

# GLOBALISATION THROUGH TRADE AND FOREIGN DIRECT INVESTMENT

A comparative study of the European Union,  
the United States of America and Japan based  
on trade and foreign direct investment data

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Mr Frank Schönborn, an official of Unit B0 of Eurostat, coordinated this report.  
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A great deal of additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server (<http://europa.eu.int>).

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## Abbreviations

EU	European Union
FDI	foreign direct investment
FDI-I	inward foreign direct investment
FDI-O	outward foreign direct investment
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
GDCF	Gross domestic capital formation
HS	Harmonised System
ITC	International Trade Centre UNCTAD/WTO
OECD	Organisation for Economic Co-operation and Development
RCA	Revealed comparative advantage
SITC	Standard International Trade Classification
TNCs	Transnational corporations
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organisation

Throughout the study, subscripts refer to the following:

i:	host country/exporting country
j:	home country/importing country
k:	sector

Throughout the study, the following symbols are used:

-	for data not available;
0	for a value of zero;
(blank)	for not applicable.



## PREFACE

International trade and foreign direct investment (FDI) are at the epicentre of recent globalisation pressures. Trade and investment have become closely intertwined and mutually reinforcing dimensions of the increasingly interdependent world economy.

Both trade and FDI have attracted wide-spread attention by policy makers and the business sector. In response to the demand for a better understanding of these two central forces, research and analysis focusing on either trade or on FDI are highly developed and have yielded an immense body of theoretical and empirical literature.

While interest in the *nexus* between trade and FDI has increased rapidly in the mid-1990s, research has been hampered by one major factor: there is a wide gap between the good data coverage of international trade, on the one hand, and the scarcity and lack of comparability of FDI data, on the other. In the past, it has been extremely difficult to obtain disaggregated FDI data which could be compared with trade data. This gap has seriously undermined the availability and quality of *empirical* analysis on the relation between international trade and FDI beyond isolated case studies or very aggregated patterns, both of which tend to be insufficient for policy and international marketing purposes.

It is against this background, that the recent work of EUROSTAT on FDI data is important: the generation of more detailed data - in particular in terms of industrial sectors and partner countries - and the effort to harmonise data within the European Union have the potential of enhancing the understanding, and strategies based on this understanding, in this important area of globalisation.

The objective of this paper is to illustrate how a combination of these sectoral and partner-country-specific FDI data with trade data can contribute to the globalisation debate. For this purpose, several empirical indicators combining trade and FDI data are introduced. The first part of the paper (chapters II to IV) presents the major findings on trade- and investment-led globalisation in the European Union, the United States and Japan based on these empirical indicators. Chapters V and VI take a more technical approach and discuss the characteristics of each of these indicators as well as some methodological and data issues.

The paper has been written primarily for trade and FDI analysts and may be of interest to producers of trade and investment data.

Whenever possible, figures in this study are expressed in ECU in line with the primary data. Values in US\$ were only used for figures derived from US\$-based sources, in particular those from the United Nations and the OECD with a view to minimising exchange-rate distortions. This applies in particular to the first two chapters. The ECU was equivalent US\$ 1.27 in 1990 and US\$ 1.17 in 1993 (see Appendix 3).





## I. Why should Trade and Foreign Direct Investment Analysis be linked?

In the mid 1990s, a new and broad-based consensus has emerged on the need for considering trade and FDI as closely interrelated dimensions of the globalisation process. This holds true both for analytical work on FDI and trade, and for trade- and FDI-related policies.

### A. Economic perspective

The interest in combining trade and FDI data stems primarily from the growing recognition that

- both are propelled by a similar set of micro-economic determinants and motivations,
- FDI has become a principal mode of delivering goods and services to foreign markets,
- they have reached similar orders of magnitude (see table 1), and
- they involve the same actors.

**Table 1: World trade and FDI in perspective**

	<i>Year</i>	<i>Value US\$ billion</i>	<i>% growth p.a. 1981-93</i>
World exports (trade and services)	1995	6,100	6.6
World outward FDI (stocks)	1995	2,600	11.6
World outward FDI (flows)	1995	315	n.a.
World portfolio investment (flows)	1994	350	n.a.
World royalty and fee receipts	1993	40	11.7
Global sales of foreign affiliates	1993	6,022	7.6
World GDP (factor cost)	1993	23,300	5.9
World capital formation	1993	5,400	5.1
Share of FDI flows in world capital formation	1993	4.1%	n.a.

Source: United Nations, *World investment report 1995 and 1996*, pp. 4 and 5, 14; WTO, *Press release*, 22 March 1996.

The interest in taking a closer look at FDI and its relation to trade has been further augmented by the rapid growth of FDI in the mid-1990s. World inflows of FDI grew by 29 per cent in 1993, 9 per cent in 1994 and 40 per cent in 1995, reaching US\$ 315 billion. In addition, the successful conclusion of the Uruguay Round is likely to accelerate further the flows of FDI in particular through the inclusion of services under multilateral trade discipline, the adoption of trade-related investment measures, and better protection of intellectual property rights which often constitute a major element among the determinants of FDI. Moreover, host country policies towards FDI have reversed over the past two decades from an approach oriented towards control and restrictions to a open-door and promotional one. The liberalisation of FDI policies has further accelerated in the mid 1990s. In 1995, for instance, 64 countries introduced 112 changes in their investment regimes, out of which 106 were in the direction of liberalisation and promotion and 6 in the

direction of control (UNCTAD 1996a:112). In fact, competition among host countries for FDI has greatly intensified (see for instance WTO 1996:30).

The discussion on trade and investment is closely related to the role of transnational corporations (TNCs) in the global economy. There is a growing body of literature showing that a country's trade structure does not only depend on the classical determinants of trade, i.e. resource and factor endowment, geographical and cultural proximity to major trading partners, similarity in demand, etc., but also on the types of firms involved in foreign trade, and in particular on the role of TNCs.

The new understanding of international trade has benefited from the theory of the firm, transaction cost analysis, work on monopolistic and oligopolistic competition and research on corporate marketing strategies. Numerous studies have shown that there tend to be significant differences in the behaviour of domestic firms and TNCs as far as trade, employment, investment and R&D are concerned.

TNCs have come to handle a large share of world trade. For a number of countries, there is empirical evidence on the importance of TNCs in their exports and imports (see table 2). The available, rough estimates put the share of intra-firm trade at as much as one third of world trade and trade of TNCs with non-affiliated firms at another third.<sup>1</sup>

The interrelation between trade and FDI is not a one-way street in terms of relative importance. Not only have TNCs become a driving force in world trade, but trade represents an increasingly important activity for TNCs. As may be gathered from table 3, the share of exports in sales of US majority-owned foreign affiliates in manufacturing has continuously edged up over the past three decades and accounted for 40 per cent in 1993.

Against this background, many observers have underlined the need for an integrated analysis of trade and FDI.

The European Commission (1994:11) has argued that “.. it is more useful in effective policy terms to view individual flows not in isolation but, rather, as a set of interrelated elements which together reflect the standing of a country or region in the global economy”.

Similarly, the OECD (1994) has called for a new generation of competitiveness indicators, which expand the analysis of international trade through the inclusion of FDI-related aspects such as intra-firm trade, R&D activities of domestic firms abroad, etc..

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<sup>1</sup> WTO, *Press Release*, 9 October 1996, p. 2/3

**Table 2: Share of foreign-affiliated enterprises in foreign trade of selected countries**

	<i>Type</i>	<i>Year</i>	<i>Percentage</i>
<b>Brazil</b>	Exports	1978	39
<b>China</b>	Exports	1994	29
	Imports	1994	46
<b>France, intra-firm trade</b>	industrial exp.	1993	34
	industrial imp.	1993	18
<b>Japan, intra-firm trade</b>	exports.	1993	25
	imports	1993	14
<b>Philippines</b>	Exports	1983	61
<b>Singapore</b>	Exports	1983	90
<b>Sweden, intra-firm trade</b>	industrial exp.	1994	38
	industrial imp.	1994	9
<b>Thailand</b>	Exports	1980	37
<b>Tunisia</b>	Exports	1986	37
<b>United States, intra-firm trade</b>	Exports	1993	36
	Imports	1993	43

Source: UNCTAD, 1996:121; F. von Kirchbach 1988; F. von Kirchbach 1995.

In the same line of argument, the United Nations' 1996 *World Investment Report* analysed in its thematic focus the relation between trade and FDI, and WTO prepared a comprehensive report on *Trade and foreign direct investment* on 16 October 1996.

**Table 3: Export propensities of US majority-owned foreign affiliates in manufacturing**

	<i>(percentage of exports in sales)</i>					
	<b>1966</b>	<b>1977</b>	<b>1982</b>	<b>1986</b>	<b>1989</b>	<b>1993</b>
Developed economies	20	33	37	39	38	41
Developing economies	8	18	22	33	37	39
All economies	19	31	34	38	38	40

Source: UNCTAD, *World Investment Report* 1996:110.

There are additional factors in the globalisation process which merit attention. Technology and licensing contracts and portfolio investment are frequently mentioned in this context. None of these factors, however, has reached the same significance as trade and FDI. As may be gathered from table 1, world royalty and fee receipts remained two orders of magnitude below world trade and FDI. The argument is not that they should be discarded

from the analysis of globalisation, but that priority should be given to strengthening the analytical link between trade and FDI.

## B. Policy perspective

At the policy level, the close relation between trade and FDI is moving centre stage. The general objective of a more homogenous policy framework for trade and FDI has been to promote efficiency through open competition both *among* countries - i.e. through open trade - and *within* countries - i.e. through open competition between domestic and foreign-owned firms.

After the major efforts over the 1980s and early 1990s to liberalise world trade, attention is moving to FDI with the objective of ensuring a neutrality between trade and investment, both for access and presence. The same principles as in international trade are to be applied to the treatment of FDI, namely liberalisation of rules and eventual elimination of policy restrictions, national treatment, most-favoured nation status, and international dispute settlement. This interest in a multilateral agreement on FDI is closely related to the multiplication and proliferation of bilateral investment treaties. In mid-1996, more than 1,100 of such bilateral treaties had been concluded (UNCTAD 1996:147).

The OECD has advanced rapidly in its preparations for a *Multilateral Agreement on Investment*. Similarly, trade and investment has been one of the major so-called *new issues* on the occasion of WTO's first Ministerial Meeting in Singapore in December 1996 (see also WTO, 1996).

## C. Methodological perspective

In a strict sense, trade and FDI are an analytical mismatch. They are not situated at the same level. It is not FDI, that could be a substitute for exports, but the sales of the foreign-affiliated firms created with FDI.

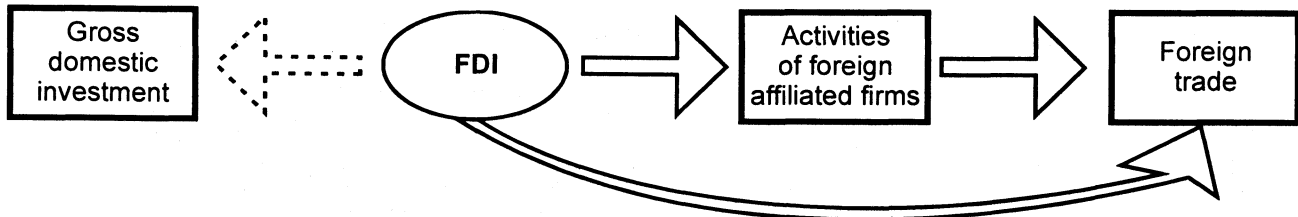
From a business perspective, for instance, firms can choose between exports from their home country (or a third country) to the target market and production in the target market. In order to shed light on the empirical importance of these alternative forms of servicing foreign markets, one would require data on the *operations* of TNCs in their home country, the target market and third countries and in particular data on the export and import operations of these firms.

In the absence of such data on sales, exports and imports of TNCs by products and countries, FDI data on stocks and flows offers an interesting proxy.

This argument can probably be generalised in the sense that FDI influences a number of macro-economic variables, including domestic investment, technological development, employment, etc. Taking into account, however, that the share of TNCs in trade is substantially higher than the share of FDI in investment (see tables 1 and 2), FDI may well have more explanatory power for a given country's foreign trade and, more generally, its overall integration into the international division of labour, than for its gross domestic investment (see chart 1).

**Chart 1**

The explanatory power of FDI for domestic investment and trade



At the same time, a word of caution is in place: as FDI related indicators are often the only available source of information on the operational characteristics of TNCs, it is very difficult to assess their reliability as proxies. Yet, there are a number of obvious shortcomings in extrapolating operational variables of TNCs from FDI data (see for instance Ramstetter 1996). These shortcomings go beyond the more limited reliability of FDI data as compared to trade data.

In this sense, FDI data are a second-best data source to enhance the understanding of international trade. They are, however, better than the most frequently applied third-best solution of disregarding all information which could help to distinguish local and foreign firms.

#### D. Focus of previous research

The discussion on the linkages of trade and FDI is still at the beginning. UNCTAD (1996:73) argues that "one of the principal reasons for this lack of knowledge and understanding is that the theoretical explanations of these two distinct yet interlinked activities have largely gone their separate ways, and attempts to integrate the theories of trade and FDI are, despite considerable progress in recent years, still at a stage of infancy." Or, in the words of WTO (1996:19), "the theory has only provided limited guidance to the empirical work."

The discussion on the relation between trade and FDI has focused to a large extent on the question of whether trade and FDI flows are of a complementary or substitutive nature. An understanding of the issue of complementarity versus substitutability of trade and FDI is critical for evaluating welfare and distributional effects arising from job creation and displacement through FDI both in home and host countries. The principal arguments of the debate are summarised in tables 3 and 4 below.

However, the inconclusiveness of the debate at the general level shows that "there is no distinct theoretical answer to the substitution/complementarity hypothesis of the FDI export relationship. An empirical assessment is therefore needed" (Pfaffermayr 1994:338). As the empirical evidence in tables 3 and 4 suggests, the specific relations between trade and FDI differ among industries, host and home countries, periods of time and the analytical perspective (i.e. micro versus macro approach). This underlines the importance of empirical research on the specific relation between trade and FDI, and hence the importance of enhancing the quality of matching trade and FDI data.

In sum, trade and FDI are different dimensions of globalisation patterns and strategies. Neither of them can replace the other. Any one-dimensional assessment of globalisation either through international market share analysis or through FDI-based indicators is not sufficient. Both indicators need to be combined.

**Table 4: Substitutive forces between trade and FDI**

<b>Arguments</b>
<ul style="list-style-type: none"> <li>• From a marketing perspective, FDI to establish local production in the target market represents an alternative to direct exports, in particular in case of natural or trade-policy induced protection of the target market. The validity of the argument depends on the import content of the goods produced in the target market. In some countries (i.e. in the ASEAN region), the relocation of production to the target market has been associated with a growth of related imports, comprising in particular intermediate and capital goods.</li> <li>• From a trade policy perspective, protectionist measures (both tariffs and non-tariff measures) can tilt the balance between exports and domestic production by foreign-affiliated enterprises in favour of the latter.</li> <li>• The substitution argument is behind the propositions for adjusting the US trade deficit with Japan by taking into account the sales of foreign-affiliated firms in both markets (e.g. K.Ohmae 1987).</li> <li>• The product-cycle approach implies a basically substitutive relation between trade and FDI: as products mature, production capacities are relocated from the innovating, high-income countries to low-cost production locations, partly through FDI. The wild-geese model for trade and investment in East Asia applies a similar reasoning.</li> <li>• FDI in world-market oriented export platforms may be a substitution for exports of the home country to third countries.</li> <li>• Concern of organised labour regarding relocation of employment to low-cost and low labour-standard locations often reflects fears of a substitutive relation between FDI and trade.</li> <li>• Rowthorn (1996:8) argues that - in contrast to trade and FDI relations <i>within</i> economic blocs - "between blocs, investment is more likely to be a substitute for trade, since transport and allied cost (cultural distance, etc.) are relatively high and the regional market is large enough to make local production economical."</li> <li>• In trade theory, factor mobility reduces trade in a classical Heckscher-Ohlin model (Mundell 1957).</li> <li>• Kojima (1977) characterised United States FDI as anti-trade oriented, i.e. substitutive, in contrast to trade-oriented Japanese FDI.</li> </ul>
<b>Empirical evidence</b>
<ul style="list-style-type: none"> <li>• Research into the motivation of FDI has shown that proximity to domestic demand in the host country is the most important determinant for a large share of direct investment flows (e.g. Pantelidis and Kyrkilis 1995). This implies a substitutive element in the relation between trade and FDI.</li> </ul>

**Table 5: Complementary forces between trade and FDI**
**Arguments**

- FDI may be the only option for market access due to high natural or policy protection or non-tradability of goods and services. In this case, FDI is not a substitution to trade.
- More generally, FDI represents an option for taking advantage of the possession of intangible non-tradable assets. This applies in particular, but not only, to services.
- FDI may represent a strategy to enhance the competitive position of the company, e.g. to diffuse new, capital-intensive product technology (Vernon 1971 cited from Graham 1995).
- FDI represents often bridgeheads for the development of exports to the host country.

**Empirical evidence**

Numerous empirical studies underline the complementary relation between outward FDI and exports of the home country.

- A recent OECD report (1996) prepared by L. Fontagné concluded on the basis of US and French data that "one dollar of investment abroad leads to \$ 2.7 additional exports and imports to, and from the, the host country. Reciprocally, one dollar of inward investment leads to a \$ 1 increase in imports from the investing country and only 32 cents additional exports to the latter country. Thus, at the industry level, FDI is a complement to trade, home investment abroad does not worsen the domestic trade balance, whereas foreign FDI in home country does." (p. 2)
- Pfaffermayr (1994:349) provides empirical evidence that FDI causes exports.
- An OECD study (1994:30,31) concludes: "There is a positive correlation between investment abroad and exports" in terms of export market share and direct investment market share which is statistically significant.
- G.Hufbauer, D.Lakdawalla and A.Malani (1994) show that FDI stocks increase trade with the home country. A 1 per cent rise of US stocks in the host country is associated with a 0.25 per cent rise in US exports to that country.
- A study on the United States finds that exports of US multinational companies to overseas affiliates "are correlated strongly and positively with growth in foreign affiliate sales. This demonstrates that (...) exports follow investment" (Emergence Committee for American Trade, 1993:6, cited from OECD 1994:14).
- "German and Japanese FDI flows to host countries are positively correlated in a statistically significant way with exports and imports to and from these countries and the same broad picture holds for lagged FDI flows (one and two years respectively). ... For the United States, the statistical correlation between FDI and trade is much weaker." (Nunnenkamp at al 1994:84).
- Studies in the US, Britain and France show that immediate losses of low-skilled jobs due to FDI in developing countries are broadly offset by an increase in higher skilled jobs in supporting sectors (OECD 1994:15).

Other studies bring out the close relation between FDI and exports of the host country (e.g. Pantelidis and Kyrkilis 1995).

## **E. Challenges for linking trade and investment data**

### **1. Combine available trade and FDI data**

In a first and simple step, trade and FDI flows need to be analysed in parallel. All too often, the analysis of internationalisation and globalisation process relies exclusively on one or the other. Notwithstanding the huge corpus of literature on trade and on FDI, very few studies combine both aspects. Yet, even a simple juxtaposition of the principal structures and trends in both areas helps to go beyond the results of a monodisciplinary analysis of either trade or FDI.

### **2. Refine sector-specific analysis of trade and FDI**

If there is one lesson to be learnt from trade flow analysis, it is the importance of sectoral breakdowns. As far as FDI is concerned, the amalgamation of FDI in the primary, secondary and tertiary sectors has often blurred comparisons among countries, with the large share of Japanese FDI flows into the service sector of developed market economies in the late 1980s being a prime example.

Many of the analytical tools developed for trade by product groups can be employed for analysing FDI by sectors. This holds true for concepts such as market share analysis in trade and investment, revealed comparative advantage and intra- versus inter-industry trade.

What is required in this context is a breakdown of both trade and FDI data by product groups or sectors according to a common nomenclature.<sup>2</sup>

### **3. Disaggregate the analysis of trade and FDI by partner countries**

The same argument applies to a breakdown of trade and FDI data by partner countries. While an analysis of exports and imports by the direction of trade has become a standard element of trade flow analysis both for marketing and policy purposes, this approach is far less developed for FDI flows. Yet, FDI appears to be even more concentrated in geographical terms than trade. Again, it should be of interest to apply the concepts developed for the analysis of the direction of international trade to the analysis of FDI flows.

Analysing FDI data broken down by both sectors and partner countries is certainly one of major future challenges.

### **4. Develop numerical and graphical indicators on the nexus between trade and FDI**

Interlinkages between trade and FDI are complex. Indicators for trade have to cope with problems of volume versus value changes, different customs regimes - e.g. processing versus ordinary trade - and increasingly complicated geographical metamorphoses of goods before they reach the final user. FDI data are even more differentiated: FDI flows and stocks need to be distinguished. Unlike exports and imports, FDI flow can be positive or negative. Moreover, FDI can take three different forms, namely equity capital,

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<sup>2</sup> A very recent study (OECD:1996) prepared by L. Fontagné makes a major contribution in this context. On the basis of a breakdown of FDI and trade data for France and the USA by product groups and partner countries, it lends additional support to the view that trade and FDI are complementary forms of the globalisation process.



reinvested earnings, short- or long-term borrowing between different affiliates of the same company.

Developing meaningful indicators which capture the interlinkage between trade and FDI indicators is thus a major task.

## F. Focus of study

The present paper looks into the four above issues of globalisation through trade and FDI.

The study analyses EUROSTAT's new sector-specific FDI data for the EU, the United States and Japan in combination with the corresponding trade. These data distinguish 16 product sectors.

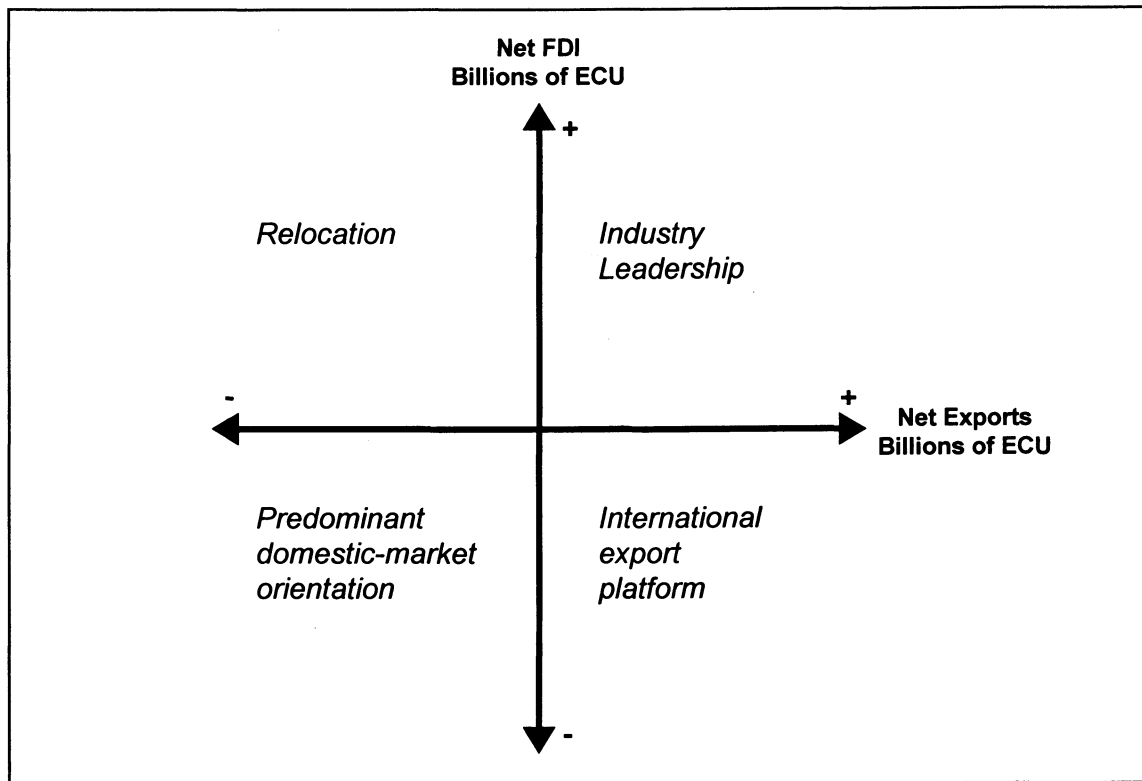
The FDI data used in this study is also broken down by major partner countries and regions. So far, however, only a very limited number of countries - e.g. France, the UK, and the United States - produce a breakdown of FDI data both by sectors *and* partner countries. For the European Community as a whole, such data do not exist. Hence, for the time being, sectoral and geographical characteristics of FDI have not been dealt with simultaneously.

Globalisation patterns in the EU are analysed on the basis of indicators which combine these trade and FDI data. They shed light on market shares, sectoral and geographical composition and specialisation and the relative importance of intra-industry and intra-regional trade and investment.

The quantitative analysis is complemented by a graphical presentation of the importance of trade and FDI in country- and sector-specific globalisation patterns. This graphical presentation distinguishes four archetypes according to whether a country or sector is a net investor rather than recipient of FDI and whether it is a net exporter or net importer (see chart 2).

- Sectors characterised both by net outward FDI and a trade surplus have a high international competitiveness. They are referred to as *industry leaders*. For firms in such sectors, exports and FDI are complementary.
- The second quadrant of chart 2 is typical for hollowing out or *relocation*: firms relocate their production capacities through high outward FDI, and imports have overtaken exports and provide part of the domestic demand. FDI and trade are of a substitutive nature.
- Countries or sectors characterised by high domestic demand and a low level of international competitiveness may be referred to as having a *predominant domestic market orientation* or, colloquially, as black holes, as they are net importers both of goods and FDI. They match sectors in the first quadrant in terms of the complementarity of trade and FDI.
- Similarly, the fourth quadrant represents the counterpart to the second: it is typical for *international export platforms* which attract FDI to become major suppliers to the world market.

**Chart 2** Globalisation pattern of a given country/sector in terms of net FDI and net exports



For the sake of brevity, this chart is referred to as globalisation chart. It is used through out this study, as it provides a succinct overview of the integration of a given country/sector into the international division of labour.

## II. Patterns of trade- and investment-led globalisation: an overall perspective

Each of the three Triad members has contributed to, and has been profoundly affected by, the trade- and investment-led globalisation trends of the world economy over the past one-and-a-half decades. The following paragraphs discuss the orders of magnitude of trade and FDI. They are based on data provided by EUROSTAT. As discussed below, there are very significant discrepancies among each of the major data sources, i.e. EUROSTAT, OECD, United Nations and IMF. An effort has been made to limit the following analysis to trends and orders of magnitude which are robust across the different sources of data. Yet, some of the findings are likely to be affected if the analysis were based on any of the other sources (see chapter VI B for details).

### A. Convergence of trade and FDI ratios

Differentials in trade and income growth of the Triad members have led to a striking convergence in the trade orientation of the three Triad members over the 10 years from 1984 to 1993 (see chart 3). Japan and the EU (third country trade only) began this period with export-to-GDP ratios<sup>3</sup> of nearly twice the corresponding US values. Ten years later, these trade ratios were all of an order of 10 per cent and differed by less than two percentage points. Driving forces behind this convergence were the strength of domestic-demand led growth in Japan and the surge of United States exports in the late 1980s and early 1990s.

Again, there is a striking convergence of absolute and relative orders of FDI flows. Annual FDI flows of the Triad members reached roughly similar orders of magnitude of between 15 and 30 billion of US\$ in the early 1990s, with the minuscule Japanese FDI inflows being the only notable exception. Variations in FDI flows appeared to be larger over time than among the Triad members.

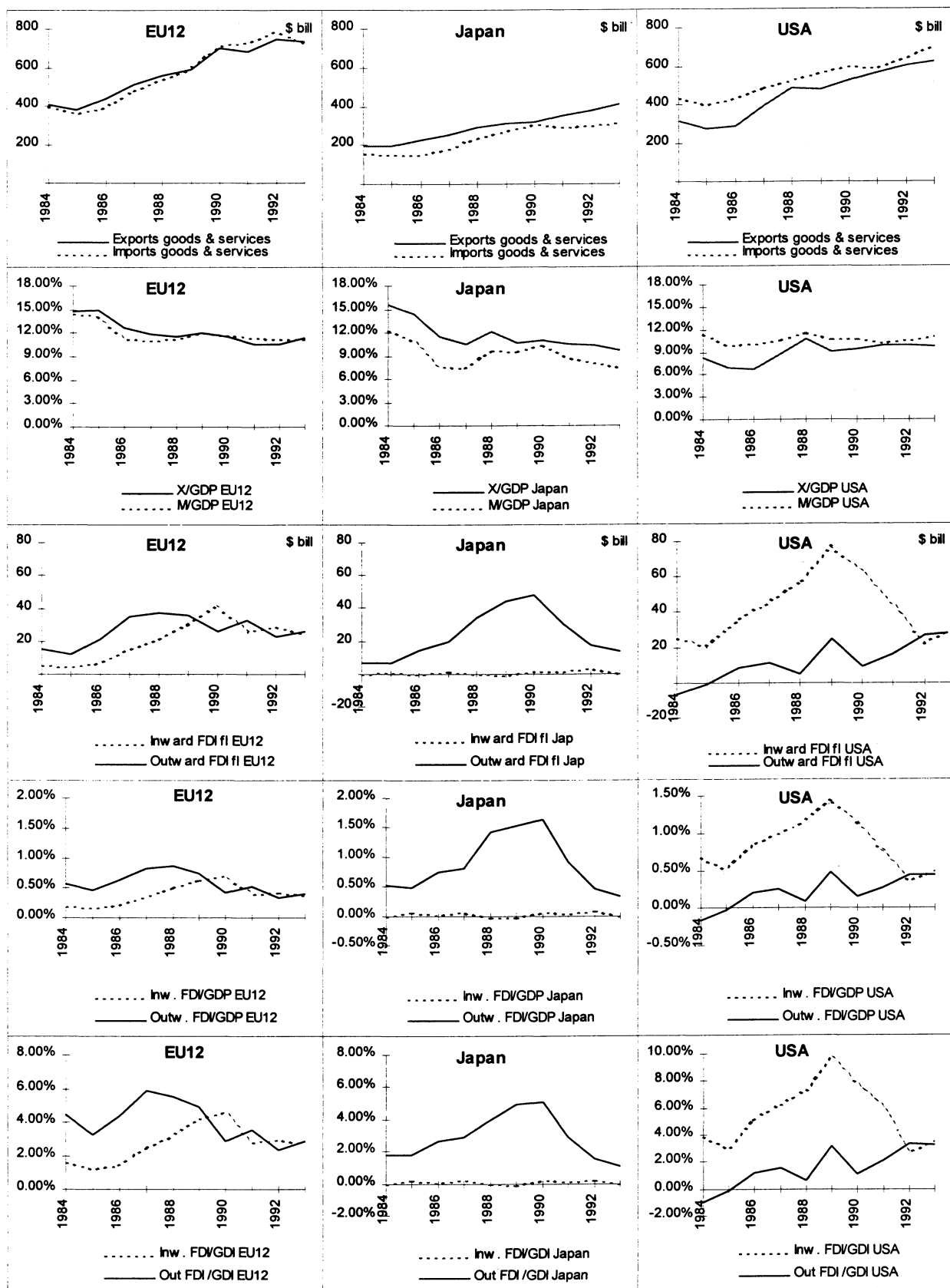
EU extra-regional outward FDI increased over the mid-eighties, but has been declining in real terms, and - more visibly - in relation to GDP and to exports. In 1992 and 1993, the outward-FDI-to-export ratio had fallen back to 3 per cent, which was very similar to the corresponding ratios for Japan and slightly lower than those for the United States (see Appendix 1).

US outflows have evolved from negative values implying disinvestments in the mid 1980s to an order of magnitude of US\$ 20 billion in the early 1990s, representing more than 3 per cent of exports. The corresponding values and ratios were similar on the import side in the early 1990s.<sup>4</sup>

<sup>3</sup> Exports including goods and services.

<sup>4</sup> OECD data shows a similar trend for US FDI outflows, but at a significantly higher level, with a differences of annual flows of as much as US\$ 20 billion.

**Chart 3: Overview of trade and FDI in the Triad**



Source: see Appendix 1

Parallel to the yen appreciation and the built-up of the bubble economy, Japanese outward FDI rose spectacularly over the second half of the 1980s to reach the all-time peak of US\$ 48 billion in 1990, which corresponded to 1.6 per cent of GDP and 15 per cent of exports, only to plummet back in the following years.<sup>5</sup> The United States experienced an even higher peak on the inflow side with inward FDI reaching US\$ 76 billion in 1989, reflecting major inflows of Japanese FDI to the United States.

Japanese inward FDI remained at a very low level throughout the period: annual inflows never exceeded US\$ 3 billion for the years under review.

Parallel to the convergence of export-to-GDP ratios among the Triad members at around 10 per cent, one finds a similar convergence of outwards FDI flows at around 0.4 per cent of GDP. It will be interesting to follow whether this is just a short-term phase in which different trends happen to cross, or whether there is any more fundamental convergence between the three Triad members, and whether there is any relation to the parallel convergence in trade ratios.

In contrast to the smooth evolution of trade, FDI flows oscillated wildly over the period under review, in particular for Japan and the US (see chart 3). Measuring the volatility of FDI flows in terms of the degree of determination  $R^2$  in a regression trend for the ten year period under review yields values in general below 0.7 (and as low as 0.02) for FDI flows compared to values of more than 0.9 for trade flows (calculated on the basis of Appendix 2 data).

A priori, one should have expected a higher volatility for FDI inflows rather than outflows on the basis of the argument that the global supply of footloose FDI is influenced in its locational decisions by bandwagon effects which would lead to strong temporary preferences for specific countries. In contrast, outward flows would be more stable as the supply base is more limited. Put differently, one would assume that the locational elasticity of outward FDI decisions is higher than the elasticity of overall FDI supply. The available data lends only partly support to this argument. FDI inflows have been fairly stable in the EU ( $R^2$  of inflows 1984-93 of 0.71) and certainly more stable - in the sense of being marginal - than outflows in Japan ( $R^2$  of inflows 1984-93 of 0.77). Only the US has experienced continuous growth of outflows ( $R^2$  of 0.82) versus volatile inflows ( $R^2$  of 0.02).

Combining the above indicators, it is evident that the EU - in terms of its third-country relations - is more trade- and less FDI oriented than either Japan or the US. Although the EU's trade ratio has come down over recent years, its (third-country) export-to-GDP ratio continues to be two percentage points higher than that of the other two Triad members. Its import ratio is slightly higher than that of the US and much higher than the corresponding Japanese ratio. Outward FDI flows, on the other hand, are slightly below those of the US in absolute terms and in comparison to GDP.

<sup>5</sup> Based on OECD data, the corresponding figures were an outflow of Japanese FDI of US\$ 68 billion in 1989, representing 2.4 per cent of GDP and 22 per cent of exports (see Appendix 2).

## B. Share of Triad members in world trade and FDI

An analysis of the shares of Triad members in world trade and FDI stocks and flows reiterates the impressions of a certain convergence.<sup>6</sup> Outward stocks of FDI range between US\$ 260 billion for Japan and US\$ 560 billion for the US. In the same way, their exports and imports have roughly similar orders of magnitude. The data for the early 1990s does not suggest any further catching up or taking over, as far as outflows are concerned: for each of the Triad members, the average 1991-1993 outflows represent 8 per cent of outward stocks, and the share of flows of outward FDI in world outward FDI flows were a percentage point below the corresponding share in stocks of outward FDI.

The three major players accounted for slightly less than half of world trade in 1993; in fact, their share of 47 per cent of world exports and imports had not changed two years later in 1995. Japan's trade surplus amounting to 4 per cent of world trade matched exactly with the US trade deficit, whereas the EU's trade was balanced.

For FDI, the situation was more complex. First, each of the three members of the Triad have been net FDI exporters to the world. This was particularly visible from the global distribution of FDI stocks. The share of the EU in the world's outward FDI stocks was 7 percentage points higher than its share in inward stocks. The same applied for the US, and in the case of Japan, the differential was even 16 per cent. Whereas the Triad accounted for three quarters of world outward FDI stock, its share in global inward FDI was only 46 per cent. The FDI *flows* from 1991 to 1993 further increased the gap between the Triad's higher share in outward FDI and its lower share in inward FDI.

The shares of Triad members in outward FDI - both stocks and flows - were consistently higher than their shares in world exports. The Triad was the major supplier of world FDI, and globalisation strategies of the Triad, as a whole, relied to a larger extent on FDI rather than trade in comparison with the rest of the world.

On the inflow side, the three Triad members had significantly different profiles. The US was the world's largest host country to foreign investment accounting for 30 per cent of world inward stocks and a fifths of inward flows. The US share in FDI inwards stocks was 10 percentage points higher than its share in world imports.

The implications are clear: among the three players, the USA has pursued the most pronounced FDI-led globalisation strategy. Unlike the EU and Japan, its outward FDI stocks exceeded its annual exports, and it accounted for more than a third of world FDI stocks. It was the largest host country and its inward FDI stocks represented three quarters of its annual import value, which was again much higher than for the EU or Japan. Moreover, the United States was the only country in the Triad in which the share of FDI flows in the early 1990s exceeded its share both as exporter and importer of goods and as exporter of capital.

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<sup>6</sup> The FDI data for this section is taken from the United Nations, as this is the only source with estimations on global FDI flows and stocks.

**Table 6: Share of Triad members in world trade and FDI flows and stocks, 1991- 93**

	<i>EU - 12 Extra</i>		<i>Japan</i>		<i>USA</i>		<i>World</i>	
	US\$ b	%	US\$ b	%	US\$ b	%	US\$ b	%
<b>Exports</b>	546	19	361	12	465	16	2907	100
<b>Imports</b>	581	19	241	8	603	20	3016	100
<b>Outw. FDI stocks</b>	327 <sup>a</sup>	22	260	17	560	37	1499 <sup>a</sup>	100
<b>Inw. FDI stocks</b>	225 <sup>b</sup>	15	17	1	445	30	1479 <sup>b</sup>	100
<b>Outw. FDI flows</b>	27	21	21	16	47	36	130	100
<b>Inw. FDI flows</b>	26	20	1	1	27	21	128	100

*Sources:* EU extra-community FDI from EUROSTAT, trade data from WTO, FDI data for Japan, USA and World from United Nations, World Investment Report 1995, p. 391ff.

*Notes:* General: Trade figures relate to 1993, FDI flow figures indicate annual averages for the years 1991 to 1993. World excludes EU intra-regional trade and FDI. US FDI outflows are significantly higher in UNCTAD's database as compared to EUROSTAT data.

- a. The share of EU extra-regional outward FDI stocks was estimated at 34 per cent of total EU outward FDI stocks of US\$ 962 billion, in line with a share of 34 per cent of extra-regional FDI flows in total outward EU FDI outflows.
- b. The share of EU extra-regional inward FDI stocks was estimated at 27 per cent of total EU inward FDI stocks of US\$ 832 billion, in line with a share of 27 per cent of extra-regional FDI flows in total inward EU FDI outflows.

### C. FDI-to-trade ratios in triadic relations

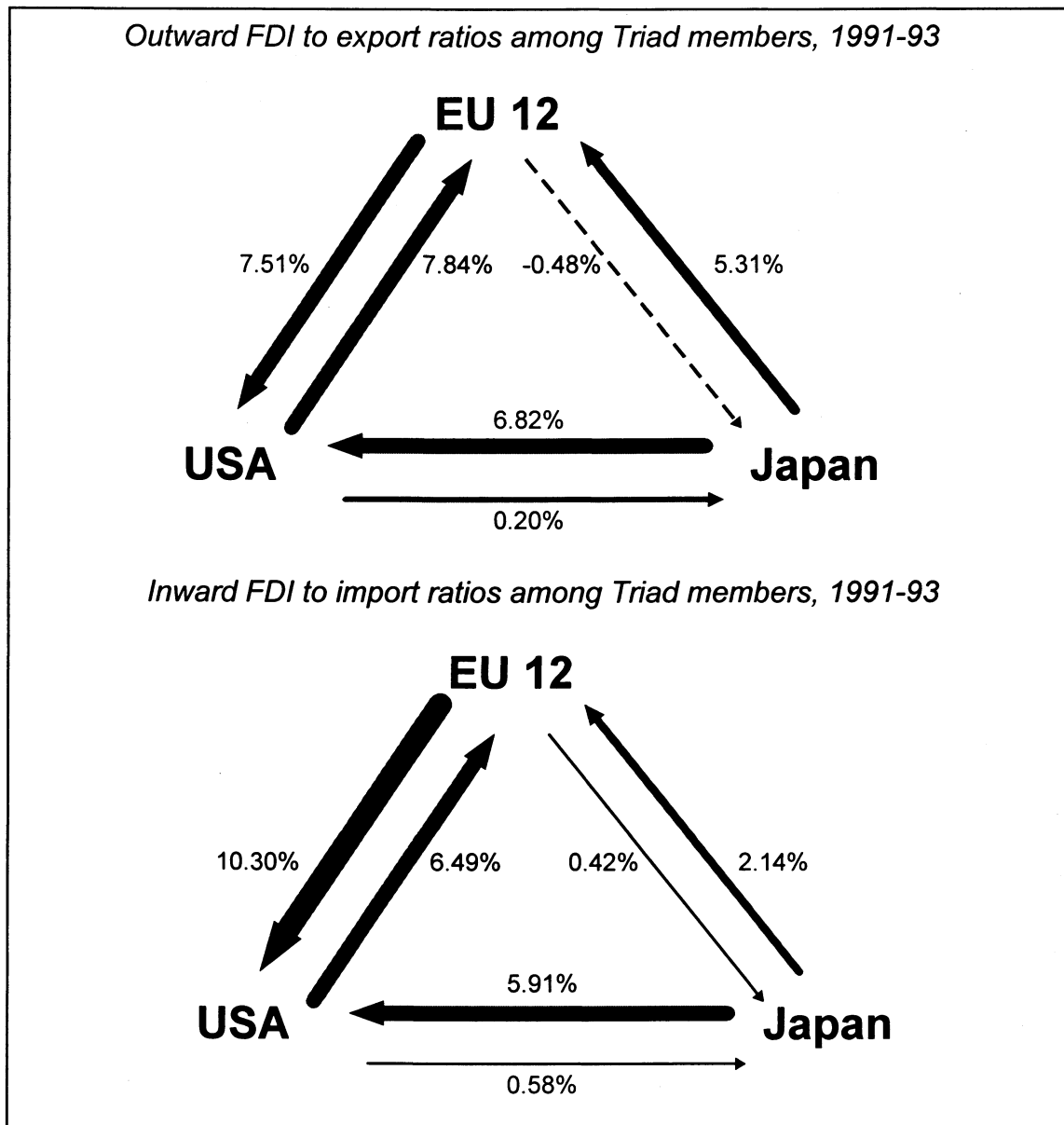
FDI flows have reached a significant order of magnitude when compared with trade flows. At the global level, outward FDI flows were equivalent to 4.5 per cent of world exports from 1991 to 1993.

Outward-FDI-to-export ratios converged at an even higher level for trade among Triad members, if one disregards FDI flows into Japan. According to EUROSTAT data, outward-FDI-to-export ratios averaged at between 5.3 and 7.8 per cent for transatlantic trade and for Japan's outward flows and exports to the United States and to the EU. The ratio of American outward FDI to exports with respect to Japan was 0.2 per cent, and the corresponding ratio for the EU even negative, reflecting apparently a pulling out of EU investment from Japan (see chart 4).

In the early 1990s, FDI to export ratios were higher in transatlantic trade than in trans-pacific trade not only because of the paltry FDI inflows into Japan, but also because of somewhat lower outgoing FDI to export ratios for Japan.

The reliance on FDI rather than trade in the case of transatlantic trade comes out, as well, from the very limited importance of trade in manufactures as compared to GDP and total import demand. In 1992, manufactured exports from Western Europe to the US were only 1.2 per cent of European GDP and represented approximately 3 per cent of US expenditure on manufactures. Similarly, US manufactured exports to Western Europe amounted to only 1.6 per cent of US GDP and about 2 per cent of European expenditure on manufactures. In contrast, US and EU imports from Japan represent a significantly higher share of their total expenditure on manufactures (Rowthorn 1996:9).

**Chart 4 FDI-to-trade ratios among Triad members, 1991 to 1993**



Note: FDI data from EUROSTAT  
Trade data (merchandise only) from IMF

What does a FDI-to-trade ratio of 7 per cent imply? One way of putting such a ratio into a broader perspective - and to attenuate the conceptual mismatch between FDI and trade referred to above - is to estimate the sales created by this outward investment and to compare these sales in the host country with exports.

Data is extremely hard to come by, but there are some rough indications. At the global level, world stocks of FDI in 1993 were estimated by UNCTAD at US\$ 2.1 trillion compared to an estimated total sales of foreign affiliates of TNCs of US\$ 6 trillion for the



same year. Put differently, for each dollar of FDI stocks, foreign affiliated companies realise annual sales of three dollars.<sup>7</sup>

FDI to export ratios, however, relate to flows rather than stocks. How do FDI flows affect stocks? For each of the Triad members, the outflow of one dollar has been associated with a substantially larger increase in outward stocks (see Appendix table 1). In fact, Japanese outward FDI 1984 to 1993 accounted for about half of the increase in stocks.<sup>8</sup> In the case of the US, the corresponding share was only one third.<sup>9</sup> This may be related to two different factors. First, outward flows may be complemented by borrowing in the host or a third country. Second, reinvested earnings increase foreign FDI stocks even in the absence of FDI flows. This would imply that reinvested earnings more than compensate the depreciation of FDI stocks.

Against this background, it is probably safe to assume that each dollar of outward FDI flows increases FDI stocks in the host country by at least one dollar and that the depreciation of stocks is compensated by reinvested earnings.

Taken together, these points imply that each dollar of outward FDI entails three dollars of sales in the host country. Hence, an outward-FDI-to-export ratio of 7 per cent - i.e. the one typical for transatlantic trade - would increase the ratio of overseas sales on the other side of the Atlantic to exports by some 20 per cent per year.

This assessment tallies with the results of the Japan's EXIM Bank 1994 survey of FDI (see table 7). The export ratio for Japan's industry is estimated to remain fairly constant at about 19 per cent over the four-year period from 1993 to 1997. The overseas production ratio, however, is projected to edge up by 6 per cent from 16 to 22 per cent over the time span. The mix of a constant export ratio and an increasing importance of overseas production may very well capture the combined effect of complementary and substitutive forces of trade and FDI.

**Table 7: Exports-to-overseas-production ratio for Japanese FDI, 1993 - 1997**

	<i>Actual FY 1993</i>	<i>Projection FY 1994</i>	<i>Planned FY 1997</i>
Export ratio	18.8	19.3	19.6
Overseas production ratio	16.1	17.5	21.6

Source: Tejima 1995:39

Notes: FY: Fiscal year

Export ratio: export sales by Japanese parent companies / sales by Japanese parent companies

Overseas production ratio: overseas output by subsidiaries / domestic output by Japanese parent companies + overseas output by subsidiaries

<sup>7</sup> The results of the recent OECD (1996) paper by Fontagné is not incompatible with this ratio: based on French and US data, the study concludes that one dollar of FDI leads to 2.7 dollars of imports of the home country from the host country. In turn, sales of the affiliate in the host country are at least three times as high as the amount of FDI.

<sup>8</sup> Tejima (1995:2) finds in his survey of Japan's foreign direct investment that "slightly less than 50 % of all FDI was made with funds from the parent; the rest was made with funds procured by local subsidiaries, most of which consisted of reinvestment".

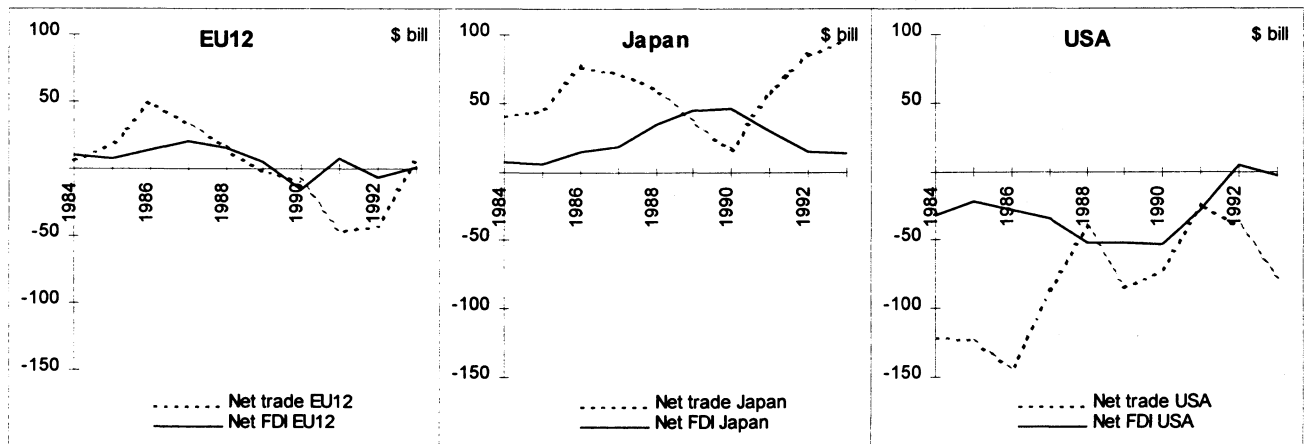
<sup>9</sup> Recent US data provides additional evidence on this point: In 1995, reinvested earnings accounted for US\$ 59 billion out of total US FDI of US\$ 97 billion. cited from WTO 1996:13.

## D. Trade and FDI balances

How do trade and FDI balances compare in the Triad in terms of their signs, orders of magnitude and volatility?

Surprisingly, net FDI, i.e. outward FDI minus inward FDI flows, has been less volatile than the trade balance among Triad members over the second half of the 1980s and first half of the 1990s (see chart 5).

**Chart 5: FDI and trade balances of the Triad, 1984 to 1993**



Source: see Appendix 1

The EU's external net FDI remained quite stable between US\$ 10 and 15 billion in the mid 1980s, before dropping to US\$ - 10 billion in 1990 and remaining balanced in the three following years. In contrast, the EU moved from a trade surplus in the 1980s to a trade deficit in the early 1990s to end up again with a small trade surplus in 1993. Overall, the EU's external trade and FDI positions were fairly balanced.

In contrast, Japan's annual net FDI exceeded US\$ 10 billion ever since 1986 and topped US\$ 40 billion in 1989 and 1990. In these two years, Japan's FDI surplus was even larger than its trade surplus. More generally, the FDI imbalance was more pronounced than Japan's highly politicised trade surplus. The difference between Japan's share in world exports and world imports was 4 percentage points; the corresponding difference for FDI stocks was as high as 16 percentage points and 15 percentage points for FDI flows in the early 1990s (see table 6). In other words, the difficulties of exporting to Japan appear to be minor in comparison with the difficulties of investing in Japan.

Overall, one should expect a parallel development of trade and FDI surpluses or deficits. Countries or sectors with a pronounced trade surplus would have the resources to invest abroad, whereas FDI inflows represent one form of financing trade deficits.

In contrast to this expectation, Japan's trade and FDI balance developed anti-cyclical, at least over the period from 1986 to 1993. While Japan's trade surplus declined from 1986 to 1990, the FDI surplus increased. Conversely, as the FDI surplus declined in the early 1990s, the trade surplus picked up again (see chart 6). The underlying factors for this development are not clear.

