Nevertheless, the country continues to attract record foreign investments, suggesting that investors are still confident in its long-term growth prospects. Viet Nam is becoming an increasingly attractive location for FDI in labour-intensive manufacturing and other activities. Most of its FDI comes from investors in other developing economies.[25]

Judging from data on cross-border M&A sales in the region, the share of developed countries as source of investment declined in 2008 (table II.7), and the share of investors from within the region itself was rapidly catching up. In other words, intraregional FDI is rising. Indeed 6 of the top 10 cross-border M&A deals concluded in the region were intraregional (table II.9).

(ii) Outward FDI: strong, but falling

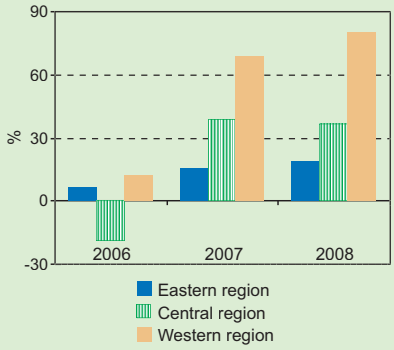
FDI outflows from South, East and South-East Asia rose by 7% to $186 billion (figure II.8). The total value of cross-border M&A purchases by TNCs based in the region was $69 billion in 2008, up by 27% from 2007 (table II.7). M&A purchases had already surpassed M&A sales in 2007 and continued to do so in 2008. In recent years, rising outflows from major economies in the region have been fuelled by their relatively high economic growth, rapid accumulation of foreign currency reserves as a result of trade surpluses,[26] and, more fundamentally, the greater competitiveness of firms based in these economies. Supportive government policies have also played a role, especially in China – the second largest outward investing economy in the region (following Hong

Box II.2. Booming FDI to West China: drivers and determinants

FDI inflows into China have been concentrated in the coastal areas of the country. By the end of 2008, more than four fifths of the accumulated inflows were in the eastern region. However, in recent years, FDI inflows to the central and western regions have boomed, and the growth rates of inflows were much higher than in the eastern region (box figure II.2.1). This reflects a growing interest by TNCs to explore investment opportunities in the inland areas.

FDI inflows into China's central and western regions surged in response to a proactive "Go West" policy introduced by the Central Government a decade ago. This policy aims to promote economic growth of the inland areas in order to reduce income disparity between the coastal and inland areas. Preferential treatment is offered to FDI projects in the economically backward central and western provinces.[a] In addition, rising production costs in the coastal areas have been influencing TNCs' location decisions in favour of inland areas. Moreover, rapid infrastructure development in the central and western regions has significantly reduced transportation and other costs related to production.

Box figure II.2.1. FDI growth rates in the three regions of China, 2006–2008



Source: Ministry of Commerce of China.

Source: UNCTAD.

[a] For instance, foreign invesment projects falling into the *Catalogue of Advantaged Industries for Foreign Investment in the Central-Western Region* (newly amended in 2008) are entitled to preferential tax treatments.

Table II.9. South, East and South-East Asia: top 10 cross-border M&A sales,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	7 785	China Netcom Group Corp (Hong Kong) Ltd	Hong Kong, China	Radiotelephone communications	China Unicom Ltd.	China	31
2	3 442	Ranbaxy Laboratories Ltd	India	Pharmaceutical preparations	Daiichi Sankyo Co Ltd	Japan	43
3	3 072	Tuas Power Ltd	Singapore	Electric services	Huaneng Group	China	100
4	2 763	Senoko Power Ltd	Singapore	Electric services	Lion Power (2008) Pte Ltd	Japan	100
5	2 474	Wing Lung Bank Ltd	Hong Kong, China	Banks	China Merchants Bank Co Ltd	China	53
6	2 231	Peak Gain International Ltd	China	Land subdividers and developers, except cemeteries	Shanghai Shimao Co Ltd	China	100
7	2 116	Himart Co Ltd	Korea, Republic of	Radio, television, and consumer electronics stores	Eugene Himart Holdings Co Ltd	Korea, Republic of	100
8	2 082	Wing Lung Bank Ltd	Hong Kong, China	Banks	China Merchants Bank Co Ltd	China	45
9	1 869	Homever	Korea, Republic of	Grocery stores	Tesco PLC	United Kingdom	100
10	1 800	Indonesian Satellite Corp PT {Indosat}	Indonesia	Telephone communications, except radiotelephone	Qtel	Qatar	41

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] In the immediate host economy.

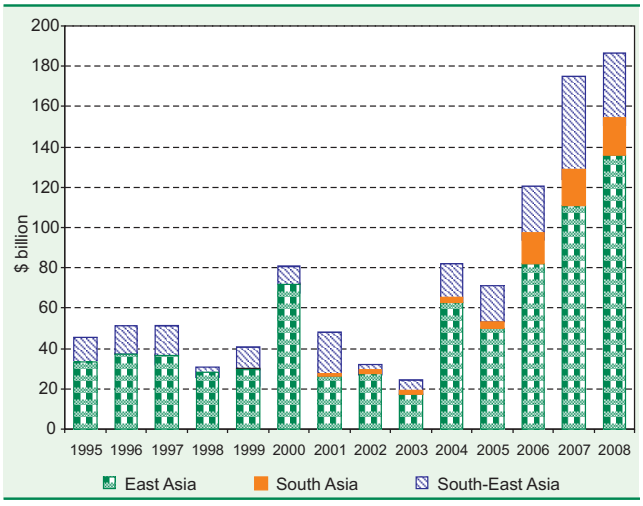
Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company.

Kong, China). Since late 2008, the global financial crisis has weakened economic performance and undermined the ability and motivation of many TNCs in the region to invest abroad.[27] As a result, their FDI outflows are set to slow down.

China and India have become important sources of outward investment from the region (figure II.9). Their share in total regional outflows rose from 23% in 2007 to 37% in 2008. Despite the global crisis, FDI from China, in particular, surged, reaching $52 billion in 2008, 132% up from 2007, and its outflows continued to grow in early 2009. The country ranked thirteenth in the world as a source of FDI and third among all developing and transition economies. Many large Chinese TNCs are driven to invest abroad by their need to secure access to natural resources (such as oil, gas and mineral deposits) and created assets (such as technologies, brand names and distribution networks). Moreover, significant exchange-rate fluctuations and falling share prices abroad as a result of the crisis might have created good opportunities for them to buy bargain assets.

In contrast, FDI outflows from other major economies in the region slowed down in 2008. Outflows from all four Asian NIEs declined, by 2% in Hong Kong (China), by 7% in Taiwan Province of China, by 18% in the Republic of Korea, and by a massive 63% in Singapore (with outflows amounting to $60 billion, $10 billion, $13 billion and $9 billion, respectively) (figure II.9). This caused their share in total outward FDI from the region to decline from 64% in 2007 to 49% in 2008. The Asian NIEs have been hit particularly hard by the crisis, and their relative significance in the region's outward FDI is continuing to decline, as suggested by the fall in their cross-border M&A purchases in the first half of 2009.

Figure II.8. South, East and South-East Asia: FDI outflows, by subregion, 1995–2008

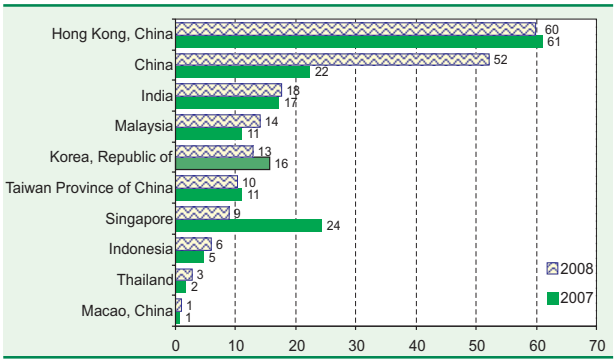


Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.

The bulk of the South-South flows (excluding those targeting offshore financial centres) from the region are intraregional in nature. Flows within East and South-East Asia are particularly pronounced, and have contributed to the promotion of regional economic integration. Those flows have been on the rise in infrastructure industries.[28] There has also been a rise in FDI to low-income African countries. In 2008, for example, investments from Asian countries in infrastructure projects in sub-Saharan Africa rose significantly. They play a crucial role in the financing of infrastructure in African LDCs, such as Angola and the Democratic Republic of the Congo.

Outward FDI from South, East and South-East Asia to developed countries has also been

Figure II.9. South, East and South-East Asia: top 10 sources of FDI outflows, 2007–2008[a]
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.
[a] Ranked by the magnitude of 2008 FDI outflows.

rising as part of efforts by Asian firms to acquire strategic assets abroad. Indeed, an increasing number of large deals undertaken by companies and funds based in the region have been targeting all the three economic sectors in developed counties (section b).

b. Sectoral trends

(i) Inward FDI: services and manufacturing continued to be targeted

In 2008, FDI directed towards the services sector in South, East and South-East Asia continued to increase, as also reflected in the rising value of cross-border M&A sales in that sector (table II.10). In the NIEs, a major part of their cross-border M&As continued to be in services, although in late 2008, and particularly in early 2009, they fell sharply in banking. This is because banks and private equity firms based in the United States as well as Europe are not able to invest any more, and have even started to divest due to the difficulties they face at home. In China and India FDI growth was significant in such services as infrastructure and retail. For example, following its global competitors such as Metro AG (Germany), Wal-Mart Stores (United States) opened its first store in India in 2008, and plans to open 15 more over the next few years.

Cross-border M&A sales in the region increased in the manufacturing sector while they declined in the primary sector in 2008. Investment in pharmaceuticals was noteworthy, including two acquisitions of Ranbaxy Laboratories Ltd (India) by Daiichi Sankyo Co Ltd (Japan) for $5 billion. Manufacturing still accounts for about half of inflows to China, and more inflows are targeting high-tech industries. However, the country now faces fierce competition from low-income countries in South and South-East Asia in attracting FDI in labour-intensive production. How to tackle the impacts of the "hollowing out" of the production base, while also to upgrade to high-end industries and high-value-added activities has become a challenge for a number of China's coastal provinces, such as Guangdong.

In India in 2008, FDI in industries such as steel continued to increase, including from Western steelmakers, as well as from Chinese metal companies (Minmetals and Xinxing for instance). In the steel industry, Formosa Plastics Corporation (Taiwan Province of China) started to invest in an $8 billion plant in Viet Nam. In the electronics industry, leading companies such as Foxconn (Taiwan Province of China) and Samsung (Republic of Korea) are also investing in several multibillion dollar projects in Viet Nam.[29] All of these investments were through greenfield projects, rather than acquisitions.

Table II.10. South, East and South-East Asia: value of cross-border M&A sales and purchases, by sector/industry, 2007–2009[a]
(Millions of dollars)

	Net sales of companies in South, East and South-East Asia[b]			Net purchases by South, East and South-East Asian companies worldwide[c]		
Sector/industry	**2007**	**2008**	**2009[a]**	**2007**	**2008**	**2009[a]**
Total	45 328	50 796	15 857	54 180	68 759	8 654
Primary	3 348	823	786	- 28	6 098	384
Mining, quarrying and petroleum	2 566	624	776	2 258	6 104	375
Secondary	13 828	18 936	4 492	16 089	6 569	2 064
Food, beverages and tobacco	1 903	1 661	2 660	- 575	201	16
Textiles, clothing and leather	23	286	13	487	579	374
Chemicals and chemical products	1 600	8 237	176	1 189	228	- 40
Non-metallic mineral products	1 313	1 116	349	60	396	- 13
Metals and metal products	2 308	1 635	- 0	1 727	759	1 455
Machinery and equipment	1 771	875	132	6 162	1 146	45
Electrical and electronic equipment	2 666	1 612	79	5 847	776	68
Motor vehicles and other transport equipment	561	1 703	8	261	2 557	85
Services	28 152	31 037	10 580	38 119	56 092	6 206
Electricity, gas and water	194	7 498	2 357	2 099	3 444	2 484
Construction	- 181	41	47	260	1 360	41
Trade	- 37	1 942	1 242	803	- 109	1 332
Transport, storage and communications	2 286	5 314	4 202	- 11 940	- 238	- 3 342
Finance	15 170	11 640	432	45 990	47 753	5 339
Business services	7 647	3 566	2 111	560	1 196	278

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).
[a] For 2009, January–June only.
[b] Net sales in the industry of the acquired company.
[c] Net purchases by the industry of the acquiring company.
Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

(ii) Outward FDI: resource-seeking FDI rose

In 2008, cross-border M&A purchases by firms based in South, East and South-East Asia increased significantly in the primary and services sectors, but declined in manufacturing (table II.10). Some of the largest deals targeted the services sector both in the region and in developed countries: investment by Temasek Holdings (Singapore) in Merrill Lynch (United States) is a good example (table II.11). A recent case in manufacturing was the $2.3 billion acquisition of Jaguar Cars Ltd (United Kingdom) by Tata Motors Ltd (India) (table II.11).

In the primary sector, outward FDI in agriculture from East and South-East Asia has been on the rise. In 2008, resource-seeking FDI from the region continued to expand as well. In addition to oil companies, large mining and metal companies from China and India have become more and more aggressive in acquiring overseas assets. For example, in February 2008, in cooperation with Alcoa (United States), Chinalco (China) acquired a 12% stake in Rio Tinto PLC in the United Kingdom, for $14 billion. This deal, China's biggest ever acquisition overseas, gave Chinalco 9% ownership of Rio Tinto (Australia/United Kingdom) as a whole, making it the largest shareholder. However, in early 2009, a second deal by Chinalco aiming at acquiring Rio Tinto's Australian assets failed.

The global financial crisis may to some extent promote more natural-resource-seeking investments by Asian firms. During the global financial crisis, for example, the slump in share prices of mining companies in Australia, together with the sharp depreciation of its currency, have created good acquisition opportunities for resource-hungry investors from developing Asia. In addition, heavily indebted Western mining companies' need for cash might enable Asian companies to control mining assets. In July 2008, for instance, Sinosteel (China) acquired a 51% stake in Midwest (Australia), an iron ore mining firm, for $1.4 billion.

In financial services, a number of sovereign wealth funds and other financial institutions based in East and South-East Asia started to invest in troubled banks in developed countries in 2007 and 2008. The Asian investors might have seen this as a good opportunity to buy big Western banks that were in urgent need of cash during the credit crunch, and to access developed-country markets for financial services. However, the huge losses in book value suffered by the investors in late 2008 and 2009 highlighted the high risks associated with such investments.

c. Policy developments

The overall trend in Asian countries to change national policies and legislation to become more favourable to FDI led to the further opening up of markets and to a more enabling environment for foreign companies to do business in several countries. Government policy responses to address the financial crisis and its economic aftermath have played an important role in creating favourable conditions for a recovery of economic growth and FDI inflows in the region.

Regarding changes in national legislation more favourable to FDI, India abolished existing FDI ceilings, or at least raised some of them, for certain industries in 2008 and early 2009.[30] In March 2009, China streamlined the procedures for approval of FDI projects in general and holding companies in particular.[31] In April 2009, Malaysia raised foreign equity limits in financial services.[32] In Viet Nam, beginning from September 2008, a newly introduced decree eliminated permits and sub-licence

Table II.11. South, East and South-East Asia: top 10 cross-border M&A purchases,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	14 284	Rio Tinto PLC	United Kingdom	Gold ores	Chinalco	China	12
2	7 785	China Netcom Group Corp (Hong Kong) Ltd	Hong Kong, China	Radiotelephone communications	China Unicom Ltd.	China	31
3	5 617	Standard Bank Group Ltd	South Africa	Banks	ICBC	China	20
4	4 400	Merrill Lynch & Co Inc	United States	Security brokers, dealers, and flotation companies	Temasek Holdings	Singapore	11
5	3 072	Tuas Power Ltd	Singapore	Electricity services	Huaneng Group	China	100
6	2 656	Sabiha Gokcen International Airport	Turkey	Airports and airport terminal services	Investor Group	India	100
7	2 501	Awilco Offshore ASA	Norway	Oil and gas field exploration services	Undisclosed	China	100
8	2 489	Santos Ltd	Australia	Crude petroleum and natural gas	Undisclosed	Malaysia	40
9	2 474	Wing Lung Bank Ltd	Hong Kong, China	Banks	China Merchants Bank Co Ltd	China	53
10	2 300	Jaguar Cars Ltd	United Kingdom	Motor vehicles and passenger car bodies	Tata Motors Ltd	India	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] From the ultimate home economies.

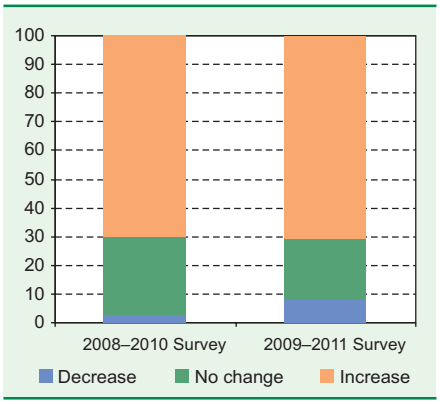
Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

requirements imposed by ministries, agencies and local authorities on businesses.[33] In terms of more openness to FDI in R&D, the Republic of Korea now allows foreign institutions to take the lead role in joint research projects between entities based in the country and other countries.[34]

In 2008, several Asian countries also adopted measures with a regulatory effect on FDI. In Indonesia, for example, in March 2008 the Ministry of Communications issued a decree banning foreigners from investing in the construction and ownership of wireless communications towers.[35] China introduced its Anti-monopoly Law (effective as of 1 August 2008) and an enforcement system involving three government agencies. The first rejected M&A case was the $2.4 billion bid by Coca Cola (United States) to acquire Huiyuan, a Chinese fruit juice company.[36]

At the regional level, the Asia Pacific Economic Cooperation (APEC) forum reached agreement in May 2008 on its Investment Facilitation Action Plan 2008–2010, which was designed to encourage investment in the Asia-Pacific region by reducing obstacles to foreign investors. Specifically, the plan contains investment facilitation principles to guide the collective actions of APEC member economies in key areas affecting investment flows.[37] Also, the Heads of State of the Association of Southeast Asian Nations (ASEAN) affirmed their commitment to ensure the free flow of investments and to expand regional cooperation, including among ASEAN countries, plus China, Japan and the Republic of Korea.[38]

Figure II.10. South, East and South-East Asia: comparison of the results of *WIPS 2009–2011* with *WIPS 2008–2010*
(Percentage of respondents)



Source: UNCTAD 2009b.

The countries of the region concluded 19 BITs and 13 DTTs in 2008, bringing the total to 777 and 767, respectively. South, East and South-East Asia continued to be the most active developing region, with 10 new agreements other than BITs and DTTs signed in 2008 (chapter I). Singapore concluded FTAs with the GCC, China and Peru, while China concluded agreements with New Zealand and Peru. ASEAN countries concluded FTAs with Japan, Australia and New Zealand; Viet Nam concluded an FTA with Japan.

d. Prospects: downturn is looming

Due to the heavy reliance of East and South-East Asia on trade, the impact of the current financial crisis on the region's economic performance will be much deeper than was anticipated, and will inevitably have a negative impact on FDI flows in the short to medium term. Weakened FDI activity in the first half of 2009 ended the growth trend of FDI to the region. The duration and depth of the downturn in FDI will depend on a range of factors, including, in particular, the severity and duration of the global recession and the efficiency and effectiveness of national and international policy responses in the region.

FDI inflows into the region that have been driven by both efficiency- and market-seeking motives are being affected. A big fall in demand from developed countries is inevitably causing a fall in efficiency-seeking, export-oriented FDI to the region. In the countries where the confidence of domestic consumers is falling and economic and income growth are sharply slowing down, market-seeking FDI is also decreasing. However, in China and India, such kind of FDI is expected to recover soon. This is partly supported by the view of TNCs in response to the *WIPS 2009–2011* (figure II.10). In China, proactive fiscal policy responses to sustain economic growth, such as the $580 billion stimulus package, as well as the expansionist monetary policy, may help maintain foreign investors' confidence and FDI inflows at relatively high levels.

In terms of outward FDI, as noted above, the ability and motivation of some large TNCs in the region to invest abroad have been weakened significantly by the global financial and economic crisis. On the other hand, companies and funds from a number of Asian economies that are not, or are less, affected by the financial turmoil may maintain an aggressive strategy for overseas investments and become more important actors on the global FDI scene.[39] Furthermore, for many Chinese and Indian companies, in particular, the desire to acquire undervalued assets (such as mineral deposits, technologies, brand names and distribution networks) during the global and financial crisis may boost Asian investments in developed countries.

3. West Asia

FDI inflows into West Asia increased in 2008 for the sixth consecutive year. The increase was largely due to a significant rise of inflows to Saudi Arabia, whereas FDI growth was uneven among the other countries of the region. It was mainly driven by real estate, petrochemicals, refining, construction and trade. Until September 2008, FDI inflows were

still bolstered by the continuous rise in oil prices, robust economic growth and the proliferation of mega development projects. However, seizure in global credit markets has had a severe impact on the financing of development projects, which is likely to cut FDI inflows in 2009. FDI outflows from West Asia fell sharply in 2008, along with the value of net cross-border M&A purchases by West Asian TNCs. After suffering large losses related to the global crisis, outward investors have become more risk averse, and some have turned their spending to their own economies. On the other side, the fall in global equity markets has offered new investment opportunities for cash-rich enterprises and entities, which is likely to positively affect outward prospects for 2009. The policy liberalization trend continued in 2008, with the implementation in a number of countries of new policy measures aimed at encouraging FDI.

a. Geographical trends

(i) Inward FDI: 2008 marked six years of growth

FDI inflows to West Asia increased by 16%, to $90 billion in 2008, marking the sixth consecutive year of increase (figure II.11). The region's share in total FDI flows in the developing world rose to 15% in 2008, compared with a paltry 3% in 2002. Traditionally, FDI inflows in West Asia have been concentrated in Saudi Arabia, Turkey and the United Arab Emirates, particularly since 2003. They accounted for 75% of cumulated inflows during the period 2003–2007, and for 78% in 2008. They were also the top three holders of inward FDI stock, with 70% of West Asia's aggregate FDI stock concentrated in them in 2008.

The increase of FDI inflows in 2008 was largely due to soaring flows to Saudi Arabia, which rose by 57% to $38 billion (figure II.12). The petrochemical and refining industry in that country accounted for most of the growth in inflows, which amounted to $12 billion (a 57% increase over the previous year), and there was a fourfold rise in the real estate sector, where inflows totalled $7.9 billion (SAGIA, 2009). Saudi Arabia attracted 42% of total inflows to the region, consolidating its position as the region's top FDI recipient (figure II.12).

In Turkey, the second largest recipient in the region, inflows declined by 17% to $18 billion, after reaching an exceptionally high level in 2007 due to a number of cross-border M&A mega deals in the financial industry (see *WIR07*). Inflows fell by 3% in the United Arab Emirates to $14 billion, as the global financial crisis in the last quarter of 2008 began to hit Dubai's tourism, real estate and banks.

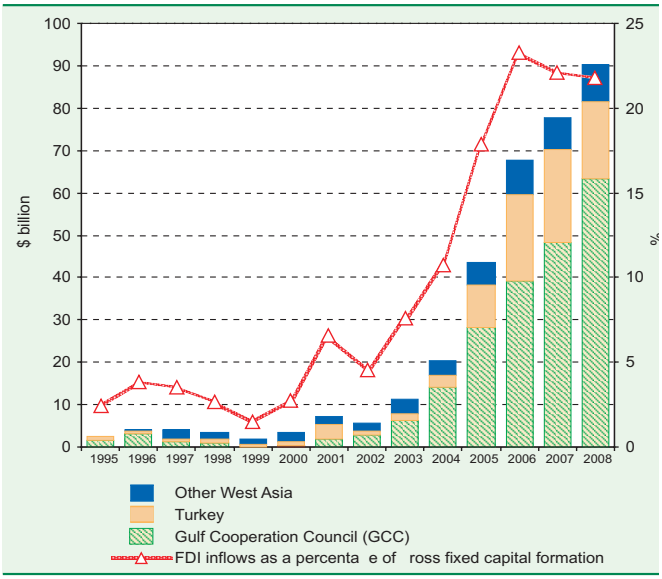
Among the other countries of the region, Qatar saw a sizeable 43% increase in FDI inflows, mainly in liquefied natural gas (LNG), power and water, and telecommunications. In Lebanon, the 32% rise in inflows was mainly driven by real estate. In the Syrian Arab Republic the massive 70% rise in inflows, that reached $2 billion, was attributable to growing business opportunities resulting from that country's increasing economic openness and improving international relations. FDI inflows rose only slightly in Bahrain, Iraq and the Palestinian territory, remained almost at the same level in Jordan, and fell in Kuwait, Oman and Yemen (annex table B.1).

Until September 2008, FDI to West Asia was still bolstered by the continuing rise in oil prices, which formed the basis for robust economic growth. The members of the Gulf Cooperation Council (GCC)[40] have used their abundant oil wealth to launch massive projects in a variety of industries, such as refineries, petrochemicals, electricity, water, telecommunications, real estate, and tourism and leisure. In the process, their reliance on FDI has increased, not so much for its financial contribution, but for the technology, expertise and management it brings with it. High oil prices also contributed to the increase in FDI in countries that are not significant oil exporters in two principal ways: (i) they made funds available for increased intraregional FDI; and (ii) they boosted economic growth through increased aid, investment and workers' remittances from the GCC countries. These factors increased the attractiveness of these countries for FDI.

The sharp fall in oil prices and the steadily worsening outlook for the world economy since the third quarter of 2008 have dampened the optimism that infused the region for the past six years. Countries are now facing the prospect of deficits on their fiscal and current accounts for the first time in over five years, and development projects across the region are being hit hard by the global credit crunch and the changing economic outlook. The number of international banks willing to lend to projects in GCC countries has shrunk sharply: only 12 banks were actively seeking project finance deals there at the end of 2008, down from 45 in 2006.[41] As a result, major oil and gas, industrial and infrastructure projects that have a substantial amount of FDI have been delayed (see box II.3). Countries that are not (or not significant) oil exporters face worsening economic prospects and much lower oil revenues for intraregional FDI.

While FDI inflows to West Asia remained resilient to the global economic and financial crisis in 2008, cross-border M&A sales in the region dropped by 36% to $14.7 billion in 2008. This was due to a 71% fall in net acquisitions by TNCs from developed countries, which plummeted to $4.2 billion. TNCs from developing countries registered a smaller

Figure II.11. West Asia: FDI inflows, by value and as a percentage of gross fixed capital formation, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

decrease in net acquisitions (5%), which totalled $7.5 billion, 62% of which involved West Asian TNCs (table II.12). Most of the net cross-border sales (79%) took place in Turkey where they amounted to $11.6 billion (annex table B.4.), half of which were privatization deals. The fall in cross-border M&A sales accelerated during the first half of 2009, as net sales in that period totalled only $1.4 billion (table II.12).

(ii) Outward FDI: strong decline, especially to developed countries

FDI outflows from West Asia amounted to $34 billion in 2008, down by 30% (figure II.13). They fell the most in Saudi Arabia (from $13.1 billion to $1.1 billion) and in Qatar (from $5.3 billion to $2.4 billion). Outward stocks amounted to $132 billion, with GCC countries accounting for more than 80% of the total. All major investors from the region are GCC countries (figure II.14).

This strong decline in outward FDI is largely explained by the 45% fall in the value of net cross-border M&A purchases by West Asian TNCs, due to a 73% drop in their net purchases (by value) of firms in developed countries.[42] By contrast, West Asia's cross-border acquisitions in developing Asia increased by 63%. As a result, the share of developed countries in the net value of total purchases abroad by West Asian enterprises declined sharply, from 70% in 2007 to 34% in 2008 (table II.12). The GCC countries accounted for 97% of West Asia's cross-border M&A purchases in 2007 and for 93% in 2008 (annex table B.4).[43]

Outward FDI activities have become part of the diversification policy of GCC countries, away from oil- and gas-based economies, with sovereign wealth funds (SWFs), State-owned enterprises (SOEs) and other government-controlled entities playing a key role.

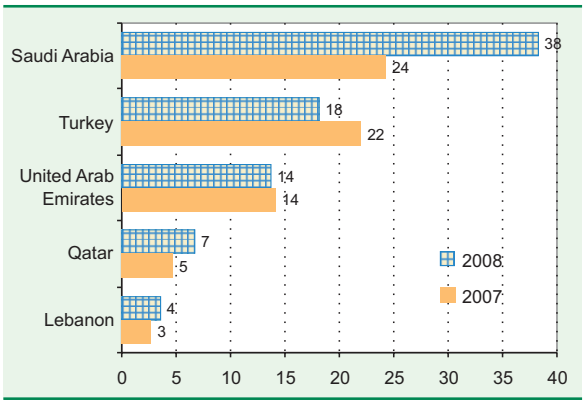
With the global financial crisis and the collapse of global equity markets, most SWFs in the region – as elsewhere – have registered significant losses, estimated at close to 30% of their portfolios (table II.14). This has made them risk averse (box II.4). At the same time, SOEs and government-controlled entities in general (including SWFs) have switched their spending to their own crisis-hit economies. They are thus reducing purchases of foreign assets, and several have even liquidated assets abroad in order to secure funds to bail out their domestic banking systems and capital markets.[44]

However, the exception is GCC members' State-owned telecom companies, which were actively investing abroad in 2008. Saudi Telecom, Zain (Kuwait), and Qatar Telecom (Qtel) each concluded a cross-border M&A mega deal (table II.15), and Omantel (Oman) acquired a 65% stake in Pakistan's WorldCall for $204 million. In addition, a number of GCC States' telecom companies secured licences to operate abroad.[45]

b. Sectoral trends: manufacturing up

Sectoral data for Saudi Arabia and Turkey, which together attracted 63% of total FDI inflows to the region in 2008, show an FDI boom in real estate acquisitions. Inflows to this industry increased by 120%, to $10.9 billion. There was a 28% increase

Figure II.12. West Asia: top 5 recipients of FDI inflows,[a] 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Ranked by the magnitude of 2008 FDI inflows.

in the manufacturing sector – mainly oil refining and petrochemicals as well as food and beverages – resulting in total investments of $17.8 billion. On the other hand, the services sector with $20.3 billion worth of inflows registered a 3% decline, and the primary sector saw an even larger decline of 13% with inflows amounting to $4 billion. Within the services sector, FDI increased strongly in construction (104%) and trade (154%), to $3.7 billion and $2.9 billion respectively, while it decreased by 36% in finance to $8.4 billion.[46]

The sectoral breakdown of cross-border M&A net sales in the region shows a halving of net sales in the services sector and their doubling in manufacturing in 2008 (table II.16). The latter is mainly the result of a number of privatization deals that took place in Turkey, which involved the sale, among others, of a refinery for $2 billion and a tobacco company for $1.7 billion.

In the *primary sector,* TNCs have been very active in West Asia, despite restrictions on foreign investment in the upstream segment of the oil and natural gas industry. Moreover, they have remained active even after the fall in oil prices since the second half of 2008. Depending on national regulations, their participation takes the form of either service contracts, production sharing agreements, concessions, or joint ventures with SOEs.

- In *Saudi Arabia*, a number of foreign companies, including the Royal Dutch/Shell Group (United Kingdom/Netherlands), Sinopec (China), Eni (Italy) and Lukoil (Russian Federation) are exploring for gas in the south-east of the country. In addition, all the major international oil/gas design, engineering, and project management companies have a strong presence, and are competing with each other for signing oil and gas service contracts with the State-owned Saudi Aramco. In 2009, J. Ray McDermott (United States), Hyundai Engineering and Construction (Republic of Korea) and Petrofac (United Kingdom) were awarded contracts for development of the offshore Karan gas field and onshore processing facilities.[47]
- In the *United Arab Emirates* in 2009, Adco[48] awarded contracts worth a total of $3.6 billion to Petrofac (United Kingdom), Tecnicas Reunidas (Spain) and CCC Group (Greece), for the expansion of production capacity in three fields.[49]

Box II.3. Reappraisal of some big project deals in GCC countries

West Asia has emerged in recent years as the world's biggest market in project finance, with the private sector (both national and foreign) playing an increasing role. For example, in the first nine months of 2008, nearly $40 billion in project debt was raised for developments in West Asia and North Africa compared with $32 billion in Western Europe and $29 billion in North America. In addition, the project finance debt raised in West Asia and North Africa in the whole of 2006 amounted to over 5% of the region's GDP, compared with less than 0.25% in Western Europe, with Saudi Arabia in the lead.

However, the deepening global financial and economic crisis has dried up project finance, and has also led developers to reappraise projects in light of the new economic outlook. Indeed, falling demand and the worsening outlook for credit markets are affecting project prospects and their financing, especially those that require substantial investments (box table II.3.1).

The collapse of the project finance market and the drying up of financing from international banks has put pressure on governments to mobilize local liquidity through increased direct public funding, additional local equity, or loans from local banks. For example, the Saudi Arabian Government has significantly relaxed its tight monetary policy by cutting both the repurchase rate and reserve requirements for banks. Moreover, in 2009 it awarded two railroad contracts worth some $3.6 billion, financed through the State-owned Public Investment Fund. The first was awarded to a consortia led by local groups, with Chinese minority participation, and the second to China Railway Construction Corporation. Finally, the $2.5 billion Rabigh power project has been resumed with the financial backing of two local institutions, Samba and Al-Rajhi Bank. The Republic of Korea's State-run electricity company, KEPCO, is to develop the project in a consortium with Saudi Arabia's ACWA Power International.

Box table II.3.1. Examples of delayed projects in some GCC countries

Nature of the project	Host country	Investors	Amount ($ billion)
Aluminium smelter	Saudi Arabia	Rio Tinto Alcan (Canada) /Maaden (Saudi Arabia)	10.0
Refinery (Yanbu)	Saudi Arabia	Saudi Aramco (Saudi Arabia) /ConocoPhillips (United States)	10.0
Refinery (Jubail)	Saudi Arabia	Saudi Aramco (Saudi Arabia)/Total (France)	10.0
Water and power (Ras el Zour)	Saudi Arabia	Sumitomo (Japan) /Malakoff (Malaysia)/Al Jomaih (Saudi Arabia)	5.5
Power generation and water desalination (Shuweihat 2)	United Arab Emirates	ADWEA (UAE) (60%) /GDF Suez (France) (40%)	2.0
Worlds of Discovery theme park collection	United Arab Emirates	Nakheel (UAE) /Busch Entertainment (United States)	-
Power and water (Al Dur)	Bahrain	Gulf Investment Corporation (Kuwait)/GDF Suez (France) (50%)	2.2

Source: UNCTAD, based on EIU, *Business Middle East*, 1–15 November 2008, 1–31 December 2008, and 1–15 March 2009*; Middle East Business Intelligence* (MEED), 24 February 2009, 19 March 2009 and 27 March 2009; *Trade Arabia*, 4 March 2009; *Global Water Intelligence*, 9(10), October 2008; and *Project Finance*, November 2006.

Table II.12. West Asia: value of cross-border M&A sales and purchases, by region/economy, 2007–2009[a]
(Millions of dollars)

Region/economy	Net sales of companies in West Asia[b]			Net purchases by West Asian companies worldwide[c]		
	2007	2008	2009[a]	2007	2008	2009[a]
World	22 976	14 677	1 391	37 056	20 498	8 652
Developed economies	14 332	4 179	1 394	25 994	7 030	7 037
Europe	9 783	4 369	1 394	3 525	1 376	1 848
European Union	9 835	3 892	1 258	3 890	1 376	1 595
France	- 647	- 80	408	210	3 714	- 129
Germany	1 840	- 64	-	40	51	951
Netherlands	2 895	244	187	898	- 268	-
Sweden	3 100	-	-	-1 658	-4 109	-
United Kingdom	247	3 593	33	3 352	854	757
North America	4 376	13	-	21 717	5 307	3 904
Canada	-	11	-	5 388	3 989	-
United States	4 376	3	-	16 329	1 318	3 904
Other developed countries	172	- 203	-	752	347	1 285
Australia	32	- 203	-	- 21	335	1 143
Developing economies	7 956	7 532	- 11	10 901	13 178	1 615
Africa	525	115	-	3 485	1 060	513
Egypt	525	125	-	2 372	837	180
Latin America and the Caribbean	-	52	-	-	60	320
Asia	7 431	7 364	- 11	7 416	12 058	782
West Asia	6 108	4 664	- 11	6 108	4 664	- 11
Iraq	-	-	-	-	1 234	-
Kuwait	1 044	2 383	20	3 801	22	- 58
Oman	-	159	-	621	10	28
Qatar	4 087	908	6	-	117	-
Saudi Arabia	68	1 087	- 64	125	26	-
Turkey	-	-	-	833	1 087	-
United Arab Emirates	764	43	28	169	1 020	-
South, East and South-East Asia	1 323	2 700	-	1 308	7 394	793
India	37	2 678	-	9	- 181	-
Indonesia	-	-	-	510	1 816	793
Malaysia	5	76	-	330	1 278	-
Pakistan	-	-	-	- 708	417	-
Singapore	7	- 53	-	1 041	3 301	-
South-East Europe and the CIS	612	2 622	-	161	290	-
Kazakhstan	257	2 050	-	-	-	-

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Sales to the region/economy of the ultimate acquiring company.

[c] Purchases in the region/economy of the immediate acquired company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

- In *Oman* in 2009, the Ministry of Oil and Gas awarded Epsilon Energy (Canada) the rights to explore for oil and gas in concession block 55. Foreign oil companies are very active in the country's petroleum sector. The main producer, Petroleum Development Oman – a joint venture that includes the Omani Government, Royal Dutch/Shell (United Kingdom/Netherlands), Hunt Oil (United States), Circle Oil (Ireland) and Sinopec (China) – has signed concession agreements in recent years. In addition, Occidental Petroleum (United States), the Mubadala Development Company (United Arab Emirates) and the State-owned Oman Oil Company signed an agreement in November 2008 to develop together four gas fields in Oman.[50]
- In *Bahrain*, the National Oil and Gas Authority (NOGA) has selected a consortium led by Occidental Petroleum (United States) to upgrade facilities and increase production at its Awali oilfield. The two sides signed an initial accord in March 2009, with a final 20-year development and production sharing agreement expected to be concluded later.[51]
- In the *Syrian Arab Republic*, the Royal Dutch/Shell Group and France's Total signed extensions to their production sharing contracts in 2008, while Petrofac (United Kingdom) was awarded two gas development contracts worth almost $1 billion in total.[52]

In the *manufacturing sector*, soaring energy prices have encouraged FDI in downstream oil refining, petrochemicals and natural gas liquefaction in recent years, especially in the GCC countries. While a number of mega refinery and petrochemical projects with foreign participation have been delayed (section a), other projects went ahead. For example construction began of a liquefied natural gas (LNG) plant in Yemen for which Yemen LNG (France/United States/Yemen) obtained $2.8 billion in financing in 2008. A number of cross-border acquisitions took place in Turkey in 2008, including the privatization of a refinery and a tobacco factory (table II.13), and the sale of companies in industries such as steel, cement, plastics, and aluminium.

FDI in *services* has become more prominent in recent years after liberalization and privatization policies in most countries spurred foreign investment in telecoms, banking, power, water and real estate. However, the ongoing economic and financial crisis has also dried up credit in a number of infrastructure mega projects with foreign participation. In addition, investments in residential, commercial and tourism-related real estate projects have been especially hard hit by the crisis, as the lack of liquidity has forced developers to either cancel or suspend many projects.

c. Policy developments

Since the late 1990s, there have been continuous legal reforms towards liberalization in West Asian countries (including regulations governing the status of foreign firms), with the new legal environment becoming more favourable to foreign investors (see *WIR06*, *WIR07* and *WIR08*). Changes have included more liberal entry, fewer performance requirements, more incentives, and more guarantees and protection for investors. The number of activities in which FDI

Table II.13. West Asia: top 10 cross-border M&A sales,[a] 2008

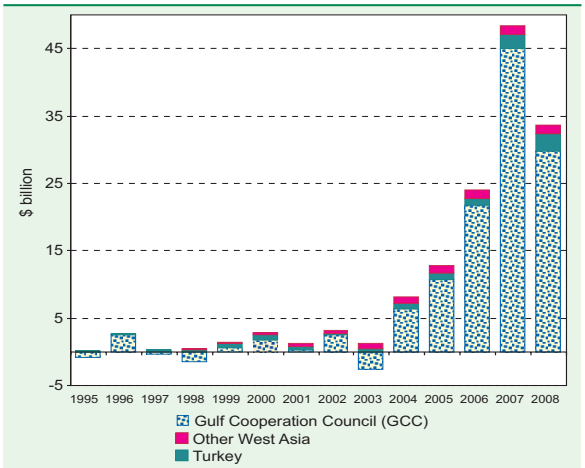
Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	2 850	Oger Telecom	United Arab Emirates	Telephone communications, except radiotelephone	Undisclosed	Saudi Arabia	35
2	2 656	Sabiha Gokcen International Airport	Turkey	Airports and airport terminal services	Investor Group	India	100
3	2 050	Petkim Petrokimya Holding AS {Petkim}	Turkey	Petroleum refining	Investor Group	Kazakhstan	51
4	1 720	Tutun Tutun Mamulleri Tuz ve Alkol Isletmeleri AS	Turkey	Chewing and smoking tobacco and snuff	British American Tobacco PLC	United Kingdom	100
5	1 654	Migros Turk Ticaret AS	Turkey	Grocery stores	Migros Turk Ticaret AS SPV	United Kingdom	51
6	1 200	IRAQNA Company for Mobile Phone Services Ltd	Iraq	Telephone communications, except radiotelephone	Zain Group	Kuwait	100
7	1 080	Turkiye Finans Katilim Bankasi AS	Turkey	Banks	Undisclosed	Saudi Arabia	60
8	877	Eregli Demir Celik Fabrikalari TAS	Turkey	Cold-rolled steel sheet, strip and bars	Arcelor Mittal NV	Luxembourg	11
9	730	Jordan Kuwait Bank	Jordan	Banks	Burgan Bank KSC	Kuwait	44
10	600	United Arab Bank	United Arab Emirates	Banks	Commercial Bank of Qatar QSC	Qatar	40

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] In the immediate host country.

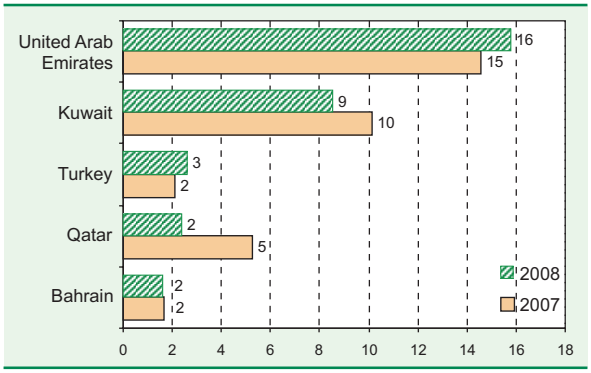
Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the utlimate home economy correspond to the acquisition of a foreign affiliate by a national company

Figure II.13. West Asia: FDI outflows, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Figure II.14. West Asia: top 5 sources of FDI outflows,[a] 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Ranked by the magnitude of 2008 FDI outflows.

is barred or restricted has been reduced, especially in the manufacturing sector, but also, increasingly, in natural resources and services.

This liberalization trend continued in 2008, with relevant policy measures implemented in a number of countries. Examples include the following:

In Saudi Arabia, the business visa requirements have been eased and visas can be issued not only through Saudi embassies but also Chambers of Commerce. In order to facilitate foreign investments into Saudi Arabia, the Government set up 2 new one-stop-shop offices and allowed the Saudi Arabian General Investment Authority offices abroad to issue investment licences to foreigners.[53]

In Kuwait, in 2008 the parliament passed a law to cut the rate of tax levied on foreign companies to 15% from 55%, and to abolish capital gains tax on stock market holdings. It also approved the partial privatization of Kuwait Airways Corporation.[54]

In Jordan, in a move towards liberalization of the downstream segment of the petroleum industry, the Government will allocate distribution and retail assets, and associated staff of the Jordan Petroleum Refinery Company (JPRC), to four new companies; and it will proceed with an international tendering process for the privatization of the four companies. Regarding the privatization of the Jordan Post Company, the Council of Ministers approved, on 6 January 2009, the privatization strategy encompassing the tendering of up to 74% of the company's shares, excluding the company's land and real estate, which shall be retained by the Government of Jordan.[55]

In Turkey, the privatization process continued. The overall privatization proceeds of the Turkish Privatization Administration (PA) amounted to $38.2 billion in July 2009, of which $30 billion related to

Table II.14. Estimated gains and losses of Gulf funds
(Billions of dollars)

Agency	Value Dec. 2007	Changes in value		Value Dec. 2008	Gain/loss on Dec. 2007 portfolio (%)
		Capital gain/loss	Net inflows		
Abu Dhabi Investment Authority (ADIA), Abu Dhabi Investment Council (ADIC)	453	-183	59	328	-40
Qatar Investment Authority (QIA)	262	-94	57	228	-36
Kuwait Investment Authority (KIA)	65	-27	28	58	-41
Saudi Arabian Monetary Agency (SAMA)	385	-46	162	501	-12
Other GCC	116	0	-33	84	0
GCC Total	1282	-350	273	1200	-27
Memorandum					
Norway	371	-111	64	325	-30

Source: Setser and Ziemba, 2009.

the period 2004–July 2009. Furthermore, a revenue of $10.6 billion was generated from privatizations implemented by other government institutions.[56]

In the Syrian Arab Republic, the Government took a number of steps in 2008 to liberalize the exchange-rate regime and to improve the access of investors to financing. The cabinet issued a decree allowing foreign investors to obtain external loans in foreign currency, and to purchase foreign currency from local banks to service those facilities. In a further move, the central bank established a hard currency clearing room, allowing conversions between dollars and euros to be conducted automatically. Finally, the Credit and Monetary Council issued a decree authorizing Syrian banks to lend in foreign currency to licensed investment projects.[57]

Oman and Qatar ended the fixed-line monopoly. Oman awarded a second fixed-line licence

Box II.4. The evolving investment strategies of GCC member States' SWFs

Until the 1990s, West Asian SWFs were largely risk-averse investors abroad, investing primarily in dollar-denominated United States Treasury bill holdings. Their role was mainly to support economic stabilization, particularly in the 1990s when oil prices fell to around $10 per barrel. For example, the Saudi Arabian Monetary Agency, which has been accumulating surplus oil revenues since the 1970s, helped fund expansion in Saudi Arabia throughout the decade of low growth from 1980 to 1990. The Kuwait Investment Authority emerged as the main driver of the country's rebuilding efforts in the aftermath of the first Gulf War.

In the late 1990s, GCC governments decided to reduce their dependence on oil by diversifying their investments. With fewer immediate possibilities at home, their SWFs started investing in relatively riskier assets abroad, such as stocks and real estate. This trend gained strength as oil prices started to rise at the beginning of the 2000s, and grew stronger with increased globalization. With oil prices rising further, the strategies of SWFs sought not just to support economic stability and investment diversification, but also to maximize returns, which drove most of them to undertake riskier investments.

The recent oil price boom also led some SWFs to adopt a new approach, using part of their financial surplus to invest in industries that their governments perceive as particularly relevant for the development and diversification of their national economies. This led the more proactive SWFs to seek greater involvement in managing the companies in which they invested. Recent examples of proactive investors include Mubadala Development Company, Dubai Investment Corp (both United Arab Emirates) and Qatar Investment Authority (QIA). Mubadala, for instance, was created in 2002, and over the past few years it has used its assets to develop a network of international and domestic partnerships in numerous industries, including energy, automotives, aerospace, real estate, health care, technology and infrastructure and services. These are industries that benefit the United Arab Emirates' overall economic development objectives. For example, in acquiring a 5% stake in Ferrari in 2005, it improved the potential for increased tourism in Abu Dhabi in the form of the Ferrari theme park. It has also invested $8 billion in an R&D partnership with General Electric (United States), which in turn has committed to increasing its investments and transfer of technology to the United Arab Emirates.

However, the recent collapse of real estate and equity markets has generated large losses for SWFs (table II.14), but it also offers investment opportunities. It is too early to gauge the impact of the financial crisis on the investment strategies of these funds. Some have helped European and North American banks weather the crisis,[a] but, after sustaining large losses,[b] they have become more cautious in their investments abroad and are switching to investments in support of their local economies. Others are continuing to engage in strategic investments by making smaller scale acquisitions that support their national economic development objectives (see section d).

Source: UNCTAD, based on *Knowledge@Wharton*, 11 March 2009; *Stratfor Global Intelligence*, 25 November 2008; *SWF Radar*, 19 February 2008; EIU, *Business Middle East,* 1-15 January 2008; *Thomson Reuters*, 31 January 2008; and Behrendt, 2009.

[a] For example, Abu Dhabi Investment Authority (United Arab Emirates) injected $7.5 billion into Citigroup (United States) at the beginning of 2008 for a 4.9% stake; Kuwait Investment Authority (Kuwait) acquired a minority stake in Merrill Lynch (United States) for $2 billion; and Qatar Investment Authority (Qatar) invested $500 million in Credit Suisse for a 2% stake.

[b] For example, in late September 2008, KIA admitted to a loss so far of $270 million on a $3 billion investment in Citigroup made in January 2008.

Table II.15. West Asia: top 10 cross-border M&A purchases,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	3 964	PrimeWest Energy Trust	Canada	Crude petroleum and natural gas	Undisclosed	United Arab Emirates	100
2	3 397	OMX AB	Sweden	Security brokers, dealers, and flotation companies	Undisclosed	United Arab Emirates	69
3	2 964	Cegelec SA	France	Engineering services	Undisclosed	Qatar	100
4	2 850	Oger Telecom	United Arab Emirates	Telephone communications, except radiotelephone	Undisclosed	Saudi Arabia	35
5	1 800	Indonesian Satellite Corp PT	Indonesia	Telephone communications, except radiotelephone	Qtel	Qatar	41
6	1 598	Labroy Marine Ltd	Singapore	Ship building and repairing	Undisclosed	United Arab Emirates	98
7	1 400	280 Park Ave,New York,NY	United States	Operators of nonresidential buildings	SIPCO Ltd	Bahrain	100
8	1 256	JTC Corp-Industrial Property Portfolio	Singapore	Land subdividers and developers, except cemeteries	Arcapita Bank BSC	Bahrain	100
9	1 205	RHB Capital Bhd	Malaysia	Investment advice	Undisclosed	United Arab Emirates	25
10	1 200	IRAQNA Company for Mobile Phone Services Ltd	Iraq	Telephone communications, except radiotelephone	Zain Group	Kuwait	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] From the ultimate home country.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

to Nawras (Oman-based affiliate of Qatar Telecom) in November 2008, while Qatar did the same in September 2008 with a consortium including United Kingdom's Vodafone Group.[58]

A one-stop-shop the system for foreign investments was implemented in Yemen. It makes possible the completion of a business start-up at a single location, where the licence and registration services of 14 government agencies (such as immigration, customs, taxation and project registration) are available in one place.[59]

In the area of international investment agreements, West Asian countries concluded 15 new BITs, bringing the total number of BITs for the region to 407 by end 2008. The Syrian Arab Republic was the most active, signing three new BITs with the Czech Republic, India and Romania, followed by Jordan, Qatar, Turkey and Yemen, with two new BITs each.

As far as DTTs are concerned, 12 new agreements were concluded by West Asian countries in 2008, bringing the total number of the region's DTTs to 311 by the end of 2008. The most active was Qatar with four new agreements (Cyprus, Malaysia, the Netherlands and the former Yugoslav Republic of Macedonia), followed by the Syrian Arab Republic with two new DTTs (with Croatia and the Czech Republic).

Regarding IIAs other than BITs and DTTs, Turkey and Chile concluded an FTA that includes investment promotion provisions. Also the GCC and Singapore concluded an FTA, including provisions encouraging the conclusion of BITs between Singapore and GCC countries.

d. Prospects: fall in inflows, but a possible rise in outflows

FDI inflows to West Asia are expected to fall in 2009 as the impacts of the ongoing global economic and financial crisis cause a further drop in international trade and in key revenue sources, as well as a continued tightening of credit markets for

Table II.16. West Asia: value of cross-border M&A sales and purchases, by sector/industry, 2007–2009[a]
(Millions of dollars)

	Net sales of companies in West Asia[b]			Net purchases by West Asian companies worldwide[c]		
Sector/industry	**2007**	**2008**	**2009[a]**	**2007**	**2008**	**2009[a]**
Total	22 976	14 677	1 391	37 056	20 498	8 652
Primary	144	3	-	5 782	3 486	281
Mining, quarrying and petroleum	140	-	-	5 782	3 486	281
Secondary	2 449	5 224	39	14 999	2 597	45
Food, beverages and tobacco	581	1 720	-	53	876	113
Coke, petroleum and nuclear fuel	-	2 050	-	- 392	-	-
Chemicals and chemical products	781	-	- 59	11 645	48	- 64
Motor vehicles and other transport equipment	-	27	-	2 261	1 607	-
Services	20 383	9 451	1 352	16 274	14 416	8 327
Electricity, gas and water	479	51	1 145	12	240	320
Trade	38	1 861	-	- 1 819	174	- 10
Transport, storage and communications	9 634	2 900	6	3 890	3 651	1 077
Finance	7 803	3 682	20	17 985	8 574	7 197
Business services	810	206	104	- 2 276	2 779	- 257

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Net sales in the industry of the acquired company.

[c] Net purchases by the industry of the acquiring company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

investment projects. Preliminary data show a strong reduction in net cross-border M&A sales in West Asia during the first half of 2009 (table II.12).[60] However, accumulated reserves and brighter prospects for oil prices could have a positive effect on FDI to West Asia in the medium term.

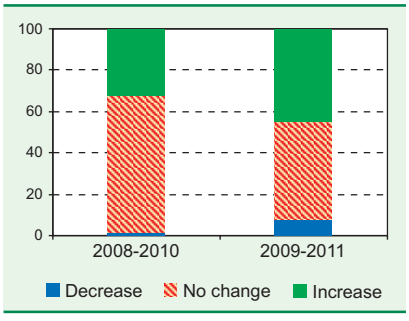
According to UNCTAD's *World Investment Prospects Survey 2009–2011*, FDI prospects in West Asia seem more favourable than those reported in the previous survey. Of the total respondents to the latest survey, 45% expected an increase in FDI during the period 2009–2011 (compared with 32% for the period 2008–2010 of the previous survey), 47% expected no change (compared with 67%), and 8% expected a decline (compared with almost no respondents in the previous survey) (figure II.15).

Outward FDI flows from West Asian countries, largely originating from GCC countries, are expected to increase, as the global economic and financial crisis offers new investment opportunities for cash-rich companies and investment funds. They can take advantage of their relatively strong financial position to buy companies weakened by tight credit markets at discount prices.

Some of them have already begun to make acquisitions that support their national economic development objectives. Particularly active in doing so is the Government of the Abu Dhabi Emirate, which has undertaken a series of acquisitions and/or partnerships through the International Petroleum Investment Company (IPIC),[61] the Mubadala Development Company,[62] the Abu Dhabi National Energy Company (Taqa),[63] and the Abu Dhabi future energy company, Masdar.[64]

In addition, some of them are planning to expand their operations abroad. For example, IPIC (Abu Dhabi) plans to invest not only in the oil and gas sector but also into new areas, increasing its investment stock (including portfolio) to $40 billion within five years. This is double the company's previous 2007 estimates of $20 billion which it was close to reaching at the end of 2008.[65]

Figure II.15. West Asia: comparison of the results of *WIPS 2009–2011* with *WIPS 2008–2010*
(Percentage of respondents)



Source: UNCTAD 2009b.

4. Latin America and the Caribbean

In 2008, FDI inflows to Latin America and the Caribbean (LAC), overall, remained resilient despite the spreading financial crisis and world economic slowdown. However growth rates varied among the different subregions: in South America there was a significant increase in FDI, while Central America and the Caribbean registered a decline. This divergent evolution is due to the differing impacts of the global financial and economic crisis on economies in the two subregions. Natural resources and related activities remained the main attraction for FDI in South America, and they are increasingly becoming a greater FDI target in Central America and the Caribbean. FDI outflows from the region increased, mainly driven by Brazilian TNCs, which offset the strong decline in outflows from Mexico. The shift towards a bigger role of the State in the economies and more restrictive FDI-related policies continued in a number of countries and extended to new activities, some of which related to the financial crisis, such as banking and pension funds.

a. Geographical trends

i. Inward FDI: resilient to the spreading crisis

FDI inflows into Latin America and the Caribbean increased in 2008 by 13%, showing resilience to the spreading financial crisis and world economic slowdown (figure II.16). However, the growth of FDI was uneven among subregions, with a significant increase of 29% in flows to South America, a decline of 6% to Central America and the Caribbean (other than financial centres) and of 7% to the offshore financial centres. In the first quarter of 2009 FDI flows declined by 42% compared to the first quarter of 2008, for a number of Latin American and Caribbean countries (table II.17) while cross-border M&As in the first half of 2009 plummeted to negative values (table II.19).

The strong increase in South America was due to the sharp rise of inflows to the top four recipient countries of the subregion: Brazil (by 30%), Chile (by 33%), Colombia (by 17%) and Argentina (by 37%); together they represented 89% of the subregion's total inflows. *Brazil* alone, with a record $45 billion in investments (figure II.17), accounted for half of the region's total inflows. The rise of FDI to this country resulted from an almost trebling of inflows to the primary sector, mainly due to cross-border M&As in the metals and minerals extractive industry (tables II.18 and II.21). Inter-company loans, which increased by 76% (compared with 15% for equity capital), explain most

of the FDI growth in Brazil. In *Chile,* FDI growth was mainly due to a 223% increase in equity capital, partly boosted by a 117% increase in cross-border M&As (see annex table B.4) which compensated for the 27% decline in reinvested earnings.[66] In *Argentina,* FDI growth can be explained by the increase of 152% in intercompany loans and 51% in equity capital. Strong increases in inflows were also registered in countries such as Bolivia, the Bolivarian Republic of Venezuela, Ecuador, Guyana, Paraguay and Uruguay, but from a lower level. Only Peru and Suriname recorded a decline in inflows, though in the case of Peru, they remained above their 2006 level (annex table B.1).

In Central America and the Caribbean (other than financial centres), the decline in FDI inflows was largely due to a 20% fall in flows to Mexico, which mainly resulted from a halving of inflows to the manufacturing sector (CNIE, 2009). Although Mexico remained the subregion's main recipient in 2008, its share in the subregion's total inflows decreased from 76% in 2007 to 65%, suggesting that FDI growth was uneven among the countries of this subregion. Indeed, FDI inflows soared from $830 million to $3 billion in Trinidad and Tobago, which became the subregion's second largest recipient country due to the $2.2 billion acquisition of RBTT Financial by Royal Bank of Canada. Inflows increased by 83% to $2.9 billion in the Dominican Republic, despite a strong decline in the traditional sectors such as tourism, free zones and real estate, suggesting that the Dominican Republic-Central America Free Trade Agreement (DR-CAFTA) might have opened new investment opportunities for foreign firms. In Costa Rica, FDI increased by 7%, to $2 billion. It was driven by strong growth in agriculture, which compensated for declining FDI in all the other activities.[67] Increases were also registered in Belize, Cuba, Guatemala, Honduras and Nicaragua – although from low levels – while El Salvador, Haiti and Jamaica registered declining inflows (annex table B.1).

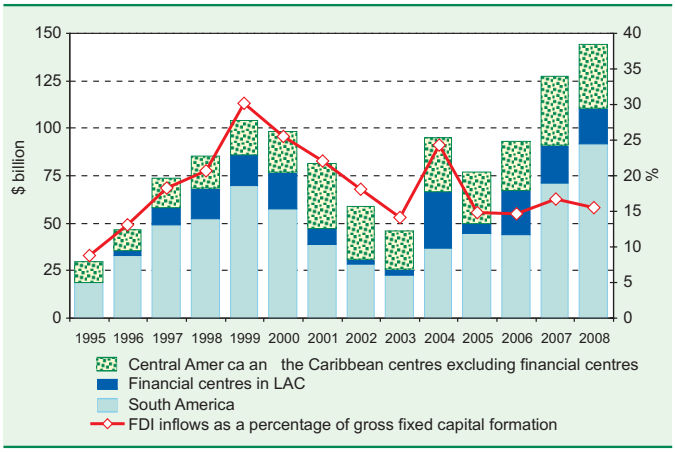
The divergent evolution of FDI inflows to the two main subregions in 2008 is due to the differing impacts of the global financial and economic crisis on their economies. Central American economies, which are strongly dependent on the United States economy, both for their exports and remittances, were directly hit by the slowdown that began in the United States economy in late 2007, and the rapidly deteriorating demand and job market there. South American economies, more reliant on commodity export revenues, were affected by a drop in commodity prices, deteriorating terms of trade and weaker demand in export markets other than the United States, but with a certain time lag. Indeed, until September 2008, South American growth was bolstered by robust domestic and global demand and high prices for commodities such as oil and gas, iron ore, copper, gold, soya beans, of which the subregion is a major exporter. This economic environment continued to attract increasing flows of FDI (mainly resource- and market-seeking) to the subregion.

ii. Outward FDI: sharp rise in outflows from South America

FDI outflows from Latin America and the Caribbean increased in 2008 by 22%, to reach $63 billion (figure II.18). This was due to a strong increase of outflows from South America (131%) that offset the 22% decline of outflows from Central America and the Caribbean. In South America, the strongest increase was registered in Brazil (189%), where outflows amounted to $20 billion as a result of soaring intercompany loans. This suggests that Brazilian parent companies may have transferred capital to their financially distressed affiliates abroad.[68] In contrast, outflows from Mexico plummeted to $0.7 billion from their previous level of $8 billion (figure II.19), as did net cross-border acquisitions by Mexican firms, which posted negative results of -$358 million (annex table B.4). This meant that sales of foreign affiliates of Mexican-based TNCs were higher than the purchases of firms abroad by Mexican-based TNCs.

In 2008, Brazilian enterprises continued to acquire assets abroad in mining and natural-resource-based activities, such as foods and metal and steel (table II.20), which they had started to undertake in 2006. However, the global financial crisis and the fall in commodity prices have revealed the vulnerabilities of these acquiring TNCs. For example, following its

Figure II.16. Latin America and the Caribbean: FDI inflows, by value and as a percentage of gross fixed capital formation, 1995–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Table II.17. Latin America and the Caribbean: FDI flows of selected countries, 2008–2009, by quarter
(Millions of dollars)

Country	FDI inflows					FDI outflows				
	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1
Argentina	3 483	2 236	2 221	913	1 685	346	318	498	188	393
Bahamas	159	219	161	160	163	..	..	..	..	..
Bolivia	253	- 33	200	92	104	..	..	..	..	..
Brazil	8 799	7 910	14 145	14 203	5 342	4 453	4 125	6 829	5 050	- 392
Chile	6 505	1 270	4 883	4 130	3 505	1 959	812	2 655	1 466	2 193
Colombia	2 822	2 623	2 606	2 513	2 528	360	444	764	589	1 168
Costa Rica	375	797	459	390	286	1	- 3	1	7	1
Dominican Republic	1 072	507	998	308	637	..	..	..	..	..
El Salvador	292	58	58	376	- 32	160	- 116	31	- 10	- 31
Guatemala	243	220	217	158	180	4	4	4	4	14
Haiti	6	7	7	11	11	..	..	..	..	..
Mexico	5 995	7 085	3 748	5 122	2 663	- 501	631	6	549	2 939
Nicaragua	125	129	203	169	143	..	..	..	..	..
Panama	562	696	614	529	387	..	..	..	..	..
Paraguay	117	37	118	48	49	2	2	2	2	2
Peru	2 822	1 599	903	- 515	1 391	6	91	35	598	5
Uruguay	569	668	526	442	374	2	4	- 4	- 2	- 2
Venezuela, Bolivarian Republic of	637	1 394	- 33	- 282	906	1 068	1 871	747	- 929	80
Total	*34 836*	*27 422*	*32 034*	*28 766*	*20 322*	*7 862*	*8 184*	*11 569*	*7 512*	*6 369*

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

acquisition of the large nickel producer Inco (Canada) in 2007, Brazil's CVRD (mining) has become more exposed to commodity price volatility. In addition, losses from bad currency bets using derivatives have affected Brazilian and Mexican companies after the sharp devaluation of the real and peso against the dollar. In Brazil, the affected companies include TNCs such as Sadia (a food processor), Votorantim (an industrial conglomerate) and Aracruz (a cellulose maker) that have incurred losses of several billion dollars.[69]

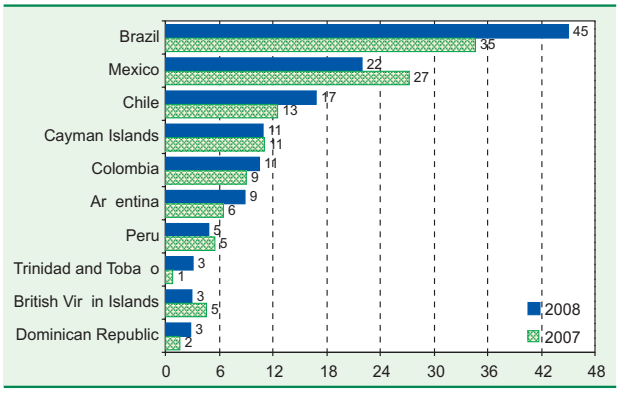
In Mexico, companies such as Cemex, Gruma, Grupo Industrial Saltillo and Comercial Mexicana also reported derivative losses, mostly tied to currency devaluation. In addition to $700 million in losses on derivatives in the third quarter of 2008, Cemex registered a sharp contraction in sales volumes in Spain, the United Kingdom and the United States, as well as a significant increase in the cost of debt and difficulty in refinancing it, not to mention high energy and transportation costs. Moreover, its assets in the Bolivarian Republic of Venezuela were nationalized. The firm also saw a significant decline in its stock price, as well as downgrades from rating agencies.[70]

b. Sectoral analysis: continued interest in natural resources and related activities

Natural resources and related activities continued to be the main attraction for FDI in South America. For example in Brazil, which accounted for about half of inflows to South America in 2008, FDI to the primary sector increased threefold in 2008 and represented 34% of total inward FDI to that country. In the manufacturing sector – which accounted for 35% of total FDI in Brazil – natural-resources-related activities (such as metallurgy, food and beverages, plastics and rubber, refining, metals and non-metallic mineral products) attracted more than 80% of total FDI flows to the sector (Banco Central do Brasil, 2009).

In Central America and the Caribbean too, FDI continued to increase in natural-resource-related activities in 2008, in contrast to the decline in total FDI flows to the subregion. For example in Mexico, which accounted for 65% of FDI flows to the subregion in 2008, foreign investments in non-oil extractive industries increased more than threefold in 2008, to reach an unprecedented level of $4.2 billion. While FDI in these industries was almost nil

Figure II.17. Latin America and the Caribbean: top 10 recipient of FDI inflows, [a] 2007–2008
(Billion of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Ranked by the magnitude of 2008 FDI inflows.

Table II.18. Latin America and the Caribbean: top 10 cross-border M&A sales,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	3 493	IronX Mineracao SA	Brazil	Iron ores	Anglo American PLC	United Kingdom	64
2	3 120	Nacionale Minerios SA	Brazil	Iron ores	Investor Group	Japan	40
3	2 235	RBTT Financial Holdings Ltd	Trinidad and Tobago	Banks	Royal Bank of Canada	Canada	100
4	2 235	YPF SA	Argentina	Crude petroleum and natural gas	Enrique Eskenazi	Argentina	15
5	2 223	Grupo Financiero Inbursa SA de CV	Mexico	Investment offices, nec	La Caixa	Spain	20
6	1 647	ArcelorMittal Inox Brasil SA	Brazil	Steel works, blast furnaces, and rolling mills	Arcelor Mittal NV	Luxembourg	40
7	1 515	YPF SA	Argentina	Crude petroleum and natural gas	Enrique Eskenazi	Argentina	10
8	1 500	ING Seguros SA de CV	Mexico	Life insurance	AXA SA	France	100
9	1 310	Antofagasta PLC	Chile	Copper ores	Marubeni Corp	Japan	30
10	1 287	Sociedad Austral de Electricidad SA	Chile	Electric services	Investor Group	Canada	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] In the immediate host country.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company.

Table II.19. Latin America and the Caribbean: value of cross-border M&A sales and purchases, by region/economy, 2007–2009[a]
(Millions of dollars)

Region/economy	Net sales of companies in Latin America and the Caribbean[b]			Net purchases by Latin American and Caribbean companies worldwide[c]		
	2007	2008	2009 [a]	2007	2008	2009 [a]
World	20 554	15 231	- 748	38 514	2 584	- 721
Developed economies	14 243	14 119	-1 442	32 130	1 998	- 643
Europe	11 042	6 917	-1 669	4 287	2 139	-3 363
European Union	10 250	7 092	-1 113	3 699	1 595	-3 363
France	866	3 368	- 728	- 23	-	5
Germany	292	164	- 3	4	1 012	-
United Kingdom	1 760	1 986	- 930	2 734	21	-3 121
North America	1 371	2 975	483	12 237	-1 838	2 688
Canada	3 408	4 356	280	2 364	34	162
United States	-2 037	-1 381	203	9 873	-1 872	2 526
Other developed countries	1 830	4 227	- 256	15 606	1 697	32
Australia	59	19	- 3	14 992	184	2
Japan	1 175	4 430	- 262	615	1 513	30
Developing economies	6 274	918	703	6 384	454	- 37
Africa	- 410	175	-	- 155	-	- 66
Latin America and the Caribbean	5 752	170	- 636	5 752	170	- 636
Argentina	625	265	- 98	576	217	850
Brazil	1 995	506	1 529	1 371	863	- 93
Chile	466	- 102	130	220	- 624	- 233
Venezuela	-	- 896	- 7	100	-	-1 970
Central America	1 116	- 479	-	- 424	135	10
Mexico	2 558	- 185	-	270	101	-
Panama	-1 582	- 294	-	-	35	10
Asia	932	572	1 339	787	283	665
China	64	- 33	133	113	- 15	-
Hong Kong, China	232	490	12	561	- 291	- 300
Korea, Republic of	-	125	893	-	112	161
Singapore	356	- 1	-	- 61	215	-

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Sales to the region/economy of the ultimate acquiring company.

[c] Purchases in the region/economy of the immediate acquired company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

before 2007, its share increased to 7% in 2007 and reached 23% in 2008 (CNIE, 2009).

Primary sector

The metal mining extractive industry attracted large amounts of FDI in 2008, along with soaring cross-border M&As. Indeed, net cross-border M&A sales in mining and quarrying increased more than eightfold to reach $9 billion (table II.21), mostly targeting Brazil (table II.18). In contrast, cross-border M&A sales in the oil and gas industry fell to negative values in 2008 and the first half of 2009, indicating divestments by foreign firms (table II.21).

But TNCs were active in greenfield investments both in oil and gas, and in metal and mineral projects. In oil and gas, foreign firms have been very active in exploration activities, especially in Brazil, Colombia and Peru. In Brazil, State-owned Petrobras announced major offshore deepwater discoveries in a number of fields located very deep below the seafloor (in the "pre-salt" area), including those in which the company already has partnerships with foreign TNCs.[71] Although very expensive to exploit, these discoveries have created considerable optimism, not only in the newly discovered fields but also in neighbouring areas, where a number of TNCs have concessions. Some TNCs have already announced significant investment plans, such as the BG Group (United Kingdom), which in January 2009 confirmed investment plans of up to $5 billion over the four-year period to 2012 for development of Brazil's offshore "pre-salt" oil and gas fields.[72]

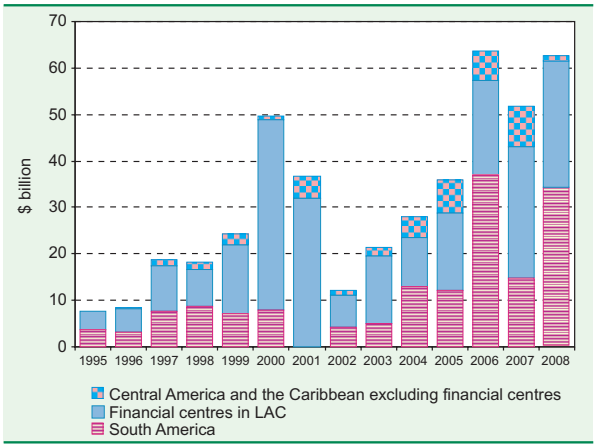
TNCs were also active in metal mining exploration and development projects. In Peru for example, where more than 250 foreign mining companies have been established since 1990, investments in the non-oil mining sector totalled

$1.6 billion in 2008, most of it undertaken by foreign companies (Peru, Ministerio de Energía y Minas, 2009). This excludes investments in exploration, which amounted to $475 million in 2007. In addition, there were three mining projects by foreign companies, totalling more than $4 billion, which were at the feasibility study stage, and another two projects worth $2.1 billion each have also been confirmed. However, there is widespread dissatisfaction among local communities where major mining and energy projects are located (section c).

While South American countries have attracted most of the FDI in the primary sector, the traditional targets of resource-seeking, export-oriented FDI in the region, an increasing share is being directed to Central American countries. This is a trend that has developed since the latest commodity price boom. In Mexico, for example, Goldcorp of Canada has made a large new investment of close to $2.2 billion in various mining projects, including the $1.5 billion Peñasquito project that is expected to reach completion by mid-2009. In addition, Jinchuan Group of China is expected to invest $612 million to develop a large copper-zinc deposit acquired from Tyler Resources (Canada) in January 2008 (Business Monitor, 2008). In the Dominican Republic, Barrick Gold (United States) plans to spend $3 billion on the reopening of the formerly State-owned Pueblo Viejo gold mine. Exploration in oil and gas by foreign firms is also taking place in Cuba, Guyana and Nicaragua.[73]

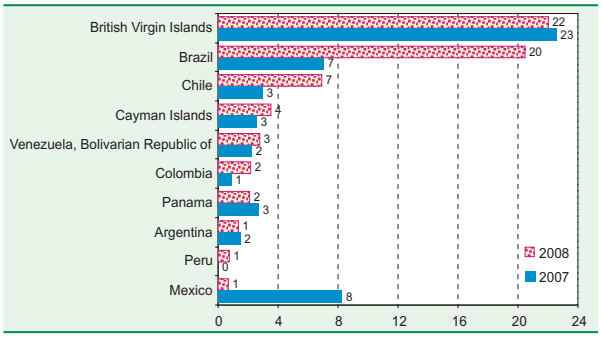
However, slackening world demand for commodities and tightening loan conditions since the second half of 2008 have led to investment cuts and/or delays in some cases. For example, BHP Billiton (Australia) has delayed work on a $6.7 billion expansion plan at its Escondida copper mine in Chile.[74]

Figure II.18. Latin America and the Caribbean: FDI outflows, by subregion, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Figure II.19. Latin America and the Caribbean: top 10 sources of FDI outflows, [a] 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Ranked by the magnitude of 2008 FDI outflows.

Manufacturing sector

FDI inflows to the manufacturing sector in Latin America and the Caribbean declined in 2008. This was due to a sharp drop in flows to Central America and the Caribbean, where foreign-owned export-oriented manufacturing activities are closely tied to the United States economic cycle. In South America, FDI inflows to manufacturing activities are mostly concentrated in Brazil, and more oriented to the internal market and to export destinations other than the United States, so that they more or less maintained their previous level. For example, while in Mexico inflows to the manufacturing sector decreased by 37% in 2008, in Brazil they remained at the same level as in 2007 (at around $16 billion), and double that of 2006 (Banco Central do Brazil, 2009: and CNIE, 2009).

The export factories established in Central America and the Caribbean have been particularly hard hit by the dramatic deterioration of macroeconomic conditions in the United States, which constitutes by far their main export destination. In Mexico, for example, 25% of Ciudad Juarez's 330 plants have temporarily laid off 40,000 employees. In Tijuana, 25,000 jobs were lost before December 2008. Auto-parts maker Delphi, which has 50 plants in Mexico, laid off workers in the first quarter of 2008, and General Motors and Chrysler announced their intentions to reduce production at several plants in Mexico to cut costs and inventories (La Botz, 2009). In other Central American countries there were factory closures in the *maquila* textile industry, and sharp drops in exports and employment. In Nicaragua, for example, employment in the industry fell from around 85,000 workers in 2007 to 65,000 in 2008. The fall accelerated dramatically in 2009: in the month of January alone, the export volume of textiles fell by 35% in Guatemala, 28% in Costa Rica, 27% in El Salvador, 16% in Honduras and 8% in Nicaragua.[75]

Table II.20. Latin America and the Caribbean: top 10 cross-border M&A purchases,[a] 2008

Rank	Value $ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	1 749	Quanex Corp	United States	Steel works, blast furnaces, and rolling mills	Gerdau SA	Brazil	100
2	1 386	Shinsei Bank Ltd	Japan	Banks	Investor Group	Cayman Islands	23
3	944	LWB Refractories GmbH	Germany	Brick and structural clay tile	Magnesita Refratarios SA	Brazil	100
4	565	Smithfield Beef Group Inc	United States	Beef cattle, except feedlots	J&F Participacoes SA	Brazil	100
5	537	OC Oerlikon Corp AG	Switzerland	Semiconductors and related devices	Columbus Trust Co Ltd	Bahamas	11
6	474	Mineracao Taboca SA	Brazil	Miscellaneous metal ores, nec	Cia de Minas Buenaventura SAA	Peru	100
7	455	Sementes Selecta	Brazil	Soybeans	Grupo Los Grobo SA	Argentina	90
8	425	Inalca SpA	Italy	Sausages and other prepared meat products	J&F Participacoes SA	Brazil	50
9	380	Refrigerantes Minas Gerais Ltd[a]	Brazil	Bottled & canned soft drinks & carbonated waters	Coca-Cola FEMSA SA CV	Mexico	100
10	295	US Zinc Corp	United States	Secondary nonferrous metals	Grupo Votorantim	Brazil	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] From the ultimate home economy.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company.

In South America, FDI in the manufacturing sector remained buoyant in 2008 and mostly targeted natural-resource-related activities. In Brazil, metallurgy, food and beverages, petroleum refining, plastics and rubber, and chemical products continued to attract significant FDI, totalling around $13 billion, almost the same amount as in 2007. In Uruguay, the construction by Ence (Spain) of the second of two very large pulp mills was the major driver of FDI growth in 2008. In Peru, implementation of a free trade agreement with the United States boosted FDI in the ethanol industry. Maple Energy (United States) has built a $220 million ethanol facility and Brazilian companies are also interested in investing in the industry, although their plans may be disrupted by the credit crisis.[76]

Table II.21. Latin America and the Caribbean: value of cross-border M&A sales and purchases, by sector/industry, 2007–2009[a]
(Millions of dollars)

	Net sales of companies in Latin America and the Caribbean[b]			Net purchases by Latin American and Caribbean companies worldwide[c]		
Sector/industry	**2007**	**2008**	**2009 [a]**	**2007**	**2008**	**2009 [a]**
Total	20 554	15 231	- 748	38 514	2 584	- 721
Primary	1 734	5 173	- 1 675	3 984	1 880	2 262
Agriculture, hunting, forestry and fisheries	278	849	43	-	1 610	-
Mining, quarrying and petroleum	1 456	4 324	- 1 718	3 984	270	2 262
Mining and quarrying	1 001	8 665	309	3 866	137	2 335
Petroleum	454	-4 341	-2 027	118	134	- 72
Secondary	5 212	- 1 540	- 1 553	24 111	2 830	204
Food, beverages and tobacco	1 219	- 539	-	1 654	583	2 502
Chemicals and chemical products	702	- 1 182	29	759	172	9
Non-metallic mineral products	57	-	373	14 437	913	- 65
Metals and metal products	2 357	194	- 1 960	7 313	740	- 1 960
Services	13 609	11 598	2 480	10 419	- 2 126	- 3 187
Trade	1 716	944	1 267	935	134	- 3 106
Transport, storage and communications	3 381	1 350	545	1 749	- 1 849	120
Finance	4 878	7 243	- 36	7 674	1 172	- 207
Business services	2 506	1 785	607	- 196	- 1 731	-

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Net sales in the industry of the acquired company.

[c] Net purchases by the industry of the acquiring company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

The automobile industry – another important FDI recipient both in Brazil and Argentina – went from boom to bust in a matter of months. Having registered a record-breaking performance since 2003, and strong sales growth during the first nine months of 2008, car manufacturers (almost exclusively foreign investors) were still announcing ambitious investment plans as late as September 2008.[77] However, the global financial crisis and deteriorating local and external demand took their toll at the end of the year. In December alone, production fell year-on-year by over 51% in Brazil and 47% in Argentina. Brazilian automakers reported 1,900 layoffs in January – the third straight month of layoffs. This scenario seems to be changing in Brazil due to the Government's fast action in reducing the IPI, a direct tax on industrialized products. The industry recorded an average growth of 6.1% between January and May.[78]

Services sector

In the financial industry, the worsening of the financial crisis has led some international financial institutions to focus on domestic markets in their home countries, and to shed some of their operations abroad, while others are taking the opportunity to expand through acquisitions at a time when the prices of bank

assets are low. For example, the insurance firm American International Group, Inc (AIG) (United States) is reportedly selling its consumer finance businesses in Latin America, and HSBC (United Kingdom) is to close branches and move out of retail banking in Nicaragua and to sell its 18.7% interest in Mexican micro-lender Financiera Independencia. On the other hand, as mentioned above, Royal Bank of Canada acquired RBTT financial holding (Trinidad and Tobago) for $2.2 billion, and the Spanish bank Santander continued to expand its activities in Brazil with the $650 million acquisition in 2008 of Torre Sao Paolo, an owner and operator of office buildings. It also signed an agreement in March 2009 for the purchase of 50% of Brazilian insurer, Real Tokio Marine Vida e Previdencia, for $285 million.[79]

At the same time, in Brazil, the financial crisis has triggered the expansion of domestic banks (either private or State-owned) which had little direct exposure to derivatives markets and other toxic assets, and had learned from the lessons of previous crises and boom-and-bust cycles. These banks have led a wave of consolidations starting with the creation in November 2008 of the Itau Unibanco Banco Multiplo SA through the acquisition of Unibanco by Banco Itaú for 23 billion real. The new entity has become the largest financial institution in the country, and one of the major banks in Latin America. However, this may not be for long, as State-controlled Banco do Brasil, backed by the Government (section c), has been making a series of acquisitions in a move to regain the leadership position in a strategic sector of the economy at a time of global financial crisis.[80]

In retail, the global financial and economic crisis has forced some retailers to reduce their expansion plans, while it has represented opportunities for others to get bigger. For instance, Chilean retailers that were undergoing a period of expansion in Latin America at the time of the crisis began to postpone or cancel foreign investment plans or sell some of their assets abroad: Ripley decided to postpone its plans to invest an estimated $400 million in Mexico during 2009. In January 2009, Wal-Mart Stores (United States) paid $2.8 billion for a 58.2% controlling stake in D&S, Chile's largest grocer. Wal-Mart has not been hurt by the crisis, and has even continued to grow, increasing its income by 5.2% in 2008. Its strategy of low prices and its financial strength seem to have given it a competitive advantage in a time of crisis. The company announced that in 2009 it would open stores in Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Chile and Puerto Rico.[81]

In the tourism industry, dominated in the Caribbean countries by foreign investors, the global credit crunch and declining demand have had a severe impact on projects. Several airlines have announced substantial cuts to their existing timetables or halted flights to the region completely. Luxury real estate and tourism resort activities have fallen victim to tougher credit terms and growing risk aversion. For example, the Cap Cana project in the Dominican Republic, the Caribbean's largest resort development, laid off hundreds of workers and suspended construction due to financing problems. The scarcity of funding also paralysed the construction of a hotel in the Turks and Caicos Islands for the Ritz-Carlton hotel chain (United States).[82]

c. Policy developments

FDI-related policies in parts of Latin America and the Caribbean have moved towards more State control, a trend that had already been observed in previous years (see *WIR08*, *WIR07*, *WIR06*). This is not only due to dissatisfaction with the outcome of the economic reforms implemented during the 1990s, in which privatization and FDI promotion were core policy tools; it is also because of the commodity price boom, which led governments to review incentives given to resource-oriented FDI and reduced their dependence on external finance by improving their current-account balances. The policy trend towards more State control has been most visible in oil and natural gas, where a number of measures have been implemented.

For example, in Bolivia, after the nationalization of the country's largest telephone company Entel (Telecom Italy) in May 2008 (see *WIR08*), the Government went on to complete the nationalization of the Bolivian oil and natural gas industry.[83] Until May 2009, the following companies had been nationalized: Andina, Chaco, Transredes, YPFB Refinación, CLHB and Air BP S.A.[84] In addition, voters approved a new constitution that reaffirms the Central Government's ownership and control over Bolivia's natural resources, and also gives Bolivian investment priority over foreign investment.

In Ecuador, a new constitution was approved in September 2008, which stipulates, *inter alia*, that foreign investment is complementary to national investment, and that FDI has to be oriented to the needs and priorities defined in the National Development Plan and in the development plans of the decentralized autonomous governments. A policy shift towards increasing taxes on windfall profits on oil has generated frictions with some foreign companies. For example, in March 2009 the Government began to seize crude oil produced by Perenco (France) to cover the company's contested tax debts after the latter refused to abide by the 2007 decree that raised the levy on windfall oil revenues to 99% (see *WIR08*). The resulting dispute between Perenco and Ecuador is still far from being resolved.[85] At the same time,

a mining law was approved in early 2009, which, although providing for more State revenue and control over mining, also opens the door to foreign investment and large-scale mining projects.

In the Bolivarian Republic of Venezuela, the Government has continued its nationalization policy. In the course of the nationalization of its Venezuelan cement plants, Cemex (Mexico) sought ICSID arbitration after the Government rejected its demand for $1.3 billion in compensation in October 2008.[86] Also in 2008, the Venezuelan National Assembly adopted a Liquid Fuel Internal Market Reorganization Organic Law,[87] which under certain conditions reserves for the State the intermediation in the supply of liquid fuels between the State-owned company PDVSA and its affiliates and gasoline stations. Following this legislation, the national oil company Petróleos de Venezuela S.A. (PDVSA) took over the operations run by the gas company Exterran (United States).

In Peru, protests by Amazonian native groups led to the suspension of recent decrees by Congress.[88] The questioned decrees aimed at facilitating the exploration and exploitation of the Amazon and other natural-resource-rich areas by foreign investors.

In Mexico, after several years of national debate on the pros and cons of opening up the oil sector (nationalized since the 1930s) to private investors, Congress passed a reform of the energy sector in 2008 which aims to change the way in which the State-owned oil enterprise PEMEX operates. It allows PEMEX to enter into performance-based service contracts with private oil companies, but specifically prohibits shared production and risk contracts with the private sector.

In November 2008, the Brazilian President decreed a change to Brazil's telecommunications law aimed at allowing fixed-line telecom providers to operate in more than one region of the country. This will permit Oi Participações (Brazil) to buy Brasil Telecom, the country's third largest fixed-line carrier, and will enable the new company to compete with foreign players that dominate the market, namely Telefonica (Spain) and America Movil (Mexico).

Several measures were adopted in the region in response to the global financial crisis, which also have an effect on FDI. For example, in Argentina, the State resumed control over assets held by private pension funds after the Senate approved a law converting the private pension system into a public one in November 2008.[89] The Government of Brazil issued a decree that allows the State-controlled Banco do Brasil to buy stakes in privately owned banks, a move aimed at permitting the bank to regain its leadership position in a strategic sector of the economy in the midst of the global financial crisis.[90] Also, taxes imposed on foreign investors for financial market transactions and for their liquidation of foreign currency loans were eliminated in October 2008.[91] The Government of the Bolivarian Republic of Venezuela took over Stanford Bank (United States) to protect depositors and prevent contagion in the Venezuelan banking system. The Bank was later sold to the local Banco Nacional de Crédito.[92]

Countries of Latin America and the Caribbean concluded six new BITs and eight DTTs in 2008, bringing the total number of BITs and DTTs for the region to 483 and 327, respectively. Mexico was the most active in both treaties. Peru signed three new comprehensive FTAs with Canada, China and Singapore. Chile concluded FTAs with Australia and Turkey, while Colombia concluded agreements with Canada and the members of the European Free Trade Association. The CARIFORUM States concluded the Economic Partnership Agreement with the European Community, which addresses the progressive, reciprocal and asymmetric liberalization of investment. Honduras joined the Bolivarian Alternative for the Americas (ALBA).[93] In June 2009, Ecuador also joined ALBA, and in July 2009, Ecuador's President decreed the withdrawal from the Convention of the International Centre for Settlement of Investment Disputes (ICSID Convention), which will take effect on 7 January 2010.

d. Prospects: gloomy in the short term, improving in the medium term

The drop in international trade and tightened credit markets for investment as a result of the global economic and financial crisis has dimmed the short-term prospects for FDI to Latin America and the Caribbean. In 2009, the GDP growth rate in Latin America is expected to average around -2%. Central America is expected to suffer from the most severe recession, with a fall of 6% in GDP growth due to an estimated 7% drop in Mexican GDP, while the growth rate in South America and the Caribbean is expected to be close to zero (IMF, 2009a).

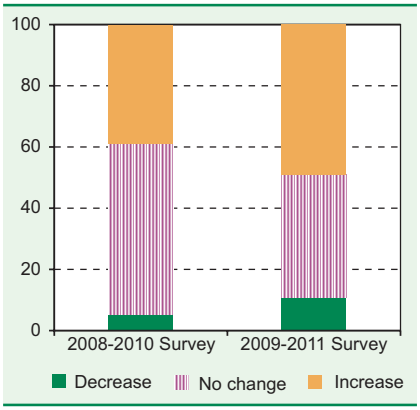
Preliminary cross-border M&A data for the first half of 2009 show net sales of Latin American and Caribbean firms plummeting to negative values. This means that the amount of divestment (i.e. sales of foreign affiliates to domestic firms) was higher than that of the sales of domestic firms to foreign TNCs. It accentuates the trend of the declining share of cross-border M&A sales in inward FDI in the region that began in the early 2000s *(WIR07* and *WIR06*). Cross-border M&A sales of Latin American firms to developed countries were the most affected (table II.19).

However, positive trends in commodity prices could have a favourable impact on medium-term prospects for natural-resource-related FDI, mainly

concentrated in South America but increasingly also targeting Central America and the Caribbean.

According to UNCTAD's *World Investment Prospects Survey 2009–2011*, FDI prospects in Latin America and the Caribbean are likely to be more favourable than those indicated in the previous survey. Of the total respondents to the latest survey, 53% expected to increase their FDI for the period 2009–2011 (compared with 39% in the previous survey), 39% expected no change (compared with 56% in the previous survey), and 8% expected a decrease (compared with 5% in the previous survey) (figure II.20).

Figure II.20. Latin America and the Caribbean: comparison of the results of *WIPS 2009–2011* with *WIPS 2008–2010*
(Percentage of respondents)



Source: UNCTAD, 2009b.

Outward FDI flows from Latin America and the Caribbean are expected to fall in 2009, as preliminary data for selected countries for which data were available show a 19% decline during the first quarter of 2009 compared to the first quarter of 2008 (table II.17).

Medium-term prospects for outward FDI from the region depend on world economic growth prospects, which affect sales and revenues generated abroad, and on the capacity of Latin American TNCs – especially those from Brazil and Mexico – to overcome their financial problems stemming from the global economic and financial crisis (see section a).

B. South-East Europe and the CIS[94]

1. Geographical trends

In 2008, inward FDI flows in South-East Europe and the Commonwealth of Independent States (CIS) reached a new record high, despite the global financial and economic crisis and armed conflicts within and between countries in certain parts of the region. The growth rate of inflows was high, especially in the first half of 2008. However, with the crisis deeply affecting several countries by late 2008, initial hopes that the region would prove relatively immune to the global turmoil evaporated. Judging from data on cross-border M&As, which have become an important mode of FDI in the region, FDI inflows started to slow down in the second half of 2008, and were showing signs of a sharp decline in the first half of 2009.

In South-East Europe most of the FDI inflows continued to be driven by privatization of the remaining State-owned enterprises (SOEs) in 2008. In the CIS, on the other hand, inward FDI was motivated by a desire to gain access to large and growing local consumer markets, such as those of the Russian Federation and Ukraine, and to benefit from business opportunities arising from the liberalization of selected industries. TNCs from EU countries accounted for the bulk of both greenfield projects and cross-border M&A purchases in the region, while there was also an increase in intraregional investments. Outward FDI flows, dominated yet again by Russian TNCs, maintained their upward trend in spite of some divestments that took place in the second half of 2008.

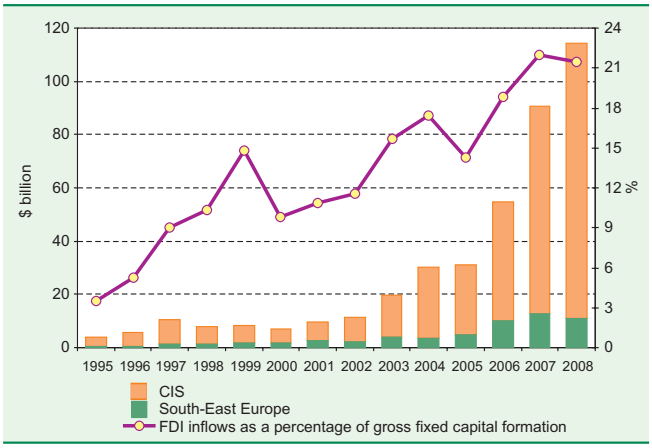
Governments in natural-resource-rich economies continued to increase their control over strategic primary industries, while policy changes in South-East Europe were related to seeking closer association with the EU. The reduction of economic growth in the region, resulting from tight credit markets and lower domestic demand, coupled with recession in the main FDI partners and a collapse in commodity prices, have dampened the prospects for inward and outward FDI in 2009 and beyond.

a. Inward FDI: the upward trend continued

In 2008, despite the financial and economic crisis, FDI inflows into South-East Europe and the CIS reached $114 billion, up by 26%. This marked the eighth consecutive year of growth and represented a 13-fold increase over flows of 10 years ago. As domestic investment grew almost as fast as FDI, the ratio of inward FDI to gross fixed capital formation decreased only marginally, from 22% in 2007 to 21% in 2008 (figure II.21).

As in previous years, inflows in 2008 remained unevenly distributed, with three large countries (the Russian Federation, Kazakhstan, and Ukraine, in that order) accounting for 84% of the region's total. Inflows rose in 13 countries and fell in 5 countries (annex table B.1). Despite a worldwide credit crunch and high volatility in capital markets, the number of cross-border M&A transactions increased by 13% in 2008, driven by medium-sized deals,[95] while

Figure II.21. South-East Europe and CIS: FDI inflows, by value and as a percentage of gross fixed capital formation, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex tables B.1. and B.3.

their *value* fell by 33% (annex tables B.4 and B.5). Although inward FDI in 2008 as a whole increased due to robust growth in the first half of the year, the second half of 2008 saw a slowdown, and even a decline of inflows in some of the region's economies. The decline accelerated in the first quarter of 2009, as there was a 46% fall of inward FDI flows compared to the same period of 2008 (table II.22).

Inflows to the region's largest economy, *the Russian Federation*, increased again in 2008 (figure II.22), driven mainly by large investments in the liberalized power generation industry, as well as in the automotive and real estate industries. The bulk of FDI in the country continued to be in natural-resource-related projects (extraction, as well as oil and gas refining), though a substantial amount of natural-resource-based FDI is financed from round-tripped Russian capital (box II.5).

However, in the second half of 2008, conflict with Georgia and tensions with certain developed countries, combined with concerns about the business environment and weaker economic performance, reduced investor confidence in the Russian Federation.[96] While all these factors were largely disregarded when oil prices were in triple digits, with the price at a third of that level, the extractive industry is looking less attractive in terms of the risk-reward ratio.

In *Kazakhstan,* FDI inflows grew to $14.5 billion in 2008, up from $11 billion in 2007, driven by additional investments in three main oil and gas projects (Kashagan, Tengiz and Karachaganak), as well as in geological exploration activities by foreign investors in major deposits of uranium, gold, zinc and copper. In contrast, in 2008, the net cross-border M&A sales of Kazakhstan firms turned negative (with more divestments than investments) in the wake of the global economic crisis, as potential buyers struggled to raise funds. FDI flows to *Ukraine* maintained their upward trend and exceeded $10 billion, owing mainly to large investments in the banking and steel industries: the two largest deals in 2008 were the acquisition of OJSC Ukrsotsbank by Unicredit (Italy) and the acquisitions of Sukhaya Balka GOK by Evraz group (Russian Federation), both for around $2.2 billion (table II.23).

In *Croatia*, the fourth largest recipient of inflows in the region in 2008, almost half of inward FDI went to financial services. Other notable cases of large inflows were *Serbia*, with inflows amounting to $3 billion, *Belarus*, which received more than $2 billion mainly, as a result of its liberalization of the financial services industry, and Armenia, which saw a 71% surge of FDI flows resulting in more than $1 billion.

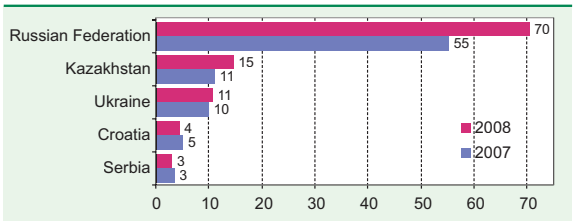
Table II.22. South-East Europe and CIS: FDI flows of selected countries,[a] 2008–2009, by quarter
(Millions of dollars)

Country	FDI inflows					FDI outflows				
	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1
Albania	155	188	267	331	161	34	13	31	15	2
Belarus	907	308	809	135	971	3	1	3	3	3
Bosnia and Herzegovina	118	209	382	294	40	-	-	-	-	-
Georgia	538	605	135	286	125	7	-	34	1	-
Kazakhstan	2 690	3 476	4 299	4 078	2 539	874	252	1 542	1 143	296
Kyrgyzstan	75	64	54	39	- 9	..	..	..	..	..
Moldova, Republic of	129	191	259	134	49	2	6	30	- 5	- 2
Montenegro	244	292	221	183	144	38	30	28	13	15
Russian Federation	20 537	22 679	16 799	10 305	9 993	15 818	16 342	11 174	9 056	12 892
Serbia	1 255	1 071	331	338	828	29	57	128	62	2
The FYR of Macedonia	172	201	133	93	71	..	..	..	..	..
Ukraine	2 596	3 762	3 401	934	957	166	671	77	96	16
Total	*29 416*	*33 047*	*27 089*	*17 149*	*15 869*	*16 970*	*17 372*	*13 048*	*10 383*	*13 225*

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Only those countries were selected for which data were available for the first quarter of 2009 (as of July 2009).

Figure II.22. South-East Europe and CIS: top 5 recipients of FDI inflows,[a] 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Ranked by magnitude of 2008 FDI inflows.

In nine countries of the region, FDI inflows still remained below $1 billion, but in certain economies such as *Albania*, they increased by 45% in 2008 due to the privatization of large State-owned companies and improvements in the business environment. On the other hand, in *Bosnia and Herzegovina*, the lumpiness of privatization-related FDI, with exceptionally large transactions in 2006 and 2007 but few in 2008, led to a lower level of inflows in 2008. After two consecutive years of negative inflows, FDI to *Azerbaijan* turned positive, although it was very small in value.

Developed countries, mainly EU members, continued to account for the bulk of FDI in the region in 2008, although there was a slight increase of intraregional greenfield FDI projects.[97] The share of the EU in cross-border M&As fell from 85% to 83% in 2008 and in greenfield projects from 60% in 2007 to 57%. Companies from developing countries also undertook some greenfield FDI projects.[98] Finland became the leading source of investment through cross-border M&As in South-East Europe and the CIS, when its power utility firm, Fortum, acquired a controlling stake in the Russian regional power-generating company TGK-10 for $3.2 billion (box II.6). It was followed by Italy, reflecting the acquisitions in Ukraine by two major banks, Unicredit and Intesa San Paolo, and purchases of Enel in the Russian power-generating industry. The share of transition economies as buyers in cross-border M&As in the region remained the same in 2008 as in 2007, at 12% (table II.24).

b. Outward FDI: more moderate growth

In 2008, FDI outflows from the region maintained their upward trend, reaching $58 billion (figure II.23). However, as with inflows, trends in outflows differed between the first and second halves of 2008: in the first half, abundant liquidity, a drive to enter new markets and access to raw materials continued to spur outward FDI; in the second half, divestments or freezing of acquisitions characterized the FDI activities of TNCs from the region. Outward FDI flows were dominated by Russian TNCs, although TNCs from Kazakhstan also invested large amounts abroad.

Outward FDI from the Russian Federation reached a new high in 2008 ($52 billion) (annex table B.1), making that country again the second leading source of FDI among developing and transition economies, after Hong Kong (China). With a slowdown in foreign demand for their products, Russian TNCs shifted their strategies from expanding markets for their products abroad (through securing access to downstream activities along value chains) to gaining access to technological innovations and

Box II.5. Who are the real investors in the Russian Federation?

A closer look at FDI in the Russian Federation reveals that a substantial proportion of inflows was in reality a return of offshore capital held by Russian residents in Europe and various financial hubs around the world (box table II.5.1). For example, nearly half of inward FDI in 2008 was invested in oil production and exploration, according to statistics reported by the central bank, though no new major acquisitions or large investments by foreign firms in the Russian oil industry were reported to have taken place. Since a large share of inflows in 2008 originated in the Netherlands, it is likely that it was mainly Gazprom's financial services affiliate in that country which was channelling money back into the Russian energy industry. In addition, special purpose entities in Cyprus and the British Virgin Islands also appear to have been involved in such investments.

Source UNCTAD.

Box table.II.5.1. Sources of FDI flows to the Russian Federation, 2007–2008
(Million of dollars)

Economy	2007	2008[a]
World	47 853	52 173
Austria	324	387
Bahamas	354	-1 003
Bermuda	8 369	7 492
British Virgin Islands	- 392	2 178
Cyprus	12 061	18 336
Finland	980	1 574
France	414	419
Germany	7 695	2 446
Gibraltar	873	641
Italy	780	955
Luxembourg	-2 309	- 123
Netherlands	9 384	8 773
Norway	1 302	244
Seychelles	- 441	59
Sweden	529	500
United Kingdom	3 266	3 657
United States	1 498	2 003
CIS	131	9

Source: The central bank of the Russian Federation.
[a] Only first three quarters.
Note: The data cover only non-banking corporations.

advanced marketing and management know-how. Indeed in the first half of 2008, Russian oil and gas TNCs continued market-seeking acquisitions of processing entities, distribution networks and storage and transportation facilities across Europe and the United States. For example, Gazprom concluded an agreement with Austrian OMV for the purchase of 50% of the largest Central European gas distribution terminal and storage facility in January 2008, and Lukoil acquired a 49% stake in the Priolo oil refinery of ERG (Italy) for $2.1 billion (table II.25) – the first ever deal of a firm from the Russian Federation in such activities in Western Europe. Russian TNCs in iron and steel also continued to increase investments in developed countries. For instance, the Evraz Group acquired a Swedish steel and pipe tube company in Canada for $4 billion and OAO SeverStal purchased two steel companies in North America for a total of $1.9 billion (table II.25), while the major Russian mobile phone operators consolidated their position in other CIS countries (e.g. Vimpel-Communications OJSC raised its stake in a wireless telecommunication services provider in Kazakhstan from 50% to 75%).

The situation changed in the second part of 2008 when outward FDI from the region declined significantly. The lack of external financing due to shrinking market capitalization arising from falling commodity prices, and the high indebtedness of some Russian TNCs, in particular the country's major natural-resource companies and industrial corporations such as Norilsk Nickel, affected those companies' capacities to invest. The fall in outward FDI took place either through divestments, through cancelling acquisitions abroad or through the freezing of acquisitions that were in the process (for example, Basic Element ceded its 10% stake in the construction major Hochtief (Germany), and its 20% stake in the car parts major Magna (Canada) both acquired in 2007).

2. Sectoral trends: manufacturing attracted market-seeking FDI

To a large extent, the sectoral and industrial patterns of cross-border M&A sales and purchases are indicative of the patterns of FDI flows to and from South-East Europe and the CIS, as the bulk of FDI in and from the region takes place through privatizations and acquisitions of existing private firms. In 2008, cross-border M&A sales of firms in the manufacturing sector increased further, while those in the primary and services sectors fell significantly after reaching exceptionally high values in 2007 (table II.26). On the other hand, cross-border M&A purchases increased in the manufacturing sector, marked a pause in the primary sector and decreased in the services sector.

Primary sector. In 2008, FDI inflows in the primary sector were much lower than in 2007, judging from data on cross-border M&A sales of companies in the region**.** One of the main reasons for this decline was increasing host-country restrictions on investment in oil and gas. In the first half of that year, high commodity prices gave significant leverage to host-country governments when dealing with foreign oil and gas companies operating in the region. However, strategic investors still saw value in investing in the primary sector, and their technological know-how in developing oil and gas reserves was welcomed in the exploitation of vast and complex oil and gas fields. In 2008, various companies from developing countries invested in Kazakhstan and Uzbekistan. For example Malaysia's Petronas signed a production sharing agreement with the Government of Uzbekistan for three oil fields in the northern region of Ustyurt.

Manufacturing. Market opportunities, as well as improvements in some aspects of the business environment, resulted in a sharp increase in cross-border M&A sales of firms in the region's manufacturing industries that are not deemed

Table II.23. South-East Europe and CIS: top 10 cross-border M&A sales,[a] 2008

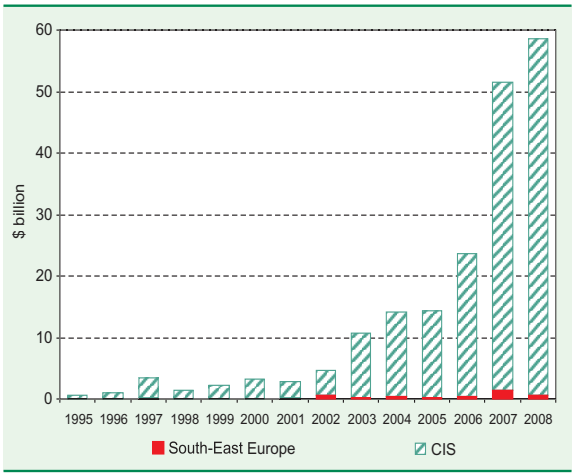
Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	3 188	Territorial Generation Co	Russian Federation	Electric services	Fortum Oyj	Finland	76
2	2 231	OJSC Ukrsotsbank	Ukraine	Banks	Unicredito Italiano SpA	Italy	94
3	2 189	Sukhaya Balka GOK	Ukraine	Iron ores	Evraz Group SA	Russian Federation	99
4	1 481	AES Corp-Ekibastuz	Kazakhstan	Electric services	Kazakhmys PLC	United Kingdom	100
5	1 448	JSC The Fifth Power Generation Co	Russian Federation	Electric services	Enel SpA	Italy	23
6	1 166	OAO Avtovaz	Russian Federation	Motor vehicles and passenger car bodies	Renault SA	France	25
7	1 165	Insurance Co RESO-Garantia	Russian Federation	Life insurance	AXA SA	France	37
8	746	JSC Pravex-Bank	Ukraine	Banks	Intesa SanPaolo SpA	Italy	100
9	745	Expobank Commercial Bank	Russian Federation	Banks	Barclays PLC	United Kingdom	100
10	720	Berezovskaya Mine JSC	Russian Federation	Bituminous coal and lignite surface mining	Arcelor Mittal NV	Luxembourg	98

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] In the immediate host country.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company.

Figure II.23. South-East Europe and CIS: FDI outflows, 1995–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

"strategic". The relatively large domestic markets of Kazakhstan, the Russian Federation and Ukraine attracted new investors. Cross-border M&A sales in the region increased almost 50% in 2008 mainly in beverages and the motor vehicles industry. For example in the Russian Federation, Renault (France) increased its equity share from 25% to 50%-plus-one in OAO Avtovaz for $1.2 billion. In addition, in that country there were some large transactions in the food, beverages and tobacco industry: PepsiCo (United States) purchased a 75% stake in Lebedyansky, the country's largest juice producer, for $1.4 billion. This was the biggest deal in juice production in the Russian Federation, so far, and the largest foreign acquisition by PepsiCo worldwide (*WIR08*).

Services. Although in the first half of 2008, M&A sales in the services sector of the region more than doubled, compared to the first half of 2007, a very low level of acquisitions in the second half reduced total M&A sales for the year by 26%. Half of the acquisitions in 2008 took place in the banking industry, reflecting European banks' increasing interest in growth opportunities outside their traditional markets.[99] Foreign investors also invested some $5.4 billion in the Russian energy generation and distribution industry in 2008, seizing opportunities resulting from its reorganization (whereby the national monopoly was broken down into regional providers and the latter were partly privatized).

3. Policy developments

In 2008, the bulk of policy changes in South-East Europe and the CIS were more favourable for foreign investors. Some countries continued to liberalize FDI regulations in certain industries. The most salient case was the liberalization of electricity generation in the Russian Federation – one of that country's major liberalizing reforms of recent years – which resulted in the participation of a large number of foreign firms (box II.6). Additionally, Belarus opened up certain industries (banking, retail and telecommunications)[100] to partial foreign participation. In the Ukraine a new

Box II.6. Liberalization of electricity generation in the Russian Federation: Opportunities for FDI

The Russian Federation is the world's fourth largest producer of electricity, behind the United States, China and Japan. Its generation capacity is based on a broad range of energy sources, such as thermal, hydropower, coal, natural gas and nuclear power. The Government has recognized the need for structural reform to enable the industry to meet the growing demand for electric power and to attract the investment needed to modernize and expand production capacities (Tumminia, 2007). Until 2007, electricity generation was dominated by State-owned Unified Energy Systems (RAO UES), which owned various assets along the electricity value chain (i.e. power plants, vertically integrated energy companies, the federal high voltage transmission grid and the energy dispatch system). Unlike other large Russian TNCs, RAO UES sold almost all its output to the domestic market, and had no export earnings to set against the cost of the domestic subsidies it provided (Thomson, 2004).

In 2008, the reorganization of the power generation industry was completed, and the unbundling of RAO UES was carried out. The reform involved the lifting of the company's quasi-monopoly and the divestment of stakes in 72 vertically integrated affiliates, each of which has a regional monopoly on electricity generation and distribution. Through a subsequent process of consolidation, these entities were transformed into six wholesale generation companies (WGCs) and 14 territorial generation companies (TGCs). This restructuring and sales of assets have provided opportunities for foreign investors to enter the industry. A number of the stakes in WGCs and TGCs have already been acquired by various European TNCs such as Fortum (Finland), Enel (Italy), E.ON (Germany), CEZ (Czech Republic), RWE (Germany) and EDF (France).[a]

While it is clear that the implementation of the restructuring plan creates new opportunities, the Russian electricity market continues to be highly regulated with respect to transmission, distribution and tariff policies, with a prominent role for the State.

