

# CPB Memorandum

CPB Netherlands Bureau for Economic Policy Analysis



Sector(s) : Competition and Regulation; International Economics  
Author(s) : Henk Kox, Arjan Lejour, and Raymond Montizaan  
Number : 102  
Date : 19 November 2004

## **Intra-EU trade and investment in service sectors, and regulation patterns**

*This report sketches basic patterns and facts about the EU service market and the structure of regulations that affect the patterns of trade and direct investment in the EU service market. The present report forms a background report for CPB Document No. 69 that is published jointly with this research memorandum. The project focus is on quantifying the potential impact of newly proposed EU measures for the European internal service market.*

## Table of contents

1	Introduction	3
2	Patterns in cross-border service trade within the EU	5
2.1	Aggregate service trade	5
2.2	Trade in sub-sectors of services	7
2.3	Trade specialisation	10
2.4	Conclusions on intra-EU trade patterns in services	12
3	Intra-EU patterns in service provision through foreign subsidiaries (FDI)	14
3.1	Foreign services sales by foreign affiliates	14
3.2	Services share in intra-EU FDI inflows	16
3.3	Conclusions on intra-EU direct investment in services	22
4	The present role of regulation in intra-EU service markets	24
4.1	Regulatory intensity in EU service markets	24
4.2	Regulatory environment for foreign direct investment	30
4.3	Conclusions on the regulatory situation in EU service markets	33
5	Conclusions	34
	Annexes	36
	References	38

# 1 Introduction

*This report sketches basic patterns and facts about the EU service market and the structure of regulations that affect the patterns of trade and direct investment in the EU service market. The present report forms part of a broader project that assesses the potential impacts of recent EU measures to liberalise the EU market of services.*

One of the achievements of the of the European Union (EU) is the free movement of goods, services, capital and labour between the member states. The internal market for goods seems to function well, after the implementation of the Single Market programme in 1988. That is however not the case for the internal market in services. Many providers experience impediments if they want to export their services to other EU member states, or in setting up an foreign establishment. The EC (2002) has concluded that these impediments are often caused by national, regional and/or local regulation, to which the service providers, the service or the foreign subsidiary has to comply.

This report will try to answer the following questions:

- What does these impediments for trade mean for the present patterns in intra-EU service trade and foreign direct investment?
- How did trade and investment in service sectors develop, in spite of the trading obstacles?.
- What are the developments and national differences in regulation intensity for service markets?

This background report has a descriptive nature. Bringing together the best available statistical information on the functioning of intra-EU service markets, we sketch the present situation. This research memorandum forms part of a wider project that aims at quantifying the impacts of measures that the European Commission has recently advanced for improving the free movement of services in the internal market.<sup>1</sup> The main report of this project (Kox, Lejour and Montizaan 2004) has been published jointly with this memorandum.

## **Structure of this report**

International trade in services proceeds along four so-called supply modes. The service product may cross the border while the service provider stays at home; this is what we normally call international trade in the case for goods. The foreign service consumer may also cross the border to consume the product in the home country of the service provider. These first two

<sup>1</sup> In March 2004 the European Commission launched a draft Directive on this issue (European Commission 2004). It will be discussed in the European Parliament and the European Council starting in Autumn 2004. The proposed measures are to become effective by 2010.

forms of intra-EU service trade will be dealt with in section 2. We sketch the sectoral patterns in intra-EU service trade, the openness or trade-orientedness of specific EU service markets, and country specialisation patterns in services. One of the factors behind these trade patterns are national differences in the regulation of domestic service markets.

Probably the most important supply mode for in international service trade is local commercial presence in foreign markets (this is the third supply mode). Because the production and consumption of services is sometimes different to separate in time and space, service providers may themselves move to a foreign market, through foreign direct investment. Several studies have shown that this category of international trade in services is probably the dominant form of providing services in foreign markets. Section 3 describes the actual situation with regard to intra-EU foreign direct investment in services. Again, some of the intra-EU foreign direct investment patterns are related with differences between member states in the regulation of direct investment in service industries.<sup>2</sup>

Section 4 provides a summary picture of regulatory intensity in EU service markets on the basis of recent research work by OECD researchers on regulation intensity and its impact on border-crossing trade and direct investment. We establish that not only the regulatory intensity in member states affects transaction costs for service firms. Also the heterogeneity of national regulations contributes to a fragmentation of EU service markets, an issue that is elaborated on in the main report of the project. Section 5 summarises the main conclusions.

<sup>2</sup> The fourth form of supply modes entails that the service provider sends some of his employees (on a temporary assignment) to a foreign country to supply the service product to foreign customers. We do not explicitly deal with this supply mode here.

## 2 Patterns in cross-border service trade within the EU

*International trade in services occurs along several supply mode according to the action that brings producer and consumer together. This section deals with that part of service trade, for which either the product itself, or the producer on a temporary basis service crosses the border. It describes the recent developments in cross-border service trade since 1985 in the European Union, thus sketching the baseline situation before the EU Services Directive comes into force.*

We first examine the developments of aggregate service trade since 1985, especially the service trade oriented at the internal EU market. As a next step (section 2.2) we look at a more disaggregated level to EU service trade. This is relevant for pinpointing potential problem areas in EU service trade. The newly proposed EU Directive mainly concerns the following sub-sectors: *business services, trade, construction and personal services*. It does not cover *financial services, transport and communication*. Section 2.3 analyses the trade specialisation patterns of EU member states. Section 2.4 draws some conclusions.