Throughout the period under review, the US has run a high, though volatile, trade deficit. This trade deficit was matched by a pronounced net inflow of FDI, which actually exceeded the trade deficit in 1988 with net FDI inflows of US\$ 52 billion. Only in 1992 was the US a net exporter of FDI, primarily due to the significant drop in FDI inflows. As in the case of Japan, trends in net FDI and net trade were rather anti-cyclical.

#### **E. FDI and gross domestic capital formation**

A comparison of FDI in relation to the gross domestic capital formation (GDCF) and to exports and imports brings out marked differences among the Triad (see chart 3 and Appendix 1). For the EU, outward FDI ranged only between 2.3 per cent and 5.9 per cent of total GDCF over the ten years under review. Inflows were even smaller, ranging between 1.2 per cent and 4.6 per cent of GDCF.

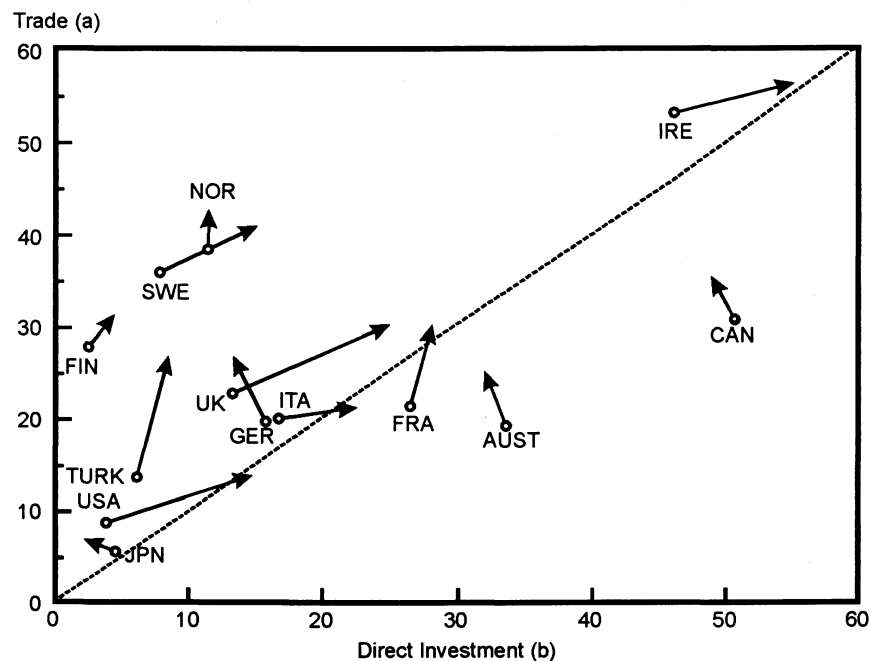
In the United States, incoming FDI made a significant contribution to GDCF accounting for around 8 per cent of GDCF in the late 1980s, although this share had dropped back to below 3 per cent in 1992/93.

The importance of FDI as compared to domestic investment was similar to the situation in the EU. For Japan's leading multinationals, however, the ratio of FDI to domestic investment was much higher, averaging at about 20 per cent in the early 1990s, reaching 23 per cent in 1995 and projected to edge up further (Tejima 1995: 14n).

#### **F. Comparison with indicators on exports and imports of foreign-affiliated companies**

How do these trends based on FDI compare with indicators based on the operations of TNCs? Chart 6 presents an interesting juxtaposition prepared by OECD which focuses on the trade orientation and the share of foreign subsidiaries in national turnover for 13 countries.

**Chart 6: Exposure of domestic markets to competition from manufactured imports and domestic production by foreign subsidiaries, 1980 - 1990**



\* / ° or nearest year

a: Imports / Domestic demand.

b: Turnover (or Production) of foreign subsidiaries / Total national Turnover.

Turnover was used instead of production for the following countries: United States, Germany, France, Italy, Canada and Australia

Source: OECD, EAS, Industrial Activity of Foreign Affiliates data bank, cited from OECD DSTI/EAS/IND/WP9(94)19.

While the trade orientation has increased for all countries under review over the period from 1980 to 1990, the relative importance of the foreign-affiliated sector has been quite mixed: Ireland, Canada and Australia were the countries with the highest share of foreign-affiliated firms in their manufacturing sectors, exceeding 30 per cent. On the other hand, foreign subsidiaries in Japan, Finland and Turkey remained below 10 per cent of manufacturing sales.

Significantly, Japan and the US have changed positions: whereas Japan had a higher foreign-controlled share in the manufacturing sector in 1980 than the US, the situation completely reversed. In line with the marginal inflows of FDI into Japan over the 1980s, the share of foreign subsidiaries further declined below the five per cent range, whereas foreign subsidiaries in the US - the world's largest recipient of FDI - tripled their share to about 15 per cent in 1990.

In general, there seemed to be a trend towards convergence in the sense that the share of foreign subsidiaries increased in countries with an initially low share of foreign subsidiaries and vice versa. The major exceptions to this trend were Japan and Germany, both with below-average and yet further declining foreign control in their manufacturing sectors.

The extension of the analysis of trade to other operational indicators of foreign-affiliated firms confirms the findings based on the review of trade and FDI. A comparison of overseas employment of US, Japanese and European firms shows that US firms rely to a

significantly larger extent on FDI than Japanese firms. Overseas employment of US firms represented 22 per cent of total US employment compared with 8 per cent in the case of Japanese firms. For France and Germany, the corresponding figures are even higher than for the US, but the data does not allow to distinguish between employment in other EU member countries and in third countries (see table 8).

**Table 8: Operational indicators on foreign-affiliated enterprises in the Triad**

	<i>EU</i>	<i>Japan</i>	<i>USA</i>
% share of employees of domestic firms abroad in total employment at home	France: 33 Germany: 24	8	22
% share of employees in foreign-affiliated firms at home in total employment at home	France: 24 Germany: 16 UK: 16	1	12
% share of R&D expenditure abroad to R&D expenditure at home	Germany: 15	2	10
% share of R&D expenditure of foreign-affiliated firms at home in total R&D expenditure at home	France: 15 Germany: 16 UK: 26	5	15
% share of patents registered by domestic firms abroad	France: 14 Germany: 15 UK: 42	1	8

Source: Deutsches Institut für Wirtschaftsforschung, Internationalisierung von Forschung und Entwicklung in multinationalen Unternehmen, *Wochenbericht*, 18, April 1996:263, translation by F. von Kirchbach.

The very limited inflows of FDI into Japan are reflected in the low share of employment in foreign-affiliated firms in Japan as compared to Japan's total labour force. This share was only 1 per cent; in contrast, the corresponding share for the US stood at 12 per cent. Again, the EU registered even higher shares of foreign affiliates in domestic employment, although it was not possible to separate firms from other EU countries and from third countries.

In the same line of argument, the internationalisation of research and development had advanced much more in the US than in Japan, and even more in the EU, if intra-community internationalisation is taken into account. For US firms, for instance, the share of R&D expenditure abroad in total R&D expenditure was with 10 per cent five times higher than the corresponding share in Japan (see table 8).

Similarly, American firms undertook a much larger share of R&D activities abroad than Japanese firms.



### III. Patterns of trade- and investment-led globalisation: a sectoral approach

#### A. The concentration of FDI in services

One of the most striking differences between FDI and trade is the concentration of FDI in services and the concentration of trade in manufactures. Nearly two thirds of FDI outflows of the Triad went into services, compared to a share of services in total exports of the Triad of less than a quarter (see tables 9 and 13 for definitions). Conversely, manufacturing accounted for less than a third of the Triad's outward FDI, but for nearly three quarters of its exports.

**Table 9: Trade and FDI of Triad by major sectors**

#### Outward FDI flows and exports

(Average annual values 1992-1993 in ECU millions)

		EU intra		EU extra		Japan		USA		Sum (excl. EU-intra)	
		FDI-O	Exports	FDI-O	Exports	FDI-O	Exports	FDI-O	Exports	FDI-O	Exports
Primary sector	value	676	39,124	139	17,039	466	462	2,143	27,137	2,748	44,638
	%distrib.	2	5	1	3	4	0	8	6	5	3
	%share	25	88	5	38	17	1	78	61	100	100
Secondary sector	value	12,357	616,608	7,455	441,845	3,764	279,726	6,402	318,891	17,621	1,040,462
	%distrib.	32	75	38	71	36	87	25	67	32	73
	%share	70	59	42	42	21	27	36	31	100	100
Tertiary sector	value	25,446	163,808	11,812	163,424	6,300	42,984	16,933	133,192	35,045	339,599
	%distrib.	66	20	61	26	60	13	66	28	63	24
	%share	73	48	34	48	18	13	48	39	100	100
Total (a)	value	38,478	819,540	19,406	622,308	10,530	323,172	25,478	479,220	55,413	1,424,699
	%distrib.	100	100	100	100	100	100	100	100	100	100
	%share	69	58	35	44	19	23	46	34	100	100

#### Inward FDI flows and imports

		EU intra		EU extra		Japan		USA		Sum (excl. EU-intra)	
		FDI-I	Imports	FDI-I	Imports	FDI-I	Imports	FDI-I	Imports	FDI-I	Imports
Primary sector	value	-38	40,136	799	90,814	0	56,795	-819	45,549	-20	193,158
	%distrib.	0	5	4	14	0	21	-3	9	0	14
	%share	190	21	-3,995	47	0	29	4,095	24	100	100
Secondary sector	value	9,010	614,393	8,652	389,514	433	132,779	10,369	385,433	19,454	907,726
	%distrib.	31	75	39	61	60	49	33	74	36	63
	%share	46	68	44	43	2	15	53	42	100	100
Tertiary sector	value	19,942	164,042	12,625	161,250	286	80,856	21,708	87,748	34,618	329,854
	%distrib.	69	20	57	25	40	30	69	17	64	23
	%share	58	50	36	49	1	25	63	27	100	100
Total (a)	value	28,914	818,571	22,075	641,578	719	270,430	31,258	518,730	54,052	1,430,738
	%distrib.	100	100	100	100	100	100	100	100	100	100
	%share	53	57	41	45	1	19	58	36	100	100

Sources: All primary data from EUROSTAT as raw data except trade in services which is derived from EUROSTAT 1995b.

Note: % shares for EU intra-regional trade and FDI are given for reference only and are not included in the sum. Tertiary sector includes only non-factor services.

a. Total represents sum of three above sectors without non-allocated FDI.

A similar picture emerges if one looks at the Triad as a recipient of trade and FDI. Close to two thirds of incoming FDI went into services, compared to a service share of 23 per cent in the Triad's total imports. The industrial sector accounted for 36 per cent of FDI inflows, compared to a share of 63 per cent of manufactures in total imports of goods and services. The primary sector played a minor role in the Triad's FDI, accounting for 5 per cent of outflows and being actually negative on the inflow side. The share of primary products in trade was low on the export side with 3 per cent of the Triad's total exports, and with 14 per cent somewhat more important as far as the Triad's imports are concerned.

The standard explanation for the high share of services in FDI is the non-tradability of some services. More importantly, the comparison of trade and FDI flows, on the one hand, with the sectoral composition of GDP in developed market economies, on the other, suggests that the distribution of FDI corresponds more closely than that of trade to the predominance of services in the national product of the advanced countries.

## **B. Trade and FDI in the Triad by major sector**

### **1. FDI outflows and exports**

On the FDI outflow side, there is a lot of similarity in the sectoral breakdown among the three Triad members. Services account for three fifth of FDI outflows both for Japan and the European Union (third country relations) and for two thirds for the US. The relative share of the industrial sector in FDI outflows ranges between 36 and 38 for Japan and the EU and is markedly lower only for the US where it accounts for a quarter. The lower share of manufacturing in US FDI outflows is partly counterbalanced by a larger propensity of American firms to invest abroad in the primary sector.

Surprisingly, the sectoral structure of FDI is far more similar among the three Triad members than the structure of trade. While services play an equally important role in Japan's outward FDI as in Europe and an even more important role than in the US, the share of services in Japan's trade is less than half of the corresponding levels in the US and in Europe. At the same time, manufactures dominate Japanese exports; at 87 per cent of total exports their share is 20 percentage points higher the corresponding share in US exports.

The data in table 9 permits the calculation of simple indicators in line with the concept of revealed comparative advantage (RCA). Basically, the RCA shows whether the share of a given product or sector in total exports of the country under review is more or less important than on the world average (see chapter V D for details). The same concept can be applied to FDI: are outflows of FDI in services from the EU, for instance, more important than the world average - or in this case than the Triad average? And how do the RCAs for FDI compare with those for trade? The simple ratio of the FDI and trade RCAs indicates whether the country has relied to an above-average degree on FDI (ratio > 1) or on trade (ratio < 1).



**Table 10: Revealed comparative advantages in exports and outward FDI of the Triad members by major sectors, 1992-93**

		EU intra	EU extra	Japan	USA	Sum (excl. EU-intra)
Primary sector	RCA FDI	0.35	0.14	0.89	1.70	1.00
	RCA-Exports	1.52	0.87	0.05	1.81	1.00
	RCA-FDI/RCA-Exports	0.23	0.17	19.56	0.94	1.00
Secondary sector	RCA FDI	1.01	1.21	1.12	0.79	1.00
	RCA-Exports	1.03	0.97	1.19	0.91	1.00
	RCA-FDI/RCA-Exports	0.98	1.24	0.95	0.87	1.00
Tertiary sector	RCA FDI	1.05	0.96	0.95	1.05	1.00
	RCA-Exports	0.84	1.10	0.56	1.17	1.00
	RCA-FDI/RCA-Exports	1.25	0.87	1.70	0.90	1.00

Source: Table 9

The results in table 10 on outward FDI and exports bring out a number of interesting points:

- The US had a comparative advantage in both FDI and exports in the tertiary sector. This comes out very clearly from chart 8, which suggests that the US have the characteristics of an export platform for services with net FDI inflows and a trade surplus.
- The EU had a comparative advantage in services exports, but not in outward FDI in services. Both the EU and the US, however, relied to a larger extent on exports than on FDI in the service sector, when compared with Japanese companies which employed FDI to a much larger extent than exports in their globalisation strategies of the services sector.
- In the manufacturing sector, Japan had the highest comparative advantage in exports and a clear advantage in industrial outward FDI over the Triad average (see also chart 7). The EU registered the highest RCA in industrial outward FDI and remained slightly below the average for industrial exports. EU manufacturing firms relied to a larger extent on FDI rather than trade when compared to Japan and the US. In contrast, the below-average RCAs for trade and FDI of the American manufacturing sector, as well as its export rather than FDI orientation pointed to its relative weakness in the early 1990s.
- US firms had a clear comparative advantage in the primary sector: not only were they the largest exporters and overseas investors in absolute terms, but they also had a distinct comparative advantage both in trade and FDI. The EU, on the other hand, was nearly absent as investor. The relative share of resource-dependent Japan in the primary sector was a multiple of its negligible exports of primary goods.
- The comparison of intra and extra EU trade and FDI points to substantial differences in their structures. In contrast to third-country relations, EU companies have relied on FDI rather than direct exports in the internationalisation of services within the Community. In the manufacturing sector, precisely the opposite holds true. Within the EU, direct exports have been slightly more important than FDI, although outward FDI was the preferred strategy vis-à-vis third countries.

## 2. FDI inflows and imports

The same questions can be asked on the inflow side: which sectors have been particularly attractive as targets for foreign suppliers of goods and foreign investors. The findings are shown in table 11.

**Table 11: Revealed comparative advantages in imports and inward FDI of the Triad members by major sectors, 1992-93**

		EU intra	EU extra	Japan	USA	Sum (excl. EU-intra)
Primary sector	RCA FDI	3.55	-97.82	0.00	70.81	1.00
	RCA-Imports	0.36	1.05	1.56	0.65	1.00
	RCA-FDI/RCA-Exports	9.78	-93.30	0.00	108.87	1.00
Secondary sector	RCA FDI	0.87	1.09	1.67	0.92	1.00
	RCA-Imports	1.18	0.96	0.77	1.17	1.00
	RCA-FDI/RCA-Exports	0.73	1.14	2.16	0.79	1.00
Tertiary sector	RCA FDI	1.08	0.89	0.62	1.08	1.00
	RCA-Imports	0.87	1.09	1.30	0.73	1.00
	RCA-FDI/RCA-Exports	1.24	0.82	0.48	1.48	1.00

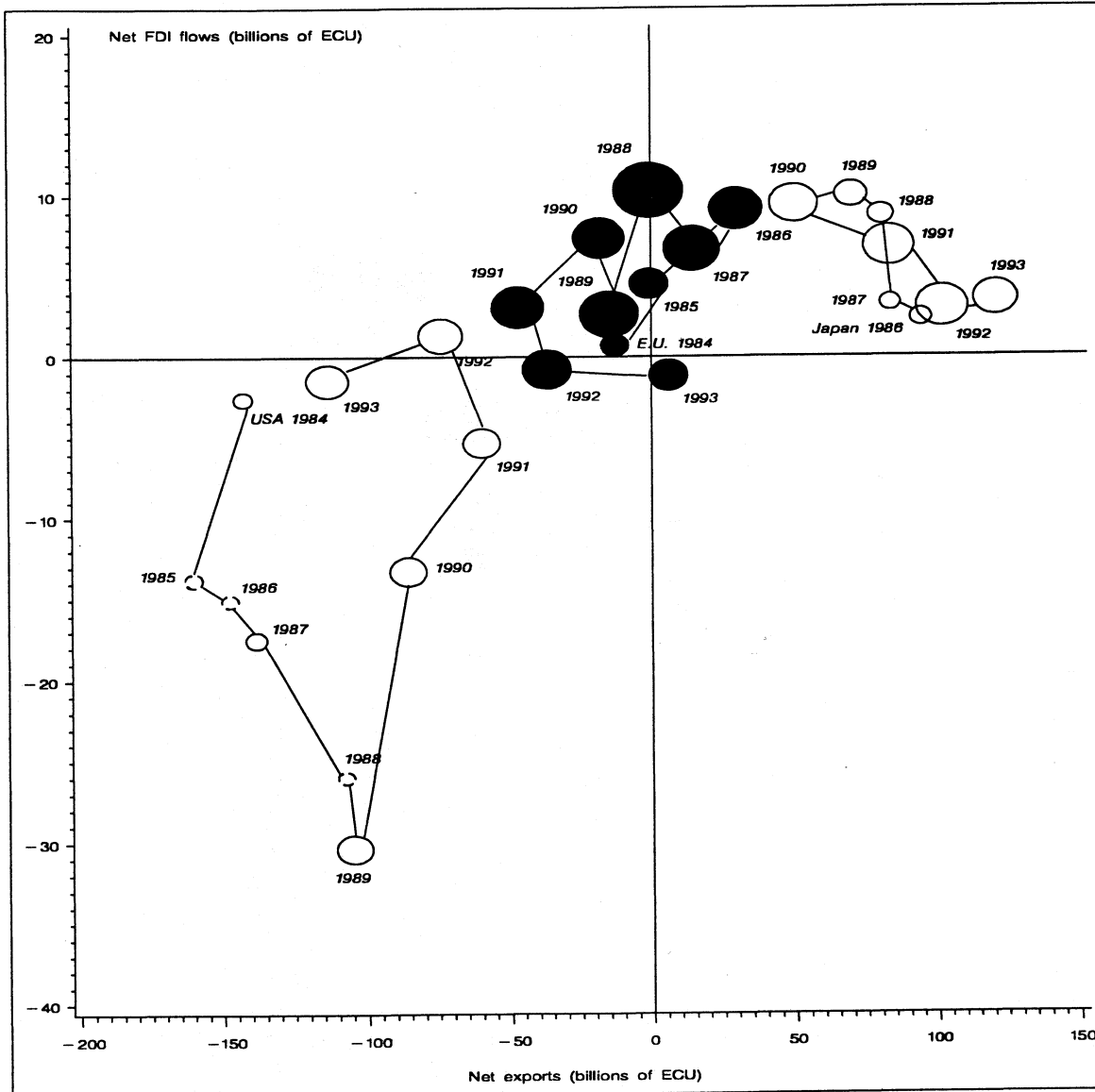
Source: Table 9

Highlights are:

- Again, there is a clear difference in the tertiary sector between the United States, on the one hand, and the EU and Japan, on the other. Foreign suppliers of services to the US have preferred the FDI route rather than direct exports, whereas the opposite held true for the EU and Japan. This tallies with the earlier observation that investing in Japan has been even more difficult than exporting to Japan.
- Also for the secondary sector, the situation of the EU and Japan are similar and contrast with that of the US. In the period under review, the US have received a below average share of industrial FDI, whereas imports of manufactures have been particularly important amounting to three quarters of all US imports compared to 61 per cent for the EU and half for Japan.
- Within the very limited FDI inflows into Japan, the manufacturing sector absorbed by far the largest part and - relatively speaking - significantly more than in the US and the EU. As a result, the inward FDI RCA to import RCA ratio in the secondary sector was above one. This should not distract from the fact that Japan's manufacturing sector absorbed only 2 per cent of inward industrial FDI of the Triad while importing 15 per cent of the Triads total industrial imports.
- In the primary sector, the RCA values are counter-intuitive as there has been a net disinvestment in the Triad over the period under review.
- Intra-EU delivery of services relied to a larger extent on inward FDI than on direct imports. This dovetails with the findings in table 10. The opposite held true for manufactures where companies showed a preference for direct exports rather than FDI in intra-EU trade.

**Chart 7: Globalisation chart of manufacturing sectors of Triad members**

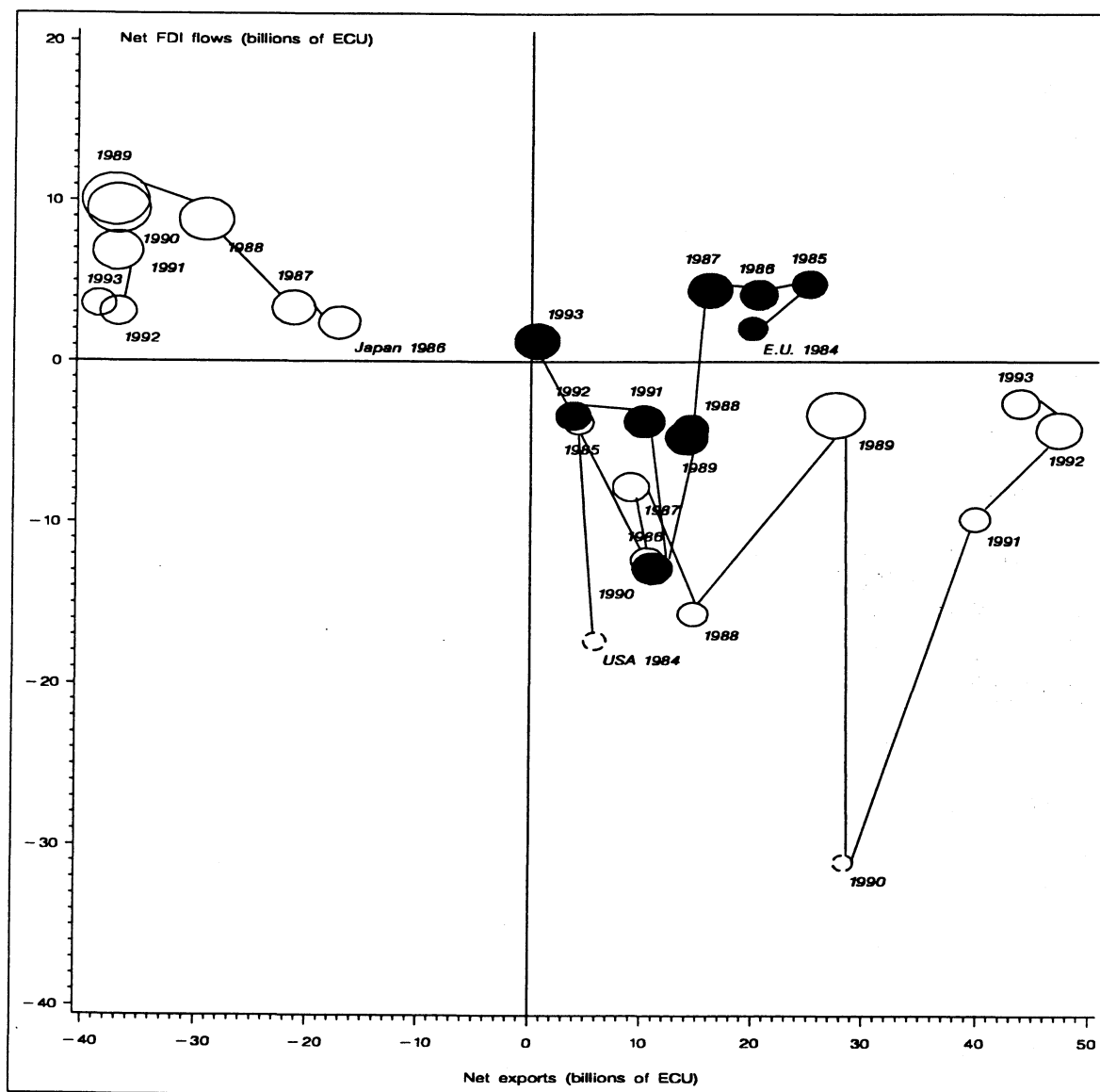
*in terms of net FDI, net exports and outward FDI flows  
(size of the circles), 1984 - 93*



Source: Primary data from EUROSTAT except for the proportion of Japanese manufacturing FDI in total Japanese FDI, which has been calculated on the basis of OECD data.

### Chart 8: Globalisation chart of services sectors of Triad members

*in terms of net FDI, net exports and outward FDI flows  
(size of the circles), 1984 - 93*



Source: Primary data from EUROSTAT except for the proportion of Japanese FDI in services in total Japanese FDI, which has been calculated on the basis of OECD data.

#### IV. Trade and FDI country profiles in the early 1990s

This chapter presents detailed trade and FDI profiles of the EU member countries as well as of Japan and the US. Each of these profiles consists of a short text summary on the nexus between trade and FDI and the six following charts and tables:

##### Trade and FDI by major sectors

**Chart 1:** a country-specific globalisation chart by major sectors (for explanations see section V H). *This chart does not include trade and FDI in services, as trade data on services were missing.*

**Table 1 A:** in addition to trade and FDI flows by sectors in terms of values, this table provides the following indicators:

- outward-FDI-to-export ratios (explained in section V C)
- revealed comparative advantages (RCA) for outward FDI (explained in section V D)
- revealed comparative advantages for exports (explained in section V D)
- ratios of the RCA in outward FDI and the RCA in exports (explained in section V D)
- inward-FDI-to-import ratios (explained in section V C)
- ratios of the RCA in inward FDI and the RCA in imports (explained in section V D)

**Table 1 B:** in addition to trade and FDI flows by sectors in terms of values, this table provides the following indicators:

- relative outward-FDI-to-export ratios (explained in section V C)
- intra-industry trade ratios (explained in section V E)
- intra-industry FDI ratios (explained in section V E)
- relation of intra-industry FDI ratios to intra-industry trade ratios (see section V E)
- relative inward-FDI-to-import ratio (explained in section V C)
- ratio of FDI outflows to FDI inflows

*In contrast to FDI data, trade data for services were not available.*

*Charts and tables do not distinguish between intra-EU and extra-EU trade and FDI.*

### Trade and FDI by partner countries

**Chart 2:** a country-specific globalisation chart by major partner country and region. This chart provides a graphical presentation of the trade and FDI relations with the most important partner countries both within the EU and outside the EU (see table 14 for the geographical classification). *In contrast to chart 1 above, this chart does include trade and FDI in services.*

**Table 2 A:** in addition to trade and FDI flows by partner countries in terms of values, this table provides the following indicators:

- outward-FDI-to-export ratios (explained in section V C)
- revealed comparative advantages (RCA) for outward FDI (explained in section V F)
- revealed comparative advantages for exports (explained in section V F)
- ratios of the RCA in outward FDI and the RCA in exports (explained in section V F)
- inward-FDI-to-import ratios (explained in section V C)
- ratios of the RCA in inward FDI and the RCA in imports (explained in section V F)

**Table 2 B:** in addition to trade and FDI flows by partner countries in terms of values, this table provides the following indicators:

- relative outward-FDI-to-export ratios (explained in section V C)
- intra-regional trade ratios (explained in section V G)
- intra-regional FDI ratios (explained in section V G)
- relation of intra-regional FDI ratios to intra-regional trade ratios (explained in section V G)
- relative inward-FDI-to-import ratio (explained in section V C)
- ratio of FDI outflows to FDI inflows

*The tables include FDI and trade data for the services sector.*

*All charts and tables allow to distinguish between transactions within the EU and those with third countries.*

All indicators are based on EUROSTAT data. While EUROSTAT provided FDI data for the primary, secondary and tertiary sectors, it was not possible to obtain data on trade in services broken down to the same categories as FDI in services. As a result, tables 1 A and B of the trade and investment profiles include FDI but not trade in services.<sup>10</sup> In contrast, Tables 2 A and B with details on the direction of trade and FDI, however, relate to FDI in trade *and* services.

<sup>10</sup> This uneven coverage has created some problems for indicators which refer to total trade and FDI. In turn, the sum of FDI in the first line (World) of table 1 A of the trade and investment profiles takes into account all FDI (including services). Hence, the FDI-to-trade ratios in the first line (World) tend to be overstated. For this reason, a second line (total without services) has been introduced, which indicates trade and FDI figures exclusive of services. For the sectoral breakdown FDI in services is not taken into account, either.

In contrast to the first three chapters of this study, which focuses on the comparison among the three members of the Triad, the trade and FDI profiles of the EU member countries in this chapter capture both intra-EU and extra-EU trade and FDI. This allows a better analysis of intra-EU versus extra-EU globalisation strategies.

## A. European Union

Over the three years under review, the EU registered both a trade and a FDI surplus. The manufacturing sector was the driving force behind the twin surplus (see chart 1 of the profile). The ratio of total outward FDI to exports in the manufacturing sector was in fact clearly higher than the corresponding ratio for Japan and slightly higher than that of the United States (see table 12). Taking into account, that more than 60 per cent of FDI and trade was intra-regional, it is clear that European companies have a tendency to respond to globalisation pressures by enhancing the division of labour through FDI within the EU rather than to third countries.

From a trade and FDI perspective, Europe's leading industries were the metal and mechanical and the chemical industry. The competitiveness of European metal and mechanical product producers may also be gathered from the low value of intra-industry FDI (see table 1 B of the trade and FDI profile).

However, on both the high- and low-technology ends of the industrial spectrum, namely in textiles and wood, on the one hand, and in information technology and machinery, on the other, the EU seems to have lost industrial leadership in terms of being a net importer of goods and investment.

**Table 12: FDI-to-trade ratios in the manufacturing sector, 1992-1994**

<i>Country</i>	<i>outward FDI to exports (%)</i>	<i>relative outward-FDI-to-export ratio</i>	<i>inward FDI to imports (%)</i>	<i>relative inward-FDI-to-import ratio</i>
EU 12	1.93	0.92	1.80	1.05
- Denmark	3.43	1.08	2.01	0.88
- France	2.02	0.84	1.60	1.10
- Germany	1.69	0.99	-0.08	1.19
- Greece	-0.33	1.08	0.81	0.98
- Ireland	4.43	1.03	0.37	0.37
- Italy	0.85	1.06	0.77	0.94
- Netherlands	5.00	1.04	1.25	1.00
- Portugal	0.78	1.00	1.62	0.96
- Spain	0.36	0.53	6.13	1.08
- United Kingdom	1.99	1.08	2.01	0.97
Japan	1.42	0.91	0.28	1.40
United States	1.91	1.08	2.73	1.11

*Source:* Trade and FDI data from EUROSTAT, for details see trade and investment profiles below, for the definition of relative FDI-to-trade ratios see section V C.

In the product group machinery and information technology, the EU's Revealed Comparative Advantage (with relation to the Triad as a whole) was only 0.63 for outward

FDI and 0.38 for exports. As far as inflows into this sector were concerned, the EU's suppliers relied to a larger extent on trade than on investment (see table 1 A of the profile).

EU producers of transport equipment, who produced a trade surplus of more than ECU 25 billion, made little use of outward FDI. They registered the lowest outward-FDI-to-export ratio of all industrial sub-sectors. Their outward FDI-to-trade ratio was only a quarter of the EU average (excluding services), as may be gathered from the relative FDI-O to export ratio of 0.23 in table 1 B of the trade and investment profile. This is surprising as transport equipment is the most typical example of a producer- rather than buyer-driven commodity chain for which FDI tends to have an above-average importance. Inflows into this sector were accordingly high, and Japan and the US had significantly higher RCAs in outward FDI and exports as well as a higher ratio of their RCAs in FDI over their RCAs in exports.

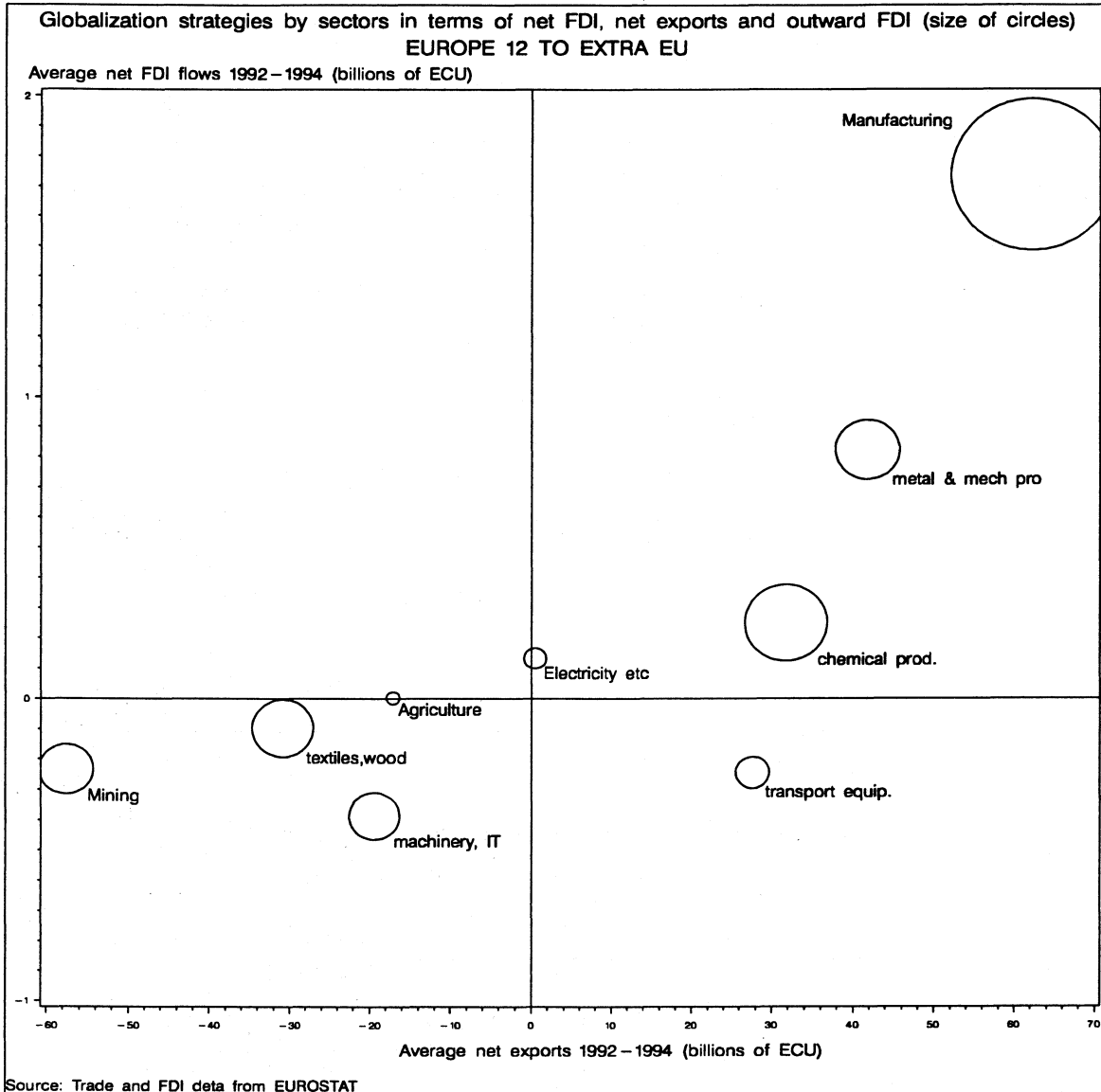
In geographical terms, the importance of intra-community FDI comes out clearly from the globalisation chart below (chart 2 of the profile), although the United States were the single most important target and source country for EU FDI. The EU's FDI-to-trade ratio with the US was twice as high as the average both for outflows and inflows. This underlines again the importance of FDI in transatlantic economic relations.

EU firms remained net exporters of goods and capital vis-à-vis Central and Eastern European countries, for which they had a clear comparative advantage over the other Triad members, and relied to an above-average extent on FDI (see table 2 A of the profile).

Japan hardly appeared on the EU's map of FDI: it was the only country listed in the table below, for which EU FDI outflows were actually negative from 1992 to 1994. On the inflow side, Japanese incoming FDI accounted for 8 per cent of extra-Community FDI as compared to Japan's 10 per cent share in extra-Community imports.



### Trade and FDI Profile: European Union - Chart 1



## Trade and FDI Profile: European Union - Table 1 A

Foreign direct investment and trade by sector EXTRA-EU 12

(Annual averages of FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD (incl. intra-EU trade & FDI)	59,522	1,194,682	4.98	1.00	1.00	1.00	50,547	1,191,808	4.24	1.00
TOTAL excl. services and intra-EU relations	10,152	484,080	2.10	1.00	1.00	1.00	8,515	496,137	1.72	1.00
Agriculture and fishing	59	7,853	0.75	0.84	0.61	1.38	57	24,992	0.23	2.08
Mining and quarrying	943	9,041	10.43	0.69	1.50	0.46	1,176	66,611	1.77	2.07
Manufacturing	8,989	466,037	1.93	1.04	1.00	1.04	7,253	403,841	1.80	0.90
- Textiles and wood activities	1,274	48,317	2.64	1.85	1.35	1.37	1,372	79,172	1.73	2.15
- Petroleum, chemical, rubber, plastic	2,233	91,674	2.44	2.00	1.25	1.60	1,984	59,968	3.31	2.13
- Metal & mech. products	1,377	116,348	1.18	1.33	1.14	1.17	555	74,596	0.74	0.62
- Machinery, computers, RTC, communications	844	52,912	1.59	0.90	0.58	1.55	1,231	72,344	1.70	0.77
- Vehicles and other transport equipment	378	78,797	0.48	0.56	0.80	0.70	623	51,196	1.22	2.87
Electricity, gas and water	160	1,149	13.95	2.28	2.26	1.01	28	694	4.04	1.86
Construction	306	n.a.		1.56			212	n.a.		
Trade and repairs	657	n.a.		0.35			2,097	n.a.		
Hotels and restaurants	317	n.a.		2.28			201	n.a.		
Transport & communication	-50	n.a.		-0.16			520	n.a.		
- Land sea and air transport	-157	n.a.		-2.23			54	n.a.		
Financial intermediation	6,883	n.a.		0.92			4,805	n.a.		
- other financial intermediation	1,742	n.a.		2.28			629	n.a.		

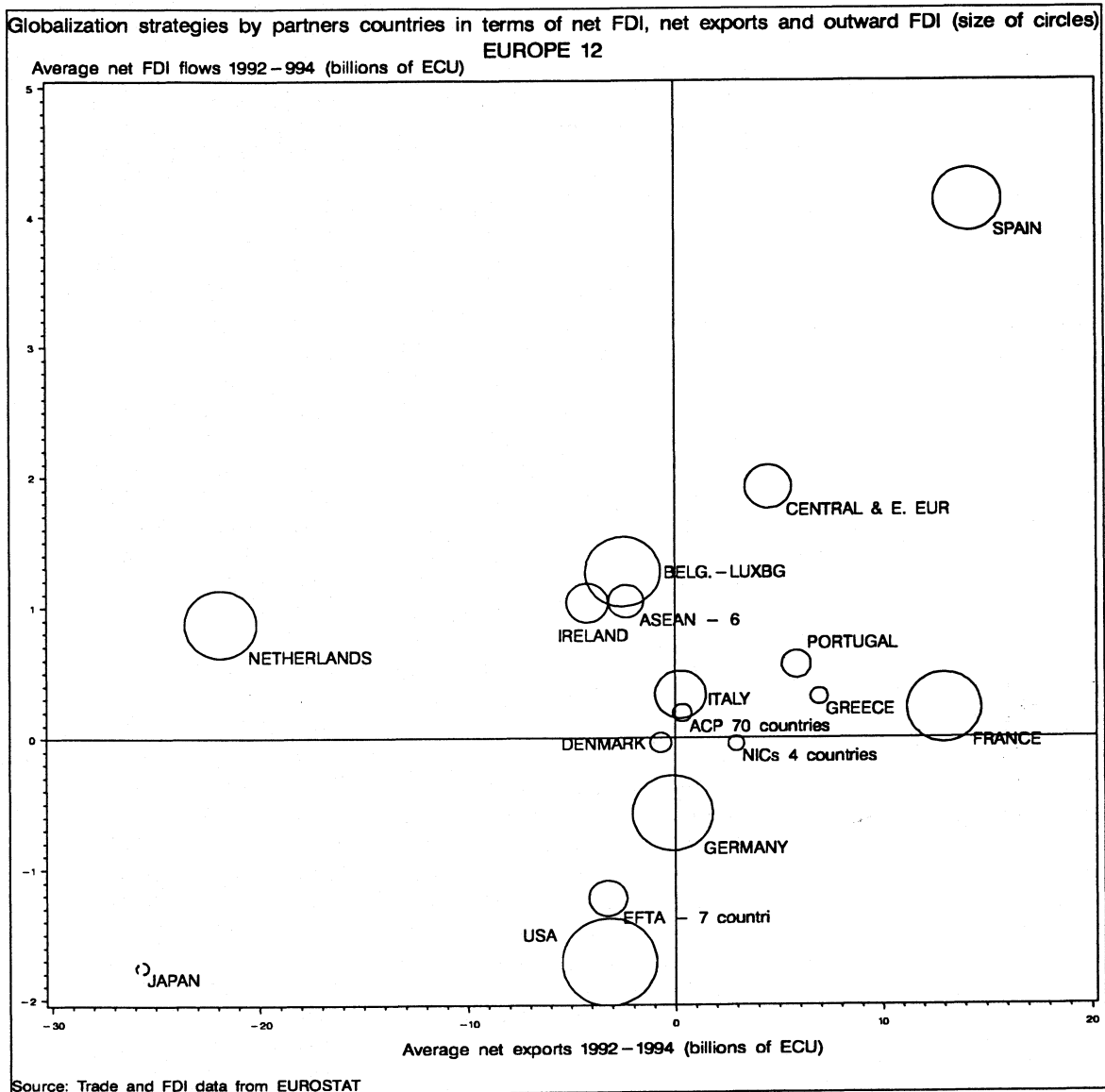
## Trade and FDI Profile: European Union - Table 1 B

Foreign direct investment and trade by sectors EXTRA-EU 12

(Annual averages of FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- industry trade ratio	Intra- industry FDI ratio	Relation intra- industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	59	7,853	0.36	0.48	0.99	2.06	57	24,992	0.13	1.03
Mining and quarrying	943	9,041	4.98	0.24	0.89	3.72	1,176	66,611	1.03	0.80
Manufacturing	8,989	466,037	0.92	0.93	0.89	0.96	7,253	403,841	1.05	1.24
- Textiles and wood activities	1,274	48,317	1.26	0.76	0.96	1.27	1,372	79,172	1.01	0.93
- Petroleum, chemical, rubber, plastic	2,233	91,674	1.16	0.79	0.94	1.19	1,984	59,968	1.93	1.13
- Metal and mechanical products	1,377	116,348	0.56	0.78	0.57	0.74	555	74,596	0.43	2.48
- Machinery, computers, RTC, communications	844	52,912	0.76	0.84	0.81	0.96	1,231	72,344	0.99	0.69
- Vehicles and other transport equipment	378	78,797	0.23	0.79	0.76	0.96	623	51,196	0.71	0.61
Electricity, gas and water	160	1,149	6.65	0.75	0.30	0.39	28	694	2.35	5.73
Construction	306	n.a.			0.82		212	n.a.		1.44
Trade and repairs	657	n.a.			0.48		2,097	n.a.		0.31
Hotels and restaurants	317	n.a.			0.78		201	n.a.		1.58
Transport and communication	-50	n.a.			0.00		520	n.a.		-0.10
- Land sea and air transport	-157	n.a.			0.00		54	n.a.		-2.93
Financial intermediation	6,883	n.a.			0.82		4,805	n.a.		1.43
- other financial intermediation	1,742	n.a.			0.53		629	n.a.		2.77

### Trade and FDI Profile: European Union - Chart 2



## Trade and FDI Profile: European Union - Table 2 A

### Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	59,522	1,194,682	4.98	1.00	1.00	1.00	50,547	1,191,808	4.24	1.00
EU - 12 countries	36,935	709,501	5.21	1.18	1.33	0.89	29,746	687,318	4.33	0.80
France	5,236	127,504	4.11	1.18	1.40	0.85	5,010	114,528	4.37	0.73
Belg.-Luxbg	5,265	72,865	7.23	1.28	1.35	0.95	3,995	75,356	5.30	1.02
Netherlands	4,908	70,640	6.95	1.71	1.26	1.36	4,032	92,488	4.36	0.85
Germany	6,058	164,532	3.68	1.17	1.32	0.89	6,632	164,654	4.03	0.76
Italy	2,458	76,674	3.21	1.24	1.41	0.88	2,128	76,415	2.79	1.06
Utd. Kingdom	5,183	90,757	5.71	0.73	1.18	0.62	4,930	79,421	6.21	0.68
Ireland	1,652	12,587	13.13	1.51	1.22	1.24	621	16,779	3.70	0.58
Denmark	423	14,843	2.85	1.39	1.41	0.99	460	15,531	2.96	0.69
Greece	291	11,232	2.59	1.50	1.40	1.07	-23	4,304	-0.54	1.18
Portugal	796	16,151	4.93	1.57	1.44	1.09	236	10,309	2.29	1.16
Spain	4,341	51,714	8.39	1.45	1.41	1.03	217	37,533	0.58	1.88
Extra Europe 12	22,586	485,182	4.66	0.80	0.74	1.09	20,802	504,490	4.12	1.21
EFTA - 7 countries	1,375	111,298	1.24	0.91	1.38	0.66	2,599	114,528	2.27	0.65
OECD	50,767	946,668	5.36	1.08	1.20	0.90	42,974	951,239	4.52	0.81
Central & E. Europe	2,050	34,887	5.88	1.60	1.47	1.09	133	30,378	0.44	1.14
NAFTA	7,969	99,450	8.01	1.28	0.50	2.57	8,372	98,981	8.46	2.33
ASEAN - 6	1,157	23,379	4.95	1.21	0.42	2.89	115	25,710	0.45	3.74
ACP 70 countries	340	17,533	1.94	1.60	0.97	1.65	149	17,187	0.87	1.99
NICs 4 countries	238	34,179	0.70	0.34	0.37	0.92	284	31,234	0.91	1.27
Mediterranean	720	44,861	1.60	1.60	1.20	1.34	189	36,528	0.52	1.32
CIS 11 countries	280	12,526	2.23	1.60	1.19	1.35	20	16,056	0.12	1.36
North Africa -6	125	18,806	0.67	1.60	1.25	1.28	45	21,225	0.21	1.19
Other African	271	21,218	1.28	1.60	1.12	1.43	113	23,300	0.48	1.66
Central America	1,656	13,220	12.53	0.49	0.31	1.60	1,496	6,445	23.21	2.25
South America	1,514	16,044	9.43	0.84	0.62	1.35	100	20,412	0.49	-1.73
Near & Middle East	175	37,243	0.47	0.81	0.97	0.83	770	22,956	3.36	2.05
Other Asian	1,732	70,172	2.47	0.40	0.49	0.81	2,156	104,136	2.07	1.06
Australia, Oceania	413	9,419	4.38	1.10	0.58	1.91	607	6,449	9.41	1.37
Iceland	8	624	1.23	1.60	1.30	1.24	5	879	0.57	1.46
Norway	505	10,386	4.86	0.77	1.30	0.60	275	18,001	1.53	0.69
Sweden	2,589	22,100	11.72	1.45	1.37	1.06	126	25,024	0.50	0.13
Finland	130	7,500	1.73	1.16	1.33	0.87	613	11,053	5.55	0.89
Switzerland	818	40,296	2.03	1.01	1.35	0.75	2,183	36,333	6.01	0.65
Austria	614	30,391	2.02	0.57	1.46	0.39	651	23,237	2.80	0.44
USA	8,413	84,510	9.95	0.94	0.77	1.22	10,128	87,688	11.55	1.52
Japan	-172	23,270	-0.74	-0.58	0.58	-1.00	1,580	48,953	3.23	0.61

**Trade and FDI Profile: European Union - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio (third- country FDI and trade)	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio (third- country FDI and trade)	Ratio: FDI outflow / FDI inflow
WORLD	59,522	1,194,682		1.00	0.92	0.92	50,547	1,191,808		1.18
EU - 12 countries	36,935	709,501		0.98	0.89	0.91	29,746	687,318		1.24
Germany	6,058	164,532		1.00	0.95	0.96	6,632	164,654		0.91
Denmark	423	14,843		0.98	0.96	0.98	460	15,531		0.92
Spain	4,341	51,714		0.84	0.10	0.11	217	37,533		20.00
Belg.-Luxbg	5,265	72,865		0.98	0.86	0.88	3,995	75,356		1.32
France	5,236	127,504		0.95	0.98	1.03	5,010	114,528		1.05
Utd. Kingdom	5,183	90,757		0.93	0.97	1.04	4,930	79,421		1.05
Greece	291	11,232		0.55	0.00	0.00	-23	4,304		-12.49
Ireland	1,652	12,587		0.86	0.55	0.64	621	16,779		2.66
Italy	2,458	76,674		1.00	0.93	0.93	2,128	76,415		1.16
Netherlands	4,908	70,640		0.87	0.90	1.04	4,032	92,488		1.22
Portugal	796	16,151		0.78	0.46	0.59	236	10,309		3.37
Extra Europe 12	22,586	485,182	1.00	0.98	0.96	0.98	20,802	504,490	1.00	1.09
EFTA - 7 countries	1,375	111,298	0.27	0.99	0.69	0.70	2,599	114,528	0.55	0.53
OECD	50,767	946,668	1.15	1.00	0.92	0.92	42,974	951,239	1.10	1.18
Central & E. Europe	2,050	34,887	1.26	0.93	0.12	0.13	133	30,378	0.11	15.41
NAFTA	7,969	99,450	1.72	1.00	0.98	0.98	8,372	98,981	2.05	0.95
ASEAN - 6	1,157	23,379	1.06	0.95	0.18	0.19	115	25,710	0.11	10.06
ACP 70 countries	340	17,533	0.42	0.99	0.61	0.62	149	17,187	0.21	2.28
NICs 4 countries	238	34,179	0.15	0.95	0.91	0.96	284	31,234	0.22	0.84
Mediterranean	720	44,861	0.34	0.90	0.42	0.46	189	36,528	0.13	3.80
CIS 11 countries	280	12,526	0.48	0.88	0.13	0.15	20	16,056	0.03	14.22
North Africa -6	125	18,806	0.14	0.94	0.53	0.56	45	21,225	0.05	2.81
Other African	271	21,218	0.27	0.95	0.59	0.62	113	23,300	0.12	2.41
Central America	1,656	13,220	2.69	0.66	0.95	1.45	1,496	6,445	5.63	1.11
South America	1,514	16,044	2.03	0.88	0.12	0.14	100	20,412	0.12	15.14
Near & Middle East	175	37,243	0.10	0.76	0.37	0.49	770	22,956	0.81	0.23
Other Asian	1,732	70,172	0.53	0.81	0.89	1.11	2,156	104,136	0.50	0.80
Australia, Oceania	413	9,419	0.94	0.81	0.81	1.00	607	6,449	2.28	0.68
Iceland	8	624	0.26	0.83	0.79	0.95	5	879	0.14	1.53
Norway	505	10,386	1.04	0.73	0.71	0.96	275	18,001	0.37	1.83
Finland	130	7,500	0.37	0.81	0.35	0.43	613	11,053	1.34	0.21
Switzerland	818	40,296	0.44	0.95	0.55	0.57	2,183	36,333	1.46	0.37
Austria	614	30,391	0.43	0.87	0.97	1.12	651	23,237	0.68	0.94
Sweden	2,589	22,100	2.52	0.94	0.09	0.10	126	25,024	0.12	20.60
USA	8,413	84,510	2.14	0.98	0.91	0.92	10,128	87,688	2.80	0.83
Japan	-172	23,270	-0.16	0.64	0.00	0.00	1,580	48,953	0.78	-0.11

## 1. Belgium-Luxembourg

The aggregated data suggests that Belgium/Luxembourg has attracted twice as much inward investment as it has invested abroad over the early 1990s. In addition, there was considerable disinvestment in more than a dozen of the partner countries and regions. Both points are likely to be related to Luxembourg's financial sector. Unfortunately, no sectoral breakdown of FDI is available (for this reason, chart 1 and tables 1 A and B are missing). Without such a breakdown, it is impossible to obtain any clear picture of the role of FDI in globalisation patterns of the two countries.