Source: UNCTAD based on "Russian power reform: five years on" Power Engineering International, April 2008.
[a] In 2008, Fortum (Finland) purchased a controlling stake in TGC-10 and RWE (Germany) bought a majority share in TGC-12, while EDF (France) has entered into a partnership with the Russian bidder TransNeftServis-S to acquire OGC-1, one of RAO UES' most valuable assets.

Table II.24. South-East Europe and CIS: value of cross-border M&A sales and purchases, by region/economy, 2007–2009[a]
(Millions of dollars)

Region/economy	Net sales of companies in South-East Europe and the CIS[b]			Net purchases by South-East Europe and the CIS's companies worldwide[c]		
	2007	2008	2009 [a]	2007	2008	2009 [a]
World	30 671	20 505	1 005	21 728	20 648	3 534
Developed economies	27 675	17 196	761	17 074	14 673	3 401
Europe	26 974	17 196	680	5 175	5 720	2 333
European Union	26 205	17 070	776	4 972	5 404	2 333
Finland	-	4 782	-	816	112	-
France	2 085	2 336	-	- 11	-	-
Italy	9 595	4 272	250	263	2 098	-
United Kingdom	1 007	3 074	33	485	1 642	482
North America	619	11	75	11 900	7 941	1 068
Canada	42	- 22	-	8 547	5 278	-
United States	577	33	75	3 353	2 663	1 068
Developing economies	- 663	448	50	994	3 478	-
Africa	165	-	-	250	15	-
Latin America and the Caribbean	-	133	- 42	-	1	-
Asia	- 828	315	92	744	3 462	-
West Asia	161	290	-	612	2 622	-
Turkey	161	-	-	612	2 622	-
South, East and South-East Asia	- 989	25	92	132	840	-
South-East Europe and the CIS	3 659	2 497	133	3 659	2 497	133
Kazakhstan	365	-	-	- 980	217	-
Russian Federation	2 417	2 510	165	-	-	-
Ukraine	25	-	-	353	2 237	158

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Sales to the region/economy of the ultimate acquiring company.

[c] Purchases in the region/economy of the immediate acquired company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

law on joint stock companies was approved[101] and in Georgia, the Government took various steps towards simplifying the tax system and making it easier to start a business.[102]

Some governments in the natural-resource-rich countries of the CIS continued to strengthen their control over their natural resources in order to increase their share of windfall income. For instance, the new law on foreign investment in strategic industries approved in the Russian Federation in May 2008 expanded the number of strategic industries to 42 (*WIR08*: 227).

The financial crisis that erupted in the second half of 2008 led some governments in the region to take measures to help sustain the profitability of companies suffering from the economic slowdown. In the Russian Federation, for example, as part of the economic stimulus package, the Government cut corporate profit taxes to 20% from 24% in 2009.[103]

Countries of the South-East European subregion continued to strengthen their ties with the EU. Among them, Croatia was negotiating its membership agreement, while Albania's Stabilization and Association Agreement entered into force on 1 April 2009.[104]

In addition to 19 new BITs (chapter I) countries of the region concluded as many as 25 DTTs – the highest number of DTTs per region. In terms of other IIAs, Bosnia and Herzegovina concluded an Interim Agreement on Trade and Trade-related Matters with the EU, which includes a commitment to refrain from restrictive measures concerning the free transfer of funds related to investment.

4. Prospects: slowdown expected

The results of UNCTAD's *World Investment Prospects Survey 2009–2011* suggest a decline in FDI inflows to large economies in the CIS, such as the Russian Federation, Kazakhstan and Ukraine, in the near future. Preliminary data for FDI flows in the first quarter of 2009 and cross-border M&As for the

Table II.25. South-East Europe and CIS: top 10 cross-border M&A purchases,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	4 025	IPSCO Inc	Canada	Steel pipe and tubes	Evraz Group SA	Russian Federation	100
2	2 189	Sukhaya Balka GOK	Ukraine	Iron ores	Evraz Group SA	Russian Federation	99
3	2 098	ERG Raffinerie Mediterranee SpA	Italy	Crude petroleum and natural gas	OAO LUKOIL Holdings	Russian Federation	49
4	2 050	Petkim Petrokimya Holding AS	Turkey	Petroleum refining	Investor Group	Kazakhstan	51
5	1 524	Oriel Resources PLC	United Kingdom	Ferro-alloy ores, except vanadium	OAO Mechel	Russian Federation	100
6	1 200	IPSCO Tubulars Inc	United States	Steel pipe and tubes	TMK	Russian Federation	100
7	1 115	Penfold Capital Acquisition Corp	Canada	Investors, nec	OAO SeverStal	Russian Federation	95
8	1 009	Consolidated Minerals Ltd	Australia	Ferro-alloy ores, except vanadium	Palmary Enterprises Ltd	Ukraine	88
9	940	Formata Holding BV	Netherlands	Grocery stores	Pyaterochka Holding	Russian Federation	100
10	810	Sparrows Point LLC	United States	Cold-rolled steel sheet, strip and bars	OAO SeverStal	Russian Federation	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] From the ultimate home country.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Table II.26. South-East Europe and CIS: value of cross-border M&A sales and purchases, by sector/industry, 2007–2009[a]
(Millions of dollars)

Sector/industry	Net sales of companies in South-East Europe and the CIS[b]			Net purchases by South-East Europe and the CIS's companies worldwide[c]		
	2007	2008	2009[a]	2007	2008	2009[a]
Total	30 671	20 505	1 005	21 728	20 648	3 534
Primary	8 225	2 401	168	3 779	3 464	2 333
Mining, quarrying and petroleum	7 823	2 399	168	3 779	3 464	2 333
Secondary	2 187	3 169	360	9 841	12 031	1 068
Food, beverages and tobacco	571	1 329	102	-	2	-
Metals and metal products	51	297	7	9 748	11 818	1 068
Motor vehicles and other transport equipment	-	1 177	250	-	11	-
Services	20 259	14 934	477	8 108	5 153	133
Electricity, gas and water	9 833	5 349	-	-	- 50	-
Transport, storage and communications	1 033	972	- 35	1 723	799	- 32
Finance	8 939	7 583	377	4 171	3 438	162
Business services	639	395	75	394	46	2

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).
[a] For 2009, January-June only.
[b] Net sales in the industry of the acquired company.
[c] Net purchases by the industry of the acquiring company.
Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

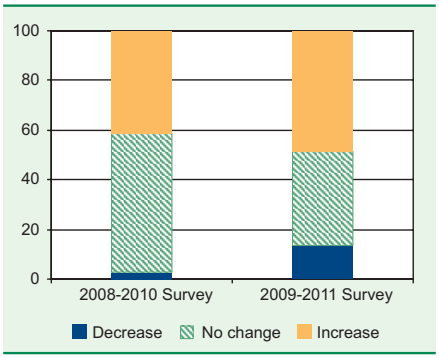
first half of 2009 support this finding (table II.22 and table II.24).

The economic and financial crisis, coupled with the near-exhaustion of major privatization opportunities in various South-East European countries, is likely to cause a decline in FDI flows to the subregion. The significant slowdown of economic growth worldwide during the course of 2008 and its expected continuation in 2009 (IMF, 2009a), along with the fall in commodity prices and deterioration of external demand for the main export commodities of the transition economies, could significantly affect FDI inflows into natural-resource-abundant countries (e.g. Ukraine, which exports around 80% of its processed metal). Moreover, the financial and economic crisis could affect FDI inflows considerably in some countries hit by the crisis (such as Ukraine), due principally to high risk aversion by foreign investors. Some countries of the region (for example Belarus) are seeking to attract buyers for their big State-owned industrial enterprises in the hope that this will relieve pressures on their budgets, but this is proving difficult in the current depressed global investment climate.

The medium-term outlook for inward FDI in South-East Europe and the CIS is better than the short-term prospects. For instance, according to UNCTAD's *World Investment Prospects Survey 2009-2011,* the outlook for investment in the region should be better in 2009–2011 than in 2008–2010 (figure II.24). In some countries such as Ukraine, this relative optimism about investment prospects can be explained by the fact that certain sales of large-scale State assets are expected to be completed in the coming years, such as the privatizations of the State-owned fixed-line telecommunications monopoly, Ukrtelecom, and of the large chemicals producer, Odessa Portside Plant. As the financial crisis has left the Russian Federation unable to invest in the development of its oil and natural gas assets, some foreign companies such as Shell, are being invited again to invest in projects such as Sakhalin 3 and 4.[105]

Outward FDI from the region is expected to slow down in 2009. However some Russian TNCs with large cash reserves, but which are new to foreign expansion, expanded in early 2009 despite the financial crisis. For example, Surgutneftgaz bought 21.2% shares in the National Hungarian Oil Company, MOL, from the Austrian National Oil Company OMV for $1.4 billion, marking the first major acquisition abroad by that Russian company. As for future outward FDI beyond 2009, it is notable that, according to PricewaterhouseCoopers' *12th Annual Global CEO Survey* (2009), Russian business leaders are more optimistic about their business prospects than their foreign counterparts: 30 Russian CEOs surveyed expressed confidence that revenue would increase in the coming years.

Figure II.24.South-East Europe and CIS: Comparison of the results of *WIPS 2009–2011* with *WIPS 2008–2010*
(Percentage of respondents)



Source: UNCTAD, 2009b.

C. Developed countries

1. Geographical trends

After reaching a historical peak in 2007, FDI flows to and from developed countries fell sharply in 2008: inflows fell by 29%, to $962 billion, and outflows by 17%, to $1,507 billion. The decline was widespread, as the financial crisis and the accelerating economic downturn seriously affected all major economies of the world in 2008. Firms cut their investments at home and abroad significantly. Cross-border M&As – the main mode of FDI entry, and the principal drivers of the FDI boom during the period 2003–2007 – plunged. Falling profits and financial pressures led to a decline in reinvested earnings and a rechanneling of loans from foreign affiliates to the headquarters of TNCs, which depressed net FDI outflows.

As most developed countries fell into deep recession, FDI flows continued to decline in the first half of 2009, with a significant reduction in cross-border M&As. A recovery in FDI flows will depend crucially on future developments in the world economy and the financial system. Until financial markets regain systemic stability and major economies recover, FDI will remain sluggish due to financing difficulties as well as poor markets and dim profit prospects for TNCs. The results of UNCTAD's latest *World Investment Prospects Survey* (UNCTAD, 2009b) point to a further decline in FDI activity in 2009 and 2010, and a small recovery in 2011.

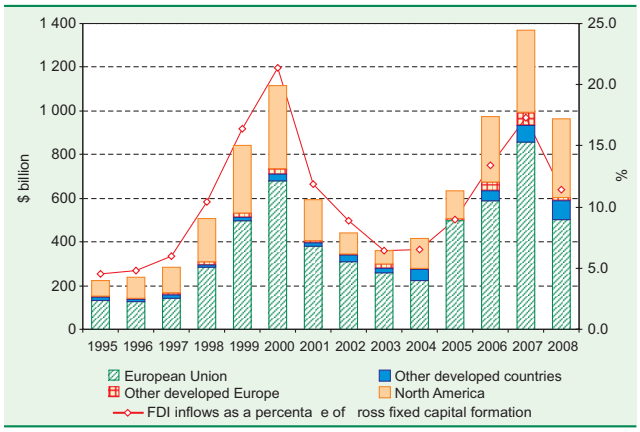
a. Inward FDI: strong decline as the financial and economic crisis unfolds

FDI inflows to developed countries fell sharply in 2008, to reach $962 billion (figure II.25). Out of 38 developed countries, 23 experienced a decline in FDI inflows (annex table B.1). All major host countries except the United States received lower FDI flows.

In 2008, FDI inflows into *North America* decreased by 5%, to $361 billion (figure II.25). Despite turbulence in financial markets, which originated in the United States and led to the sharpest downturn of its economy in decades, the *United States* retained its position as the largest FDI recipient, both among developed countries (figure II.26) and worldwide (annex table B.1). FDI flows to the United States amounted to $316 billion, up by 17%. The rise was due to a 61% increase in equity capital inflows amounting to $250 billion. The flows targeted mainly manufacturing and finance and the largest sources were the Netherlands, the United Kingdom, Japan and Switzerland in that order. The rise in FDI is in sharp contrast to the dramatic fall in other capital flows (including portfolio flows and bank lending) to the United States. Several high-value cross-border acquisitions of United States firms contributed to the strong increase in the equity capital stock of foreign TNCs. Eight of the 20 largest inward M&A transactions worldwide, each valued at more than $7 billion, involved United States firms (annex table A.I.3). Among others, a Belgian investor acquired the United States brewery Anheuser-Busch Cos Inc for $52 billion, the Swiss firm Novartis bought Alcon Inc for $10.5 billion, and the British company Cadbury paid $10.3 for Dr. Pepper Snapple Group Inc. Therefore the largest recipient of equity capital investments was the manufacturing industry. While foreign equity investments in this sector increased by 10% to $99 billion, they increased more than sixfold in financial services, amounting to $85 billion. Reinvested earnings of foreign affiliates in the United States rose by 14% in 2008. Intra-company debt flows contributed to the increase in FDI inflows in the first half of 2008, but declined as the growing financial needs of foreign TNCs led to a re-channelling of financial resources from their affiliates in the United States to their headquarters in their home countries in the second half of 2008.

After a strong increase in the preceding two years, FDI inflows into *Canada* plummeted in 2008, from $108 billion in 2007 to $45 billion. This was mainly due to the end of the boom in natural-resources that had led to a wave of high-value cross-border investments in the Canadian mining and natural-resource industries in 2006 and 2007. In 2008, foreign investors continued to invest in those industries – about half of foreign investments in Canada being in the energy and metallic minerals sector – but the number of mega deals (valued at

Figure II.25. Developed countries: FDI inflows, by value and as a percentage of gross fixed capital formation, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

more than $1 billion) declined sharply. This caused the value of cross-border M&A inflows to drop to $35 billion in 2008 (a 65% decrease from the level of 2007). The leading sources of Canada's FDI inflows were the United States and European countries.

FDI flows into the *EU-27* countries fell by 40% in 2008, to a total of $503 billion. The financial crisis and the economic downturn were responsible for the decline in inward FDI in the majority of these countries. In 2008, seven of the ten largest cross-border M&As worldwide took place in the EU (annex table A.I.3), of which four were intra-EU transactions. Cross-border bank mergers played an important role, as the process of consolidation in the European financial services industry continued.[106] In the first quarter of 2009, FDI activity in most of EU countries was down compared to the first quarter of 2008 (table II.27).

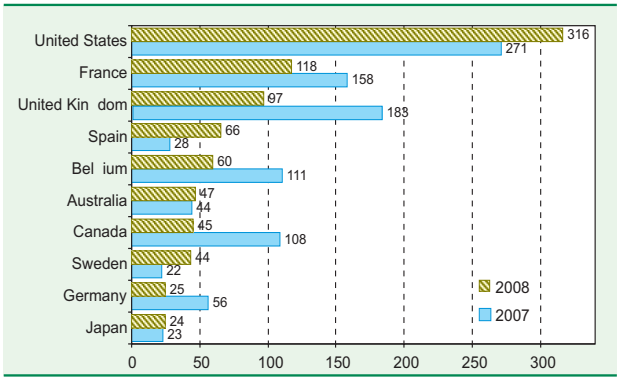
Inward FDI flows to the 15 countries of the *European Monetary Union* (EMU) (or the euro zone) declined in 2008 by 48%, to $287 billion. A large share of inflows to EMU-member countries consisted of intra-EMU FDI.[107] Ten of the 15 EMU countries recorded a significant decline in FDI inflows in 2008. In *France*, FDI inflows fell by 26%, from a record level of $158 billion in 2007 to $118 billion, which was nevertheless still a high level. Indeed, France ranked second among FDI recipients worldwide in 2008 (figure II.26), with inflows spread across a wide range of sectors. The overall decline in FDI inflows was mainly due to cutbacks in lending by TNCs to their foreign affiliates located in France. These intra-company loans fell by 35% to $68 billion. Equity capital inflows fell by 32% while reinvested earnings of foreign affiliates in France rose by 23%. *Belgium* saw its FDI inflows plunge by 46% to $60 billion in 2008. Flows to Belgium are very volatile due to the presence of special purpose entities and corporate headquarters (*WIR03*, box. II.11). FDI inflows into *Germany* also fell sharply, by 56%, to only $25 billion. As a result, Germany's ranking among the top developed-country recipients of FDI fell from seventh place in 2007 to ninth in 2008 (figure II.26). A fall in the net equity capital component of FDI inflows by 59% (to $18 billion) – the lowest level for Germany since the 1990s – contributed to most of the decline in FDI inflows. This was largely due to the sharply shrinking investments of foreign private equity funds. Their leveraged buyouts (LBOs) in Germany fell by $12 billion to $1.5 billion in 2008 (Deutsche Bundesbank 2009: 30). In addition, intra-company loans to foreign affiliates in Germany dried up.

Among the other EMU-15 host countries *Austria*, *Italy* and the *Netherlands* also recorded a decline in FDI inflows. The Netherlands hosts large holding and financing TNCs that contribute to volatile FDI flows, especially in the form of intra-company loans. Inward FDI in the Netherlands in 2008 turned negative (-$3.5 billion) compared with $118 billion in 2007. Part of this dramatic fall can be attributed to one-off divestment deals. Thus, while FDI inflows in 2007 had been extraordinarily high due to two large takeovers,[108] in 2008, one of the three banks that took over ABN-AMRO withdrew from it (i.e. assets of ABN-AMRO were sold) and the Government took over the stake that Fortis Belgium owned in Fortis Netherlands. Together, these two withdrawals reduced the 2008 figure by some €30 billion. FDI inflows in Italy fell sharply, from $40 billion to $17 billion. The large cross-border acquisition of an Italian energy supplier (Endesa Italia by the German E.ON for $14.3 billion) was more than offset by divestments by foreign investors in the banking industry (Banca Monte dei Paschi di Siena SpA (Italy) acquired Banca Antonveneta SpA from Santander Central Hispano SA (SC) for $13.2 billion).

FDI inflows to *Finland* and *Ireland* turned negative in 2008. Ireland was seriously hit by the financial crisis. Foreign investors withdrew a massive $38 billion worth of intra-company loans from the country, and reduced their equity investments by $9 billion. This caused FDI inflows to turn negative, falling by $45 billion: from an inflow of $25 billion in 2007 to minus $20 billion in 2008.

Bucking the general downward trend of FDI inflows in 2008, five of the EMU-15 countries (Spain, Luxembourg, Greece, Portugal and Slovenia) recorded an increase in FDI inflows. Inward FDI to *Spain* more than doubled, to $66 billion, driven by several high-value cross-border M&As, such as the $18 billion acquisition of the Spanish Cigarette producer Altadis by British Imperial Tobacco. This consistent rise in inflows raised its stock of FDI to $635 billion – the sixth highest of all developed countries. FDI inflows into *Luxembourg,* which were negative in 2007, turned positive and reached $3 billion. FDI inflows also increased in *Greece*

Figure II.26. Developed countries: top 10 recipients of FDI inflows, [a] 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Ranked by magnitude of 2008 FDI inflows.

(by 166% to $5.1 billion), *Slovenia* (by 26% to $1.8 billion) and *Portugal* (by 16% to $3.5 billion).

Trends in inward FDI flows to the three EU-15 countries that do not participate in the EMU were uneven in 2008. In *Sweden* inward FDI rose by 98% to $44 billion, driven by an increase in cross-border M&As (e.g. the acquisition of the Swedish Vin & Sprit AB by the French Pernod Ricard for $8.9 billion). However, privatization – a magnet for recent FDI flows to Sweden – is losing momentum due to the global economic downturn, which is likely to affect the country's inflows in 2009. In the *United Kingdom,* FDI inflows halved in 2008 to $97 billion, and the country lost its position as the largest FDI recipient in Europe to France. The fall in inflows was mainly due to equity investments, which fell in value from $161 billion in 2007 to $91 billion in 2008 – the lowest value since 2005.[109] Reinvested earnings of foreign affiliates in the United Kingdom amounted to $31 billion (37% lower than in 2007), and intra-company loans of foreign TNCs to their affiliates in the United Kingdom turned negative (-$24 billion), reducing net FDI inflows to this country (chapter I). Despite the decline in inflows in the form of cross-border M&As, the United Kingdom recorded several high-value transactions by foreign TNCs: Woodbridge (Canada) acquired Reuters Group (United Kingdom) for $17.6 billion, Akzo Nobel (Netherlands) bought Imperial Chemical Industries for $16.3 billion and L'Arche Green NV (Netherlands) bought Scottish & Newcastle Plc. for $14.9 billion (table II.28).

Inward FDI of the *nine*[110] *new EU member countries* (those that joined the EU in 2004 and 2007) that did not participate in the EMU fell by 9% in 2008, to $65 billion. This was a much smaller rate of decline than that of inflows into the EU-15 countries. Inward FDI flows to the group in 2008 were unevenly distributed: the *Czech Republic*, *Hungary, Romania* and *Slovakia* saw an increase in inflows that was more than offset by the decrease in flows to the other five countries, *Bulgaria*, *Estonia*, *Latvia*, *Lithuania* and *Poland*. Four countries together accounted for the lion's share (77%) of the group's total inflows: *Poland* ($16.5 billion), *Romania* ($13.3 billion), the *Czech Republic* ($10.7 billion) and *Bulgaria* ($9.2 billion). As many companies scaled back or suspended their expansion plans due to the global financial crisis, FDI inflows into Poland and Bulgaria declined considerably in 2008, but in the Czech Republic and Hungary they did not change significantly, despite increasing macroeconomic problems in both countries. For many years the automotive industry has been the key driver of strong FDI inflows to the new EU member countries, but the decline in euro-area car sales that began in the last quarter of 2008 has revealed the region's vulnerability on account of its heavy reliance on the industry.

In *Japan,* inward FDI flows maintained their upward trend in 2008, reaching $24 billion, with more than two thirds concentrated in the services sector. Inflows were not much affected by the current crisis, except for a few cases of divestments by foreign firms and a decline of FDI in real estate. However, in comparison to its potential, the second largest economy in the world, with its large trade and financial market ties with the rest of the world, still has a low inward FDI stock. Large divestments in 2009 due to weakened activities by foreign finance companies (e.g. selling of the Japanese affiliates of AIG, the largest United States insurance company) will further reduce FDI inflows in the finance industry, which is the largest FDI recipient industry in Japan.

Table II.27. Developed countries: FDI flows of selected countries,[a] 2008–2009, by quarter
(Millions of dollars)

Country	FDI inflows					FDI outflows				
	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2009:Q1
Developed countries	292 494	252 280	205 920	207 271	157 435	462 188	328 009	328 888	337 086	248 386
European Union	193 819	123 008	111 411	71 357	109 556	305 227	193 447	193 944	166 628	176 684
France	28 207	41 206	38 629	9 469	9 243	62 322	72 150	56 657	28 917	44 345
Germany	8 740	6 020	4 548	5 692	2 550	64 597	50 259	13 504	29 761	17 898
Ireland	-1 112	-5 251	-6 674	-6 993	1 129	1 994	902	6 555	4 050	1 185
Luxembourg	4 247	-3 076	2 597	- 757	5 699	-16 407	-12 125	3 221	375	4 073
Netherlands	26 635	4 641	79	-34 847	4 950	47 365	-15 252	-2 457	27 914	11 155
United Kingdom	45 560	27 666	-4 531	28 244	63 177	45 560	44 435	31 661	12 364	59 945
Other developed Europe	-2 173	8 643	-1 489	9 747	5 483	14 191	15 535	38 333	39 368	12 373
Iceland	- 262	-1 216	505	-1 619	- 10	-1 816	477	- 709	-4 933	- 245
Switzerland	4 902	7 452	520	4 541	5 321	16 022	10 711	28 725	30 838	8 409
North America	73 463	107 211	79 793	100 358	33 543	120 130	112 997	80 819	75 517	28 918
United States	57 825	101 995	64 244	92 048	33 312	92 164	101 833	55 819	61 980	25 022
Other developed countries	27 386	13 417	16 205	25 808	8 854	22 639	6 030	15 792	55 574	30 412
Australia	13 035	3 949	10 156	19 634	4 118	-9 309	-12 412	-8 089	-6 128	11 959
Japan	10 339	6 408	1 744	5 934	2 347	29 828	18 141	21 887	58 164	17 196

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Only those countries were selected for which data were available for the first quarter of 2009 (as of July 2009).

The lumpiness of FDI in *Switzerland*, with an exceptional number of acquisitions of large Swiss companies in 2006 and 2007, but few in 2008, led to a lower level of inflows ($17 billion) to that country in 2008. Moreover, foreign TNCs withdrew loans from their affiliates in Switzerland, thereby reducing flows through intra-firm lending. Reinvested earnings also declined, although they contributed the most to inward FDI. In addition, divestments further reduced FDI inflows. Inflows to *Australia* remained almost the same level, while those to *New Zealand* declined.

In 2008, the value of cross-border M&A sales of developed-country firms fell by 39% to $552 billion, roughly their 2006 level (table II.29), as the financial crisis and economic downturn exerted a dampening effect on cross-border M&A activity. The number of such M&A deals fell by 13%, to 4,481. Data for the first half of 2009 show a continuing downward trend: the number of high-value M&A deals fell sharply during the first semester, as banks were hesitant to finance such transactions in the prevailing climate of high and rising risk (chapter I). In 2008, strategic investors dominated cross-border M&A activity, whereas private equity funds and other collective investment funds lost importance. Around 84% of cross-border M&As in developed countries were concluded by firms from other developed countries. The share of developing countries' cross-border acquisitions in developed countries declined marginally and the acquisitions were uneven across major regions and countries. In comparison to 2007, TNCs from Latin America and Asia considerably reduced their cross-border M&As in developed countries. Chinese and Russian TNCs were by far the largest investors from developing countries and transition economies. Chinese acquisitions of developed-country firms totalled $25 billion – 23 times their 2007 level. The increasing cross-border M&As from the Russian Federation and China fuelled the ongoing debate about investments by SWFs and State-owned enterprises in developed countries, and provoked a variety of policy reactions.

b. Outward FDI: moderate but a widespread decline

In 2008, outward FDI from developed countries fell by 17% to $1,507 billion (figure II.27). Outflows exceeded inflows by $544 billion, so that, as in previous years, developed countries retained their position as the largest net outward investor group. The decline in FDI outflows of developed countries was widespread, with 24 out of 37 countries registering a fall (annex table B.1). In 2009, a further drop in FDI flows is expected, as the continuing financial crisis and the accelerating economic downturn in all major regions of the world have a negative impact on the investment plans of developed-country TNCs.

Among the largest FDI source countries, only *Japan, Switzerland, Canada* and the *Netherlands* saw a rise in their FDI outflows in 2008. *Japan's* TNCs, awash with cash until mid-2008,[111] increased their FDI outflows by 74% to $128 billion. As in 2007, Japanese outward FDI reached a new record high due to a strong increase in cross-border equity investments. Japanese outward FDI was spread wide across major economies in the world and a range of industries. The majority of investments have been undertaken by firms oriented toward the domestic market, but they are now seeking foreign markets. An appreciating yen encouraged further FDI in 2008. However, this trend is being reversed in 2009, as Japanese TNCs' rapidly declining sales and profits are affecting their investment expenditures, both domestic and foreign.[112] FDI outflows from *Switzerland* grew by 74%, reaching $86 billion in 2008. This mainly reflects an increase in equity investments by banks in their affiliates abroad, but also a rise in investments by Swiss holding companies abroad. *Canada's* FDI outflows increased by 30% to $78 billion –

Table II.28. Developed countries: top 10 cross-border M&A sales,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	52 178	Anheuser-Busch Cos Inc	United States	Malt beverages	Stichting Interbrew SA	Belgium	100
2	23 137	Fortis Bank Nederland(Holding) NV	Belgium/Netherlands	Banks	Government of the Netherlands	Netherlands	100
3	17 873	Altadis SA	Spain	Cigarettes	Imperial Tobacco Group PLC	United Kingdom	100
4	17 628	Reuters Group PLC	United Kingdom	News syndicates	Woodbridge Co Ltd	Canada	100
5	16 258	Imperial Chemical Industries PLC	United Kingdom	Paints, varnishes, lacquers, & allied products	Akzo Nobel NV	Netherlands	100
6	16 000	Intelsat Ltd	Bermuda	Communications services, nec	Serafina Holdings Ltd	United Kingdom	76
7	14 900	Scottish & Newcastle PLC	United Kingdom	Malt beverages	L'Arche Green NV	Netherlands	100
8	14 342	Endesa Italia	Italy	Electric services	E ON AG	Germany	80
9	14 284	Rio Tinto PLC	United Kingdom	Gold ores	Chinalco	China	12
10	13 212	Banca Antonveneta SpA	Italy	Banks	BMPS	Italy	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] In the immediate host economy.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company.

the country's highest annual outflow ever. Around two thirds of the FDI outflows originated from the financial sector of the Canadian economy, and was similar to the average of the last three years. On a geographical basis, the bulk of FDI flows (around 60%) were directed to the United States. Canadian investors preferred to inject new funds into existing foreign affiliates via reinvested earnings and intra-company loans, rather than acquiring or establishing new firms.

The *United States* maintained its position as the largest outward investor in 2008 (figure II.28). Outward FDI of that country's TNCs declined by 18% – from a record level of $378 billion in 2007 to $312 billion in 2008. As in 2007, reinvested earnings of foreign affiliates of the United States TNCs were strong. At $231 billion, they were the major element fuelling cross-border outward investments by United States TNCs. In addition, United States' companies raised their cross-border equity capital investments by $90 billion with negative intra-company loans. Three of the top 20 cross-border M&A transactions worldwide, each valued at over $8 billion, were undertaken by United States TNCs (annex table A.I.3). In 2009, the decline in the outward FDI of the United States is likely to accelerate, as profits of foreign affiliates are expected to decline due to recession in most of the main host countries.

EU outward FDI fell to $837 billion in 2008, representing a sharp decline of 30%. As a result, the EU countries' share in total outward FDI from developed countries dropped to 56% from 66% in 2007. The *United Kingdom* lost its position as the largest source country of FDI in Europe, as that country's TNCs cut their new investments abroad to $111 billion, compared to $275 billion the previous year. A large fall in equity investments and net divestments in the form of intra-company loans contributed the most to the decline.[113] The largest share of FDI from the United Kingdom targets the United States, particularly its financial service – which was the industry the most seriously affected by the financial and economic crisis. In 2008, *France* ranked first among countries in Europe in terms of outward FDI, with investments amounting to $220 billion – slightly lower than in 2007. In contrast outward FDI of the other larger economies in Western Europe (*Germany, Italy* and *Spain*), hit by the deteriorating economic climate and the turmoil in the financial markets, fell considerably by 13%, 52% and 20% respectively.

The nine *new EU members* that are not members of EMU accounted for 1% of the outward FDI of EU countries, and their FDI outflows declined by 30% in 2008.[114] Growing financial needs of the parent companies led to shrinking cross-border equity investments and a withdrawal of intra-company loans abroad.

2. Sectoral trends: robust FDI growth in the primary sector

Judging from data on cross-border M&As, while FDI inflows in the manufacturing and services sectors of developed countries declined substantially

Table II.29. Developed countries: value of cross-border M&A sales and purchases, by region/economy, 2007–2009[a]
(Millions of dollars)

Region/economy	Net sales of companies in developed countries[b]			Net purchases by developed countries' companies worldwide[c]		
	2007	2008	2009 [a]	2007	2008	2009 [a]
World	903 430	551 847	102 313	841 999	539 598	99 936
Developed economies	743 949	464 828	89 146	743 949	464 828	89 146
Europe	500 453	280 016	76 370	515 503	197 191	66 907
European Union	473 025	248 873	73 909	489 091	180 484	59 509
Belgium	6 518	30 279	124	898	2 307	11 027
France	73 175	35 592	29 039	27 423	-3 397	280
Germany	48 820	54 966	4 885	42 445	27 243	- 188
Italy	48 277	16 968	17 257	21 526	-5 740	1 301
Netherlands	-8 007	51 828	- 752	160 646	-9 389	9 974
Spain	34 935	-12 644	3 321	50 821	29 381	14 932
Sweden	27 827	7 461	12 660	5 226	20 915	821
United Kingdom	211 989	38 116	3 833	146 833	100 713	15 671
Other developed Europe	27 428	31 143	2 461	26 413	16 707	7 398
Switzerland	10 461	25 128	2 543	19 412	5 641	6 530
North America	207 125	107 878	7 545	190 966	230 325	15 703
Canada	41 780	39 680	5 053	75 613	21 010	927
United States	165 345	68 198	2 492	115 353	209 315	14 775
Other developed countries	36 372	76 933	5 231	37 480	37 312	6 537
Australia	41 587	17 856	213	21 730	26 000	5 866
Japan	23 043	40 686	4 416	12 350	8 847	-1 400
Developing economies	119 807	60 868	7 402	70 375	57 574	10 028
Africa	9 405	7 361	18	3 462	13 093	2 780
Egypt	908	4 488	-	- 813	15 058	1 407
South Africa	8 542	2 782	18	3 784	348	1 496
Latin America and the Caribbean	32 130	1 998	- 643	14 243	14 119	-1 442
Brazil	8 790	4 685	66	4 849	7 211	479
Asia and Oceania	78 272	51 509	8 027	52 670	30 362	8 690
West Asia	25 994	7 030	7 037	14 332	4 179	1 394
Turkey	606	618	-	13 162	5 165	1 332
China	1 078	24 632	591	3 763	4 672	- 31
Hong Kong, China	-1 501	-1 714	-1 086	5 161	4 558	392
India	26 559	8 850	76	16 383	7 602	3 206
Singapore	17 682	6 174	159	3 663	4 164	106
South-East Europe and the CIS	17 074	14 673	3 401	27 675	17 196	761
Russian Federation	15 443	13 727	3 401	22 550	13 352	778

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

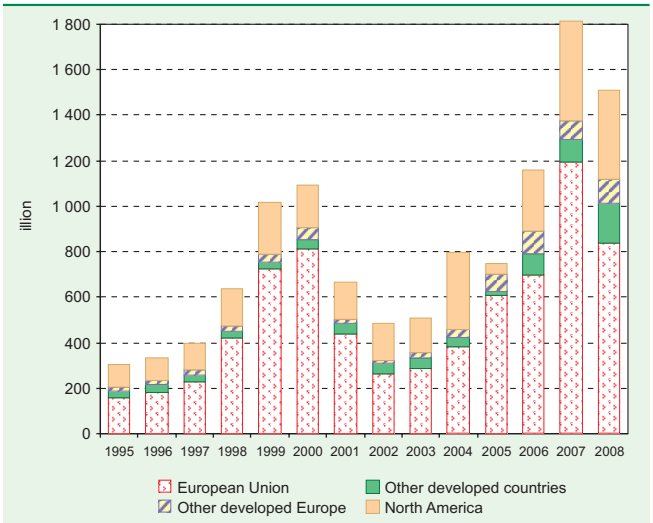
[a] For 2009, January–June only.

[b] Sales to the region/economy of the ultimate acquiring company.

[c] Purchases in the region/economy of the immediate acquired company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Figure II.27. Developed countries: FDI outflows, by sub-group, 1995–2008



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

in 2008, foreign investments in the primary sector experienced robust growth (table II.31). On the other hand, FDI outflows declined in the primary sector and services and increased in manufacturing.

In the *primary sector*, cross-border M&A sales in developed countries increased by 44%. In the mining and quarrying industries, the consolidation process, which had been driven by the boom in natural resources, continued in 2008 and the first half of 2009. Mining and quarrying TNCs from developed countries invested heavily in the sector through cross-border M&As, including in other developed countries, in order to strengthen their position against competitors. In addition, large companies from developing countries (notably from China) undertook cross-border M&As to acquire substantial stakes in developed-country firms in the primary sector.

In the *manufacturing sector,* cross-border M&A sales of companies in developed countries declined by 16%, while cross-border M&A purchases by developed-country TNCs increased by 63%. Nearly all industries suffered from falling investments, with the exception of food, beverages and tobacco, in which cross-border M&A sales more than doubled, driven by several large-scale investments. The industry profited from the expectation that it would suffer much less in the economic crisis than other industries. Among the 20 largest cross-border M&As in 2008, five were in the food, beverages and tobacco industry (annex table A.I.3). This trend is continuing in 2009, with a $3.6 billion bid by Agrium (Canada) to acquire CF industries (United States).

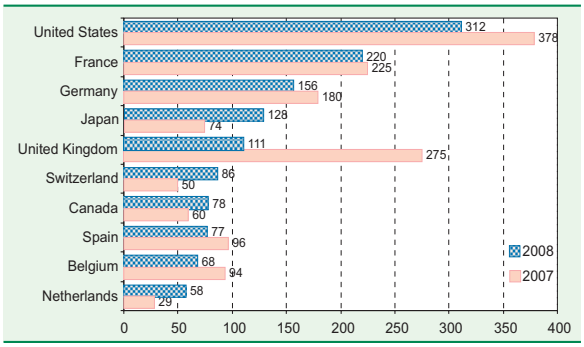
In the *services sector,* both cross-border M&A sales and purchases of developed countries declined substantially, by 61% and 53% respectively. Services, which remain the sector with the largest FDI activity in developed countries, accounting for 38% of cross-border M&A sales, suffered most from the financial crisis and the economic downturn. Cross-border M&As fell in almost all services. In financial services M&A activity that had soared in previous years, driven by several mega deals, shrank dramatically by around 84%. Among the larger industries, business services partially withstood the sharp downward trend.

3. Policy developments

In 2008, the national and international policy environments for FDI in developed countries were influenced by the continuing debate on cross-border investments by sovereign wealth funds (SWFs). Furthermore, several countries adopted legislation concerning the review of foreign investment on national security grounds. In addition, some countries took measures to further improve investment conditions.

SWFs have been criticized mainly on the grounds of lack of transparency. Moreover, the fear that they may be pursuing political rather than purely economic goals led to reactions in several developed countries. In principle, it was acknowledged that the rise of SWFs should not lead to new barriers to international capital flows. The European Commission, in February 2008, urged a common European approach to SWFs that should strike a balance between addressing concerns about SWFs and maintaining the benefits of open capital markets. Fears of possible discriminatory measures towards SWFs led to the establishment of the International Working Group of Sovereign Wealth Funds (IWG) in May 2008, which agreed on Generally Accepted Principles and Practices (GAPP) – the so-called Santiago Principles (chapter I). The GAPP seek to ensure that SWFs bring economic

Figure II.28. Developed countries: top 10 sources of FDI outflows,[a] 2007–2008
(Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Ranked on the basis of the magnitude of 2008 FDI outflows.

Table II.30. Developed countries: top 10 cross-border M&A purchases,[a] 2008

Rank	Value ($ million)	Acquired company	Host economy	Industry of the acquired company	Ultimate acquiring company	Ultimate home economy	Shares acquired (%)
1	52 178	Anheuser-Busch Cos Inc	United States	Malt beverages	Stichting Interbrew SA	Belgium	100
2	17 873	Altadis SA	Spain	Cigarettes	Imperial Tobacco Group PLC	United Kingdom	100
3	17 628	Reuters Group PLC	United Kingdom	News syndicates	Woodbridge Co Ltd	Canada	100
4	16 258	Imperial Chemical Industries PLC	United Kingdom	Paints, varnishes, lacquers, & allied products	Akzo Nobel NV	Netherlands	100
5	16 000	Intelsat Ltd	Bermuda	Communications services, nec	Serafina Holdings Ltd	United Kingdom	76
6	15 018	OCI Cement Group	Egypt	Cement, hydraulic	Lafarge SA	France	100
7	14 900	Scottish & Newcastle PLC	United Kingdom	Malt beverages	L'Arche Green NV	Netherlands	100
8	14 342	Endesa Italia	Italy	Electric services	E ON AG	Germany	80
9	10 547	Alcon Inc	United States	Ophthalmic goods	Novartis AG	Switzerland	25
10	8 888	Vin & Sprit AB	Sweden	Wines, brandy, and brandy spirits	Pernod Ricard SA	France	100

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] From the ultimate home country.

Note: The data cover only those deals that involved an acquisition of an equity stake of more than 10%. Deals where the host economy is the same as the ultimate home economy correspond to the acquisition of a foreign affiliate by a national company.

and financial benefits to home countries, recipient countries and the financial system.[115] Emphasis is placed on transparency. The GAPP state that "the policy purpose of the SWF should be clearly defined and publicly disclosed." And they call for increased cooperation between the domestic authorities and the SWF if a potential investment is likely to have broader macroeconomic implications. Furthermore, they state that SWFs should establish a clear and effective division of roles and responsibilities to improve accountability with the objective of ensuring a high degree of independence of their managing boards from possible policy interventions.

Several countries have adopted or amended regulations to review foreign investment on national security grounds (Marchick and Slaughter, 2008: 2). In the United States, the CFIUS (Committee on Foreign Investments in the United States), an inter-agency committee, is authorized to review transactions that could result in control of a United States business by a foreign person ("covered transactions"), in order to determine the effect of such transactions on the country's national security. The CFIUS process has been subjected to significant reforms over the past several years. The latest has been the revision of the CFIUS regulations in November 2008, and publication of guidance on CFIUS's national security considerations in December 2008.[116] The number of national security-related cases investigated increased to 23 in 2008 from 6 in 2007.[117] In April 2009, Germany adopted an amendment to its Foreign Trade and Payments Act and its implementing regulations. According to the amendment, the Federal Ministry of Economics and Technology has the right to initiate a review of foreign investments, and can exceptionally prohibit transactions that threaten to impair public security or public order. The screening is applicable to investors from outside the EU and the European Free Trade Association that seek to acquire 25% or more voting rights of a German company. It is not limited to specific sectors or a certain size of the target enterprise. Also Canada amended its Investment Canada Act in March 2009, which authorizes the Government to review investments that impair or threaten to impair national security and, if necessary, take appropriate action. At the same time, the reform also aimed at liberalizing the review process by raising the general review threshold from $312 million for 2009 to $1 billion for 2010, by eliminating lower review thresholds in identified areas (i.e. transportation services, financial services and uranium production) and by requiring the Minister to justify any decisions to disallow an investment.[118]

In November 2008, France announced the establishment of a new public fund which will be run by the French Government and the Caisse des Dépôts et Consignations, a public entity under the supervision of the parliament. It would provide capital injections to strategic industries as well as small and medium-sized enterprises with a high development potential.

Several developed countries have changed tax policies and other incentives to promote domestic and foreign investment. In Switzerland, a referendum approved the reform of the corporate tax, which will reduce the double taxation of dividends.[119] In Australia, various provisions were introduced to encourage foreign investment. For instance, it relaxed the review process of foreign investment in residential real estate.[120]

In Japan, the Government introduced various measures in 2008 and 2009 aimed at encouraging inward investments, as well as improving Japan's capital markets. Foreign investors satisfying certain requirements who invest in foreign private equity funds are eligible as of April 2009 for tax exemptions on capital gains that they made at the time when foreign private equity firms sold shares of their acquired Japanese firms. The Government has also

Table II.31. Developed countries: value of cross-border M&A sales and purchases, by sector/industry, 2007–2009[a]
(Millions of dollars)

Sector/industry	Net sales of companies in developed countries[b]			Net purchases by developed countries' companies worldwide[c]		
	2007	2008	2009 [a]	2007	2008	2009 [a]
Total	903 430	551 847	102 313	841 999	539 598	99 936
Primary	55 806	80 514	8 294	80 890	33 519	- 3 343
Mining, quarrying and petroleum	54 895	78 604	7 823	80 483	29 826	- 3 448
Secondary	311 264	261 139	18 967	128 754	209 539	14 465
Food, beverages and tobacco	45 629	107 922	1 623	29 662	75 743	1 624
Chemicals and chemical products	111 800	66 611	9 440	80 988	59 943	8 815
Non-metallic mineral products	34 933	11 926	- 460	372	20 553	74
Metals and metal products	64 488	9 877	291	- 1 872	3 660	- 236
Machinery and equipment	17 704	13 236	184	2 945	5 788	207
Electrical and electronic equipment	21 894	10 537	5 628	34 370	23 786	561
Precision instruments	- 17 165	22 980	1 996	- 9 868	7 140	2 777
Services	536 360	210 194	75 051	632 143	296 497	88 814
Electricity, gas and water	91 681	34 998	48 990	41 405	13 978	26 725
Hotels and restaurants	8 188	3 155	539	- 11 652	636	233
Trade	42 335	10 847	- 2 890	- 3 113	191	1 990
Transport, storage and communications	53 862	20 766	2 067	28 011	- 7 117	7 747
Finance	214 827	33 794	21 358	567 124	270 740	54 455
Business services	88 666	96 833	3 963	11 817	21 631	- 1 049

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] For 2009, January–June only.

[b] Net sales in the industry of the acquired company.

[c] Net purchases by the industry of the acquiring company.

Note: Net cross-border M&A sales in a host economy are sales of companies in the host economies to foreign TNCs (excluding sales of foreign affiliates in the host economy). Net cross-border M&A purchases by a home economy are purchases of companies abroad by home-based TNCs (excluding sales of foreign affiliates of home-based TNCs). The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

introduced a tax reduction for repatriated foreign income by Japanese TNCs to stimulate domestic investment in Japan. Concerning outward FDI, the Japan Bank for International Cooperation can now extend loans to Japanese firms that invest in other developed countries so as to reduce the impact of the credit crunch due to the financial crisis in those countries. Previously it could only extend loans to just those investing in developing countries.

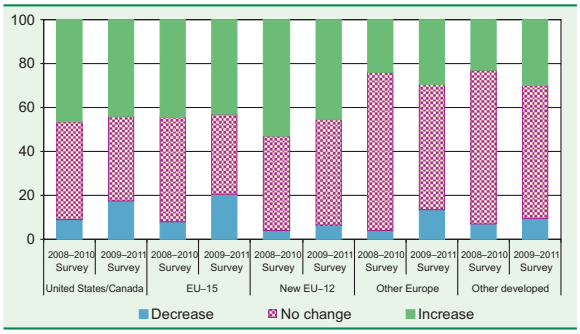
At the international level, developed countries concluded 38 new BITs, most of which were with developing countries (26 BITs). As far as DTTs are concerned, 63 new agreements were concluded by developed countries in 2008, bringing their total number of DTTs to 2,148. In terms of IIAs (other than BITs and DTTs) involving developed countries, 15 agreements were concluded in 2008 (for example the FTAs between Canada and Colombia, Canada and Peru, China and New Zealand, and ASEAN and Japan).

4. Prospects: FDI flows expected to fall further

The short-term prospects for FDI flows to and from developed countries have deteriorated sharply. In 2009, developed countries fell into the severest economic and financial crisis in several decades. An end of the economic downturn and a recovery of developed economies are not foreseeable in the near future. The real GDP of developed countries as a group is expected to decline by 3% in 2009, with the real GDP of the United States forecast to decline by 2.5%, of the EU by 3% and of Japan by 2% (IMF, 2009a). In addition, access to bank financing of cross-border M&As remains difficult. Several bank lending surveys point in this direction (ECB, 2009). Banks have tightened credit standards, and risk premiums have risen considerably. Private equity funds and other collective investment funds that were important drivers of the previous M&A boom have been seriously hurt by the crisis. Financing for large leveraged buyouts is hard to find. As a result, TNCs are cutting back their investment plans. For example, while in 2008 Japanese TNCs were very active abroad, as noted, their FDI is expected to fall by as much as 33% in fiscal year 2009 (ending March 2010), and this fall will be mostly in developed countries, ranging between 40% for EU countries and 44% for the United States; China, on the other hand, is expected to see only a small decline in Japanese FDI, of 3%.[121] FDI flows, both outward and inward, could fall by 30–50% in 2009.

In UNCTAD's *World Investment Prospects Survey 2009-2011,* respondent firms indicated a decline in planned investments in the medium term, in all sub-groups of developed countries except "other Europe" and "other developed countries" (figure II.29). Almost 42% of European investors indicated they would reconsider the way they propose to expand their international operations and FDI activity in 2009. Non-cash mergers and consolidation are likely to be the preferred modes, as companies seek to survive the financial turmoil by optimizing assets and combining with competitors to cut costs (Ernst & Young, 2009). In the *12th Annual Global CEO Survey* (2009) by PricewaterhouseCoopers, pessimism prevails across all geographic regions, business sectors and levels of economic development: nearly 70 per cent of CEOs mentioned that they would delay planned investments due to higher financing costs.

Figure II.29. Developed countries: comparison of the results of *WIPS 2009–2011* with *WIPS 2008–2010*
(Percentage of respondents)



Source: UNCTAD, 2009b.

Notes

1 For example, two of the world's largest mining groups, Anglo American and Rio Tinto, with major operations in African countries, have announced sizeable cutbacks in planned capital spending in 2009 – a move that is bound to have adverse repercussions in Africa. Anglo is halving its budget to $4.5 billion, while Rio Tinto is cutting spending by $5 billion (EIU, "Sub-Saharan Africa industry: multinationals cut back", *Viewswire*, 19 January 2009, at: www.eiu.com). Norilsk Nickel (Russian Federation) will also seek to divest its assets in Australia, Botswana and South Africa, and will halve its total investment programme to $1.2 billion. The firm is said to be considering all options, including a possible merger with another metals producer, because of the difficult international environment (EIU, "Sub-Saharan Africa industry: Norilsk Nickel pulling out of market", *Viewswire*, 5 February 2009, at www.eiu.com).

2 Data on greenfield projects in this chapter are from fDi Markets, fDi Intelligence (www.fDimarkets.com).

3 Countries in the subregion are: Algeria, Egypt, the Libyan Arab Jamahiriya, Morocco, Sudan and Tunisia.

4 "Egypt industry: Edison secures 40% stake in mature gas field", *EIU Viewswire,* 15 January 2008.

5 Countries in the subregion are: Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo.

6 Other investments included the following: in Côte d'Ivoire, Energy Allied International, WCW International (United States) and the Ivorian State-owned oil company, Petroci, began construction of a crude oil refining and storage facility for $1.4 billion. Cape Verde performed exceptionally well, after a 28.5% stake in the State-owned Empresa Nacional de Combustíveis (Enacol), was offered on the country's stock exchange, Bolsa de Valores de Cabo Verde (BVC). In addition, a Spanish consortium, Bucan, is investing $308 million in tourism infrastructure for construction of luxury hotels.

7 Countries in the subregion are: Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Mayotte, Reunion, Seychelles, Somalia, Uganda and the United Republic of Tanzania.

8 Countries in the subregion are: Burundi, Cameroon, Central African Republic, Chad, Congo, the Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda and Sao Tome and Principe.

9 See: "Equatorialguinean govt buys oil assets", *AfrolNews,* 3 June 2008 (www.afrol.com).

10 Countries in the subregion are: Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.

11 Richemont, the jewellery company, sold its 19.4% stake in BAT in 2008 and distributed to the owner, while Remgro spinned off 10.7% of its holding of BAT. ("UK tobacco: Richemont to spin off BAT stake", *Financial Times*, 8 August 2008).

12 Libyan African Investment Portfolio, owned by the Government of the Libyan Arab Jamahiriya, has a number of successful FDI operations across Africa ("Libya invades energy, ICT and tourism sectors", at http://www.eastandard.net/InsidePage.php?id=1143990200&cid=4) *The Standard,* 14 July 2008).

13 For example, one of Algeria's largest gas-based industrial projects, entailing the construction of a fertilizer complex in Arzew in the west of the country, is being carried out by Sorfert, owned by Orascom Construction Industries (OCI) of Egypt (51%) and by Algeria's national oil and gas corporation, Sonatrach (49%) ("Arzew fertiliser complex project achieves financial close", *EIU-Viewswire,* 23 July 2008).

14 Egypt State Information Service available at www.sis.gov.eg.

15 Communication from the Permanent Mission of Mauritius in Geneva, Switzerland, and http://supremecourt.intnet.mu/Entry/dyn/GuestGetDoc.Asp?Doc_Idx=8292881&Mode=Html&Search=No.

16 India-Africa, Forum Summit 2008, New Delhi, 8–9 April 2008 (for details, see: http://www.africa-union.org).

17 FDI inflows declined by 21% in China, 40% in Hong Kong (China) and 56% in India for the first quarter of 2009 compared to the corresponding period of 2008.

18 Among the 19 States, 15 of them have data (or estimates) on FDI inflows in 2008. They are: Cook Islands, Fiji, French Polynesia, Kiribati, Marshall Islands, the Federated States of Micronesia, Nauru, New Caledonia, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

19 Between January and June 2008, FDI inflows into the non-financial sector in China rose by 45.6%, to reach $52.4 billion. However, inward FDI in the form of "hot money" (speculative capital driven by the expectation of further appreciation of the renminbi) in the first half of 2008 showed signs of slowing by the last quarter (Mure Cickie, "China sees slowdown in 'hot money' flow", *Financial Times*, 14 October 2008).

20 During the past few years, in the coastal regions of China, production costs have increased due to higher wages, tighter labour regulations and a stronger yuan, which makes those regions less competitive than before in the production of low-end goods such as textiles and garments. This trend has been interrupted by the impact of the global financial crisis.

21 By January 2009, 15% of China's 130 million migrant workers had lost their jobs and quit coastal manufacturing centres ("Downturn has sent 20m rural Chinese home", *Financial Times*, 3 February 2009).

22 For example, ArcelorMittal may cut some components of its eight-year global expansion programme, and other planned projects may be postponed, such as plans for two new steel plants in India with a total investment of $20 billion. (Peter Marsh, "Mittal reviews $35bn growth plans", *Financial Times*, 23 October 2008).

23 See, for example, "Asian economies: sitting on the dock of a bay", *The Economist*, 22 November 2008; "Troubled tigers", *The Economist*, 31 January 2009; "Unlucky numbers", *Financial Times*, 10 February 2009.

24 Arijit Ghosh, "BRIC should include Indonesia, Morgan Stanley says", 15 June 2009 (www.bloomberg.com).

25 The three largest cases of FDI in Viet Nam in 2008 involved two steel firms and one oil refinery. Companies from Malaysia, Taiwan Province of China and Kuwait, respectively, were involved. In addition, in November 2008, Formosa Plastics (Taiwan Province of China) announced its intention to invest up to $15 billion in a large-scale petrochemical complex in central Viet Nam.

26 The economies in South, East and South-East Asia had total foreign exchange reserves of about $3 trillion by end 2008 and early 2009. (UNCTAD secretariat calculations based on data from central banks). Part of these reserves were invested abroad through direct investment by SWFs. They have also facilitated outward investment by State-owned and privately owned firms through the reduction or elimination of regulatory controls on FDI and/or easier access to foreign exchange.

27 For example, Hutchison Whampoa (Hong Kong, China), the largest TNC in both the region and the developing world as a whole, and a leading conglomerate in global infrastructure industries (*WIR08*), announced that it would suspend all new investments in its global operations (www. dwnews.com).

28 For example, in the electricity industry, State Grid (China) won a bid for operating the national transmission network in the Philippines for 25 years. In roads, TNCs from South-East Asia have been participating on a build-operate-transfer (BOT) basis in various expressway projects in China, which connect some remote and economically backward areas to the country's expressway network. For example, MTD (Malaysia) is investing in, and will operate a highway linking Yangshuo and Luzhai in Guangxi Province. This and other investments have been taking place as part of China's "Go West" strategy (box II.2).

29 See: "Taiwan's Foxconn hunkers down in Vietnam" (http://www.thanhniennews.com/).

30 For example, India allows FDI up to 100% for publication of facsimile editions of foreign newspapers, and allows FDI up to 26% with prior approval of the Government for publication of Indian editions of foreign magazines dealing with news and current affairs (Ministry of Commerce and Industry, Department of Industrial Policy and Promotion Press Note n°1, 2009).

31 Circular of the Ministry of Commerce on Delegation of the Authority to Examine and Approve the Establishment of Investment Companies by Foreign Investors and Circular of the Ministry of Commerce on Further Improving Examination and Approval of Foreign Investment.

32 On 27 April 2009, the Prime Minister of Malaysia announced a package of measures to liberalize financial services, including raising the foreign equity limits in investment in Islamic banks and insurance and Takaful firms from 49% to 70% (Official website of the Prime Minister's Office of Malaysia, www.pmo.gov.my).

33 Decree Providing Detailed Guidelines for Implementation of a Number of Articles of the Law on Enterprises (see, for example, www.itpc.gov.vn).

34 "Foreign firms allowed to lead R&D projects", 22 May 2008, *Investment News*, Investment Korea (www.investkorea.org).

35 Regulation No. 02/PER/M.KOMINFO/3/2008.

36 See: http://fldj.mofcom.gov.cn/aarticle/ztxx/200903/20090306108494.html.

37 APEC, "APEC Peru 2008: Outcomes" (www.apec.org).

38 Press statement on the global economic and financial crisis, Cha-am, Thailand, 1 March 2009, available at: www.aseansec.org/22323.htm.

39 Temasek (Singapore), for instance, is targeting more Asian financial companies which are undervalued due to the financial turmoil. (See: "Temasek to target more Asian investments", *Financial Times*, 6 October 2008).

40 The GCC is a regional grouping consisting of six Gulf countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

41 EIU, *Business Middle East*, 1–15 November 2008; and *MEED*, "Gulf project finance market collapses", 26 September 2008.

42 This drop in cross-border M&A value occurred despite a 17% increase in the number of deals, reflecting the fall in stock values.

43 Based on UNCTAD cross-border M&As database (www.unctad.org/fdistatistics).

44 See: Knowledge@Wharton.com, 11 March 2009; and EIU, *Business Middle East*, February 16–17, 2009.

45 For example, Saudi Telecom gained ownership of a 26% stake in Kuwait's third mobile phone licence, and was awarded the third mobile phone licence in Bahrain. The United Arab Emirates' Etisalat was awarded the third mobile phone licence in the Islamic Republic of Iran, and plans to invest around $1 billion in the construction of its network.

46 SAGIA (2009) and Undersecretariat of Treasury, Republic of Turkey Prime Ministry, at: www.treasury.gov.tr.

47 EIU, *Business Middle East*, 1–15 April 2008, London, and J. Ray Mcdermott, *Press Release*, 10 March 2009, www.jraymcdermott.com.

48 Adco is the onshore arm of the Abu Dhabi National Oil Company (ADNOC). ADNOC, which is entirely owned by the Government of Abu Dhabi, has a 60% share in Adco, with the remaining equity held by BP, Shell, ExxonMobil, Total and Partex.

49 Alexander's *Gas & Oil Connections*, 14 (3), 5 March 2009, www.gasandoil.com/goc/company/cnm90993.htm.

50 EIU, *Business Middle East*, 16–28 February 2009.

51 *Arabian Business.com*, 16 March 2009, at: www.arabianbusiness.com.

52 EIU, *Business Middle East*, 1–15 October 2008.

53 Communication from Saudi Arabian General Investment Authority.

54 EIU, *Business Middle East,* 16-31 January 2008.

55 Website of the Executive Privatization Commision, (www.epc.gov.jo)

56 Permanent Mission of Turkey to WTO

57 EIU, *Business Middle East*, 1-15 February 2008, 1-15 March 2008.

58 Websites of Supreme Council of Information & Communication Technology of Qatar (www.ict.gov.qa) and Telecom Regulatory Authority of Oman (www.tra.gov.om)

59 Website of General Investment Authority (www.giay.org)

60 Preliminary FDI data for the first quarter of 2009 were available only for Turkey and Jordan by July 2009. Together, they accounted for 22% of total inflows to the region in 2008, but FDI inflows decreased by 54% in the first quarter of 2009 compared to the first quarter of 2008.

61 IPIC's outward acquisition activities in 2009 included a 17.6% stake for around $1 billion in Oil Search Ltd. (Australia), which operates all of the oil and gas producing fields in Papua New Guinea; a 70% stake in a German industrial services company, Man Ferrostaal; a 71% stake in the energy investment company, Aabar Investments Co., for which it paid $1.63 billion; a 100% stake in NOVA Chemicals (Canada), the total value of

which (including assumption of NOVA Chemicals' net debt obligations) is approximately $2.3 billion; and a 32.5% stake in the Spanish energy company Cepsa.

62 Mubadala's outward FDI activities consisted of a number of partnerships aimed at strengthening the United Arab Emirate's position in the global aviation, aerospace and technology industries. Partnerships have been established in particular with the following: Finmeccanica, the Italian aerospace company, to manufacture aerospace composite components for civil aircraft; the European Aeronautic Defence and Space Company, EADS, to build a new aerostructure composites plant; and GE, in a broad range of initiatives, including commercial finance, clean energy R&D, aviation and corporate learning.

63 Taqa took a 50% stake in the Caribbean operations of Japan's Marubeni Corporation in 2009.

64 Masdar purchased a stake in WinWinD of Finland (which specializes in the production of wind turbines). It also formed a joint venture with Spain's Sener Group de Ingenieria (Torresol Energy) to work on the design and construction of concentrated solar power plants, and it has started work on the construction of a $230 million solar photovoltaic plant in Germany.

65 In 2007, IPIC announced plans to increase its investment portfolio to $20 billion from $11 billion over five years. But the company's Managing Director said it had already reached $14 billion in 2007 and it was close to reaching $20 billion at the end of 2008 (Gulfnews.com, 12 September 2008, at http://www.gulfnews.com/Business/Investment/10244404.html).

66 Banco Central do Brasil, Balanço de pagamentos, at: www.bcb.gov.br; Banco Central de Chile, Balanza de pagos de Chile, at: www.bcentral.cl; and INDEC (Argentina), 2009.

67 Banco Central de la Republica Dominicana, www.bancentral.gov.do; and Mideplan (Costa Rica): www.mideplan.go.cr.

68 The strong increase in inter-company loans resulted from a 112% increase in claims on affiliated enterprises of Brazilian TNCs and a 35% decrease in liabilities to affiliated enterprises (Banco Central do Brasil, Balanço de pagamentos, at: www.bcb.gov.br).

69 These companies made overoptimistic bets on their country's currency: they were holding foreign-currency-denominated debt and purchasing foreign exchange rate derivatives (basically betting on the future value of their national currency against the dollar) (EIU, *Business Latina America*, 24 November 2008; and *Latin Finance,* 1 November 2008).

70 *Jamaica Observer*, 11 February 2009.

71 These fields are equivalent to 41% of the pre-salt area, 60% of which belongs to Petrobras.

72 See EIU, *Business Latin America*, 19 January 2009; *Gazeta Mercantil*, 13 February 2009; and *Offshore Magazine*, Volume 68, Issue 7, July 2008.

73 See EIU, *Business Latin America*, 11 February 2008, 12 May 2008, 24 November 2008, and 16 February 2009.

74 Mineweb, 9 June 2009, at: http://www.mineweb.com/mineweb/view/mineweb/en/page36?oid=84557&sn=Detail.

75 *El Universal*, 19 January 2009; *Nacion.com*, 24 March 2009; and *Business Latin America*, 12 January 2009 and 2 February 2009.

76 See *América Economía*, 21 October 2008; and *Inter-American Dialogue's*, 23–27 June 2008, at: www.iamericas.org/news/energy/LEA080626.pdf.

77 For example, Toyota announced in September 2008 that it would set up its second car plant in Brazil to produce some 150,000 small-size passenger cars per year by 2011 (EIU, *Business Latin America*, 8 September 2008), and Hyundai Motor announced also in September that it would build its first South American auto plant in Brazil as part of its drive to go global (*The Economic Times*, 19 September 2008).

78 See ANFAVEA, at: www.anfavea.com.br; ADEFA, at: www.adefa.com.ar; EIU, *Business Latin America*, 24 November 2008 and 16 February 2009; and *Valor Economico*, "Incentivos puxam a lenta recuperação da indústria", 6 May 2009.

79 See EIU, *Business Latin America*, 2 February 2009 and 29 September 2008; and Eldiariomontanes.es, 10 March 2009.

80 Banco do Brasil acquired several State-owned banks from various states of the country: Santa Catarina (in the southern region), Piauí (northeast), and São Paulo, the country's wealthiest state, which agreed to sell a majority stake in Nossa Caixa for $2.3 billion. It then bought half of Banco Votorantim, a private Brazilian bank, in January 2009 for which it will pay $1.3 billion (EIU, *Business Latin America*, 16 March 2009)

81 *Bloomberg.com*, 23 January 2009; and Universia Knowledge@Wharton, 10 December 2008 and 25 March 2009.

82 EIU, *Business Latin America*, 24 November 2008, and 15 December 2008.

83 This process was initiated by Supreme Decree No. 28701 ("Héroes del Chaco"), which regulates the full recuperation of all oil and natural gas resources by the State.

84 Ministerio de Hidrocarburos & Energía, Boletín Informativo No. 2, Año 1, 2009.

85 In May 2009, an ICSID tribunal, pursuant to Perenco's application for provisional measures, provisionally prohibited the disposal of the seized oil production, *Perenco Ecuador Ltd. v. Republic of Ecuador and Petroecuador* (ICSID Case No. ARB/08/6, Decision on Provisional Measures, 8 May 2009).

86 *CEMEX Caracas Investments B.V. and CEMEX Caracas II Investments B.V. v. Bolivarian Republic of Venezuela* (ICSID Case No. ARB/08/15).

87 The Law was published in the Official Gazette No. 39.019, 18 September 2008.

88 Ley No. 29376, 10 June 2009, at www.congreso.gob.pe.

89 Sistema Integrado Provisional Argentino, Ley 26425, 20 November 2008, at: www.infoleg.gov.ar.

90 Medida Provisória No. 443, 21 October 2008, converted into Law No. 11.908/2009, at: http://www010.dataprev.gov.br/sislex/paginas/45/2008/443.htm.

91 Decreto No. 6.613, 22 October 2008, and: "Lula assina decreto zerando alícuota do IOF", Agencia Brasil, at: www.agenciabrasil.gov.br.

92 "Vendido Stanford Bank a Banco Nacional de Crédito", Nota de Prensa, 8 May 2009, *Ministerio del Poder Popular para Economía y Finanzas*, at: www.mf.gov.ve.

93 ALBA was established in 2004 and aims at social, political, and economic integration between the countries of Latin America and the Caribbean (see *WIR06*).

94 In this report, Georgia is still treated as part of the CIS, since its effective separation from the CIS took place in August 2009.

95 Medium-sized M&A transactions are deals valued at between $30 million and $300 million (PricewaterhouseCoopers, 2008).

96 As a result, there was a net capital outflow (of direct and portfolio investment) of $100 billion as TNCs operating in the country scaled back their capital expenditures.

97 For example in Armenia, nearly two thirds of the total

FDI inflows in 2008 came from the Russian Federation, mainly in the energy, telecommunications and transport industries (EIU, 2009).

98 For example in 2008, there was a large announced project by an investor based in the United Arab Emirates to set up an oil refinery and petrochemical complex worth $4.5 billion in the Chelyabinsk Oblast of the Russian Federation

99 In addition to the previously mentioned acquisition of Ukrsotsbank in Ukraine by Unicredit (Italy), Barclays (United Kingdom) acquired Moscow-based Expobank for $745 million, and Commerzbank AG (Germany) acquired Kiev-based Bank Forum for $600 million.

100 Some of the liberalization measures in the financial services industry included dropping the requirement for a mandatory deposit, and an increase in the level of authorized foreign capital in domestic banks from 25% to 50% (European Bank for Reconstruction and Development, "Recent legal developments in transition countries", 2008, at http://www.ebrd.com/country/sector/law/new/transition.pdf).

101 European Bank for Reconstruction and Development, "Recent legal developments in transition countries", 2008 at http://www.ebrd.com/country/sector/law/new/transition.pdf.

102 "Implementation of the European Neighbourhood Policy in 2008: Progress Report Georgia", at http://ec.europa.eu/world/enp/pdf/progress2009/sec09_513_en.pdf.

103 At http://www.premier.gov.ru/eng/anticrisis/.

104 EuropeanCommission,athttp://ec.europa.eu/enlargement/press_corner/whatsnew/accession-negotiations_en.htm.

105 "Putin welcomes Shell to offshore projects", *Financial Times*, 28 June 2009

106 European Central Bank, 2008. The consolidation process in the European banking sector is driven by the growing role of institutional investors (notably mutual funds, pension funds and insurance companies) as shareholders in European banks.

107 FDI inflows from third countries into the euro area declined sharply in 2008, to only €50 billion compared to €365 billion in 2007 (*ECB Monthly Bulletin*, March 2009: S64).

108 One was the acquisition of Dutch bank ABN-AMRO by a consortium of three foreign banks for more than €60 billion, and the other was the takeover of Nutricia, a baby-food company, by the French Danone for €12 billion.

109 United Kingdom, Office for National Statistics, 2009: 5.

110 Slovenia joined the EMU in January 2007, while Cyprus and Malta joined it in January 2008.

111 However, the profitability of Japanese TNCs has been deteriorating drastically in 2009 with a more than 30% decline in profits.

112 According to Nikkei (8 June 2009), investment expenditures fell by 5.6% in fiscal year 2008 (ending March 2009), and are projected to fall by another 15.9% in fiscal year 2009 (ending March 2010).

113 However, the United Kindom was the home for the second largest acquisition made by developed-country firms (table II.30)

114 However, some companies such as CEZ (Czech Republic) continued to expand and consolidate their position in South-East European markets. In 2008, CEZ finalized an agreement with the Government of Albania for the acquisition of a 76% stake in the State-owned electricity distribution company OSSH for $131 million.

115 The 24 principles cover: (i) the legal framework, objectives and coordination with macroeconomic policies, (ii) the institutional and governance structure, and (iii) the investment and risk-management framework of SWFs (IWG, 2008).

116 United States Treasury Department: http://www.treas.gov/offices/international-affairs/cfius/

117 United States Treasury Department: http://www.ustreas.gov/offices/international-affairs/cfius/docs/Covered-Transactions_2006-2008.pdf

118 Investment Canada Act: http://www.ic.gc.ca/eic/site/ica-lic.nsf/eng/lk50926.html.

119 Swiss Confederation: http://www.admin.ch/ch/d/as/2008/2893.pdf (accessed on 22 July 2009)

120 Foreign Investment Review Board Australia: www.firb.gov.au/content/policy.asp (accessed on 21 July 2009).

121 *Nikkei*, 6 June 2009.

PART TWO

TRANSNATIONAL CORPORATIONS, AGRICULTURAL PRODUCTION AND DEVELOPMENT

INTRODUCTION

For the greater part of humanity, primarily in developing countries, agriculture remains at the core of their existence: it provides sustenance, supports people's livelihoods and defines their traditions. Moreover, the bounty of agricultural production in many societies the world over, and throughout the ages, has created surplus value that has underpinned their material basis. This applies equally to urban civilizations founded in the past, the triangular trade of the colonial period which aided the industrialization of Europe and North America (Thomas, 1997), the more recent transformation of Taiwan Province of China from a tropical agricultural island to an electronics superpower (Lee, 1971; Wu, 1984), and the significant agriculture-based dynamism and diversification of Brazil's economy today (Brainard and Martinez-Diaz, 2009).

Given the fundamental importance of agriculture to most developing economies, its chronic neglect by many countries is of utmost concern. This has occurred because of a number of factors, including a "bias" by some countries against agriculture in favour of manufacturing (one which does not sufficiently recognize the interdependence of the two), and a lack of finance and other resources. To make matters worse, domestic and regional conflicts in many parts of the world have destroyed agricultural communities, resources and infrastructure. The *relative* neglect of agriculture is reflected in the numbers. For example, although the total agricultural gross capital formation (GCF) in developing countries tripled between 1980 and 2007, to $355 billion, agriculture's share in total GCF fell from 17% to less than 10% of the total over the same period. Similarly, official development assistance (ODA) in agriculture to developing countries, both in gross terms and as a share of total ODA, has been declining since its peak in 1990. A fall of investment in agriculture is not on its own an issue for concern, since this can signify both rising productivity in the sector itself and a growing economy that is diversifying into other industries and sectors. What is of concern is that the above-mentioned decline in investments is often the greatest in poorer countries – especially parts of Africa and in the least developed countries (LDCs) – which can ill-afford them.

The lack of investment in agriculture in particular regions and countries is one of the factors contributing to poverty and hunger, the reduction of which has been declared the first of the United Nations Millennium Development Goals (MDG-1).[1] In stark terms, 923 million people were undernourished in 2007. And on the basis of the global hunger index (GHI), 65 countries are in "serious", "alarming" or "extremely alarming" danger of food shortages, partly because of rising international food prices in recent years. Increasing investment in agriculture in developing countries is thus a priority, but it is likely to be hampered by the current financial and economic crisis. Efforts are being made to raise investment levels in agriculture, targeting specific developing countries, with the aim of halving world hunger by 2015. There is some scope for an increase in investment by governments, partly because of trade surpluses, and optimistic projections suggest that agriculture's share of ODA might soon return to 10%. However, for many countries this will still leave investment short of what is needed, which is why governments are looking to the domestic private sector and foreign investors to help meet the shortfall. It is essential for governments to tap into these additional sources of finance if, looking beyond MDG-1, they are to succeed in utilizing agriculture as an engine for growth.

A number of factors, which are not mutually exclusive, have resulted in a recent upswing in domestic private and foreign participation in agricultural industries in a significant number of developing countries. First, the rapid rates of growth in some of the more populous emerging countries such as Brazil, China, India and the Republic

of Korea have resulted in rising incomes, higher expenditures on foodstuffs (including a shift towards items such as meat, fish and milk products) and, in some cases, imports of some food items (or feedstock) from other developing countries. In turn these imports have created opportunities for investors from these and other countries to invest in agricultural industries in developing host countries. Secondly, biofuel initiatives around the world, which have received strong support from governments in Brazil, the United States and the European Union (EU), have resulted in a spate of investments in developing countries to grow sugarcane, grains (such as maize) and oilseeds (such as soya beans), as well as non-food crops such as jatropha. Thirdly, the rapid rise in food prices over the past few years (partly attributable to the above trends), with subsequent shortages in commodities such as rice and restrictions on exports of these products by some developing-country governments, has spawned "new investors" in agriculture. Many companies and governments in countries such as the Republic of Korea, Saudi Arabia and the United Arab Emirates are investing in agricultural production abroad. The underlying reasons behind their decision are the lack of arable land and insufficient water for safe and viable irrigation in their own countries. Finally, seizing on these trends, a number of purely speculative investors also appear to have emerged on the scene.

The renewal of interest by TNCs' and foreign governments in the agricultural industries of developing *host* countries represents an opportunity to raise the level of investment in this critical sector even further. At the same time, there is evidence that developing host countries are reviewing their policy frameworks and legislation to encourage and permit foreign participation in their agricultural sectors. This stance represents a significant change for many governments, which earlier had considered agriculture to be sacrosanct and open only to domestic interests. Of course, there are attendant risks to entry by TNCs into developing-country agriculture. These risks include, the possible disruption of traditional farming and loss of livelihood for subsistence farmers or other disadvantaged groups, such as indigenous peoples; the concentration of the industry into fewer hands, with the danger of market power being exercised against farmers and consumers; potential environmental degradation, for instance arising from the introduction of water-hungry "industrial" methods in agriculture; and the wider dangers of dependence on foreign investors, including concerns about "land grabbing" leading to neo-colonial relations between countries producing and consuming agricultural produce. On the other hand, encouraging and utilizing TNC participation (among other sources of investment), in their agriculture, if properly managed in the context of national goals, can support the development of the industry, further its essential role for poor-pro growth in rural communities, and, in the longer run, support the sector's potential as a motor for modernization and diversification of the economy.

Given these developments, it is an opportune time to examine the role of TNCs in the agricultural sector and its implications for development, hence the focus of the *World Investment Report 2009* (*WIR09*). The *Report* focuses on TNCs' involvement in and influence on *agricultural production* in host countries, including direct and indirect impacts on development. Many types of TNCs might invest or participate in agricultural production, including agriculture-based TNCs, manufacturers, retailers and commodity traders. They can do this by establishing a farm (FDI), by contract farming, or some other form. *WIR09* only examines TNC activity in agriculture *to the extent that this activity directly involves or influences agricultural production*. Thus, for instance, traders such as Cargill are discussed *only* if they influence the quality of agricultural production by introducing or reinforcing quality standards. Similarly, international supermarkets per se are *not* a focus of *WIR09*, but any farming of produce they contract with local interests in developing countries *is* relevant to the *report*.

Part two of *WIR09* consists of three chapters. Chapter III analyses the role and evolution of TNC participation in agricultural production in developing countries. It first provides a snapshot of agriculture in the developing world, followed by a conceptual framework for analysing and explaining existing and emerging trends and patterns in FDI and other forms of TNC participation in the industry. Particular attention is given to TNC drivers, motives and strategies inasmuch as these have a bearing on the impact of companies' participation on host economies and constitute a major concern for policymakers. Chapter IV discusses the development impacts and implications of TNC involvement in agricultural production, taking a case-orientated approach to examining issues where possible. Finally, chapter V charts recent policy developments and considers the implications of the findings of chapter IV for national and international policies pertaining to FDI and TNC participation in agriculture. The policy discussion focuses on a number of key concerns for both host and home developing countries, including issues of sustainable development and food security.

Note

[1] The MDG-1 target is to halve the number of people going hungry by 2015 (and living in poverty).

CHAPTER III

TNCs AND AGRICULTURAL PRODUCTION IN DEVELOPING COUNTRIES

A. Introduction

Agriculture is of fundamental importance to developing countries, both for meeting their growing requirements for food and for providing a basis for industrial development, diversification and growth. In some countries, increased investment and technological advances have transformed agriculture, raising productivity and output to meet food requirements as well as laying the foundations for rapid economic growth. In other countries, however, especially in Africa and parts of Asia, agricultural potential is not being fully exploited, with resultant shortfalls in food supply and constraints on economic development. Greater investment in agriculture is thus a priority for development, and one that has received growing attention during the recent food crisis.

Insufficient investment and declining official development assistance (ODA) in agriculture has prompted governments to look increasingly to the private sector – domestic and foreign – for significant new investment. This is reflected in the liberalization of policies related to agriculture and land ownership by host and home countries (discussed in chapter V). In fact, in the past foreign direct investment (FDI) has played an important role in agriculture, with TNC activity in agricultural production particularly strong in some export-oriented commodities. However, after the Second World War, there was a long-running decline in FDI flows to agriculture in developing host countries. This trend has been reversed in recent years for a variety of reasons, but some forms of foreign participation – not least the so-called "land grabs" by investors – are causing concern by some quarters in the development community.

There are no recent systematic studies of TNC participation in agricultural production in developing countries, which, along with the increasing interest in private investment mentioned above, is why it is the focus of this year's *World Investment Report*. Agricultural production consists of subsistence and commercial farming of crops and livestock (box III.1). Within this broader definition, this report concentrates primarily on crops grown for food, although production for other purposes (e.g. the production of biofuels)[1] is also discussed, where appropriate. The analysis of developments in foreign participation includes an examination of different aspects of involvement, for instance, by commodity value chains (e.g. coffee or soya beans) or types of TNCs (e.g. plantation TNCs or international supermarket chains), but only to the extent that this has a bearing on agricultural production. Thus, rather than examining, for example, the supermarket industry, it is concerned with how TNCs in that industry participate in or affect developing-country agricultural production (e.g. by establishing farms themselves or by implementing and reinforcing standards and procedures which affect the production methods of local farmers).

The analysis in this and other chapters relies not only on UNCTAD's databases on FDI and TNCs, recent research by international organizations and others, and surveys conducted for this report, but also on dedicated commodity, country and other case studies prepared to provide deeper insight into specific issues. Case studies were prepared on the following commodities: bananas, coffee, floriculture, rice, soya beans and sugarcane (including an assessment of the industries in which each of these products fall).

Box III.1. Definitions related to agriculture and agribusiness

In this report, *agriculture* refers to the production of food and non-food items through farming or animal husbandry. It encompasses both the rearing of livestock and the growing of crops, such as cereals, arboriculture, viniculture, seed growing, industrial crops, tea, coffee and cocoa production and horticulture (agricultural production), as well as agricultural animal husbandry and horticultural *services* such as harvesting, animal shearing, pest control, the picking and packing of fruits and vegetables, and the operation of irrigation systems (agricultural services). Agriculture excludes hunting, forestry and fisheries. However, in many national statistical sources, it is difficult to separate data on agriculture from those on hunting, forestry and fisheries.

Agribusiness refers to commercial agriculture, usually farms specializing in non-subsistence food and non-food production, and related businesses that are directly involved (upstream or downstream) in the value chain of agricultural products, "ranging across production, post-harvest handling, processing, transportation, marketing, distribution and other agro-based commercial activities" (OECD, 2008c: 72). *Agri-food* is a subset of agribusiness and refers to industries involved in the production, processing and inspection of solely food products made from agricultural commodities. It includes both the production of food items in agriculture, and their processing by the food and beverages industry. The *value chain* in agribusiness comprises the suppliers of inputs (such as seeds, chemicals and machinery), farmers and other agricultural producers and service providers, processors of agricultural goods (such as manufacturers of foods and beverages), trading companies dealing with agricultural commodities, and retailers (such as supermarket chains).

This report focuses on TNCs' involvement in agricultural production in host developing countries, sometimes truncated to "TNCs in agricultural production"[a] for ease of presentation. TNCs can be involved in farming or other types of agricultural production through both equity and non-equity forms of participation, by either the parent company or a local affiliate. TNCs' core activities may focus on any point in the value chain for agricultural products, but they are relevant for this report *only* if they are directly involved in agricultural production or services (e.g. supermarkets in developed countries for which contract farmers in developing countries produce fruits and vegetables). It is possible for TNCs and investors not in agribusiness to invest in agricultural production or services. Indeed, this may be a rising phenomenon, as evidenced by recent investments in agriculture by private equity investors and sovereign wealth funds. For ease of narrative flow, these investors are normally included in this report under "TNCs in agricultural production".

Source: UNCTAD.

[a] "TNCs in agricultural production", which can derive from any part of the value chain and participate in agriculture *to a degree*, are to be distinguished from "agricultural (or agriculture-based) TNCs", such as plantation companies, which are *purely* or primarily involved in agriculture. The latter are, however, a subset of the former.

This chapter provides an overview of key aspects of agriculture in developing countries. It examines trends and patterns of participation in agriculture by TNCs and other foreign investors, the main TNC players in various areas of agricultural production and related activities, and the factors and driving forces behind TNC activity in the industry. Section B examines the characteristics of, and current trends and developments in, agriculture in developing countries, with a particular focus on investment objectives to meet the United Nations' Millennium Development Goals (MDGs) and other development targets. It also examines the recent food crisis and other salient factors affecting investment in agriculture. Section C provides a brief historical account of and a conceptual framework to explain and understand TNC participation in agricultural production, synthesizing the eclectic (ownership-location-internalization (OLI)) paradigm with the global value chain approach. Section D analyses the patterns and forms of TNC participation in agriculture in developing countries, focusing on the key modalities utilized by TNCs, especially FDI and contract farming. Section E presents a picture of major TNCs in agricultural production (such as those running farms or plantations), as well as those in related industries, such as food processing and distribution, since the latter are also involved in agriculture in many developing countries. The section includes an examination of the evolution of the relevant TNCs over time, including the emergence of new players such as sovereign wealth funds. Section F concludes with the key issues that are discussed further in subsequent chapters.

B. Agriculture in developing countries: characteristics, significance and salient issues

1. Characteristics of agricultural production

a. A diverse industry

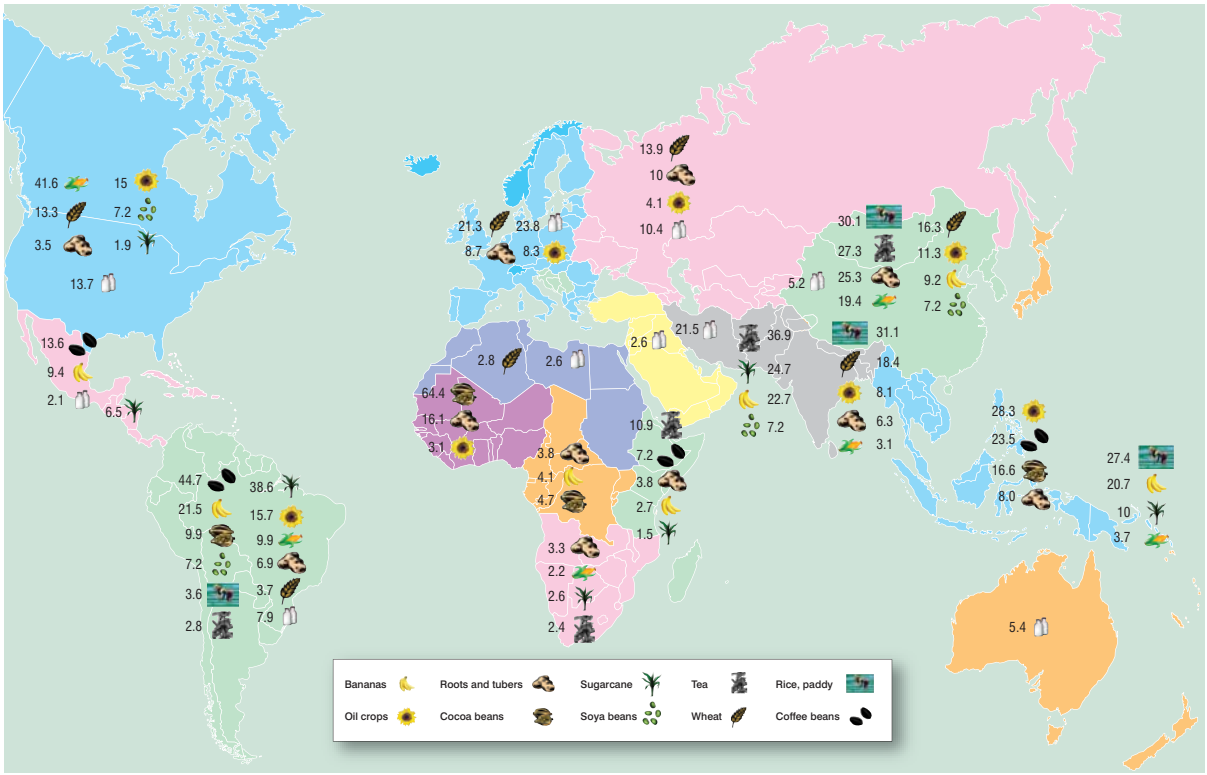
Agricultural production is a very special social and economic activity. It is central as a provider of food, a channel to eradicate poverty and hunger, a

significant agent for mass and rural employment, a major contributor to national economic growth and a considerable foreign exchange earner for many developing countries. Agriculture is also a sensitive and strategic industry, and, for this reason, foreign participation in agricultural production may be restricted in some countries (chapter V). Agriculture has features distinct from the manufacturing and services sectors in terms of its importance to an economy, food security and a number of social considerations. The characteristics examined in this section include country and regional differences in agricultural production, the types of crops farmed, and key producers and companies that participate at various stages of the agricultural value chain.

Because of differing soil, water and climatic conditions, not every region can produce all types of agricultural commodities and in sufficient quantities, either for local consumption or for export. Moreover, the production of some agricultural commodities is heavily concentrated in some geographical areas, and less so in others. For example, among staple crops, rice is grown mainly in Asia, while wheat is grown in many different regions, notably in Europe, Asia, North America and the Commonwealth of Independent States (CIS) (figure III.1). Overall, Asia accounts for more than 40% of the world production of bananas (including plantains), oil crops, roots and tubers, and sugarcane. The African continent on the other hand, particularly West Africa, contributes to nearly 70% of world cocoa production, in addition to considerable farming of roots and tubers, which are a major staple food for the region. The Latin American region is a major producer of coffee, soya beans and sugarcane. Within each region, the production of specific agricultural crops is concentrated in a few key countries. Brazil and Argentina are the two biggest producers of soya beans in Latin America (and among developing countries). The largest producers of sugarcane are Brazil in Latin America, and China and India in Asia. These differences are partly shaped by the geographic diversity inherent in agriculture, partly by historical trends and partly by policy differences (chapter V).

Within agriculture, crops can be categorized as food and non-food commodities, and both can be domestically consumed or exported. Non-food agricultural crops include, for example, cotton, linen and jute, which can be used for purposes such as garments and building materials. Food crops can also be cultivated and used for non-food purposes, such as the use of sugarcane, soya beans and maize as feedstock for biofuels (FAO, 2008c) – an aspect which deserves special attention because of the potential implications for food production in the context of a global economy in which people go hungry in large

Figure III.1. Share of subregions in world production of selected agricultural commodities, average for 2002–2007
(Per cent)



Source: UNCTAD, based on FAOStat data.

segments of the world (chapter IV). Similarly, food crops such as soya beans are also used as animal feed, which has raised concerns in the light of the recent food crisis.

Agriculture is a diverse industry as indicated by the vast number of crops grown globally, with their geographic distribution reflecting not only climatic conditions, as mentioned above but tastes, demand patterns, trade and socio-cultural aspects (table III.1). For instance, staple food crops such as rice are produced and consumed in large quantities in Asia. Although rice is also produced in Africa, until recently it was only farmed in small quantities as it is not a traditional food in the region. Similarly, commodities such as bananas, soya beans, coffee, sugarcane and cut flowers have distinctive features in terms of their consumption patterns, geographical concentration in production, key players involved and the extent to which TNCs participate in their supply chains.

The growth of agriculture has been uneven across developing regions and countries, reflecting different endowments and underlying conditions, development policies, technological progress and the consequent evolution of agricultural production over time. The World Bank (2007) categorizes countries into three groups, based on agricultural development, poverty reduction and growth indicators, with an implied evolution of countries from "agriculture-based" to "urbanized" over time. However, agriculture, in addition to manufacturing and services, remains highly important to the economies of some developed countries such as Australia, Denmark, France and the Netherlands. The same applies to some relatively higher-income developing countries such as Argentina, Brazil, Malaysia and Thailand. For many other developing countries, such as Benin, Cambodia, Ethiopia, Fiji, Ghana, Nicaragua, Paraguay, Uganda and the United Republic of Tanzania, although agriculture is important to their economies, its full potential for supporting modernization and development has not yet been realized (annex table A.III.1).

The diversity of agriculture can also be seen from the varied players participating in its value or supply chain (section C). The different *types of producers* range from local subsistence farmers to individual farmers and private firms (local and foreign), producing crops on a commercial basis (table III.2). While many developing countries now promote domestic private and foreign participation in agriculture in general, some, especially in Asia and Latin America, restrict foreign investment in the production of food crops (chapter V), such as rice in a number of Asian countries. On the other hand, many countries in Africa actively encourage foreign private sector participation, even in staple food crops, in order to increase agricultural output and foreign exchange earnings. Such policy differences partly explain why TNCs play a more prominent role in certain agricultural commodity groups (e.g. food crops) in some regions and countries than in others, and why some types of TNCs play a more significant role in agricultural production than others (sections C and E; chapter IV).

Agricultural value chains can be long, and at each stage of the chain many different players (local and foreign) are involved (section C; figure III.3). Each player contributes specific functions and adds value to the chain. This could range from being an input supplier to farmers, engaging in harvesting operations, transportation, processing, marketing and retailing. For instance, in cut flowers, many local farmers and companies, including foreign-owned businesses, are involved in different parts of the value chain, working closely together to produce and deliver cut flowers from farms to markets.

Table III.1. Categories of agricultural commodities from developing countries

Categories	Examples	Consumption/ export patterns/other issues
Staple food crops (limited trade)	Rice, wheat, tapioca and maize.	Except in the case of some surplus countries, *staple crops* are produced mainly to meet domestic consumption. Examples: rice in Asia, tapioca and maize in Africa and wheat in Latin America. Though a staple crop in much of East Asia, soya beans increasingly also fall into the other two categories in this table.
Food export commodities	Coffee, tea, cocoa, spices, bananas (excluding plantains), horticultural produce (vegetables and other fruit)	Largely produced for export and relatively small amounts consumed locally. These commodities are grown as *cash crops* for earning export revenues. Colonial ties have an important influence on the production of some of these commodities. Suitable climatic conditions and availability of farm workers favour production in some developing countries, such as Brazil, Colombia and Viet Nam for coffee; Indonesia for spices; China, Kenya and Sri Lanka for tea; and Côte d'Ivoire and Ghana for cocoa.
Non-food (export) commodities	Rubber, cotton, cut flowers and biofuel crops (e.g. palm oil, soya beans and maize).	These are non-food export commodities or *cash crops* farmed in countries with climatic advantages. Examples: Malaysia and Indonesia for rubber and palm oil. Colonial plantations sometimes played a role in their earlier development, but later, because of scarcity of land and labour shortages, production shifted to new countries such as Thailand and Viet Nam in the case of rubber plantations. Some food crops – especially sugarcane, soya beans and maize (which is generally not traded) – are increasingly being used as biofuels feedstock. Planting of GM crops, such as types of cotton or soya beans, is also a significant feature of commodities grown for non-food purposes.

Source: UNCTAD.

Table III.2. Agricultural producers, farmers and firms in developing countries

Types	Examples	Characteristics
Self-sufficient and semi-commercial farmers	Individual farmers, mostly living in rural areas.	Self-sufficient farmers in rural areas operating on a subsistence farming basis. They grow crops on small plots of land to feed themselves and their families. Any produce that is left may then be sold in local markets.
		Semi-commercial farmers are involved in agricultural production to meet their consumption needs, but a part of the farming activities is undertaken for commercial purposes – selling their produce to small traders, cooperatives or on a contract farming basis.
Other domestic private sector enterprises and cooperatives	Domestic commercial farmers individual or corporate.	Entrepreneur farmers or local firms producing agricultural commodities (both food and non-food crops) for commercial purposes and on larger tracts of land. Their agricultural production is either sold in local markets or exported abroad, mainly through an export agent or wholesaler. Some may operate as contract farms to produce specific commodities and qualities, such as horticulture produce for a group of customers, or for a single large buyer such as a local or overseas supermarket group.
State-owned enterprises (SOEs)	Agricultural SOEs.	Agricultural public companies or SOEs established by governments to support production and marketing of certain commodities. Some SOEs also undertake to produce or act as large buyers of agricultural produce such as rice, soya beans or cocoa.
Foreign firms	Largely TNCs from developed countries and increasingly from developing countries (for examples, see section E).	Farms on large agricultural land mainly to export agricultural commodities. Some production could be for local markets but in proportionately smaller amounts than for export. Agricultural production by TNCs covers both food and non-food crops. TNCs also involve local farmers to produce crops for them on a contract farming basis.

Source: UNCTAD.

b. Agricultural inputs, technology and institutions

(i) Land, water and other inputs

Agriculture is highly dependent on natural resource endowment such as the availability of arable land, fertile soil, climatic conditions and water. These endowments and climatic conditions differ significantly across the world, with implications for the pattern of global agricultural production, investment and trade. Arid and water-scarce countries face a big challenge to produce food crops for their own consumption. Land issues, such as uncertainty of land rights and ownership and land and civil disputes, have also limited the rate of growth of agricultural production in some developing countries. Of all industries, farming is the biggest user of water resources (*WIR08)*. Apart from land and water, other important agricultural inputs include seeds, chemicals, fertilizers, machinery and tools. In some of these agricultural inputs, TNCs play an important role as producers and suppliers, including through participation in agricultural production.

Because of disparities in agricultural endowments some economies have become large net importers of food, [2] while others with food surpluses are net food exporters. However, there is a third group of countries that possess arable land and water, but are unable to become self-sufficient in agriculture/food production or enter export markets partly because of their underutilization of arable land and low productivity. This third group of countries requires investment, technology and a better use of arable land. This is where increased investment by private and foreign investors can play a role, alongside the public sector. However, the role of foreign investors can be contentious because of the economic and social importance of agriculture to developing countries, and concerns over land lease or ownership and food security. The degree and nature of contention varies, for example between regions, countries and types of commodities and depending on whether farming is done on new or existing farm lands; and what the crops are used for (e.g. biofuel as opposed to food). Some African countries have policies that encourage private and foreign participation in agricultural production, ostensibly because they possess large tracts of arable land which are undercultivated, and sometimes in relatively underpopulated areas (chapter V).

(ii) Technology and R&D

Technological improvements and research and development (R&D) play an important role in increasing agricultural productivity.[3] They were a key factor in the Green Revolution for instance in Asia, which significantly increased the yields of major food grains in some countries in the 1960s and 1970s (David and Otsuka, 1994; USDA, 2003), although the Green Revolution itself had negative side effects, too, especially on the environment (George, 1976; Tudge, 1977). More recently, in Sub-Saharan

Africa, agricultural research has contributed greatly to productivity growth and poverty reduction. It has been estimated that doubling agricultural research expenditures per hectare in Africa can increase agricultural productivity by about 38% (Alene and Coulibaly, 2009).

In general, there are two major aspects to investment in research: fundamental and development research, with the former primarily undertaken by the public sector (*WIR05*; Beintema and Stads, 2008). A considerable amount of R&D, including in agriculture, and especially that with a commercial interest, is undertaken by the private sector (World Bank, 2007). Developed countries invest considerably more in agricultural R&D than developing countries; indeed, in the latter countries, investment has stagnated over time, or even declined. Within developing regions, there are large differences in agricultural R&D spending, with relatively more public spending in South and South-East Asia. On average, Asia spends five times more than Africa in agricultural R&D per hectare (Alene and Coulibaly, 2009). Despite its critical role, there is an underinvestment in R&D in agricultural farming and food production in developing countries, as compared to its potential and need; von Braun, 2008; Beintema and Stads, 2008).

Agricultural technological development and basic R&D have gone beyond "just" raising crop yields. They now encompass the application of biotechnologies, improvements in agricultural resource management (including land use and water conservation), reductions in the use of pesticides and fertilizers (FAO, 2003a; World Bank, 2007) and support measures for sustainable farming. A well-known example of the application of biotechnology to agricultural production is the introduction of GM crops, which are disease resistant and give a higher yield. This has revolutionized agricultural farming. The planting of GM crops has increased in some developing countries,[4] but it is largely confined to certain crops (e.g. soya beans, maize and cotton) and is concentrated in a relatively small group of countries (e.g. Argentina and Brazil) (World Bank, 2007; James, 2008). While the benefits of GM crops have been recognized by some, their use is controversial. It raises particular concerns about food safety and risks to health (chapter IV), which is partly why GM crops have been largely restricted to animal feeds and non-food commodities such as cotton.[5]

(iii) Institutional support

Institutional support is important for agricultural development. Agricultural institutions such as R&D centres and cooperatives play a crucial role in agricultural extension, development of new seed varieties and in national agricultural planning and productivity. The government can contribute to such support by providing agriculture-related infrastructure facilities, such as irrigation and building rural roads and those linking farms to markets, along with their maintenance. Increasing productive capacities of farmers, such as through technical training and better water management, are other important aspects of public sector institutional support. However, the extent to which institutions contribute to agricultural production varies by country and by type of institution. Budgetary constraints in poor countries limit their capacity to establish relevant and adequate institutions in support of agricultural development. Therefore it is essential to increase public budgets and ODA in support of agricultural institutional development to enhance agricultural productivity and food production in developing countries, the distribution of food to consumers and the transformation of rural economies (Haggblade, Hazell and Reardon, 2009; FAO, 2004a; FARA, 2006; OECD, 2006).

c. Environment and biodiversity

An important characteristic of agriculture is its close association with the environment. Agricultural farming can be a major contributor to environmental degradation through pollution, greenhouse gas (GHG) emissions, deforestation and soil degradation. Extensive use of chemicals and pesticides has polluted rivers, lakes and other water resources and has had detrimental effects on the health of farm workers (Food and Water Watch, 2008; Loukes, 2008; ETI, 2008; Wee and Arnold, 2009). The conversion of forest into new farmland increases deforestation and has a significant impact on biodiversity, in particular the destruction of wildlife and its habitats (Tan et al., 2009; Koh and Wilcove, 2007). Intensive farming can deplete water resources (thus increasing water scarcity) and contribute to soil erosion, which damages the prospects of future food production for a growing population. Agriculture also contributes to climate change, as it is the second largest source of GHG emissions – after energy – globally, accounting for 15% of global emissions[6] (World Bank, 2007). The clearing of forests for agriculture, field burning and the associated haze problem are further factors contributing to environmental degradation and climate change. Climate change and climate variability affect agricultural production because of increasing unpredictability of weather patterns and changes in temperature.

These agriculture-related environmental concerns are already influencing how local farmers and TNCs operate in agricultural production by adopting more sustainable and environment-friendly farming techniques, such as hydroponic farming in floriculture, better water management, utilization of renewable energy sources (e.g. geothermal) in farms and technologies and practices that use fewer

pesticides and chemicals, as in integrated pest management (chapter IV). Recycling of waste water for irrigation and crop waste as a source of nitrogen are further examples of sustainable farming and making agricultural systems more environmentally sustainable (World Bank, 2007).

2. The significance of agriculture in developing countries

a. General importance

Agriculture is vital for material well-being and the alleviation of poverty and hunger in the vast majority of countries. Technological transformation and growth in agriculture have provided the impetus for rapid industrialization and overall economic growth in the developed countries as well as several developing countries. That process has been accompanied by structural changes in economies, with an increased share of manufacturing and services in GDP and a much decreased share of agriculture. For instance, during 2003–2007, the share of value added of agriculture in GDP averaged 3% globally: less than 2% in developed countries, more than 10% in developing countries and about 7% in the transition economies of South-East Europe and CIS (table III.3). There are considerable regional differences: for example, between 2003 and 2007, agriculture contributed to about one third of GDP in West and East Africa, a marked contrast to Latin America and the Caribbean where it contributed to less than 6% of GDP. In addition, while agriculture remains a mainstay in many developing countries, over time its contribution to GDP has declined in all regions in part because of underinvestment in, and neglect of, the industry in favour of manufacturing (section B.3 below; FARA, 2006; DESA, 2009).

Agriculture is a major contributor to exports in many developing countries, and especially LDCs. For some developing countries, especially LDCs, it accounted for more than 60% of total merchandise exports in 2002–2006.[7] Particular regions and countries dominate in the export of specific commodities, reflecting their locational advantages, historical and colonial influences, policy encouragement and agribusiness development over time. For instance, during 2002–2006, more than 50% of world exports of tea came from Asia, some 68% of world cocoa bean exports were associated with four countries in Africa (Cameroon, Côte d'Ivoire, Ghana and Nigeria), nearly 50% of world banana exports originated from five countries in Latin America (Colombia, Costa Rica, Ecuador, Guatemala and Honduras), about 60% of the world's coffee exports came from Latin America, and developed countries

Table III.3. Regional differences in significance of agriculture, 2002–2007

(Percentage)

Region	Share of agricultural exports in total merchandise exports[a]	Share of agricultural employment in total employment[b]	Share of value added of agriculture in GDP[c]	Share of rural population in total population[d]	Share of agricultural population in total population[a]
	2002–2006	2002–2006	2003–2007	2003–2007	2002–2006
World	**6.5**	**30.8**[e]	**3.0**	**51.1**	**40.5**
Developed economies	6.9	4.4	1.6	24.7	4.0
Developing economies	5.9	40.0	10.2	57.3	49.1
Africa	8.0	51.2	16.5	62.1	52.2
North Africa	3.7	32.2	13.5	49.9	35.1
West Africa	13.1	53.6	33.1	58.3	44.9
Central Africa	4.5	..	20.7	66.0	60.8
East Africa	38.0	74.6	32.7	79.7	76.5
Southern Africa	7.3	21.7	5.3	55.5	44.7
Latin America and the Caribbean	18.9	17.3	5.9	22.6	18.7
South America	22.3	17.1	6.9	18.3	16.0
Central America	13.0	17.7	4.6	29.9	24.1
Caribbean	11.5	17.0	3.3	36.5	24.1
Asia and Oceania	3.6	42.9	10.8	61.4	52.9
West Asia	2.7	24.3	5.9	35.5	22.1
East Asia	1.8	42.8	9.8	57.5	61.6
South Asia	7.8	46.1	17.6	69.6	50.9
South-East Asia	7.1	44.3	11.8	55.9	46.9
Oceania	13.4	70.6	13.1	76.8	63.5
South-East Europe and the CIS	4.5	17.5	6.9	36.8	14.2
South-East Europe	13.4	25.8	10.7	47.8	15.3
CIS	3.9	17.0	6.6	36.0	14.1

Source: UNCTAD, based on data from FAO, ILO and World Bank (as specified in the notes below).

[a] Data based on FAOstat, average of available data for the period shown. Last accessed 24 April 2009.
[b] Data based on ILO data (LABORSTA database), average of available data for the period shown. Available data covers 130 out of 243 countries. Last accessed 24 April 2009.
[c] Data based on United Nations Statistics Division (UNSD), average of available data for the period shown. Last accessed 24 April 2009.
[d] Data based on World Bank, World Development Indicators, average of available data for the period shown. Last accessed 24 April 2009.
[e] Based on data for 130 out of 243 economies. Data for China are included but not for India.

(e.g. Australia, Canada, France, Germany, the United Kingdom and the United States) dominated in the export of wheat (annex table A.III.2).

Agriculture also provides significant employment opportunities in developing countries and is a crucial source of livelihood for the rural poor, in particular women (chapter IV; OECD, 2006). In 19 developing countries, agriculture accounted for more than 40% of total employment during 2002–2006.[8] More than 60% of the population in Africa and Asia live in rural areas, and most of them are employed in agriculture (table III.3). While agriculture accounts for more than half of employment in Africa, wide variations exist within the region.[9] Similarly, large variations exist in Asia where employment in agriculture accounted for over 40% of total employment in South, East and South-East Asia but less than 25% in West Asia during 2002–2006. Effective agricultural growth could therefore contribute to employment creation and reduce poverty in developing countries, in line with MDG-1.[10] Indeed, in poor countries, under the right conditions, agriculture is at least twice as effective in reducing poverty as compared to GDP growth originating outside agriculture (World Bank, 2007: 6).

b. Agriculture as a neglected motor for development

Despite the importance of agriculture as a motor of development, it has been neglected in many developing countries (FAO, 2008d; HLTF, 2008). Investment in agriculture, measured as a proportion of gross capital formation (GCF),[11] has been declining in both developed and developing countries over the past few decades, although the absolute level of investment has been increasing (table III.4). In 2007, agriculture's share in GCF in developing countries was 9.3%, with significant variations across regions.[12] Much of this relative decline has been due to underinvestment by the domestic public sector, as well as the low level of private investment. It has also been due to the falling share of agriculture in total ODA, from a high of 13% in 1985 to less than 4% between 2002 and 2007 (figure III.2; UNCTAD, 2008g).

Agriculture's relative economic importance in developing countries has fallen significantly since the 1970s, as many developing and transition economies have shifted or attempted to shift their economies towards manufacturing and services (United Nations, 2006: 32). However, there is a significant difference between those countries where the low/declining importance of agriculture is due to their passing through a process of agricultural transformation and transition or diversification, and those where it is the result of neglect, underinvestment and consequent low productivity in agriculture. Low agricultural commodity prices over a prolonged period of time in the past have also affected developing-country agricultural exports and terms of trade, resulting in stagnant or low rates of growth and investment capacity in commodity-export countries. In some countries, national policies favouring rapid industrialization, urbanization and other industrial activities over the

Table III.4. Estimated gross capital formation in agriculture,[a] 1980–2007
(Millions of dollars and percentage share in total)

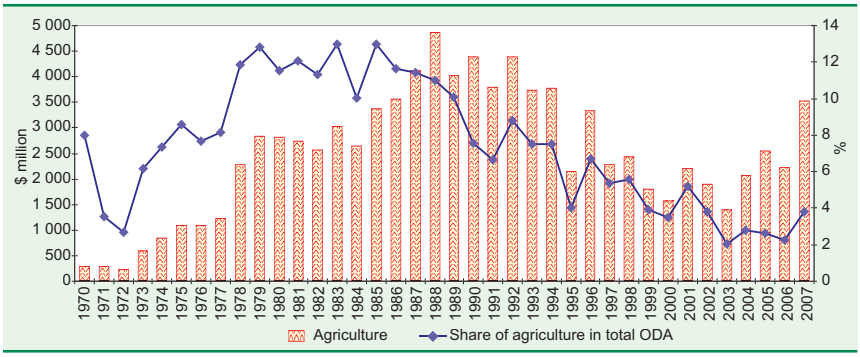
Region	Value ($ million)						Share in total gross capital formation (%)					
	1980	1990	1995	2000	2005	2007	1980	1990	1995	2000	2005	2007
World	215 585.6	272 894.8	279 923.8	255 830.7	386 403.3	525 413.0	7.5	5.5	4.4	3.7	4.0	4.4
Developed economies	77 677.0	112 885.7	112 177.9	97 233.8	122 049.5	145 681.1	3.9	2.9	2.3	1.9	1.8	1.9
Developing economies	104 336.1	115 161.8	155 359.5	150 929.7	248 042.7	354 478.2	16.8	14.0	11.5	9.8	9.2	9.3
Africa	20 117.1	15 870.5	14 004.9	14 317.8	22 336.6	34 617.8	18.5	17.3	14.2	14.1	12.9	13.9
North Africa	4 757.1	6 115.4	5 375.6	5 836.2	7 525.8	11 754.8	12.1	15.1	11.7	11.8	10.3	11.6
West Africa	10 119.6	3 317.9	2 711.5	2 697.2	5 732.2	10 157.4	30.2	31.8	31.5	27.6	30.6	31.5
Central Africa	1 260.3	1 458.0	1 177.8	1 058.1	1 899.6	2 589.3	22.0	24.6	25.7	20.5	16.4	15.7
East Africa	1 751.2	2 796.1	2 512.9	3 030.8	4 654.8	6 630.7	37.3	40.7	36.2	34.4	33.1	32.0
Southern Africa	2 228.9	2 183.1	2 227.3	1 695.5	2 524.2	3 485.6	8.7	7.8	6.9	5.9	4.6	4.5
Latin America and the Caribbean	16 573.1	21 636.0	23 386.3	21 530.4	28 145.2	44 837.9	8.5	9.6	6.9	5.5	5.8	6.2
South America	10 600.1	15 683.6	18 669.2	13 771.3	19 390.0	33 620.3	8.4	10.1	7.0	6.1	6.7	7.1
Central America	4 850.0	4 432.5	3 839.7	6 663.3	7 620.6	9 767.7	8.9	8.5	6.8	4.8	4.6	4.6
Caribbean	1 122.9	1 520.0	877.5	1 095.7	1 134.6	1 449.9	8.8	7.8	4.6	3.8	3.3	3.4
Asia	67 272.5	77 235.1	117 414.2	114 662.8	197 028.2	274 435.0	21.2	15.3	13.0	11.0	9.8	9.7
West Asia	4 332.2	8 903.2	10 408.8	10 075.9	12 414.4	19 378.2	6.3	11.6	10.3	8.5	5.8	5.8
South, East and South-East Asia	62 940.3	68 331.9	107 005.3	104 586.9	184 613.7	255 056.8	25.2	16.0	13.3	11.4	10.2	10.2
Oceania	373.4	420.1	554.1	418.8	532.7	587.5	20.1	15.4	16.3	14.7	10.8	10.1
South-East Europe and the CIS	33 572.5	44 847.3	12 386.4	7 667.1	16 311.2	25 253.7	11.4	19.0	10.5	10.6	7.4	6.2
South-East Europe	3 109.4	2 038.8	1 478.3	1 269.1	2 556.9	3 517.3	13.6	17.2	18.8	14.9	10.5	10.3
CIS	30 463.1	42 808.5	10 908.1	6 398.0	13 754.3	21 736.3	11.2	19.1	9.9	10.0	7.1	5.8

Source: UNCTAD, based on data provided by the United Nations Statistical Office.

