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European Integration: A Threat to Foreign Investment in Developing Countries?

by Jamuna P. Agarwal, Ulrich Hiemenz
and Peter Nunnenkamp

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- European integration is expected to enhance the attractiveness of EU countries for domestic and foreign investors. This has caused concerns in developing countries that foreign direct investment there may be diverted to Europe.
- In preparing for the Single Market, European companies have indeed become more Eurocentric, but this mainly affected their investment activities in the United States. They neglected developing countries only temporarily and largely because of macroeconomic disturbance in Latin America. Likewise, European integration has not induced US and Japanese investors to curtail their investment activities in developing countries either.
- Sector studies show that closer intra-EU cooperation has not stopped the worldwide globalisation of EU companies:
 - In the EU's automobile sector, the Single Market programme has not reduced the pressure to overcome cost disadvantages through globalised production and marketing.
 - In the chemical sector, globalisation has increased, particularly because of oligopolistic competition for the US market.
 - In the textiles and clothing sector, suppliers have continued their globalisation efforts, as world market conditions have forced them to invest not only in Europe and North America but also in Asian developing countries.Investors are apparently aware that they cannot afford to lock themselves into Fortress Europe, thus foregoing the cost advantages of international sourcing and marketing.
- Central and Eastern European countries are becoming major partners in the globalisation strategies of EU companies. Investments in this region are, however, unlikely to divert investment flows away from developing countries. In particular, there are no indications that investment locations in Asia have become less attractive. This region being the world's economic growth pole, EU investors have no choice but to improve their position in the highly competitive Asian markets by exporting to, and investing in, these markets.

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I. Introduction

Foreign direct investment (FDI) is widely acknowledged to stimulate economic growth both in developing (DCs) and developed countries. For this reason, countries compete for internationally mobile capital and attempt to improve their locational advantages. Economic integration among countries can be regarded as such an attempt, since larger markets in a uniform regulatory environment are expected to offer opportunities to increase production, improve the allocation of resources and reap economies of scale. Furthermore, the fear of rising protection against non-member countries can become an important motive for investing in integration schemes rather than to export to them. In both cases, FDI flows may be diverted away from other recipients, thus slowing down economic progress in these countries. Such a possible outcome may entail a worldwide proliferation of integration schemes.

DCs have repeatedly voiced fears of investment diversion in the context of European economic integration. They argue that the deepening and widening of integration in Europe will reinforce a Eurocentric strategy of European multinationals and attract investors especially from Japan and the US to the detriment of DCs. It is anticipated that these tendencies may even become more pronounced in the second half of the 1990s when EFTA countries join the EU, when the formerly socialist Central and Eastern European countries are more closely integrated with the EU and when a common European currency is introduced (for details, see Hiemenz et al. 1994, Chapter C). Such fears are founded on studies that have identified the size and growth of host country markets as important determinants of FDI (Stehn 1992; Agarwal et al. 1991). In addition, EU enlargements to the Southern and Eastern peripheries comprise countries with factor endowments similar to many DCs. These countries could attract FDI that would otherwise have gone to DCs.

Contrary to these expectations, one may, however, argue that European integration may either stimulate additional FDI in the EU or

may, at worst, divert FDI at the expense of other industrialised countries with less favourable growth prospects. Then DCs with a proven record of international competitiveness such as many Asian DCs would not suffer from a loss of their comparative locational advantages as a result of European integration. They may even become more important partners of European as well as other firms from industrialised countries in the ongoing process of globalisation of production.

The validity of either hypothesis is hard to assess empirically. In contrast to the considerable work done on the production and trade effects of European integration (as summarised in Hiemenz et al. 1994), its effects on capital flows has been largely neglected so far. It is the purpose of this study to review recent changes of international investment patterns and to relate them to economic integration in Europe. The study will focus on the effects of the Southern enlargement of the Community completed in 1986 and the establishment of the Single Market by the end of 1992. Since foreign and EU investors have anticipated the deepening of integration since the publication of the *White Paper on Completing the Internal Market* on 15 July 1985, FDI flows in the late 1980s and early 1990s are expected to reflect the reaction of multinational enterprises to the envisaged changes of economic parameters.

Chapter II will assess the trends of FDI flows from and to EU member countries since 1985. It will be shown whether the EU has become more attractive for foreign investors and whether EU companies have indeed become more inward-looking in their globalisation strategies. Chapter III is devoted to differential reaction patterns at the sectoral level. The literature suggests that multinational enterprises may have different criteria for choosing production locations depending, e.g., on the factor intensity of their production processes or the motive for overseas investment (Hiemenz et al. 1991). Such differences among globalisation strategies are highlighted on the basis of sec-

torally disaggregated FDI data and case studies for selected industrial subsectors such as automobiles, chemical and textile production.

Chapters IV and V deal more specifically with issues of investment diversion. One issue is related to the potential attractiveness of Central and Eastern Europe for investors from EU countries. Low labour costs and their nearness to EU markets may give them a competitive

edge over other investment locations with a similar factor endowment, e.g., in DCs. Whether DCs have actually suffered from European integration in terms of lower FDI inflows is finally analysed for DCs in East and Southeast Asia. These economically successful countries provide good cases for testing the hypothesis of investment diversion. Chapter VI summarises the findings of the study.

II. Overview of Foreign Direct Investment Flows

1. European Foreign Direct Investment

The run-up to the completion of the Single Market has been widely expected to induce European firms to streamline production structures and to exploit locational advantages within the EU (see, e.g., Cecchini 1988; Emerson et al. 1988). Furthermore, a large unified market could provide an incentive to focus FDI on the EU to reap potential economies of scale instead of investing in other regions of the world. For these reasons, European multinationals might have become more inward-looking since 1985.

The data available to assess this proposition require a few methodological comments. Only France, Germany, the Netherlands and the United Kingdom regularly publish FDI data in satisfactory regional and sectoral disaggregations. Even these statistics provide an incomplete and at times inconsistent picture of the external engagement of domestic investors, since methods of compilation differ among countries. Some data have long publication lags (Netherlands, United Kingdom), and there are sometimes large gaps in the coverage of host countries to prevent the disclosure of information relating to individual enterprises (for details, see Langhammer and Groß 1986). These shortcomings have partly been remedied by a new set of FDI data for OECD countries recently published by the OECD (various issues). This source is based on information pro-

vided mostly by Central Banks and includes annual FDI flows for almost all EU countries and the period of 1982–1992.¹ Total in- and outflows are reported in national currencies by home and host countries, while sectoral flows are given in summary tables without any geographical breakdown. Furthermore, OECD data are not fully consistent with data published by national authorities.

Table 1 provides the most recent and complete set of information on European FDI (based on OECD various issues). The general trends emerging from this table are in line with the developments in the national data on FDI provided by France, Germany, the Netherlands and the United Kingdom.² The most important features of the behaviour of investors from EU countries are the following:

- Investors from EU member countries have significantly increased their foreign engagement since 1985. Additional FDI was predominantly geared at industrialised countries.
- EU integration has proven to be a stimulus for intra-EU investment. In 1988–1990 more than half of the annual flows were directed to other EU member countries, and this share was even higher in the early 1990s.
- Additional intra-EU engagements coincided not only with higher overall FDI but also with lower flows to other destinations. The main loser was the North

Table 1 – European^a Foreign Direct Investment by Regions and Countries, 1985–1992 (per cent of world total)

	1985–1987 ^b	1988–1990 ^b	1990	1991	1992
<i>World total (m. ecus)</i>	42,781	76,709	79,828	77,588	71,162
Industrialised Countries	87.0	88.9	90.4	82.2	86.7
EU-12	30.5	50.7	65.1	57.4	67.2
Belgium and Luxembourg	2.5	8.1	10.5	7.0	10.5
Denmark	0.1	0.3	0.1	0.4	0.6
France	3.6	6.6	6.6	5.6	9.9
Germany	1.7	6.3	9.8	4.9	10.7
Greece	0.2	0.2	0.3	0.5	0.5
Ireland	0.7	1.8	3.1	5.7	3.0
Italy	2.3	2.9	3.3	3.4	4.7
Netherlands	8.2	9.2	10.8	6.5	12.5
Portugal	0.7	1.1	1.3	1.3	2.2
Spain	2.6	4.3	5.8	7.1	6.5
United Kingdom	7.7	8.9	12.5	9.3	6.1
EFTA ^c	3.2	4.1	5.3	5.1	4.3
North America	49.7	30.2	16.4	16.3	12.0
Japan	0.7	0.9	1.4	0.6	0.7
Australia	2.7	2.8	1.8	2.5	2.0
Central and Eastern Europe	0.1	0.2	0.3	1.7	2.5
Developing Countries	9.9	8.8	9.3	10.4	10.2
Africa	0.8	1.2	0.5	1.2	2.1
Latin America	5.9	4.8	6.9	5.4	4.6
Middle East	0.7	0.6	0.5	0.9	0.4
Asia	2.2	1.7	1.2	2.6	3.0
NICs ^d	2.0	1.1	0.7	1.5	1.9
Other Asia ^e	0.5	0.6	0.5	1.1	1.2
Unallocated	3.0	2.0	-0.0	5.8	0.6

^aWithout Greece and Ireland. — ^bAnnual average. — ^cAustria, Finland, Iceland, Norway, Sweden, Switzerland, other Europe. — ^dHong Kong, Korea, Malaysia, Singapore, Taiwan, Thailand. — ^eChina, India, Indonesia, Philippines and other Asian DCs.

Source: OECD (various issues).

American region; its share in EU FDI declined from almost 50 per cent in 1985–1987 to roughly 30 per cent in 1988–1990 and amounted to merely 12 per cent in 1992. European investors had also reduced their engagement in DCs, albeit only temporarily and by a small margin. In 1991–1992, the respective share again exceeded the 1985–1987 share. Both Latin American and Asian DCs were negatively affected by a temporarily declining European engagement.

By and large, one may summarise that the prospect of the Single Market had indeed induced European multinationals to become more Eurocentric, partly at the expense of DCs but predominantly at the expense of the United

States. This conclusion also holds for FDI flows from individual EU member countries (OECD various issues). The disaggregation of FDI flows by countries (not shown here) yields some slight modifications, though. First, the inward orientation of most investors from EU countries was even stronger than indicated by the aggregate data. Only firms in the United Kingdom devoted more than half of their foreign engagement to industrialised countries outside the EU throughout the period of 1985–1990; subsequently this difference has become less pronounced because of a significant shift of UK FDI flows towards the EU. Second, three of the four major home countries of European investors (Germany, the Netherlands and the United Kingdom) show increasing FDI flows to Asian DCs. This observation seems to indicate that European market integration cannot erode the cost advantages many DCs possess in the production of manufactures. This interpretation is reinforced by the most recent changes of European FDI flows. Asian DCs received increasing shares of total FDI from EU countries in 1991–1992 (Table 1). Likewise, Central and Eastern Europe began to gain some prominence as a host of EU FDI (see Chapter IV below).

Further insights into the behaviour of European multinationals can be gained from a sectoral breakdown of FDI, which is available for the four major home countries from national sources (see note 2). These data (not shown here) reveal that European FDI in Asian manufacturing industries did in fact increase in all countries except France. This shift further supports the above conclusion that the focus of European companies on the EU market may have temporarily slowed the process of a worldwide globalisation of production but did not bring it to an end. In the medium term, the companies can obviously not afford to lock themselves into a Fortress Europe and forego the cost advantage to be derived from a regional decentralisation of production. They would ultimately lose their competitiveness even in the European market.

A second result from the sectoral breakdown concerns the much less pronounced shift of FDI in manufacturing activities towards the EU

compared with total FDI flows. This differential pattern is related to EU trade policies. Remaining barriers to trade within the EU were highest for services, while trade in most manufactured products had already been liberalised completely prior to 1985 (Hiemenz et al. 1994). Hence, potential benefits from market integration were expected to accrue primarily to services and only to a much more limited extent to manufacturing activities.

Expected benefits from integration also had an important impact on the strategies of multinationals for positioning themselves in the Single Market. Major host countries for new intra-EU FDI were the Benelux countries, France, Germany, the United Kingdom and Spain (Table 1). In particular, European manufacturers have strengthened their ties to neighbouring countries. Manufacturing investment flows from the United Kingdom increased overproportionately to France and the Netherlands, while French manufacturers turned to Italy and Germany, and Dutch manufacturers to France. All in all, the traditionally preferred host countries for intra-EU FDI, i.e., France, the Netherlands and the United Kingdom, were able to maintain a prominent position, but Belgium and Luxembourg, Germany and Spain have substantially gained in importance and are now also ranking among the most attractive destinations.

2. Japanese and US Foreign Direct Investment

The previous section has shown that European multinationals have indeed redirected their overseas investment and enhanced their engagement within Europe. Their presence in DCs has traditionally been rather weak. However, European integration has not further jeopardized their longer term competitiveness by disregarding cost advantages to be derived from investing in DCs. This section deals with the response of non-European investors to European integration. The strategies of multinational companies from Japan and the United States are to illustrate how resource allocation

was influenced by the deepening and widening of integration in the EU.