Belgium's and Luxembourg's largest FDI partner is Germany, followed by France, the Netherlands, the US and Sweden. Surprisingly, these partners can be found in each of the four quadrants of the globalisation chart.

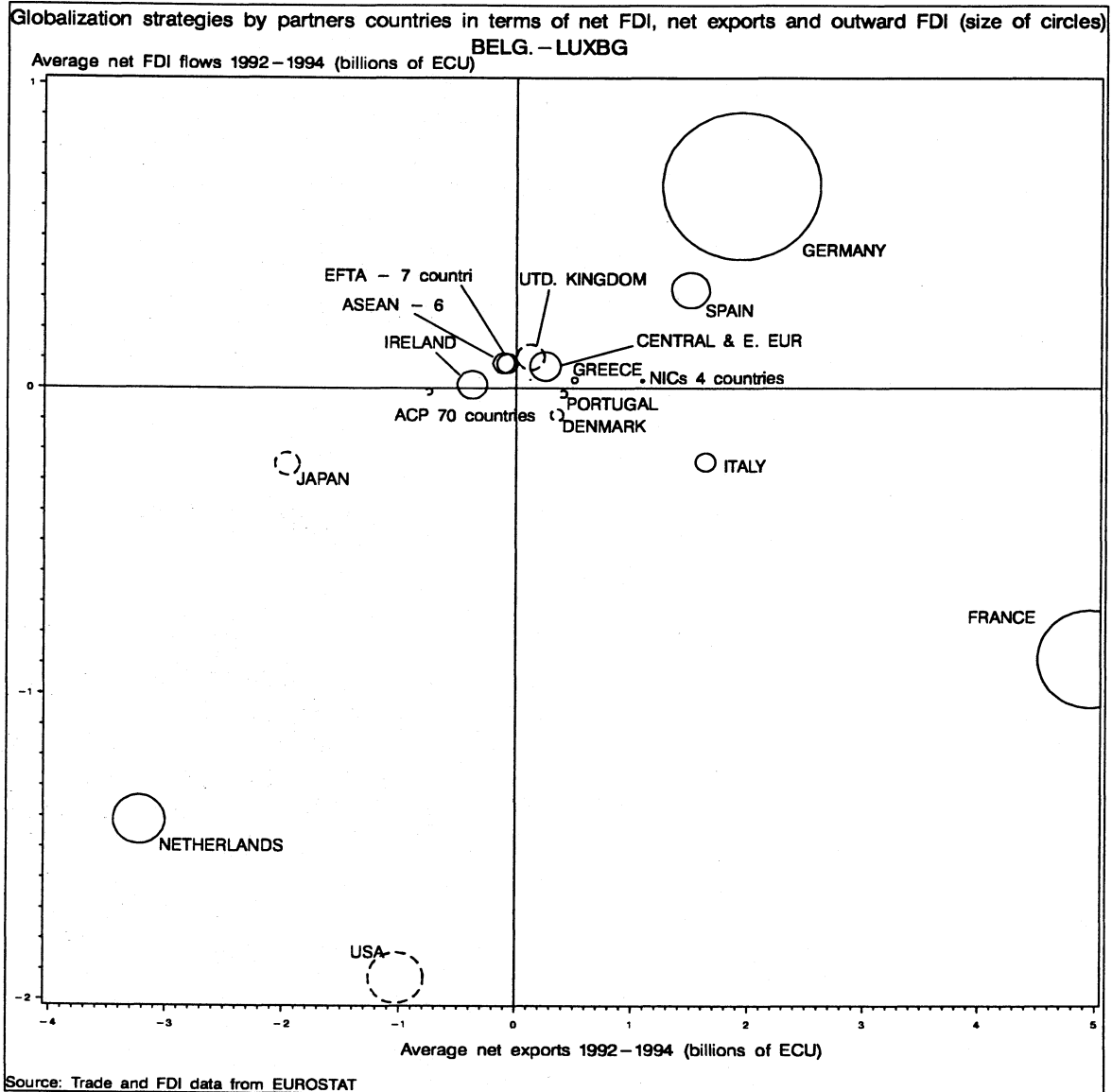
The data suggests that Belgium/Luxembourg has been a leading investor in Germany with average annual FDI outflows of ECU 2.5 billion in the early 1990s. This would have represented 71 per cent of total recorded German FDI inflows over the same period, although the inflows from Belgium/Luxembourg recorded by Germany were only at ECU 0.5 billion. Unless there is a very special background to these orders of magnitude, possibly related to Luxembourg as a financial centre, these results do not make sense and warrant further verification. In addition to its reported net FDI surplus, Belgium/Luxembourg recorded a significant trade surplus with Germany of nearly ECU 2 billion.

Similarly, investment in Sweden appears very high with an average of ECU 0.7 billion in the early 1990s. The FDI-to-trade-ratio of Belgium/Luxembourg was as high as 0.54. In contrast to its relations with Germany, Belgium/Luxembourg registered a pronounced trade deficit with Sweden.

The Netherlands and the United States were in the third quadrant of the globalisation chart of Belgium and Luxembourg. Belgium/Luxembourg attracted significant net FDI from these two countries, which - in the case of the US - even exceeded the trade deficit.

For French traders and investors, Belgium/Luxembourg may have served as a type of export platform (fourth quadrant): they invested a net annual average of ECU 0.9 billion into the two countries and ran a trade deficit of around ECU 5 billion, which was nearly as high as the world's total trade deficit with Belgium/Luxembourg. Without details on the sectoral breakdown and the role Luxembourg as a financial market, however, these findings remain very tentative.

## Trade and FDI Profile: Belgium/Luxembourg - Chart 2



## Trade and FDI Profile: Belgium/Luxembourg - Table 2 A

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	4,434	106,115	4.18	1.00	1.00	1.00	10,673	100,694	10.60	1.00
EU - 12 countries	4,072	77,785	5.23	1.75	1.64	1.07	5,586	70,013	7.98	0.59
France	1,087	20,520	5.30	3.30	2.53	1.30	1,972	15,566	12.67	0.84
Netherlands	271	14,012	1.94	1.27	2.81	0.45	1,683	17,235	9.76	0.76
Germany	2,537	22,836	11.11	6.58	2.06	3.19	1,873	20,905	8.96	0.68
Italy	40	5,832	0.68	0.27	1.20	0.22	281	4,213	6.67	1.01
Utd. Kingdom	-80	8,648	-0.93	-0.15	1.26	-0.12	-183	8,527	-2.14	-0.09
Ireland	90	391	23.03	1.11	0.43	2.60	78	773	10.09	0.63
Denmark	-17	967	-1.79	-0.77	1.03	-0.74	70	615	11.34	1.06
Greece	4	627	0.64	0.28	0.88	0.32	-24	125	-18.92	16.44
Portugal	-7	880	-0.80	-0.19	0.89	-0.21	12	473	2.46	0.50
Spain	146	3,074	4.76	0.66	0.94	0.70	-176	1,580	-11.12	-14.47
Extra Europe 12	362	28,330	1.28	0.17	0.48	0.36	2,733	30,682	8.91	1.05
EFTA - 7 countries	44	5,758	0.77	0.39	0.80	0.49	-37	5,837	-0.63	-0.07
OECD	4,290	90,453	4.74	1.23	1.29	0.95	7,910	85,607	9.24	0.67
Central & E. Europe	96	1,436	6.71	1.01	0.68	1.49	24	1,099	2.18	2.28
NAFTA	-150	5,464	-2.75	-0.32	0.31	-1.05	2,217	6,621	33.48	3.69
ASEAN - 6	47	1,357	3.46	0.66	0.27	2.41	-35	1,464	-2.41	-8.08
ACP 70 countries	-6	1,084	-0.52	-0.36	0.68	-0.53	5	1,797	0.28	0.25
NICs 4 countries	-1	2,117	-0.06	-0.03	0.26	-0.10	-26	1,033	-2.52	-1.41
Mediterranean	-26	3,961	-0.65	-0.77	1.19	-0.65	12	1,931	0.62	0.63
CIS 11 countries	20	549	3.58	1.51	0.59	2.59	2	1,086	0.15	0.68
North Africa -6	-46	1,009	-4.56	-7.90	0.75	-10.48	-1	1,046	-0.13	-0.29
Other African	-14	1,374	-1.02	-1.11	0.82	-1.36	4	2,312	0.19	0.26
Central America	171	459	37.23	0.68	0.12	5.66	656	541	121.18	4.69
South America	-45	679	-6.63	-0.34	0.30	-1.14	13	1,291	0.98	-1.38
Near & Middle East	-13	3,675	-0.35	-0.81	1.08	-0.75	8	849	0.90	0.22
Other Asian	-17	5,264	-0.32	-0.05	0.41	-0.13	167	6,361	2.62	0.54
Australia, Oceania	-63	414	-15.20	-2.25	0.28	-7.90	-8	505	-1.52	-0.09
Iceland	2	20	11.61	6.55	0.47	13.96	1	24	5.61	5.79
Norway	-42	482	-8.64	-0.86	0.68	-1.26	-24	707	-3.44	-0.62
Sweden	749	1,382	54.18	5.63	0.96	5.85	-100	2,419	-4.13	-0.42
Finland	-28	458	-6.04	-3.32	0.91	-3.64	142	561	25.26	1.62
Switzerland	84	2,201	3.80	1.39	0.83	1.66	-13	1,468	-0.91	-0.04
Austria	-59	1,215	-4.85	-0.73	0.66	-1.11	-7	657	-1.01	-0.06
USA	-307	4,800	-6.40	-0.46	0.49	-0.94	1,619	5,826	27.79	1.46
Japan	-63	1,230	-5.12	-2.83	0.34	-8.22	185	3,193	5.79	0.44



**Trade and FDI Profile: Belgium/Luxembourg - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	4,434	106,115	1.00	0.97	0.70	0.71	8,319	100,694	1.00	0.53
EU - 12 countries	4,072	77,785	1.25	0.95	0.84	0.89	5,586	70,013	0.97	0.73
France	1,087	20,520	1.27	0.86	0.71	0.82	1,972	15,566	1.53	0.55
Netherlands	271	14,012	0.46	0.90	0.28	0.31	1,683	17,235	1.18	0.16
Germany	2,537	22,836	2.66	0.96	0.85	0.89	1,873	20,905	1.08	1.35
Italy	40	5,832	0.16	0.84	0.25	0.29	281	4,213	0.81	0.14
Utd. Kingdom	-80	8,648	-0.22	0.99	0.00	0.00	-183	8,527	-0.26	0.44
Ireland	90	391	5.51	0.67	0.93	1.38	78	773	1.22	1.15
Denmark	-17	967	-0.43	0.78	0.00	0.00	70	615	1.37	-0.25
Greece	4	627	0.15	0.33	0.00	0.00	-24	125	-2.29	-0.17
Portugal	-7	880	-0.19	0.70	0.00	0.00	12	473	0.30	-0.60
Spain	146	3,074	1.14	0.68	0.00	0.00	-176	1,580	-1.35	-0.83
Extra Europe 12	362	28,330	0.31	0.96	0.23	0.24	2,733	30,682	1.08	0.13
EFTA - 7 countries	44	5,758	0.18	0.99	0.00	0.00	-37	5,837	-0.08	-1.21
OECD	4,290	90,453	1.14	0.97	0.70	0.72	7,910	85,607	1.12	0.54
Central & E. Europe	96	1,436	1.61	0.87	0.40	0.46	24	1,099	0.26	4.01
NAFTA	-150	5,464	-0.66	0.90	0.00	0.00	2,217	6,621	4.05	-0.07
ASEAN - 6	47	1,357	0.83	0.96	0.00	0.00	-35	1,464	-0.29	-1.33
ACP 70 countries	-6	1,084	-0.13	0.75	0.00	0.00	5	1,797	0.03	-1.13
NICs 4 countries	-1	2,117	-0.02	0.66	0.00	0.00	-26	1,033	-0.30	0.05
Mediterranean	-26	3,961	-0.16	0.66	0.00	0.00	12	1,931	0.08	-2.14
CIS 11 countries	20	549	0.86	0.67	0.16	0.23	2	1,086	0.02	11.80
North Africa -6	-46	1,009	-1.09	0.98	0.00	0.00	-1	1,046	-0.02	34.50
Other African	-14	1,374	-0.24	0.75	0.00	0.00	4	2,312	0.02	-3.23
Central America	171	459	8.91	0.92	0.41	0.45	656	541	14.67	0.26
South America	-45	679	-1.59	0.69	0.00	0.00	13	1,291	0.12	-3.55
Near & Middle East	-13	3,675	-0.08	0.38	0.00	0.00	8	849	0.11	-1.70
Other Asian	-17	5,264	-0.08	0.91	0.00	0.00	167	6,361	0.32	-0.10
Australia, Oceania	-63	414	-3.64	0.90	0.00	0.00	-8	505	-0.18	8.22
Iceland	2	20	2.78	0.92	0.73	0.79	1	24	0.68	1.75
Norway	-42	482	-2.07	0.81	0.00	0.00	-24	707	-0.42	1.71
Sweden	749	1,382	12.97	0.73	0.00	0.00	-100	2,419	-0.50	-7.49
Finland	-28	458	-1.45	0.90	0.00	0.00	142	561	3.06	-0.20
Switzerland	84	2,201	0.91	0.80	0.00	0.00	-13	1,468	-0.11	-6.28
Austria	-59	1,215	-1.16	0.70	0.00	0.00	-7	657	-0.12	8.85
USA	-307	4,800	-1.53	0.90	0.00	0.00	1,619	5,826	3.36	-0.19
Japan	-63	1,230	-1.23	0.56	0.00	0.00	185	3,193	0.70	-0.34

## 2. Denmark

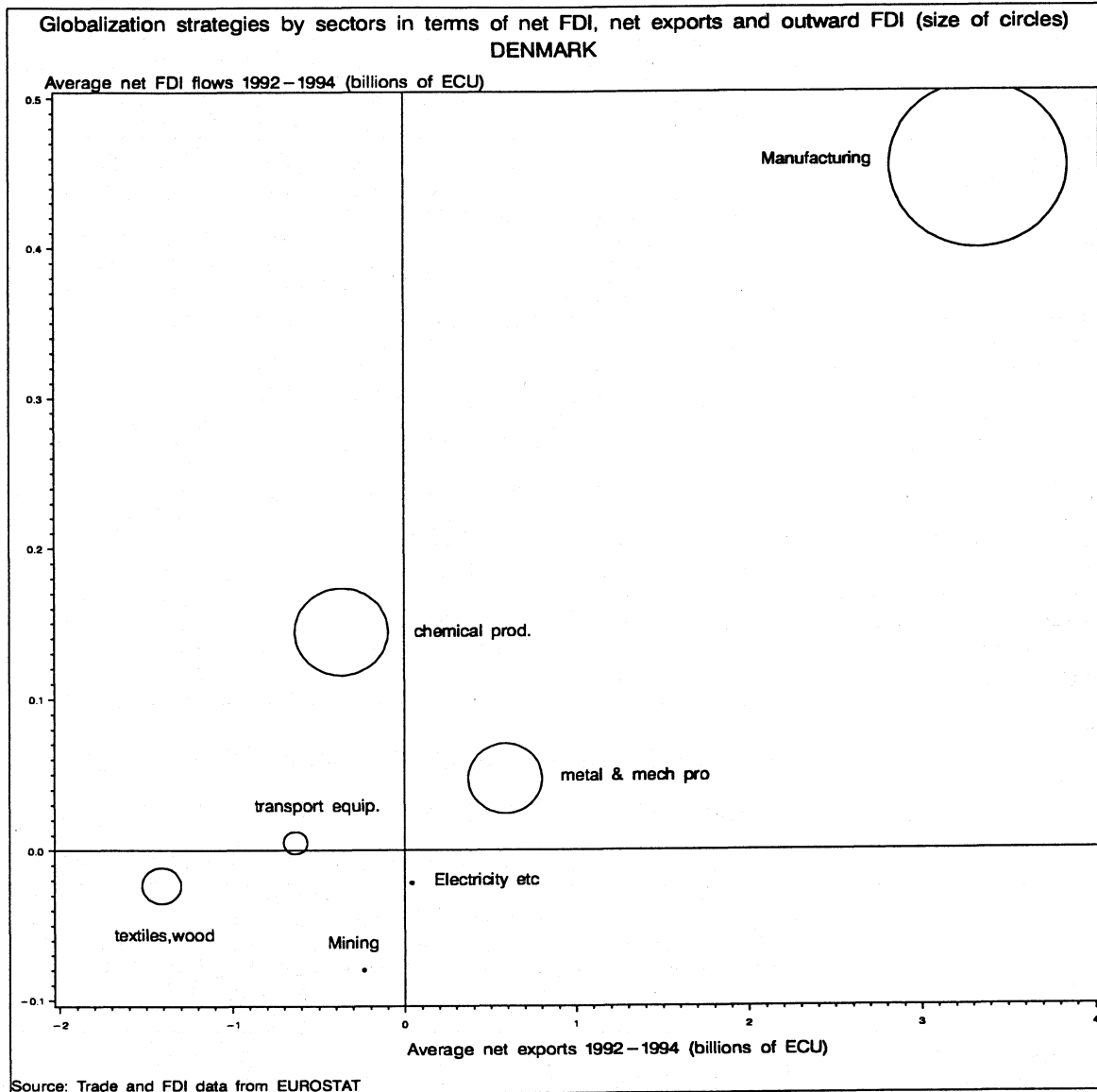
FDI was particularly important for Denmark's services sector: more than half of outflows and more than 70 per cent of inflows were related to the services sector.

Denmark's manufacturing sector has been a net exporter of goods and FDI to the rest of the world. However, among the five industrial subsectors, only metal and mechanical products were in the first quadrant of the globalisation chart with an average outward investment of ECU 219 m over the early 1990s and an export surplus of ECU 0.5 billion. Internationalisation in this sector relied to an above-average extent on FDI (comparatively high outward-FDI-to-export ratio), and while intra-industry trade was important, intra-industry FDI was relatively low.

In contrast, the chemical product group and transport equipment combined trade deficits with outflows of FDI. Denmark's machinery sector has absorbed both significant FDI inflows - a quarter of all inflows into manufacturing - and registered a trade deficit of a billion of ECUs. Internationalisation in agriculture relied nearly exclusively on trade.

Denmark was different from the EU in one major aspect: its relations within the EU were less FDI intensive than those with third countries. This was largely influenced by significant Danish investment to the United States and its Nordic neighbours Sweden, Norway and Finland. Within the EU, Danish firms have relied on FDI rather than trade in particular in relation to Spain and Ireland.

### Trade and FDI Profile: Denmark - Chart 1



## Trade and FDI Profile: Denmark - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	2,047	31,703	6.46	1.00	1.00	1.00	2,113	26,938	7.84	1.00
TOTAL without services	935	29,527	3.17	1.00	1.00	1.00	594	25,909	2.29	1.00
Agriculture and fishing	0	1,639	0.00	0.00	2.09	0.00	12	1,151	1.01	6.89
Mining and quarrying	0	522	0.06	0.00	1.42	0.00	80	768	10.42	9.17
Manufacturing	934	27,269	3.43	1.17	0.96	1.22	480	23,934	2.01	0.75
- Textiles and wood activities	45	2,815	1.59	0.70	1.29	0.55	68	4,226	1.61	1.50
- Petroleum, chemical, rubber, plastic	257	4,182	6.15	2.50	0.93	2.67	112	4,546	2.47	1.19
- Metal and mechanical products	164	5,549	2.96	1.73	0.89	1.94	117	4,963	2.35	1.47
- Machinery, computers, RTC, communications	0	2,111	0.00	0.00	0.38	0.00	58	3,149	1.84	0.63
- Vehicles and other transport equipment	11	1,916	0.59	0.18	0.32	0.57	8	2,550	0.31	0.55
Electricity, gas and water	0	98	0.34	0.05	3.17	0.02	22	57	38.81	13.38
Construction	12	n.a.	0.64				41	n.a.		
Trade and repairs	166	n.a.	0.96				523	n.a.		
Hotels and restaurants	131	n.a.	10.27				172	n.a.		
Transport and communication	32	n.a.	1.10				15	n.a.		
- Land sea and air transport	0	n.a.	0.00				0	n.a.		
Financial intermediation	708	n.a.	1.03				669	n.a.		
- other financial intermediation	599	n.a.	8.52				685	n.a.		

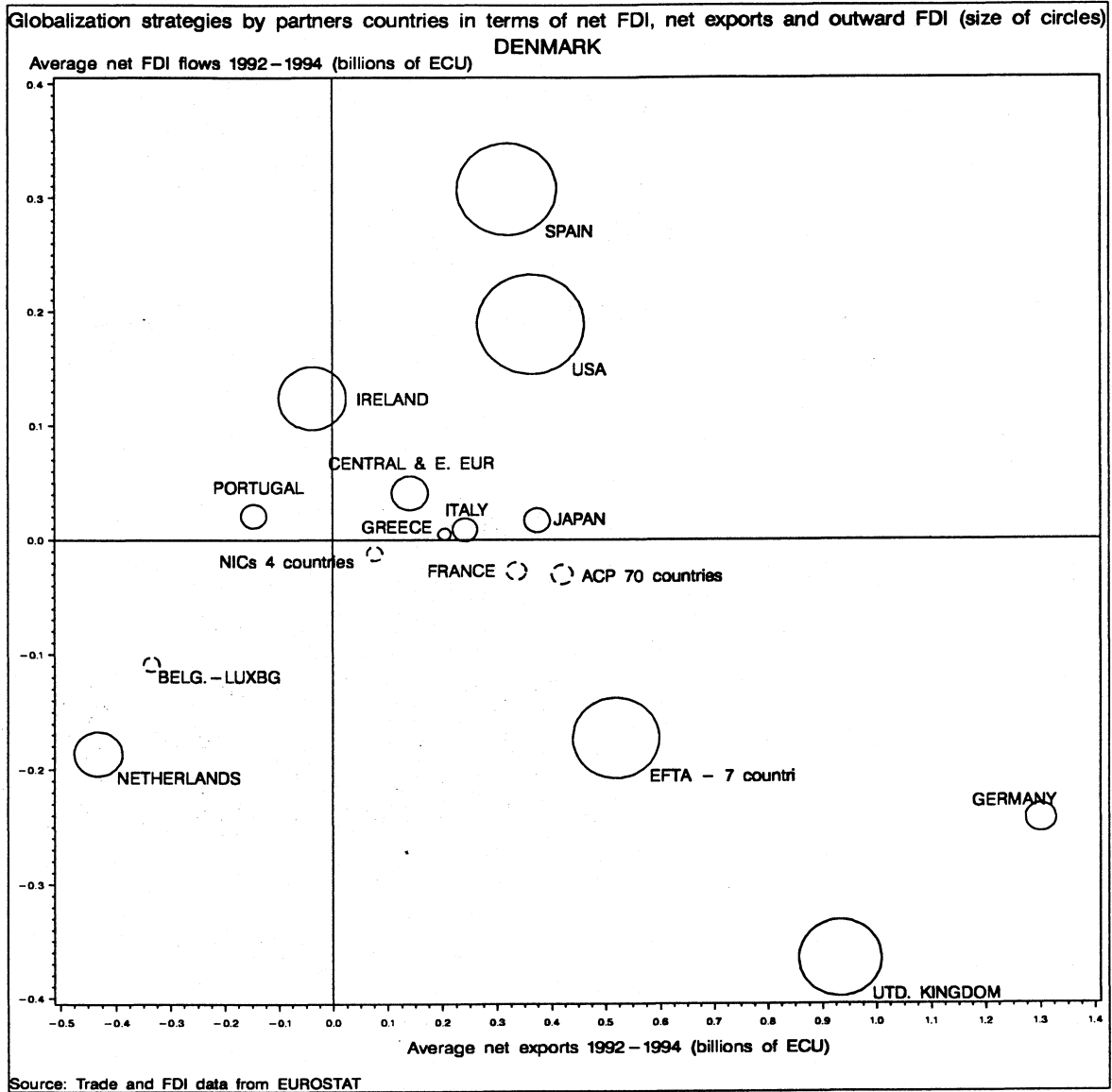
## Trade and FDI Profile: Denmark - Table 1 B

Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	0	1,639	0.00	0.83	0.00	0.00	12	1,151	0.44	0.00
Mining and quarrying	0	522	0.02	0.81	0.01	0.01	80	768	4.55	0.00
Manufacturing	934	27,269	1.08	0.93	0.68	0.73	480	23,934	0.88	1.95
- Textiles and wood activities	45	2,815	0.50	0.80	0.79	0.99	68	4,226	0.70	0.66
- Petroleum, chemical, rubber, plastic	257	4,182	1.94	0.96	0.61	0.63	112	4,546	1.08	2.29
- Metal and mechanical products	164	5,549	0.93	0.94	0.83	0.88	117	4,963	1.03	1.41
- Machinery, computers, RTC, communications	0	2,111	0.00	0.80	0.00	0.00	58	3,149	0.80	0.00
- Vehicles and other transport equipment	11	1,916	0.19	0.86	0.83	0.96	8	2,550	0.14	1.42
Electricity, gas and water	0	98	0.11	0.73	0.03	0.04	22	57	16.94	0.02
Construction	12	n.a.			0.44		41	n.a.		0.28
Trade and repairs	166	n.a.			0.48		523	n.a.		0.32
Hotels and restaurants	131	n.a.			0.87		172	n.a.		0.77
Transport and communication	32	n.a.			0.63		15	n.a.		2.16
- Land sea and air transport	0	n.a.					0	n.a.		
Financial intermediation	708	n.a.			0.97		669	n.a.		1.06
- other financial intermediation	599	n.a.			0.93		685	n.a.		0.87

## Trade and FDI Profile: Denmark - Chart 2



## Trade and FDI Profile: Denmark - Table 2 A

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	2,047	31,703	6.46	1.00	1.00	1.00	2,113	26,938	7.84	1.00
EU - 12 countries	797	16,738	4.76	0.74	1.18	0.63	1,262	14,371	8.78	0.88
France	-13	1,783	-0.71	-0.08	0.74	-0.11	15	1,451	1.01	0.09
Belg.-Luxbg	-9	630	-1.38	-0.06	0.44	-0.14	100	964	10.34	1.08
Netherlands	71	1,388	5.12	0.72	0.93	0.77	257	1,819	14.15	1.49
Germany	29	7,482	0.39	0.16	2.26	0.07	272	6,182	4.40	0.45
Italy	19	1,322	1.46	0.28	0.91	0.31	10	1,080	0.96	0.20
Utd. Kingdom	217	2,930	7.40	0.89	1.43	0.62	582	1,997	29.14	1.72
Ireland	146	158	92.13	3.88	0.58	6.73	22	196	11.08	0.94
Greece	5	255	1.96	0.75	1.20	0.63	0	49	0.00	0.00
Portugal	21	177	11.86	1.20	0.60	2.02	0	323	0.00	0.00
Spain	311	612	50.87	3.02	0.63	4.81	4	310	1.29	2.27
Extra Europe 12	1,249	14,965	8.35	1.28	0.85	1.50	851	12,567	6.77	1.08
EFTA - 7 countries	234	6,803	3.44	4.50	3.17	1.42	407	6,283	6.48	1.00
OECD	1,971	26,673	7.39	1.22	1.27	0.96	2,069	22,909	9.03	0.88
Central & E. Europe	28	859	3.26	0.64	1.36	0.47	1	758	0.09	0.12
NAFTA	388	1,875	20.71	1.81	0.35	5.12	175	1,387	12.64	1.88
ASEAN - 6	0	457	0.00	0.00	0.31	0.00	23	457	5.11	23.11
ACP 70 countries	-10	543	-1.84	-1.37	1.13	-1.21	10	114	9.04	11.17
NICs 4 countries	-8	699	-1.14	-0.33	0.29	-1.17	4	623	0.64	0.49
Mediterranean	6	537	1.18	0.41	0.54	0.76	6	249	2.54	3.49
CIS 11 countries	2	299	0.78	0.39	1.07	0.36	2	280	0.83	5.02
North Africa -6	1	191	0.52	0.37	0.48	0.78	0	75	0.00	0.00
Other African	0	365	0.00	0.00	0.73	0.00	1	130	1.03	1.90
Central America	-1	420	-0.32	-0.01	0.37	-0.03	-1	93	-0.72	-0.04
South America	20	260	7.56	0.32	0.38	0.84	3	452	0.59	-1.13
Near & Middle East	-1	715	-0.14	-0.13	0.70	-0.19	-1	64	-1.03	-0.34
Other Asian	23	2,110	1.11	0.16	0.56	0.28	38	2,084	1.82	0.50
Australia, Oceania	2	210	0.79	0.13	0.48	0.27	3	71	4.23	0.33
Iceland	0	125	0.27	2.03	9.81	0.21	1	83	1.61	2.24
Norway	181	1,937	9.34	8.05	9.11	0.88	285	1,587	17.94	4.38
Sweden	385	3,188	12.09	6.28	7.43	0.85	161	2,990	5.38	0.74
Finland	133	619	21.53	34.61	4.13	8.39	52	757	6.91	0.60
Switzerland	53	605	8.76	1.90	0.77	2.48	121	562	21.61	1.26
Austria	1	328	0.41	0.04	0.59	0.06	3	305	0.87	0.07
USA	363	1,609	22.56	1.18	0.55	2.14	174	1,250	13.95	0.99
Japan	21	1,223	1.74	2.08	1.15	1.81	4	849	0.51	0.05

**Trade and FDI Profile: Denmark - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	2,047	31,703	1.00	0.92	0.98	1.07	2,113	26,938	1.00	0.97
EU - 12 countries	797	16,738	0.74	0.92	0.77	0.84	1,262	14,371	1.12	0.63
France	-13	1,783	-0.11	0.90	0.00	0.00	15	1,451	0.13	-0.86
Belg.-Luxbg	-9	630	-0.21	0.79	0.00	0.00	100	964	1.32	-0.09
Netherlands	71	1,388	0.79	0.87	0.43	0.50	257	1,819	1.80	0.28
Germany	29	7,482	0.06	0.90	0.19	0.21	272	6,182	0.56	0.11
Italy	19	1,322	0.23	0.90	0.70	0.77	10	1,080	0.12	1.87
Utd. Kingdom	217	2,930	1.15	0.81	0.54	0.67	582	1,997	3.72	0.37
Ireland	146	158	14.27	0.89	0.26	0.29	22	196	1.41	6.72
Greece	5	255	0.30	0.32	0.00	0.00	0	49	0.00	
Portugal	21	177	1.84	0.71	0.00	0.00	0	323	0.00	
Spain	311	612	7.88	0.67	0.03	0.04	4	310	0.16	77.83
Extra Europe 12	1,249	14,965	1.29	0.91	0.81	0.89	851	12,567	0.86	1.47
EFTA - 7 countries	234	6,803	0.53	0.96	0.73	0.76	407	6,283	0.83	0.58
OECD	1,971	26,673	1.14	0.92	0.98	1.06	2,069	22,909	1.15	0.95
Central & E. Europe	28	859	0.50	0.94	0.05	0.05	1	758	0.01	42.00
NAFTA	388	1,875	3.21	0.85	0.62	0.73	175	1,387	1.61	2.21
ASEAN - 6	0	457	0.00	1.00	0.00	0.00	23	457	0.65	0.00
ACP 70 countries	-10	543	-0.29	0.35	0.00	0.00	10	114	1.15	-0.97
NICs 4 countries	-8	699	-0.18	0.94	0.00	0.00	4	623	0.08	-2.00
Mediterranean	6	537	0.18	0.63	1.00	1.58	6	249	0.32	1.00
CIS 11 countries	2	299	0.12	0.97	1.00	1.04	2	280	0.11	1.00
North Africa -6	1	191	0.08	0.56	0.00	0.00	0	75	0.00	
Other African	0	365	0.00	0.53	0.00	0.00	1	130	0.13	0.00
Central America	-1	420	-0.05	0.36	0.00	0.00	-1	93	-0.09	2.00
South America	20	260	1.17	0.73	0.24	0.33	3	452	0.08	7.38
Near & Middle East	-1	715	-0.02	0.17	0.00	0.00	-1	64	-0.13	1.50
Other Asian	23	2,110	0.17	0.99	0.76	0.77	38	2,084	0.23	0.61
Australia, Oceania	2	210	0.12	0.50	0.71	1.42	3	71	0.54	0.56
Iceland	0	125	0.04	0.80	0.40	0.50	1	83	0.20	0.25
Norway	181	1,937	1.45	0.90	0.78	0.86	285	1,587	2.29	0.64
Sweden	385	3,188	1.87	0.97	0.59	0.61	161	2,990	0.69	2.39
Finland	133	619	3.34	0.90	0.56	0.63	52	757	0.88	2.55
Switzerland	53	605	1.36	0.96	0.61	0.63	121	562	2.75	0.44
Austria	1	328	0.06	0.96	0.67	0.69	3	305	0.11	0.50
USA	363	1,609	3.49	0.87	0.65	0.74	174	1,250	1.78	2.08
Japan	21	1,223	0.27	0.82	0.34	0.41	4	849	0.07	4.92

### 3. France

In the early 1990s, France's inward and outward trade and investment flows were very balanced.

The French manufacturing sector proved its international competitiveness by registering both a significant surplus of outward FDI and exports. This was most obvious in the petroleum and chemical sector. Transport equipment, the largest contributor to exports, on the other hand, reduced its outward investment. The textiles and wood sector was found in the third quadrant in the early 1990s: imports exceeded exports by a large margin and there was a net inflow of foreign capital. In mining and quarrying, significant overseas investment coincided with a pronounced import surplus - a situation which is rather typical for the world's leading exporters of manufactures.

Notwithstanding the fact that France is the world's second largest exporter of services, the large outflows of FDI from financial institutions - which were with an annual average of ECU 3 billion nearly as high as outflows of manufacturing FDI - were exceeded by even higher inflows of FDI into France's financial sector.

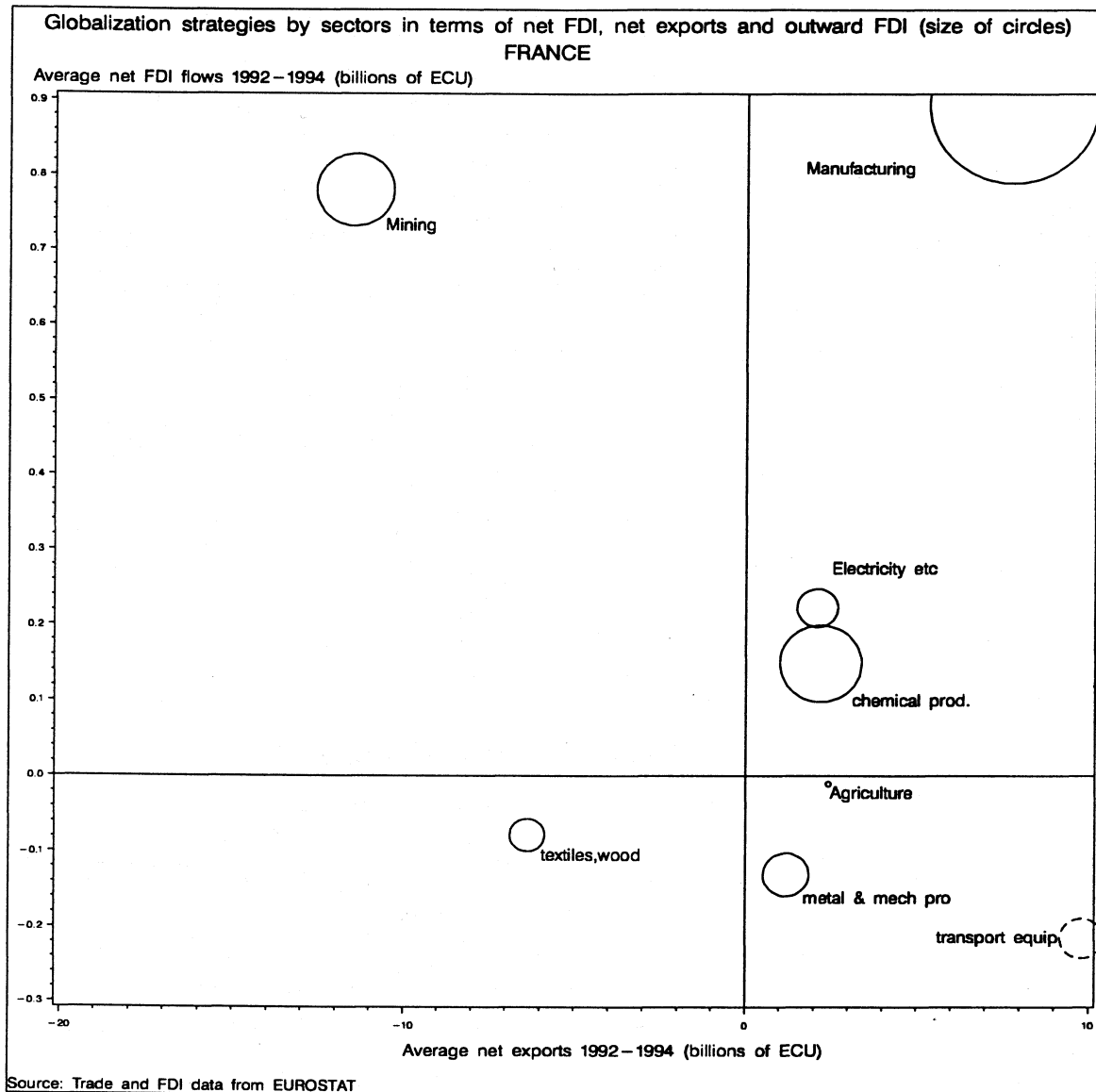
In geographical terms, three of France's most important FDI partner were in the second quadrant of the globalisation chart: French companies pursued their globalisation vis-à-vis the Netherlands, Germany and the US through significant net investment flows to these three countries, with which France registers otherwise a large trade deficit.

French firms proved to be leaders in terms of trade and FDI surpluses as compared to Spain, the ACP countries, Central and Eastern Europe, Portugal, Greece and ASEAN.

On the other hand, France obtained large inflows of FDI from the UK and Switzerland, although the two countries ran pronounced trade deficits with France.



### Trade and FDI Profile: France - Chart 1



### Trade and FDI Profile: France - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	11,364	197,166	5.76	1.00	1.00	1.00	10,673	196,268	5.44	1.00
TOTAL without services	4,733	196,198	2.41	1.00	1.00	1.00	2,848	195,383	1.46	1.00
Agriculture and fishing	4	9,242	0.04	0.12	1.77	0.07	15	6,817	0.22	2.30
Mining and quarrying	793	608	130.38	1.24	0.25	4.97	13	12,064	0.11	0.15
Manufacturing	3,715	184,077	2.02	0.92	0.98	0.94	2,822	176,323	1.60	0.94
- Textiles and wood activities	161	17,465	0.92	0.50	1.20	0.42	239	23,831	1.00	1.47
- Petroleum, chemical, rubber, plastic	884	34,310	2.58	1.70	1.15	1.47	735	32,121	2.29	1.73
- Metal and mechanical products	278	32,032	0.87	0.58	0.77	0.75	408	30,842	1.32	1.30
- Machinery, computers, RTC, communications	0	19,800	0.00	0.00	0.53	0.00	0	21,942	0.00	0.00
- Vehicles and other transport equipment	-247	47,088	-0.53	-0.79	1.18	-0.67	-32	37,301	-0.09	-0.24
Electricity, gas and water	221	2,270	9.72	6.74	11.04	0.61	-2	179	-1.12	-0.61
Construction	251	n.a.		2.74			29	n.a.		
Trade and repairs	789	n.a.		0.90			687	n.a.		
Hotels and restaurants	257	n.a.		3.97			57	n.a.		
Transport and communication	211	n.a.		1.42			132	n.a.		
- Land sea and air transport	140	n.a.		4.26			103	n.a.		
Financial intermediation	4,210	n.a.		1.21			4,560	n.a.		
- other financial intermediation	4,210	n.a.		11.83			4,560	n.a.		

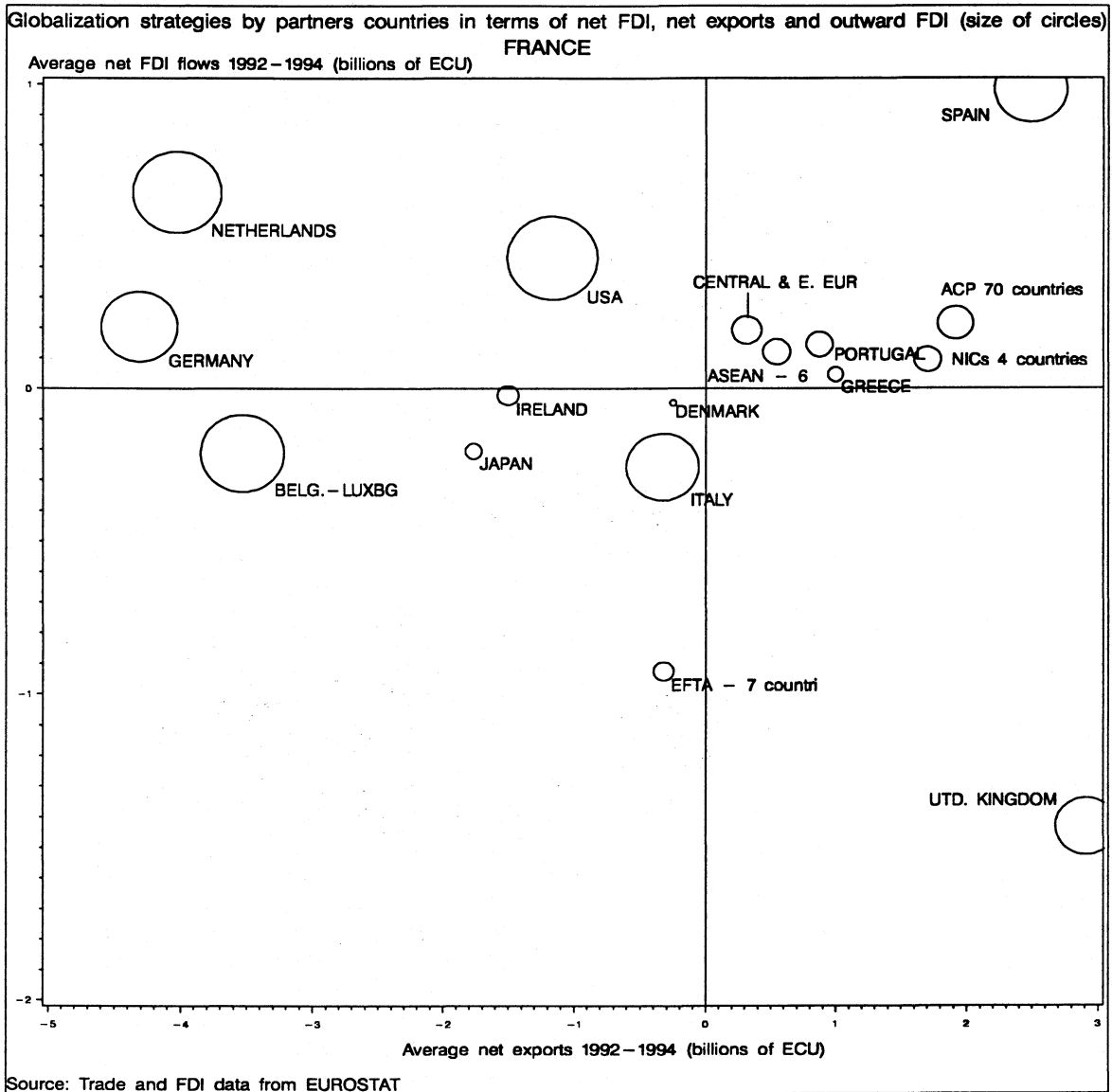
### Trade and FDI Profile: France - Table 1 B

Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	4	9,242	0.02	0.85	0.43	0.50	15	6,817	0.15	0.27
Mining and quarrying	793	608	54.05	0.10	0.03	0.34	13	12,064	0.07	60.97
Manufacturing	3,715	184,077	0.84	0.98	0.86	0.88	2,822	176,323	1.10	1.32
- Textiles and wood activities	161	17,465	0.38	0.85	0.80	0.95	239	23,831	0.69	0.67
- Petroleum, chemical, rubber, plastic	884	34,310	1.07	0.97	0.91	0.94	735	32,121	1.57	1.20
- Metal and mechanical products	278	32,032	0.36	0.98	0.81	0.83	408	30,842	0.91	0.68
- Machinery, computers, RTC, communications	0	19,800	0.00	0.95			0	21,942	0.00	
- Vehicles and other transport equipment	-247	47,088	-0.22	0.88	0.00	0.00	-32	37,301	-0.06	7.73
Electricity, gas and water	221	2,270	4.03	0.15	0.00	0.00	-2	179	-0.77	-110.33
Construction	251	n.a.			0.21		29	n.a.		8.66
Trade and repairs	789	n.a.			0.93		687	n.a.		1.15
Hotels and restaurants	257	n.a.			0.36		57	n.a.		4.54
Transport and communication	211	n.a.			0.77		132	n.a.		1.59
- Land sea and air transport	140	n.a.			0.85		103	n.a.		1.36
Financial intermediation	4,210	n.a.			0.96		4,560	n.a.		0.92
- other financial intermediation	4,210	n.a.			0.96		4,560	n.a.		0.92

### Trade and FDI Profile: France - Chart 2



## Trade and FDI Profile: France - Table 2 A

### Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU-m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	11,364	197,166	5.76	1.00	1.00	1.00	10,673	196,268	5.44	1.00
EU - 12 countries	7,467	120,879	6.18	1.25	1.37	0.91	7,421	127,450	5.82	0.84
Belg.-Luxbg	1,435	16,694	8.59	1.82	1.87	0.97	1,647	20,224	8.14	1.22
Netherlands	1,603	8,950	17.91	2.92	0.97	3.02	958	12,863	7.45	1.13
Germany	1,186	36,326	3.27	1.20	1.77	0.68	984	40,636	2.42	0.36
Italy	1,079	19,862	5.43	2.85	2.21	1.29	1,337	20,191	6.62	1.96
Utd. Kingdom	769	18,631	4.13	0.57	1.46	0.39	2,201	15,721	14.00	1.19
Ireland	91	955	9.56	0.44	0.56	0.78	113	2,459	4.61	0.57
Denmark	10	1,657	0.58	0.17	0.95	0.17	57	1,910	2.98	0.54
Greece	50	1,490	3.36	1.35	1.12	1.20	4	493	0.81	-1.37
Portugal	151	2,946	5.13	1.56	1.60	0.98	6	2,072	0.31	0.12
Spain	1,095	13,367	8.19	1.91	2.21	0.87	110	10,879	1.01	2.56
Extra Europe 12	3,896	76,287	5.11	0.72	0.70	1.03	3,253	68,818	4.73	1.08
EFTA - 7 countries	83	12,798	0.65	0.29	0.96	0.30	1,008	13,122	7.68	1.71
OECD	9,710	152,804	6.35	1.08	1.17	0.92	10,229	161,847	6.32	0.89
Central & E. Europe	187	3,160	5.92	0.77	0.81	0.95	-4	2,652	-0.15	-0.31
NAFTA	1,818	15,795	11.51	1.53	0.48	3.19	1,348	16,129	8.36	1.80
ASEAN - 6	157	3,641	4.30	0.86	0.40	2.17	37	3,095	1.20	7.80
ACP 70 countries	263	6,125	4.29	6.49	2.05	3.16	48	4,129	1.16	2.07
NICs 4 countries	151	5,081	2.97	1.13	0.33	3.39	57	3,378	1.68	1.83
Mediterranean	331	9,785	3.38	3.86	1.58	2.44	31	6,850	0.45	0.90
CIS 11 countries	53	1,318	3.99	1.58	0.76	2.09	-84	2,136	-3.92	-34.01
North Africa -6	96	6,437	1.49	6.43	2.59	2.49	25	4,785	0.52	2.31
Other African	279	6,320	4.41	8.64	2.03	4.26	27	4,318	0.63	1.67
Central America	351	3,885	9.03	0.55	0.55	1.00	84	1,468	5.75	0.43
South America	131	2,564	5.11	0.38	0.60	0.63	2	2,478	0.09	-0.26
Near & Middle East	196	5,801	3.37	4.73	0.92	5.16	140	5,021	2.78	1.32
Other Asian	420	10,515	3.99	0.50	0.45	1.13	357	11,561	3.09	1.23
Australia, Oceania	-2	1,596	-0.10	-0.02	0.59	-0.04	9	851	1.06	0.12
Iceland	1	38	1.77	0.73	0.47	1.54	0	110	0.00	0.00
Norway	-28	797	-3.55	-0.23	0.60	-0.38	45	2,276	1.99	0.70
Sweden	61	2,049	2.99	0.18	0.77	0.23	52	2,558	2.03	0.40
Finland	11	680	1.67	0.53	0.73	0.73	103	1,309	7.87	0.98
Switzerland	111	7,333	1.51	0.71	1.49	0.48	963	5,287	18.21	1.53
Austria	1	1,900	0.07	0.01	0.55	0.01	10	1,582	0.61	0.08
USA	1,687	13,291	12.70	0.99	0.73	1.35	1,259	14,457	8.71	0.89
Japan	58	3,585	1.63	1.02	0.54	1.89	264	5,352	4.93	0.73

**Trade and FDI Profile: France - Table 2 B**

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	11,364	197,166	1.00	1.00	0.97	0.97	10,673	196,268	1.00	1.06
EU - 12 countries	7,467	120,879	1.07	0.97	1.00	1.02	7,421	127,450	1.07	1.01
Belg.-Luxbg	1,435	16,694	1.49	0.90	0.93	1.03	1,647	20,224	1.50	0.87
Netherlands	1,603	8,950	3.11	0.82	0.75	0.91	958	12,863	1.37	1.67
Germany	1,186	36,326	0.57	0.94	0.91	0.96	984	40,636	0.45	1.21
Italy	1,079	19,862	0.94	0.99	0.89	0.90	1,337	20,191	1.22	0.81
Utd. Kingdom	769	18,631	0.72	0.92	0.52	0.57	2,201	15,721	2.57	0.35
Ireland	91	955	1.66	0.56	0.89	1.60	113	2,459	0.85	0.81
Denmark	10	1,657	0.10	0.93	0.29	0.31	57	1,910	0.55	0.17
Greece	50	1,490	0.58	0.50	0.15	0.30	4	493	0.15	12.50
Portugal	151	2,946	0.89	0.83	0.08	0.10	6	2,072	0.06	23.84
Spain	1,095	13,367	1.42	0.90	0.18	0.20	110	10,879	0.19	9.98
Extra Europe 12	3,896	76,287	0.89	0.95	0.91	0.96	3,253	68,818	0.87	1.20
EFTA - 7 countries	83	12,798	0.11	0.99	0.15	0.15	1,008	13,122	1.41	0.08
OECD	9,710	152,804	1.10	0.97	0.97	1.00	10,229	161,847	1.16	0.95
Central & E. Europe	187	3,160	1.03	0.91	0.00	0.00	-4	2,652	-0.03	-46.75
NAFTA	1,818	15,795	2.00	0.99	0.85	0.86	1,348	16,129	1.54	1.35
ASEAN - 6	157	3,641	0.75	0.92	0.38	0.42	37	3,095	0.22	4.23
ACP 70 countries	263	6,125	0.74	0.81	0.31	0.38	48	4,129	0.21	5.47
NICs 4 countries	151	5,081	0.51	0.80	0.55	0.68	57	3,378	0.31	2.66
Mediterranean	331	9,785	0.59	0.82	0.17	0.21	31	6,850	0.08	10.68
CIS 11 countries	53	1,318	0.69	0.76	0.00	0.00	-84	2,136	-0.72	-0.63
North Africa -6	96	6,437	0.26	0.85	0.41	0.48	25	4,785	0.10	3.84
Other African	279	6,320	0.77	0.81	0.18	0.22	27	4,318	0.11	10.32
Central America	351	3,885	1.57	0.55	0.39	0.71	84	1,468	1.06	4.16
South America	131	2,564	0.89	0.98	0.04	0.04	2	2,478	0.02	56.14
Near & Middle East	196	5,801	0.59	0.93	0.83	0.90	140	5,021	0.51	1.40
Other Asian	420	10,515	0.69	0.95	0.92	0.97	357	11,561	0.57	1.17
Australia, Oceania	-2	1,596	-0.02	0.70	0.00	0.00	9	851	0.19	-0.19
Iceland	1	38	0.31	0.51	0.00	0.00	0	110	0.00	
Norway	-28	797	-0.62	0.52	0.00	0.00	45	2,276	0.37	-0.63
Sweden	61	2,049	0.52	0.89	0.92	1.03	52	2,558	0.37	1.18
Finland	11	680	0.29	0.68	0.20	0.29	103	1,309	1.45	0.11
Switzerland	111	7,333	0.26	0.84	0.21	0.25	963	5,287	3.35	0.11
Austria	1	1,900	0.01	0.91	0.24	0.27	10	1,582	0.11	0.14
USA	1,687	13,291	2.20	0.96	0.85	0.89	1,259	14,457	1.60	1.34
Japan	58	3,585	0.28	0.80	0.36	0.45	264	5,352	0.91	0.22

#### 4. Germany

Germany was one of the world's leading home countries of FDI in the early 1990s: with average outward FDI flows of ECU 14 billion for all sector and ECU 5 billion for the manufacturing sector, it was a more important supplier of FDI to the world than Japan and exceeded two thirds of US FDI outflows. Inflows, on the other hand, were rather low and even negative in a number of industrial sub-sectors. This suggests that the trend of a declining share of foreign-affiliated firms in Germany's industrial output, which was apparent over the second half of the 1980s (see chart 6), continued in the early 1990s.

