CHAPTER I

GLOBAL TRENDS: SUSTAINED GROWTH IN FDI FLOWS

The upward trend in foreign direct investment (FDI) that began in 2004 accelerated further in 2006. FDI flows increased in all the major country groups – developed countries, developing countries and the transition economies of South-East Europe and the Commonwealth of Independent States (CIS) – but at varying rates. The sustained growth of FDI and related international production primarily reflect the strong economic performance and increasing profits of many countries in the world, further liberalization of their policies, and other specific factors such as currency movements, stock exchange and financial market developments and high commodity prices. Increases in cross-border mergers and acquisitions (M&As), fuelled substantially by private equity funds, also added to FDI growth.

This chapter first examines recent trends in global FDI flows, changes in international production, the comparative position of countries in terms of transnationalization and inward FDI performance and potential, and recent developments in FDI policies (section A). The changing geographic and industrial patterns of FDI are described in section B, while section C presents an analysis of the world's top transnational corporations (TNCs). Section D concludes with a review of future prospects for FDI, based on UNCTAD surveys of TNCs and their foreign affiliates.

A. FDI and international production

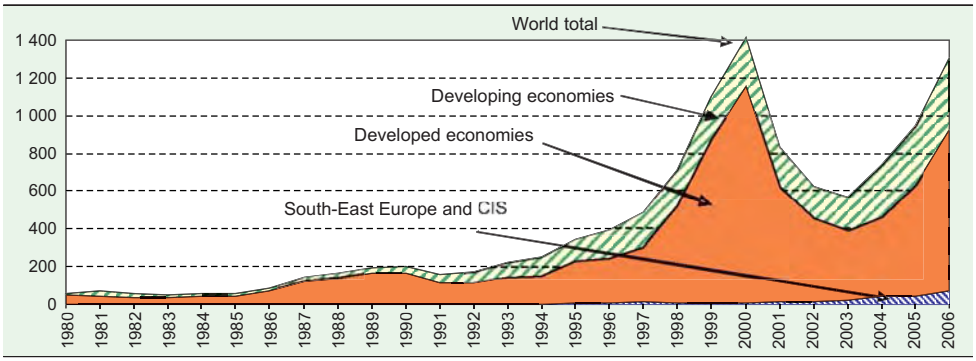
1. Trends in FDI

a. Overall trends

Global FDI inflows grew in 2006 for the third consecutive year to reach $1,306 billion, the second highest level ever recorded. All three major country groups – developed countries, developing countries and the transition economies of South-East Europe and the CIS – saw continued growth.

FDI inflows in 2006 were 38% higher than in 2005, approaching the peak of $1,411 billion reached in 2000 (figure I.1). Although FDI flows to all three major country groups rose, they varied greatly among regions and countries (chapter II).

Figure I.1. FDI inflows, global and by group of economies, 1980-2006
(Billions of dollars)



Source: UNCTAD, based on annex table B.1 and FDI/TNC database (www.unctad.org/fdi statistics).

FDI flows to developed countries in 2006 rose by 45%, well over the growth rates of the previous two years, to reach $857 billion (figure I.1 and annex table B.1). The United States regained its position as the world's leading FDI recipient, overtaking the United Kingdom, which had led in 2005. The European Union (EU) remained the largest host region, with 41% of total FDI inflows. FDI inflows to developing countries and economies in transition rose by 21% and 68%, respectively, to new record levels for them (annex table B.1). Developing Asia retained its strong attraction for investors, accounting for more than two thirds of the total inflows to all developing countries in 2006.

- In *Africa*, FDI inflows exceeded their previous record set in 2005. High prices and buoyant global demand for commodities were again key factors. The oil industry attracted investment from TNCs based in both developed and developing countries (chapter IV). Cross-border M&As in the extractive industries rose fivefold to $4.8 billion. As in previous years, most of the inflows were concentrated in West, North and Central Africa. However, inflows remained small in low-income economies with few endowments of natural resources.
- Inflows to *Latin America and the Caribbean* increased on average by 11% in 2006. However, if the offshore financial centres are excluded, they remained almost unchanged over the previous year. Mexico was the largest recipient followed by Brazil. While inflows to Mexico were similar to 2005, those to Brazil rose by 25%. In the Andean group of countries, the commodity price boom induced a more restrictive regulatory environment governing TNC participation in the extractive industries (Part Two). The possibility of additional regulatory changes and of their spread to more countries may have raised uncertainty among investors in the primary sector, resulting in lower FDI flows to some countries in the region. In addition, high commodity prices and resulting improvements in current-account balances led to an appreciation of the currencies of some mineral-rich countries in the region, potentially harming the prospects for FDI in other export-oriented activities.
- FDI inflows to *South, East and South-East Asia, and Oceania* maintained their upward trend, reaching a new high in 2006 of $200 billion, an increase of 19% over the previous year. At the subregional level, the shift in favour of South and South-East Asia continued. China, Hong Kong (China) and Singapore retained their positions as the three largest recipients of FDI in the region. Outward FDI from the region surged, driven by the rapid rise in FDI from all the Asian subregions and major economies. FDI inflows to Oceania remained small, at less than $400 million.
- In *West Asia*, FDI flows – both inward and outward – maintained their upward trend in 2006. Turkey and the oil-rich Gulf States continued to attract the most FDI inflows, achieving record levels in 2006 in spite of geopolitical uncertainty in parts of the region. Energy-related manufacturing and services were the most targeted activities. Countries with large financial resources, led by Kuwait, accounted for most of the rise in outward FDI from the region. Cross-border M&As continued to be the main mode of outward FDI, particularly by State-owned enterprises. The region's closer ties with economies in other parts of Asia and Africa support its energy-related FDI.
- FDI inflows to the 19 countries of South-East Europe and the CIS expanded significantly in 2006, for the sixth consecutive year, and they more than doubled in the region's largest host country, the Russian Federation (annex table B.1).

The continued rise in FDI flows across regions largely reflects strong economic growth and performance in many parts of the world.[1] High corporate profits (and stock prices) boosted the value of cross-border M&As, which account for a large share of such flows. The number of greenfield and expansion investment projects increased by 13% to 11,800 projects, notably in developing countries (annex tables A.I.1) and in the services sector (annex table A.I.2). In 2006, FDI inflows accounted for half of all net capital flows to developing countries (World Bank, 2007a: 37).[2] Thus, as in more recent years, FDI flows continued to be the most important and stable source of external financing for developing countries (chapter II). Mobilizing international resources for development, including FDI, was set out as one of the objectives in the Monterrey Consensus.[3]

Global FDI flows also rose as a result of a weakening dollar in 2006. The United States attracted large inflows from both the euro area and Japan. Overall, however, the amounts in 2006 (as well as 2005) were not much higher than those of the 1990s. The sharp appreciation of the euro in recent years has not led to as strong an increase in FDI outflows from the euro area into the United States and Japan, possibly suggesting that TNCs from the countries in the euro area are reacting less to exchange rate changes than in the past. This is probably because they have already reached a relatively high degree of internationalization (section C), which makes their profits less vulnerable to exchange rate changes vis-à-vis particular host countries. Moreover, TNC strategies are now

influenced by other secular developments. For example, the creation of the euro area has promoted greater regional integration and concentration of economic activity within the EU and led to increased intra-EU FDI flows to the common currency area as well as to the United Kingdom and the EU accession countries (chapter II, section C).

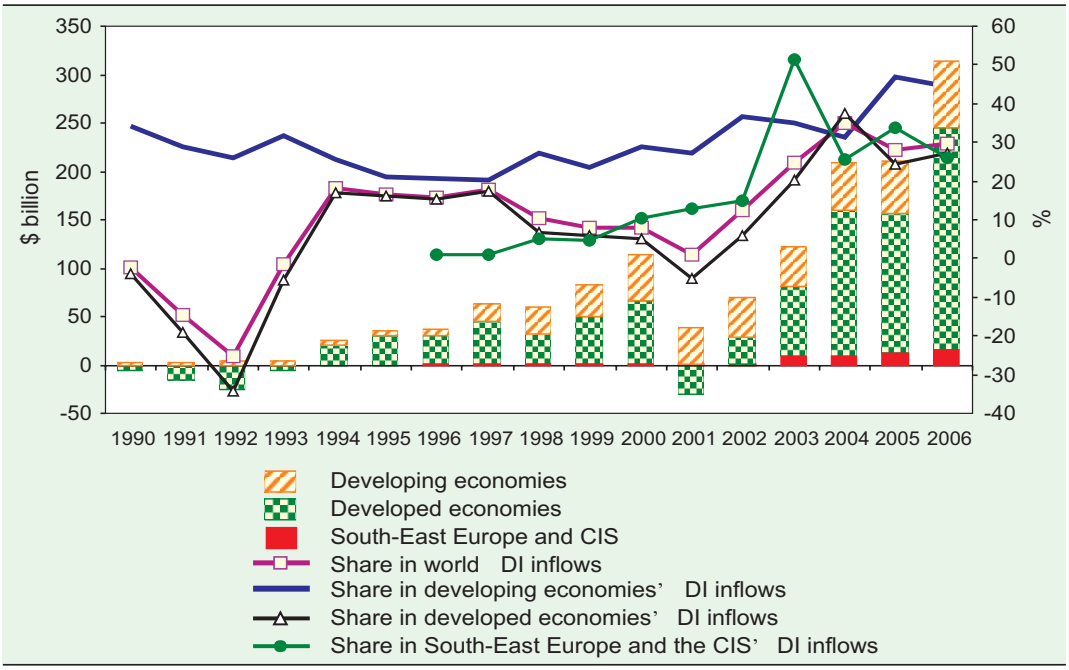
Increased corporate profits (and consequently higher stock values), also partly explain rising global FDI flows. They have boosted the value of cross-border M&As, which, as mentioned, account for a large share of FDI flows, and contributed to higher reinvested earnings. For example, the profits-to-sales ratio of the United States' top 500 firms in 2006[4] was the highest for the past two decades, and profits of Japanese firms have continued to rise, setting new records every year since 2003.[5] Similarly, profits of EU companies have surged: in the United Kingdom, for example, the net rate of return of private non-financial corporations in 2006 rose to an all-time high (United Kingdom, National Statistics Office, 2007). Profits earned abroad or by foreign affiliates were also high. Income on FDI (i.e. repatriated profits and reinvested earnings as recorded in host countries' balance of payments) rose another 29% in 2006, following a 16% rise in 2005.[6] In the 93 countries for which data on all three components of FDI – equity investments, reinvested earnings and other capital (essentially intra-company loans) – were available, reinvested earnings in 2006 reached a peak. They accounted for 30% of world FDI inflows and for almost half of total inflows to developing countries (figure I.2).

b. Continued rise in cross-border M&As

Cross-border M&As increased by 23% to $880 billion in 2006, and the number of transactions increased by 14% to 6,974 (figure I.3 and annex tables B.4-B.5), reflecting strong global M&A activity in general. Their value, however, still remained below the peak attained in 2000 (figure I.3). The rise in the value of cross-border M&As was largely fuelled by the growing strength of the stock markets,[7] and sustained increases in the asset values of enterprises.[8] In 2006, increases in stock values in emerging markets also played a role: for example, for the first time ever, the combined value of 13 stock markets in developing Asian economies exceeded that of the Tokyo Stock Exchange, now the second largest in the world.

The higher stock prices, increased purchasing power of investors, and the desire of firms to capture a growing market share in global competition led to a further increase in the number of mega deals (i.e. cross-border deals worth over $1 billion). In 2006, the number of such deals rose to 172, compared to 141 in 2005 and close to the record of 2000 (table I.1). They accounted for two thirds of the total value

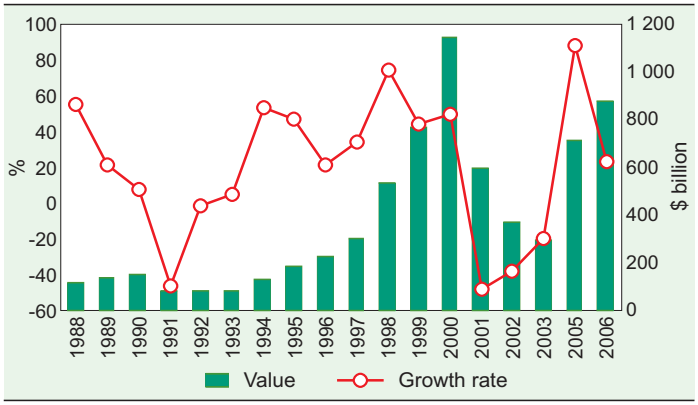
Figure I.2. Reinvested earnings: value and share in total FDI inflows, 1990-2006



Source: UNCTAD.

Note: Only 48-112 countries that reported all three components of FDI inflows already mentioned in the text are covered. They accounted for 74% of global FDI flows between 1990 and 2006.

Figure I.3. Global cross-border M&As, value and growth rate, 1988-2006



Source: UNCTAD, cross-border M&A database.

of global cross-border M&As – a higher share than in 2005, but still below that of 2000.[9]

The current M&A boom is spread across regions and sectors. In North America, the value of cross-border M&A sales nearly doubled in 2006.[10] This is mainly because of a number of mega deals concluded in natural resources in Canada where cross-border M&A deals rose more than 2.5 times in value. Moreover, in 2006, the United States regained its position as the country with the largest cross-border M&A sales in the world. In Europe, M&A activity remained high in terms of both sales and purchases. The large number of M&A deals by European companies reflect the regained strength of European corporations after successful cost-cutting and restructuring efforts. The United Kingdom was the main target country for cross-border M&As by strategic investors from continental Europe. Three of the six largest cross-border M&As worldwide were acquisitions of United Kingdom companies by other EU investors (chapter II and annex table A.I.3).[11] These transactions partly reflect the United Kingdom's openness to cross-border M&As. Firms located in the new member States of the EU continued to remain important targets for cross-border M&As, but there were fewer mega deals, and the value of those deals fell considerably, from $19 billion in 2005 to $10 billion in 2006.

In 2006, developing countries and economies in transition (South-East Europe and CIS) further increased their role as buyers in the global M&A market. Investors from the fast growing emerging economies of Asia and from Eastern Europe – especially China, India and the Russian Federation – played a prominent role (box I.1). In the oil and gas industry, for example, two of the three largest companies worldwide (measured by market capitalization) – Gazprom (Russian Federation) and Petrochina (China) – have substantially increased their foreign investments through M&As. As several corporations located in the developing world have grown significantly in recent years (section C.2; *WIR06*: 32), they are expected to make larger acquisitions in the future. In some cases, their home-country governments also actively support their overseas expansion (*WIR06*, chapter IV).

Table I.1. Cross-border M&As valued at over $1 billion, 1987-2006

Year	Number of deals	Percentage of total	Value ($ billion)	Percentage of total
1987	14	1.6	30.0	40.3
1988	22	1.5	49.6	42.9
1989	26	1.2	59.5	42.4
1990	33	1.3	60.9	40.4
1991	7	0.2	20.4	25.2
1992	10	0.4	21.3	26.8
1993	14	0.5	23.5	28.3
1994	24	0.7	50.9	40.1
1995	36	0.8	80.4	43.1
1996	43	0.9	94.0	41.4
1997	64	1.3	129.2	42.4
1998	86	1.5	329.7	62.0
1999	114	1.6	522.0	68.1
2000	175	2.2	866.2	75.7
2001	113	1.9	378.1	63.7
2002	81	1.8	213.9	57.8
2003	56	1.2	141.1	47.5
2004	75	1.5	187.6	49.3
2005	141	2.3	454.2	63.4
2006	172	2.5	583.6	66.3

Source: UNCTAD, cross-border M&A database.

Taking a look at cross-border M&A activity across industries, significant M&As were recorded in the consumer goods and service industries (including financial services) and in energy supply and basic materials. In contrast to the M&A boom of the late 1990s and early 2000s, which was largely driven by takeovers in the information and communications technology industries, there were fewer takeovers in telecommunications, media and technology services in 2006 (section B.2).

In 2006, cross-border M&As were largely driven by favourable financing conditions worldwide, reflecting low debt-financing costs and an abundant supply of credit as a result of high corporate profits. Recent cross-border M&A transactions have been carried out primarily through cash and debt financing. In the previous M&A boom, transactions were to a large extent financed by the exchange of shares (table I.2). For example, in large deals, including many in the mining and oil industries, cash is now the standard payment method. Emerging economies awash with petrodollars (West Asia) and foreign exchange (e.g. China) have become very active in cash-based cross-border acquisitions. The increasing role of debt financing can partly be explained by the fact that the cost of equity capital remains significantly higher than the cost of debt financing. This reflects a corporate strategy of not holding excessive equity capital and instead using borrowings and internal funds in

Box I.1. Selected examples of major acquisitions by companies from developing countries and economies in transition

A few cross-border M&As by firms from developing and transition economies took place in the past two years, reflecting their increasing strength. The following are a few examples:

- In China, the largest and most active buyers are in the oil and gas industry. China National Petroleum Corporation acquired PetroKazakhstan for $4.1 billion in 2005, and Sinopec bought the Russian-United Kingdom joint venture Udmurtneft for $3.5 billion in 2006.[a]
- The main motives for Indian companies to undertake cross-border M&As are to gain access to new technologies and competencies, and to build stronger positions in global markets. The acquisition by Mittal Steel group (a company of Indian origin headquartered in the Netherlands) of the European steel company Arcelor for $32 billion, was the world's largest cross-border M&A transaction in 2006, and the largest deal ever made by a company with origins in a developing country (annex table A.I.3). In the same year, the Indian Tata Group acquired the Corus Group (United Kingdom/Netherlands) – also in the steel industry – for $9.5 billion (though the deal was not recorded in 2006, as the payment was not completed).
- The Russian oil and gas giants (Gazprom, Rosneft and Lukoil) have started to expand abroad. Gazprom has made several investments in Germany through M&As in the energy sector in order to reach directly the end-users of its natural resources.[b] Gazprom is also planning investments in the oil industry in Algeria, Bolivia and the Libyan Arab Jamahiriya. Some other large cross-border M&As by Russian companies included Russian Aluminium's acquisition of part of Glencore International (Switzerland) for $2.5 billion, and CTF Holdings' (Alfa Group) purchase of Turkcell Iletisim Hizmetleri, a telecommunications firm in Turkey for $1.6 billion[c] (neither of them was recorded in 2006).
- In the past, companies from West Asia, in particular from the Gulf region, were not very active in cross-border M&As; instead they preferred portfolio investments in foreign companies. But this has changed in recent years. For instance, Saudi Oger acquired Turk Telekom for $6.6 billion in 2005 and Ports Customs Free-Zone Thunder FZE United Arab Emirates bought Peninsular & Oriental Steam (United Kingdom) for $6.9 billion in 2006 (annex table A.I.3).