[a] Agriculture, hunting, forestry and fishing.

Note: Gross capital formation (GCF) data were available for 10 to 30 countries only, which account for 13%–18% of total GCF. For other countries, the share of agriculture, hunting, forestry and fishing in value added was applied to total GCF to estimate GCF in agriculture.

Figure III.2. ODA in agriculture: value and share in total ODA, 1970–2007



Source: UNCTAD, based on OECD, OECD.Stat Extracts (accessed on 6 May 2009).
Note: Data from 1970 to 1994 include forestry and fishing, which account for roughly one quarter of total agriculture, forestry and fishing.

rural economy have further contributed to lower agricultural growth and development (annex table A.III.1; United Nations, 2006).

Although the opportunity exists for agriculture to act as an important motor for development in many developing countries (see box III.2 for the case of Ethiopia), more needs to be done to realize this promise. Trends towards lower relative investment in agriculture need to be reversed. In this regard, public investment, ODA, private and foreign investment can all play a role.

3. Salient issues influencing investment in agriculture

The re-emergence of agriculture as a priority at the national and international levels, by both the public and private sectors, is interlinked with a number of emerging issues, including those arising from the food crisis of 2008, the MDG targets and the rise of biofuel production. For example, commitment to meet the MDG-1 target has encouraged countries to step up or promote agricultural investment, including by the domestic private sector and TNCs.

a. The food crisis and the drive for food security

The food crisis of 2008 brought to the fore the need to seriously address the issue of future food insecurity in developing countries (FAO, 2008b and 2008d; UNCTAD, 2009l).[13] The crisis has forced the international community to reassess whether, and how, the current global food production system will be able to meet various challenges, including reaching the MDG targets on hunger and poverty. This includes the need to secure a future food supply to feed a growing world population of more than nine billion people by 2050. Unlike previous food crises, caused partly by poor harvests, the latest one was linked with a number of interconnected factors, such as rapidly increasing demand and competition between grains for both human consumption and for feeding livestock and biofuel production.

As discussed in the introduction, an interplay of factors resulted in a hike in food prices in 2008, and shortages in food supply in some developing countries. The price hike was more broad-based than in previous incidents, covering many food commodities as well as cash crops (UNCTAD, 2008b). While prices of such crops have receded from the peak of 2008, they are nevertheless high relative to their historic levels,[14] and are likely to remain high in the future,[15] raising concerns for future food security.[16] Growth of agricultural productivity, particularly in food crop production, has fallen behind growth in

Box III.2. Ethiopia: agriculture as a motor for growth and development

Agriculture is an important pillar in Ethiopia's economic development. Its value added contributed to about 46% of Ethiopia's GDP between 2003 and 2007, and it accounted for 68% of total employment and 57% of the country's total merchandise exports between 2002 and 2006. Agriculture is therefore an important motor for development in the country, which has led Ethiopia to pursue an "agricultural development-led industrialization" strategy. This framework for national economic development emphasizes the need to raise the share of manufacturing in the economy by promoting agricultural productivity and a resource-based process of industrialization. The rationale for this strategy is that the country's rich and diverse agricultural output offers a basis for a wide range of manufacturing activities for the domestic and export markets. In addition, the manufacturing sector is heavily dependent on inputs from agriculture. Under Ethiopia's Industrial Development Strategy, launched in 2003, efforts have concentrated on creating an enabling environment for the private sector to be a driving force for economic development. The sectoral focus of that strategy is on developing agro-based industries and strengthening the interrelationship between agriculture and manufacturing.

Source: UNCTAD, based on research by Aurelia Calabro, UNIDO (Ethiopia office) and Juliana Gonsalves, UNECA (Ethiopia).

global demand; and changing consumption patterns in fast-growing developing economies have also contributed to pressure on food prices (ECOSOC, 2008a; United Nations, 2008).[17] The low agricultural productivity growth arises from a combination of factors, such as underinvestment in agricultural R&D and infrastructure, land degradation, growing water scarcity in some developing regions and fragmented as well as uneconomical land holdings in small plots (ECOSOC, 2008b). High energy prices have also pushed up the cost of food production, chemical fertilizers and transportation.

The food crisis has triggered a number of responses. At the international level, there is growing concern about food security amid the further challenges posed by global warming, which is expected to affect food systems. At the national level, some countries worried about food security have taken measures to address their anxieties, including through efforts to increase investment in agriculture. Some food crop producing countries restricted the export of staples at the height of the food crisis, while food importing countries have started investing in overseas farming to secure future food supply (Brown, 2008; Blanche, 2009; Smith, 2008; sections D and E). However, food security does not imply food autarky. Both imports and exports of agricultural products constitute elements of government policies for food security and agriculture's role in economic development.

b. Investment to meet MDG targets

The decline in investment in agriculture in developing countries in recent years has significantly hindered countries and the global community in meeting the MDG-1 targets. A number of studies, based on varying assumptions, coverage and methodology, have estimated the food security-related agricultural investment needs of developing countries. For instance, the Common Framework of Action proposed by the United Nations High-level Task Force on the Global Food Crisis estimated that the global incremental financial requirement for investment in agricultural development for food and nutrition security and to meet other objectives would range from $25 billion to $40 billion per annum;[18] and this investment would primarily have to be covered through public finance and ODA (HLTF, 2008). Similarly, FAO estimates that an extra $30 billion per year needs to be invested in agriculture and safety nets to ensure that the MDG target of halving the absolute number of hungry is met by 2015 (FAO, 2003b and 2008b).

Although national public sectors and ODA are seen as providing the bulk or entirety of funding for this investment, it is not clear how feasible this is, especially in Africa. For example, in their Maputo Declaration in 2003, African Heads of State and Government agreed to allocate at least 10% of their countries' national budgets for agriculture and rural development within five years (African Union, 2003; FAO, 2006b).[19] However, the average agricultural budget allocation for the region had not reached the agreed target in 2008: fewer than 10 countries achieved the 10% level or higher (IFPRI, 2008; African Union, 2008). The impact of the current economic and financial crisis means that some countries will be challenged to find agricultural investment funds for meeting MDG-1 targets, but this goal nevertheless remains an imperative for investment in agriculture (UNCTAD, 2009e), some of which needs to come from the private sector (FAO, IFAD and WFP, 2005; HLTF, 2008).[20]

c. The rise of biofuel production

The rapid growth of the *biofuels* industry is contributing to major structural changes in global agricultural production (Flammini, 2008). In particular, the profitability of growing crops for biofuel feedstock is an important incentive for private investment in this activity. [21] A number of large developed and developing countries and groupings, such as Brazil, China, the European Union, India and the United States, are among the leaders in the global growth in biofuel production (table III.5), which has had a knock-on effect on agricultural commodity prices (World Resources Institute and A.T. Kearney, 2008).

Government policies in some countries have facilitated the growth of biofuel production and use. For instance, in support of the ethanol industry, Brazil introduced legislation requiring the use of ethanol-gasoline blends. In an effort to produce alternative fuel sources, other developing countries are also launching biofuel programmes that use molasses, sugarcane and/or oilseeds such as soya beans, oil palm and *Jatropha curcas.* Biofuel production receives support through consumption incentives (e.g. fuel tax reductions), production incentives (such as tax incentives and loan guarantees) and mandatory consumption requirements (World Bank, 2007; FAO, 2008c). Currently, global biofuel production is dominated by just a few major producing economies (James, 2008), but many other developing countries are launching their own programmes (World Bank, 2009c). Current estimates indicate that the biofuels industry will continue to grow, with output of global ethanol and biodiesel projected to more than double between 2007 and 2017 (FAO, 2008c). That would make the industry a potentially significant contributor to the expansion of agricultural production in some developing countries. However, there is a strong debate on whether agricultural resources should be diverted from food production to biofuel crops, especially since this use of crops for biofuel was seen

Table III.5. Biofuel production in selected economies and grouping, 2007
(Million litres and per cent)

Economy/ grouping	Ethanol		Biodiesel		Total
	Volume	Share in world production	Volume	Share in world production	
World	**52 009**	**100.0**	**10 204**	**100.0**	**62 213**
Brazil	19 000	36.5	227	2.2	19 227
Canada	1 000	1.9	97	0.9	1 097
China	1 840	3.5	114	1.1	1 954
European Union	2 253	4.3	6 109	59.9	8 361
India	400	0.7	45	0.4	445
Indonesia	-	-	409	4.0	409
Malaysia	-	-	330	3.2	330
United States	26 500	50.9	1 688	16.5	28 188
Others	1 017	2.0	1 186	11.6	2 203

Source: UNCTAD, based on FAO 2008c, based on F.O. Licht, 2007, and data from the OECD-FAO Aglink-Cosimo database.

as a contributor to the price hikes during the recent food crisis. There is a need to examine the challenges and opportunities posed by biofuel production in the context of the twin challenges of world food and energy security.[22]

C. TNC participation in agriculture: historical and conceptual insights

1. Historical developments: from plantations to value chain coordination

Early examples of TNC involvement in agricultural production include FDI in the nineteenth and twentieth centuries by companies based in Japan, Europe and the United States, primarily to produce cash and food crops such as cotton, rubber, sugar and others (Freeman, Holslag and Wei, 2008; Suret-Canale, 1964). The history of foreign investment in agriculture is actually even older, and goes back to the early colonial era (from the sixteenth century onwards), when foreign expansion by European powers to the developing countries of today was largely motivated by the search for natural resources, combined with cheap labour by indentured workers or slaves (Thomas, 1997). Thus agricultural production, together with extractive industries, was an early target for foreign investors, some of which resembled TNCs in the modern sense; others were traders or State-mandated companies, all of which aimed at supplying agricultural goods to the growing populations and industries of their home countries (and third markets) (Jones and Khanna, 2006; Wilkins, 2008; Munro, 1976). Very few, if any, processing activities were located in the developing host countries.

After the Second World War, FDI in agriculture grew slower than that in other industries, although there were major variations by region, country and commodity (Twomey, 2000; Tsakok and Gardner, 2007). The general trend was towards industrialization, including in developing countries, which increased the share of manufacturing unrelated to agriculture. In many countries, this industrialization was accelerated by government policies which, through various measures, favoured manufacturing over primary industries (section B.2). In addition, as part of the decolonization process, host governments increasingly assumed control over their natural resources, including land, making it more difficult for foreign investors to become involved in the production of agricultural goods directly. During the period 1960–1976, agriculture was second, after banking and insurance, among activities affected by a wave of nationalizations of foreign enterprises in developing countries, with 272 cases of expropriations (compared to 349 cases in banking and insurance) out of an overall total of 1,369 nationalizations. In South and East Asia, nearly half of all expropriations took place in agriculture (UNCTC, 1978: 233).

From the early 1980s, foreign ownership of land became more restricted across most of the developing world, with implications for FDI in agricultural production (Rama and Wilkinson, 2008; UNCTC, 1983: 218). For example, in Central America, TNCs have moved away from banana plantation production to purchasing bananas from local farmers and providing technical advice and marketing services (Striffler and Moberg, 2003). The tea industry in Kenya, originally based on the foreign-owned plantation model, has undergone a similar transformation, as has the international tobacco industry (Eaton and Shephard, 2001; Neilson and Pritchard, 2009). This does not mean, however, that former agriculture-based TNCs have withdrawn completely from the control of agricultural production. Indeed, some are still significant in agricultural FDI (as shown in section E),[23] but most operate mainly through non-equity forms, such as contract farming, often linked to their activities in processing, marketing and distribution. In general, contract farming has been historically used by companies in high quality fruits and vegetables, organic products, spices, flowers, tea, tobacco, seed crops and other quality sensitive and perishable commodities (Bijman, 2008). The main reason is that such products require good coordination between buyers and farmers for harvesting, quality control and timely delivery.

In the post-war era, TNCs' involvement in agriculture-related activities in developing countries has increasingly focused on the upstream or supporting industries (e.g. provision of inputs, seeds and machinery) or downstream industries

(trading, processing and retailing). Partly, this is a consequence of the reduced involvement of TNCs in farming and plantations; but it is more because of the rise in relative importance of TNCs in other highly profitable segments of the global value chain (GVC) in agribusiness (box III.3; figure III.3). Their ownership of created assets such as brands, logistics expertise and intellectual property[24] allows them to compete dynamically with incumbents and newcomers alike. Changing consumer preferences, especially in developed countries, are also a factor.[25] The expansion of relatively new activities connected with the industry, such as biofuels production, has also resulted in the involvement of some companies not previously associated with agriculture. In general, in today's agriculture-related activities, value creation resides mainly in the non-agricultural production segments of agribusiness GVCs (figure III.3) (e.g. downstream activities such as retailing, and upstream activities such as biotechnology-enhanced seeds). This also affects the revenues of local farmers in developing countries. (Table III.6 provides an illustration of the global value chain in agribusiness as it applies to floriculture.)

2. Conceptual overview

The degree of involvement, geographical spread and forms of TNC participation in agricultural production in developing countries can be understood by applying the theoretical framework of ownership-location-internalization (OLI) advantages (box III.4)

Box III.3. Global value chains and their implications for types of TNC participation in agricultural production and related activities

The concept of a global value chain is a commonly used framework for analysing the sequence or stream of interrelated activities performed by firms, organizations or individuals in different geographical locations, necessary for bringing a product or service from production stages to final customers (UNCTAD, 2006a). In the case of agriculture, a typical or generalized agribusiness GVC includes the production of inputs (such as seeds and fertilizers) feeding into agricultural production and leading onto trading and logistics, processing and ultimately to retailing, and thence to final consumers in the downstream part of the chain (figure III.3).

GVCs help understand how activities performed at different stages of the chain are coordinated and the complexities of the governance structure (Gereffi, Humphrey and Sturgeon, 2005). In terms of the power of companies at different stages of GVCs, chains can be typified as either "producer driven" (e.g. during the colonial era, ownership of a plantation was key in delivering fresh produce to industrial or final customers), or "buyer driven" (e.g. in the post-war era, ownership of brands or distribution, among others, means that the lead firms in GVCs are more often companies such as traders and supermarkets, depending on the commodity) (Gereffi, 1989).

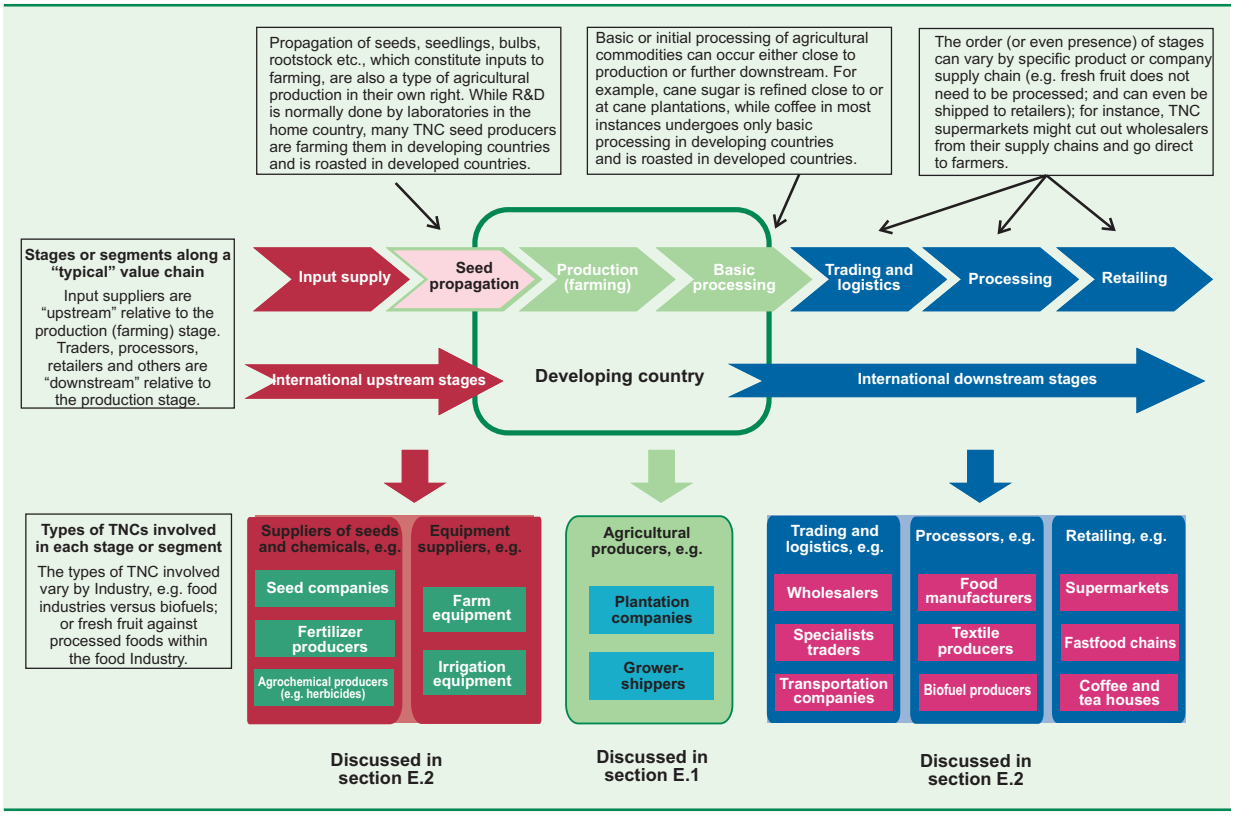
Five basic types of relationships (or patterns of governance) between firms in GVCs can be distinguished (Humphrey and Schmitz, 2002; Schmitz, 2005; Sturgeon and Gereffi, 2008).[a] They are:

- *Arm's length* (pure market) relations where there is no close relationships between buyer and supplier firms. In the case of agriculture, manufacturers and other downstream firms buy commodities on the international market. There is no direct participation by such TNCs in agricultural production.
- *Modular networks* (market-like, but inter-firm linkages are tighter than simple markets): firms develop information-intensive relationships, frequently dividing essential competences between them. Suppliers produce to the customer's specifications, which, in the case of agricultural production involves farmers meeting *standards* such as those related to quality control or safety. Lead firms may support farmers or other agricultural producers, for example through technical training, funding and provision of seeds. TNC involvement with farmers through modular networks can be considered an indirect form of TNC participation in agricultural production.
- *Relational networks:* these involve mutual dependence between firms, regulated by trust, which may derive from, among others, reputation, family and ethnic ties and commonly held values. In the case of agriculture, an example is the close links between Indian agricultural TNCs and parts of East Africa (*WIR06*).
- *Captive networks:* the buyer exercises a high degree of control over other, less powerful and usually smaller firms in the chain. In the case of agricultural production, this can take the form of *contract farming*. Contract farming can be regarded as a non-equity form of TNC participation in agricultural production.
- *Hierarchy*: governance is characterized by vertical integration and managerial control (i.e. *foreign direct investment*). Transactions are internalized within firms, and affiliates (which may be joint ventures) produce for the parent firm and other parts of its network. This represents an equity form of TNC participation in agricultural production. In addition, there may be instances where a TNC does not own the farming land, but has a long-term lease.

Source: UNCTAD.

[a] Most of these authors refer to four basic types of relationship, but more recently relational networks were introduced, especially to take into account a wider range of TNCs, such as those from developing countries, than was envisaged in earlier theories. This is analogous to the wider formulation of competitive or ownership advantages in *WIR06*.

Figure III.3. A typical agribusiness global value chain in a developing economy and types of TNC players



Source: UNCTAD.

(or the "eclectic paradigm", first formulated by John Dunning, 1993) to internationalization in the context of agribusiness GVCs (box III.3). In doing this, one can distinguish horizontal international expansion by TNCs located in a *particular segment of the value chain* from vertical expansion and international coordination of activities undertaken *along the segments of a value chain.* In the former, an agricultural, manufacturing or retail TNC moves to a host country and establishes an affiliate or a contractual arrangement for production in the same activity as that in which it is engaged at home (e.g. establishment of a supermarket by a retail company), or undertakes a subset of the activities it carries out in the home country. Thus, as box III.4 shows, an agricultural firm with competitive advantages might be drawn to a particular host economy because of the country's locational (L) advantages, including agricultural endowments and a favourable policy on land ownership; furthermore the TNC can choose to operate in that location through direct investment in a plantation by using its ownership or competitive advantages (O), such as technical knowledge or management expertise, or by making such assets available to host-country firms through a licence, or a management contract or other arrangements. Which of these modalities of operation a TNC chooses rests on the internalization decision (I) (i.e. whether it is better to own and run the plantation itself (through FDI or not). This decision is influenced by factors such as the relative profitability and risks involved in the various choices, and whether a mutually acceptable price can be agreed on for the sale of its knowledge assets.

TNCs coordinating a network of activities along a GVC can also have both the motives and the capabilities to participate in agricultural production. Examples of motives are to secure commodity inputs and sell seeds, while examples of capabilities include a subset of ownership advantages that facilitate value chain coordination, such as control of, and expertise in, distribution and procurement systems. TNCs can participate in, or influence, relevant agricultural production in countries with the necessary locational advantages (such as the availability of land, water and labour), especially in countries in which they are already present in the upstream or downstream activities (box III.3, figure III.3). Whether TNC participation in agricultural production through such vertical expansion of TNCs occurs and what form it takes depend on a number of factors, including:

- The nature and extent of the TNC's ownership advantages relevant to value chain coordination. For instance, supermarkets are extremely proficient supply chain coordinators;

Table III.6. The global value chain in floriculture: key stages and selected TNCs at each stage, 2009

Value chain stage	Supply of inputs		Production	Trading and logistics			Retailing
	Chemicals, fertilizers and equipment manufacturers	Breeders and propagators	Farming and grower-distributors	Transport and logistics providers	Sourcing and marketing	Wholesale	Retail and distribution
Activities	TNCs at this stage include chemical and fertilizer companies, as well as manufacturers of greenhouses and other farming equipment.	TNCs or inter-national companies that provide farmers with different varieties of flowers, developed for size, colour, etc.	TNCs with investments in farmland in developing countries that grow flowers for export or for local markets. Grower distributors distribute cut flowers from their own farms. Some TNCs subcontract local farmers to produce flowers for them.	TNCs that provide transportation (incl. airfreight) for cut flowers from farms to markets. Some charter daily flights for this purpose.	TNCs with affiliates in overseas locations (mostly in major producing countries) to source flowers for sale.	International auction centres that establish business ventures in emerging centres for the flower trade. Flowers are traded by auction and reshipped to final buyer markets. International companies purchase flowers and operate as wholesalers.	TNCs that market and distribute cut flowers directly to final customers through supermarkets, specialist flower shops and retail chains. Some supermarket chains – as large buyers – are involved in contract farming in developing countries.
Examples of TNCs	**BASF** (Germany) **Syngenta** (Switzerland)	**Rosen-Tantau** (Germany) **Nirp International** (France) **Lex+** (Netherland) **Dekker Chrysanten** (Netherlands)	**Homegrown** and **Flamingo** (part of Finlay, United Kingdom) **Sher Karuturi** (India) **Oserian** (Kenya) **Finlay** (United Kingdom) **Welyflor** (Ecuador)	**East African Flowers-**Netherlands **and Airflo-** Kenya (members of Mavuno Group) **Swire-Finlay Group** (United Kingdom) **Emirates Sky Cargo** (United Arab Emirates)	**Bloom** (Netherlands) **World Flowers** (United Kingdom) **Sourcing, marketing, wholesale** **Dutch Flower Company** (Netherlands)	**Dutch auction centres** (Netherlands) **Mayesh Wholesale Florist** (United States)	**Tesco** (United Kingdom) **Asda** (United Kingdom) **Marks & Spencer** (United Kingdom) **Albert Heijn** (Netherland) **Sainsbury** (United Kingdom) **Waitrose** (United Kingdom)
	Integrated business networks This includes groups of companies that are involved in breeding, contract farming, distribution and marketing of cut flowers produce by members of the group. These TNCs include: **Karuturi Group** (India) **Mavuno Group** (Netherlands) **Swire-Finlay Group** (United Kingdom) **Beekenkamp Group** (Netherlands) **Esmerralda Farms** (United States) **Falcon Farms** (United States) **Golden Rose** (Canada) **Continental Floral Greens** (United States)						

Source: UNCTAD.

- The agricultural resources available and the capabilities of the farmers whom the TNC deals with. If they have the technology and expertise to deliver produce of the quantity and quality required, then contractual arrangements are more likely to prevail than FDI;
- The risks involved (e.g. might it be cheaper and/or less prone to political risk to procure agricultural commodities through the market?); and,
- How much value added can be captured through direct investment in agricultural production (i.e. control of the movement of goods and services along a chain gives considerable leverage over the setting of prices).

Depending on how these factors play out concretely,[26] the types of "vertical" TNC participation along the value chain in agricultural production can thus take one (or a mix) of three principal forms (box III.3, figure III.4):

(i) Indirect, non-equity participation through implementation of standards and other information-intensive relationships in which a host country farmer/firm produces to the specifications of a foreign TNC involved in activities downstream or upstream of production in the host country. Coordination of the relationship by the TNC can be loose or strong, but either way an inability to meet standards can have negative commercial repercussions for the supplier.

(ii) Direct, non-equity participation through contract farming, in which host-country farmers/firms are tightly coordinated and controlled by the TNC, which may also provide inputs and assistance of various kinds, for instance because of the need for secure or timely delivery (such as in the case of fresh fruit and vegetables) to geographically distant outlets.

(iii) Direct equity participation through FDI, whereby coordination and control of transactions are fully internalized within the TNC.

The ownership advantages of TNCs involved mainly in the downstream stages of agribusiness value chains tend to be information-related, particularly concerning markets, prices, consumer preferences and the forecasting of changes in these critical parameters. Much of this is owed to experience and accounts for the longevity of TNCs in these industries. Two key processes are at work: coordination of the multistage processes of agri-business by TNCs, and their internalization and control of key markets in information and expertise. The first process arises because of the need to ensure product quality over the time that agricultural production, processing and

Box III.4. The OLI paradigm and international production in agriculture

The OLI paradigm (Dunning and Lundan, 2008) is a simple but effective framework for understanding the factors that determine the internationalization choices of firms. It explains the choice of FDI over other forms of internationalization (such as trade or contractual arrangements) in terms of the presence or otherwise of: a) ownership-specific advantages of firms; b) location-specific advantages of countries abroad; and c) internalization advantages from cross-border transactions within firms rather than through markets or contractual arrangements.

The basic rationale for internationalization by firms is to increase or protect their profitability and/or capital value, usually triggered by threats or opportunities such as for example those related to the food crisis or the rise of biofuels and the related price increases in the case of agriculture (section B.3). In order to compete effectively in foreign host economies, TNCs normally need to possess and utilize competitive or *ownership-specific* (O) advantages, which may derive from a number of sources. Most commonly, these ownership advantages consist of the possession of "strategic" created assets, such as technology and R&D capabilities, production-related expertise, ability to finance large-scale operations, brands, distribution networks, production related expertise, business models and managerial competences. For instance, for a firm to engage in agricultural production abroad, the ability to establish, manage and run plantations or farming operations to a high standard of performance that can compete with host-country farming enterprises, requires a number of such assets, both explicit (e.g. financial strength, technical expertise on, say, oil palms or tea) and tacit (e.g. effective management of a large-scale workforce).

The possession of ownership advantages does not necessarily lead to FDI. For example, instead of FDI, an agricultural enterprise might sell or provide its ownership advantages to host country companies in a number of ways. Technological knowledge can be made available through sales of intermediate goods and the licensing of technology to host-country firms, which then establishes production facilities and pays the TNC (the licensor) a royalty. Under conditions where the host-country firm does not possess the capabilities to absorb the technological (or other) knowledge, or where the knowledge is of a tacit nature and not easily transferable, the agricultural TNC can enter into a management contract: the host-country firm puts up the capital and owns the plantation or other facilities (thereby bearing much of the risk), while a team from the TNC manages them for a fee. For the TNC, returns may be lower, but so are the risks. The decision whether to *internalize* (I) operations (i.e. FDI) or exploit ownership advantages externally through the market for goods, services or knowledge (e.g. through licensing or management contracts) depends on various factors. The most important factor is the relative return versus the relative risks (e.g. FDI can be expensive and is beset by commercial and political risks; in contrast, sale of knowledge, even on a contractual basis, runs the risk of the TNC's very ownership advantages being lost to the buyer.

The specific choice of locating production abroad, rather than exploiting competitive advantages through international trade, will depend on the presence of *locational* (L) advantages in a country or countries abroad, including economic determinants (e.g. market size, natural resources and created assets), policy framework, business facilitation measures, and business conditions. The presence of host-country advantages is the third condition necessary for international production. Differences between locational advantages of different countries are important determinants of the international location pattern of FDI or other types of TNC activity. In the case of agricultural production, agricultural endowments, historical legacies (e.g. the introduction of coffee production to Brazil) and government policies can all affect the location of TNC activity.

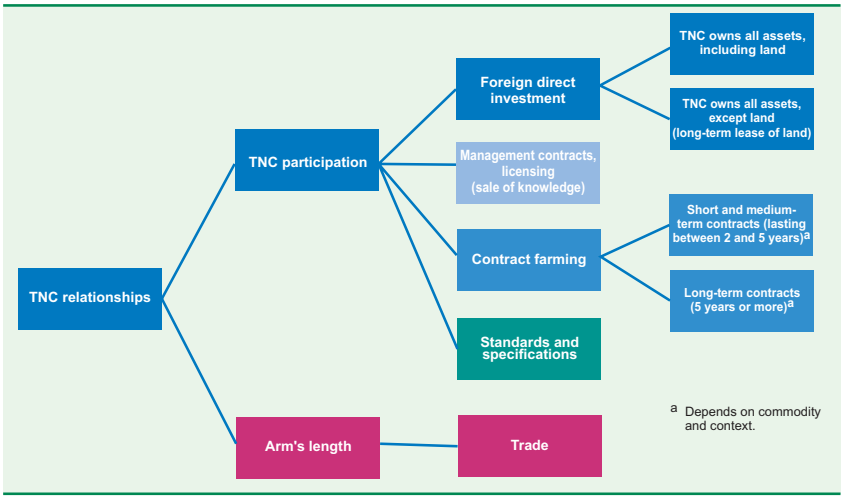
Source: UNCTAD.

sales take place. This necessitates the coordination of planting, growing, harvesting, transportation, packing and delivery. Product quality in retail markets is often associated with branding, and TNCs derive profits by guaranteeing the consistent quality represented by key brands. This is strongly linked to the second factor, namely the control and use of critical information throughout the TNC-controlled value chain. Information on consumer tastes and on relative costs of production, transportation and delivery from the major sources of agricultural production to key markets is a vital element in TNC strategy (Buckley, 2009; Gereffi, 2007; boxes III.3 and III.4).

The degree and form of TNC participation in agricultural production is likely to differ according to a company's stage in a GVC, as suggested by examples from the GVC in floriculture (table III.6). For instance, large *supermarket chains* have the coordinating ability and the power to enforce standards/specifications in order to secure supplies of quality cut flowers directly from growers in developing countries, in circumstances where they cannot secure them from traders, or, if it is more profitable, to cut out the "middle man". Enforcement of standards suffices in most cases of direct procurement from growers (sometimes through agents), but contract farming does occur to some extent in order to ensure security of supply (the supermarkets have a large number of outlets which need to receive equivalent products).

In contrast to supermarkets, most *retail outlets* are not able to procure cut flowers directly from developing countries and are not involved in

Figure III.4. Types of TNC participation in agricultural production in host countries



Source: UNCTAD.

activities in those countries. The *trade/wholesaling stage* is therefore very important to the industry as a whole. Companies in this segment of the floriculture value chain primarily source flowers at arm's length (through the market), and have little participation in agricultural production. However, some TNCs in this segment have adopted an integrated value chain approach, which involves both agricultural production and wholesaling. In order to side-step the power of traders/wholesalers, a number of TNCs in floriculture have extended their ownership assets beyond production and evolved into *grower-distributors*. This helps them to better control channels of distribution and therefore capture more value added in the cut flowers industry. *Breeders and propagators* are an important part of the floriculture GVC.[27] They undertake research and breed and propagate new and different varieties of flowers, in colours and sizes demanded by consumers. Some of them farm inputs (i.e. seeds, bulbs and seedlings) in developing countries to ensure that they are available to farmers (Wee and Arnold, 2009).

To summarize, whether or not agribusiness TNCs participate in agricultural production abroad, their form of participation (e.g. through FDI in agriculture or contract farming) and where (e.g. in traditional host countries or in new locations) depends on the specific ownership advantages they possess in some vital parts of the value chain (which also depends on the particular agribusiness chain in question); the existence of location-specific reasons for choosing international production rather than arm's length transactions and operating in a particular host economy; and finally, the costs and benefits to TNCs in agriculture and related industries of the internalization of transactions across borders (FDI),[28] as opposed to non-equity, contractual forms of coordination of the supply chain. The TNC will choose the best mix that provides security of supply, flexibility and quality assurance. TNCs are, of course, faced with the costs of such global operations. These include coordination costs – requiring sophisticated management and information systems – and the potential risks of losses through unforeseen hold-ups, production failures and potential discrimination against foreign firms by hostile host-country elements.

D. Trends in FDI and other forms of TNC participation in agriculture

As mentioned in section C, prior to the Second World War, agriculture in developing countries, especially export-oriented production of crops such as bananas, sugar and tea, was an important host for TNC participation (mainly FDI, but also other forms of participation). After the war, as a result of the rise of FDI in manufacturing and then services, as well as the restrictions on FDI in agriculture imposed by newly independent developing countries, the relative importance of foreign investment in agricultural production declined considerably. However, in many cases TNCs from the earlier period retained control, as specialist traders and retailers, over trade and access to industrialized country markets. At the same time, to guarantee a supply of the relevant commodities, they partly moved over to contract farming in lieu of FDI. As this section shows, TNCs continue to be involved in plantation agriculture, although they constitute a smaller part of the total picture now.

After a long period of decline in TNC participation in agricultural production, a resurgence may however be under way. Although it is still too early to present a fully reliable statistical picture, this section maps emerging trends and patterns, documents how different forms of TNC involvement have evolved, and attempts to gauge the extent of agricultural production by new actors, such as private equity funds and a variety of investors from developing countries. An analysis of patterns of TNC participation in agricultural production shows that it takes various modes, from wholly-owned affiliates and joint ventures, to management contracts and contract farming.

Much of the analysis in this section and in the report focuses on FDI and contract farming because these are the two most common forms of TNC participation in agricultural production. To the extent that their impact is relevant for agriculture, data on TNCs in agriculture-related industries are also taken into consideration while discussing the role of TNCs in agriculture (section E).While efforts have been made to use a common industry or group of industries methodology based on standard international classifications, due to differing collection practices and methodologies, the industries covered vary slightly among the two data sets used: (a) FDI stocks and flows, and (b) cross-border M&As (box III.5).

1. FDI trends and patterns

a. FDI

In the recent past, allowing for data limitations (box III.5), the direct involvement of TNCs in agriculture has been limited. World inward FDI stock in agriculture comprised only $32 billion – only 0.2% of total inward FDI stock in 2007 – despite significant growth in FDI since 2000, particularly in developing countries (table III.7). Between 1989 and 1991, world FDI flows in agriculture remained below $1 billion per annum, as compared to more than $7 billion in food and beverages (table III.7 and figure III.5). By 2005–2007, world FDI inflows in agriculture exceeded $3 billion per annum. This still constituted less than 1% of total world FDI inflows. The low levels of FDI in agriculture may be partly explained by the regulated nature of the industry, restrictions on ownership of agricultural land by foreigners, and corporate strategies which favour control over the supply chain through upstream and downstream activities (section C). FDI outflows in agriculture in 2005–2007 were even smaller than inflows: they remained on average around $1 billion per year. This difference between inflows and outflows suggests that an important part of agricultural FDI is undertaken by TNCs coming from related industries (and therefore the capital outflows are registered under those industries in the outward data) (table III.7).

In terms of FDI stocks, agriculture accounts for a considerably smaller share than food and beverages, indicating a greater focus by TNCs on downstream activities (table III.7). The inward FDI stock in agriculture was higher in developing countries than in developed countries over the period 2001–2007. Moreover, in terms of its share in the total FDI stock of all industries in all sectors – primary, manufacturing and services – combined, agriculture has been much more important for developing countries than for developed countries. This may reflect various factors, including the relative importance of agriculture in the economies of developing countries in general, the availability of land for cultivation and government policies. On the other hand, developed countries consistently receive more FDI in food processing than developing countries, suggesting that the majority of higher value added activities in agri-food supply chains are still concentrated in the former group.

At the country level, the share of agriculture in total inward FDI flows is less than 1% for 17 of the 40 economies shown in figure III.6a, while agriculture's share in total FDI stock does not exceed 1% in 21 of the 40 economies shown in figure III.6b. However, in some LDCs, the share of FDI in agriculture in total FDI flows or stocks is relatively significant (e.g. Cambodia, Lao People's Democratic Republic, Malawi, Mozambique and United Republic of

Box III.5. Data sets used in *WIR09*

FDI data based on balance of payments. These data are available for 24–65 countries, for inward FDI and for 9–30 countries for outward FDI in agriculture, forestry and fisheries (in the primary sector); and for 20–50 countries for inward FDI and for 13–28 for outward FDI in food and beverages (including tobacco) (in the manufacturing sector), for 1990 to 2007. A detailed breakdown of data by sub-industries was not available, and neither were data for some important host and home countries. For example, there were no relevant outflow data for Brazil, Mexico and the Russian Federation.

FDI data based on completed cross-border M&A transactions: A full analysis of cross-border M&As along the supply chain is possible, as a detailed industry breakdown was available (including for agriculture and the above-mentioned manufacturing and service industries, as well as for input industries such as fertilizers and agricultural machinery).Detailed information was available for individual deals from 1987 onwards. Data on some 840 deals in agriculture (primary production), 6,900 in food processing and food-support industries (manufacturing) and 2,200 in services related to agriculture and food were available for 1987–June 2009. Data have been calculated on a net basis: The value of net cross-border M&A sales takes the gross value of M&A sales of companies (either national or foreign) to foreign TNCs, from which is subtracted the value of the sales of foreign affiliates (to either national or foreign investors). The value of net cross-border M&A purchases takes the value of purchases of companies abroad by home-country based TNCs, from which is subtracted the value of sales of foreign affiliates of home-country based TNCs.

Source: UNCTAD.

Table III.7. Estimated FDI in agriculture, forestry and fishing[a] and food and beverages[b], various years
(Billions of dollars and per cent)

Region	FDI flows				FDI stock			
	Inflows		Outflows		Inward stock		Outward stock	
	1989–1991	2005–2007	1989–1991	2005–2007	1990	2007	1990	2007
(a) Agriculture, forestry and fishing[a]								
World	0.6	3.3	0.5	1.1	8.0	32.0	3.7	10.2
	(0.3%)	(0.2%)	(0.2%)	(0.1%)	(0.4%)	(0.2%)	(0.2%)	(0.1%)
Developed economies	- 0.0	0.0	0.5	0.6	3.5	11.8	3.4	7.5
	..	..	(0.2%)	..	(0.2%)	(0.1%)	(0.2%)	(0.1%)
Developing economies	0.6	3.0	0.0	0.5	4.6	18.0	0.3	2.4
	(1.8%)	(0.8%)	(0.7%)	(0.4%)	(1.3%)	(0.5%)	(1.5%)	(0.1%)
South-East Europe and the CIS	..	0.3	..	0.0	..	2.2	..	0.3
	..	(0.7%)	..	(18.2%)	..	(0.7%)	..	(1.3%)
(b) Food and beverages[b]								
World	7.2	40.5	12.5	48.3	80.3	450.0	73.4	461.9
	(3.8%)	(2.8%)	(5.6%)	(3.3%)	(4.1%)	(2.9%)	(4.1%)	(2.8%)
Developed economies	4.8	34.1	12.2	45.7	69.9	390.7	73.1	458.1
	(3.2%)	(3.2%)	(5.6%)	(3.4%)	(4.4%)	(3.4%)	(4.1%)	(3.2%)
Developing economies	2.4	5.1	0.3	2.6	10.4	46.9	0.3	3.5
	(6.8%)	(1.4%)	(4.1%)	(1.9%)	(2.9%)	(1.2%)	(1.4%)	(0.2%)
South-East Europe and the CIS	..	1.4	..	- 0.0	..	12.4	..	0.3
	..	(3.2%)	..	(-4.5%)	..	(4.2%)	..	(1.7%)

Source: Annex tables A.I.4–A.I.7.

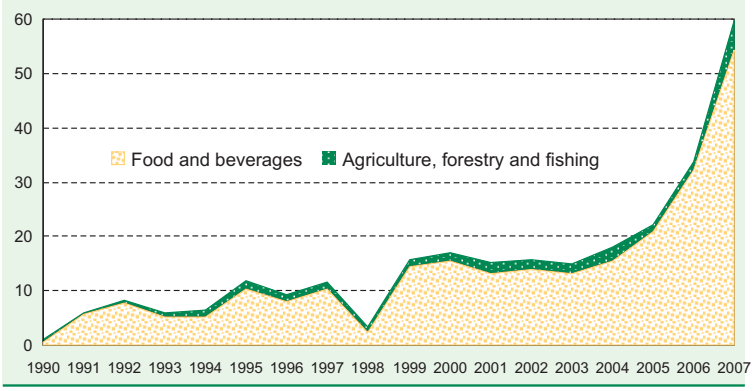
[a] Includes hunting.

[b] Includes tobacco.

Notes: Data are estimates for global flows and stocks of FDI in agriculture, forestry and fishing, and in food and beverages and tobacco, projected from available data. Therefore, these estimates may not be comparable with data shown elsewhere. Figures in parenthesis show the share of these industries in total FDI to all industries. (For details on data sets used, see box III.5.)

Tanzania), as also in some other developing countries (e.g. Ecuador, Indonesia, Malaysia and Viet Nam) (figure III.6). Some reasons for this relatively high share relate to the structure of the domestic economy (especially the high share of agriculture in GDP), availability of agricultural land (mostly for long-term lease), and national policies (including investment promotion in agriculture). Furthermore, some developing countries such as Egypt and Paraguay are also important host economies for food processing FDI: the share of food and beverages in their inward FDI is more than one tenth of their total inward FDI, and this results in linkages with agricultural production.

Figure III.5. FDI inflows in agriculture, forestry and fishing, and food and beverages, 1990–2007
(Billions of dollars)

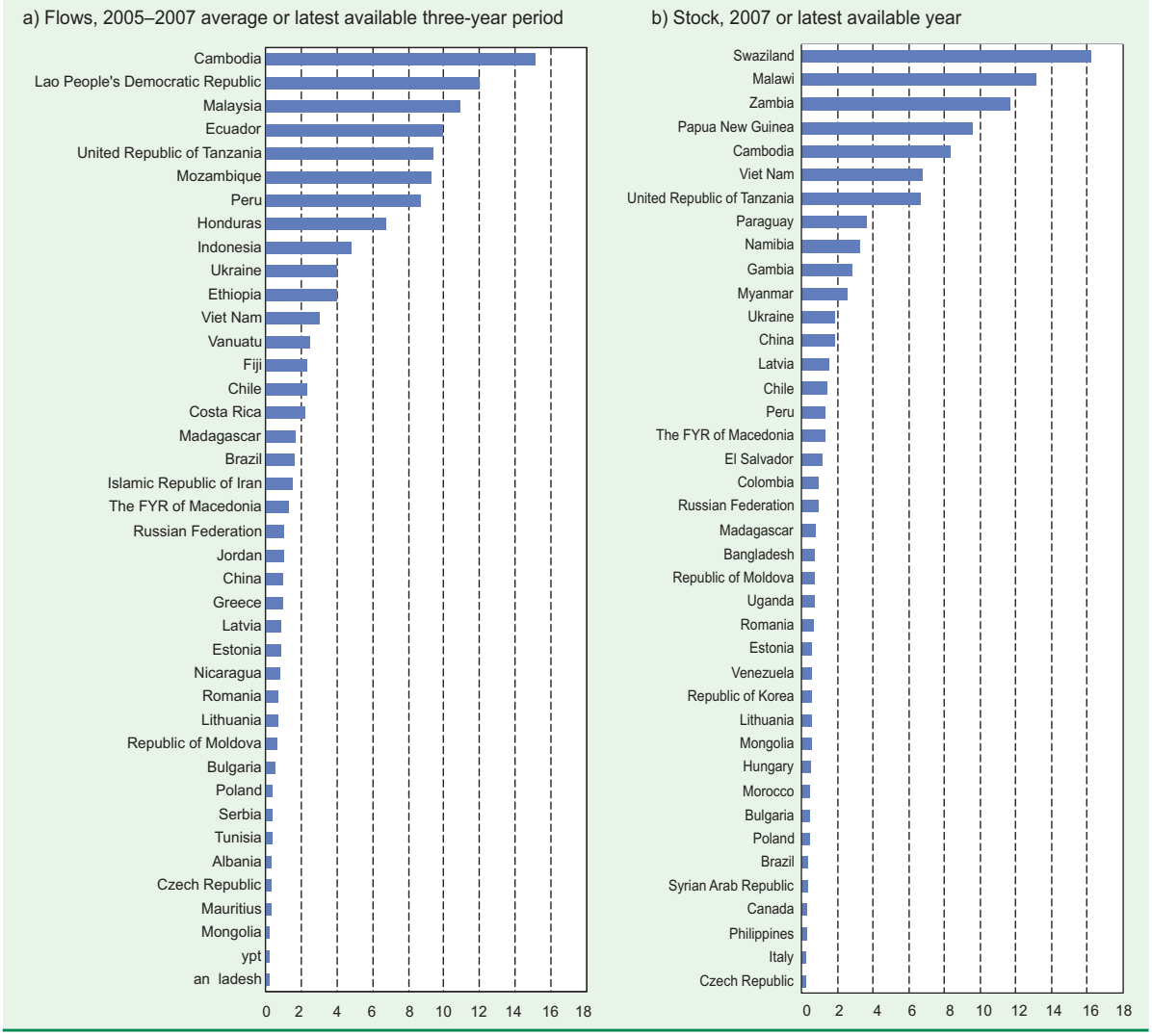


Source: UNCTAD, FDI/TNC database.

Note: Agriculture, forestry and fishing include hunting; food and beverages include tobacco. Figures are for the sum of countries for which data were available for each year. Therefore, the number may vary from year to year, covering an average of 45 countries accounting for about two thirds of world inflows.

The importance of FDI and TNCs also varies by commodity. FDI is usually minimal in staple food items such as rice, but relatively important in some cash crops, such as cut flowers, and in the sugar industry in which crop production is closely linked with the first step of processing (i.e. in sugar mills) (box III.6). In some other commodities such as soya beans, TNCs control the value chain from their position in the wholesale trading segment, and are involved in production mostly through contractual arrangements (section C).

Figure III.6. Share of agriculture in inward FDI of selected economies, various years
(Per cent)



Source: UNCTAD, based on annex table A.III.3.

b. Cross-border M&As

Cross-border M&As have been a relatively important mode of TNC entry into agriculture and related activities (Rastoin, 2008) and hence may be viewed as another indicator of TNC involvement in agriculture. In some years (e.g. 1995 and 1998), the value of net cross-border M&A sales in agriculture has come close to that of FDI flows, and in other years, such as 1991 and 2005, their value has even exceeded that of FDI inflows (table III.8).[29]

Cross-border M&A data for the most recent period (2007–2008) confirm a major rise of investments in agriculture and related activities. This co-evolution is linked to the fact that, until recently, greenfield investments have been very small in agricultural production (see below), and have had little influence on overall FDI flows. Net cross-border M&A sales in agriculture reached $1.8 billion in 2007 and $2.1 billion in 2008 (table III.8). This is partly a parallel trend to that in the food processing industry, where M&As increased sharply in 2007 and 2008 (to $33 billion and $86 billion, respectively). A large proportion of M&A deals targeting agricultural production itself were undertaken by TNCs operating primarily in food processing and trade, confirming the importance of vertical integration.

Cross-border M&A data also throw light on the relative importance of the various stages of the value chain for TNC activities in recent years. Agriculture alone accounts for only a small part of the total value of net cross-border M&As, which is dominated by the food processing industry. Taking the agribusiness value chain as a whole, in 2007 agriculture (primary sector) accounted for 5% of total cross-border M&As and food processing (manufacturing) for 95%, while

Box III.6. TNCs in the production of bananas, coffee, cut flowers, rice, soya beans and sugar

The participation of TNCs varies widely between the six different products for which UNCTAD has prepared in-depth case studies: bananas, coffee, cut flowers, rice, soybeans and sugar. It is limited in rice production, and mostly confined to contractual arrangements through trading in the coffee and soya bean industries. On the other hand, it is fairly strong in bananas, cut flowers and sugar production.

There are no dominant players in global *rice* production. TNCs which are involved in contract farming in Asia and Africa are often rice wholesalers (e.g. Kitoku Shinryo in Viet Nam and VeeTee in Nigeria) or major food manufactures (e.g. PepsiCo in India). In general, with the exception of Tilda's (United Kingdom) contract farming in Uganda, the scale of these TNCs' involvement, and thus their impacts on rice cultivation in host countries has been marginal relative to overall rice production in those countries.

In the major *soya bean* producer countries (Argentina, Brazil and the United States), a small number of TNCs dominate all the stages of the value chain except farming (Moussa and Ohinata, 2009). For instance, four TNCs (ADM, Bunge, Cargill and Louis Dreyfus) control over 40% of crushing capacity in Brazil. In the area of genetically modified soya, one TNC (Monsanto) alone provides 90% of the world's GM soya seeds.

Since the early twentieth century, international *banana* trade has been dominated by vertically integrated TNCs that control production, packing, shipping, import and ripening. Economic power in the banana trade today remains in the hands of a few large developed-country TNCs such as Chiquita, Dole, Del Monte and Fyffes (Liang and Pollan, 2009). It is estimated that about half of the bananas sold by Chiquita, Dole and Del Monte originate from their own plantations. The role of TNCs in production varies considerably across regions and countries: in Central America, their direct involvement is still significant in Costa Rica, Honduras, Guatemala and Panama; in South America, they are involved in Colombia; in the Caribbean, they are no longer directly involved in production; in Africa and Asia, they have some control over production through joint ventures.

Coffee is grown mostly by local producers, the overwhelming majority being small farmers. TNCs play an important role at the stage of purchasing coffee beans in the major growing countries, such as Brazil, Colombia and Viet Nam, as well as in further processing (Krueger and Negash, 2009). At these stages of the supply chain, a few TNCs specializing in trading and roasting dominate the international market.

In certain developing countries where floriculture is a major export industry – such as Ethiopia, Kenya and Uganda – the participation of foreign firms in *cut flower* farming has been significant, and they provide an important opportunity for business linkages with local farmers through outgrower arrangements or contract farming (Wee and Arnold, 2009).

In countries such as Brazil, South Africa and some LDCs in Southern Africa (Malawi, Mozambique, the United Republic of Tanzania and Zambia), FDI has played a major role in expanding *sugar* production and exports (Van Giffen and Kalotay, 2009). In Brazil, sugar and ethanol production attracts TNCs – from traditional sugar producers to energy companies and investment funds. In Southern Africa, newly emerging investors, such as the Associated British Foods' South African affiliate Illovo, are becoming major players in local sugar production, while Tongaat Hulett, a South African sugar TNC, has expanded production to Mozambique, Swaziland and Zimbabwe.

Source: UNCTAD, based on the commodity case studies.

wholesale trade, which underwent restructuring in 2007 and 2008, had a negative value of net M&A sales, due to divestments in certain foreign locations (figure III.7).[30]

The dominance of food processors as a target for M&As in the agricultural and food supply chain suggests that food TNCs (figure III.7) are major investors in primary production, distribution and marketing of food products (see also section E). In agricultural production alone there were 63 cross-border M&A purchases valued at $4.5 billion in 2007, 70% of these M&As by value were undertaken by food-related manufacturing and services TNCs.

Data on the *international production* of affiliates of TNCs, including information on indicators such as sales, exports, employment and assets of foreign affiliates in host economies, are available on a selective basis. Data for affiliates abroad of United States TNCs in agriculture, hunting, forestry and fishing show that in the total sales of affiliates, the share of domestic sales in host countries was the most dynamic element in 1983–2006, closely followed by sales to foreign countries. On the other hand, the value of sales back to the home country was shrinking (figures III.8 and III.9). These patterns suggest dual motivations on the part of investors: market-seeking motives related to local sales in host countries, and resource-seeking ones related to exports, mainly to third countries. The composition of exports themselves revealed that a large proportion of exports to third countries took place within the corporate network (i.e. between affiliates of the same firm), confirming a high degree of international integration of TNCs involved in agricultural production (section C).

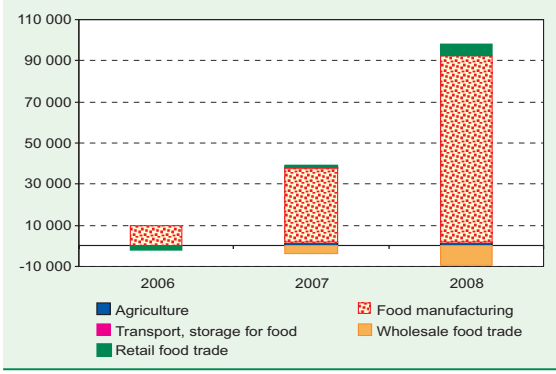
Table III.8. Comparison of FDI inflows and net cross-border M&A sales in agriculture and food processing, 1990–June 2009
(Millions of dollars)

Year	Agriculture (primary)		Food processing (manufacturing)	
	FDI inflows	Net cross-border M&A sales	FDI inflows	Net cross-border M&A sales
1990	559	112	505	9 261
1991	308	453	5 688	4 151
1992	363	- 25	7 846	5 632
1993	544	- 8	5 276	4 810
1994	1 194	- 113	5 218	10 180
1995	1 439	891	10 324	7 793
1996	1 346	- 36	8 027	397
1997	1 338	158	10 246	14 579
1998	1 127	595	2 330	1 621
1999	1 391	301	14 308	3 293
2000	1 601	485	15 337	44 595
2001	1 901	85	13 180	4 105
2002	1 627	121	13 997	21 333
2003	1 689	174	13 212	16 812
2004	2 471	306	15 575	8 178
2005	1 256	7 568	20 772	31 646
2006	1 420	56	32 252	9 196
2007	5 450	1 818	54 298	32 998
2008	..	2 102	..	86 338
January–June 2009	..	404	..	3 895

Source: UNCTAD, FDI/TNC database and cross-border M&A database.

Note: FDI data refer to agriculture, forestry, fishing and hunting; and food, beverages and tobacco. M&A data refer to agricultural production and food processing only, as detailed industry data are available. Figures for inward flows are the sum of countries for which data are available for each year. The number may vary from year to year, and covers an average of 45 countries accounting for about two thirds of world inflows. Cross-border M&A sales are calculated on a net basis as follows: cross-border M&A net sales in a host economy = sales of companies in the host economy to foreign TNCs (-) sales of foreign affiliates in the host economy. The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

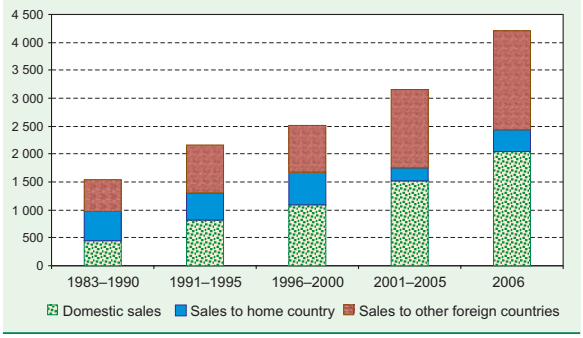
Figure III.7. Distribution of cross-border M&As along the value chain in agriculture and food industries, 2006, 2007 and 2008
(Millions of dollars)



Source: UNCTAD, based on the cross-border M&A database.

Note: Secondary for food includes the processing of food, the manufacturing of food processing machinery and fertilizers. For technical description of agricultural M&A data see note of table III.8.

Figure III.8. Sales and exports of majority-owned affiliates abroad of United States TNCs in agriculture, hunting, forestry and fishing, 1983–2006
(Millions of dollars)



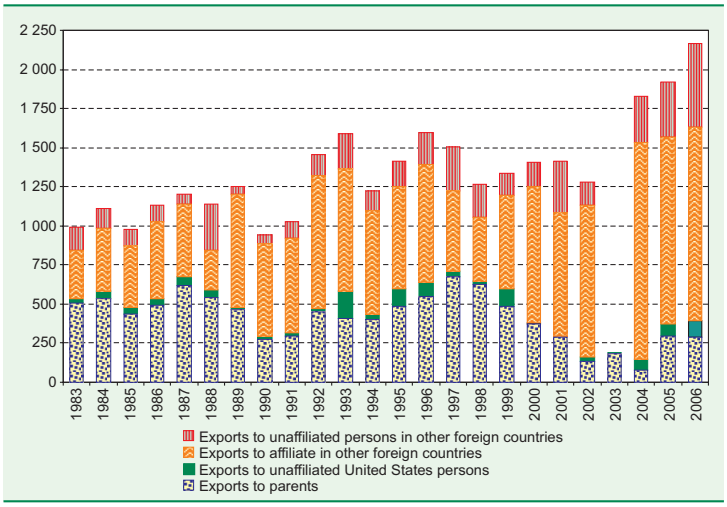
Source: UNCTAD, based on data from United States Bureau of Economic Analysis.

c. Geographical patterns

Data on FDI inflows in agriculture since 2000 indicate the increasing attractiveness of developing regions, particularly Asia and Oceania and Latin America and the Caribbean – and of the transition economies of South-East Europe and the CIS as hosts to FDI in agriculture (figure III.10). In contrast, flows to Africa appear to have declined.[31] After 2000, the FDI inflows to agriculture in developed countries remained small and declined overall. These trends are also reflected in inward FDI stock data (figure III.11). The data suggest that, as mentioned earlier, countries with large territories (such as Australia, Canada, China, Indonesia, the Russian Federation and the United States) are hosts to significant levels of inward FDI stocks or flows in agriculture (table III.9). Other host countries which receive significant amounts of FDI (according to either inward FDI stock or flow data available) include various Asian countries, such as Cambodia, China, Indonesia, Viet Nam (in terms of both flows and stock); Malaysia (in terms of flows only); the Republic of Korea and Turkey (in terms of stock only); and Latin American countries, such as Brazil and Chile (in term of both flows and stock); Ecuador, Costa Rica, Honduras and Peru (in terms of flows only). There was only one African country (the United Republic of Tanzania) on the list of the 20 largest recipients of flows or stocks reported (table III.9). Among developed countries, important recipients include various EU members: France, Poland, Romania and the United Kingdom (in term of both flows and stock); Bulgaria (in terms of flows only); Hungary and Italy (in terms of stocks); as well as Australia, Canada and the United States (in terms of stocks only).

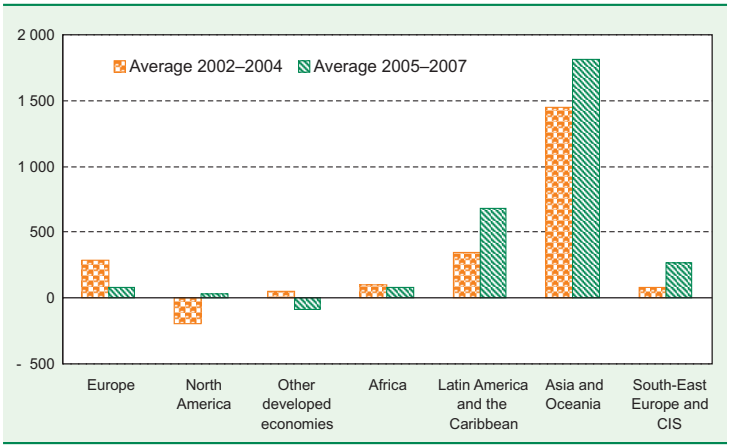
FDI and other forms of TNC participation in agriculture vary by product, region and time (figure III.12). In terms of the main produce targeted by foreign

Figure III.9. Exports of majority-owned affiliates abroad of United States TNCs in agriculture, hunting, forestry and fishing, by destination, 1983–2006
(Millions of dollars)



Source: UNCTAD, based on data from United States Bureau of Economic Analysis.

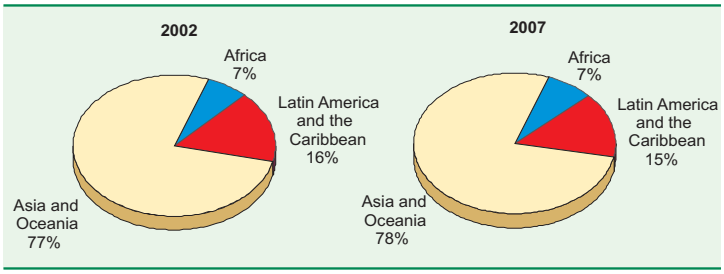
Figure III.10. Inward FDI flows in agriculture by region, 2000–2007
(Millions of dollars)



Source: UNCTAD, FDI/TNC database.

Note: Regional and sub-regional totals include flows to only those countries for which data are available.

Figure III.11. Inward FDI stock in agriculture by developing region, 2002 and 2007
(Per cent)



Source: UNCTAD.

Note: Regional shares cover only those countries for which data are available.

investors, each region and subregion of the world exhibits some degree of specialization. In developed regions, most of TNC activity has concentrated on cash crops such as fruits, vegetables and flowers, and on animal products like meat, poultry and dairy. Developing regions show a somewhat different and more diverse picture: For instance, South American countries have attracted FDI in a wide range of products such as wheat, rice, sugar cane, fruits, flowers, soya beans, meat and poultry, while in Central American countries FDI has focused mostly on fruits and sugar cane. In Africa, foreign investors have shown a particular interest in staple crops such as rice, wheat and in oil crops. But there is also TNC involvement in sugar cane and cotton in Southern Africa and in floriculture in East Africa. In South Asia, foreign investors have mainly targeted the large-scale production of rice and wheat, while TNC activities in other Asian regions have concentrated more on cash crops, meat and poultry. TNCs in transition economies have been mainly involved in dairy products but more recently they also seek to invest in wheat and grains. While the bulk of FDI in developing regions has targeted food and cash crops, various projects related to oil crops in Africa and sugar cane in South America aim at increasing biofuel production (box III.6, figure III.12).

Cross-border M&A sales data – the equivalent of inward FDI – show a slightly different picture: developed countries as targets of takeovers remained relatively important until recently, despite a rise in the share of developing countries in 1996–2000 (table III.10). Cross-border M&A sales of developing countries exceeded those of developed countries for the first time in 2007, and remained the main targets of M&As in 2008. The net cross-border sales of economies in transition, too, rose quickly after 2000. They nevertheless declined after the peak of 2007.

Information on the countries of origin of FDI in agriculture is available on a selective basis. Of the 20 most important countries of origin of outward FDI stock in agriculture, 12 were developed countries, with the United States and Canada occupying the top

Table III.9. Inward FDI flows and stock in agriculture, selected countries, various years
(Millions of dollars)

Host economy	Flows, average 2005–2007	Host economy	Stock, 2007 or latest year available
China	747.0	China	6 156.2[a]
Malaysia	671.2	United States	2 561.0
Brazil	420.9	Viet Nam	1 753.1
Russian Federation	187.7	Canada	1 497.8
Indonesia	119.6	Indonesia	1 001.4[a]
Cambodia	87.0	Russian Federation	953.0
United Kingdom	84.7	Chile	949.7
Poland	73.9	Italy	624.3
Papua New Guinea	71.1	Australia	624.2
Romania	67.7	France	616.4
France	61.5	Ukraine	557.6
Ukraine	57.3	Hungary	493.9
Viet Nam	51.4	United Kingdom	490.8
Peru	51.0	Poland	446.3
Chile	49.5	Romania	412.8
United Republic of Tanzania	40.5	Korea, Republic of	400.5
Honduras	36.2	Brazil	383.6
Bulgaria	34.6	Cambodia	318.7
Ecuador	31.8	Turkey	289.0
Costa Rica	31.4	United Republic of Tanzania	252.4

Source: UNCTAD, based on annex table A.III.3.

[a] Based on approval data.

Note: Data were available for a selected number of countries only (box III.5). Moreover, certain countries reported only FDI flows or FDI stock in agriculture.

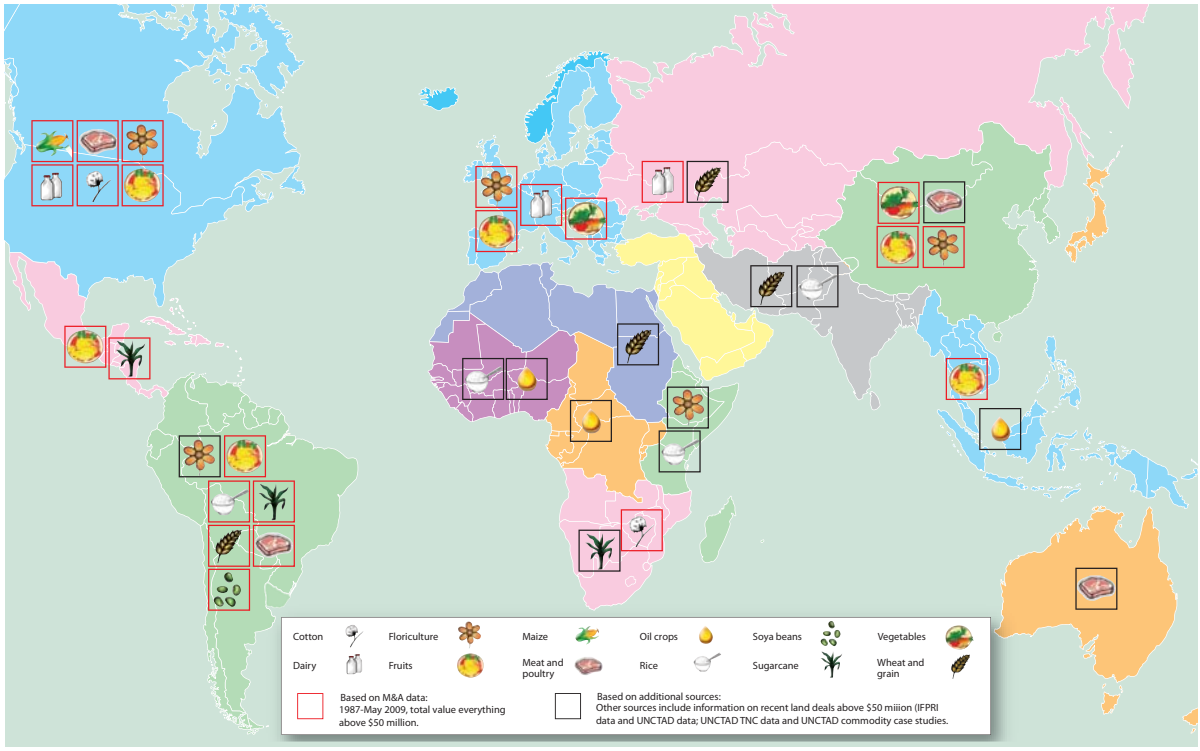
positions in 2007 (figure III.13). There were also six developing countries on the list – with China in third position and the Republic of Korea seventh – and one economy in transition (Croatia). Developed countries also continue to be the main home-countries of acquirers in cross-border M&As in agriculture, but since 2000, developing countries, mainly from South, East and South-East Asia as well as Latin America and the Caribbean, have been gaining in importance as sources of purchases.[32] In 2008, developing economies became major sources of cross-border take-overs, with Latin American firms this time taking the lead.[33]

2. Contract farming

As discussed in section C, contract farming is a significant alternative to FDI in terms of TNC participation in agriculture, and there are some indications that it is growing (Da Silva, 2005). The term contract farming covers a variety of arrangements (box III.7), differing by type of contractor, type of product, intensity of coordination (usually vertical) between farmer and TNC, and number of key stakeholders involved. Five different basic models of contract farming can be distinguished: centralized, "nucleus estate", multipartite, informal and intermediary (box III.7).

TNCs in downstream stages of value chains, such as food manufacturers and retail TNCs, secure

Figure III.12. Main agricultural produce targeted by TNCs in foreign locations, by subregion, up to 2009



Source: UNCTAD, based on the sources cited above.

Table III.10. Net value of cross-border M&As in agriculture by target region, 1987–May 2009
(Millions of dollars)

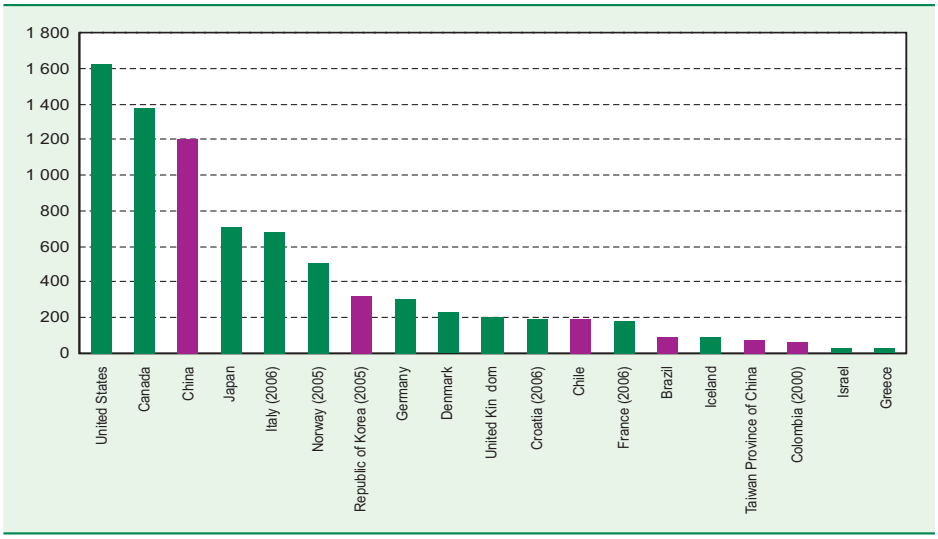
Target region / economy	1987–1990	1991–1995	1996–2000	2001–2005	2006	2007	2008	2009 [a]
World	444.9	239.9	300.7	1 650.6	56.3	1 818.3	2 102.1	400.8
Developed economies	393.3	249.9	160.6	1 639.1	50.8	315.3	1 049.5	348.5
Europe	8.3	29.9	134.3	1 286.1	7.7	277.2	235.2	13.7
North America	371.1	176.4	- 26.0	- 11.8	15.2	-	750.6	-
Other developed countries	13.8	43.6	52.4	364.9	27.9	38.1	63.7	334.7
Developing economies	51.6	- 10.0	140.0	8.1	- 30.9	1 101.2	1 050.3	52.4
Africa	-	-	2.3	-	-	-	-	-
Latin America and the Caribbean	51.6	12.9	93.7	19.8	- 6.0	277.8	849.5	43.0
South and Central America	51.6	12.9	93.7	21.4	- 6.0	277.8	849.5	43.0
Caribbean	-	-	-	- 1.6	-	-	-	-
Asia	-	- 22.9	44.0	- 11.7	- 24.9	778.9	200.8	9.4
West Asia	-	-	-	-	4.0	3.7	2.5	-
South, East and South-East Asia	-	- 22.9	44.0	- 11.7	- 28.9	775.3	198.3	9.4
Oceania	-	-	-	-	-	44.5	-	-
South-East Europe and the CIS	-	-	-	3.3	36.4	401.8	2.3	-
South-East Europe	-	-	-	2.4	18.6	397.9	-	-
CIS	-	-	-	0.9	17.8	3.9	2.3	-

Source: UNCTAD, cross-border M&As database.

[a] Up to May 2009.

Note: Net cross-border M&A sales in a host economy are the sales of companies in the host economy to foreign TNCs minus the sales of foreign affiliates in the host economy. Data cover only those deals that involved an acquisition of an equity stake of more than 10%. (See also box III.5.)

Figure III.13. Outward FDI stock of selected economies in agriculture, 2007 or latest year available
(Millions of dollars)



Source: UNCTAD, FDI/TNC database.

Note: Data for Taiwan Province of China are on an approval basis.

agricultural inputs in host countries by entering into contracts with local farmers. These contracts can be negotiated and managed by the parent company, agents or local affiliates. There are no overall data available at the global level – and in the large majority of countries, even at the national level – to gauge the full extent and contours of contract farming in the same quantitative manner as for FDI or cross-border M&As. However, there are sufficient data available to measure the general magnitude of the phenomenon, as well as its wide geographic spread and considerable intensity in developing countries.

The global spread of the phenomenon across Africa, Asia and Oceania, and Latin America and the Caribbean can be gauged from the contract farming activities of the largest agribusiness TNCs – from manufacturers to traders. TNCs are engaged in this and other non-equity forms of participation in agricultural production in over 110 countries worldwide. For example, in 2008 the food processor Nestlé (Switzerland) had more than 600,000 contract farmers in over 80 developing and transition economies as direct suppliers of various agricultural commodities (Nestlé, 2008). Similarly, Olam

Box III.7. A typology of contract farming

In recent years, contract farming has spread widely, and particularly rapidly to developing countries, as a way to coordinate production and ensure quality. One reason is that it offers companies higher returns from high-value export crops and the introduction of new technologies. In Viet Nam, for example, there are indications that 90% of cotton and fresh milk, 50% of tea and 40% of rice production are being purchased by enterprises through contracts (Kirsten and Sartorius, 2002; Da Silva, 2005). There are five different models of contract farming:

- The *centralized model* is the classical model for contract farming in which a TNC buys produce from a large number of (small) farmers. In this model there is strict vertical coordination, which means that quality is tightly controlled and quantity is determined at the beginning of the growing season. Products produced and traded under this model are those requiring a high degree of processing (e.g. sugar cane, tea, coffee).
- The *nucleus estate model* differs from the centralized model in that the contractor not only sources from independent farmers but also has its own production facilities (an estate plantation). The central estate is usually used to guarantee throughput for the processing unit but is also sometimes used only for research and breeding purposes. This model is mainly used for perennial crops, but there are examples of its application for other crops as well. One *variation* of this model is *outgrowing,* under which a central facility is surrounded by growers who produce on their own land under contract; the central facility provides inputs and technical assistance to growers; it guarantees to purchase the growers' crop subject to meeting predefined standards; and offers growers a pre-agreed percentage of the final sale price of their product (UNCTAD, 2002a: 10–11). Outgrower schemes are most commonly organized around a processor, though they may also be constituted by other off-takers (including traders, exporters or end users), as well as input suppliers, governments or government agencies and non-governmental organizations. Outgrower schemes, in particular, play a special role in agricultural development.
- In the *multipartite model* the contractor is a joint venture between a statutory entity and a private company (such as a TNC). Public or private providers of credit, extension services and inputs may be part of the arrangement. This model has often been used by developing countries as part of the liberalization process. Vertical coordination often increases once the joint venture has sufficient control over its transactions with the farmers.
- The *informal model* is characterized by individual entrepreneurs or small companies contracting informally with farmers on a seasonal basis. The success of this model often depends on the availability of supporting services, sometimes provided by government agencies. An informal contractual relationship provides fewer options for vertical coordination than a more formal relationship. This model is used particularly for crops that require only a minimal amount of processing, such as fresh fruit and vegetables.
- In the *intermediary model,* contractual arrangements are made between at least three different levels: a processor or major trader formally contracts with a collector (or "middle person"), who then informally contracts with a number of farmers. The model has both elements of the centralized and the informal models. Vertical coordination is more difficult under this model as there is no direct link between the principal contractor and the farmers.

Source: UNCTAD, based on Eaton and Shepherd, 2001; and Bijman, 2008.

(Singapore), a developing-country TNC, has a globally spread contract farming network: in 2008, it sourced 17 agricultural commodities from approximately 200,000 suppliers in 60 countries (most of them developing countries) (Olam, 2008). As for Unilever (United Kingdom/Netherlands), agricultural crops which make up two thirds of the raw materials used by the company, are sourced mostly from 100,000 smallholder farmers and larger farms in developing countries.

Apart from these global players, many other TNCs are involved in contract farming on a regional or geographically selected basis. For example, SAB Miller (United Kingdom) has contract farming programmes with smallholder farmers in India, South Africa, Uganda, the United Republic of Tanzania and Zambia. The number of smallholder farmers involved in contract farming in these countries with SAB Miller has increased from 62 in 2000–2001 to 16,829 in 2009.[34] Another example is Grupo Bimbo (Mexico), which in 2008 had more than 3,000 contract suppliers spread across various Latin American countries (Grupo Bimbo, 2008). Supermarket TNCs such as Wal-Mart (United States) and Carrefour (France) are other prime examples of companies with geographically selected contract farming. The latter, for instance, is sourcing from large numbers of contract farmers in 18 developing countries.[35]

In various developing economies, including more advanced and lower-income countries, the share of contract farming in total farming is high, and the intensity of TNC involvement is important. For instance, in Brazil, 75% of poultry production and 35% of soya bean production is sourced, largely by TNCs, through contract farming (UBA, 2005; Moussa and Ohinata, 2009); in Viet Nam the story is similar, with 90% of cotton and fresh milk, 50% of tea and 40% of rice being purchased through farming contracts (Anh, 2004); and in Kenya, about 60% of tea and sugar are produced through this mode.[36] Among

the poorest countries, contract farming – primarily by TNCs – in some cash crops can be exceptionally high: for example, in Mozambique this was the case for 100% of cotton production, as also in Zambia for both cotton and paprika. An extreme example of TNC involvement in contract farming is Nestlé in Pakistan where in 2007 the local affiliate collected milk from 140,000 farmers over an area of 100,000 square kilometers.[37]

Case study evidence (as illustrated below) highlights the major role that contract farming plays in various host countries. These cases confirm that contract farming with TNC involvement is present in all developing regions and significant in some instances. In countries where FDI in agriculture is permitted (through leasing or ownership of land), contract farming can still be a leading choice of TNCs, because it is midway between coordination through markets or standards on the one hand and FDI on the other. Compared with coordination of standards, contract farming is riskier, but ensures better control over product specifications, and compared with FDI, it may be less capital-intensive and less risky, but requires that farmers develop better capabilities.

- In *Asia*, an example of a contract farming scheme that is part of a GVC is provided by Nestlé India which has a retail network of some 700 outlets in India, serviced by 4,000 distributors and covering 3,300 towns. Its products include baby food, infant milk powder, dairy whiteners, sweetened condensed milk, ghee, UHT milk, curd and butter. In 2001, Nestlé sourced milk from over 8,500 local farmers, from larger ones directly and from smaller ones through agents.[38] In Malaysia, Nestlé was reported to have started a red rice contract farming project in 2007, with the support of the Agricultural Department of Sarawak, to supply its global production of infant cereals (GRAIN, 2008a).
- Again in *Asia*, Pepsi (United States) has been involved in the export of Basmati rice from India since 1990. After extensive R&D in the country, Pepsi ventured into contract farming in Basmati rice in 1999 after having invested over Rs.5 million in a processing plant (MANAGE, 2003). By the end of 2004, the company extended contract farming from 800 hectares to 4,000 hectares to meet the requirements of its manufacturing plant.
- In China's rice industry, Japanese trading TNCs started procuring specific Japanese rice varieties through contract farming in the late 1990s, and exported them back to Japan. For example, Mitsui

Box III.8. Contract farming in the Lao People's Democratic Republic

In the Lao People's Democratic Republic, contract farming takes various forms mentioned in box III.7. In the *rice* industry, the Lao Arrowny Corporation, a joint venture between a Lao and a Japanese investor, established in 2002, produces organic Japanese rice for export to Japanese expatriates in South-East Asia. The company recruited small farms throughout the country, covering a combined area of 18,500 hectares countrywide. In 2004, the company had approximately 2,000 households under contract. In the *tea* industry, contract farming involves 520 households and covers a production area of approximately 400 hectares. The contracts are signed between Chinese traders and a local Provincial Government, which organizes farmers to grow the tea for a predetermined price. The Chinese investors provide seeds and technical assistance on production and processing methods, and they purchase all of the tea from the farmers to sell in the Chinese market. In the *maize* industry, verbal contracts have been made between a Thai import firm and approximately 600 households with a total cultivation area of 1,136 hectares. The firm supplies contracted farmers with inputs including seeds, fertilizer and credit. In *Soya bean* production, contract farming is organized mostly by a United States–Lao joint venture feed mill firm, although in 2004, many contracts were breached and the supply chain broken when Chinese traders offered more competitive prices and purchased soya beans from the contracted farmers. In the *sugar* industry, Lao farmers produce sugar cane for a Chinese sugar mill across the border. The buyers provide some seeds and fertilizer, but do not offer a guaranteed price. In *sweetcorn* production, Vientiane Province Lao Agro Industry Co. (LAI) is a Thai–Lao joint venture affiliated with Lampang Food Products, a Thai food processor and exporter. LAI has been operating in the country since 1994, processing bamboo shoots, baby corn, mangoes, and sugar palm seed. LAI contracts households from the sweetcorn farmer production and marketing group (FPMG) to supply sweetcorn to its cannery. The company provides credit for seeds and fertilizer, while the local government provides credit for land preparation. Although only 11 households on 3.5 hectares were contracted in the 2006/07 dry season, LAI is targeting a planting area of approximately 160 hectares to produce 2,000 tons of sweetcorn. In *horticulture*, Thai processing firms organize contract farming of horticulture crops such as mustard cabbage. Finally, in the *rubber* industry, Pará rubber tree cultivation was introduced in the mid-1990s with Chinese assistance. The area under rubber cultivation in the Northern provinces has since expanded steadily due to growing demand from China. Although large-scale concession areas currently account for most of the rubber production, the Government is promoting smallholder rubber production as a way of stabilizing shifting cultivation and increasing upland farmers' incomes.

Source: UNCTAD, based on Setboonsarng, Leung and Stefan, 2008.

has been engaged in rice contract farming in China since 1998 through a joint venture with Satake (a Japanese manufacturer of machinery for rice and other food products) and a local company.[39]

- In the rice industry of Viet Nam and its neighbours in Indochina, Kitoku Shinryo (Japan), which is mainly a wholesale dealer of rice and maize products, established a joint venture in 1991 with An Giang Import-Export, a local SOE, to construct a rice-processing mill in Viet Nam. The joint venture company procures high-quality rice from 2,000 contracted farmers from An Giang Province of Viet Nam, as well as adjacent provinces in Cambodia and Thailand (ADB, 2005; Khiem, 2005).
- In some countries, such as the Lao People's Democratic Republic, there is relatively ample information available on the product scope of contract farming (box III.8). It covers rice, tea, soya beans, sugar cane, sweetcorn, horticultural and rubber production, and involves various types of foreign investors. In the provinces of the Lao People's Democratic Republic (as well as Cambodia) which border Thailand and China, contract farming has emerged in response to the lack of local markets and the attraction of the markets of the larger neighbouring countries (Setboonsarng, Leung and Cai, 2006).
- In *Latin America and the Caribbean*, large banana TNCs, such as Chiquita, Dole, Del Monte and Fyffes, have developed extensive contract farming schemes since the 1970s (Hall, 2008; Arias et al., 2003), and have kept their own plantations only in some countries (e.g. Chiquita, Del Monte and Dole in Colombia, Costa Rica, Ecuador, Guatemala and Honduras). In countries such as Ecuador, Nicaragua and the Caribbean countries, TNCs involvement in banana production is mainly through contract farming (Hall, 2008).
- In *Africa*, one example of contract farming is horticulture and floriculture in Kenya. Over time, the country has become a major source of horticultural exports to various developed countries (Wee and Arnold, 2009). TNCs have established business linkages with local farmers through various outgrower arrangements. Wholesalers that source flowers from different parts of the world also contribute to contract farming, which involves many local smallholders. One of the South African affiliates of the Flower Group (Netherlands) sources flowers from more than 70 growers in Kenya. Flamingo Holdings (United Kingdom), a flowers and vegetables TNC, involves over 600 smallholders in growing vegetables for the company in Kenya.
- In *Africa*'s coffee industry, an important contract farming scheme in Uganda involves the production of Kawacom Sipi Organic Arabica coffee. The scheme is run by Kawacom (U) Ltd., an affiliate of Ecom Agroindustrial Corporation (a commodity trading company incorporated in Switzerland). In the area covered by the scheme, 62% of households have registered in it. Kawacom pays an organic premium which gives the farmers the incentive to undertake more stages of the production process on the farm, including assuming the risks associated with the necessary investment in equipment and labour (Bolwig, Gibbon and Jones, 2009).
- In the banana industry in *Africa*, TNCs' involvement takes place mostly via contract farming, with the exception of Cameroon and Côte d'Ivoire (Hall, 2008). These TNCs still control banana exports.

3. Trends in South-South investment in agriculture

Although no clear trends can be discerned so far, there are indications that South-South investment in agricultural production, both FDI and non-equity forms, is on the rise. The drivers behind most of these investments do not differ in kind from those of developed-country TNCs. For instance, Sime Darby's (Malaysia) $800 million investment in a plantation in Liberia in 2009 is a horizontal diversification by the world's largest firm in the oil palm industry.[40] Similarly, Chinese investments and contract farming in commodities such as maize, sugar and rubber in the Mekong region – especially in the Lao People's Democratic Republic and Cambodia – are driven by the home country's strategy to gain access to resources for its agribusinesses, and the host countries' objective to secure investments for developing their agriculture (Rutherford, Lazarus and Kelley, 2008). The proximity of home and host countries means that relatively small companies can be involved in the China-Mekong region investments. At a more modest level, regional expansion also underlies Zambeef's (Zambia) expansion into Ghana and Nigeria.[41] In Latin America, the Grupo Bimbo (Mexico) has ventured into a number of countries in that region.[42]

However, in the wake of the food crisis (section B.3), an additional significant home-country driver of the expansion of South-South investments is the push for food security by countries such as China, the Republic of Korea and, most significantly, the Gulf Cooperation Council countries of West Asia. All of these countries are major importers of grains, with large populations relative to arable land (Woertz, 2009; World Bank, FAO and IFAD, 2009a; Freeman, Holslag and Wei, 2008). To varying degrees, the governments of these source countries have decided that investment abroad in countries, which gives them control over crop production and export of the output back to the home economy, can contribute

towards ensuring food security for their populations. In fact, historically there has been a recurring cycle of reliance on foreign investment in agriculture.[43] However, inasmuch as the recent food crisis seems to be the result of a confluence of factors, the drivers of food-security-related FDI may be less volatile than before.

Until recently, the availability of underutilized agricultural land was seen as perhaps the main host-country factor driving for food-security-related FDI in agriculture (Woertz et al, 2008). However, it is now increasingly recognized that perhaps the most crucial factor or driver is not land per se, but rather the availability of water resources to irrigate the land. For example table III.11 shows that many West Asian economies possess very little fresh water (per capita), and a number of these countries are making (or considering making) investments in relatively water-abundant countries and land. It is this critical water situation that primarily explains why a number of GCC countries have overturned their decades-old policy of fostering agricultural production in their own economies to undertake agricultural investments in other developing countries, as well as transition economies. Saudi Arabia is an example of this policy shift (box V.14). Apart from the GCC, other investor countries from the South, including China, face severe water shortages for agricultural production (FAO, 2003; UNESCO, 2009; Xie et al., 2009).

Irrespective of longer term considerations, South-South FDI that is driven by food security concerns is currently in a cyclical upswing, but its scale is not easy to determine because many relevant deals have only recently been signed; others are being considered or in negotiation. So far, of the definite larger scale investments involving land acquisitions (i.e. outright ownership and long-term leases), the largest investing countries from the South include Bahrain, China, Qatar, Kuwait, the Libyan Arab Jamahiriya, Saudi Arabia, the Republic of Korea and the United Arab Emirates. The leading developing host countries are in Africa, with Sudan, Ethiopia, and the United Republic of Tanzania among the foremost recipients of investments (figure III.14).

As mentioned earlier, the scale of South-South FDI for food security cannot be gauged, as the majority of projects are at early stages of negotiation, and it is unclear whether they will become actual investment projects in the future. Nevertheless, the scale of some of these potential investments is large and controversial, especially as they affect the existing use of agricultural lands and the production structures of host economies, thereby creating major changes and potential displacements in traditional agriculture (chapter IV).

Table III.11. Water resources in selected regions and countries, 2008

(Cubic metres)

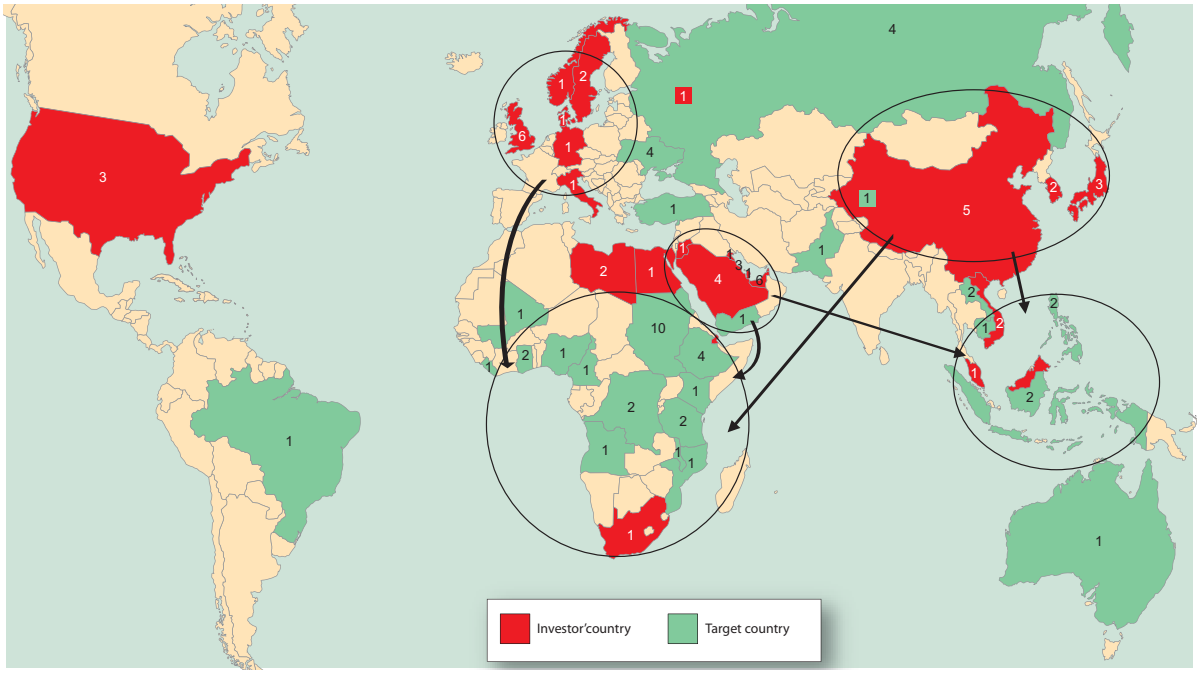
	Region / country	Fresh water resources per capita
Selected West Asian countries	Bahrain	..
	Iran, Islamic Republic of	1860
	Iraq	..
	Kuwait	..
	Oman	399
	Qatar	126
	Saudi Arabia	104
	United Arab Emirates	49
	Yemen	194
Regions	Latin America and the Caribbean	24 471
	Europe and Central Asia	11 473
	Sub-Saharan Africa	5 093
	East and South-East Asia, and Oceania	5 022
	South Asia	1 230
	West Asia and North Africa	757
Major host countries for investors seeking to operate farms for food security	Australia	24 118
	Brazil	29 000
	Cambodia	8 642
	Ethiopia	1 623
	India	1 152
	Kazakhstan	4 978
	Kenya	581
	Myanmar	..
	Pakistan	366
	Philippines	5 664
	Sudan	813
	Thailand	3 333
	Turkey	3 150
	Ukraine	1 127
	Viet Nam	4 410

Source: UNCTAD, based on FAO data.

E. Major TNCs in agriculture and related activities

This section identifies the major TNCs involved in agriculture and related industries, and examines their characteristics and competitive or ownership advantages. Most major TNCs operating in agriculture and related industries – with the notable exception of "new investors" – have operated overseas for many decades. However, a number of them no longer focus on agricultural activities, trying instead to influence these activities by controlling and coordinating value chains via various forms of non-equity participation. This does not mean, however, that they are entirely absent from agricultural production (section C). For example, TNCs in the banana industry still source about half of their produce from their own plantations (box III.6). TNCs therefore may be directly involved in agricultural production, or they may be purchasers of agricultural output, or key suppliers of critical inputs to agriculture, or distributors of that production, or they may internalize downstream activities such as processing, marketing, branding and merchandising downstream outputs.

Figure III.14. Investor and target regions and countries in overseas land investment for agricultural production, 2006–May 2009
(Number of signed or implemented deals)



Source: UNCTAD.

Notes: This map covers only confirmed deals that have been signed, some of which have been implemented. However, not all signed deals have been implemented, and all signed deals that were rescinded by one or both parties before the end of May 2009 are excluded. Prospective deals reported in the press, but which have not progressed to the stage of agreement are excluded. The total number of deals was 48, shown by both source and destination countries.

In addition to TNCs in agribusiness value chains, firms from unrelated activities may also move into agriculture. Notable examples are foreign extractive industry firms moving into agriculture in Africa, services firms diversifying into agricultural assets,[44] and manufacturing firms attempting to acquire land abroad for agricultural production. Additional notable cases are general trading TNCs, especially Japanese *sogo shosha* (general trading companies), which sometimes also have projects in agricultural production (Goerzen and Makino, 2007). Some of these projects started in the 1970s, while others, such as Mitsui's investment in Brazil,[45] are more recent. These borderline cases are not covered in the section below, which focuses on TNCs with a systemic involvement in agriculture and directly related activities.

Some of the analysis below uses lists of top TNCs (when data are available) to identify the major TNCs in agriculture and related activities, while other parts use more descriptive methods. There is a separate list for large privately owned TNCs, which are important players in all segments of agribusiness, but for which data on international activities were not available (table III.12). For that reason, those firms are ranked by their sales in agriculture and related industries rather than by foreign assets. TNCs with a major link with agriculture, and thus the ones covered in this section, are either those based in agricultural production, or have stronger than arm's-length relationships or modalities with agricultural producers such as contract farming. Most of these TNCs are from developed economies, but some are also from developing economies such as Malaysia, Hong, Kong (China), Mexico and Singapore (table III.13, box III.9).

1. Agriculture-based TNCs

The universe of TNCs based, or primarily involved, in the agricultural production segment of the value chain (farms and plantations) is relatively small at present (annex table A.III.4). Judging from the top 25 list, most companies based in agriculture usually also have major operations in downstream activities (such as processing or trading of the commodities produced), especially abroad. Consequently, the distinction between agriculture-based TNCs and those further downstream, is not always clearcut. The group of the 25 largest agriculture-based TNCs also differs from the list of top firms in agriculture-related industries (section E.2) in terms of a major presence of developing-country firms. The list of leading agriculture-based TNCs is almost evenly

Table III.12. Top 25 TNCs in agribusiness industries, ranked by foreign assets, 2007
(Companies in bold are based in a developing or transition economy)

Rank	Agriculture-based	Suppliers	Food and beverages	Retail	Privately owned (ranked by agri-food sales)
1	**Sime Darby Bhd.**[a] (Malaysia)	BASF AG[b]	Nestlé SA	Wal-Mart Stores	Cargill Inc.
2	Dole Food Company, Inc.	Bayer AG[b]	Inbev SA	Metro AG	Mars Inc.
3	Fresh Del Monte Produce[c]	Dow Chemical Company[b]	Kraft Foods Inc	Carrefour SA	Lactalis
4	Socfinal SA	Deere & Company	Unilever	Tesco PLC	Suntory Ltd.
5	**Charoen Pokphand Foods Public Company Ltd.**[d] (Thailand)	El Du Pont De Nemours	Coca-Cola Company	McDonalds Corp.	Dr August Oetker KG
6	Chiquita Brands International, Inc.	Syngenta AG	SAB Miller	Delhaize Group	Louis Dreyfus Group
7	**Kuala Lumpur Kepong Bhd. (Malaysia)**	Yara International ASA	Diageo Plc	Koninklijke Ahold NV	Barilla
8	KWS Saat AG	Potash Corp. of Saskatchewan	Pernod Ricard SA	Sodexo	Ferrero
9	**Kulim (Malaysia) Bhd.** (Malaysia)	Kubota Corp.	Cadbury PLC	Compass Group PLC	Keystone Foods LLC
10	Camellia PLC	Monsanto Company	Bunge Limited	Seven & I Holdings Company Ltd.	McCain Foods Ltd
11	Seaboard Corp.	Agco Corporation	Heineken NV	**China Resources Enterprise Ltd.** (Hong Kong, China)	OSI Group Companies
12	Sipef SA	The Mosaic Company	Pepsico Inc	Yum! Brands, Inc.	Perdue Farms Inc.
13	Anglo-Eastern Plantations PLC	ICL-Israel Chemicals Ltd	Molson Coors Brewing Company	Autogrill	Bacardi Ltd.
14	Tyson Foods Inc	Provimi SA	Kirin Holdings Company Limited	Alimentation Couche Tard Inc	Groupe Soufflet
15	**PPB Group Bhd.** (Malaysia)	Bucher Industries AG	Archer-Daniels-Midland Company	Safeway Incorporated	Golden State Foods
16	**Carsons Cumberbatch PLC** (Sri Lanka)	Nufarm Limited	Associated British Foods PLC	Sonae Sgsp	Groupe Castel
17	**TSH Resources Bhd.** (Malaysia)	CLAAS KGaA	Carlsberg A/S	George Weston Limited	J.R. Simplot
18	**Multi Vest Resources Bhd.** (Malaysia)	Sapec SA	HJ Heinz Company	**Dairy Farm International Holdings Ltd.** (Hong Kong, China)	Schreiber Foods
19	**Bakrie & Brothers Terbuka**[e] (Indonesia)	Terra Industries Inc	Danone	Jeronimo Martins SA	Muller Gruppe
20	PGI Group PLC	Aktieselskabet Schouw & Co.A/S	Anheuser-Busch Companies Inc	**Kuwait Food Company (Americana)** (Kuwait)	Bel
21	Firstfarms A/S	Genus PLC	**Wilmar International Ltd.** (Singapore)	Kesko OYJ	Perfetti Van Melle
22	**New Britain Palm Oil Ltd.** (Papua New Guinea)	Scotts Miracle-Gro Company	Sara Lee Corp.	Starbucks Corp.	Rich Products
23	**Karuturi Global Ltd.** (India)	Kverneland ASA	Constellation Brands Inc	Burger King Holdings, Inc.	J. M. Smucker
24	Nirefs SA	Sakata Seed Corp.	**Fraser & Neave Ltd.** (Singapore)	Maruha Nichiro Holdings, Inc.	Haribo
25	**Country Bird Holdings Ltd.** (South Africa)	Auriga Industries A/S	Danisco A/S	Familymart Company Limited	Eckes-Granini

Source: Annex tables A.III.4–8.

[a] A conglomerate with its core business in agriculture and plantations.
[b] General chemical/pharmaceutical companies with large activities in agricultural supply, especially crop protection, seeds, plant science, animal health and pest management.
[c] Legally unrelated with Del Monte Foods.
[d] Members of the Charoen Pokphand (CP) Group report their activities by company.
[e] Diversified company with important presence in agriculture.

Note: Various companies are present in more than one agribusiness industry. In those cases, they have been classified according to their main core business.

split between developed- and developing-country firms, indicating that while agriculture-related TNCs from developed countries dominate the international markets, firms from developing countries are also emerging as important players in global food and non-food agricultural production (box III.9). For instance, 12 of the top 25 agriculture-based TNCs are headquartered in developing countries and 13 in developed countries (annex table A.III.4). Indeed, a developing-country TNC, Sime Darby Berhad (Malaysia), occupies the top position (box III.9), while United States firms (Dole Food and Del Monte) are in second and third positions (table III.12).

Of the top 25 agricultural TNCs, Malaysia, a developing country, has the largest number of TNCs (6), followed by the United States (5) and the United Kingdom (3) (annex table III.14). By region, the developed-country TNCs on the list are split between the EU (8) and North America (5), while all but two of the dveloping-country firms are headquartered in Asia. The remaining developing-country TNCs are from South Africa and Papua New Guinea. It is notable that TNCs from some major agricultural regions and countries – including Latin America and the Caribbean, South-East Europe and the CIS, and developed countries such as Australia and New Zealand – are missing from this list.[46] This picture remains similar even if privately owned large agricultural TNCs such as Lactalis (France) and Perdue Farms (United States), listed separately (annex table A.III.8) are taken into account, as these firms are also headquartered in either the EU or North America.

In terms of international assets, there is a big gap between the top five companies, each of which have foreign assets exceeding $1 billion, and the

bottom nine companies, each of which have foreign assets below $100 million. A general characteristic of the largest agricultural TNCs is that, in addition to horizontal integration (investments in agriculture in foreign countries), they are often engaged in downstream (especially food processing activities, or vertical integration), and in unrelated activities (conglomeration). Examples include firms such as Sime Darby (Malaysia) and Charoen Pokphand Foods (Thailand) (box III.9).

2. TNCs from other segments of the value chain

The universe of agriculture-related TNCs includes food processors/manufacturers, retailers, traders and suppliers of inputs. They can participate in agricultural production through FDI in farming/plantations, as well as contract farming and other contractual forms (section D.2). These TNCs are usually larger than agricultural TNCs. For example, the world's largest food and beverages TNC, Nestlé (Switzerland), controls $66 billion in foreign assets, while the largest food retailer, Wal-Mart (United States), has $63 billion in foreign assets. In contrast, the largest agricultural TNC, Sime Darby (Malaysia), has foreign assets of only $5 billion. In addition to FDI, the largest agriculture-related TNCs are extensively involved in agricultural production through contract farming and the setting/implementing of standards for products in the cultivation of which they are involved through non-equity forms or other means (section D.2; chapter IV). These firms are still predominantly headquartered in developed countries. Indeed, the largest suppliers to farming operations are headquartered *only* in developed countries. Their main features include the following:

- *Suppliers of inputs such as equipment, fertilizers and seeds:* Only developed-country firms figure on the list of the largest TNC suppliers to agriculture, as mentioned earlier (annex table A.III.5). Eight of them are headquartered in the United States, three in Germany, while Denmark, Japan, Norway and Switzerland are each home to two of them. The largest suppliers are diversified firms (such as BASF, Bayer and Dow Chemicals) engaged in the production of all kinds of chemical products, including agricultural supplies (table III.12). The power of TNC suppliers of inputs over their buyers can be significant, especially when the TNCs control key technologies. Some of the largest TNCs, such as Monsanto, have close links with trading companies (e.g. Cargill).
- *Manufacturers/processors:* Manufacturers and processors that are closely linked with production (e.g. through contract farming, and in some cases, direct production) can have a major impact on agriculture. Food and beverage processors are large firms, and the majority are headquartered in developed countries (39 of the largest 50) (annex table A.III.6). In terms of foreign assets, the largest agricultural TNC, Sime Darby, is only comparable in size to the 24th largest food and beverages TNC (Fraser & Neave). The top three food manufacturing TNCs (Nestlé, Inbev and Kraft Foods) are particularly large. The international activities of food and beverages TNCs are highly concentrated: the nine largest, all headquartered in developed countries, control more than $20 billion in foreign assets each; together, they represent about two thirds of the foreign assets of the top 50 such firms. In comparison, the foreign assets of the largest developing-country food processing TNC, Wilmar International Limited (Singapore) (box III.10), amounted to only $6 billion in 2007.[47] The United States is home to by far the largest number of food processing TNCs (14 of the top 50, of which Kraft Foods and Coca-Cola have the largest foreign assets), followed by the United Kingdom (5 TNCs plus co-ownership of Unilever), and the Netherlands (3 TNCs plus co-ownership of Unilever). Of the 11 developing-country firms, 8 are headquartered in Asia and 3 in Latin America and the Caribbean (Mexico). In the developing world, Hong Kong (China), Singapore and Mexico are the most important home economies. There are no African firms in the top 50 list. Some of the major food processors, such as Mars (United States), Barilla (Italy) and Suntory (Japan), are privately owned and thus listed separately (annex table A.III.8).
- *Retailers/supermarkets:* Retailing and supermarket TNCs also play a major role in international agricultural supply chains. The majority of the 25 largest TNCs in this industry (22) are from developed countries (table III.12 and annex table A.III.7). The largest TNCs are engaged in the distribution of not only agricultural or food products, but also a wide range of other goods. The largest supermarket TNCs have significant buying power vis-à-vis suppliers such as farmers. Seldom engaging in direct production of crops or agricultural commodities (Weatherspoon, 2003; Bijman, 2008), they are more likely to participate in agriculture in developing countries through contract farming. The United States is the most important home country of large retail TNCs (6 companies), including Wal-Mart, which, with assets abroad of $63 billion, is in a league of its own. It has an international presence similar to that of Nestlé (Switzerland), the world's largest food processing TNC, with $66 billion of assets abroad. The other TNCs on the list are geographically disperse; no other country has headquarters of more than two firms. By region, 11 of the top 25 firms

Box III.9. Selected agriculture-based developing-country TNCs

Recently, agriculture-based companies from developing countries have started emerging as TNCs, investing in both agricultural production abroad, and in downstream activities further afield. Some agriculture-based developing-country TNCs have a long corporate history, started in some cases with colonial-linked expatriates (e.g. in South-East Asia's rubber plantation industry). Over time, these companies have diversified into oil palm and other crop plantations. Some of them also evolved into locally owned conglomerates through change of ownership and acquisition of shares by investors of the host country (e.g. Sime Darby). These companies figure prominently on UNCTAD's list of the largest agriculture-based TNCs (annex table A.III.4).

Sime Darby Berhad (Malaysia) (which tops the list of largest agriculture-based TNCs) is today a major developing-country TNC, involved in a wide range of activities, with agriculture remaining its main business. With 633,000 hectares of land ownership, Sime Darby Berhad is today one of the largest plantation companies in the world. The merger with Golden Hope Plantations Berhad and Kumpulan Guthrie Berhad in 2007 helped Sime Darby Berhad become the world's largest palm oil producer, with the potential to produce 8% of the world's total palm oil output. Sime Darby Berhad has operations that span 20 countries with a total workforce of 100,000. Its plantation operations are mainly in oil palm in Malaysia and Indonesia. Its plantation operations in Indonesia account for about 35% of its total planted oil palm land. It is also involved in rubber plantation and processing. Apart from plantations, Sime Darby Berhad is involved in downstream activities such as oils, fats and oleochemical businesses in 15 countries in Asia, Western Europe, Africa, West Asia, Latin America and North America.

Charoen Pokphand (CP) (its affiliate Charoen Pokphand Foods Public Company is 5th on the list) is the largest agro-industrial and food conglomerate in Thailand. The main business of CP is in livestock and aquaculture operations, involving upstream and downstream activities such as animal farming, animal feed production, food processing and fish farms. While most of its business is based in Thailand, CP has expanded abroad, with operations in China, India, ASEAN countries, Turkey, the Russian Federation and the United Kingdom. In 2008, 15% of its $4.7 billion revenues came from its overseas operations.

Kulim Berhad (Malaysia) (9th on the list) was originally incorporated in the United Kingdom in 1933 and started rubber plantation operations in Malaysia in 1947. It is now a leading Malaysian plantation and processing TNC in oil palm and is also involved in oleochemicals production, other downstream activities and processing. Other important operations relate to foods and restaurants, and manufacturing. The drive for more land for oil palm cultivation had pushed Kulim to internationalize actively since 1996 with investments in Papua New Guinea and later in Indonesia and the Solomon Islands. Its overseas investments in oil palm plantations were made through a series of acquisitions. In 2008, Kulim generated total revenues of $1.2 billion, of which only 37% were generated in Malaysia. As at 31 December 2008, some 70% of the plantation land the company owned was outside Malaysia, in particular in Papua New Guinea and the Solomon Islands.

Karuturi Global Limited (23rd on the list), headquartered in India, was incorporated in 1994. It is today a global leader in the production and export of roses through both the growth of existing business and acquisition of assets abroad. In 2007, it acquired Sher Agencies, the world's largest rose farm in Kenya, for $69 million. Started as a floriculture company, Karuturi has now expanded into food processing in India, and large-scale agricultural farming in Ethiopia.[a] In 2008, it acquired more land in Ethiopia to expand operations into production of rice, wheat, palm oil and sugar cane for sugar and ethanol. The company is involved in the entire value chain in floriculture – from R&D and production to marketing of cut flowers from its farms. It supplies flowers on a contractual basis to Tesco supermarkets in the United Kingdom and Edeka in Germany. In the financial year ended March 2008, the company generated $100 million revenue of which the lion's share was generated from its operations abroad.

Source: UNCTAD, based on annual reports of companies and company information from their websites.
[a] In 2008, its operation in Ethiopia employed 1,200 workers and 4,000 in Kenya.

are from Europe (all of them headquartered in the EU-15), 8 from North America and 3 from Japan. There are only a few developing-country TNCs on the list, and their foreign assets are much smaller than those of their developed-country counterparts. The largest developing-country TNC in this group (China Resources Enterprise) is one-tenth the size of the largest developed-country TNC in terms of foreign assets.