### 2.1 Aggregate service trade

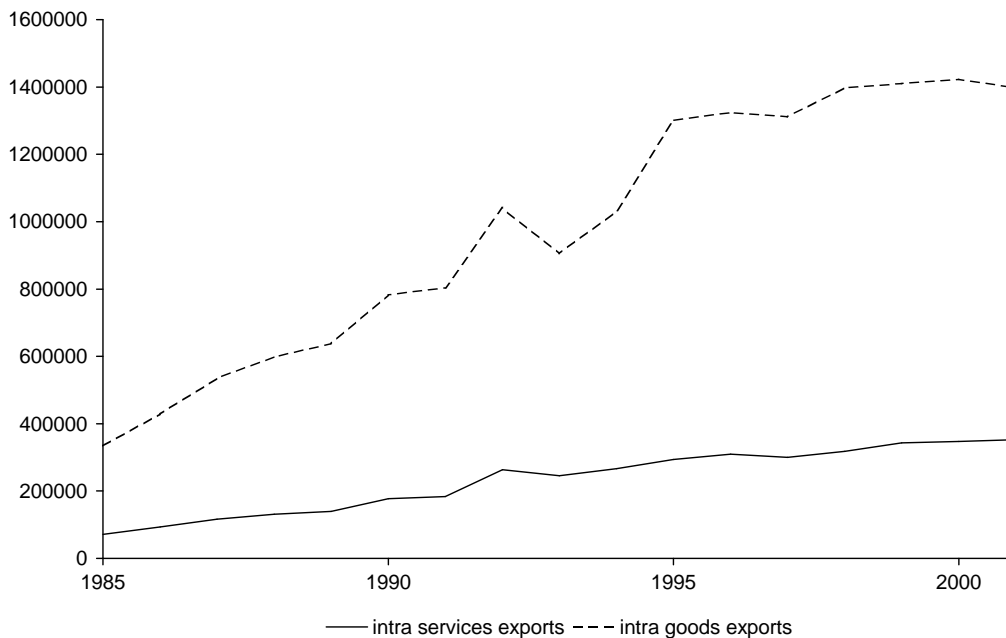
In the period 1985-2001, EU trade in goods and services has increased by about 8.4 per cent per year on average. In 1985, the EU-15<sup>3</sup> countries exported for about 173 billion US dollar in services, which was a quarter of EU goods exports. In 2001 the value of service trade has increased to 633 billion dollar, but still this was only 28 per cent of EU goods exports.

A substantial share of EU service exports is directed to other EU countries. The share of intra EU exports in services has increased from 41 per cent in 1985 to 56% in 2001. The value of intra-EU services trade has grown on average by 10.5 per cent annually in the period 1985-2001, exceeding the growth of intra-trade in goods by about 1 percentage point. The size of intra EU services increased by 400 per cent in value terms. However, figure 2.1 shows that it is still low compared to trade in goods. Intra-EU trade in goods is relatively more important than trade in services as figure 2.2 shows. The share of intra-trade in goods exceeds that share in services by about 6 percentage points in 2001. Between 1991 and 1992 intra-trade in goods increased by 5 percentage points, and by 8 percentage points in services. This increase above all represents a new change in the classification system of service trade, and not an increase in economic activity.<sup>4</sup> Since 1992 the share of intra-trade in services is more or less stable. Between 1985 and 1991 it increased 7 percentage points.

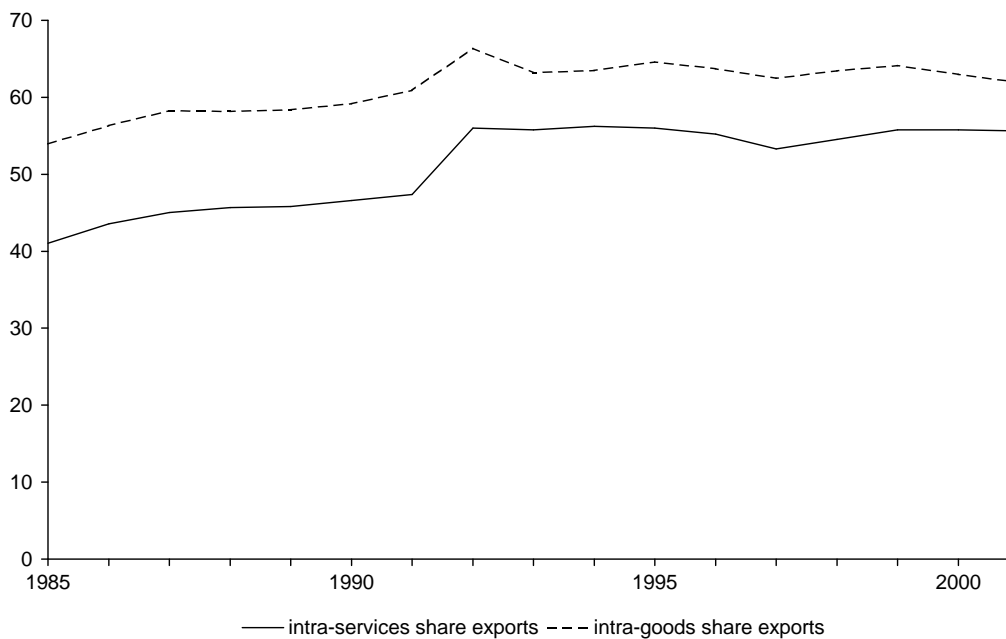
<sup>3</sup> We concentrate on the fifteen countries that were also member of the EU before May 2004. The reason is that for most of the ten new member states there are no or only a few data available.