Source: UNCTAD.

[a] "Die Käufer des neuen Jahrtausends", *Frankfurter Allgemeine Zeitung*, 22 December 2006: 23.

[b] Gazprom holds stakes in Wingas (49.99%), VNG Verbundnetz (5.26%) and Winthershall Erdgas Handelshaus (50%).

[c] "Die Käufer des neuen Jahrtausends", *Frankfurter Allgemeine Zeitung*, 22 December 2006: 23.

investment to attain high managerial efficiency (measured, for example, by the return on equity).[12] In financing M&As, bank loans accounted for 36% of total finance during January-September 2006, compared to 29% in 2005.[13]

The continuing strong M&A activity can also be partly explained by the fact that the current M&A boom has produced more corporate value for the acquiring companies than the previous one; the value of the companies created by M&As in the previous boom shrunk continuously as these activities progressed (McKinsey, 2007a).

Table I.2. Cross-border M&As through exchange of shares, 1987-2006

Year	Number of deals	Percentage of total	Value ($ billion)	Percentage of total
1987	6	0.7	1.5	2.0
1988	14	0.9	1.6	1.4
1989	51	2.3	11.2	8.0
1990	45	1.8	12.6	8.4
1991	22	0.8	2.3	2.9
1992	48	1.8	3.0	3.8
1993	75	2.6	14.3	17.3
1994	71	2.0	5.3	4.2
1995	96	2.3	13.8	7.4
1996	113	2.5	29.8	13.1
1997	112	2.2	32.4	10.6
1998	134	2.4	140.9	26.5
1999	176	2.5	277.7	36.3
2000	271	3.4	507.8	44.4
2001	206	3.4	140.9	23.7
2002	142	3.2	39.9	10.8
2003	123	2.7	32.7	11.0
2004	161	3.1	62.2	16.3
2005	149	2.4	123.7	17.3
2006	171	2.5	96.0	10.9

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

Note: Covers only deals the transaction value of which is known.

c. FDI by private equity funds

Private equity funds[14] and other collective investment funds continued to engage in cross-border M&As in 2006. These, along with mutual and hedge funds, have become increasingly important participants in such transactions (*WIR06*:16-21). In 2006, collective investment funds were involved in 18% of all cross-border M&As, registering a record value of $158 billion, a value significantly higher than in previous years though slightly lower in terms of their share in the total value of all M&As (table I.3).[15] They accounted for 18% of worldwide M&As (domestic and cross-border) in 2006, compared to 12% in 2005 and 4% in 2000.[16] In 2006, private equity funds raised a record amount of $432 billion, compared to $315 billion in 2005 (Private Equity Intelligence, 2007).[17]

The funds benefit from the ample liquidity in the global financial markets. In addition, private equity firms have successfully

devised alternative ways of fundraising. Unlike previous practices, these firms, such as Apollo Management (United States), RHJ International (part of Ripplewoods) (United States) and KKR (United States), listed their firms in stock markets in Europe in 2004, 2005 and 2006 respectively, and Blackstone (United States) in the United States in 2007, and collected funds from the general public.[18] Funds of funds (mutual funds that invest in other mutual funds) have become the single most important source of financing investment by private equity funds. It has been estimated that in 2006, $500 billion or 38% of total private equity assets globally were managed by funds of funds (Private Equity Intelligence, 2007). North America and the United Kingdom are still the most important regions for fundraising and investments by private equity firms but continental Europe and Asia (particularly West Asia) are gaining ground.

Table I.3. Cross-border M&As by private equity funds and other funds, 1987-2006
(Number of deals and value)

Year	Number of deals		Value	
	Number	Share in total (%)	$ billion	Share in total (%)
1987	43	5.0	4.6	6.1
1988	59	4.0	5.2	4.5
1989	105	4.8	8.2	5.9
1990	149	6.0	22.1	14.7
1991	225	7.9	10.7	13.2
1992	240	8.8	16.8	21.3
1993	253	8.9	11.7	14.1
1994	330	9.4	12.2	9.6
1995	362	8.5	13.9	7.5
1996	390	8.5	32.4	14.3
1997	415	8.3	37.0	12.1
1998	393	7.0	46.9	8.8
1999	567	8.1	52.7	6.9
2000	636	8.1	58.1	5.1
2001	545	9.0	71.4	12.0
2002	478	10.6	43.8	11.8
2003	649	14.2	52.5	17.7
2004	773	15.1	83.7	22.0
2005	889	14.5	134.6	18.8
2006	889	12.4	158.1	18.0

Source: UNCTAD cross-border M&As database.
Note: Private equity funds as well as other funds such as hedge funds are included. They are defined here to include funds managed by firms in the following industries: investment advice, investment offices not elsewhere classified, management investment offices and investors not elsewhere classified.

In 2006, of the 889 cross-border M&As undertaken by collective investment funds, the largest two – the acquisitions of Philips Semiconductor (Netherlands)[19] for $9.5 billion and of Altana Pharma (Germany)[20] for $5.8 billion – were done by club deals involving more than two private equity funds (annex tables A.I.3 and A.I.4).[21] However, the share of single funds in cross-border M&As increased substantially in 2006. Because of the growing size of the funds, private equity investors are now trying to buy larger and also publicly listed companies, such as the two firms mentioned above.[22]

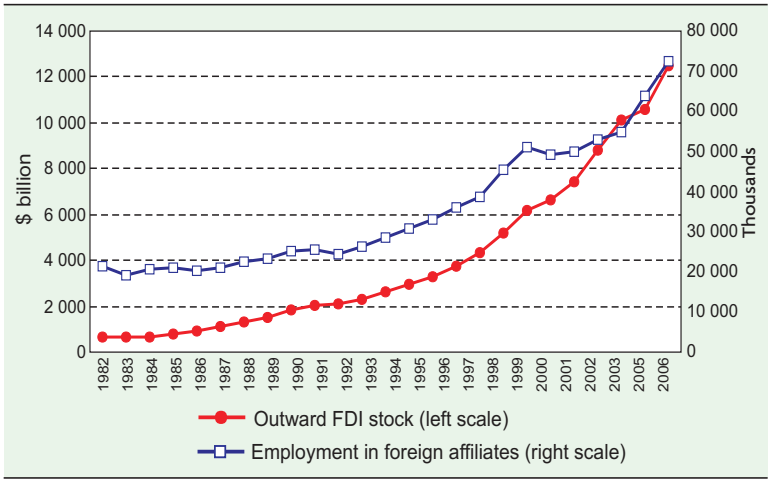
A number of factors raise doubts as to the sustainability of this high level of FDI activity by private equity and other collective investment funds.[23] First, the prices that private equity funds pay for their investments (mainly buyouts or acquisitions of firms) have increased substantially in recent years (Standard and Poor's, 2006). This is partly because competition is becoming stronger and partly because they are targeting larger firms. A second, related factor is that private equity funds are increasingly acquiring listed companies, in contrast to their former strategy of investing in high-yield and high-risk assets. Third, the abundance of funds available for private equity markets is resulting in greater competition between buyers, which makes it increasingly difficult to find profitable target firms for investment. Other factors include rising interest rates, the fact that the favourable tax rates offered to private equity firms are being examined by authorities in some countries,[24] and risks associated with the financial behaviour of private equity firms.[25]

Nevertheless, these firms will continue to play a role in M&As, including cross-border ones. Over time, in general, acquired firms improve performance (Kaplan and Schoar, 2005). This is the case for buyouts, whether by public companies or private equity firms, and the available evidence does not suggest any additional efficacy of the buyouts by the latter. Nevertheless, while private equity firms may not improve the efficiency of buyouts any more than public companies, it is argued that they help raise the overall efficiency of economies by expanding the sheer scale of domestic and cross-border M&A activity.[26] Against this are attendant concerns. Private equity firms have typically shorter time horizons than public companies engaged in buyouts, as they are inclined to look for options that offer quick returns, more akin to those of portfolio investors. This has raised concerns regarding the dismantling of the acquired companies and layoffs of their workers.[27] There are also worries about less transparency,[28] especially when public companies are taken into private ownership. These concerns notwithstanding, cross-border M&As by private equity firms are still a relatively recent phenomenon that needs further investigation, especially given their rising involvement in developing countries.

2. International production

International production, as measured by indicators of the value adding activities of TNCs outside their home countries, is continuing to grow. In keeping with the large increase in FDI flows worldwide, several indicators rose more rapidly in 2006 than in the previous year (table I.4). The estimated foreign capital stock of TNCs (i.e. the total assets of foreign affiliates) rose by 20% in 2006, while the estimated sales, value added (gross

Figure I.4. Outward FDI stock and employment in foreign affiliates, 1982-2006



Source: UNCTAD, FDI/TNC database.

Note: For the employment estimation method, see footnote g in table I.4.

product) and exports of foreign affiliates increased by 18%, 16% and 12% respectively (table I.4). These affiliates also accounted for an estimated 10% of world GDP, compared to 9% in 2005.[29] The expansion of the foreign assets and operations of TNCs, however, is largely due to acquisitions rather than to organic growth. To the extent that additions to FDI take place through M&As rather than greenfield investments, they involve a shift in production control and management from domestic to foreign firms, rather than additions to global production capacity (*WIR06*: 10-13). Such a shift may, nevertheless, lead to sequential FDI through greenfield projects that

Table I.4. Selected indicators of FDI and international production, 1982-2006

Item	Value at current prices (Billions of dollars)				Annual growth rate (Per cent)						
	1982	1990	2005	2006	1986-1990	1991-1995	1996-2000	2003	2004	2005	2006
FDI inflows	59	202	946	1 306	21.7	22.0	40.0	-9.3	31.6	27.4	38.1
FDI outflows	28	230	837	1 216	24.6	17.3	36.4	3.6	56.6	-4.6	45.2
Inward FDI stock	637	1 779	10 048	11 999	16.9	9.4	17.4	20.6	16.9	5.0	19.4
Outward FDI stock	627	1 815	10 579	12 474	17.7	10.6	17.3	18.1	15.6	4.2	17.9
Income on inward FDI	47	76	759	881	10.4	29.2	16.3	37.5	33.2	28.9	16.0
Income on outward FDI	46	120	845	972	18.7	17.4	11.8	38.0	38.4	24.7	15.1
Cross-border M&As[a]	..	151	716	880	25.9[b]	24.0	51.5	-19.7	28.2	88.2	22.9
Sales of foreign affiliates	2 741	6 126	21 394[c]	25 177[c]	19.3	8.8	8.4	26.6	15.0	3.0[c]	17.7[c]
Gross product of foreign affiliates	676	1 501	4 184[d]	4 862[d]	17.0	6.7	7.3	21.1	15.9	6.3[d]	16.2[d]
Total assets of foreign affiliates	2 206	6 036	42 637[e]	51 187[e]	17.7	13.7	19.3	26.0	-1.0	9.3[e]	20.1[e]
Exports of foreign affiliates	688	1 523	4 197[f]	4 707[f]	21.7	8.5	3.3	16.1[f]	20.5[f]	10.7[f]	12.2[f]
Employment of foreign affiliates (in thousands)	21 524	25 103	63 770[g]	72 627[g]	5.3	5.5	11.5	5.7	3.7	16.3[g]	13.9[g]
Memorandum											
GDP (in current prices)	12 002	22 060	44 486	48 293[h]	9.4	5.9	1.3	12.3	12.4	7.7	8.6
Gross fixed capital formation	2 611	5 083	9 115	10 307	11.5	5.5	1.0	12.6	15.5	4.8	13.1
Royalties and licence fee receipts	9	29	123	132	21.1	14.6	8.1	12.4	19.2	9.6	7.2
Exports of goods and non-factor services	2 124	4 329	12 588	14 120	13.9	8.4	3.7	16.1	20.5	10.7	12.2

Source: UNCTAD, based on the FDI/TNC database (www.unctad.org/fdi statistics), UNCTAD GlobStat database, and IMF, 2007b.

[a] Data are available only from 1987 onwards.
[b] 1987-1990 only.
[c] Data are based on the following regression result of sales against inward FDI stock (in $ million) for the period 1980-2004: sales=1,853+1.945* inward FDI stock.
[d] Data are based on the following regression result of gross product against inward FDI stock (in $ million) for the period 1982-2004: gross product=679+0.349* inward FDI stock.
[e] Data are based on the following regression result of assets against inward FDI stock (in $ million) for the period 1980-2004: assets= -1,523+4.395* inward FDI stock.
[f] For 1995-1997, data are based on the regression result of exports of foreign affiliates against inward FDI stock (in $ million) for the period 1982-1994: exports=285+0.628*inward FDI stock. For 1998-2006, the share of exports of foreign affiliates in world exports 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 1980-2004: employment=18,021+4.55* inward FDI stock.
[h] Based on data from the IMF, *World Economic Outlook*, April 2007.

Note: Not included in this table are the values of worldwide sales of foreign affiliates associated with their parent firms through non-equity relationships and 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 the worldwide outward FDI stock.

add to the production capacity of countries in subsequent years.

Among the indicators of international production, employment in foreign affiliates is of particular interest to host countries, most of which are concerned about the impact of FDI on employment within their economies.[30] The increase in FDI in recent years has led to rising employment in foreign affiliates of TNCs. An estimated 73 million workers were employed in foreign affiliates of TNCs in 2006, nearly three times larger than in 1990 (table I.4), and their total employment accounted for an estimated 3% of the global workforce.

At the global level, changes in the employment of foreign affiliates in comparison to changes in FDI stock or foreign affiliate output may indicate changes in the composition, capital-intensity or technological sophistication of international production. Over the period 1982-2006, employment in foreign affiliates worldwide rose at a lower rate than did FDI stocks (figure I.4)[31] and the gross product of foreign affiliates (table I.4), suggesting a possible shift by TNCs towards more capital- and knowledge-intensive production.

Global trends in employment by foreign affiliates affect individual countries differently. In countries that are both home and host economies, the direct employment consequences of FDI will also depend upon what happens to employment by foreign affiliates in their economies as well as to employment in their foreign affiliates abroad. For instance, China is the host country with the largest number of employees in foreign affiliates. In 2004, around 24 million workers (3% of total employment in China) were employed in foreign affiliates in that country (table I.5)[32] compared to less than 5 million in 1991 (*WIR04*: 187). Employment in foreign affiliates of TNCs in the United States shrank by half a million between 2001 and 2004 to 5 million as the United States economy underwent an economic downturn. FDI inflows to the United States during this period were only two fifths of those in 2000.

The United States has by far the largest stock of outward FDI, and this is reflected in the employment of foreign affiliates of United States-based TNCs: nearly 9 million employees in majority-owned foreign affiliates in 2004, a larger number of employees abroad than in TNCs from any other home country (table I.5 and annex table B.10). The workforce employed in majority-owned foreign affiliates of United States TNCs increased significantly from the 1950s to the 1980s. In 1985, nearly 5 million employees worked in such affiliates. The growth in their workforce over the subsequent two decades (at an annual average rate of 2.9%) was, however, much lower than that in the foreign affiliates of several other countries' TNCs (figure I.5). In Europe, employment in foreign affiliates of TNCs based in countries like Austria (with an average annual growth rate of foreign-affiliate employment of 13.1%), the Czech Republic (19.5%) and Finland (17.9%), in particular, has expanded much more rapidly. German and Japanese TNCs have the second and third largest number

Table I.5. Employment related to inward and outward FDI and total employment in selected economies, most recent year

(Thousands of employees)

Economy	Year	Host economy employment of foreign affiliates (A)	Foreign employment of home-based TNCs (B)	Difference (A-B)	Total paid employment in the economy (C)	Share of foreign affiliates' employment in total (A/C)
Australia	2002	..	321.9[a]	..	7 959.8	..
Austria	2004	232.8	370.5	- 137.7	3 266.5	7.1
Belgium	2003	..	209.7	..	3 460.6	..
Canada	2002	..	919.0[a]	..	12 996.0	..
China	2004	24 000.0	..	..	752 000.0	3.2
Czech Republic	2004	620.4	24.8	595.6	3 890.0	15.9
Finland	2001	176.1[a]	315.1[a]	- 139.0	2 060.0	8.5
France	2003	1 880.0[b]	..	..	13 460.0[c]	14.0
Germany	2004	2 280.0	4 605.0	- 2 325.0	31 405.0	7.3
Hong Kong, China	2004	543.0[a]	..	..	2 460.5	22.1
Hungary	2000	606.7	..	..	2 703.2	22.4
Ireland	2004	149.5[d]	..	..	295.8[d]	50.6
Italy	1999	560.1[e]	642.5[e]	- 82.4	4 075.0[e]	13.7
Japan	2004	430.9	4 138.6	- 3 707.7	53 550.0	0.8
Luxembourg	2001	72.9	103.3	- 30.4	258.9	28.2
Macao, China	2004	36.7	10.9	25.8	192.3	19.1
Madagascar	2003	193.8[f]	..	..	8 098.5[g]	2.4
Mozambique	2004	13.2[h]	..	..	..	..
Nepal	1999	73.5[h]	..	..	..	..
Poland	2000	648.3[a]	..	..	10 546.0	6.1
Portugal	2002	150.4[a]	23.6[a]	126.8	3 756.2	4.0
Singapore	2004	157.6[e]	..	..	335.2[e]	47.0
Slovenia	2004	64.0	..	..	798.0	8.0
Sri Lanka	2004	415.7[h]	..	..	7 394.0	5.6
Sweden	2004	544.6[a]	953.6[a]	- 409.1	3 796.0	14.3
Switzerland	2004	190.1	1 861.7	- 1 671.6	3 631.6	5.2
United Rep. of Tanzania	2000	80.6	..	..	16 914.8[i]	0.5
United States	2004	5 116.4[a]	8 617.2[a]	- 3 500.8	131 367.4	3.9
Vanuatu	2002	0.1	..	..	..	..