Until the mid 1980s, the globalisation strategies of multinationals from both countries had differed considerably with respect to their regional focus (Table 2). Three fourths of US FDI were geared to other industrialised countries in 1985–1987, while this share only amounted to two thirds in the case of Japan. Among industrialised countries, the EU played a dominant role for US investors. The EU attracted roughly 50 per cent of US FDI in industrialised countries and only about 25 per cent of Japanese FDI flows to this group of countries. These differences were even larger for FDI in manufacturing activities.³ Japanese multinationals had predominantly invested in the United States, which accounted for two thirds of all Japanese FDI flows to industrialised countries and three fourths of Japanese FDI in manufacturing in these countries. Likewise, Japanese and US investors favoured different locations in the developing world: 80 per cent of Japanese FDI flows into manufacturing activities of DCs were geared to Asia, while 75 per cent of the respective US FDI was located in Latin America.⁴

The prospects of the Single Market in Europe have provided a forceful stimulus to Japanese investors. Driven by FDI flows to manufacturing activities Japanese multinationals substantially increased their presence in the EU. An essential motive for relocating the production of manufactures to the EU were fears of rising protectionism of the EU against outside competitors to ease the adjustment process within the EU. Japan was indeed among the few countries suffering from an increase of EU protectionism (mostly export restraint measures) in the run-up to the Single Market (Hiemenz et al. 1994, pp. 189 ff.), while the position of the United States was hardly affected by the changes of national and EU trade policies. Hence, US manufacturers did not shift their priorities away from other regions to Europe to any significant degree. The slight increase of total FDI stocks merely indicates an inflow of US investment in services in anticipation of the liberalisation of trade in

Table 2 – Japanese and US FDI by Regions and Countries, 1985–1993 (per cent of world total)

	Japan ^a					United States ^b				
	1985–1987 ^c	1988–1990 ^c	1991	1992	1993	1985–1987 ^c	1988–1990 ^c	1991	1992	1993
<i>World total (billion US\$)</i>	22.6	57.2	41.6	34.1	36.0	268.0	382.7	467.8	499.0	548.6
Industrialised Countries	67.9	77.1	73.9	69.7	69.3	75.1	75.5	74.9	72.5	71.5
EU-12	16.8	20.8	21.1	19.5	18.1	38.1	41.2	42.6	41.5	40.9
Belgium and Luxembourg	5.0	1.4	1.2	1.0	0.5	2.4	2.5	2.6	2.6	2.5
France	0.8	1.7	2.0	1.3	1.5	3.5	4.2	4.6	5.0	4.3
Germany	1.2	1.6	2.7	2.3	0.4	7.7	6.4	6.9	6.7	6.8
Ireland	0.3	0.1	0.2	0.3	1.3	1.7	1.4	1.4	1.5	1.7
Italy	0.1	0.4	0.8	0.6	0.5	2.7	3.0	3.2	2.8	2.5
Netherlands	3.1	5.6	4.7	4.2	6.0	4.2	4.7	4.3	4.0	3.6
United Kingdom	5.7	9.3	8.6	8.6	7.0	14.1	16.5	17.1	16.6	17.6
Southern Periphery ^d	0.7	0.7	0.9	1.0	0.7	1.3	1.9	2.0	2.0	1.5
EFTA ^e	0.7	1.3	0.7	0.7	1.5	8.6	na	7.3	7.3	7.4
United States	44.6	47.2	43.3	40.5	40.9	–	–	–	–	–
Japan	–	–	–	–	–	4.5	5.3	5.4	5.3	5.7
Australia and New Zealand	4.1	6.3	6.7	6.5	5.4	3.9	4.0	4.1	4.0	3.9
Central and Eastern Europe	0.0	0.0	0.6	0.0	0.2	na	na	0.1	0.1	0.3
Developing Countries	32.1	22.9	25.6	30.3	30.5	23.2	23.7	24.5	26.8	28.1
Africa	1.1	1.1	1.8	0.7	1.5	1.6	0.9	0.8	0.7	1.0
Latin America	17.9	8.9	8.0	8.0	9.4	10.5	16.3	16.6	18.2	18.6
Middle East	0.2	0.2	0.2	2.1	0.6	1.7	1.0	1.1	1.1	1.2
Asia	12.7	12.2	14.3	18.8	18.4	6.1	5.5	5.9	6.7	7.2
China PR	2.3	0.6	1.4	3.1	4.7	0.1	0.1	0.1	0.1	0.2
NICs	7.1	6.7	5.3	5.6	6.7	3.0	3.3	3.8	4.3	4.6
Hong Kong	2.5	3.1	2.2	2.2	3.4	1.5	1.5	1.4	1.7	1.9
Korea, S.	1.8	0.8	0.6	0.7	0.7	0.3	0.6	0.6	0.6	0.5
Singapore	1.7	2.0	1.5	2.0	1.8	0.8	0.8	1.1	1.3	1.6
Taiwan	1.1	0.8	1.0	0.9	0.8	0.4	0.5	0.6	0.6	0.6
ASEAN-4	3.1	4.7	7.4	9.4	6.7	2.8	1.8	1.9	2.1	2.1
Indonesia	1.8	1.4	2.9	4.9	2.3	1.5	0.8	0.8	0.9	0.9
Malaysia	0.6	1.0	2.1	2.1	2.2	0.4	0.3	0.4	0.3	0.4
Philippines	0.1	0.3	0.5	0.5	0.6	0.4	0.3	0.3	0.3	0.3
Thailand	0.6	1.9	1.9	1.9	1.6	0.4	0.4	0.4	0.5	0.5
South Asia ^f	0.1	0.1	0.1	0.5	0.2	0.2	na	0.1	0.1	0.1

^aNotified FDI flows; fiscal year ending March 31. — ^bEnd year stocks. — ^cAnnual average. — ^dGreece, Spain, Portugal. — ^eAustria, Finland, Norway, Sweden, Switzerland. — ^fIndia, Pakistan, Sri Lanka. — na = not available.

Source: Ministry of Finance (a; b); US Department of Commerce (various issues).

services within the EU. The share of DCs in US FDI remained relatively stable during the second half of the 1980s and increased subsequently, and so did the share of Asian DCs with a trend towards increasing the manufactures component in total US FDI. In clear contrast, Japanese companies had initially reduced their engagement in DCs, although not in Asia. The 1991–1993 data suggest that Japanese FDI in DCs picked up again in the early 1990s when Japanese companies completed their strategic adjustment in the EU.

The positioning of Japanese multinationals in EU markets also had a geographical component (for the sectoral components, see Chapter III).

The United Kingdom and the Netherlands have become the dominating targets for Japanese FDI in the EU (Table 2). All other member countries, including the new entrants in the South, rather play a marginal role for new investment. This pattern seems to underline the defensive character of Japanese FDI in the EU. It is important to obtain market access and to meet local content requirements by achieving a sufficient depth of production, but cost advantages are rather derived from investment elsewhere, particularly in Asian DCs. By contrast, US FDI in the EU had always been highly concentrated in the United Kingdom and Germany. In the run-up to the Single Market, the position

of the United Kingdom was reinforced primarily because of FDI in services, but otherwise there was a tendency of broadening investment activities across EU member countries, with the new entrants becoming a more important target for US FDI in manufacturing. In this latter respect, US multinationals seem to pursue a strategy similar to European companies.

Summarising, stylised facts are that Japanese companies have defended their interests in the EU by selectively increasing their presence at the expense of FDI flows mainly to manufacturing activities in the United States and Latin America, but not at the expense of their presence in Asian DCs. US companies have maintained a substantial engagement in the EU

and diversified investment locations while expanding their activities in DCs. The main target was Latin America reflecting the envisaged establishment of NAFTA as well as economic stabilisation in some countries of the Southern Cone. Asian DCs were also able to attract more US FDI in manufacturing. Generally, there seems to be a tendency for both Japanese and US foreign investors to focus more on DCs in the early 1990s; though less significant and starting from a relatively low level, this tendency was also observed for European multinationals. Hence, there is little empirical support for the hypothesis that economic integration in Europe has diverted international investment flows to the detriment of DCs.

III. Impact of the Single Market Programme on the Behaviour of European Multinationals

The subsequent analysis proceeds in two steps. Section III.1 presents an overview of changes in the sectoral composition of FDI by major EU countries. The focus is on comparing the intra-EU pattern of FDI with the sectoral pattern in other industrialised countries and DCs. The sectoral disaggregation allows for a closer inspection of the hypothesis that non-member countries suffered from Eurocentrism of EU multinationals. Specifically, the preliminary finding of no significant investment diversion to the detriment of DCs will be substantiated (see Chapter II).

In addition, the statistical breakdown of FDI provides useful information to identify specific sectors in which the globalisation strategies of EU multinationals may have differed. Such differences may be revealed by relatively pronounced changes in the destination of FDI. In the case studies on sector-specific reaction patterns of EU investors, non-traditional elements of globalisation strategies such as licensing and cooperation agreements have also been taken into account (Sections III.2–III.4).

1. The Sectoral Structure of FDI by Major EU Countries

A sectoral breakdown of FDI outflows from EU countries is available for eight member states (OECD various issues).⁵ The definition and coverage of specific sectors differ considerably and are often deficient from an economic viewpoint.⁶ More importantly, OECD data do not provide a breakdown of sector-specific FDI outflows to different recipient countries and regions.⁷ Hence, this source presents only a rough picture on the sectoral focus of FDI outflows from EU countries. Table 3 reveals the following:

- The aggregated outflows from eight EU members became heavily concentrated on the tertiary sector in the early 1990s (see also OECD 1993a). Particularly FDI in finance, insurance and business services gained in importance.
- By contrast, FDI outflows to the primary sectors of recipient countries declined

Table 3 – Sector-Specific FDI Outflows from Eight EU Countries,^a 1984–1992 (per cent of total outflows)

	1984–1985 ^b	1986–1987 ^b	1988–1989 ^b	1990–1991 ^b	1992
Primary sector	22.1	9.1	7.2	5.2	0.9
Agriculture	0.5	0.6	0.3	0.5	0.3
Mining and quarrying	0.1	0.9	0.5	1.5	1.1
Oil	21.5	7.6	6.4	3.1	-0.5
Secondary sector	36.5	44.1	46.9	38.7	39.8
Food, beverages and tobacco	4.0	6.3	11.5	5.4	9.3
Textiles, leather and clothing	0.5	0.2	0.3	0.6	0.7
Paper, printing and publishing	0.0	2.4	3.1	2.1	2.7
Chemical products	17.5	14.7	9.2	8.6	7.5
Coal and petroleum products	0.0	0.4	0.1	1.4	0.7
Non-metallic products	0.2	0.9	1.6	1.4	0.6
Metal products	2.3	2.8	4.2	3.1	2.2
Mechanical equipment	2.7	1.8	2.3	2.9	2.5
Electric and electronic equipment	1.9	6.6	5.8	4.4	6.8
Transport equipment	2.2	1.0	1.0	2.1	-0.2
Other manufacturing	5.3	5.8	7.3	4.8	4.2
Tertiary sector	41.0	44.8	42.9	51.4	56.2
Construction	2.0	1.5	1.0	1.1	0.0
Wholesale and retail trade	11.4	8.3	8.0	6.5	9.8
Transport and storage	1.0	0.9	2.7	2.0	1.9
Finance, insurance and business services	16.9	17.5	20.8	29.4	34.0
Communication	0.1	0.0	0.1	0.2	0.7
Other services	9.6	16.5	10.2	12.2	9.6
Unallocated	0.3	2.0	3.0	5.0	3.8

^aAggregated outflows from Denmark, France, Germany, Italy, the Netherlands, Portugal, Spain and the United Kingdom; 1984–1985 without Germany. The sector classification differs considerably among these countries. Data in national currency were converted into ecus at period average exchange rates. — ^bPeriod averages.

Source: OECD (various issues).

considerably in relative terms. This trend has to be attributed to the shrinking role of FDI in the oil sector.

- The weight of total manufacturing in the early 1990s was comparable to the mid 1980s. The peak of the manufacturing share in 1988–1989 (46.9 per cent) was mainly due to high FDI in food, beverages and tobacco.⁸ Most of the manufacturing industries do not reveal a clear trend, but are rather characterised by volatile FDI shares.⁹ One exception stands out: chemical products, which had accounted for almost half of FDI in manufacturing in 1984–1985, lost considerably in importance.

To test the hypothesis of sector-specific investment diversion, a statistical breakdown of FDI according to sectors *and* host regions is required. Such a disaggregation is available only for German and Dutch FDI stocks (Deutsche Bundesbank various issues; De Nederlandsche Bank various issues), and for French and UK FDI flows (Banque de France various issues; UK Business Statistics Office various issues). The degree of sectoral disaggregation differs remarkably between these four home countries,¹⁰ which imposes serious constraints on any comparison between the reaction patterns of investors from major EU countries.

These limitations notwithstanding, the available data offer important insights as to the issue of investment diversion. The sectoral structure of FDI by major EU countries may be analysed with respect to changes over time and differences across regions. The Single Market programme promised improved locational advantages of EU member countries in services and manufacturing sectors with unexploited economies of scale (Hiemenz et al. 1994). Hence, an integration induced relocation of FDI can reasonably be assumed to be sector-specific. A considerable redirection of FDI in the aftermath of the Single Market programme would then have two consequences: (i) the sectoral composition of FDI should differ between regions, and (ii) the composition in specific host country regions should change. By contrast, similar sectoral structures of FDI across regions and a stable composition over time would provide indications against significant investment diversion effects.

The results of the correlation analysis reported in Tables 4 and 5 are rather inconsistent with pronounced investment diversion.¹¹ Table 4 indicates that the composition of EU FDI in “other industrialised countries” and DCs was similar to that prevailing within the EU in the mid 1980s. The sectoral shares in total FDI within and outside the EU are correlated in a significantly positive way. Exceptions relate to German FDI in all DCs and Asian DCs, and to UK FDI in Asian DCs.

Table 4 – Sectoral Structure of FDI by EU Investor Countries: A Comparison between Selected Regions, mid 1980s and early 1990s (Pearson Correlation Coefficients)^a

	Intra-EU FDI in EU-12 vis-à-vis Extra-EU FDI in:		
	other industrialised countries	all DCs	DCs in Asia
	<i>France</i>		
1985–1987	0.42* (23)	0.43* (23)	na
1990–1992	0.39* (23)	0.66**(23)	na
	<i>Germany</i>		
1985	0.84**(8)	0.07 (8)	0.45 (7)
1992	0.76* (9)	0.47 (9)	0.85**(8)
	<i>Netherlands</i>		
1985	0.80**(10)	0.74* (10)	0.72* (9)
1992 ^b	0.84**(10)	0.77**(10)	0.66* (9)
	<i>United Kingdom</i>		
1985–1987	0.73**(13)	0.71**(14)	0.37 (12)
1989–1991	0.29 (13)	0.49* (14)	0.39 (14)

^aIn parentheses: number of sectors; **(**) indicates significance at the 10 (1) per cent level; na = not available. — ^b1991 for DCs in Asia.