- *Traders/wholesalers:* Data on trading TNCs is scarce, as most of these firms (e.g. Cargill, Louis Dreyfus) are privately owned and do not provide detailed statistics on their foreign activities. However, they are large players on the international scene (UNCTAD, 2008d), and have a major impact on agricultural producers through their purchasing schemes. They seldom invest or participate, through contract farming, in agricultural production in host countries. There are also various TNCs that are active in both trading and manufacturing, such as Noble Group (Hong Kong, China) and Baywa (Germany) (annex table A.III.6). Certain traders, such as Olam International (Singapore) (box III.10) are headquartered in developing countries. In certain industries, such as coffee growing, trader TNCs have a major influence on

Box III.10. Selected agriculture-related developing-country TNCs

There are various developing-country TNCs with important activities in agriculture that have evolved from downstream segments of the value chain. Most of them started their activities in manufacturing, and then diversified their activities to the whole value chain, including agricultural production. Examples of agriculture-related developing-country TNCs, some of which are on the list of the top 25/50 of their industries, are described below.

Wilmar International (21st on the list of food processors), headquartered in Singapore, is one of the largest agriculture-related TNCs in the world. With operations in 20 countries on four continents, and annual revenues of roughly $29.1 billion in 2008, the company has evolved rapidly since it was established as a palm oil trading company in 1991. It has systematically internalized nearly the entire palm oil value chain – from cultivation to sales of retail products. Today, the company is a substantial plantation operator in Malaysia and Indonesia; it operates 250 processing plants in Asia and Europe; and sells edible oils under its own brands in China, India and Indonesia.

San Miguel Corporation (35th on the list of food processors) is headquartered in the Philippines. Established in 1890 as a brewery, today it is a conglomerate with beverages, food, agribusiness and packaging businesses. It has brewery operations in many ASEAN countries and China, and owns meat processing plants in Indonesia and Viet Nam, as well as a feed mill and hog farm facility in Viet Nam.

Grupo Bimbo (42nd on the list of food processors) is a leading Mexican producer of baked foods with a significant presence in many Latin American countries and in the United States. The group comprised more than 108,000 associates in 18 countries, including China and the Czech Republic. It produces, distributes and markets over 5,000 products, including breads, buns, cookies, cakes, pastries, bagels, packaged foods, tortillas, salted snacks and confectionary goods. It has internationalized rapidly through both greenfield and M&As. In 2008, Grupo Bimbo generated $9.4 million in sales of which half came from its operations based in the United States and Latin America.

IOI Corporation (44th on the list of food processors), headquartered in Malaysia, started as a real estate company in 1982. Today it is an integrated palm oil company involved in the entire value chain, from seedling, extraction and other value added manufacturing, to processing, refinery and commodity trading activities. In 1985, it started oil palm plantation activities in Malaysia and extending those activities to Indonesia in 2007. Most of its plantations are in Malaysia and it employs about 30,000 people in 15 countries.

Olam International Limited (Singapore) (not on the list), is often portrayed as one of the world's leading traders of agricultural commodities such as cocoa, coffee, cotton, cashew, rice, sesame, sugar and timber. It has 43 majority-owned affiliates abroad, most of which are located in developing countries. The most important ones are located in Nigeria, Ghana, Indonesia, Viet Nam and Côte d'Ivoire. Developing countries account for 82% of its foreign assets. Today, with global sales of over $5 billion and 8,000 employees worldwide, Olam is "a global leader in the supply chain management of agricultural products and food ingredients".[a] Its activities in each product include not only sourcing but also primary processing, storage, transport, warehousing, marketing and distribution. The company sources 16 agricultural commodities from 200,000 suppliers in 56 countries (most of them developing countries) selling them to 6,500 of customers in over 60 destination countries. Olam supplies many of its products to international brand owners and processors such as Cadbury, Cargill, Lavazza, Kraft, Mars and Nestlé.

Zambeef Products Plc (not on the list) is one of Zambia's leading agri-businesses based in Zambia with a presence in West Africa, particularly in Ghana and Nigeria. It is involved in the production, processing, distribution and retailing of livestock, dairy products and edible oils, as well as in the plantation of sugarcane and oil palm. In 2008, more than 20% of the group profits of $10 million came from crop farming operations, mainly in Zambia.

Source: UNCTAD, based on companies' annual reports and their websites.
[a] Olam: News release: "Milestone Year for Olam" (accessed 13 June 2009).

the production process. Trader TNCs, such as Louis Dreyfus, have affiliates operating in all key coffee producing countries, carrying out milling, trading and warehousing operations. TNCs often purchase raw or semi-processed coffee directly from growers or their cooperatives, through both contract farming and spot market transactions (Krueger and Negash, 2009).

3. New investors in agriculture

Certain trends with respect to FDI in agriculture, observed from the end of the Second World War have been showing signs of a reversal since the beginning of the new millennium. The emergence of new investors in agricultural production signals the possibility that FDI in this industry could become more significant in the new millennium. For some home countries, this could be for strategic reasons similar to those of the first industrializing countries: ensuring the supply of agricultural goods for their growing populations and industries. Additional, and relatively new, factors include securing agricultural feedstock for new industries such as biofuels (sections B.3 and D.3). Historically, foreign private investors were not the only cross-border actors involved in agricultural production. States, international public institutions (e.g. aid agencies), trading houses, and individual

migrant farmers, to mention a few, also participated in international investment in agriculture. Today, there seems to be a revival of this trend, and if these actors retain their residence in their home country, their activities can be regarded as FDI. In other cases, for example when farmers move their residence abroad together with their operations (essentially an act of migration), these activities are not FDI in the narrow sense of the definition. However, their patterns of involvement in agricultural production and their impact may be similar to those of TNCs.[48] Overall, FDI by the new investors is relatively recent, and its scale not yet known. Nevertheless, it is important to examine these trends because these investors represent a relatively untapped source of investments for agricultural development.

Some developing-country governments (e.g. China, the Republic of Korea and GCC countries) have shown a growing interest in investment in food production abroad, which has contributed to the rise of FDI and other contractual arrangements in agricultural production from those economies. Some of this investment is by SWFs, which often act in tandem with their respective governments. These activities have contributed to strengthening further the South-South dimension in international investment in agriculture. As most of the SWFs have limited reporting on their international activities, it is difficult to separate their foreign agricultural involvement from the rest of their activities. For that reason, it is not possible to draw a list of the most important SWFs ranked according to their foreign agricultural production. Moreover, most of the agricultural projects of SWFs are currently in the phase of exploration and consultations.[49]

New investors in agricultural production are "new" for a number of reasons: for instance, they may originate from countries, such as those of the GCC, which have not traditionally invested overseas in this industry; or they may be cross-industry TNC entrants into the industry, such as Daewoo Logistics (Republic of Korea) and ExxonMobil (United States); or they may be non-TNC actors, usually private equity or State-owned funds, sometimes especially established for this purpose, such as Palmer Capital/Bidwells private equity fund (Germany/United Kingdom) and Gulamerah Fund (Malaysia) (table III.14). The main drivers (or motives) behind the rise of the new investors are both threat and opportunity. For example, Agricapital (a State-owned fund based in Bahrain) and Hadco (Saudi Arabia) are investing in food crops overseas to support government food security policies, while at the same time supplying food to the world's burgeoning markets. These markets are seen as a considerable opportunity, which is spurring international investment in agriculture by companies and funds such as Vision 3 (United Arab Emirates) and Goldman Sachs (United States) (table III.13). Similarly, companies such as ExxonMobil (United States), Al Jenat (Saudi Arabia) and Wuhan Kaidi (China) see the production of food crops for biofuels as both a way of fending off the threat of an energy crisis and an opportunity to enter a new market (table III.13).

Some of the opportunities have arisen from policy changes in host countries, which, though generally aimed at increasing investment in agriculture, also encourage niche investments, such as research into the medicinal properties of plants in Cambodia and the Lao People's Democratic Republic, and – in this case – links to the pharmaceutical industry (Shaw and Callander, 2007; George 2005). The likely importance of agricultural production in the future, especially because of the rising world population and change in consumption patterns (section B), has also prompted large-scale speculative overseas purchases of land by companies and funds, such as Jarch Capital (United States) and Landkom (United Kingdom) (table III.13). Many of these speculative land purchases take place in developed or transition economies, but a large number are also developing countries (figure III.14), which has drawn much attention, including accusations of "land grabbing" (Cotula et al., 2009, Smaller and Mann, 2009; chapter IV, section D.4).

F. Conclusions

This chapter has examined the main characteristics of agriculture, as well as the involvement of TNCs in agricultural production and related activities. Its major findings, summarized below, indicate that the participation of TNCs in developing country agriculture is on the rise, with major implications for these economies' modernization, and consequent policy challenges for their governments.

Agriculture is an important and socially, as well as politically, sensitive industry in developing countries, despite a history of relative neglect after the Second World War. It differs considerably from manufacturing and services because it is central to the provision of food, the eradication of hunger and poverty alleviation, and is usually a major source of employment. Moreover, recent trends in agricultural production have given rise to a host of politically charged issues, including those related to food security and food crises; non-food uses of agricultural produce such as biofuels; its impact on the environment (such as depletion of water resources, deforestation and soil degradation) and biodiversity; the high levels of carbon emissions from some forms of agriculture and their impact on climate change; and the controversial use of GM crops. Agriculture is diverse in terms of the different actors involved, the types of crops that

Table III.13. Examples of new investors in agricultural production in developing countries, based on their motivations for investment

Purpose of agricultural production	Overall context of investment			
	Threat (e.g. food security)		Opportunity (e.g. new profitable niches)	
	Type of Investor	Examples	Type of Investor	Examples
Food crops	State-owned funds (including SWFs)	- Agricapital (Bahrain) - G2G (Qatar) - Libya Africa Investment Portfolio (Libyan Arab Jamahiriya)	Start-up companies	- Trans4mation Agritech (United Kingdom)
	Private sector investors with state support	- Hadco (Saudi Arabia) - Ald Dahra (United Arab Emirates) - IFFCO (United Arab Emirates)		
			Private equity funds	- Gulamerah Fund (Malaysia) - Palmer Capital/Bidwells PEF (Germany/United Kingdom) - Nagathom Fund (Cambodia) - Vision 3 (United Arab Emirates)
	Large (cross-)industry entrants, including SOEs	- Zad Holding Co. (Qatar) - ZTE (China)		- Goldman Sachs (United States) - Dubai World Trading (United Arab Emirates) - Mitsui (Japan)
Non-food crops/ activities			Start-up companies	- Sun Biofuels (United Kingdom) - Skebab (Sweden) - Flora EcoPower (Germany) - CAMS Group (United Kingdom) - ScanFuel (Norway) - Agroils (Italy)
			Investors in land (and "land rush") Private equity funds	- Jarch capital (United States) - Landkom (United Kingdom) - Renaissance Capital (Russian Federation)
	Large cross-industry entrants, including SOEs	- ExxonMobil (United States) - Al Jenat Consortium (Saudi Arabia) - Wuhan Kaidi (China)		- CNOOC (China) - ZTE International (China)

Source: UNCTAD.

Note: Investors can have multiple motives, some of which are indicated by arrows. For example, large TNCs such as Daewoo Logistics (Republic of Korea) and Zad Holding Co. (Qatar) are investing in food crops for food security reasons (sometimes at the behest of their home Governments), but also because they see investment in crops as a viable long-term opportunity.

are produced and the dominance of certain regions in the production of particular commodities because of historical and climatic factors and policy influences.

In developed and certain developing countries, increased investment and technological progress have transformed agriculture into high-productivity activities, but in other developing economies, agriculture continues to suffer from a chronic lack of investment, leading to food insecurity and the underutilization of the industry as a motor for development. In developing countries that suffer from an investment gap in agriculture, public spending has been low and declining as has foreign financial support in the form of ODA. Consequently these countries face difficulties in meeting objectives such as the MDG target of halving hunger and poverty by 2015.

This chapter has found that FDI and TNC involvement may be one possible channel for meeting the investment needs of agriculture. However, considering the mixed historical record of foreign investors in the industry and the policy challenges that agriculture raises, TNC participation is far from being the only channel; and this participation needs to be followed closely by policy makers, in order to maximize the potential benefits and minimize the potential negative impact (chapters IV and V).

FDI in agriculture is unevenly spread within and between countries. In most countries of the world, agriculture accounts for a very small share of inward FDI (typically less than 1%). There are, however, some developing countries (such as China, Malaysia, Peru, Swaziland and Viet Nam), and LDCs (such as Cambodia, Ethiopia, the Lao People's Democratic Republic and the United Republic of Tanzania) where the share of agriculture in inward FDI exceeds this level by a substantial margin. Data also indicate that Asia is the developing region that has attracted the most FDI in agriculture. Moreover, its share in the total of developing economies increased in the 2000s. A caveat to this finding is data scarcity that could result in underreporting of FDI in agriculture in some countries and regions.

TNC involvement in agricultural production goes beyond FDI; it also encompasses a wide range of non-equity, short- and long-term contractual arrangements. Of these latter arrangements, much TNC participation in agricultural production appears to be in the form of contract farming. Indeed, the post-war withdrawal of TNCs from investment in developing countries' agricultural production did not necessarily rollback their involvement in agriculture. Among others, they continued to play an important role through segments of the agribusiness value chain,

for example as suppliers of inputs or in the form of contractual agreements between traders, processors and retailers with farmers in developing countries. This chapter has found that contract farming is a key channel for linkages between TNCs located at various stages of the agribusiness value chain – both upstream and downstream of agriculture – and in agriculture itself. Hence, the impact of TNCs on agriculture should be evaluated by considering the full extent of their participation, whether direct or indirect; and, within direct participation, whether it is in equity (FDI) or non-equity (non-FDI) forms.

After a long period of relative decline, since the 1990s there have been signs of increased TNC participation in agricultural production in developing countries. Foreign investors are evincing renewed interest in agriculture, as indicated for example by a rising number of deals aimed at securing access to arable land in host countries. However, most of these deals are so far at an early stage of negotiations. There are also "new" investors emerging in agriculture, including not only TNCs, but also investors such as sovereign wealth funds, private equity funds and, sometimes, farmers themselves going abroad. Many of these new investors originate in developing countries, and there are indications that South-South investment in agricultural production, both FDI and non-equity forms, is on the rise. Cross-border M&As undertaken by investors from developing countries have started to exceed those from developed countries, and are targeted mostly at other developing countries.

Despite the rise of new investors, the universe of large TNCs in the agribusiness value chain is still dominated by developed-country TNCs – with one exception: agricultural production itself. The list of the largest agriculture-based TNCs contains a relatively large number of developing-country firms (12 out of the 25 firms), including the largest agricultural TNC, Sime Darby (Malaysia). In contrast, TNCs participating in agricultural production from the upstream (suppliers) or downstream (processors, retailers, traders) segments of agribusiness value chains are primarily based in developed countries. This is particularly true of suppliers of inputs.

TNCs usually target specific crops in individual host countries and regions. These preferred crops may vary by region, subregion and country. In general, however, apart from some new investors, TNCs target staple crops less frequently than cash crops. According to the findings of this chapter, TNCs have invested mostly in cash crops (e.g. fruits, vegetables and flowers), and in animal products (e.g. meat, poultry and dairy) in developed countries. In some developing regions, such as South America and some African countries, TNCs also target staple crops such as rice and wheat. Nevertheless, they focus mostly on export commodities such as flowers, fruits, oil crops, soya beans and sugar cane, to mention a few.

The home-country drivers of FDI and other forms of TNC involvement in agriculture include a number of factors, which are not mutually exclusive, and which have evolved over time. New push drivers include, rapid rates of growth, especially in emerging economies, leading to higher incomes and expenditures on foodstuffs and imports of some food items; the rising use of agricultural produce for biofuels; and policy changes favouring overseas investment by developing home countries with scarce water and land resources. TNC participation in agriculture has been further spurred by economic and political factors, such as the rise in food prices and shortages – resulting in some export bans – in certain commodities over the past few years. These drivers have also encouraged some speculative international investments in agriculture. In the wake of the food crisis, the push for food security has become a major driver of new investment in agriculture. Looking to host countries, the availability of underutilized agricultural land, increasingly coupled by the availability of water resources to irrigate the land, as well as more open policies towards land ownership and lease, have been the most important pull factors of investment in agriculture.

Although TNC involvement in agriculture varies considerably by host region and country, in those host countries, especially LDCs, where TNCs play a major role, they can have a wide range of economic, environmental, social and political impacts. Given the social and political sensitivity of agriculture, these effects need to be examined carefully, including implications for food security in host and home countries (chapter IV). FDI and other forms of TNC involvement in agriculture pose a major challenge, as well as an opportunity, for policymakers in both home and host countries, especially in managing the impact of such investment (chapter V). As mentioned above, a new salient issue of particular relevance to host country policymakers is the acquisition of large areas of land by foreign investors. This and other issues will be analysed in the following two chapters.

Notes

1 Also known as "agrofuels".

2 This aspect has led some water scarce countries to invest in major agriculture producing locations to address their food security concerns (section D.3). Instead of using scarce water resources at home for food production, water-scarce countries can import food farmed in water-rich countries.

3 Steady genetic improvements and generation of new plant varieties in a number of crops as a result of R&D have contributed to continuing gains in yield (World Bank, 2007: 160–163).

4 For instance, the number of countries planting GM crops increased to 25 in 2008, from 6 in 1996. The number of farmers who use GM crops increased by 1.3 million in 2008 to 13.3 million, and more than 90% of farmers who use GM crops in developing countries are small and resource-poor (James, 2008).

5 Four types of companies – mostly TNCs – have had an impact on the development and adoption of GM technology. These are agriculture seed and biotechnology companies, chemical pesticide companies, food and feed companies, and major retailers such as supermarkets and fast food chains. Seeds and biotech TNCs, such as Monsanto, DuPont/Pioneer and Syngenta, developed most of the GM crops currently on the market, and remain dominant players (Paarlberg and Pray, 2007).

6 Excluding deforestation.

7 According to data collected by UNCTAD and summarized in table III.3.

8 Bangladesh, Cambodia, Cameroon, China, Indonesia, Ethiopia, Madagascar, Mali, Mongolia, Nicaragua, Nepal, Pakistan, Papua New Guinea, Sierra Leone, the United Republic of Tanzania, Thailand, Uganda, Viet Nam and Zambia, according to data collected by UNCTAD and summarized in table III.3.

9 For instance, more than 70% of employment in East Africa during 2002–2006 was in agriculture, compared with only 32% in North Africa.

10 MDG-1: refers to "Eradicate Extreme Hunger and Poverty" by halving, between 1990 and 2015, the proportion of people whose income is less than $1 a day and the proportion of people who suffer from hunger.

11 Gross capital formation is measured by the total value of the gross fixed capital formation, changes in inventories and acquisitions less disposals of valuables.

12 For instance, Africa and South, East and South-East Asia have a relatively high share of agriculture in total investments, which suggests the greater importance of agriculture for economies in these regions.

13 The term *food crisis* refers to a situation of food shortages arising from the imbalance between the basic needs of a society in terms of the supply of food and the means of providing for the population's dietary needs and food preferences. A food crisis is always context-specific in time and cause. Thus the 2007–2008 food crisis was associated with a major increase in world food (and fuel) prices (FAO, 2008b), fuelled by changing patterns in global food (and energy) consumption and trade.

14 With the exception of coffee and palm oil.

15 See "Soaring food prices: Facts, perspectives, impacts and actions required", document HLC/08/INF/1 of the "High-level conference on world food security: the challenges of climate change and bioenergy", Rome, 3–5 June 2008.

16 Food security refers to the availability of sufficient quantities of food of appropriate quality and a given society's access to as well as utilization of it (FAO, 2006a). The supply of food is secure if all people of the given society, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (FAO, 2008a). Conversely, "the two most basic causes of food insecurity" are "inadequate food availability at national level and inadequate access to food due to poverty" (Smith, El Obeid and Jensen, 2000: 205).

17 The energy crisis and high fuel prices have encouraged the growth in biofuel crop production (III.B.3.c), putting additional pressure on the global food supply. Speculative activities to take advantage of high food prices have further worsened the food supply situation and pushed prices up even further (FAO, 2008b).

18 One third of this amount relates to financing immediate requirements for food assistance, agricultural inputs and budgetary as well as balance-of-payments support.

19 See also Maputo Declaration on Agriculture and Food Security: "10 percent national budget allocation for agriculture development", African Union, July 2003 (www.africa-union.org/root/UA/Conferences/2008/avril/REA/01avr/Pamphlet_rev6.pdf).

20 See also Declaration of the High-level Conference on World Food Security: The Challenges of Climate Change and Bioenergy, 5 June 2008, Rome. Available at: www.fao.org/fileadmin/user_upload/foodclimate/HLCdocs/declaration-E.pdf.

21 For instance, ZTE International (China), Flora EcoPower (Germany), Sun Biofuels (United Kingdom) and CAMS Group (United Kingdom) have signed land deals with African countries for production of biofuel crops. Similarly, Sinopec (China) and Chinese National Overseas Oil Corporation (China) have interests in Indonesia to grow maize for biofuel production ("Sinopec reportedly to invest $5 billion in biofuels in Indonesia, *Biopact*, 28 January 2008, at: http://news.mongabay.com/bioenergy/2008/01/sinopec-reportedly-to-invest-5-billion.html, and "CNOOC to build 3 biodiesel plants in West Kalimantan", *Biopact*, 7 May 2007, at: http://news.mongabay.com/bioenergy/2007/05/cnooc-to-build-3-biodiesel-plants-in.html).

22 See, the Declaration of the High-level Conference on World Food Security: The Challenge of Climate Change and Bioenergy, 5 June 2008, Rome.

23 However there are variations of this situation. For example, until the 1980s, a number of foreign investors in Latin America's food industry integrated vertically into primary production, controlling vast areas of land and engaging in local processing, as well as the exports of goods such as sugar, bananas or meat to Europe and the United States (Dinham and Hines, 1983; Striffler and Moberg, 2003).

24 This can be a point of concern. It has been argued, for instance, in a critical analysis of the nature of intellectual property as applied to plants, that there are significant commercial and political pressures towards classifying, say, new plant varieties as 'inventions' (patentable) rather than 'discoveries' (not patentable) (Van Dooren, 2008).

25 Such changes can have a large influence on farmers — among others — in developing countries. Fold and Gough (2008) show how EU consumers' tastes have changed for a new variety of pineapple 'MD2' (marketed by plantation TNCs via supermarkets) over another variety also grown in Ghana, 'smooth cayenne'. Local smallholders growing smooth cayenne have seen a large fall for their produce, without being able to switch to 'MD2'.

26 For instance, there are likely to be four principle transaction costs incurred by TNCs (or other companies) in contract farming, especially smallholders: (a) costs of drafting, negotiating and enforcing contracts; (b) maladoption costs when contract specifications are not met; (c) set-up and running costs associated with governance; and (d) bonding costs of implementing secure commitments. These costs can be reduced to mutual advantage, as in the case of contract farming in seed maize involving a TNC and smallholders in Indonesia (Irianto, Yuniarti and Santoso, 2006).

27 Because of the critical role of breeding and propagation in the floriculture (and horticulture) value chain, a number of suppliers of other inputs have recently acquired companies

in this segment. In a number of cases, these acquisitions have resulted in participation in agricultural production. For example, Syngenta AG (Switzerland) has bought a number of breeders/propagators, including Fischer (Germany) in 2007 and Goldsmith Seeds (United States) in 2008. These two companies, now part of Syngenta, are producing/farming flower seeds and bedding plants, among others, in developing countries as far afield as Guatemala and Kenya.

28 For TNCs, operating their own production sites (for example, plantations) abroad may be an efficient way of influencing the quantity, price and quality of the commodity produced. However, it might also entail high costs. One of the main costs is that of supervision, reflecting a relatively high cost of monitoring labour (because, despite mechanization, certain parts of agricultural production are still labour-intensive). This applies to complex crops, in particular, which require specific technologies or management. Other costs are associated with land and labour, such as the establishment of infrastructure, costs of permanent staff and costs arising from political opportunism (e.g. taxation or extortion) (Simmons, 2003: 5).

29 These results may be due to differences in statistical accounting, but also to only partial availability of FDI data (box III.5), compared to a relatively comprehensive coverage of M&As.

30 In 2008, the breakdown remained similar, with agriculture accounting for 2% of the total and food production for 97% (figure III.7).

31 This low level may be partly due to a lack of adequate statistical information.

32 Examples of TNCs from developing countries active in cross-border M&A purchases include Guthrie Group and Sime Darby Group (both Malaysian) in primary production (section E).

33 For example, J&F Participacoes SA (a cattle company in Brazil) acquired Smithfield Beef Group in the United States; Los Grobo (an Argentinian wheat company) acquired majority interest in Sementes Selecta (a Brazilian soybean company); JBS SA (a Brazilian cattle company) acquired majority interest in Inalca (an Italian sausage and meat producer); and the same company acquired Tasman Group Services (a meat packing company in Australia).

34 7,500 in India, 5,800 in Uganda, 2,685 in Zambia, 686 in the United Republic of Tanzania and 158 in South Africa (SAB Miller, 2009).

35 www.carrefour.com/docroot/groupe/C4com/Pieces_jointes/RA/Part3_ra_2004_GB.pdf.

36 "Contract farming offers fresh hope for Africa's declining agriculture", East Africa Policy Brief, No. 2. NEPAD, 2005.

37 "Nestlé opens new milk factory in Pakistan, its largest milk reception plant in the world", Nestlé Press Release, 16 March 2007.

38 In the latter case, contracts were concluded with the agents (Birthal et al., 2008).

39 www.nouminren.ne.jp/dat/200107/1001070902.htm (accessed on 18 February 2009).

40 "Malaysian investors take over Guthrie as Ellen signs $800 mn deal", *Informer Newspaper,* Liberia, 1 May 2009. Interestingly, Sime Darby has taken over most of the rubber plantations previously owned and operated by Guthrie, another Malaysian TNC, which were overrun and looted by rebels during the Liberian civil war.

41 Zambeef Annual Report, 2008, and company website at: www.zambeef.com.

42 Grupo Bimbo Annual Report, 2008, and company website at: www.grupobimbo.com.

43 For instance, in the 1970s, GCC countries also engaged in FDI in agricultural production, mostly in Arab League countries, prompted by threats of a boycott in food delivery to the region during the oil crisis. Later this investment thrust was diluted – though not fully abandoned – as their international relations stabilized. Similarly, in the 1960s and 1970s the Republic of Korea tried to develop overseas food production centres in South America, mainly in Argentina, Brazil, Chile and Paraguay.

44 For example, the IJM Group (Malaysia), a TNC with core assets in construction, property and infrastructure operations, created an affiliate, IJM Plantations, in 1985. IJM Plantations has expanded its oil palm operations to Indonesia and, through a joint venture, to India. It is involved in oil palm cultivation, plantation, processing and downstream activities including trading of agrochemicals and fertilizers, agro-management services and R&D.

45 For example, in 2006, Mitsui (Japan) invested $76 million in a joint venture with CHS (a diversified energy, grains and food company in the United States) called Multigrain (headquartered in Switzerland), which grows soya beans, maize, and cotton, produces flour, gins cotton, sells fertilizers, exports soya beans, markets and exports cotton and sugar, and imports wheat, all in Brazil. In 2008, Mitsui agreed to increase its original investment by $124 million (www.mitsui.co.jp/en/release/2008/1188983_2849.html).

46 In the case of the latter two, this is due to a lack of detailed statistics on certain large co-operatives and product boards.

47 In 1999, SAB Miller, originally established in South Africa, moved its headquarters to the United Kingdom, and hence can no longer be considered a developing-country TNC. If it had remained South African, it would have been the largest developing-country food and beverages processor in 2007.

48 Evidence of migrant farmers as international investors is very limited. However, the phenomenon exists and can be important locally. For example, with the help of local investment promotion agencies, a relatively significant number of farmers have been moving from India to arid lands in Kenya and Uganda to grow cotton, sugarcane, groundnuts, paddy, bananas and citrus fruit and flowers ("Kenya woos Andhra farmers", *IST Financial Express*, 20 October 2004; "Debt-ridden Andhra Pradesh farmers eye Uganda for new start", *IST Financial Express*, 8 November 2004; "1,000 Indian Farmers Coming to EA", *The Nation* (Nairobi), 29 October 2004). These migrants cultivate 50,000 acres of land, leased to them for 99 years ("Kenya: Indian Farmers to Receive 99-Year Arid Land Lease", *The East African Standard*, 13 November 2004).

49 For example, the Kuwait Investment Authority has organized the visit of its high-level delegations to countries such as Cambodia, the Lao People's Democratic Republic and Myanmar, aimed at exploring investment opportunities in agriculture and manufacturing (*Gulf News*, 16 Aug 2008; *Asia Times*, 26 Sept 2008).

CHAPTER IV

DEVELOPMENT IMPLICATIONS OF TNC INVOLVEMENT IN AGRICULTURE

WIR 2009

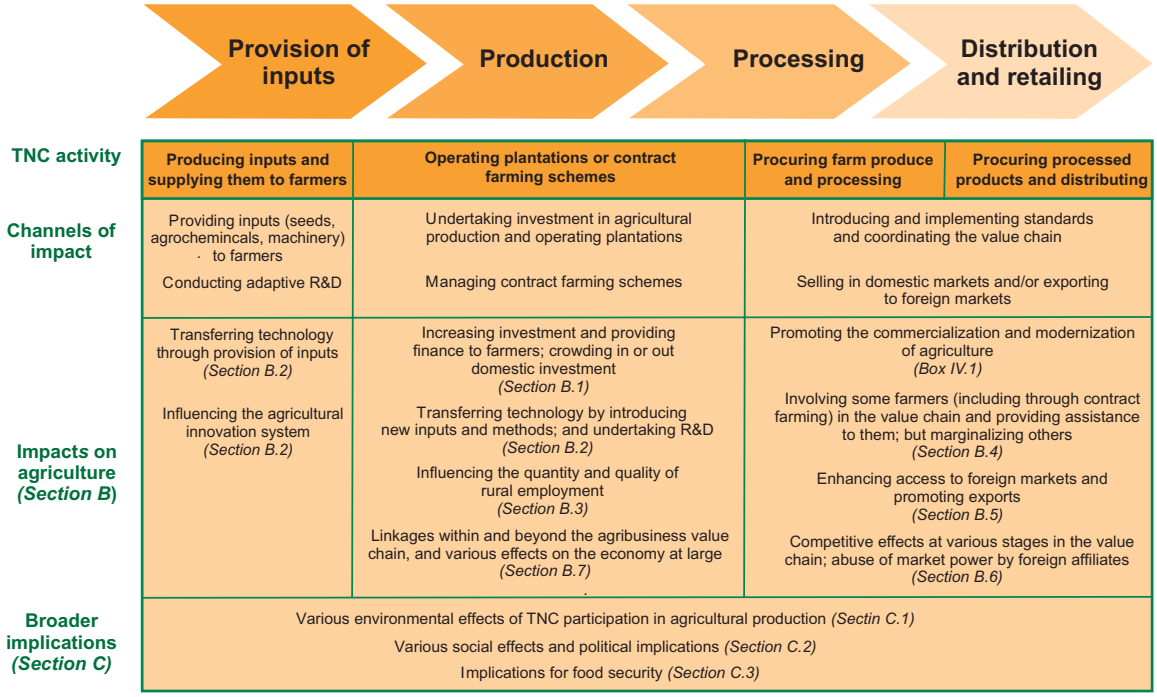
A. Introduction

Given the importance of agriculture for economies and societies, the impact and implications of TNC participation in the industry, especially in developing countries, are of considerable significance. This impact varies, depending partly on the nature of TNC participation, in particular whether the mode of involvement is FDI or a non-equity form such as contract farming (significant types and channels of impact are illustrated in figure IV.1). FDI in farming may have a positive effect on agricultural production and the host economy by providing financial resources, introducing new technologies, training workers, creating linkages with local input suppliers and encouraging – through example – the entry of other firms into the industry. Negative effects may result from TNC-run operations driving farmers out of business, for instance, with adverse consequences for employment and rural society. TNC involvement through contract farming can affect domestic agriculture via different channels, among others by providing local farmers with inputs such as seeds and fertilizers, and linking them to the global marketplace through their international supply chains. On the other hand, these links run the risk, for instance, of making farmers highly dependent on large and powerful companies.

In their international production activities, TNCs deploy a package of assets and resources that are useful for development, but are often in short supply or simply not available in host developing countries (chapter III). The challenge faced by a developing country is how to ensure that the ownership advantages possessed by TNCs in agriculture and agriculture-related activities can best contribute to its agriculture and the wider economy. There are potential synergies and beneficial effects to be gained from combining TNC advantages with underutilized agricultural resources – including labour and land – in developing countries, but there are also drawbacks. Some important questions therefore need to be borne in mind when assessing the impact of TNC participation in developing-country agriculture. For example, to what extent has TNC participation increased agricultural production and created value? To what degree has the value created in the host economy been retained domestically? And how has this retained value been distributed among various stakeholders, especially local farmers and the rural poor? In addition, against the backdrop of the current food crisis, what are the development implications of rising South-South FDI in food crop production?

Drawing on existing literature, as well as on a series of commodity and country case studies, this chapter examines the positive and negative impacts of TNC participation on agricultural development in host developing countries. The analysis focuses on the effects of their participation on agricultural production, but also considers the wider economic, environmental, and social implications for host countries. It takes into account the significance of contextual variables in determining the outcome of TNC involvement, including, for example, country/locational characteristics and endowments, the types of TNCs involved, their specific forms of participation, their stage in agribusiness value chains and the attributes of particular agricultural

Figure IV.1. TNC activities along agribusiness value chains and types of impact in host developing countries



Source: UNCTAD.

Note: The impacts and implications listed in the figure are discussed in the respective sections of chapter IV indicated in brackets.

products. For any specific agricultural operation with TNC involvement, the effects described in figure IV.1 are not necessarily attributable to TNCs. A major methodological challenge is therefore to isolate TNC-specific effects from more general ones; and the analysis needs to take into account the relevant alternatives and counterfactuals.

Bearing such issues in mind, section B of the chapter assesses the impact of TNC participation on agriculture production, looking at various areas of impact such as the provision of finance and investment, technology transfer and innovation, and foreign market access and exports. It also considers the overall impact on agriculture and wider economic implications. Section C addresses a number of environmental, social and political issues, taking into account factors related to sustainable agricultural development. Section D concludes, with particular attention to findings relevant for policy.

B. Impact on agricultural production in host developing economies

In developing countries, the involvement of TNCs in agricultural production, which is often linked to their participation in other parts of the agribusiness value chain, can intensify and accelerate the commercialization and modernization of agriculture (box IV.1). These processes influence, in varying degrees, all aspects of TNC impact on agricultural production examined in this section.

1. Financing and investment

a. Contributing capital and increasing investment through FDI

As TNCs in agriculture-related activities focus on their core competencies and undertake only limited FDI in agricultural production, their contributions to overall capital inflows to agriculture in developing countries are small (chapter III). However, when agricultural FDI is compared to total investment or value added in agriculture in a host country (a more appropriate comparison than that to overall FDI), or, even better, to private investment in agriculture, it shows that the share of such FDI can be quite significant in some cases.

Overall, the ratio of FDI to gross capital formation (GCF) in agriculture in developing countries is small, at 1.1%, compared with a ratio of 12.7% for total FDI inflows to total GCF of developing countries in 2007.[1] Nevertheless, there are several developing

Box IV.1. TNC participation and the commercialization and modernization of agriculture in developing countries

The shift from subsistence to commercial farming is an integral part of the overall process of modernization of agriculture in developing countries. By helping expand production, enhance efficiency and release labour from agriculture, the commercialization of farming underpins the role of agriculture in economic development.

Commercialization is a process that takes place with or without TNC involvement. However, the participation of agribusiness TNCs can accelerate the process of commercialization, for example by favouring farming operations that are specialized, large-scale, and capital- and knowledge-intensive. Moreover, in order to comply with the requirements of agribusiness TNCs, farmers have to become more responsive to market trends and requirements, with a strong emphasis on delivery, quality and other specifications and standards. In practice, this means that not only do local farms need to invest in physical capital (e.g. storage and transport facilities, irrigation systems), but they also have to adopt modern business practices (e.g. managing financial flows, meeting various standards and traceability requirements) and improve logistics. In this respect, agribusiness TNCs play an important role in modernizing agriculture in host countries. However, their participation can also have negative consequences which need to be addressed, such as the decline of small-scale farms and unfavourable effects on the environment.

Source: UNCTAD.

countries, in which the share of FDI relative to domestic agricultural investment is much higher than the average for all developing countries (table IV.1). China and Viet Nam are examples of two countries that have included agriculture among their priority areas for attracting FDI, and, unlike some other developing countries which also do so, they have managed to attract significant amounts of such investment. This has made a distinct difference to their agriculture, not only in terms of capital and investment, but also, for example, by way of upgrading productivity and exports (boxes IV.2 and IV.3).

As noted in chapter III, there are many agriculture-related TNCs that engage directly in agricultural production in host developing countries, provided that those countries manage to reduce risk factors and create a more conducive environment. In addition, new investors are emerging, such as TNCs from developing countries and private equity funds, and some of their actual and proposed investment projects are very large (chapter III). As more developing countries seek to promote agricultural FDI, it can be expected to help raise investment levels in agriculture in these countries.

In addition to their direct impact on investment, TNCs can indirectly influence investment levels in host-country agriculture through their effects on investments of domestic entities. These effects vary: the direct participation of TNCs in agricultural production may substitute for domestic investment; but it may also "crowd in" other investors through demonstration and/or spillover effects. Domestic private investment is always important for agricultural development, but FDI can play a complementary role, both by increasing the total amount of investment, as noted above, and by directing investment to preferred areas such as the production of high-value-added crops, as discussed in the following sections. Nevertheless, the importance of public investment in agriculture needs to be emphasized, as it helps pull infrastructure into rural areas, empowers small farmers, and provides an enabling environment for private investment.

b. Easing financial constraints through contract farming

While FDI accounts for a relatively small share of capital inflows and agricultural investment in most developing countries, an important form of TNC involvement is contract farming. This form

Table IV.1. FDI in agriculture in selected major host developing countries: ratios of FDI inflows to GCF and of FDI stock to GDP, in agriculture and in the entire economy, 2007
(Per cent)

	FDI inflows in GCF		FDI stock in GDP	
	Agriculture	Economy	Agriculture	Economy
Country	2005–2007[a]	2007	2007	2007
Average of developing countries	1.1	13.1	..	29.7
Malaysia	21.9	20.6	..	41.0
Cambodia	19.1	51.9	..	44.2
Guyana	15.1	57.9	..	117.4
Honduras	9.2	21.8	..	34.3
Costa Rica	8.1	33.1	..	34.0
Fiji	6.7	45.8	..	44.1
Tanzania, United Rep. of	6.1	17.7	..	41.0
Lao PDR	5.7	19.6	..	28.3
Mozambique	5.5	23.1	..	41.5
Ecuador	4.9	2.0	..	23.2
Chile	4.0	38.4	19.7	60.7
Brazil	3.9	14.8	..	23.2
Viet Nam	1.5	25.5	17.6	56.6
China	0.5	6.0	18.6	9.7
Morocco	0.1	12.2	14.6	52.6
Namibia	..	35.3	16.4	43.6
Papua New Guinea	..	8.5	9.2	36.7

Source: UNCTAD, based on UNCTAD, FDI/TNC database and data provided by the United Nations Statistical Office.

[a] Or latest three-year period available between 1999 and 2006.

of involvement can have a very important impact on agriculture in developing countries, in particular by helping to ease financial and other investment constraints on local farmers, who might otherwise lack access to financial services. Indeed, despite the expansion of financial services for agriculture, they are still inaccessible to a majority of smallholders worldwide (World Bank, 2007).[2]

Banks and other financial institutions have not filled the gap, because they tend to focus on urban areas, where there is a higher concentration of potential clients (businesses and households), and where clients are relatively more affluent, operating costs are lower and contract enforcement is easier than in rural areas. Where finance in rural areas has been available (often through informal service arrangements such as money lenders, pawnshops or families), it has normally been directed at larger farms, so that most small producers have been excluded from the credit system.[3] In this context, the emergence of vertically coordinated supply chains (chapter III) – domestic and/or international – and contract farming, often run by TNCs in segments of the value chain upstream or downstream from production, has in many cases facilitated financial intermediation for farmers, including smallholders, who have been able to link up with these chains.

Contracts, especially with large, reputable TNCs, can ease financial constraints for participating local farmers in developing countries in a number of ways:

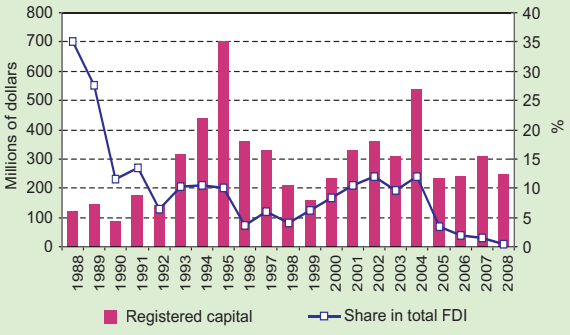
- Contract farming usually facilitates farmers' access to credit to finance production inputs and/or investment. In most cases it is contractors who advance such credit (Eaton and Shepherd, 2001). Agribusiness firms have an advantage over banks as lenders in such circumstances, because of their ability to monitor and enforce credit contracts (Key and Runsten, 1999).[4] Their contracts with smallholders usually include forward payments or provision of inputs to help overcome the problem of financial constraints faced by these farmers (Simmons, 2003).
- Some bank managers consider contracts with large agro-industry firms as a substitute for collateral, and on this basis, provide credit to smallholders, which otherwise would not have been possible (Reardon and Swinnen, 2004). In other cases, where banks or government agencies do not advance credit without guarantees, the sponsors of contracts make the necessary arrangements for credit, with the contract serving as collateral (Eaton and Shepherd, 2001). This is particularly

Box IV.2. The contribution of FDI to agriculture in Viet Nam

For many years, Viet Nam has offered a variety of incentives to promote FDI in agriculture. During the period 1988–2008, the country registered 719 FDI projects in agriculture, forestry and fishing worth $4.2 billion of total registered capital (box figure IV.2.1). These projects accounted for 7% of the total number of registered FDI projects and for 3% of the total registered FDI capital. But the implementation of licensed projects is much lower, and as a result, FDI stock in agriculture was $1.7 billion in 2007 (annex table A.III.1). If the stock is compared with value added in agriculture or the estimated private investment in Viet Nam's agriculture during the period 1988–2007, then the contribution of foreign investment becomes very significant: 18% and 28% of the total respectively. Most of this FDI originates from Asian developing economies, with Taiwan Province of China being the largest source, accounting for a quarter of the country's FDI stock in agriculture.

Apart from bringing much needed capital to Viet Nam's agriculture and contributing to the expansion of production capacity, FDI projects have increased productivity through the transfer of advanced technology and the competitiveness of agro-forestry produce. The Government is continuing in its efforts to improve the investment climate in agriculture in order to sustain FDI inflows, the significance of which fell in recent years. It hopes to raise the level of implementation of registered FDI projects and promote not only resource exploitation, but also FDI in high-value-added activities. The Ministry of Agriculture has initiated a programme for 2008–2015 aimed at addressing bottlenecks to TNC participation.[a]

Box figure IV.2.1. FDI in agriculture in Viet Nam, registered capital and share in total FDI, 1988–2008



Source: Foreign Investment Agency Viet Nam.

Source: UNCTAD, based on Truong (2009).

[a] Viet Nam, Foreign Press Center, "Foreign investment in agriculture remains limited", 18 December 2008 (www.presscenter.org.vn).

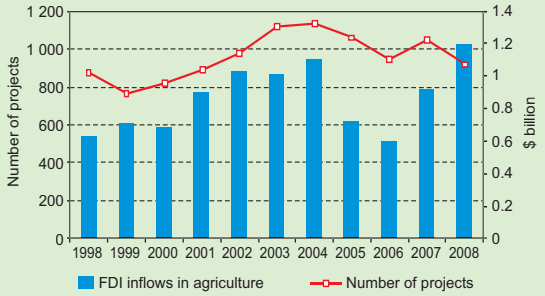
Box IV.3. The significance of FDI in China's agriculture

China has received significant inflows of FDI in agriculture since 1998: they ranged from $600 million to over $1.2 billion annually between 1998 and 2008 (box figure IV.3.1). During the entire period, China registered 10,622 FDI projects in agriculture (or 3% of the total number of FDI projects) and nearly $10 billion of cumulative FDI inflows (or 1.5% of total accumulated inflows).

Significant FDI to agriculture in the country supplements domestic capital for investment, brings advanced technologies and equipment, introduces new products and advanced management, promotes development of the food processing industry, and accelerates reform in rural areas and in agriculture in general (Ge, 2009).

Source: UNCTAD.

Box figure IV.3.1. FDI in agriculture in China, inflows and number of projects, 1998–2008



Source: Ministry of Commerce of China.

important when farmers have to make substantial investments (e.g. in heavy machinery).

- Participation in contract farming strengthens the credit and investment capabilities of farmers by increasing their income. Contract farmers have significantly higher incomes than other farmers: from 10% to as much as 100% higher in Guatemala, Indonesia and Kenya (World Bank, 2007). In two cases of contract farming examined in India, one concerning milk and another vegetables, revenues of farmers were two to four times higher than those of non-contract farmers (Birthal, Joshi and Gulati, 2005). Indeed, most empirical studies suggest that contract farming schemes have raised the income of participating farmers (e.g. Little and Watts, 1994; Porter and Phillips-Howard, 1997; Minot, 2007).

On the other hand, participating farmers can come under considerable financial pressure when dealing with large agribusiness firms. It is common practice by companies such as supermarkets to delay payments to suppliers; for example, in Latin America, horticultural producers face payment delays of 15 to 90 days (Reardon and Berdegué, 2002).

While the provision or facilitation of access to finance for local farmers through contract farming is common, data concerning the amounts involved are difficult to ascertain. Sometimes, for an individual farmer these amounts are relatively small, but they can make a big difference (Setboonsarng, 2008), as illustrated by Olam Nigeria's support to rice farmers (box IV.4). Other examples indicate that the amounts can be significant. For example, Bunge, a United States agribusiness TNC, provided the equivalent of nearly $1 billion worth of inputs to Brazilian soya farmers in 2004 (Greenpeace, 2006). Overall, United States TNCs are responsible for 60% of the total financing of soya production in Brazil (Milieudefensie and Friends of the Earth, 2006).[5]

2. Technology and innovation

Technological progress is crucial for agricultural development. Throughout the twentieth century, improvements in agricultural productivity were closely linked to policies towards and investments in agricultural R&D (Alston, Pardey and Smith, 1999). Agricultural development through innovation is vital for reducing poverty in the developing world, but agricultural R&D remains concentrated in developed countries and is grossly underfunded in most developing countries (IAASTD, 2008). Due partly to weaknesses in their agricultural innovation systems, developing countries as a whole invested only 0.56% of their agricultural value added in R&D in 2000, compared with 5.16% invested by developed countries (Pardey et al., 2007).

Public research programmes have in the past produced important results, including scientific and technological breakthroughs.[6] They contributed to the "Green Revolution", the first wave of agricultural technology development in the developing world, in which an explicit strategy for technology development and diffusion targeting poor farmers in low-income countries made improved technologies freely available as a public good (Pingali and Raney, 2005). However, total public spending on R&D has slowed down significantly in developing regions in the past decade or so (chapter III). This has widened the knowledge divide between developing and developed countries, and, within the developing world, between a handful of "star performers" (e.g. Brazil, China, India and Malaysia) and most of the others (World Bank, 2007; chapter III). In the meantime, the locus

of global agricultural R&D has shifted from the public sector to TNCs, driven by some interrelated technological and institutional forces.[7] Coupled with the transition in plant improvement research, from (conventional) breeding to molecular approaches, TNCs have been leading a "Gene Revolution", a second wave of agricultural technology development, in which improved agricultural technologies flow to developing countries primarily through market transactions (Pingali and Traxler, 2002).

Given their increased importance in agricultural innovation, TNCs can play a role in narrowing the above-mentioned knowledge gaps, both by transferring new technologies to developing countries (section B.2.a) and by engaging in local R&D activities (section B.2.b). However, the concrete technological contributions of TNCs have been limited, varying greatly by product and country. They are significant in the production of certain commercial crops in some developing countries, but remain marginal in most low-income countries for many important agricultural products, especially food staples. In addition, TNC involvement in agricultural production in developing countries has given rise to concerns that the technologies used or transferred by foreign companies may not be the most suited to these countries, and that it may have made local farmers overly dependent on specific technologies provided by TNCs.

a. TNC participation and technology transfer

Developing countries can improve agricultural productivity by acquiring advanced technologies from developed countries, but a number of factors related to the creation and dissemination of agricultural technology have significantly limited the benefits they have reaped from technology transfer.

- First, R&D by TNCs tends to focus on commercial crops with relatively large markets. No serious investments have been made in developing genetically modified (GM) seeds of importance to the poorest arid countries, and only 1% of TNCs' R&D budgets has been spent on crops that might be useful for the developing world (Pingali and Traxler, 2002; United Nations, 2004). The benefits remain limited for countries in sub-Saharan Africa, in particular, where crops grown "are more diverse, with many so-called orphan crops where there is little global public or private R&D" (World Bank, 2007: 168).
- Second, technologies created by developed-country firms may not be suitable or beneficial to developing countries, as their utilization is often constrained by geographical and climatic conditions. Therefore, the transfer of agricultural technology is more constrained than that of industrial technology (Hayami and Ruttan, 1985;

Box IV.4. Easing financial and other constraints on rice farming and processing in Nigeria

For many years, Olam Nigeria, a foreign affiliate of a Singapore-based agriculture-related TNC (box III.10), has been an importer of rice. Although Nigeria has suitable conditions for rice cultivation, local production does not satisfy the demand. A major reason is low productivity because farmers cannot afford expensive inputs (e.g. high quality seeds and fertilizers) for meeting standards of quality. Moreover, smallholder farmers are unable to get credit from the banks, which consider them "unbankable". Difficulty of access to markets due to lack of transport, poor and insecure roads and the lack of reputable buyers, is another problem. Consequently, the country imports nearly 60% of rice to meet local demand, making Nigeria the largest importer of rice in Africa and the second largest in the world.

Taking advantage of high import tariffs on milled rice, in 2005 Olam leased a mill from the Government and began processing locally produced rice. By 2007, the company had invested $5 million in upgrading the mill and had doubled its capacity. To solve the problem of an insufficient supply of high quality rice, in 2006 Olam started an outgrowers programme for rice cultivation in Nigeria, in partnership with, and the encouragement of, the United States Agency for International Development (USAID).

Initially, Olam provided credit to farmers to buy seeds and fertilizers. It also encouraged a Nigerian commercial bank, First Bank, to establish a commercial credit programme for smallholder farmers amounting to $5 million. This was made possible because of Olam's backing and the Central Bank of Nigeria serving as a guarantor. During the first two years, 8,000 farmers participated in the programme, and participation is expected to grow to 20,000 farmers by the end of 2009. Equipped with credit, smallholder farmers have been able to buy inputs from Olam, including certified herbicides, crop protection chemicals, fertilizers and sprayers. The buy-back provisions allow Olam to buy the rice at above-market price at the farm gate, transporting it for free to the mill. USAID has provided, among others, a model farm that is used for training and capacity-building for obtaining higher yields and better quality, and cooperatives have been formed to bundle rice and negotiate prices. Farmers, having gained their first-ever access to credit and a reliable buyer, have seen their incomes rise.

Source: UNCTAD, based on various online sources from USAID.

Sachs, 2001). Without adaptive research, it is usually difficult to transfer advanced technologies produced in developed countries that are mostly in temperate zones, to developing countries, many of which are in tropical zones (Johnson and Evenson, 2000; Gutierrez, 2002).[8]

- Third, barriers to international trade and investment in agricultural industries, as well as institutional asymmetries between developed and developing countries (e.g. in terms of agricultural systems and market institutions),[9] make the channels of technology transfer frequently dysfunctional or inefficient. For instance, regulatory obstacles in many developing countries hamper the transfer of agricultural technologies (Gisselquist and Grether, 2000). Moreover, an increasing proportion of new agricultural technologies are protected by intellectual property rights (IPRs) in developed countries, which limits developing countries' access to them and poses a major challenge for their use to benefit the poor (chapter V).

Due to these factors, expectations regarding the technological contribution of TNCs to agricultural development cannot be high. Nevertheless, as the following analysis highlights, there are areas where TNCs can make a contribution. Evidence from case studies shows that, apart from the traditional modes of international technology transfer related to international trade,[10] the direct and indirect participation of TNCs in production provides additional, and perhaps more effective, ways of transferring technologies. The involvement of different types of TNCs, including seed companies and other input providers, plantation companies and food processors, can bring a variety of useful technologies that may not otherwise be locally available. These technologies include, for instance, new farming methods, knowledge for enhancing production, soil and water management know-how, and various technologies intrinsic to inputs such as seeds, agrochemicals and machinery.

TNC participation in agricultural production through FDI. Utilizing their ownership advantages in technology (chapter III), TNCs participating in agricultural production through FDI introduce a range of hard and soft technologies that contribute to increased output and enhanced productivity. In the cut flower industry in many African and Latin American countries, foreign-owned farms have contributed to higher efficiency and productivity by adopting new technologies at various stages of the cut flower value chain (Wee and Arnold, 2009).[11] In Asia, foreign-invested projects in some agricultural crops have brought in more effective, sophisticated or advanced varieties, techniques and equipment, helping to improve productivity in countries such as China (box IV.5). In Viet Nam, significant technology transfer has occurred in foreign-invested projects in sugar production, vegetable and fruit planting and processing, and reforestation, including the introduction of various high-yield plant and animal varieties. In Africa, high-yielding varieties of cereals have been introduced by TNCs, leading to higher productivity. For example, China State Farm and Agribusiness Corporation (CSFAC) collaborated with the China Hybrid Rice Engineering Research Centre in introducing high-yielding hybrid rice to African countries such as Guinea.[12]

However, FDI in the industry has not always resulted in technology-related productivity gains, partly due to the fact that technological innovation in agriculture often occurs in discontinuous steps with perhaps long intervals of little or no change in between. For example, in the global banana industry in which TNCs play an important role in distribution as well as production (chapter III), no significant innovations took place during the 1980s, leading researchers to believe – erroneously – that there was little hope of productivity increases and cost reductions (FAO, 1996).[13] Moreover, technology transfer to TNC-owned farms does not readily diffuse to local producers, and nor is this usually in TNCs' interest.

TNC participation in agricultural production through contract farming. Under contract farming arrangements, agricultural TNCs normally provide

Box IV.5. Foreign investment and technological progress in agriculture in China

Foreign investment in agricultural production projects in China has introduced more than 100,000 copies of animal and plant germplasm resources, and a large number of advanced and practical technologies. Examples of significant technologies include: plastic film mulching technology, dry rice planting technology, agricultural remote sensing technology, straw ammoniation technology, and fresh fruit and vegetable processing technology. The plastic mulching technology has been utilized in nearly 100 crops.

In rice production, dry rice planting technology has been extended to more than 10 provinces, covering an area of 13 million hectares. New equipment has also been introduced. For instance, a joint venture established between Satake (a Japanese manufacturer of machinery for rice and other food products), Mitsui (a Japanese trading company) and a local company has engaged in rice contract farming in Jilin since 1998, using advanced rice mill technology.

Source: UNCTAD, based on China, Ministry of Agriculture (2004) and information provided by the Ministry of Commerce of China.

local farmers with technical assistance, seeds, fertilizers, as well as other inputs in which technology and know-how are embedded. In addition, they have a strong interest in providing effective extension services in order to obtain high-quality, low-cost products. Therefore, TNCs can support local farmers in contract farming schemes to overcome technological barriers in order to orient their production towards higher value-added, more knowledge-intensive agricultural products, and accordingly increase their revenues and income. However, technology transfer through contract farming takes place more frequently in the production of high-value-added crops and varieties which attract greater TNC involvement, than in the production of traditional food crops.

Through contract farming, foreign affiliates in the food processing and trading industries have helped transfer new plant varieties, equipment and practices to their local suppliers, primarily farmers. For instance, field research conducted by UNCTAD in 2001 revealed that leading foreign affiliates in India's food industry had contributed significantly in this regard.[14] For example, Pepsi supplied its contract farmers with various agricultural implements and hybrid seeds/plantlets, free of cost, as well as process know-how. Cadbury India has a procurement and extension services team that provides training to potential and existing suppliers on new techniques in planting, harvesting, quality control and post-transplantation care of crops (*WIR01*). In Nigeria, Olam (Singapore) provides farmers with all inputs, including certified herbicides, crop protection chemicals, fertilizers and sprayers, and the foreign affiliate runs a model farm for capacity-building seed multiplication (box IV.4).

Through their involvement in contract farming and transfer of technology to host countries, TNCs in food processing and trading can induce productivity upgrading and yield increases. Sometimes these effects can be significant. For example in India's state of Punjab, prior to TNC entry in 1989, the tomato yield was 16 tons/hectare; by 1999, the yield of suppliers to foreign processing affiliates had increased to 52 tons/hectare, partly as a result of this relationship (*WIR01*). Similarly, a study of a foreign-involved contract farming operation in the north of India demonstrated that yields of tomato farmers under contract were 64% higher than those of farmers who were not (Eaton and Shepherd, 2001; Bruinsma, 2003).

Involvement of foreign seed companies as well as other input providers. TNCs can also play an important role in bringing to local farmers useful technologies that are embedded in products such as seeds, agrochemicals (fertilizers and pesticides) and machinery.[15] The seed industry in the developing world was started by TNCs from developed countries, and then led to the emergence of local firms (Morris, 1998). In particular, the economic viability of hybrids has resulted in a rapid development of the seed industry in developing countries, and the industry has expanded even in low-income countries. In Uganda, for example, 14 major seed companies have local affiliates, among them Monsanto, which deals in hybrid maize that has helped increase yields significantly (Nsonzi, 2009). All the seeds Monsanto supplies in Uganda can be replanted. However, in some other cases, seeds provided by TNCs cannot be replanted, and farmers cannot set aside seeds for planting in the next season, which means they have to buy them from suppliers. This has led to concerns about the dependence of local farmers on specific inputs provided by TNCs.[16]

Although TNCs' investments in genomics and genetic engineering could be useful for addressing the problems faced by poor farmers in developing countries, their potential has not been realized. This is partly because of the necessary ongoing debate about the long-term impacts of GM crops on the environment and human health (section C.1). Developed countries (mainly the United States and Canada) accounted for a major share of the estimated 125 million hectares of GM crops grown globally in 2008 (James, 2008). Only 6 developing countries, namely Argentina, Brazil, China, India, Paraguay and South Africa, have planted more than 1 million hectare of GM crops; and only 3 African countries have ever planted such crops.

b. TNC participation and the agricultural innovation system in host countries

As noted above, adaptive R&D is often needed in order for TNCs to transfer advanced technologies created in developed countries to their operations in developing countries. In addition, sometimes foreign affiliates conduct location-specific research on crops, soil and water, and for developing more sustainable and resilient agricultural systems. Until recently, however, these kinds of activities were limited to a few developing countries and selected crops.

An *agricultural innovation system* is characterized by its very diverse composition, including players such as public research institutes, private enterprises (domestic or foreign), farmers and various government agencies and regulatory bodies. When they engage in R&D activities locally, TNCs become players in the system and influence its effectiveness and performance in a number of ways:

- First, their spending helps increase agricultural R&D in developing countries, as for example in India (box IV.6). In Latin America, some international seed and agrochemical producers,

such as BASF, Dupont, Monsanto, Novartis, Pioneer and Syngenta, actively conduct agricultural R&D, as do TNCs such as Chiquita, Del Monte and Dole (Stads and Beintema, 2009). In China, Syngenta has established four seed research and demonstration facilities and a technical centre for crop protection, and its sixth global R&D centre was set up in Beijing in 2008.[17]

- Second, TNC involvement in agricultural R&D increases the significance of the private sector in the sectoral innovation system. A common weakness of the innovation system in developing countries, particularly in agriculture, is the absence of a sufficient number of innovative enterprises (*WIR05*).[18] In Latin America, for instance, the public sector does most of the R&D in agriculture; most domestic private companies outsource their research to government agencies or universities, or they import technologies from abroad (Stads and Beintema, 2009). However, in a number of Latin American countries, such as Argentina and Brazil, and Asian countries, including China, India, Malaysia and Thailand, foreign investors have made an important contribution to private research in agriculture, though the total amount is still small (Pray and Fuglie, 2001).
- Third, TNC participation creates opportunities for learning and channels for knowledge spillovers, and it links local entities to global innovation systems. For instance, as many public research institutes in developing countries face institutional constraints that inhibit their effectiveness and thus their ability to attract funds, they can benefit from knowledge spillovers from TNCs and activate their underutilized innovative potential by conducting adaptive, commercially-oriented R&D. Several types of international public-private partnerships (PPPs) can be developed between public research institutes and TNCs (box IV.7), and government policies in developing countries can play an important role in fostering such partnerships (chapter V).

At the same time, agricultural R&D undertaken by TNCs locally may trigger concerns in host developing countries. The potential costs of TNC involvement in the agricultural innovation system for a host developing country depend mainly on the type of R&D and TNCs' motives, as well as on the strength of the domestic innovation system. Major issues of concern relate to the potential downsizing of domestic R&D, the narrow scope of R&D activities (focusing too much on short-term commercial interests), unfair sharing of intellectual properties resulting from local R&D and related revenues, and possible technology leakage. A related concern is that the knowledge created by TNCs in cooperation with local institutions may be used by the TNCs in other markets, thereby enabling them to cream off the returns. Another concern is that foreign research affiliates might become "gene pirates" if they transfer domestic-specific germplasm resources abroad and utilize them commercially for international markets. Policymakers in host developing countries therefore need to consider the protection of their particular gene resources as well as the IPRs of TNCs (chapter V).

For low-income countries, small-scale farmers' limited access to new technologies has always been a problem for technological progress in agriculture. Traditional extension services often have limited outreach, while local producers have restricted access

Box IV.6. TNCs and the agricultural innovation system in India

India has one of the largest and most complex and institutionally diverse agricultural innovation systems in the world. The system is characterized by a proactive government policy, coupled with support from a number of bilateral and multilateral donors. It has achieved many successes, most notably the Green Revolution in the 1960s and 1970s (Evenson, Pray and Rosegrant, 1999). To achieve a more complex and expanding research agenda, the Indian Government has involved TNCs in the system since the early 1990s. In 1991, the Government allowed seed imports and majority foreign ownership of seed companies, which resulted in a number of foreign seed companies entering the market and undertaking R&D locally (Pal and Byerlee, 2006).

In a dynamic system of innovation, various players operate in partnerships, networks and consortia, and various forms of public-private partnerships (PPPs) may emerge (Hall, 2009). The various forms of partnership between domestic and foreign entities in India's agricultural innovation system have created opportunities for learning and channels of knowledge spillovers from TNCs to local entities, including public research institutes, domestic enterprises and farmers. For example, in the area of biotechnology, all Indian companies with significant R&D programmes have established joint ventures with global companies for access to their proprietary tools and technologies (Pal and Byerlee, 2006). In the food processing industry, the four largest foreign affiliates (Pepsi Foods Ltd., GlaxoSmithKline Beecham Ltd., Nestlé India Ltd. and Cadbury India Ltd.) are engaged in product development with local research institutes or universities to develop hybrid varieties of crops and vegetables and new agricultural implements to alter cropping patterns and raise productivity (*WIR01*).

Source: UNCTAD.

Box IV.7. International public-private partnership between public research institutes and TNCs: the case of Embrapa in Brazil

Established in 1973, Embrapa is the leading public agricultural research institute in Brazil. It has established several types of domestic and international partnerships with TNCs:

- *Partnerships with TNCs for the development of new technologies.* In this kind of partnership, Embrapa and its partner develop R&D projects together, and the resulting technology is then made available for broader local use. For example, BASF and Embrapa signed a technical collaboration agreement to create cultivars resistant to herbicides. These cultivars will soon be available in the market.
- *Partnerships for incorporating technologies from other corporations into Embrapa products.* This type of agreement enables Embrapa to identify and license technologies from other organizations, and incorporate them into its own products. It helps the R&D process and facilitates technology transfer. Some TNCs and technologies involved are, for example, BASF (herbicide resistance) and Monsanto (resistance to glyphosate-based herbicide).
- *Partnerships where Embrapa provides licences of its technologies to TNCs.* In this type of partnership, Embrapa's technologies are licensed to be validated and commercialized abroad. In this kind of contract the licensee pays royalties or a similar fee.

Since 1998, Embrapa has created several virtual laboratories abroad: in France, the Netherlands, the United Kingdom and the United States. Further, with the aim of providing humanitarian aid to low-income developing countries through technology transfer, Embrapa carries out several cooperation projects in all South American and 13 African countries.

Source: UNCTAD, based on inputs from Antonio Flavio Dias Avila, Embrapa (Brazil).

to improved seedlings and processing technologies (World Bank, 2007). In a diversified agricultural innovation system, both agricultural extension services and private businesses – domestic or foreign – become innovation brokers to help farmers identify market opportunities in production and related downstream activities, and link them to sources of knowledge and inputs to grasp those opportunities (Hall, 2009). By linking local farmers and other entities to the global knowledge network of TNCs, in cases where the former can be effectively involved, foreign affiliates become actors in a new approach to technology delivery. This can be an important supplement to the traditional, specialized technology delivery through agricultural extension services. It is best illustrated by the role of Syngenta in the development of Shouguang as a major vegetable production and export base in China (box IV.8).

Domestic entities that already have a threshold level of technological capabilities are more likely to benefit from technology transfer and knowledge spillovers, when they occur: for farmers, through contract farming, and for public research institutes, through cooperative research. Institutions and policies can influence the extent of technology transfer and the efficiency of the agricultural innovation system, with or without the involvement of TNCs in local production and innovation. At the international level, renewed

Box IV.8. Bringing high-value seeds and new technology to farmers: the role of Syngenta in the Shouguang Model

Shouguang in Shandong Province is a major vegetable production, trading and export base in China. It has been identified as one of 18 models of successful local economic development that have emerged in China during the past three decades.

International seed companies have played a role in the development of the Shouguang Model. After an initial investment by Syngenta Seeds in Shouguang in 1998, most of the world's largest seed companies have established their presence there, targeting both the local and national markets. Shouguang Syngenta Seeds Company, a joint venture between Syngenta Seeds and the local government, engages in testing, demonstrating and transmitting the latest results of Syngenta's vegetable breeding research from its global R&D network to Chinese growers. Some of the main vegetable products have included tomatoes, peppers and watermelons. To meet the different climatic conditions, planting habits, product demands and marketing characteristics of different regions in China, the joint venture started R&D on vegetable seeds in Shouguang in 2001.

Syngenta has signed a memorandum with the National Agricultural Technical Extension and Service Centre of the Ministry of Agriculture of China to provide farmers with training in farming and culturing techniques. It has launched an initiative in Shandong Province aimed at reducing the layers of distribution channels and providing direct extension services to farmers. Vegetable growers have received, in addition to high-value-added commercial seeds, instructions on planting and farming, which help them improve the quality and quantity of production and access to international markets, resulting in increased income.

Source: UNCTAD, based on a field study conducted in April 2009.

collective actions in agricultural R&D and increased investment in the associated institutions are crucial (Alston and Pardey, 2006). Policymakers also need to determine how best to involve TNCs in advancing and disseminating useful technologies (chapter V). To fight the food crisis, a daunting challenge is how to create incentives for PPPs that will allow the public sector to use and adapt technologies developed by TNCs to overcome problems faced by poor farmers, especially those growing non-commercial crops.

3. Employment and skills

Agriculture provided jobs for 1.3 billion smallholders and landless workers worldwide in 2007, but in rural areas severe underemployment is still a problem (World Bank, 2007). Generating more and better jobs is therefore an integral aim of sustainable agricultural development, and is crucial for rural development and poverty alleviation (ILO, 1988 and 2008).

The variety of land ownership patterns and modes of cultivation in agriculture give rise to many types of labour relations and forms of labour participation.[19] The involvement of TNCs in the agribusiness value chain affects the size and quality of many of these employment types and forms (section B.3.a). It also influences the level of human resources and skills in the agricultural industries of host developing countries (section B.3.b). As noted earlier, the participation of TNCs enhances the shift to modern commercial farming, which places an emphasis on capital formation and technological progress aimed at ever higher levels of output and productivity. As TNCs are most likely to engage in capital-intensive operations and to employ sophisticated labour-saving mechanical equipment (section B.2), coupled with their low level of participation in agricultural production in many developing countries, these firms make only a limited quantitative contribution to employment in agriculture as a whole. Indeed, to the extent that smallholders may be driven out of business during the process of commercialization and modernization in agriculture, employment in the industry may even decline. At the same time, evidence from case studies shows that in some circumstances TNC participation can create significant employment at the local level, and that the qualitative impact of their participation in terms of enhancing skills and human resources can be significant.

a. Employment creation

The quantitative impacts of TNC participation on agricultural employment can be both direct and indirect. Direct impacts refer to employment creation (or reduction) by foreign-invested plantations, or by foreign affiliates through contract farming. Indirect impacts on employment by local entities resulting from TNC participation can occur through, for example, competition from foreign players, business linkages, and demonstration and spillover effects.

The *direct* impact of an agricultural production project with TNC involvement on the size of employment varies by product, the mode of TNC involvement and the context of the host-country economy and industry. TNC participation through FDI in new production facilities can directly create job opportunities in host developing countries. In some labour-intensive industries like floriculture and tea production, employment generation by foreign affiliates has been significant in countries such as Colombia, Ecuador, Ethiopia, Kenya and Mexico. For example, in Kenya, the cut flower industry, in which TNCs are major players, provides direct employment to about 55,000 people.[20] In the tea industry, Unilever operates in 18 African countries, providing employment to about 20,000 people (OECD, 2008c). Job creation is also increasingly related to South-South investment in agriculture. For instance, Sime Darby (Malaysia), one of the largest plantation companies in the world (chapter III), is undertaking a project for the rehabilitation and expansion of the Guthrie Rubber Plantations in Liberia, which will provide 20,000 jobs.[21]

However, while agricultural employment might rise due to FDI, often because of increased exports induced by improved access to international markets,[22] this may not be sustainable. For example, the shift of TNC activities in banana cultivation from higher cost countries to lower cost ones may threaten employment in the former if they cannot enhance labour productivity and retain their competitiveness (Arias et al., 2003). Moreover, the direct participation of TNCs from developed countries in the production of certain agricultural products may substitute for investment and operations by domestic farmers in a host developing country (section B.1). This displacement tends to reduce the size of overall employment, as TNCs usually utilize more capital-intensive production methods. There is also likely to be a negative impact on employment when large foreign-invested plantations crowd out small local farmers.

Employment opportunities may also be generated by TNCs through contract farming arrangements with local farmers. Studies have found large variations in this respect. On the one hand, in labour-intensive cash crops, there is a significant increase in daily farm employment in crops newly contracted by TNCs. For example, in Kachorwa District in eastern Uganda, a contract farming scheme for growing organic coffee set up by a foreign affiliate encompasses about 4,000 organic farmers, and more than 60% of all households in the area (Bolwig,

Gibbon and Jones, 2009). In the same industry and country, another foreign affiliate[23] also involves more than 4,000 farmers in its contract farming scheme (Nsonzi, 2009). On a larger scale, an international joint venture project in Leshan, China, involved 400,000 farmers in planting fast-growing trees for its production of medium density fibreboard.[24] On the other hand, in cases where a highly mechanized and centralized system is transferred to large local farmers, the situation is quite different and may result in a fall in employment (Glover, 1984; Glover and Kusterer, 1990).

The participation of agricultural TNCs also influences employment *indirectly,* both on- and off-farm. Their involvement along the agribusiness value chain may help create jobs by forming backward and forward linkages with local entities. It can foster off-farm enterprise development and create non-farm employment opportunities.[25] A study on farm and non-farm linkages at the household level in Senegal showed that greater off-farm employment opportunities for rural households – resulting from increased horticulture exports and associated agro-industrialization – had benefited the smallholder farms (Maertens, 2008). In addition, earnings from employment in the growing horticulture export industry in Senegal are partly invested in family farms, resulting in larger farm sizes, higher farm expenditures and higher farm incomes.

b. Skills enhancement

The qualitative aspects of agricultural employment have become an increasingly important concern for developing countries, as reflected in the advocacy by the International Labour Organization of a comprehensive strategy for promoting employment and decent work in rural areas (ILO, 2008).[26] Like FDI in other industries, the primary impact of TNC involvement in agriculture on employment is as likely to be on its skill mix and quality (in terms of remuneration and working conditions) as on the number of jobs created (Dunning, 1993; *WIR94*).[27] In agricultural production, TNC involvement, particularly in large-scale plantations, often creates skill-intensive, better-paid employment. In Chile, the percentage of waged workers in areas focusing on TNC-driven, export-oriented horticulture has risen steadily since the early 1990s, in contrast to stagnation in other production areas with less TNC involvement (wheat, dairy and beef) (Valdés and Foster, 2006). In Kenya, floriculture companies, most of which are foreign-invested producers, have developed a code of conduct, backed by regular audits, with requirements for workers' health and safety, general worker welfare and various labour-related issues.[28]

With regard to its impact on the skills base of host developing countries, TNC participation can help improve domestic manpower through different channels. For example:

- Foreign affiliates need to provide some form of on-the-job training to ensure that the farming methods they use are deployed efficiently. However, decisions on whether to invest in more advanced forms of training depend on the extent to which these firms are exposed to competition and the expected economic returns. These in turn are influenced by the skills provided by the education system and the prospects of retaining trained workers (*WIR99*). The contributions of TNCs to skills upgrading and human resource development are related to the relative newness of specific skills and appropriate technologies in the context of agriculture in a host country.
- Local farmers can learn various skills through contract farming arrangements with TNCs, including record-keeping, efficient use of farm resources, improved methods of applying chemicals and fertilizers, knowledge of quality standards and information on export markets (Eaton and Shepherd, 2001). They can be related to relatively advanced or niche areas, such as organic planting requirements (box IV.9). Farmers can apply some of their acquired skills to the production of other cash and subsistence crops. However, this is not always possible, as some of the skills and techniques learned in contract farming schemes are highly crop-specific and are not transferable to other products (Glover, 1984; Glover and Kusterer, 1990).

However, TNC involvement can also have negative consequences stemming from the possibilities for exploiting their power over labour, which can result in less favourable working conditions. Indeed, the economic, social and political power imbalance between employers and workers tends to be more prevalent in rural areas than in urban areas; rural labour markets tend not to function well partly because labour organizations are usually weaker there (ILO, 2008). TNCs' power over their suppliers in the trading relationship (section B.6) and their constant search for cheap inputs may also create problems for workers and producers. In the global banana industry, for example, the downward spiral in purchase prices has been passed on to workers in the plantations and to small producers, further depressing wages and working conditions in producing countries worldwide,[29] according to the Second International Banana Conference (Arias et al., 2003).

Child labour is a major concern in agriculture throughout the developing world (ILO, 2007). According to the Food and Agriculture Organization of the United Nations (FAO), agriculture accounts for 70% of child labour worldwide, a significant proportion of which is in plantations, such as coffee,

cocoa and banana plantations. In cocoa plantations, for example, hundreds of thousands of children are engaged in hazardous tasks on cocoa farms in a number of African countries, including Cameroon, Côte d'Ivoire, Ghana and Nigeria (International Institute of Tropical Agriculture, 2002). There is regular trafficking of child workers from neighbouring, more impoverished countries, such as Burkina Faso, Mali and Togo, who are sold into forced labour. TNCs in the global cocoa/chocolate supply chain have committed themselves to addressing this problem through their participation in the Cocoa Industry Protocol, the International Cocoa Initiative and the Cocoa Certification and Verification System (see box V.10 in chapter V).

4. Standards and supply chain management

As mentioned earlier, agribusiness TNCs may accelerate and intensify the commercialization of agriculture in host developing countries (see box IV.1). One of the ways they can do this is through the diffusion of international standards with respect to quality and safety of agricultural products (in addition to general standards such as ISO 9000). A major channel for such diffusion is through contract farming. Agribusiness TNCs in the downstream part of the value chain can be grouped into three categories: retailers, traders and food processors (chapter III). This section draws largely on studies relating to transnational retailers or supermarket chains to illustrate the diffusion of standards because they have been more intensively researched than other categories of agribusiness firms. But this does not mean that the impacts of traders and food processors are any less important.[30]

Transnational retail chains have an impact on developing-country farmers not only through their procurement for developed-country markets, but also, increasingly, because of their dominance of the food retailing industry in developing countries. Although agricultural exports from developing countries receive much attention in the literature, the domestic market is generally much more important in terms of size since the share of exports in total food production is very small in most countries. Globally, over 90% of agricultural output is consumed within the country where the production takes place, and the share is even larger in developing regions, except for Latin America. Subsistence farming remains important in some countries, but as a result of rapid industrialization and urbanization, an increasing proportion of the population obtains food through market transactions in which food retailers are assuming a greater role as intermediaries between farmers and consumers. In food retailing, the share of supermarkets is rising fast, although the picture varies widely across regions.[31] Importantly, in the fast growing supermarket segment of the market, it is transnational retail chains that have been expanding fastest through FDI to become prominent, if not dominant, players in the most dynamic segment of food retailing in many developing countries. As such, they are in a position to exert a significant influence on agriculture through both global and domestic value chains; the power they exercise can have both negative and positive outcomes.

a. Diffusion of standards

For major agribusiness TNCs, ensuring the quality and safety of the foods they produce is an important part of their business strategies, especially since the reputation of their brand is an integral element of their competitiveness. They therefore require their suppliers to comply with stringent quality and safety standards, which are often more demanding than Codex Alimentarius, the internationally recognized food safety standard developed by FAO and the World Health Organization (WHO).

As consumers become relatively affluent, they are willing to pay a premium price for food products that have quality and safety certification. This is

Box IV.9. Teaching local farmers to grow organic coffee in Uganda

In the Kawacom Sipi Organic Arabica scheme in Uganda run by Kawacom, an affiliate of Ecom Agroindustrial Corporation (Switzerland), most farmers involved have EU or United States organic certification. Project farmers are required to adopt certain production and on-farm processing practices/methods that prohibit the use of synthetic inputs and encourage the use of other organic practices.

Kawacom employs various means to help growers comply with its organic and quality standards, including group training, individual advice and input provision. A group certification system is used based on an elaborate internal control system, the central component of which is an annual or semi-annual farm inspection performed by locally recruited company field officers. These officers have been trained in organic farming methods, and they run demonstration farms and conduct occasional training. They also give technical advice to farmers during the farm inspections and monitor their performance in terms of their compliance to the organic standards and other project requirements.

Source: UNCTAD, based on Bolwig, Gibbon and Jones (2009).

certainly the case in developed-country markets, but urban consumers in developing countries are also showing the same tendency. In a competitive market, such consumer preferences influence the procurement practices of retail chains. What marks out transnational supermarkets in this regard are their scale and expertise in managing supply chains, which allows them to impose the requirements of markets – notably their consumers – on suppliers more effectively. The main tools transnational supermarkets deploy in managing their supply chains are product standards. Since public standards for food quality and safety are relatively low, or not enforced in practice, in many developing countries there has been a proliferation of private standards by agribusiness TNCs and, subsequently, systems of third-party certification (box IV.10).[32] Indeed, in most cases, the standards that agribusiness TNCs apply in developing countries today are no less stringent than those in use in developed-country markets as a result of the centralization of distribution systems and exports of farm produce.

Standards allow firms to specify, harmonize and manage the product quality and delivery conditions that they require from suppliers. Standards are also used to set criteria for rewarding suppliers who invest in quality and safety management systems. Traditionally, agribusiness firms used standards for coordinating supply chains, which might be spread over many regions or even countries. More recently, however, these firms also use standards as a marketing tool for differentiating goods in response to consumer demand for quality. As a result, in some cases, standards extend to labour and environmental aspects of farming as well (sections B.3.b and C).

Centralization is a key element of agribusiness TNCs' procurement systems. In an effort to reduce the cost of coordinating the supply chain, transnational supermarket chains tend to centralize procurement by establishing distribution centres, instead of letting each store manage its own procurement. The geographical scope of such centralization is not confined within a country; the area served by a central distribution centre may progressively be extended from a country, to a region and even to the global market. Such centralization, in effect, helps to implement the strict standards among all the countries a centralized distribution centre serves (Henson and Reardon, 2005; Berdegué et al., 2005).

Furthermore, it has been observed that the selection of sources by agribusiness TNCs results in a *de facto* extension and implementation of developed-country standards to developing countries. For example, Freshmark, a specialized procurement agent owned by the transnational supermarket chain Shoprite (South Africa), selects its suppliers from areas where the majority of growers also supply export markets and hence are required to comply with the GLOBALGAP (see box IV.10). Thus, much of the

Box IV.10. Coalitions of agribusiness TNCs for setting common standards

A recent development in private voluntary standards for agribusiness industries is the emergence of coalitions by leading agribusiness firms for setting standards (Fulponi, 2006). Some international food standards, such as the British Retail Consortium (BRC) Global Standards, the International Featured Standard, and Safe Quality Food (SQF) 2000, are designed for the processing stage of agribusiness value chains. Others are concerned with the pre-farm-gate stage, covering the entire farming process – from the use of inputs to the produce leaving the farm. The two most widely used pre-farm-gate standards are SQF 1000 and GLOBALGAP.

- *SQF 1000.* The SQF Program is a global food safety and quality certification programme and management system. Launched in 1994 in Australia, since 2004 it has been administered by the SQF Institute (SQFI), a division of the Food Marketing Institute (FMI) based in the United States. It has 1,500 member companies in the food retail and wholesale industries around the world. The programme comprises two codes: SQF 1000 for primary production and SQF 2000 for food manufacturing and distribution.
- *GLOBALGAP* (formerly EUREPGAP) is a private sector body that sets voluntary standards for the certification of agricultural products. Its membership includes retail and food service providers, producers/suppliers and associate members from the input and service side of agriculture. Some European chains apply GLOBALGAP to supplies of some fresh produce and meat products from developing-country markets (Henson and Reardon, 2005).

Efforts to harmonize standards are still ongoing, led by the Global Food Safety Initiative (GFSI), which was launched in 2000. The GFSI is coordinated by CIES – The Food Business Forum, a global food business network comprising 400 retailers and manufacturers across 150 countries.

In addition, there are a number of commodity-specific pre-farm-gate standards, including: the Common Code for the Coffee Community (4C), initiatives from the Sustainable Agriculture Initiative Platform (covering wheat, palm oil and dairy products), Cotton Made in Africa, and the Better Cotton standard. The nature of these standards is slightly different from food safety standards in the sense that they are explicitly aimed at helping small-scale farmers or promoting sustainable farming.

Source: UNCTAD.

produce sold by Shoprite's retail network throughout the African continent is effectively governed by the same safety and quality standard as in Europe (Weatherspoon and Reardon, 2003).

b. Use of contract farming and specialized procurement agents

For agribusiness TNCs, it can be difficult to enforce standards in traditional wholesale markets as it is hard to trace the origin of the produce sold in these markets and, under such circumstances, supermarkets can exert little leverage on producers with regard to farming methods. Furthermore, it is difficult to ensure a constant volume of supply that meets a particular standard through such markets. To resolve these problems, companies often resort to contract farming for sourcing agricultural produce; or, alternatively, they outsource the procurement function to specialized agents, which in turn establish contractual relationships with farmers.

A consequence of agribusiness TNCs' implementation of private standards has been the decline of traditional wholesale markets in developing countries where they operate. Since the TNCs have few possibilities to control and verify farms' production processes when they buy through wholesale markets, they often interact directly with host-country farmers through contract farming. Alternatively, they outsource the procurement and distribution functions to specialized procurement agents dedicated to the supermarket industry.[33]

In order to ensure that production processes and farm produce conform to their requirements and that produce is delivered on time in sufficient quantities, agribusiness TNCs or their specialized procurement agents form a contractual relationship with their suppliers, sometimes referred to as a system of preferred suppliers.[34] Under this arrangement, the agribusiness firm "lists" suppliers and commits to purchasing certain produce from them. The benefits that "listing" brings to farmers (suppliers) can be considerable. It provides a guaranteed market, and, if stipulated in the contract, at a predetermined price. Contracts with transnational supermarket chains, which dominate the most dynamic segments of the food retail industry, are likely to offer potential for further growth. In addition, the range of produce required by supermarkets tends to involve more intensive use of labour, thus enabling family-run farms a fuller use of household labour.

Although there can be enormous potential benefits to contracted farmers, they also face considerable hurdles in meeting their obligations as suppliers. Controlling the quality and attributes of farm produce, for instance, requires management of production through the use of fertilizers, pesticides and other systems that protect the crops from variability in natural conditions (e.g. irrigation systems and greenhouse). Thus suppliers to agribusiness TNCs need to have the capability to manage a modern business operation effectively. In addition, assuring quality and safety of foods is based on the principle of traceability, which requires farmers to maintain detailed bookkeeping records. Farmers may also need to adopt the technologies required for packaging and bar-coding. Finally, unlike selling directly through more traditional markets, delivering to supermarkets may not result in immediate payments, since some chains operate a long-term payment system. Thus the ability to manage financial flows, including obtaining credit, becomes an essential part of running a farm. It is evident that managing such a capital- and knowledge-intensive operation requires a high degree of technical and managerial expertise on the part of the farmers.

Even those farms that succeed in establishing themselves as suppliers to agribusiness firms face a number of challenges. For instance, as mentioned above, farms need to make considerable investments to modernize operations and adapt farming patterns and practices to meet the requirements of agribusiness TNCs. Moreover, although farms might enter into a contractual relationship with the companies voluntarily, over time it becomes difficult for them to exit the relationship, given the considerable fixed investments they will have made. Thus these farms may become dependent on agribusiness firms, which weakens their bargaining power (Watts, 1994). The problem is especially acute in countries where agribusiness industries are concentrated in a few large firms (section B.6).

There are also possible broader negative consequences. For instance, the procurement practices of agribusiness TNCs, based on enforcing standards and establishing a system of preferred suppliers, are likely to induce structural changes in agriculture in favour of larger, more capital- and knowledge-intensive farming operations, to the detriment of small-scale farmers. Further, farmers who succeed as suppliers are often those who are willing to concentrate on the production of a smaller variety of crops to facilitate screening and monitoring, hence improving farmers' links to markets and income prospects, but at the cost of crop variety. In addition, standards may specify a number of conditions for seeds, which could limit farmers' choice of seed suppliers. Given the increasing dominance of a few TNCs in the seeds market, there are concerns that such a requirement further weakens the bargaining position of farmers vis-à-vis seed suppliers (section B.6).

c. Agribusiness TNCs' supply chains and the decline of small farmers

Not all farmers are in a position to benefit from the increased presence of transnational supermarket chains or food processors in their countries' markets (box IV.11). Small-scale farmers in remote areas are particularly ill-equipped to cope with the changing nature of the value chain. For produce that commands premium prices, such as fruits and vegetables, supermarkets expect crops to be harvested and delivered fresh, perhaps on a daily basis, which implies that the farms need to be situated in areas where transport and logistics systems are reasonably well developed. Similarly, for commodities characterized by a low value per unit of volume, such as wheat and soya, adequate infrastructure that facilitates transportation of large quantities of goods is essential.

For farmers who fail to meet the requirements of agribusiness firms, market conditions could become increasingly difficult. Experience in Latin America, where supermarket retailing is more developed than in other developing regions, suggests that supermarkets and specialized procurement agents are increasingly dominating the food marketing industry in urban areas, marginalizing small traders, spot food markets and neighbourhood stores. As a result, alternative outlets for those small farmers who fail to meet the requirements of supermarket chains could diminish (Dolan, Humphrey and Harris-Pascal, 1999; Reardon and Berdegué, 2002).[35]

Evidence from dairy industries in Argentina and Brazil shows that smaller producers who did not meet the threshold scale of operation required for supplying retailers, mainly TNCs, have exited the industry or operate in the informal sector. In that sector they serve local markets where there are no formal standards and control systems and taxes are not paid, thus allowing them to charge a lower price (Farina et al., 2005). Others have found employment as labourers in larger operations. Partly in response to such trends, and in order to sustain the viability of small-scale farming, donors, non-governmental organizations (NGOs) and public sector institutions have been taking a closer look at the role of producer organizations. One course of action has been to assist the formation of cooperatives and other forms of producer organizations (chapter V).

5. Foreign-market access and exports

Various trade barriers and subsidies in developed countries limit the scale and scope of agricultural exports from developing countries (chapters III and V). In addition, the proliferation and increased stringency of quality and safety standards (section B.4) has become a source of concern among some developing countries, as these standards are perceived by them as a barrier to their agricultural exports (Unnevehr, 2000; Garcia-Martinez and Poole, 2004). Against this background, what role can TNCs play in helping developing countries access foreign markets and enhance agricultural exports?

In agriculture today, TNCs have only limited involvement in the production of agricultural commodities exported from developing countries, focusing instead on downstream operations (chapter III). While several developing countries have acquired and/or developed the capabilities and technologies needed for successfully exporting their agricultural products – traditional or newer, high-value ones – many others have not. In such circumstances the role

Box IV.11. Do agribusiness TNCs procure from small-scale farmers?

In general, agribusiness TNCs avoid dealing with small farmers, as this is often very costly. But the profitability of a supply network depends on the market conditions. The price at which the agribusiness firm can sell its output in relation to the cost of procurement is the overriding factor. In addition, the availability of large-scale farmers and competition from rival firms for the sourcing of farm produce are important considerations.

The experience of dairy farmers in Latin America has received much attention in the literature, as indicative of the plight of small-scale farmers in modern supply chains. In Brazil for example, it is alleged that the procurement practices of Nestlé, along with other large dairy processors, were responsible for driving as many as 60,000 small-scale dairy farmers out of business in the period 1997–2000. Nestlé alone is reported to have shed 20,000 farmers from its supplier list during this period (Farina, 2002). Other studies on small-scale farmers suggest that the scale of operation is not necessarily the determining factor, but it still seems essential for small-scale farms to be well capitalized in order to succeed (Reardon et al., 2005).

It is not surprising, therefore, that the development community has aroused concern. Globally, however, evidence on this issue has been mixed, suggesting that TNCs' procurement strategies vary widely depending on the market conditions. In economies where large-scale farmers are rare, agribusiness TNCs have no choice but to procure from a large number of small-scale farmers. For instance, in contrast to the experience in Latin America, Nestlé in Pakistan sources half a million tonnes of milk a year from more than 135,000 small-scale dairy farmers through milk delivery points in 2,000 villages.

Source: UNCTAD.

of TNCs – international trading companies, processing companies and supermarkets – in helping to increase the competitiveness of agricultural exports of many developing countries should not be underestimated.

Many developing countries possess comparative advantages (based on factor endowments and costs) in agricultural production. However, these advantages are a necessary but not sufficient condition to initiate, sustain and increase exports.[36] Many other conditions are needed, such as producers' responsiveness to export opportunities, knowledge of changing consumer preferences, and established brands in the case of differentiated products. The potential contribution of TNCs to agricultural exports consists of providing the missing ingredients so as to allow countries to exploit their comparative advantages. TNC involvement can help them exploit static comparative advantages (in traditional standardized commodities and products), and also in a number of cases the development of dynamic advantages (in higher value added products). At the same time the risk of becoming over-dependent on these companies for exports is a crucial consideration.

TNCs can have large internal (intra-firm) markets, accessible only to their affiliates or associated firms. They also control or have access to large markets of unrelated parties, and can therefore influence the granting of trade privileges in their home (or third country) markets. TNCs dominate international markets for some agricultural products and a large part of international trade in those products is intra-firm trade, which makes access by independent producers difficult, if at all possible. Furthermore, some TNCs have established brand names and distribution channels with supply facilities spread over several national and international locations. This makes it difficult for developing-country firms to gain physical access to international marketing and distribution channels to consumers. The strong TNC domination of market access to developed-country markets is particularly evident in classical cash crops such as coffee, where international trade and the value chain in general are dominated by a handful of international trading houses and roasters (box IV.12 illustrates an interesting exception to this general tendency).

Box IV.12. Bypassing established coffee value chains: not easy but possible

For the bulk of globally traded coffee, international trading houses and processing TNCs ("roasters", such as Eduscho, Lavazza, Jacobs Suchard, Tschibo and Nestlé) buy green coffee beans in coffee-growing countries and the role of developing-country participants in the value chain usually ends there. One of the main reasons is that coffee sold to final consumers is generally a branded product. Developing a coffee brand (or any brand) and successfully nurturing and marketing it in intensely competitive markets is very costly and risky. It also requires a continuous, large supply of consistently high-grade coffee. Attempts by developing-country enterprises to develop own brands, and thus circumvent the value chain by eliminating intermediaries, more often than not have failed. But there have been some successes, often in some form of association with TNCs.

One way of shortening the coffee value chain is to use fewer intermediaries (notably international trading companies) and develop own brands. This is not easy, but there are very few global coffee brands that are owned by coffee producers. A recent example of a "shortened value chain", whereby developing-country producers sell coffee directly to developed-country markets, is the company, Juan Valdez Café from Colombia. Run by the National Federation of Coffee Growers of Colombia, a non-profit organization, the company has successfully capitalized on the good reputation of Colombian coffee, particularly in the United States.[a]

Another way to sidestep existing value chains is to develop niche products such as organic coffee, if necessary in partnership with TNCs and/or with the support of development agencies. An example is the cooperative of the Indigenous Peoples of the Sierra Madre of Motozintla (ISMAM), which represents over 1,500 indigenous smallholder families who grow organic coffee at high altitudes in Southern Mexico. ISMAM formed a partnership with German coffee roaster Niehoff and a French importer Schorn SA in late 2002, each partner holding a stake of one third in the venture.[b]

An often neglected aspect is that some TNCs specialize in providing a wider range of services to (potential) exporters based on management contracts. For example, ED&F Man, a Swiss-based TNC with affiliates operating in 16 of the top 20 coffee-producing host countries, provides farm management services in Kenya through its affiliate, Coffee Management Services. The services include financing, farm inputs, accountancy services, feasibility studies (e.g. environmental and social assessment studies), marketing, certification compliance and farmer training.[c] In addition, it uses the latest research and technology to assist farmers in accessing international coffee markets.

Source: UNCTAD, based on Krüger and Negash (2009).

[a] See: www.juanvaldezcafe.com, www.juanvaldezcafe.us/Locations.asp, and Roldán-Pérez et al. (2009).

[b] See: www.farmingsolutions.org.

[c] See: www.coffeemanagent.co.ke.

a. Trading TNCs and exports of traditional agricultural commodities

Historically, in agricultural commodities such as coffee, cocoa, tea, sugar and bananas, TNCs from developed countries were involved in exporting from developing countries. In many cases they owned plantations and farms for producing and exporting these products. In other cases, specialist traders bought produce from agricultural TNCs and sold it in international markets. Even today, their significant role as intermediaries in trade in traditional agricultural commodities (UNCTC, 1983) has not changed much. Although TNCs have become less important players in agricultural production in developing countries in recent decades, they remain entrenched in trade (chapter III).

For example, coffee trading TNCs purchase the commodity from host countries' farmers through spot market transactions, but also through contractual arrangements, such as contract framing which entails a degree of participation in agricultural production. Contracts seek to guarantee the supply of and demand for coffee – usually raw or semi-processed. They typically stipulate the quantity, price and quality of coffee and distribute risks between the contracting parties. These contracts help farmers receive from TNCs goods and services which are necessary for efficient export production. In turn, the TNCs receive coffee, usually raw or semi-processed, and process it further. The TNCs are responsible for marketing and managing the whole operation.

Some trading TNCs from developing countries have acquired knowledge, capabilities and experience, permitting them to successfully compete in international markets with traditional TNCs from the North. In addition to trade intermediation, which remains an important function, they have evolved into global supply chain managers. In many host countries, developing-country trading TNCs have become major players in export-oriented and domestic agriculture. They help generate, sustain or increase exports by providing the necessary ingredients, and occasionally help those countries exploit their comparative advantages or upgrade their existing advantages (box IV.13).

b. TNCs and exports of non-traditional agricultural products

The most dynamic part of agricultural trade has been the trade in higher value, non-traditional products, such as vegetables and cut flowers. Developing countries are taking a rising share in global exports of these products. It has enabled a number of these countries to diversify away from stagnating traditional commodity exports towards higher value agricultural exports, for which the demand is rapidly growing.

Non-traditional products are easier to export as they have not been as adversely affected by trade barriers. But at the same time, their export markets are very demanding in terms of quality, volume, delivery conditions and timing, which puts pressure on developing-country producers and exporters. Most of these products are exported for sale to developed-country consumers, and market access is almost entirely controlled by companies from developed countries. Indeed, international markets for non-traditional agricultural products are essentially driven by TNCs – supermarket chains and processing companies – which control and coordinate

Box IV.13. The role of TNCs in upgrading Africa's exports of cashews

African countries account for one third of the world's raw cashew nut crop, but less than 3% is processed (and consumed) in Africa. Their inability to process cashews is due to many factors related to the farming process, lack of capabilities and government policies. Labour costs in Africa are high, compared to those in India and Viet Nam, and labour regulations do not address specific industry requirements. Selling processed cashews would require the ability to access markets and, in the case of Africa, overcome the unfavourable reputation of African kernels. Government intervention, such as setting minimum prices for farmers, charging export duties and not permitting traders to buy directly from farmers, has often been misplaced and undercuts export competitiveness. In extreme cases it has had an adverse impact on existing exports and on the very farmers it was supposed to help.

Olam, a Singapore-based TNC, is a leading trader of cashews in the world. For two decades, it has exported raw cashew nuts from Africa for processing by independent agents or by its own processing affiliates in Brazil, India and Viet Nam. In 2003, Olam started a programme of local processing in a number of African countries to upgrade their exports. It built processing factories in Côte d'Ivoire, Mozambique, Nigeria and the United Republic of Tanzania. In 2008, together with a few partners, Olam started a five-year plan aimed at increasing productivity and processing capabilities in Africa. A project in Côte d'Ivoire focuses on improved farming and post-harvest practices. In the United Republic of Tanzania, with the help of the Government and funding from USAID, Olam participates in a programme aimed at increasing yields, and the productivity and incomes of small farmers. As a result, exports of processed kernels from Africa have taken off.

Source: UNCTAD.

international agribusiness supply chains. These TNCs have therefore been instrumental in increasing and diversifying developing-country agricultural exports towards higher-end products. They have provided the necessary ingredients for boosting agricultural competitiveness, thus helping several developing countries to shift from static to dynamic comparative advantages in agricultural exports, as illustrated by the development of horticultural exports in Kenya.

Initially Kenya had few skills, technology, processes and, most importantly, knowledge of, and access to, foreign markets, where demand for fresh vegetables and cut flowers has been growing rapidly.[37] TNC participation in Kenya's horticulture industry has helped boost exports and secure market access. In Kenya's exports of vegetables to the United Kingdom, for example, supermarkets play an important role: they accounted for three quarters of Kenya's fruit and vegetable sales in the United Kingdom in the second half of the 1990s (Dolan and Humphrey, 2004). The necessity of creating and enforcing standards and related activities, driven by consumer needs in the United Kingdom, has led supermarkets and importers to establish instruments of coordination and control, which resulted in the upgrading and transformation of the horticulture industry in Kenya.

However, while TNCs can support developing countries' efforts to exploit their dynamic comparative advantages in agricultural production, such support varies by country and commodity. Furthermore, an over-reliance on corporate supply chains can breed dependence on TNCs. For example, a negative side of the entry of the Kenyan vegetables into international markets is that smallholder production is less viable in a vertically integrated international industry structure serviced by large-scale production units. The few Kenyan players large enough to provide vegetables at the prices, standards and time schedules required by international supermarkets are largely locked into these retailers' supply chains (at least in the short run). At the same time, small firms become detached from such chains (Dolan and Humphrey, 2004). Reliance on TNCs for access to foreign markets is therefore a double-edged sword.

6. Competition and market power

Issues of competition and market power concern all stages of the value chain. Salient issues can differ depending on the specific agricultural markets, ranging from traditional smallholder production of basic foodstuffs to production of non-traditional agricultural export commodities like cut flowers. In any case, TNC entry into agricultural production can have important consequences for competition and market power in the relevant product and factor markets.[38] Its impact in these respects should be seen in the context of the general tendency of TNCs to participate in markets that have a relatively high degree of concentration. This has been attributed to the technology intensity of the markets, which can result in high capital intensity, and the demand for differentiated products (potentially the result of branding). Both can prevent new market entries and lead to market imperfections that allow TNCs to capitalize even more on their technological advantages (*WIR97*).

The relationship between concentration, competition and efficiency of agricultural commodity markets can be a complex one. Market concentration (i.e. large market shares held by a few participants) should not be considered necessarily equivalent to low competition and "the ability of a firm, or a group of firms acting jointly, to raise (or decrease) and profitably maintain prices above (or below) the level that would prevail under competition for a significant period of time" (UNCTAD, 2008d: vi). Even a situation of a few competitors and high market concentration can be consistent with a high level of efficiency, for example through economies of scale and fierce competition among the few. Nevertheless, markets highly concentrated on the buyer or seller side offer opportunities for market power, and abuses thereof.

In agricultural production, TNC entry can result in higher market concentration, but only in the case of commodities where the tendency of TNCs to use highly mechanized, capital-intensive agricultural production techniques may render smallholders uncompetitive. For many agricultural commodity markets, the sheer size of TNCs and their technologies and strategies can mean an "industrialization" of production. This is no more evident than in the extreme case of livestock: "Three quarters of the world's chicken, two thirds of the milk, half of the eggs and one third of the pigs are produced from industrial breeding lines" (Gura, 2008: 2). In fact, large-scale production is already a part of developing countries' agriculture, and is growing; but for most countries and most products this is not yet the dominant form of production, nor is it likely to be in the near future (Hazel et al., 2006).

Production technologies in some agricultural industries like sugar are particularly unfavourable for producers in terms of market power distribution, with a large number of farmers selling to one (or only a few) processors. In some industries, and in a number of countries, TNCs have established monopsonies, as in the case of sugar.[39] However, this relationship is not at all dependent on the processor being part of a TNC or not; and there are potential differences, as TNCs frequently copy the operation model used in the home country. This often makes them more efficient, but at the same time more responsive to the needs of their suppliers, as they are commonly under

observation from their home country for their good behaviour. The sugar market is a typical example, where producer associations and State intervention have been instrumental in securing greater benefits for producers by reducing the market power of TNCs (chapter V).

Market power as a result of TNC participation can be very strong, but its abuse is hard to prove. In many countries, production and marketing of a number of agricultural commodities were previously regulated through forms of marketing boards until the late 1980s and early 1990s. Thereafter, deregulation and liberalization in many developing countries led to the weakening of "aggregated producer power". The power asymmetry on these markets was further skewed by an increasing concentration at the buying end (trading, processing and retailing) of many agricultural commodity value chains, frequently dominated by TNCs. The coffee and cocoa value chains are good examples, with only a few companies sharing most of the market.

The most concentrated stage of many agriculture-based value chains is international trading. Concentration at that stage is often blamed for the growing price difference between global and domestic markets. The significant role of international trading companies (all TNCs) has not changed much since the late 1970s (UNCTC, 1983); indeed, in a number of products it has even increased, leading to a higher degree of concentration and thus market power of TNCs in these markets. It is at this stage in the value chain that economies of scale and the know-how of TNCs (the traders) seem to be the crucial competitive advantages over newcomers, which guarantees their continuing dominance. High and increasing concentration, and therefore the market power of transnational trading companies, is considered a major reason behind the growing difference between world and domestic prices (that is, developing-country exporters' f.o.b. prices) of such products as wheat, rice and sugar. This difference more than doubled between 1974 and 1994. It is generally believed that when an industry's four largest companies' combined market share exceeds 40%, "competitiveness [of markets] begins to decline, leading to higher spreads between what consumers pay and what producers receive for their produce" (World Bank, 2007: 136).

Examples of high concentrations are found in many agribusiness value chains. In the coffee industry, for example, international trading companies and roasters intermediating between some 25 million farmers and 500 million consumers have a share of 40% (for the largest four players in trading) and 45% respectively.[40] The share of revenues of major coffee producing countries in the retail price at destination declined from one third in the early 1990s to 10% in 2002, while the sales of coffee doubled. Similarly, in the cocoa market, concentration ratios of trading companies, cocoa grinders and confectionary manufacturers range from 40% to 50% (World Bank, 2007).[41]

Similar developments have been reported for other commodities like sugar, grain, tea and flowers. Consequently, developing countries' claims on value added fell from around 60% in the early 1970s to less than 30% in 1998–2000 (World Bank, 2007).[42] However, the declining shares of farmers in retail prices can also be due to changes in processing and marketing. Before jumping to conclusions of abuse of market power, it is therefore necessary to determine if the respective cost structure has changed in the downstream stages of the respective value chains. To date, the few attempts to attribute downward movements in the producers' shares of retail prices to rising TNC market power have not been successful (Gilbert, 2008).

Contract farming arrangements offer opportunities for the abuse of asymmetric power relations. This arises from the way TNCs – particularly trading firms – engage with smallholders, which gives the former more influence in determining the production method and other quality-determining factors. The unequal distribution of market power in such arrangements can produce some very undesirable outcomes. It has been argued that the bargaining power between TNCs and contract farmers is so unevenly distributed that abuses occur regularly (Singh, 2002; Kirsten and Sartorius, 2002).

Beyond individual segments of the agribusiness value chain, a few very influential alliances of TNCs have emerged which span various upstream and downstream stages of respective value chains. The three most advanced alliances of this sort are alleged to be Monsanto/Cargill, ConAgra and Novartis/ADM (Archer Daniels Midland). As agglomerates of vertical activities related to agricultural production, they encompass seeds and chemicals, processing, packaging and trading activities, and for more than one commodity (Bruinsma, 2003). This situation, if empirically and analytically confirmed, is qualitatively different from concentration within a single industry that has been relatively common in the past few decades. The global supply of proprietary seeds and agrochemicals is controlled by only a few TNCs. For instance, the top four seed TNCs control 53% of the global proprietary seed market: the leader – Monsanto – accounts for 23% of this market (ETC Group, 2008).[43] This strong power of big TNCs in some chains, such as that for soya (box IV.14), raises concerns about how much room is left for competition, for consumers' choices and for independent farmers in the respective markets.

In the face of large TNC buyers, producer organizations can bundle "producer power" as a way

to mitigate power asymmetries. More direct linkages between consumers and producers can also help by "short-circuiting" the channels that some TNCs control, as in the case of fair trade. In addition, fair trade organizations have created a mechanism by which consumers can choose to pay a premium in support of farmers – a growing trend, but from a small base. For instance, fair trade coffee accounts for very little of globally traded coffee, estimated at 1–2% in 2002,[44] but growth rates from this low level are high (United Kingdom, DFID and ODI, 2004; IISD, 2008). The fair trade system helps distribute the higher revenue to the producers, and evidence suggests that this mechanism strengthens agricultural cooperatives (Milford, 2004). However, only a limited number of farmers in developing countries are part of related certification schemes.

In the light of existing evidence, the emerging picture of competition, concentration and power distribution in agricultural commodity markets in which TNCs play an important role, especially in processing and trade, seems to be unfavourable for producers in developing countries. The high level of concentration at the downstream end of agribusiness value chains vis-à-vis an often atomized group of sellers (farmers) suggests the prevalence of a highly unequal distribution of market power that should be addressed by host-country governments and development partners to avoid the abuse of that power. Various measures are available to host countries to counter excessive market power (chapter V).

7. Implications for the host economy

The overall effect of TNC participation on agricultural production depends on the interplay between beneficial and adverse effects of their involvement in the various interrelated areas of impact discussed above. It has generally increased the income of domestic farmers, who are either directly employed by foreign-invested plantations, or involved in contract farming schemes operated by foreign affiliates. In any particular case, there can be negative outcomes in some aspects of agricultural production (e.g. job losses) and positive ones in other aspects (e.g. improved productivity). The result is context-specific, varying by type of product, the mode of TNC involvement, and host-country characteristics, especially the policy and institutional environment. Beyond its effects on various aspects of agriculture, the involvement of TNCs in agricultural production has various broader economic implications for host developing countries.

Box IV.14. The soya value chain: domination of a few TNCs

The global trade and processing of soya beans is concentrated in only a small number of TNCs, which are involved – directly or indirectly – at each stage of the soya value chain through financing, partnerships and/or ownerships. They therefore control key elements of production, processing, trading and marketing.

The first part of the soya value chain (i.e. input provision) is dominated by a handful of TNCs. Monsanto's near monopoly position in GM soya bean seeds gives it a dominant position as a seed and agrochemical supplier to soya farmers. Thus, while GM soya beans were used on almost 60% of the total area worldwide under soya bean cultivation in 2005, Monsanto's biotech seeds and traits accounted for almost 90% of the worldwide area planted with GM soya bean seeds.[a]

Corporate farming of soya by TNCs has been very limited, although a number of cases have been reported recently. In countries like Paraguay and Uruguay, foreign individual farmers, entrepreneurs and investors have migrated from neighbouring countries (Argentina and Brazil) and have played a major role in the development of soya farming. Nevertheless, transnational trading companies have a significant influence on the farming stage of the value chain through the provision of credit and inputs to farmers.

In the trading stage of the chain, four TNCs dominate world trade in soya beans (as well as many other commodities): ADM Co. (United States), Bunge Ltd. (United States), Cargill Inc. (United States) and Louis Dreyfus Group (France).

Traders provide resources to farmers, to ensure the supply of soya and other agricultural materials for their agribusiness operations and for stages of the value chain in which they are also important actors, such as crushing, processing and manufacturing. ADM, Bunge, Cargill and Louis Dreyfuss control 43% of crushing capacity in Brazil and almost 80% in the EU (Dros, 2004). In Paraguay, Cargill distributes seeds to farmers, runs the country's largest soya bean processing plant and buys 20% of the soya beans produced.[b] Trading TNCs have also invested heavily in crushing capacity in the major soya-importing countries. Besides the four main soya trading TNCs that control almost 80% of crushing capacity in the EU, in China, for instance, foreign companies (such as ADM, Bunge and Cargill from the United States, and Wilmar from Singapore) control about 40% of crushing capacity.[c]

Source: UNCTAD.

[a] See: "Monsanto's soybean monopoly challenged in Munich: European Patent Office will decide fate of species-wide soybean patent on 3 May 2007", News Release, ETC Group, 30 April 2007 (www.etcgroup.org).

[b] See: "Soybean fever transforms Paraguay", *BBC News*, 6 June 2005.

[c] See: *The Economic Observer Online*, 13 March 2009 (www.eeo.com.cn) and "China seeks to calm anger over soy imports", Reuters, December 11, 2008 (www.reuters.com).