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

a Data refer to majority-owned affiliates only.

b Employees in enterprises under foreign control.

c Employees in enterprises under foreign control + employees in enterprises under French control.

d Total permanent full-time employment in the manufacturing and internationally traded services sectors.

e Data refer only to the manufacturing sector.

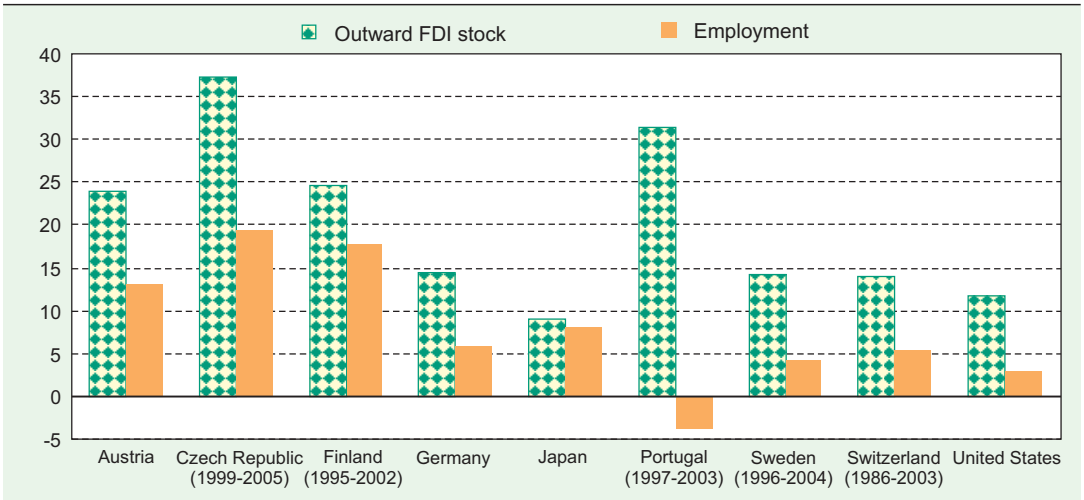
f 1998.

g Total labour force in 2003.

h Approval data.

i Total employed persons in Tanzania mainland (from the Integrated Labour Force Survey 2000-2001).

Figure I.5. Outward FDI stock and employment in foreign affiliates of selected home countries: average annual growth, 1985-2004
(Per cent)



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

Note: Employment data for Finland, Portugal and Sweden are for majority-owned affiliates only.

of employees in their foreign affiliates worldwide (4.6 million and 4.1 million, respectively, in 2004).

The employment impact of FDI in host economies varies by region and industry. Generally, employment created by a given amount of FDI is larger in developing and transition economies than in developed countries, and in the manufacturing sector than in other sectors. In the case of United States outward FDI, for instance, the largest impact is observed in South-East Europe and the CIS, followed by developing countries (table I.6). Employment creation is smallest in the primary sector, including the mining and oil industry.

The effects of outward FDI on employment in the home countries are often the focus of economic and political debates in those countries. Fears of job losses at home may also induce home governments to introduce policy measures that try to prevent companies from expanding abroad or they may offer them incentives to stay and invest at home. In the United States, for example, public debate about possible job losses through expansion abroad by United States TNCs led to the introduction of the Homeland Investment Act in 2004 to encourage more investment at home (see *WIR06*: 89 for the effects of this Act on United States FDI outflows).[33] In many developed countries, jobs created abroad by their own TNCs (through outward FDI) tend to be larger than those created by foreign companies operating

Table I.6. Employment in United States foreign affiliates abroad and United States outward FDI stock, by sector, 2003

Region/sector	Employees (Thousands)	Outward FDI stock ($ million)	No. of employees per $1 million of outward FDI stock
World			
Total	9 657.5	1 769 613	5.5
Primary	199.5	85 473	2.3
Mining, quarrying and petroleum	181.0	85 473	2.1
Manufacturing	4 989.2	371 078	13.4
Services	3 973.4	1 176 957	3.4
Developed countries			
Total	5 983.1	1 266 350	4.7
Primary	56.7	42 876	1.3
Mining, quarrying and petroleum	55.5	42 876	1.3
Manufacturing	2 760.6	280 874	9.8
Services	1 755.8	835 881	2.1
Developing countries			
Total	3 550.4	489 865	7.2
Primary	107.3	37 506	2.9
Mining, quarrying and petroleum	92.1	37 506	2.5
Manufacturing	2 099.9	88 369	23.8
Services	779.6	333 917	2.3
South-East Europe and CIS			
Total	32.1	2 511	12.8
Primary	4.3	1 253	3.4
Mining, quarrying and petroleum	4.3	1 253	3.4
Manufacturing	15.1	266	56.8
Services	4.8	325	14.8

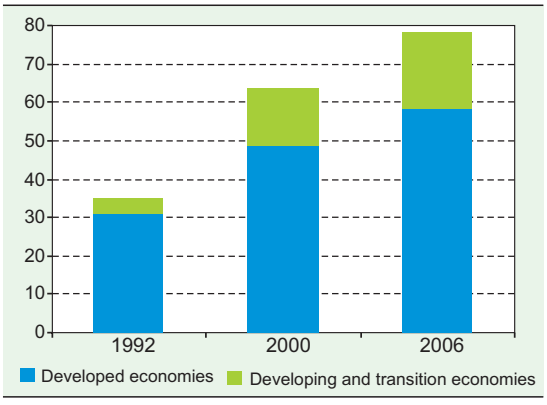
Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

in those countries (through inward FDI) (table I.5). This is largely a reflection of their position as net direct investors (with outward FDI stock exceeding inward FDI stock).[34] However, some empirical studies for the United States do not support the hypothesis that FDI abroad causes job losses at home (Hanson, Mataloni and Slaughter, 2005; Desai, Foley and Hines, 2005; Mankiw and Swagel, 2005).[35] Instead, they suggest that outward FDI has a positive or non-significant effect on employment at home. In the case of Japanese TNCs, according to a recent survey on the likely impact of outward FDI on employment in parent firms, only 6% of the surveyed firms said that they would cut labour at home while 62% said that outward FDI would not create redundant labour at home (Japan, METI, 2007: 58).

There are other instances where outward FDI has led to a reduction of employment in the home country at least in the short run. A study of German and Swedish TNCs, for instance, found that foreign-affiliate employment tends to substitute for employment of the parent firm, with significant positive employment effects for host countries that have a large wage gap with Sweden and Germany, notably the Central and Eastern European countries (Becker et al., 2005). For Italy it was found that FDI has a negative effect on labour intensity of home-country production by TNCs in the case of efficiency-seeking FDI, especially for smaller firms that invested in other developed countries. Positive home-country effects were found for market-seeking FDI in developed countries (Mariotti, Mutinelli and Piscitello, 2003).[36]

Available data suggest that TNCs responsible for the growth of cross-border production numbered at least some 78,000 parent companies with at least 780,000 foreign affiliates in 2006 (annex table A.I.5). Of these, about 58,000 parent TNCs were based in developed countries and about 20,000 in developing and transition economies (18,500 in developing countries and 1,650 in transition economies). The number of TNCs from developing and transition economies has increased more than those from developed countries over the past 15 years: 4,000 in the former and 31,000 in the latter in 1992 (figure I.6). Regarding foreign affiliates, in 2006 there were 260,000 located in developed countries, 407,000 in developing countries, and 111,000 in the transition economies. China continues to host the largest number of foreign affiliates, accounting for one third of all foreign affiliates of TNCs worldwide. Given its small share in global inward stock (only 2% in 2006), this implies that many foreign affiliates in China are very small, or are joint ventures with domestic enterprises.

Figure I.6. Number of TNCs from developed, developing and transition economies, 1992, 2000 and 2006
(Thousands)



Source: UNCTAD, based on annex table A.I.5.

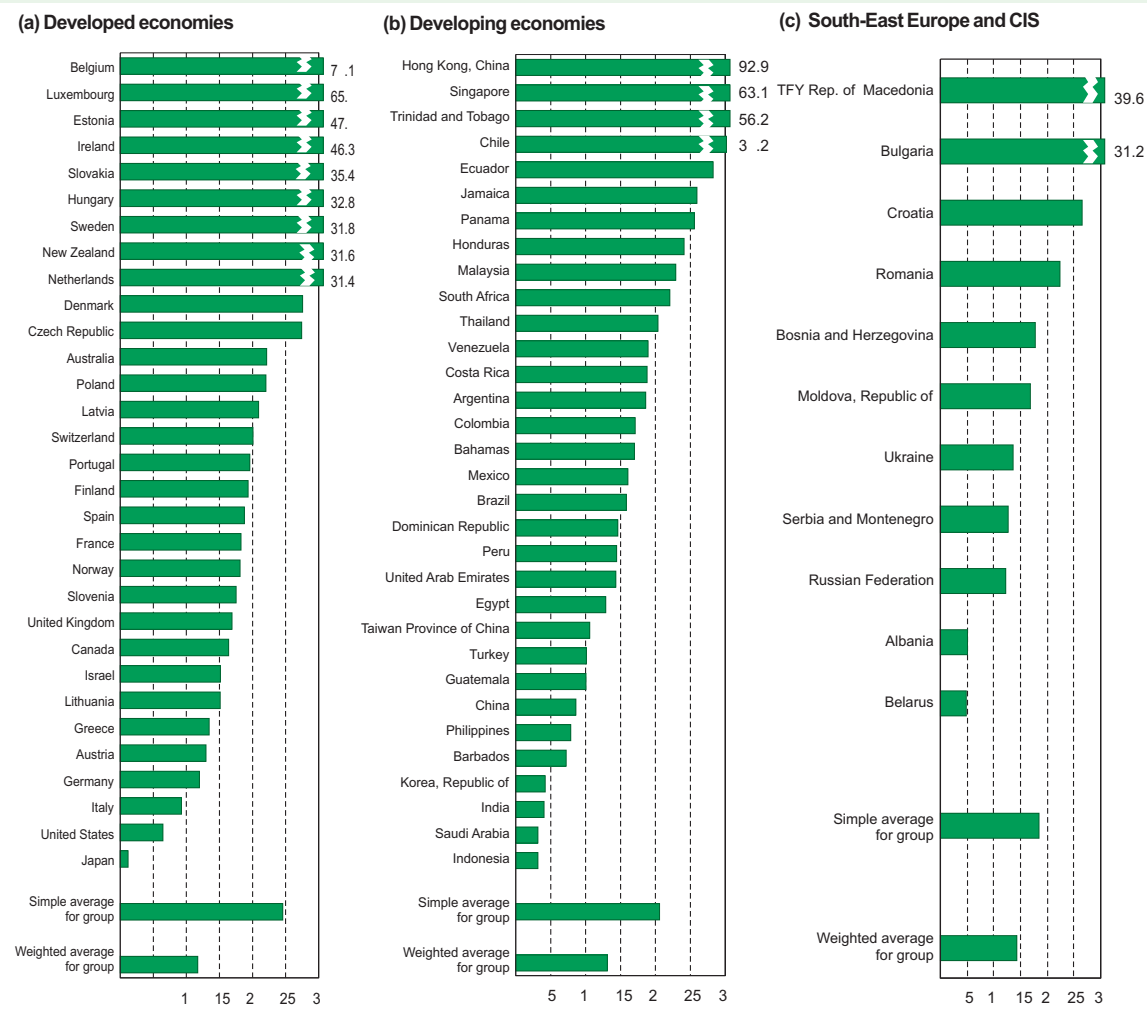
UNCTAD's Transnationality Index[37] shows that in 2004 (the latest year for which the index was compiled), the importance of international production rose in most host economies (developed and developing as well as transition), reflecting the rise of FDI flows that year (figure I.7). The transnationalization of the largest TNCs worldwide has also increased (as discussed in section C).

3. Indices of inward FDI performance and potential

The rankings of countries by UNCTAD's Inward FDI Performance[38] and Potential Indices,[39] as well as the Outward FDI Performance Index[40] for 2006 show the continuation of a number of previous patterns and some year-to-year changes. Among the top 20 listed in the Performance Index for both inward and outward FDI, some relatively small countries continued to rank high (table I.7; annex table A.I.6). Bahrain and Tajikistan entered the top 20 rankings for inward FDI performance, and Israel and Estonia, entered the top 20 for outward FDI performance. In general, however, there were few major changes in the top rankings.

There were no major changes in the Inward FDI Potential Index rankings; this index essentially reflects the country-specific structural variables affecting inward FDI that do not generally change significantly from year to year. Juxtaposing the Inward FDI Performance Indices of countries with their respective Inward FDI Potential Indices yields a matrix of the following categories: front-runners − countries with high FDI potential and performance; above potential − countries with low FDI potential but strong performance; below potential − countries with high FDI potential but low performance; and underperformers − countries with both low FDI potential and performance (figure I.8). While

Figure I.7. Transnationality Index[a] for host economies,[b] 2004
(Per cent)



Source: UNCTAD estimates.

[a] Average of the four shares: FDI inflows as a percentage of gross fixed capital formation for the past three years 2002-2004; FDI inward stocks as a percentage of GDP in 2004; value added of foreign affiliates as a percentage of GDP in 2004; and employment of foreign affiliates as a percentage of total employment in 2004.

[b] Only the above-mentioned economies for which data for all of these four shares are available were selected. Data on value added are available only for Australia (2001), Belarus (2002), China (2003), the Czech Republic, France (2003), Hong Kong (China), Ireland (2001), Japan, Lithuania, the Republic of Moldova, Singapore (manufacturing only), Slovenia, Sweden (2003), and the United States. For Albania, the value added of foreign affilialtes was estimated on the basis of the per capita inward FDI stocks and the corresponding ratio refers to 1999. For the other economies, data were estimated by applying the ratio of value added of United States affiliates to United States outward FDI stock to total inward FDI stock of the country. Data on employment are available only for Australia (2001), Austria, China, the Czech Republic, France (2003), Germany, Hong Kong (China), Ireland (2001), Japan, Lithuania, Luxembourg (2003), Poland (2000), the Republic of Moldova, Singapore (manufacturing only), Slovenia, Sweden, Switzerland, and the United States. For Albania, the employment impact of foreign affiliates was estimated on the basis of their per capita inward FDI stocks and the corresponding ratio refers to 1999. For the remaining countries, data were estimated by applying the ratio of employment of Finnish, German, Japanese, Swedish, Swiss and United States affiliates to Finnish, German, Japanese, Swedish, Swiss and United States outward FDI stock to total inward FDI stock of the economy. Data for Ireland, Sweden and the United States refer to majority-owned foreign affiliates only. Value added and employment ratios were taken from Eurostat for the following countries: Austria (value added only), Bulgaria, Estonia, Finland, Hungary, Italy, Latvia, the Netherlands, Portugal, Romania, Slovakia and Spain; the data refer to the year 2003.

there are no notable changes in the 2005 grouping of countries according to this matrix over that of the previous year (*WIR06*), several countries have improved their FDI position in performance or potential, or both, over the past decade. For example, Botswana, Croatia, Lithuania, the United Arab Emirates and Thailand significantly improved their rankings in the Performance Index or both Performance and Potential Indices (figure I.8 and annex table A.I.6), which reflects increased FDI inflows relative to their incomes as well as improved economic and other conditions for attracting FDI, relative to other countries. On the other hand, countries such as Ghana and Paraguay went into the underperformance category. Only Indonesia has fallen from a front-runner to an underperformer over the past decade.

Table I.7. Top 20 rankings by Inward and Outward Performance Indices, 2005 and 2006[a]

Inward Performance Index ranking[b]			Outward Performance Index ranking[c]		
Economy[a]	2005	2006	Economy[a]	2005	2006
Luxembourg	5	1	Iceland	1	1
Hong Kong, China	4	2	Hong Kong, China	3	2
Suriname	3	3	Luxembourg	2	3
Iceland	12	4	Switzerland	8	4
Singapore	6	5	Belgium	7	5
Malta	10	6	Netherlands	6	6
Bulgaria	8	7	Panama	4	7
Jordan	19	8	Ireland	10	8
Estonia	7	9	Azerbaijan	5	9
Belgium	11	10	Bahrain	9	10
Bahrain	23	11	Kuwait	34	11
Azerbaijan	1	12	Sweden	11	12
Gambia	14	13	Singapore	12	13
Lebanon	9	14	Spain	13	14
Georgia	16	15	Israel	23	15
Tajikistan	33	16	Estonia	21	16
Panama	25	17	France	16	17
Bahamas	21	18	Norway	14	18
Sudan	13	19	United Kingdom	15	19
Guyana	32	20	Cyprus	17	20

Source: UNCTAD, based on annex table A.I.6.

[a] Countries are listed in the order of their 2006 rankings.

[b] Rankings are based on indices derived using three-year moving averages of data on FDI inflows and GDP for the immediate past three years, including the year in question.

[c] Rankings are based on indices derived using three-year moving averages of data on FDI outflows and GDP for the immediate past three years, including the year in question.

4. Developments in FDI policies

a. Developments at the national level

Countries worldwide continue to adopt measures aimed at improving their investment climate. In 2006, according to UNCTAD's annual survey of changes in national laws and regulations relevant to the entry and operations of TNCs, a total of 184 policy changes were identified, 80% of which were in the direction of making the host-country environment more favourable to FDI (table I.8). At the same time, the survey also noted 37 changes in the opposite direction, many of which were related to the extractive industries and were concentrated in a relatively few countries.

