



DIRECTORATE FOR FINANCIAL, FISCAL AND ENTERPRISE AFFAIRS

## TRENDS AND RECENT DEVELOPMENTS IN FOREIGN DIRECT INVESTMENT\*

June 2003

### I. FDI and the global economic slowdown: recent trends

*FDI remains subdued due to macroeconomic weakness...*

Foreign direct investment (FDI) in the OECD area has cooled considerably since the investment boom of the late 1990s. The continued sluggishness of the global economy in combination with weak equity prices has already weighed down on FDI flows for a couple of years. However, a number of additional factors appear to be exerting fresh downward pressure on cross-border investment. For example, an increasing number of financial market participants have expressed fears of deflationary pressures in some of the largest OECD economies, contributing to rising uncertainty about the macroeconomic outlook and the future course of monetary policy.

*...uncertainty...*

The feeling of uncertainty was further exacerbated in the first months of 2003 by the unsettled international political and security environment. Given the fact that transparency and predictability tops most surveys of the factors that are important to direct investors, it was probably inevitable that FDI activity would decline in 2002 and continue to decline into the first half of 2003. However, as geopolitical tensions recede, the outlook is for a gradual recovery of investor confidence.

*...and sector-specific concerns.*

Some sectoral developments also appear to have played a role in dampening direct investment activity. Certain sectors (e.g. the airline and tourism industries) are directly hit by the unsettled international situation. Others, such as certain of the “new economy” service sectors that were at the centre of much cross-border investment in the late 1990s, are now burdened with sizeable debts and those involved in them have turned their attention from cross-border takeovers to consolidation. On the other hand, restructuring of the sector is well under way in many countries and the underlying demand for “new economy” services appears to be strong, which should lead to an eventual upturn in investment.

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a) ***Further declines in OECD countries' FDI***

***FDI inflows to OECD countries fell by 20 per cent in 2002...***

FDI to and from the OECD countries continued to decline in 2002. FDI inflows into the OECD area dropped from 614 billion US dollars (USD) in 2001 to 490 billion USD in 2002 (Table 1) – a decline of more than 20 per cent. FDI outflows also declined, albeit at a slightly more modest pace. In 2002, they stood at 607 billion USD, compared with 690 billion USD the year before, a fall of 12 per cent. OECD countries' traditional role as net providers of direct investment to the rest of the world was buttressed. Net FDI flows to non-Member economies reached 117 billion USD in 2002, up from 76 billion USD in 2001 and 4 billion USD in 2000.

***... due to a sharp drop in investment into United States and United Kingdom.***

The United States and United Kingdom accounted for the entire decline in OECD-wide inflows between 2001 and 2002. These two countries, traditionally the largest recipients of FDI within the OECD area, saw their inflows fall by a combined 138 billion USD. Inflows into the United States in 2002 at 30 billion USD were puny by past standards (and represented a decline of 77 per cent relative to 2001). This reduced the United States to the status of fourth-largest FDI recipient after having dominated the league table for a decade. Inflows into the United Kingdom fell from 62 billion USD in 2001 to 25 billion USD in 2002 – or a 60 per cent decline.

***United States has become a net FDI exporter.***

By contrast, FDI outflows from the United States have held up rather well. In 2002, total outflows stood at 123.5 billion USD, down by only 4 billion USD from the year before. As a result, the United States' previous role as a net importer of FDI was reversed, with the country providing net direct investment to the rest of the world to the tune of more than 90 billion USD.

OECD countries other than the United States and United Kingdom recorded a total increase in FDI inflows of 14 billion USD (or 3 per cent) in 2002. However, significant country differences underlay this increase. Some stylized observations offer themselves (see also Figure 1):

***Several smaller countries recorded large increases in their inflows of FDI...***

- The countries that saw the largest relative declines in direct investment inflows in 2002 were New Zealand (93 per cent), Austria (73 per cent), Hungary, Norway and Turkey (all three more than 60 per cent) and Denmark, Korea and Mexico (between 40 and 50 per cent).
- Some countries attracted more investments in 2002 than they did at the height of the FDI boom 2000 (when total inflows into the OECD area reached an all time high of 1.273 trillion USD). For example, inflows to Australia rose to 14 billion USD, the highest level on record since the early 1990s. Likewise inflows rose significantly in 2002 into the Czech Republic (to 8 billion USD), the Slovak Republic (to 4 billion USD) and Finland (to 10 billion USD).

**Table 1. Direct investment flows to and from OECD countries: 1999-2002**

(billion US dollars)

	Outflows				Inflows			
	1999	2000	2001p	2002e	1999	2000	2001p	2002e
Australia	0.7	0.6	11.0	6.8	2.9	13.0	4.0	14.0
Austria	3.3	5.7	3.5	5.4	3.0	8.8	6.1	1.7
Belgium/Luxembourg	132.3	218.4	100.6	..	142.5	221.0	84.7	..
Belgium	..	..	..	13.3	..	..	..	18.3
Luxembourg	..	..	..	154.1	..	..	..	125.7
Canada	15.6	47.5	35.5	27.9	24.4	66.6	27.5	21.4
Czech Republic	0.1	0.0	0.2	0.2	6.3	5.0	5.6	8.4
Denmark	16.9	25.0	13.0	4.9	16.7	32.8	11.5	6.0
Finland	6.6	24.0	8.4	9.8	4.6	8.8	3.7	9.2
France	126.9	177.5	93.0	62.6	46.5	43.3	52.6	48.2
Germany	109.6	56.9	42.1	24.6	55.8	203.1	33.9	38.1
Greece	0.6	2.1	0.6	0.7	0.6	1.1	1.6	0.0
Hungary	0.3	0.6	0.3	0.3	2.0	1.7	2.6	0.9
Iceland	0.1	0.4	0.3	0.2	0.1	0.2	0.2	0.1
Ireland	6.1	4.6	5.9	2.7	18.5	26.5	15.7	19.0
Italy	6.7	12.3	21.5	17.1	6.9	13.4	14.9	14.6
Japan	22.8	31.5	38.4	32.3	12.7	8.3	6.2	9.3
Korea	4.2	5.0	2.4	2.7	9.3	9.3	3.5	2.0
Mexico	..	..	4.4	1.0	12.9	15.5	25.3	13.6
Netherlands	57.6	73.5	48.5	26.3	41.2	60.3	51.2	29.2
New Zealand	1.1	0.6	0.7	0.3	0.9	1.3	4.0	0.3
Norway	6.3	8.3	-0.7	4.8	8.3	5.9	2.1	0.8
Poland	0.0	0.0	-0.1	0.3	7.3	9.3	5.7	4.1
Portugal	3.2	7.5	7.6	3.5	1.2	6.8	5.9	4.3
Slovak Republic	-0.4	0.0	0.1	0.0	0.4	2.2	1.3	4.0
Spain	42.1	54.7	33.1	18.5	15.8	37.5	28.0	21.2
Sweden	21.9	40.6	6.6	10.9	60.9	23.2	11.8	11.1
Switzerland	33.3	44.7	17.3	11.8	11.7	19.3	8.9	9.3
Turkey	0.6	0.9	0.5	0.2	0.8	1.0	3.3	1.0
United Kingdom	202.3	255.2	68.1	39.7	89.3	119.7	62.0	25.0
United States	188.9	178.3	127.8	123.5	289.5	307.7	130.8	30.1
<b>Total OECD</b>	<b>1009.7</b>	<b>1276.5</b>	<b>690.4</b>	<b>606.4</b>	<b>893.0</b>	<b>1272.6</b>	<b>614.5</b>	<b>490.6</b>