Source: Deutsche Bundesbank (various issues); Banque de France (various issues); UK Business Statistics Office (various issues); De Nederlandsche Bank (various issues).

Table 5 – Sectoral Structure of FDI by EU Investor Countries: A Comparison over Time, mid 1980s and early 1990s (Pearson Correlation Coefficients)^a

	EU-FDI in period 1 vis-à-vis period 2 in: ^b			
	EU-12	other industrialised countries	all DCs	DCs in Asia
France	0.90**(23)	0.61**(23)	0.91**(23)	na
Germany	0.70* (8)	0.79* (8)	0.84**(8)	0.80* (6)
Netherlands	0.90**(10)	0.94**(10)	0.87**(10)	0.99**(9)
United Kingdom	0.50* (14)	0.37 (13)	0.65* (14)	0.41 (12)

^aIn parentheses: number of sectors; **(**) indicates significance at the 10 (1) per cent level; na = not available. — ^bPeriod 1 refers to: 1985–1987 (France; United Kingdom) and 1985 (Germany; Netherlands), respectively; period 2 refers to: 1990–1992 (France), 1992 (Germany; Netherlands), except the correlation for DCs in Asia, which refers to 1991, and 1990–1991 (United Kingdom), respectively.

Source: See Table 4.

Only modest changes occurred since the mid 1980s. According to the correlation coefficients, the strong similarities in the sectoral structure of Dutch FDI stocks within and outside the EU are unaffected. The picture remains largely unchanged for German and French FDI as well. Relatively pronounced changes can be observed only for FDI by the United Kingdom.

After the Single Market programme had been launched, the engagement of UK investors in “other industrialised countries” was no longer directed to exactly those sectors that received the bulk of intra-EU FDI. For example, the shares of distribution services, energy and the paper industry in intra-EU FDI remained high or increased significantly, while their shares declined in other industrialised countries (UK Business Statistics Office various issues). By contrast, other manufacturing industries lost importance with respect to intra-EU FDI, but gained considerable weight in other industrialised countries.

The comparison of the sectoral structure of FDI in specific regions over time reveals that the pattern observed in the early 1990s was largely the same as in the mid 1980s (Table 5). Typically, the correlation coefficients are significantly positive and many of them are extremely high. The finding of a strikingly stable sectoral structure of FDI applies to all host country regions and — with some qualifications for the United Kingdom — to all major EU investor countries.¹² Most surprisingly perhaps, the Single Market programme did not result in a pronounced reorientation of intra-EU FDI to sectors for which gains from the deepening of integration were expected to be particularly large. The absence of a systematic overhaul of the sectoral targeting of intra-EU FDI had as a consequence that the specialisation pattern of extra-EU FDI remained largely unaltered as well.

To substantiate these indications of fairly limited investment diversion in the aftermath of the Single Market programme, changes in the share of intra-EU FDI in total FDI in the respective sector are analysed in the following.¹³ An increase of this share is a necessary condition for investment diversion, if it is assumed that regional shares would have remained constant without the deepening of integration in the EU. As a matter of fact, the intra-EU share has increased for almost all the manufacturing and service sectors under consideration (Table 6).¹⁴

Table 6 – Change in Regional Shares of FDI by Major Sectors and EU Investor Countries (percentage points)

	EU-12	Other industrialised countries	All DCs	DCs in Asia
<i>France (1990–1992 vis-à-vis 1985–1987)</i>				
Chemicals	25.1	-25.9	0.8	na
Metal products	23.3	-24.8	2.0	na
Electrical equipment	35.3	-34.8	-0.1	na
Transport equipment	-9.7	28.0	-13.2	na
Food, beverages, tobacco	25.7	-26.5	-0.1	na
Accommodation, restaurants	25.8	-2.3	-19.5	na
Transport	50.5	-54.0	1.7	na
Finance	19.2	-8.8	-10.2	na
Insurance	3.3	-5.3	1.7	na
<i>Germany (1992 vis-à-vis 1985)</i>				
Chemicals	4.6	-2.6	-2.4	0.3
Machinery	6.2	-0.0	-7.3	0.5
Transport equipment	12.9	-13.3	-3.2	na
Electrical equipment	14.8	-13.8	-1.3	2.3
Trade	5.9	-7.5	0.2	1.3
Financial institutions	0.9	13.3	-14.4	na
<i>Netherlands (1992 vis-à-vis 1985)^a</i>				
Mining, quarrying, oil and chemicals	10.1	-18.1	8.0	1.9
Metals and electrical engineering	-2.4	3.0	-0.6	0.5
Food, beverages, tobacco	4.8	-13.6	8.8	-1.7
Trade	33.3	-12.3	-21.0	1.3
Transport, storage and communication	7.1	8.0	-15.1	-4.2
Banking and insurance	6.8	-11.2	4.4	0.1
<i>United Kingdom (1989–1991 vis-à-vis 1985–1987)</i>				
Chemicals	2.6	-21.3	18.7	15.6
Mechanical engineering	23.3	-24.9	0.6	1.0
Food, beverages, tobacco	10.6	4.4	-15.1	na
Distribution	38.6	-55.9	17.3	1.5

^aDCs in Asia: 1991 vis-à-vis 1985. — na = not available.

Source: See Table 4.

With the exception of Germany, the increase of the share of intra-EU FDI is fairly pronounced in some service sectors. Examples are: transport, accommodation and finance in the case of France, trade in the case of the Netherlands, and distribution in the case of the United Kingdom. This is not surprising given that the liberalisation of service markets figured high on the agenda for completing the Single Market.¹⁵ More surprisingly perhaps, the corresponding declines of extra-EU FDI shares were not confined to “other industrialised countries”. DCs attracted significantly lower shares of French FDI in financial and tourist services and of Dutch FDI in trade, for example.

The manufacturing sectors for which the increases of intra-EU shares were steepest differ between the four major EU investor countries (Table 6). France and the United Kingdom represent the extremes with respect to chemicals: French FDI in this sector was redirected to the EU to a considerable extent, whereas the intra-EU share did not change very much in the case of the United Kingdom. The picture for France and Germany differs remarkably with respect to transport equipment: while the share of intra-EU FDI declined in the case of France, this sector reveals a pronounced shift of German FDI towards the EU.

Significant increases of intra-EU shares in manufacturing sectors are frequently matched by correspondingly high declines of FDI shares of “other industrialised countries”. With few exceptions, the figures do not support the hypothesis of considerable investment diversion effects at the expense of DCs. Especially in the case of France, the potential of such adverse effects was fairly limited from the beginning. In 1985–1987, DCs accounted for 1–3 per cent of French FDI in chemicals, electrical equipment, and food, beverages and tobacco (Banque de France various issues), i.e., the sectors in which intra-EU FDI shares increased most dramatically.

The exceptions mainly relate to German FDI in manufacturing. In all four industries, higher intra-EU shares went along with lower FDI shares of DCs (Table 6). However, this pattern can hardly be attributed to investment diversion induced by the deepening of integration at the EU level. Traditionally, German FDI in DCs has been heavily concentrated on Latin America (Agarwal et al. 1991). The foreign debt crisis in this region and the underlying domestic policy failures impaired the attractiveness of Latin America for international investors over much of the 1980s (Nunnenkamp and Agarwal 1993). Although German investors maintained their strong inherited engagement, the economic crisis contributed to a slowdown of new investments in this region.¹⁶ By contrast, German FDI stocks in Asian DCs expanded by 103 per cent (chemicals) to 206 per cent (electrical equipment) in the period of

1985–1992 (Deutsche Bundesbank various issues).¹⁷ Also for investors from other EU countries, the sectoral analysis of regional FDI shares offers little evidence on investment diversion in manufacturing activities to the detriment of Asian DCs, thereby supporting the reasoning in Section II.1.

Investment diversion may be absent even in the case of lower FDI shares of non-EU members. In other words, higher intra-EU shares are a necessary but not a sufficient condition for diversion effects. They may indicate integration-induced investment creation as long as extra-EU FDI continues to rise, although at a slower pace than intra-EU FDI.¹⁸ As a matter of fact, the engagement of EU investors in non-EU industrialised countries and in DCs has been expanded in the large majority of manufacturing and services sectors:

German FDI stocks were higher in 1992 (as compared with 1985) in all manufacturing and service sectors for which comparable data are available with respect to “other industrialised countries”, all DCs and DCs in Asia (Deutsche Bundesbank various issues).

The development of *Dutch FDI* stocks points to an interesting difference between other industrialised countries and DCs as host regions. For “other industrialised countries”, the only exception to the pattern of an extended sectoral engagement across all regions relates to mining, quarrying, oil and chemicals (which are presented as one sector in Dutch statistics). For DCs, the exceptions relate to non-manufacturing sectors (construction, trade) (De Nederlandsche Bank various issues).

For *France and the United Kingdom*, the assessment is based on absolute changes of FDI flows between 1985–1987 and 1990–1992 (United Kingdom: 1989–1991). In the case of France, higher intra-EU flows of FDI in manufacturing and services went along with reduced flows to “other industrialised countries” in five out of 18 sectors; the decline was more than marginal only in electrical equipment and transport (Banque de France various issues). Declining flows to

DCs are largely restricted to transport equipment, trade, and tourist services (accommodation and restaurants).¹⁹ In the case of the United Kingdom, the figures point to investment diversion at the expense of other industrialised countries in mechanical engineering and the paper industry, as well as in energy and distribution services. Higher intra-EU flows went along with lower flows to DCs in the food industry and in transport services (UK Business Statistics Office various issues).

All in all, the evidence suggests that investment diversion to the detriment of EU outsiders has remained fairly limited with few exceptions at the sectoral level. This conclusion is underscored by a simple correlation exercise that compares the sectoral changes of intra-EU FDI with the corresponding changes of extra-EU FDI in “other industrialised countries”, all DCs, and DCs in Asia (Table 7). The hypothesis of integration-induced investment diversion would imply that the growth of extra-EU FDI was comparatively low or even negative in sectors for which intra-EU FDI expanded most rapidly. Hence, the correlation coefficients should be significantly negative. Such a pattern does not turn out in any of the correlations. The large majority of the coefficients reported in Table 7 is insignificant.²⁰ Notwithstanding the typically small number of observations, this can be taken as another indication that the development of extra-EU FDI in both industrialised and developing countries was not adversely affected to a significant extent by the expansion of intra-EU FDI.

The overview of the sectoral structure of EU FDI suggests that the globalisation strategies of major EU investors were largely independent of the deepening of integration in Europe. However, this conclusion may have to be qualified once entrepreneurial reaction patterns in particular sectors are analysed in some more detail. The strategic responses to the Single Market programme may differ across sectors, as its effects on the competitiveness of EU companies were expected to be sector-specific, e.g., depending on factor intensities and potential

Table 7 – Change of Intra-EU FDI versus Extra-EU FDI by Sectors, 1985–1992 (Pearson and Rank Correlation Coefficients)^a

Investor country	Extra-EU FDI in:					
	other industrial countries		all DCs		DCs in Asia	
	Pearson corr.	Rank corr.	Pearson corr.	Rank corr.	Pearson corr.	Rank corr.
France ^b						
A	0.21 (21)	0.33 (21)	-0.09 (21)	0.09 (21)	na	na
B	-0.03 (21)	-0.02 (21)	0.01 (21)	0.29 (21)	na	na
Germany ^c	0.97*(6)	0.09 (6)	0.71 (6)	0.54 (6)	na	na
Netherlands ^c	0.34 (7)	0.46 (7)	-0.14 (7)	-0.14 (7)	0.74*(6)	0.49 (6)
Germany and Netherlands ^d	0.88*(13)	0.35(13)	0.09 (13)	0.08 (13)	na	na
United Kingdom ^e	0.10 (12)	0.04 (12)	0.47 (12)	0.25 (12)	0.29 (10)	0.13 (10)

^aIn parentheses: number of sectors; *indicates significance at the 10 per cent level; na = not available. — ^bChange in sectoral FDI flows, in million francs; A: 1988–1990 vis-à-vis 1985–1987; B: 1991–1992 vis-à-vis 1985–1987. — ^cPercentage change in sectoral FDI stocks, 1992 vis-à-vis 1985; 1991 vis-à-vis 1985 in the case of Dutch FDI in Asian DCs. — ^dThe sectors of both countries are pooled. — ^eChange in sectoral FDI flows, 1989–1991 vis-à-vis 1985–1987, in million pounds.

Source: See Table 4.

economies of scale (Hiemenz et al. 1994). Moreover, the evaluation of FDI may not fully capture different reaction patterns if non-equity forms of international cooperation have become more important. The subsequent sector studies on the automobile industry, chemicals, and textiles and clothing provide an empirical assessment in these respects.²¹ The production of automobiles is representative of a technologically advanced and human-capital-intensive sector, in which EU suppliers are under heavy competitive pressure especially from Japan. The chemical industry stands for a physical-capital-intensive sector that, in terms of EU FDI, has been among the frontrunners of globalisation. Finally, textiles and clothing provide an example for a highly competitive and relatively labour-intensive sector, in which both complex institutional arrangements and non-equity forms of international cooperation have a long tradition.

2. The Automobile Industry

FDI by EU countries in the transport equipment sector does not reveal a clear trend. The sector's contribution to overall FDI by the United Kingdom remained marginal (1989–1991: 0.8

per cent) (UK, Business Statistics Office, various issues). The same applies to intra-EU FDI by the French transport equipment industry, while its engagement in other industrial countries was considerably enlarged. The latter development was mainly due to cross shareholding arrangements of Renault and Volvo; an agreement on financial relations came into force on 1 January 1991 (McLeod 1992, p. 14), but the envisaged strategic alliance was finally rejected by Volvo in late 1993. By contrast, the transport equipment sector revealed a steep increase of intra-EU FDI in the case of Germany (Table 6).