Linkages. TNC activities in agriculture can have linkage effects beyond the industry, which contribute significantly to growth and development. They include interactions with suppliers (backward linkages), with customers (forward linkages) and with others that are not part of agribusiness value chains. Backward and forward linkages between foreign affiliates in agricultural production and domestic firms can lead to the emergence of new economic activities in manufacturing and services, strengthen domestic enterprises, and promote the diversification and growth of the overall host economy. There are successful examples in a number of developing countries.

In Uganda, for example, TNC involvement in coffee, floriculture and fishing has led to *backward linkages*, and therefore to the development of domestic industries that supply goods or provide support services to foreign affiliates (Nsonzi, 2009). In Brazil, domestic enterprises that have benefited from *forward linkages* as a result of TNC involvement in the production of sugarcane include manufacturing firms using milling by-products or outputs, animal feed factories, soda and confectionary firms, and biofuel and energy producers and distributors (Neves, Pinto and Conejero, 2009). In some cases, the initial stages of processing of some commodities are retained in the home country.[45] Such forward linkages can be especially valuable as a first step in agriculture-led industrialization and upgrading of value chains, with larger shares of the overall value added remaining in developing countries.

In Kenya, floriculture has benefited from an additional synergy with the tourism industry through air transport, which is a key service provider to both floriculture and tourism. The existence of a vibrant tourism industry, with air connections to Europe several times a day that had excess capacity on the northbound leg of the journey, helped support the flower industry before it reached the critical mass to be able to charter whole cargo flights (World Bank, 2005).

Infrastructure development. TNCs' investment in infrastructure facilities to support their agricultural projects can benefit farmers in connected locations and promote rural development in general. For instance, roads built as part of an agricultural project could, in addition to supporting TNCs' activities, help other farmers get their crops to the market, and also facilitate local business and social activities. In Mozambique, for example, Companiha de Sena S.A.R.L. (a sugar plantation rehabilitation project undertaken by a Mauritian investor) has contributed to local infrastructure development, including transport infrastructure, water supply, electrification of a village, and upgrading of a school and hospital in that village.[46] Implications for the host country go well beyond economic ones, as infrastructure, such as roads, electricity or water, brings important benefits in terms of improving accessibility and quality of health, education and other social services (UNECA, 2007). Therefore, these are important considerations for governments when signing contracts or negotiating for large-scale investments in agriculture with TNCs, sovereign wealth funds, or other new investors.

Fiscal revenues. Evidence is scarce and inadequate to conclude that direct fiscal effects from FDI or other forms of TNC participation in agriculture might be sizeable. However, one specific benefit of TNC involvement in agriculture might be the formalization of parts of otherwise largely informal economies. This can be true for businesses related to TNCs (i.e. suppliers), especially because the process of standardization leads to the measurement of all aspects of production, costs and revenue, which make it possible for the government to collect taxes. It can also apply to workers employed by TNC affiliates (and probably even to contract farmers) who hold jobs in the formal sector and therefore are obliged to pay income tax. Importantly, the use of enhanced fiscal revenues should not be neglected: they enable governments to establish the foundations for wider development and modernization, be this through social and physical infrastructure, investment in enterprises or other measures.

Balance of payments. Problems with insufficient generation of foreign exchange through trade make the external macroeconomic balance a challenge for many developing countries. How and to what extent FDI and other forms of TNC participation in agriculture contribute to the generation of foreign exchange earnings, or have the opposite effect, is thus important for a number of developing countries' growth prospects. On the one hand, there is the implicit assumption that, more often than not, because of their involvement in global agribusiness value chains, TNC activities in agriculture will have a strong positive balance-of-payments effect, as much of the output tends to be exported (section B.5). This applies to both traditional and non-traditional export crops, such as coffee, tea, cocoa, bananas and cut flowers. In addition, for some crops, such as sugar, there can be significant import substitution effects that are frequently intended and observed.[47] On the other hand, expenditure on imported inputs can substantially water down the level of foreign exchange generated. TNCs in agriculture frequently use production techniques that are highly dependent on more sophisticated inputs. This could even turn the overall balance-of-payments effect negative, particularly if there is an intention to sell the produce locally.

Another issue concerning the balance of payments is that many developing countries –

including least developed countries (LDCs) – are highly dependent on one or a few agricultural commodities for the bulk of their export earnings, and thus face considerable risk in terms of demand and price volatility.[48] On the other hand, when properly managed, agriculture offers some countries options for diversification beyond their heavy dependence on extractive industries (*WIR06*),[49] and, with TNC participation, it offers additional options for diversification beyond the traditional choices of manufacturing and services. Each case needs to be carefully evaluated to find appropriate commodities with strong long-term prospects, whose prices are, ideally, not highly correlated to prices of currently extensively exported goods. For instance, TNCs in dynamic agricultural industries such as horticulture (section B.5) offer opportunities for diversification.[50]

C. Broader implications

The implications of TNC involvement in agricultural production for host developing countries extend beyond agriculture and the wider economy. There are concerns about their environmental, social and political repercussions. This section examines some aspects of these broader implications and, in the case of food security, also considers the implications for developing home countries.

1. Impact on the environment

In agriculture, as in other industries, the impact of TNC activities on the environment is an important aspect of their overall effects on sustainable development in host countries. Agriculture and the natural environment are closely intertwined. Farming has contributed over the centuries to creating and maintaining a variety of semi-natural habitats (European Union, 2003). However, production activities in agriculture, like those in other industries, can also harm the environment through their damaging effects on air, water, soil and biodiversity (chapter III). Mitigating the adverse effects and strengthening the positive interactions with the environment, including climate change,[51] are increasingly considered an important part of countries' efforts to promote sustainable development.

The environmental impact of TNC participation in agricultural production depends on a number of factors, including: the specific crop or activity in which the TNCs are involved, the production technologies they use, their scale of operations, their management strategies and practices, and host-country and international rules and regulations with respect to the environmental impacts of production activities in agriculture. Given that agricultural production inevitably has some negative effects on the environment, the question is whether TNC involvement reduces or accentuates those effects. It is unlikely, especially in the light of the location-specific factors driving TNC activities in agriculture, that TNC involvement in developing countries' agricultural production reflects shifts of pollution-intensive activities from home to host countries.[52] However, the nature and scale of many of the production activities in which they are involved make the question of their environmental impact particularly relevant.

In terms of transferring and disseminating technologies in support of sustainable agriculture development in developing countries, TNCs have played both positive and negative roles. In the cut flower industry, for example, foreign-owned farms introduced environment-friendly farming technologies such as the use of geothermal steam to fight fungal diseases and the introduction of integrated pest management systems (Wee and Arnold, 2009). In the banana industry in the late 1980s and early 1990s, the technologies used by TNCs caused some environmental problems (see discussions below). Since the late 1990s, TNCs have adopted increasingly environmentally sustainable practices in their plantations. In particular, organic planting technologies and standards introduced by them have contributed to more value creation and higher income for farmers (Liu, 2009).

Research and information on the environmental aspects of TNC involvement in agricultural production activities in host developing countries is limited. However, there are a few studies that provide some insights into the environmental impacts and implications of their evolving practices in a few specific areas of agricultural production.

Banana plantations in Latin America. As noted earlier (chapter III), TNCs have dominated the world banana trade since the early twentieth century through their vertically integrated value chains. In the late 1980s and early 1990s, their intensified use of inputs in the plantations in Latin America gave rise to a series of environmental and labour problems. In 1992, for example, the second International Tribunal on Water in Amsterdam condemned the Standard Fruit Company (now Dole) (United States) for seriously polluting Costa Rica's Atlantic region through its banana operations in the Valle de la Estrella (Arias et al., 2003). In the 1990s, Del Monte, Dole and Chiquita were sued by ex-workers for injuries resulting from their exposure to a nematicide (Nemagon) during the period 1965–1990. The TNCs in the banana industry also came under increasing criticism from NGOs concerned with human rights and environmental issues. That, as well as pressure from shareholders, as the concept and practice of corporate social responsibility became more common (chapter

V), forced TNCs in banana production in Latin America to improve their social and environmental performance (Arias et al., 2003). Market factors, such as oversupply, fierce competition, the pressure of retailers and changing consumer preferences, also motivated TNCs to differentiate products to retain their market share by offering "environmentally friendly" and other types of "ethical" bananas as a means of attracting more consumers.

Environmental standards and certification have come to play an important role in inducing TNCs to turn to more environmentally friendly production methods and practices in their banana plantations in response to growing criticism and environmental concerns. Initially they established their own standards and increasingly are conforming to standards established by outsiders. However, the TNCs embraced environmental certification somewhat reluctantly, because their culture of secrecy made it difficult for them to collaborate with civil society organizations.[53] Subsequently, they increasingly came to recognize that certification not only improved their corporate image, but also permitted cost reductions through lower use of inputs, recycling and other factors. Collaboration with NGOs and independent certification programmes has helped reduce criticism of TNCs, but not entirely; their certification initiatives have not yet convinced many critics. They still need to demonstrate real progress towards environmental (and social) sustainability of their banana production operations (Arias et. al., 2003).[54] Moreover, with TNCs starting to produce in a more sustainable manner, the attention of environmentalists has turned to their independent suppliers.

Floriculture in Kenya. TNCs play an important role in export-oriented horticulture in a number of developing countries,[55] including the growing of flowers and vegetables. In Africa, Kenya is a major host for TNCs in floriculture (section B.5.b).[56] Nearly 50% of the country's flower production is estimated to be concentrated around Lake Naivasha, making it the hub of the country's flower industry. A shallow basin lake situated 80 kilometres north-west of Nairobi in the Kenyan Rift Valley (Becht, Odada and Higgins, 2005), Lake Naivasha is an important freshwater source that supports a rich ecosystem, and is a base for a variety of economic activities that have sprung up over time.

The continuing growth of flower farms around the lake since the early 1980s, and the associated increase in population and unplanned settlements, has caused concern about the capacity of the lake to sustain the increased demand on its resources. It has given rise to disputes between conservationists and commercial growers on a variety of issues, such as the volume of water extraction and the effects of deforestation. These concerns and disputes led to an initiative to study the lake's water balance and the water-related environmental impacts of activities in the surrounding area. This initiative was spearheaded by the Lake Naivasha Riparian Association (LNRA), an organization of landowners and others interested in managing the lake and its sustainable development (Becht, Odada and Higgins, 2005).

In addition, the Lake Naivasha Growers' Group (LNGG), established by the large flower farms, also began to realize that overexploitation of the finite natural resources would damage the entire flower industry. The fact that developing a reputation for environmentally friendly production is an asset in their main European export markets also encouraged the LNGG to become a more active partner in lake management. As a result, it has been working with LNRA on issues such as land tenure, abstraction rates, agrochemical controls and water availability.

The Oserian Development Company (Netherlands) is an example of a TNC in Kenyan floriculture that has adopted a number of improved, environmentally friendly technologies and practices. For example, the company introduced hydroponics to cut back on water usage, and it generates three quarters of the energy it uses from geothermal springs.[57] Max Havelaar (which awards the Fairtrade label), Oserian's retailers (e.g. supermarket chains) and a local team (created by Oserian and other local growers) are allowed to inspect the company at any time (Coglianese and Nash, 2001).

Due to pressure from environmental and human rights groups as well as consumer demands, the flower farms in Kenya have been opening up to the public and there is a horizontal flow of information among them (Bolo, 2008). Regular environmental and social audits are conducted to ensure that the farms not only conform to good agricultural practices (GAPs), but also maintain environmental standards and favourable working conditions for their workforce. Compliance is enforced through codes of practice and certification by industry associations such as Kenya Flower Council, Fresh Produce Exporters' Association of Kenya, Horticultural Ethical Business Initiative, LNGG, LNRA and the Kenya Bureau of Standards. Notwithstanding the positive steps and practices mentioned above, the sustainability of the extensive TNC-led cut flower industry on Kenya's Lake Naivasha under present conditions has been questioned (Becht, Odada and Higgins, 2005; Loukes, 2008). Some of the concerns arise from the lack of institutionalization of the management plan for the lake and shortage of funds and experts in scientific management.

Soya Beans in Latin America. While the cases of banana plantations and floriculture discussed above throw light on evolving trends in environmental management and the impacts of TNCs operating

directly in agricultural production, the impact of TNCs in downstream and upstream activities along the agribusiness value chain in host countries may also have significant environmental consequences. By influencing the scale of production and the variety and quality of agricultural products, TNCs that supply seeds and other inputs and purchase output for processing and/or distribution can affect land use and other input use and production patterns, and thereby various aspects of the environment. For instance, in the cultivation of soya beans – a major source of animal feed – transnational trading companies and seed suppliers have had a significant influence on the size and nature of farming. Their involvement has led to a major expansion of production and to a shift to large-scale farming in South America. This has raised concerns about the impact in terms of deforestation of the Amazon biome (the Amazon rainforest and its related ecosystems), especially in Brazil, the second largest producer of soya in the world.

The land devoted to soya cultivation currently consitutes only 0.3% of the Amazon biome, and is therefore perhaps a negligible factor in its direct deforestation. However, this could change if the profitability of soya farming continues to increase. Moreover, it can be an important indirect driver of deforestation, mainly by displacing cattle ranching which has been pushed to expand into the Amazon (Verweij et al., 2009). The expansion of soya production has also involved the use of a GM variety of soya ("Roundup Ready" soya), which may have some positive impacts on the environment, because it is resistant to and thus enables the use of glyphosate (known commercially as "Roundup"), a herbicide that enables a no-tilling system of farming thus reducing soil erosion by controlling the serious weed growth that such a system generates.[58] However, there are concerns that the application of this herbicide may also have environmental and health consequences, and that the GM variety could be potentially damaging to the environment due to the uncertain impacts of the release of genetically modified organisms into nature. More generally, the agrochemicals (pesticides and herbicides) involved in large-scale soy cultivation have raised concerns about their impact on biodiversity and health.[59] In response to pressure from environmental groups, leading soya processors and exporters operating in Brazil, including ADM, Bunge, Cargill and Monsanto, signed an agreement in July 2006 committing themselves to refrain from purchasing soya from lands that have been deforested in the Amazon biome.[60] The TNCs mentioned above are also members of the Round Table on Responsible Soy Association that is developing a set of standards for the production and sourcing of socially and environmentally responsible soya as well as a verification mechanism.[61]

Overall, there is little statistical evidence from studies on a range of industries to show that foreign firms consistently perform better than domestic ones in terms of their environmental impact in developing countries, especially when firms' size is taken into account (UNCTAD, 2002b). However, firms in agriculture as well as other industries – both domestic and foreign – appear to be incrementally improving their environmental performance in many parts of the world, primarily in response to effective national regulation and/or community pressure (Zarsky, 1999), but also, as illustrated by the experience with respect to TNCs involved in the specific agricultural crops described above, because of a growing awareness of the benefits of such improvements to the firms themselves.

2. Social effects and political implications

Issues and concerns about the social and political implications of TNC participation in agriculture have a long history (George, 1976; Vallianatos, 2001). First, there are concerns about the involvement of TNCs in the political process of the host country. Second, TNC-induced transformation of agriculture may have an impact on income distribution (e.g. by gender and farm size) and poverty in rural areas in a number of ways. Finally, a range of socio-political externalities can arise, such as the disruption of traditional economic systems, and impacts on health and safety as well as on land rights.

TNCs' impact on the political process. Concerns about the political involvement of TNCs engaged in agriculture are not confined to instances of blatant interference, such as support for sympathetic regimes or agrarian elites in parts of Latin America or Asia (Burbach, 2008; Franco and Borras, 2005). Lobbying by TNCs may also have impacts that are detrimental to the broader interests of the host country. For instance, the United Nations Special Rapporteur on the Right to Food notes: "As financially powerful lobbying groups, corporations can also exert great control over laws, policies and standards applied in their industries, which can result in looser regulation and negative impacts on health, safety, price and quality of food" (United Nations, 2003). These concerns are particularly relevant in countries where the governance structure is weak. Such lobbying may also take place at the international level. The Special Rapporteur notes that "the FAO/World Health Organization Codex Alimentarius Commission, which sets international standards for food safety recognized by WTO, is criticized by civil society organizations for failing to include the participation of small producers and consumers, and being heavily influenced by the

lobbying and participation of large agribusiness, food and chemical corporations" (United Nations, 2004).

Impact on income distribution and poverty. Commercialization of agriculture can drive small-scale farmers out of the supply chains (section B.4), even while consumers benefit in general, as do farmers who succeed in adapting to the modern supply chain management techniques of agribusiness TNCs. Thus, even though the economy as a whole might gain from TNC involvement, it might exacerbate rural poverty (Berg et al., 2006; Haggblade, Hazell and Reardon, 2009). Clearly, FDI in any industry could have such distributional impacts, but what is of particular concern about FDI in agriculture is that the majority of poor people live in the rural area and could be the worst affected, thus widening income gaps even further. Furthermore, in many developing countries, rural inhabitants exercise less political influence on their national government than urban dwellers, thus attracting less public action to address their problems. Yet it is possible to reduce or even reverse these negative impacts by investing in capabilities (e.g. the skills needed to participate in global, regional and domestic value chains) and facilities in rural areas (Berg et al., 2006; Hoeffler, 2008).[62]

The distributional impact has a significant gender aspect as well. For instance, traditional retail markets have provided income-generating opportunities for peasant farmers, especially women. The loss of these markets (as discussed in section B.4) would deprive them of their source of income. Women can also lose out more than men through the processes associated with commercialization, often driven by TNCs. For instance, in many countries and cultures there are restrictions on women's mobility or the jobs they can undertake, or they are denied educational and other rights; in others, women bear the main responsibility for household subsistence (World Bank, FAO and IFAD, 2009b). At the same time, under the right conditions, women can benefit from the involvement of TNCs in agriculture. For instance, in Ghana, the development of an export-orientated value chain in exotic mangoes has given women opportunities to expand their activities into wider distribution channels (Berg et al., 2006).

Furthermore, increased investment in some agricultural industries through TNC participation may create relatively more employment opportunities for women. Commonly, this is in export-oriented products, such as cut flowers and vegetables (Wee and Arnold, 2009; Hurst, Termine and Karl, 2005), though the impact on women – and other workers – is often mixed. In Kenya, women in flower cutting jobs were (and in some cases still are) illegally treated as casual or temporary workers, which reduced their rights and bargaining power, and thereby their incomes and other benefits (UNCTAD, 2008e). Context matters, but overall, in order to empower women in agriculture – especially where commercialization is rapid and the involvement of TNCs intensive – it is important to strengthen their control over and ownership of assets, ranging from human capital to property rights (Quisumbing and Meinzen-Dick, 2009).[63]

Socio-political externalities. Socio-political externalities, or unintended consequences, can be both positive and negative. There can be extensive repercussions for the existing social and political order arising from TNC involvement in agriculture and rural communities. This aspect is important, because economic institutions can function only as part of an often elaborate social, political and cultural context. As such, disruption of an existing system due to the transformation of agriculture may have unpredictable consequences, even if it is progressive and benefits the poor in the long run. For example, many rural communities rely on a local system of credit that operates through traditional markets. The loss of those markets therefore disrupts the system of credit, causing financial problems for the communities. A study on a major TNCs' direct procurement of produce from farmers in Indonesia showed that while traditional credit systems can be exploitative, they nevertheless provide farmers with capital needed for non-farm expenses (Clay, 2005).

Positive externalities can also arise, for instance where the rural community can take advantage of capabilities, facilities or institutions provided or created by TNCs to realize their own objectives.[64] Rural roads are a good example: communities connected to markets are also able to use the infrastructure for other purposes or objectives, and, importantly, to achieve them faster (Hettige, 2007).[65] Other examples of socio-political externalities are effects on the health of rural communities, which can be negative or positive. The detrimental effects of agricultural pesticides – often required to be used in the context of TNC involvement, among others – on the health of workers and communities is an important and politically sensitive issue of long standing (Carvalho, 2006). In contrast, some recent research shows that the health of farmers growing organic produce – also induced in many cases by TNCs – is better than that of farmers that use conventional methods (Setboonsarng and Lavado, 2008).

Land acquisitions and land rights.[66] A number of large-scale land deals in developing countries in recent years, both to grow crops for food (e.g. by developing home countries as part of their food security strategies) and for other purposes (e.g. feedstock for biofuels) (chapter III), have prompted protests/vociferous debate over so-called "land grabs" (Hallam, 2009; Smaller and Mann, 2009; von Braun and Meinzen-Dick, 2009). At first sight, such a response is surprising: after all, land is frequently

acquired by foreign investors in developed as well as developing countries. Some companies use the land to establish factories; others need it to create infrastructure facilities such as ports and their hinterland operations; in yet other cases, mining operations are impossible without a certain amount of land for locating extraction activities and housing ancillary activities; and, of course, many agriculture-based companies operate huge plantations and farms. In this sense, the acquisition of land to produce agricultural commodities – food or non-food – for export or local sale, or for inputs within an agribusiness value chain, is not in itself remarkable. Moreover, despite the number of putative deals, there are only a small portion of them that are actually implemented, and they are primarily in the form of leases rather than outright ownership of land (chapter III).

There are, however, two major underlying issues which give credence to the concerns voiced. First, although it may be too early to say what the overall impact of these recent large-scale investments might be, the little evidence amassed thus far – for instance by looking at deals and their aftermath in a few countries in Africa (Cotula et al., 2009) – indicates that host governments have usually not negotiated favourable contracts (due to the weak institutional capacities), the process of negotiation and implementation is normally not transparent (stakeholders' views are seldom solicited or considered) and post-deal compliance structures are inadequate. Under such conditions, it is fair to conclude that the sensitive balance between the positive and negative impacts of TNC participation may well be skewed in favour of the latter. Furthermore, it is important to note that most large-scale land deals take place in LDCs or other poor countries such as the Democratic Republic of the Congo, Ethiopia, Liberia, Mali, Mozambique, Sudan and the United Republic of Tanzania (figure III.14) – countries which are themselves facing severe food insecurity (FAO, 2008c). It is not clear whether large-scale land deals help or hinder food security in such countries (section C.3), a concern which needs to be addressed by appropriate policy measures (chapter V).

Secondly, aside from large-scale land acquisitions, TNC participation in agricultural production – even in wealthier developing economies – has implications for land rights enjoyed by host-country communities. In countries where TNCs are in the vanguard of commercial agriculture, their involvement accelerates the process of reform pertaining to property rights, including those with respect to land. The granting of enforceable rights increases the chances of investment by TNCs and other firms (domestic and foreign), and may unlock the productive potential of land, but it comes at a cost, namely the loss of rights of individuals, groups and communities if they are not properly compensated (CAPRi, 2006). TNCs are both drivers for land reform and beneficiaries, which creates the temptation for introducing reforms that benefit TNCs, other domestic and private companies and State allies, often with anti-poor consequences (Borras, Carranza and Franco, 2007). Thus, even though land reforms may be essential for the longer term development of a country, it is important that they be introduced in a fair, reasonable and transparent manner (chapter V).

Overall, the social and political impacts of TNCs' involvement in agriculture on host countries, and especially on agricultural and non-farm rural communities can be considerable. There are too many different factors combined to permit definitive or general conclusions. However, the above discussion does indicate that, given the significant impacts, governments need to consider at the outset how best the transformation of agriculture and rural communities can be brought about. This would include ensuring effective linkages of TNCs with communities and examining carefully the resources used and changes created or induced by TNCs to make sure that they are in line with national development goals and trajectories (Haggblade, Hazell and Reardon, 2009).

3. Implications for food security in host and home developing countries

Food security is not simply a matter of ensuring the sufficiency of food crops for a particular population or country. Food security is compromised if, for example, households do not have the income to buy food, or if the infrastructure to transport it to the necessary locations is not available, or if it is not safe to eat. This broader concept of food security is commonly accepted (Pinstrup-Andersen, 2009), and is captured in the FAO's definition, which requires the following conditions to be met: availability of food, access to food, stability of supply, and safe and healthy utilization (FAO, 2008c; figure IV.2). These dimensions are relevant for all developing countries, whether they are host to TNCs in agricultural production or home to such TNCs.

a. Implications for host countries

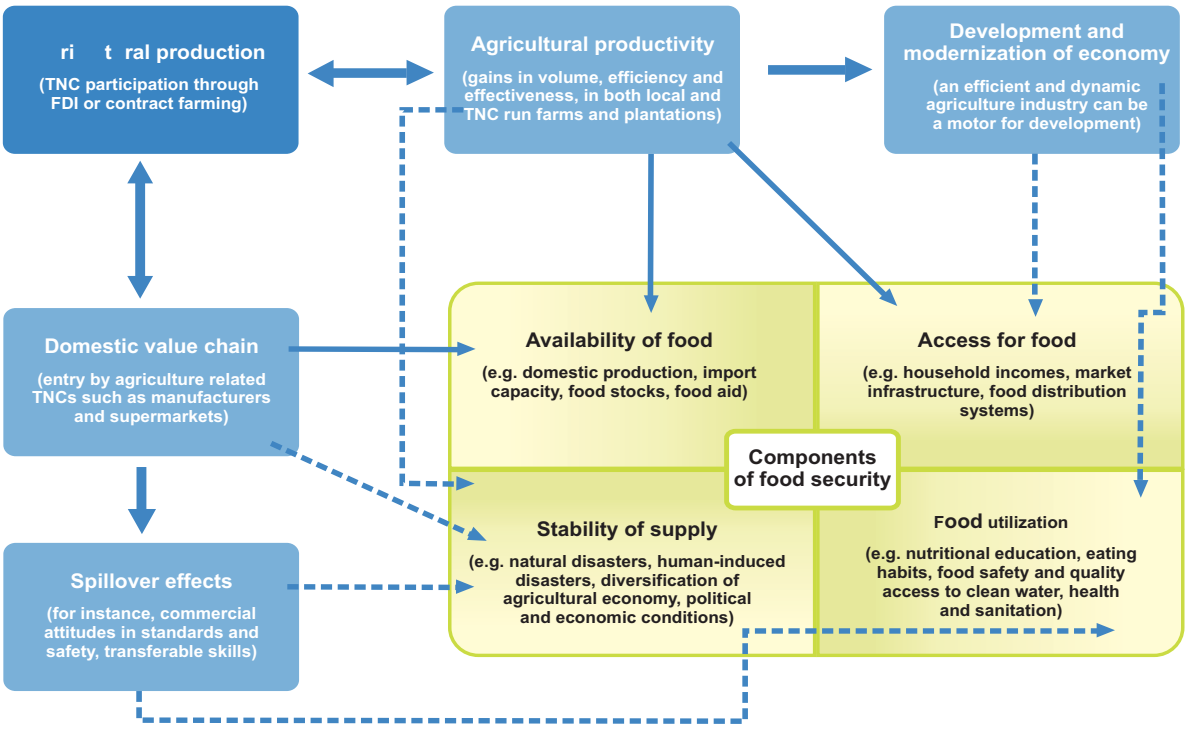
The implications of TNC participation in agricultural production for host developing countries derive from its various impacts on agriculture and the wider economy discussed in section B and earlier in this section. Given that TNC involvement is not motivated by host-country food security concerns, the impact on food security can be highly variable, not least in terms of the four dimensions mentioned above. Nevertheless, since TNC involvement in

agriculture inevitably affects aspects of food security (figure IV.2) – both positively and negatively – it is important for governments to be aware of the key types of impacts that occur so that they can design their policies appropriately, including establishing conditions under which food security could be enhanced.

Availability of food. The foremost dimension of food security is the domestic availability of food crops, and in this respect TNC involvement in agricultural production is likely to increase the overall volume of production of certain crops. However, much of this production may be for exports (section B.5); moreover, a large share tends to be in high-value-added cash crops which are normally not the staple foods of the host countries concerned (chapter III). In addition, there is the danger that TNC involvement may adversely affect smallholders or other farmers, either through direct competition in product markets (sections B.6) or through alternative uses for land, water and other resources (e.g. by companies involved in biofuel production) (FAO, 2008c) or, indeed, food crops for export, thereby reducing the volume of food supply available for domestic consumption. Dynamically, TNC involvement can have a positive impact on the production of food crops. In particular, learning effects and productivity gains to local farmers (especially through contract farming) resulting from the transfer of agricultural technology, modern management techniques and knowledge of supply chain management can improve the capacity of local agricultural producers. Under the right conditions, host-country farmers can apply the knowledge they gain to food crops other than the ones they produce under contract to TNCs. Moreover, demonstration effects can bring new producers into agricultural production.

Access to food. As with food availability, the impact on access is mixed. It is possible for a vicious circle to be established, whereby improved productivity can lead to falling employment, lower household incomes for some farmers and a negative effect on the non-farm rural economy (section B).[67] However, much depends on the overall volume of increase in food and non-food crops and the linkages created, which may maintain income levels. Arguably, the overall issue is one of transition, and how governments manage the process of channelling the productivity gains (be this through TNC involvement or other sources of investment) in order to modernize their agriculture (chapter V). If a more productive agricultural industry can be used to boost the development process – as in Brazil, China and India (Neves, Pinto and Conejero, 2009; Nsonzi, 2009) – then rising urban and rural incomes will improve access to food. Inasmuch as TNCs largely export the crops they produce or contract out, they require infrastructure – whether established by the TNCs

Figure IV.2. TNC participation in agricultural production and impact on food security



Source: UNCTAD.
Note: The line arrows indicate selected immediate and longer term consequences of TNCs participation in a developing country's agricultural industry on food security, through various rutes of impact. The dashed arrows indicate that the impacts are indirect and difficult to quantify. In principle the impacts can be net negative or positive, depending to a great extent on conditions and policy.

themselves or by the host government – connecting producing regions to ports. This helps improve access to food for urban areas, and to rural areas as well if there is a shortage which can be resolved through imports or intra-country shipments.

Stability of supply. Apart from the above-mentioned increased agricultural capacity in host countries resulting from productivity increases, TNC involvement in farming and plantations is unlikely to have a direct impact on the stability of food supply. However, depending on the economy, a key beneficial spillover effect on supply stability is the diversification of agriculture, arising from new crops being introduced by TNCs or from the use of knowledge gained by farmers in new fields. However, a contrary effect is illustrated by the danger of monoculture production leading to greater risk from disease and natural disasters (section C.1). Depending on government policies, the entry by agriculture-related TNCs (chapter III), such as manufacturers and supermarkets, into the domestic value chain may lead to enhanced stability of supply. These companies have the ability and motivation to ensure stability of food supply for their customers. For example, in times of shortage, they have both the distribution channels to import food and the financial means to pay for it.[68]

Food utilization. Agribusiness TNCs can introduce higher quality and safety standards and associated practices (such as those related to traceability) to host developing countries (section B.4; Wong, 2009). Their involvement in agricultural production and the domestic value chain has a number of spillovers to local farmers and other companies, such as those related to quality control, food standards and consumption patterns. Thus, for instance, knowledge of food safety and quality standards applied to TNCs' customers, many in developed countries, but increasingly in developing economies as well (Gereffi and Lee, 2009), can spill over into food utilization in poorer countries. However, by the same token, the food consumption patterns of developed-country populations – emulated in developing countries and sometimes induced by TNC entry into the local food chain (as with "fast food") – can be very unhealthy, in contrast to traditional eating habits (FAO, 2004c; Pimbert, 2009).

b. Implications for home countries

As mentioned in chapter III, a number of developing countries, notably the GCC countries and the Republic of Korea, have recently established or reinforced their national food security strategies through investment in agricultural production abroad, principally targeting staples such as rice and wheat for consumption in their own domestic markets. In terms of the four main components of food security, their key objective is to ensure stability of supply (especially in view of market volatility and export bans by the principal trade partners). In some cases, a number of countries are shifting production of crops overseas because of scarcity of land and – most importantly – water resources in their own countries (chapter III).

It is too early to determine what the effects of such recent FDI in agriculture will be on developing home countries' food security. However, similar past investments in overseas agricultural production undertaken for food security reasons were mostly unsuccessful, as in the case for the Republic of Korea in the 1960s, 1970s and 1990s, and some GCC countries in the 1970s. One reason was that agriculture is among the most sensitive and thus most regulated industries in host countries; while on the side of the home country, inappropriate policies, inexperience, lack of understanding by investors of local culture and customs, low productivity and profitability of investments contributed to the failures, as in the case of the Republic of Korea. Another problem has to do with the fact that investment return periods for overseas agricultural investment are comparatively long, while the required initial investments can be huge because of the need to develop new arable lands and agricultural infrastructure such as irrigation and transportation facilities (Sung, 2008; Republic of Korea, MIAFF, 2008). The story is similar for overseas agricultural investments by GCC countries. Apart from political instability in the host countries (e.g. civil war in Sudan, a significant recipient of GCC agricultural FDI), financial, technical and institutional problems caused most of these investments to fail. Many of the investors, whether private or State/State-backed, were relatively small and inexperienced, as they are even today. Compared to the magnitude of the food gap in GCC countries, their overseas investments in agricultural production in the 1970s and 1980s remained small: they were seldom little more than pilot projects. Indeed, the heavily subsidized agricultural developments in the GCC countries themselves, most notably Saudi Arabia, led to an explosion of production in crops which far exceeded their overseas production (Woertz, 2009; Nur, 2009).

Although the past experience of developing home countries in overseas agricultural investments for food security does not bode well for the latest wave of such investments, it is worth mentioning that there are significant differences between the investment environment of the past and the present. This may result in a more successful outcome for home-country food security from those investments than from previous ones. First, many home countries see the latest changes in the global agricultural industry

as a sea change from the past, with high prices, shortages and volatility in food crops persisting into the future (e.g. because of competition for the same resources from the biofuels industry). Thus success in these investments is imperative. Secondly, host countries today are generally more open to such investments, thereby reducing risks and increasing the possible benefits arising from agglomeration and scope: more investments in agriculture, including by other TNCs for different reasons, creates the basis for a more effective infrastructure, including linkages with upstream industries. Thirdly, home countries are recognizing that the heavily subsidized domestic agriculture of the past is no longer viable, and are more willing to explore these and other business models to ensure food security (chapter V; Hallam, 2009).

D. Conclusions

A precisely quantified evaluation of the impact of TNC involvement in agriculture on important development aspects, such as its contribution to investment, technology transfer and foreign market access, is hindered by the limited availability of relevant data collected by national authorities and international organizations. The actual impact and implications vary greatly by country and type of agricultural produce (especially between cash crops and staple foods). Nevertheless, a number of salient observations on the implications of TNC involvement in agriculture for developing countries do emerge.

FDI can help fill the investment gap in agriculture in developing countries, which is crucial for increasing production capacity and output (section B.1.a). To date, however, TNCs in general have not been major sources of investment or finance for agricultural development in the developing world, though in a number of countries their contribution is significant in both absolute and relative terms. Perhaps, more importantly, TNCs' contractual relationships with local farmers can have an important beneficial effect on agricultural development by easing their financial constraints (section B.1.b). Through contract farming, foreign affiliates can provide credit to farmers, which is a possible solution to the persistent problem of lack of financing in rural areas.

The limited role of TNCs in agricultural investment does not mean that their impacts on agriculture are insignificant. On the contrary, for instance, TNC participation in agricultural production provides effective channels of technology transfer and dissemination (section B.2). Evidence from case studies suggests that the involvement of different types of TNCs, including seed companies and other input providers, plantation companies and food processors, brings a variety of useful technologies to developing countries that may not otherwise be locally available. Further, when TNCs undertake R&D locally, they become players in the local agricultural innovation system and influence its structure and performance. However, the scope of concrete technological contribution of TNCs has generally been limited. In particular, it remains marginal in most low-income countries and for many important agricultural products, especially food staples.

Various trade barriers and subsidies in developed countries limit the scale and scope of agricultural exports from developing countries. Furthermore, their comparative advantages based on factor endowments are not a sufficient condition for them to increase agricultural exports. By providing the "missing ingredients", such as established brand names, distribution channels and marketing skills, TNCs can help developing countries exploit their comparative advantages, access foreign markets, build export competitiveness and expand agricultural exports (section B.5).

The transfer of advanced technology, the enhancement of farmers' skills (section B.3) and the introduction of standards and modern supply chain management (section B.4) help improve labour productivity, while better irrigation and land management, improved seed varieties and soil fertility increase land productivity. In addition to greater efficiency in the production of existing crops, especially traditional export-oriented commodities, TNCs can contribute to the introduction of new, high-value-added commercial crops that might otherwise not be possible, at least in the short run. All these factors are conducive to fostering competitiveness in agriculture and to promoting sustainable and pro-poor agricultural development. Indeed, TNC involvement in agriculture has contributed to enhanced productivity and output in a number of developing countries, and in some instances boosted employment and incomes.

However, the evidence also highlights the need for host developing countries to be particularly aware of the negative consequences that can arise from TNC participation along the agribusiness value chain. For instance, direct TNC involvement may crowd out domestic investment (section B.1), displace small farmers (section B.4) and create market power, leading to an adverse bargaining position for domestic producers and, thereby, to an unfair distribution of economic benefits (section B.6). These may cause a deviation from the host country's objective of developing its agriculture and increasing farmers' incomes. Not all farmers benefit from TNC involvement. Some may not be able to work in a plantation or participate in contract farming schemes, and therefore could become marginalized. Others may become economically worse off due to the competitive pressure from foreign affiliates engaged

in farming the same crops. Such issues raise various social and political concerns in developing countries, particularly when TNCs own or control large tracts of agricultural land (section C.2). In terms of the environmental impact, case studies show that TNCs have the potential to bring environmentally sound technologies, but their impacts through extensive farming have also raised doubts, including on their effects on biodiversity and water usage (section C.1).

The actual impacts of TNC participation vary greatly across countries and types of agricultural goods, and are influenced by a range of factors, especially the mode of TNC involvement and the host-country institutional environment. The beneficial effects have been observed more in high-value-added commercial products than in traditional cash crops, and much less in basic foods. Generally, it is still unclear to what extent TNC involvement has allowed developing countries to increase its production of staple food and improve food security. Available evidence points to TNCs being mostly involved in the production of cash crops, and rarely staple food crop. (It is still too early to assess the likely effect of the recent rise of South-South FDI in this area.) However, it should be recognised that food security is not just about food supply: TNCs also have effects on food access, stability of supply and food utilization and, in the longer run, their impacts in these aspects of food security are likely to prove more important (section C.3).

With regard to the mode of TNC involvement, evidence from many developing countries shows that through contract farming host countries can receive most of the benefits related to TNC participation, while avoiding a number of negative consequences. Contractual links between foreign affiliates and local farmers can help the latter overcome technological barriers and move into higher value-added products, link up with global markets, and, consequently increase their income. The terms of a contract are extremely important in determining the value retained in host countries and the economic benefits received by local farmers, and they generally reflect the relative bargaining power of farmers vis-à-vis foreign affiliates. How farmers are organized and what policies and institutional arrangements concerning contract farming are in place largely influence the net outcome. In general, a sound policy and institutional framework is crucial for maximizing the benefits while minimizing the costs associated with TNC involvement (chapter V).

Overall, TNC involvement in developing countries has promoted the commercialization and modernization of agriculture. They are by no means the only – and seldom the main – agents driving this process, but they play an important role in a significant number of countries. They have done so not only by investing directly in agricultural production, but also through non-equity forms of involvement, mostly contract farming. They have contributed, in many cases, to significant transfers of skills, know-how and methods of production, facilitated access to credit and various inputs, and given access to markets to a very large number of small farmers previously involved mostly in subsistence farming. Nevertheless, governments need to be sensitive to the above-mentioned negative impacts of TNC involvement in their agriculture, with the aim of avoiding or minimizing them.

Notes

1 The ratio of agricultural FDI stock to agricultural GDP in developing countries is also small – only 1% in 2005, compared to 26% in manufacturing GDP and 33% in services GDP.

2 For example in India, 87% of the surveyed households had no access to formal credit and 71% had no access to a savings account in a formal financial institution (World Bank, 2007).

3 Difficulties in financing small farmers are due to their lack of ownership of assets which could serve as collateral for credit. Where assets are owned, there is a reluctance to use them as collateral, as they are vital for livelihoods. The development of microfinance, which provides access to credit without formal collateral, overcomes this problem, but this form of finance is still in its infancy and has not yet reached most agricultural activities.

4 Since credit can be abused by farmers through selling crops to outsiders or using material inputs for purposes outside the contractual obligations, many contracts include provisions relating to the use of the credit provided.

5 However, the current economic crisis appears to be reducing the availability of finance. For example, Bunge cut advance cash payment to Brazilian farmers by 70% in 2008 ("In Brazil, credit to farmers dries up", *The Wall Street Journal*, 29 November 2008).

6 For example, public breeding programmes in developing countries have released more than 8,000 improved crop varieties over the past four decades (Evenson and Gollin, 2003). In China, based on public research, high-yielding, hybrid rice was commercialized in 1976 and has contributed significantly to productivity growth since then. In Brazil, Embrapa, the leading public agricultural research institute, has generated more than 9,000 technological improvements since its establishment in 1973.

7 The global system for supplying improved agricultural technologies to farmers has been transformed by three interrelated forces: (i) the rapid pace of discovery and growth in importance of molecular biology and genetic engineering; (ii) the strengthening of intellectual property legislation in plant innovations; and (iii) more open trade in agricultural inputs and outputs in nearly all countries. These developments have created a powerful new set of incentives for private R&D investment and altered the structure of the global agricultural innovation system, particularly with respect to crop improvement (Pingali and Traxler, 2002).

8 The importance of inventive adaptation for technology progress and productivity gains was first emphasized by Griliches (1957).

9 See, for example, Pingali and Raney (2005).

10 There are several major modes of international technology transfer in the agricultural sector, apart from FDI and non-equity forms of TNC participation. International

trade in agricultural products is one such mode: it opens channels of communication and introduces incentives to innovation by enlarging market size. It also induces patterns of specialization that influence productivity growth (Coe and Helpman, 1995). In addition, many new technologies can reach local farmers through various marketed inputs, including seeds, fertilizers, pesticides and machinery. Technologies can also be imported by licensing and other forms of technology trade.

11 See UNCTAD (2005) for examples.

12 CSFAC and the Guinea Ministry of Agriculture co-founded the Sino-Guinea Agricultural Cooperation and Development Company and Koba Farm. In 2003, Chinese experts successfully conducted high-yield breeding and cultivation experiments in Guinea (see "Fruitful agricultural cooperation", at: www.china.org.cn).

13 Previously, during the 1970s, there had been considerable technological innovation, with the substitution of Gros Michel by Cavendish varieties, the boxing of bananas and overhead cableways for fruit transport, all of which reduced production costs, increased production and lowered world prices (Arias et al., 2003).

14 The research involved interviews with four leading foreign affiliates of TNCs in the food processing industry in India: Pepsi Foods Ltd., GlaxoSmithKline Beecham Ltd., Nestlé India Ltd. and Cadbury India Ltd. (*WIR01*).

15 Ranging from tractors and combine harvesters to airborne spraying techniques.

16 See, for example, Dutfield (2003).

17 The research centre will employ up to 200 scientific and technical personnel, once its laboratory facilities are established and functioning in 2011. The establishment of the R&D centre makes Syngenta the first foreign agribusiness to set up a global R&D institute in China (*Source:* field study conducted by UNCTAD).

18 A major difference between developed and developing countries with regard to the structure of their agricultural innovation systems is that in developing countries the public sector plays a much more dominant role. Whereas in developed countries, private investment accounts for over half of R&D in agriculture, in developing countries as a whole the share is only 6%. In most low-income countries, the bulk of it is done in universities and government research institutes, sometimes with few, if any, linkages with producers. Where R&D is undertaken by TNCs in host developing countries, it compensates to some extent for the absence of innovative enterprises, which is a common weakness in their agricultural systems.

19 Those who work in agriculture include wage earners (such as permanently employed workers, seasonal or casual workers and migrant workers), self-employed, unpaid family members and others (e.g. cooperative workers) (ILO, 2008).

20 See: www.fairtrade.org.uk.

21 See: the *Informer Newspaper Liberia*, "Malaysian investors take over Guthrie as Ellen signs $800 mn deal", 1 May 2009.

22 In the case of coffee, for most producing countries (with the notable exceptions of Brazil and Ethiopia), virtually all demand comes from abroad through international trading houses and roasting companies.

23 Kyagalanyi Coffee Limited is an affiliate of ED&F Man Holdings based in the United Kingdom.

24 This refers to PTP Group, a joint venture between Asia Timber Products (Singapore) and the local government. (The information on employment is provided by the Ministry of Commerce of China.)

25 A substantial body of literature shows the importance of non-farm enterprises as engines of rural development, and their role in income growth and poverty reduction (see, for example, World Bank, 2006).

26 Decent work is about opportunities for women and men to obtain productive employment in conditions of freedom, equity, security and human dignity (ILO, 2008).

27 Depending on their size, technological advantage and country of origin, foreign affiliates have been observed to offer higher remuneration and better conditions of work than domestic firms, in both developed countries (OECD, 2001) and developing countries (*WIR94*).

28 The Kenya Flower Council, whose members include more than 50 floriculture companies, has developed a code of practice, backed by regular audits, with requirements concerning workers' health and safety, general worker welfare and various other labour-related issues.

29 For example, structural overproduction, greater competition and declining prices have been responsible for permanent workers being replaced by migrant and/or contract workers, the increasing employment of under-age workers, and a deteriorating quality of life for workers and small farmers in producing countries.

30 A number of factors suggest that the impacts of transnational food processors can be significant. First, a large proportion of the food sold in supermarkets is in the form of processed products supplied by food processors. In general, farmers have a more direct link with food processors than supermarket chains or specialized procurement agents acting on their behalf. Secondly, entry costs for small-scale farmers supplying processors tend to be lower. Since food processors generally have less exacting quality standards, they can accept supplies from more marginal producers who tend to be excluded from the value chains of fresh produce for export or for supermarkets. Finally, the scale of production contracted or bought by processors is often much larger than for supermarkets. Therefore, food processors play an important role as intermediaries with direct contact with local farmers, and, as such, influence both the quantity and quality of agricultural production by the farmers involved.

31 In Latin America, which is the most advanced region in this regard, their share already exceeds 50% in many countries. Asia and Africa lag behind, but a number of the more developed countries and urban centres in these regions are catching up fast (Reardon, Henson and Berdegué, 2007).

32 For a detailed discussion on private grades and standards, including how their role has evolved over time, see Reardon et al., 2001.

33 Freshmark (South Africa) and Hortifruti (Costa Rica) are among the better known transnational procurement agents.

34 In some developing countries where written contracts are rare, these kinds of contracts are often informal, but nevertheless effective.

35 More recent evidence suggests that smaller retailers are showing more resilience in the face of competition from transnational supermarket chains. In Brazil, for example, the share of transnational supermarket chains has levelled off after years of expansion. This is attributed to two main factors. First, smaller shops have begun to collaborate in their procurement to gain stronger bargaining power in dealing with suppliers. It also helps that they now have access to the technology used in modern retailing. Second, food producers have recognized the importance of smaller retailers, and provide them with some preferential treatment so as to avoid too much concentration in the hands of a few supermarkets. These factors, coupled with their "natural" advantage that they are typically established at convenient locations, appear to have given a new lease of life to smaller shops.

36 As noted in one study, "a comparative advantage in producing a good does not necessarily imply a comparative advantage in marketing it." One of the reasons is that marketing and trading functions are knowledge- and skill-intensive – more skill-intensive than, for example,

producing simple, labour-intensive manufactured goods (UNCTC, 1989: 120). It should be noted that a number of developing countries established State-owned companies in the past to deal with the marketing of agricultural commodities, among others. These companies often came to be criticized for their lack of efficiency and poor management, resulting in lower prices paid to farmers and a fiscal burden on State budgets. In the late 1980s and 1990s, many of these agencies were abolished or restructured (World Bank, 2007). A number of countries have tried to develop alternative marketing channels for their agricultural exports, but only some have succeeded.

37 Moreover foreign markets are also very demanding. This is due not only to intensifying competition among supermarkets and changing consumer tastes, but also to emerging food safety regulations (e.g. strict sanitary and phytosanitary standards) as well as growing attention paid by consumers in developed countries to fair trade issues, including working conditions of suppliers. In general, the so-called "credence goods" in the food industry have been gaining in importance. "The quality and safety characteristics that constitute credence attributes include the following: (1) food safety; (2) healthier, more nutritional goods (low-fat, low-salt, etc); (3) authenticity; (4) production processes that promote a safe environment and sustainable agriculture; and (5) 'fair trade' attributes (for example, working conditions)" (Reardon et al., 2001: 424).

38 Information on market concentration in global agricultural commodity chains is limited. As noted by Murphy (2006: 7): "There is a widely acknowledged need for increased transparency in national and international markets about the scale and diversity of the largest food companies."

39 Deardorff and Rajaraman (2009) suggest that "although the evidence points to oligopsony rather than pure monopsony, it is likely that market segmentation leads to the producers in any single country confronting one rather than more than one buyer." An example of monopsony is the Kabuye sugar factory in Rwanda, which is the only sugar producer in the country (UNCTAD interview with the Kabuye Sugar Works Sarl, Rwanda, in early 2009).

40 Such an "hourglass" situation is responsible for occurrences of market power in agriculture in general (Murphy, 2006: 12).

41 In Côte d'Ivoire, for example, the liberalization of world markets in cocoa in the past few decades has not only resulted in a stronger concentration in downstream parts of the value chain, where a few TNCs form an oligopsony and are engaged in fierce competition, but also in a concentration of buying, resulting in market power over farmers in particular. This situation has been aggravated by the dismantling of State regulatory bodies and marketing boards, which had atomized the supply side. This is despite the fact that Côte d'Ivoire accounts for 40% of world cocoa supplies and should thus be in a position to amass some "selling power" (Dorin, 2008; UNCTAD, 2008d).

42 See, for instance, South Centre (2008: 5): "For commodity exporters, the market concentration has negatively affected their ability to maintain existing markets and penetrate new ones. It is also one of the major reasons for the little share of producers' earnings in final value of commodities. This is clear from the large gap between farm-gate prices that commodity producers receive and retail prices that consumers pay."

43 See also UNCTAD (2006a) for an analysis of concentration in the agricultural input industry and of food clusters.

44 This small share is partly due to the fact that most certified fair trade coffee is sold on the open market and not by fair trade dealers, and therefore does not fetch the fair trade premium.

45 Coffee, for example, undergoes initial stages of processing before the green beans are exported for further processing in consuming countries. In the case of soluble (instant) coffee, all production stages can be done domestically as it has a much longer shelf life (Krüger and Negash, 2009). Another example is tobacco, with the dried tobacco bought from tobacco farmers and then processed and stored in a local plant until it is ready to head off to a cigarette production facility overseas (World Bank, 2003).

46 See MIGA website at: http://www.miga.org/sectors/index_sv.cfm.

47 In some African countries, several sugar projects were launched with the explicit aim of reducing the sugar import bill (e.g. Kibos Sugar and Allied Industries Limited, Kenya, the Companiha de Sena S.A.R.L., Mozambique or the Kenana Sugar Company, Sudan). The latter two projects were also undertaken to increase exports of sugar from the respective countries (see, for example: http://www.miga.org/sectors/index_sv.cfm; Nur, 2009). Biofuels are another generally promising industry involving TNCs. Ethiopia, for instance, is trying to tackle a rising petroleum import bill and improve its energy security by encouraging investments in bio-diesel and bio-ethanol production. Foreign investors from Germany and the United Kingdom have signed up to grow and process Jatropha and castor beans for this purpose (Fessehaie, 2009).

48 With respect to agricultural commodities the following examples highlight this dependence. In Burkina Faso, the share of cotton in exports was 72% in 2004, and in Benin it was 58% in 2005, while tobacco accounted for 49% of Malawi's exports in 2007 and soya for 45% of Paraguay's exports.

49 Dependence on oil and minerals can be extreme: In Nigeria the share of petroleum in its exports was more than 98% in 2006, in Sudan it was 88% and in Gabon 86%. Mali depended on gold for 75% of its exports in 2007, Zambia on copper for 71% and Niger on uranium for 63% (UNCTAD, based on Comtrade data).

50 Another example of diversification and generation of export earnings is the fishing industry in Eritrea that is being built with the help of investors from Italy and the Netherlands (Library of Congress, Federal Research Division, 2005).

51 Some 14% of total GHG emissions have been attributed to agriculture (excluding change in land use), compared with 60% to energy, 18% to deforestation and 4% to industrial processes (World Bank, 2007).

52 Even in manufacturing, in which TNC participation in pollution-intensive activities in host developing countries is relatively high, there is no clear evidence to support the hypothesis that TNCs in general shift the location of their pollution-intensive activities to take advantage of lax environmental standards in host developing countries (*WIR99*).

53 The large banana TNCs based in the United States, which have been controlling plantations in several Latin American countries since the early 1900s, had a reputation for their broad reach and influence (extending, in some cases, to influencing governments, giving rise to the term "banana republic"). This was likely accompanied by a tendency to be closed and defensive in addressing concerns about standards and practices, as acknowledged by the President and CEO of Chiquita in 2000 (Arias et al., 2003).

54 One persistent issue relates to the health impacts of pesticides used in banana plantations. In November 2007, a Los Angeles jury awarded punitive damages to some Nicaraguan workers who suffered adverse effects from exposure to a pesticide containing DBCP used in Dole's plantations ("Los Angeles Jury punishes Dole Foods Company, Inc", *Pesticide News Archive*, November 16, 2007 (www.bananalink.org.uk). More recently, two lawsuits filed against the company in Los Angeles on

behalf of Nicaraguan banana workers with respect to the use of the same pesticide were thrown out by the judge because of fraud (Katherine Glover, "Fraud helps Dole in Nicaragua banana pesticide case", 13 May 2009, http://industry.bnet.com).

55 For example, Ethiopia, Kenya and Uganda in Africa, Colombia and Ecuador in Latin America, and India and Viet Nam in Asia.

56 About 80% of the total income of the horticulture industry in the country is attributed to the 10 leading companies, all foreign owned,56 and about two thirds of flower farms in Kenya are managed by foreign firms (Lans, 2005). See: "Kenya: country's wealth in foreign hands", *African Path*, 30 May 2007.

57 "How Kenya is caught on the thorns of Britain's love affair with the rose", *The Guardian*, 13 February 2006.

58 Both the herbicide glyphosate, and the glyphosate-resistant GM variety of soya are sold by Monsanto (United States), under the names "Roundup" and Roundup Ready", respectively.

59 See, for instance Howard and Dangl, "The multinational beanfield war: soy cultivation spells doom for Paraguayan campesinos" (http://inthesetimes.com).

60 In June 2008, the agreement was extended for another year.

61 See the Round Table on Responsible Soy Association website, at: www.responsiblesoy.org.

62 As stated by Berg et al. (2006: viii), "…for value chain promotion to be pro-poor, it needs to be firmly embedded in direct measures to make resource-poor producers 'linkable' to markets. Without developing necessary physical and institutional infrastructure and human capacities at the micro level, value chain support activities at the meso and macro levels are likely not only to by-pass the poor, but to widen the gap between poor and non-poor."

63 This can be done by women and the community itself, as in the flower cutting industry in Kenya (UNCTAD, 2008e); by the State, as in the case of government programmes in Indonesia and the Philippines (World Bank, FAO and IFAD, 2009b); or by TNCs, such as through the partnership between the United Nations Development Programme (UNDP), Nestlé Pakistan and Engro Food (Nestlé, 2008). In the last case, through a partnership between UNDP, Nestlé Pakistan and Engro Food, 4000 women were trained in Pakistan to act as farm consultants, dispensing technical advice about milk production to 85,000 farmers (Nestlé, 2008).

64 Or indeed domestic companies, because whether this effect is TNC-specific depends on context (e.g. there may be no local companies capable of undertaking the relevant activities).

65 For example, for visiting family and friends, attending school, accessing medical facilities, or going to work.

66 Closely linked to this issue are water rights, which are not treated separately here (see, for instance, UNESCO, 2009)

67 This situation can be worsened, for example by price rises resulting from demand for alternative uses for food crops, as in some cases of recent diversion to biofuel use, although such a situation is unlikely to persist (FAO, 2008c; von Grebmer et al., 2008).

68 At least in the short run. TNCs will normally have access to the hard currency needed to pay for imports.

CHAPTER V

POLICY CHALLENGES AND OPTIONS

A. The main policy challenges

Expansion and revitalization of agricultural production is crucial for developing countries, both to meet the rising food needs of their burgeoning populations, and as a basis for economic diversification and development. In order to realize these objectives, there is a strong and urgent need to invest more in this industry. Increasing investment from private domestic and foreign sources is critical, particularly as public sector funds for agricultural investment are limited in many countries, and the share of agriculture in official development assistance (ODA) devoted to the industry has fallen.

The investment potential of local farmers is very limited in many developing countries, due to their lack of financial, managerial, technological and other resources. One alternative approach, therefore, is to harness the capabilities of TNCs. The recent renewed interest of FDI in agricultural production (chapter III) provides policymakers in developing countries with an opportunity to boost agricultural production and productivity and enhance overall economic development. As shown in chapter III, although overall FDI in agricultural production has been very low, the attractiveness of developing countries as hosts is likely to increase as global agricultural production continues to shift from developed to developing countries. Indeed, by 2017, the latter are expected to dominate the production and consumption of most agricultural commodities (OECD and FAO, 2008). Also, given that a growing number of developing countries are short of arable land, to meet the challenge of securing domestic food supply they are promoting outward investment in agricultural production (chapter III). Home countries embarking upon this path have to ask themselves under what conditions such strategies can be successful and whether there are alternatives to FDI. Host countries, on the other hand, need to consider the possible implications of such investment for their own food security, land distribution and economic development.

As analysed in chapter IV, TNC participation in agricultural production has both positive and negative impacts on the industry, and on the economy as a whole. Although TNC involvement in agriculture has contributed to enhanced productivity and increased output in a number of developing countries, and helped create employment and raise incomes, existing evidence also highlights that developing-country governments need to be aware of negative consequences that can arise from TNC participation along the agribusiness value chain. For instance, FDI may crowd out domestic investment, displace or marginalize small farmers, and concentrate market power, and thus lead to an adverse bargaining position for domestic producers, resulting in an unfair distribution of economic benefits. Governments also need to be concerned about the environmental consequences of TNCs' involvement in agriculture.

While such double-edged effects of TNC involvement are not uncommon, they are more controversial in agriculture than in most other industries. Fears have been expressed that, instead of producing food for people, TNCs produce profits for "large interests" (Vallianatos, 2001: 49–50). Policymakers cannot ignore such concerns: they need to consider what role, if any, TNCs could play in domestic agricultural production to ensure that it supports the host countries' development objectives. Successful examples (chapter IV) show that

it is possible for host countries to generate synergies by combining the resources of TNCs (such as investment, technology and distribution networks) with domestic resources (such as abundant labour and available land) for long-term agricultural development. It is also possible to learn from unsuccessful outcomes, where domestic and foreign players compete for a limited supply of domestic resources, particularly land and water, and where the market power of TNCs deters efficiency gains and leads to welfare losses. In particular, host-country governments should help local farmers to become active players in the agribusiness value chain, while also providing social protection to smallholders, especially those who are marginalized in the accelerated process of commercialization and modernization.

International investment policies can be a significant supplementary tool for developing countries seeking to promote TNC participation in agricultural production. However, how to preserve host countries' regulatory discretion, while undertaking international obligations vis-à-vis foreign investors in agriculture remains a major challenge.

This chapter analyses the above-mentioned challenges for policymakers, and discusses policy options and implications.

Section B examines host-country policy options with regard to openness to FDI in agricultural production. It then explores policy approaches aimed at maximizing the benefits of TNC participation, such as leveraging FDI for agricultural development and the establishment of linkages between local farmers and TNCs. This section also looks at environmental and social concerns pertaining to TNC involvement in the industry, including corporate social responsibility, and discusses some other relevant policy areas. Section C assesses relevant home-country policies, particularly recent home-country strategies aimed at encouraging outward FDI for domestic food security. Section D widens the analysis to international cooperation, with a focus on the role of international investment agreements (IIAs). Section E draws conclusions and offers policy recommendations.

B. Host-country policy options for TNC participation in agricultural production

When designing strategies in respect of TNC participation in agricultural production, host countries need to distinguish between different forms of such involvement, especially FDI and non-equity forms of participation (i.e. contractual arrangements between TNCs and local farmers and other links through food value chains). Each type of TNC involvement has particular impacts on the host country (chapter IV), and may therefore require different host-country policy responses. Economies of scale, heavy investment requirements and technical difficulties in dividing the production process between different agents (e.g. production of biofuels) are arguments in favour of FDI, whereas high labour intensity favours non-equity TNC involvement through linkages with local farmers (Kirsten and Sartorius, 2002).

Host-country policies range from complete or partial prohibition of TNC involvement in the production of individual commodities to active promotion of FDI. They are often a mixture of encouraging and regulatory elements, where TNC participation is promoted for the production of individual commodities or for specific purposes. Some host countries apply laissez-faire policies, with no specific rules for TNC involvement in agricultural production. They deal with individual concerns, such as land use, or environmental or social impacts in their overall regulatory framework.

These findings are confirmed by a survey of governments conducted by UNCTAD,[1] which revealed that most of the respondent countries allow FDI in agricultural production. This is consistent with a survey of investment promotion agencies (IPAs) also undertaken by UNCTAD (see below), where the majority of the respondents (59%) indicated that they promote FDI in agricultural production.

1. Openness to FDI in agricultural production

The degree of openness of a country to FDI in agricultural production is determined by a number of factors. Amongst the most relevant are the entry conditions for FDI, regulations concerning land and water use, and investment protection and promotion measures. Each of these factors is discussed below.

a. Entry conditions

Policymakers first need to determine to what extent they wish to open their countries to FDI in agricultural production. Many developing countries do not have special entry regulations for such FDI; instead they apply their general rules on foreign investment.[2] These regulations vary between countries.

Specific entry restrictions on FDI in agricultural production are typically based on *socio-political, cultural economic or security-related considerations*, according to which agricultural production is reserved for local farmers. The main policy instruments for determining the entry conditions for FDI in this industry are outright prohibition or limits on foreign ownership, or approval requirements (box V.1).

b. Land and water use

As discussed in chapter IV, FDI in agricultural production can have politically sensitive implications for land and water use. This is reflected in land ownership restrictions imposed by numerous developing countries for political, economic, security-related, social or cultural reasons. Instead, many countries prefer long-term land lease contracts to foreign ownership.[3] How access to agricultural land is regulated varies between countries and regions. In general, many countries in Latin America and the Caribbean are open to foreign ownership of agricultural land, while many transition economies allow agricultural land use by foreigners only in the form of lease contracts. Africa and Asia show a more diverse picture, with numerous countries only allowing land lease and others permitting both foreign ownership and lease. The regulatory system is often complex.[4]

From the point of view of foreign investors, the lack of clear titles and cumbersome administrative procedures for the allocation of land use rights are among the major barriers to investment in agricultural production. Procedures are often difficult, expensive and lengthy, sometimes stretching over several years (USAID, 2008). Land deals between the government and a foreign investor may involve several contracts and legal instruments, and a wide range of public and private stakeholders at the local, regional and national levels. Additional hurdles can be the absence of clear records of land titles and the existence of multiple legal provisions relating to land ownership or use at various levels. Moreover, reforms are extremely difficult because of differing concepts of land rights, including the legitimacy of land ownership and the existence of customary, common and traditional rights, especially where it is hard to define the actual holder, be it the tribe or the chief. There may also be interlocking claims arising from, for example, different sources of historical legitimacy or displacements as a result of conflicts (Biacuana, 2009; Kanji et al., 2005; Manji, 2005; Rugadya, Nsamba-Gayiiya and Kamusiime, 2006; Ubink, 2004).

The issues of clarifying land rights and facilitating procedures were analysed in some recent Investment Policy Reviews conducted by UNCTAD. These reviews point out that policymakers have a wide choice to address the problems. They vary from defining secure and transferable land titles, adopting appropriate land surveying, planning and zoning, eliminating superfluous administrative and procedural steps, and building and maintaining electronic records of land transactions (UNCTAD, 2009h, 2009i, 2009j). Improvements in these areas would benefit TNCs and domestic individuals and companies alike.

Equally important is the issue of water rights. In many developing countries, legislation on water rights is either missing or not effectively implemented, or it is based on vague customary or local laws, thus discouraging investment in agricultural production. The situation is further complicated by the fact that agricultural production in many countries depends on irrigation, and delivery of water may be based on complex service contracts between the investors and the irrigation agency. Host-country governments therefore need to introduce and manage sophisticated regulatory mechanisms for the granting, administration and duration of water rights. To reduce the risk of disputes, investment contracts should be sufficiently specific with regard to the obligations

Box V.1. Specific entry regulations for FDI in agricultural production

Agriculture-related entry conditions in a number of countries are presented below.

China's policies on foreign ownership and control vary for different agricultural products and agriculture-related activities. This is reflected in the *Catalogue for the Industrial Guidance of Foreign Direct Investment*, which was amended in 2007. According to the catalogue, foreign participation in some areas is encouraged (e.g. by preferential tax treatment), while in a few areas it is restricted or prohibited. For example, breeding and seed development companies have to be majority-owned by Chinese companies; and foreign investment in the development of genetically modified (GM) seeds and the plantation of domestic-specific "precious varieties", such as some traditional Chinese herbal medicines, is prohibited.

India prohibits FDI in agricultural production in general, with the exception of floriculture, horticulture, development of seeds, animal husbandry, pisciculture, and cultivation of vegetables and mushrooms under controlled conditions as well as services related to agro and allied sectors. For these exceptions, an automatic approval route applies. In the tea sector, prior approval is needed and 100% foreign ownership is permitted subject to the condition that 26% of the equity be divested in favour of a domestic partner (private or public) within a period of five years.[a] Also, any changes in future land use are subject to prior approval.

Tunisia permits foreign equity in the agricultural industry of up to 66%.[b]

In the *Republic of Korea*, foreign entities may not cultivate rice and barley.[c]

Source: UNCTAD.

[a] OECD (2009:47 fn 71).

[b] See http://www.tunisie.com/APIA/foreign_investment.htm.

[c] Public notice by the Ministry of Knowledge and Economy, No. 2009-81.

of the contracting parties and the consequences of a breach of those obligations.

c. Investment promotion and protection

Investment promotion schemes are important policy devices for developing countries that are seeking to attract FDI in agricultural production. Promotional measures include, for instance, various forms of fiscal, financial and technical support (box V.2).

As part of background research for this report, UNCTAD and the World Association of Investment Promotion Agencies (WAIPA) jointly undertook a survey on the role of investment promotion agencies in attracting FDI in agricultural production and promoting investment in overseas agriculture.[5] This section presents the main findings.

The majority of respondents (59%) reported promoting FDI in agricultural production, although amongst developed countries the proportion of IPAs active in this area was considerably lower (28%) than that from developing regions (73%) and transition economies (60%).[6] In particular agencies from Africa (87%) and Asia (75%) reported promoting foreign investment in agriculture, while just over half of those from Latin America and the Caribbean do so. Moreover, between 50% and 60% of respondents from developing and transition economies stated that they accorded greater importance to attracting foreign investment in agriculture today than three years ago, and they expected the industry would gain even further priority in their work until 2011.[7] Their main motivation for this is to enable their countries to derive more benefits from the competitive advantages of their agricultural industries, and because of the importance of agriculture for exports and gross domestic product (GDP).[8] In particular, IPAs expect TNCs to make new technologies, finance and inputs available to the industry and to help provide market access.

IPAs showed varying degrees of interest in different agricultural activities, but a particularly large percentage of them indicated a strong desire to attract FDI in the production of cash crops (table V.1). More than half of the respondents reported actively promoting FDI in one or more cash crops, especially fruits and vegetables. Also many agencies were targeting FDI in animal products, such as meat and poultry and dairy, and to a lesser extent in staple crops and biofuel commodities.

Although there appeared to be no significant regional variation in terms of priorities, there were some clear differences in the level of attention given to specific activities. This can partly be explained by the fact that production of specific crops is often limited by geographical conditions. Overall, these findings

Box V.2. Examples of policies for promoting investment in agriculture production

Various developing countries have introduced incentives for encouraging investment in agriculture. The following are some examples:

Argentina offers, for example, tax relief for projects associated with biodiesel fuels – an area in which Argentina has a competitive advantage, given its low production costs in agriculture (Law No. 26,093 published in the Official Gazette, 15 May 2006).

China has adopted a selective support policy on foreign investment in agriculture (Ge, 2009). FDI for the production of some agricultural products and TNC involvement in related activities are encouraged (see also box V.12). According to the *Catalogue for the Industrial Guidance of Foreign Direct Investment*, for instance, foreign investment in the production of products such as rubber, sisal and coffee is encouraged (e.g. through tax incentives).

Nigeria offers, inter alia, (i) unrestricted capital allowance for agribusinesses, and up to 50% for agro-related plants and equipment, (ii) guarantees of up to 75% of all loans granted by commercial banks for agricultural production and processing under the Agricultural Credit Guarantee Scheme Fund (ACGSF), and (iii) 60% repayment of interest provided by the Interest Drawback Program Fund paid by those who borrow from banks under the ACGS for the purpose of cassava production and processing, provided such borrowers repay their loans on schedule. Also, processing of agricultural produce has been declared a pioneer industry which entitles the companies involved to 100% tax exemption for a period of five years.[a]

Papua New Guinea, under the rural development incentive, encourages agricultural production of any kind by inter alia granting a 10-year exemption from corporate income taxes for businesses engaged in agricultural production that are established in specified rural development areas. Also, accelerated depreciation rates are offered for new plants (other than residential property with a cost exceeding kina 100,000 – approximately $37,250) with a life span exceeding five years that are used in Papua New Guinea's agricultural production.[b]

Viet Nam had set a target of mobilizing approximately $8.2 billion from 2006 to 2010 for investments in agricultural development.[c]

Source: UNCTAD.

[a] Nigerian Investment Promotion Commission (NIPC), Investment Incentives, available at: http://nipc.gov.ng/investment.html.
[b] Papua New Guinea Investment Promotion Agency, www.ipa.gov.pg.
[c] Website of the Ministry of Agriculture and Rural Development.

Table V.1. Percentage of IPAs that promote FDI in specific agricultural commodities, by region, 2009
(Percentage of respondents)

Commodity	Total	Developed countries	Developing countries				SEE and CIS
			Total	Africa	Asia and Oceania	Latin America and the Caribbean	
Staple crops	32	11	42	60	25	38	20
Cereals	27	11	35	53	17	31	20
Roots and tubers	19	11	22	27	17	23	20
Cash crops	56	28	67	80	67	54	60
Fruits	46	22	55	60	50	54	60
Coffee	17	-	27	40	8	3`	-
Tea	14	6	17	40	-	8	20
Cacao	14	-	22	7	17	46	-
Fibre crops	14	6	17	40	-	8	20
Horticulture	52	28	62	73	58	54	60
Vegetables	44	22	52	53	58	46	60
Floriculture	24	17	30	47	8	31	-
Animal products	44	22	52	60	50	4	60
Meat and poultry	40	22	45	53	50	31	60
Dairy	35	22	37	53	17	38	60
Biofuel crops	22	11	27	40	25	15	20
Other	38	17	47	67	33	38	40
Soybeans	13	6	17	20	8	23	-
Oil crops	22	6	30	40	25	23	20
Other	22	11	25	40	17	15	40
Number of responses	*63*	*18*	*40*	*15*	*12*	*13*	*5*

Source: UNCTAD–WAIPA Survey of IPAs, February–April 2009.

confirm the broad patterns of openness to TNC involvement (see section B.1.a). Cereals are more frequently targeted in Africa and in Latin America and the Caribbean than in Asia, where, for instance, rice farming is strongly protected. Other noteworthy differences between regions include the relatively high priority given by IPAs in Latin America and the Caribbean to cacao, and the relatively low priority to meat and poultry and biofuel crops as compared to other developing regions. A possible explanation is that there is already a strong domestic presence in these industries. Finally, a large proportion of agencies in Africa seek to attract foreign investment in biofuel crops.

Notwithstanding the fact that barriers to FDI may vary, both between specific countries or regions and between different crops, the participating IPAs highlighted a number of major obstacles.[9] The main impediment to attracting foreign investors into agriculture is the lack of good quality infrastructure services, as reported the most by IPAs from Africa (40%) and to a lesser extent by those from Latin America and the Caribbean (31%) and Asia (25%). Another major obstacle reported by agencies from developing countries is the lack of quality inputs (25%). Furthermore, one third of the agencies from Asia indicated that export restrictions on agricultural products and the lack of local partners were the main barriers to FDI. Political uncertainty and administrative obstacles were reported by more agencies from both Asia and Latin America and the Caribbean.

Only a minority of respondents (22%) reported targeting TNCs from specific home countries or regions. This was the most common among IPAs from Africa (47%), and the least among those from Asia (17%). In the majority of cases, no country or region was targeted in particular, although some agencies focused on only one or two specific countries, while others showed interest in a wide variety of countries and regions.

Investor targeting, investor aftercare and policy advocacy to address specific problems that foreign investors face in the agricultural industry remain critical tasks for IPAs. For instance, a number of IPAs have established a land bank directory with the objective of identifying potential land for investment, including in agriculture. Under this approach, land is sourced in order to make it readily available for strategic investors and developers. One example in this regard is Ghana.[10]

With respect to investor targeting, IPAs could employ strategies to develop clusters (for instance, in cut flowers, viticulture, dairy industry and apiculture). For many agricultural products a critical mass of producers and agricultural support services (pest and disease control, agricultural machinery, storage and transport, research and breeding, and marketing services) is necessary for becoming internationally competitive. Both potential producers and service providers should be targeted, including those with similar products in similar climatic zones. It is important to ensure that direct or indirect incentives do not discriminate against small farmers and small- and medium-sized enterprises. Investor aftercare is particularly important because of the rural locations where many of these companies often operate. IPAs should consider appointing specialized officers who operate as an extension service to deal with the day-to-day and longer term problems that investors face. These problems vary by country, but land and water issues are often mentioned as sticking points, as well as lack of rural infrastructure.

Besides investment promotion, the provision of adequate *investment protection* is an FDI determinant that host countries seeking to attract FDI in agricultural production need to take into account. This includes, in particular, protection of foreign investors against discrimination, expropriation and transfer restrictions, and putting in place efficient dispute settlement mechanisms (see also section D.2).[11]

2. Maximizing development benefits from TNC participation

Host countries face the challenge of how to maximize the benefits from TNC involvement in agricultural production. This includes benefits from FDI and from contractual arrangements between TNCs and local farmers.

a. Leveraging FDI for long-term agricultural development

In order to leverage FDI involvement, developing countries should, above all, seek to match incoming foreign investment with existing domestic resources, such as availability of labour and land. In particular, in light of the recent interest in outward FDI to secure domestic food supply, there is potential for host countries to benefit from such investment to meet their own staple food requirements, provided that the resulting production is shared between home and host countries. FDI should create positive synergies to make sagging, traditional agriculture more competitive and economically viable, and to promote long-term agricultural development. Besides the legislative framework in host countries, investment contracts between the host government and foreign investors can be important instruments for enabling a country to maximize the contribution of FDI to sustainable agricultural and rural development, in particular in respect of investments involving major land deals. These contracts should be structured in a way to maximize benefits for host countries and local farmers. Among the critical issues that should be considered in investment contracts are: (i) entry regulations (see also Hallam, 2009; and section B.3), (ii) the creation of on- and off-farm employment opportunities, (iii) transfer of technology and R&D requirements (see section B.4.d, and chapter IV), (iv) the welfare of local farmers and communities, (v) production sharing, (vi) distribution of revenues, (vii) local procurement of inputs, (viii) requirements of target markets, (ix) development of agriculture-related infrastructure, and (x) environmental protection. Host countries should also be aware of the possible conflict between how they seek to attract foreign investors in investment contracts (e.g. a commitment to never impose export controls or to reduce tariffs on imported inputs) and internationally agreed trade rules.

Another possibility that has been suggested is to develop a method for governments and development agencies to implement sustainable and integrated FDI projects related to agricultural production. The objective would be to assess whether the conditions for making an investment are fulfilled and ensuring that the project furthers development goals. Questions to be addressed in this context include: (i) what products are feasible for production in a certain region from a technical point of view, (ii) whether there is a market for the products, (iii) whether the project could be financially attractive for an investor, (iv) how to settle relationships with smallholders, and (v) how to motivate sustainability of the project (Neves and Thomé e Castro, 2009).

An incentive system can also play a role. Within the framework of an overall agricultural development strategy, host-country governments should identify priorities and consider incentives for TNC involvement in preferred areas. Such areas might include the production of high-value-added varieties, participation in organic and fair-trade schemes, the establishment of international joint ventures, the transfer of technology related to those agricultural commodities in which the host country is particularly interested, and the promotion of local R&D activities (see also chapter IV).

With regard to the increasing number of FDI projects that are targeting large areas of land for staple food production (chapter III), host countries should consider output-sharing arrangements with the foreign investor. The social and environmental impacts of these projects should be assessed carefully, and particular attention paid to the long-term implications for domestic agricultural development and food security. Negotiations should be transparent with regard to the land involved and the purpose of production, and they should include the participation of local landholders (von Braun and Meinzen-Dick, 2009). In this context, the United Nations Special Rapporteur on the Right to Food has developed a set of core principles and measures to address the human rights challenge of large-scale land acquisitions and leases (de Schutter, 2009). The FAO, IIED and IFAD have made recommendations for agricultural investments and international land deals in Africa (box V.3). Also, in the preparation of the G-8 Summit in L'Aquila in July 2009, it had been proposed to develop joint principles for international agricultural investment involving land deals.[12] Furthermore, as noted in chapter III, some governments allow foreign investments in export-oriented agricultural production, provided these create additional benefits for the host country, such as infrastructure development (including the building of schools and hospitals), technology transfer, training, and/or the sale of goods or raw materials at preferential prices.

b. Promoting contractual arrangements between TNCs and local farmers

(i) Regulations on contract farming

In general, host-country policies impose few restrictions on TNC involvement in contract farming. Most host countries regard it as an opportunity to

improve life for local farmers rather than a threat. Despite the ever growing number of contract farming agreements worldwide, special legal regulations on contract farming, be it with domestic or foreign firms, exist only in a few developing countries, and examples that could be found for this report are mainly from Asia.

For example, India, Thailand and Viet Nam have introduced special regulations on contract farming over the past decade.[13] The provisions address, inter alia, the establishment of a special register or a notification procedure for contract farming agreements, special regulations on land lease by enterprises and land property rights of farmers, compensation in case of contract breach (e.g. quality defects of the produce) and rules relating to *force majeure*. Another key aspect relates to special dispute settlement mechanisms; in some cases decisions are final, binding and enforceable.

Where specific regulations are lacking, general contract laws may fill the gap. Contractual approaches often vary amongst different contractors (chapter III). A number of countries have made political commitments to foster contract farming or monitor its impact.[14]

(ii) Promotion of contractual arrangements

Improving the productivity of local farmers is fundamental for enhancing agricultural development in developing countries. Therefore, a key element of developing countries' strategies should be the promotion of linkages through contractual arrangements between TNCs and local farmers that enable the latter to enhance and upgrade their capacities, in particular through transfer of technology and other knowledge (chapter IV). One particular approach in this respect is the promotion of outgrower schemes or integrated producer schemes (chapter III; box V.5), where the TNC acts as the lead firm that organizes and overlooks agricultural production by a multitude of local smallholders or cooperatives. In general, TNCs have been mainly involved in contractual arrangements for the production of cash crops. Therefore, promoting contract farming in staple food production, with a view to alleviating the food crisis, remains a challenge for policymakers.

Governments should examine the whole value chain with a view to identifying bottlenecks to effective cooperation between TNCs and local farmers. Governments and their specialized agencies need to have the capacity for such analyses, including the ability to design appropriate training and competence strengthening measures. Among the most relevant issues that need to be tackled by host countries are: (i) smallholders' inability to supply products of a consistent quality and in a timely manner; (ii) lack of modern technology and standards; (iii) lack of capital; (iv) remoteness of production; (v) limited role of farmer organizations; and (vi) lack of adequate legal instruments for dispute settlement (HLTF, 2008).

(1) Improving the capacity of smallholders to supply products of a consistent quality and in a timely manner

One policy option is the provision of government-backed *education and training programmes* for local farmers in order to make them better prepared for cooperating with TNCs. Even basic education is often lacking in rural populations. At a more advanced level, teaching about biophysical properties and growing conditions, including the proper use of

Box V.3. Agricultural investment and international land deals in Africa: policy recommendations for host countries

The FAO, IIED and IFAD have jointly developed a set of general recommendations for agricultural investment and international land deals in Africa. These recommendations address different stakeholders, namely investors, host governments, civil society (organizations of the rural poor and their support groups) and international development agencies.

The recommendations addressed to host governments include the following:

- Governments need to clarify what kinds of investment they want to attract;
- Attention to increased agricultural productivity needs to be balanced with assessment of how gains are achieved and how benefits are shared;
- State-of-the-art assessments of the social and environmental impacts of proposed investments are needed;
- Governments should ask hard questions about the capacity of investors to manage large-scale agricultural investments effectively;
- Land contracts must be structured so as to maximize the investment's contribution to sustainable development;
- Mechanisms should be developed to discourage purely speculative land acquisitions;
- Investment decision-making must be transparent;
- Efforts must be stepped up in many countries to secure local land rights.

Source: Cotula et al., 2009.

cultivation methods, can be helpful. Since farmers are increasingly affected by market demands or drawn into discourses on sustainability, freshness, food safety and quality, government-sponsored programmes could also prepare them for these expected requirements (McKenna, Roche and Le Heron, 1999: 39). Innovation and knowledge need to be improved on a continuing basis without charging farmers high consultancy fees, given the disadvantaged socio-economic conditions of smallholders (Msuya, 2007: 7). In Brazil, for instance, the Government sponsors a television programme aimed at informing and educating farmers. There is also a significant role for non-governmental organizations (NGOs), including farmers' cooperatives, and international organizations, as the example of the "Songhai model" in Africa demonstrates (see box V.4).

Local farmers would also benefit from more information about the pros and cons of different types of contract farming. To establish oversight and ensure fair and informed bargaining, governments could consider the development of model contracts to protect the interest of farmers in their negotiations with TNCs. Model contracts could also be a useful policy tool for avoiding disputes between the contracting parties.

Often, a thorough analysis of the value chain will reveal the significant role played by intermediaries or "middlemen" in agribusiness in liaising between large buyers and small-scale farmers. Two policy options are available relating to these intermediaries: (i) cutting them out and thus establishing a direct flow of technology and knowledge transfer between farmers and buyers/firms; or (ii) permitting stronger integration of the intermediaries by training them to become a medium or channel through which technology and knowledge are transferred, and enabling them to advise producers on how to maintain certain standards of production, service and delivery.

(2) Enhancing access to appropriate technology and standards

Contract farming arrangements with TNCs offer potential opportunities for transfer of technology. Host-country governments can play a major role in ensuring that such transfer maximizes development benefits for smallholders, for instance by guiding the extension services of TNCs (see box V.5). However, as explained in chapter IV, transfer of technology by TNCs often focuses on the production of high-value-added crops rather than staple food crops. Some of the technology and know-how that TNCs transfer in respect of cash crop production may indirectly be used for staple food production. Host-country governments that seek to increase the production of staple food crops through contract farming arrangements with TNCs therefore face the challenge of findings ways to promote technology transfer in this context. One approach could be the establishment of a joint venture between a TNC and a State entity, which would procure staple food from local farmers and provide

Box V.4. The Songhai model in Africa

The Songhai Centre, an international NGO based in Benin, is globally recognized as a world leader in promoting innovative and ecologically sustainable agricultural enterprises. It has established an integrated value chain system organized in commercially viable clusters of agro-enterprises, and developed a practically oriented training programme for graduates and youth in rural and peri-urban areas.

A joint programme of the FAO, IFAD, the ILO, UNDP, UNIDO and the Songhai Centre builds on the successful operation of the Songhai model to respond to requests from several African countries to implement agricultural entrepreneurship development programmes. The Songhai model adopts a holistic approach to agribusiness and entrepreneurship development, which involves training, provision of support services, and linkages to credit and markets through networking of graduates that have received the training.

Programme operations will initially focus on 11 countries in West, Eastern and Southern Africa: Benin, Burkina Faso, Côte d'Ivoire, Gabon, Ghana, Guinea, Kenya, Liberia, Sierra Leone, Malawi and Togo. All these countries have reviewed the regional programme framework and have endorsed both its objective and intended outputs.

The programme will have five interrelated components aimed at:

- Facilitating and supporting the establishment of a Regional Centre of Excellence for Agribusiness and Entrepreneurship Development in Africa.
- Reinforcing the capacity of relevant national institutions to establish National Centres for Agri-Enterprise Development in participating countries.
- Developing agricultural entrepreneurial skills and capabilities of youth, women and men, particularly those from rural areas.
- Creating platforms to facilitate effective linkages between agribusinesses and providers of credit, market and business support services.
- Improving the institutional business environment for small- and medium-scale agribusiness development.

Source: UNDP, 2008.

them with seeds, pesticides and other inputs (see chapter IV).

TNCs increasingly require contract farmers to comply with certain *quality standards and certification procedures*. Host-country governments may wish to promote adherence to such standards and ensure that supplies have easy access to information about the relevant requirements. They may also seek the cooperation of TNCs and donors in providing support for the implementation of agricultural quality controls. One policy strategy in this context is to create "islands of excellence" in local farmer communities.

(3) Improving the capital base of local farmers

A sufficient capital base is a prerequisite for the proper maintenance of farmland, for buying necessary equipment, fertilizers and pesticides, and for modernizing cultivation techniques (McKenna, Roche and Le Heron, 1999: 45; Vellema, 1999: 94). As explained in chapter IV, TNCs can provide local farmers with capital, or otherwise help them overcome difficulties in obtaining bank loans. Host-country policies can play an important supplementary role in this respect by providing help through tax credits or rebates, guarantees and co-financing (Vellema, 1999: 100), as illustrated by PRONAF in Brazil (see box V.6). Some developing countries, such as the Philippines, have established land banks with a special focus on serving the needs of farmers.[15] ODA funds could also be made available for that purpose.

(4) Improving business opportunities for farmers in remote areas

Host-country policies aimed at better connecting farmers in remote areas with TNC operations face two major challenges. First, public investment in infrastructure needs to be improved (see section B.4.a). Second, governments should consider the establishment of information and matchmaking services – at national and local levels – to serve both domestic farmers and TNCs, and help them overcome the information gap with regard to linkage opportunities. For instance, specific information may include details about availability of farmers, prices, qualities, standards of agricultural products, market trends and inputs (e.g. seeds and equipment), as well as the names, profiles and needs of potential foreign and domestic partners.

For example, the Heze region in Shandong Province of China is actively seeking FDI in agricultural production and related processing activities in order to develop the region into a major production and export base of organic agricultural products in the country. The local government has prepared a catalogue of projects, which provides potential foreign investors with detailed information on the market potential, estimated investment needs, projected earnings and the preferred mode of entry of TNCs. The programme covers more than 50 projects for 2009, in various commodities, such as the production of cereals, vegetables, meat and traditional Chinese medicines.[16]

Box V.5. Integrated producer schemes in the United Republic of Tanzania

In the United Republic of Tanzania, integrated producer schemes (mainly in the form of outgrower schemes) have been beneficial to smallholders in terms of increasing their productivity and specialization (chapter IV). The scheme involves a system that links production, extension services, transportation, processing and marketing, and has often included technical assistance from foreign companies. It requires a lead firm for governance, while the Government plays a critical role as market facilitator.

In the initial stages, the Government needs to support both smallholders and TNCs by providing guarantees to investors and/or building capacities of smallholders. In order for TNC participation in agriculture to be a win-win situation, the creation and retention of value added in the host country is important. This can be achieved through contract farming and a number of programmes, such as the promotion of rural entrepreneurs in farming activities. This requires, first and foremost, collaboration between the public sector and TNCs in technology transfer and innovation. One success story in this regard is KATANI.[a] In 1998, this foreign affiliate introduced the Sisal Smallholder and Outgrower (SISO) scheme in five estates in the Tanga Region, involving 2,500 farming families. Knowing that extension services are critical for increasing productivity, the local government in Korogwe appointed KATANI to provide extension services to sisal smallholders in and around the estates, including various forms of technical assistance. In addition, KATANI is collaborating with Mlangoni Agricultural Research Institute, established under the Ministry of Agriculture, to conduct R&D on sisal production.

Source: UNCTAD, based on input from Elibariki Msuya, Kyoto University, Japan.

[a] KATANI is a private company registered in the United Republic of Tanzania. It is owned by African Mpya (90%), a Tanzanian company, and Mkonge Investment and Management Company (10%), owned by private foreign investors. The foreign affiliate has three main objectives: to grow sisal for fibre production, to conduct research aimed at developing new varieties of sisal suitable for various end-users, and to develop and disseminate new technologies in the cultivation and processing of sisal.

Box V.6. Brazil's PRONAF

The Government of Brazil runs "PRONAF" (National Program for the Strengthening of Family Agriculture) to finance farming and non-farming activities (e.g. rural tourism, handicraft production, family agribusinesses) in rural areas. As the programme aims to support rural businesses and make the best use of the family workforce, some conditions are applied for eligibility to the programme. These include residence in or close to the property, no (or limited) use of paid employees and a ceiling on the size of land. The credits it provides should be used to purchase items which are directly related to the production and service activities and contribute to increasing the productivity and income of the rural producer families (e.g. purchase of new machinery, development of irrigation and rural telephony). Credits can be provided not only to individuals but also to groups.

The programme consists of seven financing facilities: Conventional PRONAF, PRONAF Agribusiness, PRONAF Woman, PRONAF Agro-ecology, PRONAF ECO, PRONAF More Food and PRONAF Reconstruction and Revitalization. Each facility has different purposes and financing conditions. For example, Conventional PRONAF provides financial support for expanding or upgrading farming or non-farming services and production infrastructure on rural property or in rural community areas. PRONAF Agro-ecology provides financial support for investments in agro-ecological or organic production systems, while PRONAF More Food is dedicated to financial support for investments in the production of corn, beans, rice, wheat, cassava, vegetables, fruits and milk. The programme offers more beneficial financial conditions for smaller projects. Maturity differs depending on the utilization of the loans. For example, the maturity period for loans for new machinery is 10 years, while for other expenditures it is 8 years.

Source: UNCTAD, based on information from the Brazilian Development Bank (BNDES).

(5) Organizing farmers in the market

Local farmers may hesitate to enter into contractual arrangements with TNCs because of their limited bargaining power vis-à-vis those firms. One means of strengthening the negotiating capacities of farmers is to encourage them to form producer organizations and to negotiate with TNCs collectively (Prowse, 2007). These organizations can also provide a forum for farmers aimed at making TNCs more environmentally and socially responsible. Institutional arrangements for smallholders through producer organizations may also contribute to improving productivity, reducing costs through supply chain linkages, improving access to necessary and affordable inputs such as technologies and credit, and enhancing competitiveness (see box V.7). From a TNC's point of view, producer organizations may reduce transaction costs and help overcome information and communication deficiencies.

In addition, host-country policies should encourage competition among buyers of agricultural produce through appropriate competition laws that prohibit the abuse of a dominant position (see section B.4.b below and chapter IV). To reduce dependence, host-country policies should further envisage, for instance, promotion programmes for the diversification of agricultural production, improved storage facilities to avoid post-harvest losses, and subsidies for the purchase of fertilizers and machinery (Ashoff, 2005).

(6) Strengthening dispute avoidance and resolution

One potential disincentive for TNCs to enter into contractual arrangements with local farmers is the lack of effective dispute settlement procedures. The relationship between TNCs and local farmers is exposed to the risk of conflict; all the more so as specific legal regulations on contract farming scarcely exist (see above). Conflicts may arise, for instance, as a result of the unequal bargaining power of TNCs and farmers, or because each side has a different understanding of the purpose and objectives of their contractual arrangements (Zola, 2004). The delayed payment of farmers and/or their non-compliance, because they can achieve higher prices elsewhere, can also become contentious issues. Theft of assets can be another problem.

Improving domestic courts and accelerating the decision process, including enforcement procedures, can help increase legal security for both partners to an agreement. However, judicial reform efforts may take time, and the costs of legal proceedings related to contract farming arrangements may be higher than the amount in dispute. This underlines the importance of conflict pre-emption strategies. As noted above, policymakers can help prevent conflicts between TNCs and local farmers by developing model contracts. It may also be worthwhile for host countries to consider including more explicit rules on contract farming in their domestic legislation and offering the possibility of recourse to mediation.

3. Addressing environmental and social concerns

a. Sustainable agriculture and environmental policies

Growth in agricultural output in the last few decades has been based largely on intensification of production through greater inputs of fertilizers, pesticides, irrigation, new crop strains and other technologies. Even though this has come at significant environmental costs, agricultural intensification remains important for food security. The main priority for governments, therefore, is to ensure that this intensification does not lead to environmental degradation, for instance by promoting sustainable farming systems. Many industrialized countries have already started this process, and developing countries could learn from their successes and failures. However, policy responses in developing countries are often constrained by inadequate finance for necessary research, a lack of institutions and support services and the need to avoid measures that raise food prices (FAO, 2003c).

TNC involvement in agricultural production can have both positive and negative impacts on the sustainability of agricultural systems in developing countries (see chapter IV). Overall, environmental policies should discourage "bad" behaviour, such as excessive use of inputs, and support "good" behaviour, such as introducing new technologies and management skills that have a positive impact on the environment. When considering policy options, governments need to take into account the fact that TNCs are more often indirectly involved in agricultural production (e.g. through contract farming and through the involvement of other parts of the value-chain) than directly involved (e.g. plantations). So far, environmental policies have been mainly directed at farmers. However, policies should also bear in mind TNCs' responsibilities when they indirectly control production.

Disciplining harmful TNC involvement is critical in cases of environmental damage through mismanagement of agricultural inputs such as fertilizers, pesticides and water. In order to control detrimental effects, it is essential to establish an adequate regulatory framework. However, conventional command-and-control regulation in developing countries has not always worked well in the past. Approaches based on economic factors, such as cost, are often more successful (World Bank, 2000). Governments need to find the right mix between the two types of regulations. Examples of policy options are the introduction of pollution taxes, water-pricing policies and the removal of input subsidies (FAO, 2003c). Many developing countries, for example, provide subsidies for agricultural inputs, often leading to their excessive use and environmental degradation. Since subsidies should rapidly lead to learning more about both input use and benefits, as well as to increased incomes, they should be phased out in due course. Moreover, subsidies often end up in the hands of the TNCs that provide the inputs (Dorward, Hazell and Poulton, 2008). Thus, removing input subsidies, or providing them under strict conditions, may reduce harmful environmental effects.[17]

Biosafety is another area where good government regulation is essential. Many developing countries view biotechnology as important for the future growth of agricultural output, but uncertainty concerning the risks and the lack of proper regulation are major impediments to its current use. Government regulation is also critical to curtail the potential abuse of market power of the few major biochemical TNCs that now control global research, production and distribution of genetically modified organisms (GMOs) for agricultural production. Argentina is one of the first countries to have established a biosafety system for regulatory oversight of genetically engineered agricultural crops. In Africa, the African Union developed the African Model Law on Safety in Biotechnology to help member States fulfil their international obligations under the Cartagena Protocol

Box V.7. Examples of networking and linkages by farmers' organizations in Uganda

UNCTAD's Business Linkages programme, implemented in Uganda but also in other countries such as Argentina, Brazil, the Dominican Republic, Mozambique, Peru, the United Republic of Tanzania, as well as Zambia, has proven to be a viable mechanism for improving business opportunities not just for urban-based SMEs, but also and most importantly, for rural communities engaged in income-generating activities. In Uganda, by transforming farmers into rural entrepreneurs, the programme has had a significant impact on poverty reduction. For example, the linkages pilot project, funded by the Government of Sweden in 2005–2007 and implemented by the Ugandan Investment Authority and Enterprise Uganda as lead facilitator, helped to develop a local source for barley by linking manufacturing and brewing companies with local farmers. It now benefits over 3,000 farmers organized in the Kapchorwa Commercial Farmers Association (KACOFA). Its achievements include increasing farmers' incomes and facilitating the association's move into basic processing stages in the value chain (such as drying, cleaning and packing).

Source: UNCTAD.

on Biosafety and manage related issues.[18] Efficient monitoring and enforcement systems are another essential element of good environmental governance. However, developing countries often lack adequate financial and institutional resources and technical information, which underlines the importance of more capacity-building.

Apart from disciplining harmful involvement, governments may wish to adopt policies that promote sustainable agricultural practices by TNCs. For instance, fiscal and regulatory incentives could be used to promote TNC involvement in sustainable agricultural management (e.g. conservation agriculture or organic production), or TNCs could be encouraged to undertake R&D for sustainable agriculture (see section B.4.d).

Certification schemes for agricultural production have already been developed by many NGOs and TNCs. Governments and development agencies should encourage TNCs to promote the use of organic and fair-trade standards in their relations with local farmers and to strengthen farmers' capacities to meet them, including through adequate monitoring systems. For example, the Government of China encourages TNC participation in the environmentally friendly planting of certain crops, including vegetables, fruits and teas (e.g. by granting tax incentives).[19]

Within the fresh fruit industry, the banana industry leads by far in the use of voluntary certification. Indeed, there are many voluntary certification schemes used in the industry. Among the most common are the Rainforest Alliance, organic agriculture and fair trade labelling schemes. Since organic and fair-trade banana production may fetch higher export prices and help developing-country producers to capture a larger share of the value, it is in the interest of host-country governments to support the adherence of domestic producers to these standards for local markets. However, governments need to consider both benefits and disadvantages (e.g. additional costs to smallholders) before promoting any certification scheme. In particular, certification standards for international markets may hamper local efforts to be more organic.

International assistance and cooperation can contribute significantly to helping countries gain access to information and best practices in sustainable agricultural production. For example, with regard to pesticide use, safety information and technical assistance is provided to developing countries through the International Plant Protection Convention. The design of many national climate change mitigation and adaptation policies may benefit from discussions that are currently taking place at the international level in preparation for the 15th Conference of the Parties to the United Nations Framework Convention on Climate Change, to be held in Copenhagen in December 2009. These discussions relate to issues such as the establishment of international carbon markets and risk reduction policies (FAO, 2008b), but also to policies on sustainable biofuel production by TNCs and the possible use of the Clean Development Mechanism (CDM) for sustainable investment in agriculture.[20] Finally, the international community can provide technical assistance in developing good environmental governance. For instance, the World Bank Environment and Natural Resource Management Programme brings together a number of international initiatives that promote environmental governance in developing countries.

b. Social policies

TNC involvement in agricultural production can have both positive and negative social impacts on a host country (see chapter IV). Their involvement also raises fundamental questions concerning the right to food and related human rights aspects, including the protection of the rights of indigenous peoples (see boxes V.8 and V.9).

Security of land tenure is critical for the majority of the world's population who depend on land and land-based resources for their lives and livelihoods, both from a human rights and economic perspective.[21] However, FDI in agricultural production may deprive local people of their land (see chapter IV).

Host-country policies concerning FDI in agricultural production should give due respect to the land tenure rights of smallholders. A better definition and protection of these rights can contribute to more sustainable management of those resources. However, in many cases it has proved difficult to change informal customary land tenure systems, which have been in existence for centuries, and transform them into a system of more formal rights. In addition, whether land titles or other registration documents improve security of land tenure of local land users depends on the existence of strong local institutions that are able to uphold and defend the rights embodied in those documents (Kanji et al., 2005). If people are dispossessed, they should have access to the courts and the right to compensation. Smallholders could also benefit from reducing incentives for land transfers, for instance by asking higher purchase prices or lease rents, or introducing higher taxes for land use. Transparency is also a critical issue in land deals with TNCs.

Allocating State-owned or underutilized land to TNCs is another critical issue. There should be appropriate safeguards to ensure that such allocations are made using objective criteria. Special preferences could be given to local farmers that depend on such lands for their livelihoods, for example because of traditional farming rights. Transferring land to more

productive uses and users such as TNCs should be encouraged only to the extent that it does not lead to further marginalization of the poorest (de Schutter, 2008).

Another important aspect of social policies has to do with labour conditions. Agriculture is among the most labour-intensive and hazardous industries, and the workforce is often poor and badly organized. However, it includes many child labourers. In numerous developing countries, agricultural workers are poorly protected by national labour laws. In addition, there are problems of illiteracy and ignorance of workers' rights, which may be further aggravated in the context of seasonal, migratory and casual labour.[22] International organizations, such as the International Labour Organization (ILO) and FAO, can assist developing countries that have insufficient domestic capacities for incorporating international labour standards into their national legal frameworks. There are eight ILO Conventions and Recommendations that address labour issues relating specifically to agricultural and rural workers.[23]

c. Corporate social responsibility

An increasing number of TNCs involved in agricultural production provide the public with information on principles that guide their own conduct, including their impacts on their suppliers.[24] Such principles are often included in individual codes of conduct or are based on multi-stakeholder initiatives. The latter can be general initiatives, such as the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI), agriculture-specific schemes (e.g. GLOBALGAP and the Sustainable Agriculture Initiative (SAI)), or commodity-specific programmes, for instance for cocoa, palm oil, soy and sugar cane production (see box V.10).[25]

Issues that are frequently addressed in agriculture-related initiatives or codes of conduct are knowledge transfer (e.g. through training and dissemination of best practice information), and community-building activities (e.g. promotion of health care and education). TNCs also seek cooperation with suppliers to improve labour standards (e.g. through certification schemes and

Box V.8. The role of the right to adequate food in guiding investments in agriculture

The right to food is protected as a human right in international law, at least since the adoption of the Universal Declaration on Human Rights in 1948 (G.A. Res. 217 A (III), U.N. Doc. A/810, at 71 (1948)) and, subsequently, the 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR) (G.A. Res. 2200 (XXII).

According to the Committee on Economic, Social and Cultural Rights, the body of independent experts monitoring compliance with the ICESCR, "the right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement." It is not primarily about being fed; it is about being guaranteed the right to feed oneself.

Taking into account States' obligations for upholding the right to adequate food therefore has operational implications in at least three ways. First, it requires that efforts to support agricultural production or to establish social safety nets are targeted towards the needs of the most vulnerable, identified through food insecurity and vulnerability information and mapping systems. Second, it requires the establishment of accountability mechanisms to ensure that victims of violations of the right to food have access to independent bodies empowered to control choices made by decision-makers. Although it includes requirements linked to good governance and respect for the rule of law, it goes beyond those dimensions to encompass empowerment and accountability, as well as the participation of those directly affected by the design and implementation of the policies. Third, the right to food requires prioritization: trade and investment policies and choices relating to modes of agricultural production, for instance, should be subordinated to the overarching objective of realizing the right to food. Both the Committee on Economic, Social and Cultural Rights and the FAO Voluntary Guidelines for the Progressive Realization of the Right to Food recommend that States adopt national strategies for the realization of the right to food, in order to ensure that policies in other areas effectively contribute to this end (FAO, 2005).

An approach to investment in agriculture which is grounded in the right to food requires that greater attention be paid in the future to developing forms of agriculture that are more sustainable socially and environmentally, and that would significantly increase yields. The United Nations Environment Programme (UNEP), the FAO and UNCTAD, as well as other agencies have published reports that demonstrate how these models of agro-ecological agricultural production should and could be scaled up. The relationships between these agro-ecological approaches and the human right to food have been established. First, these sustainable farming approaches are adapted to the complex environments where some of the most vulnerable groups live. Second, the management processes that lead to them are generally participatory processes involving the affected vulnerable groups in order to guarantee sustainable results, a strategy consistent with a rights-based approach. Third, these techniques improve the resilience of farming systems to climate change and to high oil prices – two developments which directly affect those who are already the most vulnerable today.

Source: de Schutter (2008). Comments by the United Nations Special Rapporteur on the Right to Food, prepared for UNCTAD.

Box V.9. Protecting the rights of indigenous peoples

There have been instances where investments in agriculture have infringed on the rights of indigenous peoples. For example, cases have been reported in Latin America where a number of agro-industrial corporations, often with the help of security forces, have evicted peasants and indigenous peoples from their lands by force in order to secure the production of soya.[a] Concerns have been expressed that the model of export-oriented agriculture, which often leads to investments in large-scale plantations, has resulted in deforestation as well as hunger, poverty and eviction of indigenous peoples in countries such as Argentina, Brazil, Cameroon, Colombia, Guatemala, Indonesia and Paraguay.[b]

In recent years, increased investments in agrofuels have exacerbated these concerns. Such investments have a direct impact on indigenous peoples, as the strong competition for land and natural resources often results in their eviction and displacement when they lack security of tenure.[c] Recent examples of forced evictions of indigenous peoples for the production of agrofuels have been noted by several NGOs. In Colombia, the NGO, Human Rights Everywhere, documented forced evictions, the appropriation of land and other human rights violations in oil palm plantations, along with the responsibilities of all the actors along the production chain.[d] Another study estimated that if existing investment plans were realized, up to 60 million indigenous peoples would be forcibly evicted from lands which are customarily owned in order to make way for bio-fuel plantations (Tauli-Corpuz and Tamang, 2007).

TNCs, States and the international community can act to prevent the eviction and displacement of indigenous peoples resulting from investment in agribusiness. All TNCs involved in the production of agrofuels must avoid complicity in human rights violations against indigenous peoples.[e] States need to respect, protect and fulfil the right of indigenous peoples to access land which are customarily owned and have security of tenure as a means to sustainable development.[f] Finally, the Special Rapporteur on the Right to Food has recommended that the international community develop guidelines for the production of agrofuels, which include human rights standards and protections for indigenous peoples.[g]

Source: UN-OHCHR and the United Nations Special Rapporteur on the Right to Food.

[a] Document No. (A/62/289).
[b] Document No. (A/62/289) (E/CN.4/2006/44/Add.1).
[c] Document No. (A/62/289) (A/HRC/9/278) (A/HRC/9/23) (A/HRC/7/5).
[d] Document No. (A/HRC/7/5).
[e] Document No. (A/HRC/7/5).
[f] See ICESCR Article 11.2(a); CESCR General Comment 12, ILO Convention 169, articles 13–19, UN Declaration on the Rights of Indigenous Peoples articles 8.2(b) and 10, and A/57/356.
[g] Document No. (A/HRC/9/23).

campaigns against forced labour) and transfer of business knowledge (e.g. accounting, entrepreneurship and creditworthiness).

An examination of the 100 largest food and beverages TNCs shows that approximately one third of the companies specifically address their relationship with farmers in their CSR reporting.[26] In particular the largest TNCs – presumably those with the most public exposure – are the most inclined to underwrite international CSR initiatives, such as the UNGC and GRI. The advantage of such international multi-stakeholder cooperation is that it enables implementation of better coordinated knowledge transfers and community-building activities. In addition, more and improved reporting standards may result from these concerted efforts, including reliable auditing practices.

Although governments normally are not directly involved in CSR initiatives, they can play a major role in promoting CSR practices in agricultural production, and in improving social and environmental standards. This could also benefit the industry's competitiveness and exports (Tallontire and Greenhalgh, 2005). However, governments should also be aware of the limitations of CSR initiatives. Policymakers need to take into account issues such as the actual costs and benefits of these initiatives for smallholders, and the availability of independent auditing systems or official grievance procedures.

4. Other relevant policies

In addition to the above issues, there are several other policy areas relating to a broader economic agenda that are significant determinants of TNC participation in agricultural production and their development impact in the host country. They therefore need to be integrated into host-country strategies aimed at attracting TNCs to agricultural production. Among the most important ones are those related to infrastructure development, competition policies, international trade and research and development (R&D).

a. Infrastructure policies

Infrastructure development is critical for the participation of TNCs in agricultural production, as confirmed by UNCTAD's surveys of IPAs and governments. Arable land may be located far from main transportation routes and major cities where the bulk of food consumers live. Since most agricultural

Box V.10. Sector-specific corporate social responsibility initiatives[a]

The following are examples of corporate social responsibility (CSR) initiatives taken by producers of specific agricultural commodities. In general, these initiatives include projects that promote local production capacities and address issues such as the creation of a learning or information network (e.g. on best practises), labour rights and conditions, certification, transparency and traceability. They often also seek to create a discussion forum or partnership that includes all stakeholders (industry, governments and NGOs).

International Cocoa Initiative (ICI)

The ICI was established in July 2002 to ensure against the use of child and forced labour in the production of cocoa. It promotes the engagement of companies in projects that will promote improvements in the supply chain and in cocoa producing communities. Its board members include representatives from the major chocolate brands, processors and key cocoa-related associations as well as from civil society, including trade unions and NGOs.

Common Code for the Coffee Community Association (4C)

Within the Common Code for the Coffee Community Association (4C), producers, trade, industry and civil society from around the world cooperate to enhance sustainability in the entire coffee industry. This global community seeks to improve the social, environmental and economic conditions for the people who make their living from coffee production. The main pillars of 4C are a code of conduct, participation rules for trade and industry, support mechanisms for coffee farmers, a verification system and the participatory governance structure.

Roundtable on Sustainable Palm Oil (RSPO)

The RSPO is an association created by organizations involved in and around the entire supply chain for palm oil. It seeks to promote the growth and use of sustainable palm oil through cooperation within the supply chain and open dialogue with its stakeholders. The seven industries of ordinary members are oil palm growers, palm oil processors and/or traders, consumer goods manufacturers, retailers, banks and investors, environmental/nature conservation NGOs and NGOs dealing with social and development issues.

Round Table on Responsible Soy Association (RTRS)

The RTRS is an international multi-stakeholder initiative that brings together those concerned with various impacts of the soy economy. It is developing a set of standards for the production and sourcing of responsible soy, and aims to promote the best available practices. The membership consists of representatives from civil society organizations, industry, finance, trade and producers.

Better Sugar Cane Initiative Limited (BSI)

The BSI's main mission is to ensure that current and new sugarcane production is produced sustainably. It focuses on social and environmental issues such as soil productivity, rational water use, effluent management, biodiversity maintenance and equitable labour. The BSI represents collaboration between sugar retailers, investors, traders, producers and NGOs.

Source: UNCTAD, based on information from websites of the ICI, 4C, RTPO, RTRS and BSI.

[a] These examples of sector-specific initiatives are intended to provide a general indication. The selection is based on commodities for which TNCs are more likely to be confronted with CSR issues.

commodities perish quickly if left untreated, transportation between farms, food processing factories and urban areas needs to be fast and reliable. In developing countries, financing for infrastructure development remains well below overall needs (*WIR08*). While governments and ODA have to be the major sources of funding, private investors (including TNCs) can play a supplementary role (chapter IV).