Notes: data are converted to US dollars using average exchange rates. p: preliminary; e: estimate.

Source: OECD International Direct Investment Database.

*...which, in turn, originated largely in a handful of big OECD countries.*

- Foreign direct investment into Japan increased between 2001 and 2002 (to 9 billion USD) but they remained somewhat below the all-time high of 13 billion USD that was recorded in 1999.
- The main providers of outward FDI in 2002, apart from the United States and United Kingdom, were Luxembourg<sup>1</sup> (154 billion USD), France (63 billion USD), Japan (32 billion USD), Canada (28 billion USD) and the Netherlands (27 billion USD).
- The countries with the largest relative drops in FDI outflows in 2002 were France, Germany, Spain and the Netherlands (all of which saw declines exceeding 40 per cent). Among the other large economies, Japan and Canada also recorded declining outward FDI in 2002, but at more modest rates of 16 and 21 per cent, respectively.

*On a net basis, the OECD area remains the world's main provider of FDI.*

Taking a slightly longer perspective, the role of OECD countries as the world's foremost provider of direct investment funds is well established. Net outflows from the OECD area reached 876 billion USD over the last decade (1993 to 2002 – see Table 2). The United Kingdom, France, Japan, Switzerland and Germany have been the OECD's main net exporters of FDI. By contrast the United States – which is by far the top country both as an investor and a recipient of FDI – has been among the main net recipients in the OECD area, second only to Ireland.

**b) Strong activity among some non-Member economies**

*Flows to some non-Member countries have held up well in recent years...*

The FDI flows to several developing countries have held up much better than OECD area inflows, and in some cases have even risen in recent years. FDI inflows in non-Member countries adhering to the OECD Declaration on International Investment and Multinational Enterprises were halved between 2000 and 2002 (Table 3). This decline is less than what was experienced by an average OECD economy over the same period, which is particularly remarkable since the non-Member Adherents include three South American countries (Argentina, Brazil and Chile) that were affected by the fallout from the financial crisis in Argentina. In 2002 two former transition economies (Lithuania and Slovenia) saw their FDI inflows rise.

*...and China has become the world's foremost recipient of FDI.*

Among other non-Member countries, inflows into China (mainland) have been particularly impressive. According to national sources they stood at almost 53 billion USD in 2002 – their highest level ever – making China the world's largest recipient of FDI (at least when the notoriously volatile data for Luxembourg are disregarded). Judging from preliminary data for the first four months of 2003, significant further increases are likely this year.

**Table 2. Cumulative FDI flows in OECD countries 1993-2002**

(billion US dollars)

Inflows		Outflows		Net outflows	
United States	1284.5	United States	1220.8	United Kingdom	407.0
Belgium/Luxembourg	682.4	United Kingdom	891.5	France	312.0
United Kingdom	484.5	France	634.4	Japan	208.8
Germany	393.8	Belgium/Luxembourg	680.3	Switzerland	118.2
France	322.4	Germany	489.7	Germany	95.8
Netherlands	272.5	Netherlands	346.8	Netherlands	74.4
Canada	206.1	Japan	253.2	Spain	44.2
Sweden	167.9	Canada	223.5	Italy	37.2
Spain	152.7	Spain	196.9	Finland	38.3
Mexico	128.6	Switzerland	191.5	Canada	17.4
Ireland	97.2	Sweden	141.3	Norway	3.6
Denmark	88.9	Italy	110.5	Portugal	0.7
Italy	73.3	Finland	83.6	Iceland	0.3
Australia	74.9	Denmark	79.4	Greece	-5.6
Switzerland	73.3	Australia	44.0	Korea	-2.4
Poland	49.4	Norway	38.7	Turkey	-7.6
Finland	45.2	Korea	35.5	Austria	-8.1
Japan	44.3	Portugal	29.4	Denmark	-9.5
Korea	37.9	Austria	28.2	Slovak Republic	-9.6
Austria	36.3	Ireland	26.4	New Zealand	-19.2
Czech Republic	35.9	Mexico (1)	5.4	Hungary	-20.1
Norway	35.1	Turkey	3.1	Belgium/Luxembourg	-2.1
Portugal	28.7	New Zealand	2.7	Sweden	-26.5
Hungary	22.7	Hungary	2.5	Australia	-30.9
New Zealand	21.9	Iceland	1.3	Czech Republic	-34.9
Turkey	10.7	Czech Republic	1.1	Poland	-48.6
Slovak Republic	9.6	Poland	0.8	United States	-63.8
Greece	9.3	Greece	3.7	Ireland	-70.8
Iceland	1.0	Slovak republic	0.1	Mexico (1)	-123.2
<b>TOTAL OECD</b>	<b>4891.1</b>	<b>TOTAL OECD</b>	<b>5766.2</b>	<b>TOTAL OECD</b>	<b>875.1</b>

(1) Based on outflow data for 2001 and 2002 only.

Source: OECD International Direct Investment Database.