These diverse developments may be partly due to the fact that transport equipment represents a rather heterogeneous sector, ranging from aircrafts to automotive parts and components. In the following, we concentrate on one important segment, i.e., the automobile industry. This segment is of particular interest, as “the automobile industry is one of the most delicate areas in the programme of European harmonisation” (Salvadori 1991, p. 62; see also Smith and Venables 1990). The programme involved: (i) the reduction of fiscal trade barriers stemming from large intra-EU disparities in taxes imposed on the purchase of vehicles (different VAT rates, country-specific sales and

registration taxes); (ii) the removal of physical barriers impeding the free circulation of vehicles (custom controls, national import quotas, regulations concerning type approval); and (iii) the development of EU-wide technical standards replacing national specifications and, thereby, allowing for economies of scale (for details, see Pemberton 1988, pp. 60 ff.).

Liberalisation and harmonisation in these areas were expected to reduce the costs of production and distribution, and to improve the competitiveness of the EU's automobile industry. However, it is rather unlikely that the investment and production strategies of EU car producers were dominated by the Single Market programme. The integration of EU markets for automobiles was still deficient (Scholfield and Henry 1992).²² Even if the deepening of integration represented a catalyst for technological change in the EU's automobile industry, the unit cost reductions of about 5 per cent, which were expected from EU integration (Emerson et al. 1988, p. 73) would have remained insufficient to overcome the seriously impaired cost and productivity situation. In 1989, the average productivity of assembly plants of European producers (35.5 hours of worker input per unit) was only half the productivity of their competitors in Japan (16.8 hours per unit) (Womack et al. 1990, Graph 4.3).

The effects of the Single Market programme on the investment and production strategies of European car manufacturers can hardly be isolated as producers were subject to different challenges at the same time (see also Smith and Venables 1990, p. 144). While EU integration may have induced a further concentration of activities within the region, fiercer worldwide competition may have encouraged globalisation and relocation to newly emerging automobile markets (e.g., in post-socialist countries and China). The locational consequences of the reorganisation of production required to achieve cost efficiency, e.g., by means of "lean production" (Womack et al. 1990), global sourcing and cooperation agreements, are difficult to predict. As indicated by the diverse development of FDI, the strategic responses to these challenges are likely to differ among EU car

manufacturers, depending, *inter alia*, on their market focus and their earlier approach towards globalisation.²³

Fiercer competition on EU and overseas markets has led car manufacturers to consider new options of internationalisation. Hence, the internationalisation of automobile production is more advanced than FDI data suggest. The current trend is to improve the competitive position through various forms of cooperation, including cross shareholding and takeovers, strategic alliances, licensing, joint production of components and for serving niche markets, R&D partnerships, and distribution agreements (Salvadori 1991, pp. 82 ff.; Urban and Vendemini 1992, p. 40). Nearly all car manufacturers (and major part suppliers) are inter-related in one way or another (OECD 1993a, p. 71). EU-based producers contributed to this trend to a considerable extent.²⁴

Outstanding examples of closer intra-EU links are Volkswagen's acquisition of SEAT, the formation of Sevel by Fiat and Peugeot and, most recently, BMW's majority stake in Rover and its cooperation agreement with Rolls Royce. Spain and Portugal have also attracted joint ventures of EU-based companies with US-based multinationals. Furthermore, several producers (particularly Renault and Peugeot) are involved in intra-EU research partnerships and cooperation concerning the production of major components (engines, transmissions). However, the internationalisation of the EU's automobile industry is not restricted to the region. It has various other dimensions:

- Not surprisingly, the cooperation network has been extended to companies based in countries that have recently joined the EU (e.g., Austria, Sweden).
- Since the fall of the communist regime, major EU car producers have rapidly moved into Central and Eastern Europe and strengthened their links with local companies (see also Scholfield and Henry 1992, p. 164; OECD 1993a, p. 74). The motivation appears to be twofold: (i) to reduce production costs in the respective home countries by means of outsourcing

parts and components (the cooperation between Volkswagen and BAZ in Slovakia may provide an example), and (ii) to establish regional production outlets early in the transition of post-socialist economies in order to supply newly emerging automobile markets.

- Closer cooperation within Europe notwithstanding, EU car manufacturers have maintained traditional links with other regions and formed new ones, where they had hardly been present before. An example of maintaining a traditional link is Volkswagen's engagement in Latin America, which is basically motivated to supply host country markets. Various reasons are underlying the relatively new ventures in the Far East: promising markets (e.g., China), cost savings by global sourcing, technological complementarity (e.g., the Mercedes-Benz/Mitsubishi agreement) (Salvadori 1991, pp. 84 f.), and the attempt to draw on Japanese industrial skills for supporting restructuring and reducing the innovation period.²⁵

Evidently, cooperation at the EU level went hand in hand with intensified efforts at globalisation by major EU car manufacturers. Production data support the proposition that the deepening of integration within Europe was not at the expense of the EU car manufacturers' engagement in other regions (Table 8). The internationalisation strategies of EU-based producers differed considerably. Operations in EU countries (other than the respective home country) were marginal or non-existent in the case of Fiat and Rover, and the share in total production remained virtually constant in the case of Peugeot. Rising intra-EU shares are observed for Renault and Volkswagen. However, this shift did hardly affect overseas production in other regions, but was rather at the expense of operations in the respective home country (see also Diekmann 1992a).

The production figures do not support the notion of investment diversion to the detriment of EU outsiders in the automobile industry. While production shares of the rest of Europe

Table 8 – Car Production by Major EU Producers in Different Regions,^a 1985 and 1993 (per cent of total production volume)

		Fiat	Peugeot	Renault	Rover	Volkswagen
<i>Domestic production</i>	1985	84.9	83.0	71.2	100.0	71.7
	1993	58.2	80.6	64.8	100.0	60.2
EU ^b	1985	0.8	15.5	21.7	–	7.0
	1993	–	15.8	24.1	–	13.7
Other	1985	2.6	0.1	1.6	–	–
Europe ^c	1993	13.8	0.2	6.8	–	–
North America	1985	–	–	–	–	4.0
	1993	–	–	–	–	–
Latin America	1985	11.7	1.2	3.3	–	16.8
	1993	28.0	3.5	4.3	–	26.2
Other regions	1985	–	0.2 ^d	2.2 ^d	–	0.5 ^d
	1993	–	–	–	–	–

^aBuses and trucks excluded. Total production refers to all countries listed in the VDA statistics as production/assembly locations. Assembly included in several countries, so that double counting cannot be avoided. Fiat: excluding Alfa Romeo, Autobianchi, Ferrari and Lancia; Peugeot: including Citroen; VW: including Audi, but excluding SEAT and Skoda. — ^bExcluding the respective home country. — ^cExcluding former Yugoslavia. — ^dFormer Yugoslavia.

Source: VDA (various issues).

were at best marginal in most instances, they increased considerably for Renault and Fiat. The relevance of Latin America as a production location has been subject to some fluctuation since 1985 (Renault, VW) (VDA various issues). This has to be attributed to economic stagnation and policy failure in important host countries in this region. Recently, however, the share of Latin America has increased. The only significant drop of overseas production by EU-based car producers since the mid 1980s relates to VW's discontinuation of operations in the United States.²⁶ The reason was that VW's expectations of lower cost production for the North American market were frustrated (Womack et al. 1990, pp. 225 f.). Production was relocated to Mexico, which clearly indicates that European integration cannot be blamed for VW's move.

In summary, the EU's automobile industry has intensified its cooperation at the regional level. However, intra-EU cooperation was not considered to be an alternative to a more global internationalisation strategy in order to meet the challenge of fiercer worldwide competition and greater cost efficiency of Japanese producers in particular. The EU as the largest automobile market will become the principal battlefield of the world's main car manufacturers (see also

Salvadori 1991, p. 73). EU integration does not only benefit EU producers, but is also attractive for external competitors. Hence, the Single Market programme did not reduce, but rather amplified the pressure for the EU's automobile industry to improve productivity through internal restructuring, worldwide sourcing and technological innovation, and to globalise production and marketing.²⁷ A purely regional approach in dealing with these challenges would almost certainly fail.

3. The Chemical Industry

In the field of FDI, the chemical industry has for long been the leading investor. As a result, it has the largest share of FDI stocks in most of the OECD countries, ranging between 20 and 30 per cent of total manufacturing investment abroad (OECD 1993a). In 1984–1985, nearly half of all EU FDI outflows in the manufacturing sector was accounted by the chemical industry (Table 3). Since then its share has declined. The chemical industry's contribution to the EU's overall outflows in 1992 amounted to only one third the level reached in 1982–1984 (Table 9). This could arouse the impression that this loss is due to investment diversion triggered by the Single Market programme. However, investment diversion was rather unlikely

in the chemical industry because multinational corporations had treated the European region like their internal market even before the Single Market programme was launched. The deepening of integration was expected to bring to them far less than to other manufacturing industries in terms of lower transaction costs and economies of scale (Bradley et al. 1989; Mayes 1992).

Empirical evidence also suggests that the reduced role of the chemical industry in EU FDI outflows is not to be interpreted as an indication of investment diversion.²⁸ First, investment diversion due to the deepening of integration should mean a greater inflow of FDI in the Community. But Table 9 shows that the share of this industry in FDI inflows in the EU has declined. Second, in the case of investment diversion from third countries it would be expected that the southern EU periphery should receive relatively more FDI on account of its cost advantages. The example of Spain, for which the relevant data are available, does not reveal a clear picture in this respect; the chemical industry's share fluctuated heavily in the late 1980s and the early 1990s.

Third, an evaluation of the chemical industry's investments in DCs strengthens the case against FDI diversion, though the picture depicted in Table 10 is not quite homogeneous.

Table 9 – Share of the Chemical Industry in Total Inflows and Total Outflows of FDI, 1982–1992 (per cent)

	Inflows					Outflows				
	1982–1984	1985–1989	1990	1991	1992	1982–1984	1985–1989	1990	1991	1992
Denmark	-8.00	5.92	6.83	3.43	4.90	-4.55	4.18	5.00	3.12	9.69
France	11.08	3.23	5.93	3.69	4.05	3.28	7.95	9.67	2.73	5.33
Germany	2.43	-4.21	-62.19	-5.52	-24.03	19.83	13.99 ^d	8.65	5.88	6.13
Italy	22.48	15.25	0.63	36.48	1.64	8.98	5.43	2.90	0.79	-1.73
Netherlands ^a	-11.41	29.21	28.20	na	na	53.56	23.44	10.57	10.53	4.91
Spain ^b	14.84	16.77	12.55	9.01	24.04	5.51	4.84	7.61	3.20	1.38
United Kingdom	na	6.48	2.31	4.22	-2.83	na	11.41	15.55	16.86	17.63
EU ^c	12.36	9.67	5.93	6.13	6.79	22.04 ^e	11.28	9.96	7.19	7.52
Japan	28.11	12.59	15.76	20.79	17.38	3.83	2.63	4.03	3.85	5.90
United States	6.09	13.63	17.47	13.71	66.32	17.58	11.62	8.24	12.42	13.68

^aIncluding mining, quarrying and oil. — ^bIncluding mineral products. — ^cIncludes Denmark, France, Germany, Italy, the Netherlands, Spain, the United Kingdom. Based on data converted into ecus at period average exchange rates. — ^d1986–1989. — ^eExcluding Germany and the United Kingdom in 1982–1983. — na = not available.

Source: OECD (various issues); Deutsche Bundesbank (various issues).

Table 10 – Share of DCs in Chemical Industry's FDI from Selected EU Countries, 1985–1992 (per cent)

	Germany ^a			France ^b			Netherlands ^c			United Kingdom ^d		
	1986	1989	1992	1985	1989	1992	1985	1989	1992	1985	1989	1991
All DCs	2.1	8.2	8.6	14.2	0.2	10.7	11.7	11.6	19.7	10.7	24.9	16.6
DCs in Africa	0.0	0.1	1.0	na	na	na	3.4	1.5	1.7	-0.7	0.6	-0.3
DCs in Latin America	0.3	5.5	1.5	na	na	na	1.6	2.9	3.4	na	4.8	-3.5
DCs in Asia	1.7	2.7	6.3	na	na	na	6.2	6.6	5.9	8.7	18.0	20.4
OPEC	0.1	0.2	1.4	2.4	-0.1	0.2	na	na	na	-0.5	0.4	0.9
Central and Eastern Europe	0.0	0.0	1.7	0.0	0.0	0.9	na	na	0.0	na	na	na

^aFlow data; available only from 1986 onwards. — ^bFlow data; in the case of Central and Eastern Europe, 1985 data include other state-trading countries as well. — ^cDCs = World total minus Europe, United States and Japan; FDI stocks including the data for mining, quarrying and oil; OPEC included in DCs. — ^dFDI flows; OPEC included in DCs. — na = not available.

Source: Deutsche Bundesbank (unpubl. data); Banque de France (various issues); De Nederlandsche Bank (various issues); UK Business Statistics Office (various issues).

The required disaggregated data are available only for four EU countries. In the case of German FDI, the chemical industry of DCs increased its share fourfold between 1986 and 1992. All the regions have benefited from this increase. The DCs' share has increased also in Dutch and UK chemical FDI, whereas in the case of French investments it has declined. The Asian countries have recently hosted the highest share of chemical FDI among the DCs. The demand for chemical products in Asian countries was expected to continue growing relatively fast (Ward 1992), which has attracted investments from EU chemical multinational corporations. The high growth of French and German FDI in the chemical industry of Central and Eastern Europe, starting from very low levels, is a result of the investors' desire to secure first-mover's advantages. There is no evidence that the engagement of Central and Eastern Europe diverted EU FDI away from DCs (see also Chapter IV).