The FDI outflow to inflow ratio was with 4 one of the highest among the countries under review (see trade and FDI profile table 2 A). In this sense, Germany resembled Japan not only with respect to its structural trade surplus, but also in terms of the large net FDI outflow.

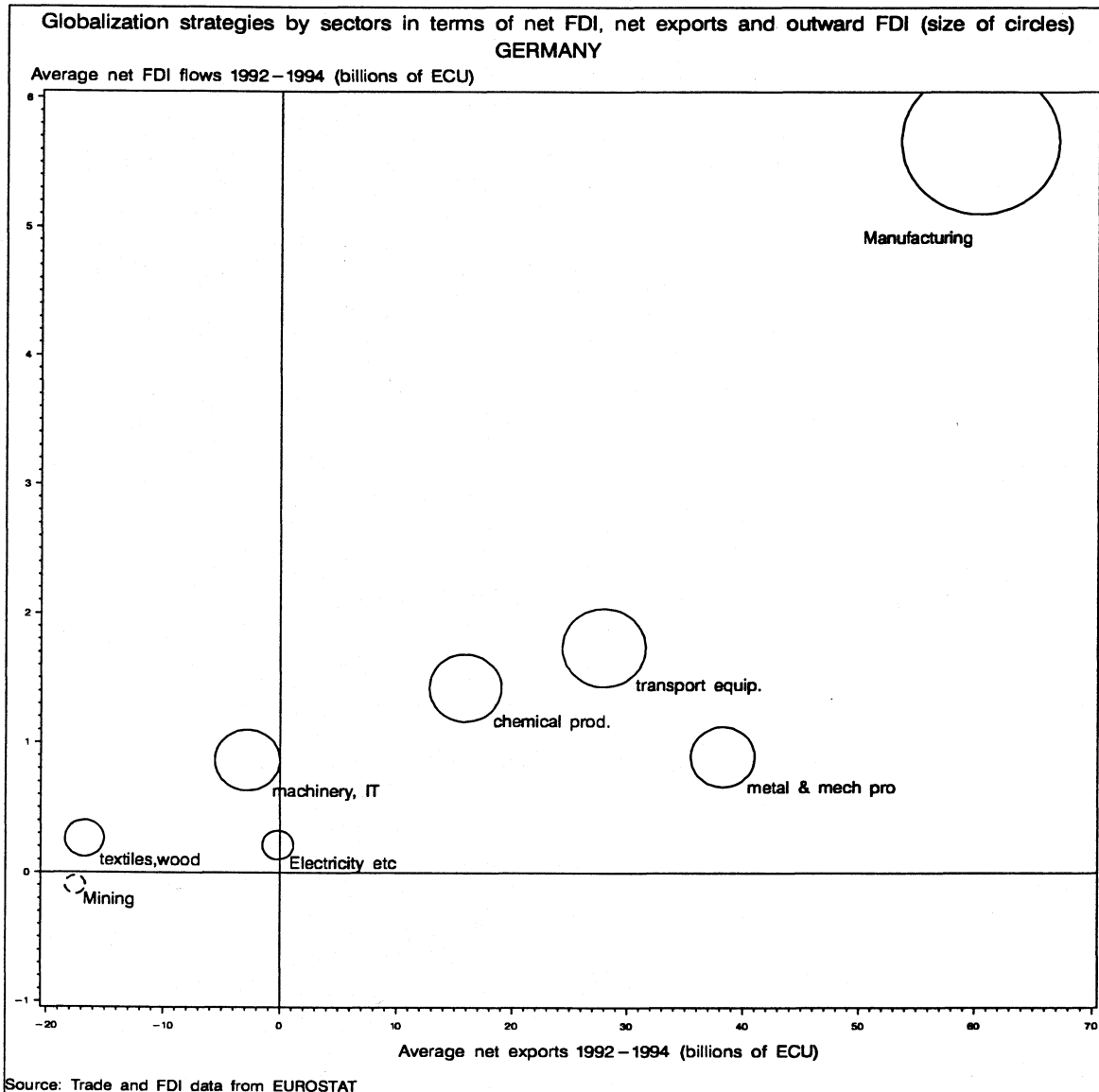
Three of the five industrial subsectors - namely chemicals, transport equipment and metal and mechanical products - realised significant surpluses in both trade and FDI. Similar to the situation throughout Europe, the industrial sectors textiles and wood, and machinery, computers and information technology registered a trade deficit. Unlike the rest of Europe, however, Germany remained a net FDI exporters in these two sectors. The intensive structural adjustment in Germany's textile sector is visible from the high intra-industry FDI-O ratio (see trade and FDI profile table 1 B).

Nearly all of Germany's industrial sub-sectors were characterised by revealed comparative advantages in outward FDI as well as in exports (with the exception of machinery and IT products) as compared to the Triad as a whole (see trade and investment profile table 1 A).

Nearly all of Germany's partner country were in the first quadrant of Germany's globalisation chart, i.e. nearly all of them were net importers of goods and FDI from Germany. The three major exceptions were the Netherlands, Ireland and Japan, the latter being the only country in the third quadrant. Although Germany was a small, net importer of FDI from Japan, Germany had nevertheless a pronounced revealed comparative advantage for outward FDI to Japan (see trade and FDI profile table 2 A).

The other area in which Germany had a very high RCA for outward FDI was Central and Eastern Europe. In fact, German firms relied to an above-average degree on FDI in their strategies towards Central and Eastern European countries.

### Trade and FDI Profile: Germany - Chart 1



## Trade and FDI Profile: Germany - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	14,097	337,407	4.18	1.00	1.00	1.00	3,564	308,619	1.15	1.00
TOTAL without services	5,576	328,069	1.70	1.00	1.00	1.00	-197	296,289	-0.07	1.00
Agriculture and fishing	0	3,224	0.00	0.00	0.37	0.00	10	14,023	0.07	-16.11
Mining and quarrying	-95	1,117	-8.48	-0.13	0.27	-0.46	1	18,638	0.01	-0.16
Manufacturing	5,459	323,268	1.69	1.15	1.03	1.12	-208	262,983	-0.08	1.02
- Textiles and wood activities	333	30,130	1.11	0.88	1.24	0.71	71	46,870	0.15	-4.87
- Petroleum, chemical, rubber, plastic	1,161	57,911	2.01	1.89	1.16	1.62	-263	42,011	-0.63	10.38
- Metal and mechanical products	906	86,890	1.04	1.60	1.25	1.28	12	48,650	0.03	-0.55
- Machinery, computers, RTC, communications	927	36,697	2.53	1.80	0.59	3.03	62	39,514	0.16	-1.85
- Vehicles and other transport equipment	1,556	70,102	2.22	4.23	1.05	4.01	-181	42,153	-0.43	26.12
Electricity, gas and water	212	459	46.15	5.49	1.34	4.11	0	645	-0.05	0.61
Construction	133	n.a.		1.23			83	n.a.		
Trade and repairs	544	n.a.		0.53			720	n.a.		
Hotels and restaurants	-2	n.a.		-0.03			-47	n.a.		
Transport and communication	319	n.a.		1.82			52	n.a.		
- Land sea and air transport	0	n.a.		0.00			0	n.a.		
Financial intermediation	2,931	n.a.		0.72			-616	n.a.		
- other financial intermediation	865	n.a.		2.06			-518	n.a.		

## Trade and FDI Profile: Germany - Table 1 B

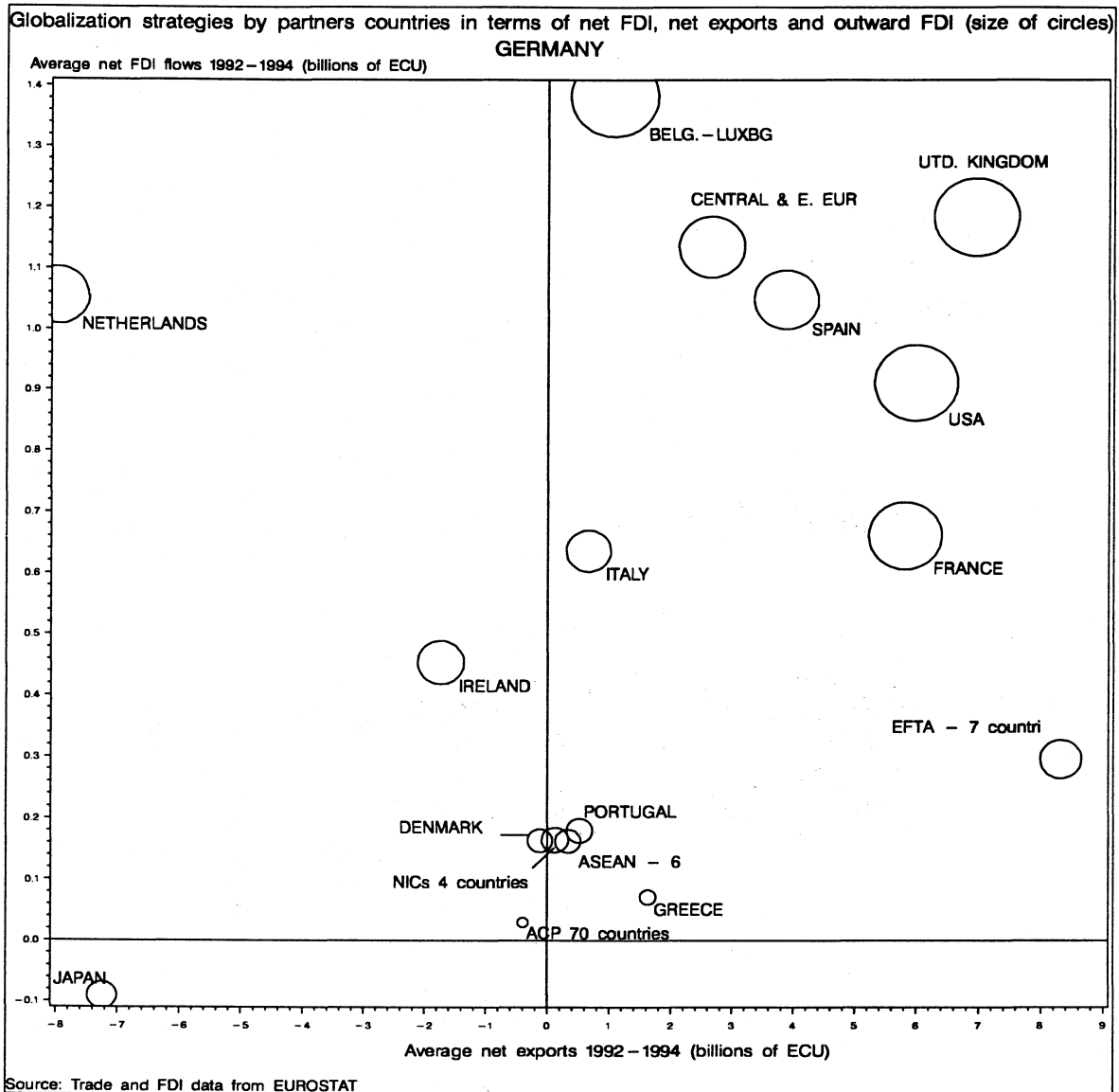
Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	0	3,224	0.00	0.37	0.00	0.00	10	14,023	-1.04	0.00
Mining and quarrying	-95	1,117	-4.99	0.11	0.00	0.00	1	18,638	-0.08	-94.67
Manufacturing	5,459	323,268	0.99	0.90	0.00	0.00	-208	262,983	1.19	-26.29
- Textiles and wood activities	333	30,130	0.65	0.78	0.35	0.45	71	46,870	-2.29	4.67
- Petroleum, chemical, rubber, plastic	1,161	57,911	1.18	0.84	0.00	0.00	-263	42,011	9.41	-4.41
- Metal and mechanical products	906	86,890	0.61	0.72	0.03	0.04	12	48,650	-0.38	73.46
- Machinery, computers, RTC, communications	927	36,697	1.49	0.96	0.13	0.13	62	39,514	-2.37	14.87
- Vehicles and other transport equipment	1,556	70,102	1.31	0.75	0.00	0.00	-181	42,153	6.46	-8.58
Electricity, gas and water	212	459	27.15	0.83	0.00	0.00	0	645	0.78	-636.00
Construction	133	n.a.			0.77		83	n.a.		1.60
Trade and repairs	544	n.a.			0.86		720	n.a.		0.76
Hotels and restaurants	-2	n.a.			0.00		-47	n.a.		0.04
Transport and communication	319	n.a.			0.28		52	n.a.		6.09
- Land sea and air transport	0	n.a.					0	n.a.		
Financial intermediation	2,931	n.a.			0.00		-616	n.a.		-4.76
- other financial intermediation	865	n.a.			0.00		-518	n.a.		-1.67



### Trade and FDI Profile: Germany - Chart 2



## Trade and FDI Profile: Germany - Table 2 A

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	14,097	337,407	4.18	1.00	1.00	1.00	3,564	308,619	1.15	1.00
EU - 12 countries	8,759	171,916	5.09	1.18	1.14	1.04	1,922	161,236	1.19	0.81
France	1,369	41,825	3.27	1.31	1.62	0.81	708	36,023	1.97	1.20
Belg.-Luxbg	1,975	23,457	8.42	2.02	1.54	1.32	593	22,390	2.65	1.87
Netherlands	1,003	26,368	3.80	1.47	1.66	0.89	-52	34,354	-0.15	-0.11
Italy	513	27,305	1.88	1.09	1.77	0.61	-124	26,646	-0.46	-0.65
UTD. Kingdom	1,849	26,672	6.93	1.10	1.22	0.90	665	19,722	3.37	1.35
Ireland	570	1,505	37.87	2.21	0.52	4.27	116	3,239	3.58	2.07
Denmark	162	6,254	2.60	2.25	2.10	1.07	-1	6,348	-0.02	-0.02
Greece	66	3,324	2.00	1.44	1.46	0.99	-5	1,697	-0.29	2.35
Portugal	180	3,238	5.55	1.50	1.02	1.46	0	2,718	-0.01	-0.02
Spain	1,073	11,968	8.96	1.51	1.15	1.31	24	8,100	0.30	3.54
Extra Europe 12	5,339	165,491	3.23	0.80	0.89	0.90	1,642	147,383	1.11	1.20
EFTA - 7 countries	438	50,944	0.86	1.22	2.23	0.55	142	42,609	0.33	0.35
OECD	12,058	261,695	4.61	1.08	1.17	0.92	3,388	242,299	1.40	0.93
Central & E. Europe	1,144	17,727	6.46	3.78	2.64	1.43	9	15,952	0.06	0.56
NAFTA	1,810	28,873	6.27	1.23	0.51	2.40	927	20,822	4.45	4.50
ASEAN - 6	166	7,425	2.24	0.74	0.47	1.56	4	7,090	0.05	1.59
ACP 70 countries	31	2,203	1.42	0.62	0.43	1.44	1	2,563	0.05	0.44
NICs 4 countries	186	10,559	1.76	1.12	0.40	2.78	21	10,434	0.20	1.05
Mediterranean	99	11,148	0.89	0.93	1.05	0.89	58	9,441	0.61	5.73
CIS 11 countries	50	6,512	0.77	1.21	2.18	0.55	67	5,933	1.13	46.17
North Africa -6	-26	3,262	-0.81	-1.42	0.77	-1.86	12	3,708	0.31	6.54
Other African	52	4,276	1.21	1.29	0.80	1.61	-1	3,565	-0.02	-0.24
Central America	233	2,894	8.05	0.29	0.24	1.22	62	1,130	5.49	1.95
South America	156	4,896	3.19	0.37	0.67	0.55	-15	4,778	-0.31	4.06
Near & Middle East	9	9,180	0.10	0.18	0.85	0.21	18	3,146	0.57	1.28
Other Asian	659	23,793	2.77	0.64	0.59	1.08	347	33,758	1.03	1.93
Australia, Oceania	80	2,506	3.21	0.90	0.54	1.66	0	1,218	0.03	0.01
Iceland	0	126	0.27	0.29	0.92	0.32	0	179	0.00	0.00
Norway	15	2,861	0.54	0.10	1.26	0.08	0	4,743	0.01	0.01
Sweden	279	7,257	3.84	0.66	1.59	0.41	-210	6,711	-3.12	-2.93
Finland	19	2,668	0.70	0.70	1.67	0.42	171	3,221	5.32	3.13
Switzerland	422	18,130	2.33	2.20	2.16	1.02	-246	13,415	-1.83	-0.73
Austria	75	19,903	0.38	0.29	3.39	0.09	2	14,340	0.01	0.01
USA	1,766	24,496	7.21	0.83	0.79	1.06	854	18,516	4.61	2.22
Japan	225	8,252	2.73	3.19	0.73	4.38	316	15,497	2.04	1.42

**Trade and FDI Profile: Germany - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	14,097	337,407	1.00	0.96	0.40	0.42	3,564	308,619	1.00	3.96
EU - 12 countries	8,759	171,916	1.22	0.97	0.36	0.37	1,922	161,236	1.03	4.56
France	1,369	41,825	0.78	0.93	0.68	0.74	708	36,023	1.70	1.93
Belg.-Luxbg	1,975	23,457	2.02	0.98	0.46	0.47	593	22,390	2.29	3.33
Netherlands	1,003	26,368	0.91	0.87	0.00	0.00	-52	34,354	-0.13	-19.16
Italy	513	27,305	0.45	0.99	0.00	0.00	-124	26,646	-0.40	-4.15
Utd. Kingdom	1,849	26,672	1.66	0.85	0.53	0.62	665	19,722	2.92	2.78
Ireland	570	1,505	9.06	0.63	0.34	0.53	116	3,239	3.10	4.91
Denmark	162	6,254	0.62	0.99	0.00	0.00	-1	6,348	-0.02	-121.75
Greece	66	3,324	0.48	0.68	0.00	0.00	-5	1,697	-0.26	-13.27
Portugal	180	3,238	1.33	0.91	0.00	0.00	0	2,718	-0.01	-539.00
Spain	1,073	11,968	2.15	0.81	0.04	0.05	24	8,100	0.26	44.69
Extra Europe 12	5,339	165,491	0.77	0.94	0.47	0.50	1,642	147,383	0.96	3.25
EFTA - 7 countries	438	50,944	0.21	0.91	0.49	0.54	142	42,609	0.29	3.09
OECD	12,058	261,695	1.10	0.96	0.44	0.46	3,388	242,299	1.21	3.56
Central & E. Europe	1,144	17,727	1.55	0.95	0.02	0.02	9	15,952	0.05	122.61
NAFTA	1,810	28,873	1.50	0.84	0.68	0.81	927	20,822	3.85	1.95
ASEAN - 6	166	7,425	0.54	0.98	0.04	0.04	4	7,090	0.04	45.36
ACP 70 countries	31	2,203	0.34	0.92	0.08	0.09	1	2,563	0.05	23.50
NICs 4 countries	186	10,559	0.42	0.99	0.21	0.21	21	10,434	0.18	8.72
Mediterranean	99	11,148	0.21	0.92	0.74	0.80	58	9,441	0.53	1.71
CIS 11 countries	50	6,512	0.18	0.95	0.85	0.90	67	5,933	0.98	0.75
North Africa -6	-26	3,262	-0.19	0.94	0.00	0.00	12	3,708	0.27	-2.26
Other African	52	4,276	0.29	0.91	0.00	0.00	-1	3,565	-0.02	-77.50
Central America	233	2,894	1.93	0.56	0.42	0.75	62	1,130	4.75	3.76
South America	156	4,896	0.76	0.99	0.00	0.00	-15	4,778	-0.27	-10.40
Near & Middle East	9	9,180	0.02	0.51	0.67	1.31	18	3,146	0.50	0.50
Other Asian	659	23,793	0.66	0.83	0.69	0.83	347	33,758	0.89	1.90
Australia, Oceania	80	2,506	0.77	0.65	0.01	0.01	0	1,218	0.02	241.00
Iceland	0	126	0.06	0.83	0.00	0.00	0	179	0.00	
Norway	15	2,861	0.13	0.75	0.04	0.06	0	4,743	0.01	46.00
Sweden	279	7,257	0.92	0.96	0.00	0.00	-210	6,711	-2.70	-1.33
Finland	19	2,668	0.17	0.91	0.20	0.22	171	3,221	4.61	0.11
Switzerland	422	18,130	0.56	0.85	0.00	0.00	-246	13,415	-1.59	-1.72
Austria	75	19,903	0.09	0.84	0.04	0.05	2	14,340	0.01	45.00
USA	1,766	24,496	1.73	0.86	0.65	0.76	854	18,516	4.00	2.07
Japan	225	8,252	0.65	0.69	0.83	1.20	316	15,497	1.76	0.71

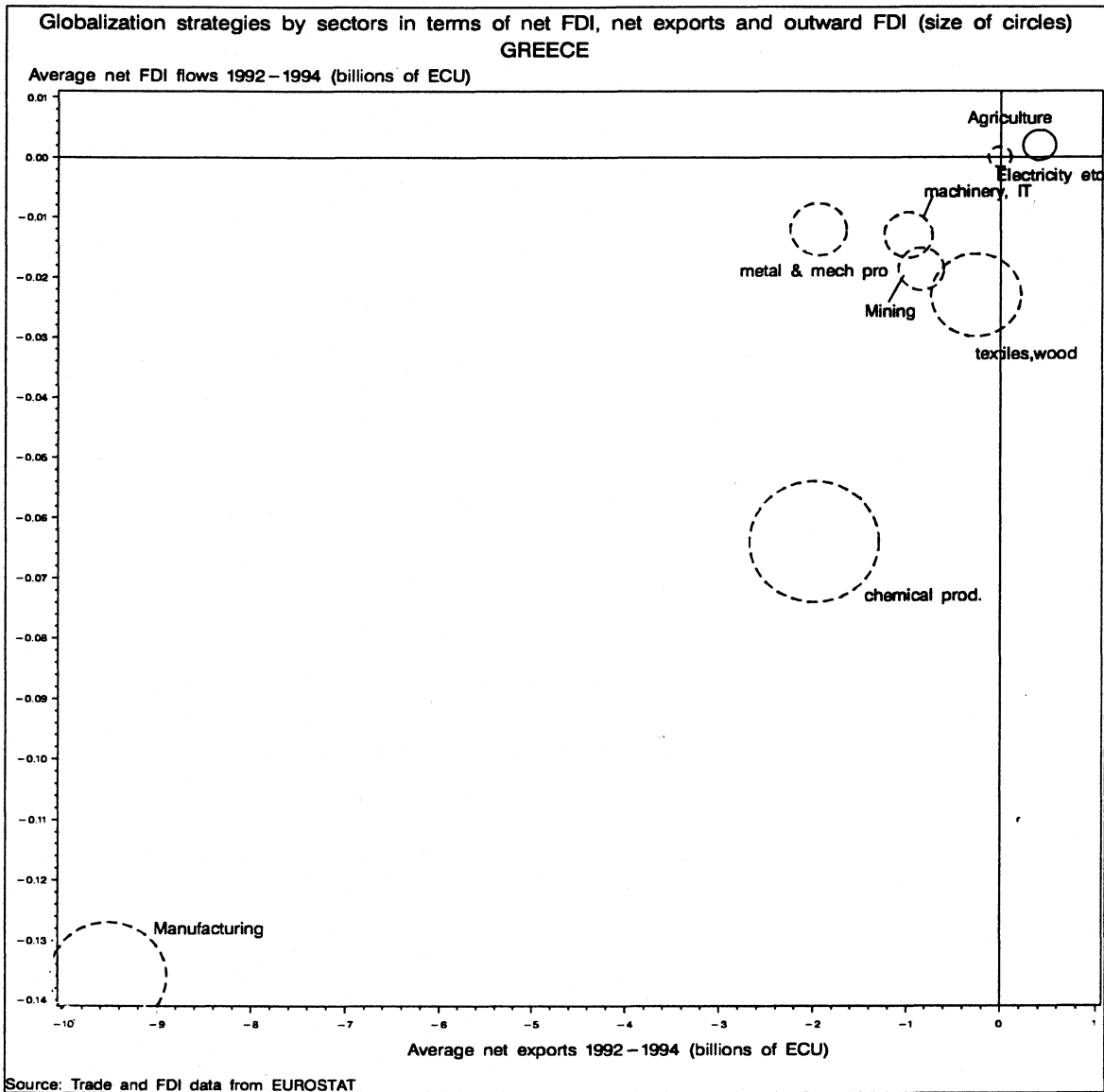
## 5. Greece

In the early 1990s, Greece ran significant trade and FDI deficits with the rest of the world. In fact, Greek firms reduced their overseas investment in nearly all sectors. The negative values of Greek FDI outflows render some of the indicators based on trade and FDI counter-intuitive. Moreover, FDI data on Greece is extremely patchy and not always consistent.

At the same time, Greece benefited from substantial inflows of FDI averaging nearly half a billion ECUs per year. These were, however, clearly below the average for the EU and not comparable with the levels of FDI inflows into Portugal and Ireland which appeared to have based their development strategies to a larger extent on FDI inflows than Greece.

Two-thirds of FDI inflows into Greece went into services. Greece was one of the very few countries in the Community to have a revealed comparative advantage in agriculture and in textiles. Agriculture was in fact the only sector in the first quadrant of Greece's globalisation chart.

### Trade and FDI Profile: Greece - Chart 1



### Trade and FDI Profile: Greece - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	-43	6,360	-0.68	1.00	1.00	1.00	418	16,277	2.57	1.00
TOTAL without services	-19	6,240	-0.30	1.00	1.00	1.00	134	16,213	0.82	1.00
Agriculture and fishing	1	940	0.14	-10.16	5.66	-1.79	-1	536	-0.12	-2.35
Mining and quarrying	-3	133	-2.00	1.04	1.72	0.60	16	982	1.63	3.98
Manufacturing	-17	5,166	-0.33	1.05	0.86	1.22	119	14,683	0.81	0.84
- Textiles and wood activities	-3	1,923	-0.17	2.59	4.15	0.62	4	2,186	0.20	0.51
- Petroleum, chemical, rubber, plastic	-7	670	-1.04	3.34	0.71	4.73	14	2,659	0.54	0.72
- Metal and mechanical products	-1	768	-0.17	0.69	0.58	1.19	3	2,719	0.10	0.17
- Machinery, computers, RTC, communications	-1	163	-0.61	0.57	0.14	4.10	3	1,150	0.29	0.27
- Vehicles and other transport equipment	0	76	0.00	0.00	0.06	0.00	-2	2,723	-0.09	-0.42
Electricity, gas and water	-1	0	-196.66	5.07	0.05	97.81	-1	12	-5.74	-5.50
Construction	-1	n.a.		1.81			5	n.a.		
Trade and repairs	-2	n.a.		0.57			22	n.a.		
Hotels and restaurants	0	n.a.		0.00			-10	n.a.		
Transport and communication	2	n.a.		-2.80			60	n.a.		
- Land sea and air transport	1	n.a.		-5.04			-1	n.a.		
Financial intermediation	-32	n.a.		2.32			65	n.a.		
- other financial intermediation	-16	n.a.		10.97			8	n.a.		

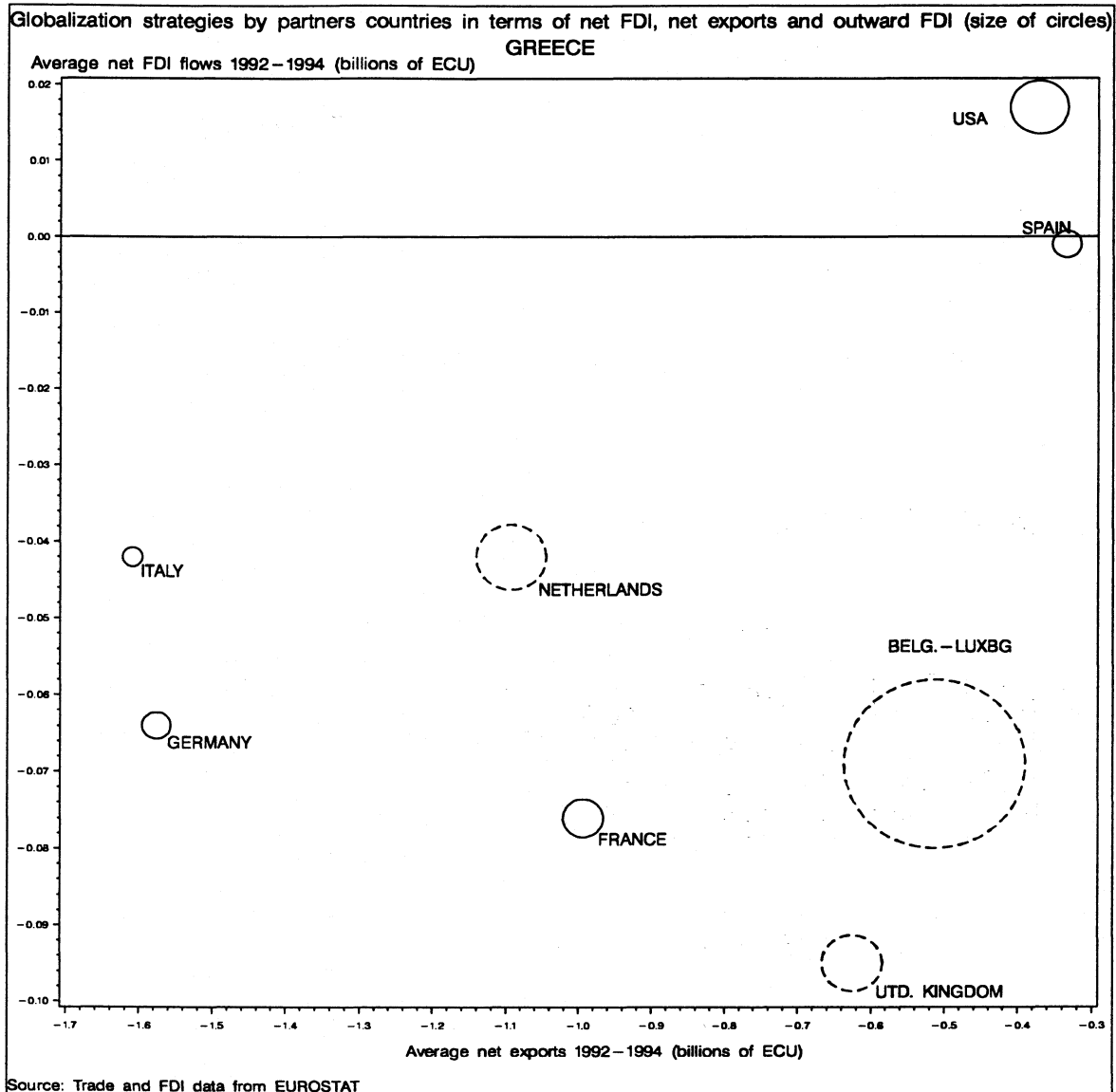
### Trade and FDI Profile: Greece - Table 1 B

Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- industry trade ratio	Intra- industry FDI ratio	Relation intra- industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	1	940	-0.47	0.73	0.00	0.00	-1	536	-0.15	-2.00
Mining and quarrying	-3	133	6.57	0.24	0.00	0.00	16	982	1.98	-0.17
Manufacturing	-17	5,166	1.08	0.52	0.00	0.00	119	14,683	0.98	-0.14
- Textiles and wood activities	-3	1,923	0.57	0.94	0.00	0.00	4	2,186	0.24	-0.77
- Petroleum, chemical, rubber, plastic	-7	670	3.43	0.40	0.00	0.00	14	2,659	0.65	-0.49
- Metal and mechanical products	-1	768	0.57	0.44	0.00	0.00	3	2,719	0.12	-0.50
- Machinery, computers, RTC, communications	-1	163	2.01	0.25	0.00	0.00	3	1,150	0.35	-0.30
- Vehicles and other transport equipment	0	76	0.00	0.05	0.00	0.00	-2	2,723	-0.10	0.00
Electricity, gas and water	-1	0	645.85	0.06	0.00	0.00	-1	12	-6.96	1.00
Construction	-1	n.a.			0.00		5	n.a.		-0.14
Trade and repairs	-2	n.a.			0.00		22	n.a.		-0.09
Hotels and restaurants	0	n.a.			0.00		-10	n.a.		0.00
Transport and communication	2	n.a.			0.05		60	n.a.		0.03
- Land sea and air transport	1	n.a.			0.00		-1	n.a.		-0.67
Financial intermediation	-32	n.a.			0.00		65	n.a.		-0.49
- other financial intermediation	-16	n.a.			0.00		8	n.a.		-2.04

### Trade and FDI Profile: Greece - Chart 2



## Trade and FDI Profile: Greece - Table 2 A

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	-43	7,595	-0.57	1.00	1.00	1.00	418	18,971	2.21	1.00
EU - 12 countries	-30	4,428	-0.67	1.31	1.30	1.01	304	11,523	2.64	0.94
France	4	475	0.84	-1.25	0.82	-1.53	80	1,469	5.45	1.74
Belg.-Luxbg.	-79	145	-54.57	26.54	0.42	62.98	-10	658	-1.52	-0.56
Netherlands	-12	196	-6.11	5.78	0.55	10.51	30	1,289	2.33	0.87
Germany	2	1,726	0.12	-0.53	2.18	-0.25	66	3,302	2.00	0.73
Italy	1	1,147	0.09	-0.70	3.31	-0.21	43	2,756	1.56	1.14
Utd. Kingdom	-9	472	-1.91	1.76	0.96	1.83	86	1,097	7.84	1.64
Ireland	0	19	0.00	0.00	0.29	0.00	0	136	0.00	0.00
Denmark		57			0.86	0.00		257		
Portugal		29			0.41	0.00		64		
Spain	2	161	1.24	-0.92	0.69	-1.34	3	496	0.61	3.79
Extra Europe 12	-14	3,167	-0.43	0.67	0.75	0.89	114	7,447	1.54	0.87
EFTA - 7 countries	0	368	0.00	0.00	0.72	0.00	41	991	4.14	2.28
OECD	-22	5,321	-0.41	0.64	1.06	0.60	370	14,568	2.54	0.88
Central & E. Europe		613			4.06	0.00		727		
NAFTA	12	361	3.41	-2.74	0.28	-9.63	20	746	2.64	1.40
ASEAN - 6	0	43	0.00	0.00	0.12	0.00	0	181	0.00	0.00
ACP 70 countries		108			0.94	0.00		165		
NICs 4 countries	0	64	0.00	0.00	0.11	0.00	0	534	0.00	0.00
Mediterranean		860			3.61	0.00		1,075		
CIS 11 countries	-13	134	-9.98	105.83	1.99	53.15	2	341	0.49	10.48
North Africa -6	0	188	0.00	0.00	1.96	0.00	0	696	0.00	0.00
Other African	0	83	0.00	0.00	0.70	0.00	0	164	0.00	0.00
Central America	0	80	0.00	0.00	0.29	0.00	0	83	0.00	0.00
South America	0	41	0.00	0.00	0.25	0.00	0	177	0.00	0.00
Near & Middle East	0	376	0.00	0.00	1.54	0.00	0	963	0.00	0.00
Other Asian	0	167	0.00	0.00	0.18	0.00	0	1,974	0.00	0.00
Australia, Oceania	0	37	0.00	0.00	0.35	0.00	0	41	0.00	0.00
Iceland	0	1	0.00	0.00	0.24	0.00	0	12	0.00	0.00
Norway	0	30	0.00	0.00	0.59	0.00	0	56	0.00	0.00
Sweden	0	83	0.00	0.00	0.81	0.00	6	233	2.57	1.26
Finland	0	41	0.00	0.00	1.15	0.00	0	115	0.00	0.00
Switzerland	0	104	0.00	0.00	0.55	0.00	39	342	11.39	2.37
Austria		109			0.83	0.00		232		
USA	8	309	2.59	-1.24	0.44	-2.81	-9	681	-1.32	-0.33
Japan	0	67	0.00	0.00	0.26	0.00	0	1,217	0.00	0.00



**Trade and FDI Profile: Greece - Table 2 B**

## Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	-43	7,595	1.00	0.57	0.00	0.00	418	18,971	1.00	-0.10
EU - 12 countries	-30	4,428	1.18	0.56	0.00	0.00	304	11,523	1.20	-0.10
France	4	475	-1.49	0.49	0.10	0.19	80	1,469	2.47	0.05
Belg.-Luxbg.	-79	145	96.37	0.36	0.00	0.00	-10	658	-0.69	7.90
Netherlands	-12	196	10.80	0.26	0.00	0.00	30	1,289	1.06	-0.40
Germany	2	1,726	-0.20	0.69	0.06	0.09	66	3,302	0.91	0.03
Italy	1	1,147	-0.15	0.59	0.05	0.08	43	2,756	0.71	0.02
Utd. Kingdom	-9	472	3.37	0.60	0.00	0.00	86	1,097	3.55	-0.10
Ireland	0	19	0.00	0.25			0	136	0.00	
Denmark		58		0.37	0.00	0.00		257		
Portugal		29		0.63	0.00	0.00		64		
Spain	2	161	-2.19	0.49	0.80	1.63	3	496	0.27	0.67
Extra Europe 12	-14	3,167	0.76	0.60	0.00	0.00	114	7,447	0.70	-0.12
EFTA - 7 countries	0	368	0.00	0.54	0.00	0.00	41	991	1.88	0.00
OECD	-22	5,321	0.72	0.54	0.00	0.00	370	14,568	1.15	-0.06
Central & E. Europe		613		0.92	0.00	0.00		727		
NAFTA	12	361	-6.03	0.65	0.77	1.18	20	746	1.20	0.63
ASEAN - 6	0	43	0.00	0.38			0	181	0.00	
ACP 70 countries		108		0.79	0.00	0.00		165		
NICs 4 countries	0	64	0.00	0.22			0	534	0.00	
Mediterranean		860		0.89	0.00	0.00		1,075		
CIS 11 countries	-13	134	17.62	0.56	0.00	0.00	2	341	0.22	-8.00
North Africa -6	0	188	0.00	0.42			0	696	0.00	
Other African	0	83	0.00	0.67			0	164	0.00	
Central America	0	80	0.00	0.98			0	83	0.00	
South America	0	41	0.00	0.38			0	177	0.00	
Near & Middle East	0	376	0.00	0.56			0	963	0.00	
Other Asian	0	167	0.00	0.16			0	1,974	0.00	
Australia, Oceania	0	37	0.00	0.95			0	41	0.00	
Iceland	0	1	0.00	0.11			0	12	0.00	
Norway	0	30	0.00	0.69			0	56	0.00	
Sweden	0	83	0.00	0.52	0.00	0.00	6	233	1.17	0.00
Finland	0	41	0.00	0.53			0	115	0.00	
Switzerland	0	104	0.00	0.46	0.00	0.00	39	342	5.16	0.00
Austria		109		0.64	0.00	0.00		232		
USA	8	309	-4.58	0.62	0.00	0.00	-9	681	-0.60	-0.89
Japan	0	67	0.00	0.10			0	1,217	0.00	

## 6. Ireland

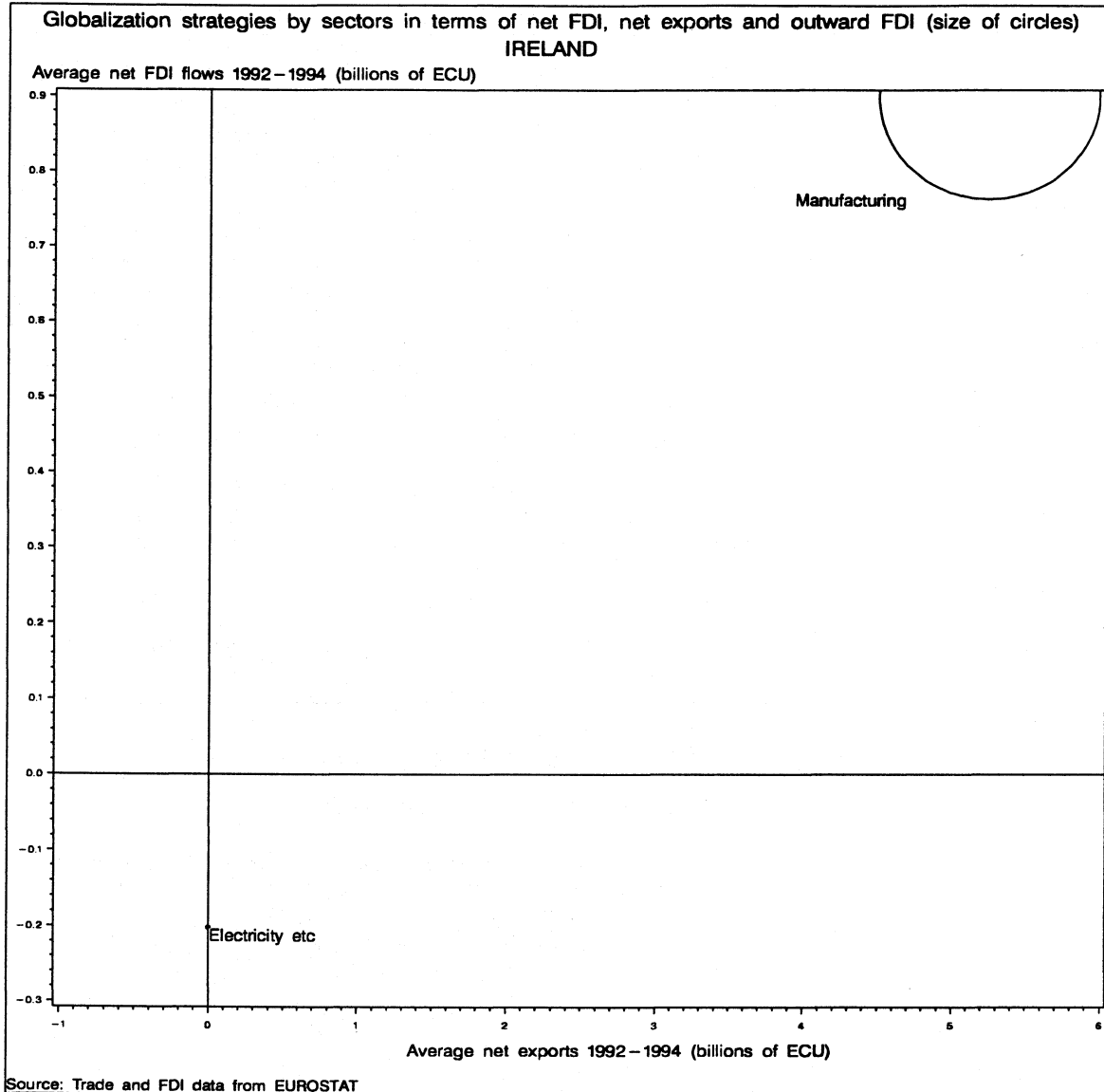
Ireland is one of the countries with the highest share of foreign-affiliated firms in national manufacturing turnover exceeding 50 per cent in 1990 (see for instance chart 6). In the early 1990s, however, inflows into Ireland's manufacturing sector were small both in absolute and relative terms: they represented 0.4 per cent of imports and only 3 per cent of total FDI inflows.

By contrast, average FDI outflows of the Irish manufacturing sector averaged at ECU 1 billion, 16 times higher than inflows. Unfortunately, there was no breakdown for the different industrial subsectors.

The geographical distribution of trade and FDI suggests, that EU firms have used Ireland as an export base: net FDI outflows of other EU countries to Ireland averaged at ECU 1 billion, whereas Ireland realised a large export surplus of ECU 6 billion with the rest of the EU. The situation was rather the opposite for third countries: Ireland invested twice as much in non-European countries as it received as inflows, and its trade was fairly balanced.

The importance of Irish FDI outside the EU was primarily influenced by Irish investment in the US, which exceeded, in the three years under review, Irish investment flows to the EU. Surprisingly, Irish firms were extremely active as investors throughout the Western Hemisphere: the Irish outward-FDI to export ratio was above 20 per cent for NAFTA, Central America and South America.

### Trade and FDI Profile: Ireland - Chart 1



### Trade and FDI Profile: Ireland - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	1,609	25,066	6.42	1.00	1.00	1.00	2,138	18,669	11.45	1.00
TOTAL without services	958	22,248	4.31	1.00	1.00	1.00	170	17,353	0.98	1.00
Agriculture and fishing	0	464	0.00	0.00	0.78	0.00	2	462	0.36	5.74
Mining and quarrying	0	147	0.00	0.00	0.53	0.00	-94	497	-18.91	-39.00
Manufacturing	959	21,637	4.43	1.18	1.01	1.16	60	16,394	0.37	0.32
- Textiles and wood activities	0	1,210	0.00	0.00	0.73	0.00	0	2,357	0.00	0.00
- Petroleum, chemical, rubber, plastic	0	5,739	0.00	0.00	1.70	0.00	0	3,569	0.00	0.00
- Metal and mechanical products	0	1,658	0.00	0.00	0.35	0.00	0	2,437	0.00	0.00
- Machinery, computers, RTC, communications	0	5,893	0.00	0.00	1.40	0.00	0	4,111	0.00	0.00
- Vehicles and other transport equipment	0	301	0.00	0.00	0.07	0.00	0	1,247	0.00	0.00
Electricity, gas and water	0	0	-2380.95	-0.05	0.00	-83.71	202	0	154591.84	124895.59
Construction	-2	n.a.		-0.09			20	n.a.		
Trade and repairs	83	n.a.		0.47			61	n.a.		
Hotels and restaurants	1	n.a.		0.08			-13	n.a.		
Transport and communication	2	n.a.		0.06			27	n.a.		
- Land sea and air transport	1	n.a.		0.15			7	n.a.		
Financial intermediation	1,002	n.a.		1.43			1,358	n.a.		
- other financial intermediation	4	n.a.		0.05			196	n.a.		