Out of 184 identified changes, 109 were adopted in developing countries, with Africa accounting for 57, West Asia for 14, South, East and South-East Asia for 32, and Latin America and the Caribbean for 6. South-East Europe and the CIS adopted 38 of the changes and developed countries 37 (see also chapter II).

Most of the changes involved the introduction of new promotional efforts, including incentives aimed at increasing FDI in certain economic activities. As in 2005, many involved lowering corporate income taxes, a measure that affects

Figure I.8. Matrix of inward FDI performance and potential, 2005

	High FDI performance	Low FDI performance
	Front-runners	Below potential
High FDI potential	Azerbaijan, Bahamas, Bahrain, Belgium, Botswana, Brunei Darussalam, Bulgaria, Chile, China, Croatia, Cyprus, Czech Republic, Dominican Republic, Estonia, Hong Kong (China), Hungary, Iceland, Israel, Jordan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Netherlands, Panama, Poland, Portugal, Qatar, Singapore, Slovakia, Thailand, Trinidad and Tobago, Ukraine, United Arab Emirates and United Kingdom.	Algeria, Argentina, Australia, Austria, Belarus, Brazil, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Islamic Republic of Iran, Italy, Japan, Kuwait, Libyan Arab Jamahiriya, Mexico, New Zealand, Norway, Oman, Republic of Korea, Russian Federation, Saudi Arabia, Slovenia, Spain, Sweden, Switzerland, Taiwan Province of China, Tunisia, Turkey, United States and Venezuela.
	Above potential	Under-performers
Low FDI potential	Albania, Angola, Armenia, Colombia, Congo, Costa Rica, Ecuador, Egypt, Ethiopia, Gabon, Gambia, Georgia, Guyana, Honduras, Jamaica, Kyrgyzstan, Lebanon, Mali, Mongolia, Morocco, Mozambique, Namibia, Nicaragua, Republic of Moldova, Romania, Sierra Leone, Sudan, Suriname, Tajikistan, Uganda, United Republic of Tanzania, Uruguay, Viet Nam and Zambia.	Bangladesh, Benin, Bolivia, Burkina Faso, Cameroon, Democratic Republic of Congo, Côte d'Ivoire, El Salvador, Ghana, Guatemala, Guinea, Haiti, India, Indonesia, Kenya, TFY Rep. of Macedonia , Madagascar, Malawi, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Paraguay, Peru, Philippines, Rwanda, Senegal, South Africa, Sri Lanka, Syrian Arab Republic, Togo, Uzbekistan, Yemen and Zimbabwe.

Source: UNCTAD, based on annex table A.I.6.

Table I.8. National regulatory changes, 1992-2006

Item	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Number of countries that introduced changes	43	56	49	63	66	76	60	65	70	71	72	82	103	93	93
Number of regulatory changes	77	100	110	112	114	150	145	139	150	207	246	242	270	205	184
More favorable to FDI	77	99	108	106	98	134	136	130	147	193	234	218	234	164	147
Less favorable to FDI	0	1	2	6	16	16	9	9	3	14	12	24	36	41	37

Source: UNCTAD database on national laws and regulations.

both domestic companies and foreign affiliates. For example, Egypt reduced its corporate tax to a standard rate of 20% (from a basic rate of 40% and from 32% for industrial and export activities).[41] Similar steps were taken by Ghana (which reduced its corporate income tax from 28% to 25%) and Singapore (from 20% to 18%). Other countries, including India, created new special economic zones, many offering tax holidays or other incentives. Brazil decided to implement an "accelerated growth programme" that will provide corporate tax reductions amounting to an estimated $4.7 billion.

The overall trend to provide more incentives to foreign investors goes hand in hand with the continuing opening up of a number of economic sectors to FDI in various countries. In Italy, for example, a wide ranging liberalization programme was agreed, covering a number of service industries such as professional services, pharmacies, banks and taxi transport. Many of those services have traditionally been protected by licensing regimes. Steps to liberalize the telecommunications industry were taken, for example in Botswana, Cape Verde and Kenya; the banking industry was made more open in Belarus and Mali; and the energy/electricity industry was liberalized to FDI in, for example Albania, Algeria, Bulgaria and Kyrgyzstan. While the overall policy trend in the services sector remains in the direction of greater openness to FDI, the extent to which countries restrict the entry of foreign companies to the sector still varies widely. Outside developed countries, Latin America and the transition economies are the most open to FDI in services (box I.2).

A notable exception to the liberalization trend relates to the extractive industries, where a number of new restrictions on foreign ownership were observed in 2006.[42] For example, in Algeria, the State-owned oil and gas enterprise must now hold a minimum 51% stake in exploration and production arrangements. In Bolivia, discussions relating to ownership and fiscal arrangements in the oil and gas industry were resolved by the signing of new service contracts; these substantially raise the Government's revenues from production and return ownership of all reserves to the State oil company (see also chapter VI). In Indonesia, on the other hand, the Government decided to offer subsidies and tariff reductions to extractive-industry investors in the eastern part of the country.

While the proportion of less favourable changes has remained at the peak of 20% reached in 2005, the nature and significance of those changes vary. In 2006, the majority of them concerned tax increases or the introduction of new taxes, such as withholding taxes (e.g. the former Yugoslav Republic of Macedonia), or solidarity or social taxes (e.g. Hungary, Lithuania). More far-reaching changes were observed in the Russian Federation, where in March 2006 the Government released a preliminary list of 39 "strategic sectors" in which inward FDI would be restricted, including most defence-related activities, aviation and natural resources.[43] Foreign companies will only be allowed to own minority stakes in "strategic assets" in the country's natural resources sector. In China, a similar development aimed at the protection of strategic sectors has been observed. A new policy includes "provisions for increased supervision of sensitive acquisitions" to ensure that what are termed "critical industries and enterprises" remain under Chinese control.[44] The potential negative effects of such policies stem mainly from the uncertainties relating to the definition of strategic sectors or national security (*WIR06*).

By region, as in 2005, Latin America and the Caribbean had a relatively high proportion of "less favourable" changes, which mainly reflected regulatory amendments related to the extractive industries in Bolivia, Peru and Venezuela, and to the Venezuelan programme to nationalize "strategic sectors" such as energy and telecommunications (figure I.9). FDI policy changes at the regional level are described further in the analysis of regional trends in chapter II.

In sum, while, in general, policy changes are in the direction of more liberalization and deregulation, there are some notable changes that suggest signs of a shift towards restrictions on investments in some industries. As in 2005, restrictions are still confined to a relatively small number of countries, and with notable regional differences. But the perception that such changes might trigger renewed protectionism in certain countries has prompted some concern reflected in policy-related initiatives such as the series of round tables launched in 2006 by the Organisation for Economic Co-operation and Development (OECD) on Freedom of Investment, National Security and "Strategic" Industries. Issues discussed at four such round tables so far include the role of national security considerations in present investment regulations in OECD and non-OECD countries, their treatment in international investment agreements (IIAs); regulatory approaches to foreign State-controlled enterprises, and the challenge of identifying ultimate beneficiary ownership and control in cross-border investments. The view emerging from these round tables was that investment policies should be guided by the principles of regulatory proportionality, predictability and accountability.[45] It was also suggested that restrictions on investment should not

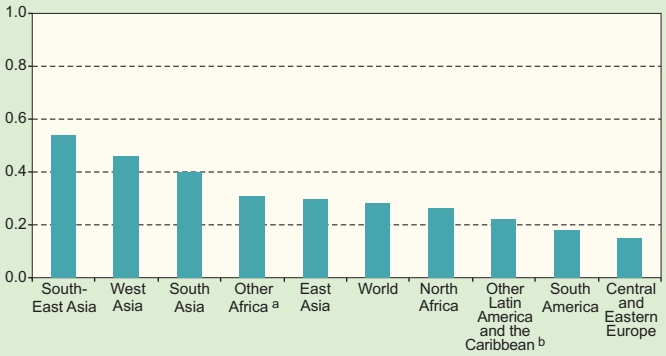
Box I.2. Developing-country openness to FDI in services varies widely

Services account for about two thirds of FDI inflows worldwide and for half of FDI inflows in developing countries (annex table A.I.10). The extent to which countries have opened up to FDI in services varies considerably. Latin America and Central and Eastern Europe are on average more open than countries in Africa and developing Asia (box figure I.2.1), but with significant intraregional variation. A recent UNCTAD study (2006a) found that among developing countries Bolivia and Uganda have the fewest restrictions on FDI in services, whereas Ethiopia, the Philippines and Saudi Arabia are at the other end of the spectrum.

Social services such as health and education are among the industries with the lowest level of explicit restrictions on FDI, followed by business services and the distribution industries. By contrast electricity, telecommunications, transport and financial industries remain highly restricted. Earlier studies (e.g. Warren, 2001; McGuire and Smith, 2001; Kemp, 2001; Kalirajan, 2000; Nguyen-Hong, 2000; and McGuire, 2002), which relied primarily on information contained in the country schedules of the WTO General Agreement of Trade in Services (GATS), tended to underestimate the extent to which countries have opened up their services to FDI. This is partly because countries have been more willing to liberalize unilaterally than multilaterally, for various reasons, including their desire to maintain policy space.

Source: UNCTAD, 2006a.

Box figure I.2.1. Openness to FDI in services in developing and transition economies, by region, 2004



Source: UNCTAD database on national laws and regulations.

a Excluding North Africa.

b Excluding South America.

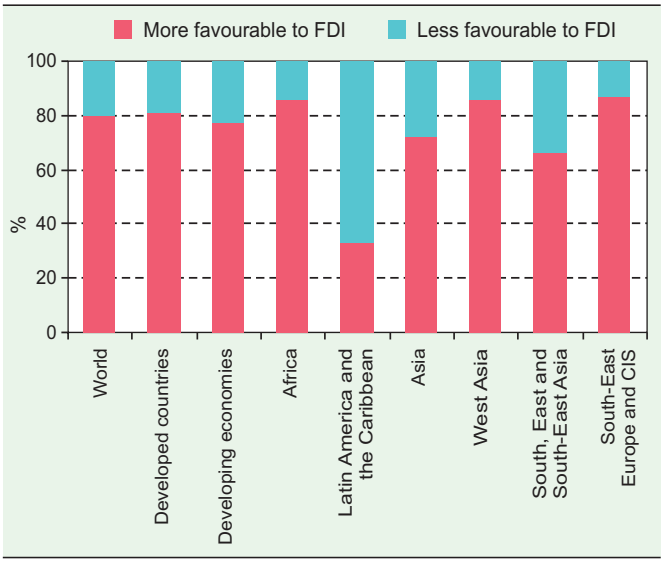
Note: Openness is measured on a scale of 0-1, with 0 representing full openness and 1 a de facto or actual prohibition of FDI. The measurement takes into account rules on ownership, screening and post-entry operational restrictions.

be more costly or more discriminatory than needed to achieve the security objectives, and that they should not duplicate what is, or could be, better dealt with by other regulations. Other guiding principles proposed were that regulatory objectives and practices should be made as transparent as feasible, and that proper mechanisms should be introduced to ensure accountability. The G-8 Heiligendamm Summit Declaration in June 2007 called for a continuation of this work.

b. Developments at the international level

The universe of international investment agreements (IIAs) continues to grow in number and complexity. In 2006, 73 bilateral investment treaties (BITs), 83 double taxation treaties (DTTs), and 18 other international agreements that deal with other economic activities (such as trade) but also contain investment provisions[46] were concluded. This brought the total number of IIAs to close to 5,500 at the end of 2006: 2,573 BITs (figure I.10), 2,651 DTTs (figure I.10), and 241 other agreements (figure I.11).

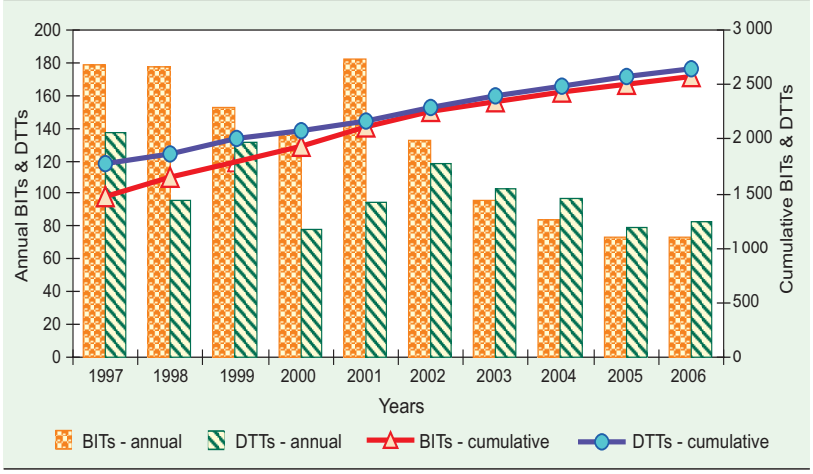
Figure I.9. More favourable and less favourable regulatory changes in 2006, by region



Source: UNCTAD, database on national laws and regulations.

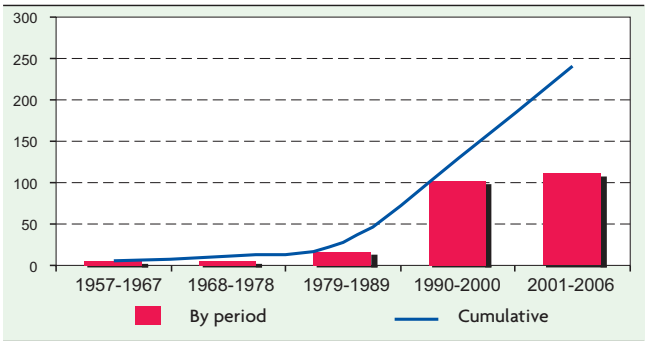
Some recent developments deserve particular attention. First, the IIA universe continues to evolve into an increasingly complex and diverse patchwork.[47] Among its key characteristics are its universality, in that nearly every country has signed at least one IIA, and its atomization, in that no single authority coordinates the overall structure or the content of the thousands of agreements that constitute the system. Moreover, it is multilayered, with IIAs existing at the bilateral, regional, sectoral, plurilateral and multilateral levels; it is also multifaceted with some IIAs including not only provisions on investment, but also – and in some cases more extensively – rules on related matters such as trade in goods and/or services, or intellectual property protection.

Figure I.10. Number of BITs and DTTs concluded, cumulative, 1997-2006



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

Figure I.11. Number of other agreements[a] concluded, by period, 1957-2006



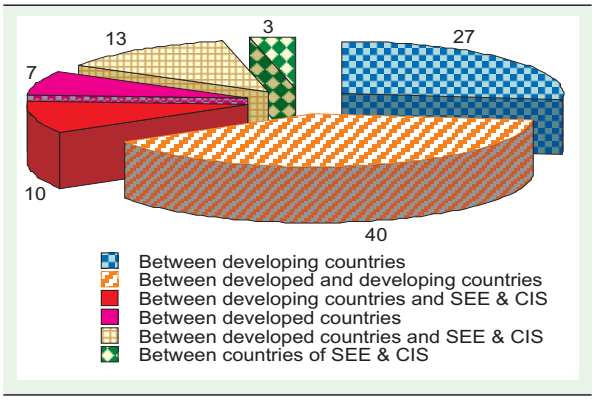
Source: UNCTAD (www.unctad.org/iia).

[a] International agreements, other than BITs and DTTs, that contain investment provisions.

Secondly, IIAs other than BITs and DTTs have proliferated. While their total number is still small compared with the number of BITs, it has nearly doubled over the past five years (figure I.11). Most of the agreements concluded in 2006 are free trade agreements (FTAs) that establish, inter alia, binding obligations of the contracting parties concerning the admission and protection of foreign investment. The scope of the protection commitments in these FTAs is comparable to those found in BITs, including with regard to dispute settlement. Furthermore, the new Central European Free Trade Agreement (CEFTA) was concluded, which consolidated over 30 bilateral FTAs. In addition, at least 68 such agreements, involving 106 countries, were under negotiation at the end of 2006.[48]

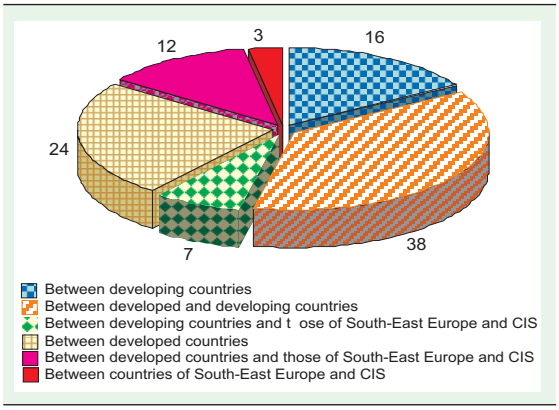
Thirdly, the role of developing countries in international investment rule-making is growing. At the end of 2006, they were party to 76% of all BITs (figure I.12), 61% of all DTTs (figure I.13), and 81% of all other IIAs. For the first time, there are now three developing countries – China, Egypt and the Republic of Korea – among the top 10 signatories of BITs worldwide (figure I.14). Least developed countries (LDCs), while host to less than 1% of global inward FDI stock, had nevertheless concluded 16% of all BITs, 7% of all DTTs and 15% of other IIAs by the end of 2006. There is also a substantial increase in the number of IIAs concluded among developing countries. By December 2006, 680 BITs had been concluded among developing countries, constituting about 27% of all BITs. There were more than 90 South–South IIAs other than BITs and DTTs at the end of 2006.[49] The

Figure I.12. BITs concluded as of end 2006, by country group
(Per cent)



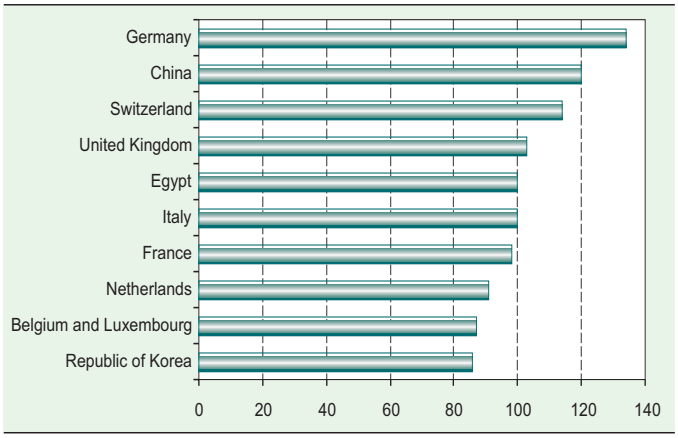
Source: UNCTAD (www.unctad.org/iia).