**Table 3. Direct investment flows to selected non-OECD countries: 1997-2002**

(billion US dollars)

	1997	1998	1999	2000	2001p	2002e
<b>Adherents to the OECD Declaration (1):</b>						
Argentina	9.2	7.3	24.0	11.7	3.2	0.4(3)
Brazil	19.7	31.9	28.6	32.8	22.6	19.2(4)
Chile	5.3	4.6	8.8	3.6	4.5	1.6
Estonia	0.3	0.6	0.3	0.4	0.5	0.3(3)
Israel (2)	2.0	1.8	3.1	5.0	3.3	1.6
Lithuania	0.4	0.9	0.5	0.4	0.4	0.8
Slovenia	0.3	0.2	0.1	0.1	0.5	1.9
<b>Total</b>	<b>37.0</b>	<b>47.4</b>	<b>65.3</b>	<b>54.0</b>	<b>35.1</b>	<b>25.8</b>
<b>Other non-Member economies:</b>						
China	44.2	43.8	38.8	38.4	44.2	52.7(5)
Hong Kong, China	..	14.8	24.6	61.9	22.8	13.7(6)
Indonesia	4.7	-0.4	-2.7	-4.6	-3.3	-2.3
Malaysia	5.1	2.2	3.9	3.8	0.6	..
Singapore	10.7	6.4	11.8	5.4	8.6	..
Russia	4.9	2.8	3.3	2.7	2.5	2.4
South Africa	3.8	0.6	1.5	1.0	7.3	0.7

Note. p: preliminary; e: estimate.

(1) Countries adhering to the OECD Declaration on International Investment and Multinational Enterprises.

(2) Source: Central Bank of Israel.

(3) Secretariat estimate based on the first three quarters of the year.

(4) Secretariat estimate based on the first half of the year.

(5) Source: Chinese Ministry of Commerce.

(6) Source: Hong Kong Census and Statistics Department.

Source: IMF Balance of Payments Statistics, unless otherwise stated.

Hong Kong (China) is another major recipient of FDI flows (albeit often in connection with investment projects in mainland China), which however saw its inflows drop sharply in 2001 and 2002. Since the mid-1990s, Russia has tended to attract FDI to the tune of 2-3 billion USD per year, a trend that was confirmed in 2002 and appears likely to continue in 2003, judging by data for the first three months. Finally, direct investors continued disengaging from Indonesia in 2002. The total amount of disinvestment was 2.3 billion USD, down from 3.3 billion USD the year before.

c) ***Mergers and acquisitions in the first half of 2003: an indication of things to come?***

***M&A data can provide an indication of FDI, but must be interpreted with caution.***

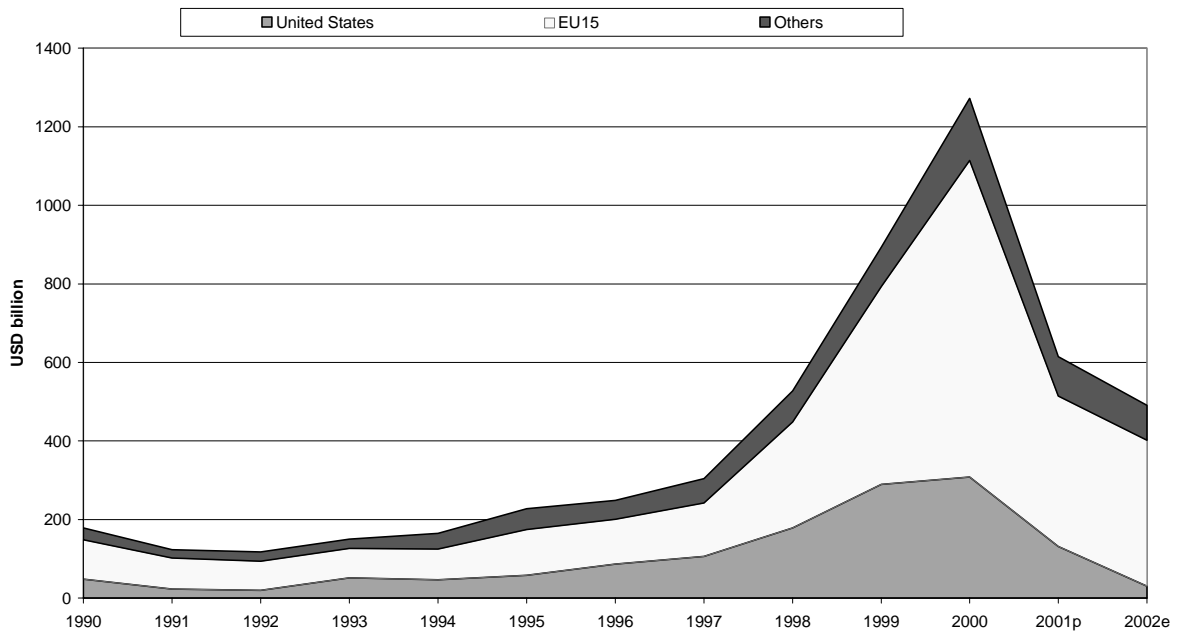
Mergers and acquisitions (M&As) are the largest single component of FDI in most OECD Member countries,<sup>2</sup> and unlike official FDI figures M&A data can be obtained on a weekly basis from private data providers. Thus, cross-border M&A data can be used to shed some light on the likely trends in FDI in the first half of 2003. The downside is that such data is generally not fully consistent with official sources (for instance, they tend to be more inclusive in the types of transactions they consider as “investment”). Therefore, direct comparisons between the data presented in the present subsection and the official FDI data quoted elsewhere should be avoided.<sup>3</sup>

According to data provided by Dealogic, cross-border M&As in OECD countries during the first five months of 2003 fell to the lowest level since the mid-1990s. Both inflows and outflows were less than half of the levels recorded in the same months of 2002, and in both cases the declines reflect a falling number of transactions as well as a smaller average deal size.