Water policies play a particularly important role in infrastructure development for agriculture.[27] Improved water management, including increased efficiency in irrigation, can achieve "more crop per drop". This means renovating outdated irrigation infrastructure to reduce leakage, using better water storage and delivery techniques, and adopting emerging technologies, such as plant varieties. For instance, since the late 1970s, China has invested 954.5 billion yuan (around $150 billion) for the improvement of the country's irrigation system.[28] Host-country policies should consider whether TNCs involved in agricultural production can make a contribution in this respect, for instance through "build-operate-transfer (BOT)" contract schemes.

b. Competition policies

Agricultural industries are usually composed of different hierarchies of producers, traders, buyers and sellers, which together make up the value chain. Within this value chain, farmers or small and medium producers are the weakest link due to their small sizes and high concentration in the upstream and downstream markets. In the upstream markets, farmers deal with input providers such as seeds and fertilizers. Farmers usually deal with a few national retailers, which buy from big multilateral input provider companies with substantial market power. Since most agricultural markets are national in scope, prices and supply conditions differ from one country to another. In addition, there is market segmentation due to the existence of different seeds for specific climate zones. Considering the large number of farmers who

deal with only a limited number of wholesalers or middlemen – who usually enjoy high profit margins – there is need for appropriate competition policies to deal with potential anti-competitive practices that may arise in these markets. Such practices could be price-fixing or the abuse of a dominant position by major input providers, which will adversely affect farmers' incomes. From a wider competition policy perspective, allowing imports of inputs may exert competitive pressures on dominant companies. From a narrower competition policy perspective, adoption and enforcement of competition laws may be effective in dealing with such practices.

Another important problem with this type of value chain is the link between farmers and buyers of their products. Usually, the buyers and/or traders are a few large TNCs having considerable national and/or global market shares. These companies tend to use their buyer power vis-à-vis farmers but whose market shares are too small to enable them to bargain effectively with large firms. Hence farmers usually face prices much lower than world market prices. However, they may find themselves in a situation where they have to sell at lower prices; if they refuse they have no alternative means to dispose of their products, hence loose income. Poor infrastructure in developing countries, particularly in the least developed countries, contributes to creating large distortions in the market by restricting market entry by new firms. These anti-competitive practices may have serious implications for the livelihoods of farmers in developing countries (chapter IV).

Price setting in agriculture, especially with respect to export products or staple food products, such as for rice in Thailand and for milk in China, is a common policy response to deal with such situations. Another policy response may be to ensure that competition law in countries that depend on agriculture includes provisions on abuse of buyer power and also exempts farmers' associations and/or cooperatives from the scope of competition law. This will allow farmers to be organized, and increase their negotiating power vis-à-vis large TNCs.

c. Trade policies

Trade policies may have a substantial impact on TNC involvement in agricultural production. These policies include tariffs and non-tariff barriers, as well as subsidies (see box V.11 and chapter IV).

Tariffs and non-tariff barriers on agricultural commodities may distort FDI flows in various ways. First, high import tariffs and non-tariff barriers applied to agricultural commodities in the host country may encourage barrier-hopping FDI. Second, high import tariffs in the home country of the investor – or any third country – may discourage export-oriented FDI (i.e. for the production of cash crops). Therefore, it is crucial for developing countries with FDI promotion strategies that tariffs and non-tariff barriers on export commodities in their export markets are kept low. Countries benefiting from lower tariffs than their competitors may want to keep these preference margins in their export markets. Since tariffs are high for agricultural goods, preferential treatment under non-reciprocal agreements (such as the Generalized System of Preferences (GSP)) or reciprocal bilateral and regional trade agreements can further encourage export-oriented FDI in agricultural production. These considerations also apply to developing-country strategies aimed at the production of cash crops through contract farming arrangements involving TNCs. Investments in banana production in Angola and other African, Caribbean and Pacific (ACP) countries, for example, have been encouraged by the duty-free access of ACPs and LDCs to the EU.[29]

Higher tariffs and non-tariff barriers imposed on processed products as opposed to those on raw materials (i.e. tariff escalation) discourage FDI in food processing for exports. It hampers developing countries' diversification into the export of value added, processed agricultural products such as orange juice, cigarettes or instant coffee. Indeed, agricultural exports of many developing countries are highly concentrated in raw materials such as green coffee or cocoa beans. Safeguard measures, such as the special agricultural safeguard mechanism (or, possibly as a result of the Doha Round, a new safeguard mechanism for developing countries) that allows countries to temporarily raise tariffs above bound rates, reduce predictability of market access. This may have a positive impact on barrier-hopping FDI if used by the host country, and a negative impact on export-oriented FDI if used by the home country or any third country.

Agricultural subsidies, including both domestic support measures and export subsidies, are likely to affect the locational determinant of FDI activities. Subsidies in the home country discourage outward FDI to countries offering lower or no subsidies, since they provide a direct price-cost advantage for subsidized producers. Despite existing commitments in the WTO, subsidies in agriculture are still relatively high. Furthermore, loopholes such as permissible indirect export subsidies, for example through export credits or food aid, exist. Production and export subsidies in agriculture were estimated at around $365 billion in 2007 (OECD, 2008d).[30] And developed countries account for the lion's share of agricultural subsidies.

Milk and other diary products receive the largest share of trade-distorting subsidies. Other agricultural commodities that are highly subsidized include apples, barley, corn, cotton, soyabeans, sugar, tobacco, tomatoes, olive oil and wheat. Thus the list of subsidized products includes various cash crops and staple food items for which developing countries

Box V.11. Trade barriers and developing countries' exports of agricultural commodities

Although the Uruguay Round made some progress in global agriculture and trade policy reform, most developing countries are disappointed about the continuing high levels of protection and subsidies for agricultural goods, mainly in developed countries. These measures hamper developing-country exports of agricultural products, and undermine the effective use of their comparative advantages. Most of the trade-distorting domestic support in developed countries is for temperate products such as milk, but subsidies are also high for some products for which developing countries produce substitutes, such as sugar, or for their traditional products such as tobacco, cotton or oilseeds. This, along with the overall long-term downward trend in world market prices observed in the past, and the considerable price fluctuations and demanding standards, has made it difficult for many exporters of commodities to sustain their exports.

A recent World Bank estimate suggests that developed-country agricultural policies cost developing countries about $17 billion each year – a cost equivalent to about five times the current levels of development assistance to agriculture. The benefits for exporting developing countries from liberalization of agricultural policies in developed countries would mainly result from better market access and higher prices for commodities. With full trade liberalization, world market prices would increase on average by 5.5%, while those for cotton would rise by 21% and those for oilseeds by 15%.

Source: WTO Domestic Support notifications; World Bank, 2008: 11; and Ingco and Nash, 2004.

compete with developed countries in the world market or local markets (UNDP, 2003).

Agricultural subsidies in developed countries have contributed to years of underinvestment in this sector in developing countries (World Bank, 2007; UNCTAD, 2008i). Reducing subsidies in developed countries could encourage FDI in poor countries. These subsidies have been the subject of intense and controversial negotiations in the WTO, leading to calls for their substantial reduction or elimination (UNCTAD, 2008j). The fact that many developing countries are net food importers that would be confronted with higher food bills as a consequence of agricultural liberalization complicates the matter. Therefore, effective strategies to mitigate adjustment costs as a consequence of further agricultural liberalization, such as longer repayment periods for export credits, facilitating imports into net food-importing developing countries, and even more important, support for increasing agricultural productivity, especially in LDCs, in order to enhance their agricultural production and their competitiveness are essential.

Another concern that has been raised is that structural adjustment programmes that encouraged low import tariffs, and fiscal austerity and abandoned or weakened the role of marketing boards and commodity stabilization funds for both cash crops and food staples have contributed to low investments in agriculture in developing countries. Therefore, viable alternatives should be put in place (UNCTAD, 2008i).

d. R&D-related policies

Increases in agricultural productivity are closely linked to R&D (see chapters III and IV). Host-country policies aimed at increasing agricultural production through TNC participation therefore need to consider what role – if any – R&D activities of these companies could play. While most TNC activities in this field are still undertaken at headquarters in the home country, there has been a trend in recent years towards shifting R&D partially to developing countries in order to adapt the development of seeds and products to local and regional conditions (e.g. climate, soil, tastes and traditions) (see also chapter III).

An initial question for policymakers is whether they wish to encourage TNCs to undertake agricultural R&D in their countries. The benefits of agricultural R&D derive from its potentially significant contribution to productivity gains and quality improvements; but there are also some risks and uncertainties involved, in particular in the case of biotechnology (see chapter IV). There is strong opposition in some countries to GMOs, because they are associated with damage to the surrounding environment (e.g. harm to biodiversity), an increase in the debt burden of local farmers, and a loss of "traditional" food, not to mention possible, though yet unproven, health threats.

Second, if the host country considers, in principle, that agricultural R&D by foreign affiliates is desirable, it needs to assess whether it is a suitable location for this. An essential condition for a country's capability to benefit from TNC-led R&D programmes is that it should already have some relevant basic R&D capacity in domestic universities, laboratories and research centres, so that they are able to work with and learn from TNC affiliates' innovation activities (Rama and Wilkinson, 2008). Host-country policies aimed at capacity-building may be necessary, and ODA funds and international development assistance agencies can play a significant catalytic role. A number of developing countries have well-established domestic research capabilities in this area, but most other developing countries lag far behind.

Public-private partnerships (PPPs) for R&D that involve TNCs can be a principal policy instrument to foster innovation, to make agricultural R&D more responsive to local needs, to reduce costs and to spread the project risks between the partners involved (chapter IV).[31] However, PPPs may create costs as well as benefits. A major challenge is to connect the knowledge generated in TNCs, universities and national research institutes with the knowledge nurtured and held by farmers themselves, although indigenous knowledge and traditional practices may need to be specifically protected. Policymakers can facilitate these PPPs by providing incentives for innovation through low-interest grants that co-finance both R&D and the pilot testing of innovation. In fostering such PPPs, a typical option is to promote collaboration with international agricultural research institutions, such as the Consultative Group on International Agricultural Research (CGIAR).[32]

Establishing seed and technology centres in the form of PPPs can ensure the required technology transfer and capacity-building to adapt seeds and related farming technologies to local needs and conditions, distribution to local farmers, as well as build long-term indigenous capacities. This is especially important with regard to bringing the "green revolution" to Africa. A sound institutional framework needs to be put in place that supports these strategies, and at the same time addresses the dependency concerns that have arisen with them. Investing in trade (and investment) facilitation is equally important.

Third, if the above conditions of general acceptance of agricultural R&D and sufficient domestic endowments are fulfilled, policies need to aim at ensuring that TNCs' research activities take into account the host country's development needs (box V.12). In this context, the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD, 2009) pointed out that agricultural science and technology should be redirected to ensure that it addresses the needs of smallholders in developing countries, and that it meets the challenge of sustainability, particularly in the context of climate change.[33] This includes, for instance, the issue of which crops to promote. They should be considered in the context of the economic and ecological environments of the host country, and their role in the livelihoods of the poor. Also, problems such as availability and cost of good quality seeds, soil degradation, and post-harvest losses, could be tackled with relatively simple technologies and investments, provided the diffusion of such technologies and such investments are redefined as a priority. International agricultural research projects with substantial payoffs for a large number of beneficiaries should be given priority.

The CGIAR centres have identified examples of "best bets" in agricultural research. These include programmes to revitalize yield growth in the intensive cereal production systems in Asia, ensure productive and resilient small-scale fisheries, address threatening pests such virulent wheat rust, tackle cattle diseases such as East Coast Fever, breed drought-resistant maize in Africa, and scale up bio-fortification of food crops (von Braun et al., 2008). Many of these projects offer considerable opportunities for PPPs in planning and execution, with shared costs, risks and benefits (Spielman, Hartwich and von Grebmer, 2007).

Host-country policies also need to consider the role of intellectual property rights (IPRs) in the promotion of agricultural research. The major forms of IPRs that concern TNCs' activities in agriculture and related R&D are patents on life forms, pesticides, and fertilizers; plant variety rights; and marks, including certain trademarks and geographical indications. It is not evident that agricultural development in the developing world would benefit from a stronger IPR regime, since public sector involvement in agriculture, development assistance, and trade and investment flows may suggest that IPRs are not the most critical factors for promoting innovation in many developing countries (Falck-Zepeda et al., 2008; Lesser, 2003). Furthermore, there is considerable controversy about how TNCs, which are often the holders of the exclusive rights conferred by IPRs, manage their intellectual property (IP) in the field of agriculture.[34] This *WIR* does not take a position as to whether or not such exclusive rights ought to be granted; instead it focuses on the interests that need to be balanced by host countries in order to maximize the contribution of TNCs to a developing country's needs in agriculture.

Host countries that seek to attract TNCs that undertake agricultural R&D need to design an appropriate legal framework for IP, including enforcement of rights. The WTO Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement) imposes on member countries an obligation to provide a *minimum standard* of protection for a range of IPRs. The actual standard of protection, however, differs significantly among WTO members. Developing countries could use their regulatory discretion under the WTO to adapt their IP legislation to their needs. For instance, they could opt to provide plant variety protection in lieu of permitting the patenting of plants. Such plant variety protection systems are "*sui generis* rights", which can be tailored, for example, by explicitly mandating open access to protected varieties for purposes of adaptation and breeding of new varieties, and granting farmers privileges to reuse seeds, thereby allowing the diffusion of seed technologies.

M&As of biotechnology companies that aim at creating alliances and cooperation across the industry and globally have often led to the concentration of IPRs, which may affect the ability of developing countries to negotiate for access to proprietary

Box V.12. China's policy on foreign investment in R&D in agriculture

The policy of the Government of China on foreign investment in agricultural R&D is embedded in several regulations and policy documents promulgated by relevant central government agencies, especially the National Development and Reform Commission (NDRC) and the Ministry of Commerce (MOFCOM). The country's policy approach to this issue reflects both its general strategy for agricultural research, which seeks to balance developing domestic innovative capabilities with promoting knowledge spillovers from industrial countries,[a] and its evolving policy on inward FDI, which increasingly emphasizes the role of quality FDI in technological progress and sustainable development.

According to the Eleventh Five-Year Plan for Utilizing Foreign Investment announced by the NDRC in 2006, the Government encourages foreign investment in the development of modern agriculture and the introduction of advanced agricultural technology and business management. It focuses on:

- Development of ecological agriculture and high-tech, high-value-added farming;
- Utilization of aquaculture and agricultural waste;
- Development of biomass energy; and
- Development and manufacture of modern farming machinery and agricultural processing equipment.

According to the *Catalogue for the Industrial Guidance of Foreign Direct Investment* amended by the NDRC and the MOFCOM in 2007, the Government encourages foreign investment, in agriculture-related R&D in the following areas:

- Development of new technologies for sugar crops, fruit trees and forage grass;
- Development of sources of organic fertilizers;
- Cultivation of fine strains of trees and new varieties of polyploidy trees and genetically engineered trees.

Source: UNCTAD.

[a] See, for example, Outline for the Development of Agricultural Science and Technology, announced by the State Council in 2001, http://www.peopledaily.com.cn/GB/shizheng/252/5570/5571/20010530/478329.html.

technologies at a reasonable price (see box V.13).[35] This challenge stems largely from patents that confer broad rights over GMOs and plant varieties. To address this problem, developing countries should consider safeguards based on appropriate IP and competition policies in the field of agriculture.

Host-country policies aimed at *export-oriented* agricultural production should pay attention to the protection of trademarks and marks that indicate that certain standards are met. For instance, the Government of Ethiopia successfully registered SIDAMO coffee as a trademark in the United States,[36] and the International Fairtrade Certification Mark guarantees compliance with fair trade standards.[37] If TNCs can establish or acquire already existing trademarks in developing countries, or prove compliance with fair trade standards, they may have a better chance of selling their agricultural products in domestic and foreign markets. The same could be said for the use of geographic indications (GIs),[38] which have become increasingly common in developing countries, and the registration of appellations of origin.[39]

However, IPRs may also have a negative effect on export-oriented agricultural production. For example, Argentinean producers have to pay royalty on a patent that is not granted in Argentina in order to access the United States market where Monsanto maintains a valid patent (Trommetter, 2008). Monsanto has brought a number of unsuccessful border measures and patent infringement claims against European imports of soya beans and animal feeds from Argentina (Baldock and Boult, 2006/2007). Thus host-country policies aimed at export-oriented agricultural production need to consider whether such export activity could be hindered by foreign IP holders.

5. Concluding remarks

Host-country governments can determine the degree of openness to FDI in agriculture and influence the operational behaviour of TNCs by setting specific entry and operational conditions. Where, how and to what extent they involve TNCs in agricultural production should be decided according to their resource needs and their overall objectives of agricultural development. In addition, policies may need to be adjusted over time to reflect changes in domestic capabilities and global markets.

A sound policy and institutional framework for TNC participation in agricultural production, as well as in other stages along the agri-food value chain, is critical for ensuring development gains. Host countries need an overall strategy for agricultural development, covering various areas such as infrastructure development, competition, international trade in agricultural products and agriculture-related R&D. This makes policy coherence important, including effective coordination of the relevant ministries and agencies.

When designing specific policies related to TNC participation in agricultural production, developing-country policymakers should consider how that involvement could best serve their long-term

Box V.13. Licensing practices, and determining competitive rates of royalty payment

Mahyco-Monsanto Biotech is a joint venture between India's leading seed company, Mahyco, and transnational agricultural biotechnology company, Monsanto. The joint venture was one of the first firms to undertake the development of GM cotton in India. India's Genetic Engineering Approval Committee approved the marketing of *Bt* cotton hybrids submitted by the joint venture.

The cotton seeds sold in the Indian state of Andhra Pradesh by this joint venture were costlier than the usual hybrid variety. In 2005, the Government of Andhra Pradesh took the case to the Monopolies and Restrictive Trade Practices Commission (MRTPC). It claimed that for each 450 gm packet of *Bt* cotton seeds purchased by the farmer, 67.6% of the cost constituted royalty payments – much higher than the share paid by farmers in Australia, Brazil, China and the United States – to the parent company, Monsanto. The MRTPC directed Monsanto to substantially reduce the price of the seeds it sells in India. Monsanto reduced the royalty fees of GM seeds by 30% to Rs. 900 per 450 gm in March 2006, but it also challenged the MRTPC order in the Supreme Court. However, India's Supreme Court upheld the order.

Source: UNCTAD, based on Thomas (2007).

development objectives. As noted above, this can be achieved by: (i) creating a conducive environment for attracting TNCs and drawing on their resources, (ii) matching TNC assets with domestic endowments to create positive synergies, (iii) promoting linkages between foreign affiliates and domestic entities (particularly small farmers), and (iv) ensuring that a sufficient proportion of the value added is retained in the host economy, and that the economic benefits are fairly shared among the various stakeholders. At the same time, policymakers need to deal with the possibly far-reaching social and environmental consequences of foreign investment in agriculture. Strategies have to be developed to prevent small-scale farmers from being squeezed out, to secure land tenure for local farmers, to uphold the right to food, and to favour those forms of agricultural production that are environmentally sustainable.

C. Home-country policies to encourage outward FDI in agricultural production

Numerous home countries encourage outward FDI in agricultural production within the framework of their general investment promotion programmes. More recently, a number of home countries have adopted specific strategies to promote outward FDI in order to secure domestic food supply.

1. General promotion policies

The general investment promotion schemes of home countries can be grouped into three main categories: (i) information provision and technical assistance, (ii) fiscal and financial incentives, and (iii) political risk insurance (*WIR95*).

The IPA survey conducted by UNCTAD (see section B.1.c) revealed that only a small minority of participating agencies (11%) promote outward FDI in agricultural production (table V.2), and mainly those from developed countries and Asia. Agricultural industries that are most frequently targeted for outward FDI are cereals, fruits and vegetables and animal products. The main goal of developed-country IPAs is to assist their TNCs to further globalize their production chain. IPAs from other regions promote outward FDI because of limitations in their own national production capabilities, or to benefit from opportunities to obtain agricultural land abroad.

The most common forms of support are financial assistance and provision of information to companies investing in overseas agricultural production. For instance, in China, the Special Fund for Foreign Economic and Technical Cooperation, which is administered by the Ministry of Commerce, provides financial support (sometimes in connection with its ODA) to support outward investment and agricultural projects. The Government of China also makes funds available for pre-investment expenses, such as costs of feasibility studies or surveys (Freeman, Holslag and Wei, 2008). Similarly, the Government of the Republic of Korea provides loans for companies that invest in overseas agricultural development,[40] and information about potential investment regions, including their natural environment, logistics and agricultural potential (Republic of Korea, MIAFF, 2008).[41] Beyond direct government measures, public financial institutions and sovereign wealth funds (SWFs) – such as the Saudi Industrial Development Fund (SIDF) and the Abu Dhabi Fund for Development (ADFD) – can play an important promotional role (Woertz, 2009).

2. Challenges related to overseas agricultural production to secure food supply

In recent years, some food-importing countries, such as the Republic of Korea and some GCC countries, have adopted a policy of developing overseas agricultural production to secure food supply (chapter III and box V.14.; Woertz et al., 2008;

Table V.2. IPAs that actively promote outward FDI in agricultural production, by country group/region
(Percentage of respondents to UNCTAD survey)

Home region	Yes	No	*No response*
Total	11	82	6
Developed	17	83	-
Developing	12	87	-
Africa	13	67	20
Asia	17	83	-
Latin America and the Caribbean	-	92	8
Transition economies	-	100	-

Source: UNCTAD–WAIPA Survey of IPAs, February–April 2009.

Kim Yelie, 2008; Grain, 2008b). These policies were initiated by food price hikes (Woertz et al., 2008), and intensified following some recent restrictions on food exports by supplier countries. Such policies, if designed and implemented properly, can help curb food price inflation by increasing the global production of food. Furthermore, participation by new investors can alleviate distortions in the international food market, which is dominated by a few agriculture exporting countries and large agribusiness TNCs (chapter III). However, concerns have also been raised that overseas agricultural production may aggravate food shortages in host countries and deprive local farmers of land (chapter IV).

Home-country policies aimed at overseas agricultural production to secure food supply are not a new phenomenon. For example, a number of Arab countries started to explore overseas food supply sources as early as 1973, as a reaction to the United States' threat to boycott food delivery to the region during the oil crisis at that time. To secure food, Gulf countries planned to develop Sudan as a bread basket to meet their needs (Woertz et al., 2008). Accordingly, the Arab Authority for Agricultural Investment and Development (AAAID), established in 1976, is headquartered in Khartoum, Sudan.[42]

Some earlier investments in overseas agricultural production for food security, such as those undertaken by the Republic of Korea from the 1960s to the 1990s, and by some Arab countries in the 1970s, faced difficulties for various reasons (see chapter IV). One particular challenge arises from the target regions. While established agricultural regions such as North America and Europe have advantages, including good infrastructure, developed rules of law and safe FDI environments, the downside for foreign investors is that they have dominant agricultural traders controlling storage and transportation facilities in their region. In contrast, less developed regions may suffer from poorer infrastructure, an unreliable supply of materials, lack of quality inputs, political instability and institutional shortcomings. Although powerful agricultural traders have a weaker presence, several of these target regions are currently net food importers (Woertz et al., 2008), and exporting food may have serious socio-political consequences.

In addition, there is a risk of the host country imposing an export ban during a food crisis. Under GATT/WTO rules, export restrictions can be applied temporarily to prevent critical food shortages, subject to certain conditions (see GATT Article XI and WTO Agreement on Agriculture, Article 12). As at July 2008, more than 40 countries had imposed export controls on commodities (HLTF, 2008).

3. Policy implications

Home countries should assess carefully the possible pros and cons of a policy strategy on outward FDI in agricultural production aimed at securing domestic food supply *versus* a trade-oriented approach. For countries where climate, soil and water conditions prevent the cultivation of sufficient agricultural commodities, outward FDI in agricultural production may be an appealing alternative. However, home countries need to consider whether this is more advantageous than importing agricultural products from third-party producers. There can be significant benefits in gaining control over production, as well as cost savings. On the other hand, there is a risk that a food crisis in the host country could cause it to restrict exports of agricultural commodities, which

Box V.14. The King Abdullah Initiative for Saudi Agricultural Investment Abroad

Launched in January 2009, the King Abdullah Initiative for Saudi Agricultural Investment Abroad (KAISAIA) "aims at contribution to realizing national and international food security, building integrative partnerships with countries all over the world that have high agricultural potential to develop and manage agricultural investments in several strategic crops at sufficient quantities and stable prices in addition to ensuring their sustainability."

Investments by this initiative are based on a number of principles and criteria. For example, the investment should be long-term, through ownership or long-term contracts; investments should take place in countries with "promising agricultural resources" and "encouraging government and administrative regulations and incentives"; the investors should be allowed to select which agricultural crops to grow; and bilateral agreements should be signed with the concerned countries to ensure achievement of the investment objectives. (For further details see www.mofa.gov.sa).

Source: Ministry of Foreign Affairs, Kingdom of Saudi Arabia.

would defeat the purpose of the overseas investment. These considerations call for the setting up of broader strategies to secure food supply at home, for instance by diversifying outward FDI to different host countries. Outward FDI-oriented policies aimed at increasing food security in the home market should also go hand in hand with low trade barriers in the home country, at least vis-à-vis imports from the host country for the corresponding products.

Overseas agricultural investment is a risky business and it can take a long time to deliver the desired outcomes. This makes thorough pre-investment research vital.[43] Even after an initial in-depth study, a step-by-step approach is advisable as it is difficult to design a "perfect" plan from the start.

As discussed above, many target countries for investment in agricultural production aimed at supplying home-country markets are net food importers. Exporting food from those net importing countries can cause social disturbance. It has been suggested that a set of principles be developed for host countries and foreign investors, including rules on transparency of negotiations, respect for existing land rights, sharing of benefits, environmental sustainability, national food security and the human rights challenge (von Braun and Meinzen-Dick, 2009; de Schutter, 2009).

Home countries should also consider whether overseas food production in the form of contract farming could be a viable alternative to FDI. One specific approach could be to involve SWFs – possibly through intermediary companies – in the contract farming arrangements. These funds have considerable financial resources that could be made available for agricultural development. Several of them are headquartered in countries that are actively seeking host countries for agricultural production. Investing in agricultural production may contribute to diversifying risks and be an alternative to placing capital in financial institutions where some SWFs have realized heavy losses due to the global economic crisis.

Contract farming arrangements could create a win-win situation for all partners involved, provided that appropriate bargaining conditions exist, with all parties capable of protecting their essential concerns in the negotiation process. Contractual links can enable foreign investors to establish long-term relationships with local professional farmers in the host country to secure food supply. In addition, the contract farming option reduces the production risks associated with the FDI option, and avoids potentially strong opposition in the host country to foreigners gaining direct access to agricultural land. Local farmers could substantially benefit from contract farming through the transfer of capital, technology and know-how and a stable source of income. This income generation could contribute to gradually reducing poverty in the host country and enable farmers to move to higher value activities. If local farmers have a vested interest in maintaining their contractual relationship, the home country and its investors could be better protected against interference by the host-country authorities. However, it is essential that contract farming arrangements are not concluded at the expense of sufficient food supply to the host country's population.

Mixed models are also possible. There are examples of large-scale commercial units, often privatized former State farms, owned and operated by an international investor with links to smallholders in a symbiotic relationship, whereby the smallholders sell their output under contract to the large company while receiving support in the form of agreed sales, credit and technical assistance. Sugar investments in the United Republic of Tanzania are one example of such a development, and in Zambia, an objective of the government policy is the creation of a similar model based on the so-called "farm blocks" concept (Hallam, 2009).

In addition to focusing on agricultural production itself, consideration should be given to investing in trading firms and in logistical infrastructure such as ports. Such investments not only offer the opportunity to lower food procurement costs by cutting out middlemen and agency fees; they could also improve food security in a food crisis by facilitating access to international agricultural markets (Sung, 2008; Woertz et al., 2008).

D. International policies related to FDI in agricultural production

1. Major international policy initiatives

Agriculture and food security are high on the international agenda.[44] A major development was the establishment of the United Nations High-Level Task Force on the Global Food Security Crisis (HLTF) in April 2008. The HLTF elaborated a Comprehensive Framework for Action (CFA) which presents two sets of action: meeting immediate needs and building resilience. Under the latter, the CFA aims at stimulating public and private investment in agriculture by calling for the creation of a more conducive climate for investment. The Leaders' Statement on Global Food Security adopted at the G-8 Summit in Hokkaido in July 2008 contains a commitment to reverse the overall decline of aid and investment in agriculture, and calls for a Global Partnership on Agriculture and Food Security (G-8, 2008). At the G-8 Summit in L'Aquila in July 2009, countries represented made a commitment towards the goal of mobilizing $20 billion over the next three years for a comprehensive strategy for sustainable global food security and for

advancing by the end of 2009 the implementation of the Global Partnership for Agriculture and Food Security. On the occasion of the L'Aquila Summit, the International Fund of Agricultural Development (IFAD) stressed that the world food security issue cannot be resolved without long-term investment in agriculture.

At the regional level, recognizing that agriculture is crucial to Africa's economic and overall development, African leaders initiated, within the framework of the New Partnership for Africa's Development (NEPAD), the Comprehensive Africa Agriculture Development Programme (CAADP) to boost agricultural productivity in Africa. In Asia, at the 14th ASEAN summit in February–March 2009, ASEAN leaders adopted the ASEAN Integrated Food Security Framework (AIFS) and the Strategic Plan of Action on Food Security in the ASEAN Region (SPA-FS) 2009–2013.

The focus of the FAO strategy on involving TNCs in agriculture has been on agribusiness and the agro-industry. The FAO's support to developing countries is delivered through various forms of technical assistance to recipient governments and to farmers, with a focus on capacity-building, information dissemination, policy advice and skills development. Through its Investment Centre, the FAO focuses on promoting investment in agriculture by assisting developing countries to identify and formulate effective and sustainable agricultural policies, and by designing and implementing specific programmes and projects.

The Multilateral Investment Guarantee Agency (MIGA) and the International Finance Corporation (IFC) promote FDI in agricultural production in developing countries by providing guarantees against various kinds of political risks in the host country, or by providing financial or technical support.

The recent G-8 pledge to devote substantially more ODA to agriculture in developing countries and the various regional initiatives to improve the institutional framework for investment in agriculture are encouraging signs. However, still more could be done, especially with regard to addressing the concerns caused by the recent surge in large-scale land acquisitions by foreign investors in agricultural production. One particular challenge relates to the development of international principles for such investments (mentioned above), highlighting the need for transparency, stakeholder involvement and sustainability, and stressing concerns for domestic food security and rural development.

2. International investment agreements

International investment agreements (IIAs) promote foreign investment, which would include investment in agricultural production, by protecting it against certain kinds of political risks in the host country. However, undertaking international commitments in a highly regulated and sensitive industry like agriculture, where government policies may be controversial and subject to change, also carries the risk of reducing the policy space of host countries.

One means for host countries to preserve regulatory discretion is the use of reservations in IIAs, in particular with regard to the entry of FDI. An UNCTAD survey of IIAs that include establishment rights revealed that reservations relating to foreign investment in agriculture are common, especially in free trade agreements (FTAs) with investment chapters. Out of a total of 150 examined bilateral investment treaties (BITs) and FTAs with pre-establishment rights (covering 88 countries), 85 IIAs (56%) included national treatment reservations relating to agriculture or the use and ownership of land.[45] A similar host-country approach consists of reserving the right to adopt or maintain any measures with regard to the approval of agricultural projects.[46]

IIAs usually establish various investment protection obligations for host countries. Several of these are particularly relevant for TNC participation in agricultural production.

Most IIAs include *immovable property* (land) and *intellectual property* in their definition of investment. Intellectual property is relevant with regard to the transfer of technology and R&D activities, for instance in connection with GMOs, but also pesticides and fertilizers. Some IIAs even go so far as to cover plants as a protected investment.[47]

A core provision in most IIAs is the principle of *fair and equitable treatment*. The meaning and content of this provision is somewhat ambiguous and, as shown below, has given rise to several investment disputes relating to agriculture. Arbitration practice in recent years has tended to interpret the article in a broad manner, protecting the "legitimate expectations" of foreign investors. As a highly regulated as well as politically and socially sensitive industry, agriculture is particularly exposed to government intervention, which foreign investors might consider as being contrary to their expectations. This applies to a broad range of host-country regulations. One example relates to subsidies that governments pay to producers. An elimination or reduction of such State assistance may be perceived as unexpected by the foreign investor, and therefore considered as unfair treatment. Other examples relate to export taxes or other restrictions that adversely affect investors' operations, or the introduction or modification of standards in agricultural production relating to safety, hygiene or other areas of health.

Expropriation of land from foreign farmers has been an issue repeatedly raised in connection with host-

country policies on land redistribution. In addition, the examples cited above might become relevant with regard to indirect expropriations (i.e. situations where the foreign investor's property rights remain formally untouched, but where the host-country measure has a similar effect as a formal expropriation).

Equally pertinent is the issue of protection in case of *war and civil strife*. History is replete with examples where disputes about control over land have caused wars, revolutions or civil unrest. Social unrest in a country may result in farm occupation, the expulsion of farmers from their homes, the destruction of crops and other acts of physical violence. IIAs containing a clause on war and civil strife usually oblige contracting parties to grant non-discriminatory treatment to foreign investors with respect to eventual compensation payments by the host country.

Numerous IIAs contain a provision that explicitly permits contracting parties to take any measures aimed at protecting public *health and safety*. This clause might shield host countries from investor claims, for instance in connection with the introduction of new regulatory standards for agricultural production. Likewise, many IIAs include a *national security exception*, which may become important if a contracting party rejects a foreign investor because it considers agricultural production as a security-sensitive industry.

Foreign investment in agricultural production often has a *trade link*. This is most obvious if agricultural production is destined for export purposes or if the production process necessitates the import of certain technological inputs. This makes it relevant for IIA negotiators to consider including a trade component, particularly in the context of bilateral or regional FTAs, or other agreements on closer economic cooperation. A combined investment and trade agreement can make the host country more attractive for foreign investors in agricultural production, but it also increases the host country's obligations.

Compared to other economic industries, few international investor-State disputes have arisen in agriculture and related industries. There were 19 known international arbitration cases involving foreign investment in the agricultural value chain by the end of 2008.[48] Six of these cases involved agricultural production (cultivation of plants, crops, fruit, vegetables or cattle).

The disputes have focused on a number of IIA provisions, in particular the principle of fair and equitable treatment, the standard of full protection and security, national treatment, expropriation and State responsibility. The known total amount of compensation sought by the foreign investors is approximately $1.1 billion.

IIA negotiators should be aware of the potential consequences of an investment agreement for agricultural policies. A number of issues deserve special attention by developing countries. For example, if a developing country decides that foreign investors are welcome for the production of certain agricultural commodities, it could reflect this in specific investment promotion provisions of the IIA. This approach requires that host countries identify those sub-sectors for which foreign investors should be specifically targeted (UNCTAD, 2008h). One example is the Economic Partnership Agreement (EPA) between the EU and the member States of the Caribbean Forum (CARIFORUM), which calls for a dialogue, exchange of information, experiences and best practices for the promotion of investment in the CARIFORUM agricultural industry, including small-scale activities.[49]

Another issue relates to linkages between investment and trade policies. If developing countries seek the involvement of foreign investors in agricultural production for export purposes, trade liberalization and facilitation become significant FDI determinants. In this case, host countries should aim at the conclusion of IIAs that include trade provisions, as in a number of recent EPAs or FTAs.

IIA negotiators also should pay attention to the increasing risk that developing countries face of being drawn into an investor-State dispute. As shown above, core IIA provisions, such as fair and equitable treatment, full protection and security, and protection in case of expropriation, have become the subject of investment disputes in agriculture. Developing countries should therefore consider a clarification of these clauses in future IIA negotiations, including a possible narrowing of their scope of application.[50] Developing countries could also benefit from exception clauses in IIAs, relating to such areas as public health and national security.

The legal protection of local landowners' rights often lags considerably behind that offered to foreign investors, as noted earlier. This may have significant adverse consequences for land security, especially for small-scale local farmers who run the risk of being easily dispossessed to make way for foreign investors. Subsequent governmental actions to protect local land titles could become the subject of investor-State disputes in the future if they interfere with rights granted to foreign investors. These concerns should be adequately addressed through the device of the development dimension in the IIAs.

E. Conclusions and policy options

Developing countries face many challenges in promoting agricultural production. One strategy to cope with these challenges is to use the advantages and resources of TNCs by involving them in the

industry. However, expectations concerning the level of FDI and its possible benefits should be realistic, particularly for such products as staple food crops. In addition, the existing institutional environment in numerous developing countries limits, to varying degrees, entry by TNCs, and not all host-country governments may be sufficiently equipped to attract TNCs.

Host-country policies concerning TNC participation in agricultural production have changed over time, and vary between countries, commodities and type of TNC involvement. There is no "one-size-fits-all" solution, as policies are based on different combinations of individual factors, such as the special characteristics of agricultural commodities, the type and objective of production (staple food for domestic food supply or cash crops for export), the geographic and agro-climatic characteristics of locations, and the socio-political and cultural environment.

The main challenge for host-country governments is how to maximize the development benefits of TNC participation in agricultural production, while minimizing the costs. Responding to this challenge involves a broad and complex agenda that extends well beyond FDI policies per se, and may require trade-offs with various other policy objectives. The involvement of TNCs in agricultural production may have far-reaching social and environmental implications for a host developing country. Host-country governments need to assume the main responsibility in this regard, but the role of other stakeholders – civil society and international organizations – should not be neglected, in addition to that of the TNCs themselves. A comprehensive host-country strategy towards TNC participation in agricultural production also requires integrating policies related to such aspects as infrastructure, competition, trade and R&D.

Given the concerns that exist in numerous countries in respect of FDI in agricultural production, and TNCs' generally limited interest in this activity, contract farming may in many cases be a promising alternative. This mode of TNC involvement can significantly contribute to raising agricultural production and productivity, and to economic development in general. Provided that contract farming schemes are based on fair and informed bargaining, and help create mutually beneficial linkages and allow domestic producers to become a part of larger food value chains, it is in the interest of host countries to support the participation of local farmers in these arrangements.

In recent years, an increasing number of food-importing countries have started pursuing a strategy of overseas agricultural production to secure food supply at home. Such strategies can contribute to creating value and generating export revenues in the host countries, but they can also have negative consequences for food supply in the exporting country, including depriving local farmers of land. However, a win-win situation can emerge if the institutional arrangements are carefully designed, and if the legislative framework and investment contracts ensure a fair sharing of the benefits between host countries and foreign investors.

IIAs can be an additional means to promote TNC participation in agricultural production, but their careful formulation is crucial with a view to striking a proper balance between the obligations to protect and promote foreign investment, on the one hand, and policy space for the right to regulate, on the other. This is particularly important in the case of agriculture, as the sector is highly regulated and sensitive, where government agricultural policies may be controversial and subject to change, and the countries' social and environmental policies are rapidly evolving (including in line with various international standard-setting processes).

Based on the above considerations, a number of policy recommendations can be made:

(1) Developing countries should *strategize agricultural production* and the food industry and consider what role TNCs could play in implementing their strategies. For this purpose, they may wish to:
   - Establish a multi-stakeholder mechanism, with the effective participation of smallholders, to engage in open discussions concerning the potential role of TNCs in agricultural production and its possible implications.
   - Adopt an integrated policy approach that comprises not only agricultural and investment policies, but also other crucial policy areas such as infrastructure development, competition, trade and R&D.
   - Identify environmental and social concerns associated with TNCs' involvement in agricultural production, and address them in the overall policy framework.
   - Monitor the impact of TNC involvement in agricultural production.
   - Consider (especially in the case of developing countries with small markets) regional economic integration that could help attract TNCs in agricultural production by providing larger regional integrated markets.

(2) Developing countries should pay particular attention to the *promotion of contractual linkages* between TNCs and local farmers so as to enhance farmers' productive capacities and help them benefit from the global value chain. In

this context, host-country strategies should seek to:

- Review the whole value chain with a view to identifying and addressing bottlenecks in successful contractual cooperation between TNCs and local farmers.
- Develop model contracts for contract farming, ensuring they are socially and environmentally sustainable.

(3) Developing countries could also consider whether they can benefit from the renewed interest of numerous home countries in *FDI in staple food production*. Developing countries aiming to attract such FDI may wish to:

- Review their FDI entry regulations and land-use policies (e.g. by clarifying land-use rights and streamlining administrative procedures), while ensuring adequate and effective protection of land rights of local farmers and communities.
- Strengthen the role of IPAs with regard to attracting FDI in agricultural production.
- Conduct an environmental and social impact assessment of the specific investment project before admitting FDI. Decision-making should be transparent and open to public scrutiny.
- Develop a checklist of issues for host countries to negotiate with foreign investors in order to ensure development benefits for the host country. (Key points for consideration are listed on page 172 above).
- Identify priority areas for agricultural R&D that are important for the host country's development needs, and promote public-private partnerships. Seed and technology centres are ideal examples of such a priority. First, they would adapt relevant seed and farming technologies to make them suitable for, and available to, smallholders. Secondly, a PPP is an ideal way of transferring and diffusing the relevant knowledge between partners to build and deepen indigenous capacity.

(4) Recommendations in respect of country strategies related to *outward FDI to secure food supply*:

- Start with an assessment of the potential advantages and risks of an FDI-driven strategy compared to a trade-based approach. Consider whether contract farming or mixed approaches could be a useful alternative to FDI.
- Consider, in addition, investing in local infrastructure, such as trading houses, harvesting facilities, roads and ports, which can bring benefits to both agriculture and the overall economy.

(5) Recommendations related to the *international community*:

- Reduce import tariffs, non-tariff barriers and agricultural subsidies in developed countries to encourage FDI in poor countries.
- Consider the development of an internationally agreed set of core principles for large-scale land acquisitions by foreign investors in agricultural production. These principles should highlight the need for transparency, respect for existing land rights, protection of indigenous peoples, the right to food and social and environmental sustainability.
- Consider the use of ODA funds in the context of agricultural development strategies that combine public investments with maximising benefits from TNC involvement.

Notes

1 In March–May 2009, UNCTAD conducted a questionnaire-based survey of all UNCTAD Member States on foreign investment policy relating to agricultural production. The following 35 countries responded: Albania, Angola, Argentina, Azerbaijan, Bosnia and Herzegovina, Colombia, Costa Rica, Ecuador, El Salvador, Ethiopia, Fiji, Finland, Georgia, Ghana, Greece, Jamaica, Jordan, Kyrgyzstan, Lebanon, Lithuania, Malawi, Mauritius, Mexico, Oman, Portugal, Rwanda, South Africa, Sri Lanka, Suriname, Saint Vincent and the Grenadines, the United Republic of Tanzania, Tonga, Turkey, Ukraine and Zambia.

2 According to UNCTAD's survey of governments, approximately 70% of the responding countries reported not imposing any specific entry conditions on TNCs that plan to invest in agricultural production.

3 Long-term land lease period is usually 50–99 years, sometimes including an option for renewal.

4 This is confirmed by the results of UNCTAD's Government survey.

5 A total of 63 questionnaires were completed by members of WAIPA, representing an overall response rate of 30%. A geographical breakdown of the responses shows a fairly similar distribution to that of the WAIPA membership.

6 Of the total respondents, 22% indicated that their policies did not give priority to the agricultural sector. Among developed-country agencies, the share was much higher (44%). Only 5% of all IPAs indicated that another government agency was taking care of promotional activities, while none indicated that investment was prohibited.

7 Among IPAs from developed countries, 17% indicated that attracting FDI into agriculture is now more important than three years ago and 28% expected this to continue for the next three years.

8 Only a few respondents cited food security as a motivation for attracting FDI.

9 For instance, four agencies in developed countries said that barriers overall were low, and that policy uncertainty and macroeconomic and trade barriers were their major focus (both 11% of respondents). In contrast, some of the

agencies from Asia and Latin America and the Caribbean also mentioned these issues, but none of the IPAs from Africa did so.

10 See http://www.ghanalap.gov.gh/privatecontent/File/lands%20commission%20folder/ Land%20Bank%20Directory%202nd%20edition.pdf.

11 International aspects of investment protection are discussed in section D.2.

12 The suggestion had been made by the Government of Japan. It aims at establishing a set of principles for both host countries and foreign investors, covering the following issues: Transparency and accountability, respect for rights and benefits of local population, developmental and environmental impact assessment, food security and market principles (see http://mofa.go.jp/policy/economy/fishery/food_sec0907.html).

13 See for example, India's State Agricultural Produce Marketing (Development and Regulation) Act (APMA Model Act) of 2003, Chapter VIII, No. 38, Viet Nam's Decision No. 80/2002/Qd-TTg of 24 June 2002 and Thailand's Standard Contract Farming Agreements of 1999.

14 For example, in the United Republic of Tanzania, the planned Guidelines for the Marketing and Private Sector Development Component in the Agricultural Sector Development Programme also cover contract farming (see: www.actanzania.org/index.php?option=com_content&task=view&id=119&Itemid=39).

15 See https://www.landbank.com/about.asp.

16 *Source:* Field study undertaken by UNCTAD in Heze in April 2009.

17 For instance, in recent years there has been a growing interest in "smart subsidies particularly in Africa. These subsidies are innovative input delivery systems that are intended to reduce common problems facing subsidy programmes and to extend their benefits (Dorward, Hazell and Poulton, 2008).

18 The Protocol on Biosafety is an international treaty governing the movements of living modified organisms (LMOs) resulting from modern biotechnology from one country to another. It was adopted on 29 January 2000 as a supplementary agreement to the Convention on Biological Diversity and entered into force on 11 September 2003. The Protocol imposes upon signatory countries the responsibility for ensuring that activities involving GMOs are conducted in a manner that does not pose a risk to biodiversity or the environment. It is intended to increase transparency on the nature of traded goods by stipulating requirements for advanced informed agreement on the part of the importing country. This entails undertaking a scientifically sound risk assessment of the GMO. Accordingly, it calls for the development of regulatory frameworks and a capacity for risk assessment in countries that still lack them (Burachik and Traynor, 2002).

19 See *Catalogue for the Industrial Guidance of Foreign Direct Investment* (amended in 2007).

20 For instance, land use is currently excluded from the CDM, with the exception of afforestation and reforestation projects. The United Nations Convention to Combat Desertification (UNCCD) has suggested expansion CDM coverage of agricultural land (see http://www.fao.org/fileadmin/user_upload/foodclimate/statements/unccd_kalbermatten.pdf).

21 Guideline 8.10 of the FAO Guidelines on the Right to Food (see also box V.8) emphasizes the need to promote and protect the security of land tenure, especially with respect to women, poor and disadvantaged segments of society, through legislation that protects the full and equal right to own land and other property, including the right to inherit; and it recommends advancing land reform to enhance access for the poor and women. Securing land rights also makes economic sense: it has been widely documented that providing land owners or users with security against eviction enhances their competitiveness by encouraging land-related investment, and lowers the cost of credit by increasing the use of land as collateral. *Source*: comments provided by the UN Special Rapporteur on the Right to Food, Mr. Olivier De Schutter.

22 The ILO Declaration on Fundamental Principles and Rights at Work: available at http://www.ilo.org/public/english/protection/safework/agriculture/agrivf01.htm#nl.

23 (http://www.ilo.org/public/english/dialogue/sector/sectors/agri/standards-rural.htm).

24 Although in some cases private standards only reflect host-country standards.

25 The *United Nations Global Compact* is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labour, environment and anti-corruption. *GRI* promotes and develops a standardized approach to reporting to stimulate demand for information on sustainability, and can be used as a benchmark for assessing organizational performance with respect to laws, norms, codes, performance standards and voluntary initiatives. Adherence to it demonstrates organizational commitment to sustainable development and enables comparison of organizational performance over time. *GlobalGap* is a partnership between agricultural producers and retailers to establish certification standards and procedures for good agricultural practices (GAP) (see also chapter IV, box IV.11). The *SAI Platform* is an organization created by the food industry to communicate worldwide and to actively support the development of sustainable agriculture among the different stakeholders in the food chain. Other relevant initiatives include the SA8000, ISO 14001, the Ethical Trade Initiative (ETI) and various international framework agreements.

26 The research made an assessment of CSR strategies and reporting based on available online corporate documents such as annual reports, business codes and sustainability reports, and especially focused on adherence to relevant UNGC and GRI principles. This information was obtained from the Agrodata database of UMR MOISA, Montpellier, and company reports.

27 Some 40% of global food is produced on irrigated land, and significant additional investment in irrigation systems will be needed in the future (FAO, 2007b).

28 Xinhua News Agency.

29 In the current Doha Round the treatment of preferences is a controversial issue among developing countries especially because of different tariffs for tropical products.

30 This includes government support and indirect support such as transfers from consumers to producers through higher prices due to boarder measures.

31 PPP can be defined in this context as any research collaboration between public and private entities in which the partners jointly plan and execute activities with a view to accomplishing agreed objectives, while sharing the costs, risks and benefits incurred in the process (Spielman, Hartwich and von Grebmer, 2007).

32 The CGIAR is a worldwide network of agricultural research centres with a permanent secretariat, supported by the World Bank, with the FAO, UNDP and IFAD as co-sponsors. It now has 64 governmental and non-governmental members and 15 research centres. It is a centre-driven coalition to promote collective action among the centres and between the centres and their partners.

33 The IAASTD process was initiated in 2002 by the World Bank in open partnership with a multi-stakeholder group

of organizations, including FAO, GEF, UNDP, UNEP, WHO and UNESCO and representatives of governments, civil society, private sector and scientific institutions from around the world. The objective was to evaluate the impacts of past, present and future agricultural science and technology on 1) the reduction of hunger and poverty, 2) improvement of rural livelihoods and human health, and 3) equitable, socially, environmentally and economically sustainable development.

34 See, for instance, the extensive literature surrounding the Canadian Supreme Court case of *Monsanto Canada Inc. v. Schmeiser* [2004] 1 S.C.R. 902, 2004 SCC 34.

35 Taking 18 major agrochemicals' country markets as a proxy for the global market, it is estimated that 77% of the global agrichemicals are dominated by six players (as of the year 2004): Bayer (Bayer Crop Science), Syngenta, BASF, Dow (Dow AgroSciences), Monsanto and DuPont (chapter III).

36 USPTO, Registration Number, 3381739, 12 February 2008. Starbucks had abandoned its original application dated June 2004 for the registration of trademark SHIRKINA SUN-DRIED SIDAMO, application serial number 78431410. Starbucks confirmed that the coffee beans are sun-dried and originate from the Sidamo region of Ethiopia.

37 Fair trade standards are set by Fairtrade Labelling Organizations International (FLO).

38 For example, Café de Colombia is a registered GI of coffee in the EU originating from Colombia. There are 10 pending applications originating from China, and 2 applications from India that request the registration of Darjeeling tea and Kangra Tea.

39 World Intellectual Property Organization (WIPO), Agreement for the Protection of Appellations of Origin and their International Registration, Lisbon 1958, and Lisbon System for the International Registration of Appellations of Origin. For instance, Mexico has registered Café Chiapas, and Café Veracruz as appellations of origins.

40 The Republic of Korea, Ministry for Food, Agriculture, Forestry and Fisheries, Public Notice, No. 2008-355.

41 For details, see http://oai.ekr.or.kr/ekr/oai.html.

42 As at 2001, the AAAID had invested about $352 million: 38% of that went into plant production, 21% in animal production, 37% in agricultural processing, 2% in inter-Arab trade development and another 2% in agricultural services. Most of the AAAID's activities are directed to Sudan (AAAID, 2002).

43 For example, failures by Korean companies in the past mainly resulted from insufficient research (Kim Yong-taek and Bae-sung Kim, 2007), which is why the Government of the Republic of Korea opened an Information Centre for Overseas Agricultural Investments in 2008.

44 This section only deals with developments at the multilateral and regional – not the bilateral – level.

45 Reservations on fisheries were not taken into account. In the North American Free Trade Agreement (NAFTA), for example, Mexico has a reservation stating that "only Mexican nationals or Mexican enterprises may own land for agriculture, livestock or forestry purposes." For instance, the BIT between Lithuania and the United States specifies: "The Government of the United States of America reserves the right to make or maintain limited exceptions to national treatment […] in the sectors or matters it has indicated below: […] the use of land and natural resources."

46 For instance, the FTA between Malaysia and Pakistan states: "Malaysia reserves the right to adopt or maintain any measures with regard to approval for […] agricultural projects. All approvals are subject to National Land Code and other laws, regulations and policies of the Central and Regional Governments."

47 For example, in the Economic Partnership Agreement between Indonesia and Japan, the definition of investment also comprises intellectual property rights, including new varieties of plants (Art. 58 (f) (vi)).

48 UNCTAD database on investor-State dispute settlement cases.

49 The 15 CARIFORUM-EPA countries are: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Saint Kitts and Nevis, Suriname, and Trinidad and Tobago.

50 One example of this approach is the 2004 United States model BIT with its extensive interpretative language on the meaning of the fair and equitable treatment standard and its notion of an indirect taking.

EPILOGUE

Building on advanced technologies and management processes, and diversifying into new agribusiness chains, pioneering countries such as Brazil, China, Egypt, India, Kenya and Viet Nam are utilizing agriculture as a lynchpin for economic development and modernization. Moreover, in most of them, TNCs have acted as agents of agricultural change in varying degrees. The extent to which these and other developing countries can build on the promise of agriculture depends on how they meet a number of interconnected development challenges. This *Report* has focused primarily on one of these, namely the *investment challenge*, but others are equally important. Four of the most significant are outlined below, as well as the roles that TNCs might play in helping to meet them:

Development challenge 1: Harnessing technology to support agricultural development

Fundamentally an efficient agricultural industry depends on the effective use of hard and soft technologies, ranging from tilling methods, through fertilizer formulation to management process in agribusiness value chains. In developing countries the highest returns to agricultural productivity are often realized through effective resourcing and R&D by public research institutions in cooperation with the private sector, including TNCs. This challenge can be addressed at three different levels.

First, it is important to spread existing knowledge and tools to boost productivity and growth in LDCs and other poorer economies to levels already prevailing in other developing countries i.e. essentially spreading the "Green Revolution". In such cases, more effort is needed to bolster and support the skills base and institutional framework in order to improve the take-up of technologies. Public-private partnerships (PPPs), in which TNCs may be involved, is one way forward because of their "learning-by-doing" characteristics, especially since partners learn from each other.

Secondly, developing countries, to the extent that they deem relevant and appropriate, should connect with the production and research networks (in which TNCs are major players) that create the technologies which are essential to the future of agricultural production. Examples include greener methods to produce crops, including for biofuels ("grassoline"), or those involving biotechnology and molecular research (the "gene revolution").

Finally, Governments and the development community need to find ways to push the technology frontier in the direction of technologies relevant to developing countries, such as non-traded staple crops. Agribusiness TNCs, with their vast knowledge and experience in cognate research, would make good partners in furthering this aim, but only if there is coherence of interests between these aims and TNC objectives (as discussed further in the next challenge).

Development challenge 2: Improving entry into international agricultural markets - and building domestic and regional value chains.

Expansion into international agricultural markets abroad has been a viable strategy for many farmers and firms in developing countries, frequently through the supply chains operated by agribusiness TNCs. In the near-term such a strategy will continue to pay dividends, especially if freer trade is supported through, for instance, a reduction in subsidies offered to farmers in developed countries. Freer trade in agriculture will not be easy to negotiate, but

as TNCs expand their roots in agricultural production in developing countries, they are more likely to make representations to this effect to their home-country governments.

Beyond this, in the longer run, expansion into global markets for developing countries as a way of revitalizing their agricultural industries in the pursuit of development will be insufficient; and it is also imperative to build domestic value chains. In fact, a twin track policy encompassing both international and domestic agribusiness value chains is required, not least because this better supports the whole physical, social and institutional infrastructure of agricultural development, as well as ancillary goals such as reducing commodity-export dependence.

Participation by transnational food manufacturers and supermarkets – as well as agriculture-based companies – can contribute to building viable domestic agribusiness value chains, but companies need to be persuaded about the longer term commercial merits of doing so. To some extent this is already evident: TNCs are entering host country markets, especially those of emerging economies because of the rapid existing and projected rates of growth. However, to better support this trend, a more strategic approach would be to foster regional markets, in addition to domestic ones, in parts of the developing world. Apart from increasing TNC participation (including South-South intra-regional FDI), the value of regional agribusiness value chains is that they can help boost economies of scale, pull LDCs and other poorer countries into wider value chains, encourage regional infrastructure development (many of which involve PPPs, including TNCs (*WIR08*)), and create the conditions for agglomerative activity, for instance collaborative research on locally consumed food crops at a level that is commercially feasible.

Development challenge 3: Addressing concerns about "land grab".

Economic development and reform of land and property rights are intertwined processes: clear and transparent rights boost commercial activity and smoothen the transition from predominantly agrarian to largely urban societies. However, since the preponderance of the world's population still depends heavily on land and agriculture, during this decades-long transition period inevitable concerns that commercial interests, including TNCs, may take advantage of reform of land rights' by acquiring assets unfairly (i.e. "land grab") need to be addressed.

There is no perfect reform process, even if governments and their advisers were totally impartial. Thus, in addition to any reforms pursued, and the lease or sale of land to TNCs or other private investors, the main goal should be to manage the process carefully, with due regard to the economic and political interests of the country, and, above all, to do so sensitively. When dealing with investors that seek large-scale land acquisitions or leases (which are the most open to charges of "land grab"), a number of issues should be examined carefully, including: the legality of the propose deal, whether all stakeholders have been properly consulted, whether the net socio-economic benefits of the proposed investment - in the short and long run - are sufficient to warrant allowing it to proceed, and whether there are better alternatives to the deal. A transparent approach is vital, and an additional rule of thumb might be to err in favour of the poor, marginalized and dispossessed.

Development challenge 4: Working towards food security.

At the end, the beginning: today, the burning question remains that of ensuring food security for the world's poor, despite the many recent gains – and failures – in agricultural production. As this report has shown, TNCs' involvement in agriculture can play a role in improving food security in developing countries. Their involvement may not only boost food supply, but it may also directly and indirectly affect stability of supply (e.g. diversification arising from the introduction of new or disease resistant crops), food utilization (e.g. better food safety standards) and food access (e.g. employment generation in urban as well as rural areas). However, this is not a given, TNCs can have negative as well as positive impacts; and they are by no means the sole agents for improving food security.

* * *

All of these challenges are part and parcel of the development process. Therefore, perhaps the real question for developing host countries is not whether to involve TNCs in agriculture and agribusiness value chains, but rather how to establish a framework and develop national capabilities to best harness them for modernization. This requires the support of the entire development community, including home country governments, international organizations, NGOs and others.

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WIR 2009

ANNEXES

Annex table A.I.1. Number of greenfield FDI projects, by source/destination, 2004–2009

Partner region/economy	World as destination						World as source					
	2004	2005	2006	2007	2008	2009 (Jan–Mar)	2004	2005	2006	2007	2008	2009 (Jan–Mar)
	Source						Destination					
World	10 222	10 481	12 175	11 928	15 551	3 363	10 222	10 481	12 175	11 928	15 551	3 363
Developed countries	8 750	8 984	10 192	10 066	12 725	2 800	4 664	5 089	6 089	6 195	6 972	1 528
Europe	4 618	4 873	5 793	6 132	7 492	1 700	3 503	4 032	4 837	4 795	5 332	1 101
European Union	4 269	4 540	5 366	5 709	6 892	1 552	3 405	3 935	4 708	4 625	5 115	1 047
Austria	204	221	258	244	266	55	99	103	87	104	111	17
Belgium	95	124	142	188	202	36	115	162	122	206	179	22
Bulgaria	15	6	6	7	12	1	109	140	285	151	146	33
Cyprus	9	5	21	8	9	2	6	5	15	7	18	2
Czech Republic	17	22	39	32	53	3	148	150	179	148	141	22
Denmark	134	152	142	132	174	45	91	78	69	67	65	10
Estonia	7	25	44	39	26	7	43	62	55	32	44	6
Finland	105	186	186	181	197	39	32	35	44	38	38	4
France	571	644	678	870	986	228	233	492	587	566	668	149
Germany	881	1 025	1 256	1 264	1 431	299	276	271	360	440	503	99
Greece	44	39	51	58	73	11	59	28	29	37	47	12
Hungary	26	12	19	29	29	3	221	205	241	217	147	31
Ireland	45	65	86	83	104	29	131	192	146	116	183	40
Italy	351	312	272	305	445	86	131	140	148	170	219	34
Latvia	10	11	23	14	17	2	30	83	110	33	51	10
Lithuania	11	54	67	13	17	6	23	76	60	44	46	8
Luxembourg	26	27	29	54	48	6	14	3	12	26	19	5
Malta	1	3	3	-	3	1	3	9	12	9	8	6
Netherlands	306	239	348	344	450	81	104	109	138	130	173	24
Poland	25	28	38	38	42	8	239	270	337	340	353	43
Portugal	40	21	25	36	87	11	82	28	57	77	74	17
Romania	9	13	13	13	20	-	180	262	373	369	348	41
Slovakia	5	-	3	2	5	-	88	118	118	99	86	15
Slovenia	33	41	48	27	29	7	23	19	23	23	23	1
Spain	264	149	216	442	548	148	267	156	287	427	495	100
Sweden	259	271	283	290	321	81	128	106	123	86	85	25
United Kingdom	776	845	1 070	996	1 298	357	530	633	691	663	845	271
Other developed Europe	349	333	427	423	600	148	98	97	129	170	217	54
Iceland	14	15	29	25	25	7	1	1	5	1	2	-
Liechtenstein	1	4	3	3	6	-	-	1	-	2	1	-
Norway	82	91	101	69	110	25	23	20	20	24	44	9
Switzerland	252	223	294	326	459	116	74	75	104	143	170	45
North America	2 889	3 109	3 260	2 984	3 764	811	825	781	912	1 009	1 144	322
Canada	300	419	246	248	316	78	223	207	179	162	213	69
United States	2 589	2 690	3 014	2 736	3 448	733	602	574	733	847	931	253
Other developed countries	1 243	1 002	1 139	950	1 469	289	336	276	340	391	496	105
Australia	113	141	151	143	194	49	139	113	129	169	228	58
Bermuda	17	22	54	32	65	20	-	-	2	4	-	-
Greenland	-	1	-	1	1	-	1	2	-	-	-	-
Israel	57	54	108	64	117	13	17	23	33	21	40	5
Japan	1 042	771	800	691	1 065	196	158	121	149	172	196	31
New Zealand	14	13	26	19	27	11	21	17	27	25	32	11
Developing economies	1 305	1 315	1 776	1 671	2 534	506	4 847	4 483	5 310	4 975	7 437	1 631
Africa	49	70	83	60	192	51	279	459	446	381	820	162
North Africa	8	24	27	17	43	12	111	206	200	195	351	53
Algeria	-	-	1	2	3	-	19	45	50	33	71	10
Egypt	6	13	17	10	23	1	34	45	51	54	83	12
Libyan Arab Jamahiriya	-	1	-	-	-	-	7	15	11	21	39	4
Morocco	-	4	5	3	5	9	37	58	46	57	90	10
Sudan	-	-	-	-	-	-	5	10	15	2	13	3
Tunisia	2	6	4	2	12	2	9	33	27	28	55	14
Other Africa	41	46	56	43	149	39	168	253	246	186	469	109
Angola	2	-	-	2	4	-	16	18	15	10	33	15
Benin	-	-	-	-	2	1	-	-	-	-	-	-
Botswana	-	-	1	-	-	-	5	6	4	4	14	1
Burkina Faso	-	-	-	-	-	-	1	3	-	1	2	-
Cameroon	-	1	-	-	-	-	1	1	1	1	3	4
Cape Verde	-	-	-	-	-	-	-	-	-	1	1	-
Congo	-	-	-	-	-	-	1	-	-	1	-	-
Congo, Democratic Republic of	-	-	-	-	2	-	2	10	8	5	15	4
Côte d' Ivoire	1	3	1	-	2	-	-	2	2	2	5	1
Djibouti	-	-	-	-	-	-	-	1	2	1	3	1
Equatorial Guinea	-	-	-	-	-	-	-	-	3	-	1	1
Eritrea	-	-	-	-	1	-	1	4	1	-	-	-
Ethiopia	-	-	-	-	2	-	1	1	3	10	10	2

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Annex table A.I.1. Number of greenfield FDI projects, by source/destination, 2004–2009 (continued)

Partner region/economy	World as destination						World as source					
	2004	2005	2006	2007	2008	2009 (Jan–Mar)	2004	2005	2006	2007	2008	2009 (Jan–Mar)
	Source						Destination					
Gabon	-	-	-	-	-	-	-	4	3	3	5	3
Gambia	-	-	-	-	-	-	-	1	2	1	3	1
Ghana	1	-	-	-	-	-	5	16	16	4	20	2
Guinea	-	-	-	-	-	-	3	3	3	-	-	1
Guinea-Bissau	-	-	-	-	-	-	-	-	-	1	-	-
Kenya	1	4	3	2	28	12	15	13	12	8	19	6
Lesotho	-	-	-	-	-	-	-	-	-	1	1	-
Liberia	-	-	-	-	-	-	-	2	-	-	1	2
Madagascar	-	-	2	-	-	-	3	4	3	3	4	-
Mali	-	-	-	-	-	-	-	3	3	-	2	1
Mauritania	-	-	-	-	-	-	1	3	4	2	1	-
Mauritius	-	1	-	2	5	-	7	5	1	4	13	-
Mozambique	-	-	-	-	-	-	4	-	5	5	23	2
Namibia	-	-	1	-	1	-	5	7	6	5	14	1
Niger	-	-	-	-	-	-	-	-	1	-	2	-
Nigeria	2	3	7	6	24	7	20	38	25	19	46	5
Reunion	-	-	-	-	-	-	-	-	1	-	-	-
Rwanda	-	-	-	-	-	-	-	2	-	8	13	9
São Tomé and Principe	-	-	-	-	-	-	-	1	-	1	-	-
Senegal	-	-	-	-	-	-	3	3	5	4	8	3
Seychelles	-	-	-	-	-	-	2	3	-	3	2	-
Sierra Leone	-	-	-	-	-	-	1	2	2	-	5	-
Somalia	-	-	-	-	-	-	1	-	1	-	2	-
South Africa	33	32	41	27	61	10	52	61	73	56	114	25
Swaziland	-	-	-	-	-	-	2	2	-	-	3	-
United Republic of Tanzania	-	-	-	-	-	-	6	11	7	6	16	2
Togo	-	1	-	3	6	5	-	-	1	1	-	-
Uganda	-	1	-	1	3	3	5	7	16	7	41	8
Zambia	-	-	-	-	-	-	4	14	14	5	16	2
Zimbabwe	1	-	-	-	7	-	1	2	3	2	5	2
Latin America and the Caribbean	158	81	126	221	205	58	808	560	575	783	1 106	252
South America	109	62	87	141	161	46	562	366	326	437	612	131
Argentina	19	2	16	26	15	7	75	42	49	109	115	15
Bolivia	-	-	-	-	-	-	14	2	7	4	3	4
Brazil	40	34	39	64	97	16	261	170	149	152	245	51
Chile	17	11	13	25	22	9	56	38	38	29	64	28
Colombia	15	-	2	8	13	2	47	46	31	66	73	12
Ecuador	-	1	1	3	2	8	21	4	4	8	7	-
Guyana	-	-	-	-	-	-	1	3	3	1	1	-
Paraguay	-	-	-	-	-	-	2	-	-	2	4	1
Peru	14	3	2	6	3	1	31	29	22	36	61	17
Suriname	-	-	-	-	-	-	-	-	-	-	2	-
Uruguay	1	-	-	1	1	-	11	7	7	20	15	-
Venezuela, Bolivarian Republic of	3	11	14	8	8	3	43	25	16	10	22	3
Central America	37	12	21	60	30	8	195	162	213	308	430	109
Costa Rica	1	-	-	7	1	-	7	11	20	40	17	12
El Salvador	1	-	-	2	-	-	7	4	5	7	9	3
Guatemala	-	1	-	2	2	-	3	1	2	13	15	4
Honduras	4	1	2	2	-	-	6	2	2	12	9	2
Mexico	29	10	19	43	23	8	160	135	177	209	346	78
Nicaragua	-	-	-	1	-	-	1	1	3	6	6	3
Panama	2	-	-	3	4	-	11	8	4	21	28	7
Caribbean	12	7	18	20	14	4	51	32	36	38	64	12
Aruba	-	-	-	-	-	-	-	1	-	-	1	-
Bahamas	2	1	1	2	1	-	1	2	-	1	3	-
Barbados	-	-	-	1	-	-	1	-	-	-	-	-
Cayman Islands	1	3	12	7	6	3	-	1	2	1	4	1
Cuba	-	-	-	-	1	-	5	5	1	2	7	3
Dominican Republic	1	1	-	3	-	1	9	7	10	8	16	4
Guadeloupe	-	-	-	-	-	-	-	-	1	-	1	-
Haiti	-	-	-	-	-	-	-	1	2	-	1	-
Jamaica	4	-	4	1	5	-	4	2	2	2	5	-
Martinique	-	-	-	-	-	-	-	-	1	2	-	1
Puerto Rico	4	-	-	4	1	-	29	7	12	17	20	3
Saint Lucia	-	1	-	-	-	-	-	-	-	1	-	-
Trinidad and Tobago	-	1	1	2	-	-	2	6	5	4	4	-
Asia and Oceania	1 098	1 164	1 567	1 390	2 137	397	3 760	3 464	4 289	3 811	5 511	1 217
Asia	1 098	1 164	1 565	1 390	2 134	397	3 753	3 462	4 285	3 808	5 501	1 215
West Asia	171	233	425	286	572	104	386	496	703	563	1 078	311
Bahrain	5	3	11	12	33	8	17	27	49	33	64	28

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Annex table A.I.1. Number of greenfield FDI projects, by source/destination, 2004–2009 (concluded)

Partner region/economy	World as destination						World as source					
	2004	2005	2006	2007	2008	2009 (Jan–Mar)	2004	2005	2006	2007	2008	2009 (Jan–Mar)
	Source						Destination					
Iran, Islamic Republic of	8	7	8	7	8	3	23	9	9	17	20	3
Iraq	-	1	-	1	-	1	5	8	4	2	17	4
Jordan	2	6	12	6	14	3	11	24	32	19	32	7
Kuwait	15	14	46	27	76	12	21	10	21	8	28	13
Lebanon	8	11	16	6	9	2	23	11	18	10	9	7
Oman	1	-	-	4	6	2	14	13	37	14	53	11
Palestinian territory	-	-	1	-	-	-	-	-	5	1	2	-
Qatar	12	9	20	11	50	5	27	24	44	28	80	30
Saudi Arabia	20	20	58	51	56	11	37	57	98	51	106	35
Syrian Arab Republic	-	-	-	-	2	1	6	24	16	16	28	3
Turkey	66	66	51	29	59	8	67	68	85	94	169	36
United Arab Emirates	41	103	210	139	263	51	154	227	291	283	480	136
Yemen	1	-	-	-	4	-	4	3	3	4	10	1
South, East and South-East Asia	927	931	1 140	1 104	1 562	293	3 367	2 966	3 582	3 245	4 423	904
Afghanistan	-	-	-	-	-	-	4	5	3	1	2	1
Bangladesh	-	4	3	-	3	2	7	7	11	5	11	6
Bhutan	-	-	-	-	-	-	-	-	2	-	-	-
Brunei Darussalam	-	2	-	-	1	-	2	4	-	6	4	2
Cambodia	-	-	-	-	1	6	7	6	5	8	34	6
China	98	140	133	202	240	44	1 545	1 244	1 402	1 190	1 483	238
Hong Kong, China	102	99	116	117	161	24	127	125	158	146	202	39
India	203	192	295	215	345	57	693	590	983	690	958	218
Indonesia	9	9	5	9	5	-	59	76	97	77	130	25
Korea, Democratic People's Republic of	-	-	-	-	-	-	-	-	2	4	4	1
Korea, Republic of	171	185	216	195	229	45	106	120	88	72	82	23
Lao People's Democratic Republic	-	-	-	-	2	-	3	8	8	10	20	11
Macao, China	-	-	-	-	1	-	6	8	4	12	9	-
Malaysia	78	73	71	73	131	27	125	93	125	167	209	39
Maldives	-	-	-	-	-	-	-	-	5	2	4	-
Mongolia	1	-	-	-	-	-	2	8	3	6	6	1
Myanmar	-	-	-	1	-	-	1	-	2	3	6	2
Nepal	-	-	-	-	-	-	1	-	2	1	11	2
Pakistan	3	6	4	3	6	1	20	67	28	28	25	4
Philippines	14	6	9	24	18	3	75	66	63	95	135	32
Singapore	102	85	100	92	172	30	179	159	196	245	290	73
Sri Lanka	3	5	4	1	3	1	11	12	11	15	21	3
Taiwan Province of China	110	87	123	121	152	29	84	69	67	61	83	24
Thailand	18	19	36	29	48	16	126	120	112	122	327	84
Timor-Leste	-	-	-	-	-	-	-	1	-	-	-	-
Viet Nam	7	12	17	15	36	5	161	169	196	262	347	67
Oceania	-	-	2	-	3	-	7	2	4	3	10	2
Fiji	-	-	-	-	-	-	-	-	1	1	2	-
Micronesia, Federated States of	-	-	1	-	-	-	-	-	1	-	-	-
New Caledonia	-	-	-	-	-	-	3	1	-	1	1	1
Papua New Guinea	-	-	-	-	2	-	4	1	2	1	5	1
Transition economies	167	182	207	191	292	57	711	909	776	758	1 142	204
South-East Europe	15	8	14	9	31	8	125	149	138	152	229	43
Albania	1	-	-	-	-	-	7	13	11	6	16	3
Bosnia and Herzegovina	1	2	-	-	-	-	20	26	17	21	24	8
Croatia	11	6	7	7	16	4	39	46	39	32	39	7
The FYR of Macedonia	-	-	-	-	-	-	7	11	25	9	23	9
Montenegro	-	-	-	-	-	-	-	-	3	5	15	1
Serbia	2	-	7	2	15	4	52	53	43	79	112	15
CIS	152	174	193	182	261	49	586	760	638	606	913	161
Armenia	-	2	1	-	3	-	6	12	8	7	19	1
Azerbaijan	1	4	2	10	21	5	26	20	14	17	41	14
Belarus	6	2	7	14	8	2	11	11	20	19	26	8
Georgia	1	-	-	-	2	-	7	11	19	20	40	8
Kazakhstan	7	12	5	2	7	3	31	29	24	33	57	11
Kyrgyzstan	-	1	-	-	1	-	1	3	3	4	7	1
Moldova, Republic of	-	-	-	-	1	-	14	13	6	12	6	2
Russian Federation	109	139	155	135	188	30	383	513	397	368	561	88
Tajikistan	-	-	-	-	3	2	4	6	2	4	4	1
Turkmenistan	-	-	-	-	-	-	3	1	-	5	11	2
Ukraine	28	14	23	21	27	7	85	127	128	106	123	21
Uzbekistan	-	-	-	-	-	-	15	14	17	11	18	4

Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com).
Note: The database includes new FDI projects and expansions of existing projects both announced and realized. Because of non-availability of data on the value of most projects, only the number of cases can be used.

Annex table A.I.2. Number of greenfield FDI projects, by sector/industry, 2004–2009

Sector/industry	2004	2005	2006	2007	2008	2009 (Jan–Mar)
Total sectors	10 222	10 481	12 175	11 928	15 551	3 363
Primary	326	452	482	611	1 022	256
Minerals	27	50	23	29	60	12
Coal, oil and natural gas	258	327	281	291	556	138
Alternative/renewable energy	41	75	178	291	406	106
Manufacturing	5 957	5 694	6 225	5 834	7 433	1 571
Food, beverages and tobacco	756	685	745	647	883	233
Beverages	157	93	124	114	175	38
Food and tobacco	599	592	621	533	708	195
Textiles	589	411	515	522	757	189
Wood and wood products	226	228	192	182	197	36
Paper, printing and packaging	130	127	119	113	130	22
Wood Products	96	101	73	69	67	14
Chemicals and chemical products	689	591	651	656	712	162
Biotechnology	68	75	81	89	94	26
Chemicals	416	316	373	370	378	81
Pharmaceuticals	205	200	197	197	240	55
Rubber and plastic products	292	306	336	289	366	53
Plastics	230	232	265	204	257	43
Rubber	62	74	71	85	109	10
Non-metallic minerals	186	192	221	237	312	49
Building and construction materials	145	157	186	164	233	32
Ceramics and glass	41	35	35	73	79	17
Metals	372	539	444	458	581	80
Machinery and equipment	449	472	587	659	914	203
Engines and turbines	50	46	67	69	133	18
Industrial machinery, equipment and tools	399	426	520	590	781	185
Electrical and electronic equipment	974	954	934	781	907	186
Business machines and equipment	179	176	155	116	136	39
Consumer electronics	230	237	195	168	169	38
Electronic components	316	357	359	335	463	86
Semiconductors	249	184	225	162	139	23
Medical devices	92	92	130	88	133	26
Motor vehicles and other transport equipment	901	820	883	857	1 079	195
Aerospace	101	113	143	128	209	41
Automotive components	406	348	375	358	437	66
Automotive OEM	337	311	309	307	346	63
Non-automotive transport OEM	57	48	56	64	87	25
Consumer products	431	404	587	458	592	159
Services	3 939	4 335	5 468	5 483	7 096	1 536
Hotels and tourism	287	266	296	298	553	123
Transport, storage and communications	783	1 047	1 158	1 012	1 243	276
Communications	365	527	564	442	582	132
Transportation	265	367	412	457	548	117
Warehousing and storage	153	153	182	113	113	27
Financial services	642	789	1 138	1 137	1 568	307
Business activities	1 971	2 042	2 612	2 829	3 514	766
Business services	551	572	770	801	1 158	366
Real estate	228	269	509	598	880	92
Software and IT services	1 192	1 201	1 333	1 430	1 476	308
Space and defence	25	25	32	47	39	20
Healthcare	47	37	56	57	80	16
Leisure and entertainment	184	129	176	103	99	28

Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com).

Note: The database includes new FDI projects and expansions of existing projects both announced and realized. Because of non-availability of data on the value of most projects, only the number of cases can be used.

Annex table A.I.3. Cross-border M&A deals worth over $3 billion completed in 2008

Rank	Value (billion $)	Acquired company	Host economy[a]	Acquiring company	Home economy[a]	Industry of the acquiring company
1	52.2	Anheuser-Busch Cos Inc	United States	InBev NV	Belgium	Malt beverages
2	23.1	Fortis Bank Nederland(Holding) NV	Belgium/Netherlands	Government of the Netherlands	Netherlands	National government
3	17.9	Altadis SA	Spain	Imperial Tobacco Overseas Holdings Ltd	United Kingdom	Investors, nec
4	17.6	Reuters Group PLC	United Kingdom	Thomson Corp	United States	Information retrieval services
5	16.3	Imperial Chemical Industries PLC	United Kingdom	Akzo Nobel NV	Netherlands	Paints, varnishes, lacquers, & allied products
6	16.0	Intelsat Ltd	Bermuda	Serafina Holdings Ltd	United Kingdom	Investors, nec
7	15.0	OCI Cement Group	Egypt	Lafarge SA	France	Cement, hydraulic
8	14.9	Scottish & Newcastle PLC	United Kingdom	Sunrise Acquisitions Ltd	Jersey	Investors, nec
9	14.3	Endesa Italia	Italy	E.ON AG	Germany	Electric services
10	14.3	Rio Tinto PLC	United Kingdom	Shining Prospect Pte Ltd	Singapore	Investors, nec
11	13.2	Banca Antonveneta SpA	Italy	Banca Monte dei Paschi di Siena SpA	Italy	Banks
12	10.5	Alcon Inc	United States	Novartis AG	Switzerland	Pharmaceutical preparations
13	10.3	Dr Pepper Snapple Group Inc	United States	Shareholders	United States	Investors, nec
14	8.9	Vin & Sprit AB	Sweden	Pernod Ricard SA	France	Distilled and blended liquors
15	8.8	Barr Pharmaceuticals Inc	United States	Teva Pharmaceutical Industries Ltd	Israel	Pharmaceutical preparations
16	8.7	Millennium Pharmaceuticals Inc	United States	Mahogany Acquisition Corp	United States	Investors, nec
17	8.6	Commerce Bancorp Inc.	United States	Toronto-Dominion Bank	Canada	Banks
18	8.0	NAVTEQ Corp	United States	Nokia Oyj	Finland	Radio & TV broadcasting & communications equipment
19	7.9	Origin Energy Ltd-Coal Seam Gas Assets	Australia	ConocoPhillips Co	United States	Crude petroleum and natural gas
20	7.8	Morgan Stanley	United States	Mitsubishi UFJ Financial Group Inc	Japan	Banks
21	7.8	China Netcom Group Corp (Hong Kong)Ltd	Hong Kong, China	China Unicom Ltd	Hong Kong, China	Telephone communications, except radiotelephone
22	7.0	E.ON Sverige AB	Sweden	E.ON Scandinavia AB	Sweden	Electric services
23	7.0	Angel Trains Ltd	United Kingdom	Investor Group	Australia	Investors, nec
24	6.6	Citibank Privatkunden AG & Co KGaA	Germany	Banque Federative du Credit Mutuel	France	Banks
25	6.6	MidCon Corp	United States	Investor Group	Australia	Investors, nec
26	6.5	Vivendi Universal Games Inc	United States	Activision Inc	United States	Prepackaged Software
27	6.1	British Energy Group PLC	United Kingdom	Lake Acquisitions Ltd	United Kingdom	Investors, nec
28	5.6	APP Pharmaceuticals Inc	United States	Fresenius SE	Germany	Electromedical and electrotherapeutic apparatus
29	5.6	Standard Bank Group Ltd	South Africa	Industrial & Commercial Bank of China	China	Banks
30	5.5	Business Objects SA	United States	Systeme Anwendungen Produkte AG	Germany	Prepackaged software
31	5.5	National Starch & Chemical Co.	United States	Henkel AG & Co KGaA	Germany	Perfumes, cosmetics, and other toilet preparations
32	5.5	Duvernay Oil Corp	Canada	Shell Canada Ltd	Canada	Crude petroleum and natural gas
33	5.3	Respironics Inc	United States	Koninklijke Philips Electronics NV	Netherlands	Household audio and video equipment
34	5.3	LEG Landesentwicklungs gesellschaft NRW GmbH	Germany	Whitehall Street Real Estate Fund	United States	Investment offices, nec
35	5.1	DRS Technologies Inc	United States	Finmeccanica SpA	Italy	Search, detection, and navigation equipment
36	5.0	Cognos Inc	Canada	International Business Machines Corp	United States	Computer programming services
37	4.9	Prvni Privatizacni Fond AS	Czech Republic	Assicurazioni Generali SpA	Italy	Life insurance
38	4.7	Philadelphia Consolidated Holdings Corp	United States	Tokio Marine Holdings Inc	Japan	Fire, marine, and casualty insurance
39	4.5	Energy East Corp	United States	Iberdrola SA	Spain	Electric services
40	4.5	Nikko Cordial Corp	Japan	Citigroup Japan Holdings Ltd	Japan	Investors, nec

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Annex table A.I.3. Cross-border M&A deals worth over $3 billion completed in 2008 (concluded)

Rank	Value (billion $)	Acquired company	Host economy[a]	Acquiring company	Home economy[a]	Industry of the acquiring company
41	4.4	Merrill Lynch & Co Inc	United States	Temasek Holdings(Pte)Ltd	Singapore	Management investment offices, open-end
42	4.4	Scania AB	Sweden	Volkswagen AG	Germany	Motor vehicles and passenger car bodies
43	4.3	Steen & Strom ASA	Norway	Investor Group	France	Investors, nec
44	4.2	Distrigaz SA	Belgium	ENI G&P Belgium SpA	Belgium	Natural gas transmission and distribution
45	4.1	House of Prince A/S	Denmark	British American Tobacco PLC	United Kingdom	Cigarettes
46	4.1	Lafarge SA	France	NNS Holding	Egypt	Investors, nec
47	4.1	OMX AB	Sweden	Nasdaq Stock Market Inc	United States	Security and commodity exchanges
48	4.1	Hagemeyer NV	Netherlands	Kelium Acquisition Holding	Netherlands	Investors, nec
49	4.1	ConvaTec Ltd	United States	Cidron Healthcare Ltd	Jersey	Investors, nec
50	4.0	IPSCO Inc-Canadian Tubular Operations	Canada	Evraz Group SA	Russian Federation	Steel foundries, nec
51	4.0	Hellenic Telecommunications Organization SA	Greece	Deutsche Telekom AG	Germany	Telephone communications, except radiotelephone
52	4.0	PrimeWest Energy Trust	Canada	Abu Dhabi National Energy Co PJSC{TAQA}	United Arab Emirates	Crude petroleum and natural gas
53	3.8	ChoicePoint Inc	United States	Reed Elsevier Group PLC	United Kingdom	Periodicals: publishing, or publishing & printing
54	3.7	UnionBanCal Corp.	United States	Bank of Tokyo-Mitsubishi UFJ Ltd	Japan	Banks
55	3.7	Evonik Industries AG	Germany	CVC Capital Partners Ltd	Luxembourg	Investors, nec
56	3.7	Burren Energy PLC	United Kingdom	Eni UK Holding PLC	United Kingdom	Investors, nec
57	3.7	Ventana Medical Systems Inc	United States	Roche Holding AG	Switzerland	Pharmaceutical preparations
58	3.6	Fortis Banque Luxembourg SA	Luxembourg	Grand Duchy of Luxembourg	Luxembourg	National government
59	3.6	MGI PHARMA Inc	United States	Jaguar Acquisition Corp	United States	Investors, nec
60	3.5	IronX Mineracao SA	Brazil	Anglo American PLC	United Kingdom	Gold ores
61	3.4	Ranbaxy Laboratories Ltd	India	Daiichi Sankyo Co Ltd	Japan	Pharmaceutical preparations
62	3.4	OMX AB	Sweden	Dubai International Financial Centre	United Arab Emirates	Management investment offices, open-end
63	3.4	Chesapeake Energy Corp.	United States	StatoilHydro ASA	Norway	Crude petroleum and natural gas
64	3.3	Queensland Gas Co Ltd	Australia	BG Group PLC	United Kingdom	Crude petroleum and natural gas
65	3.3	Maxit Holding GmbH	Germany	Cie de Saint-Gobain SA	France	Glass products, made of purchased glass
66	3.2	Enel Viesgo SA	Spain	E.ON AG	Germany	Electric services
67	3.2	Corporate Express NV	Netherlands	Staples Inc	United States	Stationery stores
68	3.2	Banque de Savoie	France	Banque Federale des Banques Populaires SA	France	Banks
69	3.2	Territorial Generation Co No 10{TGC-10}	Russian Federation	Fortum Oyj	Finland	Electric services
70	3.2	Xella International GmbH	Germany	Xella International GmbH SPV	France	Investors, nec
71	3.1	Nacionale Minerios SA	Brazil	Investor Group	Japan	Investors, nec
72	3.1	Tuas Power Ltd	Singapore	SinoSing Power Pte Ltd	Singapore	Electric services
73	3.0	SigmaKalon Group BV	Netherlands	PPG Industries Inc	United States	Paints, varnishes, lacquers, & allied products

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] Immediate country.

Note: As long as the ultimate host economy is different from the ultimate home economy, M&A deals that were undertaken within the same economy are still considered cross-border M&As.

Annex table A.I.4. Estimated world inward FDI stock, by sector and industry, 1990 and 2007
(Millions of dollars)

Sector/industry	1990			2007			
	Developed countries	Developing economies	World	Developed countries	Developing economies	South-East Europe and CIS	World
Total	1 579 483	362 632	1 942 116	11 583 162	3 816 510	297 204	15 696 876
Primary	151 505	30 349	181 854	863 657	240 791	67 988	1 172 436
Agriculture, hunting, forestry and fishing	3 466	4 571	8 036	11 830	17 997	2 182	32 010
Mining, quarrying and petroleum	148 039	23 750	171 789	851 826	222 794	65 806	1 140 426
Unspecified primary	-	2 028	2 028	-	-	-	-
Manufacturing	640 572	158 026	798 598	3 251 613	916 814	77 407	4 245 834
Food, beverages and tobacco	69 940	10 401	80 341	390 734	46 919	12 378	450 030
Textiles, clothing and leather	23 275	5 422	28 697	77 533	12 039	682	90 254
Wood and wood products	20 089	4 943	25 032	115 928	21 587	4 285	141 800
Publishing, printing and reproduction of recorded media	15 050	592	15 643	76 934	271	66	77 271
Coke, petroleum products and nuclear fuel	54 487	3 179	57 666	95 392	42 915	8 862	147 169
Chemicals and chemical products	124 255	47 696	171 950	723 348	111 736	6 846	841 929
Rubber and plastic products	12 943	1 915	14 859	62 328	12 285	1 464	76 076
Non-metallic mineral products	16 875	2 966	19 841	114 454	22 091	5 097	141 642
Metal and metal products	52 140	15 473	67 613	300 374	39 049	30 455	369 878
Machinery and equipment	53 138	10 311	63 449	212 038	32 223	1 050	245 312
Electrical and electronic equipment	71 085	18 231	89 316	276 186	121 960	1 377	399 523
Precision instruments	11 786	498	12 284	89 893	3 665	128	93 686
Motor vehicles and other transport equipment	46 976	8 226	55 202	317 231	51 088	1 721	370 039
Other manufacturing	19 195	3 079	22 274	97 782	11 193	604	109 579
Unspecified secondary	49 335	25 095	74 430	301 458	387 796	2 393	691 646
Services	778 457	169 243	947 701	7 300 508	2 586 293	133 682	10 020 483
Electricity, gas and water	7 090	3 044	10 134	271 469	71 007	2 379	344 855
Construction	16 670	5 501	22 171	90 160	40 761	4 887	135 807
Trade	202 342	25 855	228 197	1 376 703	262 080	21 432	1 660 215
Hotels and restaurants	21 120	4 730	25 850	75 046	29 158	2 477	106 680
Transport, storage and communications	16 284	13 293	29 577	660 982	246 265	13 219	920 466
Finance	288 748	95 288	384 035	2 457 410	544 898	39 586	3 041 894
Business activities	122 603	16 682	139 285	1 536 639	1 341 328[a]	47 701	2 925 668[a]
Public administration and defence	-	59	59	21 643	332	33	22 009
Education	94	-	94	7 817	874	105	8 797
Health and social services	992	-	992	25 838	4 946	368	31 152
Community, social and personal service activities	13 332	20	13 352	31 874	14 208	1 479	47 561
Other services	71 415	2 988	74 403	182 667	23 257	16	205 941
Unspecified tertiary	17 768	1 783	19 551	562 259	7 179	-	569 437
Private buying and selling of property	-	-	-	6 043	-	-	6 043
Unspecified	8 949	5 014	13 963	161 341	72 612	18 126	252 079

Source: UNCTAD.

[a] A considerable share of investment in business activities is in Hong Kong (China), which accounted for 88% of developing economies and 40% of the world total in 2007. Hong Kong (China) data include investment holding companies.

Note: The world total was extrapolated on the basis of data covering 54 countries in 1990 and 92 countries in 2007, or latest year available. They account for over four-fifths of world inward FDI stock in 1990 and 2007. Only countries for which data for the three main sectors were available were included. The distribution share of each industry of these countries was applied to estimate the world total in each sector and industry. As a result, the sum of the sectors for each group of economies is different from the totals shown in annex table B.2. In the case of some countries where only approval data were available, the actual data was estimated by applying the implementation ratio of realized FDI to approved FDI to the latter (56% in 1994 for Japan, 10% in 1990 and 7% in 1999 for Lao People's Democratic Republic, 84% in 2007 for Malaysia, 44% in 2002 for Mongolia, 39% in 1990 and 35% in 2007 for Myanmar, 41% in 1990 and 35% in 1999 for Nepal, 62% in 1995 for Sri Lanka, 73% in 1990 and 52% in 2007 for Taiwan Province of China). The world total in 1990 includes the countries of South-East Europe and the CIS, although data by sector and industry are not available for that region.

Annex table A.I.5. Estimated world outward FDI stock, by sector and industry, 1990 and 2007
(Millions of dollars)

Sector/industry	1990			2007			
	Developed countries	Developing economies	World	Developed countries	Developing economies	South-East Europe and CIS	World
Total	1 765 278	20 306	1 785 584	14 277 765	1 909 575	19 884	16 207 225
Primary	154 668	2 583	157 251	1 110 525	45 152	5 487	1 161 165
Agriculture, hunting, forestry and fishing	3 421	309	3 730	7 541	2 446	263	10 250
Mining, quarrying and petroleum	151 247	2 274	153 521	1 102 984	42 707	5 224	1 150 915
Manufacturing	769 479	7 217	776 696	4 051 964	163 876	1 603	4 217 443
Food, beverages and tobacco	73 150	294	73 444	458 064	3 457	329	461 851
Textiles, clothing and leather	18 916	1 032	19 948	82 201	3 941	2	86 144
Wood and wood products	22 446	944	23 390	100 103	2 396	73	102 572
Publishing, printing and reproduction of recorded media	2 192	56	2 248	101 742	88	-	101 831
Coke, petroleum products and nuclear fuel	38 046	35	38 081	40 231	65	79	40 375
Chemicals and chemical products	163 089	189	163 278	913 342	4 440	699	918 480
Rubber and plastic products	14 072	881	14 953	55 411	2 372	1	57 784
Non-metallic mineral products	12 694	297	12 991	54 549	2 472	144	57 165
Metal and metal products	72 615	34	72 649	393 202	2 229	187	395 618
Machinery and equipment	40 676	3	40 680	182 906	646	3	183 555
Electrical and electronic equipment	102 240	92	102 332	353 062	12 674	15	365 752
Precision instruments	13 090	-	13 090	78 377	-	-	78 377
Motor vehicles and other transport equipment	58 300	10	58 310	627 266	1 547	11	628 823
Other manufacturing	50 038	75	50 113	250 457	2 603	41	253 101
Unspecified secondary	87 917	3 275	91 192	361 049	124 947	18	486 014
Services	836 691	9 843	846 534	8 833 715	1 666 368	11 765	10 511 848
Electricity, gas and water	9 306	-	9 306	201 435	11 283	514	213 233
Construction	17 650	107	17 757	55 890	9 503	- 581	64 812
Trade	137 858	1 714	139 573	928 547	148 114	1 063	1 077 723
Hotels and restaurants	6 896	-	6 896	114 918	9 733	43	124 694
Transport, storage and communications	38 471	455	38 925	652 586	75 763	53	728 402
Finance	416 522	6 114	422 636	3 248 047	274 789	1 838	3 524 674
Business activities	81 748	1 268	83 016	2 776 980	1 115 725[a]	8 809	3 901 514[a]
Public administration and defence	-	-	-	7 982	4	23	8 009
Education	417	-	417	1 518	29	4	1 552
Health and social services	828	-	828	2 310	75	-	2 386
Community, social and personal service activities	3 315	-	3 315	65 033	4 275	-	69 308
Other services	108 965	175	109 140	233 149	10 327	-	243 476
Unspecified tertiary	14 714	10	14 724	545 319	6 748	-	552 067
Private buying and selling of property	862	-	862	2 447	-	-	2 447
Unspecified	3 578	663	4 241	279 115	34 179	1 029	314 323

Source: UNCTAD.

[a] A considerable share of investment in business activities is in Hong Kong (China), which accounted for 94% of developing economies and 28% of the world total in 2007. Hong Kong (China) data include investment holding companies.

Note: The world total was extrapolated on the basis of data covering 27 countries in 1990 and 51 countries in 2007, or latest year available. They account for 79 and 88 per cent of world outward FDI stock respectively in 1990 and in 2007. Only countries for which data for the three main sectors were available were included. The distribution share of each industry of these countries was applied to estimate the world total in each sector and industry. As a result, the sum of the sectors for each group of economies is different from the totals shown in annex table B.2. Approval data were used for India (2005 instead of 2007) and Taiwan Province of China. For 1990, the world total includes the countries of South-East Europe and the CIS although data by sector and industry are not available for that region. Moreover, as major home developing economies were not covered due to lack of data, the respective shares for developing economies were underestimated in that year.

Annex table A.I.6. Estimated world inward FDI flows, by sector and industry, 1989-1991 and 2005–2007
(Millions of dollars)

Sector/industry	1989–1991			2005–2007			
	Developed countries	Developing economies	World	Developed countries	Developing economies	South-East Europe and CIS	World
Total	151 998	34 551	186 549	1 060 084	367 294	43 886	1 471 264
Primary	8 998	3 860	12 858	124 046	33 639	13 205	170 891
Agriculture, hunting, forestry and fishing	- 6	628	623	39	2 980	309	3 328
Mining, quarrying and petroleum	8 967	3 232	12 198	124 008	30 659	12 896	167 563
Unspecified primary	37	-	37	-	-	-	-
Manufacturing	47 769	16 081	63 849	232 141	113 850	7 192	353 183
Food, beverages and tobacco	4 790	2 361	7 151	34 051	5 079	1 415	40 545
Textiles, clothing and leather	2 089	240	2 328	5 304	1 318	127	6 749
Wood and wood products	1 983	236	2 219	5 100	1 090	586	6 776
Publishing, printing and reproduction of recorded media	860	-	860	5 065	145	17	5 227
Coke, petroleum products and nuclear fuel	- 1 130	309	- 821	4 311	4 976	1 391	10 678
Chemicals and chemical products	9 952	2 047	11 998	66 045	7 543	981	74 569
Rubber and plastic products	922	30	953	5 407	557	291	6 256
Non-metallic mineral products	1 283	222	1 505	11 292	1 666	698	13 655
Metal and metal products	4 033	1 271	5 304	26 356	7 124	413	33 892
Machinery and equipment	4 794	2 936	7 730	27 698	7 593	295	35 586
Electrical and electronic equipment	3 292	844	4 136	22 763	5 143	119	28 024
Precision instruments	827	-	827	1 031	66	24	1 121
Motor vehicles and other transport equipment	3 530	328	3 859	5 914	2 263	330	8 507
Other manufacturing	2 219	838	3 057	11 693	932	31	12 656
Unspecified secondary	8 324	4 419	12 743	112	68 357	474	68 942
Services	83 477	10 634	94 111	636 238	208 180	22 931	867 349
Electricity, gas and water	818	1 183	2 001	33 664	7 392	229	41 285
Construction	476	567	1 043	9 809	6 428	879	17 116
Trade	16 289	2 310	18 599	81 872	25 091	3 804	110 767
Hotels and restaurants	3 562	1 072	4 634	3 474	3 603	198	7 275
Transport, storage and communications	1 633	1 196	2 829	69 329	24 836	2 228	96 392
Finance	30 915	2 179	33 094	237 671	70 923	5 879	314 473
Business activities	17 089	1 313	18 402	155 918	60 275[a]	9 346	225 539[a]
Public administration and defence	2 290	-	2 290	- 479	-	37	- 442
Education	7	4	11	507	92	- 7	592
Health and social services	67	23	89	6 193	241	47	6 481
Community, social and personal service activities	2 248	6	2 254	1 978	2 309	200	4 487
Other services	7 088	419	7 507	15 565	2 381	2	17 948
Unspecified tertiary	994	363	1 358	20 737	4 612	88	25 437
Private buying and selling of property	113	-	113	9 766	-	1	9 767
Unspecified	11 642	3 977	15 619	57 892	11 624	557	70 073

Source: UNCTAD.

[a] A considerable share of investment in business activities is in Hong Kong (China), which accounted for 44% of developing economies and 11% of the world total during 2005–2007. Hong Kong (China) data include investment holding companies.

Note: The world total was extrapolated on the basis of data covering 70 countries in 1989-1991 and 104 countries in 2005–2007, or the latest three-year period average available. They account for 88 and 95% of world inward FDI flows respectively in the periods 1989–1991 and 2005–2007. Only countries for which data for the three main sectors were available were included. The distribution share of each industry of these countries was applied to estimate the world total in each sector and industry. As a result, the sum of the sectors for each group of economies is different from the totals shown in annex table B.1. Approval data was used for Israel (1994 instead of 1989–1991), Mongolia (1991–1993 instead of 1989–1991) and Mozambique (2003–2005). In the case of some countries, the actual data was estimated by applying the implementation ratio of realized FDI to approved FDI to the latter : Bangladesh (2% in 1989–1991), Cambodia (9% in 1994–1995), China (47% in 1989–1991), Indonesia (15% in 1989–1991), the Islamic Republic of Iran (69% in 1993–1995 and 22% in 2001–2003), Japan (20% in 1989–1991), Jordan (74% in 2001–2003), Kenya (7% in 1992–1994), the Lao People's Democratic Republic (1% in 1989–1991), Malaysia (52% in 1989–1991), Mauritius (72% in 1995), Mexico (93% in 1988–1990), Mongolia (62% in 2005–2007), Myanmar (70% in 1989–1991), Nepal (30% in 1989–1991 and 53% in 1996–1998), Papua New Guinea (20% in 1993–1995 and 36% in 1996–1998), Solomon Islands (1% in 1994–1995 and 3% in 1996), Sri Lanka (47% in 1995 and 91% in 2005–2007), Taiwan Province of China (65% in 1989–1991 and 50% in 2005–2007), Turkey (40% in 1989–1991) and Zimbabwe (23% in 1993–1995). The world total in 1989–1991 includes the countries of South-East Europe and the CIS, although data by sector and industry are not available for that region.

Annex table A.I.7. Estimated world outward FDI flows, by sector and industry, 1989–1991 and 2005–2007

(Millions of dollars)

Sector/industry	1989-1991			2005-2007			
	Developed countries	Developing economies	World	Developed countries	Developing economies	South-East Europe and CIS	World
Total	217 637	6 142	223 779	1 332 782	140 901	270	1 473 953
Primary	9 869	291	10 160	133 672	12 392	879	146 943
Agriculture, hunting, forestry and fishing	467	45	512	599	495	49	1 143
Mining, quarrying and petroleum	9 269	246	9 515	133 073	11 898	830	145 800
Unspecified primary	133	-	133	-	-	-	-
Manufacturing	80 050	3 494	83 543	335 135	24 414	98	359 647
Food, beverages and tobacco	12 233	253	12 486	45 723	2 617	- 12	48 327
Textiles, clothing and leather	1 947	178	2 125	11 211	664	- 1	11 874
Wood and wood products	4 538	74	4 612	5 897	29	- 4	5 922
Publishing, printing and reproduction of recorded media	137	-	137	6 116	1	1	6 117
Coke, petroleum products and nuclear fuel	2 943	-	2 943	5 866	905	- 6	6 766
Chemicals and chemical products	13 076	1 136	14 212	79 367	1 314	90	80 770
Rubber and plastic products	1 072	128	1 200	5 077	61	- 0.2	5 138
Non-metallic mineral products	637	165	802	2 808	87	18	2 912
Metal and metal products	6 430	244	6 674	47 330	2 205	- 1	49 534
Machinery and equipment	7 437	25	7 462	19 760	153	1	19 914
Electrical and electronic equipment	10 606	868	11 474	25 787	1 142	12	26 942
Precision instruments	578	-	578	9 482	-	-	9 482
Motor vehicles and other transport equipment	4 061	-	4 061	29 033	170	1	29 204
Other manufacturing	7 571	9	7 580	27 344	227	- 1	27 570
Unspecified secondary	6 783	414	7 197	14 333	14 841	-	29 174
Services	110 661	2 021	112 682	755 164	98 438	- 618	852 985
Electricity, gas and water	1 023	-	1 023	13 992	1 137	-	15 129
Construction	2 246	97	2 343	5 664	1 856	76	7 596
Trade	14 219	315	14 535	82 989	17 378	- 275	100 092
Hotels and restaurants	405	3	408	4 237	450	- 12	4 675
Transport, storage and communications	6 770	57	6 827	53 919	2 894	248	57 061
Finance	43 715	1 179	44 894	318 720	26 317	- 416	344 621
Business activities	29 352	17	29 368	240 771	42 561 [a]	- 237	283 094 [a]
Public administration and defence	-	0.1	0.1	810	-	-	810
Education	18	-	18	154	5	- 2	157
Health and social services	- 110	-	- 110	595	3	-	598
Community, social and personal service activities	501	-	501	2 773	182	- 0.1	2 955
Other services	8 552	344	8 896	14 577	918	-	15 495
Unspecified tertiary	3 970	8	3 979	15 964	4 737	-	20 700
Private buying and selling of property	497	-	497	3 370	-	-	3 370
Unspecified	16 561	336	16 897	105 441	5 657	- 89	111 008

Source: UNCTAD.

[a] A considerable share of investment in business activities is in Hong Kong (China), which accounted for 87% of developing economies and 12% of the world total during 2005–2007. Hong Kong (China) data include investment holding companies.

Note: The world total was extrapolated on the basis of data covering 27 countries in 1989–1991 and 50 countries in 2005–2007, or the latest three-year period average available. They account for over 90% of world outward FDI flows in the periods 1989–1991 and 2005–2007. Only countries for which data for the three main sectors were available were included. The distribution share of each industry of these countries was applied to estimate the world total in each sector and industry. As a result, the sum of the sectors for each group of economies is different from the totals shown in annex table B.1. Approval data was used for Taiwan Province of China. In the case of Japan, the actual data was estimated by applying the implementation ratio of realized FDI to approved FDI to the latter : 75% in 1989–1991. The world total in 1989-1991 includes the countries of South-East Europe and the CIS, although data by sector and industry are not available for that region.

Annex table A.I.8. Number of parent corporations and foreign affiliates, by region and economy, latest available year
(Number)

Region/economy	Year	Parent corporations based in economy[a]	Foreign affiliates located in economy[a]
Developed economies		**58 783**[b]	**366 881**[b]
Europe		**47 765**[b]	**347 771**[b]
European Union		**43 492**[b]	**335 577**[b]
Austria	2005	1 048	2 721[c]
Belgium	2003	991[d]	2 341[d]
Bulgaria	2000	26	7 153
Cyprus	2005	1 650	4 800
Czech Republic	1999	660[e]	71 385[f]
Denmark	1998	9 356	2 305[g,h]
Estonia	2007	1 168	2 858
Finland	2007	2 807	4 124[c, g]
France	2002	1 267	10 713
Germany	2007	6 115	11 750
Greece	2006	245	777
Hungary	2005	..	26 019[i]
Ireland	2001	39[j]	1 225[k]
Italy	2005	5 750[l]	7 181[l]
Luxembourg	2005	38[m]	717[m]
Latvia	2008	26	5 683
Lithuania	2007	285	3 240
Malta	2008	95	291
Netherlands	2008	4 788[n]	17 521
Poland	2001	58[j]	14 469[o]
Portugal	2005	1 300	3 000[p]
Romania	2002	20[j]	89 911
Slovakia	2008	534	3 398
Slovenia	2000	..	1 617[q]
Spain	2008	1 598[r]	14 767
Sweden	2007	1 268[s]	11 944[c]
United Kingdom	2005	2 360	13 667
Other developed Europe		**4 273**[b]	**12 194**[b]
Gibraltar	2008	293	182
Iceland	2000	18	55
Norway	2004	1 346	5 105[t]
Switzerland	2008	2 616[u]	6 852
North America		**3 857**[b]	**9 389**[b]
Canada	1999	1 439	3 725[c]
United States	2002	2 418	5 664
Other developed countries		**7 161**[b]	**9 721**[b]
Australia	2006	1 380	1 991
Bermuda	2008	604	698
Israel	2008	297	489
Japan	2006	4 663[v]	4 500[w]
New Zealand	2008	217[e]	2 043
Developing economies		**21 425**[b]	**425 258**[b]
Africa		**746**[b]	**6 084**[b]
North Africa		**155**[b]	**3 478**[b]
Algeria	2007	..	65
Egypt	2004	10	271
Morocco	2008	3	237
Sudan	2008	..[x]	10
Tunisia	2007	142[h]	2 895
Other Africa		**591**[b]	**2 606**[b]
West Africa		**21**[b]	**629**[b]
Benin	2007	..	11
Burkina Faso	2007	..	23
Côte d'Ivoire	2008	5	91
Gambia	2007	..	8
Ghana	2008	4	52
Guinea	2004	..	31
Guinea-Bissau	2007	..	4
Liberia	2008	1	16
Mali	2008	1	10
Mauritania	2008	1[x]	9
Niger	2006	..[x]	181
Nigeria	2008	2	132
Senegal	2008	4[x]	38
Sierra Leone	2006	..[x]	11
Togo	2008	3[x]	12
Central Africa		**8**[b]	**204**[b]
Burundi	2007	..	3
Cameroon	2008	1	52
Central African Republic	2008	1	2
Chad	2007	..	8
Congo	2008	3	53
Congo, Democratic Republic of	2007	1[x]	26
Equatorial Guinea	2007	..	11
Gabon	2007	..	36
Rwanda	2004	2	13
East and Southern Africa		**562**[b]	**1 773**[b]
East Africa		**262**[b]	**583**[b]
Comoros	2004	..	1
Djibouti	2007	1[x]	6
Ethiopia	2007	..[x]	19
Kenya	2008	21	115
Madagascar	2007	..	43
Mauritius	2008	30	62
Seychelles	2008	4	5
Somalia	2006	..	1
Uganda	2008	2	36
United Republic of Tanzania	2001	204	295
Southern Africa		**300**[b]	**1 190**[b]
Angola	2008	1	64
Botswana	2008	8	40
Lesotho	2008	1	5
Malawi	2006	..	32
Mozambique	2006	..[x]	89
Namibia	2008	3	53
South Africa	2008	261	769
Swaziland	2002	12	61
Zambia	2004	11	13
Zimbabwe	2008	3	64
Latin America and the Caribbean		**3 533**[b]	**39 737**[b]
South and Central America		**851**[b]	**36 647**[b]
South America		**545**[b]	**9 277**[b]
Argentina	2008	106	1 826
Bolivia	2004	..	287
Brazil	2008	226	4 172
Chile	2008	99[y]	874
Colombia	2008	71[u]	645
Ecuador	2008	14	301
Guyana	2002	4[h]	56
Paraguay	2008	1	64
Peru	2004	10[e,z]	329
Suriname	2008	1	14
Uruguay	2002	..	164[aa]
Venezuela, Bolivarian Republic of	2004	13	545
Central America		**306**[b]	**27 370**[b]

/...