Figure I.13. DTTs concluded as of end 2006, by country group
(Per cent)



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

Figure I.14. Number of BITs concluded by top ten economies, end 2006



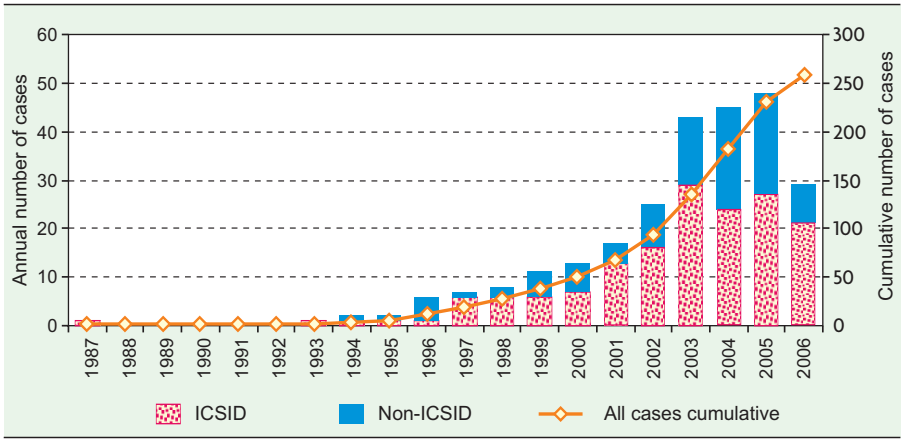
Source: UNCTAD (www.unctad.org/iia).

growth of FDI from the South means that a number of developing countries are becoming both host and home economies.

Fourthly, the number of known treaty-based investor–State dispute settlement cases further increased by 29 in 2006, bringing the total number of such cases to 259 (figure I.15).[50] However, the increase in 2006 was considerably smaller than during 2003-2005. As of end 2006, more than half (161) of all known cases had been filed with the International Centre for Settlement of Investment Disputes (ICSID). Other disputes were initiated under the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL) (65), the Stockholm Chamber of Commerce (18), the International Chamber of Commerce (4), ad hoc arbitration (4), and the Cairo Regional Centre for International Commercial Arbitration (1). The venues for the remaining six cases are unknown. Most of the cases (42%) involved the services sector (including electricity distribution, telecommunications, debt instruments, water services and waste management), 29% were related to mining and oil and gas exploration activities, and another 29% concerned the manufacturing sector. At least 70 governments – 44 of developing countries, 14 of developed countries and 12 of South-East Europe and the CIS – faced investment treaty arbitration, with Argentina topping the list (42 claims), followed by Mexico (18), the United States and the Czech Republic (11 each).[51] In terms of substance, in 2006 arbitration tribunals rendered significant awards relating to IIA provisions on most-favoured-nation (MFN) treatment, fair and equitable treatment, expropriation, the "umbrella clause", and a "state of necessity" exception.[52]

The evolution of the IIA universe, including investment arbitration, poses challenges of capacity and content for many developing countries. Challenges of capacity arise from the fact that many developing countries lack the resources to participate fully and effectively in the development of the IIA network that is increasing in scope, complexity and diversity.[53] Challenges of content arise in several respects, three of which are of primary importance: policy

Figure I.15. Known investment treaty arbitrations, cumulative and new cases, 1987 to end 2006



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

coherence, balancing private and public interest in IIAs, and strengthening the development dimension of these agreements, as discussed below.

Policy coherence. The increasingly complex universe of IIAs raises concerns related to coherence among different IIAs, with implications for the formulation of effective development policies. Due to capacity constraints and weaker bargaining positions, developing countries may find it more difficult than developed countries to establish coherent development polices that are consistent with IIAs or that conform with the requirements/ principles of IIAs and consistently reflect them in IIAs. On the other hand, the possible effects of inconsistency might be mitigated by the MFN clause that is a standard feature in practically all IIAs. It has, in principle, the effect of harmonizing the different degrees of investment protection granted by a country in its IIAs at a level that is the most favourable for the investor, thereby enhancing coherence. Also, international jurisprudence can make an important contribution to harmonizing understanding of the interpretation of core principles of investment protection. However, some recent contradictory awards have created uncertainty as to the circumstances under which the MFN clause actually applies and how far-reaching its effects might be (UNCTAD, 2005a).

Balancing private and public interests in IIAs. The rise in investor-state disputes over the past few years has triggered a discussion on what should be the proper counterweight to investors' rights in IIAs. Three approaches have emerged in recent treaty-making. First, some developed countries have clarified individual IIA provisions to prevent overly broad interpretations. This has occurred, for example, with regard to provisions guaranteeing fair and equitable treatment of investment and the definition of indirect takings.[54] Secondly, numerous recent IIAs place a stronger emphasis on public policy concerns, for example by including general exceptions to maintain national security, preserve the public order, and protect public health, safety or the environment. These provisions may become particularly relevant for investments in extractive industries (chapter VI). Thirdly, some IIAs have strengthened the public role in investor-State dispute resolution, for example, by allowing individuals or entities not involved in the dispute to make written submissions to a tribunal (UNCTAD, 2007a). Most of the three approaches mentioned above have so far been limited to a small, but growing number of countries.[55] It remains to be seen whether they will become a more commonly used feature in future IIAs. Finally, in April 2007, three countries in Latin America, Bolivia, Nicaragua and Venezuela, announced plans to withdraw from the World Bank's arbitration court, ICSID. So far, only Bolivia formally notified its withdrawal to the World Bank (chapter II).

Strengthening the development dimension of IIAs. It might be useful for IIAs to include provisions for strengthening their development dimension. Apart from provisions aimed at allowing regulatory flexibility for host countries (UNCTAD, 2004), they could also include specific investment promotion provisions, such as transparency and exchange of investment-related information, fostering linkages between foreign investors and domestic companies, capacity-building and technical assistance, granting of investment insurance and other incentives, easing informal investment obstacles, joint investment promotion activities, and the setting up of an institutional mechanism for coordination and monitoring purposes (UNCTAD, forthcoming a). The issue of incorporating a development dimension into an IIA also raises the question of what kind of IIA best advances development objectives. This may vary for different countries. The development dimension thus requires not only selecting the type of instrument to be negotiated, but also the drafting of specific provisions for incorporating into the agreement.

B. Changing patterns of FDI

1. Geographic patterns

The geographic pattern of FDI has changed in various ways during the past decade, with new countries having emerged as significant host and home economies. Shifts in the patterns of bilateral FDI relationships have occurred among developed countries, as well as in the relative importance of developed versus developing and transition economies. The rise of FDI from developing and transition economies and the growth of South-South FDI, as discussed in *WIR06*, are examples of recent trends. In order to assess the strength of FDI links between different home and host economies and its development over time, the value of bilateral FDI stocks for 72 countries for which data are available is examined below.

In 2005, the largest bilateral outward FDI stock was that of the United Kingdom in the United States, amounting to $282 billion (table I.9). In comparison, the stock of FDI of the United States in the United Kingdom was valued at $234 billion – the third largest bilateral FDI relationship. Twenty years earlier, the situation had been the reverse, with the FDI stock of the United States being larger in the United Kingdom. Whereas the bilateral link between these two economies, together with those of United States-Canada and Netherlands-United States, dominated the global picture in 1985,

Table I.9. Top 50 bilateral FDI relationships, 1985, 1995, 2005
(Billions of dollars)

Rank	Home economy	Host economy	1985[a]	1995[a]	2005[a]
1	United Kingdom	United States	44	116	282
2	Hong Kong, China	China	..	120	242
3	United States	United Kingdom	48	85	234
4	Japan	United States	19	105	190
5	Germany	United States	15	46	184
6	United States	Canada	49	83	177
7	Netherlands	United States	37	65	171
8	China	Hong Kong, China	0.3	28	164
9	British Virgin Islands	Hong Kong, China	..	70	164
10	Canada	United States	17	46	144
11	France	United States	7	36	143
12	Switzerland	United States	11	27	122
13	Luxembourg	United States	0.3	6	117
14	Netherlands	Germany	5	34	111
15	Netherlands	France	10	31	102
16	United Kingdom	France	9	26	96
17	Netherlands	United Kingdom	17	27	93
18	Germany	United Kingdom	3	14	86
19	United States	Netherlands	8	25	84
20	France	United Kingdom	5	13	80
21	United States	Switzerland	..	14	79
22	United States	France	12	36	79
23	Germany	France	6	21	79
24	Netherlands	Ireland	..	..	76
25	Belgium	France	..	17	73
26	United States	Germany	14	41	68
27	United Kingdom	Netherlands	4	18	67
28	France	Germany	2	15	59
29	Germany	Netherlands	2	12	58
30	United States	Australia	..	33	54
31	Belgium	Netherlands	1	11	50
32	United Kingdom	Germany	3	11	49
33	United States	China	..	18	48
34	Japan	China	..	19	47
35	Luxembourg	France	..	2	44
36	Australia	United States	3	10	44
37	United States	Japan	..	15	44
38	Netherlands	Switzerland	..	10	43
39	Netherlands	Hong Kong, China	..	16	42
40	United Kingdom	South Africa	..	..	40
41	Netherlands	Italy	..	6	40
42	Luxembourg	Germany	0.3	3	40
43	Taiwan Province of China	China	..	18	40
44	Switzerland	France	5	19	39
45	United States	Sweden	1	6	39
46	United Kingdom	Australia	..	25	38
47	Virgin Islands	China	..	3	37
48	Belgium and Luxembourg	Ireland	..	..	37
49	Netherlands	Sweden	1	6	36
50	United Kingdom	Sweden	..	2	35

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).
[a] Or latest year available.
Note: Countries are ranked by the value of inward FDI stock in 2005 as reported by the host economy.

today, the situation is considerably more multifaceted, reflecting the involvement of many more countries in international production.

For example, in 2005, the second strongest relationship was between Hong Kong (China) and China. Other bilateral links that have grown significantly in importance since 1985 include Japan-United States, Germany-United States, China-Hong Kong (China) and the British Virgin Islands-Hong Kong (China) (table I.9). Out of the top 50 home-host economy FDI relations in 2005, 41 were among only developed countries and 9 involved developing economies, and especially China and Hong Kong (China). Reflecting its position as the largest FDI recipient in the world, the United States appears eight times among the 20 destinations with the largest stock of FDI from another country in 2005. Geographical proximity has become more important over time for partners.[56] For example in Europe in 2005, out of the top 50 pairs of countries with the strongest FDI links in terms of bilateral inward FDI stock, 22 were from Europe, compared to 17 in 1995 (table I.9; annex table A.I.7 ranks the next 50 pairs by inward FDI stock of host partner economy).

The above analysis can be taken a step further by comparing the actual volume of bilateral FDI stocks with what could have been "expected" by considering the respective shares of each economy in global outward and inward FDI. [57] A comparison of the actual value with the "expected value" of the bilateral FDI stock provides a measure of the intensity of the FDI relationship between a home economy and a host economy (box I.3).

An analysis of the intensity of the FDI relationship of major developed home economies with various host economies produces the following patterns (annex table A.I.8):

- The FDI intensities of the United States with its main traditional developed host-country partners, such as Canada, Japan and the United Kingdom, were all larger than one in 2005. And the intensity of its FDI relationship with some European host countries (e.g. Sweden and Switzerland) has increased. The analysis further shows the growing importance of Asian host economy partners with the United States than would be expected given their shares in global inward FDI: out of 10 economies with a strong relationship, four were in developing Asia. For example, in 1995, the United States-Malaysia FDI stock was only about half of the expected value (an FDI intensity of 0.5), and by 2005, it had increased to 1.3. Conversely, the United States' actual FDI stock in Latin America has fallen more than expected, given that region's importance in global inward FDI.
- Reflecting the strong geographical dimension of FDI, Japan's FDI intensity with respect to

Box I.3. Analysing the intensity of FDI relationships

Similar to the trade intensity index (Srivastava and Green, 1986), it is possible to assess the intensity of the FDI relationship between a home country (i) and a host country (j) by using a ratio that compares the actual value of the stock of country i in country j with what might be expected given the world position of each of them as home and host countries respectively.

FDI intensity ratio (R) = $FDI_{ij} / ExpFDI_{ij}$

FDI_{ij} = Actual amount of FDI stock from country $_i$ to $_j$.

$ExpFDI_{ij}$ = Expected value of FDI stock from country $_i$ to country $_j$

$$= \frac{FDI_{wj}}{FDI_{ww}} * \frac{FDI_{iw}}{FDI_{ww}} * FDI_{ww}$$

where,

FDI_{wj} = Total inward stock in the j country;

FDI_{iw} = Total outward FDI stock of i country in the world; and

FDI_{ww} = Worldwide inward or outward FDI stock.

If the intensity ratio is greater than 1, the FDI relationship is stronger than would be expected based on the relative importance of the two economies as home and host; if it is less than 1 it is weaker than expected.

For example, considering United States FDI in France: in 2004, the United States outward FDI stock accounted for 20% of the world outward stock. France's stock of inward FDI accounted for 7% of the world inward stock. The "expected value" of the United States FDI stock in France would then be 1.4% (0.2*0.07) of world FDI stock.[a] In the case of United States and France, the actual FDI stock in 2004 was $79 billion and the "expected value" about $140 billion (1.4% of world FDI stock in 2004). Accordingly, the FDI intensity was 79/140, or 0.56 – a weaker than expected relationship.

Source: UNCTAD.

[a] A similar assessment of FDI intensity, proposed by several researchers (Petri, 1994; Dunning, Fujita and Yakova, 2007) in the context of regional flows, measures the relative importance of a host region for a particular home country by looking at the ratio of the share of the host region in outward FDI stock of that country to the share of the host region in worldwide stock.

Asian developing countries has been not only stronger than with other developing countries, it has also increased over the past decade. The main exception was its bilateral FDI relationships with Hong Kong (China) and Indonesia, which have weakened. The intensity of Japan's FDI in such developed host countries as Australia and the United States have increased over the past decade.

- The intensity of the bilateral FDI relationships of major EU home countries have generally increased with other European countries, suggesting increased regional integration through FDI. For example, the FDI intensity of the United Kingdom as a home country, with Sweden rose from 0.6 to 1.6 between 1995 and 2005, and from 0.4 to 0.9 with Austria. Among non-European countries, its FDI intensity with Panama and Singapore has increased. The FDI intensity of France has increased with Japan and the United States, but fallen with Latin American host countries (e.g. Argentina and Brazil). Germany's FDI intensity has risen with host countries such as France, the United States and the United Kingdom, as well as with some Asian host countries (notably Malaysia and the Republic of Korea). However, the FDI intensity of Germany and France with new EU member countries as hosts has weakened significantly over the past decade.

Home developing economies have established stronger than expected FDI links with other developing host economies, especially in the regional context of Asia, China, Malaysia and the Republic of Korea (annex table A.I.8). A number of their developing-country partners rank higher than those from developed countries in terms of FDI intensity. Bilateral links are particularly strong with countries within the region, such as China-Hong Kong (China), Malaysia-Cambodia and the Republic of Korea-China. Malaysia is an exception in that its FDI intensity with home developing countries such as China and the Republic of Korea declined between 1995 and 2005, while it increased with home developed countries such as the United States and Japan.

Overall, the analysis suggests that geographical proximity is associated with stronger FDI intensities between certain home and host countries than between others. The geographical

dimension has become more important for Asian home and host countries, especially for Japan as a home country. For the United States, FDI flows have increasingly spread beyond traditional recipients in Canada and Latin America. A similar phenomenon can be observed for the EU, as witnessed by its declining FDI intensity with many of its traditional developing-country partners. A number of home developing countries have developed stronger than expected FDI relationships, especially with other developing countries, highlighting the scope for increasing South-South investments.

2. Sectoral and industrial distribution of FDI

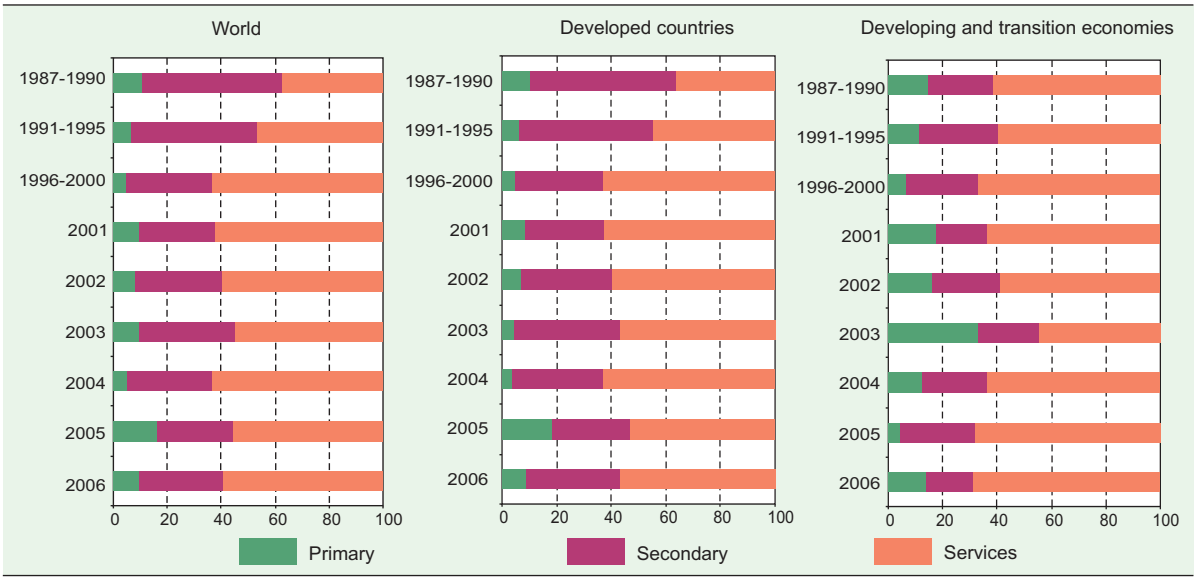
The most important change in the sectoral and industrial pattern of FDI over the past quarter century has been the shift towards services (*WIR04*), accompanied by a decline in the share of FDI in natural resources and manufacturing. Recently, however, FDI in the extractive industries of resource-rich countries has rebounded (Part Two), and its importance in infrastructure services is also rising.