***Cross-border M&A in early 2003 show that activity has more than halved since the year before...***

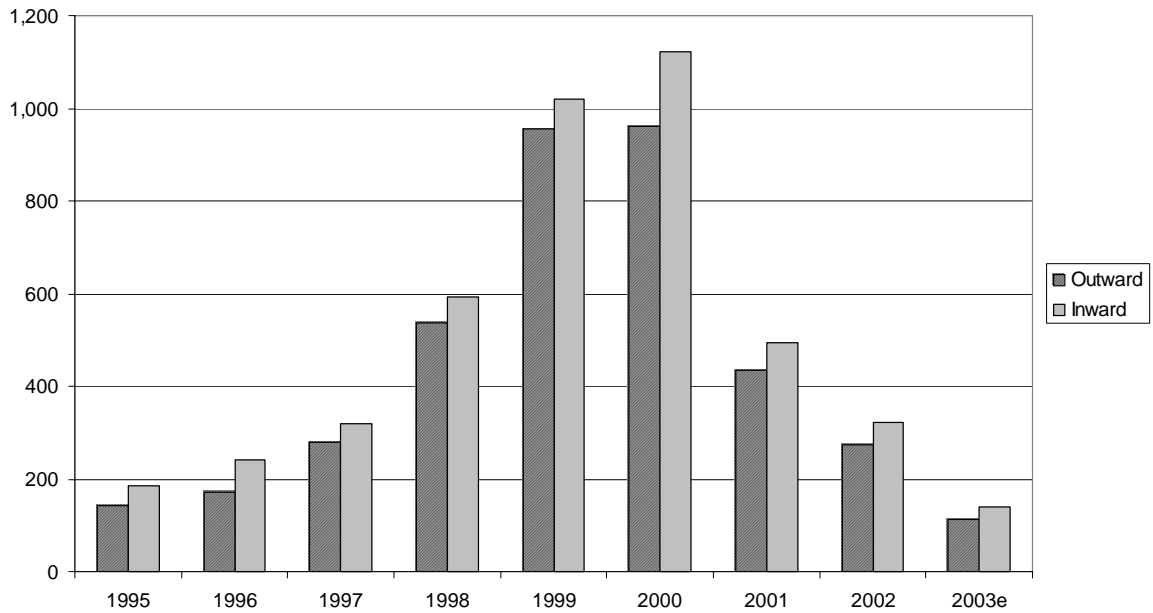
Assuming that the levels of M&A do not recover from the present low levels, 2003 will be a year of very low cross-border M&As by past historic standards (Figure 2). On an annual basis, the January-May figures correspond to a total OECD inflow of 140 billion USD in 2003 and an outflow of 115 billion dollars. Both figures are around one eighth of the corresponding flows recorded only three years earlier. Without getting into a detailed breakdown of the trends by countries, it is nevertheless fair to say that the declines have affected most of the large OECD countries. The preliminary data suggest that all the most important economies in Europe and North America saw their FDI inflows through the M&A channel dwindle in the first months of 2003.

**Figure 1. Total FDI inflows to OECD countries**



Source: OECD International Direct Investment Database

**Figure 2. Cross-Border M&As, Total OECD Area**



Note. e: secretariat estimate.

Source: Dealogic

*...which could imply further declines in FDI this year.*

This, in turn, indicates that on present trends FDI in OECD countries is set to decline further in 2003. Total FDI flows are, however, considerably less volatile than cross-border M&As, so they are unlikely to show declines of a similar magnitude. The estimated linear relationships between FDI and cross-border M&As over the last decade suggest that (again on present trends) FDI into the OECD area in 2003 could decline by as much as 25 to 30 per cent. By the same measure, FDI outflows would drop by about 20 per cent. If borne out by facts, the 2003 FDI flows into and out of OECD countries would stand at around one third of the levels of the peak years 1999 and 2000, but still above the FDI flows recorded in the mid-1990s.

## **II. Individual transactions in 2002 and early 2003**

*Fewer and smaller transactions in 2002 and early 2003...*

In the process of sharply declining cross-border investment, individual transactions have not just become fewer they have also become smaller on average. In 2002 and early 2003, only eight cross-border M&As involved bid values in excess of 5 billion USD, and the largest individual transaction was valued at around 14 billion USD. In the late 1990s and 2000, corporate takeovers worth tens of billions of dollars happened virtually every month.

### *a) The OECD area: What sectors, what investors?*

*...but there was still non-negligible activity in the telecom sector...*

Some of the largest cross-border mergers and acquisitions into OECD countries during the period under review took place in the *telecommunications* sector. The largest individual transaction was France Telecom's investment of 7.1 billion USD into the troubled German mobile telephony provider Mobilcom. Among the other major investments in this sector was the acquisition of the Finnish telecom operator Sonera Oyj by Telia of Sweden for 5.8 billion USD, the 2.3 billion USD purchase of 22.5 per cent of the shares in German E-Plus Mobilfunk by Koninklijke of the Netherlands and Deutsche Telekom's sale of its six remaining regional cable TV networks to an international investor group for 2.3 billion USD.

*...and in energy production and distribution.*

Another sector that saw much cross-border investment activity in 2002 and early 2003 was *energy production and distribution*. The United Kingdom figured prominently in this respect. For example, the UK oil producer Enterprise Oil was taken over by Royal Dutch/Shell for 5.0 billion USD, and the power and gas generator Innogy Holdings was bought by German RWE for 4.4 billion USD. TXU Europe Group sold its retail business to Powergen, which is a subsidiary of E.On of Germany, for 2.5 billion USD and the electricity distributor Seeboard was taken over by Electricité de France for 2.0 billion USD.

Furthermore, the largest individual transaction into the former transition economies was the privatisation sale of 49 per cent of the shares in the Slovakian natural gas utility Slovensky Plynarensky Priemysel. The shares were auctioned off to an international consortium consisting of Gaz de France (France), Ruhrgas (Germany) and Gazprom (Russia) for 2.7 billion USD.

***Less activity in utilities...***

The *utilities* sectors (apart from the segments already mentioned) were not the target of similarly massive individual takeovers as in the past, but a couple of privatisation sales to foreign investors nevertheless bear mentioning. 12.5 per cent of East Japan Railway Company and 44.2 per cent of the French toll road operator Autoroutes du Sud de la France were sold off to international investor groups. The value of the transaction was in both cases 2.1 billion USD.

***...and, with one notable exception, in finance.***

The *financial* sector recorded the largest individual transaction during the period under review, namely the estimated 14.5 billion USD that HSBC Holdings of the United Kingdom paid for the US consumer finance group Household International. Other major investment included Bank of America's 1.6 billion purchase of 24.9 per cent of the Mexican banking group Grupo Financiero Serfin, and the acquisition of the UK First National Consumer Finance by General Electric of the United States at a price of around 1.4 billion USD.

***Among the more "traditional" industries, food and beverages scored well...***

Among the more traditional industries, the *food and beverages* sector saw several large cross-border transactions in 2002 and early 2003. Among the largest was South African Breweries' 5.5 billion USD purchase of the US brewery group Miller Brewing from Philip Morris and Cadbury Schweppes' 4.2 billion USD purchase of Adams Confectionery Business from Pfizer Inc, likewise from the United States. Both the acquiring enterprises are domiciled in the United Kingdom. Another big M&A was the purchase of 90 per cent of the shares in German tobacco manufacturer Reemtsma Cigarettenfabrik for 4.6 billion USD by the UK Imperial Tobacco Group. Finally, Nestlé of Switzerland took control of the US frozen-food producer Chef America for 2.6 billion USD.