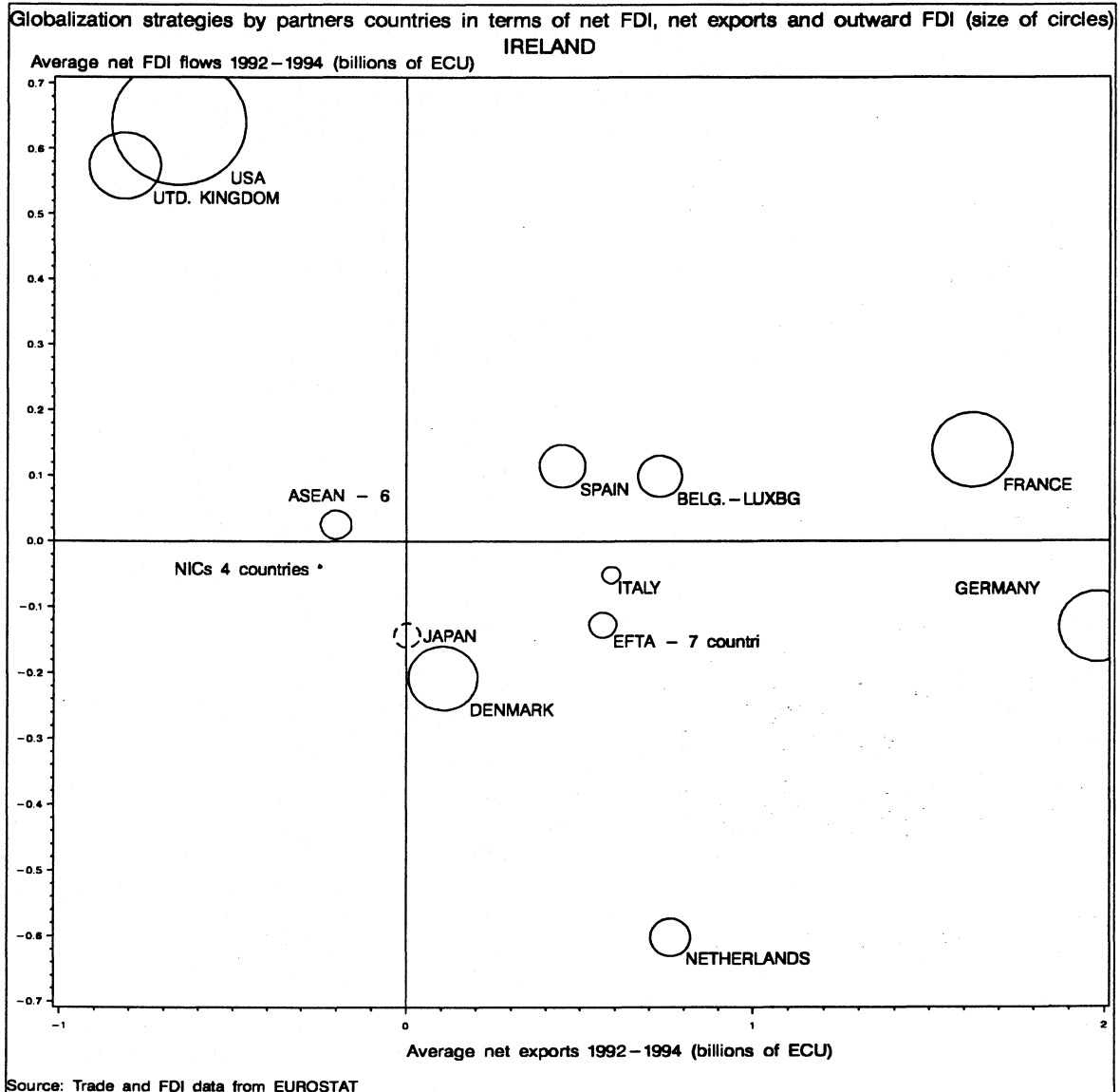
### Trade and FDI Profile: Ireland - Table 1 B

Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	0	464	0.00	1.00	0.00	0.00	2	462	0.37	0.00
Mining and quarrying	0	147	0.00	0.46	0.00	0.00	-94	497	-19.34	0.00
Manufacturing	959	21,637	1.03	0.86	0.12	0.14	60	16,394	0.37	15.98
- Textiles and wood activities	0	1,210	0.00	0.68			0	2,357	0.00	
- Petroleum, chemical, rubber, plastic	0	5,739	0.00	0.77			0	3,569	0.00	
- Metal and mechanical products	0	1,658	0.00	0.81			0	2,437	0.00	
- Machinery, computers, RTC, communications	0	5,893	0.00	0.82			0	4,111	0.00	
- Vehicles and other transport equipment	0	301	0.00	0.39			0	1,247	0.00	
Electricity, gas and water	0	0	-552.75	0.19	0.00	0.00	202	0	158116.23	0.00
Construction	-2	n.a.			0.00		20	n.a.		-0.08
Trade and repairs	83	n.a.			0.84		61	n.a.		1.37
Hotels and restaurants	1	n.a.			0.00		-13	n.a.		-0.08
Transport and communication	2	n.a.			0.12		27	n.a.		0.06
- Land sea and air transport	1	n.a.			0.26		7	n.a.		0.15
Financial intermediation	1,002	n.a.			0.85		1,358	n.a.		0.74
- other financial intermediation	4	n.a.			0.04		196	n.a.		0.02

### Trade and FDI Profile: Ireland - Chart 2



## Trade and FDI Profile: Ireland - Table 2 A

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	1,609	25,633	6.28	1.00	1.00	1.00	2,138	19,133	11.17	1.00
EU - 12 countries	621	17,676	3.51	0.74	1.54	0.48	1,646	12,077	13.63	0.96
France	262	2,346	11.17	2.19	1.20	1.83	123	724	16.98	1.07
Belg.-Luxbg.	81	1,062	7.62	0.73	0.92	0.79	-18	334	-5.39	-0.39
Netherlands	67	1,524	4.40	0.86	1.27	0.68	669	763	87.65	6.50
Germany	234	3,390	6.90	1.67	1.27	1.32	364	1,410	25.82	1.86
Italy	13	965	1.35	0.24	0.82	0.29	64	377	16.99	2.44
Utd. Kingdom	209	7,291	2.87	1.09	4.40	0.25	-365	8,105	-4.50	-0.19
Denmark	190	258	73.78	23.11	1.14	20.31	398	153	260.07	23.07
Greece		132			0.77			12		
Portugal		112			0.47			51		
Spain	87	596	14.60	1.07	0.76	1.42	-28	148	-18.86	-23.29
Extra Europe 12	988	7,957	12.42	1.29	0.56	2.30	492	7,056	6.97	0.78
EFTA - 7 countries	30	1,444	2.08	0.73	0.83	0.88	157	880	17.84	1.94
OECD	1,382	22,239	6.21	1.09	1.31	0.83	1,934	16,570	11.67	0.80
Central & E. Europe		235			0.46	0.00		140		
NAFTA	728	2,452	29.67	4.32	0.57	7.55	95	2,870	3.30	0.34
ASEAN - 6	38	265	14.45	1.49	0.22	6.70	13	466	2.72	8.63
ACP 70 countries		201			0.52	0.00		168		
NICs 4 countries	0	355	0.09	0.02	0.18	0.10	38	602	6.36	3.39
Mediterranean		329			0.41	0.00		110		
CIS 11 countries	4	124	3.24	0.85	0.55	1.56	21	29	72.32	305.65
North Africa -6	3	181	1.66	1.42	0.56	2.53	1	41	2.46	5.29
Other African	-12	231	-5.33	-2.70	0.57	-4.73	12	182	6.78	8.82
Central America	59	180	33.00	0.65	0.20	3.34	73	20	362.14	13.31
South America	28	122	23.25	0.58	0.22	2.65	-1	75	-1.77	2.37
Near & Middle East	-5	369	-1.36	-0.85	0.45	-1.90	51	47	108.05	25.05
Other Asian	35	1,151	3.07	0.30	0.37	0.80	160	1,395	11.50	2.23
Australia, Oceania	26	168	15.64	2.59	0.48	5.41	81	22	361.90	20.03
Iceland		8			0.80	0.00		3		
Norway		233			1.35	0.00		289		
Sweden	3	465	0.65	0.06	1.34	0.05	-386	250	-154.17	-14.94
Finland	6	134	4.46	1.98	1.11	1.79	11	95	11.62	0.71
Switzerland		450			0.70	0.00		170		
Austria		154			0.34	0.00		73		
USA	738	2,107	35.01	3.05	0.89	3.42	98	2,766	3.53	0.18
Japan	-28	811	-3.49	-3.51	0.94	-3.73	115	809	14.18	1.02

**Trade and FDI Profile: Ireland - Table 2 B**

## Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	1,609	25,633	1.00	0.85	0.86	1.00	2,138	19,133	1.00	0.75
EU - 12 countries	621	17,676	0.56	0.81	0.55	0.67	1,646	12,077	1.22	0.38
France	262	2,346	1.78	0.47	0.64	1.35	123	724	1.52	2.13
Belg.-Luxbg.	81	1,062	1.21	0.48	0.00	0.00	-18	334	-0.48	-4.50
Netherlands	67	1,524	0.70	0.67	0.18	0.27	669	763	7.84	0.10
Germany	234	3,390	1.10	0.59	0.78	1.33	364	1,410	2.31	0.64
Italy	13	965	0.21	0.56	0.34	0.60	64	377	1.52	0.20
Utd. Kingdom	209	7,291	0.46	0.95	0.00	0.00	-365	8,105	-0.40	-0.57
Denmark	190	258	11.75	0.75	0.65	0.87	398	153	23.28	0.48
Greece		132		0.17	0.00	0.00		12		
Portugal		112		0.62	0.00	0.00		51		
Spain	87	596	2.33	0.40	0.00	0.00	-28	148	-1.69	-3.11
Extra Europe 12	988	7,957	1.98	0.94	0.66	0.71	492	7,056	0.62	2.01
EFTA - 7 countries	30	1,444	0.33	0.76	0.32	0.42	157	880	1.60	0.19
OECD	1,382	22,239	0.99	0.85	0.83	0.98	1,934	16,570	1.04	0.71
Central & E. Europe		235		0.75	0.00	0.00		140		
NAFTA	728	2,452	4.73	0.92	0.23	0.25	95	2,870	0.30	7.69
ASEAN - 6	38	265	2.30	0.73	0.50	0.68	13	466	0.24	3.03
ACP 70 countries		201		0.91	0.00	0.00		168		
NICs 4 countries	0	355	0.01	0.74	0.02	0.02	38	602	0.57	0.01
Mediterranean		329		0.50	0.00	0.00		110		
CIS 11 countries	4	124	0.52	0.38	0.32	0.84	21	29	6.47	0.19
North Africa -6	3	181	0.26	0.37	0.50	1.36	1	41	0.22	3.00
Other African	-12	231	-0.85	0.88	0.00	0.00	12	182	0.61	-1.00
Central America	59	180	5.26	0.20	0.90	4.48	73	20	32.41	0.82
South America	28	122	3.70	0.76	0.00	0.00	-1	75	-0.16	-21.25
Near & Middle East	-5	369	-0.22	0.23	0.00	0.00	51	47	9.67	-0.10
Other Asian	35	1,151	0.49	0.90	0.36	0.40	160	1,395	1.03	0.22
Australia, Oceania	26	168	2.49	0.23	0.49	2.10	81	22	32.39	0.33
Iceland		8		0.49	0.00	0.00		3		
Norway		233		0.89	0.00	0.00		289		
Sweden	3	465	0.10	0.70	0.00	0.00	-386	250	-13.80	-0.01
Finland	6	134	0.71	0.83	0.71	0.85	11	95	1.04	0.55
Switzerland		450		0.55	0.00	0.00		170		
Austria		154		0.64	0.00	0.00		73		
USA	738	2,107	5.58	0.86	0.23	0.27	98	2,766	0.32	7.55
Japan	-28	811	-0.56	1.00	0.00	0.00	115	809	1.27	-0.25

## 7. Italy

Among the larger European trading nations, Italy has been a relatively minor home and host country of FDI. As far as outflows are concerned, it ranged with an FDI-to-export ratio in the industrial sector of 0.85 per cent lower than all other 12 countries under review except for Greece, Portugal and Spain. On the inflow side, only Japan, Germany and Ireland registered lower inward-FDI to import ratios (see table 12).

Italy was the only country under review to occupy a leadership position in textiles and wood products with a twin surplus in terms of trade and FDI. Italy had a pronounced comparative advantages in outward FDI and - even more so - in exports of this sector.

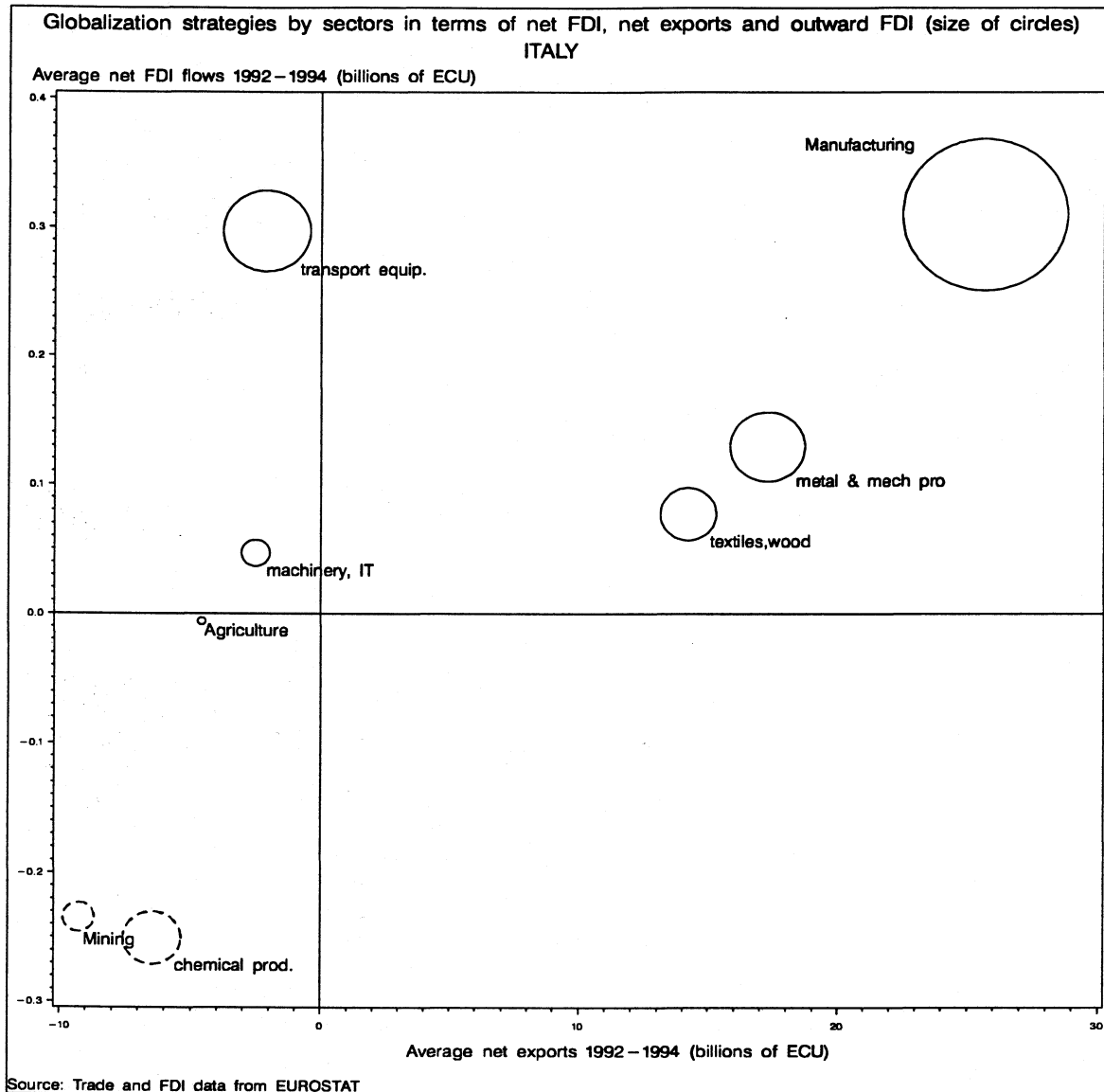
In the manufacturing sector, transport equipment was the leading supplier of outward FDI. In fact, the outward-FDI-to-export ratio was higher in Italy than in any of the other major car exporters, namely France, Germany, Japan and the United States, notwithstanding the fact that Italy ran a trade deficit in transport equipment. In fact, intra-industry trade in this sector was particularly high, in contrast to intra-industry FDI (see trade and investment profile tables 1 A and B). It is not clear whether this situation reflects relocation efforts of Italian transport equipment producers or whether Italy is catching up only in terms of outflows with competitors from other countries which have embarked on their overseas production strategies much earlier.

Although Italy's foreign investment remained modest, Italy was more important as home than as host country in relation to most partner countries (see trade and FDI profile table 2 B). There was a clear emphasis in outward investment on Southern Europe, with relative FDI-to-trade ratios significantly above 1 for France, Portugal and Spain; and a revealed comparative advantage for outward FDI to Greece.

The EU accounted for a more important part in FDI - both for inflows and outflows - than in trade as compared to third countries. This confirms again that the delivery of goods within the EU relies to a larger extent of FDI than it is the case for third countries.



## Trade and FDI Profile: Italy - Chart 1



## Trade and FDI Profile: Italy - Table 1 A

### Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	4,950	146,991	3.37	1.00	1.00	1.00	2,509	137,536	1.82	1.00
TOTAL without services	1,163	145,416	0.80	1.00	1.00	1.00	1,094	133,640	0.82	1.00
Agriculture and fishing	3	2,819	0.09	0.33	0.73	0.46	9	7,416	0.12	2.22
Mining and quarrying	-45	349	-12.90	-0.29	0.19	-1.48	190	9,615	1.97	4.86
Manufacturing	1,205	142,249	0.85	1.22	1.02	1.20	896	116,609	0.77	0.81
- Textiles and wood activities	143	29,879	0.48	1.82	2.77	0.66	66	15,676	0.42	1.10
- Petroleum, chemical, rubber, plastic	-147	17,920	-0.82	-1.14	0.81	-1.41	104	24,380	0.43	0.57
- Metal and mechanical products	250	41,309	0.61	2.11	1.34	1.57	121	24,054	0.50	0.88
- Machinery, computers, RTC, communications	37	11,647	0.32	0.34	0.42	0.81	-10	14,170	-0.07	-0.07
- Vehicles and other transport equipment	343	14,747	2.33	4.47	0.50	8.93	46	16,867	0.27	1.36
Electricity, gas and water	0	0	0.00	0.00	0.00	0.00	0	0	0.00	0.00
Construction	-24	n.a.		-1.05			15	n.a.		
Trade and repairs	-21	n.a.		-0.10			3	n.a.		
Hotels and restaurants	-59	n.a.		-3.71			13	n.a.		
Transport and communication	152	n.a.		4.16			40	n.a.		
- Land sea and air transport	18	n.a.		2.18			24	n.a.		
Financial intermediation	3,094	n.a.		3.63			1,051	n.a.		
- other financial intermediation	1,730	n.a.		19.79			977	n.a.		

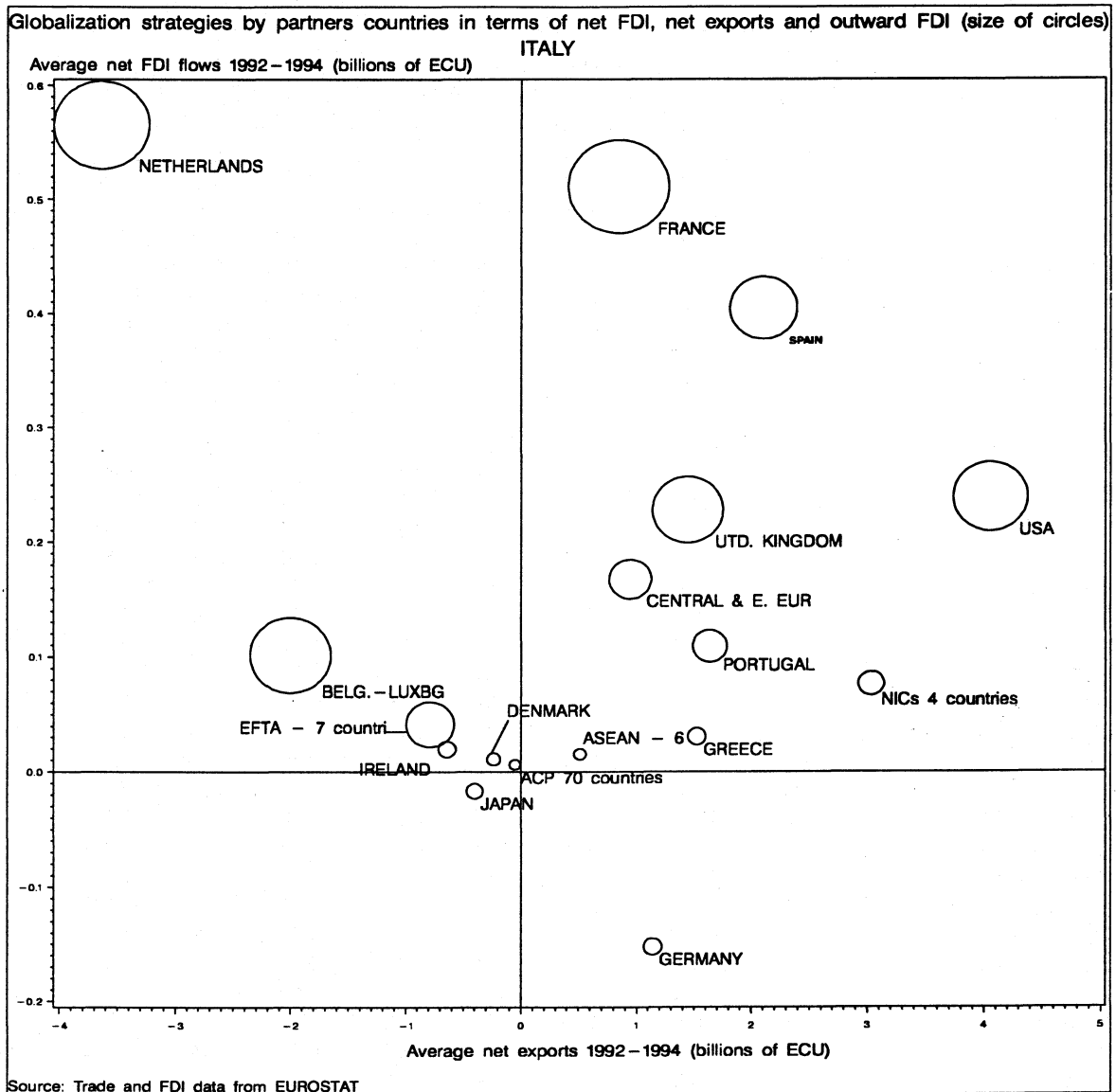
## Trade and FDI Profile: Italy - Table 1 B

### Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- industry trade ratio	Intra- industry FDI ratio	Relation intra- industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	3	2,819	0.12	0.55	0.47	0.85	9	7,416	0.14	0.31
Mining and quarrying	-45	349	-16.13	0.07	0.00	0.00	190	9,615	2.41	-0.24
Manufacturing	1,205	142,249	1.06	0.90	0.85	0.95	896	116,609	0.94	1.35
- Textiles and wood activities	143	29,879	0.60	0.69	0.63	0.92	66	15,676	0.52	2.16
- Petroleum, chemical, rubber, plastic	-147	17,920	-1.02	0.85	0.00	0.00	104	24,380	0.52	-1.41
- Metal and mechanical products	250	41,309	0.76	0.74	0.65	0.89	121	24,054	0.61	2.07
- Machinery, computers, RTC, communications	37	11,647	0.40	0.90	0.00	0.00	-10	14,170	-0.08	-3.83
- Vehicles and other transport equipment	343	14,747	2.91	0.93	0.24	0.26	46	16,867	0.34	7.40
Electricity, gas and water	0	0	0.00	0.21			0	0	0.00	
Construction	-24	n.a.			0.00		15	n.a.		-1.58
Trade and repairs	-21	n.a.			0.00		3	n.a.		-7.00
Hotels and restaurants	-59	n.a.			0.00		13	n.a.		-4.54
Transport and communication	152	n.a.			0.42		40	n.a.		3.76
- Land sea and air transport	18	n.a.			0.85		24	n.a.		0.74
Financial intermediation	3,094	n.a.			0.51		1,051	n.a.		2.94
- other financial intermediation	1,730	n.a.			0.72		977	n.a.		1.77

### Trade and FDI Profile: Italy - Chart 2



## Trade and FDI Profile: Italy - Table 2 A

### Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	4,950	146,991	3.37	1.00	1.00	1.00	2,509	137,536	1.82	1.00
EU - 12 countries	3,538	80,492	4.40	1.36	1.22	1.11	1,697	78,283	2.17	0.94
France	946	19,958	4.74	2.57	1.78	1.45	435	19,115	2.28	0.88
Belg.-Luxbg	616	4,541	13.57	1.80	0.68	2.63	515	6,537	7.87	3.52
Netherlands	843	4,309	19.57	3.53	0.62	5.65	278	7,944	3.50	1.59
Germany	31	28,781	0.11	0.07	1.88	0.04	183	27,642	0.66	0.29
Utd. Kingdom	476	9,537	4.99	0.81	1.00	0.80	248	8,094	3.06	0.78
Ireland	28	478	5.93	0.31	0.38	0.83	9	1,116	0.78	0.28
Denmark	17	1,150	1.45	0.66	0.89	0.74	6	1,385	0.41	0.22
Greece	31	2,632	1.18	1.92	2.66	0.72	0	1,109	0.03	-0.15
Portugal	113	2,110	5.34	2.67	1.53	1.74	3	475	0.70	0.82
Spain	426	6,995	6.09	1.71	1.55	1.10	21	4,865	0.42	3.21
Extra Europe 12	1,412	66,499	2.12	0.60	0.82	0.73	812	59,253	1.37	0.94
EFTA - 7 countries	220	11,892	1.85	1.74	1.19	1.46	178	12,686	1.41	0.94
OECD	4,237	109,165	3.88	1.08	1.12	0.96	2,334	102,882	2.27	0.95
Central & E. Europe	167	6,059	2.75	1.57	2.08	0.76	-1	4,848	-0.02	-0.13
NAFTA	499	12,946	3.86	0.96	0.53	1.83	289	8,197	3.52	2.25
ASEAN - 6	14	2,600	0.54	0.18	0.38	0.47	-1	2,080	-0.06	-1.25
ACP 70 countries	11	1,712	0.66	0.64	0.77	0.83	5	1,702	0.29	1.56
NICs 4 countries	62	5,246	1.18	1.07	0.46	2.31	-15	2,209	-0.66	-2.16
Mediterranean	106	9,419	1.12	2.83	2.04	1.39	-8	8,769	-0.09	-0.52
CIS 11 Countries	3	1,752	0.17	0.21	1.35	0.15	-3	3,604	-0.08	-2.15
North Africa -6	20	3,940	0.51	3.08	2.13	1.45	-1	6,339	-0.02	-0.28
Other African	9	1,875	0.46	0.62	0.81	0.76	2	3,369	0.05	0.39
Central America	-61	1,757	-3.49	-0.22	0.33	-0.66	37	417	8.87	2.00
South America	15	3,171	0.46	0.10	1.00	0.10	-1	2,868	-0.05	0.38
Near & Middle East	7	6,447	0.10	0.37	1.37	0.27	-4	3,513	-0.10	-0.15
Other Asian	112	9,827	1.14	0.31	0.56	0.55	28	8,635	0.32	0.38
Australia, Oceania	-14	1,077	-1.27	-0.44	0.53	-0.82	0	844	0.04	0.01
Iceland	0	29	0.00	0.00	0.50	0.00	0	14	0.00	0.00
Norway	5	609	0.88	0.10	0.62	0.16	1	642	0.21	0.22
Sweden	18	1,331	1.38	0.12	0.67	0.18	120	1,729	6.94	4.12
Finland	-3	568	-0.47	-0.29	0.82	-0.35	7	835	0.80	0.30
Switzerland	211	5,716	3.70	3.13	1.56	2.01	172	6,422	2.67	0.67
Austria	-12	3,638	-0.33	-0.13	1.42	-0.09	0	3,044	0.00	0.00
USA	517	11,023	4.69	0.69	0.81	0.85	277	6,969	3.98	1.21
Japan	25	2,930	0.84	0.99	0.59	1.68	41	3,330	1.24	0.55

**Trade and FDI Profile: Italy - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	4,950	146,991	1.00	0.97	0.67	0.70	2,509	137,536	1.00	1.97
EU - 12 countries	3,538	80,492	1.31	0.99	0.65	0.66	1,697	78,283	1.19	2.08
France	946	19,958	1.41	0.98	0.63	0.64	435	19,115	1.25	2.18
Belg.-Luxbg	616	4,541	4.03	0.82	0.91	1.11	515	6,537	4.32	1.20
Netherlands	843	4,309	5.81	0.70	0.50	0.71	278	7,944	1.92	3.03
Germany	31	28,781	0.03	0.98	0.29	0.30	183	27,642	0.36	0.17
Utd. Kingdom	476	9,537	1.48	0.92	0.68	0.75	248	8,094	1.68	1.92
Ireland	28	478	1.76	0.60	0.47	0.78	9	1,116	0.43	3.27
Denmark	17	1,150	0.43	0.91	0.51	0.56	6	1,385	0.22	2.94
Greece	31	2,632	0.35	0.59	0.02	0.04	0	1,109	0.02	93.00
Portugal	113	2,110	1.59	0.37	0.06	0.16	3	475	0.38	33.80
Spain	426	6,995	1.81	0.82	0.09	0.11	21	4,865	0.23	20.60
Extra Europe 12	1,412	66,499	0.63	0.94	0.73	0.77	812	59,253	0.75	1.74
EFTA - 7 countries	220	11,892	0.55	0.97	0.90	0.93	178	12,686	0.77	1.23
OECD	4,237	109,165	1.15	0.97	0.71	0.73	2,334	102,882	1.24	1.82
Central & E. Europe	167	6,059	0.82	0.89	0.00	0.00	-1	4,848	-0.01	-166.67
NAFTA	499	12,946	1.15	0.78	0.73	0.94	289	8,197	1.93	1.73
ASEAN - 6	14	2,600	0.16	0.89	0.00	0.00	-1	2,080	-0.04	-10.50
ACP 70 countries	11	1,712	0.20	1.00	0.61	0.61	5	1,702	0.16	2.27
NICs 4 countries	62	5,246	0.35	0.59	0.00	0.00	-15	2,209	-0.36	-4.23
Mediterranean	106	9,419	0.33	0.96	0.00	0.00	-8	8,769	-0.05	-13.78
CIS 11 countries	3	1,752	0.05	0.65	0.00	0.00	-3	3,604	-0.05	-1.00
North Africa -6	20	3,940	0.15	0.77	0.00	0.00	-1	6,339	-0.01	-15.00
Other African	9	1,875	0.14	0.72	0.32	0.45	2	3,369	0.03	5.20
Central America	-61	1,757	-1.04	0.38	0.00	0.00	37	417	4.86	-1.66
South America	15	3,171	0.14	0.95	0.00	0.00	-1	2,868	-0.03	-11.00
Near & Middle East	7	6,447	0.03	0.71	0.00	0.00	-4	3,513	-0.06	-1.82
Other Asian	112	9,827	0.34	0.94	0.40	0.42	28	8,635	0.18	4.06
Australia, Oceania	-14	1,077	-0.38	0.88	0.00	0.00	0	844	0.02	-41.00
Iceland	0	29	0.00	0.64			0	14	0.00	
Norway	5	609	0.26	0.97	0.40	0.41	1	642	0.11	4.00
Sweden	18	1,331	0.41	0.87	0.27	0.30	120	1,729	3.81	0.15
Finland	-3	568	-0.14	0.81	0.00	0.00	7	835	0.44	-0.40
Switzerland	211	5,716	1.10	0.94	0.90	0.95	172	6,422	1.47	1.23
Austria	-12	3,638	-0.10	0.91	0.00	0.00	0	3,044	0.00	
USA	517	11,023	1.39	0.77	0.70	0.90	277	6,969	2.18	1.86
Japan	25	2,930	0.25	0.94	0.75	0.80	41	3,330	0.68	0.60

## 8. Netherlands

Over the three years under review, the Netherlands have been among the world's most important suppliers of FDI. This holds true in relative terms: the Dutch outward-FDI-to-export ratio in the manufacturing sector was with 5 per cent higher than that of any of the other countries under review. But also in absolute terms, this small country supplied an annual average of ECU 5 billion industrial FDI, i.e. more than France, the UK or Japan, and only slightly less than Germany. It would be interesting to analyse to what extent this has been true not only in the early 1990s and whether it is related to the fact that the Netherlands are the home country of three of the world largest multinationals.

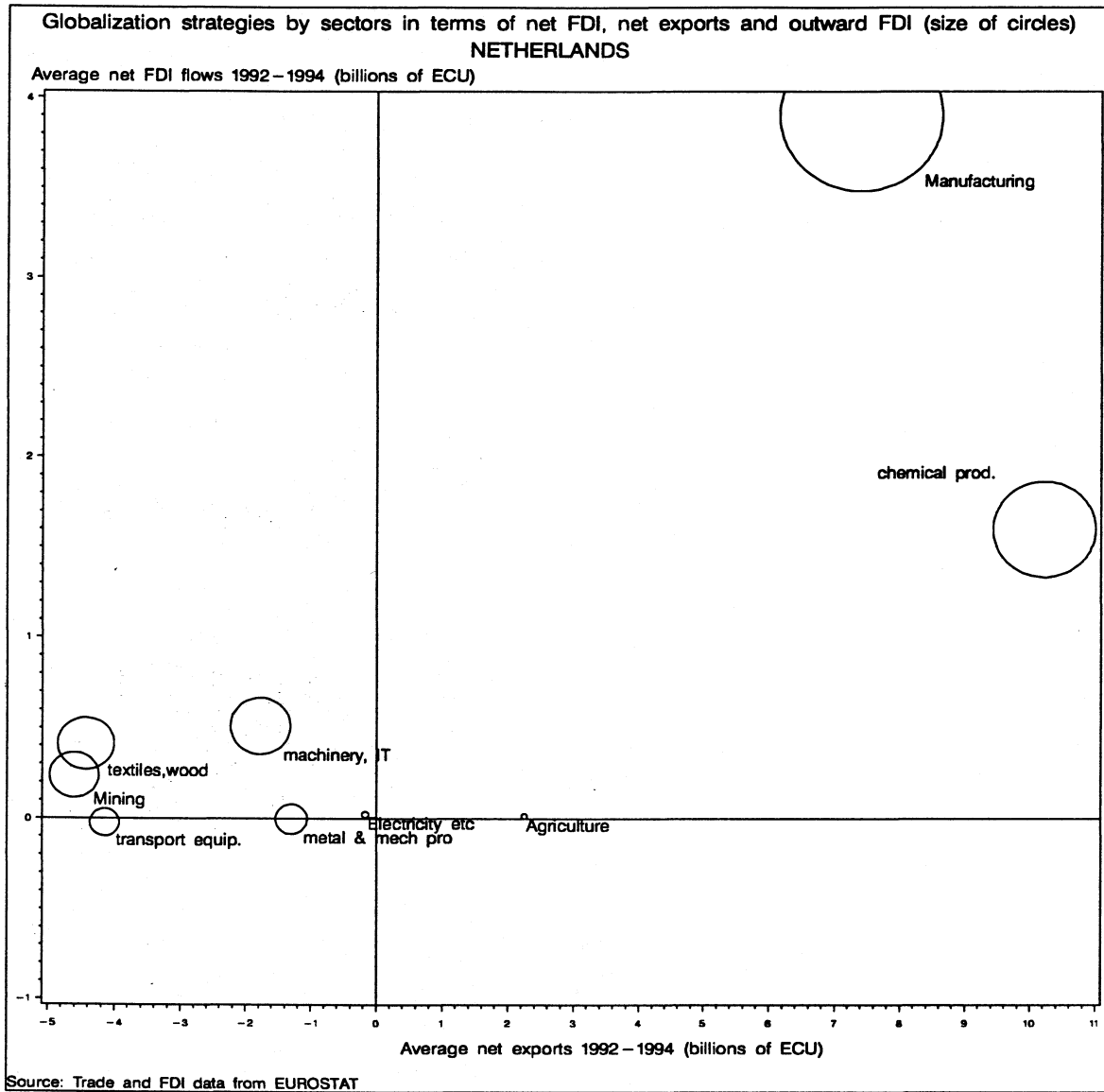
The chemical and petrochemical sector made a major contribution to Holland's rapid globalisation through FDI. It invested an annual average of ECU 2 billion abroad, was in the top right area of first quadrant of the globalisation chart, and had a very high revealed comparative advantage both in exports and outward FDI.

In three other industrial sectors, the combination of significant outflows of FDI and a trade deficit pointed to structural adjustment and relocation.

While there was no *sector* with the typical characteristics of export platforms, namely high FDI inflows and an export surplus, Germany as partner country was in this category. FDI inflows from Germany were high (Germany was in fact the largest single investor), exceeded outflows to Germany, and the Netherlands realised a pronounced trade surplus with Germany of ECU 9 billion, nearly twice as much as Holland's overall trade surplus. This may well have been related to the key role of Rotterdam as the largest port for Germany's and the EU imports and as a centre for light processing activities.

With respect to most other EU countries, the Netherlands were both net investors and net exporters. Unlike the EU as a whole, the Netherlands combined a high trade deficit and significant FDI outflows in relation to the United States. Over the period under review, Dutch companies reduced their outward investment substantially in Japan. Inflows from Japan were fairly small.

### Trade and FDI Profile: Netherlands - Chart 1



## Trade and FDI Profile: Netherlands - Table 1 A

### Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	10,912	115,730	9.43	1.00	1.00	1.00	5,120	110,596	4.63	1.00
TOTAL without services	5,529	114,735	4.82	1.00	1.00	1.00	1,377	109,871	1.25	1.00
Agriculture and fishing	7	8,947	0.08	0.18	2.93	0.06	-6	6,698	-0.09	-1.17
Mining and quarrying	446	4,172	10.69	0.60	2.92	0.20	208	8,777	2.37	3.82
Manufacturing	5,076	101,609	5.00	1.08	0.92	1.17	1,175	94,219	1.25	0.86
- Textiles and wood activities	587	9,631	6.10	1.56	1.13	1.38	176	14,060	1.25	2.13
- Petroleum, chemical, rubber, plastic	2,019	29,547	6.83	3.31	1.70	1.95	420	19,334	2.17	1.91
- Metal and mechanical products	194	15,309	1.27	0.35	0.63	0.55	197	16,608	1.19	1.36
- Machinery, computers, RTC, communications	692	14,143	4.90	1.35	0.65	2.07	183	15,919	1.15	0.71
- Vehicles and other transport equipment	162	6,798	2.38	0.44	0.29	1.51	185	10,946	1.69	5.44
Electricity, gas and water	3	8	37.09	0.08	0.07	1.17	-4	177	-2.45	-1.55
Construction	32	n.a.		0.30			32	n.a.		
Trade and repairs	1,240	n.a.		1.21			858	n.a.		
Hotels and restaurants	27	n.a.		0.36			71	n.a.		
Transport and communication	232	n.a.		1.34			184	n.a.		
- Land sea and air transport	145	n.a.		3.77			81	n.a.		
Financial intermediation	2,767	n.a.		0.68			1,481	n.a.		
- other financial intermediation	1,958	n.a.		4.71			1,448	n.a.		

## Trade and FDI Profile: Netherlands - Table 1 B

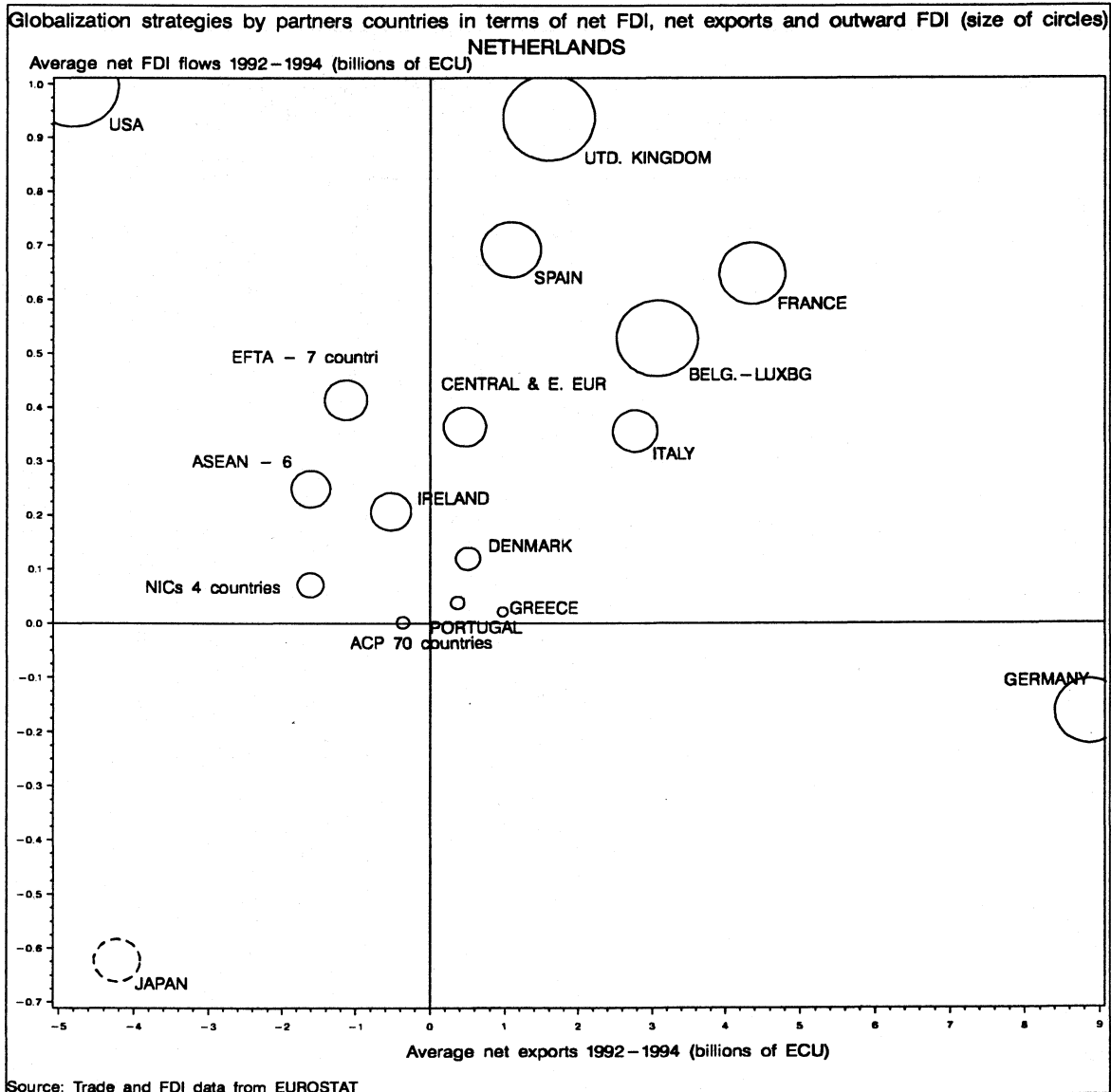
### Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- industry trade ratio	Intra- industry FDI ratio	Relation intra- industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	7	8,947	0.02	0.86	0.00	0.00	-6	6,698	-0.08	-1.11
Mining and quarrying	446	4,172	2.22	0.64	0.64	0.99	208	8,777	1.90	2.14
Manufacturing	5,076	101,609	1.04	0.96	0.38	0.39	1,175	94,219	1.00	4.32
- Textiles and wood activities	587	9,631	1.26	0.81	0.46	0.57	176	14,060	1.00	3.34
- Petroleum, chemical, rubber, plastic	2,019	29,547	1.42	0.79	0.34	0.44	420	19,334	1.74	4.81
- Metal and mechanical products	194	15,309	0.26	0.96	0.99	1.03	197	16,608	0.95	0.98
- Machinery, computers, RTC, communications	692	14,143	1.02	0.94	0.42	0.44	183	15,919	0.92	3.79
- Vehicles and other transport equipment	162	6,798	0.49	0.77	0.93	1.22	185	10,946	1.35	0.88
Electricity, gas and water	3	8	7.69	0.09	0.00	0.00	-4	177	-1.96	-0.69
Construction	32	n.a.			1.00		32	n.a.		1.00
Trade and repairs	1,240	n.a.			0.82		858	n.a.		1.44
Hotels and restaurants	27	n.a.			0.56		71	n.a.		0.39
Transport and communication	232	n.a.			0.88		184	n.a.		1.26
- Land sea and air transport	145	n.a.			0.72		81	n.a.		1.78
Financial intermediation	2,767	n.a.			0.70		1,481	n.a.		1.87
- other financial intermediation	1,958	n.a.			0.85		1,448	n.a.		1.35



### Trade and FDI Profile: Netherlands - Chart 2



## Trade and FDI Profile: Netherlands - Table 2 A

Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	10,912	115,730	9.43	1.00	1.00	1.00	5,120	110,596	4.63	1.00
EU - 12 countries	6,639	85,670	7.75	1.16	1.65	0.70	3,231	62,588	5.16	0.88
France	879	12,096	7.27	1.08	1.37	0.79	231	7,741	2.99	0.45
Belg.-Luxbg	1,357	15,685	8.65	1.80	3.00	0.60	830	12,613	6.58	1.16
Germany	960	33,067	2.90	1.01	2.74	0.37	1,123	24,166	4.65	0.81
Italy	407	6,524	6.24	1.12	1.24	0.91	52	3,757	1.38	0.48
Utd. Kingdom	1,738	10,733	16.19	1.34	1.43	0.93	800	9,138	8.76	0.88
Ireland	327	704	46.45	1.63	0.70	2.32	121	1,232	9.80	1.41
Denmark	119	1,755	6.76	2.13	1.72	1.24	0	1,247	0.00	0.00
Greece	21	1,148	1.80	0.58	1.47	0.39	0	178	0.00	0.00
Portugal	38	953	3.95	0.41	0.88	0.46	0	585	0.00	0.00
Spain	717	3,005	23.87	1.31	0.85	1.55	17	1,931	0.88	2.62
Extra Europe 12	4,272	30,059	14.21	0.82	0.47	1.75	1,889	48,008	3.93	1.06
EFTA - 7 countries	248	7,046	3.51	0.89	0.90	0.99	-28	8,177	-0.34	-0.09
OECD	9,185	99,881	9.20	1.07	1.31	0.82	4,780	86,766	5.51	0.91
Central & E. Europe	361	2,305	15.66	1.54	1.00	1.54	-2	1,867	-0.09	-0.21
NAFTA	985	5,540	17.77	0.86	0.29	3.01	273	10,512	2.59	0.65
ASEAN - 6	314	1,702	18.45	1.80	0.32	5.70	66	3,310	1.99	15.28
ACP 70 countries	32	1,312	2.46	0.83	0.75	1.11	31	1,625	1.91	3.99
NICs 4 countries	142	2,550	5.56	1.11	0.28	3.88	71	4,162	1.71	2.20
Mediterranean	116	2,418	4.80	1.41	0.67	2.12	35	2,196	1.61	3.74
CIS 11 countries	106	960	11.07	3.33	0.94	3.54	3	1,083	0.25	2.51
North Africa -6	13	830	1.61	0.93	0.57	1.64	0	1,051	0.00	0.00
Other African	29	1,437	2.02	0.94	0.79	1.19	14	1,676	0.84	2.62
Central America	377	814	46.29	0.61	0.20	3.12	172	562	30.55	2.71
South America	320	985	32.47	0.97	0.39	2.46	14	3,172	0.43	-1.39
Near & Middle East	29	2,233	1.30	0.73	0.60	1.21	45	4,394	1.02	0.57
Other Asian	155	4,161	3.73	0.19	0.30	0.65	270	11,226	2.41	1.13
Australia, Oceania	79	573	13.73	1.14	0.36	3.16	28	508	5.51	0.74
Iceland	0	104	0.00	0.00	2.24	0.00	0	59	0.00	0.00
Norway	106	892	11.84	0.88	1.15	0.77	7	2,144	0.31	0.13
Sweden	713	1,869	38.17	2.18	1.19	1.83	116	2,458	4.72	1.10
Finland	3	682	0.39	0.13	1.24	0.10	36	1,082	3.36	0.49
Switzerland	131	2,084	6.30	0.88	0.72	1.22	410	1,451	28.23	2.80
Austria	83	1,414	5.84	0.42	0.70	0.59	35	983	3.53	0.51
USA	1,599	4,795	33.35	0.97	0.45	2.17	602	9,604	6.27	0.75
Japan	-440	1,155	-38.14	-8.04	0.30	-27.12	182	5,378	3.38	0.59

**Trade and FDI Profile: Netherlands - Table 2 B**

## Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	10,912	115,730	1.00	0.98	0.64	0.65	5,120	110,596	1.00	2.13
EU - 12 countries	6,639	85,670	0.82	0.84	0.65	0.78	3,231	62,588	1.12	2.05
France	879	12,096	0.77	0.78	0.42	0.53	231	7,741	0.65	3.80
Belg.-Luxbg	1,357	15,685	0.92	0.89	0.76	0.85	830	12,613	1.42	1.64
Germany	960	33,067	0.31	0.84	0.92	1.09	1,123	24,166	1.00	0.85
Italy	407	6,524	0.66	0.73	0.23	0.31	52	3,757	0.30	7.83
Utd. Kingdom	1,738	10,733	1.72	0.92	0.63	0.69	800	9,138	1.89	2.17
Ireland	327	704	4.93	0.73	0.54	0.74	121	1,232	2.12	2.71
Denmark	119	1,755	0.72	0.83	0.00	0.00	0	1,247	0.00	
Greece	21	1,148	0.19	0.27	0.00	0.00	0	178	0.00	
Portugal	38	953	0.42	0.76	0.00	0.00	0	585	0.00	
Spain	717	3,005	2.53	0.78	0.05	0.06	17	1,931	0.19	42.20
Extra Europe 12	4,272	30,059	1.51	0.77	0.61	0.80	1,889	48,008	0.85	2.26
EFTA - 7 countries	248	7,046	0.37	0.93	0.00	0.00	-28	8,177	-0.07	-8.85
OECD	9,185	99,881	0.98	0.93	0.68	0.74	4,780	86,766	1.19	1.92
Central & E. Europe	361	2,305	1.66	0.89	0.00	0.00	-2	1,867	-0.02	-216.60
NAFTA	985	5,540	1.89	0.69	0.43	0.63	273	10,512	0.56	3.61
ASEAN - 6	314	1,702	1.96	0.68	0.35	0.51	66	3,310	0.43	4.76
ACP 70 countries	32	1,312	0.26	0.89	0.98	1.10	31	1,625	0.41	1.04
NICs 4 countries	142	2,550	0.59	0.76	0.67	0.88	71	4,162	0.37	1.99
Mediterranean	116	2,418	0.51	0.95	0.47	0.49	35	2,196	0.35	3.28
CIS 11 countries	106	960	1.17	0.94	0.05	0.05	3	1,083	0.05	39.88
North Africa -6	13	830	0.17	0.88	0.00	0.00	0	1,051	0.00	
Other African	29	1,437	0.21	0.92	0.65	0.71	14	1,676	0.18	2.07
Central America	377	814	4.91	0.82	0.63	0.77	172	562	6.60	2.20
South America	320	985	3.44	0.47	0.08	0.17	14	3,172	0.09	23.41
Near & Middle East	29	2,233	0.14	0.67	0.78	1.16	45	4,394	0.22	0.64
Other Asian	155	4,161	0.40	0.54	0.73	1.35	270	11,226	0.52	0.57
Australia, Oceania	79	573	1.46	0.94	0.53	0.56	28	508	1.19	2.81
Iceland	0	104	0.00	0.72			0	59	0.00	
Norway	106	892	1.26	0.59	0.12	0.20	7	2,144	0.07	15.85
Sweden	713	1,869	4.05	0.86	0.28	0.32	116	2,458	1.02	6.15
Finland	3	682	0.04	0.77	0.14	0.18	36	1,082	0.73	0.07
Switzerland	131	2,084	0.67	0.82	0.49	0.59	410	1,451	6.10	0.32
Austria	83	1,414	0.62	0.82	0.59	0.72	35	983	0.76	2.38
USA	1,599	4,795	3.54	0.67	0.55	0.82	602	9,604	1.35	2.65
Japan	-440	1,155	-4.05	0.35	0.00	0.00	182	5,378	0.73	-2.42

## 9. Portugal

In line with what one would expect for catching-up development, Portugal realised marked trade and FDI deficits. Outgoing FDI represented only 0.8 per cent of exports and 22 per cent of incoming FDI. Yet, incoming FDI remained below the EU average when compared to imports.