Over the past 25 years, FDI has increased significantly in absolute terms in all three major sectors: primary, manufacturing and services. However, the shares of the primary and manufacturing sectors in world inward FDI stock have declined. In 2005, FDI stock in the primary sector accounted for less than one tenth of total world inward FDI stock, only slightly lower than its share in 1990, while manufacturing accounted for slightly less than a third of total FDI stock (30%), a noticeable drop from its share of 41% in 1990 (annex tables A.I.9-A.I.12). Services represented nearly two thirds of the global FDI stock (61%) in 2005, up from 49% in 1990. FDI flow data for recent years suggest that the share of the primary sector is partly recovering and could eventually reach its 1990 level, possibly even surpassing it if current trends continue. The sector accounted for 12% of world FDI inflows in 2003-2005, compared with 7% in 1989-1991.

Data on cross-border M&As confirm the growing importance of services. This sector's share in worldwide cross-border M&As rose from 37% in 1987-1990 to 58% in 2002-2006 (figure I.16), while that of the primary sector was halved, from 11% to 5% between 1987-1990 and 1996-2000, but it recovered to 11% in 2002-2006 (figure I.16). The share of manufacturing fell from 52% of global cross-border M&As in 1987-1990 to 31% in 2002-2006.

The estimated share of the primary sector in total inward FDI stock is lower in developed countries than in developing countries and in the transition economies of South-East Europe and the CIS (annex table A.I.9). Its decline in total inward FDI stock during 1990-2005 was largely confined to developed countries. In South-East Europe and the CIS, the primary sector's share has been particularly high. In 2005, it accounted for almost a quarter of their total inward FDI stock. The decline in the share of manufacturing in FDI was slightly larger in developing countries – where it reached 31% in 2005 – than in developed countries where it was 29%. On the other hand, the share of services in total inward stock (annex table A.I.9) in developed

Figure I.16. Sectoral distribution of cross-border M&As, by industry of seller, 1987-2006
(Per cent)



Source: UNCTAD, cross-border M&A database.

and in developing countries rose at a similar rate in the two regions, reaching 62% and 58% of their respective inward FDI stocks in 2005.

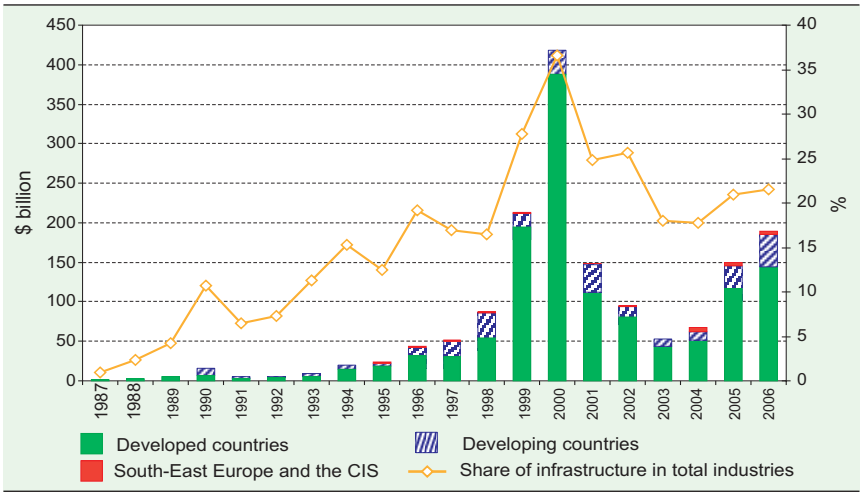
By far the highest share of FDI in the primary industries has been in mining (grouped along with quarrying) and petroleum. While FDI stock and flow estimates are not available for mining and petroleum separately, data on cross-border M&As suggest that both these industries have attracted increasing volumes of investment in recent years. During 2005 and 2006, the value of cross-border M&As in petroleum (representing an annual average of $63 billion) was nearly twice that in mining. Two of the five largest cross-border M&A deals in 2006 were in the mining sector (annex table A.I.3): one was the acquisition of Falconbridge, a Canadian copper and nickel mining company, by Xstrata of Switzerland for $17 billion, and the other was the $17 billion acquisition of Inco, also Canadian, by CVRD of Brazil (see also Part Two, chapter IV).

FDI stock estimates as well as data on cross-border M&As suggest that nearly all manufacturing industry groups have experienced a declining share in FDI over 15 years (annex table A.1.9-A.I.12). That includes industries that have been the largest recipients of FDI in manufactures: chemicals and chemical products, motor vehicles and other transport equipment, food, beverages and tobacco, electrical and electronic equipment, and machinery and equipment.[58] With the exception of chemicals and chemical products, and motor vehicles and other transport equipment, in developed countries during the period 1990-2005, the share of all manufacturing industry groups in global inward FDI stock declined in both developing and developed countries.

In the services sector, estimated inward FDI stock data for 1990 and 2005 and data on cross-border M&As for 1987-2006 suggest that there has been a relatively steady increase in the shares of electricity, gas and water distribution, and transport, storage and communications in global FDI (annex table B.6). The share of construction has declined, but FDI in infrastructure services as a group has risen in both absolute and relative terms.[59] As infrastructure development requires vast amounts of financing, it is almost impossible to meet such requirement from public sources alone in particular in developing countries. TNCs have therefore been increasingly involved in infrastructure development through FDI (both greenfield investments and M&As) as well as through non-equity forms of participation (such as build-operate-transfer and other modalities). For example, infrastructure-related industries accounted for 22% of worldwide cross-border M&As in 2006 (figure I.17), and for 30% in the developing and transition economies (figure I.18) – with both sets of shares rising recently. Private equity firms are also entering this market, and accounted for more than half of the worldwide M&A deals (both domestic and cross-border) in infrastructure in 2006, compared with only 2% in 1998.[60]

Regarding financial services, estimates show that its share in global inward FDI stock between 1990 and 2005 appears to have fallen slightly (annex table A.I.9), as also its share in total cross-border M&As over the past decade (annex table B.6 for the last three years).[61] There are noticeable differences between regions with respect to the relative

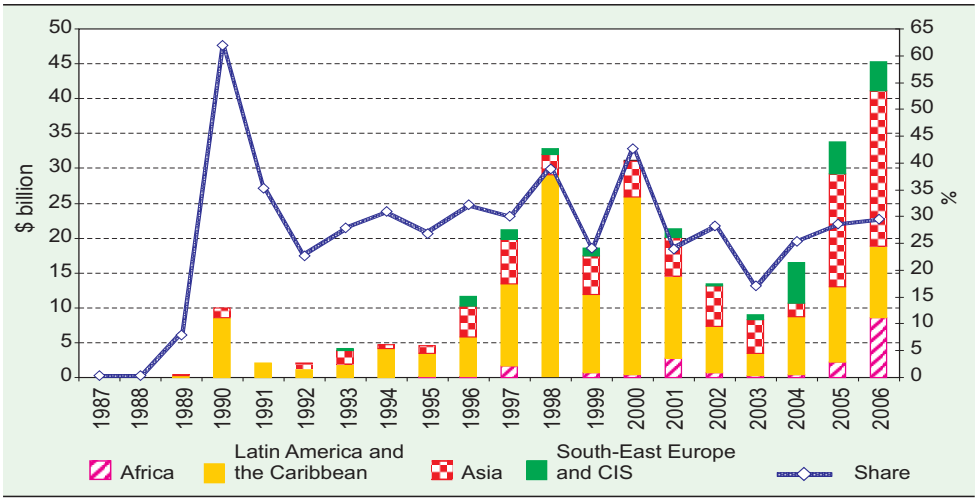
Figure I.17. Cross-border M&As in infrastructure, by value and share in total M&As in all industries, 1987-2006



Source: UNCTAD, cross-border M&A database.

Note: Includes electricity, gas, and water distribution; construction; transport, storage and communications; educational services; and health and social services.

Figure I.18. Cross-border M&As in infrastructure in developing and transition economies, by value and share in total M&As in all industries, 1987-2006



Source: UNCTAD cross-border M&A database.

Note: Includes electricity, gas, and water distribution; construction; transport, storage and communications; educational services; and health and social services.

importance of inward FDI in financial services. This industry accounted for a larger share of the estimated inward FDI stock of developing countries than that of developed countries in 1990 (26% compared to 19%); however, this was reversed in 2005 when it accounted for 20% in developed countries and 15% in developing countries.

The broad sectoral and industrial patterns discussed above conceal changes in the sectoral composition of FDI at the regional, subregional and country levels. A discussion of industrial patterns of FDI and differences in them among the major regions is included in chapter II.

C. The largest TNCs

The composition of the 100 largest TNCs worldwide changed moderately in 2005 (the latest year for which data on the top TNCs are available), as did their foreign activities as measured by sales and employment. The foreign activities of the largest 100 TNCs from developing countries grew more noticeably; however, the importance of foreign operations in their total activities remained relatively stable.

This section looks at developments among the largest TNCs, including the 100 largest non-financial TNCs worldwide and the 100 largest non-financial TNCs from developing economies, ranked by foreign assets. The current UNCTAD lists of largest TNCs, however, exclude many TNCs (such as family-owned and State-owned firms) that are not publicly listed, due to non-availability of comparable information for such companies. If data were available, it is likely that a number of them would feature in the list.[62] This section also includes an analysis of the 50 largest financial TNCs ranked by the Geographical Spread Index.

1. The world's 100 largest TNCs

The world's 100 largest TNCs play a major role in international production. In 2005, they accounted for 10%, 17% and 13% respectively of the estimated foreign assets, sales and employment of all TNCs worldwide. Following a slowdown in their rate of expansion in 2000, they have increased their activities significantly since 2002. Overall, the rankings in the first half of the list have remained relatively stable compared to those in 2004, with General Electric, Vodafone and General Motors at the top (annex table A.I.13). The top 10, with about $1.7 trillion in foreign assets (i.e. almost 36% of the total foreign assets of the top 100), include four TNCs in petroleum and three in automobile production.

There were only 10 new entrants to the list in 2005, originating from seven different countries. By origin, 84 of the companies had their headquarters in the Triad (the EU, Japan and the United States), the United States dominating the list with 24 TNCs. Five countries (the United States, the United Kingdom, France, Germany and Japan) had 72 of the top 100 firms. The most significant change over the past two years has been the increase in the number of firms from developing economies, from five to seven (six of which were from Asia and one from Mexico), in line with the rise of TNCs from several developing countries (*WIR06*). There is a large disparity in size (as measured by foreign assets) between the largest firms and those ranked in the second half

of the list. However, the level of concentration of foreign assets within the largest TNCs has remained relatively stable over the past 10 years.[63]

Although their foreign assets remained almost the same as in the previous year, the activities of the largest TNCs increased significantly in 2005, with foreign sales and employment increasing faster than those of their domestic counterparts by almost 10% and 9% respectively (table I.10). In addition, the ratio of foreign sales and employment to total sales and employment increased again in 2005.[64]

Of the top 100 TNCs, 58 belonged to six industries: motor vehicles (11), petroleum (10), electrical and electronic equipment (10), pharmaceuticals (9), telecommunications (9), and electricity, gas and water services (9).

If ranking were to be based on foreign sales or foreign employment they would yield different results (UNCTAD, forthcoming b). Ranking by sales would move the petroleum TNCs into the top four positions on the list and another four motor vehicles TNCs into the top 10. The largest TNC in terms of foreign sales (ExxonMobil) is 10 times larger than the firm ranked 55 in the list. Ranking the companies by foreign employment would present yet another picture, placing three retail TNCs in the top positions. On average, the largest TNCs had affiliates in 39 foreign countries. Deutsche Post (Germany) was the leader in this regard, with value-added activities in 103 host economies,[65] followed by Royal Dutch/Shell (United Kingdom/Netherlands) with 96. (annex table A.I.16).

Table I.10. Snapshot of the world's 100 largest TNCs, 2004, 2005
(Billions of dollars, thousands of employees and per cent)

Variable	2004	2005	% change
Assets			
Foreign	4 728	4732	0.1
Total	8 852	8 683	-1.9
Share of foreign in total (%)	53.4	54.5	1.1[a]
Sales			
Foreign	3 407	3742	9.8
Total	6 102	6623	8.5
Share of foreign in total (%)	55.8	56.5	0.7[a]
Employment			
Foreign	7 379	8025	8.8
Total	14 850	15107	1.7
Share of foreign in total (%)	49.7	53.1	3.4[a]

Source: UNCTAD/ Erasmus University database.
[a] In percentage points.

Table I.11. Snapshot of the world's 100 largest TNCs from developing economies, 2004, 2005
(Billions of dollars, thousands of employees and per cent)

Variable	2004	2005	% change
Assets			
Foreign	336.9	471	39.8
Total	1073.2	1 441	34.3
Share of foreign in total (%)	31.4	32.7	1.3[a]
Sales			
Foreign	323.0	477	47.6
Total	738.2	1 102	49.3
Share of foreign in total (%)	43.8	43.2	-0.5[a]
Employment			
Foreign	1109	1 920	73.2
Total	3364	4 884	45.2
Share of foreign in total (%)	33.0	39.3	6.4[a]

Source: UNCTAD/ Erasmus University database.
[a] In percentage points.

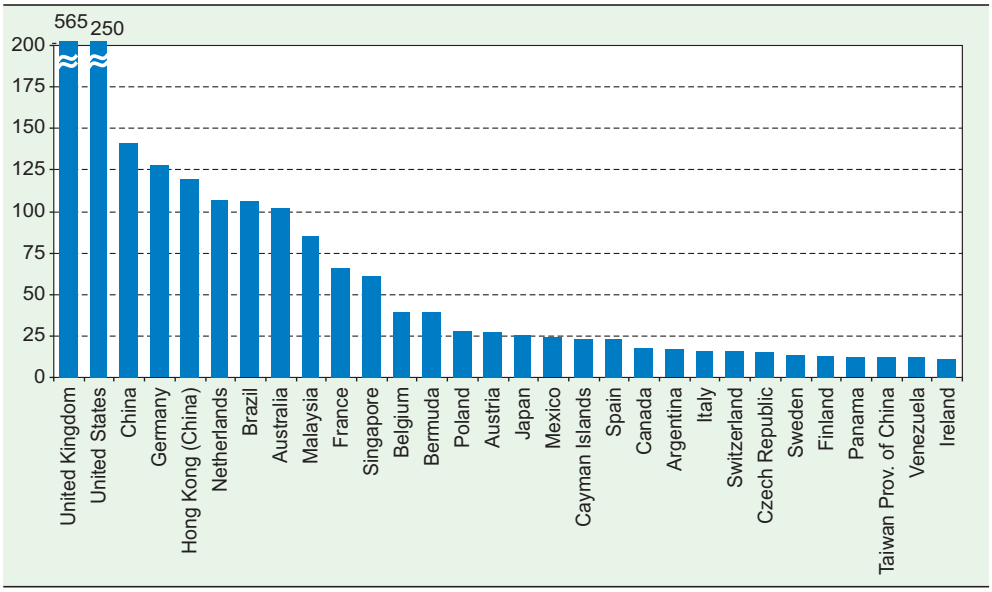
2. The 100 largest TNCs from developing economies[66]

In 2005, the foreign assets of the 100 largest TNCs from developing economies amounted to $471 billion. The five largest TNCs accounted for one third of the foreign assets of the top 100. With foreign assets of $62 billion, Hutchison Whampoa (Hong Kong, China) remained the leader, accounting for as much as one eighth of all foreign assets of the top 100 developing-country TNCs. Petronas (Malaysia), Cemex (Mexico), Singtel (Singapore) and Samsung Electronics (the Republic of Korea) remained in the next four positions (annex table A.I.14).

The regions and countries of origin of the top 100 developing-country TNCs have changed little over the past 10 years, and 78 of them originate in South, East and South-East Asia. Other companies are headquartered in Latin America (11) and Africa (11). By home economy, Hong Kong (China) and Taiwan Province of China dominate with 25 and 18 TNCs respectively of the top 100. China has gained in importance with 10 companies listed. Other important home developing countries of TNCs in the top 100 are Singapore with 11, South Africa with 10, Mexico with 7 and Malaysia with 6. In 2005, their foreign assets and foreign sales increased significantly over the previous year, by 40% and 48% respectively (table I.11). But their foreign operations, as reflected in the ratio of foreign to total assets and foreign to total sales, remained relatively stable compared with 2004. By contrast, foreign employment increased more than domestic employment and the ratio of foreign to total employment rose by 6%.

The top 100 TNCs from developing economies operate in a broader range of industries than do the world's largest TNCs. In 2005, apart from the large number of diversified groups, the single most important industry for the top firms remained electrical/electronic equipment and computers, with a large number of companies from Asia. This was followed by petroleum, which gained in importance in 2005, accounting for 10 companies on the list. Other relatively well-represented industries in the top 100 were food and beverages (8), transportation and storage (7), telecommunications (6), and metal and metal products (5).