***...whereas M&As in mining and mineral extraction have cooled.***

The *mining and mineral extraction* sector, which is traditionally active in repositioning itself internationally, recorded relatively few and limited cross-border M&As during the period under review. Among the exceptions was Xtrata of Switzerland, purchasing the Australian/South African coal mining company Glencore International for 2.5 billion USD and the 1.0 billion USD acquisition of German Preussag Energie by Gaz de France.

Finally, the *pharmaceuticals* industry saw a few sizable international transactions in 2002 and early 2003. The sell-off of the Swiss company Roche Holding's vitamins and fine chemicals division for 1.9 billion USD to DSM of the Netherlands was the largest, followed by the 1.5 billion USD paid by Merck & Co. of the United States for 49.1 per cent of the shares in Japan's Banyu Pharmaceutical Company.

**b) Important deals outside the OECD area**

***Non-Member countries saw a few large takeovers...***

By far the largest individual transaction into a non-OECD country in the period under review was recorded in China, where China Mobile of Hong Kong (China) paid 10.2 billion USD for the mobile phone operator Anhui Mobile Communication. Other large transactions included the sale of Panamerican Beverages of Panama to the Mexican corporation Fomento Economico Mexicano for 2.7 billion USD.

***... for instance in the financial sector...***

The financial sector in Hong Kong (China) was the target of a couple of large cross-border transactions. One was the acquisition of 21.7 per cent of the shares in the commercial bank BOC Hong Kong Holdings by an international group of investors for 2.5 billion USD. Another was the sale of 28.4 per cent of DBS Diamond Holdings (the owner of Dao Heng Bank) to DBS Group Holdings of Singapore.

***...and in mining and mineral extraction.***

In the mining and mineral extraction sectors, 17.8 per cent of the metal producer Companhia Vale do Rio Doce SA of Brazil was purchased by an international group of investors, and Lukoil of Russia sold the Azeri-Chirag-Guneshli oil field to INPEX Corporation of Japan for 1.4 billion USD.

**III. Spotlight on the high-tech sectors**

***M&As between high-tech companies attracted much attention in the late 1990s...***

During the boom in FDI in the late 1990s and 2000, much of the attention focused on the high-tech sectors. Knowledge-based enterprises – particularly the information and communication technology (ICT) companies of the so-called “new economy” – saw their market valuations increase sharply during the equity price boom. On top of this, privatisation and liberalisation in the telecommunication sectors of a range of OECD countries led to a deepening of the relevant segments of the markets for corporate control. Both of these factors contributed to a wave of corporate restructuring within the high-tech sectors. Corporate entities were actively traded between rival conglomerates, including across borders.

*... caused occasional controversy...*

The wave of M&As led to a certain amount of controversy at the time. The sale of “national champions” in the knowledge-based industries to foreign competitors triggered public concerns in some countries – and was discouraged by policy makers in some others. However, standard arguments such as “losing our competitive advantages” and “being swallowed by the foreign competition” seem to presuppose that a main purpose of takeovers is the transfer of competences out of the host economy, and that there are such economies of scale that this will lead to irreparable economic losses. This could be the case in some parts of the knowledge-based economy, but there is little evidence to suggest that it applies generally – nor indeed that it is an issue of greater concern than in the traditional industries. Furthermore, the takeover of high-tech companies was often part of a process of corporate restructuring by which corporate entities sold certain subsidiaries in order to acquire others. In consequence, the economies that saw the largest inward investment are often the same ones from which the largest outward transactions originate (but this is not always the case – see below).

*...and gave some observers the impression that the boom in FDI was largely technology-driven.*

A second observation that was much discussed in the public and press during the late 1990s was that the upsurge in cross-border direct investment coincided with the strong M&A activity in the high-tech sectors. This made some commentators conclude that, for this reason, the growth in FDI was largely triggered by the high-tech boom. However, while there is some empirical support for this argument, the reality appears to have been more complex (see below).

Statistical evidence of cross-border M&As in high-tech sectors is surveyed in the following subsections. Two sectors are included. First, the high-tech industries, following standard OECD definitions, include aerospace, computers and office machinery, electronics and communications equipment, and pharmaceuticals. Second, the “new economy” service sectors include telecommunication and broadcasting, and information and data processing services. Given the nature of the high-tech sectors cross-border M&As are usually a reliable indicator of total FDI, but it should be noted that, as mentioned earlier, the available M&A data are not collected in accordance with OECD standards for direct investment statistics. Hence, direct comparisons between the M&A transactions and the official FDI statistics of Section I should be avoided.

a) ***The high-tech industries followed the general trend***

***Investment into the high-tech industries grew in the late 1990s, but not by more than overall flows.***

Cross-border mergers and acquisitions into and out of high-tech industrial companies domiciled in OECD countries more than trebled over the second half of 1990s, reaching an all-time record level in 1999 (Figure 3, Panel A). In this sense, it is probably correct to say that the mini-boom in FDI in the late 1990s involved significant amounts of investment by the high-tech industries. However, there is not much evidence that cross-border investment in this sector has grown (or, following 2000, declined) faster than FDI overall. On the contrary, the share of the high-tech industries in total OECD cross-border M&A has remained consistently around 9 per cent in the case of outflows, and 7 per cent in the case of outflows (Figure 3, Panel B).

***United States was the main recipient...***

The geographic distribution of inflows to and outflows from the high-tech industries is highly uneven. Between 1995 and 2002, the United States was by far the greatest recipient of cross-border M&A within this sector, accounting for almost a third of total OECD area inflows (Figure 4, Panel A). With 17 per cent of total inflows during this period, Germany came second, with Sweden<sup>4</sup> in third position and France in fourth.

***...while the European countries were important providers of funds.***

The relative importance of investor countries was somewhat different. As an originator of high-tech industry M&A, the United States was relegated to second rank by the United Kingdom (Figure 4, Panel B) – a country which itself attracted little inward M&A to its high-tech industries. France was likewise more important as an outward investor than as a recipient, and with 11 per cent of total outflows Switzerland came in fourth place. In other words, some countries (e.g. United States, France and Germany) appear to have taken part in cross-border structural restructuring within the high-tech industry itself in the sense that they received as well as contributed large amounts of international investment. Others (e.g. United Kingdom, Switzerland) witnessed large scale investment toward high-tech industrial companies abroad by domestic investors that were themselves not always classified as belonging to the high-tech industries.