Fourth, the trend of declining shares of the chemical industry in total FDI outflows of major investor countries was not confined to the EU. In the United States, the share of chemicals in outward FDI dropped from 17.6 per cent (1982–1984) to 13.7 per cent (1992) (Table 9). In Japan, there was no clear trend. In the second half of the 1980s the share declined, but rose again thereafter. In the case of inward

FDI, the share of chemicals in the United States has risen significantly. European firms seem to have been more eager to get established in the US market than to expand in the EU, which is again inconsistent with investment diversion to be associated with the Single Market programme (Ghellinck 1991, p. 370).

Two additional data sets may be examined to verify the above results. They refer to production at the firm level, drawn from annual reports of leading European multinational corporations in chemicals, and to macro information on the foreign and domestic involvement of the chemical industry in major producer countries. According to production data, the globalisation of EU chemical firms has increased.²⁹ In most of the cases, the foreign share of output has risen after the announcement of the Single Market programme (Table 11). Generally, this applies to both European and non-European host countries. Except in the case of BASF, it is very conspicuous that EU firms have raised their production in North America strongly, mainly through acquisitions of existing firms.³⁰ Increased investment activities of EU chemical firms are mainly the result of oligopolistic competition for the US market place and strategic responses to the formation of NAFTA, rather than being related to the Single Market programme. There is also no evidence for FDI diversion away from DCs. On the contrary,

Table 11 – Chemical Production by Major EU Producers in Different Regions, 1986 and 1992 (per cent of total production)

		Akzo	BASF ^a	Bayer	DSM	Henkel	Höchst	ICI ^a	Mont-edison	Rhone-Poulenc ^a
Home country	1986	36.6	69.6	44.5	84.2	43.4	62.5	44.0	64.8 ^b	69.2
	1992	33.9 ^c	76.6 ^d	38.8	62.2	35.5	42.0	45.2 ^c	36.0 ^c	50.5
Europe ^e	1986	46.8	na	24.9 ^f	13.3	40.4	18.9	22.1	18.3 ^b	33.5
	1992	37.4 ^c	— ^g	25.6	23.2	47.3	23.1	25.6 ^c	43.9 ^c	33.2
North America	1986	12.3	21.0	19.3	2.5	6.3	10.1	24.2	16.5 ^b	5.2
	1992	21.2 ^c	16.9	21.3	14.3	10.2	21.1	30.8 ^c	19.1 ^c	25.3
Latin America	1986	na	3.8	5.3 ^f	0.0	na	3.8	— ^h	na	9.9 ⁱ
	1992	na	3.8	4.5	0.0	2.8	6.3	— ^h	na	5.6 ⁱ
Asia, Africa and Middle East	1986	na	2.3 ^j	7.4 ^{f,j}	0.0 ^k	4.6 ^{b,j}	4.8 ^j	19.3	na	3.5
	1992	na	2.7 ^j	9.8 ^j	0.2 ^k	4.2 ^j	7.4 ^j	19.2 ^c	na	5.7

^aThe sum of regional shares may exceed 100 because of the inclusion of intra-firm trade. — ^b1988. — ^c1991. — ^dTotal Europe. — ^eExcluding the respective home country. — ^f1987. — ^gTreated as domestic. — ^hIncluded in North America. — ⁱBrazil only. — ^jIncludes Australia and Japan. — ^kJapanese subsidiaries excluded. — na= not available.

Source: Annual reports by the companies under consideration, various years.

Table 12 – Share of FDI in Total Investment^a of the Chemical Industry of Selected Producer Countries, 1982–1992 (per cent)

	Denmark	France	Germany ^b	Italy	Netherlands ^c	Spain ^d	United Kingdom	Japan	United States
1982–1984	–5.27	7.07	33.90	14.42	65.00	5.73	36.65 ^e	6.05	10.04
1985–1989	12.72	23.45	36.10	8.43	49.04	8.94	54.71	8.34	16.15
1990	19.26	36.42	38.30	6.56	40.03	21.84	41.72	12.45	10.58
1992	36.02	20.45	45.14	–3.49	22.50	5.48	45.10	10.32	17.89

^aDomestic and foreign investment. — ^bGross FDI. — ^cFDI includes mining, quarrying and oil. — ^dFDI includes mineral products. — ^e1984.

Source: OECD (various issues); VDI (1994); European Chemical Industry Council (CEFIC) (unpubl. data); IMF (b).

DCs have rather attracted a greater portion of production of EU chemical multinational corporations since the middle of the 1980s. This applies especially to non-Latin American DCs.³¹

An increasing globalisation of the chemical industry is also indicated by Table 12. In most of the seven EU countries for which the required data are available, the ratio of foreign to domestic investment went up, if the early 1990s are compared with 1982–1984. Italy and the Netherlands represent the exceptions. In Spain, the share was volatile. Finally, non-equity forms of investment appear to have been gaining weight in the globalisation of chemical production especially in DCs and Central and Eastern Europe (Nunnenkamp et al. 1994,

Table A6). Oman (1989) cites a number of cases (Argentina, Brazil, India, Korea, Mexico and Saudi Arabia) where multinational corporations have participated in establishing petrochemical plants through technical cooperation agreements, turnkey projects, management and marketing contracts, and licensing. Franchising is considered as a very flexible means of foreign engagement in Central and Eastern Europe, where business risks and bureaucratic hurdles are still high (UN 1993a, No. 3). Thus, when non-equity forms of investment of the chemical industry in DCs and Central and Eastern Europe are taken into consideration, the case for investment diversion is further weakened. Especially the Asian Pacific region is likely to strengthen its attractiveness

as a location for chemical production (UNIDO 1990, p. 187). South Korea, Taiwan, China and ASEAN countries are already building up massive petrochemical bases with the participation of foreign capital and technology (Ward 1992, p. 7).

4. Textiles and Clothing

The question of investment diversion is of particular relevance with respect to textiles and clothing, the production of which has been an engine of industrialisation and trade for many DCs since they were able to compete internationally with these relatively labour-intensive products. The EU has traditionally been the world's largest market for textiles and clothing (EIU 1993, p. 77) and a major market for DC exports of these products (Spinanger 1993). EU producers have been under pressure to adjust to increasing international competition since the early 1970s. The adjustment pressure has, however, been mitigated by the provisions of the Multifibre Arrangement (MFA), which resulted in country-specific and product-specific import quotas, in the case of "hyper-sensitive" products even for each EU member country. The deepening and widening of integration in Europe has changed the rules of competition between DC and EU suppliers in two important ways: (i) national quotas have been aggregated to an EU-wide quota, roughly equivalent to the sum of national quotas, and (ii) economic transition and the Europe Agreements have facilitated trade with formerly socialist Central European countries. While the unified EU market may be beneficial to DC suppliers, easier access to Central Europe could encourage a redirection of FDI and cooperation arrangements of EU textile and clothing firms with suppliers in this region, thus weakening the competitive position of DCs.

Extra-EU imports of textiles and clothing increased faster than total extra-EU imports of manufactures in 1986–1992 (Eurostat various issues). At the same time, EU FDI outflows of this sector declined (relative to total outflows) in the second half of the 1980s, but strongly re-

covered in 1990–1992 (Table 3). An evaluation of these developments requires a broader view of institutional arrangements governing trade in textiles and clothing, as well as an evaluation of adjustment strategies pursued by EU producers in the past. Several studies have shown (e.g., Piatti and Spinanger 1992) that European textile and clothing industries tried to overcome the comparative disadvantage with respect to labour costs by quality improvements, product differentiation and process innovation. These strategies were designed to carve out a competitive niche for EU suppliers at the upper end of the market, while they simultaneously reduce production costs through, e.g., state-of-the-art equipment such as CAD and CIM. The clothing industry has further supported the move to the high quality/fashion segment of the market by establishing brand names and a tighter control of distribution channels. Textile firms intensified their cooperation with textile machinery producers and the chemical industry in order to develop and expand new markets (industrial textiles).

Despite these efforts, the output of EU textile and clothing industries continued to decline in the 1970s and 1980s, and employment fell in both sectors by about 40 per cent (Spinanger 1993, p. 260). Tougher competition weeded out inefficient firms, particularly in textiles, where, e.g., the number of German suppliers was halved in 1970–1990, and promoted a fragmentation of supply, i.e., the demise of larger and the emergence of smaller companies, particularly in clothing (Piatti and Spinanger 1992, p. 13). This streamlining of intra-EU production capacities was accompanied by globalisation strategies that aimed at bolstering the competitive position of the remaining suppliers. These strategies reflect the respective conditions in world markets faced by EU suppliers. In 1992, the three leading countries of origin for extra-EU imports of MFA textiles included Switzerland, Austria and the United States which accounted for roughly 30 per cent of total extra-EU imports in this category (EIU 1993, Table 16). The three leading suppliers of MFA clothing to the EU were Turkey, Hong Kong and China, also accounting for roughly 30 per cent

of the total (EIU 1993, Table 17). These observations demonstrate that the (relative to clothing) more capital-intensive textile industry competes to a large extent with suppliers from industrialised countries, while the labour-intensive clothing industry has to defend itself predominantly against imports from DCs (EIU 1993, p. 81).

The reaction pattern of EU suppliers to increasing international competition consisted of FDI, offshore processing and contractual production agreements (Piatti and Spinanger 1992, pp. 8 ff.). The degree to which these options were chosen is difficult to establish on an EU-wide basis, but the firm-specific data given in Table 13 and sample survey results for Germany presented in Piatti and Spinanger (1992) allow to draw some tentative conclusions. For the textile industry, data drawn from the company reports of five large European suppliers show the aforementioned decline of domestic production and a simultaneous expansion of foreign activities in 1986–1992. The expansion seems to have primarily been driven by FDI of EU textile firms in other industrialised countries, notably in Europe and North America. This is confirmed by the recent major acquisi-

tions and joint ventures of European companies listed by Nunnenkamp et al. (1994, Table A9). Textile producers have established themselves with production facilities in the markets of their major competitors and in geographical proximity to their overseas customers. It does not appear that European integration had any influence on this globalisation strategy, nor is there any evidence of investment diversion at the expense of DCs.

The globalisation strategy adopted by the clothing industry is less straightforward and reflects institutional particularities of the MFA (Oman 1989, Chapter 5). FDI played only a minor role compared with textiles and was often focused on distribution channels and sales outlets. The major channels of internationalisation in the clothing industry were offshore processing and contractual production agreements. The first was made attractive by special offshore processing quotas in the MFA and the possibility to tap labour markets of low-wage countries without losing control over design and distribution. Similar advantages were derived from contractual agreements with independent overseas suppliers, which encompassed the production and delivery of finished products. Industry sources (BBI 1991) show that offshore processing and contractual agreements accounted for about 50 per cent of German clothing imports in 1990. However, these options were used much less by other European suppliers, which have focused on quality improvements and the establishment of brand names, notably in France and Italy. A major reason for these differences in internationalisation strategies may be the higher degree of openness of the German clothing market to international competition, which is reflected in increasing and above average penetration ratios (Piatti and Spinanger 1992, p. 26).

Concerning the partner countries for the internationalisation strategies of EU clothing producers, there is a distinct pattern. Contractual agreements play an important role in imports from Turkey and Hong Kong, as well as increasingly from China, the leading sources of extra-EU imports (EIU 1993, p. 82). Offshore processing has followed the pattern established

Table 13 – Textile and Clothing Production by Major EU Companies in Different Regions, 1986 and 1992 (per cent of total production)

		Coats	Cour-	Royal	Boss	Dierig
		Viyella	taulds	Niyverdal-		
		United	United	Nether-	Germany	Germany
		Kingdom	Kingdom	lands		
Domestic	1986	58	82 ^b	44	100	96
production	1992	49 ^c	73 ^c	35	88	94
Foreign pro-	1986	42	18 ^b	56	0	4
duction	1992	51 ^c	27 ^c	66	12	6
Europe	1986	13	11 ^b	36	0	4
	1992	21 ^c	16 ^c	43	0	6
North	1986	12	5 ^b	na	0	0
America	1992	16 ^c	13 ^c	20	12	0
Latin	1986	7	na	na	1	0
America	1992	7 ^c	na	na	0.2	0
Africa,						
Australia,	1986	9	na	na	0	0
Asia	1992	7 ^c	na	na	0.5	0

^aThe sum of regional shares may exceed 100 per cent because of inclusion of intra-firm exports. — ^b1987. — ^c1991.

Source: Annual reports of the companies under consideration, various years.

by the preferential trade agreements signed by the EU with various countries. These agreements provide ACP (African, Caribbean and Pacific) countries with free access to EU clothing markets and a self-monitoring of clothing exports to the EU for North African countries and the former Yugoslavia (Stüven 1993). Since transportation costs matter for offshore processing, North African countries and especially the former Yugoslavia became preferred partners in particular of the German clothing industry. However, economic liberalisation in Central and Eastern Europe and the prospect of association to the EU made this region another attractive location for offshore processing. By 1992, Central and Eastern Europe provided almost 11 per cent of total EU clothing imports compared with 10 per cent from North Africa and Turkey, while China and Hong Kong together accounted for 23 per cent (EIU 1993, p. 46). A considerable share of imports from Central and Eastern Europe can be attributed to offshore processing and this share is expected to increase in the future (EIU 1993, pp. 55 ff.).

To evaluate the prospects for international networking of EU textiles and clothing industries, several factors have to be taken into account:

- Many Asian DCs have emerged as successful suppliers not only in clothing but also in textiles (EIU 1993, p. 80). India, China, Pakistan and Indonesia ranked already among the top ten sources of extra-EU textile imports in 1992.
- The supply of clothing from Asian DCs will continue to increase as a result of unprecedented economic growth in China and the emergence of new competitive suppliers such as Indonesia, which jumped from the 19th to the 8th important source of EU clothing imports in 1988–1992 (EIU 1993, p. 82).
- Production capacities of Central and Eastern Europe, where textiles and clothing had a long tradition, have not been fully used as yet. Furthermore, EU imports from this region will be liberalised much faster than envisaged for other

suppliers of MFA products. The competitive position of this region will depend on the progress in economic transformation and political consolidation.

- The MFA continues to influence the worldwide distribution of production. When MFA trade will be gradually reintegrated into the GATT framework, as was agreed upon in the Uruguay Round, the competitive position of EU firms will decline and imports will expand.