Figure I.19. The top 30 locations for foreign affiliates of the 100 largest TNCs from developing economies, 2005
(Number of foreign affiliates)



Source: UNCTAD, based on Dun & Bradstreet, *Who Owns Whom Database*.

With respect to the geographical spread of foreign operations and the number of host countries for foreign affiliates, compared to the average of 39 host countries for the 100 largest TNCs worldwide, the largest ones from developing economies each had affiliates in 28 foreign countries on average. The preferred locations for their foreign affiliates were the United Kingdom and the United States (figure I.19), followed by China, Germany, Hong Kong (China), the Netherlands and Brazil.

3. Transnationality of the largest TNCs

The Transnationality Index (TNI), a composite of three ratios – foreign assets/total assets, foreign sales/total sales and foreign employment/total employment – is higher for the 100 largest TNCs worldwide than for the 100 largest TNCs from developing economies. Another measure of transnationality, the Internationalization Index (II), which is the ratio of a TNC's foreign to total affiliates, also shows that, on average, 69% of the affiliates of the world's largest TNCs are located abroad, a much higher percentage than that for TNCs from developing economies (55%) (table 1.12). However, the picture is more nuanced by industry (table I.12).

In addition to the TNI and II, *WIR06* introduced the Geographical Spread Index (GSI)[67] which seeks to capture both the number of foreign affiliates and the number of host countries in which a company has established its affiliates. Since TNCs from developing and transition economies have foreign affiliates in fewer host countries than their counterparts from developed countries, the GSI indicates much lower levels of internationalization by developing-country TNCs (annex table A.I.16) in keeping with their relatively recent expansion internationally.

Table I.12. Comparison of II and TNI values for the top 100 TNCs[a], by industry, 2005

Industry	Largest TNCs		TNCs from developing countries	
	II	TNI	II	TNI
Motor vehicles	62.1	55.5	71.3	24.7
Electrical/electronics	76.2	53.9	67.1	53.6
Petroleum	60.5	55.5	21.0	24.6
Pharmaceuticals	81.9	60.2	..	..
Telecommunications	71.6	61.6	52.2	35.8
Utilities	53.1	52.3	31.4	41.0
Metals and metal products	77.7	62.0	35.9	41.5
Food and beverages	77.8	73.3	38.3	59.2
Transport and storage	62.9	50.6	56.5	60.7
Computer and related activities	..	..	68.5	50.9
All industries	69.5	59.9	54.5	50.6

Source: UNCTAD/Erasmus University database.
[a] Annex tables A.I.13 and A.I.16.

4. The world's 50 largest financial TNCs

Large TNCs that have grown mainly through M&As dominate world financial services, not only in terms of their total assets but also the number of countries in which they operate. The 50 largest financial TNCs are ranked in this Report by the GSI (annex table A.I.15) and not, as in the case of the largest non-financial TNCs by foreign assets,

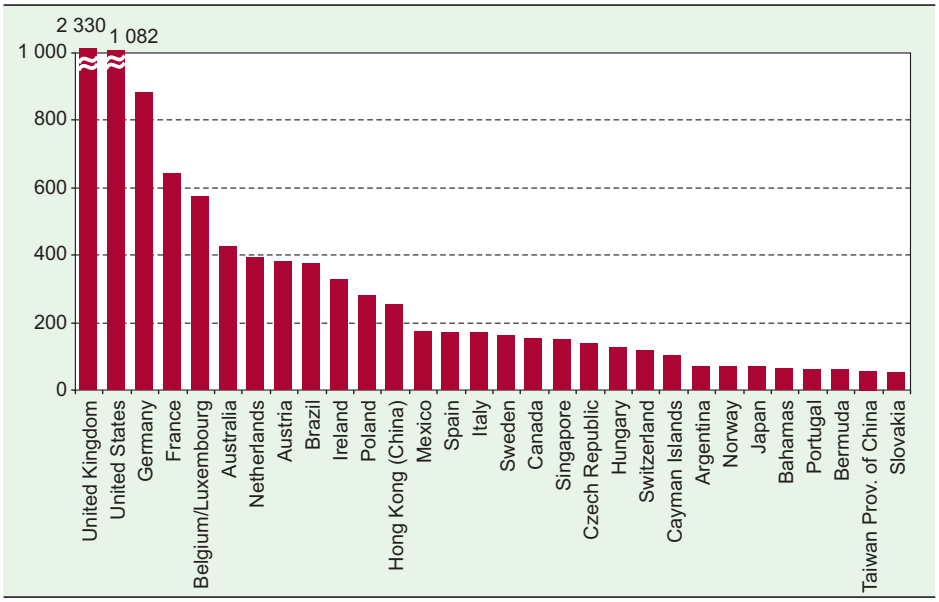
as data on foreign assets as well as on foreign sales and foreign employment of financial TNCs are not available. The GSI is significantly higher for the largest financial groups, and for financial firms from Switzerland due to that country's small home market. The top 50 financial TNCs have, on average, affiliates in 28 host countries, whereas the five largest have affiliates in 51 host countries, on average.

Information on the location of foreign affiliates suggests that the most favoured host country for the largest financial TNCs is the United Kingdom followed by the United States and Germany (figure I.20). Among developing economies, Brazil hosts the largest number of affiliates of the world's largest financial TNCs, followed by Hong Kong (China) and Mexico. It is noteworthy that tax havens such as the Cayman Islands, Bermuda and the Bahamas are also favoured as locations.

The rise in the value of assets of TNCs in the insurance industry, including reinsurance (box I.4), may be attributed to growth through M&As. At the end of the 1990s, many European life insurance companies had established a presence in the United States by acquiring United States companies. The fact that nearly all the acquisitions were by European companies was no coincidence, as European insurers are larger than their United States counterparts: ING (Netherlands), AXA (France), Allianz (Germany) and Fortis (Belgium) were ranked 13th to 18th in the *Fortune Global 500* in 2006.

These companies have been looking for growth opportunities in the United States market and their presence there enables them to become global players. Two thirds of the world's retirement assets

Figure I.20. The 30 most favoured locations for foreign affiliates of the top 50 financial TNCs, 2005
(Number of foreign affiliates)



Source: UNCTAD, based on Dun & Bradstreet, *Who Owns Whom Database*.

Box I.4. Globalization in the reinsurance market

Globalization and consolidation are changing the composition of the largest reinsurance TNCs. Although three countries (Germany, Switzerland and the United States) have dominated the reinsurance business worldwide over the past 10 years, with more than 60% of total reinsurance premiums, Bermuda has in recent years emerged as a major reinsurance centre. At the same time, the consolidation of the reinsurance market in the 1990s has significantly increased the market share of the largest companies. In 2005, the three largest groups wrote 54% of all net reinsurance premiums for the 20 largest companies in this industry. In 2006 Swiss Re completed its acquisition of GE Insurance Solutions in a deal estimated at $7.5 billion (including $1.7 billion of debt), to become the world's largest reinsurance group.

In 1985, 8 of the 20 largest reinsurance groups in the world were from the United States, five were German and three were Japanese, and the others were from other European countries. Twenty years later, according to Standard & Poor's, five were from the United States, only two were German, another two were from Japan, but four were companies established in Bermuda for tax reasons and they have grown rapidly over

/...

Box I.4. Globalization in the reinsurance market (concluded)

the past decade. Compared with the largest financial companies, reinsurance firms are still small in terms of assets and employment, but the average number of host countries in which they operate (14 to date) is on the rise due to the globalization of the reinsurance business. In terms of the GSI, more than half of the firms would rank among the 50 largest financial TNCs (box table I.4.1).

Box table I.4.1. The world's largest reinsurance groups, ranked by the Geographical Spread Index, 2005
(Millions of dollars and number of employees)

Rank 2005	GSI	TNC	Home country	Assets	Sales	Employees	Affiliates		
				Total	Net premiums	Total	Number of host countries	Foreign	Total
1	47.9	Swiss Re [a]	Switzerland	166 552	21 204	8 882	24	179	187
2	41.4	Munich Re	Germany	259 087	22 603	37 953	37	138	298
3	40.3	ACE Tempest Re	Bermuda	61 126	1 546	10 061	20	82	101
4	38.4	Mapfre Re	Spain	29 540	1 082	..	29	86	169
5	30.5	SCOR Re	France	4 440	2 692	994	14	20	30
6	30.3	QBE Insurance Group	Australia	13 929	1 190	7 800	13	36	51
7	30.1	XL Re	Bermuda	58 137	5 013	3 600	13	62	89
8	29.5	Hannover Re (Talank)	Germany	39 624	9 191	1 989	21	53	128
9	27.3	White Mountains Re	Bermuda	8 458	1 304	..	8	27	29
10	26.8	Berkshire Hathaway	United States	198 325	10 041	..	23	148	473
11	25.8	PartnerRe	Bermuda	13 744	3 616	943	10	8	12
12	23.9	Mitsui Sumitomo Insurance Co.	Japan	69 203	1 713	16 432	9	26	41
13	23.1	Millea (Tokio Marine&Fire)	Japan	108 430	2 789	..	10	23	43
14	22.7	Odyssey Re	United States	8 620	2 302	592	8	9	14
15	22.0	Transatlantic Holdings Inc.(AIG)	United States	4 242	3 466	485	12	141	349
16	19.8	Reinsurance Group of America	United States	16 140	3 863	..	14	22	78
17	16.9	Axis Capital Holdings	Bermuda	11 926	1 491	441	4	5	7
18	15.8	Sompo Japan Insurance Group	Japan	54 913	1 804	14 705	5	10	20
19	15.8	Aioi Insurance Co.	Japan	25 265	1 152	9 085	5	8	16
20	13.4	Converium Re	Switzerland	10 983	1 816	579	3	3	5

Source: UNCTAD, based on Standard & Poor's, Global Reinsurance Highlights; companies' websites; Dun & Bradstreet, *Who Owns Whom* database; and Thomson Financial database.

[a] In June 2006, Swiss Re completed its acquisition of GE Insurance Solutions, a process which started in Nov. 2005, with a deal estimated at $7.4 billion.

Note: The Geographical Spread Index (GSI), is calculated as the square root of the Internationalization Index multiplied by the number of host countries. The internationalization Index (II), is calculated as the number of foreign affiliates divided by the number of all affiliates (majority-owned affiliates only).

From an operating performance perspective, and given the high degree of volatility inherent in the reinsurance business, out of the past 18 years, global reinsurers only managed to achieve underwriting profitability in 2003 and 2004. The operating difficulties encountered in this market have reduced the number of reinsurers, and only large diversified reinsurers such as Munich Re and Swiss Re managed to close 2005 with operating profits. In contrast with this picture, most United States-based and Bermuda-based reinsurers reported significantly weaker results for 2005.

Source: UNCTAD.

are in the United States, and the annuity market is expected to double over the next decade (KPMG, 2006). There are likely to be more M&As due to the fragmented nature of the United States market. Driving this activity are the ever-increasing capital demands by rating agencies and regulators on these companies. However, the lack of attractive targets and excessive price expectations are factors that could work in the opposite direction (KPMG, 2006).

In the banking industry, over the past three years, the largest cross-border deals (over $10 billion each) were concluded among European banks. In 2004, Santander (Spain) acquired Abbey National (United Kingdom) for $15.8 billion. In 2005, one of the largest deals was the acquisition by Unicredito (Italy) of the German Bayerishe Hypo Bank and the Bank of Austria Creditanstadt for a total of $21.6 billion. In 2006, this trend continued with the acquisition of Banca Nazionale del Lavaro (Italy) by BNP (France) for about $11 billion. European banks are also expanding rapidly in South-East Europe.

D. Prospects

Various surveys point to continued growth of FDI flows in 2007 and beyond, although the increase in global flows in 2007 is likely to be at a slower rate than in 2006. Inflows in 2007 are forecast to reach $1,400–$1,500 billion, which would imply a new record level. Many factors that

drive FDI activity have developed favourably during the course of 2007, but there could also be some hindrances responsible for the slower rate.

Global economic growth in 2007 is projected to slow down moderately, but to remain robust nonetheless, and above its long-term trend (IMF, 2007a; World Bank, 2007b; and OECD, 2007).

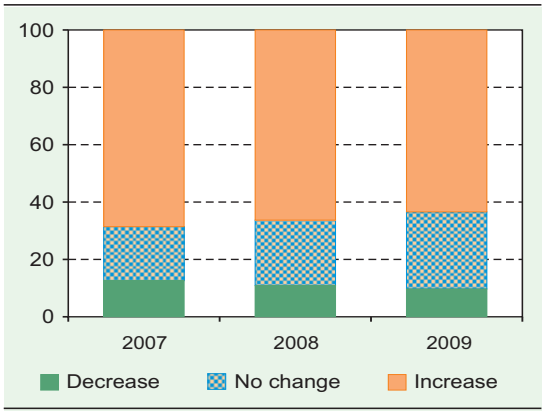
- World trade is expected to be robust.
- The continuing expansion of the world economy – now into its fifth year – should stimulate FDI.
- Corporate profits and external financing conditions are likely to remain positive in 2007.
- M&A activity is forecast to continue its upward trend in 2007, boosted by ample global liquidity, strong growth, low inflation and high corporate profitability. In the first half of 2007, cross-border M&As had increased by 54% over the same period in 2006, to reach $581 billion.
- Private equity and hedge funds, many in collaboration with minority shareholders, were responsible for several high-value M&As in the first half of 2007.[68]

UNCTAD's *World Investment Prospects Survey* for 2007-2009 provides strong support for the projection that FDI flows are set to increase in 2007 and beyond (UNCTAD, 2007b).[69] An average of 63% of the companies surveyed expressed optimism regarding FDI prospects for the period 2007-2009 (figure I.21), and 66% expect an increase in FDI flows in 2007. These results are also broadly supported by the worldwide survey of foreign affiliates of TNCs conducted jointly by UNCTAD and the World Association of Investment Promotion Agencies (WAIPA).[70] Some 76% of the responding CEOs of foreign affiliates expected their investment in host economies to increase over the next three years (figure I.22). Several international organizations and research institutes (IMF, 2007a; IIF, 2007; World Bank, 2007a) also predict higher FDI in 2007.[71]

In terms of preferred regions and country groups for FDI location, East, South and South-East Asia remains the most favourable region, followed by North America, the EU-15, and the new EU-12 (countries that joined the EU in 2005 and 2007) (UNCTAD, 2007b). China is the most preferred investment location, according to the UNCTAD survey responses, followed by India and the United States (table I.13), and then the Russian Federation and Brazil. Viet Nam is ranked higher than the United Kingdom and Germany as an attractive location. Many other recent assessments and surveys concur with these broad results of preferred regions and countries for TNC location (Ernst & Young, 2007; IIF, 2007; JBIC, 2007; JETRO, 2007; McKinsey, 2007b; World Bank, 2007a). FDI prospects by region are discussed in more detail in chapter II.

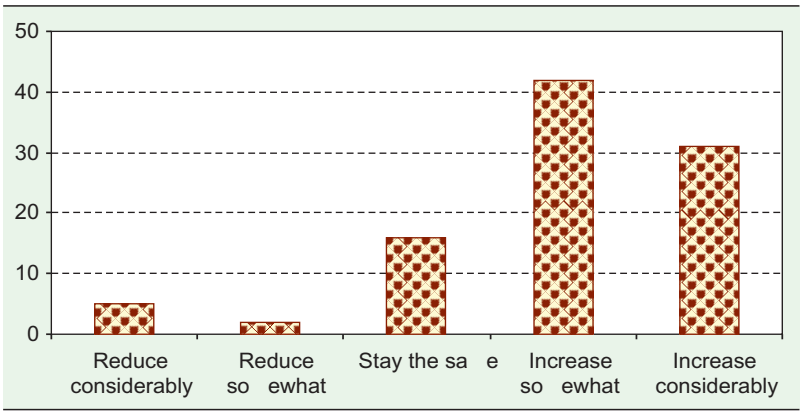
These preferences are undoubtedly swayed by the specific strategies of TNCs. For example, in contrast to the UNCTAD survey, a recent survey of CEOs on M&A trends suggests that developed countries continue to be the favourite M&A destination: 43% prefer Western Europe for M&As, followed by Asia (31%) and North America (25%), with the majority of CEOs targeting countries in their own region or traditional trading partners (PricewaterhouseCoopers, 2007a).

Figure I.21. Prospects for global FDI flows for 2007-2009
(Per cent of survey responses)



Source: UNCTAD, 2007b.

Figure I.22. FDI plans by foreign affiliates in host countries for 2007-2009
(Per cent of survey responses)



Source: UNCTAD-WAIPA Worldwide Survey of Foreign Affiliates, 2007.

The UNCTAD survey did not cover prospects by industry in detail, but the general consensus is that current trends will continue, with large-scale M&As already occurring or in the offing in the *primary sector*,[72] and especially in chemicals and automotive industries in the *manufacturing sector*.[73] Further growth[74] and liberalization[75] in the *services sector* is likely to help maintain the momentum of FDI flows to this sector in the largest host developed and developing regions. In banking and other financial services the upward trend in M&A activity continued in the first half of 2007.[76]

Table I.13. The most attractive locations for FDI for 2007-2009

Economies	Percentage of respondents
China	52
India	41
United States	36
Russian Federation	22
Brazil	12
Viet Nam	11
United Kingdom	10
Poland	7
Germany	7
Australia	6

Source: UNCTAD, 2007b.