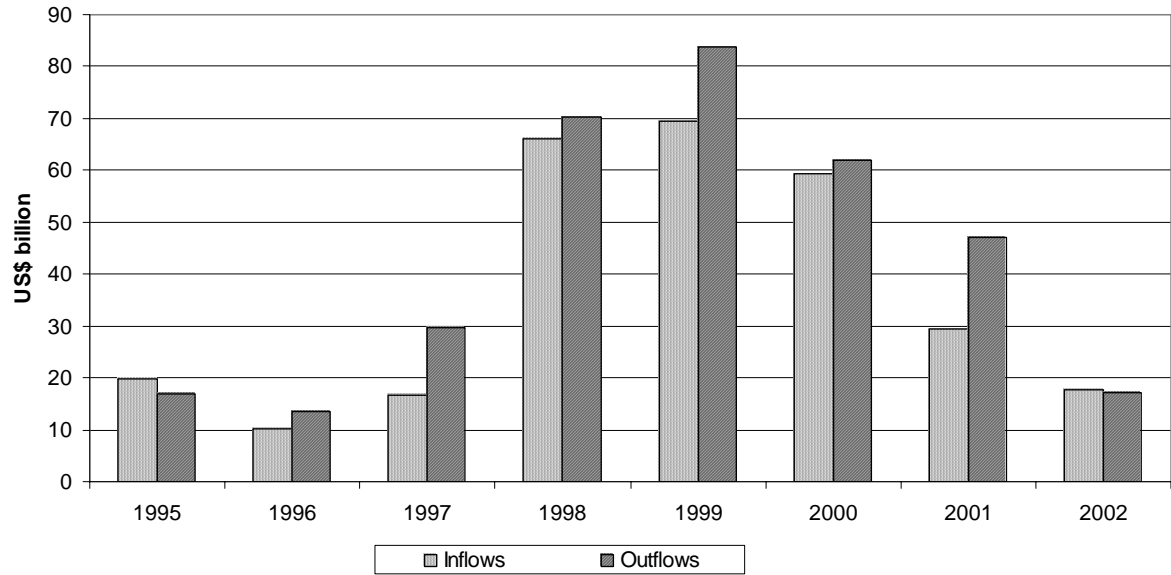
b) ***Strong investment in the “new economy” service sectors***

***Cross-border M&As into the “new economy” service sectors grew explosively in the 1990s...***

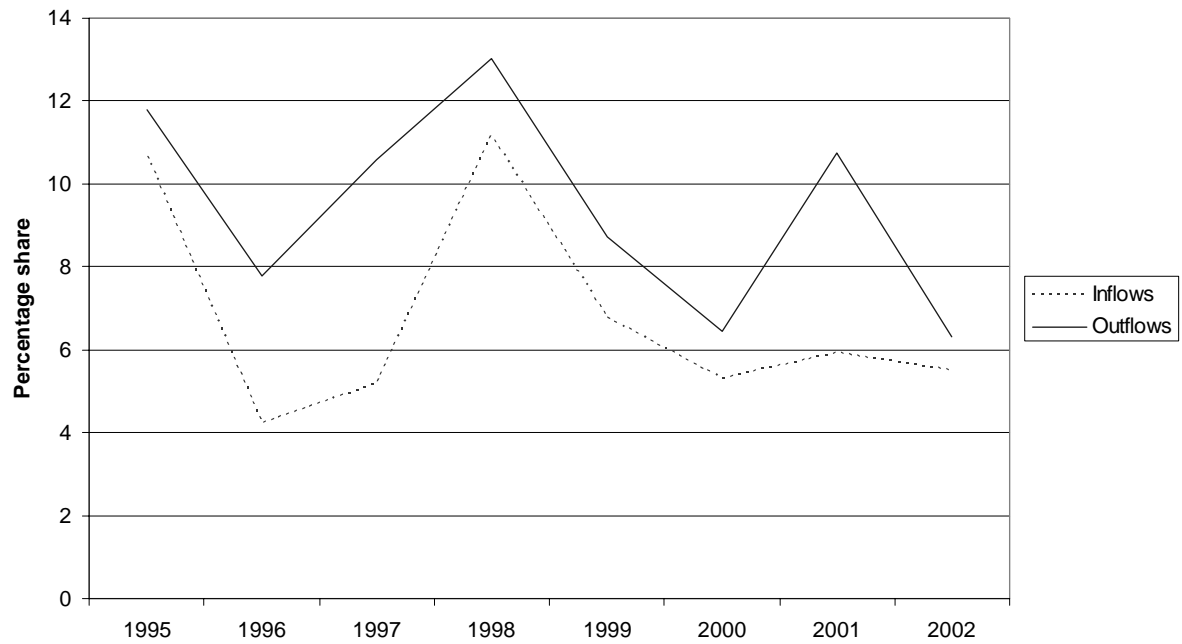
Cross-border M&As in the segments of the service sector that are commonly referred to as the “new economy” developed much more strongly in the late 1990s than those of the high-tech industry. Moreover, they peaked one year later in 2000. Cross-border inflows to the “new economy” sectors of all OECD countries are estimated to have climbed from a relatively puny 18 billion USD in 1995 to more than 400 billion USD in 2000. They have since fallen by more than 80 per cent.

Figure 3.

Panel A. Cross-border M&A in High-Tech Industries, OECD Total



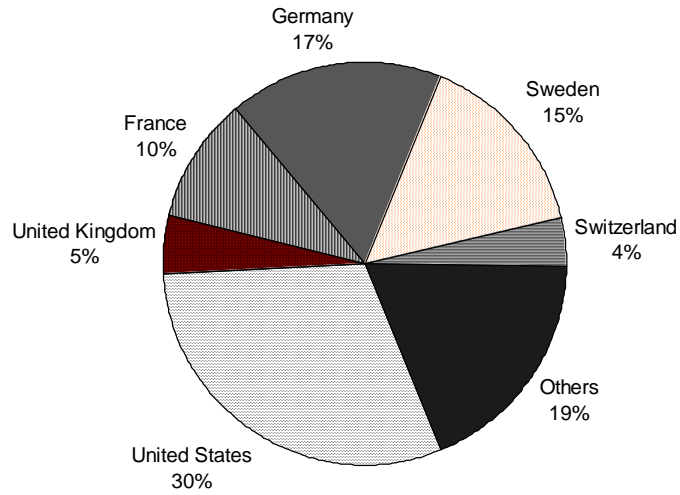
Panel B. High-Tech Industry M&A as Share of Total, OECD Total