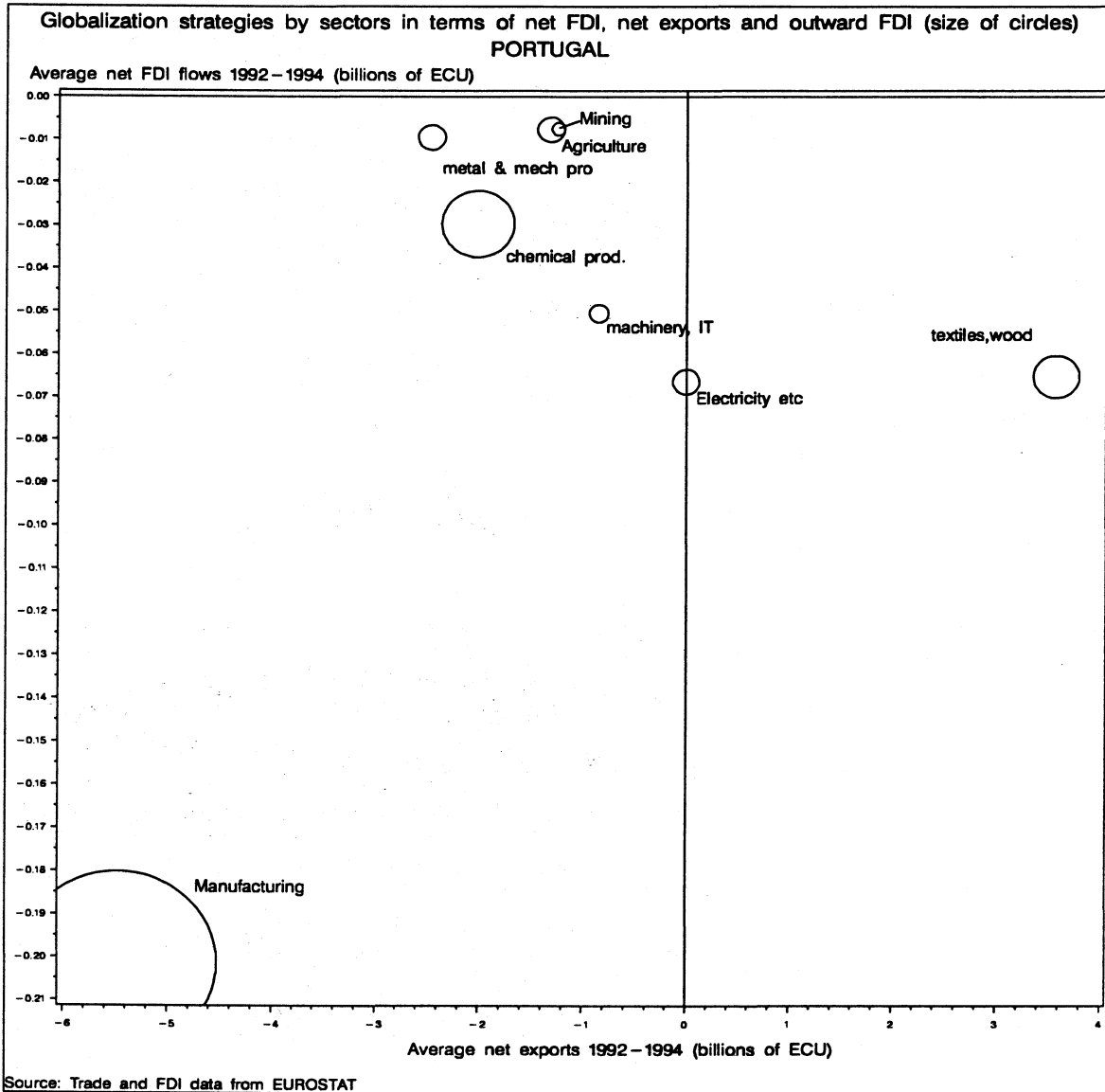
There was only one industrial sector, in which Portugal had a revealed comparative advantage, namely textiles and wood activities. The relative share of this sector in the country's exports were six times higher than the Triad average. This was also the only sector that generated a considerable trade surplus. Yet, Portuguese textile producers relied nearly exclusively on direct exports rather than FDI outflows. It would be interesting to analyse to what extent this reflects a large extent of foreign ownership in Portugal's textile sector and a reluctance of foreign-affiliated daughter firms to invest abroad.

As far as inflows were concerned, transport equipment was the most important host country sector.

The UK, Spain and Germany have been Portugal's most important supplier of FDI. In the case of Spain, there has been intensive exchange of FDI. The intra-regional FDI ratio between Portugal and Spain was very high with 0.8 (see trade and investment profile table 2 B). In fact, more than half of Portugal's total investment went to its neighbour on the Iberian peninsula. At the same time, Portugal registered the largest bilateral trade deficit with Spain. In the case of Germany, France and the UK, bilateral trade deficits were much smaller, but net FDI inflows larger. These home countries appear to have used Portugal less as a platform for exports back to their home countries.

In line with its colonial past, Portugal registered a very high revealed comparative advantage in trade and FDI vis-à-vis the ACP countries and, more specifically, sub-Saharan Africa (other Africa in trade and investment profile table 2 A).

### Trade and FDI Profile: Portugal - Chart 1



## Trade and FDI Profile: Portugal - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	284	13,851	2.05	1.00	1.00	1.00	1,280	21,923	5.84	1.00
TOTAL without services	107	13,837	0.77	1.00	1.00	1.00	316	21,875	1.44	1.00
Agriculture and fishing	2	150	1.33	2.71	0.41	6.65	10	1,465	0.66	7.12
Mining and quarrying	0	235	0.14	0.02	1.37	0.02	5	1,480	0.36	0.50
Manufacturing	105	13,452	0.78	1.15	1.01	1.14	306	18,925	1.62	0.96
- Textiles and wood activities	6	6,663	0.09	0.78	6.49	0.12	47	3,087	1.53	2.26
- Petroleum, chemical, rubber, plastic	9	1,301	0.72	0.79	0.62	1.28	44	3,317	1.32	1.01
- Metal and mechanical products	1	1,078	0.12	0.12	0.37	0.33	8	3,540	0.22	0.22
- Machinery, computers, RTC, communications	1	1,345	0.05	0.07	0.51	0.13	34	2,196	1.56	0.85
- Vehicles and other transport equipment	0	1,095	0.00	0.00	0.39	0.00	75	3,631	2.07	5.79
Electricity, gas and water	1	0	7407.41	0.90	0.00	1455.30	46	6	797.25	436.40
Construction	3	n.a.		1.29			53	n.a.		
Trade and repairs	21	n.a.		1.08			23	n.a.		
Hotels and restaurants	0	n.a.		0.23			38	n.a.		
Transport and communication	7	n.a.		2.09			19	n.a.		
- Land sea and air transport	1	n.a.		0.90			14	n.a.		
Financial intermediation	103	n.a.		1.32			551	n.a.		
- other financial intermediation	45	n.a.		5.65			379	n.a.		

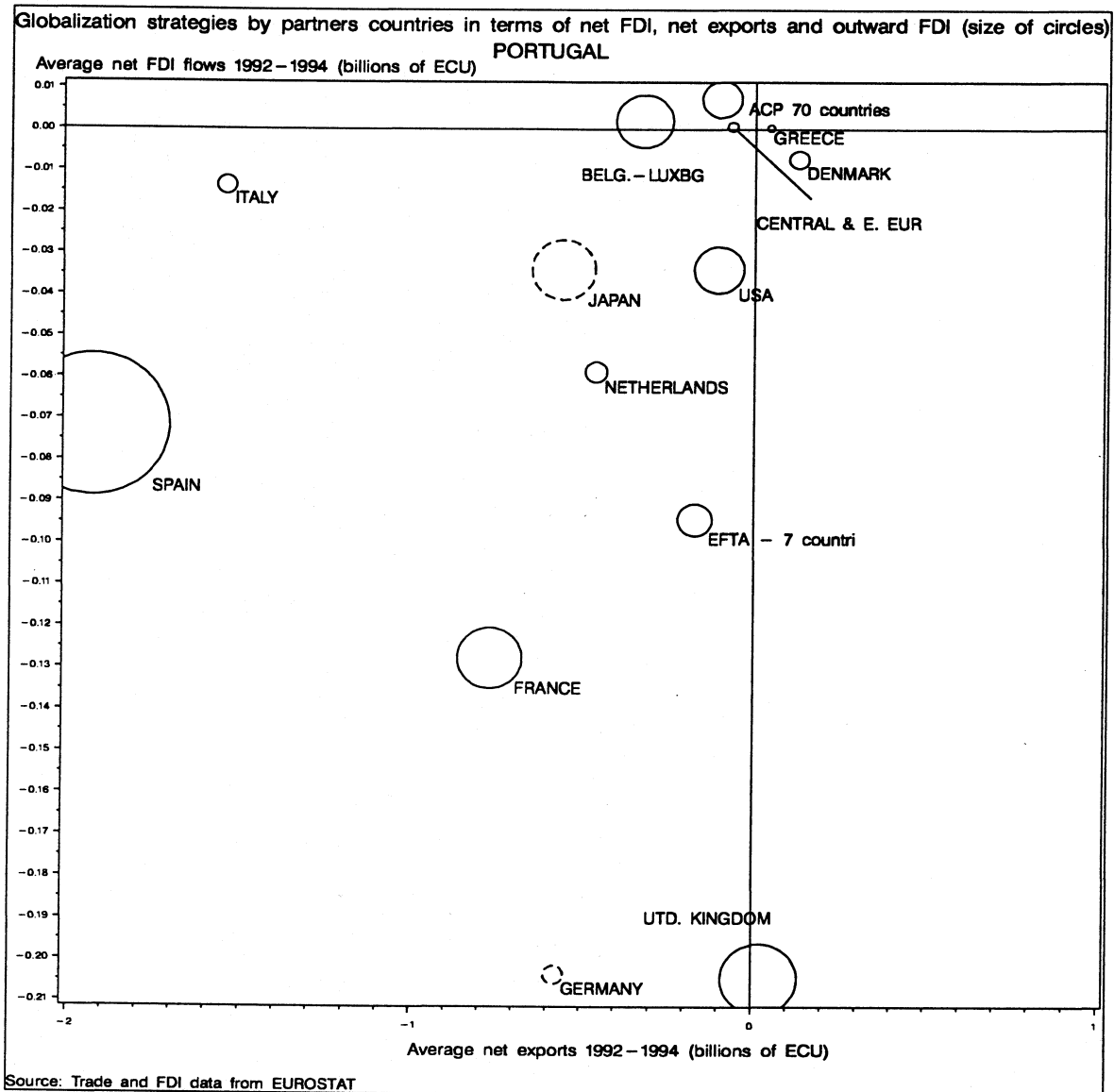
## Trade and FDI Profile: Portugal - Table 1 B

Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	2	150	1.71	0.19	0.34	1.84	10	1,465	0.39	0.21
Mining and quarrying	0	235	0.18	0.27	0.12	0.43	5	1,480	0.22	0.06
Manufacturing	105	13,452	1.00	0.83	0.51	0.61	306	18,925	0.96	0.34
- Textiles and wood activities	6	6,663	0.11	0.63	0.21	0.34	47	3,087	0.91	0.12
- Petroleum, chemical, rubber, plastic	9	1,301	0.92	0.56	0.35	0.63	44	3,317	0.79	0.21
- Metal and mechanical products	1	1,078	0.16	0.47	0.30	0.63	8	3,540	0.13	0.17
- Machinery, computers, RTC, communications	1	1,345	0.06	0.76	0.04	0.05	34	2,196	0.93	0.02
- Vehicles and other transport equipment	0	1,095	0.00	0.46	0.00	0.00	75	3,631	1.23	0.00
Electricity, gas and water	1	0	9520.03	0.00	0.03	9.17	46	6	475.63	0.01
Construction	3	n.a.			0.10		53	n.a.		0.05
Trade and repairs	21	n.a.			0.97		23	n.a.		0.94
Hotels and restaurants	0	n.a.			0.02		38	n.a.		0.01
Transport and communication	7	n.a.			0.55		19	n.a.		0.38
- Land sea and air transport	1	n.a.			0.09		14	n.a.		0.05
Financial intermediation	103	n.a.			0.32		551	n.a.		0.19
- other financial intermediation	45	n.a.			0.21		379	n.a.		0.12

### Trade and FDI Profile: Portugal - Chart 2



## Trade and FDI Profile: Portugal - Table 2 A

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	284	13,851	2.05	1.00	1.00	1.00	1,280	21,923	5.84	1.00
EU - 12 countries	236	10,419	2.27	1.59	1.68	0.94	934	15,872	5.88	0.79
France	26	2,033	1.28	1.23	1.92	0.64	154	2,802	5.49	0.66
Belg.-Luxbg	20	484	4.14	1.02	0.77	1.32	18	806	2.23	0.31
Netherlands	3	735	0.41	0.22	1.13	0.19	62	1,194	5.16	0.73
Germany	-3	2,649	-0.10	-0.11	1.83	-0.06	201	3,225	6.23	0.86
Italy	2	471	0.49	0.25	0.75	0.33	16	2,013	0.79	0.22
Utd. Kingdom	36	1,576	2.26	1.06	1.76	0.60	240	1,553	15.47	1.23
Ireland	0	62	0.00	0.00	0.52	0.00	16	118	13.89	1.59
Denmark	2	305	0.77	1.61	2.49	0.65	10	177	5.45	0.93
Greece	0	69	0.49	0.36	0.74	0.49	0	23	0.00	0.00
Spain	145	2,036	7.11	10.13	4.78	2.12	216	3,960	5.46	12.91
Extra Europe 12	47	3,432	1.38	0.35	0.45	0.78	346	6,051	5.72	1.22
EFTA - 7 countries	7	1,127	0.65	1.02	1.20	0.85	102	1,302	7.81	1.62
OECD	225	12,336	1.82	1.00	1.35	0.75	723	18,640	3.88	0.51
Central & E. Europe	1	45	1.48	0.11	0.16	0.67	0	80	0.00	0.00
NAFTA	17	722	2.31	0.56	0.31	1.80	51	885	5.76	1.15
ASEAN - 6	0	59	0.00	0.00	0.09	0.00	0	207	0.00	0.00
ACP 70 countries	10	604	1.60	9.57	2.89	3.31	2	659	0.35	0.59
NICs 4 countries	0	79	0.00	0.00	0.07	0.00	13	231	5.48	5.58
Mediterranean	8	219	3.65	3.74	0.51	7.41	12	578	2.02	3.72
CIS 11 countries	0	47	0.00	0.00	0.38	0.00	0	144	0.00	0.00
North Africa -6	0	102	0.00	0.00	0.58	0.00	4	480	0.90	3.71
Other African	17	628	2.76	21.52	2.87	7.50	3	740	0.36	0.90
Central America	11	30	38.41	0.71	0.06	11.92	31	171	18.32	1.29
South America	1	103	1.29	0.16	0.35	0.45	39	516	7.56	-19.37
Near & Middle East	0	131	0.00	0.00	0.29	0.00	7	392	1.87	0.83
Other Asian	-14	221	-6.19	-0.66	0.13	-4.94	53	1,101	4.79	1.78
Australia, Oceania	0	45	0.00	0.00	0.24	0.00	0	43	0.00	0.00
Iceland	0	8	0.00	0.00	1.48	0.00	2	24	8.31	15.55
Norway	0	149	0.00	0.00	1.60	0.00	2	324	0.51	0.17
Sweden	-2	394	-0.59	-0.27	2.10	-0.13	0	265	0.13	0.02
Finland	-1	152	-0.88	-2.50	2.31	-1.08	28	132	21.23	2.47
Switzerland	7	267	2.75	1.90	0.77	2.45	96	383	25.07	1.97
Austria	0	158	0.00	0.00	0.66	0.00	0	174	0.00	0.00
USA	15	607	2.52	0.36	0.48	0.76	49	713	6.91	0.66
Japan	-9	108	-8.04	-6.09	0.23	-26.34	8	665	1.20	0.17



**Trade and FDI Profile: Portugal - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	284	13,851	1.00	0.77	0.36	0.47	1,280	21,923	1.00	0.22
EU - 12 countries	236	10,419	1.11	0.79	0.40	0.51	934	15,872	1.01	0.25
France	26	2,033	0.62	0.84	0.29	0.34	154	2,802	0.94	0.17
Belg.-Luxbg	20	484	2.02	0.75	0.95	1.26	18	806	0.38	1.11
Netherlands	3	735	0.20	0.76	0.09	0.12	62	1,194	0.88	0.05
Germany	-3	2,649	-0.05	0.90	0.00	0.00	201	3,225	1.07	-0.01
Italy	2	471	0.24	0.38	0.25	0.67	16	2,013	0.14	0.15
Utd. Kingdom	36	1,576	1.10	0.99	0.26	0.26	240	1,553	2.65	0.15
Ireland	0	62	0.00	0.69	0.00	0.00	16	118	2.38	0.00
Denmark	2	305	0.37	0.74	0.39	0.53	10	177	0.93	0.24
Greece	0	69	0.24	0.50	0.00	0.00	0	23	0.00	
Spain	145	2,036	3.47	0.68	0.80	1.18	216	3,960	0.94	0.67
Extra Europe 12	47	3,432	0.67	0.72	0.24	0.33	346	6,051	0.98	0.14
EFTA - 7 countries	7	1,127	0.32	0.93	0.13	0.14	102	1,302	1.34	0.07
OECD	225	12,336	0.89	0.80	0.47	0.60	723	18,640	0.66	0.31
Central & E. Europe	1	45	0.72	0.72	0.00	0.00	0	80	0.00	
NAFTA	17	722	1.13	0.90	0.49	0.55	51	885	0.99	0.33
ASEAN - 6	0	59	0.00	0.44			0	207	0.00	
ACP 70 countries	10	604	0.78	0.96	0.39	0.41	2	659	0.06	4.14
NICs 4 countries	0	79	0.00	0.51	0.00	0.00	13	231	0.94	0.00
Mediterranean	8	219	1.78	0.55	0.81	1.48	12	578	0.35	0.69
CIS 11 countries	0	47	0.00	0.49			0	144	0.00	
North Africa -6	0	102	0.00	0.35	0.00	0.00	4	480	0.15	0.00
Other African	17	628	1.35	0.92	0.27	0.29	3	740	0.06	6.50
Central America	11	30	18.75	0.29	0.53	1.80	31	171	3.14	0.36
South America	1	103	0.63	0.33	0.07	0.20	39	516	1.30	0.03
Near & Middle East	0	131	0.00	0.50	0.00	0.00	7	392	0.32	0.00
Other Asian	-14	221	-3.02	0.33	0.00	0.00	53	1,101	0.82	-0.26
Australia, Oceania	0	45	0.00	0.98			0	43	0.00	
Iceland	0	8	0.00	0.51	0.00	0.00	2	24	1.42	0.00
Norway	0	149	0.00	0.63	0.00	0.00	2	324	0.09	0.00
Sweden	-2	394	-0.29	0.80	0.00	0.00	0	265	0.02	-7.00
Finland	-1	152	-0.43	0.93	0.00	0.00	28	132	3.64	-0.05
Switzerland	7	267	1.34	0.82	0.14	0.17	96	383	4.29	0.08
Austria	0	158	0.00	0.95			0	174	0.00	
USA	15	607	1.23	0.92	0.47	0.52	49	713	1.18	0.31
Japan	-9	108	-3.93	0.28	0.00	0.00	8	665	0.21	-1.08

## 10. Spain

Over the three years under review, Spain has been the most successful country in the community in attracting FDI. Inflows represented 6 per cent of imports, thrice the level as that of Denmark and the UK, the next two most successful host countries. More than half of the incoming investment went into the manufacturing sector; compared to a corresponding share of 20 per cent for the Triad. Spain appeared to thrive on the hollowing out through relocation of industrial production capacity of some of its partner countries.

Inflows were fairly equally distributed among Spain's major industrial sectors. Comparatively speaking, Spain was most successful in attracting FDI into transport equipment and textiles; in these two sectors, the relation between Spain's revealed comparative advantage in FDI and its revealed comparative advantage in imports was most pronounced.

Spanish mining companies proved to be major foreign investors over the three years under review. The FDI-to-exports ratio was close to half, and Spain had a clear comparative advantage in mining FDI outflows vis-à-vis the Triad average.

Proximity was a more important factor in determining FDI inflows than in determining imports: the share of the EU in Spain's incoming investment was 63 per cent, compared to 70 per cent in FDI inflows.

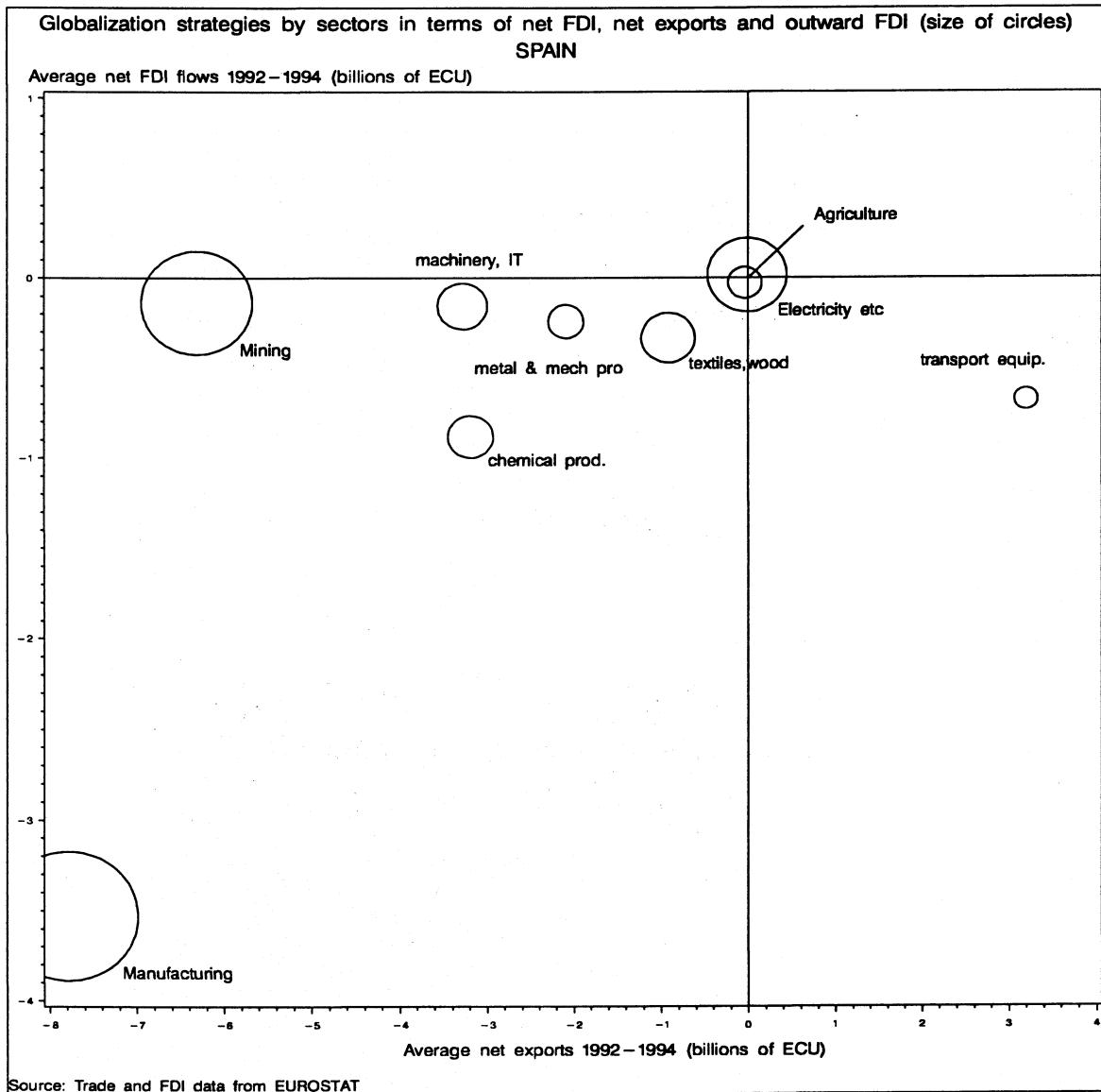
The opposite held true on the export and FDI-outflow side: Spain's FDI to export ratio was six times higher for its relation with third countries as compared to Spain's relation with the Community (see table 2 A<sup>11</sup>). This was closely related to Spain's strong position in the Western Hemisphere: Spanish firms had a pronounced revealed comparative advantage for investing in the US and in South America. In fact, Spanish FDI flows to South America reached 84 per cent of Spanish FDI to the rest of the Community.

In sum, Spain enhanced its position as a manufacturing base for EU companies and, at the same time, strengthened its network of overseas affiliates in the Western Hemisphere.

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<sup>11</sup> Tables 2 A and 2 B show exports from Spain to Spain and imports of Spain from Spain. The reasons are not clear. They may be related to Spanish overseas territories.

### Trade and FDI Profile: Spain - Chart 1



## Trade and FDI Profile: Spain - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	2,210	57,705	3.83	1.00	1.00	1.00	6,912	72,012	9.60	1.00
TOTAL without services	388	57,495	0.68	1.00	1.00	1.00	4,072	71,636	5.68	1.00
Agriculture and fishing	11	4,240	0.27	4.23	2.77	1.52	39	4,278	0.91	2.50
Mining and quarrying	123	268	45.97	2.35	0.37	6.25	262	6,577	3.99	1.41
Manufacturing	191	52,965	0.36	0.58	0.96	0.60	3,723	60,747	6.13	0.93
- Textiles and wood activities	19	6,159	0.31	0.72	1.44	0.50	362	7,077	5.11	1.92
- Petroleum, chemical, rubber, plastic	14	8,467	0.16	0.32	0.97	0.33	602	11,655	5.17	1.00
- Metal and mechanical products	9	9,424	0.09	0.22	0.77	0.28	255	11,515	2.22	0.56
- Machinery, computers, RTC, communications	16	4,312	0.38	0.45	0.40	1.15	181	7,592	2.39	0.33
- Vehicles and other transport equipment	4	15,271	0.02	0.14	1.31	0.11	454	12,072	3.76	2.68
Electricity, gas and water	63	22	288.60	23.32	0.36	64.71	48	34	141.36	19.64
Construction	19	n.a.		2.48			64	n.a.		
Trade and repairs	54	n.a.		0.75			642	n.a.		
Hotels and restaurants	5	n.a.		0.88			112	n.a.		
Transport and communication	376	n.a.		30.92			62	n.a.		
- Land sea and air transport	26	n.a.		9.61			37	n.a.		
Financial intermediation	552	n.a.		1.94			978	n.a.		
- other financial intermediation	0	n.a.		0.00			0	n.a.		

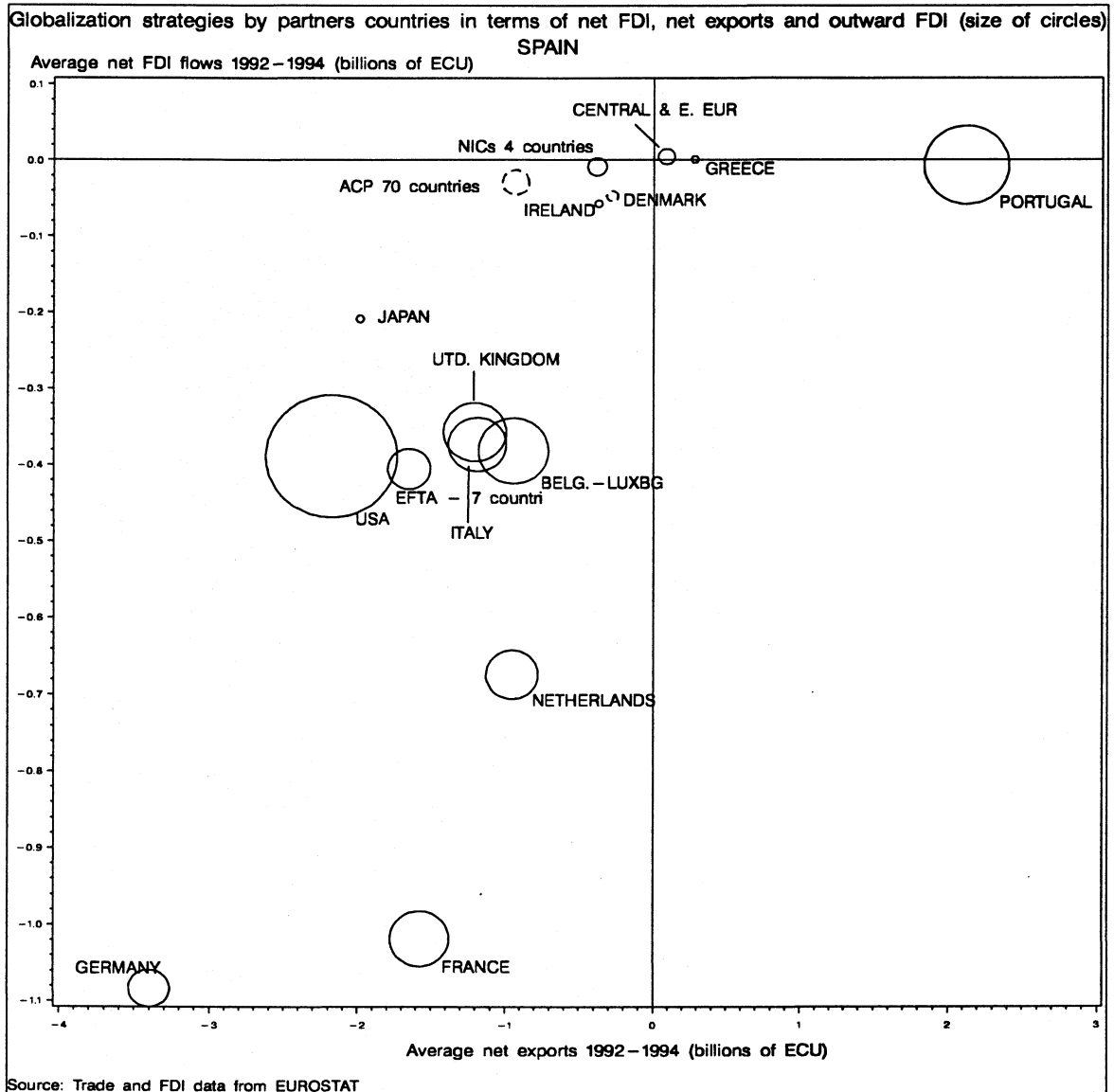
## Trade and FDI Profile: Spain - Table 1 B

Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	11	4,240	0.40	1.00	0.45	0.45	39	4,278	0.16	0.29
Mining and quarrying	123	268	68.06	0.08	0.64	8.16	262	6,577	0.70	0.47
Manufacturing	191	52,965	0.53	0.93	0.10	0.10	3,723	60,747	1.08	0.05
- Textiles and wood activities	19	6,159	0.46	0.93	0.10	0.11	362	7,077	0.90	0.05
- Petroleum, chemical, rubber, plastic	14	8,467	0.24	0.84	0.04	0.05	602	11,655	0.91	0.02
- Metal and mechanical products	9	9,424	0.14	0.90	0.07	0.07	255	11,515	0.39	0.03
- Machinery, computers, RTC, communications	16	4,312	0.56	0.72	0.17	0.23	181	7,592	0.42	0.09
- Vehicles and other transport equipment	4	15,271	0.04	0.88	0.02	0.02	454	12,072	0.66	0.01
Electricity, gas and water	63	22	427.29	0.78	0.87	1.11	48	34	24.87	1.31
Construction	19	n.a.			0.45		64	n.a.		0.29
Trade and repairs	54	n.a.			0.16		642	n.a.		0.08
Hotels and restaurants	5	n.a.			0.08		112	n.a.		0.04
Transport and communication	376	n.a.			0.28		62	n.a.		6.07
- Land sea and air transport	26	n.a.			0.83		37	n.a.		0.70
Financial intermediation	552	n.a.			0.72		978	n.a.		0.56
- other financial intermediation	0	n.a.					0	n.a.		

## Trade and FDI Profile: Spain - Chart 2



## Trade and FDI Profile: Spain - Table 2 A

### Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	2,210	57,705	3.83	1.00	1.00	1.00	6,912	72,012	9.60	1.00
EU - 12 countries	779	41,017	1.90	0.67	1.59	0.42	4,778	45,623	10.47	0.86
France	101	10,738	0.94	0.61	2.44	0.25	1,119	12,312	9.09	0.67
Belg.-Luxbg	141	1,678	8.42	0.92	0.64	1.44	523	2,619	19.97	1.70
Netherlands	78	2,058	3.77	0.73	0.76	0.96	752	3,009	24.98	2.16
Germany	46	8,015	0.58	0.24	1.33	0.18	1,130	11,414	9.90	0.83
Italy	96	5,268	1.82	1.30	2.00	0.65	469	6,454	7.27	1.22
Utd. Kingdom	112	4,267	2.63	0.43	1.14	0.37	469	5,471	8.58	0.41
Ireland	2	209	0.80	0.04	0.42	0.10	59	577	10.23	0.71
Denmark	-4	336	-1.19	-0.35	0.66	-0.54	44	594	7.36	0.76
Greece	2	452	0.37	0.23	1.17	0.20	1	169	0.59	-0.57
Portugal	205	4,095	5.01	10.90	7.58	1.44	212	1,979	10.71	2.39
Extra Europe 12	1,431	16,689	8.57	1.36	0.52	2.60	2,135	26,389	8.09	1.05
EFTA - 7 countries	54	2,176	2.47	0.95	0.56	1.71	459	3,817	12.03	1.52
OECD	1,387	46,826	2.96	0.80	1.23	0.65	6,393	57,213	11.17	0.89
Central & E. Europe	8	669	1.25	0.18	0.58	0.30	4	555	0.66	0.76
NAFTA	566	3,863	14.66	2.45	0.40	6.11	906	5,940	15.25	1.86
ASEAN - 6	0	595	0.00	0.00	0.22	0.00	2	1,115	0.15	0.55
ACP 70 countries	-22	903	-2.40	-2.75	1.03	-2.66	8	1,827	0.42	0.42
NICs 4 countries	10	1,039	0.99	0.40	0.23	1.71	19	1,420	1.34	0.83
Mediterranean	35	2,454	1.41	2.08	1.36	1.53	24	2,921	0.81	0.91
CIS 11 countries	2	231	0.72	0.26	0.45	0.57	8	743	1.08	5.29
North Africa -6	34	1,616	2.08	11.60	2.22	5.22	5	2,294	0.23	0.58
Other African	0	855	-0.04	-0.05	0.94	-0.06	2	2,057	0.11	0.17
Central America	93	1,540	6.02	0.74	0.74	1.00	64	1,028	6.26	0.27
South America	655	1,581	41.44	9.83	1.27	7.74	47	1,904	2.49	-3.87
Near & Middle East	9	1,280	0.68	1.08	0.69	1.56	19	1,697	1.12	0.30
Other Asian	10	2,011	0.50	0.06	0.29	0.21	232	5,178	4.49	1.01
Australia, Oceania	1	198	0.34	0.05	0.25	0.19	6	270	2.22	0.14
Iceland	0	15	0.00	0.00	0.65	0.00	0	64	0.52	0.60
Norway	8	315	2.54	0.33	0.81	0.41	-18	311	-5.68	-1.13
Sweden	-1	514	-0.26	-0.02	0.66	-0.03	7	892	0.78	0.09
Finland	1	167	0.60	0.24	0.61	0.39	31	582	5.27	0.37
Switzerland	41	692	5.88	1.35	0.48	2.81	474	1,288	36.81	1.76
Austria	0	473	0.07	0.01	0.47	0.02	6	680	0.83	0.06
USA	495	2,612	18.96	1.49	0.49	3.04	884	4,786	18.47	1.07
Japan	2	519	0.32	0.15	0.27	0.56	210	2,501	8.40	0.70

**Trade and FDI Profile: Spain - Table 2 B**

## Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	2,210	57,705	1.00	0.89	0.48	0.54	6,912	72,012	1.00	0.32
EU - 12 countries	779	41,017	0.50	0.95	0.28	0.30	4,778	45,623	1.09	0.16
France	101	10,738	0.25	0.93	0.17	0.18	1,119	12,312	0.95	0.09
Belg.-Luxbg	141	1,678	2.20	0.78	0.43	0.54	523	2,619	2.08	0.27
Netherlands	78	2,058	0.99	0.81	0.19	0.23	752	3,009	2.60	0.10
Germany	46	8,015	0.15	0.83	0.08	0.10	1,130	11,414	1.03	0.04
Italy	96	5,268	0.47	0.90	0.34	0.38	469	6,454	0.76	0.20
Utd. Kingdom	112	4,267	0.69	0.88	0.39	0.44	469	5,471	0.89	0.24
Ireland	2	209	0.21	0.53	0.05	0.10	59	577	1.07	0.03
Denmark	-4	336	-0.31	0.72	0.00	0.00	44	594	0.77	-0.09
Greece	2	452	0.10	0.54	0.75	1.38	1	169	0.06	1.67
Portugal	205	4,095	1.31	0.65	0.98	1.51	212	1,979	1.12	0.97
Extra Europe 12	1,431	16,689	2.24	0.77	0.80	1.04	2,135	26,389	0.84	0.67
EFTA - 7 countries	54	2,176	0.64	0.73	0.21	0.29	459	3,817	1.25	0.12
OECD	1,387	46,826	0.77	0.90	0.36	0.40	6,393	57,213	1.16	0.22
Central & E. Europe	8	669	0.33	0.91	0.61	0.67	4	555	0.07	2.27
NAFTA	566	3,863	3.83	0.79	0.77	0.98	906	5,940	1.59	0.63
ASEAN - 6	0	595	0.00	0.70	0.00	0.00	2	1,115	0.02	0.00
ACP 70 countries	-22	903	-0.63	0.66	0.00	0.00	8	1,827	0.04	-2.83
NICs 4 countries	10	1,039	0.26	0.85	0.70	0.83	19	1,420	0.14	0.54
Mediterranean	35	2,454	0.37	0.91	0.81	0.89	24	2,921	0.08	1.46
CIS 11 countries	2	231	0.19	0.47	0.34	0.73	8	743	0.11	0.21
North Africa -6	34	1,616	0.54	0.83	0.27	0.33	5	2,294	0.02	6.31
Other African	0	855	-0.01	0.59	0.00	0.00	2	2,057	0.01	-0.14
Central America	93	1,540	1.57	0.80	0.82	1.02	64	1,028	0.65	1.44
South America	655	1,581	10.82	0.91	0.13	0.15	47	1,904	0.26	13.85
Near & Middle East	9	1,280	0.18	0.86	0.63	0.73	19	1,697	0.12	0.46
Other Asian	10	2,011	0.13	0.56	0.08	0.15	232	5,178	0.47	0.04
Australia, Oceania	1	198	0.09	0.84	0.20	0.24	6	270	0.23	0.11
Iceland	0	15	0.00	0.38	0.00	0.00	0	64	0.05	0.00
Norway	8	315	0.66	0.99	0.00	0.00	-18	311	-0.59	-0.45
Sweden	-1	514	-0.07	0.73	0.00	0.00	7	892	0.08	-0.19
Finland	1	167	0.16	0.45	0.06	0.14	31	582	0.55	0.03
Switzerland	41	692	1.54	0.70	0.16	0.23	474	1,288	3.83	0.09
Austria	0	473	0.02	0.82	0.11	0.14	6	680	0.09	0.06
USA	495	2,612	4.95	0.71	0.72	1.02	884	4,786	1.92	0.56
Japan	2	519	0.08	0.34	0.02	0.05	210	2,501	0.87	0.01

## 11. United Kingdom

The UK has traditionally been Europe's most important home country of FDI; in 1995 its stocks of FDI were higher than those of any other European country, higher than those of Japan and second only to those of the United States (UNCTAD 1996a:245).

The leadership in terms of FDI stocks abroad did not apply to UK's FDI and trade *flows* in the first half of the 1990s. The UK's outward-FDI-to-export ratio was only marginally above the European average. On the recipient side, inward FDI represented 2 per cent of imports, which was clearly higher than the corresponding values in Germany, France and Italy, but only 0.2 percentage points above the European average.

The services sector played an important part in the UK's outflows, but less so on the inflow side. FDI inflows into the manufacturing sector accounted for 43 per cent of total inflows over the years under review. As is very obvious from the globalisation chart on the UK by sectors, the UK's manufacturing sector has attracted a large amount of - non-European - investment without overcoming its import dependence. In fact, the sector-specific circles in the globalisation chart lie on the diagonal through the first and third quadrant. Put differently, the net trade and FDI positions correlated strongly. Significantly, British firms in the two sectors with the highest net inflow of FDI, i.e. transport equipment and machinery, computers and IT - actually reduced their own overseas investment and registered as well large trade deficits.

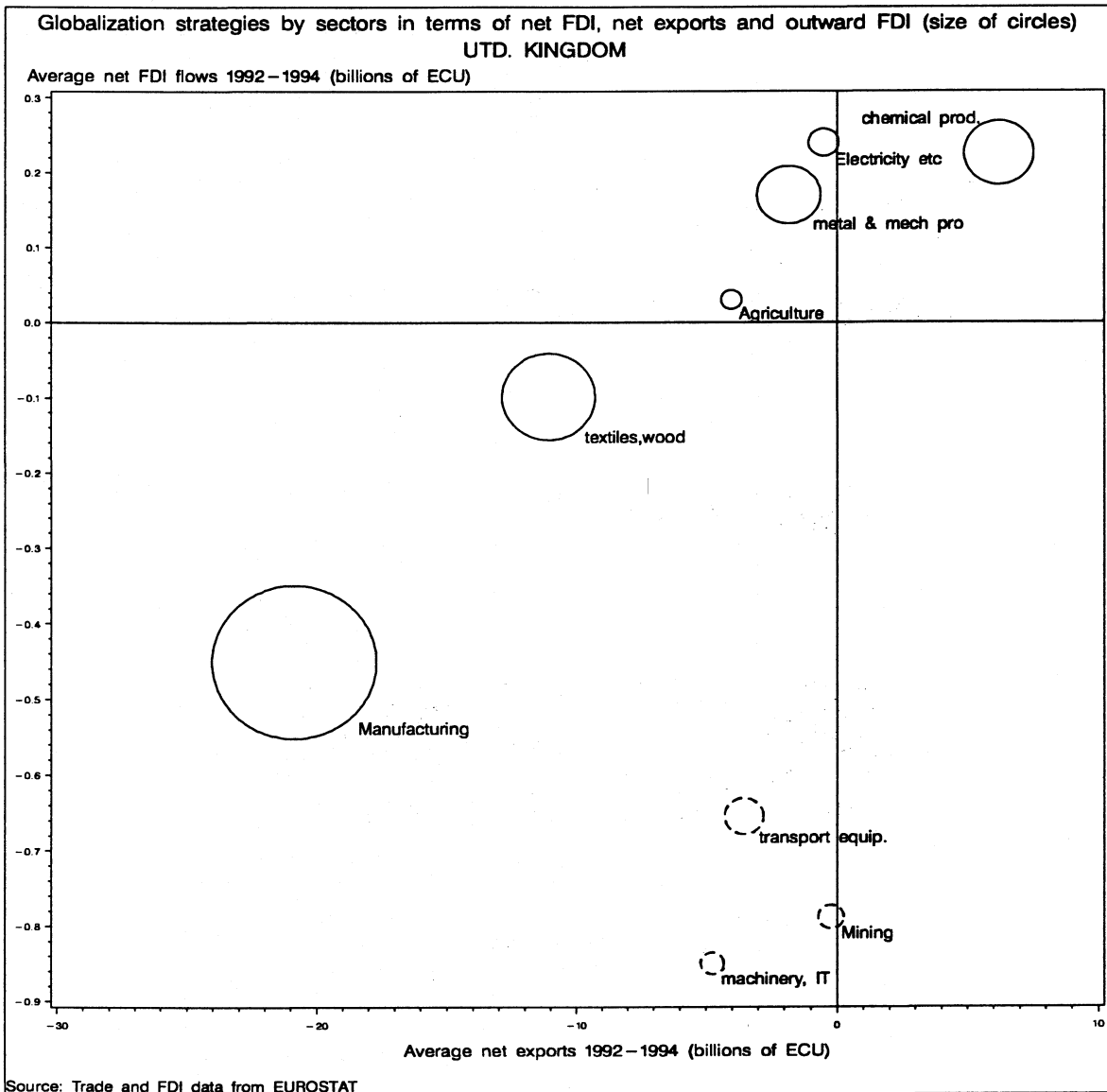
Structural adjustment was particularly obvious in the textile and wood sector. This sector accounted for the largest share - about one third - of any subsector in both outward and inward industrial FDI. The UK had in fact a pronounced revealed comparative advantage in outward FDI and, to a lesser extent, exports, when compared with to the Triad as a whole.

The UK is unique among EU members with respect to the high share of third countries in inward investment. While intra-EU FDI accounted for three fifth of inward investment for the Community in the three years under review, the corresponding share for the UK was only 13 per cent. The bulk of these investments, i.e. ECU 4.3 billion out of ECU 6.5 billion came from the United States, which realised an incoming FDI-to-import ratio of 19 per cent. Japanese investments in the UK's manufacturing sector, which have been highly publicised, are not visible from the FDI inflows 1992 to 1994. However, the UK attracted substantial amounts of FDI from numerous developing countries. Combined annual inflows from the Near and Middle East, other Asian countries and Central America averaged at ECU 1.3 billion, which was 35 per cent higher than inflows from other EU members (see trade and FDI profile 2 A). Most of Europe's leading trading nations were in the second quadrant of the UK's globalisation chart. The UK was a net investor in, but ran a trade deficit with, Germany, France, Italy and the Netherlands.

In sum, the UK has established very differentiated patterns of trade and FDI links with the different regions of the world.



### Trade and FDI Profile: United Kingdom - Chart 1



## Trade and FDI Profile: United Kingdom - Table 1 A

### Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	7,659	156,588	4.89	1.00	1.00	1.00	7,501	182,276	4.11	1.00
TOTAL without services	2,731	150,230	1.82	1.00	1.00	1.00	3,221	175,862	1.83	1.00
Agriculture and fishing	44	2,014	2.17	2.32	0.50	4.59	13	6,031	0.22	1.88
Mining and quarrying	-70	9,641	-0.72	-0.19	5.16	-0.04	479	9,880	4.85	5.34
Manufacturing	2,757	138,574	1.99	1.19	0.96	1.23	3,207	159,434	2.01	0.94
- Textiles and wood activities	893	12,252	7.29	4.82	1.10	4.38	992	23,312	4.26	4.95
- Petroleum, chemical, rubber, plastic	489	30,947	1.58	1.62	1.36	1.20	263	24,750	1.06	0.64
- Metal and mechanical products	400	27,404	1.46	1.44	0.86	1.67	230	29,240	0.79	0.62
- Machinery, computers, RTC, communications	-59	24,016	-0.25	-0.23	0.85	-0.28	790	28,769	2.75	1.17
- Vehicles and other transport equipment	-157	22,675	-0.69	-0.87	0.74	-1.17	498	26,207	1.90	4.19
Electricity, gas and water	30	0	70866.14	1.59	0.00	5904.57	-50	517	-9.67	-4.17
Construction	211	n.a.		3.98			42	n.a.		
Trade and repairs	-585	n.a.		-1.16			-133	n.a.		
Hotels and restaurants	466	n.a.		12.48			-6	n.a.		
Transport and communication	-801	n.a.		-9.36			390	n.a.		
- Land sea and air transport	-457	n.a.		-24.03			406	n.a.		
Financial intermediation	2,492	n.a.		1.24			1,158	n.a.		
- other financial intermediation	1,716	n.a.		8.36			92	n.a.		