The considerations above indicate that the Single Market programme is not likely to have a prominent influence on future developments in the EU textile and clothing industries. The major competitors threatening the viability of these industries are located in other industrialised countries or in Asian DCs. The gradual opening of European textile and clothing markets can be expected to further increase the importance of non-equity types of international cooperation, in particular offshore processing and contractual agreements, following the lead of German companies. Central and Eastern European countries can become major partners in this globalisation strategy. A closer association with Central and Eastern European countries may help EU firms to reduce production costs, but it is unlikely that such a cooperation could seriously dislodge imports from other regions. Production possibilities in Central and Eastern Europe continue to be clouded by many uncertainties, and labour costs may be low compared with Western Europe but not compared with India or China. World market conditions will force EU textile producers to invest not only in Europe and North America but also in Asian DCs with rapidly growing textile industries. First indications for such an engagement are the many subsidiaries and joint ventures the largest European textile producer, Coats Viyella PLC, has established in Asia (Nunnenkamp et al. 1994, Table A9). Likewise, the EU clothing industry will have to strengthen its position in Asian markets. This requires investment in marketing and distribution in order to increase sales, but it also requires close cooperation with local firms in order to remain cost-competitive.

IV. FDI Flows from Western to Central and Eastern European Countries

1. The Institutional Setting and Its Potential Impact

Apart from fears about FDI diversion induced by the deepening of integration in the EU, DCs have been concerned recently that some of the Community's imports of goods and exports of equity capital may be diverted from them to Central and Eastern Europe as a result of preferential arrangements with this region. This is more so because the EU agreements with Bulgaria, the Czech and Slovak Republics, Hungary, Poland and Romania go far beyond trade preferences. The so-called Europe Agreements of December 1991 accommodate the desire of Central and Eastern European countries for full EU membership in the future and offer them financial and technical help to prepare for such a membership. Moreover, the associated countries are economically, geographically and culturally nearer to the Community than any DC, arousing an apprehension that the two "natural" partners in trade and investment are going to reunite after the demise of communism and central planning in Central and Eastern Europe. However, the nexus between trade and investment will vary across industries and countries, depending on firm-specific strategies, macro-economic conditions of home and host countries, as well as their trade and investment regimes. The attention in this section is focused on the last point in so far as it is related to the recent preferential trading arrangements between the EU and the Central and Eastern European economies.

Traditionally, trade and cooperation agreements, which the EU had concluded with various partner countries, have allowed the latter to export industrial goods (except "sensitive" products such as coal, steel, textiles and garments) free from tariffs and quantitative restrictions. In the case of association agreements with Central and Eastern European countries, however, concessions go beyond traditional trade preferences. The Europe Agreements are

intended to expedite the transformation process and the integration of the signatory Central and Eastern European countries into the world market. Important characteristics of the agreements are that (i) they enable the associated countries a greater access to the EU internal market in the case of sensitive products as well, (ii) they are conceived as the beginning of full EU membership, and (iii) they include economic, technical and institutional help from the EU to prepare the associated countries for membership.

At the summit meeting in June 1993, the EU agreed to expedite the process of liberalisation for imports from the associated six Central and Eastern European countries and allow them to join the Community depending on the progress made with regard to their economic and political conditions. The new concessions encompass sensitive products such as textiles, steel and agricultural products, in which the EU has been very restrictive (NfA 1993). EU tariffs on imports of sensitive products (Annex II of the Interim Agreement) will now be dropped after two years of the Association Agreement entering into force, rather than four years as envisaged previously. Quotas and ceilings will be raised faster than originally stipulated, with some distinctions between the associated countries.

Thus, at least four important features of the new economic policy of the EU towards Central and Eastern European countries call for special attention. First, it divides Central and Eastern Europe into three groups of countries: (i) Bulgaria, the Czech and Slovak Republics, Hungary, Poland and Romania, (ii) Albania and the Baltic States, with which the EU negotiated bilateral free trade agreements and (iii) the former USSR, which received GSP treatment through so-called partnership agreements. The six associated states of group (i) benefit from higher preference margins than the other two groups. Second, access barriers for the associated Central and Eastern European economies are also lower than those for any group of DCs,

including the signatories of the Lomé Convention. Third, these Central and Eastern European countries get more non-trade support from the EU than any other recipient outside the Community (Hiemenz et al. 1994). Fourth, investors have to reckon with a steady though slow improvement of economic and social conditions in this group of economies if their associated status is to be transformed into full membership in the future.

For assessing the effects of the new EU economic policy on trade and FDI, it is, therefore, the group of associated countries that is of crucial importance in Central and Eastern Europe. The envisaged full membership means an addition to the existing "natural" locational advantages in international competition for equity capital, especially vis-à-vis DCs. Apart from geographical and cultural proximity to Western Europe, the existing advantages include the availability of human capital and relatively cheap labour. Hourly wages in the Czech and Slovak Republics, Poland and Hungary are between one tenth and one twentieth of those in the Western part of Germany. A German official is therefore quoted to have said: "It is as if we had Hong Kong just 80 km from Berlin" (Marsh and Barber 1993). However, the investors' enthusiasm may be dampened insofar as their investment plans are dependent on the continuity of lower wage costs in the associated countries. Economic progress of the Central and Eastern European countries would result in some flattening of cost differences between the two regions.

EU FDI in the associated Central and Eastern European countries is expected to rise on other grounds as well. So far, EU firms have undertaken trade supportive FDI such as in representative offices, sales show-rooms and distribution net works. But as EU exports to Central and Eastern Europe exceed some threshold, the exporting firms will be tempted to invest in export-substituting activities. Although this threshold will vary from case to case, exporters generally want to protect or raise their shares of target markets through proximity to buyers. Another important category of FDI may result from strategic alliances between EU and Cen-

tral and Eastern European firms. This may be the case, e.g., in the steel industry, which is characterised by excess capacity in the Community. Some of the acquisitions in the automobile industry of Central and Eastern Europe may also fall in this category, though the main motive of Western investors in this branch is to have first-mover's advantages in exploiting growing local markets in the host countries (OECD 1993b).

Typically, FDI is positively correlated with both exports from and imports to the home countries of investors (Nunnenkamp et al. 1994, pp. 82 ff.). For Central and Eastern European countries, it is too early to measure such correlations for want of data. The association agreements allow them a grace period of ten years for granting free entry of EU goods into their economies. In the case of imports, it is through additional interim agreements that most of the non-tariff trade barriers on imports from the associated Central and Eastern European countries have been removed by the EU. Thus, trade related EU FDI in Central and Eastern Europe is rather based on future expectations with regard to the trade intensity between these two regions.

EU investments can, in turn, contribute to the growth of trade with Central and Eastern Europe. A general argument in support of this hypothesis is that a substantial portion of total cross-border trade of multinational corporations consists of intra-firm transactions (UN 1990, 1993b). This tendency should tend to be stronger rather than weaker in EU-Central and Eastern Europe relations due to their geographical proximity and cultural affinity. Historical data and gravity analysis (Havrylyshyn and Pritchett 1991) suggest that the EU share in Central and Eastern European exports could rise to 75 per cent or even more. Even if this high level of integration is not yet reached, it is plausible that intra-firm trade and investment related third party trade will grow considerably. More specifically, a positive effect of FDI on trade is to be expected for the following reasons:

- Trade supportive FDI of EU firms will stimulate trade with Central and Eastern European economies almost by definition.
- FDI in new projects or through acquisitions of industrial units in Central and Eastern Europe will result in EU exports of machinery and intermediate goods.
- Even in the case of export-substituting FDI, the net effect on total exports of the investor country may be positive if the demonstration effect of FDI leads to exports of new products.
- In the case of EU imports, there is an even greater plausibility of a positive rather than a negative effect of EU investments in Central and Eastern Europe. This is quite obvious for FDI in natural resources and the agricultural sector of host countries insofar as this investment is undertaken to supply the home market. Offshore processing provides another example, especially in the case of labour-intensive products such as textiles and clothing, leather goods, and consumer electronics.

To conclude, the regime shift in Central and Eastern Europe and its integration into the international division of labour will push EU equity capital into this area. The inflow of FDI will be accelerated as the process of economic transformation gathers momentum in Central and Eastern Europe. This in turn will fuel the growth of EU–Central and Eastern Europe trade. Export growth from Central and Eastern European countries may partly occur at the cost of DCs, especially in sensitive products, for which the association agreements remove quantitative restrictions much earlier than envisaged for DCs according to the EU’s Uruguay Round commitments. The elasticity of supply of these goods from the associated exporters depends, *inter alia*, on the inflow of EU FDI in the respective industries. However, the net trade effects on DCs need not necessarily be adverse (Hiemenz et al. 1994). Particularly Asian NIEs have been able to restructure their exports in favour of more sophisticated goods (Böhnlein and Heitger 1991) and have been less prone to unfavourable trade effects because of closer

EU–Central and Eastern Europe cooperation. The empirical evidence on FDI in Central and Eastern Europe presented below may provide first indications whether a similar conclusion holds with respect to investment diversion.

2. Empirical Evidence

All Central and Eastern European economies have experienced a dramatic growth of the number of foreign investment projects since the beginning of their economic transformation (Table 14).³² The value of FDI has risen less dramatically. Two qualifications have to be kept in mind when analysing the engagement of foreign investors in Central and Eastern Europe. First, the growth rate of FDI is inflated because of low numbers in the base period. Prior to the collapse of socialist regimes, the Central and Eastern European economies were accessible for foreign investors only to a very limited extent. The cumulative value of FDI by the mid 1980s amounted to less than US\$1 billion, most of which was concentrated in the relatively liberal Yugoslavian economy. Second, the data on investment projects refer to registrations, many of which are unlikely to be implemented. The ratio of operational to registered joint ventures tends to be low in the initial stages of economic development or transformation. In 1992–1993, it varied between 30 per cent (Belorussia) and 70 per cent (Albania) (OECD 1993b). By contrast, FDI inflows reflect the actual import of capital based on balance-of-payments data. Between 1989 and 1993, FDI inflows increased about six times, despite political and economic instabilities still haunting most of the countries in the region. These inflows compare well with the strong growth of FDI in China after liberalisation towards the end of the 1970s. Both of the growth processes have in common that many of the investment projects are undertaken by or in partnership with expatriate nationals of the recipient countries. Such projects may be interpreted as a return of entrepreneurial “flight capital” after the opening of economies for private

Table 14 – Joint Ventures and FDI in Central and Eastern European Countries, 1989–1993

	Number of registrations ^a					Net flows of FDI in million US\$				
	1989	1990	1991	1992	1993	1989	1990	1991	1992	1993
Bulgaria	30	140	900	1,200	2,300	–	4	56	42	55
Czechoslovakia	60	1,600	4,000	5,995	9,350	257	207	600	1,103	529 ^b
Hungary	1,357	5,693	9,117	17,182 ^c	21,500 ^c	187 ^d	311 ^d	1,462	1,479	2,350
Poland	911	2,799	4,796	10,131	15,053	11	89	291	678	1,715
Romania	5	1,501	8,022	20,684	29,115	–	–18 ^d	40	77	94
Russia	689	2,224	2,022	3,252	7,989	454 ^e	–400	–100	700	400
Slovenia	192	808	1,000	2,815	3,300	.	–2 ^d	41 ^d	111	112

^aEnd of year.— ^bJanuary–November 1993; not strictly comparable with previous years. — ^cEstablished. — ^dNot strictly comparable with subsequent years. — ^eRegistered, gross.

Source: IMF (a, c); IMF (a); NBR (1992); NBP (1993); SBC (1992); UN (1992b, 1993a, 1993c); World Bank (1992); OECD (1993b).

Table 15 – FDI Flows from Western European Countries^a to Central and Eastern Europe, 1985–1992 (million US\$)^b

	1985	1986	1987	1988	1989	1990	1991	1992	Total
Austria	.	.	7.9	8.1	52.9	369.4	505.3	445.9	1,389.5
Belgium–Luxembourg	.	.	–6.6	49.8	7.7	35.2	288.2	41.1	415.4
Denmark	.	0.1	2.5	1.3	2.6	1.6	9.2	17.1	34.4
Finland	.	.	.	.	.	.	.	37.1	37.1
France	1.9	14.7	0.3	7.9	8.2	40.0	208.6	338.9	620.5
Germany	7.1	8.7	28.4	36.4	85.6	191.9	837.0	1,132.7	2,327.9
Italy	.	6.7	12.3	10.0	49.6	46.7	35.5	97.4	258.2
Netherlands	.	–6.5	7.4	4.0	10.8	6.6	178.1	559.0	759.4
Spain	.	.	.	.	.	.	14.5	3.1	17.6
Sweden	1.2	.	.	1.3	5.4	13.5	16.9	24.6	62.8
Switzerland	.	–10.0	1.3	–3.4	11.6	13.7	46.0	105.2	164.5
United Kingdom	.	.	.	.	.	5.4	26.5	114.8	146.7
Total	10.2	13.7	53.5	115.5	234.4	724.0	2,165.8	2,916.9	6,234.0

^aFor countries not included here, data are not readily available.— ^bConverted at average annual exchange rates.

Source: OECD (various issues); IMF (b).

initiative. Correlated with this is the observation that most of the projects are of small or medium size, entailing investments between US\$45,000 and US\$1.5 million (UN 1992b, p. 15) in the Central and Eastern European economies. The bigger investments, such as in automobile production (e.g., Fiat SpA in Poland, Ford Motor Co and General Motors in Hungary, Volkswagen AG in Czech Republic), electrical equipment (e.g., Elektrolux and General Electric in Hungary) or mineral resources (e.g., British Gas/AGIP, Chevron, Elf Aquitaine in CIS), are rather on the exceptional side.