Annex table A.I.8. Number of parent corporations and foreign affiliates, by region and economy, latest available year (concluded)

(Number)

Region/economy	Year	Parent corporations based in economy[a]	Foreign affiliates located in economy[a]
Belize	2008	21	21
Costa Rica	2008	32	266
El Salvador	2003	..	304
Guatemala	2008	26	224
Honduras	2004	4	253
Mexico	2002	..	25 708
Nicaragua	2008	2	77
Panama	2008	221	517
The Caribbean and other America		**2 682**[b]	**3 090**[b]
Antigua and Barbuda	2008	3	14
Aruba	2008	8	36
Bahamas	2008	184	205
Barbados	2008	33	198
British Virgin Islands	2008	1 754	1 169
Cayman Islands	2008	442	778
Dominica	2008	3	14
Dominican Republic	2008	7	211
Grenada	2008	2	17
Haiti	2008	2	12
Jamaica	2008	12	103
Netherlands Antilles	2008	212	220
Saint Kitts and Nevis	2008	14	13
Saint Lucia	2008	1	29
Saint Vincent and the Grenadines	2008	5	10
Trinidad and Tobago	2004	..	61
Asia and Oceania		**17 146**[b]	**379 437**[b]
Asia		**17 124**[b]	**378 996**[b]
West Asia		**3 245**[b]	**22 509**[b]
Bahrain	2008	26	64
Iran, Islamic Republic of	2008	44	238[ab]
Jordan	2008	11	33
Kuwait	2008	45	31
Lebanon	2008	26	58
Oman	2004	92[ac]	49
Qatar	2008	9	45
Saudi Arabia	2008	35	97
Syrian Arab Republic	2008	3	15
Turkey	2008	2 871	21 079
United Arab Emirates	2008	77	796
Yemen	2002	6[x]	4
South, East and South-East Asia		**13 879**[b]	**356 487**[b]
East Asia		**12 708**[b]	**318 355**[b]
China	2007	3 429[ad]	286 232[ae]
Hong Kong, China	2007	1 167[af]	9 712
Korea, Republic of	2008	7 460[ag]	16 953
Macao, China	2004	46	1 024
Mongolia	1998	..	1 400
Taiwan Province of China	2005	606[ah]	3 034
South Asia		**849**[b]	**4 178**[b]
Afghanistan	2007	..	6
Bangladesh	2008	10	53
Bhutan	1997	..	2
India	2008	815[ai]	2 242
Maldives	2008	3	11
Nepal	2006	..[x]	18
Pakistan	2007	21[aj]	153[aj]
Sri Lanka	2004	..	1 693
South-East Asia		**322**[b]	**33 954**[b]
Brunei Darussalam	2008	5	52
Cambodia	2002	..	23[ak]
Indonesia	2004	313[al]	721
Lao People's Democratic Republic	2004	..	161[am]
Malaysia	1999	..	15 567[an]
Myanmar	2006	..	25
Philippines	2004	..	311
Singapore	2002	..	14 052[ao]
Thailand	1998	..	2 721
Viet Nam	2008	4	321
Oceania		**22**[b]	**441**[b]
Fiji	2006	8	151[e]
Kiribati	2005	5	23
New Caledonia	2006	..	3
Papua New Guinea	2004	..	208
Samoa	2008	3[x]	12
Solomon Islands	2006	..[x]	20
Tonga	2006	..	5
Vanuatu	2008	6	19[ap]
South-East Europe and CIS		**1 845**[b]	**15 224**[b]
South-East Europe		**612**[b]	**3 990**[b]
Albania	2007	..	20
Bosnia and Herzegovina	2008	30	242
Croatia	2007	485	3 256
Serbia	2008	97	466
The FYR of Macedonia	2002	..	6
CIS		**1 233**[b]	**11 234**[b]
Armenia	2004	..	347
Azerbaijan	2008	3	67
Belarus	2008	5	71
Georgia	1998	..	190[aq]
Kazakhstan	2008	270	2 282
Kyrgyzstan	1998	..	4 004[ar]
Moldova, Republic of	2002	951	2 670
Russian Federation	2004	..	1 176
Ukraine	2004	1	367
Uzbekistan	2008	3	60
World		**82 053**	**807 363**

Source: UNCTAD, based on national sources.

[a] The number of parent companies/foreign affiliates in the economy shown, as defined by that economy. Deviations from the definition adopted in the *World Investment Report* (see section on "Definitions and sources" in annex B) are noted below. The data for Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Aruba, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bermuda, Bosnia and Herzegovina, Botswana, Brazil, British Virgin Islands, Brunei Darussalam, Burkina Faso, Burundi, Cameroon, Cayman Islands, Central African Republic, Chad, Chile, Colombia, Congo, Costa Rica, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Dominica, Dominican Republic, Ecuador, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Gibraltar, Grenada, Guatemala, Guinea-Bissau, Haiti, India, Islamic Republic of Iran, Israel (foreign affiliates), Jamaica, Jordan, Kenya, Kuwait, Lebanon, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Malta, Mauritania, Mauritius, Morocco, Mozambique, Myanmar, Namibia, Nepal, the Netherlands, the Netherlands Antilles, New Caledonia, New Zealand, Nicaragua, Niger, Nigeria, Panama, Paraguay, Qatar, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, Saudi Arabia, Serbia and Montenegro, Senegal, Seychelles, Sierra Leone, Slovakia, Solomon Islands, Somalia, South Africa, Spain, Sudan, Suriname, Switzerland, Syrian Arab Republic, Togo, Tonga, Uganda, the United Arab Emirates, Uzbekistan, Vanuatu, Viet Nam, Western Samoa and Zimbabwe are from *Who Owns Whom* database (https://solutions.dnb.com/wow). For Argentina, Bermuda, Israel and South Africa, the data for parent corporations based in the economy refer to only those that have affiliates abroad and affiliates in the home economy. Therefore, the data for the number of parent corporations are underestimated in those four countries.

[b] Data cover only the countries listed.
[c] *Source:* Institutet för tillväxtpolitiska studier, ITPS.
[d] Provisional figures by Banque Nationale de Belgique (2003).
[e] As of 1997.
[f] Of this number, 53,775 are wholly foreign-owned affiliates; includes joint ventures.
[g] Directly and indirectly foreign-owned affiliates (subsidiaries and associates), excluding branches.
[h] As of 1999.
[i] *Source*: Hungary Statistics Office.
[j] As of 1994.
[k] Refers to the number of foreign-owned affiliates in Ireland in manufacturing and services activities that receive assistance from the Investment and Development Authority (IDA).
[l] Based on Istituto nazionale per il Commercio Estero "*Italia Multinazionale 2005, Le partecipazioni italiane all'estero ed estere in Italia*", 2005.
[m] Excludes special purpose entities (i.e. holding companies).
[n] Data first referred to October 1993, from 2006 extracted from the *Who Owns Whom* database.
[o] Cumulative number of companies with foreign capital share which participated in the statistical survey.
[p] As of 2002.
[q] *Source:* Bank of Slovenia.
[r] Data refers to 1998; includes those Spanish parent companies which are controlled, at the same time, by a direct investor. From 2008 extracted from the *Who Owns Whom* database.
[s] As of 2006. *Source:* Institutet för tillväxtpolitiska studier, ITPS.
[t] Data refers to Norwegian non-financial joint-stock companies with foreign shareholders owning more than 10% of the total shares in 1998.
[u] As of 1995. From 2006 extracted from the Who Owns Whom database.
[v] *Source:* Bank of Japan.
[w] As of 2005. *Source:* Bank of Japan.
[x] As of 2001, from 2008 extracted from the *Who Owns Whom* database.
[y] Estimated by Comité de Inversiones Extranjeras 1998, from 2008 extracted from the Who Owns Whom database.
[z] Less than 10.
[aa] Number of enterprises included in the Central Bank survey (all sectors).
[ab] *Source*: Ministry of Economic Affairs and Finance.
[ac] As of May 1995.
[ad] *Source*: Ministry of Commerce (MOFCOM) 2005.
[ae] *Source*: Ministry of Commerce (MOFCOM) 2007.
[af] Number of regional headquarters as at 1 June 2002.
[ag] As of 1999. Data refer to the number of investment projects abroad.
[ah] Number of approved new investment projects abroad in 1998.
[ai] Data refers to the number of approved FDI projects as of 2003; from 2008 extracted from the *Who Owns Whom* database.
[aj] State Bank of Pakistan.
[ak] Data refers to the number of approved foreign investment projects, including joint-venture projects with local investors. Wholly owned Cambodian projects are excluded.
[al] As of 1996.
[am] Number of projects licensed since 1988 up to end 2004.
[an] May 1999. Refers to companies with foreign equity stakes of at least 51%. Of these, 3,787 are whollly-owned foreign affiliates.
[ao] Number of wholly-owned foreign affiliates.
[ap] Data refers to the number of projects implemented as of 2002.
[aq] Number of cases of approved investments of more than $100,000 registered during the period January 1996 up to March 1998.
[ar] Joint-venture companies established in the economy.

Note: The data can differ significantly from previous years, as data become available for countries that were not previously covered, as definitions change, or as older data are updated.

Annex table A.I.9. The world's top 100 non-financial TNCs, ranked by foreign assets, 2007[a]

(Millions of dollars and number of employees)

Ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
1	76	General Electric	United States	Electrical & electronic equipment	420 300	795 337	86 519	172 738	168 112	327 000	51.4
2	6	Vodafone Group Plc	United Kingdom	Telecommunications	230 600	254 948	60 317	71 070	62 008	72 375	87.0
3	35	Royal Dutch/Shell Group	Netherlands/United Kingdom	Petroleum expl./ref./distr.	196 828	269 470	207 317	355 782	86 000	104 000	71.3
4	23	British Petroleum Company Plc	United Kingdom	Petroleum expl./ref./distr.	185 323	236 076	223 216	284 365	80 600	97 600	79.9
5	41	ExxonMobil	United States	Petroleum expl./ref./distr.	174 726	242 082	269 184	390 328	50 904	80 800	68.0
6	75	Toyota Motor Corporation	Japan	Motor vehicles	153 406	284 722	145 815	230 607	121 775	316 121	51.9
7	26	Total	France	Petroleum expl./ref./distr.	143 814	167 144	177 835	233 699	59 146	96 442	74.5
8	94	Electricité De France	France	Electricity, gas and water	128 971	274 031	40 343	87 792	16 971 [d]	154 033	34.7
9	78	Ford Motor Company	United States	Motor vehicles	127 854	276 459	91 581	172 455	134 734	246 000	51.4
10	69	E.ON AG	Germany	Electricity, gas and water	123 443	202 111	41 391	101 179	53 344	90 758	53.6
11	3	ArcelorMittal	Luxembourg	Metals and metal products	119 491	133 625	105 216	105 216	244 872	311 000	89.4
12	38	Telefónica SA	Spain	Telecommunications	107 603	155 856	52 084	83 087	192 127	245 427	70.0
13	59	Volkswagen Group	Germany	Motor vehicles	104 382	213 981	120 761	160 308	153 388	328 594	56.9
14	90	ConocoPhillips	United States	Petroleum expl./ref./distr.	103 457	177 757	56 004	187 437	14 591 [d]	32 600	44.3
15	33	Siemens AG	Germany	Electrical & electronic equipment	103 055	134 778	75 961	106 651	272 000	398 000	72.0
16	63	DaimlerChrysler AG	Germany/United States	Motor vehicles	100 458	198 872	113 083	146 326	105 703	272 382	55.5
17	56	Chevron Corporation	United States	Petroleum expl./ref./distr.	97 533	148 786	120 085	214 091	34 000	65 000	58.0
18	74	France Telecom	France	Telecommunications	97 011	148 952	36 954	77 961	81 159	187 331	52.0
19	85	Deutsche Telekom AG	Germany	Telecommunications	96 005	177 630	46 845	92 030	92 488	241 426	47.8
20	39	Suez	France	Electricity, gas and water	90 735	116 483	52 322	69 888	82 070	149 131	69.3
21	61	BMW AG	Germany	Motor vehicles	84 362	131 013	64 920	82 464	27 376	107 539	56.2
22	13	Hutchison Whampoa Limited	Hong Kong, China	Diversified	83 411	102 445	33 260	39 579	190 428 [d]	230 000	82.7
23	16	Honda Motor Co Ltd	Japan	Motor vehicles	83 232	110 663	87 276	105 288	158 962	178 960	82.3
24	68	Eni Group	Italy	Petroleum expl./ref./distr.	78 368	149 360	73 473	128 450	39 319	75 862	53.8
25	29	Eads	Netherlands	Aircraft and parts	75 126	111 079	52 514	57 593	72 471	116 493	73.7
26	50	Procter & Gamble	United States	Diversified	70 241	143 992	50 498	83 503	101 220	138 000	60.9
27	89	Deutsche Post AG	Germany	Transport and storage	68 321	346 630	56 652	93 496	279 523	475 100	46.4
28	7	Nestlé SA [e]	Switzerland	Food, beverages and tobacco	65 676	101 874	94 079	95 559	267 264 [d]	276 000	86.6
29	97	Wal-Mart Stores	United States	Retail	62 961	163 514	90 640	374 526	635 000	2055 000	31.2
30	47	Nissan Motor Co Ltd	Japan	Motor vehicles	61 673	104 732	72 469	94 949	92 122	180 535	62.1
31	84	General Motors	United States	Motor vehicles	61 507	148 883	80 577	181 122	158 975	266 000	48.5
32	22	Roche Group [e]	Switzerland	Pharmaceuticals	58 808	69 465	40 554	40 989	44 094	78 604	79.9
33	55	IBM	United States	Electrical & electronic equipment	57 699	120 431	62 275	98 786	251 262	386 558	58.7
34	92	RWE Group	Germany	Electricity, gas and water	56 127	123 113	26 008	62 575	25 156	63 439	42.3
35	87	Endesa	Spain	Electricity, gas and water	55 082	120 244	15 993	36 917	14 229	27 019	47.3
36	93	Mitsubishi Motors Corporation	Japan	Motor vehicles	54 606	103 109	43 443	202 658	20 683 [d]	60 664	36.2
37	71	Pfizer Inc	United States	Pharmaceuticals	54 360	115 268	25 265	48 418	52 859 [d]	86 600	53.5
38	45	Fiat Spa	Italy	Motor vehicles	54 313	88 526	62 818	86 161	109 476	185 227	64.5
39	53	Sanofi-aventis [e]	France	Pharmaceuticals	53 817	105 865	23 359	41 295	70 903	99 495	59.6
40	81	Rio Tinto Plc [f]	Australia/United Kingdom	Mining & quarrying	50 588	101 391	15 623	33 518	24 653	45 997	50.0

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Annex table A.I.9. The world's top 100 non-financial TNCs, ranked by foreign assets, 2007[a] (continued)
(Millions of dollars and number of employees)

Ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
41	43	Mitsui & Co Ltd	Japan	Wholesale trade	50 371	85 008	22 858	50 341	40 425	42 621	66.5
42	1	Xstrata PLC	United Kingdom	Mining & quarrying	49 962	52 249	25 883	28 542	36 175	37 698	94.1
43	49	Sony Corporation	Japan	Electrical & electronic equipment	45 424	110 112	58 824	77 819	119 500	180 500	61.0
44	57	BASF AG	Germany	Chemicals	44 633	68 897	49 520	85 310	48 285	95 175	57.9
45	17	Cemex S.A.	Mexico	Non-metalic mineral products	44 269	49 908	18 007	21 780	50 041	66 612	82.2
46	48	Veolia Environnement SA	France	Electricity, gas and water	43 683	68 169	27 045	48 032	202 884	319 502	61.3
47	34	Compagnie De Saint-Gobain SA	France	Non-metallic mineral products	43 580	60 559	44 884	63 920	151 085	205 730	71.9
48	9	Nokia	Finland	Telecommunications	43 091	55 350	74 689	75 163	75 836	100 534	84.2
49	72	Renault SA	France	Motor vehicles	40 186	100 395	40 596	59 888	67 092	130 179	53.1
50	40	BHP Billiton Group	Australia	Mining & quarrying	39 895	75 889	53 632	59 473	26 306	41 732	68.6
51	54	Hewlett-Packard	United States	Electrical & electronic equipment	39 549	88 699	69 472	104 286	112 367	172 000	58.8
52	77	Johnson & Johnson	United States	Pharmaceuticals	39 400	80 954	28 651	61 095	69 994	119 200	51.4
53	73	Repsol YPF SA	Spain	Petroleum expl./ref./distr.	38 743	69 430	39 162	76 694	18 074	36 701	52.0
54	19	Volvo AB	Sweden	Motor vehicles	38 171	50 151	42 319	44 500	73 040	101 700	81.0
55	60	National Grid Transco	United Kingdom	Electricity, gas and water	36 726	75 765	13 293	22 883	17 150	27 373	56.4
56	11	Anglo American [e]	United Kingdom	Mining & quarrying	36 572	44 762	20 475	25 470	89 000	100 000	83.7
57	14	Lafarge SA	France	Non-metallic mineral products	35 937	41 672	21 990	25 930	53 167	69 319	82.6
58	12	Astrazeneca Plc	United Kingdom	Pharmaceuticals	35 363	47 957	27 578	29 559	56 100	67 900	83.2
59	15	Philips Electronics	Netherlands	Electrical & electronic equipment	35 025	53 501	37 736	39 442	106 715	123 801	82.4
60	18	Inbev SA [e]	Netherlands	Food, beverages and tobacco	34 922	42 248	16 156	21 242	77 209	88 690	81.9
61	82	Japan Tobacco Inc	Japan	Food, beverages and tobacco	34 443	44 625	23 208	56 226	14 251	47 459	49.5
62	95	Statoil Asa	Norway	Petroleum expl./ref./distr.	34 266	89 319	25 024	96 426	11 000	29 500	33.9
63	2	Linde AG	Germany	Chemicals	33 373	36 736	16 268	18 116	44 477	50 645	89.5
64	27	BAE Systems Plc	United Kingdom	Aircrafts and parts	32 310	40 585	22 296	28 664	57 459 [d]	88 000	74.2
65	79	Vivendi Universal	France	Diversified	31 723	66 361	12 151	31 881	25 354	37 223	51.3
66	20	Liberty Global Inc	United States	Telecommunications	30 787	32 619	8 027	9 003	12 951	22 000	80.8
67	5	WPP Group Plc	United Kingdom	Other business services	30 694	34 559	10 609	12 392	76 305	84 848	88.1
68	31	Lvmh Moët-Hennessy Louis Vuitton SA	France	Other consumer goods	30 651	51 069	21 769	25 386	54 771	74 834	73.0
69	64	LG Corp.	Republic of Korea	Electrical & electronic equipment	30 505	57 772	50 353	81 496	40 688	79 000	55.4
70	44	Pinault-Printemps Redoute SA	France	Wholesale trade	30 398	41 531	17 111	29 090	56 977	92 454	64.5
71	83	Kraft Foods Inc.	United States	Food, beverages and tobacco	29 697	67 993	15 698	37 241	62 000	103 000	48.7
72	58	Metro AG	Germany	Retail	29 627	49 863	55 950	94 711	138 973	253 769	57.8
73	30	Unilever [e]	Netherlands/United Kingdom	Diversified	29 581	54 912	53 613	59 159	131 000	175 000	73.1
74	32	Coca-Cola Company	United States	Food, beverages and tobacco	29 259	43 269	18 300	28 857	77 300	90 500	72.2
75	86	Samsung Electronics Co., Ltd.	Republic of Korea	Electrical & electronic equipment	29 173	99 749	82 650	105 232	29 097	84 721	47.4
76	42	Holcim AG [e]	Switzerland	Non-metallic mineral products	28 681	42 835	14 872	24 036	66 459	89 364	67.7
77	70	Carrefour SA	France	Retail	28 507	76 449	65 549	120 930	339 135	490 042	53.6
78	25	SAB Miller [e]	United Kingdom	Food, beverages and tobacco	28 142	35 813	16 168	21 410	56 195	69 116	78.5
79	62	Glaxosmithkline Plc [e]	United Kingdom	Pharmaceuticals	28 113	62 105	31 004	45 505	56 614	103 483	56.0
80	80	Marubeni Corporation	Japan	Wholesale trade	28 073	45 677	11 385	36 546	2 289	3 729	51.3

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Annex table A.I.9. The world's top 100 non-financial TNCs, ranked by foreign assets, 2007[a] (concluded)
(Millions of dollars and number of employees)

Ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign[d]	Total	TNI [b] (Per cent)
81	37	TeliaSonera AB	Sweden	Telecommunications	28 027	33 788	9 402	15 022	18 374	28 376	70.1
82	51	Alcoa	United States	Metals and metal products	28 012	38 803	13 800	30 748	69 000	107 000	60.5
83	21	CRH Plc	Ireland	Non-metalic mineral products	27 519	29 130	28 839	30 902	47 771	92 033	79.9
84	99	Petronas - Petroliam Nasional Bhd	Malaysia	Petroleum expl./ref./distr.	27 431	102 616	27 219	67 473	3 965	36 027	26.0
85	28	Diageo Plc	United Kingdom	Food, beverages and tobacco	27 399	32 105	18 255	21 320	12 432	24 373	74.0
86	65	United Technologies Corporation	United States	Aircrafts and parts	26 437	54 575	28 122	54 759	148 896	225 600	55.3
87	98	Hyundai Motor Company	Republic of Korea	Motor vehicles	25 939	89 571	33 692	74 353	5 178[d]	55 629	27.9
88	100	CITIC Group	China	Diversified	25 514	180 945	3 287	14 970	18 305	107 340	17.7
89	96	Hitachi Ltd	Japan	Electrical & electronic equipment	24 824	92 376	33 814	98 480	120 982	347 810	32.0
90	4	Pernod Ricard SA	France	Food, beverages and tobacco	24 609	27 132	8 917	9 711	14 800	17 625	88.8
91	66	Thyssenkrupp AG	Germany	Metal and metal products	24 607	56 049	48 841	76 142	106 351	191 350	54.5
92	91	Bayer AG [e]	Germany	Pharmaceuticals	24 573	75 634	24 746	47 674	50 000	106 200	43.8
93	52	Novartis [e]	Switzerland	Pharmaceuticals	23 464	75 452	37 643	38 072	49 260	98 200	60.0
94	24	AES Corporation	United States	Electricity, gas and water	23 356	34 453	10 947	13 588	25 106[d]	28 000	79.3
95	46	British American Tobacco Plc [e]	United Kingdom	Food, beverages and tobacco	23 144	37 516	31 803	52 552	34 994	53 907	62.4
96	67	Dow Chemical Company [g]	United States	Chemicals	23 071	48 801	35 242	53 513	23 100	45 900	54.5
97	8	AkzoNobel	Netherlands	Pharmaceuticals	22 770	28 328	13 027	15 040	37 700	42 600	85.2
98	88	Itochu Corporation	Japan	Wholesale trade	22 099	46 100	10 926	25 098	23 324	48 657	46.5
99	36	Telenor Asa	Norway	Telecommunications	22 068	29 729	11 191	17 093	25 600	35 800	70.4
100	10	Thomson Reuters Corporation	Canada	Other business services	22 043	22 831	7 126	7 296	18 911	33 000	83.8

Source: UNCTAD/Erasmus University database.

[a] All data are based on the companies' annual reports unless otherwise stated.

[b] TNI, the Transnationlity Index, is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

[c] Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).

[d] In the number of cases foreign employment data are calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2007.

[e] Data for foreign activities are outside Europe.

[f] Data for foreign activities are outside Australia, New Zealand and Europe.

[g] Data for foreign activities are outside of North America.

Note: The list covers non-financial TNCs only. In some companies, foreign investors may hold a minority share of more than 10%.

Annex table A.I.10. The world's top 100 non-financial TNCs, ranked by foreign assets, 2008[a]

(Millions of dollars and number of employees)

2007 ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
1	76	General Electric	United States	Electrical & electronic equipment	400 400	797 769	97 500	182 515	171 000	323 000	52.2
2	6	Vodafone Group Plc	United Kingdom	Telecommunications	204 920	222 593	51 975	59 792	68 747	79 097	88.6
3	35	Royal Dutch/Shell Group	Netherlands/United Kingdom	Petroleum expl./ref./distr.	222 324	282 401	261 393	458 361	85 000	102 000	73.0
4	23	British Petroleum Company Plc	United Kingdom	Petroleum expl./ref./distr.	187 544	228 238	283 876	365 700	76 100	92 000	80.8
5	41	ExxonMobil	United States	Petroleum expl./ref./distr.	161 245	228 052	321 964	459 579	50 337	79 900	67.9
6	75	Toyota Motor Corporation	Japan	Motor vehicles	183 303	320 243	143 886	226 221	123 580	320 808	53.1
7	26	Total	France	Petroleum expl./ref./distr.	141 442	164 662	189 784	250 489	59 858	96 959	74.5
8	94	Electricité De France	France	Electricity, gas and water	128 644	278 759	41 775	89 463	17 180	155 931	34.6
9	78	Ford Motor Company	United States	Motor vehicles	102 588	222 977	75 853	129 166	134 000	213 000	55.9
10	69	E.ON AG	Germany	Electricity, gas and water	141 168	218 573	50 437	120 742	57 292	96 573	55.2
11	3	ArcelorMittal	Luxembourg	Metals and metal products	127 127	133 088	124 936	124 936	248 704	315 867	91.4
12	38	Telefónica SA	Spain	Telecommunications	95 446	139 034	51 487	80 649	197 096	251 775	70.3
13	59	Volkswagen Group	Germany	Motor vehicles	123 677	233 708	119 869	158 397	179 323	357 207	59.6
14	90	ConocoPhillips	United States	Petroleum expl./ref./distr.	77 864	142 865	74 346	240 842	15 128	33 800	43.4
15	33	Siemens AG	Germany	Electrical & electronic equipment	110 018	131 473	90 095	107 623	295 000	427 000	78.8
16	63	Daimler AG	Germany/United States	Motor vehicles	87 927	184 021	103 070	133 435	105 463	273 216	54.5
17	56	Chevron Corporation	United States	Petroleum expl./ref./distr.	106 129	161 165	153 854	273 005	35 000	67 000	58.1
18	74	France Telecom	France	Telecommunications	81 378	132 630	34 689	74 444	79 193	182 793	50.4
19	85	Deutsche Telekom AG	Germany	Telecommunications	95 019	171 385	45 624	85 826	96 034	227 747	50.3
20	39	GDF Suez	France	Electricity, gas and water	119 374	232 718	65 631	94 536	129 134	234 653	58.6
21	61	BMW AG	Germany	Motor vehicles	63 201	140 690	59 093	74 039	25 467	100 041	50.1
22	13	Hutchison Whampoa Limited	Hong Kong, China	Diversified	70 764	87 747	38 201	44 947	182 148	220 000	82.8
23	16	Honda Motor Co Ltd	Japan	Motor vehicles	96 313	130 236	89 689	110 317	165 589	186 421	81.4
24	68	Eni Group	Italy	Petroleum expl./ref./distr.	95 818	162 269	90 799	150 519	39 400	78 880	56.4
25	29	Eads	Netherlands	Aircrafts and parts	66 934	105 964	55 070	60 216	73 625	118 349	72.3
26	50	Procter & Gamble	United States	Diversified	..	..	..	..	..	..	..
27	89	Deutsche Post AG	Germany	Transport and storage	72 135	365 990	55 597	80 315	283 699	451 515	50.6
28	7	Nestlé SA [e]	Switzerland	Food, beverages and tobacco	66 316	99 854	66 230	103 326	274 043	283 000	75.8
29	97	Wal-Mart Stores	United States	Retail	62 514	163 429	98 465	401 244	648 905	2100 000	31.2
30	47	Nissan Motor Co Ltd	Japan	Motor vehicles	61 703	112 832	67 319	92 969	81 249	159 227	59.4
31	84	General Motors	United States	Motor vehicles	40 532	91 047	73 597	148 979	145 229	243 000	51.2
32	22	Roche Group [e]	Switzerland	Pharmaceuticals	59 572	71 532	42 886	43 370	44 922	80 080	79.4
33	55	IBM	United States	Electrical & electronic equipment	52 020	109 524	66 944	103 630	283 455	398 455	61.1
34	92	RWE Group	Germany	Electricity, gas and water	53 557	130 035	25 408	68 128	26 688	65 908	39.7
35	87	Endesa	Spain	Electricity, gas and water	19 112	60 199	13 009	31 783	14 170	26 908	41.8
36	93	Mitsubishi Motors Corporation	Japan	Motor vehicles	63 952	120 309	46 762	246 712	11 384	33 390	35.4
37	71	Pfizer Inc	United States	Pharmaceuticals	49 151	111 148	27 861	48 296	49 929	81 800	54.3
38	45	Fiat Spa	Italy	Motor vehicles	36 413	85 974	62 720	82 644	115 977	198 348	58.9
39	53	Sanofi-aventis [e]	France	Pharmaceuticals	50 328	100 191	21 534	38 369	69 990	98 213	59.2
40	81	Rio Tinto Plc [f]	Australia/United Kingdom	Mining & quarrying	47 064	89 616	42 061	58 065	88 356	105 785	69.5

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Annex table A.I.10. The world's top 100 non-financial TNCs, ranked by foreign assets, 2008[a] (continued)

(Millions of dollars and number of employees)

2007 ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
41	43	Mitsui & Co Ltd	Japan	Wholesale trade	..	..	..	..	..	..	..
42	1	Xstrata PLC	United Kingdom	Mining & quarrying	52 227	55 314	25 215	27 952	37 883	39 940	93.2
43	49	Sony Corporation	Japan	Electrical & electronic equipment	61 742	132 380	64 537	85 179	113 409	171 300	62.9
44	57	BASF AG	Germany	Chemicals	43 020	70 786	48 444	86 714	49 560	96 924	55.9
45	17	Cemex S.A.	Mexico	Non-metallic mineral products	41 211	46 064	15 529	18 694	42 820	57 000	82.6
46	48	Veolia Environnement SA	France	Electricity, gas and water	43 990	68 373	30 178	50 391	189 207	297 965	62.6
47	34	Compagnie De Saint-Gobain SA	France	Non-metallic mineral products	43 597	60 397	42 761	60 960	153 614	209 175	71.9
48	9	Nokia	Finland	Telecommunications	50 006	55 090	70 074	70 578	94 916	125 829	88.5
49	72	Renault SA	France	Motor vehicles	35 560	88 839	35 654	52 597	67 507	130 985	53.1
50	40	BHP Billiton Group	Australia	Mining & quarrying	..	..	..	..	..	..	..
51	54	Hewlett-Packard	United States	Electrical & electronic equipment	48 258	113 331	81 432	118 364	209 708	321 000	58.9
52	77	Johnson & Johnson	United States	Pharmaceuticals	40 324	84 912	31 438	63 747	69 700	118 700	51.8
53	73	Repsol YPF SA	Spain	Petroleum expl./ref./distr.	32 720	68 795	41 828	80 362	18 403	37 371	49.6
54	19	Volvo AB	Sweden	Motor vehicles	37 105	47 681	37 105	38 879	73 190	101 380	81.8
55	60	National Grid Transco	United Kingdom	Electricity, gas and water	37 813	64 821	15 000	22 776	17 429	27 886	62.2
56	11	Anglo American [e]	United Kingdom	Mining & quarrying	44 413	49 738	21 766	26 311	95 000	105 000	87.5
57	14	Lafarge SA	France	Non-metallic mineral products	50 003	56 518	22 703	26 490	57 665	75 184	83.6
58	12	Astrazeneca Plc	United Kingdom	Pharmaceuticals	37 514	46 784	30 607	31 601	55 100	66 100	86.8
59	15	Philips Electronics	Netherlands	Electrical & electronic equipment	33 172	45 986	35 314	36 722	104 300	121 000	84.8
60	18	Inbev SA [e]	Netherlands	Food, beverages and tobacco	106 247	113 170	17 933	22 411	104 356	119 874	87.0
61	82	Japan Tobacco Inc	Japan	Food, beverages and tobacco	20 163	42 753	34 824	75 287	14 406	47 977	41.1
62	95	Statoil Asa	Norway	Petroleum expl./ref./distr.	37 971	82 632	22 824	93 717	11 495	29 496	36.4
63	2	Linde AG	Germany	Chemicals	29 847	33 158	15 766	17 624	44 277	51 908	88.3
64	27	BAE Systems Plc	United Kingdom	Aircrafts and parts	33 285	37 427	20 063	24 302	61 376	94 000	78.9
65	79	Vivendi Universal	France	Diversified	35 879	78 867	13 118	35 340	30 135	44 243	50.2
66	20	Liberty Global Inc	United States	Telecommunications	33 903	33 986	10 561	10 561	13 128	22 300	86.2
67	5	WPP Group Plc	United Kingdom	Other business services	31 567	35 661	9 508	10 899	88 467	97 438	88.9
68	31	Lvmh Moët-Hennessy Louis Vuitton SA	France	Other consumer goods	26 377	43 949	20 500	23 929	51 201	69 957	73.0
69	64	LG Corp.	Republic of Korea	Electrical & electronic equipment	13 235	51 435	38 793	71 634	32 962	64 000	43.8
70	44	Pinault-Printemps Redoute SA	France	Wholesale trade	29 362	37 617	17 177	28 116	54 247	88 025	66.9
71	83	Kraft Foods Inc.	United States	Food & beverages	25 638	63 078	20 765	42 201	59 000	98 000	50.0
72	58	Metro AG	Germany	Retail	24 983	47 077	57 446	94 580	161 925	265 974	58.2
73	30	Unilever [e]	Netherlands/United Kingdom	Diversified	33 470	50 302	38 511	56 399	130 251	174 000	69.9
74	32	Coca-Cola Company	United States	Food, beverages and tobacco	16 249	40 519	21 338	31 944	79 400	92 400	64.3
75	86	Samsung Electronics Co., Ltd.	Republic of Korea	Electrical & electronic equipment	28 716	83 605	84 027	96 304	29 009	84 465	52.0
76	42	Holcim AG [e]	Switzerland	Non-metallic mineral products	27 312	42 487	14 586	23 650	63 156	86 713	66.3
77	70	Carrefour SA	France	Retail	28 056	72 487	68 196	121 040	342 764	495 287	54.8
78	25	SAB Miller [e]	United Kingdom	Food, beverages and tobacco	25 139	31 619	12 585	18 703	56 195	69 116	76.0
79	62	Glaxosmithkline Plc [e]	United Kingdom	Pharmaceuticals	26 593	57 424	23 455	35 499	54 326	99 003	55.8
80	80	Marubeni Corporation	Japan	Wholesale trade	..	..	..	..	..	..	..

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Annex table A.I.10. The world's top 100 non-financial TNCs, ranked by foreign assets, 2008[a] (concluded)

(Millions of dollars and number of employees)

2007 ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
81	37	TeliaSonera AB	Sweden	Telecommunications	29 195	33 837	8 667	13 262	19 883	30 035	72.6
82	51	Alcoa	United States	Metals and metal products	26 973	37 822	12 566	26 901	57 000	87 000	61.2
83	21	CRH Plc	Ireland	Non-metallic mineral products	27 787	29 396	27 517	29 070	46 248	93 572	79.5
84	99	Petronas - Petroliam Nasional Bhd	Malaysia	Petroleum expl./ref./distr.	..	..	..	..	..	..	..
85	28	Diageo Plc	United Kingdom	Food, beverages and tobacco	..	..	..	..	..	..	..
86	65	United Technologies Corporation	United States	Aircrafts and parts	28 021	56 469	30 716	58 681	147 246	223 100	56.0
87	98	Hyundai Motor Company	Republic of Korea	Motor vehicles	28 314	81 942	29 570	63 308	19 357	56 020	38.6
88	100	CITIC Group	China	Diversified	..	..	..	..	..	..	..
89	96	Hitachi Ltd	Japan	Electrical & electronic equipment	..	..	..	..	..	..	..
90	4	Pernod Ricard SA	France	Food, beverages and tobacco	..	..	..	..	..	..	..
91	66	Thyssenkrupp AG	Germany	Metal and metal products	30 578	57 957	47 690	74 358	114 277	199 374	58.1
92	91	Bayer AG [e]	Germany	Pharmaceuticals	26 317	71 507	23 762	45 073	53 100	108 600	46.1
93	52	Novartis [e]	Switzerland	Pharmaceuticals	43 505	78 299	40 928	41 459	48 328	96 717	68.1
94	24	AES Corporation	United States	Electricity, gas and water	23 538	34 806	13 325	16 070	22 417	25 000	80.1
95	46	British American Tobacco Plc [e]	United Kingdom	Food, beverages and tobacco	19 754	40 162	10 244	17 671	75 490	96 381	61.8
96	67	Dow Chemical Company [g]	United States	Chemicals	21 197	45 474	39 055	57 514	23 150	46 000	54.9
97	8	AkzoNobel	Netherlands	Pharmaceuticals	23 102	26 074	19 474	21 454	55 000	60 000	90.3
98	88	Itochu Corporation	Japan	Wholesale trade	..	..	..	..	..	..	..
99	36	Telenor Asa	Norway	Telecommunications	19 524	26 739	9 036	13 885	28 400	38 800	70.4
100	10	Thomson Reuters Corporation	Canada	Other business services	15 324	36 020	4 317	11 707	25 300	53 700	42.2

Source: UNCTAD.

[a] Preliminary 2008 results for the top 100 TNCs of 2007, as ranked in that year. A top 100 list for 2008 will appear in *WIR10*. All data are based on the companies' annual reports unless otherwise stated.

[b] TNI is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

[c] Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).

[d] In the number of cases foreign employment data are calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2008.

[e] Data for foreign activities are outside Europe.

[f] Data for foreign activities are outside Australia, New Zealand and Europe.

[g] Data for foreign activities are outside of North America.

Note: The list covers non-financial TNCs only. In some companies, foreign investors may hold a minority share of more than 10%.

Annex table A.I.11. The top 100 non-financial TNCs from developing countries, ranked by foreign assets, 2007 [a]

(Millions of dollars and number of employees)

Ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
1	19	Hutchison Whampoa Limited	Hong Kong, China	Diversified	83 411	102 445	33 260	39 579	190 428	230 000	82.7
2	21	Cemex S.A.	Mexico	Non-metalic mineral products	44 269	49 908	18 007	21 780	50 041	66 612	82.2
3	45	LG Corp.	Republic of Korea	Electrical & electronic equipment	30 505	57 772	50 353	81 496	40 688	79 000	55.4
4	60	Samsung Electronics Co., Ltd.	Republic of Korea	Electrical & electronic equipment	29 173	99 749	82 650	105 232	29 097	84 721	47.4
5	88	Petronas - Petroliam Nasional Bhd	Malaysia	Petroleum expl./ref./distr.	27 431	102 616	27 219	67 473	3 965	36 027	26.0
6	87	Hyundai Motor Company	Republic of Korea	Motor vehicles	25 939	89 571	33 692	74 353	5 178	55 629	27.9
7	92	CITIC Group	China	Diversified	25 514	180 945	3 287	14 970	18 305	107 340	17.7
8	29	Singtel Ltd.	Singapore	Telecommunications	21 159	24 087	7 102	10 300	8 832	19 500	67.4
9	27	Tata Steel Ltd.	India	Metals and metal products	20 720	31 715	28 254	33 372	23 434	35 870	71.8
10	70	China Ocean Shipping (Group) Company	China	Transport and storage	20 181	29 194	10 109	21 701	4 135	69 285	40.6
11	69	Formosa Plastic Group	Taiwan Province of China	Chemicals	19 026	86 034	15 898	61 681	70 928	94 815	40.9
12	73	Companhia Vale do Rio Doce	Brazil	Mining & quarrying	18 846	76 717	27 836	33 115	4 568	60 405	38.7
13	90	Oil And Natural Gas Corporation	India	Petroleum expl./ref./distr.	13 331	31 805	4 477	29 526	3 917	32 996	23.0
14	98	Petroleo Brasileiro S.A. - Petrobras	Brazil	Petroleum expl./ref./distr.	11 674	129 715	9 124	87 735	6 783	68 931	9.7
15	84	China State Construction Engineering Corporation	China	Construction and real estate	11 147	24 109	4 954	23 824	30 300	118 000	30.9
16	26	Qatar Telecom	Qatar	Telecommunications	10 909	12 985	1 628	2 850	1 539	1 832	75.0
17	52	América Móvil	Mexico	Telecommunications	10 678	32 129	14 105	28 674	34 731	49 091	51.1
18	54	Zain	Kuwait	Telecommunications	10 257	15 758	4 828	6 143	1 151	15 000	50.5
19	93	Petróleos De Venezuela	Bolivarian Rep. of Venezuela	Petroleum expl./ref./distr.	10 082	107 672	31 917	96 242	5 140	61 909	16.9
20	39	Capitaland Limited	Singapore	Construction and real estate	9 977	17 930	2 011	2 632	17 732	35 850	60.5
21	38	Hon Hai Precision Industries	Taiwan Province of China	Electrical & electronic equipment	9 899	26 733	32 555	52 482	464 148	550 000	61.2
22	82	Sasol Limited	South Africa	Chemicals	8 776	20 574	6 546	19 081	6 029	33 928	31.6
23	66	Kia Motors	Republic of Korea	Motor vehicles	8 654	20 789	12 283	21 699	10 368	32 977	43.2
24	34	Flextronics International Ltd. [e]	Singapore	Electrical & electronic equipment	8 527	19 524	12 041	27 558	158 227	162 000	61.7
25	72	New World Development Co., Ltd.	Hong Kong, China	Diversified	8 414	21 189	1 728	3 764	17 890	57 000	39.0
26	63	Taiwan Semiconductor Manufacturing Co Ltd.	Taiwan Province of China	Electrical & electronic equipment	8 114	17 596	5 951	9 945	8 485	25 258	46.5
27	67	Quanta Computer Inc	Taiwan Province of China	Electrical & electronic equipment	7 941	10 043	3 043	23 963	22 428	67 291	41.7
28	47	Metalurgica Gerdau S.A.	Brazil	Metals and metal products	7 372	12 974	5 169	8 933	17 913	36 925	54.4
29	78	CLP Holdings	Hong Kong, China	Electricity, gas and water	6 989	17 468	2 676	6 510	1 481	5 695	35.7
30	100	China National Petroleum Corporation	China	Petroleum expl./ref./distr.	6 814	191 185	3 246	122 341	22 000	1167 129	2.7
31	59	YTL Corp. Berhad	Malaysia	Electricity, gas and water	6 462	10 256	877	1 819	1 931	6 232	47.4
32	28	Orient Overseas International Ltd [e]	Hong Kong, China	Transport and storage	6 301	7 214	1 728	5 651	6 130	7 200	67.7
33	22	China Resources Enterprises	Hong Kong, China	Petroleum expl./ref./distr.	6 137	7 779	4 761	6 603	125 550	135 000	81.3
34	4	China Merchants Holdings International	Hong Kong, China	Diversified	6 015	6 254	823	880	5 249	5 448	95.3
35	33	Wilmar International Limited	Singapore	Food, beverages and tobacco	5 765	10 414	8 770	11 425	12 906	23 313	62.5
36	53	Hynix Semiconductor Inc	Republic of Korea	Electrical & electronic equipment	5 765	18 928	8 634	9 234	5 160	18 226	50.8
37	41	Shangri-La Asia Limited	Hong Kong, China	Other consumer services	5 716	6 101	988	1 219	1 219	24 000	59.9
38	57	Genting Berhad	Malaysia	Other consumer services	5 490	9 127	741	2 566	16 522	27 117	50.0

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Annex table A.I.11. The top 100 non-financial TNCs from developing countries, ranked by foreign assets, 2007 [a] (continued)

(Millions of dollars and number of employees)

Ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
39	42	Star Cruises [f]	Hong Kong ,China	Transport and storage	5 157	6 429	2 123	2 576	3 200	20 500	59.4
40	80	Gold Fields Limited	South Africa	Metals and metal products	5 092	9 239	1 284	3 379	2 672	51 192	32.8
41	3	First Pacific Company Limited	Hong Kong ,China	Electrical & electronic equipment	4 963	5 228	3 075	3 075	51 694	51 722	98.3
42	75	Sinochem Corp.	China	Petroleum expl./ref./distr.	4 812	14 886	24 274	31 412	225	26 632	36.8
43	25	Acer Inc.	Taiwan Province of China	Electrical & electronic equipment	4 764	7 499	12 608	14 982	5 293	6 271	77.4
44	81	Naspers Limited	South Africa	Other consumer services	4 730	8 340	683	3 013	2 245	13 812	31.9
45	43	Fraser & Neave Limited	Singapore	Food, beverages and tobacco	4 699	8 927	2 086	3 288	8 949	17 000	56.2
46	64	Sime Darby Berhad	Malaysia	Diversified	4 695	10 879	6 493	10 296	25 432	100 000	43.9
47	46	Steinhoff International holdings	South Africa	Other consumer goods	4 049	5 527	3 629	6 615	16 092	43 364	55.1
48	61	Lenovo Group	China	Electrical & electronic equipment	4 030	7 180	10 226	16 352	5 340	23 111	47.3
49	20	Beijing Enterprises Holdings Ltd.	Hong Kong ,China	Diversified	4 027	5 727	1 448	1 448	26 275	34 400	82.2
50	30	Sappi Limited	South Africa	Wood and paper products	4 001	6 344	3 898	5 304	9 802	15 081	67.2
51	12	Li & Fung Limited	[f]Hong Kong ,China	Wholesale trade	3 994	4 075	11 571	11 852	9 765	13 293	89.7
52	86	FEMSA-Fomento Economico Mexicano	Mexico	Food, beverages and tobacco	3 922	15 258	3 812	13 579	35 647	105 020	29.2
53	51	Enka Insaat ve Sanayi	Turkey	Construction and real estate	3 867	6 405	2 440	5 283	21 707	46 018	51.2
54	77	United Microelectronics Corporation	Taiwan Province of China	Electrical & electronic equipment	3 848	9 233	1 981	3 493	1 451	14 680	36.1
55	17	TPV Technology Limited	Hong Kong ,China	Wholesale trade	3 788	3 788	8 455	8 455	14 507	27 320	84.4
56	89	Telefonos De Mexico S.A. De C.V.	Mexico	Telecommunications	3 786	15 868	3 214	12 034	12 381	56 624	24.1
57	91	Telekom Malaysia Berhad	Malaysia	Telecommunications	3 741	13 320	1 553	5 396	3 216	36 242	21.9
58	5	Guangdong Investment Limited	Hong Kong ,China	Diversified	3 631	3 909	831	857	3 498	3 736	94.5
59	50	Noble Group Limited [e]	Hong Kong ,China	Wholesale trade	3 543	6 703	15 319	23 497	1 881	4 500	53.3
60	65	MTN Group Limited	South Africa	Telecommunications	3 536	16 973	6 112	10 741	7 920	14 878	43.7
61	37	Pou Chen Corp.	Taiwan Province of China	Other consumer goods	3 493	6 126	4 252	6 063	192 542	337 670	61.4
62	74	Keppel Corporation Limited	Singapore	Diversified	3 466	10 961	2 052	7 238	16 443	31 914	37.2
63	11	Yue Yuen Industrial Holdings Limited [e]	Hong Kong ,China	Other consumer goods	3 434	4 121	3 558	4 114	299 751	300 000	89.9
64	9	Galaxy Entertainment Group Limited	Hong Kong ,China	Other consumer services	3 341	4 071	1 583	1 671	8 056	8 400	90.9
65	76	Swire Pacific Limited	Hong Kong ,China	Other business services	3 157	24 281	1 612	2 763	27 000	70 000	36.6
66	58	National Industries Group Holdings SAK	Kuwait	Diversified	2 945	8 044	297	429	1 366	3 732	47.5
67	18	Jardine Matheson Holdings Ltd	Hong Kong ,China	Diversified	2 847	2 847	2 492	2 492	58 136	110 000	84.3
68	2	Road King Infrastructure Limited	Hong Kong ,China	Transport and storage	2 721	2 747	309	309	1 467	1 467	99.7
69	97	PTT Public Company Limited	Thailand	Petroleum expl./ref./distr.	2 646	26 465	4 436	44 362	1 062	10 630	10.0
70	32	Inventec Company	Taiwan Province of China	Electrical & electronic equipment	2 631	3 293	1 105	8 085	25 016	26 447	62.7
71	48	Neptune Orient Lines Ltd. [e]	Singapore	Transport and storage	2 611	5 009	6 327	8 160	3 531	11 251	53.7

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Annex table A.I.11. The top 100 non-financial TNCs from developing countries, ranked by foreign assets, 2007 [a] (concluded)
(Millions of dollars and number of employees)

Ranking by:					Assets		Sales		Employment		
Foreign assets	TNI [b]	Corporation	Home economy	Industry [c]	Foreign	Total	Foreign	Total	Foreign [d]	Total	TNI [b] (Per cent)
72	94	Chi MEI Optoelectronics	Taiwan Province of China	Electrical & electronic equipment	2 604	15 487	113	9 323	5 765	34 287	11.6
73	55	Tanjong Public Limited Company	Malaysia	Pharmaceuticals	2 519	3 668	265	827	897	1 784	50.4
74	49	City Developments Limited [e]	Singapore	Other consumer services	2 504	8 478	992	2 155	17 294	20 519	53.3
75	79	Compal Electronics Inc	Taiwan Province of China	Other equipments goods	2 421	6 577	637	15 358	22 594	38 656	33.1
76	16	Esprit Holdings Limited	Hong Kong ,China	Other consumer goods	2 410	2 806	4 250	4 772	8 760	10 541	86.0
77	85	San Miguel Corporation	Philippines	Food, beverages and tobacco	2 245	6 959	2 384	5 845	2 369	15 252	29.5
78	1	Lee & Man Paper Manufacturing Limited	Hong Kong ,China	Wood and paper products	2 180	2 181	1 153	1 153	7 982	8 000	99.9
79	13	HKC Holdings Limited	Hong Kong ,China	Construction and real estate	2 174	2 237	63	90	473	487	88.0
80	96	China Communications Construction Co.	China	Construction and real estate	2 134	22 917	4 518	20 617	1 197	87 022	10.9
81	40	Qisda Corp. (Benq)	Taiwan Province of China	Electrical & electronic equipment	2 125	3 643	3 785	5 161	10 139	20 791	60.1
82	8	Shougang Concord International	Hong Kong ,China	Metals and metal products	2 036	2 123	1 267	1 462	3 694	4 062	91.2
83	68	Barloworld Ltd	South Africa	Diversified	2 030	4 501	2 726	6 349	7 726	21 960	41.1
84	23	Techtronic Industries Company Limited	Hong Kong ,China	Other equipments goods	2 018	2 620	3 176	3 176	14 806	23 685	79.8
85	44	Shun Tak Holdings Limited	Hong Kong ,China	Transport and storage	1 979	3 373	208	425	1 466	2 500	55.4
86	56	Advanced Semiconductor Engineering Inc	Taiwan Province of China	Electrical & electronic equipment	1 977	4 697	2 458	3 118	8 716	30 000	50.0
87	10	Asia Food & Properties	Singapore	Food, beverages and tobacco	1 887	2 000	606	611	34 767	45 000	90.3
88	62	Sinotruk (Hongkong) Limited	China	Motor vehicles	1 870	3 098	536	2 730	8 443	13 983	46.8
89	99	China National Offshore Oil Corp.	China	Petroleum expl./ref./distr.	1 861	21 256	1 944	12 177	1 500	44 000	9.4
90	15	Unimicron Technology	Taiwan Province of China	Electrical & electronic equipment	1 824	1 838	971	1 457	18 813	19 726	87.1
91	7	Pacific Andes International Holdings Limited [e]	Hong Kong ,China	Food, beverages and tobacco	1 801	1 828	1 114	1 284	9 661	10 000	94.0
92	36	Olam International Limited [f]	Singapore	Electrical & electronic equipment	1 793	4 981	3 336	5 629	8 000	9 000	61.4
93	6	Datatec Limited	South Africa	Electrical & electronic equipment	1 753	1 884	3 754	4 008	2 974	3 084	94.4
94	35	Gruma S.A. De C.V.	Mexico	Food, beverages and tobacco	1 748	3 121	2 224	3 296	11 540	18 767	61.7
95	71	ZTE Corp.	China	Other equipments goods	1 740	5 610	2 750	4 761	14 971	48 261	39.9
96	83	Bidvest Group Limited	South Africa	Other business services	1 726	4 650	5 622	13 753	16 351	104 184	31.2
97	95	China Minmetals Corp.	China	Metals and metal products	1 722	10 233	3 459	21 364	798	44 425	11.6
98	24	Cheng Shin Rubber Industries Company	Taiwan Province of China	Chemicals	1 718	2 122	1 556	1 976	15 957	20 693	78.9
99	14	Skyworth Digital Holdings Limited	Hong Kong ,China	Electrical & electronic equipment	1 675	1 675	1 787	1 787	13 939	22 000	87.8
100	31	Stats Chippac Limited	Singapore	Diversitfied	1 667	2 597	1 284	1 652	7 956	14 873	65.1

Source: UNCTAD/Erasmus University database.

[a] All data are based on the companies' annual reports unless otherwise stated.

[b] TNI, the Transnationlity Index, is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

[c] Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).

[d] In the number of cases foreign employment data are calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2007.

[e] Data for foreign activities are outside Asia.

[f] Data for foreign activities are outside Asia, Middle East and Australia.

Note: The list covers non-financial TNCs only. In some companies, foreign investors may hold a minority share of more than 10%.

Annex Table A.I.12. The top 50 financial TNCs ranked by Geographical Spread Index (GSI), 2008 [a]

(Millions of dollars and number of employees)

Rank 2008	GSI[b]	Rank 2007	GSI	Financial TNCs	Home economy	Assets	Employees	Affiliates			
						Total	Total	Total	Number of foreign affiliates	I.I.[c]	Number of host countries
1	72.9	1	67.0	Citigroup Inc	United States	1 938 470	322 800	1020	723	70.9	75
2	62.2	3	64.2	Allianz SE	Germany	1 367 062	182 865	823	612	74.4	52
3	59.8	10	54.0	ABN AMRO holding NV	Netherlands	953 959	69 747	945	703	74.4	48
4	59.5	4	60.2	Generali Spa	Italy	549 269	84 063	396	342	86.4	41
5	59.3	7	57.6	HSBC Holdings PLC	United Kingdom	2 527 465	331 458	1048	683	65.2	54
6	59.0	11	52.7	Société Générale	France	1 616 599	160 430	526	345	65.6	53
7	57.6	6	59.0	Zurich Financial Services	Switzerland	327 944	57 609	393	383	97.5	34
8	57.0	5	59.1	UBS AG	Switzerland	1 926 209	77 783	465	432	92.9	35
9	56.7	9	56.3	Unicredito Italiano Spa	Italy	1 495 868	174 519	1111	1052	94.7	34
10	56.1	8	56.5	Axa	France	963 539	109 304	575	464	80.7	39
11	55.4	2	65.5	BNP Paribas	France	2 969 315	173 188	664	425	64.0	48
12	52.4	14	45.8	Deutsche Bank AG	Germany	3 150 820	80 456	934	713	76.3	36
13	51.2	17	42.2	American International Group Inc	United States	860 418	116 000	612	356	58.2	45
14	51.1	12	50.5	Credit Suisse Group AG	Switzerland	1 118 881	47 800	299	252	84.3	31
15	50.0	15	45.6	Swiss Reinsurance Company	Switzerland	229 328	11 560	180	173	96.1	26
16	46.7	27	37.0	Dexia	Belgium	931 339	28 099	275	231	84.0	26
17	46.6	18	41.8	Crédit Agricole SA	France	2 365 122	88 933	420	234	55.7	39
18	44.3	21	39.9	Natixis	France	795 079	22 096	313	162	51.8	38
19	43.5	13	49.6	ING Groep NV	Netherlands	1 905 097	124 661	1114	555	49.8	38
20	43.5	16	42.8	Banco Santander SA	Spain	1 501 619	170 961	424	267	63.0	30
21	41.0	22	38.9	KBC Group NV	Belgium	508 322	59 510	346	265	76.6	22
22	41.0	23	38.8	The Bank Of Nova Scotia	Canada	416 427	69 049	85	62	72.9	23
23	39.9	31	34.5	Barclays PLC	United Kingdom	3 001 433	151 500	604	235	38.9	41
24	39.6	19	41.7	Fortis NV	Belgium	132 861	10 374	352	240	68.2	23
25	39.1	28	36.8	The Royal Bank Of Canada	Canada	593 814	73 323	188	160	85.1	18
26	39.1	20	40.9	Merrill Lynch & Company Inc	United States	667 543	58 500	184	108	58.7	26
27	38.9	41	30.6	Intesa Sanpaolo	Italy	910 062	108 310	218	127	58.3	26
28	38.8	25	38.0	Standard Chartered PLC	United Kingdom	435 068	73 802	122	68	55.7	27
29	38.2	24	38.3	JPMorgan Chase & Company	United States	2 175 052	224 961	444	240	54.1	27
30	37.7	29	35.8	Skandinaviska Enskilda Banken AB	Sweden	326 489	21 291	156	111	71.2	20
31	37.7	30	34.7	Muenchener Rueckversicherung AG	Germany	308 179	44 209	426	159	37.3	38
32	36.7	32	34.3	Morgan Stanley	United States	658 812	46 964	232	136	58.6	23
33	36.1	34	33.4	The Goldman Sachs Group Incorporated	United States	884 547	30 067	228	156	68.4	19
34	34.7	37	31.7	BBV Argentaria SA	Spain	776 323	111 936	236	135	57.2	21
35	34.6	36	32.4	Aviva PLC	United Kingdom	518 365	54 758	420	228	54.3	22
36	33.5	40	31.2	Berkshire Hathaway Inc	United States	267 399	246 000	570	200	35.1	32
37	33.4	38	31.4	Nordea Bank AB	Sweden	678 217	34 008	168	156	92.9	12
38	33.2	44	29.0	Mitsubishi UFJ Financial Group	Japan	2 200 818	78 302	117	68	58.1	19
39	33.2	33	34.0	Bank Of New York Mellon Corp.	United States	237 512	42 900	245	135	55.1	20
40	32.7	35	33.4	Nomura Holdings Inc	Japan	275 059	18 026	108	64	59.3	18
41	32.6	49	22.9	Royal Bank Of Scotland Group PLC	United Kingdom	3 511 187	199 000	1169	388	33.2	32
42	31.6	39	31.4	Manulife Financial Corp.	Canada	308 782	24 000	77	64	83.1	12
43	31.3	63	17.3	Hypo Real Estate Holding	Germany	600 363	1 786	81	53	65.4	15
44	31.1	58	19.5	DNB Nor ASA	Norway	263 592	14 057	33	32	97.0	10
45	27.3	47	24.8	Prudential PLC	United Kingdom	315 120	29 683	225	76	33.8	22
46	26.6	45	27.0	Aegon NV	Netherlands	410 957	31 425	353	178	50.4	14
47	26.5	48	24.7	Mizuho Financial Group Inc	Japan	1 691 286	49 114	86	43	50.0	14
48	26.2	42	29.4	Danske Bank A/S	Denmark	680 095	23 624	73	50	68.5	10
49	25.8	55	19.9	Bank Of Ireland PLC	Ireland	277 705	16 026	197	101	51.3	13
50	25.6	53	21.5	Svenska Handelsbanken AB	Sweden	280 726	10 833	64	28	43.8	15

Source: UNCTAD/HEC Montréal.

[a] Data on total assets and employees, from Bloomberg, currency (USD) millions, period 2008. Data on affiliates is based on Dun and Bradstreet's 'Who owns Whom' database.

[b] GSI, the "Geographical Spread Index", is calculated as the square root of the Internationalization Index multiplied by the number of host countries

[c] II, the"Internationalization Index", is calculated as the number of foreign affiliates divided by the number of all affiliates (Note: affiliates in this table refer to majority-owned affiliates only).

Table A.I.13. IIAs (other than BITs and DTTs) concluded in 2008

Agreement	Scope of investment provisions
FTA between EFTA States and Canada	Cooperation and promotion
FTA between Canada and Peru	Investment protection/liberalization
FTA between China and New Zealand	Investment protection
FTA between ASEAN and Japan	Cooperation and promotion
FTA between Singapore and Peru	Investment protection/liberalization
Interim Agreement on Trade and Trade-related matters between the European Community and Bosnia and Herzegovina	Free transfer of funds
Trade and Investment Framework Agreement between the United States and the East African Community	Framework agreement
Trade, investment and development cooperative agreement between the United States and the Southern African Customs Union	Framework agreement
FTA between Australia and Chile	Investment protection/liberalization
FTA between China and Singapore	Cooperation and promotion
FTA between Canada and Colombia	Investment protection/liberalization
FTA between the EFTA States and Colombia	Commercial presence
Economic Partnership Agreement between the CARIFORUM States and the European Community	Liberalization, commercial presence, cooperation, promotion
Economic Partnership Agreement between the European Community and Côte d'Ivoire	Cooperation
FTA between the Gulf Cooperation Council and Singapore	Investment protection (through BITs)
Economic Partnership Agreement between Japan and Viet Nam	The provisions of the BIT between Japan and Viet Nam (signed in November 2003) are incorporated into and form part of this Agreement

Source: UNCTAD.

Annex table A.III.1. Relative importance of agriculture and manufacturing in selected economies, 2000–2005

Relative importance of manufacturing[a] \ Relative importance of agriculture[b]			
	China, Czech Republic, Germany, Hong Kong (China), Israel, Japan, Luxembourg, Malta, Mexico, Philippines, Poland, Republic of Korea, Romania, Singapore, Slovakia, Slovenia, United Kingdom, United States.	Brazil, Estonia, Hungary, Indonesia, Italy, Malaysia, Norway, Portugal, Sweden, Switzerland, Thailand.	Australia, Austria, Belgium, Canada, Costa Rica, Denmark, Finland, France, Ireland, Netherlands, Spain.
	Bahamas, Bangladesh, Chile, Egypt, Jamaica, Jordan, Lebanon, Lesotho, Macao (China), Qatar, Russian Federation, Saudi Arabia, The FYR of Macedonia, Trinidad and Tobago.	Barbados, Bosnia and Herzegovina, Colombia, Cyprus, El Salvador, Georgia, India, Mauritius, Morocco, Pakistan, Senegal, Sri Lanka, Tunisia, Turkey, Viet Nam.	Argentina, Bulgaria, Greece, Guatemala, Iceland, New Zealand, Swaziland, Uruguay, Zimbabwe.
	Algeria, Botswana, Gabon, Iran (Islamic Republic of), Kuwait, Oman, Saint Lucia, Venezuela (Bolivarian Republic of).	Albania, Bolivia, Cameroon, Eritrea, Mongolia, Mozambique, Nepal, Nigeria, Panama, Peru, Republic of Moldova, Syrian Arab Republic, Zambia.	Benin, Cambodia, Central African Republic, Côte d' Ivoire, Ecuador, Ethiopia, Fiji, Ghana, Honduras, Kenya, Madagascar, Malawi, Namibia, Nicaragua, Niger, Paraguay, Rwanda, Sudan, Uganda, United Republic of Tanzania.

Source: UNCTAD, based on data from UNCTAD GlobStat, UNIDO *Industrial Development Report 2009*, and FAOSTAT database.

[a] The *relative importance of manufacturing* is based on UNIDO's Competitive Industrial Performance Index, which combines four main dimensions of industrial competitiveness: industrial capacity, manufactured export capacity, industrialization intensity and export quality.

[b] The *relative importance of agriculture* is calculated based on simple averages of standardized values of the following variables: agricultural value added per capita, agricultural exports per capita, share of agricultural value added in total GDP, and share of agricultural exports in total exports.

Note: Various countries are not included in the table due to missing data.

Annex table A.III.2. Top 10 exporters of selected agricultural commodities, average of 2002–2006

(Share of world total in per cent)

Commodity/country	Share in world total	Commodity/country	Share in world total	Commodity/country	Share in world total	Commodity/country	Share in world total
Bananas		**Cocoa beans**		**Roots and tubers[b]**		**Soya beans**	
Ecuador	20.7	Côte d'Ivoire	37.1	Netherlands	19.7	United States	45.4
Belgium	17.7	Ghana	17.9	France	15.9	Brazil	32.1
Costa Rica	10.7	Indonesia	11.0	Germany	7.0	Argentina	11.9
Colombia	8.4	Nigeria	8.0	United States	5.7	Paraguay	3.2
Philippines	7.1	Netherlands	5.2	Belgium	5.6	Netherlands	2.7
Germany	4.7	Cameroon	4.8	Canada	4.9	Canada	1.9
Guatemala	4.4	Belgium	4.4	China	4.9	China	0.8
United States	3.1	Ecuador	2.6	United Kingdom	4.6	Uruguay	0.5
Honduras	2.5	Papua New Guinea	1.5	Spain	3.4	Belgium	0.2
France	2.4	Dominican Republic	1.2	Italy	3.4	Ukraine	0.2
Total	81.6	Total	93.7	Total	75.0	Total	99.0
Coffee (green)		**Maize**		**Tea**		**Wheat**	
Brazil	25.3	United States	49.9	Sri Lanka	20.5	United States	24.1
Colombia	14.4	France	11.9	Kenya	16.3	Canada	13.7
Viet Nam	8.9	Argentina	10.5	China	13.7	Australia	13.2
Germany	5.7	China	8.3	India	11.1	France	13.1
Indonesia	4.8	Brazil	3.2	United Kingdom	7.3	Argentina	6.9
Guatemala	4.7	Hungary	2.4	Germany	3.8	Russian Federation	5.2
Peru	3.9	Serbia	1.6	Indonesia	3.5	Germany	4.4
Honduras	3.5	Germany	1.5	Viet Nam	2.7	Ukraine	2.6
Mexico	2.8	South Africa	1.4	United Arab Emirates	2.2	Kazakhstan	2.2
Costa Rica	2.8	Ukraine	1.3	Belgium	1.6	United Kingdom	2.0
Total	76.8	Total	92.0	Total	82.6	Total	87.4
		Oilseeds[a]				**Rice (paddy)**	
United States	34.6	Netherlands	2.9	United States	81.1	Italy	1.4
Brazil	22.3	China	2.7	China	3.7	United Arab Emirates	1.1
Argentina	8.9	Paraguay	2.3	Uruguay	2.9	India	1.0
Canada	7.6	Australia	1.6	France	2.5	Spain	0.9
France	3.1	India	1.4	Argentina	1.8	Australia	0.9
Total		87.5		Total		97.2	

Source: UNCTAD, based on FAOstat.

[a] Oilseeds include castor oil seed, copra, cottonseed, flour of oilseeds, groundnuts, shelled groundnuts, hempseed, kapokseed in shell, kapokseed shelled, karite nuts (sheanuts), linseed, mustard seed, palm kernels, poppy seed, rapeseed, safflower seed, sesame seed, soybeans, sunflower seed, tung nuts, and oilseeds not elsewhere specified.

[b] Roots and tubers include cassava, potatoes, sweet potatoes, taro (cocoyam), yams and yautia (cocoyam), and roots and tubers not elsewhere specified.

Note: Export data includes re-exports.

Annex table A.III.3. Inward FDI in agriculture, forestry and fishing,[a] various years
(Millions of dollars and per cent)

Host region/economy	Millions of dollars				Percentage share in total			
	Flows		Stock		Flows		Stock	
	2002–2004	2005–2007	2002[b]	2007[c]	2002–2004	2005–2007	2002[b]	2007[c]
World	*2 286.9*	*3 327.8*	*18 969.5*	*32 010.0*	*0.4*	*0.2*	*0.3*	*0.2*
Developed economies	*156.5*	*38.9*	*6 694.7*	*11 830.3*	*0.0*	*0.0*	*0.1*	*0.1*
Europe								
Austria	2.0	- 4.6	40.9	25.0	0.1	- 0.0	0.1	0.0
Belgium	- 2.1	- 326.3	..	..	- 0.0	- 0.9	..	..
Bulgaria	4.9	34.6	16.4	158.1	0.2	0.5	0.4	0.4
Cyprus	- 0.0	- 0.1	0.7	0.7	- 0.0	- 0.0	0.0	0.0
Czech Republic	27.8	29.0	20.3	196.5	0.5	0.3	0.1	0.2
Denmark	..	- 0.1	..	0.4	..	- 0.0	..	0.0
Estonia	0.5	21.1	16.6	102.7	0.1	0.9	0.4	0.6
France	25.4	61.5	351.3	616.4	0.1	0.1	0.1	0.1
Germany	5.6	- 6.7	194.0	225.2	0.0	- 0.0	0.1	0.0
Greece	9.1	24.6	2.6	5.9	0.7	0.9	0.0	0.0
Hungary	26.6	13.6	387.3	493.9	0.8	0.2	1.1	0.5
Iceland	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0
Italy	83.0	28.6	264.3	624.3	0.5	0.1	0.2	0.2
Latvia	10.3	14.1	47.0	159.3	2.6	0.9	1.7	1.5
Lithuania	6.6	11.3	18.4	81.5	1.2	0.7	0.5	0.6
Netherlands	21.2	..	349.2	..	0.1	..	0.1	..
Poland	43.6	73.9	185.7	446.3	0.6	0.4	0.4	0.4
Portugal	14.3	..	130.4	158.1	0.4	..	0.3	0.3
Romania	16.8	67.7	108.2	412.8	0.3	0.7	0.9	0.7
Slovakia	6.3	1.7	23.0	65.7	0.3	0.1	0.3	0.2
Slovenia	..	..	1.2	10.5	..	..	0.0	0.1
Spain	- 13.9	- 44.2	..	..	- 0.0	- 0.2	..	..
Sweden	0.5	..	..	..	0.0	..	..	..
United Kingdom	- 2.0	84.7	243.4	490.8	- 0.0	0.0	0.0	0.0
Other developed countries								
Australia	54.4	- 74.7	642.6	624.2	0.3	- 0.8	0.5	0.2
Canada	..	..	662.2	1 497.8	..	..	0.3	0.3
Israel	..	..	4.6	42.2	..	..	0.0	0.1
Japan	..	- 7.0	35.6	100.6	..	- 0.1	0.0	0.1
United States	- 195.7	31.0	1 997.0	2 561.0	- 0.2	0.0	0.2	0.1
Developing economies	*2 040.8*	*2 980.0*	*11 978.2*	*17 997.1*	*1.1*	*0.8*	*0.8*	*0.5*
Africa								
Egypt	22.2	29.5	..	..	5.4	0.2	..	..
Ethiopia	0.0	6.2	..	..	0.0	4.0	..	..
Gambia	..	..	1.7	1.3	..	..	3.0	2.8
Madagascar	..	6.5	7.5	7.5	..	1.7	4.5	0.8
Malawi	..	..	47.6	64.5	..	..	13.3	13.1
Mauritius	5.9	0.7	..	..	10.5	0.3	..	..
Morocco	8.1	2.8	119.7	179.0	0.6	0.1	1.0	0.5
Mozambique	20.8	21.5	..	..	6.7	9.4	..	..
Namibia	..	..	59.0	90.3	..	..	3.2	3.2
South Africa	..	..	75.8	126.0	..	..	0.3	0.1
Swaziland	..	..	94.1	143.9	..	..	15.4	16.2
Tunisia	6.2	7.4	..	..	0.9	0.4	..	..
Uganda	..	..	0.4	5.2	..	..	0.1	0.7
United Republic of Tanzania	40.5	40.5	210.7	252.4	9.4	9.4	6.2	6.7
Zambia	..	..	57.5	126.5	..	..	6.8	11.7
Latin America and the Caribbean								
Bolivia	-	0.4	-	-	-	0.1	-	-
Brazil	153.3	420.9	392.0	383.6	0.9	1.6	0.6	0.4
Chile	4.8	49.5	789.6	949.7	0.2	2.3	1.5	1.5
Colombia	2.1	18.2	..	171.3	0.1	0.2	..	1.0
Costa Rica	1.9	31.4	..	..	0.3	2.2	..	..
Ecuador	46.1	31.8	..	..	5.6	10.0	..	..
El Salvador	9.5	0.3	48.5	69.6	3.9	0.0	1.5	1.2
Guyana	24.5	22.2	..	..	38.3	45.0	..	..
Honduras	49.3	36.2	..	..	17.0	6.8	..	..
Mexico	41.7	31.3	..	..	0.2	0.1	..	..
Nicaragua	0.5	2.5	..	..	0.2	0.8	..	..
Paraguay	8.6	- 11.7	47.7	73.2	12.0	- 10.6	4.6	3.7
Peru	1.5	51.0	51.1	208.6	0.5	8.7	0.4	1.3
Bolivarian Rep. of Venezuela	..	..	194.2	..	..	..	0.6	..

/…

Annex table A.III.3. Inward FDI in agriculture, forestry and fishing,[a] various years (concluded)
(Millions of dollars and per cent)

	Millions of dollars				Percentage share in total			
	Flows		Stock		Flows		Stock	
Host region/economy	2002–2004	2005–2007	2002[b]	2007[c]	2002–2004	2005–2007	2002[b]	2007[c]
Asia and Oceania								
Bangladesh	2.5	1.6	28.4	27.5	0.6	0.2	1.2	0.8
Brunei Darussalam	1.1	0.4	..	..	0.1	0.0	..	..
Cambodia	13.2	87.0	46.9	318.7	11.0	15.1	2.5	8.3
China	1 047.7	747.0	4 120.3[d]	6 156.2[d]	1.9	1.0	1.9	1.9
Fiji	4.0	0.3	..	..	13.7	2.3	..	..
India	4.0	..	109.7	..	0.2	..	1.2	..
Indonesia	235.7	119.6	..	1 001.4	49.0	4.8	..	3.2
Iran, Islamic Republic of[d]	0.0	2.8	..	..	0.0	1.5	..	..
Jordan[d]	3.0	2.5	..	..	0.7	1.0	..	..
Korea, Republic of	- 4.9	1.3	400.6	400.5	- 0.1	0.0	0.9	0.6
Lao People's Democratic Rep.	0.5	2.6	..	10.0	2.2	12.0	..	1.9
Malaysia	- 17.8	671.2	..	..	- 0.5	10.9	..	..
Mongolia	0.2[d]	0.7[d]	4.1	6.9	0.2	0.3	1.4	0.5
Myanmar	0.7	0.4	194.8	121.9	0.3	0.2	4.6	2.5
Nepal[d]	1.1	..	2.1	..	6.2	..	2.9	..
Papua New Guinea	71.1[d]	..	92.3	141.4	25.1	..	12.4	9.6
Philippines	..	1.3	57.2	61.1	..	0.1	0.4	0.3
Saudi Arabia	..	10.7	..	8.0	..	0.1	..	0.0
Singapore	1.4	- 5.1	..	..	0.0	- 0.0	..	..
Solomon Islands[d]	3.6	..	..	..	61.1	..	..	..
Syrian Arab Republic	..	..	26.9	..	..	..	0.4	..
Taiwan Province of China[d]	3.3	3.5	33.1	57.5	0.3	0.1	0.1	0.1
Thailand	12.3	4.7	87.9	107.5	0.3	0.1	0.3	0.3
Turkey	2.3	7.0	27.0	289.0	0.3	0.0	0.2	0.2
Vanuatu	0.1	0.2	..	..	1.1	2.5	..	..
Viet Nam	61.9	51.4	1 753.1	..	4.4	3.0	6.7	..
South-East Europe and the CIS	*89.5*	*308.9*	*296.5*	*2 182.5*	*0.4*	*0.7*	*0.4*	*0.7*
Albania	1.0	..	1.5	3.7	0.3	..	0.4	0.2
Armenia	1.1	..	3.6	3.6	0.8	..	0.5	0.2
Bosnia and Herzegovina	- 0.7	- 0.4	6.9	6.7	- 0.1	- 0.0	0.4	0.1
Croatia	2.7	1.3	17.9	64.2	0.2	0.1	0.3	0.2
Kazakhstan	0.1	3.1	16.6	22.1	0.0	0.0	0.1	0.0
Kyrgyzstan	-	- 0.0	..	..	-	- 0.0	..	..
The FYR of Macedonia	2.7	2.7	3.9	27.1	2.3	1.3	0.3	1.3
Moldova, Republic of	0.8	0.8	3.4	3.8	0.6	0.6	0.9	0.7
Russian Federation	7.3	187.7	87.0	953.0	0.1	1.0	0.4	0.9
Serbia	10.8	14.7	..	..	0.4	0.4	..	..
Ukraine	..	57.3	113.6	557.6	..	4.0	2.1	1.9

Source: Annex A.I.4 and A.I.6 and UNCTAD, FDI/TNC database.

[a] Including the hunting industry.

[b] Or closest year available.

[c] Or latest year available.

[d] Based on approval data.

Note: The world totals, as well as totals for developed economies, developing economies and South-East Europe and CIS, were extrapolated from the data for countries for which detailed statistics on FDI in agriculture were available. The coverage of data available was as follows: about 100 countries for inward flows, accounting for over 90% of world inward FDI flows and around 90 countries for inward stock, accounting for over 85% of world FDI inward stock.

Annex table A.III.4. The world's 25 largest agriculture-based and plantation TNCs, ranked by foreign assets, 2007
(Millions of dollars and number of employees)

Rank	Corporation	Home economy	Assets		Sales		Employment
			Foreign	Total	Foreign	Total	Total
1	Sime Darby Berhad [a]	Malaysia	4 695	10 879	6 493	10 296	100 000
2	Dole Food Company, Inc. [b]	United States	2 613	4 643	4 158	6 931	87 000
3	Fresh Del Monte Produce [c]	United States	1 765	2 122	1 835	3 366	35 000
4	Socfinal SA	Luxembourg	1 091	1 285	463	491	..
5	Charoen Pokphand Foods Public Company Ltd. [d]	Thailand	1 022[e]	3 012	1 358	4 002	23 337
6	Chiquita Brands International, Inc.	United States	767	2 678	2 675	4 663	24 000
7	Kuala Lumpur Kepong Berhad	Malaysia	760	2 052	1 183	1 487	..
8	KWS Saat AG	Germany	575[f]	802	548	727	2 739
9	Kulim (Malaysia) Berhad	Malaysia	493	1 677	557	829	..
10	Camellia PLC	United Kingdom	416	1 253	180	322	73 238
11	Seaboard Corp.	United States	393	2 094	2 294	3 213	10 663
12	Sipef SA	Belgium	283	343	220	222	1 528
13	Anglo-Eastern Plantations PLC	United Kingdom	261	263	127	127	5 882
14	Tyson Foods Inc	United States	211	10 227	1 614	26 900	104 000
15	PPB Group Berhad	Malaysia	171	3623	147	904	..
16	Carsons Cumberbatch PLC	Sri Lanka	103	195	33	78	3 468
17	TSH Resources Berhad	Malaysia	94	359	35	261	..
18	Multi Vest Resources Berhad	Malaysia	79	121	..	15	..
19	Bakrie & Brothers Terbuka[g]	Indonesia	69	1 485	71	563	20 729
20	PGI Group PLC	United Kingdom	65	68	26	37	13 435
21	Firstfarms A/S	Denmark	61	97	12	12	208
22	New Britain Palm Oil Limited	Papua New Guinea	47	531	16	223	8 808
23	Karuturi Global Limited	India	37	54	15	23	..
24	Nirefs SA	Greece	24	774	171	313	1 976
25	Country Bird Holdings Limited	South Africa	11	94	11	186	..

Source: UNCTAD.

[a] A conglomerate with its core business in agriculture and plantations.

[b] Privately owned company, which still provides financial reporting.

[c] Legally unrelated to Del Monte Foods.

[d] Members of the Charoen Pokphand (CP) Group report their activities by company.

[e] Estimated from sales data.

[f] Estimated using the share of 2008 foreign assets to total assets.

[g] Diversified company with important presence in agriculture.

Note: Data are missing for various companies. In some companies, foreign or domestic investors or holding companies may hold a minority share of more than 10%. In cases where companies are present in more than one agri-food industry, they have been classified according to their main core business.

Annex table A.III.5. The world's 25 largest TNC suppliers of agriculture, ranked by foreign assets, 2007
(Millions of dollars and number of employees)

Rank	Corporation	Home economy	Assets		Sales		Employment
			Foreign	Total	Foreign	Total	Total
1	BASF AG[a]	Germany	44 633	68 897	49 520	85 310	95 175
2	Bayer AG[a]	Germany	24 573	75 634	24 746	47 674	106 200
3	Dow Chemical Company[a]	United States	23 071	48 801	35 242	53 513	45 900
4	Deere & Company	United States	13 160	37 176	7 894	23 999	52 000
5	El Du Pont De Nemours	United States	9 938	34 131	18 101	29 378	60 000
6	Syngenta AG	Switzerland	9 065	12 585	9 281	9 794	21 200
7	Yara International ASA	Norway	8 009	8 541	9 939	10 430	8 173
8	Potash Corp. of Saskatchewan	Canada	6 079	9 766	3 698	5 632	5 003
9	Kubota Corp.	Japan	5 575	12 691	4 146	9 549	23 727
10	Monsanto Company	United States	4 040	12 253	3 718	8 563	18 800
11	Agco Corporation	United States	4034	4 699	5 654	6 828	13 720
12	The Mosaic Company	United States	3 881	9 164	3 859	5 774	7 100
13	ICL-Israel Chemicals Ltd	Israel	2 066	4 617	2 092	4 351	..
14	Provimi SA	France	1 962	2 237	2 523	2 805	8 608
15	Bucher Industries AG	Switzerland	1648	1 850	2 058	2 172	7 261
16	Nufarm Limited	Australia	1 191	2 010	925	1 512	..
17	CLAAS KGaA	Germany	1 000	2 619	2 884	3 781	8 425
18	Sapec SA	Belgium	826	826	837	837	692
19	Terra Industries Inc	United States	735	1 888	389	2 360	871
20	Aktieselskabet Schouw & Company A/S	Denmark	695	2 016	1 350	1 598	3 541
21	Genus PLC	United Kingdom	652	851	394	469	2 124
22	Scotts Miracle-Gro Company	United States	591	2 277	470	2 872	6 120
23	Kverneland ASA	Norway	367	487	649	741	2 717
24	Sakata Seed Corp.	Japan	331	843	140	383	1 711
25	Auriga Industries A/S	Denmark	319	849	624	856	1 615

Source: UNCTAD.

[a] General chemical/pharmaceutical companies with significant activities in agricultural supplies, especially crop protection, seeds, plant science, animal health and pest management.

Note: Data are missing for various companies. In some companies, foreign or domestic investors or holding companies may hold a minority share of more than 10%. In cases where companies are present in more than one agri-food industry, they have been classified according to their main core business.

Annex table A.III.6. The world's 50 largest food and beverage TNCs, ranked by foreign assets, 2007
(Millions of dollars and number of employees)

Rank	Corporation	Home economy	Assets		Sales		Employment
			Foreign	Total	Foreign	Total	Total
1	Nestlé SA	Switzerland	65 676	101 874	94 079	95 559	276 000
2	Inbev SA	Netherlands	34 922	42 248	16 156	21 242	88 690
3	Kraft Foods Inc	United States	29 697	67 993	15 698	37 241	103 000
4	Unilever	United Kingdom, Netherlands	29 581	54 912	53 613	59 159	175 000
5	Coca-Cola Company	United States	29 259	43 269	18 300	28 857	90 500
6	SAB Miller	United Kingdom	28 142	35 813	16 168	21 410	69 116
7	Diageo Plc	United Kingdom	27 399	32 105	18 255	21 320	24 373
8	Pernod Ricard SA	France	24 609	27 132	8 917	9 711	17 625
9	Cadbury PLC	United Kingdom	21 055	22 323	13 608	15 867	71 657
10	Bunge Limited	United States	17 513	21 088	28 860	37 842	23 889
11	Heineken NV	Netherlands	12 857	18 468	11 287	18 369	54 004
12	Pepsico Inc	United States	10 297	34 628	17 496	39 474	185 000
13	Molson Coors Brewing Company	United States	10 263	13 115	3 426	6 191	9 700
14	Kirin Holdings Company Limited	Japan	10 044	21 797	2 437	16 123	27 543
15	Archer-Daniels-Midland Company	United States	9 619	25 118	19 774	44 018	27 300
16	Associated British Foods PLC	United Kingdom	7 503	13 938	7 229	13 716	84 636
17	Carlsberg A/S	Denmark	6 454	11 860	3 368	8 774	33 420
18	HJ Heinz Company	United States	5 995	10 033	5 192	9 002	33 000
19	Danone	France	5 911	39 426	7 246	18 678	76 044
20	Anheuser-Busch Companies Inc	United States	5 881	17 155	1 352	18 989	30 849
21	Wilmar International Limited	Singapore	5 765	10 414	8 770	11 425	23 313
22	Sara Lee Corp.	United States	5 324	12 044	5 676	12 278	52 400
23	Constellation Brands Inc	United States	4 804	9 382	2 204	5 216	9 200
24	Fraser & Neave Limited	Singapore	4 699	8 927	2 086	3 288	17 000
25	Danisco A/S	Denmark	4 592	5 712	3 435	3 729	10 272
26	Tate & Lyle PLC	United Kingdom	4 303	5 990	6 045	7 481	9 194
27	FEMSA-Fomento Economico Mexicano	Mexico	3 922	15 258	3 812	13 579	105 020
28	Noble Group Limited[a]	Hong Kong, China	3 543	6 703	15 319	23 497	4 500
29	Campbell Soup Company	United States	2 966	6 437	2 437	7 867	22 500
30	Kellogg Company	United States	2 941	11 397	3 990	11 776	26 500
31	Ebro Puleva SA	Spain	2 918	4 828	2 123	3 926	7 226
32	General Mills Inc	United States	2 643	18 184	2 184	12 442	28 500
33	Parmalat Spa	Italy	2 626	6 615	3 976	5 649	14 721
34	Nutreco NV	Netherlands	2 403	2 861	5 053	5 879	9 090
35	San Miguel Corporation	Philippines	2 245	6 959	2 384	5 845	15 252
36	Fosters Group Limited	Australia	2 230	7 861	1 428	3 862	6 588
37	Smithfield Foods Inc	United States	2 159	6 969	1 644	11 911	53 100
38	Kerry Group PLC	Ireland	1 838	5 799	2 535	7 000	22 398
39	Pacific Andes International Holdings	Hong Kong, China	1 801	1 828	1 114	1284	10 000
40	Goodman Fielder Limited	Australia	1 775	2 792	893	2 059	..
41	Gruma S.A. de C.V.	Mexico	1 748	3 121	2 224	3 296	18 767
42	Grupo Bimbo S.A. de C.V.	Mexico	1 593	4 164	2 176	6 653	91 000
43	Baywa AG[a]	Germany	1 480	4 429	3 646	10 566	16 325
44	IOI Corporation Berhad	Malaysia	1 393	5 220	3 190	4 435	27 329
45	Anadolu Efes AS	Turkey	1 343	3 351	1 095	2 607	11 234
46	Greencore Group PLC	Ireland	1 256	1 753	1 541	1 802	7 789
47	Agrana Beteiligungs AG	Austria	1 164	2 540	1 682	2 531	8 223
48	Hkscan OYJ	Finland	1 143	1 639	2 111	3 081	7 333
49	Want Want Holdings Ltd.	Singapore	1 135	1 135	1 136	1 136	38 900
50	Aarhuskarlshamn AB	Sweden	1 085	1 352	1 755	2 012	2 569

Source: UNCTAD.

[a] The company also has major activities in the wholesale trade of agricultural commodities.

Note: Data are missing for various companies. In some companies, foreign or domestic investors or holding companies may hold a minority share of more than 10%. In cases where companies are present in more than one agri-food industry, they have been classified according to their main core business.

Annex table A.III.7. The world's 25 largest food retail TNCs, ranked by foreign assets, 2007
(Millions of dollars and number of employees)

Rank	Corporation	Home economy	Assets		Sales		Employment
			Foreign	Total	Foreign	Total	Total
1	Wal-Mart Stores	United States	62 961	163 514	90 640	374 526	2 055 000
2	Metro AG	Germany	29 627	49 863	55 950	94 711	253 769
3	Carrefour SA	France	28 507	76 449	65 549	120 930	490 042
4	Tesco PLC	United Kingdom	21 286	60 425	24 888	94 748	413 061
5	McDonalds Corp.	United States	17 855	29 392	13 970	22 787	390 000
6	Delhaize Group	Belgium	10 402	12 889	21 342	27 715	138 000
7	Koninklijke Ahold NV	Netherlands	9 158	19 845	22 423	41 158	118 715
8	Sodexo	France	8 101	11 671	11 985	18 247	342 380
9	Compass Group PLC	United Kingdom	7 578	12 615	16 985	20 920	361 327
10	Seven & I Holdings Company Ltd.	Japan	6 101	37 042	18 533	55 223	55 815
11	China Resources Enterprise Limited	Hong Kong, China	6 137	7 779	4 761	6 603	135 000
12	Yum! Brands, Inc.	United States	3 746	6 952	5 219	10 416	301 000
13	Autogrill	Italy	2 759	4 481	4 170	7 236	49 053
14	Alimentation Couche Tard Inc	Canada	2 342	3 047	9 880	12 400	45 000
15	Safeway Incorporated	United States	2 197	17 651	6 015	42 286	201 000
16	Sonae Sgsp	Portugal	1 591	10 074	0 226	6 458	26 251
17	George Weston Limited	Canada	1 571	18 539	2 824	33 249	140 000
18	Dairy Farm International Holdings Ltd.	Hong Kong, China	1 425	2 289	5 628	5 890	70 000
19	Jeronimo Martins SA	Portugal	1 389	4 465	3 497	7 821	41 300
20	Kuwait Food Company (Americana) SAK	Kuwait	1 208	2 137	1 345	1 591	..
21	Kesko OYJ	Finland	1 055	5 972	3 013	13 938	25 890
22	Starbucks Corp.	United States	976	5 344	1 733	9 411	172 000
23	Burger King Holdings, Inc.	United States	645	2 517	783	2 234	39 000
24	Maruha Nichiro Holdings, Inc.	Japan	606	3 177	448	6 246	10 311
25	Familymart Company Limited	Japan	519	2 633	404	2 514	6 735

Source: UNCTAD.

Note: Data are missing for various companies. In some companies, foreign or domestic investors or holding companies may hold a minority share of more than 10%. In cases where companies are present in more than one agri-food industry, they have been classified according to their main core business.

Annex table A.III.8. The world's 25 largest privately owned agri-food TNCs, ranked by their agri-food sales, 2006
(Millions of dollars and number of employees)

Rank	Corporation	Home economy	Sales		Employment
			Total	Agri-food	Total
1	Cargill Inc.	United States	88 300	44 200[a]	38 000[a]
2	Mars Inc.	United States	27 400	27 400	21 000[a]
3	Lactalis	France	13 245	13 245	9 510
4	Suntory Ltd.	Japan	12 710	12 000[a]	..
5	Dr August Oetker KG	Germany	11 313	11 313[a]	22 680
6	Louis Dreyfus Group	France	20 000[a]	10 000[a]	10 000[a]
7	Barilla	Italy	5 857	5 857	5 221
8	Ferrero	Italy	5 742	5 742	5 392
9	Keystone Foods LLC	United States	5 580	5 580[a]	3 120[a]
10	McCain Foods Ltd	Canada	5 129	5 129[a]	4 729[a]
11	OSI Group Companies	United States	4 620	4 620[a]	4 200[a]
12	Perdue Farms Inc.	United States	4 300	4 300[a]	3 350
13	Bacardi Ltd.	Bermuda	4 200	4 200[a]	..
14	Groupe Soufflet	France	3 591	3 591	..
15	Golden State Foods	United States	3 300	3 300[a]	2 380[a]
16	Groupe Castel	France	3 000	3 000[a]	..
17	J.R. Simplot	United States	4 400	2 900[a]	1 100[a]
18	Schreiber Foods	United States	2 900	2 900[a]	3 000[a]
19	Muller Gruppe	Germany	2 759	2 759[a]	2 536[a]
20	Bel	France	2 711	2 711	2 253
21	Perfetti Van Melle	Italy	2 528	2 528	2 088
22	Rich Products	United States	2 600	2 500[a]	2 500[a]
23	J. M. Smucker	United States	2 148	2 148	2 155
24	Haribo	Germany	2 000	2 000[a]	..
25	Eckes-Granini	Germany	1 261	1 261	1 527

Source: UNCTAD, based on the Agrodata database of UMR MOISA, Montpellier, and company reports.

[a] Estimates.

DEFINITIONS AND SOURCES

A. General definitions

1. Transnational corporations

Transnational corporations (TNCs) are incorporated or unincorporated enterprises comprising parent enterprises and their foreign affiliates. A parent enterprise is defined as an enterprise that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake. An equity capital stake of 10% or more of the ordinary shares or voting power for an incorporated enterprise, or its equivalent for an unincorporated enterprise, is normally considered as the threshold for the control of assets.[1] A foreign affiliate is an incorporated or unincorporated enterprise in which an investor, who is a resident in another economy, owns a stake that permits a lasting interest in the management of that enterprise (an equity stake of 10% for an incorporated enterprise, or its equivalent for an unincorporated enterprise). In *WIR*, subsidiary enterprises, associate enterprises and branches – defined below – are all referred to as foreign affiliates or affiliates.

- A subsidiary is an incorporated enterprise in the host country in which another entity directly owns more than a half of the shareholder's voting power, and has the right to appoint or remove a majority of the members of the administrative, management or supervisory body.
- An associate is an incorporated enterprise in the host country in which an investor owns a total of at least 10%, but not more than half, of the shareholders' voting power.
- A branch is a wholly or jointly owned unincorporated enterprise in the host country which is one of the following: (i) a permanent establishment or office of the foreign investor; (ii) an unincorporated partnership or joint venture between the foreign direct investor and one or more third parties; (iii) land, structures (except structures owned by government entities), and/or immovable equipment and objects directly owned by a foreign resident; or (iv) mobile equipment (such as ships, aircraft, gas- or oil-drilling rigs) operating within a country, other than that of the foreign investor, for at least one year.

2. Foreign direct investment

Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate).[2] FDI implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transactions between them and among foreign affiliates, both incorporated and unincorporated. FDI may be undertaken by individuals as well as business entities.

Flows of FDI comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor. FDI has three components: equity capital, reinvested earnings and intra-company loans.

- Equity capital is the foreign direct investor's purchase of shares of an enterprise in a country other than its own.
- Reinvested earnings comprise the direct investor's share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates, or earnings not remitted to the direct investor. Such retained profits by affiliates are reinvested.
- Intra-company loans or intra-company debt transactions refer to short- or long-term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises.

FDI stock is the value of the share of their capital and reserves (including retained profits) attributable to the parent enterprise, plus the net indebtedness of affiliates to the parent enterprise. FDI flow and stock data used in *WIR* are not always defined as above, because these definitions are often not applicable to disaggregated FDI data. For example, in analysing geographical and industrial trends and patterns of FDI, data based on approvals of FDI may also be used because they allow a disaggregation at the country or industry level. Such cases are denoted accordingly.

3. Non-equity forms of investment

Foreign direct investors may also obtain an effective voice in the management of another business entity through means other than acquiring an equity stake. These are non-equity forms of investment, and they include, inter alia, subcontracting, management contracts, turnkey arrangements, franchising, licensing and product-sharing. Data on these forms of transnational corporate activity are usually not separately identified in the balance-of-payments statistics. These statistics, however, usually present data on royalties and licensing fees, defined as "receipts and payments of residents and non-residents for: (i) the authorized use of intangible non-produced, non-financial assets and proprietary rights such as trademarks, copyrights, patents, processes, techniques, designs, manufacturing rights, franchises, etc., and (ii) the use, through licensing agreements, of produced originals or prototypes, such as manuscripts, films, etc.".[3]

B. Availability, limitations and estimates of FDI data presented in *WIR*

FDI data have a number of limitations. This section therefore spells out how UNCTAD collects and reports such data. These limitations need to be kept in mind also when dealing with the size of TNC activities and their impact.

A more detailed methodology for each economy on data collection, reporting and estimates for *WIR09* is provided in the *WIR* home page, www.unctad.org/wir. Longer time-series data are also available on its site or FDI statistics home page, www.unctad.org/fdistatistic.

1. FDI flows

Annex table B.1, as well as in most of the tables in the text, is on a net basis (capital transactions' credits less debits between direct investors and their foreign affiliates). Net decreases in assets (outward FDI) or net increases in liabilities (inward FDI) are recorded as credits (recorded with a positive sign in the balance of payments), while net increases in assets or net decreases in liabilities are recorded as debits (recorded with an opposite sign in the balance of payments). In the annex tables, as well as in the tables in the text, the opposite signs are reversed for practical purposes in the case of FDI *outflows*. Hence, FDI flows with a negative sign in *WIR* indicate that at least one of the three components of FDI (equity capital, reinvested earnings or intra-company loans) is negative and is not offset by positive amounts of the other components. These are instances of reverse investment or disinvestment.

UNCTAD regularly collects published and unpublished national official FDI data flows directly from central banks, statistical offices or national authorities on an aggregated and disaggregated basis for its FDI/TNC database (www.unctad.org/fdistatistics). These data constitute the main source for the reported data on FDI. These data are further complemented by data obtained from: (i) other international organizations such as the International Monetary Fund (IMF), the World Bank and the Organisation for Economic Co-operation and Development (OECD); (ii) regional organizations such as the ASEAN Secretariat, the European Bank for Reconstruction and Development (EBRD), the Banque Centrale des Etats de l'Afrique de l'Ouest, Banque des Etats de l'Afrique Centrale and the Eastern Caribbean Central Bank; and (iii) UNCTAD's own estimates.

For those economies for which data were not available from national official sources, or for those for which data were not available for the entire period of 1980–2008 covered in the *World Investment Report 2009 (WIR09)*, data from the IMF were obtained using the IMF's *International Financial Statistics* and *Balance of Payments Statistics Online*, July 2009. If the data were not available from the above IMF data source, data from the IMF's *Country Report*, under Article IV of the IMF's Articles of Agreements, were also used.

For those economies for which data were not available from national official sources and the IMF, or for those for which data were not available for the entire period of 1980–2008, data from the World Bank's *World Development Indicators Online* were used. This report covers data up to 2007.

Data from the EBRD's *Transition Report 2008* were utilized for those economies in the Commonwealth of Independent States for which data were not available from one of the above-mentioned sources.

Furthermore, data on the FDI outflows of the OECD, as presented in its publication, *Geographical Distribution of Financial Flows to Developing Countries*, and as obtained from its online databank, were used as a proxy for FDI inflows. As these OECD data are based on FDI outflows to developing economies from the member countries of the Development Assistance Committee (DAC) of OECD,[4] inflows of FDI to developing economies may be underestimated.

Finally, in those economies for which data were not available from either of the above-mentioned sources, or only partial data (quarterly or monthly) were available, estimates were made by:

a. annualizing the data, if they are only partially available (monthly or quarterly) from either national official sources or the IMF;

b. using the mirror data of FDI of major economies as proxy;

c. using national and secondary information sources;

d. using data on cross-border mergers and acquisitions (M&As) and their growth rates; and

e. using specific factors.

2. FDI stocks

Annex table B.2, as well as some tables in the text, presents data on FDI stocks at book value or historical cost, reflecting prices at the time when the investment was made.

As in the case of flow data, UNCTAD regularly collects published and unpublished national official FDI stock data as well directly from central banks, statistical offices or national authorities on an aggregated and disaggregated basis for its FDI/TNC database (www.unctad.org/fdistatistics). These data constitute the main source for the reported data on FDI. These data are further complemented by data obtained from (i) other international organizations such as the IMF; (ii) regional organizations such as the ASEAN Secretariat; and (iii) UNCTAD's own estimates.

For those economies for which data were not available from national official sources, or for those for which data were not available for the entire period of 1980–2008 covered in the *WIR09*, data from the IMF were obtained using the IMF's *Balance of Payments Statistics Online*, July 2009. Finally, in those economies for which data were not available from either of the above-mentioned sources, estimates were made by either adding up FDI flows over a period of time, or adding or subtracting flows to an FDI stock that had been obtained for a particular year from national official sources, or the IMF data series on assets and liabilities of direct investment, or by using the mirror data of FDI stock of major economies as proxy.

C. Data revisions and updates

All FDI data and estimates in *WIR* are continuously revised. Because of ongoing revisions, FDI data reported in *WIR* may differ from those reported in earlier Reports or other publications of UNCTAD or any other international or regional organizations. In particular, recent FDI data are being revised in many economies according to the fifth edition of the *Balance of Payments Manual of the IMF*. Because of this, the data reported in last year's Report may be completely or partly changed in this Report.

D. Data verification

In compiling data for this year's Report, requests were made to national official sources of all economies for verification and confirmation of the latest data revisions and accuracy. In addition, websites of national official sources were consulted. This verification process continued until **3 July 2009**. Any revisions made after this process may not be reflected in the Report. Below is a list of economies for which data were checked using either of these methods. For the economies which are not mentioned below, the UNCTAD secretariat could not have the data verified or confirmed by their respective governments.

E. Definitions and sources of the data in annex tables B.3

Annex table B.3 shows the ratio of inward and outward FDI flows to gross fixed capital formation and inward and outward FDI stock to GDP. All of these data are in current prices.

The data on GDP were obtained from the UNCTAD *GlobStat* database, the IMF's CD-ROM on *International Financial Statistics*, June 2009 and the IMF's *World Economic Outlook*, April 2009. For some economies, such as Taiwan Province of China, data are complemented by official sources.

The data on gross fixed capital formation were obtained from the UNCTAD *GlobStat* database and IMF's CD-ROM on *International Financial Statistics*, June 2009. For some economies, for which data are not available for the period 1980–2008, or part of it, data are complemented by data on gross capital formation. These data are further complemented by data obtained from: (i) national official sources; and (ii) World Bank data on gross fixed capital formation or gross capital formation, obtained from *World Development Indicators Online*.

Figures exceeding 100% may result from the fact that, for some economies, the reported data on gross fixed capital formation do not necessarily reflect the value of capital formation accurately, and that FDI flows do not necessarily translate into capital formation.

Data on FDI are from annex tables B.1–B.2. Longer time-series data are available on WIR home page, www.unctad.org/wir or FDI statistics home page, www.unctad.org/fdistatistics.

F. Definitions and sources of the data on cross-border M&As in annex tables B.4–B.6

FDI is a balance-of-payments concept involving the cross-border transfer of funds. Cross-border M&As statistics shown in the Report are based on information reported by Thomson Reuters. Such M&As conform to the FDI definition as far as the equity share is concerned.

Communiqué

Number of economies: 139

Afghanistan, Albania, Algeria, Angola, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bangladesh, the Banque des Etats de l'Afrique Centrale (Central African Republic only), the Banque Centrale de l'Afrique de l'Ouest (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo), Belarus, Belgium, Belize, Bermuda, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Cambodia, Canada, Cape Verde, Chile, China, Colombia, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, the Dominican Republic, the Eastern Caribbean Central Bank (Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines), Egypt, El Salvador, Estonia, Finland, Georgia, Germany, Ghana, Greece, Guatemala, Guyana, Haiti, Honduras, Hong Kong (China), Hungary, Iceland, India, Indonesia, the Islamic Republic of Iran, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, the Republic of Korea, Kuwait, Latvia, Lebanon, Lesotho, the Libyan Arab Jamahiriya, Lithuania, Luxembourg, Macao (China), Malaysia, Maldives, Malta, Mauritius, the Republic of Moldova, Montenegro, Morocco, Mozambique, Namibia, the Netherlands, the Netherlands Antilles, New Caledonia, New Zealand, Nicaragua, Norway, Oman, Pakistan, the Palestinian territory, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, Romania, the Russian Federation, Rwanda, Saudi Arabia, Serbia, Seychelles, Singapore, Slovakia, Slovenia, Solomon Islands, South Africa, Spain, Swaziland, Sweden, Switzerland, the Syrian Arab Republic, Taiwan Province of China, Tajikistan, Thailand, The FYR of Macedonia, Tonga, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, the United Kingdom, Uruguay, Vanuatu, the Bolivarian Republic of Venezuela, Zambia and Zimbabwe.

Web sites consulted in the preparation of *WIR09*

Number of economies: 174

Afghanistan, Albania, Angola, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, the Banque des Etats de l'Afrique Centrale (Cameroon, the Central African Republic, Chad, Congo, Equatorial Guinea and Gabon), the Banque Centrale des Etats de l'Afrique de l'Ouest (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo), Barbados, Belarus, Belgium, Belize, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burundi, Canada, Cape Verde, Chile, China, Colombia, Comoros, Costa Rica, Croatia, Cuba, Cyprus, the Czech Republic, Denmark, Djibouti, the Dominican Republic, the Eastern Caribbean Central Bank (Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines), Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Fiji, Finland, France, Gambia, Georgia, Germany, Ghana, Guinea, Greece, Haiti, Honduras, Hong Kong (China), Hungary, Iceland, India, Indonesia, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, the Republic of Korea, Kyrgyzstan, Latvia, the Lao People's Democratic Republic, Lebanon, Lesotho, the Libyan Arab Jamahiriya, Lithuania, Luxembourg, Macao (China), Madagascar, Malaysia, Maldives, Malta, Mauritania, Mauritius, Mexico, the Republic of Moldova, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nepal, the Netherlands, the Netherlands Antilles, New Caledonia, New Zealand, Nigeria, Norway, Oman, Pakistan, the Palestinian territory, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, Romania, the Russian Federation, Rwanda, Samoa, São Tomé and Principe, Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, South Africa, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Taiwan Province of China, Tajikistan, the FYR of Macedonia, Thailand, Tonga, Tunisia, Turkey, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, the United States, the United Republic of Tanzania, Uruguay, Vanuatu, the Bolivarian Republic of Venezuela, Yemen and Zambia.

However, the data also include purchases via domestic and international capital markets, which should not be considered as FDI flows. Although it is possible to distinguish types of financing used for M&As (e.g. syndicated loans, corporate bonds, venture capital), it is not possible to trace the origin or country-sources of the funds used. Therefore, the data used in the Report include the funds not categorized as FDI.

The UNCTAD database on cross-border M&As contains information on ultimate and immediate target and acquiring countries. To approximate further FDI flows, in *WIR09*, tables relating to cross-border M&As by region/country are tabulated based on: 1) the immediate target country principle for the sales of equity shares in a resident enterprise; 2) the ultimate acquiring country principle for the purchases of equity shares in a non-resident enterprise; and 3) the ultimate target country principle for the sales of equity shares in a non-resident enterprise, unless otherwise specified. Round tripping cases are also considered on the basis of the immediate acquiring and immediate target country principles.

FDI flows are recorded on a net basis (capital account credits less debits between direct investors and their foreign affiliates) in a particular year. In WIR09, M&As data are also recorded on a net basis, i.e. expressed as differences between gross cross-border acquisitions and divestment by firms in/from a particular country or in/from a particular industry. Transaction amounts recorded in the UNCTAD M&As statistics are those at the time of closure of the deals, and not at the time of announcement. The M&As values are not necessarily paid out in a single year.

There are three main types of cross-border M&As deals: 1) those that involve the sale of a domestic company to a foreign company; 2) those that involve the sale of a foreign affiliate to a domestic company; and 3) those that involve the purchase by a foreign company of another foreign company operating in a host country. Three examples are given to illustrate differences in the three main types of deal, and the way they are recorded:

1) An Argentine domestic company in Argentina is sold to a foreign company. Argentina is the immediate target country, and the foreign country is the ultimate acquiring country. The deal is recorded as the creation of a foreign investment in Argentina (inward investment / positive sale) and the creation of an investment abroad in the foreign country (outward investment / positive purchase).

2) An Argentine domestic company acquires the affiliate of a foreign company operating in Argentina. Argentina is the immediate target country, and the foreign country is the ultimate target country. The deal is recorded as the dissolution of a foreign investment (inward divestment / negative sale) in Argentina and the dissolution of an investment abroad (outward divestment / negative purchase) in the foreign country.

3) A foreign company A acquires an affiliate of foreign company B operating in Argentina. Argentina is the immediate target country, foreign country B is the ultimate target country, and foreign country A is the ultimate acquiring country. The deal is recorded as an inward investment (positive sale) by foreign country A in Argentina and an inward divestment (negative sale) by foreign country B in Argentina, with the net-change being zero in Argentina. It is also recorded as an outward investment (positive purchase) in foreign country A, and as an outward divestment (negative purchase) in foreign country B.

Data showing cross-border M&As activities by industry are also recorded on a net basis as sales and purchases. The UNCTAD database contains information on immediate target and immediate acquiring industries. In *WIR09*, tables relating to cross-border M&As by sector/industry are tabulated based on the immediate target industry and the immediate acquiring industry. Following are three illustrative examples:

1) A foreign food TNC acquires, in a given country, a domestic chemical company. This transaction is recorded in the columns on M&As by industry of seller in the chemical industry with positive sign. It is also recorded in the columns on M&As by industry of purchaser in the food industry (with positive sign).

2) A domestic food company acquires, in its own country, the affiliate of a foreign-owned company operating in the chemical industry. This transaction is recorded in the columns on M&As by industry of seller in the chemical industry with a negative sign. It is also recorded in the columns on M&As by industry of purchaser in the chemical industry with a negative sign. (As this database has no information about the industry of the parent company that is divesting its chemical foreign affiliate, the same industry as that of its foreign affiliate is used).

3) A foreign food TNC acquires, in a given country, an affiliate operating in the chemical industry owned by another foreign TNC. This transaction is recorded in the columns on M&As by industry of seller in the chemical industry with both negative and positive signs, with the net-change being zero. It is also recorded in the columns on M&As by industry of purchaser in the food industry (with positive sign) and the chemical industry (with negative sign). (As this database has no information about the industry of the parent company that is divesting its chemical foreign affiliate, the same industry as that of its foreign affiliate is used).

Longer time-series data are available on WIR home page, www.unctad.org/wir or FDI statistics home page, www.unctad.org/fdistatistics.

.Notes

1 In some countries, an equity stake of other than 10% is still used. In the United Kingdom, for example, a stake of 20% or more was the threshold used until 1997.

2 This general definition of FDI is based on OECD, *Detailed Benchmark Definition of Foreign Direct Investment*, third edition (OECD, 1996) and International Monetary Fund, *Balance of Payments Manual*, fifth edition (IMF, 1993).

3 International Monetary Fund, op. cit., p. 40.

4 Includes Australia, Austria, Belgium, Canada, the Commission of the European Communities, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States.