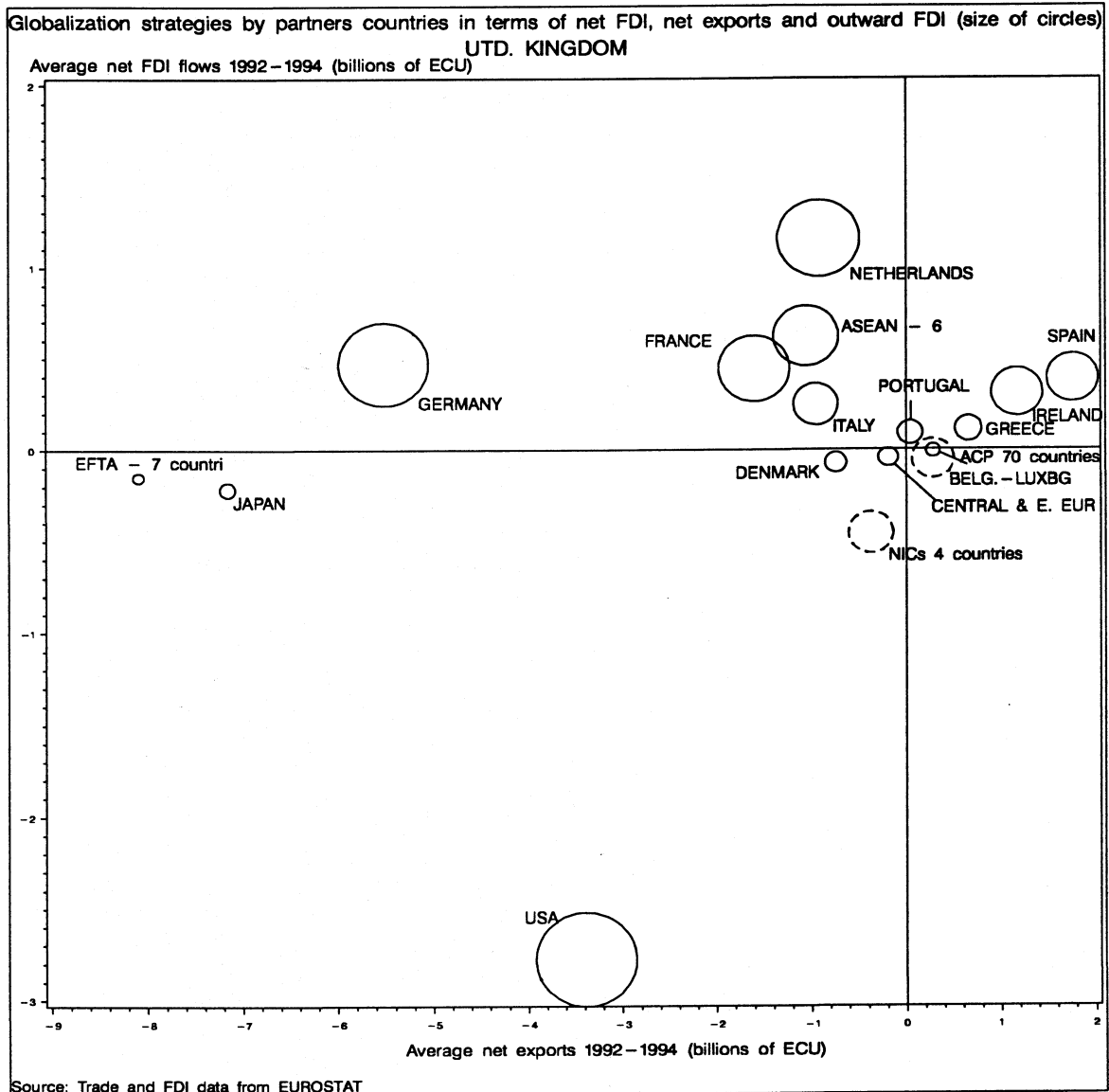
## Trade and FDI Profile: United Kingdom - Table 1 B

### Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	44	2,014	1.18	0.50	0.47	0.93	13	6,031	0.11	3.28
Mining and quarrying	-70	9,641	-0.39	0.99	0.00	0.00	479	9,880	2.34	-0.15
Manufacturing	2,757	138,574	1.08	0.93	0.92	0.99	3,207	159,434	0.97	0.86
- Textiles and wood activities	893	12,252	3.97	0.69	0.95	1.38	992	23,312	2.05	0.90
- Petroleum, chemical, rubber, plastic	489	30,947	0.86	0.89	0.70	0.79	263	24,750	0.51	1.86
- Metal and mechanical products	400	27,404	0.79	0.97	0.73	0.76	230	29,240	0.38	1.74
- Machinery, computers, RTC, communications	-59	24,016	-0.13	0.91	0.00	0.00	790	28,769	1.32	-0.08
- Vehicles and other transport equipment	-157	22,675	-0.38	0.93	0.00	0.00	498	26,207	0.92	-0.32
Electricity, gas and water	30	0	38563.90	0.00	0.00	0.00	-50	517	-4.66	-0.60
Construction	211	n.a.			0.33		42	n.a.		4.98
Trade and repairs	-585	n.a.			0.00		-133	n.a.		4.41
Hotels and restaurants	466	n.a.			0.00		-6	n.a.		-82.29
Transport and communication	-801	n.a.			0.00		390	n.a.		-2.05
- Land sea and air transport	-457	n.a.			0.00		406	n.a.		-1.12
Financial intermediation	2,492	n.a.			0.63		1,158	n.a.		2.15
- other financial intermediation	1,716	n.a.			0.10		92	n.a.		18.65

### Trade and FDI Profile: United Kingdom - Chart 2



## Trade and FDI Profile: United Kingdom - Table 2 A

## Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	7,659	156,588	4.89	1.00	1.00	1.00	7,501	182,276	4.11	1.00
EU - 12 countries	4,056	82,486	4.92	1.01	1.18	0.86	966	88,291	1.09	0.21
France	752	15,728	4.78	1.32	1.31	1.00	308	17,326	1.78	0.30
Belg.-Luxbg	-272	8,491	-3.21	-0.51	1.20	-0.43	-221	8,211	-2.69	-0.53
Netherlands	1,017	11,099	9.16	2.75	1.51	1.82	-138	12,018	-1.15	-0.23
Germany	1,193	20,260	5.89	1.79	1.24	1.44	723	25,771	2.80	0.55
Italy	298	7,978	3.73	1.17	1.12	1.04	51	8,929	0.57	0.22
Ireland	398	8,106	4.91	2.84	5.99	0.47	88	6,934	1.26	0.20
Denmark	71	2,105	3.37	1.81	1.52	1.19	143	2,846	5.04	1.21
Greece	112	1,104	10.17	4.50	1.05	4.29	0	449	0.00	0.00
Portugal	95	1,612	5.91	1.46	1.10	1.33	3	1,570	0.21	0.11
Spain	398	6,001	6.63	1.03	1.25	0.83	9	4,237	0.22	0.74
Extra Europe 12	3,603	74,103	4.86	0.99	0.86	1.16	6,535	93,985	6.95	2.10
EFTA - 7 countries	18	11,067	0.16	0.09	1.04	0.09	169	19,156	0.88	0.26
OECD	6,343	119,579	5.30	1.05	1.16	0.91	2,843	142,962	1.99	0.37
Central & E. Europe	58	2,134	2.70	0.35	0.69	0.51	102	2,111	4.83	13.01
NAFTA	1,296	21,679	5.98	1.62	0.83	1.95	2,073	25,122	8.25	2.34
ASEAN - 6	421	5,252	8.01	3.43	0.72	4.77	7	6,306	0.12	1.00
ACP 70 countries	30	2,798	1.07	1.10	1.18	0.93	39	2,508	1.54	3.63
NICs 4 countries	-304	6,414	-4.73	-3.38	0.53	-6.38	101	6,787	1.49	2.15
Mediterranean	44	4,048	1.10	0.77	0.82	0.93	19	2,799	0.68	1.78
CIS 11 countries	53	657	8.11	2.38	0.48	5.00	2	804	0.25	2.85
North Africa -6	31	1,118	2.74	3.05	0.57	5.39	0	945	0.00	0.00
Other African	-88	3,823	-2.29	-4.03	1.54	-2.61	48	4,856	0.98	3.47
Central America	424	1,199	35.33	0.98	0.21	4.59	317	963	32.94	3.29
South America	232	1,660	14.00	1.01	0.49	2.05	0	2,765	0.00	0.00
Near & Middle East	-55	7,166	-0.77	-1.97	1.43	-1.38	487	3,206	15.19	9.56
Other Asian	348	11,020	3.16	0.62	0.59	1.05	503	21,523	2.34	1.23
Australia, Oceania	304	2,609	11.64	6.28	1.22	5.16	487	2,091	23.31	3.50
Iceland	4	149	2.68	6.50	2.36	2.75	0	313	0.00	0.00
Norway	260	2,091	12.42	3.09	1.99	1.55	-23	4,939	-0.46	-0.21
Sweden	386	3,598	10.74	1.68	1.70	0.99	106	4,596	2.30	0.61
Finland	-7	1,344	-0.55	-0.51	1.81	-0.28	39	2,404	1.64	0.27
Switzerland	-242	2,750	-8.80	-2.32	0.70	-3.29	194	5,659	3.43	0.38
Austria	525	1,134	46.26	3.76	0.42	9.04	604	1,245	48.48	7.90
USA	1,537	18,964	8.10	1.33	1.31	1.02	4,314	22,348	19.30	2.61
Japan	37	3,414	1.08	0.96	0.65	1.49	255	10,568	2.41	0.47

**Trade and FDI Profile: United Kingdom - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	7,659	156,588	1.00	0.92	0.99	1.07	7,501	182,276	1.00	1.02
EU - 12 countries	4,056	82,486	1.01	0.97	0.38	0.40	966	88,291	0.27	4.20
France	752	15,728	0.98	0.95	0.58	0.61	308	17,326	0.43	2.44
Belg.-Luxbg	-272	8,491	-0.66	0.98	0.00	0.00	-221	8,211	-0.65	1.23
Netherlands	1,017	11,099	1.87	0.96	0.00	0.00	-138	12,018	-0.28	-7.39
Germany	1,193	20,260	1.20	0.88	0.75	0.86	723	25,771	0.68	1.65
Italy	298	7,978	0.76	0.94	0.29	0.31	51	8,929	0.14	5.84
Ireland	398	8,106	1.00	0.92	0.36	0.39	88	6,934	0.31	4.54
Denmark	71	2,105	0.69	0.85	0.66	0.78	143	2,846	1.22	0.50
Greece	112	1,104	2.08	0.58	0.00	0.00	0	449	0.00	
Portugal	95	1,612	1.21	0.99	0.07	0.07	3	1,570	0.05	28.60
Spain	398	6,001	1.36	0.83	0.05	0.06	9	4,237	0.05	42.64
Extra Europe 12	3,603	74,103	0.99	0.88	0.71	0.81	6,535	93,985	1.69	0.55
EFTA - 7 countries	18	11,067	0.03	0.73	0.19	0.26	169	19,156	0.21	0.10
OECD	6,343	119,579	1.08	0.91	0.62	0.68	2,843	142,962	0.48	2.23
Central & E. Europe	58	2,134	0.55	0.99	0.72	0.73	102	2,111	1.17	0.57
NAFTA	1,296	21,679	1.22	0.93	0.77	0.83	2,073	25,122	2.01	0.63
ASEAN - 6	421	5,252	1.64	0.91	0.03	0.04	7	6,306	0.03	57.36
ACP 70 countries	30	2,798	0.22	0.95	0.87	0.92	39	2,508	0.37	0.78
NICs 4 countries	-304	6,414	-0.97	0.97	0.00	0.00	101	6,787	0.36	-3.01
Mediterranean	44	4,048	0.22	0.82	0.60	0.73	19	2,799	0.16	2.33
CIS 11 countries	53	657	1.66	0.90	0.07	0.08	2	804	0.06	26.67
North Africa -6	31	1,118	0.56	0.92	0.00	0.00	0	945	0.00	
Other African	-88	3,823	-0.47	0.88	0.00	0.00	48	4,856	0.24	-1.84
Central America	424	1,199	7.22	0.89	0.86	0.96	317	963	8.00	1.34
South America	232	1,660	2.86	0.75	0.00	0.00	0	2,765	0.00	
Near & Middle East	-55	7,166	-0.16	0.62	0.00	0.00	487	3,206	3.69	-0.11
Other Asian	348	11,020	0.65	0.68	0.82	1.21	503	21,523	0.57	0.69
Australia, Oceania	304	2,609	2.38	0.89	0.77	0.86	487	2,091	5.66	0.62
Iceland	4	149	0.55	0.65	0.00	0.00	0	313	0.00	
Norway	260	2,091	2.54	0.59	0.00	0.00	-23	4,939	-0.11	-11.46
Sweden	386	3,598	2.19	0.88	0.43	0.49	106	4,596	0.56	3.66
Finland	-7	1,344	-0.11	0.72	0.00	0.00	39	2,404	0.40	-0.19
Switzerland	-242	2,750	-1.80	0.65	0.00	0.00	194	5,659	0.83	-1.25
Austria	525	1,134	9.46	0.95	0.93	0.98	604	1,245	11.78	0.87
USA	1,537	18,964	1.66	0.92	0.53	0.57	4,314	22,348	4.69	0.36
Japan	37	3,414	0.22	0.49	0.25	0.52	255	10,568	0.59	0.15

## B. Japan

As was discussed in chapter II, there was a striking convergence of trade and FDI orientations among the three Triad members in the first half of the 1990s. Although Japanese FDI outflows were much higher than those of the EU and the US in the late 1980s and probably also in the mid 1990s, the picture in the early 1990s was different: Japan was not only a latecomer in terms of overseas FDI stocks, but also FDI outflows were clearly below the US and EU (intra + extra) levels both for all sectors and for the manufacturing sector.

During the years under review, Japan continued to secure its raw materials supply through FDI. Among the Triad, Japan was the largest overseas investor in agriculture and fishing, and in mining, Japanese FDI exceeded its exports by a factor 2.

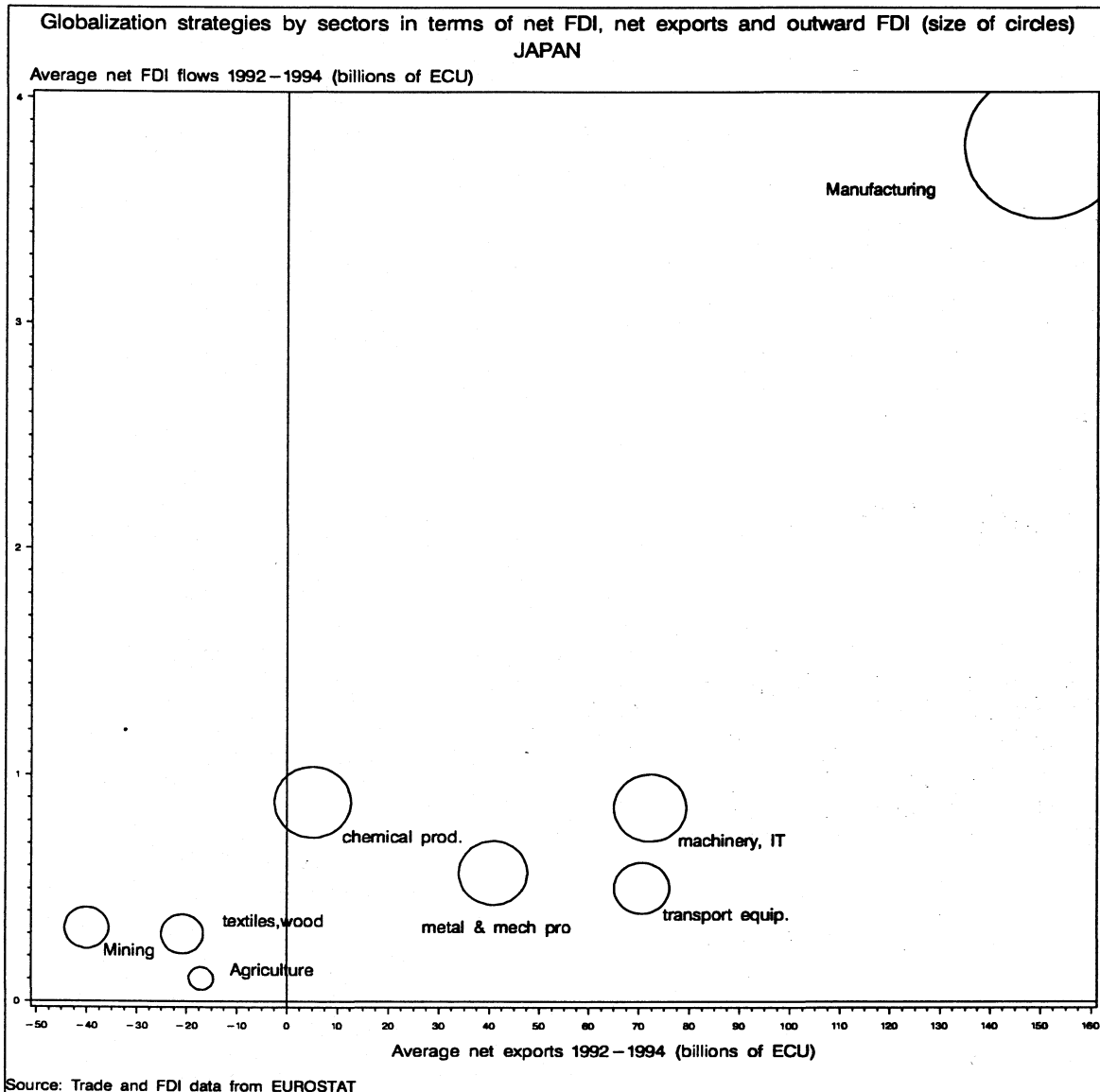
In the manufacturing sector, FDI outflows averaged, from 1992 to 1994, at 1.4 per cent of exports, and inflows at a marginal 0.28 per cent of imports. Although Japan's manufacturing sector contributed a larger share to GDP than in Europe, manufacturing FDI played a less important role in Japan's outflows than in the Europe's third country trade and FDI relations. As far as inflows were concerned, however, Japan's manufacturing sector absorbed a comparatively large share with 42 per cent of total inflows. If the establishment of foreign-affiliated manufacturing units in Japan has been difficult, the penetration of other sectors has apparently not been easier.

Compared to the Triad, Japan had pronounced revealed comparative advantages both in FDI and exports for machinery and information technology, and for transport equipment. More generally, RCAs in FDI and export correlated quite strongly.

All industrial subsectors - except textiles - were net exporters of both goods and investment capital, which underlined the strong competitive position of Japan's manufacturing sector. Intra-industry trade and FDI was significantly lower than for the other members of the Triad. Textiles and wood was the only sector with the typical characteristics of hollowing out, namely substantial FDI outflows and a large trade deficit.

Over the period under review, Japan's FDI was highly concentrated on the US (which accounted for 45 per cent of total outflows) and Asia. Asia received more Japanese investment than Europe. On the inflow side, American firms were by far the most important investors in Japan.

### Trade and FDI Profile: Japan - Chart 1



## Trade and FDI Profile: Japan - Table 1 A

Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	13,353	300,726	4.44	1.00	1.00	1.00	974	205,292	0.47	1.00
TOTAL without services	4,623	295,568	1.56	1.00	1.00	1.00	406	202,215	0.20	1.00
Agriculture and fishing	101	341	29.64	3.16	0.04	72.99	0	17,422	0.00	0.00
Mining and quarrying	325	140	231.46	0.52	0.04	13.60	0	40,143	0.00	0.00
Manufacturing	4,197	295,087	1.42	1.07	1.04	1.03	406	144,650	0.28	1.20
- Textiles and wood activities	298	8,293	3.60	0.95	0.38	2.51	0	29,145	0.00	0.00
- Petroleum, chemical, rubber, plastic	318	29,651	1.07	0.63	0.66	0.95	24	24,551	0.10	0.54
- Metal and mechanical products	784	61,707	1.27	1.67	0.99	1.69	213	20,921	1.02	7.28
- Machinery, computers, RTC, communications	857	90,929	0.94	2.00	1.63	1.23	0	18,751	0.00	0.00
- Vehicles and other transport equipment	503	80,641	0.62	1.65	1.35	1.22	0	10,099	0.00	0.00
Electricity, gas and water	0	0	0.00	0.00	0.00	0.00	0	0	0.00	0.00
Construction	142	n.a.		1.59			0	n.a.		
Trade and repairs	1,570	n.a.		1.83			177	n.a.		
Hotels and restaurants	0	n.a.		0.00			0	n.a.		
Transport and communication	776	n.a.		5.35			15	n.a.		
- Land sea and air transport	319	n.a.		9.90			0	n.a.		
Financial intermediation	2,083	n.a.		0.61			66	n.a.		
- other financial intermediation	0	n.a.		0.00			0	n.a.		

## Trade and FDI Profile: Japan - Table 1 B

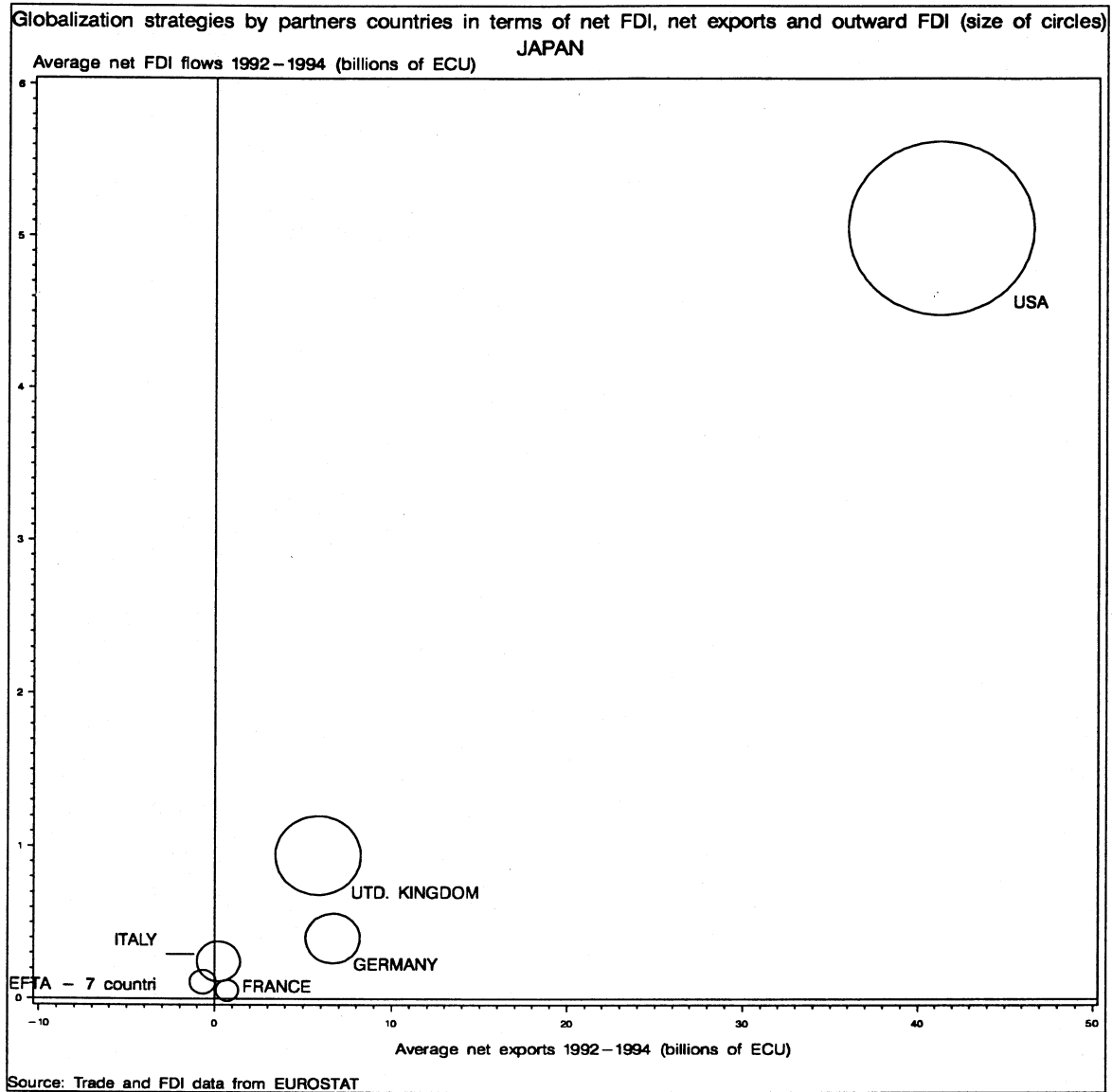
Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra-industry trade ratio	Intra-industry FDI ratio	Relation intra-industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	101	341	18.95	0.04	0.00	0.00	0	17,422	0.00	
Mining and quarrying	325	140	147.97	0.01	0.00	0.00	0	40,143	0.00	
Manufacturing	4,197	295,087	0.91	0.66	0.18	0.27	406	144,650	1.40	10.33
- Textiles and wood activities	298	8,293	2.30	0.44	0.00	0.00	0	29,145	0.00	
- Petroleum, chemical, rubber, plastic	318	29,651	0.69	0.91	0.14	0.16	24	24,551	0.49	13.08
- Metal and mechanical products	784	61,707	0.81	0.51	0.43	0.84	213	20,921	5.07	3.68
- Machinery, computers, RTC, communications	857	90,929	0.60	0.34	0.00	0.00	0	18,751	0.00	
- Vehicles and other transport equipment	503	80,641	0.40	0.22	0.00	0.00	0	10,099	0.00	
Electricity, gas and water	0	0	0.00	0.66			0	0	0.00	
Construction	142	n.a.			0.00		0	n.a.		427.00
Trade and repairs	1,570	n.a.			0.20		177	n.a.		8.87
Hotels and restaurants	0	n.a.					0	n.a.		
Transport and communication	776	n.a.			0.04		15	n.a.		52.89
- Land sea and air transport	319	n.a.			0.00		0	n.a.		956.00
Financial intermediation	2,083	n.a.			0.06		66	n.a.		31.72
- other financial intermediation	0	n.a.					0	n.a.		



## Trade and FDI Profile: Japan - Chart 2



## Trade and FDI Profile: Japan - Table 2 A

### Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	13,353	300,726	4.44	1.00	1.00	1.00	974	205,292	0.47	1.00
EU - 12 countries	2,564	48,392	5.30	0.37	0.36	1.02	121	26,651	0.45	0.75
France	319	4,651	6.86	0.32	0.20	1.59	73	4,438	1.64	2.44
Belg.-Luxbg	0	3,603	0.00	0.00	0.26	0.00	0	1,246	0.00	0.00
Netherlands	0	6,541	0.00	0.00	0.46	0.00	0	1,166	0.00	0.00
Germany	490	15,330	3.20	0.42	0.49	0.86	92	8,663	1.06	1.79
Italy	114	2,856	4.00	0.26	0.21	1.23	3	3,541	0.09	0.32
Utd. Kingdom	1,210	10,153	11.92	0.76	0.52	1.46	268	4,321	6.21	6.06
Ireland	0	1,192	0.00	0.00	0.46	0.00	0	1,043	0.00	0.00
Denmark	0	698	0.00	0.00	0.26	0.00	0	1,271	0.00	0.00
Greece	0	685	0.00	0.00	0.34	0.00	0	87	0.00	0.00
Portugal	0	638	0.00	0.00	0.23	0.00	0	149	0.00	0.00
Spain	0	2,045	0.00	0.00	0.22	0.00	0	726	0.00	0.00
EFTA - 7 countries	30	6,257	0.48	0.09	0.31	0.29	12	5,545	0.21	0.54
OECD	9,888	151,276	6.54	0.94	0.76	1.23	733	91,439	0.80	1.29
Central & E. Europe	0	554	0.00	0.00	0.09	0.00	0	435	0.00	0.00
NAFTA	0	96,887	0.00	0.00	1.93	0.00	0	54,851	0.00	0.00
ASEAN - 6	0	41,452	0.00	0.00	2.95	0.00	0	28,383	0.00	0.00
ACP 70 countries	0	4,051	0.00	0.00	0.89	0.00	0	1,819	0.00	0.00
NICs 4 countries	0	67,763	0.00	0.00	2.91	0.00	0	23,092	0.00	0.00
Mediterranean	0	3,314	0.00	0.00	0.35	0.00	0	1,261	0.00	0.00
CIS 11 countries	0	1,157	0.00	0.00	0.44	0.00	0	2,520	0.00	0.00
North Africa -6	0	1,076	0.00	0.00	0.28	0.00	0	410	0.00	0.00
Other African	0	4,569	0.00	0.00	0.96	0.00	0	2,696	0.00	0.00
Central America	0	8,710	0.00	0.00	0.81	0.00	0	1,426	0.00	0.00
South America	0	4,621	0.00	0.00	0.71	0.00	0	5,493	0.00	0.00
Near & Middle East	0	9,770	0.00	0.00	1.01	0.00	0	22,961	0.00	0.00
Other Asian	2,785	71,446	3.90	2.84	1.98	1.43	140	41,753	0.34	1.54
Australia, Oceania	0	7,898	0.00	0.00	1.92	0.00	0	12,850	0.00	0.00
Iceland	0	36	0.00	0.00	0.30	0.00	0	143	0.00	0.00
Norway	0	1,200	0.00	0.00	0.59	0.00	0	653	0.00	0.00
Sweden	0	1,222	0.00	0.00	0.30	0.00	0	1,261	0.00	0.00
Finland	0	650	0.00	0.00	0.46	0.00	0	397	0.00	0.00
Switzerland	0	1,963	0.00	0.00	0.26	0.00	0	2,482	0.00	0.00
Austria	895	1,186	75.44	3.68	0.23	16.24	4	610	0.66	0.93
USA	5,947	88,344	6.73	2.96	3.18	0.93	894	47,073	1.90	2.23

**Trade and FDI Profile: Japan - Table 2 B**

## Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	13,353	300,726	1.00	0.81	0.14	0.17	974	205,292	1.00	13.71
EU - 12 countries	2,564	48,392	1.19	0.71	0.09	0.13	121	26,651	0.95	21.25
France	319	4,651	1.54	0.98	0.37	0.38	73	4,438	3.47	4.37
Belg.-Luxbg	0	3,603	0.00	0.51			0	1,246	0.00	
Netherlands	0	6,541	0.00	0.30			0	1,166	0.00	
Germany	490	15,330	0.72	0.72	0.32	0.44	92	8,663	2.23	5.35
Italy	114	2,856	0.90	0.89	0.06	0.06	3	3,541	0.20	34.30
Utd. Kingdom	1,210	10,153	2.68	0.60	0.36	0.61	268	4,321	13.09	4.51
Ireland	0	1,192	0.00	0.93			0	1,043	0.00	
Denmark	0	698	0.00	0.71			0	1,271	0.00	
Greece	0	685	0.00	0.23			0	87	0.00	
Portugal	0	638	0.00	0.38			0	149	0.00	
Spain	0	2,045	0.00	0.52			0	726	0.00	
EFTA - 7 countries	30	6,257	0.11	0.94	0.56	0.60	12	5,545	0.44	2.57
OECD	9,888	151,276	1.47	0.75	0.14	0.18	733	91,439	1.69	13.50
Central & E. Europe	0	554	0.00	0.88			0	435	0.00	
NAFTA	0	96,887	0.00	0.72			0	54,851	0.00	
ASEAN - 6	0	41,452	0.00	0.81			0	28,383	0.00	
ACP 70 countries	0	4,051	0.00	0.62			0	1,819	0.00	
NICs 4 countries	0	67,763	0.00	0.51			0	23,092	0.00	
Mediterranean	0	3,314	0.00	0.55			0	1,261	0.00	
CIS 11 countries	0	1,157	0.00	0.63			0	2,520	0.00	
North Africa -6	0	1,076	0.00	0.55			0	410	0.00	
Other African	0	4,569	0.00	0.74			0	2,696	0.00	
Central America	0	8,710	0.00	0.28			0	1,426	0.00	
South America	0	4,621	0.00	0.91			0	5,493	0.00	
Near & Middle East	0	9,770	0.00	0.60			0	22,961	0.00	
Other Asian	2,785	71,446	0.88	0.74	0.10	0.13	140	41,753	0.71	19.85
Australia, Oceania	0	7,898	0.00	0.76			0	12,850	0.00	
Iceland	0	36	0.00	0.40			0	143	0.00	
Norway	0	1,200	0.00	0.70			0	653	0.00	
Sweden	0	1,222	0.00	0.98			0	1,261	0.00	
Finland	0	650	0.00	0.76			0	397	0.00	
Switzerland	0	1,963	0.00	0.88			0	2,482	0.00	
Austria	895	1,186	16.99	0.68	0.01	0.01	4	610	1.38	223.75
USA	5,947	88,344	1.52	0.70	0.26	0.38	894	47,073	4.00	6.65

### C. United States

Over the three years under review, FDI outflows and inflows were more important for US firms than for European or Japanese companies. Inward FDI into the manufacturing sector was with 2.7 per cent of imports higher than for any other country under review except Spain (see table 12), and the outward-FDI-to-export ratio was certainly higher than that of Japan or European third-country relations. Yet, manufacturing FDI represented only a third of total FDI outflows and inflows.

American firms were by far the most important investors in overseas mining projects. They invested close to ECU 1 billion per year, more than twice as much as the EU.

American financial institutions were also more internationalised than those from the other Triad members. They were the largest supplier of FDI and had a strong revealed comparative advantage in outward FDI. At the same time, the United States financial sector attracted FDI an order of magnitude of ECU 10 billion per annum, twice as much as Europe and incomparable with the average inflows of ECU 66 million into Japan. The high and growing international competitiveness of the American services sector comes out very well from the globalisation chart of the Triad's services sector (chart 8).

In the early 1990s, the American manufacturing sector was deep down in the third quadrant of the globalisation chart: annual trade deficits of close to ECU 80 billion combined with net annual FDI inflows of close to ECU 5 billion. While these FDI inflows have not been a major source of financing the trade deficit, they have certainly contributed to the growing share of foreign-affiliated firms in US trade. US affiliated of non-US multinational corporations accounted for 23 per cent of US exports and 34 per cent of US imports in 1993.<sup>12</sup> Machinery and information technology registered the highest inflows; in spite of the strong position of American firms in this sector, this sector was a net importer of goods and FDI and no revealed comparative advantage in outward FDI.

In geographical terms, the largest bilateral FDI partner was the UK thanks to substantial and balanced flows into both directions. Japan remained the largest investor in the US with annual inflows of ECU 6 billion. Yet, FDI inflows were not concentrated, at all, but came from all over the world, with 11 countries or regions providing an average of more than ECU 1 billion per annum.

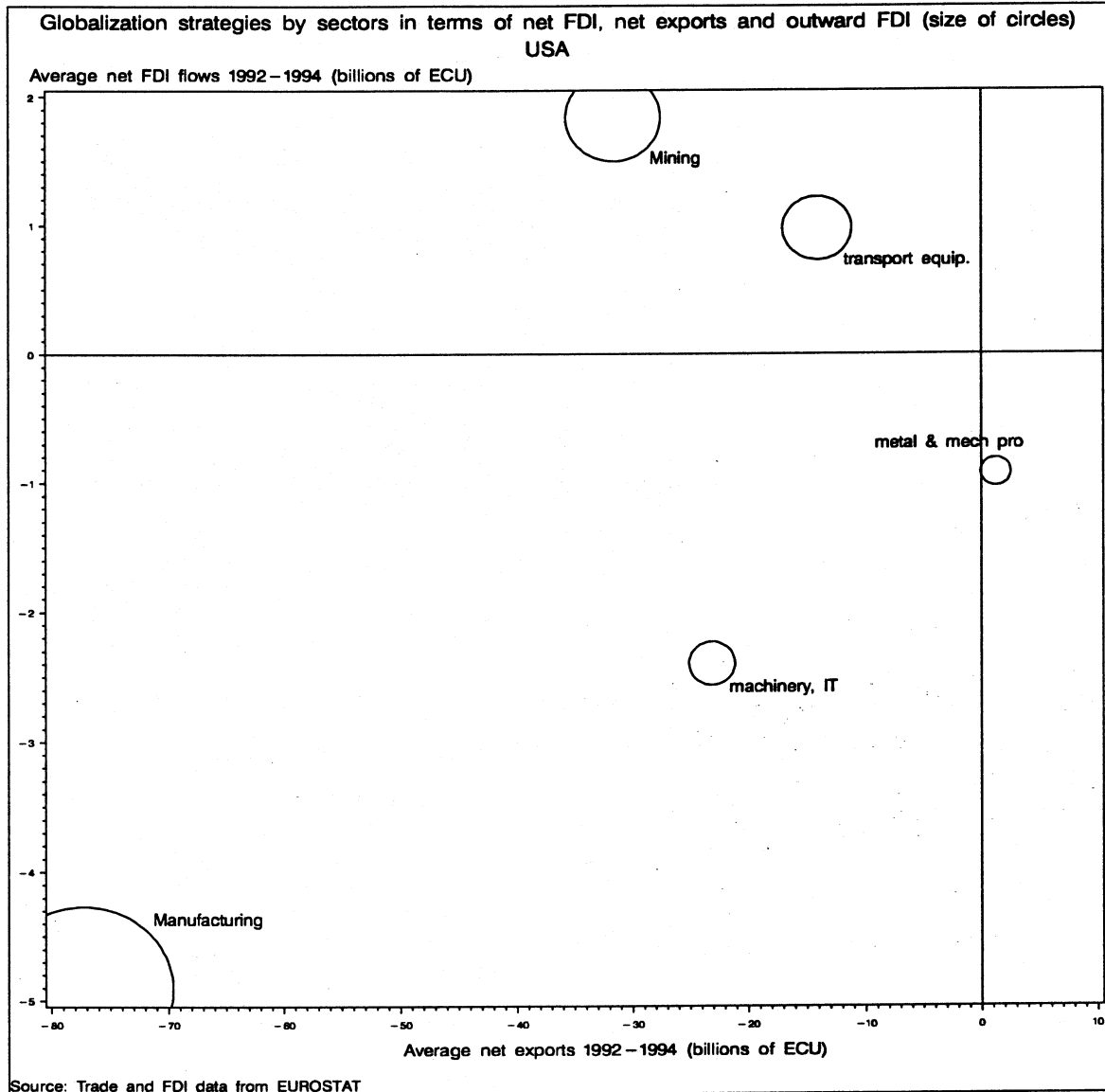
Notwithstanding the high FDI inflows from Japan, transatlantic relations hinged to a much larger extent on FDI than those with Japan, NAFTA or any other region: both outward-FDI-to-export ratios and inward-FDI-to-import ratios were much higher across the Atlantic than anywhere else (if one disregards the limited inflows from Australia).

Overall, the wide geographical spread of the United States' inward and outward FDI underlines the importance of FDI in the globalisation strategies of American firms.

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<sup>12</sup> US Department of Commerce, Survey of Current Business, May and June 1995.

### Trade and FDI Profile: United States - Chart 1



## Trade and FDI Profile: United States - Table 1 A

## Foreign direct investment and trade by sector

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sector	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI-O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	22,575	377,432	5.98	1.00	1.00	1.00	34,040	482,824	7.05	1.00
TOTAL without services	8,390	368,245	2.28	1.00	1.00	1.00	11,461	502,219	2.28	1.00
Agriculture and fishing	0	22,348	0.00	0.00	2.28	0.00	0	10,160	0.00	0.00
Mining and quarrying	1,869	5,102	36.63	1.64	1.11	1.48	32	36,735	0.09	0.08
Manufacturing	6,521	340,741	1.91	0.91	0.96	0.95	11,429	417,980	2.73	1.03
- Textiles and wood activities	0	28,526	0.00	0.00	1.04	0.00	0	63,824	0.00	0.00
- Petroleum, chemical, rubber, plastic	0	52,805	0.00	0.00	0.95	0.00	0	45,896	0.00	0.00
- Metal and mechanical products	194	64,894	0.30	0.23	0.83	0.27	1,116	63,664	1.75	1.10
- Machinery, computers, RTC, communications	443	73,052	0.61	0.57	1.05	0.54	2,841	96,150	2.95	1.01
- Vehicles and other transport equipment	648	73,139	0.89	1.17	0.98	1.19	0	87,212	0.00	0.00
Electricity, gas and water	0	54	0.00	0.00	0.14	0.00	0	609	0.00	0.00
Construction	0	n.a.		0.00			0	n.a.		
Trade and repairs	2,066	n.a.		1.33			4,325	n.a.		
Hotels and restaurants	0	n.a.		0.00			0	n.a.		
Transport and communication	0	n.a.		0.00			0	n.a.		
- Land sea and air transport	0	n.a.		0.00			0	n.a.		
Financial intermediation	8,025	n.a.		1.30			9,909	n.a.		
- other financial intermediation	0	n.a.		0.00			0	n.a.		

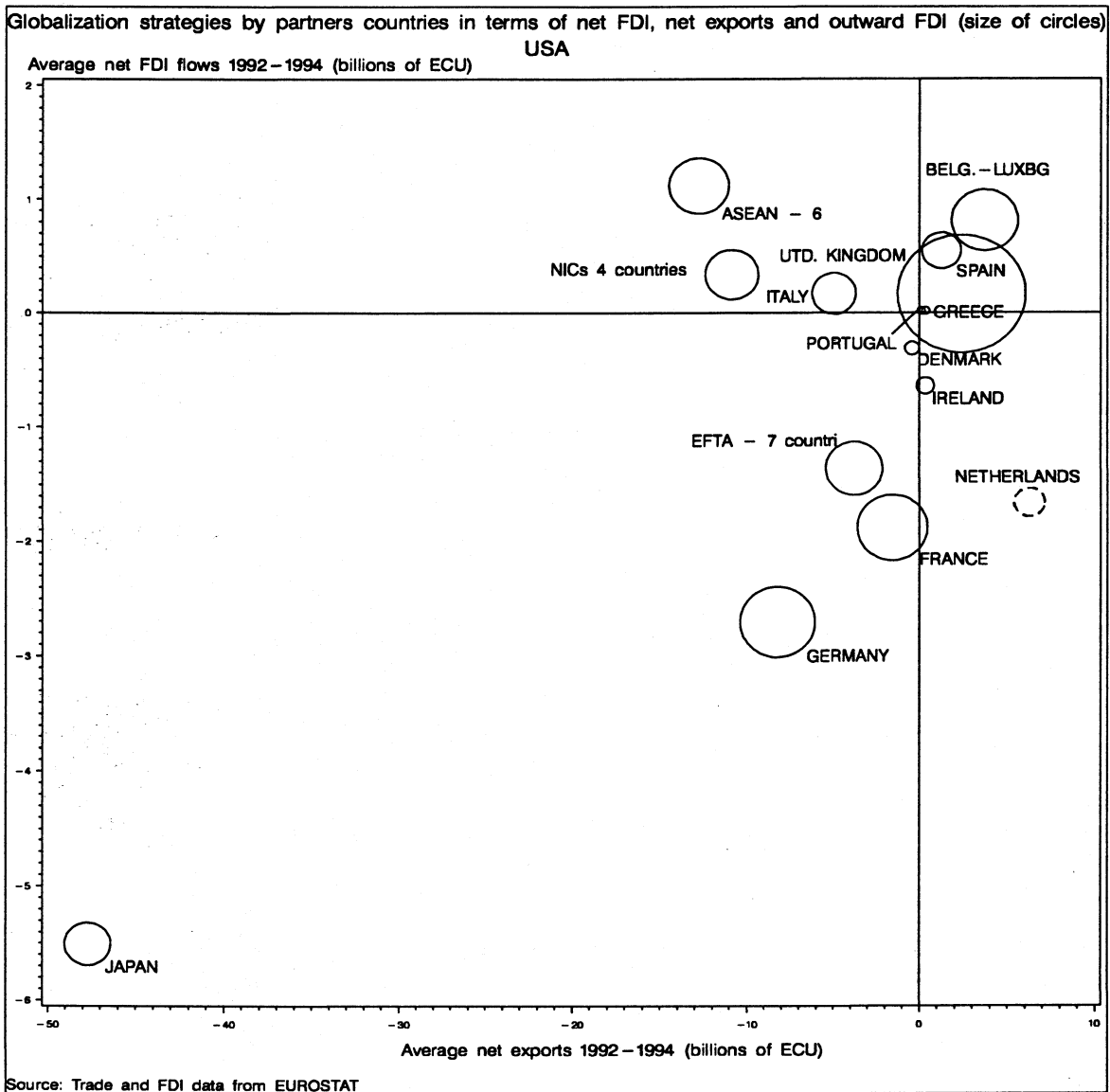
## Trade and FDI Profile: United States - Table 1 B

## Foreign direct investment and trade by sectors

(Annual averages of intra-EU plus extra-EU FDI and trade flows, 1992-1994)

Sectors	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- industry trade ratio	Intra- industry FDI ratio	Relation intra- industry FDI-O & export ratios	FDI inflow ECU m	Import ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
Agriculture and fishing	0	22,348	0.00	0.63			0	10,160	0.00	
Mining and quarrying	0	5,102	0.00	0.24			0	36,735	0.00	
Manufacturing	6,521	340,741	1.08	0.90	0.73	0.81	11,429	417,980	1.11	0.57
- Textiles and wood activities	0	28,526	0.00	0.62			0	63,824	0.00	
- Petroleum, chemical, rubber, plastic	0	52,805	0.00	0.93			0	45,896	0.00	
- Metal and mechanical products	194	64,894	0.17	0.99	0.30	0.30	1,116	63,664	0.71	0.17
- Machinery, computers, RTC, communications	443	73,052	0.34	0.86	0.27	0.31	2,841	96,150	1.20	0.16
- Vehicles and other transport equipment	648	73,139	0.50	0.91	0.00	0.00	0	87,212	0.00	
Electricity, gas and water	0	54	0.00	0.16			0	609	0.00	
Construction	0	n.a.					0	n.a.		
Trade and repairs	2,066	n.a.			0.65		4,325	n.a.		0.48
Hotels and restaurants	0	n.a.					0	n.a.		
Transport and communication	0	n.a.					0	n.a.		
- Land sea and air transport	0	n.a.					0	n.a.		
Financial intermediation	8,025	n.a.			0.89		9,909	n.a.		0.81
- other financial intermediation	0	n.a.					0	n.a.		

## Trade and FDI Profile: United States - Chart 2



## Trade and FDI Profile: United States - Table 2 A

## Foreign direct investment and trade by partner countries

(FDI and trade flows as annual averages 1992-1994)

Partner countries	FDI outflow ECU m	Exports ECU m	FDI-O to exports %	RCA FDI-O	RCA exports	RCA FDI- O / RCA exports	FDI inflow ECU m	Import ECU m	FDI-I to imports %	RCA FDI-I / RCA imports
WORLD	22,575	377,432	5.98	1.00	1.00	1.00	34,040	482,824	7.05	1.00
EU - 12 countries	10,584	80,203	13.20	0.89	0.47	1.88	16,081	81,644	19.70	2.20
France	1,539	10,954	14.05	0.92	0.38	2.42	3,421	12,618	27.12	2.71
Belg.-Luxbg	1,344	8,265	16.26	0.86	0.48	1.78	533	4,590	11.61	1.34
Netherlands	-300	10,771	-2.79	-0.28	0.61	-0.45	1,363	4,564	29.86	3.51
Germany	1,756	15,545	11.30	0.89	0.39	2.27	4,461	23,926	18.64	2.12
Italy	611	5,911	10.33	0.81	0.34	2.36	442	10,905	4.06	0.92
Utd. Kingdom	4,969	20,134	24.68	1.85	0.83	2.24	4,805	17,975	26.73	1.75
Ireland	98	2,415	4.04	0.24	0.74	0.32	738	2,096	35.19	3.33
Denmark	65	997	6.52	0.56	0.30	1.88	377	1,432	26.32	3.70
Greece	20	678	2.90	0.27	0.27	1.00	0	330	0.00	0.00
Portugal	18	744	2.37	0.09	0.21	0.44	0	640	0.00	0.00
Spain	464	3,787	12.24	0.41	0.33	1.25	-82	2,569	-3.20	-6.27
EFTA - 7 countries	1,022	9,263	11.03	1.78	0.36	4.91	2,386	13,165	18.13	3.12
OECD	14,697	139,592	10.53	0.82	0.56	1.47	29,533	187,464	15.75	1.71
Central & E. Europe	0	1,766	0.00	0.00	0.24	0.00	0	1,554	0.00	0.00
NAFTA	2,014	116,507	1.73	0.85	1.85	0.46	2,535	126,097	2.01	0.33
ASEAN - 6	373	22,591	1.65	1.03	1.28	0.80	0	35,577	0.00	0.00
ACP 70 countries	0	6,733	0.00	0.00	1.18	0.00	0	12,798	0.00	0.00
NICs 4 countries	882	42,896	2.06	3.33	1.47	2.27	546	54,076	1.01	0.85
Mediterranean	0	10,577	0.00	0.00	0.89	0.00	0	6,989	0.00	0.00
CIS 11 countries	0	2,868	0.00	0.00	0.86	0.00	0	1,827	0.00	0.00
North Africa -6	0	3,736	0.00	0.00	0.78	0.00	0	1,933	0.00	0.00
Other African	0	3,823	0.00	0.00	0.64	0.00	0	10,000	0.00	0.00
Central America	3,747	45,439	8.25	2.93	3.35	0.88	4,003	41,747	9.59	0.56
South America	1,365	19,733	6.92	2.00	2.42	0.83	-240	20,201	-1.19	2.52
Near & Middle East	172	13,078	1.32	2.10	1.08	1.94	263	12,907	2.04	0.75
Other Asian	2,483	82,589	3.01	1.50	1.83	0.82	4,202	164,088	2.56	0.79
Australia, Oceania	190	8,356	2.27	1.33	1.62	0.82	1,108	3,994	27.74	2.43
Iceland	0	95	0.00	0.00	0.63	0.00	0	178	0.00	0.00
Norway	543	982	55.28	2.19	0.39	5.65	209	1,719	12.14	3.30
Sweden	273	2,030	13.43	0.40	0.40	1.01	1,142	3,871	29.50	4.53
Finland	50	715	6.94	1.17	0.40	2.92	237	1,260	18.83	1.82
Switzerland	482	4,409	10.94	1.57	0.47	3.35	2,159	4,922	43.87	2.85
Austria	230	1,032	22.26	0.56	0.16	3.56	1,045	1,214	86.08	8.19
Japan	651	39,745	1.64	5.74	3.13	1.84	6,156	87,683	7.02	0.80



**Trade and FDI Profile: United States - Table 2 B**

Foreign direct investment and trade by partner countries

*(FDI and trade flows as annual averages 1992-1994)*

Partner countries	FDI outflow ECU m	Exports ECU m	Relative FDI-O to export ratio	Intra- regional trade ratio	Intra- regional FDI ratio	Relation intra- regional FDI-O and export ratios	FDI inflow ECU m	Imports ECU m	Relative FDI-I to import ratio	Ratio: FDI outflow / FDI inflow
WORLD	22,575	377,432	1.00	0.88	0.80	0.91	34,040	482,824	1.00	0.66
EU - 12 countries	10,584	80,203	2.21	0.99	0.79	0.80	16,081	81,644	2.79	0.66
France	1,539	10,954	2.35	0.93	0.62	0.67	3,421	12,618	3.85	0.45
Belg.-Luxbg	1,344	8,265	2.72	0.71	0.57	0.80	533	4,590	1.65	2.52
Netherlands	-300	10,771	-0.47	0.60	0.00	0.00	1,363	4,564	4.24	-0.22
Germany	1,756	15,545	1.89	0.79	0.57	0.72	4,461	23,926	2.64	0.39
Italy	611	5,911	1.73	0.70	0.84	1.20	442	10,905	0.58	1.38
Utd. Kingdom	4,969	20,134	4.13	0.94	0.98	1.04	4,805	17,975	3.79	1.03
Ireland	98	2,415	0.68	0.93	0.23	0.25	738	2,096	4.99	0.13
Denmark	65	997	1.09	0.82	0.29	0.36	377	1,432	3.73	0.17
Greece	20	678	0.49	0.66	0.00	0.00	0	330	0.00	
Portugal	18	744	0.40	0.92	0.00	0.00	0	640	0.00	
Spain	464	3,787	2.05	0.81	0.00	0.00	-82	2,569	-0.45	-5.63
Extra Europe 12	11,991	297,229	0.67	0.85	0.80	0.94	17,958	401,179	0.63	0.67
EFTA - 7 countries	1,022	9,263	1.84	0.83	0.60	0.73	2,386	13,165	2.57	0.43
OECD	14,697	139,592	1.76	0.85	0.66	0.78	29,533	187,464	2.23	0.50
Central & E. Europe	0	1,766	0.00	0.94			0	1,554	0.00	
NAFTA	2,014	116,507	0.29	0.96	0.89	0.92	2,535	126,097	0.29	0.79
ASEAN - 6	373	22,591	0.28	0.78	0.00	0.00	0	35,577	0.00	
ACP 70 countries	0	6,733	0.00	0.69			0	12,798	0.00	
NICs 4 countries	882	42,896	0.34	0.88	0.76	0.86	546	54,076	0.14	1.62
Mediterranean	0	10,577	0.00	0.80			0	6,989	0.00	
CIS 11 countries	0	2,868	0.00	0.78			0	1,827	0.00	
North Africa -6	0	3,736	0.00	0.68			0	1,933	0.00	
Other African	0	3,823	0.00	0.55			0	10,000	0.00	
Central America	3,747	45,439	1.38	0.96	0.97	1.01	4,003	41,747	1.36	0.94
South America	1,365	19,733	1.16	0.99	0.00	0.00	-240	20,201	-0.17	-5.68
Near & Middle East	172	13,078	0.22	0.99	0.79	0.80	263	12,907	0.29	0.65
Other Asian	2,483	82,589	0.50	0.67	0.74	1.11	4,202	164,088	0.36	0.59
Australia, Oceania	190	8,356	0.38	0.65	0.29	0.45	1,108	3,994	3.93	0.17
Iceland	0	95	0.00	0.70			0	178	0.00	
Norway	543	982	9.24	0.73	0.56	0.76	209	1,719	1.72	2.60
Sweden	273	2,030	2.25	0.69	0.39	0.56	1,142	3,871	4.18	0.24
Finland	50	715	1.16	0.72	0.35	0.48	237	1,260	2.67	0.21
Switzerland	482	4,409	1.83	0.94	0.37	0.39	2,159	4,922	6.22	0.22
Austria	230	1,032	3.72	0.92	0.36	0.39	1,045	1,214	12.21	0.22
Japan	651	39,745	0.27	0.62	0.19	0.31	6,156	87,683	1.00	0.11



## V. Empirical indicators combining trade and FDI data

This chapter reviews the trade and FDI indicators used above from a technical perspective. The indicators used in this study are straightforward. No attempt has been undertaken to construct broader econometric models covering both trade and FDI. Instead, the objective has been to present simple and transparent tools for trade and FDI analysts.

Each of these indicators is discussed in terms of

- questions and issues which can be addressed with the indicator under review
- the indicator
- comments on empirical applications
- references to examples

### A. Indicators on aggregated trade and FDI

#### 1. Questions addressed

- ⇒ What are the orders of magnitude of trade and investment flows?
- ⇒ What is their macro-economic significance?
- ⇒ To what extent are growth patterns of trade and investment synchronised?
- ⇒ How have they evolved over time?
- ⇒ How volatile has FDI been in comparison to trade?

#### 2. Indicators

- Nominal time series
- Shares in gross domestic product
- For the evolution of trade and FDI, growth rates based on least-square trend regressions plus coefficients of determination  $R^2$ .

#### 3. Comments on empirical applications

Nominal time series on aggregated trade and investment are the point of departure for any empirical analysis. Compiling this basic data, however, is far from obvious, and calls for specific attention in each case. This holds true in particular for cross-country studies. Major questions to be resolved are:

- There are significant differences in the definition of FDI. The choice of a single source of data (e.g. EU, IMF, OECD, UN) is neither always possible as the present study shows, nor recommendable, as it hides the significant gaps between different data sources.
- There are large discrepancies between mirror data for trade and - even more so - for FDI. Whenever possible, both sets of data (i.e. from the reporter and from the partner country) should be included in the analysis, notwithstanding the difficulties emerging from the fact that they may have little in common.