Most of the FDI in Central and Eastern European economies comes from EU and EFTA countries. Table 15 shows that Western

European FDI flows to former COMECON countries tripled in 1990 and 1991, albeit from a very low base; in 1993, the growth rate was 35 per cent. Leading investors from the EU were Germany, the Netherlands and France, while Austria emerged as an important partner country from the EFTA. The rapid increase of FDI may be attributed partly to European integration and the preferential access of Central and Eastern European host countries to EU and EFTA markets. It should be noted, however, that US FDI in Central and Eastern Europe has also increased recently and is now accounting for a sizable share of total FDI stocks particularly in Russia, Poland, Hungary and the Czech Republic (Table 16).³³ In Russia and Poland,

Table 16 – Main Sources of the Stock of FDI in Central and Eastern European Countries (latest available year,^a per cent)

	EU	EFTA	United States	Other	Major source country (%)
Bulgaria	70.5	13.4 ^b	6.5	9.6	Germany (42) Netherlands (11)
Czech Republic	54.6 ^d	10.6 ^b	27.9	7.0	Germany (31) United States (28)
Hungary	41.0	14.0 ^e	29.0	16.0	United States (29) Germany (20) Austria (14)
Poland	30.1	16.8	43.7	9.4	United States (44) Italy (11)
Romania	61.8	4.2	10.0	24.0	United Kingdom (14) Italy (13) France (11) United States (10)
Russia	15.1	10.9	60.2	13.0	United States (60)
Slovakia	34.3	29.2 ^c	13.6	22.8	Austria (25) Germany (22)
Slovenia	63.1	29.9	0.8	6.2	Germany (41) Austria (28)

^aBulgaria: May 1993; Russia: April 1992; Slovakia, September 1993; Czech Republic: January 1994; Hungary: August 1993; Poland: June 1993; Romania: 27 September 1993; Slovenia: May 1991. — ^bAustria and Switzerland. — ^cAustria and Sweden. — ^dBelgium, France, Germany and Italy. — ^eAustria.

Source: World Bank (1992); UN (1993a); PlanEcon (1993); NBR (1993); Figyelő (1993); Czech Ministry of Economy (unpubl. data).

US FDI is even substantially larger than EU FDI, indicating that trade preferences may not be the overriding incentive for FDI in Central and Eastern Europe.

Concerning the question of investment diversion, Table 16 provides another interesting

piece of evidence. The last column shows clusters of cross-border investment activities some of which are between immediate neighbours. For example, the biggest investor in Slovakia is Austria. Germany occupies prominent positions in Bulgaria, Slovenia and the Czech Republic, the latter with a common border.³⁴ In Romania, which has no such common border, FDI inflows are widely distributed among France, Italy, the United Kingdom and United States. Arguably, the clusters of FDI between neighbouring countries immediately after the removal of border restrictions on the movement of goods and capital are more the outcome of FDI creation than FDI diversion from third countries. This is suggested by the evidence on Portugal and Spain after they had joined the EU: the highest growth was recorded for their mutual FDI, and French investments in Spain increased more than those from Germany and the United Kingdom (Agarwal et al. 1994, Section 5.2). Moreover, DCs did not suffer from any significant reduction of their share in French FDI outflows when the French engagement in Spain was expanded considerably. Thus, the growth of French FDI in Spain, though initiated by European integration, was by no means a diversion of FDI from DCs. The growth of EU FDI to the Central and Eastern European economies appears to be a similar case.

V. European Integration and FDI Diversion Away from Asia³⁵

As suggested before, investment diversion induced by European integration is rather unlikely with regard to Asian DCs in particular. This tentative conclusion is corroborated by the subsequent assessment of the composition of FDI flows to this region. For this purpose, FDI flows are subdivided into two categories. The first category includes engagements that can be generally considered as independent of the widening and deepening of integration in the investors' home country. The second category deals with types of FDI for which the issue of

diversion is ambiguous more on empirical grounds. This division is guided by the motives of entrepreneurs investing abroad, which are expected to differ across the economic sectors in which FDI takes place.

The most obvious type of FDI that will not be diverted from DCs to member countries of the EU consists of investments in natural resources, especially petroleum, mining and quarrying. Foreigners invest in these sectors usually for export. Depending on demand, the output can be sold also on the local markets of host

countries. Historically, natural resources were the initial attraction for private foreign investors in DCs; for a long time, the access to natural resources was the main determinant of the inflow of FDI (Agarwal 1979).

Another sector in which FDI will remain unaffected from European integration consists of branches such as construction, real estate, trade, transport, storage, communication, finance, insurance and other services. In most of the tertiary sector, DCs do not compete for investible funds with EU countries. An investor looking for investment opportunities in local construction business in India, Malaysia or Thailand will not shift to Greece, Portugal or Spain because of an envisaged greater mobility of goods and production factors within the Community. The same applies to most of the other branches of the tertiary sector mentioned above. As in natural resources, investments in services are generally location-specific.³⁶ FDI mobility between two likely host countries is rather limited, unless they are geographically situated so near to each other that the servicing of customers in each of them from any location does not involve considerable costs. Such a situation does not prevail with regard to EU-DC relations. Typically, both country groups are not only geographically far from each other, but also the movement of capital, people, goods and services between them is mostly restricted. Even if the freedom of movement existed, which is to some extent the case with the associated DCs, a German bank or tourist agency, for example, will not substitute a subsidiary in Kenya with one in Greece or Portugal. Thus, the locational competition between the two groups of countries for FDI in the services sector is very weak or non-existent.

The primary and tertiary sectors together attract a very high share of FDI in DCs. Two thirds of total US FDI in DCs are in these sectors (US Department of Commerce 1994). The same applies to other major investor countries (UNCTAD 1993, p. 62). In the majority of Asian DCs, for which the sectoral data are available, these two sectors attracted more than half of total FDI (Table 17). The primary sector alone accounted for four fifths of the foreign

investments in Indonesia during the 1980s. Nepal, Papua New Guinea, the Solomon Islands and Viet Nam are countries with one half to three fourths of total FDI stocks in their primary sectors. The domestic markets of these countries are too small to attract large amounts of equity capital in the manufacturing sector. In Bangladesh, Malaysia and the Philippines, about one fourth of FDI stocks was in the primary sector, while new investments in the 1980s were more concentrated in other branches. In the two Asian DCs with the biggest domestic markets, i.e., China and India, the share of the primary sector in FDI was low and further declining. Here the developments in domestic markets appear more important for the inflow of FDI than changes in the external environment such as the deepening and widening of integration in Europe.

Table 17 includes FDI in agriculture, which absorbed in some cases half or more of the foreign capital invested in the primary sector (UN 1992c). This applies to Bangladesh, Fiji, India, Malaysia, Papua New Guinea, South Korea, the Solomon Islands and Sri Lanka. It would be interesting to examine in more detail whether there are agricultural products in which these countries compete for FDI with Mediterranean EU members, in order to evaluate the risks of investment diversion from these DCs to these EU member countries. First indications are that diversion is less likely in Asian DCs than in Latin America. FDI in the agricultural sector of Asian DCs is mostly in products such as tea (India, Sri Lanka), rubber (Malaysia) and forest timber (Fiji). In these cases, the locational choice of investors is country-specific, so that FDI cannot be shifted to EU members.

Most of the Asian DCs also had a high proportion of FDI in the tertiary sector. More than half of the foreign investments in Bangladesh, Fiji, Hong Kong, Pakistan, Samoa, Singapore, the Solomon Islands and Sri Lanka was in services and construction. In China, Papua New Guinea, South Korea and Thailand, these investments accounted for two fifths to one half of the total inflows during the second half of the 1980s. Higher inflows in this sector are mainly the result of liberalisation and deregulation.

Table 17 – Sectoral Distribution of FDI in Asian DCs 1986–1989 (per cent)

	Primary sector		Manufacturing sector		Services and construction	
	Inflow 1986–1989	Stock 1989	Inflow 1986–1989	Stock 1989	Inflow 1986–1989	Stock 1989
Bangladesh ^{a,b}	0.4	25.1	33.2	34.3	66.3	40.7
China ^{a,b}	4.5	8.2	52.9	47.6	42.2	40.1
Fiji	7.8	.	29.5	.	62.7	.
Hong Kong	–	–	17.4	25.9	82.6 ^c	74.1 ^c
India ^{d,e}	0.6	6.1	92.1	89.1	7.2	4.8
Indonesia ^{f,g}	82.5	81.7	13.7	15.4	3.8	2.9
Malaysia ^{a,b}	11.4	28.3	76.4	41.2	12.2	30.5
Nepal ^{a,b}	20.6	49.9	54.0	37.2	25.4	12.9
Pakistan ^{a,b}	13.7	11.5	23.7	38.7	62.6	49.8
Papua New Guinea	41.8	60.2	8.6	10.9	49.7	28.9
Philippines	27.9	29.3	45.7	48.9	26.4	21.8
Republic of Korea ^{a,b}	0.9	0.9	57.7	61.5	41.5	37.6
Samoa ^d	15.9	.	27.3	.	56.8	.
Singapore	0.2	0.2	35.7	42.4	64.1	57.4
Solomon Islands	.	76.3	.	1.5	.	22.2
Sri Lanka ^{a,b}	23.8	10.0	23.5	32.5	52.7	57.5
Taiwan ^{f,c}	0.3	–	65.7	88.3	34.0	11.7
Thailand	3.2	9.2	49.0	42.8	47.8	48.0
Viet Nam ^h	67.7	67.7	12.7	12.7	19.6	19.6

^aInflow: 1985–1988. — ^bStock: 1988. — ^cThe share of services and construction has been obtained by deducting the manufacturing share from the total FDI. — ^dInflow: 1983–1986. — ^eStock: 1986. — ^fInflow: 1987–1990. — ^gStock: 1990. — ^hInflow: 1988–1989.

Source: UN (1992c).

lation measures in these countries. The motivation for FDI will remain largely unaffected by European integration.

The same applies to FDI in the manufacturing sector of Asian DCs to the extent it is undertaken to supply the domestic markets of host countries. Such engagements are motivated by market size and growth, advantages of direct presence in the vicinity of customers, discriminatory government procurement policies and savings in transport costs that would otherwise occur in supplying the same market through exports. These decision parameters do not change as a direct consequence of EU integration. Therefore, the domestic market oriented FDI should not be negatively affected.

Cross-country studies have shown the domestic market of host countries (proxied by national income and its growth) to be the most important determinant of FDI in DCs.³⁷ Hence, the risk of FDI diversion should be relatively low for countries with large domestic markets

such as India, China and Indonesia, and for countries with favourable growth prospects such as South Korea, Malaysia and Thailand. However, many of these countries, as well as Hong Kong and Singapore, are locations where foreign investors have also been producing goods for foreign markets. European integration may, at least theoretically, affect FDI in these countries that is primarily export-oriented, because of fiercer competition for this type of FDI from low-cost locations at the EU periphery.

In the past three decades, many multinational corporations shifted some of their manufacturing activities to Asian DCs to take advantage of comparatively low unit costs of labour or other factors of production such as land. Such export-oriented engagements may become less attractive because of the deepening and widening of integration in Europe. The goods produced in the Southern member countries of the Community do not face any entry barrier to EU markets, and the market access of the associ-

ated Central and Eastern European countries is less restricted than for similar goods produced in Asian DCs.

The degree of investment diversion at the expense of Asian DCs depends on two major factors. First, a high proportion of export-oriented FDI in the manufacturing sector of DCs raises the risk of investment diversion. Because of data deficiencies, the relevance of this factor is most difficult to assess. Among Asian DCs for which manufacturing FDI is of high importance (Table 17), China, Malaysia, South Korea, Taiwan and Thailand are likely to have attracted FDI in export-oriented manufacturing to a significant extent. Most of this FDI is, however, from Japan and the United States. European firms had neglected Asian DCs until the beginning of the 1980s (Hiemenz 1987). European FDI in this area has increased only recently, and the share of Western Europe in total FDI of Asian DCs is still less than 30 per cent (UN 1992a, pp. 19 f.). This suggests that the scope for an adverse effect of European integration on manufacturing FDI in Asian DCs is rather limited.

Second, it is open to question whether the traditional cost advantages of DCs will be wiped out by the advantages that the EU periphery may derive from the recent removal of internal trade barriers. In order to answer this question precisely, cost comparisons at the country and industry level would be required, which is beyond the scope of this study. It should be noted, however, that the Social Charta of the Community is likely to increase the unit labour costs at the EU periphery (Langhammer 1990). Additional pressure can be expected from rising costs of land and environmental protection in EU countries. The

attractiveness of Central and Eastern European economies may suffer from insufficient infrastructure, remaining uncertainties and macro-economic imbalances. Thus, it appears reasonable to conclude that the cost advantages of DCs, and particularly the favourable investment climate in Asian DCs, are unlikely to be endangered by European integration in the near future.

This conclusion is consistent with the earlier observation that European FDI in Asian DCs has increased recently (Chapter II). This is not to deny that European integration and the successful transition of Central European countries provide new incentives to international investors and involve significant challenges for Asian DCs in the longer run. However, this group of DCs appears to be best prepared to meet the challenges of the future. In 1980–1992, Asian DCs were not only able to increase their share in world exports from roughly 8 to 16 per cent; they have also become an important market for the exports of industrialised countries, including the EU (UN various issues). Given the typically strong correlation between trade and investment flows, Asian DCs have favourable prospects to remain a preferred destination of foreign investments. Moreover, projections for the 1990s forecast continued high economic growth for the Asian region as a whole (Hiemenz 1992, p. 282). Industrialised countries will respond to growing demand in Asian DCs by supplying imports, but also by investing in the region. EU investors have no choice but to participate in this development in order to improve their position in the highly competitive Asian markets and to exploit locational advantages in the context of a wider globalisation strategy.

VI. Summary and Conclusions

This study focuses on changes in international capital flows in the wake of the deepening and widening of integration in Europe. This process started with the accession of Greece, Portugal and Spain to the Community (in 1981 and

1986, respectively) and continued with the establishment of a unified market, a closer association of EFTA and EU countries, as well as the opening of the EU to Central and Eastern Europe, all in 1992 and 1993. Larger markets

and the greater diversity of factor endowments are expected to enhance the attractiveness of European countries for both domestic and foreign investors. This prospect has nourished an apprehension particularly among DCs that FDI flows may be diverted away from their economies towards locations in Europe.