Despite the generally positive prospects, several challenges and risks face the world economy that may have implications for FDI flows in 2007 and 2008. Global current-account imbalances have grown dramatically in some developed countries. This could cause exchange-rate shifts, which may affect FDI negatively. High and volatile oil prices have caused inflationary pressures, so that a stronger-than-expected tightening of financial market conditions cannot be excluded. Increased risk exposure on financial markets, caused for example by the activities of hedge funds and carry trades,[77] as well as spillovers from the United States housing market, pose the risk of stronger corrections of highly valued stock and real estate markets. Some concerns about FDI prospects have been expressed by respondents to the UNCTAD survey, based on the possible rise of protectionism: more than four fifths of them believe there could be a significant risk of changes that are unfavourable to FDI in the short term (UNCTAD, 2007b). Many respondents also recognize that global threats such as terrorism and war are not negligible, but they consider that the probability that this type of risks might affect the level of FDI in the short term is relatively low (UNCTAD, 2007b). These considerations, nevertheless, emphasize the need for caution in assessing future FDI prospects.

Notes

1 Real world GDP rose by 4.9% in 2005 and 5.4% in 2006 and is projected to grow by 4.9% in 2007 (IMF, 2007a).

2 In the period 2000–2006, FDI inflows accounted for 56% of all net capital flows into developing countries, whereas the shares of portfolio, other capital transactions (e.g. bank loans) and official flows were 16%, 19% and 10% respectively (World Bank, 2007a).

3 The Monterrey Consensus was adopted by the International Conference on Financing for Development, a summit level meeting sponsored by the United Nations to address key financial and related issues pertaining to global development, held on 21-22 March 2002, in Monterrey, Mexico. It calls, among other things, for mobilizing and increasing the effective use of financial resources needed to fulfil internationally agreed development goals in the context of a holistic approach to the challenges of financing for development (United Nations, 2002).

4 See *Fortune 500*, 15 April 2007.

5 Current profits of listed firms have been rising already for four years in a row, the longest period since 1980. The current profit ratio in fiscal year 2006 was 6.5% for all listed firms (*Nikkei*, 10 February 2007).

6 Data collected by UNCTAD, based on inward FDI, are limited to 132 countries for 2006.

7 Several stock market indices in 2006 exceeded their previous records reached in 2000 (e.g. the Dow Jones in September 2006). In 2006, the blue chip indices in 48 out of 51 of the world's most important stock exchanges rose, 40 with a double-digit percentage increase and 4 with a triple-digit increase (World Federation of Exchanges, 2007: 113).

8 Market capitalization in 49 of 51 major stock exchanges increased in 2006; 41 stock exchanges recorded double-digit growth rates and 3 triple-digit growth rates (World Federation of Exchanges, 2007: 66).

9 In 2000, cross-border M&As of over $1 billion accounted for more than three quarters of the value of total cross-border M&As. This was due to several very large deals like the Vodafone-Mannesmann deal which alone accounted for 18% of the value of cross-border M&As in that year.

10 The observations in this and subsequent paragraphs on the changes in M&A values in various countries/regions are based on data from UNCTAD's cross-border M&A database.

11 O2 (telecoms) and BAA (airport services) were bought by the Spanish companies Telefónica and Ferrovial, respectively for $32 billion and $22 billion. BOC, an industrial gas company, was acquired by its German competitor Linde for $14 billion (annex table A.I.3).

12 In an environment of low interest rates and ample funds, many firms have increased their proportion of debt to capital to optimize their capital structure (IMF, 2007c: 11).

13 *Nikkei*, 18 October 2006.

14 These are funds controlled and managed by private equity firms (i.e. firms that collect funds from private investors (asset holders that are not publicly listed) and buy majority or entire ownership stakes in companies and/or business units with a view to restructuring the management and organization, and thereby raising the stock value of the latter for resale. Acquired firms are usually delisted (unless already unlisted), held privately and restructured over a certain period of years, and then resold to other parties or again listed through an initial public offering (IPO).

15 Because of data constraints and given the dominance of private equity funds, the analysis concentrates on the activities of private equity funds, which are the most active in cross-border M&As. But different kinds of funds increasingly act together, and the boundaries between private equity funds, hedge funds, other collective investment funds and even investment banks are fading away.

16 According to Dealogic, quoted in "M&A in 2006 beats tech boom", *Financial Times*, 21 December 2006; and *Nikkei*, 18 November 2006.

17 Several private equity firms raised an impressive amount of funds in 2006. For example, Blackstone Group (United States) raised $15.6 billion, 2.4 times larger than its previous highest raising of $6.5 billion in 2002. Apollo Management (United States) raised $10.1 billion, Permira (United Kingdom) $14 billion and Texas Pacific Group (United States) $15 billion "Blackstone quickens pace with $15.6 bn fund", *Financial Times*, 12 July 2006; and *Nikkei*, 13 July 2006. Investment banks or commercial banks (such as Morgan Stanley, Citigroup, Deutsche Bank, Credit Suisse and Royal Bank of Scotland) have also entered the private equity market by establishing or strengthening their investment arms, and are now heavily engaged in private equity buyouts (complete acquisition of firms through private equity funds).

18 For example, KKR raised $5 billion with its IPO in Euronext (Amsterdam) in 2006.

19 KKR, Bain Capital, Silver Lake Partners, Apax and AlpInvest Partners NV were involved in this acquisition. The new company has been named NXP.

20 This firm, a pharmaceutical arm of Altana AG (Germany) with its stock listed in Frankfurt, was acquired by Nycomed (Denmark) with the involvement of the private equity firm Avista Capital Partners (United States) and others.

21 However, on an announcement basis, the acquisition of VNU (Netherlands) by six private equity firms for $11.3 billion was the largest deal in 2006.

22 In addition to Philips Semiconductor and Altana Pharma, a number of publicly quoted companies are currently being pursued by private equity firms, including, for example, Adidas (Germany), Alliance Boots (United Kingdom), Altaria (Italy), Iberia (Spain), Sapporo Holdings (Japan), Valeo (France).

23 For example, see "The trouble with private equity" and "The business of making money", *The Economist*, 7 July 2007, "Les fonds LBO risquent une bonne correction", *Challenge*, 19 July 2007: 34.

24 For example, see "Private equity growth hitting tax revenues", *Financial Times*, 13 October 2006 and "Blackstone's blues", *The Economist*, 15 June 2007.

25 The significantly increased credit-financed share of deals can be interpreted as a sign of growing risk for the financial system as a whole. Even if banks are less exposed and less involved, because these risks are ultimately taken by other parties, especially hedge funds, the rest of the financial sector also bears a higher risk (IMF, 2007c: 11f). For acquired firms, there is also the possibility that corporate balance sheets could come under strain owing to the excess of debt financing in takeover activity (ECB, 2006a).

26 *Financial Times*, 24 April 2007, Special Report on Private Equity Funds.

27 However, it is not certain whether job cuts have been larger than job creation. According to an FT/Harris poll undertaken in five EU countries (France, Germany, Italy, Spain and the United Kingdom) in March/April 2007, out of a total of 6,587 adults surveyed, about one third of respondents (34%) believed that the industry created jobs, but almost the same percentage (32%) believed it destroyed them ("Public lacks awareness of private equity, says survey", *Financial Times*, 24 April 2007). In a separate survey on 400 managed buyouts (MBOs) and managed buyins (MBIs) conducted during 1999-2004 in the United Kingdom by the Centre for Management Buyout Research of Nottingham University, employment levels typically fell 2%-3% in the year of the MBOs, but then they rose significantly, by an average of 26% five years after the MBOs. In the case of MBIs, employment levels were lower even after five years. Overall, this survey shows a positive growth of employment ("Buyouts good for jobs, says study", in Fund Management, *Financial Times*, 26 February 2007).

28 For instance, the private equity firm Lone Star (United States) bought Korea Exchange Bank in 2003 for $1.3 billion, and was trying to sell its 50% stake to Kookmin (Republic of Korea) to make almost $4 billion in profits, according to press accounts (*source*: "S. Korea rebuffs Lone Star reproach", *Financial Times*, 25 May 2006; "Lone Star close to scuppering $7.3bn deal", *Financial Times*, 22 November 2006). The Government of the Republic of Korea charged Lone Star with stock manipulation and illegal profits. This case was still pending in June 2007.

29 Based on data on the estimated gross product of foreign affiliates and on world GDP in table I.4.

30 Starting with this report, *WIR* plans to analyse periodically one important variable indicating an aspect of international production or activities of foreign affiliates. This begins with *WIR07* focusing on the employment variable.

31 It should be noted that FDI stock is measured in nominal terms (current value), while employment is measured in real terms (number of employees). For a strict comparison, FDI data should be deflated by an appropriate price indicator.

32 Source: Ministry of Commerce, China. According to the data from National Bureau of Statistics of China (*China Statistical Yearbook*), employment in affiliates with independent accounting systems in China's urban areas was only 6.7 million in 2001. No employment data have been available from this source for subsequent years.

33 In the United Kingdom and the United States, two traditional home countries of large TNCs, the issue of export of jobs has been widely discussed. In these countries, the immediate loss of jobs at home was generally compensated by an increase in employment as a result of enhanced competitiveness of the investors (Dunning, 1993). In France and other European countries, debates surfaced in the early 1990s over the issue of *delocalization*, or the shifting of manufacturing production to other countries, and its employment consequences. This issue continues to be of concern (for a discussion, see *WIR94*, chapter IV).

34 However, in some countries, such as Australia, Belgium, Greece, Ireland, Israel, Luxembourg and New Zealand, inward FDI stock is larger than outward stock.

35 Some earlier studies rejected this hypothesis (see *WIR94*).

36 In considering home-country effects, it is important to consider the counterfactual, that is whether a company would have had a given level of employment or not in the home country if it had not been able to invest abroad.

37 The index is calculated as the average of four shares for a country: FDI inflows as a percentage of gross fixed capital formation, FDI inward stock as a percentage of GDP, value added of foreign affiliates as a percentage of GDP, and employment of foreign affiliates as a percentage of total employment.

38 The UNCTAD Inward FDI Performance Index is a measure of the extent to which a host country receives inward FDI relative to its economic size. It is calculated as the ratio of a country's share in global FDI inflows to its share in global GDP. For the detailed methodology, see *WIR02*.

39 The UNCTAD Inward FDI Potential Index is based on 12 economic and structural variables measured by their respective scores on a range of 0-1 (raw data available on: www.unctad.org/wir). It is the unweighted average of scores on the following: GDP per capita, the rate of growth of real GDP, the share of exports in GDP, telecoms infrastructure (the average no. of telephone lines per 1,000 inhabitants, and mobile phones per 1,000 inhabitants), commercial energy use per capita, share of R&D expenditures in gross national income, share of tertiary level students in the population, country risk, exports of natural resources as a percentage of the world total, imports of parts and components of electronics and automobiles as a percentage of the world total, exports of services as a percentage of the world total, and inward FDI stock as a percentage of the world total. For the methodology for building the index, see *WIR02*: 34-36.

40 The UNCTAD Outward FDI Performance index is calculated in the same way as the Inward FDI Performance Index: it is the share of a country's outward FDI in global FDI outflows as a ratio of its share in world GDP.

41 Oil companies, however, will continue to pay a 40.5% rate.

42 A total of five policy changes relating to the extractive industries were identified in UNCTAD's annual survey of policy changes – in Algeria, Bolivia, Peru, the Russian Federation and Venezuela.

43 In addition, it has compiled a list of more than 1,000 "strategic enterprises" that cannot be privatized. Apart from defence-

related enterprises, the list includes Transneft, the pipeline monopoly; Svyazinvest, a telecoms company; Alrosa, a diamond producer; and the world's largest gas producer, Gazprom (Liuhto, 2007).

44 *OECD Investment Newsletter,* February 2007.

45 Information from the OECD secretariat.

46 In the discussion here, such agreements with investment provisions are categorised as IIAs.

47 The UNCTAD secretariat is currently preparing a study on the evolution of the IIA system over the last 60 years, and its development implications (UNCTAD, forthcoming a). Various investment-related aspects of international economic agreements other than BITs and DTTs are also discussed in UNCTAD, 2006c.

48 These included FTAs signed by the United States with Colombia, Oman, Panama and Peru, and the Economic Partnership Agreement between Japan and Malaysia, and between Japan and the Philippines.

49 Recent examples of such agreements include the ASEAN agreements for the establishment of free trade and investment areas with China (2002), India (2003) and the Republic of Korea (2005), the FTA between Panama and Singapore (2006), and the FTA between China and Pakistan (2006).

50 This number does not include cases where a party signalled its intention to submit a claim to arbitration but had not yet commenced arbitration (notice of intent).

51 UNCTAD, "Latest developments in investor-state dispute settlement", *IIA Monitor*, No. 4, 2006.

52 Idem.

53 In this context, see UNCTAD, 2006b.

54 For instance, the 2004 United States Model BIT clarifies that the concept of fair and equitable treatment does "not require treatment in addition to or beyond that which is required" by the customary international law minimum standard of treatment of aliens, and that, "except in rare circumstances, non-discriminatory regulatory actions that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriations."

55 These are primarily Canada and the United States, but also Colombia, Japan and the Republic of Korea.

56 Empirical evidence suggests that the worldwide sales and investments of TNCs are heavily concentrated in their home country or one other major region (e.g. Rugman and Verbeke, 2004; Dunning, Fujita and Yakova, 2007).

57 Assuming that world outward FDI equals world inward FDI (as it should in principle), this implies that the share of the host country's total inward FDI that comes from the home country is the same as its share in total world inward FDI that comes from that home country.

58 The one exception may be metals and metal products: although estimated FDI stock data show a slight decline in their share in total world inward FDI during 1990-2005, data on cross-border M&As worldwide indicate a modest rise of their share in total sales through much of the period 1987-2006.

59 Infrastructure has been defined as social overhead capital, including public utilities (e.g. power, telecommunications, sewage and sanitation), public works (e.g. roads, dams), transportation (e.g. railways, postal systems and airports) and social services such as education and health (World Bank, 1994).

60 "Infrastructure deals soar to $145 bn", *Financial Times*, 13 October 2006.

61 For time-series data, see UNCTAD's FDI/TNC database (www.unctad.org/fdistatistics).

62 For example, the two largest private industrial corporations in the United States, Koch Industries and Cargill Inc., Boehringer-Ingelheim (one of the world's largest pharmaceutical firms) and Bertelsmann (media) in Germany, and Japan's Shiseido (the largest Japanese cosmetics TNC) and Suntory (the largest in cosmetics and alcoholic beverages) , are not included in UNCTAD's lists.

63 The relative importance of the 5, 10 and 20 largest TNCs among the world's top 100 has remained relatively stable over time (UNCTAD, forthcoming b).

64 The ratio of foreign assets to total assets also rose in 2005, but this was mainly due to the decline in total assets.

65 Its wide geographical coverage is partly explained by its control of DHL.

66 If there were a combined list of the top 100 TNCs from developing and transition economies, two Russian firms would be included: Lukoil and Norilsk Nickel.

67 It is defined as the square root of the II multiplied by the number of host countries, and was termed simply the Spread Index (SI) in *WIR06*. In this report, it is termed the Geographical Spread Index (GSI).

68 For example in April 2007, the private equity fund KKR (United States) acquired the pharmaceutical company Alliance Boots (United Kingdom) for $22 billion, the biggest ever leveraged buyout made by a private equity fund ("Le private equity pulvérise ses records", *Le Temps*, 16 May 2007).

69 The UNCTAD survey on FDI prospects by large TNCs is conducted worldwide on an annual basis. It was undertaken during March–June 2007 on a sample of 1,500 companies, chosen from among the 5,000 TNCs. A total of 191 responses were received, representing a 13% response rate. Simultaneously, an ad hoc group of international location experts has been set up to provide a more qualitative and global analysis on medium-term business opportunities, risks and uncertainties affecting international investment. The results of its analysis are included in a separate survey report (UNCTAD, 2007b).

70 The UNCTAD/WAIPA Worldwide Survey of Foreign Affiliates of TNCs conducted in February–April 2007 aimed at obtaining the views of foreign affiliates of companies worldwide with regard to investment prospects and local business environments in their respective host economies. The survey questionnaire was sent to chief executive officers (CEOs) of 850 foreign affiliates. A total of 96 foreign affiliates in 42 host countries completed the questionnaire, yielding a response rate of 11%.

71 The IMF's *World Economic Outlook* has estimated an increase in net FDI inflows (the balance between FDI inflows and FDI outflows) in emerging market economies to an estimated $284 billion, from $266 billion in 2006 (IMF, 2007a). Estimates of net FDI inflows for 2007 by the Institute of International Finance for 30 emerging economies are $194 billion in 2007, compared with $167 billion in 2006 (IIF, 2007). The World Bank projects a rise in FDI inflows to developing countries (including Central and Eastern Europe) from $325 billion in 2006 to $377-$420 billion in 2009, depending on the world economic growth rate (World Bank, 2007a).

72 For example, Rio Tinto (United Kingdom) offered a $38 billion bid for the acquisition of Alcoa (United States) in July 2007.

73 For example, 82% of Japanese companies in manufacturing plan to strengthen or expand overseas business operations over the next three years (JBIC, 2007). Eastern Europe is set to continue to receive FDI inflows in the automotive industry. Several car makers are also building plants in the Russian Federation ("Suzuki announces plan to build car plant in Russia with Itochu", *Japan Today*, 9 June, 2007; www.japantoday.com/).

74 For example, in the United States, the Institute for Supply Management's Index, which includes new orders, inventories, exports and employment by non-manufacturing businesses, including banks, builders and retailers, rose to 59.7, the highest since April 2006. ("U.S. May ISM services index rises to the highest of year", *Bloomberg*, 5 June 2007).

75 For example, agreements on the EU's Services Directive in 2006 and commitments by ASEAN member States to liberalize FDI in 70 out of 83 service industries by 2015 are likely to boost FDI.

76 For example, three major deals took place in the first half of 2007: Danske Bank (Denmark) acquired Sampo Bank (Finland) and Crédit Agricole (France) purchased Cassa di Risparmio di Parma (Italy), each for $5 billion, while Citibank (United States) acquired Akbank (Turkey) for $3 billion.

77 Transactions in which investors borrow low-yielding currencies in countries with low interest rates and lend them in other countries with high exchange rates (for a further discussion on carry trade, see UNCTAD's *Trade and Development Report 2007*).