Annex table B.1. FDI flows, by region and economy, 2006–2008
(Millions of dollars)

Region/economy	FDI inflows			FDI outflows		
	2006	2007	2008	2006	2007	2008
World	**1 461 074**	**1 978 838**	**1 697 353**	**1 396 916**	**2 146 522**	**1 857 734**
Developed economies	**972 762**	**1 358 628**	**962 259**	**1 157 910**	**1 809 531**	**1 506 528**
Europe	**631 724**	**899 627**	**518 339**	**799 581**	**1 270 523**	**944 460**
European Union	**590 305**	**842 311**	**503 453**	**697 193**	**1 192 141**	**837 033**
Austria	7 933	29 586	13 551	13 670	33 380	28 214
Belgium	58 893	110 773	59 680	50 685	93 901	68 278
Bulgaria	7 667	11 716	9 205	175	274	733
Cyprus	1 864	2 181	2 167	902	1 206	1 474
Czech Republic	5 459	10 437	10 731	1 467	1 619	1 900
Denmark	8 268	9 408	10 921	13 991	17 617	28 868
Estonia	1 788	2 736	1 969	1 112	1 737	1 089
Finland	7 652	12 351	- 4 199	4 805	7 655	1 629
France	78 154	157 973	117 510	121 371	224 652	220 046
Germany	57 147	56 407	24 939	127 223	179 547	156 457
Greece	5 364	1 918	5 093	4 167	5 338	2 651
Hungary	7 532	6 088	6 514	3 874	3 737	1 661
Ireland	- 5 542	24 707	- 20 030	15 324	21 146	13 501
Italy	39 239	40 202	17 032	42 068	90 775	43 839
Latvia	1 664	2 247	1 426	173	335	231
Lithuania	1 840	2 017	1 815	290	608	356
Luxembourg	28 482	- 31 692	3 012	3 425	57 994	- 24 936
Malta	1 872	952	879	30	31	278
Netherlands	7 450	118 376	- 3 492	65 175	28 544	57 571
Poland	19 591	22 612	16 533	8 875	4 748	3 582
Portugal	10 902	3 055	3 532	7 139	5 490	2 106
Romania	11 367	9 923	13 305	423	278	- 272
Slovakia	4 693	3 265	3 414	511	384	258
Slovenia	644	1 438	1 815	862	1 805	1 440
Spain	36 949	28 179	65 539	99 646	96 062	77 317
Sweden	27 247	22 070	43 655	23 540	37 797	37 351
United Kingdom	156 186	183 386	96 939	86 271	275 482	111 411
Other developed Europe	41 420	57 316	14 886	102 388	78 382	107 427
Gibraltar	137[a]	165[a]	159[a]	..	..	..
Iceland	4 029	3 473	- 2 592	5 241	13 141	- 6 981
Norway	6 415	4 433	- 95	21 326	15 580	28 113
Switzerland	30 839	49 245	17 415	75 821	49 661	86 295
North America	296 897	379 590	360 824	268 621	437 999	389 463
Canada	59 761	108 414	44 712	44 401	59 637	77 667
United States	237 136	271 176	316 112	224 220	378 362	311 796
Other developed economies	44 140	79 410	83 095	89 708	101 009	172 605
Australia	27 864	44 330	46 774	23 418	16 806	35 938
Bermuda	261	1 016	278	579	439	693
Israel	14 763	9 020	9 639	14 944	6 981	7 854
Japan	- 6 506	22 549	24 426	50 266	73 549	128 020
New Zealand	7 758	2 494	1 979	501	3 234	100
Developing economies	**433 764**	**529 344**	**620 733**	**215 282**	**285 486**	**292 710**
Africa	57 058	69 170	87 647	7 171	10 614	9 309
North Africa	23 155	24 786	24 001	134	5 545	8 635
Algeria	1 795	1 662	2 646	35	295	318
Egypt	10 043	11 578	9 495	148	665	1 920
Libyan Arab Jamahiriya	2 013	4 689	4 111	- 534	3 933	5 888
Morocco	2 450	2 803	2 388	445	621	369
Sudan	3 541	2 436	2 601	7	11	98
Tunisia	3 312	1 618	2 761	33	20	42
Other Africa	33 903	44 384	63 647	7 036	5 069	674
West Africa	16 095	15 934	25 969	547	868	1 393
Benin	53	255	120[a]	- 2	- 6	- 3[a]
Burkina Faso	34	344	137[a]	1	-	-[a]
Cape Verde	131	190	209	..	-	2
Côte d' Ivoire	319	427	353[a]	- 27[a]	-[a]	8[a]
Gambia	71	76	63	..	..	..
Ghana	636	855	2 120	..	..	4
Guinea	125	386	1 350[a]	..	..	694[a]
Guinea-Bissau	18	19	15[a]	-	-	-[a]
Liberia	108	132	144	346[a]	363[a]	382[a]
Mali	83	73	127[a]	1	7	3[a]
Mauritania	155	153	103[a]	5[a]	4[a]	4[a]
Niger	51	129	147[a]	- 1	8	1[a]

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Annex table B.1. FDI flows, by region and economy, 2006–2008 (continued)
(Millions of dollars)

Region/economy	FDI inflows			FDI outflows		
	2006	2007	2008	2006	2007	2008
Nigeria	13 956	12 454	20 279[a]	228	468	299[a]
Saint Helena	-[a]	-[a]	..	..	..	..
Senegal	220	297	706[a]	10	25	9[a]
Sierra Leone	59	94	30[a]	..	..	..
Togo	77	49	68[a]	- 14	- 1	- 10[a]
Central Africa	4 788	5 694	6 282	123	72	119
Burundi	-	1	1[a]	..	-	..
Cameroon	309	284	260	- 1	- 2	2[a]
Central African Republic	35	57	121	..	..	..
Chad	656	718	834	..	..	..
Congo	1 919	1 816	2 622[a]	..	..	..
Congo, Democratic Republic of	- 108[a]	720[a]	1 000[a]	..	..	..
Equatorial Guinea	1 656	1 726	1 290	..	..	..
Gabon	268	269	20	106[a]	59[a]	96[a]
Rwanda	16	67	103	14	13	14[a]
São Tomé and Principe	38	35	33[a]	3	3	7[a]
East Africa	2 643	4 028	4 272	63	108	114
Comoros	1	8[a]	8[a]	..	..	..
Djibouti	164	195	234	..	..	..
Eritrea	-[a]	-[a]	-[a]	..	..	..
Ethiopia	545	222	93[a]	..	..	..
Kenya	51	728	96	24	36	44
Madagascar	294	777	1 477	..	..	..
Mauritius	105	339	383	10	58	52
Mayotte	-[a]	..	..	..	..	..
Seychelles	146	238	364	8	9	10
Somalia	96[a]	141[a]	87[a]	..	..	..
Uganda	644	733	787	..	..	..
United Republic of Tanzania	597	647	744	20[a]	5[a]	8[a]
Southern Africa	10 377	18 729	27 123	6 303	4 021	- 952
Angola	9 064	9 796	15 548	194	912	2 570
Botswana	486	495	- 4	50	51	3
Lesotho	92	106	199	..	..	..
Malawi	30	55	37[a]	1	1	1[a]
Mozambique	154	427	587	-	-	-
Namibia	387	733	746	- 12	3	5
South Africa	- 527	5 687	9 009	6 067	2 962	- 3 533
Swaziland	36	37	10	2	3	- 5
Zambia	616	1 324	939	..	86	..
Zimbabwe	40	69	52	-	3	8
Latin America and the Caribbean	**93 303**	**127 491**	**144 377**	**63 619**	**51 741**	**63 207**
South and Central America	69 014	105 996	121 418	45 101	26 266	37 255
South America	43 833	71 323	91 742	37 000	14 907	34 366
Argentina	5 537	6 473	8 853	2 439	1 504	1 351
Bolivia	281	366	513	-	7	4
Brazil	18 822	34 585	45 058	28 202	7 067	20 457
Chile	7 298	12 577	16 787	2 742	3 009	6 891
Colombia	6 656	9 049	10 564	1 098	913	2 158
Ecuador	271	194	974	8[a]	8[a]	9[a]
Falkland Islands (Malvinas)	-[a]	..	..	..	..	..
Guyana	102	152	178	..	..	..
Paraguay	173	185	320	7	7	8
Peru	3 467	5 491	4 808	428[a]	66	729
Suriname	323	316	- 234	..	..	..
Uruguay	1 493	1 288	2 205	- 1	89	1
Venezuela, Bolivarian Republic of	- 590	646	1 716	2 076	2 237	2 757
Central America	25 181	34 673	29 676	8 101	11 359	2 889
Belize	109	140	179	1	1	3
Costa Rica	1 469	1 896	2 021	98	263	6
El Salvador	241	1 509	784	- 26	100	65
Guatemala	592	745	838	40	25	16
Honduras	669	816	877	1	1	2
Mexico	19 316	27 278	21 950	5 758	8 256	686
Nicaragua	287	382	626	21[a]	9[a]	16[a]
Panama	2 498	1 907	2 402	2 209[a]	2 704[a]	2 095[a]
Caribbean	24 289	21 495	22 960	18 518	25 475	25 951
Anguilla	143	120	90	..	..	..

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Annex table B.1. FDI flows, by region and economy, 2006−2008 (continued)
(Millions of dollars)

Region/economy	FDI inflows			FDI outflows		
	2006	2007	2008	2006	2007	2008
Antigua and Barbuda	361	358	255	..	..	..
Aruba	572	- 91	187	- 13	30	3
Bahamas	706	746	700	..	..	..
Barbados	105	233	133[a]	14	197	73[a]
British Virgin Islands	6 759[a]	4 609[a]	3 000[a]	11 990[a]	22 591[a]	22 000[a]
Cayman Islands	11 539[a]	11 012[a]	10 920[a]	6 064[a]	2 557[a]	3 500[a]
Cuba	26[a]	30[a]	36[a]	- 2[a]	..	..
Dominica	29	61	60	..	..	..
Dominican Republic	1 528	1 579	2 885	- 61[a]	- 17[a]	- 19[a]
Grenada	96	190	168	..	..	..
Haiti	160	75	30	..	..	..
Jamaica	882	867	789[a]	85	115	102[a]
Montserrat	2	6	2	..	..	..
Netherlands Antilles	- 22	234	266	57	- 3	15
Saint Kitts and Nevis	115	164	94	..	..	..
Saint Lucia	238	259	110	..	..	..
Saint Vincent and the Grenadines	109	117	96	..	..	..
Trinidad and Tobago	883	830	3 047[a]	370	-	271[a]
Turks and Caicos Islands	58	97	92	14	4	5
Asia and Oceania	**283 402**	**332 682**	**388 709**	**144 492**	**223 130**	**220 194**
Asia	282 127	331 425	387 828	144 448	223 081	220 139
West Asia	67 633	77 609	90 255	23 977	48 342	33 684
Bahrain	2 915	1 756	1 794	980	1 669	1 620
Iraq	383	485	488[a]	305	149[a]	181[a]
Jordan	3 268	1 950	1 954	- 138	48	13
Kuwait	122	123	56	8 240	10 156	8 521
Lebanon	2 675	2 731	3 606	875	848	987
Oman	1 688	3 125	2 928	275	243	329
Palestinian territory	19	28	29[a]	129	44	45[a]
Qatar	3 500[a]	4 700[a]	6 700[a]	127[a]	5 263[a]	2 400[a]
Saudi Arabia	18 293	24 318	38 223	1 257[a]	13 139[a]	1 080[a]
Syrian Arab Republic	659	1 242	2 116[a]	55[a]	55[a]	57[a]
Turkey	20 185	22 046	18 198	924	2 106	2 585
United Arab Emirates	12 806	14 187	13 700[a]	10 892	14 568	15 800[a]
Yemen	1 121	917	463[a]	56[a]	54[a]	66[a]
South, East and South-East Asia	**214 495**	**253 816**	**297 573**	**120 470**	**174 739**	**186 455**
East Asia	131 769	150 353	186 982	82 301	111 176	136 156
China	72 715	83 521	108 312	21 160	22 469	52 150
Hong Kong, China	45 054	54 365	63 003	44 979	61 119	59 920
Korea, Democratic People's Republic of	- 105[a]	67[a]	44[a]	..	..	..
Korea, Republic of	4 881	2 628	7 603	8 127	15 620	12 795
Macao, China	1 608	1 642	1 905[a]	636	861	998[a]
Mongolia	191	360	683	..	..	..
Taiwan Province of China	7 424	7 769	5 432	7 399	11 107	10 293
South Asia	27 758	33 982	50 669	14 871	17 758	18 182
Afghanistan	238	243	300	..	..	..
Bangladesh	793	666	1 086	4	21	9
Bhutan	6	73	30	..	..	..
India	20 336	25 127	41 554	14 344	17 281	17 685
Iran, Islamic Republic of	1 626	1 658	1 492	386[a]	302[a]	380[a]
Maldives	14	15	15	..	..	..
Nepal	- 7	6	1	..	..	..
Pakistan	4 273	5 590	5 438	109	99	46
Sri Lanka	480	603	752	29	55	62
South-East Asia	54 967	69 482	59 923	23 298	45 805	32 117
Brunei Darussalam	434	260	239	18	37[a]	34[a]
Cambodia	483	867	815	12	5	24
Indonesia	4 914	6 928	7 919	2 726	4 675	5 900
Lao People's Democratic Republic	187	324	228	..	..	..
Malaysia	6 060	8 401	8 053	6 084	11 087	14 059
Myanmar	428	258	283[a]	..	..	..
Philippines	2 921	2 916	1 520	103	3 536	237
Singapore	27 680	31 550	22 725	13 298	24 458	8 928
Thailand	9 460	11 238	10 091	972	1 857	2 835
Timor-Leste	-[a]	-[a]	-[a]	..	..	..
Viet Nam	2 400	6 739	8 050	85	150	100[a]

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Annex table B.1. FDI flows, by region and economy, 2006–2008 (concluded)
(Millions of dollars)

Region/economy	FDI inflows			FDI outflows		
	2006	2007	2008	2006	2007	2008
Oceania	1 275	1 258	881	44	49	55
Cook Islands	3[a]	-[a]	1[a]	-[a]	1[a]	-[a]
Fiji	374	289[a]	274[a]	1	6[a]	6[a]
French Polynesia	31	58	32[a]	10	14	13[a]
Kiribati	13[a]	- 8[a]	2[a]	..	..	..
Marshall Islands	6[a]	12[a]	6[a]	- 8[a]	..	..
Micronesia, Federated States of	1[a]	17[a]	6[a]	..	..	..
Nauru	-	1[a]	-[a]	..	..	..
New Caledonia	749	657	467[a]	31	7	23[a]
Niue	..	..	..	- 2[a]	2[a]	..
Palau	1[a]	3[a]	2[a]	..	..	..
Papua New Guinea	- 7	96	- 30	1	8	-
Samoa	12	3	6[a]	2	-	-[a]
Solomon Islands	34	67	76	7	10	12
Tonga	10	28	6	2	2	2
Tuvalu	5[a]	-[a]	2[a]	..	..	..
Vanuatu	44	34	34	1	1	- 1
Wallis and Futuna Islands	-[a]	1[a]	..	..	..	..
South-East Europe and CIS	54 548	90 866	114 361	23 724	51 505	58 496
South-East Europe	9 891	12 792	10 880	396	1 380	634
Albania	324	658	956	11	15	92
Bosnia and Herzegovina	718	2 115	1 009	4	24	-
Croatia	3 457	4 982	4 383	263	246	170
Montenegro	618	876	939	33	157	108
Serbia	4 350	3 462	2 994	85	938	277
The FYR of Macedonia	424	699	598	-	- 1	- 14
CIS	**44 657**	**78 074**	**103 481**	**23 328**	**50 125**	**57 862**
Armenia	453	661	1 132	3	- 3	10
Azerbaijan	- 601	- 4 817	11	705	286	556
Belarus	354	1 785	2 158	3	15	9
Georgia	1 170	1 750	1 564	- 16	75	41
Kazakhstan	6 278	11 126	14 543	- 385	3 151	3 812
Kyrgyzstan	182	208	233	-	-	-
Moldova, Republic of	251	493	713	- 1	12	33
Russian Federation	29 701	55 073	70 320	23 151	45 916	52 390
Tajikistan	339	360	376	..	..	..
Turkmenistan	731[a]	804[a]	820[a]	..	..	..
Ukraine	5 604	9 891	10 693	- 133	673	1 010
Uzbekistan	195[a]	739[a]	918[a]	..	..	..
Memorandum						
All developing economies, excluding China	361 049	445 823	512 421	194 122	263 017	240 560
Developing economies and transition economies	488 312	620 210	735 095	239 006	336 991	351 206
Least developed countries (LDCs) [b]	22 714	25 737	33 098	670	1 521	3 889
Major petroleum exporters [c]	77 747	92 095	126 371	27 848	58 211	48 581
Major exporters of manufactures [d]	254 855	311 425	353 498	151 351	185 964	202 630
EU-15, 1995 [e]	524 324	766 699	433 681	678 500	1 175 380	824 305
EU-25, 2005 [f]	571 271	820 672	480 943	696 595	1 191 589	836 573

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Estimates. For details, see "Definitions and Sources".

[b] Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

[c] Major petroleum exporters countries include: Algeria, Angola, Bahrain, Brunei Darussalam, Congo, Gabon, Indonesia, the Islamic Republic of Iran, Iraq, Kuwait, the Libyan Arab Jamahiriya, Nigeria, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic, Trinidad and Tobago, the United Arab Emirates, the Bolivarian Republic of Venezuela and Yemen.

[d] Major exporters of manufactures include: Brazil, China, Hong Kong (China), India, the Republic of Korea, Malaysia, Mexico, the Philippines, Singapore, Taiwan Province of China, Thailand and Turkey.

[e] EU-15, 1995 include: Austria, Belgium and Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

[f] EU-25, 2005 include: Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Annex table B.2. FDI stock, by region and economy, 1990, 2000, 2008
(Millions of dollars)

Region/economy	FDI inward stock			FDI outward stock		
	1990	2000	2008	1990	2000	2008
World	**1 942 207**	**5 757 360**	**14 909 289**	**1 785 584**	**6 069 882**	**16 205 663**
Developed economies	**1 412 605**	**3 960 321**	**10 212 893**	**1 640 405**	**5 186 178**	**13 623 626**
Europe	**808 943**	**2 281 563**	**6 932 525**	**887 519**	**3 250 775**	**8 997 437**
European Union	**761 897**	**2 163 354**	**6 431 893**	**810 472**	**2 983 925**	**8 086 804**
Austria	10 972	31 165	139 340	4 747	24 821	152 562
Belgium and Luxembourg	58 388	195 219	..	40 636	179 773	..
Belgium	..	..	518 940	..	..	588 269
Bulgaria	112[a]	2 704	46 011	124[a]	67	1 248
Cyprus	..[a, b]	2 910[a]	20 706	8[a]	560[a]	10 493
Czech Republic	1 363[a]	21 644	114 369	..	738	9 913
Denmark	9 192	45 916	150 492	7 342	44 981	192 523
Estonia	..	2 645	15 962	..	259	6 686
Finland	5 132	24 273	87 860	11 227	52 109	114 526
France	97 814	259 775	991 377	112 441	445 091	1 396 997
Germany	111 231	271 611	700 471[a]	151 581	541 861	1 450 910[a]
Greece	5 681[a]	14 113	36 703	2 882[a]	6 094	32 441
Hungary	570	22 870	63 671	159[a]	1 280	14 179
Ireland	37 989[a]	127 089	173 420[a]	14 942[a]	27 925	159 363[a]
Italy	59 998	121 170	343 215	60 184	180 275	517 051
Latvia	..	2 084	11 447	..	24	1 066
Lithuania	..	2 334	12 847	..	29	1 990
Luxembourg	..	23 492	85 353	..	7 927	62 664
Malta	465[a]	2 263	9 142[a]	..	193	1 517[a]
Netherlands	68 731	243 733	644 598	106 900	305 461	843 737
Poland	109	34 227	161 406	95[a]	1 018	21 814
Portugal	10 571	32 043	99 820	900	19 793	63 642
Romania	-	6 953	71 864	66	136	912
Slovakia	282[a]	4 746	45 933	..	373	1 901
Slovenia	1 643[a]	2 894	15 782[a]	560[a]	768	8 650[a]
Spain	65 916	156 348	634 788	15 652	129 194	601 849
Sweden	12 636	93 995	253 502	50 720	123 256	319 310
United Kingdom	203 905	438 631	982 877	229 307	897 845	1 510 593
Other developed Europe	47 045	118 209	500 632	77 047	266 850	910 633
Gibraltar	263[a]	642[a]	1 565[a]	..	..	..
Iceland	147	497	3 493	75	663	14 783
Norway	12 391	30 265	121 521[a]	10 884	34 026	171 164[a]
Switzerland	34 245	86 804	374 054	66 087	232 161	724 687
North America	507 754	1 469 583	2 691 160	515 328	1 553 886	3 682 420
Canada	112 843	212 716	412 268	84 807	237 639	520 399
United States	394 911	1 256 867	2 278 892	430 521	1 316 247	3 162 021
Other developed economies	95 908	209 175	589 207	237 558	381 518	943 768
Australia	73 644	111 139	272 174	30 507	85 385	194 721
Bermuda	..	265[a]	2 755[a]	..	108[a]	1 952[a]
Israel	4 476	22 556	57 481	1 188	9 091	53 672
Japan	9 850	50 322	203 372	201 441	278 442	680 331
New Zealand	7 938	24 894	53 424	4 422[a]	8 491	13 093
Developing economies	**529 593**	**1 736 167**	**4 275 982**	**145 179**	**862 358**	**2 356 649**
Africa	60 635	154 244	510 511	19 826	44 155	97 958
North Africa	23 923	45 688	173 637	1 836	3 282	17 719
Algeria	1 521[a]	3 497[a]	14 458[a]	183[a]	249[a]	1 335[a]
Egypt	11 043[a]	19 955	59 998[a]	163[a]	655	3 701[a]
Libyan Arab Jamahiriya	678[a]	451[a]	12 834[a]	1 321[a]	1 942[a]	10 823[a]
Morocco	3 011[a]	8 842[a]	41 001[a]	155[a]	402[a]	1 706[a]
Sudan	55[a]	1 398[a]	16 262[a]	..	..	..
Tunisia	7 615	11 545	29 083	15	33	155
Other Africa	36 712	108 555	336 874	17 989	40 874	80 239
West Africa	14 013	33 401	110 928	1 799	6 627	11 125
Benin	..[a, b]	213	677[a]	2[a]	11	27[a]
Burkina Faso	39[a]	28	697[a]	4[a]	-	10[a]
Cape Verde	4[a]	192[a]	974	1[a]	7[a]	11[a]
Côte d' Ivoire	975[a]	2 483	6 054[a]	6[a]	9	30[a]
Gambia	157	216	583[a]	..	..	..
Ghana	319[a]	1 605[a]	5 755[a]	..	..	..
Guinea	69[a]	263[a]	2 441[a]	..	7[a]	701[a]
Guinea-Bissau	8[a]	38[a]	108[a]	..	..	2[a]
Liberia	2 732[a]	3 247[a]	4 171[a]	453[a]	2 188[a]	3 981[a]
Mali	229[a]	132	1 093[a]	22[a]	22[a]	54[a]

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Annex table B.2. FDI stock, by region and economy, 1990, 2000, 2008 (continued)
(Millions of dollars)

Region/economy	FDI inward stock			FDI outward stock		
	1990	2000	2008	1990	2000	2008
Mauritania	59[a]	146[a]	2 008[a]	3[a]	4[a]	22[a]
Niger	286[a]	45	424[a]	54[a]	117[a]	122[a]
Nigeria	8 539[a]	23 786[a]	83 069[a]	1 207[a]	4 132[a]	6 020[a]
Senegal	258[a]	295	1 544[a]	47[a]	117[a]	196[a]
Sierra Leone	243[a]	284[a]	423[a]	..	..	..
Togo	268[a]	427[a]	908[a]	..	13[a]	..[a, b]
Central Africa	3 808	5 804	35 052	372	648	866
Burundi	30[a]	47[a]	48[a]	-[a]	2[a]	2[a]
Cameroon	1 044[a]	1 600[a]	4 055[a]	150[a]	254[a]	252[a]
Central African Republic	95[a]	104[a]	411[a]	18[a]	43[a]	43[a]
Chad	250[a]	576[a]	5 247[a]	37[a]	70[a]	70[a]
Congo	575[a]	1 889[a]	9 270[a]	..	..	..
Congo, Democratic Republic of	546[a]	617[a]	2 521[a]	..	..	..
Equatorial Guinea	25[a]	1 131[a]	12 035[a]	-[a]	..[a, b]	3[a]
Gabon	1 208[a]	..[a, b]	1 046[a]	167[a]	280[a]	495[a]
Rwanda	33[a]	55	274	..	..	..
São Tomé and Principe	-[a]	11[a]	146[a]	..	..	..
East Africa	1 701	7 132	24 511	165	371	666
Comoros	17[a]	21[a]	40[a]	..	..	..
Djibouti	13[a]	40	752	..	..	..
Eritrea	..	337[a]	383[a]	..	..	..
Ethiopia	124[a]	941[a]	3 681[a]	..	..	..
Kenya	668[a]	931[a]	1 988[a]	99[a]	115[a]	243[a]
Madagascar	107[a]	141	3 306[a]	1[a]	10[a]	6[a]
Mauritius	168[a]	683[a]	1 632[a]	1[a]	132[a]	348[a]
Seychelles	213	448	1 508	64	114	68
Somalia	..[a, b]	4[a]	346[a]	..	..	..
Uganda	6[a]	807	4 189	..	..	..
United Republic of Tanzania	388[a]	2 778	6 686[a]	..	..	..
Southern Africa	17 191	62 219	166 383	15 653	33 228	67 582
Angola	1 024[a]	7 978[a]	26 750[a]	1[a]	2[a]	3 696[a]
Botswana	1 309	1 827	699	447	517	1 060
Lesotho	83[a]	330[a]	934[a]	-[a]	2[a]	2[a]
Malawi	228[a]	358	627[a]	..	8[a]	21[a]
Mozambique	25	1 249	3 803	2[a]	1[a]	1
Namibia	2 047	1 276	3 472	80	45	11
South Africa	9 207	43 462	119 392[a]	15 004	32 333	62 325[a]
Swaziland	336	536	619	38	87	59
Zambia	2 655[a]	3 966[a]	8 545	..	..	154[a]
Zimbabwe	277[a]	1 238[a]	1 544[a]	80[a]	234[a]	253[a]
Latin America and the Caribbean	**110 547**	**502 487**	**1 181 615**	**57 643**	**204 388**	**561 432**
South and Central America	101 977	424 180	978 056	56 013	115 038	329 268
South America	73 481	309 057	633 517	49 344	95 939	255 506
Argentina	7 751[a]	67 601	76 091	6 057[a]	21 141	28 749
Bolivia	1 026	5 188	5 998	7[a]	29	64
Brazil	37 143	122 250	287 697	41 044[a]	51 946[a]	162 218
Chile	16 107[a]	45 753	100 989	154[a]	11 154	31 728
Colombia	3 500	11 157	67 229	402	2 989	13 084
Ecuador	1 626	6 337	11 300	16[a]	158[a]	201[a]
Falkland Islands (Malvinas)	-[a]	58[a]	..	..	..	..
Guyana	45[a]	756[a]	1 422[a]	..	1[a]	2[a]
Paraguay	418[a]	1 327	2 398	134[a]	214	234
Peru	1 330	11 062	30 232	122	505	2 270
Uruguay	671[a]	2 088	8 788	186[a]	126[a]	337
Venezuela, Bolivarian Republic of	3 865	35 480	41 375	1 221	7 676	16 619
Central America	28 496	115 123	344 539	6 668	19 099	73 762
Belize	89[a]	301[a]	1 043[a]	20[a]	43[a]	49[a]
Costa Rica	1 324[a]	2 709	10 818	44[a]	86	532
El Salvador	212	1 973	6 701	56[a]	74	449
Guatemala	1 734	3 420	5 455[a]	..	93[a]	332[a]
Honduras	293	1 392	5 112	..	..	25
Mexico	22 424	97 170	294 680	2 672[a]	8 273	45 389
Nicaragua	145[a]	1 414[a]	3 756[a]	..	22[a]	140[a]
Panama	2 275	6 744	16 974	3 876[a]	10 507[a]	26 846[a]
Caribbean	8 570	78 307	203 559	1 630	89 350	232 164
Anguilla	11[a]	231[a]	902[a]	..	..	..
Antigua and Barbuda	290[a]	619[a]	2 353[a]	..	..	..

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Annex table B.2. FDI stock, by region and economy, 1990, 2000, 2008 (continued)
(Millions of dollars)

Region/economy	FDI inward stock			FDI outward stock		
	1990	2000	2008	1990	2000	2008
Aruba	145[a]	760	2 033[a]	..	374	360[a]
Bahamas	586[a]	2 988[a]	7 593[a]	..	..	..
Barbados	171	308	923[a]	23	41	340[a]
British Virgin Islands	126[a]	32 093[a]	64 578[a]	875[a]	67 132[a]	176 862[a]
Cayman Islands	1 749[a]	25 585[a]	79 973[a]	648[a]	20 788[a]	51 287[a]
Cuba	2[a]	74[a]	185[a]	..	..	..
Dominica	66[a]	275[a]	559[a]	..	..	..
Dominican Republic	572	1 673[a]	11 408[a]	..	..	..
Grenada	70[a]	348[a]	1 156[a]	..	..	..
Haiti	149[a]	95	415	..	2[a]	2[a]
Jamaica	1 295[a]	3 821[a]	9 456[a]	42[a]	709[a]	1 452[a]
Montserrat	40[a]	83[a]	99[a]	..	..	..
Netherlands Antilles	408[a]	277[a]	967[a]	21[a]	11[a]	166[a]
Saint Kitts and Nevis	160[a]	487[a]	1 278[a]	..	..	..
Saint Lucia	316[a]	807[a]	1 870[a]	..	..	..
Saint Vincent and the Grenadines	48[a]	499[a]	1 037[a]	..	..	..
Trinidad and Tobago	2 365[a]	7 280[a]	16 415[a]	21[a]	293[a]	1 694[a]
Turks and Caicos Islands	2	4	358	..	..	..
Asia and Oceania	**358 412**	**1 079 436**	**2 583 855**	**67 710**	**613 815**	**1 697 259**
Asia	355 576	1 074 958	2 575 002	67 402	613 257	1 696 386
West Asia	43 832	66 494	362 559	8 476	16 065	131 985
Bahrain	552	5 906	14 844	719	1 752	9 340
Iraq	..[a, b]	..[a, b]	2 135[a]	..	..	..
Jordan	1 466[a]	3 135	18 012[a]	158[a]	44	373[a]
Kuwait	37[a]	608	991	3 662	1 677	15 807
Lebanon	53[a]	4 988[a]	24 170[a]	43[a]	586[a]	5 451[a]
Oman	1 723[a]	2 577[a]	11 993[a]	590[a]	611[a]	1 902[a]
Palestinian territory	..	932[a]	1 150[a]	..	606[a]	1 635[a]
Qatar	63[a]	1 912[a]	22 055[a]	..	74[a]	8 738[a]
Saudi Arabia	21 894[a]	17 577	114 277	2 124[a]	4 990[a]	23 130[a]
Syrian Arab Republic	5 954[a]	7 279[a]	10 337[a]	4[a]	105[a]	567[a]
Turkey	11 189[a]	19 204	69 871	1 157[a]	3 668	13 865
United Arab Emirates	751[a]	1 069[a]	69 420[a]	14[a]	1 938[a]	50 801[a]
Yemen	180	1 336	3 305[a]	5[a]	12[a]	376[a]
South, East and South-East Asia	**311 744**	**1 008 463**	**2 212 443**	**58 926**	**597 192**	**1 564 401**
East Asia	240 645	710 475	1 363 128	49 032	509 637	1 197 468
China	20 691[a]	193 348	378 083	4 455[a]	27 768[a]	147 949
Hong Kong, China	201 653[a]	455 469	835 764	11 920[a]	388 380	775 920
Korea, Democratic People's Republic of	572[a]	1 044[a]	1 435[a]	..	..	..
Korea, Republic of	5 186	38 110	90 693	2 301	26 833	95 540
Macao, China	2 809[a]	2 801[a]	9 749[a]	..	..	2 920[a]
Mongolia	-[a]	182[a]	1 946[a]	..	..	..
Taiwan Province of China	9 735[a]	19 521	45 458	30 356[a]	66 655	175 140
South Asia	6 795	31 003	186 105	422	3 075	65 297
Afghanistan	12[a]	17[a]	1 365[a]	..	..	..
Bangladesh	478[a]	2 162	4 817	45[a]	69	81
Bhutan	2[a]	4[a]	131[a]	..	..	..
India	1 657[a]	17 517	123 288	124[a]	1 859	61 765
Iran, Islamic Republic of	2 039[a]	2 597[a]	20 811[a]	..	572[a]	1 853[a]
Maldives	25[a]	118[a]	225[a]	..	..	..
Nepal	12[a]	72[a]	127[a]	..	..	..
Pakistan	1 892	6 919	31 059[a]	245	489	1 284[a]
Sri Lanka	679[a]	1 596	4 283[a]	8[a]	86[a]	314[a]
South-East Asia	64 303	266 985	663 210	9 471	84 481	301 635
Brunei Darussalam	33[a]	3 868[a]	10 361[a]	..	447[a]	732[a]
Cambodia	38[a]	1 580	4 637	..	193	308
Indonesia	8 732[a]	25 060[a]	67 044[a]	86[a]	6 940[a]	27 233[a]
Lao People's Democratic Republic	13[a]	556[a]	1 408[a]	..	21[a]	20[a]
Malaysia	10 318	52 747[a]	73 262	753	15 878[a]	67 580
Myanmar	281[c]	3 865[c]	5 546[a]	..	..	..
Philippines	4 528[a]	18 156[a]	21 470[a]	406[a]	2 044[a]	5 810[a]
Singapore	30 468	110 570	326 142[a]	7 808	56 755	189 094[a]
Thailand	8 242	29 915	104 850[a]	418	2 203	10 857[a]
Timor-Leste	-[a]	72[a]	166[a]	..	..	..
Viet Nam	1 650[a]	20 596	48 325[a]	..	..	..
Oceania	2 836	4 478	8 853	308	558	873
Cook Islands	14[a]	34[a]	39[a]	..	..	..

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Annex table B.2. FDI stock, by region and economy, 1990, 2000, 2008 (concluded)
(Millions of dollars)

Region/economy	FDI inward stock			FDI outward stock		
	1990	2000	2008	1990	2000	2008
Fiji	284	389	1 759[a]	25[a]	35	82[a]
French Polynesia	69[a]	139[a]	324[a]	..	..	82[a]
Kiribati	-[a]	69[a]	141[a]	..	..	..
New Caledonia	70[a]	67[a]	2 239[a]	..	..	..
Niue	..	-[a]	7[a]	..	..	..
Northern Mariana Islands	304[a]	767[a]	..	..	..	..
Palau	..	97[a]	124[a]	..	..	..
Papua New Guinea	1 582	2 010[a]	2 312[a]	26[a]	265[a]	276[a]
Samoa	9[a]	53[a]	74[a]	..	..	..
Solomon Islands	301[a]	382[a]	700	258[a]	258[a]	375
Tokelau	..	-	..	..	..	..
Tonga	1[a]	15[a]	84[a]	..	..	..
Tuvalu	..	..[a, b]	32[a]	..	..	..
Vanuatu	201[a]	457[a]	1 019	..	..	58
South-East Europe and CIS	9	60 873	420 414	-	21 345	225 387
South-East Europe	-	5 666	65 426	-	841	4 174
Albania	..	247	2 627	..	..	147
Bosnia and Herzegovina	..	1 063[a]	7 779[a]	..	..	29[a]
Croatia	..	2 800	31 061	..	825	3 635
Montenegro	..	..	3 234	..	..	310
Serbia	..	1 017[a]	16 387[a]	..	..	..
The FYR of Macedonia	..	540	4 338[a]	..	16	54[a]
CIS	**9**	**55 206**	**354 988**	**-**	**20 504**	**221 213**
Armenia	9[a]	583	3 521	..	1[a]	24
Azerbaijan	..	3 735	6 612	..	5[a]	5 232
Belarus	..	1 306	6 679	..	24	50
Georgia	..	762	6 919	..	92	130
Kazakhstan	..	10 078	58 284	..	16	5 842
Kyrgyzstan	..	432	1 015	..	33	18
Moldova, Republic of	..	449	2 573	..	23	75
Russian Federation	..	32 204	213 734	..	20 141	202 837
Tajikistan	..	136[a]	862	..	..	..
Turkmenistan	..	949[a]	4 748[a]	..	..	..
Ukraine	..	3 875	46 997	..	170	7 005
Uzbekistan	..	698[a]	3 043[a]	..	..	..
Memorandum						
All developing economies, excluding China	508 903	1 542 819	3 897 899	140 724	834 590	2 208 701
Developing economies and transition economies	529 602	1 797 039	4 696 396	145 179	883 703	2 582 037
Least developed countries (LDCs) [d]	11 579	39 061	136 167	952	3 172	10 284
Major petroleum exporters [e]	62 112	150 173	553 756	11 345	33 703	181 329
Major exporters of manufactures [f]	363 234	1 173 978	2 651 258	103 415	652 262	1 751 127
EU-15, 1995 [g]	758 156	2 055 080	5 842 753	809 459	2 978 480	8 006 436
EU-25, 2005 [h]	761 785	2 153 697	6 314 019	810 282	2 983 721	8 084 644

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Estimates. For details, see "Definitions and Sources" in annex B.

[b] Negative stock value. However, this value is included in the regional and global total.

[c] On a fiscal year basis.

[d] Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

[e] Major petroleum exporters countries include: Algeria, Angola, Bahrain, Brunei Darussalam, Congo, Gabon, Indonesia, Islamic the Republic of Iran, Iraq, Kuwait, the Libyan Arab Jamahiriya, Nigeria, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic, Trinidad and Tobago, the United Arab Emirates, the Bolivarian Republic of Venezuela and Yemen.

[f] Major exporters of manufactures include: Brazil, China, Hong Kong (China), India, the Republic of Korea, Malaysia, Mexico, the Philippines, Singapore, Taiwan Province of China, Thailand and Turkey.

[g] EU-15, 1995 include: Austria, Belgium and Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

[h] EU-25, 2005 include: Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006−2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008

(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
World						
inward	**13.4**	**16.0**	**12.3**	**9.1**	**18.1**	**24.5**
outward	***12.9***	***17.4***	***13.5***	***8.5***	***19.2***	***26.9***
Developed economies						
inward	**13.4**	**17.1**	**11.4**	**8.1**	**16.1**	**24.7**
outward	***15.9***	***22.8***	***17.9***	***9.5***	***21.1***	***33.0***
Europe						
inward	**19.8**	**23.7**	**12.7**	**10.7**	**25.7**	**36.0**
outward	***25.1***	***33.5***	***23.2***	***11.8***	***36.7***	***46.7***
European Union						
inward	**19.4**	**23.4**	**13.0**	**10.6**	**25.6**	**35.1**
outward	***23.0***	***33.1***	***21.6***	***11.3***	***35.3***	***44.2***
Austria						
inward	11.3	35.9	14.6	6.7	16.3	33.7
outward	*19.5*	*40.5*	*30.5*	*2.9*	*13.0*	*36.9*
Belgium and Luxembourg						
inward	..	..	..	27.1	77.4	..
outward	..	..	..	*18.9*	*71.3*	..
Belgium						
inward	70.3	111.6	52.2	..	..	102.9
outward	*60.5*	*94.6*	*59.7*	..	..	*116.7*
Bulgaria						
inward	93.4	99.5	55.3	0.5	21.5	92.2
outward	*2.1*	*2.3*	*4.4*	*0.6*	*0.5*	*2.5*
Cyprus						
inward	50.0	46.4	37.4	..[a]	32.0	83.4
outward	*24.2*	*25.7*	*25.5*	*0.1*	*6.2*	*42.3*
Czech Republic						
inward	15.6	24.7	20.6	..	38.2	52.7
outward	*4.2*	*3.8*	*3.7*	..	*1.3*	*4.6*
Denmark						
inward	14.1	13.6	14.8	6.8	28.7	44.1
outward	*23.8*	*25.5*	*39.1*	*5.4*	*28.1*	*56.4*
Estonia						
inward	32.1	40.3	29.9	..	47.0	68.8
outward	*20.0*	*25.6*	*16.5*	..	*4.6*	*28.8*
Finland						
inward	18.9	24.7	- 7.5	3.7	19.9	32.2
outward	*11.9*	*15.3*	*2.9*	*8.0*	*42.8*	*42.0*
France						
inward	16.7	28.2	18.8	7.9	19.5	34.7
outward	*25.9*	*40.1*	*35.2*	*9.0*	*33.5*	*48.9*
Germany						
inward	10.8	9.1	3.6	6.5	14.3	19.2
outward	*24.0*	*28.9*	*22.3*	*8.8*	*28.5*	*39.8*
Greece						
inward	8.9	2.7	7.4	6.2	11.2	10.3
outward	*6.9*	*7.6*	*3.9*	*3.1*	*4.9*	*9.1*
Hungary						
inward	38.5	27.2	27.2	1.5	47.7	41.4
outward	*19.8*	*16.7*	*6.9*	*0.4*	*2.7*	*9.2*
Ireland						
inward	- 9.3	36.0	- 34.8	79.4	131.9	63.7
outward	*25.6*	*30.8*	*23.5*	*31.2*	*29.0*	*58.6*
Italy						
inward	9.9	9.0	3.5	5.3	11.0	14.9
outward	*10.7*	*20.3*	*9.1*	*5.3*	*16.4*	*22.5*
Latvia						
inward	25.6	23.0	13.9	..	26.6	33.9
outward	*2.7*	*3.4*	*2.3*	..	*0.3*	*3.2*
Lithuania						
inward	24.2	18.4	15.4	..	20.4	27.2
outward	*3.8*	*5.6*	*3.0*	..	*0.3*	*4.2*
Luxembourg						
inward	361.8	- 325.6	27.8	..	..	158.9
outward	*43.5*	*595.9*	*- 230.4*	..	..	*116.7*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006–2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Malta						
inward	145.6	64.3	66.2	18.9	58.1	108.4
outward	*2.3*	*2.1*	*20.9*	..	*4.9*	*18.0*
Netherlands						
inward	5.2	71.0	- 2.0	23.1	63.3	74.0
outward	*45.9*	*17.1*	*32.3*	*35.9*	*79.3*	*96.9*
Poland						
inward	29.2	24.7	14.4	0.2	20.0	30.7
outward	*13.2*	*5.2*	*3.1*	*0.1*	*0.6*	*4.1*
Portugal						
inward	25.6	6.2	6.7	14.0	28.4	41.0
outward	*16.8*	*11.2*	*4.0*	*1.2*	*17.6*	*26.2*
Romania						
inward	36.2	19.6	20.1	-	18.8	36.7
outward	*1.3*	*0.5*	*- 0.4*	*0.2*	*0.4*	*0.5*
Slovakia						
inward	31.7	16.7	13.9	..	23.3	48.4
outward	*3.5*	*2.0*	*1.0*	..	*1.8*	*2.0*
Slovenia						
inward	6.3	11.1	11.9	..	17.0	29.0
outward	*8.4*	*13.9*	*9.4*	..	*4.5*	*15.9*
Spain						
inward	9.9	6.3	13.9	12.7	26.9	39.6
outward	*26.6*	*21.5*	*16.4*	*3.0*	*22.2*	*37.5*
Sweden						
inward	38.0	25.6	46.7	5.2	38.3	52.9
outward	*32.9*	*43.9*	*40.0*	*20.9*	*50.2*	*66.7*
United Kingdom						
inward	37.2	37.0	21.8	20.6	30.4	36.9
outward	*20.6*	*55.6*	*25.0*	*23.1*	*62.3*	*56.7*
Other developed Europe						
inward	27.0	31.4	7.3	13.0	27.6	52.0
outward	*67.1*	*43.1*	*53.1*	*21.4*	*62.7*	*94.9*
Iceland						
inward	71.1	61.0	- 65.4	2.3	5.7	21.1
outward	*92.5*	*230.9*	*- 176.2*	*1.2*	*7.6*	*89.3*
Norway						
inward	10.1	5.4	- 0.1	10.7	18.1	26.9
outward	*33.4*	*18.8*	*30.0*	*9.4*	*20.4*	*37.9*
Switzerland						
inward	37.1	52.6	16.7	14.4	34.7	76.1
outward	*91.1*	*53.0*	*82.7*	*27.7*	*92.9*	*147.5*
North America						
inward	10.6	13.5	12.5	8.0	14.0	17.1
outward	*9.5*	*15.6*	*13.5*	*8.1*	*14.8*	*23.4*
Canada						
inward	20.9	33.6	13.2	19.4	29.3	27.5
outward	*15.5*	*18.5*	*22.9*	*14.6*	*32.8*	*34.7*
United States						
inward	9.4	10.9	12.5	6.8	12.9	16.0
outward	*8.9*	*15.2*	*12.3*	*7.4*	*13.5*	*22.2*
Other developed economies						
inward	3.5	5.9	5.6	2.8	4.0	9.5
outward	*7.1*	*7.5*	*11.6*	*6.9*	*7.3*	*15.1*
Australia						
inward	13.8	17.5	16.4	23.2	28.6	27.4
outward	*11.6*	*6.6*	*12.6*	*9.6*	*22.0*	*19.6*
Bermuda						
inward	21.1	75.7	20.1	..	7.6	47.8
outward	*46.8*	*32.7*	*50.0*	..	*3.1*	*33.9*
Israel						
inward	59.9	29.5	26.8	7.9	18.6	28.9
outward	*60.7*	*22.8*	*21.9*	*2.1*	*7.5*	*27.0*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006−2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Japan						
inward	- 0.6	2.2	2.2	0.3	1.1	4.1
outward	*4.9*	*7.2*	*11.3*	*6.7*	*6.0*	*13.9*
New Zealand						
inward	31.1	8.2	7.0	18.1	47.3	42.3
outward	*2.0*	*10.7*	*0.4*	*10.1*	*16.1*	*10.4*
Developing economies						
inward	**13.0**	**13.1**	**12.8**	**13.8**	**25.1**	**24.8**
outward	***6.5***	***7.1***	***6.1***	***4.1***	***12.9***	***14.0***
Africa						
inward	27.3	27.0	29.0	12.5	26.2	33.2
outward	*3.9*	*4.6*	*3.4*	*4.8*	*8.3*	*7.2*
North Africa						
inward	26.5	23.3	18.7	12.8	17.7	28.6
outward	*0.2*	*5.2*	*6.7*	*1.1*	*1.3*	*3.2*
Algeria						
inward	6.7	5.0	6.8	2.5	6.4	9.1
outward	*0.1*	*0.9*	*0.8*	*0.3*	*0.5*	*0.8*
Egypt						
inward	47.9	44.3	29.2	28.0	20.0	37.0
outward	*0.7*	*2.5*	*5.9*	*0.4*	*0.7*	*2.3*
Libyan Arab Jamahiriya						
inward	45.1	91.8	56.2	2.3	1.3	12.8
outward	*- 12.0*	*77.0*	*80.5*	*4.6*	*5.7*	*10.8*
Morocco						
inward	13.0	12.2	9.1	10.4	23.9	47.5
outward	*2.4*	*2.7*	*1.4*	*0.5*	*1.1*	*2.0*
Sudan						
inward	39.6	23.1	19.8	0.3	10.6	28.1
outward	*0.1*	*0.1*	*0.7*	..	..	..
Tunisia						
inward	45.5	19.0	27.0	61.8	59.4	70.3
outward	*0.5*	*0.2*	*0.4*	*0.1*	*0.2*	*0.4*
Other Africa						
inward	27.9	29.6	36.7	12.4	32.9	36.2
outward	*7.3*	*4.1*	*0.5*	*7.4*	*14.4*	*9.8*
West Africa						
inward	61.3	48.1	64.6	19.1	39.8	35.6
outward	*2.6*	*3.2*	*3.5*	*2.9*	*8.6*	*3.8*
Benin						
inward	5.8	23.1	8.7	..[a]	9.0	12.5
outward	*- 0.2*	*- 0.6*	*- 0.2*	*0.1*	*0.4*	*0.5*
Burkina Faso						
inward	2.9	23.5	7.8	1.2	1.1	8.6
outward	*0.1*	-	-	*0.1*	-	*0.1*
Cape Verde						
inward	29.2	30.8	28.6	1.2	35.6	56.5
outward	..	*0.1*	*0.3*	*0.4*	*1.3*	*0.6*
Côte d' Ivoire						
inward	21.3	25.3	18.2	8.2	23.2	25.8
outward	*- 1.8*	-	*0.4*	*0.1*	*0.1*	*0.1*
Gambia						
inward	50.2	50.3	33.2	47.0	51.3	72.1
outward	..	..	..	..	..	..
Ghana						
inward	15.2	16.1	37.3	5.1	32.3	35.7
outward	..	..	*0.1*	..	..	..
Guinea						
inward	27.7	61.9	198.3	2.4	8.5	53.7
outward	..	..	*102.0*	..	*0.2*	*15.4*
Guinea-Bissau						
inward	34.1	34.3	23.0	3.4	17.7	23.3
outward	*0.8*	*- 0.5*	*0.4*	..	..	*0.4*
Liberia						
inward	141.9	133.1	127.7	710.6	578.7	499.0
outward	*455.8*	*366.2*	*339.2*	*117.8*	*389.9*	*476.2*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006–2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Mali						
inward	8.2	5.2	7.4	9.1	5.0	12.4
outward	*0.1*	*0.5*	*0.1*	*0.9*	*0.8*	*0.6*
Mauritania						
inward	25.5	26.4	15.9	5.6	13.6	63.5
outward	*0.8*	*0.7*	*0.6*	*0.2*	*0.4*	*0.7*
Niger						
inward	6.8	13.7	12.4	11.4	2.7	7.9
outward	*- 0.1*	*0.9*	*0.1*	*2.2*	*7.0*	*2.3*
Nigeria						
inward	116.1	81.1	103.1	27.1	51.6	38.7
outward	*1.9*	*3.0*	*1.5*	*3.8*	*9.0*	*2.8*
Senegal						
inward	9.0	9.2	18.4	4.2	6.3	11.6
outward	*0.4*	*0.8*	*0.2*	*0.8*	*2.5*	*1.5*
Sierra Leone						
inward	69.8	111.2	29.7	25.8	30.8	18.6
outward	..	..	..	..	..	..
Togo						
inward	19.0	11.0	13.1	15.5	33.0	31.4
outward	*- 3.5*	*- 0.2*	*- 1.9*	..	*1.0*	..[a]
Central Africa						
inward	32.2	31.0	27.7	10.1	20.1	38.4
outward	*2.1*	*1.0*	*1.5*	*1.6*	*3.5*	*1.3*
Burundi						
inward	-	0.2	0.2	2.6	6.6	4.4
outward	..	-	..	-	*0.3*	*0.2*
Cameroon						
inward	10.3	8.2	6.7	7.3	17.2	17.4
outward	-	*- 0.1*	*0.1*	*1.0*	*2.7*	*1.1*
Central African Republic						
inward	26.2	34.0	61.7	7.4	10.9	20.6
outward	..	..	..	*1.4*	*4.5*	*2.2*
Chad						
inward	42.6	45.0	43.7	16.2	41.6	62.5
outward	..	..	..	*2.4*	*5.1*	*0.8*
Congo						
inward	66.5	46.4	60.6	20.5	58.7	74.0
outward	..	..	..	..	..	..
Congo, Democratic Republic of						
inward	- 9.4	54.5	65.1	6.5	11.7	25.3
outward	..	..	..	..	..	..
Equatorial Guinea						
inward	51.4	40.4	20.5	19.0	96.1	80.5
outward	..	..	..	*0.2*	..[a]	-
Gabon						
inward	12.2	10.2	0.6	22.0	..[a]	7.2
outward	*4.8*	*2.2*	*2.9*	*3.0*	*5.5*	*3.4*
Rwanda						
inward	3.4	10.8	12.7	1.3	3.2	6.1
outward	*3.2*	*2.1*	*1.7*	..	..	..
São Tomé and Principe						
inward	48.1	38.0	28.8	0.3	14.9	82.9
outward	*4.0*	*3.3*	*6.1*	..	..	..
East Africa						
inward	15.8	19.3	17.0	4.4	14.9	21.8
outward	*0.7*	*0.9*	*0.9*	*1.0*	*1.7*	*1.4*
Comoros						
inward	1.4	11.9	11.2	7.0	10.2	7.6
outward	..	..	..	..	..	..
Djibouti						
inward	72.4	63.2	65.4	2.8	7.2	76.5
outward	..	..	..	..	..	..
Eritrea						
inward	0.2	-	- 0.1	..	47.8	25.9
outward	..	..	..	..	..	..

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006−2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Ethiopia						
inward	20.8	7.2	2.3	1.1	12.0	14.3
outward	..	..	..	..	..	..
Kenya						
inward	1.2	13.1	1.5	6.1	7.4	6.6
outward	*0.6*	*0.7*	*0.7*	*0.9*	*0.9*	*0.8*
Madagascar						
inward	21.1	38.3	57.8	3.5	3.6	35.7
outward	..	..	..	-	*0.3*	*0.1*
Mauritius						
inward	6.7	17.9	16.8	6.5	14.9	19.3
outward	*0.6*	*3.1*	*2.3*	*0.1*	*2.9*	*4.1*
Seychelles						
inward	57.6	76.0	127.3	57.8	72.5	180.9
outward	*3.2*	*2.7*	*3.5*	*17.3*	*18.4*	*8.2*
Somalia						
inward	18.7	27.5	16.1	..[a]	0.2	13.0
outward	..	..	..	..	..	..
Uganda						
inward	26.2	23.2	20.4	0.2	14.1	28.8
outward	..	..	..	..	..	..
United Republic of Tanzania						
inward	19.3	17.7	16.4	8.3	30.5	37.2
outward	*0.7*	*0.2*	*0.2*	..	..	..
Southern Africa						
inward	16.3	24.1	31.7	11.7	36.8	40.2
outward	*10.4*	*5.2*	*- 1.2*	*11.1*	*20.0*	*16.3*
Angola						
inward	161.3	156.4	176.4	10.0	87.4	32.1
outward	*3.5*	*14.6*	*29.2*	-	-	*4.4*
Botswana						
inward	20.7	16.4	- 0.1	37.5	33.0	6.0
outward	*2.1*	*1.7*	*0.1*	*12.8*	*9.3*	*9.0*
Lesotho						
inward	18.5	25.2	49.0	13.4	38.6	57.6
outward	..	..	..	-	*0.2*	*0.1*
Malawi						
inward	15.9	26.1	15.3	13.0	14.9	19.8
outward	*0.7*	*0.7*	*0.5*	..	*0.3*	*0.7*
Mozambique						
inward	11.6	23.1	26.5	0.9	29.0	39.4
outward	-	-	-	*0.1*	-	-
Namibia						
inward	22.4	35.3	36.2	87.5	32.7	39.3
outward	*- 0.7*	*0.1*	*0.2*	*3.4*	*1.2*	*0.1*
South Africa						
inward	- 1.1	9.5	14.0	8.2	32.7	43.2
outward	*12.5*	*4.9*	*- 5.5*	*13.4*	*24.3*	*22.5*
Swaziland						
inward	6.1	5.1	1.4	38.5	38.6	21.8
outward	*0.4*	*0.4*	*- 0.7*	*4.4*	*6.3*	*2.1*
Zambia						
inward	23.5	43.2	24.4	71.0	122.4	59.7
outward	..	*2.8*	..	..	..	*1.1*
Zimbabwe						
inward	25.5	26.4	19.2	3.2	22.0	70.4
outward	-	*1.2*	*3.0*	*0.9*	*4.2*	*11.6*
Latin America and the Caribbean						
inward	**14.7**	**16.7**	**15.5**	**9.9**	**24.3**	**27.3**
outward	***10.1***	***6.9***	***6.9***	***5.4***	***10.3***	***12.9***
South and Central America						
inward	11.4	14.4	13.5	9.6	21.5	23.5
outward	*7.5*	*3.6*	*4.2*	*5.3*	*5.9*	*7.4*
South America						
inward	11.8	14.9	15.0	9.6	23.4	22.0
outward	*10.0*	*3.1*	*5.7*	*6.4*	*7.3*	*8.9*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006–2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Argentina						
inward	11.1	10.2	11.6	5.5	23.8	23.0
outward	*4.9*	*2.4*	*1.8*	*4.3*	*7.4*	*8.7*
Bolivia						
inward	17.0	17.2	17.7	21.1	61.8	34.4
outward	-	*0.3*	*0.1*	*0.1*	*0.4*	*0.4*
Brazil						
inward	10.5	14.8	15.1	8.5	19.0	18.3
outward	*15.8*	*3.0*	*6.8*	*9.4*	*8.1*	*10.3*
Chile						
inward	26.1	38.4	41.0	48.1	60.8	59.6
outward	*9.8*	*9.2*	*16.8*	*0.5*	*14.8*	*18.7*
Colombia						
inward	16.9	17.9	17.9	7.3	11.9	27.7
outward	*2.8*	*1.8*	*3.7*	*0.8*	*3.2*	*5.4*
Ecuador						
inward	3.0	2.0	8.8	14.5	39.8	21.5
outward	*0.1*	*0.1*	*0.1*	*0.1*	*1.0*	*0.4*
Guyana						
inward	24.7	57.9	63.6	11.3	106.1	125.8
outward	..	..	..	..	*0.1*	*0.1*
Paraguay						
inward	9.8	8.7	10.2	8.5	18.7	15.0
outward	*0.4*	*0.3*	*0.3*	*2.7*	*3.0*	*1.5*
Peru						
inward	19.5	24.0	14.7	4.5	20.7	23.4
outward	*2.4*	*0.3*	*2.2*	*0.4*	*0.9*	*1.8*
Suriname						
inward	21.0	17.8	- 10.6	..	..	..
outward	..	..	..	..	..	..
Uruguay						
inward	41.5	30.7	36.6	8.0	10.4	27.3
outward	-	*2.1*	-	*2.2*	*0.6*	*1.0*
Venezuela, Bolivarian Republic of						
inward	- 1.5	1.2	2.3	8.2	30.3	13.0
outward	*5.2*	*4.1*	*3.6*	*2.6*	*6.6*	*5.2*
Central America						
inward	10.7	13.5	10.3	9.7	17.7	27.3
outward	*3.5*	*4.4*	*1.0*	*2.4*	*3.0*	*3.9*
Belize						
inward	57.5	70.6	83.1	22.0	36.2	75.5
outward	*0.3*	*0.5*	*1.3*	*4.9*	*5.2*	*3.6*
Costa Rica						
inward	32.8	33.1	27.8	18.2	17.0	36.3
outward	*2.2*	*4.6*	*0.1*	*0.6*	*0.5*	*1.8*
El Salvador						
inward	8.0	46.0	23.7	4.4	15.0	30.3
outward	*- 0.9*	*3.1*	*2.0*	*1.2*	*0.6*	*2.0*
Guatemala						
inward	9.7	10.8	10.6	25.4	19.9	14.0
outward	*0.7*	*0.4*	*0.2*	..	*0.5*	*0.9*
Honduras						
inward	22.3	21.8	20.5	9.6	19.4	36.2
outward	-	-	-	..	..	*0.2*
Mexico						
inward	9.1	11.8	8.5	8.5	16.7	27.1
outward	*2.7*	*3.6*	*0.3*	*1.0*	*1.4*	*4.2*
Nicaragua						
inward	19.3	22.5	33.0	4.0	35.9	59.1
outward	*1.4*	*0.5*	*0.8*	..	*0.6*	*2.2*
Panama						
inward	79.7	43.8	46.5	37.4	58.0	..
outward	*70.4*	*62.0*	*40.6*	*63.8*	*90.4*	..
Caribbean						
inward	87.8	72.1	71.4	14.3	83.4	118.0
outward	*82.2*	*128.8*	*117.5*	*11.8*	*304.2*	*386.2*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006−2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Anguilla						
inward	172.8	77.7	52.2	19.9	214.0	385.2
outward	..	..	..	..	..	..
Antigua and Barbuda						
inward	48.3	43.0	28.4	74.0	93.1	187.3
outward	..	..	..	..	..	..
Aruba						
inward	68.5	- 10.6	20.0	17.5	40.6	74.6
outward	*- 1.5*	*3.4*	*0.4*	..	*20.0*	*13.2*
Bahamas						
inward	26.5	28.1	29.7	18.5	59.7	101.7
outward	..	..	..	..	..	..
Barbados						
inward	17.3	34.8	18.4	10.0	12.0	25.1
outward	*2.3*	*29.4*	*10.1*	*1.4*	*1.6*	*9.2*
British Virgin Islands						
inward	2 682.1	1 657.9	1 045.6	120.0	4 093.5	5 412.9
outward	*4 758.0*	*8 126.4*	*7 668.1*	*834.1*	*8 562.8*	*14 824.7*
Cayman Islands						
inward	2 105.7	1 817.2	1 746.1	247.0	1 475.5	2 869.0
outward	*1 106.6*	*422.0*	*559.6*	*91.6*	*1 198.9*	*1 839.9*
Cuba						
inward	0.5	0.7	0.8	-	0.2	0.3
outward	-	..	..	..	..	..
Dominica						
inward	31.5	57.1	51.3	39.5	101.6	153.4
outward	..	..	..	..	..	..
Dominican Republic						
inward	23.5	20.5	34.9	8.1	7.1	25.1
outward	*- 0.9*	*- 0.2*	*- 0.2*	..	..	..
Grenada						
inward	44.8	96.9	88.2	39.8	84.9	204.9
outward	..	..	..	..	..	..
Haiti						
inward	24.9	8.8	3.1	5.7	2.7	6.0
outward	..	..	..	..	*0.1*	-
Jamaica						
inward	27.1	23.6	18.5	30.3	48.4	65.7
outward	*2.6*	*3.1*	*2.4*	*1.0*	*9.0*	*10.1*
Montserrat						
inward	18.3	49.4	13.6	59.5	237.0	200.6
outward	..	..	..	..	..	..
Netherlands Antilles						
inward	- 2.7	26.7	29.3	20.6	9.7	27.1
outward	*6.8*	*- 0.4*	*1.7*	*1.1*	*0.4*	*4.7*
Saint Kitts and Nevis						
inward	50.7	68.3	41.6	100.6	148.1	230.2
outward	..	..	..	..	..	..
Saint Lucia						
inward	87.2	99.1	41.1	75.9	114.1	182.5
outward	..	..	..	..	..	..
Saint Vincent and the Grenadines						
inward	62.6	58.0	42.2	24.3	148.9	167.9
outward	..	..	..	..	..	..
Trinidad and Tobago						
inward	22.9	17.2	53.0	46.7	89.3	66.2
outward	*9.6*	-	*4.7*	*0.4*	*3.6*	*6.8*
Turks and Caicos Islands						
inward	17.2	32.9	30.4	1.7	1.4	45.8
outward	*4.2*	*1.5*	*1.8*	..	..	..
Asia and Oceania						
inward	**11.4**	**11.0**	**10.7**	**16.1**	**25.4**	**22.8**
outward	***5.8***	***7.4***	***6.1***	***3.3***	***14.8***	***15.3***

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006–2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Asia						
inward	11.4	11.0	10.7	16.0	25.4	22.7
outward	*5.8*	*7.4*	*6.1*	*3.3*	*14.8*	*15.3*
West Asia						
inward	23.3	22.1	21.8	10.2	9.7	18.0
outward	*8.3*	*13.8*	*8.1*	*2.1*	*2.4*	*6.8*
Bahrain						
inward	74.4	40.1	35.6	12.8	73.6	69.9
outward	*25.0*	*38.1*	*32.2*	*16.8*	*21.8*	*44.0*
Iraq						
inward	3.5	4.1	2.9	..[a]	..[a]	2.3
outward	*2.7*	*1.3*	*1.1*	..	..	..
Jordan						
inward	77.8	38.5	31.8	36.5	37.1	89.9
outward	*- 3.3*	*0.9*	*0.2*	*3.9*	*0.5*	*1.9*
Kuwait						
inward	0.8	0.5	0.2	0.2	1.6	0.6
outward	*53.1*	*44.1*	*26.2*	*19.8*	*4.4*	*10.0*
Lebanon						
inward	82.8	74.6	85.2	1.9	29.9	83.5
outward	*27.1*	*23.2*	*23.3*	*1.5*	*3.5*	*18.8*
Oman						
inward	18.9	24.6	17.7	14.7	13.2	22.8
outward	*3.1*	*1.9*	*2.0*	*5.0*	*3.1*	*3.6*
Palestinian territory						
inward	1.4	2.2	2.2	..	22.6	20.0
outward	*9.8*	*3.4*	*3.4*	..	*14.7*	*28.5*
Qatar						
inward	19.2	24.2	25.6	0.9	10.8	21.6
outward	*0.7*	*27.1*	*9.2*	..	*0.4*	*8.5*
Saudi Arabia						
inward	29.4	31.8	46.1	18.8	9.3	24.4
outward	*2.0*	*17.2*	*1.3*	*1.8*	*2.6*	*4.9*
Syrian Arab Republic						
inward	9.4	14.2	17.8	53.4	37.0	18.9
outward	*0.8*	*0.6*	*0.5*	-	*0.5*	*1.0*
Turkey						
inward	17.1	15.6	12.3	5.6	7.2	9.6
outward	*0.8*	*1.5*	*1.7*	*0.6*	*1.4*	*1.9*
United Arab Emirates						
inward	38.9	37.2	24.9	2.2	1.5	26.7
outward	*33.1*	*38.2*	*28.7*	-	*2.7*	*19.5*
Yemen						
inward	34.2	16.7	6.7	4.7	13.9	12.2
outward	*1.7*	*1.0*	*1.0*	*0.1*	*0.1*	*1.4*
South, East and South-East Asia						
inward	9.8	9.5	9.3	17.4	28.4	23.8
outward	*5.5*	*6.6*	*5.9*	*3.6*	*17.1*	*17.1*
East Asia						
inward	8.6	8.2	8.4	25.9	31.8	23.1
outward	*5.4*	*6.1*	*6.1*	*5.4*	*23.0*	*20.3*
China						
inward	6.4	6.0	6.0	5.1	16.2	8.7
outward	*1.9*	*1.6*	*2.9*	*1.1*	*2.3*	*3.4*
Hong Kong, China						
inward	108.5	130.4	148.8	262.3	269.3	388.1
outward	*108.3*	*146.5*	*141.5*	*15.5*	*229.6*	*360.3*
Korea, Democratic People's Republic of						
inward	..	..	..	3.9	9.8	9.4
outward	..	..	..	..	..	..
Korea, Republic of						
inward	1.8	0.9	2.8	2.0	7.1	9.8
outward	*3.0*	*5.2*	*4.7*	*0.9*	*5.0*	*10.3*
Macao, China						
inward	32.7	24.4	30.9	93.9	45.9	45.5
outward	*12.9*	*12.8*	*16.2*	..	..	*13.6*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006−2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Mongolia						
inward	18.5	26.7	37.8	-	16.7	37.0
outward	..	..	..	..	..	..
Taiwan Province of China						
inward	9.5	9.6	6.7	5.9	6.1	11.6
outward	*9.5*	*13.7*	*12.7*	*18.4*	*20.7*	*44.6*
South Asia						
inward	6.7	6.4	8.5	1.3	4.3	9.8
outward	*3.6*	*3.4*	*3.1*	*0.1*	*0.4*	*3.5*
Afghanistan						
inward	12.8	10.8	16.7	0.3	0.6	11.3
outward	..	..	..	..	..	..
Bangladesh						
inward	5.3	4.0	5.9	1.5	4.8	5.9
outward	-	*0.1*	*0.1*	*0.1*	*0.2*	*0.1*
Bhutan						
inward	1.2	10.9	3.9	0.7	1.0	9.5
outward	..	..	..	..	..	..
India						
inward	6.9	6.5	9.6	0.5	3.7	9.9
outward	*4.8*	*4.5*	*4.1*	-	*0.4*	*5.0*
Iran, Islamic Republic of						
inward	2.5	1.9	1.5	2.3	2.5	6.0
outward	*0.6*	*0.4*	*0.4*	..	*0.6*	*0.5*
Maldives						
inward	2.8	2.9	2.5	11.6	19.0	17.8
outward	..	..	..	..	..	..
Nepal						
inward	- 0.3	0.2	-	0.3	1.2	1.0
outward	..	..	..	..	..	..
Pakistan						
inward	16.4	18.3	18.3	4.8	9.7	20.9
outward	*0.4*	*0.3*	*0.2*	*0.6*	*0.7*	*0.9*
Sri Lanka						
inward	6.8	7.5	7.3	8.5	9.8	10.5
outward	*0.4*	*0.7*	*0.6*	*0.1*	*0.5*	*0.8*
South-East Asia						
inward	21.8	22.4	15.8	18.2	44.5	44.1
outward	*9.4*	*15.0*	*8.6*	*2.8*	*15.1*	*21.7*
Brunei Darussalam						
inward	36.1	17.6	13.6	1.0	64.5	71.2
outward	*1.5*	*2.5*	*1.9*	..	*7.4*	*5.0*
Cambodia						
inward	34.3	51.9	37.9	2.2	43.1	41.5
outward	*0.9*	*0.3*	*1.1*	..	*5.3*	*2.8*
Indonesia						
inward	5.6	6.4	5.6	6.9	15.2	13.1
outward	*3.1*	*4.3*	*4.2*	*0.1*	*4.2*	*5.3*
Lao People's Democratic Republic						
inward	17.4	19.6	10.9	1.4	32.1	26.8
outward	..	..	..	..	*1.2*	*0.4*
Malaysia						
inward	18.6	20.6	18.4	23.4	56.2	33.0
outward	*18.7*	*27.2*	*32.1*	*1.7*	*16.9*	*30.4*
Myanmar						
inward	21.0	8.5	6.7	5.4	53.1	20.4
outward	..	..	..	..	..	..
Philippines						
inward	17.7	13.8	6.2	10.2	24.2	12.7
outward	*0.6*	*16.7*	*1.0*	*0.9*	*2.7*	*3.4*
Singapore						
inward	90.2	78.7	43.8	82.6	119.3	179.3
outward	*43.3*	*61.0*	*17.2*	*21.2*	*61.2*	*103.9*
Thailand						
inward	16.2	17.1	13.5	9.7	24.4	38.4
outward	*1.7*	*2.8*	*3.8*	*0.5*	*1.8*	*4.0*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006–2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy	FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
	2006	2007	2008	1990	2000	2008
Timor-Leste						
inward	0.7	0.2	0.2	0.2	22.7	33.2
outward	..	..	..	..	..	..
Viet Nam						
inward	12.0	25.5	24.1	25.5	66.1	53.8
outward	*0.4*	*0.6*	*0.3*	..	..	..
Oceania						
inward	24.3	20.5	13.3	23.5	28.4	30.8
outward	*0.9*	*0.8*	*0.9*	*6.4*	*10.1*	*4.5*
Cook Islands						
inward	11.8	- 1.2	3.2	24.1	42.5	18.0
outward	*1.1*	*2.2*	*1.1*	..	..	..
Fiji						
inward	61.9	45.8	40.9	21.2	23.1	49.0
outward	*0.1*	*0.9*	*0.8*	*1.8*	*2.1*	*2.3*
French Polynesia						
inward	2.2	3.7	2.0	2.4	4.3	5.1
outward	*0.7*	*0.9*	*0.8*	..	..	*1.3*
Kiribati						
inward	27.5	- 15.3	3.3	1.4	147.0	181.9
outward	..	..	..	..	..	..
Marshall Islands						
inward	6.0	11.3	4.9	..	..	..
outward	*- 8.0*	..	..	..	..	..
Micronesia, Federated States of						
inward	0.7	18.5	6.2	..	..	..
outward	..	..	..	..	..	..
Nauru						
inward	- 1.2	3.7	2.8	..	..	..
outward	..	..	..	..	..	..
New Caledonia						
inward	40.9	31.3	21.5	2.8	2.0	27.1
outward	*1.7*	*0.3*	*1.0*	..	..	..
Palau						
inward	2.2	6.9	3.7	..	80.8	70.9
outward	..	..	..	..	..	..
Papua New Guinea						
inward	- 0.9	8.5	- 2.1	48.2	57.1	28.6
outward	*0.1*	*0.7*	-	*0.8*	*7.5*	*3.4*
Samoa						
inward	27.2	5.6	10.5	8.1	23.0	13.7
outward	*4.6*	*- 0.1*	*- 0.1*	..	..	..
Solomon Islands						
inward	42.6	72.5	67.3	144.8	113.0	118.4
outward	*9.3*	*10.7*	*10.6*	*123.7*	*76.2*	*63.5*
Tonga						
inward	25.2	62.5	12.1	0.7	9.4	32.5
outward	*3.9*	*3.9*	*3.8*	..	..	..
Tuvalu						
inward	33.5	0.8	9.4	..	..[a]	101.8
outward	..	..	..	..	..	..
Vanuatu						
inward	41.5	27.7	24.1	131.7	186.6	177.8
outward	*0.7*	*0.5*	*- 0.4*	..	..	*10.2*
South-East Europe and CIS						
inward	18.9	22.0	21.4	..	15.6	17.9
outward	*8.4*	*12.7*	*11.1*	..	*6.0*	*10.0*
South-East Europe						
inward	36.9	38.8	26.8	..	14.0	39.6
outward	*1.5*	*4.2*	*1.6*	..	*3.4*	*3.6*
Albania						
inward	10.2	17.1	20.8	..	6.8	20.3
outward	*0.3*	*0.4*	*2.0*	..	..	*1.1*
Bosnia and Herzegovina						
inward	23.5	54.1	21.2	..	23.5	42.1
outward	*0.1*	*0.6*	-	..	..	*0.2*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006−2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (continued)
(Per cent)

Region/economy		FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
		2006	2007	2008	1990	2000	2008
	Croatia						
	inward	27.0	32.4	22.9	..	13.1	44.9
	outward	*2.1*	*1.6*	*0.9*	..	*3.9*	*5.3*
	Montenegro						
	inward	104.9	93.6	80.1	..	..	67.1
	outward	*5.6*	*16.8*	*9.2*	..	..	*6.4*
	Serbia						
	inward	72.4	46.7	32.6	..	..	32.7
	outward	*1.4*	*12.7*	*3.0*	..	..	..
	The FYR of Macedonia						
	inward	36.7	47.2	33.5	..	15.0	45.3
	outward	-	*- 0.1*	*- 0.8*	..	*0.4*	*0.6*
CIS							
	inward	17.0	20.5	21.0	..	15.7	16.3
	outward	*9.1*	*13.4*	*11.9*	..	*6.2*	*10.3*
	Armenia						
	inward	20.0	19.7	24.4	..	30.5	29.5
	outward	*0.1*	*- 0.1*	*0.2*	..	-	*0.2*
	Azerbaijan						
	inward	- 9.6	- 68.1	0.1	..	70.8	14.3
	outward	*11.3*	*4.0*	*6.0*	..	*0.1*	*11.3*
	Belarus						
	inward	3.2	12.6	10.9	..	12.5	11.1
	outward	-	*0.1*	-	..	*0.2*	*0.1*
	Georgia						
	inward	59.1	66.9	54.3	..	24.9	54.1
	outward	*- 0.8*	*2.9*	*1.4*	..	*3.0*	*1.0*
	Kazakhstan						
	inward	25.7	35.4	40.2	..	55.1	44.0
	outward	*- 1.6*	*10.0*	*10.5*	..	*0.1*	*4.4*
	Kyrgyzstan						
	inward	27.9	22.0	18.6	..	31.5	20.1
	outward	-	-	-	..	*2.4*	*0.4*
	Moldova, Republic of						
	inward	30.2	32.9	34.6	..	34.8	42.5
	outward	*- 0.1*	*0.8*	*1.6*	..	*1.8*	*1.2*
	Russian Federation						
	inward	16.2	20.2	19.5	..	12.4	12.7
	outward	*12.6*	*16.8*	*14.5*	..	*7.8*	*12.0*
	Tajikistan						
	inward	77.3	78.1	58.9	..	15.8	16.8
	outward	..	..	..	..	..	..
	Turkmenistan						
	inward	41.0	40.3	39.9	..	22.8	63.4
	outward	..	..	..	..	..	..
	Ukraine						
	inward	21.1	25.2	21.8	..	12.4	26.1
	outward	*- 0.5*	*1.7*	*2.1*	..	*0.5*	*3.9*
	Uzbekistan						
	inward	6.2	18.1	17.9	..	5.1	10.9
	outward	..	..	..	..	..	..
Memorandum							
All developing economies, excluding China							
	inward	16.4	16.8	16.9	14.8	27.0	30.3
	outward	*9.0*	*10.1*	*8.1*	*4.5*	*15.2*	*17.8*
Developing economies and transition economies							
	inward	13.5	13.9	13.6	13.8	24.6	24.0
	outward	*6.7*	*7.6*	*6.6*	*4.1*	*12.6*	*13.5*
Least developed countries (LDCs) [b]							
	inward	31.0	28.7	30.2	7.6	21.9	25.7
	outward	*1.4*	*2.5*	*5.6*	*1.3*	*2.9*	*3.1*
Major petroleum exporters [c]							
	inward	18.6	17.7	19.0	9.7	15.9	18.2
	outward	*6.7*	*11.3*	*7.4*	*2.2*	*3.7*	*6.2*

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Annex table B.3. FDI flows as a percentage of gross fixed capital formation, 2006–2008, and FDI stocks as a percentage of gross domestic product, by region and economy, 1990, 2000, 2008 (concluded)
(Per cent)

Region/economy		FDI flows as a percentage of gross fixed capital formation			FDI stocks as a percentage of gross domestic product		
		2006	2007	2008	1990	2000	2008
Major exporters of manufactures [d]							
	inward	10.3	10.4	10.0	15.5	25.7	23.4
	outward	*6.1*	*6.2*	*5.7*	*4.4*	*14.3*	*15.4*
EU-15, 1995 [e]							
	inward	18.6	23.1	12.3	10.8	25.6	34.6
	outward	*24.0*	*35.4*	*23.4*	*11.5*	*37.0*	*47.4*
EU-25, 2005 [f]							
	inward	19.1	23.2	12.7	10.6	25.7	34.9
	outward	*23.3*	*33.6*	*22.1*	*11.4*	*35.6*	*44.7*

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

[a] Negative stock value. However, this value is included in the regional and global total.

[b] Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

[c] Major petroleum exporters countries include: Algeria, Angola, Bahrain, Brunei Darussalam, Congo, Gabon, Indonesia, the Islamic Republic of Iran, Iraq, Kuwait, the Libyan Arab Jamahiriya, Nigeria, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic, Trinidad and Tobago, the United Arab Emirates, the Bolivarian Republic of Venezuela and Yemen.

[d] Major exporters of manufactures include: Brazil, China, Hong Kong (China), India, the Republic of Korea, Malaysia, Mexico, the Philippines, Singapore, Taiwan Province of China, Thailand and Turkey.

[e] EU-15, 1995 include: Austria, Belgium and Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

[f] EU-25, 2005 include: Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Annex table B.4. Value of cross-border M&As, by region/economy of seller/purchaser, 2006–2009

(Millions of dollars)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
World	635 940	1 031 100	673 214	123 155	635 940	1 031 100	673 214	123 155
Developed economies	538 415	903 430	551 847	102 313	498 387	841 999	539 598	99 936
Europe	353 141	557 542	245 749	69 546	305 862	569 397	333 546	79 978
European Union	335 738	526 486	224 575	61 834	265 714	538 536	302 826	78 010
Austria	1 145	9 661	1 327	- 7	6 982	4 720	3 148	312
Belgium	1 794	915	2 455	11 027	3 324	9 208	30 070	144
Bulgaria	807	971	186	145	-	5	7	2
Cyprus	294	1 343	- 970	28	1 274	1 022	2 058	24
Czech Republic	1 154	107	5 169	2 145	812	846	34	1 152
Denmark	11 375	5 761	6 095	1 327	2 078	3 226	2 860	1 848
Estonia	3	13	110	-	179	-	4	-
Finland	1 321	8 313	1 375	204	2 169	-1 128	13 179	314
France	19 814	28 207	4 536	666	43 463	78 108	56 617	30 692
Germany	41 388	44 040	29 961	770	16 540	59 474	57 294	4 950
Greece	7 320	715	6 049	519	5 238	1 495	2 636	52
Hungary	2 337	721	1 559	1 852	1 522	1	41	2
Ireland	2 731	811	2 892	948	10 176	6 713	3 574	131
Italy	28 341	23 633	- 752	1 357	7 976	60 150	20 101	17 612
Latvia	11	47	195	-	-	4	3	-
Lithuania	97	35	98	-	-	30	31	-
Luxembourg	35 005	7 205	-3 570	338	18 120	18 237	9 437	185
Malta	517	- 86	-	13	115	-	- 25	-
Netherlands	25 560	162 283	-8 156	9 983	51 440	-3 344	52 109	- 544
Poland	886	728	966	163	194	126	511	13
Portugal	537	1 791	-1 280	263	644	4 023	1 164	463
Romania	5 324	1 926	1 073	10	-	-	4	-
Slovakia	1 284	50	136	-	- 142	-	-	-
Slovenia	15	57	418	-	29	74	320	251
Spain	7 951	51 686	32 310	15 323	71 481	41 179	-10 994	3 437
Sweden	15 228	4 561	16 817	821	3 199	32 466	6 884	12 861
United Kingdom	123 498	170 992	125 576	13 940	18 900	221 900	51 758	4 111
Other developed Europe	17 403	31 056	21 174	7 713	40 148	30 861	30 720	1 967
Andorra	1 174	-	-	-	-	-	-	-
Faeroe Islands	-	-	0.2	-	-	-	-	-
Gibraltar	-	50	212	-	404	116	1	-
Guernsey	-	31	17	44	1 305	1 519	523	120
Iceland	39	- 227	-	-	2 311	4 664	780	- 239
Isle of Man	-	221	35	19	990	720	384	-
Jersey	254	816	251	93	96	1 153	- 61	- 94
Liechtenstein	-	-	-	-	154	270	-	-
Monaco	-	136	-	-	- 13	-	-	-
Norway	4 289	7 831	14 345	715	9 577	9 738	3 659	179
Switzerland	11 647	22 200	6 314	6 842	25 323	12 681	25 434	2 000
North America	174 460	279 520	260 849	24 473	135 279	226 517	116 554	10 216
Canada	37 876	100 301	35 071	1 225	20 844	46 701	44 248	5 496
United States	136 584	179 220	225 778	23 248	114 436	179 816	72 305	4 719
Other developed economies	10 814	66 368	45 250	8 294	57 245	46 084	89 498	9 743
Australia	10 500	44 064	33 781	7 193	31 949	43 439	17 291	378
Bermuda	1 083	1 424	624	1 359	- 619	-40 712	2 805	589
Israel	8 061	684	1 194	689	9 747	8 417	11 316	- 108
Japan	-11 683	16 116	9 250	- 971	16 980	30 376	54 058	8 850
New Zealand	2 853	4 081	401	25	- 811	4 564	4 029	33
Developing economies	89 028	96 998	100 862	19 837	114 119	139 677	99 805	16 944
Africa	11 181	7 906	20 901	3 332	15 871	9 914	8 214	186
North Africa	6 773	2 182	16 283	2 006	5 633	1 401	4 665	-
Algeria	18	-	82	-	-	- 47	-	-
Egypt	2 976	1 713	15 895	1 527	5 633	1 448	4 613	-
Libyan Arab Jamahiriya	1	200	307	145	-	-	51	-
Morocco	133	269	- 125	333	-	-	-	-
Sudan	1 332	-	-	-	-	-	-	-
Tunisia	2 313	-	122	-	-	-	-	-
Other Africa	4 408	5 724	4 618	1 326	10 238	8 513	3 550	186
Angola	1	-	- 475	- 96	-	- 60	-	-
Botswana	57	1	-	-	-	-	3	-
Burkina Faso	289	-	20	-	-	-	-	-
Cameroon	-	-	1	-	-	-	-	-
Cape Verde	-	-	4	-	-	-	-	-
Congo	20	-	435	-	-	-	-	-
Congo, Democratic Republic of	-	-	-	-	-	- 45	-	-
Equatorial Guinea	-	-	-2 200	-	-	-	-	-

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Annex table B.4. Value of cross-border M&As, by region/economy of seller/purchaser, 2006–2009 (continued)
(Millions of dollars)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan-Jun)	2006	2007	2008	2009 (Jan-Jun)
Gabon	-	82	-	-	-	- 16	-	-
Ghana	3	122	900	-	-	-	-	-
Guinea	2	-	-	-	-	-	-	-
Kenya	2	396	-	-	-	-	18	-
Madagascar	1	-	-	-	-	-	-	-
Malawi	-	5	-	-	-	-	-	-
Mali	1	-	-	-	-	-	-	-
Mauritania	-	375	-	-	-	-	-	-
Mauritius	268	-	26	5	231	112	206	140
Mozambique	34	2	-	-	-	-	-	-
Namibia	181	2	15	59	-	-	-	-
Nigeria	4 883	490	- 597	- 197	-	-	418	-
Rwanda	-	-	6	-	-	-	-	-
Seychelles	-	89	49	-	-	0.4	66	-
Sierra Leone	-	31	40	-	-	-	-	-
South Africa	-1 336	4 130	6 384	1 555	10 006	8 541	2 816	46
Togo	-	-	-	-	-	-	20	-
Uganda	-	-	1	-	-	-	-	-
Zambia	4	-	1	-	-	25	-	-
Zimbabwe	-	-	7	-	1	- 44	1	-
Latin America and the Caribbean	12 718	20 554	15 231	- 748	27 534	38 514	2 584	- 721
South and Central America	7 351	18 493	11 275	- 834	23 622	29 800	3 813	4 374
South America	4 453	13 604	8 378	- 970	19 923	12 942	4 763	1 575
Argentina	344	817	-3 279	69	160	569	274	- 91
Bolivia	- 39	- 77	24	-	-	-	-	-
Brazil	2 637	6 539	8 240	413	18 629	10 785	5 243	1 594
Chile	397	1 447	3 147	1 053	431	466	- 102	66
Colombia	1 319	4 303	- 71	- 592	697	1 174	16	12
Ecuador	21	29	0.3	7	-	-	0.1	-
Guyana	-	3	1	-	-	-	-	-
Paraguay	-	10	4	-	-	-	-	-
Peru	53	1 135	293	50	6	195	679	1
Uruguay	164	157	8	-	-	-	-	-
Venezuela, Bolivarian Rep. of	- 443	- 760	10	-1 970	-	- 248	-1 346	- 7
Central America	2 898	4 889	2 897	136	3 699	16 859	- 951	2 800
Belize	-	-	0.4	-	4	- 43	-	2
Costa Rica	294	- 34	403	-	97	642	-	-
El Salvador	173	835	-	-	370	-	-	-
Guatemala	- 2	5	145	-	317	140	-	-
Honduras	-	140	-	-	-	-	-	-
Mexico	874	3 717	2 304	115	2 750	17 633	- 358	2 636
Nicaragua	2	-	-	-	-	-	-	-
Panama	1 557	226	44	21	160	-1 512	- 593	162
Caribbean	5 367	2 061	3 956	87	3 912	8 713	-1 229	-5 095
Anguilla	-	-	-	-	-	-	30	-
Antigua and Barbuda	85	1	-	-	-	-	-	-
Aruba	468	-	-	-	-	-	-	-
Bahamas	3 027	-	41	-	- 411	2 693	537	750
Barbados	999	1	207	-	-	3	3	-
British Virgin Islands	19	559	980	85	2 369	5 017	-1 578	-2 800
Cayman Islands	49	-	493	-	1 563	1 168	2 038	-3 074
Dominican Republic	427	42	-	0.4	-	93	- 25	-
Haiti	-	-	-	1	-	-	-	-
Jamaica	67	595	-	-	158	3	13	28
Netherlands Antilles	10	-	-	-	350	-	-	-
Puerto Rico	216	862	-	-	- 216	- 261	-2 454	-
Trinidad and Tobago	-	-	2 236	-	97	- 2	207	-
Turks and Caicos Islands	-	-	-	-	0.1	-	-	-
Asia and Oceania	65 130	68 538	64 730	17 252	70 714	91 250	89 006	17 480
Asia	65 165	68 304	65 473	17 248	70 560	91 236	89 257	17 306
West Asia	22 431	22 976	14 677	1 391	35 307	37 056	20 498	8 652
Bahrain	- 410	190	178	-	4 275	415	3 348	323
Iraq	-	-	34	-	-	33	-	-
Jordan	750	440	773	27	4	45	322	-
Kuwait	13	3 963	496	- 58	1 310	2 056	3 285	159
Lebanon	5 948	- 153	108	-	716	210	- 233	-
Oman	1	621	10	-	5	79	601	856
Qatar	-	-	124	48	127	5 110	6 029	668
Saudi Arabia	21	125	102	30	5 398	12 730	1 450	- 64
Turkey	15 340	16 415	11 628	1 332	356	767	1 313	-

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Annex table B.4. Value of cross-border M&As, by region/economy of seller/purchaser, 2006–2009 (concluded)
(Millions of dollars)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
United Arab Emirates	53	1 230	1 225	12	23 117	15 611	4 384	6 709
Yemen	716	144	-	-	-	-	-	-
South, East and South-East Asia	42 735	45 328	50 796	15 857	35 253	54 180	68 759	8 654
Bangladesh	330	4	-	9	-	-	-	-
Brunei Darussalam	-	-	-	-	112	-	-	10
Cambodia	9	6	30	8	-	-	-	-
China	11 307	9 274	5 144	2 995	12 053	-2 388	36 861	1 558
Hong Kong, China	9 095	6 960	8 288	163	8 031	-8 003	-1 179	429
India	4 410	4 406	9 519	4 274	6 715	29 076	11 662	239
Indonesia	388	1 705	2 044	1 503	- 85	826	913	175
Iran, Islamic Republic of	-	-	695	-	-	-	-	-
Korea, Republic of	- 157	7	1 192	1 731	1 057	8 648	3 815	1 128
Macao, China	413	133	593	- 206	-	-	0	- 580
Malaysia	2 509	3 926	2 781	61	2 663	3 655	9 751	2 955
Maldives	-	-	3	-	-	-	-	-
Mongolia	2	7	-	87	-	-	106	- 24
Myanmar	-	- 1	-	- 0.3	-1 010	-	-	-
Nepal	- 15	-	13	-	-	-	-	-
Pakistan	3 139	956	1 147	-	30	-	-	-
Philippines	- 134	1 165	2 621	1 170	190	-2 518	- 174	6
Singapore	2 924	7 422	14 226	3 890	5 386	23 890	6 629	1 889
Sri Lanka	4	6	370	4	-	12	6	-
Taiwan Province of China	4 711	6 570	1 151	- 276	14	929	- 993	46
Thailand	3 771	2 372	120	391	88	54	1 361	822
Viet Nam	29	411	859	55	8	-	-	-
Oceania	- 36	234	- 742	4	154	14	- 251	173
Fiji	-	12	2	-	-	-	-	-
French Polynesia	-	-	-	-	-	-	-	1
Guam	72	-	-	-	-	-	-	-
Marshall Islands	-	45	-	-	-	-	-	-
Nauru	-	-	-	-	-	-	-	172
New Caledonia	- 100	-	-	-	-	-	-	-
Norfolk Island	-	-	-	-	90	-	-	-
Papua New Guinea	7	160	- 758	-	-	14	16	-
Samoa	- 18	3	13	-	64	-	- 324	-
Solomon Islands	-	14	-	-	-	-	-	-
Tonga	-	-	-	-	-	-	14	-
Tuvalu	-	-	-	-	-	-	43	-
Vanuatu	3	-	-	4	-	-	-	-
South-East Europe and CIS	8 497	30 671	20 505	1 005	2 940	21 728	20 648	3 534
South-East Europe	3 942	2 189	766	9	-2 092	1 039	- 4	- 32
Albania	41	164	3	-	-	-	-	-
Bosnia and Herzegovina	79	1 022	2	-	-	-	-	-
Croatia	2 530	672	204	-	3	-	2	-
Montenegro	7	0.1	-	-	-	4	-	-
Serbia	582	278	500	9	-1 898	1 046	- 7	- 32
Serbia and Montenegro	419	-	-	-	-	-	-	-
The FYR of Macedonia	280	53	57	-	-	-	-	-
CIS	4 556	28 482	19 739	996	5 032	20 690	20 653	3 566
Armenia	-	423	204	-	-	-	-	-
Azerbaijan	-	-	2	-	-	-	519	-
Belarus	-	2 500	16	-	-	-	-	-
Georgia	115	53	104	-	-	-	-	-
Kazakhstan	-1 751	727	- 344	35	1 503	1 833	2 047	-
Kyrgyzstan	-	179	-	-	-	-	-	-
Moldova, Republic of	10	24	4	-	-	-	-	-
Russian Federation	5 811	22 753	13 777	803	3 507	18 597	17 115	3 566
Tajikistan	-	5	-	-	-	-	-	-
Ukraine	261	1 818	5 933	158	23	260	972	-
Uzbekistan	110	-	42	-	-	-	-	-
Unspecified	-	-	-	-	20 494	27 696	13 163	2 740

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] Net sales by the region/economy of the immediate acquired company.

[b] Net purchases by region/economy of the ultimate acquiring company.

Note: Cross-border M&A sales and purchases are calculated on a net basis as follows: Net cross-border M&A sales in a host economy = Sales of companies in the host economy to foreign TNCs (-) Sales of foreign affiliates in the host economy; net cross-border M&A purchases by a home economy = Purchases of companies abroad by home-based TNCs (-) Sales of foreign affiliates of home-based TNCs. The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Annex table B.5. Number of cross-border M&As, by region/economy of seller/purchaser, 2006–2009

(Number of deals)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
World	5 724	6 926	6 244	1 808	5 724	6 926	6 244	1 808
Developed economies	4 315	5 127	4 481	1 251	4 422	5 382	4 615	1 186
Europe	2 524	2 925	2 546	664	2 500	3 081	2 766	699
European Union	2 349	2 696	2 354	600	2 196	2 749	2 470	620
Austria	44	47	29	5	75	103	74	27
Belgium	87	80	85	20	62	81	61	7
Bulgaria	29	30	26	8	2	2	6	2
Cyprus	5	17	29	5	23	22	40	70
Czech Republic	53	52	72	10	14	12	10	3
Denmark	88	87	73	15	82	82	101	32
Estonia	9	11	15	1	8	10	4	-
Finland	68	85	51	18	66	62	104	13
France	224	232	173	50	258	393	374	93
Germany	426	429	324	88	224	262	272	95
Greece	11	8	12	6	20	17	25	- 2
Hungary	46	27	26	3	13	14	9	5
Ireland	49	75	62	23	94	132	76	11
Italy	113	143	151	35	60	119	116	19
Latvia	10	17	14	3	1	4	- 1	2
Lithuania	18	17	17	1	2	2	7	-
Luxembourg	12	19	10	5	41	43	53	17
Malta	3	2	-	3	1	1	-	1
Netherlands	89	162	112	25	146	167	204	56
Poland	50	55	43	20	8	28	27	1
Portugal	29	33	10	5	16	25	36	8
Romania	44	48	39	11	1	- 1	7	-
Slovakia	13	14	13	-	2	1	7	-
Slovenia	7	8	6	1	6	6	4	4
Spain	149	163	183	79	109	158	102	28
Sweden	142	146	152	34	184	202	160	37
United Kingdom	531	689	627	126	678	802	592	91
Other developed Europe	175	229	192	64	304	332	296	79
Andorra	1	-	-	-	1	-	-	1
Faeroe Islands	-	-	1	-	-	1	-	-
Gibraltar	1	2	1	-	3	3	1	-
Guernsey	1	6	3	1	12	22	17	4
Iceland	3	1	-	-	51	38	6	- 11
Isle of Man	4	3	4	2	14	25	7	- 1
Jersey	3	7	5	2	18	29	15	1
Liechtenstein	2	1	-	-	1	1	1	- 1
Monaco	-	3	1	-	- 1	-	2	-
Norway	82	88	84	24	83	91	76	17
San Marino	-	-	-	1	-	-	-	-
Switzerland	78	118	93	34	122	122	171	69
North America	1 377	1 707	1 458	386	1 450	1 656	1 425	396
Canada	327	415	368	130	393	434	339	95
United States	1 050	1 292	1 090	256	1 057	1 222	1 086	301
Other developed economies	414	495	477	201	472	645	424	91
Australia	228	255	304	133	246	361	149	19
Bermuda	8	7	6	5	7	26	27	2
Greenland	-	-	-	-	1	-	-	-
Israel	35	30	29	11	49	59	41	10
Japan	56	85	88	33	141	154	175	57
New Zealand	87	118	50	19	28	45	32	3
Developing economies	1 207	1 530	1 460	415	827	1 021	962	300
Africa	106	114	97	22	49	60	46	18
North Africa	25	20	23	10	16	10	8	4
Algeria	5	2	4	1	1	- 1	-	-
Egypt	14	9	11	2	14	7	6	2
Libyan Arab Jamahiriya	1	1	1	2	-	2	1	-
Morocco	1	4	2	4	1	2	1	-

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Annex table B.5. Number of cross-border M&As, by region/economy of seller/purchaser, 2006–2009 (continued)
(Number of deals)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
Sudan	2	1	1	-	-	-	-	-
Tunisia	2	3	4	1	-	-	-	2
Other Africa	81	94	74	12	33	50	38	14
Angola	2	1	-	-	-	- 1	-	-
Botswana	1	4	1	-	- 1	-	3	-
Burkina Faso	1	-	2	-	-	-	-	-
Burundi	1	-	1	-	-	-	-	-
Cameroon	1	-	2	-	-	-	-	-
Cape Verde	-	-	1	-	-	-	-	-
Congo	4	-	1	-	-	-	-	-
Equatorial Guinea	-	-	- 1	-	-	-	-	-
Ethiopia	-	1	-	-	-	-	-	-
Gabon	1	3	2	-	-	- 1	-	-
Ghana	2	5	3	- 2	-	-	-	-
Guinea	1	-	-	-	-	-	-	-
Kenya	2	2	5	-	3	4	3	-
Liberia	1	-	-	-	-	-	-	-
Madagascar	3	-	1	-	-	-	-	-
Malawi	-	2	-	-	-	-	-	-
Mali	2	1	-	-	-	-	-	-
Mauritania	-	1	-	-	-	-	-	-
Mauritius	4	2	5	1	11	7	6	1
Mozambique	5	2	-	-	-	-	-	-
Namibia	2	7	2	2	-	-	-	1
Niger	-	-	-	-	-	-	-	- 1
Nigeria	5	1	-	- 1	- 1	1	4	1
Reunion	-	-	1	-	-	-	-	-
Rwanda	1	3	2	-	-	-	-	-
Senegal	-	1	1	-	-	-	-	-
Seychelles	-	2	1	-	-	2	- 1	1
Sierra Leone	-	1	3	-	-	-	-	-
South Africa	34	39	30	9	20	38	21	11
Swaziland	-	2	-	-	-	-	-	-
Togo	-	-	-	-	-	-	2	-
Uganda	1	5	3	1	-	1	-	-
United Republic of Tanzania	4	2	2	-	-	-	-	-
Zambia	3	-	3	2	1	1	-	-
Zimbabwe	-	5	2	-	2	-	-	-
Latin America and the Caribbean	249	421	373	100	131	167	134	51
South and Central America	213	356	326	76	81	101	81	33
South America	134	259	265	57	39	67	63	13
Argentina	41	42	45	3	3	- 1	3	- 3
Bolivia	-	2	2	-	-	1	-	-
Brazil	53	125	118	16	20	36	50	9
Chile	13	18	29	14	7	13	-	4
Colombia	13	26	28	9	4	15	2	2
Ecuador	6	9	2	5	1	-	1	-
Guyana	1	1	1	-	-	-	-	-
Paraguay	-	2	5	-	-	-	-	1
Peru	8	28	28	14	2	1	6	-
Suriname	-	1	-	-	-	-	-	-
Uruguay	-	6	4	1	-	-	-	-
Venezuela, Bolivarian Rep. of	- 1	- 1	3	- 5	2	2	1	-
Central America	79	97	61	19	42	34	18	20
Belize	-	-	1	1	1	- 1	1	3
Costa Rica	2	2	6	-	3	3	2	-
El Salvador	4	5	-	1	13	-	-	-
Guatemala	-	3	4	-	9	3	1	2
Honduras	1	2	-	-	-	-	-	-
Mexico	67	75	45	14	14	24	16	12
Nicaragua	2	1	-	-	-	-	-	-

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Annex table B.5. Number of cross-border M&As, by region/economy of seller/purchaser, 2006–2009 (continued)

(Number of deals)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
Panama	3	9	5	3	2	5	- 2	3
Caribbean	36	65	47	24	50	66	53	18
Anguilla	-	-	-	-	1	-	1	-
Antigua and Barbuda	1	1	-	-	2	-	-	-
Aruba	3	-	-	-	-	-	-	-
Bahamas	-	2	4	-	1	1	4	4
Barbados	1	2	-	-	3	9	4	-
British Virgin Islands	8	21	25	12	7	19	18	4
Cayman Islands	4	6	11	3	19	32	31	4
Dominican Republic	2	6	1	2	1	1	- 1	-
Haiti	2	-	-	1	-	-	-	-
Jamaica	3	13	1	1	6	4	-	4
Martinique	-	-	2	-	-	1	-	-
Netherlands Antilles	5	1	-	2	3	-	- 1	-
Puerto Rico	6	9	1	1	5	-	- 4	1
Saint Lucia	-	1	-	-	-	-	-	-
Trinidad and Tobago	1	1	2	2	-	- 1	1	-
Turks and Caicos Islands	-	1	-	-	1	-	-	-
US Virgin Islands	-	1	-	-	1	-	-	1
Asia and Oceania	852	995	990	293	647	794	782	231
Asia	844	983	984	291	642	792	778	229
West Asia	77	112	135	36	89	128	156	35
Bahrain	2	6	9	2	14	13	27	1
Iraq	-	-	2	2	-	1	-	-
Jordan	9	4	9	7	4	3	2	1
Kuwait	1	4	14	-	5	22	23	6
Lebanon	2	- 1	2	-	2	3	1	- 1
Oman	2	9	2	-	4	2	7	3
Qatar	-	2	2	1	1	7	19	3
Saudi Arabia	5	10	12	4	13	9	13	- 1
Syrian Arab Republic	-	-	-	1	-	-	-	-
Turkey	42	58	56	14	4	12	5	3
United Arab Emirates	13	19	27	5	42	56	59	20
Yemen	1	1	-	-	-	-	-	-
South, East and South-East Asia	767	871	849	255	553	664	622	194
China	226	233	230	53	36	57	65	27
Hong Kong, China	118	143	91	29	123	114	103	28
Korea, Democratic People's Republic of	1	-	-	-	-	-	-	-
Korea, Republic of	17	17	38	27	30	40	48	26
Macao, China	6	5	-	- 1	1	-	1	- 1
Mongolia	1	3	2	1	-	-	1	-
Taiwan Province of China	27	26	33	5	3	9	19	10
Bangladesh	1	1	1	1	-	-	-	-
India	128	148	131	47	134	171	161	25
Iran, Islamic Republic of	-	-	3	-	-	-	-	-
Maldives	-	-	2	-	-	-	-	-
Pakistan	7	7	10	- 1	1	-	-	-
Sri Lanka	2	4	4	7	2	2	2	1
Brunei Darussalam	5	2	-	-	1	-	-	2
Cambodia	3	3	1	1	-	-	-	-
Indonesia	23	35	50	11	1	5	11	4
Lao People's Democratic Republic	-	-	- 1	-	-	-	-	-
Malaysia	67	89	78	24	115	124	112	37
Myanmar	-	- 1	-	- 1	- 1	-	-	-
Philippines	5	11	19	-	2	9	9	1
Singapore	93	101	88	29	94	123	74	21
Thailand	36	31	40	7	9	11	16	12
Viet Nam	2	13	28	16	2	-	-	1

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Annex table B.5. Number of cross-border M&As, by region/economy of seller/purchaser, 2006–2009 (concluded)

(Number of deals)

Region/economy	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
Oceania	8	12	6	2	5	2	4	2
Fiji	1	1	3	-	-	- 1	-	-
French Polynesia	1	1	-	- 1	2	1	-	1
Guam	2	-	-	-	-	-	-	-
Marshall Islands	-	1	-	1	-	-	-	-
New Caledonia	- 1	-	-	-	1	-	-	-
Norfolk Island	-	-	-	-	1	1	-	-
Northern Mariana Islands	-	1	-	-	-	-	-	-
Papua New Guinea	3	3	1	-	-	1	1	-
Samoa	1	3	1	1	1	-	1	-
Solomon Islands	-	1	-	-	-	-	-	-
Tonga	-	1	1	-	-	-	1	-
Tuvalu	-	-	-	-	-	-	1	-
Vanuatu	1	-	-	1	-	-	-	-
South-East Europe and CIS	202	269	303	142	62	100	119	24
South-East Europe	39	70	43	9	- 2	9	4	-
Albania	1	4	5	-	-	-	-	-
Bosnia and Herzegovina	9	8	4	2	-	-	1	-
Croatia	8	17	11	2	2	6	3	1
The FYR of Macedonia	5	20	2	-	-	-	-	-
Serbia and Montenegro	10	-	2	-	-	-	-	-
Serbia	4	19	19	4	4	3	-	- 1
Montenegro	1	2	-	1	-	1	-	-
CIS	163	199	260	133	64	91	115	24
Armenia	2	5	4	-	-	-	-	-
Azerbaijan	-	1	3	1	-	-	-	-
Belarus	1	6	3	-	1	1	-	-
Georgia	7	9	4	- 2	-	1	-	-
Kazakhstan	2	9	5	2	4	11	6	- 1
Kyrgyzstan	2	5	-	1	-	-	-	-
Moldova, Republic of	5	2	6	-	-	-	1	-
Russian Federation	101	111	169	76	54	68	106	24
Tajikistan	-	3	-	-	-	-	-	-
Turkmenistan	-	1	-	-	-	-	-	-
Ukraine	37	44	62	55	4	10	2	1
Uzbekistan	6	3	4	-	1	-	-	-
Unspecified	-	-	-	-	413	423	548	298

Source: UNCTAD cross-border M&A database (www.unctad.org/fdistatistics).

[a] Net sales by the region/economy of the immediate acquired company.

[b] Net purchases by region/economy of the ultimate acquiring company.

Note: Cross-border M&A sales and purchases are calculated on a net basis as follows: Net cross-border M&A sales in a host economy = Sales of companies in the host economy to foreign TNCs (-) Sales of foreign affiliates in the host economy; net cross-border M&A purchases by a home economy = Purchases of companies abroad by home-based TNCs (-) Sales of foreign affiliates of home-based TNCs. The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

Annex table B.6. Value of cross-border M&As, by sector/industry, 2006–2009
(Millions of dollars)

Sector/industry	Net sales[a]				Net purchases[b]			
	2006	2007	2008	2009 (Jan–Jun)	2006	2007	2008	2009 (Jan–Jun)
Total industry	635 940	1 031 100	673 214	123 155	635 940	1 031 100	673 214	123 155
Primary	42 475	73 299	86 101	10 004	31 332	99 736	47 883	1 881
Agriculture, hunting, forestry and fisheries	- 152	2 421	2 963	524	259	- 1 880	5 302	114
Mining, quarrying and petroleum	42 627	70 878	83 137	9 480	31 073	101 615	42 581	1 767
Secondary	215 551	336 310	302 582	22 698	158 948	194 604	235 228	17 927
Food, beverages and tobacco	6 831	49 902	112 093	4 386	- 1 100	30 794	77 406	4 294
Textiles, clothing and leather	4 095	8 482	1 072	12	- 495	- 2 361	416	486
Wood and wood products	2 030	6 431	4 390	908	- 2 357	1 411	- 486	787
Publishing and printing	24 387	5 543	4 472	- 15	7 860	- 6 308	9 535	- 30
Coke, petroleum and nuclear fuel	2 005	2 663	3 086	999	4 365	4 072	- 476	- 204
Chemicals and chemical products	47 961	116 792	73 707	9 587	31 421	94 598	60 730	8 720
Rubber and plastic products	6 705	7 281	1 200	- 111	4 884	- 1 588	206	- 171
Non-metallic mineral products	6 166	37 836	28 770	408	6 347	15 334	22 198	- 9
Metals and metal products	45 712	69 738	13 047	- 1 415	45 654	18 125	17 114	370
Machinery and equipment	17 764	20 087	14 629	316	20 034	9 201	6 988	252
Electrical and electronic equipment	35 522	24 583	12 157	5 711	32 218	40 440	25 316	347
Motor vehicles and other transport equipment	7 464	3 048	11 940	- 95	- 497	533	12 081	232
Precision instruments	7 064	- 17 036	23 028	1 996	10 183	- 9 823	7 817	2 831
Other manufacturing	1 845	961	- 1 009	12	430	175	- 3 616	22
Services	377 915	621 491	284 531	90 453	445 552	736 548	390 061	103 346
Electricity, gas and water	9 539	102 282	48 189	52 587	- 29 594	43 591	17 605	29 535
Construction	9 939	12 986	2 430	649	5 231	10 291	1 719	- 1 323
Hotels and restaurants	14 491	9 438	3 490	433	- 7 184	- 11 617	- 12	285
Trade	10 753	43 700	16 373	- 381	524	- 3 460	1 674	207
Transport, storage and communications	113 385	70 531	32 967	7 429	70 876	23 683	- 4 911	5 510
Finance	108 524	254 226	69 555	22 160	414 084	671 753	352 004	70 099
Business services	82 336	100 359	102 628	6 783	- 2 059	10 421	23 976	- 1 065
Public administration and defense	- 111	29	30	9	873	549	199	-
Health and social services	10 624	7 811	1 781	248	- 4 172	2 541	- 1 032	- 51
Educational services	- 428	1 189	1 126	25	- 687	421	131	- 145
Community, social and personal service activities	17 749	16 724	1 196	507	- 2 116	- 9 066	- 4 206	357
Other services	1 114	2 216	4 767	3	- 224	- 2 560	2 914	- 61
Unspecified	-	-	-	-	109	213	42	-

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] Net sales in the industry of the acquired company.

[b] Net purchases by the industry of the acquiring company.

Note: Cross-border M&A sales and purchases are calculated on a net basis as follows: Net Cross-border M&As sales by sector/industry = Sales of companies in the industry of the acquired company to foreign TNCs (-) Sales of foreign affiliates in the industry of the acquired company; net cross-border M&A purchases by sector/industry = Purchases of companies abroad by home-based TNCs, in the industry of the acquiring company (-) Sales of foreign affiliates of home-based TNCs, in the industry of the acquired company. The data cover only those deals that involved an acquisition of an equity stake of more than 10%.

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QUESTIONNAIRE

World Investment Report 2009:
Transnational Corporations, Agricultural Production and Development

Sales No. E.09.II.D.15

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