The analysis of FDI flows does not provide support for such fears. In the run-up to the Single Market in the mid 1980s, European multinationals had indeed become more Eurocentric, partly at the expense of DCs, but predominantly at the expense of FDI in the United States. However, the neglect of DCs was largely a result of severe macroeconomic disturbances in Latin America and hardly related to integration per se. It disappeared once the first round effects of the preparation for the Single Market tapered off in the early 1990s. The decline of EU FDI in Latin America was halted, while Asia again received increasing shares of total FDI from most EU countries. Furthermore, European FDI from all countries except France in Asian manufacturing industries did in fact increase throughout the whole time period under observation. The sectoral breakdown of FDI flows also shows that the diversion of FDI flows to Europe was less pronounced with regard to manufacturing FDI than to FDI in services, where the gains from market integration are higher because of the removal of substantial barriers to intra-EU trade. All in all, the evidence suggests that the deepening of integration may have temporarily slowed the worldwide globalisation of European multinationals but did not bring it to an end. European companies cannot afford to lock themselves into a Fortress Europe and to forego the advantages of an international networking.

A similar conclusion holds for the globalisation strategies of Japanese and US companies. Stylised facts are that Japanese companies have defended their interests in the EU by selectively increasing their presence at the expense of FDI flows mainly to the United States and Latin America, but not at the expense of their presence in Asian DCs. US companies have maintained a substantial engagement in the EU and diversified investment locations,

while expanding their activities in DCs. The main target was Latin America, reflecting the establishment of NAFTA and economic stabilisation in some countries of the Southern Cone. Asian DCs were also able to attract more US FDI in manufacturing. Generally, there seems to be a tendency for both Japanese and US foreign investment to focus more on DCs in the early 1990s, as was also observed for European multinationals. Hence, there is little empirical support for the hypothesis that economic integration in Europe has diverted international investment flows to the detriment of DCs.

The observations above are substantiated by an assessment of globalisation strategies pursued by multinationals in single industries of EU member countries. Overall, the change in regional FDI shares in manufacturing sectors reveals a rather diverse picture. The sectors for which the increases of intra-EU shares were steepest differ between the four major EU investor countries (France, Germany, the Netherlands and the United Kingdom). France and the United Kingdom represent the extremes with respect to chemicals: French FDI in this sector was redirected to the EU to a considerable extent, whereas the intra-EU share did not change very much in the case of the United Kingdom. Likewise, the picture for France and Germany differs remarkably with respect to transport equipment, in which German FDI was shifted to the EU. Significant increases of intra-EU shares in manufacturing sectors are frequently matched by correspondingly high declines of FDI shares of other industrialised countries. With few exceptions, the figures do not support the hypothesis of considerable investment diversion effects at the expense of DCs. The exceptions are mainly related to relatively large German investments in Latin America that declined in response to the debt crisis and policy failures in the host countries, but not as a result of European integration.

Sector studies of the automobile industry, chemical industry, and textile and clothing industry confirm that globalisation strategies are predominantly motivated by concerns about competitiveness in world rather than regional markets. The EU automobile industry has in-

deed intensified cooperation at the regional level, not the least because the EU Commission encourages and supports coordinated efforts by car manufacturers (and input suppliers) to strengthen their innovative capacity through joint R & D projects, training programmes and the dissemination of new production techniques. However, intra-EU cooperation was not considered to be an alternative to a more global internationalisation strategy designed to meet the challenge of fiercer worldwide competition and greater cost efficiency of Japanese producers in particular. The EU, as the still largest automobile market, will become the principal battlefield of the world's main car manufacturers. EU integration does not only benefit EU producers, but is also attractive for external competitors. Hence, the Single Market programme did not reduce, but rather amplified the pressure for the EU's automobile industry to improve productivity through internal restructuring, worldwide sourcing and technological innovation, and to globalise production and marketing.

The chemical industry has for long been the leading foreign investor from the EU. Production data suggest that the globalisation of major EU companies has risen after the announcement of the Single Market programme. Globalisation proceeded mainly through acquisitions of existing firms, particularly in the United States. This can be attributed to oligopolistic competition for the US market place and to strategic responses to the formation of NAFTA. Data for DCs do not provide evidence for FDI diversion away from them. On the contrary, DCs have attracted a greater portion of international production of EU chemical multinational corporations since the middle of the 1980s.

The reaction pattern of EU textile and clothing suppliers to increasing international competition consisted of FDI, offshore processing and contractual production agreements. The major competitors threatening the viability of these industries are located in industrialised countries other than the EU or in Asian DCs. The gradual opening of European textile and clothing markets under the new GATT agreement is likely to further increase the importance

of non-equity types of international cooperation, in particular offshore processing and contractual agreements, following the lead of German companies. Central and Eastern Europe can become a major partner in this globalisation strategy. A closer association with countries in this area may help EU firms to reduce production costs, but it is unlikely that such a cooperation will seriously dislodge imports from other regions. Production possibilities in Eastern Europe are still clouded by uncertainties, and labour costs may be low compared with Western Europe but not compared with India or China. World market conditions will force EU textile producers to invest not only in Europe and North America, as they did in the past, but also in Asian DCs with rapidly expanding textile industries. Likewise, the EU clothing industry will have to strengthen its position in Asian markets. This requires investment in marketing and distribution in order to increase sales, but also close cooperation with local firms in order to remain cost-competitive.

Membership in or association with the EU may help to improve the attractiveness of new entrants as investment locations. Spain, for example, attracted considerably higher FDI flows after attaining full EU membership. However, membership or preferential trade agreements alone are not a sufficient condition for increased trade and investment flows, as the case of Greece reveals. Hence, it is still open to debate to which extent Central and Eastern European countries will benefit from closer institutional ties with the EU. Especially the latecomers in economic transformation continue to suffer from severe macroeconomic disturbances and supply constraints. In 1989–1993, FDI flows to the former CMEA region increased dramatically. However, FDI growth started from a very low level, and the engagement of foreign investors was heavily concentrated on Hungary, the Czech Republic and, recently, Poland. FDI flows originated mainly from Austria, Germany and the United States. Most of the new investment was small or of medium size and appears to be financed from expatriate capital to a significant extent. An overwhelming share of EU and EFTA investment in Cen-

tral and Eastern Europe was from neighbouring countries. This observation suggests that FDI flows to this region are rather generated from investment creation than investment diversion, as was the case after the Southern enlargement of the EU.

Concerning the prospects for the future, there is little reason to expect a reversal of past trends, the least in the case of Asian DCs. Many of these countries have predominantly attracted domestic market-oriented FDI in non-manufacturing sectors, which was not and will not be affected by the deepening and widening of integration in Europe. The more advanced investment diversion, but they have in fact re-

ceived more EU FDI despite the ongoing Asian DCs with larger EU shares in manufacturing FDI are potentially more vulnerable to process of European integration. These countries have become important partners in the globalisation strategies of European multinationals. Because there are no indications of a weakening competitive strength of Asian DCs, this process is likely to continue throughout the 1990s. Above average rates of growth, based on an efficient reallocation of resources within countries and in the region, will stimulate a further rapid expansion of trade and attract additional FDI from Europe, as well as from other industrialised countries.

Footnotes

- 1 In addition, FDI stocks are reported for several EU countries. For Greece and Ireland, only inflows are available. The data for DCs are less informative as some of the countries, particularly Italy, have not reported FDI stocks separately in most of the cases.
- 2 The respective sources are Deutsche Bundesbank (various issues), De Nederlandsche Bank (various issues), Banque de France (various issues), and UK Business Statistics Office (various issues).
- 3 Statistical information on Japanese and US FDI in manufacturing is published by Ministry of Finance (a, b) and US Department of Commerce (various issues). The data that are not presented here for reasons of space, are available from the authors on request.
- 4 The high share of Latin America in total Japanese FDI flows in 1985–1987 reflects a temporary investment boom in non-manufacturing activities in Panama and the Cayman Islands; this phenomenon is likely to be speculative in nature rather than the result of a globalisation strategy of Japanese multinationals.
- 5 This source does not report sector-specific flow data for Belgium, Luxembourg, Greece and Ireland.
- 6 For example, the statistics for the Netherlands group completely different activities into one category. The chemical sector includes mining, quarrying and oil; metal products include electrical engineering.
- 7 In particular, OECD data do not distinguish between intra-EU and extra-EU flows.
- 8 During the 1980s, intra-EU FDI in food processing boomed as companies wanted to strengthen their market position especially in France, Germany, Italy, the Netherlands and Spain (for details, see OECD 1993a, p. 78).
- 9 Table 3 does not support the proposition of a shift of EU FDI from relatively labour intensive activities (textiles, leather and clothing, food processing) to sophisticated manufacturing activities (chemicals, electronics). Such a shift has been observed by the OECD (1993a, p. 70) for overall FDI from OECD countries.
- 10 In some cases, the statistical breakdown remains incomplete. For example, more than one third of total German FDI stocks in 1985 escapes the sectoral breakdown provided by the Deutsche Bundesbank.
- 11 The sectoral shares in total FDI by major EU countries in the respective regions, on which the correlation analysis is based, are not reported here in detail. They are available from the authors on request.
- 12 It should be noted that a largely unaltered sectoral structure is not only revealed when the correlation analysis is based on FDI stock data (Germany, the Netherlands). Strong correlations turn out with respect to French flow data, too, although flows are subject to much less inherent stability than stocks.
- 13 The subsequent discussion ignores FDI in mining, agriculture, energy, construction and related activities. This is because the Single Market programme concerns manufacturing and services in the first place.
- 14 The calculation of regional FDI shares is not meaningful in cases for which FDI flows from France and the United Kingdom to all host countries were extremely small in the mid 1980s and/or regional flows were negative. Such sectors are not considered in Table 6. The minimum FDI requirement was set at 100 million pounds and 300 million francs.
- 15 In 1991, banks were the largest single subsector involved in mergers and acquisitions in Europe (OECD 1993a, p. 79).
- 16 As a matter of fact, non-EU investors in Latin America (e.g., US companies) reacted more significantly to the economic crisis by curtailing their engagement (Nunnenkamp and Agarwal 1993). This supports the proposition that declining FDI shares of this region are independent of the deepening of integration in the EU.
- 17 The effect of this increase on the FDI share of all DCs remains modest because of small FDI stocks in Asian DCs in 1985.
- 18 For a similar reasoning with regard to trade creation and trade diversion, see Hufbauer and Schott (1993) and Nunnenkamp (1993).
- 19 The decline of FDI flows to DCs remains marginal with respect to machinery, office machines, and rubber and plastic products.
- 20 The three significant Pearson correlation coefficients are positive. This is largely due to soaring German FDI in the financial sector of industrialised countries within and outside the EU (Deutsche Bundesbank various issues). The fact that the corresponding rank correlation coefficients are insignificant underscores the relevance of financial institutions as an outlier in terms of growth rates.
- 21 The authors appreciate the most efficient research assistance of Martin Falk in preparing the sector studies.
- 22 Market segmentation persisted for several reasons. First, taxes levied on cars have not been harmonised and the principle to tax cars according to the rules of the country of destination has been maintained. Second, the network of exclusive dealing contracts, the so-called selective distribution system, agreed upon by EU car manufacturers and authorised by the EU Commission in 1985, has remained in place. Third, some EU countries seem to insist on targeted market shares of Japanese car suppliers in their national markets for the 1993–1999 period, notwithstanding that this is inconsistent with the Single Market programme (Hiemenz et al. 1994, pp. 192 f. and 227 f.; Langhammer 1993, pp. 7 ff.).
- 23 The subsequent evaluation of the internationalisation strategies of major EU car manufacturers ignores commercial vehicles (buses and trucks) and automotive components.

- 24 For an overview on equity participation and cooperation agreements of major EU car manufacturers, see Nunnenkamp et al. (1994, Table A4).
- 25 The recent trend towards more joint ventures between European and Japanese partners in niche segments of the automobile market is expected to continue (Scholfield and Henry 1992, p. ii).
- 26 By contrast, BMW has announced recently that it is going to establish production facilities in the United States.
- 27 Similar conclusions are presented by Diekmann (1992b), Salvadori (1991, pp. 55 and 89), Smith and Venables (1990, pp. 146 f.), and Urban and Vendemini (1992, p. 70).
- 28 A more plausible reason for lower FDI shares of the chemical industry appears to be the increasing resort to non-equity forms of foreign engagements. They enable the investors to extend international production with lesser or no capital investment (UN 1992a).
- 29 Company reports present net sales according to final markets and production areas. The latter are assumed to represent the value of production in the absence of other data, although they may involve problems regarding fluctuations in stocks, etc.
- 30 For detailed information on the international engagement of chemical multinational corporations through acquisitions, mergers and cooperation agreements, see Nunnenkamp et al. (1994, Table A6).
- 31 In Brazil, the output of Rhone Poulenc has fallen considerably. This decline is not an effect of the Single Market programme, but an effect of the unfavourable investment climate in Brazil.
- 32 The total number of firms with foreign affiliations in Central and Eastern Europe increased by more than fourfold in 1990. In the following two years it doubled every year (Table 14).
- 33 US data show that the stock of US FDI in Eastern Europe increased by 5.7 times to US\$1,746 million in 1993, up from US\$307 million in 1991 (US Department of Commerce 1994).
- 34 The Czech Republic and Hungary hosted more than four fifths of total German FDI in Central and Eastern Europe until 1992. The rest was shared mainly by Poland and Russia (Deutsche Bundesbank 1994).
- 35 Some parts of this Chapter are adopted from Agarwal (1994).
- 36 Kravis and Lipsey (1988, p. 2) maintained that services are defined by the fact that production and consumption take place simultaneously within one country with only a few exceptions.
- 37 For a survey of relevant studies, see Agarwal (1980) and UN (1992a).

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