- Exchange rate effects need to be taken into consideration. Between 1980 and 1985, for instance, the EU's foreign trade grew in real terms, but declined in nominal US\$ because the depreciation of the European currencies against the US\$.
- Aggregated FDI data nearly always includes services; most trade statistics do not. When appropriate, balance-of-payments data should be used as source for trade figures rather than customs-based trade statistics.
- For comparisons between the EU, Japan and the USA, it is essential to exclude European intra-regional trade and investment.

The volatility of FDI flows is another difficult issue. It excludes the use of terminal growth rates for describing growth patterns. A fairly simple way of measuring this volatility is to use the  $R^2$  of the least square growth trend as an indicator for its volatility. In many instances, it may be useful to smooth FDI data by using three-year moving averages. The problem of moving averages is that they reduce the time span that can be studied, as the first and last year(s) have to be excluded. This is the reason why the present study did not make extensive use of moving averages.

The situation is slightly better for trade flows, but least square trends in combination with  $R^2$  are nevertheless recommended.

In view of the massive discrepancies between FDI time series from different sources (e.g. host or home country, various international institutions) graphical analysis may be particularly appropriate, as it emphasises the orders of magnitudes and trends rather than precise figures. Moreover, it provides a simple way for analysing the degree of synchronisation in the evolution of trade and FDI.

The ratio between trade and FDI indicators, on the one hand, and GDP, on the other, provide the most useful indicator for how open and outward-looking an economy is.

#### 4. Examples

Time series on the evolution of trade and FDI in the Triad are available in Appendix 1. For the sake of comparability over time and among countries, ratios are added, namely the trade orientation (export and imports as percentage of GDP) and the FDI orientation (outward and inward FDI as percentage of GDP). The major indicators are depicted in Chart 3 on page 20.

## B. Share of countries and regions in global trade and FDI

### 1. Questions addressed

- ⇒ How important is a specific country (or region) as a player in global trade and investment?
- ⇒ In relative terms, is the country more important in world trade or in FDI?
- ⇒ To what extent is there a match between the country's shares in exports and imports compared to outward and inward FDI stocks and flows?
- ⇒ How has this changed over time?

### 2. Indicator

Percentage share of exports (imports; outward FDI stocks; inward FDI stocks; outward FDI flows; inward FDI flows) in world exports (imports; outward FDI stocks; inward FDI stocks; outward FDI flows; inward FDI flows).

### 3. Comments on empirical applications

Trade data is readily available. WTO's annual publication *International Trade* and its spring press release provide tables with the shares of leading trading nations in world trade including and excluding EU intra-regional trade. The time lag is normally around three months.

For FDI, the statistical appendix of the UN *World Investment Report* provides data on global FDI stocks and flows. These data may differ significantly from OECD and EUROSTAT series, primarily due to different definitions. The data does not allow to distinguish between intra- and extra-EU FDI. The time lag tends to be two years.

There is a clear difference in coverage and quality of trade data between OECD and other countries; for FDI data, the situation is worse, as there is no equivalent to the United Nations trade database COMTRADE for FDI. UNCTAD's FDI trade database comes closest, but is not easily accessible. Yet, for analytical purposes it is essential to have an idea of world totals for FDI flows and stocks in order to put national data into perspective.

### 4. Example

The numerous notes and qualifications in table 6 on the share of Triad members in world trade and FDI flows and stocks (see page 23) bears witness to the difficulties of estimating the share of individual countries and regions in world trade and FDI.

## C. FDI-to-trade ratios

### 1. Questions addressed

- ⇒ What is the relative importance of FDI versus trade?
- ⇒ How does the relative importance of FDI and trade compare between countries?

### 2. Indicators:

- |   |                                      |
|---|--------------------------------------|
| (i) Sector- and/or partner specific outward-FDI to export ratio<br>(for exporting and home country i, partner country j and sector k) | $\frac{\text{FDI-O}_{ijk}}{X_{ijk}}$ |
| (ii) Sector- and/or partner-specific inward-FDI to import ratio<br>(for importing and host country j, partner country i and sector k) | $\frac{\text{FDI-I}_{jik}}{M_{jik}}$ |

In view of the inconsistency of data, it is advisable to calculate the two independently and to compare them.

If one wants to capture the importance of FDI vis-à-vis trade in one specific sector as compared to the average of the country under review, the simple FDI-to-trade ratio can be easily adjusted by the average FDI-to-trade ratio for the country under review. This has the advantage of showing immediately whether the sector in the country under review is more (less) FDI oriented than the national average. In this case the ratio is larger than (smaller than) one.

- |  |   |
|--|---|
| (iii) Relative sector- or partner-specific outward-FDI to export ratio<br>(for exporting and host country i, partner country j and sector k) | $\frac{\text{FDI-O}_{ijk}/X_{ijk}}{\text{FDI-O}_i / X_i}$ |
| (iv) Relative sector- or partner-specific inward-FDI to import ratio<br>(for importing and home country j, partner country i and sector k)   | $\frac{\text{FDI-I}_{jik}/M_{jik}}{\text{FDI-I}_i / M_i}$ |

### **3. Comments on empirical applications**

The FDI-to-trade ratio is the most immediate and simple indicator for comparing trade and FDI. It is particularly useful for comparisons between countries and sectors.

Its weak point is that FDI and trade relate to different levels of analysis. As a result, it may be difficult to assess whether a particular FDI-to-trade ratio is high or low in absolute terms.

A useful approach to make FDI values more compatible with trade values is to estimate the output or exports likely to be generated by FDI in the host country. This typically involves two steps. Firstly, the impact of FDI flows on stocks needs to be estimated. The empirical evidence available suggests that one dollar of FDI outflows tends to correlate to substantially larger increase of stocks in the host country of (see the discussion and references in chapter II C). Second, output-to-investment ratios of foreign-affiliated firms are required. Such data exists for the US, Japan and Sweden.

### **4. Example**

Chart 4 on page 24 and section II C (pages 23 to 25) discuss FDI-to-trade ratios in the Triad. Tables 1 and 2 B in the trade and FDI profiles of chapter V indicate relative FDI-to-trade ratios by sectors and partner countries.

## D. Indicators on the sectoral composition and Revealed Comparative Advantages (RCAs) in FDI and trade

### 1. Questions addressed

- ⇒ How do globalisation strategies with relation to FDI and trade differ between sectors?
- ⇒ To what extent do firms in a specific sector of a given country rely on FDI or on exports in comparison to other sectors in the same country and in comparison to the Triad as a whole or the world average?
- ⇒ What are the revealed comparative advantages of countries in exports and outward FDI as well as in imports and inward FDI? How do they compare?

### 2. Indicators

- Sector-specific shares in national FDI inflows and outflows
- Sector-specific FDI-to-trade ratios
- Sector-specific relative FDI-to-trade ratios
- Sector-specific Revealed Comparative Advantages (i.e. sector-specific shares in national FDI weighted by this sector's share in FDI of the world, the Triad, or any other reference group).

While the first indicator is self-explanatory, the second and third are discussed in V C.

Parallel to the concept of Revealed Comparative Advantage RCA in trade, one may apply the RCA concept to FDI. Basically, RCAs ponder simple relative shares of a given sector in national trade - or FDI - by the importance of this sector at the global level. This puts a country's sectoral distribution of trade and FDI in an international perspective. As global FDI data broken down by sector was not available, national data was compared with that of the Triad.

RCAs can then be defined as follows:

$$\begin{aligned}
 \text{(i) Sector-specific RCAs for outward FDI} &= \frac{\text{FDI-O}_{ik} / \text{FDI-O}_i}{\text{FDI-O}_{\text{Triad},k} / \text{FDI-O}_{\text{Triad}}} \\
 \text{(for home country } i \text{ and sector } k) & \\
 \text{(ii) Sector-specific RCAs for inward FDI} &= \frac{\text{FDI-I}_{jk} / \text{FDI-I}_j}{\text{FDI-I}_{\text{Triad},k} / \text{FDI-I}_{\text{Triad}}} \\
 \text{(for host country } j \text{ and sector } k) &
 \end{aligned}$$



### **3. Comments on empirical applications**

The analysis and comparison of the sectoral distribution of FDI and trade is particularly important as inter-sectoral differences are substantial. A three-tiered presentation of results as:

1. simple percentage distributions and shares within and across countries,
2. revealed comparative advantages, and as
3. ratios of FDI and trade RCAs

has proven to be useful.

### **4. Example**

Section III B 1 (pages 32 to 33), including table 10 on page 33, discuss RCAs of the three Triad members for the primary, secondary and tertiary sectors. Moreover, the trade and FDI country profiles in chapter IV indicate sector-specific RCAs in table 1 A.

## E. Indicators on the importance of intra-industry trade and FDI

### 1. Questions addressed

⇒ Trade among developed countries and in particular the EU is characterised by a high degree of intra-industry trade, reflecting a high level of product differentiation. To what extent does this apply as well to FDI?

### 2. Indicators

Measures for sector-specific intra-industry trade (IIT<sub>ik</sub>) and FDI (IIFDI<sub>ik</sub>)

$$\text{IIT Ratio}_{ik} = 1 - (|X_{ik} - M_{ik}|) / (X_{ik} + M_{ik})$$

$$\text{IIFDI Ratio}_{ik} = 1 - (|FDI-O_{ik} - FDI-I_{ik}|) / (FDI-O_{ik} + FDI-I_{ik})$$

(for country i and sector k)

As the proposed approach focuses on intra-industry trade rather than on the trade balance, it is based on the absolute value of the difference between exports and imports or FDI-O and FDI-I. This has the advantage of bringing the indicator into the range from 0 to 1, provided FDI flows are not negative.

The IIT and IIFDI ratios are one if intra-industry trade is pronounced (and if trade is balanced) and close to 0 if there is no intra-industry trade or investment. They can be compiled at the sector level or for a whole country.

In case trade and FDI are not balanced and the effect of the trade or FDI deficits or surpluses are to be neutralised, the calculation should be based on the share of specific sectors in total exports and imports rather than on the absolute values. In this latter case, they can be calculated as follows:

$$\text{adjusted IIT Ratio}_i = 1 - (|X_{ik} / X_i - M_{ik} / M_i|) / (X_{ik} / X_i + M_{ik} / M_i)$$

$$\text{adjusted IIFDI Ratio}_i = 1 - (|FDI-O_{ik}/FDI-O_i - FDI-I_{ik}/FDI-I_i|) / (FDI-O_{ik}/FDI-O_i + FDI-I_{ik}/FDI-I_i)$$

### 3. Comments on empirical applications

IIT and IIFDI ratios have been calculated in the country-specific tables. In order to facilitate their comparison, the tables include columns with the simple ratio of the two (IIFDI/IIT). This ratio indicates whether intra-industry exchange is relatively more important for FDI (ratio > 1) or for trade (ratio < 1).

The case of disinvestment is the most pronounced case of the absence of intra-industry FDI. In arithmetical terms, the negative FDI values push the IIFDI ratio below 0 or above 1. As such values are counter-intuitive, they are replaced by a value of 0, which conveys the absence of intra-industry FDI flows.

The intra-regional trade ratio for the world indicates the share of the trade balance in the sum of exports and imports.

#### 4. Example

Examples for intra-industry are given in trade and FDI country profile tables 1 B in chapter IV.

## F. Indicators on the partner country composition of trade and FDI

### 1. Questions addressed

- ⇒ How do globalisation strategies with relation to FDI and trade differ in terms of the composition of partner countries?
- ⇒ Are economic relations with neighbouring countries or countries within the same regional grouping more or less FDI-intensive than those with more distant markets?
- ⇒ Does FDI play a more important role vis-à-vis former colonies?
- ⇒ Is FDI more concentrated on a limited number of partner countries than trade?

### 2. Indicators

Parallel to the sector-specific indicators, four partner-specific indicators are used:

- Partner-specific shares in national FDI inflows and outflows
- Partner-specific FDI-to-trade ratios
- Partner-specific relative FDI-to-trade ratios
- Partner-specific Revealed Comparative Advantages (i.e. partner-specific shares in national FDI weighted by this partner's share in FDI of the world, the Triad, or any other reference group).

The FDI-to-trade ratios are discussed in section V C.

Partner-specific RCAs can be calculated as follows:

$$\begin{aligned}
 \text{(i) Partner-specific RCAs for outward FDI} &= \frac{\text{FDI-O}_{ij} / \text{FDI-O}_i}{\text{FDI-O}_{\text{Triad},j} / \text{FDI-O}_{\text{Triad}}} \\
 \text{(for home country } i \text{ and host country } j) & \\
 \text{(ii) Partner-specific RCAs for inward FDI} &= \frac{\text{FDI-I}_{ij} / \text{FDI-I}_j}{\text{FDI-I}_{\text{Triad},i} / \text{FDI-I}_{\text{Triad}}} \\
 \text{(for host country } j \text{ and home country } i) &
 \end{aligned}$$

If data is available, these indicators can, of course, be applied at the sectoral level.

### 3. Comments on empirical applications

As mentioned in Chapter II, it would be preferable to analyse the partner country specialisation in combination with, and as further differentiation of, sector-specific analysis of trade and FDI. Unfortunately, the data available does not yet permit this approach on a larger scale.

Yet, even without taking into account sectoral differences, the comparison of FDI and trade broken down by partner countries adds to the analysis. In general, FDI tends to be more concentrated on a small number of partner countries than trade.

Each of the four above-mentioned indicators has its advantages. The fourth indicator is referred to as Revealed Comparative Advantage only because of its logical similarity to the sector-specific RCAs.

#### **4. Example**

The trade and FDI country profiles in Chapter IV include examples of the non-adjusted and relative partner-specific FDI-to-trade ratios as well as the partner-specific RCAs in tables 2 A and B.

## G. Indicators on intra-regional trade and FDI and bilateral trade and FDI balances

### 1. Questions addressed

- ⇒ Intra-regional trade accounts for some two thirds of the EU's total trade. To what extent does this apply as well to FDI?
- ⇒ How symmetrical and balanced are trade and investment flows between two countries?

### 2. Indicators

Ratios on intra-regional trade and FDI concerning the EU can be simply calculated as:

$$\text{intra-regional export (import) share} = X_{i,EU,k} / X_{i,all,k} ; (M_{EU,j,k} / M_{all,j,k})$$

$$\text{intra-regional FDI-O (FDI-I) share} = FDI-O_{i,EU,k} / FDI-O_{i,all,k} ; (FDI-I_{EU,j,k} / FDI-I_{all,j,k})$$

(for home/exporting country i and host/importing country j and sector k)

These ratios are close to one if intra-regional trade is predominant and close to 0 if it is small.

Another approach is to measure how symmetrical or balanced bilateral trade flows are between two countries or regions. The measure for intra-industry trade can be easily adapted for this purpose:

$$\text{intra-regional trade ratio} = 1 - (|X_{ij} - M_{ij}|) / (X_{ij} + M_{ij})$$

$$\text{intra-regional FDI ratio} = 1 - (|FDI-O_{ij} - FDI-I_{ij}|) / (FDI-O_{ij} + FDI-I_{ij})$$

The intra-regional trade ratios are close to 1, if intra-regional trade is high in the sense of being balanced.

### 3. Comments on empirical applications

The intra-regional FDI ratios would be negative if outward FDI is negative. As this shows the highest degree of non-symmetrical relations, values of the ratio are set at zero.

### 4. Example

The trade and FDI country profiles include intra-regional trade and FDI ratios as well as the relation between intra-regional trade and FDI ratios in tables 2 B. This latter relation shows immediately whether intra-regional relations are more balanced for FDI (ratio > 1) or for trade (ratio < 1). In the large majority of partner countries, this relation is smaller than one, which implies that FDI is more concentrated on a few leading countries and that net FDI at the bilateral level tends to be more unbalanced than trade.

## H. Competitiveness indicators on the basis of FDI outflows and FDI and trade balances

### 1. Questions addressed

- ⇒ What is the relationship between the FDI and the trade balance of countries by sectors and by partner countries?
- ⇒ In what sectors does a country have a competitive leadership position in terms both export and FDI surpluses?
- ⇒ For which sectors has a country evolved into an international export platform with significant, net FDI inflows and a substantial export surplus?
- ⇒ In what sectors is there a trend towards hollowing out, i.e. a combination of net FDI outflows and a sectoral trade deficit?
- ⇒ What are the sectors that maintain a predominantly domestic-market orientation with a negative balance both for FDI and trade?
- ⇒ For a given country, how do FDI and trade balances differ among partner countries?

### 2. Indicator

A graphical presentation as shown in the “bubble” Chart 2 on page 18 and in Chapter IV allows to visualise the three variables FDI outflows, net FDI and net trade at the same time.

### 3. Comments on empirical applications

The advantage of this bubble chart is that each of its four quadrants reflect a particular type of strategy, or de-facto integration of a particular country, sector or partner country on the basis of its trade and FDI flows.

As was argued in chapter I, sectors characterised both by net outward FDI and a trade surplus have a high international competitiveness and can be referred to as *industry leaders*. In this quadrant, exports and FDI correlate positively.

In contrast, net FDI and net trade correlate negatively in the second and fourth quadrant. The second quadrant of chart 2 is typical for hollowing out or *relocation*: firms relocate their production capacities through high outward FDI, and imports have overtaken exports and provide part of the domestic demand.

The fourth quadrant represents the counterpart to the second: it is typical for *international export platforms* which attract FDI to become suppliers to the world market.

Sectors in the third quadrant are basically inward looking: they attract more goods and capital into their domestic market than they supply to the rest of the world. They match sectors in the first quadrant in terms of the complementarity of trade and FDI.

The globalisation chart with partner country focus describes the home country's position vis-à-vis its partner countries. The exporting and home country has a leadership position with regards to partner countries in the first quadrant, as it provides both trade and investment inflows. In contrast, the home country is a net

importer of goods and FDI vis-à-vis countries positioned in the third quadrant. Japan, for instance, is found practically always in the third quadrant of the partner-specific globalisation chart. For partner countries in the second quadrant, the relationship of the home country is likely to be characterised by relocation: the home country is a net investor in the partner country and its imports from the partner country exceed its exports. In the fourth quadrant, finally, the home country functions as an export platform for FDI: it attracts overseas investment and is a net exporter.

In all globalisation charts throughout this study, negative values for outward FDI have been marked by circles with dotted rather than continuous lines.

#### 4. Example

Globalisation charts are widely used throughout this study. Each of the trade and FDI country profiles contains one globalisation chart by major sector and another one by partner country. Moreover, charts 7 and 8 on pages 35 and 36 present globalisation charts with a string of bubbles to illustrate the evolution over time.



## VI. Methodological remarks

### A. Data sources

This study relies basically on EUROSTAT data on trade and FDI. Trade and FDI data was provided by EUROSTAT in machine-readable format for the twelve members of the EU before the most recent enlargement and for Japan and the United States. Data consisted of two files with matching product/ sectoral and geographical breakdown. The data covered the years 1991 to 1994. The breakdown of data by product/sectors and by the direction of trade and FDI is shown in tables 13 and 14. For the longer time series, data was taken from the two publications EUROSTAT 1995 a and EUROSTAT 1995 b.

**Table 13: Sectoral classification of trade and FDI data**

<i>Classification for FDI</i>	<i>Classification in terms of NACE divisions</i>	<i>Comments</i>
Agriculture and fishing	01, 02, 05	Merchandise trade/ primary sector
Mining and quarrying	10 -14	
Manufacturing	15 - 36	Merchandise trade/ secondary sector
Textiles and wood activities	17, 18, 20	
Petroleum, chemical, rubber, plastic products	23, 24, 25	
Metal and mechanical products	27, 28	
Machinery, computers, RTC, communication	29, 30, 31, 32	
Vehicles and other transport equipment	34, 35	
Electricity, gas and water	40, 41	Trade in services/ tertiary sector
Construction	45	
Trade and repairs	50 - 54	
Hotels and restaurants	55	
Transport and communication	60 - 64	
Land, sea and air transport	60, 61, 62	
Financial intermediation	65 - 67	
Other fin. intermediation	65.2	

**Table 14: Geographical classification of trade and FDI data**

<i>Code</i>	<i>Countries</i>
A1	World
A2	EU - 12 countries
A3	BLEU
DK	Denmark
DE	Germany
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
NL	Netherlands
PT	Portugal
GB	United Kingdom
A4	Extra Euro 12
A5	EFTA - 7 countries
AT	Austria
CH	Switzerland
FIS	Finland
NO	Norway
SE	Sweden
A9	Central and Eastern Europe - 14 countries
B1	NAFTA
US	USA
B3	ASEAN 6
B5	ACP - 70 countries
B9	NICs - 4 countries
C3	Mediterranean Basin
C6	CIS - 11 c.
E5	North Africa - 6 c.
E6	Other African countries 49 c
E9	Central American countries - 29 c.
F1	South American countries 13 c.
F3	Near and Middle East 16 c
F6	Other Asian countries 31 c.
F7	Australia, Oceania, etc. 27 countries

*Note:* for details of the composition of each of the aggregates, see EUROSTAT 1995 a.

The matching of trade and FDI data by products and sectors was one of the major difficulties for the present exercise. There is no perfect match between the trade nomenclatures focusing on products, i.e. the Harmonised System (HS), the Standard

International Trade Classification (SITC) and the Broad Economic Categories (BEC), on the one hand, and the industrial classifications, namely the International Standard Industrial Classification (ISIC) and the European classification NACE, on the other. At the same time, the imperfections in matching trade and industrial nomenclatures are not the limiting factor for this type of study simply because the aggregation level of sectoral breakdown of FDI data remains very high.

The EUROSTAT data has been complemented by data from the United Nations Conference on Trade and Development which maintains next to the IMF balance-of-payments data the only database on global FDI stocks and flows. In addition, OECD data on FDI, which is published annually in a consistent and detailed manner, has been used occasionally to cross-check. The results of these cross-checks have not been encouraging, as the next section shows.

## B. Reliability of FDI data

The reliability of trade data has been discussed in a variety of publications (see for example Rozanski and Yeats 1994, and von Kirchbach 1992). Although trade data has its well-known short-comings, the quality of trade data compares very favourably with that of FDI data. It is certainly not the limiting factor in any analysis drawing on both trade and FDI data.

The reasons for the weakness of FDI data are partly related to the fact that these data tend to come from a variety of different sources. Methodological differences concern in particular the treatment of re-invested earnings.

The balance of payments is the most important source for FDI data, and international guidelines have been agreed upon in the fifth edition of the IMF *Balance of Payments Manual*. The strength of these data concerns actual flows. The coverage of re-invested earnings, however, is obviously much weaker. Company surveys are a second major source of FDI data. They provide operational data on foreign-affiliated firms and are particularly useful for shedding light on the link between FDI flows and operational variables such as sales, exports, imports, employment, assets, etc. Such surveys are carried out regularly in the United States by the Department of Commerce, in Japan by the Export-Import Bank of Japan and very few other countries. Data from these few countries are invariably used for studies addressing operational aspects of foreign-affiliated firms. The third major source are data collected by investment monitoring or promotion offices with the mandate of licensing FDI. Frequently, data from these sources do not include re-invested earnings and loans, and in many cases, they record authorised rather than realised investment.

The discrepancies between the different sources of FDI can be staggering. In the present study, for instance, a first version of chapters II and III was based on OECD data. In spite of the various efforts to harmonise OECD and EUROSTAT data, the differences were so important that the chapters had to be entirely rewritten and the hope of being able to combine EUROSTAT and OECD data had to be given up. To illustrate these discrepancies, the OECD data was prepared in a similar format and is shown in Appendix 2 with the objective of providing a possibility to cross-check orders of magnitude and trends. A comparison of Appendices 1 and 2 yields the following major discrepancies:

**FDI outflows:**

- Japanese FDI outflows are significantly lower in EUROSTAT statistics than in the OECD series. In the early 1990s, the gap is of an order of magnitude of US\$ 10 billion per annum.
- The gap between the FDI outflow data for the United States from EUROSTAT data and from OECD is even larger, with OECD figures ranging some US 15 billion above EUROSTAT data.
- For the EU, the discrepancies are markedly smaller and - with the exception of a few years in second half of the 1980s - quite acceptable.

**FDI inflows:**

- The gap between FDI inflows into the EU according to EUROSTAT and OECD is very large. EUROSTAT data indicates higher values than OECD data.
- The time series of EUROSTAT and OECD for Japan bear very little in common.
- EUROSTAT data record significantly higher inflows for the United States than the OECD

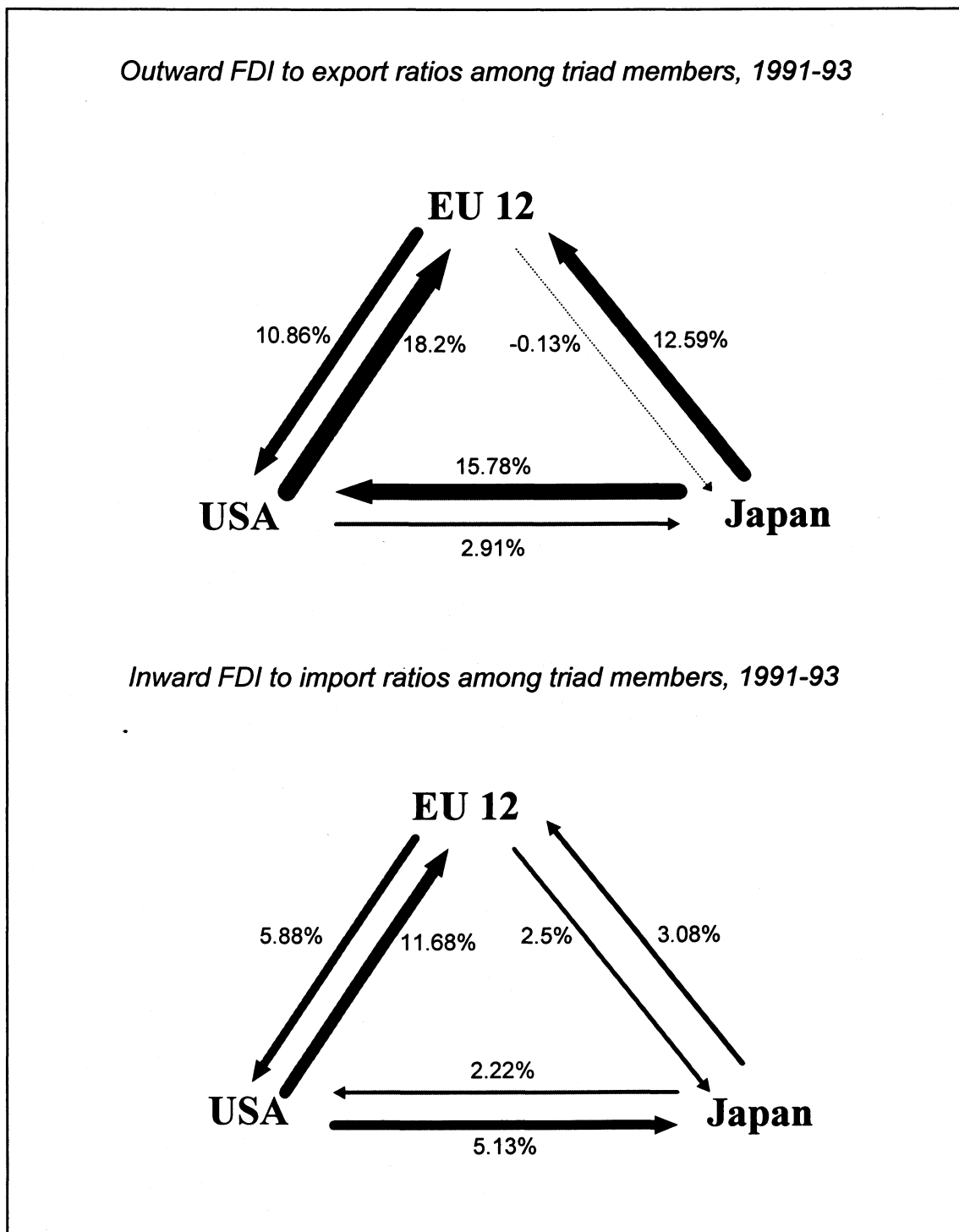
The discrepancies between the OECD data and the EUROSTAT data influence the findings at all levels. As a test, Chart 4 above on FDI-to-trade ratios among Triad members which is based on EUROSTAT data, has been recalculated with OECD data in Chart 12 below. The differences are striking: although the order of importance between the 12 arrows remains more or less valid from an ordinal point of view, the FDI-to-trade ratios according to the two different sources vary in eight of the twelve cases by a factor of two or more.

The discrepancies with data from UNCTAD, the IMF and national sources are equally disturbing.

Apart from the discrepancies between different sources, the internal consistency of FDI and trade data from the same source is not always guaranteed.

As far as the trade data by NACE sector in this study were concerned, two problems emerged. First, trade of the Triad under NACE division 99, i.e. extra-territorial organisations and bodies, was surprisingly high, namely ECU 35 billion of average exports and ECU 40 billion of average imports over the three years 1992 to 1994. Second, some exports in the tertiary sector were negative.

**Chart 9 FDI-to-trade ratios among Triad members according to OECD data, 1991-93**



Source: International direct investment statistics yearbook, OECD 1995



## VII. Conclusions

Much insight into globalisation patterns stands to be gained from linking the analysis of international trade and FDI. This comes out clearly from the present study which combines trade and FDI data from EUROSTAT to analyse globalisation patterns in the EU, Japan and the United States. It holds true irrespective of the limited coverage and reliability of available FDI data.

The analysis of trade and FDI data points to a number of striking similarities and fundamental differences among the members of the Triad in terms of their globalisation strategies:

- During the first half of the 1990s, there is a far-reaching convergence among the EU, Japan and the United States with respect to their outward orientation in terms of trade and FDI. Export-to-GDP ratios converged at about 10 per cent and outward-FDI-to-GDP ratios at about 0.4 per cent.
- The sectoral breakdown of FDI outflows is more similar among Triad members than the sectoral composition of trade.
- Globalisation strategies differ fundamentally between sectors within the same country. While the industrial sector of Japan holds a clear leadership position in terms of a large twin surplus in trade and FDI, its services sector had characteristics which tend to be typical for hollowing out: significant FDI outflows and a large trade deficit (see charts 7 and 8 on pages 35 and 36).
- For the United States, the situation was the reverse: the United States services sector has attracted significant inflows of FDI and realised large and growing trade surpluses. Its services sector has been an export platform, quite in contrast to its manufacturing sector, which has been a net importer of goods and FDI.
- The comparison of intra and extra EU trade and FDI points to substantial differences in their structures. In contrast to third-country relations, EU companies have relied on FDI rather than direct exports in the internationalisation of services within the Community.
- While Japan's trade surplus has been highly publicised, its FDI surplus is even more pronounced. Investing in Japan appears to be even more difficult than exporting to Japan.

Europe's leading industries in terms of trade- and FDI-driven globalisation were the metal and mechanical industry and the chemical industry. On both the high- and the low-technology ends of the industrial spectrum, however, the EU appears to have lost industrial leadership, as it has become a net importer of goods and investment in information technology and machinery, on the one hand, as well as in textiles and wood, on the other. Surprisingly, EU producers of automobiles and transport equipment made little use of outward FDI. They registered the lowest outward-FDI-to-export ratio of all industrial sub-sectors. Both the US and Japan had a significantly higher revealed comparative advantage in outward FDI and in trade.

For all EU member countries - with the only exception of Denmark - relations with other EU countries were more FDI intensive than those with third countries. In this respect, there was a certain similarity between intra-EU and transatlantic relations.

Over the three years 1992 to 1994, French relations with Germany, the Netherlands and the USA were characterised by an element of *hollowing-out* in the sense that France was a major, net investor in these three countries but ran a balance-of-trade deficit with them.

Germany became one of the world's leading home countries of industrial FDI in the early 1990s. The data available suggests that German outward FDI in manufacturing was higher than those of Japan and exceeded two thirds of those of the US. German firms relied to a particularly high degree on FDI in developing their economic relations with Central and Eastern Europe.

As is well-known, EU firms have used Ireland as an export base. More surprising is the fact, that Ireland invested twice as much in non-European countries as it received in terms of inflows from these countries.

Italy ranged with an outward-FDI-to-export-ratio in the industrial sector of 0.85 per cent lower than any other of the 12 EU countries with the exception of Greece, Portugal and Spain. It is in these latter three countries, that Italian firms took a special interest for their outward investment.

The Netherlands held an industrial leadership position in chemical and petroleum products and manufacturing, in general, in terms of being a net exporter of both goods and FDI. In fact, the Netherlands had become one of the world's most important suppliers of FDI.

Over the three years under review, Spain was the EU's most successful country in attracting FDI. Inflows represented 6 per cent of imports, thrice the level of Denmark and the UK, i.e. the next two most successful countries.

Although the UK has been one of the world's leading home countries of FDI, the data available for the early 1990s puts the UK's manufacturing sector into the third quadrant of the globalisation chart with the combination of significant net FDI inflows and trade deficits. FDI inflows came not only from other OECD countries. Combined inflows from the Near and Middle East, other Asian countries (excluding Japan) and Central America were 35 per cent higher than inflows from other EU members.

The empirical analysis raises a number of issues which are not clear and merit further analysis:

- Is the sectoral structure of FDI more closely related than that of trade to the sectoral composition of GDP?
- Why are trends in trade and FDI frequently anti-cyclical, i.e. growing trade deficits coincide with growing net FDI outflows and vice versa?
- Is the convergence of trade and FDI ratios in the early 1990s a simple crossing of trends, or does it reflect a more fundamental convergence?
- Why is the importance of incoming FDI in relation to imports so marginal in Germany and Japan, two of the world's leading suppliers of FDI?

Furthermore, the trade and FDI profiles in chapter IV raise a number of country-specific issues which require further clarification.

Methodologically, the study is based on a number of simple indicators which combine trade and FDI data. FDI-to-trade ratios are found to be useful for comparative purposes



among industries and countries, although their absolute values are difficult to interpret. The concept of revealed comparative advantages can be easily transferred to sectoral analysis of FDI outflows and inflows. Also for an examination of the direction of FDI flows, the approach underlying the revealed comparative advantage generates useful results. The comparison of intra-industry and intra-regional trade and FDI is more limited in its applications, but not without interest.

As far as the availability and quality of FDI data are concerned, the study leads to the following suggestions:

- Notwithstanding all the headway that has been made in recent years in the area of FDI data, a lot of additional effort is required at the national, pluri- and multilateral levels to increase the internal consistency of FDI data and to make data from different sources more compatible. In view of the limited resources available, this also calls for further efforts to ensure an optimum division of labour among the various institutions concerned with FDI data.
- FDI data broken down by sectors and countries is available only for a very limited number of countries. Major efforts should be undertaken to generate such data for a larger number of countries and to make this data easily accessible.
- The understanding of trade- and FDI-led globalisation strategies would greatly benefit from better operational data on foreign-affiliated firms. Put differently, the availability of information on sales, exports and imports, employment, investment, etc. of foreign-affiliated firms would significantly enhance the analysis on the nexus between trade and FDI.
- FDI data is not yet sufficiently robust to allow researchers to be as oblivious of the quality of the data as one can frequently observe and as it would be desirable. A considerable part of research on FDI needs to be devoted to cross-checking primary data. Analysis should be conducted in parallel with different sets of data to make sure that results hold across different sources of data. Researchers need to approach FDI data with a considerable portion of scepticism and pragmatism to make sure that they do not stretch findings beyond the cohesiveness of the primary data.



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## APPENDIX 1

## Basic statistics on trade and FDI of Triad - EUROSTAT data

(all values in US\$ million)

	data	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>EU 12 (extra-regional)</b>											
GDP EU12	a	2,758,613	2,540,175	3,467,732	4,313,911	4,794,721	4,878,438	6,069,802	6,413,084	7,036,902	6,444,000
Exports goods & services	b	407,329	378,790	441,927	511,872	555,643	587,024	704,335	682,493	746,965	734,951
Imports goods & services	b	401,023	360,420	392,719	476,966	539,800	587,887	713,624	728,148	789,737	727,342
Inward FDI fl EU12	c	5,477	4,358	7,003	14,997	21,451	30,786	41,709	25,936	29,271	24,625
Outward FDI fl EU12	c	15,496	11,832	21,574	35,407	37,461	35,567	26,140	33,121	23,058	25,591
Inward FDI stocks EU12 (2)	e	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Outw. FDI stocks EU12(2)	e	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Gross dom.capital form.	d	349,989	363,562	491,285	604,716	682,422	723,308	905,370	929,084	993,883	894,692
X/GDP EU12		14.77%	14.91%	12.74%	11.87%	11.59%	12.03%	11.60%	10.64%	10.61%	11.41%
M/GDP EU12		14.54%	14.19%	11.32%	11.06%	11.26%	12.05%	11.76%	11.35%	11.22%	11.29%
Inw. FDI/GDP EU12		0.20%	0.17%	0.20%	0.35%	0.50%	0.63%	0.69%	0.40%	0.42%	0.38%
Outw. FDI/GDP EU12		0.56%	0.47%	0.62%	0.82%	0.87%	0.73%	0.43%	0.52%	0.33%	0.40%
Inw. FDI/M EU12		1.37%	1.21%	1.78%	3.14%	3.97%	5.24%	5.84%	3.56%	3.71%	3.39%
Outw. FDI/X EU12		3.80%	3.12%	4.88%	6.92%	6.74%	6.06%	3.71%	4.85%	3.09%	3.48%
Inw. FDI/GDI EU12		1.56%	1.20%	1.43%	2.48%	3.14%	4.26%	4.61%	2.79%	2.95%	2.75%
Out FDI /GDI EU12		4.43%	3.25%	4.39%	5.86%	5.49%	4.92%	2.89%	3.56%	2.32%	2.86%
Net trade EU12		6,306	18,370	49,207	34,906	15,843	-863	-9,288	-45,655	-42,772	7,609
Net FDI EU12		10,019	7,474	14,571	20,409	16,010	4,780	-15,569	7,185	-6,214	966
<b>Japan</b>											
GDP Jap	a	1,265,338	1,343,251	1,985,574	2,408,912	2,898,393	2,871,825	2,932,088	3,351,622	3,656,889	4,190,396
Exports goods & services	b	196,000	194,000	227,085	252,397	293,910	308,980	321,861	352,209	380,235	407,388
Imports goods & services	b	155,000	149,000	151,253	180,634	233,442	273,152	305,442	295,121	295,936	311,232
Inward FDI fl Jap	c	-12	642	226	1,166	-485	-1,054	1,754	1,368	2,728	85
Outward FDI fl Jap	c	6,728	6,452	14,473	19,528	34,210	44,132	48,031	30,722	17,221	13,714
Inw. FDI stocks Japan (2)	e	5,465	6,395	7,336	9,548	12,792	15,652	18,431	22,770	26,854	29,933
Outw. FDI stocks Japan (2)	e	80,311	92,526	117,406	153,487	205,050	262,771	310,808	352,391	386,530	422,555
Gross dom.capital form.	d	371,552	369,079	541,835	685,564	866,750	889,867	944,354	1,064,724	1,122,835	1,248,336
X/GDP Japan		15.49%	14.44%	11.44%	10.48%	12.20%	10.76%	10.98%	10.51%	10.40%	9.72%
M/GDP Japan		12.25%	11.09%	7.62%	7.50%	9.69%	9.51%	10.42%	8.81%	8.09%	7.43%
Inw. FDI/GDP Japan		0.00%	0.05%	0.01%	0.05%	-0.02%	-0.04%	0.06%	0.04%	0.07%	0.00%
Outw. FDI/GDP Japan		0.53%	0.48%	0.73%	0.81%	1.42%	1.54%	1.64%	0.92%	0.47%	0.33%
Inw. FDI/M Japan		-0.01%	0.43%	0.15%	0.65%	-0.21%	-0.39%	0.57%	0.46%	0.92%	0.03%
Outw. FDI/X Japan		3.43%	3.33%	6.37%	7.74%	11.64%	14.28%	14.92%	8.72%	4.53%	3.37%
Inw. FDI/GDI Japan		0.00%	0.17%	0.04%	0.17%	-0.06%	-0.12%	0.19%	0.13%	0.24%	0.01%
Out FDI /GDI Japan		1.81%	1.75%	2.67%	2.85%	3.95%	4.96%	5.09%	2.89%	1.53%	1.10%
Net trade Japan		41,000	45,000	75,832	71,763	60,468	35,828	16,418	57,088	84,299	96,156
Net FDI Japan		6,740	5,810	14,246	18,363	34,695	45,186	46,278	29,354	14,492	13,628
<b>United States</b>											
GDP USA	a	3,777,200	4,038,700	4,268,600	4,539,900	4,900,400	5,250,800	5,522,200	5,722,900	6,020,200	6,343,300
Exports goods & services	b	312,766	276,298	287,148	395,520	485,408	476,023	521,783	564,024	600,610	624,208
Imports goods & services	b	434,490	398,263	431,795	482,511	526,555	561,112	594,863	588,843	639,927	701,573
Inward FDI fl USA	c	25,336	20,400	36,365	45,435	56,608	76,403	62,588	43,890	21,535	30,761
Outward FDI fl USA	c	-6,346	-940	8,653	11,337	4,553	24,908	8,752	15,922	26,526	28,305
Inward FDI stock USA (2)	e	164,583	184,416	220,415	263,394	314,754	368,924	394,911	418,780	425,636	445,268
Outw. FDI stocks USA (2)	e	211,522	237,087	259,834	314,336	335,915	381,781	430,521	467,844	498,991	548,644
Gross dom.capital form.	d	647,800	690,000	709,000	723,000	777,400	789,900	793,200	736,900	788,300	882,000
X/GDP USA		8.28%	6.84%	6.73%	8.71%	10.69%	9.07%	9.45%	9.86%	9.98%	9.84%
M/GDP USA		11.50%	9.86%	10.12%	10.63%	11.60%	10.69%	10.77%	10.29%	10.63%	11.06%
Inw. FDI/GDP USA		0.67%	0.51%	0.85%	1.00%	1.16%	1.46%	1.13%	0.77%	0.36%	0.48%
Outw. FDI/GDP USA		-0.17%	-0.02%	0.20%	0.25%	0.09%	0.47%	0.16%	0.28%	0.44%	0.45%
Inw. FDI/M USA		5.83%	5.12%	8.42%	9.42%	10.75%	13.62%	10.52%	7.45%	3.37%	4.38%
Outw. FDI/X USA		-2.03%	-0.34%	3.01%	2.87%	0.94%	5.23%	1.68%	2.82%	4.42%	4.53%
Inw. FDI/GDI USA		3.91%	2.96%	5.13%	6.28%	7.28%	9.67%	7.89%	5.96%	2.73%	3.49%
Out FDI /GDI USA		-0.98%	-0.14%	1.22%	1.57%	0.59%	3.15%	1.10%	2.16%	3.36%	3.21%
Net trade USA		-121,723	-121,965	-144,647	-86,991	-41,147	-85,089	-73,081	-24,818	-39,317	-77,365
Net FDI USA		-31,682	-21,340	-27,712	-34,099	-52,055	-51,495	-53,836	-27,968	4,991	-2,456

Sources: a EUROSTAT, Statistiques de base de la Communauté, 24., 25. 31 édition  
b EUROSTAT, International trade in services, EU12, 1984-1993 (exports and imports of goods and services)  
c EUROSTAT, FDI data  
d IMF, International Financial Statistics, 1994-1995 (GDP, Gross domestic capital formation, exchange rates)  
e OCDE, 1995a



## APPENDIX 2

**Basic statistics on trade and FDI of Triad - OECD data**  
(all values in US\$ million)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>EU 12 (extra-regional)</b>										
GDP EU12	2,758,613	2,540,175	3,467,732	4,313,911	4,794,721	4,878,438	6,069,802	6,413,084	7,036,902	6,444,000
Exports goods & services	407,329	378,790	441,927	511,872	555,643	587,024	704,335	682,493	746,965	734,951
Imports goods & services	401,023	360,420	392,719	476,966	539,800	587,887	713,624	728,148	789,737	727,342
Inward FDI fl EU12 (2)	5,269	6,263	6,517	13,511	14,018	22,737	24,690	24,287	21,130	18,252
Outward FDI fl EU12 (2)	11,622	13,454	19,917	27,945	30,895	31,506	29,123	32,456	24,278	27,189
Inward FDI stocks EU12 (2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Outw. FDI stocks EU12(2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Gross dom.capital form.	349,989	363,562	491,285	604,716	682,422	723,308	905,370	929,084	993,883	894,692
X/GDP EU12	14.77%	14.91%	12.74%	11.87%	11.59%	12.03%	11.60%	10.64%	10.61%	11.41%
M/GDP EU12	14.54%	14.19%	11.32%	11.06%	11.26%	12.05%	11.76%	11.35%	11.22%	11.29%
Inw. FDI/GDP EU12	0.19%	0.25%	0.19%	0.31%	0.32%	0.47%	0.41%	0.38%	0.30%	0.28%
Outw. FDI/GDP EU12	0.42%	0.53%	0.57%	0.65%	0.72%	0.65%	0.48%	0.51%	0.35%	0.42%
Inw. FDI/M EU12	1.31%	1.74%	1.66%	2.83%	2.60%	3.87%	3.46%	3.34%	2.68%	2.51%
Outw. FDI/X EU12	2.85%	3.55%	4.51%	5.46%	5.56%	5.37%	4.13%	4.76%	3.25%	3.70%
Inw. FDI/GDI EU12	1.51%	1.72%	1.33%	2.23%	2.05%	3.14%	2.73%	2.61%	2.13%	2.04%
Out FDI /GDI EU12	3.32%	3.70%	4.05%	4.62%	4.53%	4.36%	3.22%	3.49%	2.44%	3.04%
Net trade EU12	6,306	18,370	49,207	34,906	15,843	-863	-9,288	-45,655	-42,772	7,609
Net FDI EU12	6,352	7,191	13,399	14,433	16,877	8,769	4,433	8,169	3,148	8,937
<b>Japan</b>										
GDP Jap	1,265,338	1,343,251	1,985,574	2,408,912	2,898,393	2,871,825	2,932,088	3,351,622	3,656,889	4,190,396
Exports goods & services	196,000	194,000	227,085	252,397	293,910	308,980	321,861	352,209	380,235	407,388
Imports goods & services	155,000	149,000	151,253	180,634	233,442	273,152	305,442	295,121	295,936	311,232
Inward FDI fl Jap (2)	492	931	941	2,215	3,242	2,860	2,777	4,339	4,083	3,078
Outward FDI fl Jap (2)	10,158	12,217	22,320	33,364	47,020	67,542	56,915	41,586	34,138	36,025
Inw. FDI stocks Japan (2)	5,465	6,395	7,336	9,548	12,792	15,652	18,431	22,770	26,854	29,933
Outw. FDI stocks Japan (2)	80,311	92,526	117,406	153,487	205,050	262,771	310,808	352,391	386,530	422,555
Gross dom.capital form.	371,552	369,079	541,835	685,564	866,750	889,867	944,354	1,064,724	1,122,835	1,248,336
X/GDP Japan	15.49%	14.44%	11.44%	10.48%	12.20%	10.76%	10.98%	10.51%	10.40%	9.72%
M/GDP Japan	12.25%	11.09%	7.62%	7.50%	9.69%	9.51%	10.42%	8.81%	8.09%	7.43%
Inw. FDI/GDP Japan	0.04%	0.07%	0.05%	0.09%	0.13%	0.10%	0.09%	0.13%	0.11%	0.07%
Outw. FDI/GDP Japan	0.80%	0.91%	1.12%	1.39%	1.95%	2.35%	1.94%	1.24%	0.93%	0.86%
Inw. FDI/M Japan	0.32%	0.62%	0.62%	1.23%	1.39%	1.05%	0.91%	1.47%	1.38%	0.99%
Outw. FDI/X Japan	5.18%	6.30%	9.83%	13.22%	16.00%	21.86%	17.68%	11.81%	8.98%	8.84%
Inw. FDI/GDI Japan	0.13%	0.25%	0.17%	0.32%	0.37%	0.32%	0.29%	0.41%	0.36%	0.25%
Out FDI /GDI Japan	2.73%	3.31%	4.12%	4.87%	5.42%	7.59%	6.03%	3.91%	3.04%	2.89%
Net trade Japan	41,000	45,000	75,832	71,763	60,468	35,828	16,418	57,088	84,299	96,156
Net FDI Japan	9,666	11,286	21,379	31,149	43,778	64,682	54,138	37,247	30,055	32,947
<b>United States</b>										
GDP USA	3,777,200	4,038,700	4,268,600	4,539,900	4,900,400	5,250,800	5,522,200	5,722,900	6,020,200	6,343,300
Exports goods & services	312,766	276,298	287,148	395,520	485,408	476,023	521,783	564,024	600,610	624,208
Imports goods & services	434,490	398,263	431,795	482,511	526,555	561,112	594,863	588,843	639,927	701,573
Inward FDI fl USA (2)	25,567	20,490	36,145	59,581	58,571	69,010	48,422	27,246	11,452	22,630
Outward FDI fl USA (2)	11,653	12,720	17,701	28,977	17,865	37,604	30,982	32,696	41,587	58,094
Inward FDI stock USA (2)	164,583	184,416	220,415	263,394	314,754	368,924	394,911	418,780	425,636	445,268
Outw. FDI stocks USA (2)	211,522	237,087	259,834	314,336	335,915	381,781	430,521	467,844	498,991	548,644
Gross dom.capital form.	647,800	690,000	709,000	723,000	777,400	789,900	793,200	736,900	788,300	882,000
X/GDP USA	8.28%	6.84%	6.73%	8.71%	10.69%	9.07%	9.45%	9.86%	9.98%	9.84%
M/GDP USA	11.50%	9.86%	10.12%	10.63%	11.60%	10.69%	10.77%	10.29%	10.63%	11.06%
Inw. FDI/GDP USA	0.68%	0.51%	0.85%	1.31%	1.20%	1.31%	0.88%	0.48%	0.19%	0.36%
Outw. FDI/GDP USA	0.31%	0.31%	0.41%	0.64%	0.36%	0.72%	0.56%	0.57%	0.69%	0.92%
Inw. FDI/M USA	5.88%	5.14%	8.37%	12.35%	11.12%	12.30%	8.14%	4.63%	1.79%	3.23%
Outw. FDI/X USA	3.73%	4.60%	6.16%	7.33%	3.68%	7.90%	5.94%	5.80%	6.92%	9.31%
Inw. FDI/GDI USA	3.95%	2.97%	5.10%	8.24%	7.53%	8.74%	6.10%	3.70%	1.45%	2.57%
Out FDI /GDI USA	1.80%	1.84%	2.50%	4.01%	2.30%	4.76%	3.91%	4.44%	5.28%	6.59%
Net trade USA	-121,723	-121,965	-144,647	-86,991	-41,147	-85,089	-73,081	-24,818	-39,317	-77,365
Net FDI USA	-13,914	-7,770	-18,444	-30,604	-40,706	-31,406	-17,440	5,450	30,135	35,464

Sources: same as Appendix 1 except for FDI flows derived from OECD, International Direct Investment Statistics Yearbook, 1995, 1996.

## **APPENDIX 3**

**Exchange rate ECU to US dollars**

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
0.89022	0.76309	0.98367	1.15444	1.18248	1.10175	1.27343	1.239004	1.29801	1.171001

Source: *Eurostat*

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- 5 Maa- ja metsätalous, kalastus (vihreä)
- 6 Ulkomaankauppa (punainen)
- 7 Kauppa, palvelut ja liikenne (oranssi)
- 8 Ympäristö (turkoosi)
- 9 Tutkimus ja kehitys (ruskea)

**Sarja**

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- C Laskennat ja kyselytutkimukset
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- 5 Agriculture, sylviculture et pêche (vert)
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- 7 Commerce, services et transports (orange)
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- 4 Energia e indústria (azul)
- 5 Agricultura, silvicultura e pesca (verde)
- 6 Comércio externo (vermelho)
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