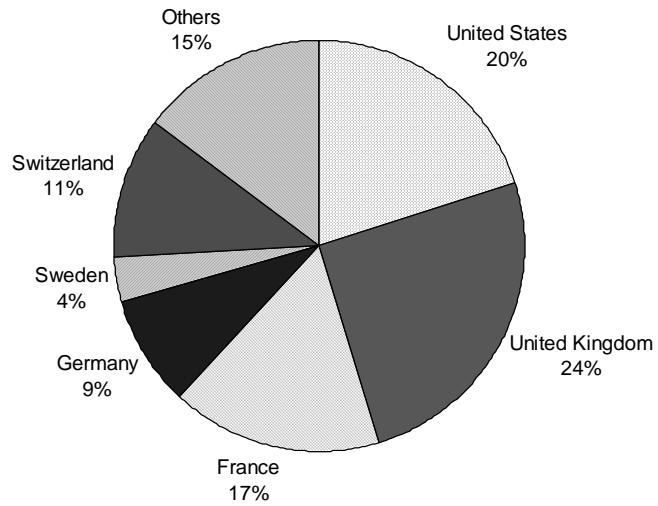
Source: Dealogic

Figure 4.

Panel A. Total OECD High-Tech Industry M&A Inflows by Country, 1995-2002



Panel B. Total OECD High-Tech Industry M&A Outflows by Country, 1995-2002



Source: Dealogic

***...to the point where they accounted for 40 per cent of all transactions in 2000.***

These gyrations were far stronger than the changes in total FDI over the same period. The spike in “new economy” international investment in 1999 and 2000 appears to have reflected valuation as well as volume effects. The sector’s share of total cross-border M&A into OECD countries, measured by the value of bids, rose from 10 per cent in 1995 to 40 per cent in 2000 (Figure 5, Panel A). At the same time, the share measured by the number of bids rose from 5 per cent to 15 per cent. This indicates that if the number of transactions rose relative to the remainder of the economy, so did the average value of each individual transaction.

***A large group of countries was affected...***

Cross-border M&A into and out of the “new economy” is more evenly distributed across OECD countries than is the case with the high-tech industries, probably because cross-border M&A in services is not concentrated around a few market leaders to the same degree as in the high-tech industries. Also, the relative importance of countries as outward investors and recipients of investment is much more similar in the case of services.

***...not least within the EU area.***

The largest recipient of inward investment, as measured by cross-border M&A, between 1995 and 2002 was the United Kingdom with 22 per cent of total OECD inflows (Figure 5, Panel B). The United States came second with 19 per cent and Germany took third place with 15 per cent. The remainder was spread across a large number of OECD countries. At first glance it may appear surprising that several European countries took such a high share of “new economy” inflows. However, it should be noted that, according to scoreboards developed by a recent OECD study, the large European economies apply a more liberal approach to cross-border takeovers into these sectors than almost any other OECD Members.<sup>5</sup> Moreover, cross-border investment into many of the European countries was encouraged by the privatisation of national telecom operators during the period under review.

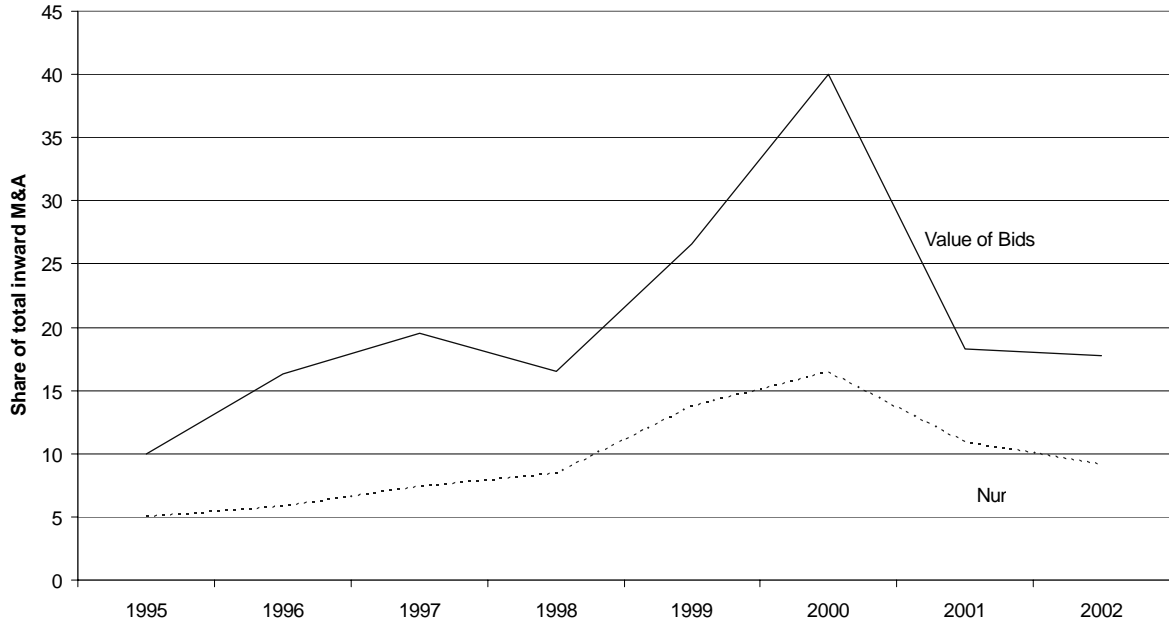
***c) Economic activity in foreign-owned high-tech companies: a snapshot***

***Foreign affiliates dominate economic activity in the high-tech industries in many countries...***

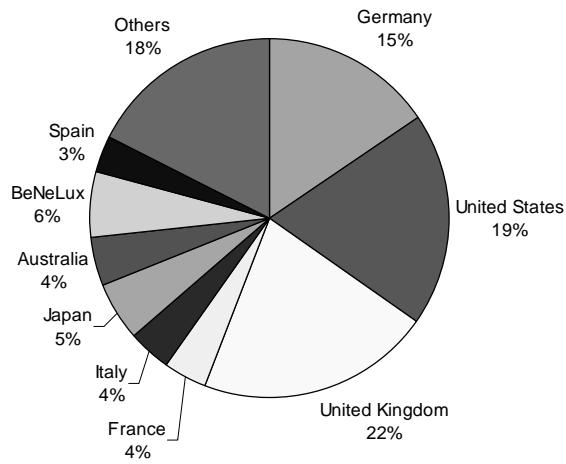
OECD wide or high-tech sector wide data for economic activity in the high-tech sectors are not available, but data for turnover in foreign affiliates in selected countries and sub-sectors may nevertheless shed valuable light on the importance of foreign presence for the home economy as a whole. As regards the technology intensive industries, manufacturing of electronic equipment is chosen as an illustrative example (Figure 6, Panel A). It appears that in countries with internationally important “national champions” in this sector (e.g. Netherlands, Finland, Sweden and Germany), foreign owned enterprises have been unable to secure significant market shares. On the other hand, in countries where these industries were until recently either uncompetitive or missing altogether (e.g. Ireland, Hungary, Poland and Czech Republic) most of the main players are foreign-owned enterprises that will have entered the markets through some form of FDI. Ireland and Hungary top the list with affiliates of foreign enterprises accounting for more than 90 per cent of the turnover in the electronic equipment industry.

Figure 5.

Panel A. Cross-Border M&As Into "New Economy" Service Sectors, 1995-2002



Panel B. Cross-Border M&A Into "New Economy" Service Sectors, 1995-2002



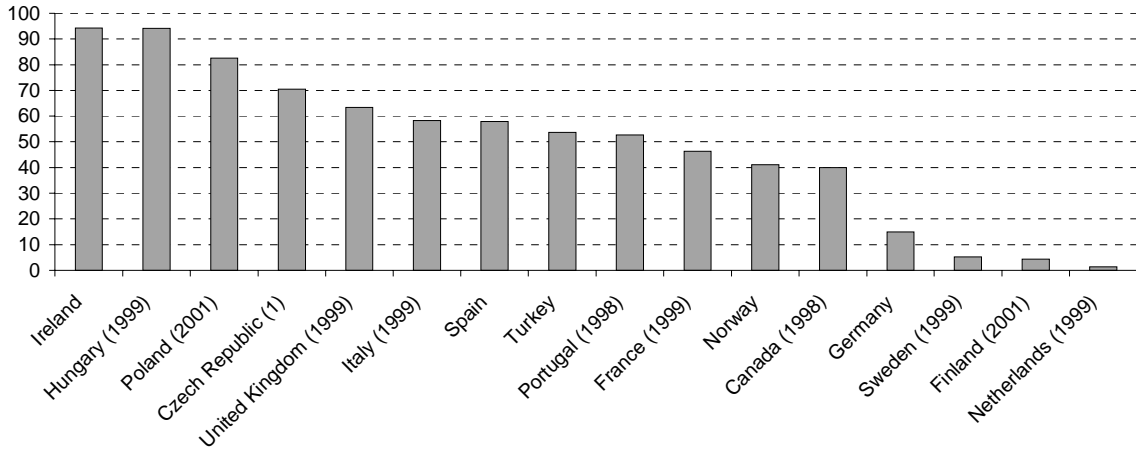
Source: Dealogic

*...which has generally not been the case in the “new economy” service sectors.*

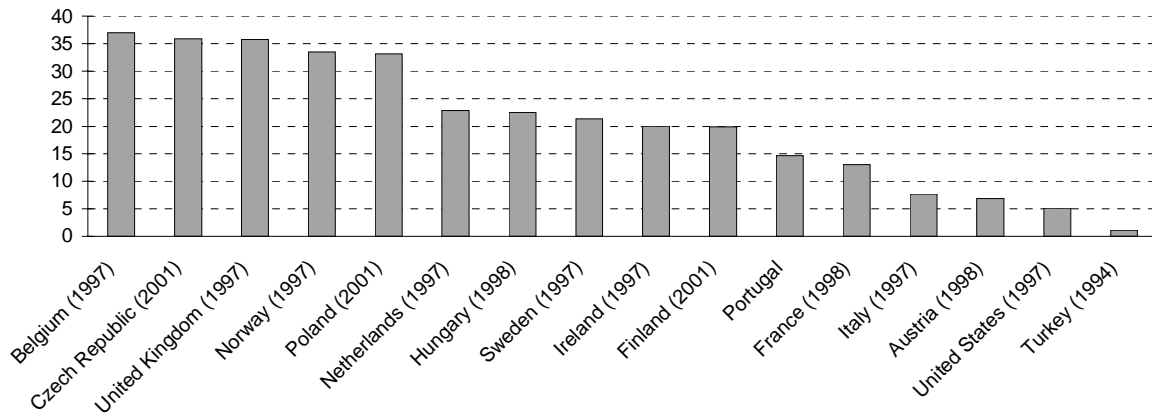
In the high-tech service sectors, where economies of scale are presumed to be less important, and where much younger enterprises predominate, the concentration of economic activity is lower than in the industries. Also, the differences between countries appear to depend less on the level of economic development. Taking computer-related services as an example, the countries where foreign-owned companies have the largest market penetration are Belgium, the Czech Republic and the United Kingdom, in all of which countries the foreign-owned share of total turnover exceeds 35 per cent (Figure 6, Panel B). At the low end, it is entirely understandable that a market leader such as the United States should have a particularly low market penetration by foreign companies, but the low foreign presence in certain of the other countries is not easily explained. These are, however, mostly economies that (according to unrelated surveys) have been relatively slow in the uptake of computerised services such as the internet. One of the reasons could therefore be that they have simply appeared less attractive to would-be entrants.

Figure 6.

**Panel A. Share of turnover of foreign affiliates in electronic equipment (ISIC 32), 2000**



**Panel B. Share of turnover of foreign affiliates in computer-related services (ISIC 72), 2000**



Source: OECD Indicators of Economic Globalisation (forthcoming)

## NOTES

1. The Luxembourg figures are influenced by corporate restructuring under the aegis of holding companies located in this country. They must be interpreted with considerable caution.
2. The other components are “greenfield” investment in new plants, reinvested earnings and capital transfers between related enterprises.
3. The methodological differences were highlighted in the previous volume of this publication (OECD International Investment Perspectives, 2002, Vol. 1).
4. The inflows into Sweden and the outflows from Switzerland are, however, boosted by changes in ownership structure within a couple of large high-tech multinational enterprises operating in both countries.
5. Giuseppe Nicoletti, Steve Golub, Dana Hajkova, Daniel Mirza and Kwang-Yeol Yoo (2003), “Policies and International Integration: Influences on Trade and Foreign Direct Investment”, Working Paper from the Economics Department, OECD, forthcoming.