<sup>4</sup> Between 1991 and 1992 total services exports and imports of the EU increased by 80 and 90 billion US\$, respectively. This is an increase by more than 20%. In both sectors travel and business services trade increased by about 40 billion US\$, that is to say 40% and 80% respectively. This is largely the result of a statistical reclassification.

**Figure 2.1 Developments EU intra trade in goods and services, 1985-2001 (millions of US dollar)**



**Figure 2.2 Share intra EU trade in goods and services, 1985-2001**



In spite of these developments services trade still seems to be underdeveloped compared to trade in goods in the EU. Its share in total intra trade is only 20%, while its share in GDP and employment exceed 70%.

## 2.2 Trade in sub-sectors of services

Traditionally the sub-sectors transport and travel are responsible for the largest share in international service trade. In 2001, both sub-sectors accounted for half of total EU exports in services. This held despite the fact that the export value in transport grew less than for average EU exports,<sup>5</sup> as is shown in Table 2.1.

**Table 2.1 EU exports in services, 2001**

	Value in billion US dollar	% share in total exports	% of intra-EU exports to total exports per sector	% value growth intra-EU exports 1985-2001
Total services	633.1	100.0	55.7	10.5
Transport	144.5	22.8	51.7	8.2
- Sea transport	61.8	9.8	47.9	10.3
- Air transport	53.2	8.4	45.2	13.8
- Other transport	29.5	4.7	71.1	3.5
Travel	176.2	27.8	63.5	11.1
Communication services	14.6	2.3	61.9	14.8
Construction	15.9	2.5	43.4	11.2
Insurance	15.1	2.4	53.4	15.3
Financial services	44.3	7.0	57.1	16.9
Computer and information	23.9	3.8	55.5	NA
Royalties and licence fees	20.5	3.2	40.3	14.6
Other business services	159.9	25.2	53.8	15.2
Personal services	6.9	1.1	85.4	10.8
Government services	11.4	1.8	44.1	6.4

Source: OECD (2003a) and own calculations.

In recent decades, trade in business services has rocketed. Its annual growth has been 15 per cent since 1985.<sup>6</sup> That is the case for computer and information services, royalties, other business services, financial services, insurance, and communication services (cf. OECD 2003; Lejour and Linders 2002). Trade in government services and personal services is relatively unimportant.

Of all EU service exports, on average 56 per cent is destined for the EU-15 countries. If we take this average as a benchmark, we can identify the service sub-sectors that are Europe-oriented and those that are much less so:

<sup>5</sup> This was due in particular to the modest growth in 'other transport' (mainly road transport).

<sup>6</sup> Note that this growth rate is biased by a net increase in trade of about 80 per cent in 1992 due to a change in the statistical classification system. Without this break in the data, the growth rates would be about 5 percentage points lower.

- High share of intra-EU trade: personal services, travel, communication services, and 'other' transport.<sup>7</sup> In this group, *travel* is double the size of all other sub-sectors together. Intra-EU trade in *personal services* is very small.
- Low share of intra-EU trade: construction, air transport, sea transport, government services, and royalties and licence fees.<sup>8</sup> A large part of *government services* relates to defence material which is often demanded by countries outside the EU.

The intra-EU trade share of financial services, insurance and other business services is about the average share of intra-EU services trade.

The picture for imports at sub-sector level is more or less comparable to what we have seen for exports. The annual value growth of total imports is lower than for intra-EU exports, but the pattern between the sectors is similar is for exports. Sub-sector import data can be found in Annex Table A2.

**Table 2.2 Exports in 'other business services', 2001**

	Total exports (billion US\$)	Share in other business services	Share of intra EU exports	Value growth of intra EU exports, 1992-2001
'Other business services'	159.9	100	53.8	5.5
of which:				
Merchanting and other trade- related services	35.9	22.5	51.3	3.6
- Merchanting	16.0	10.0	39.8	3.3
- Other trade related	20.0	12.5	60.5	3.9
Operational leasing services	5.9	3.7	56.5	7.6
Miscellaneous business, prof. and technical services	118.1	73.9	54.5	5.9
- Legal, accounting, consulting etc	21.1	13.2	55.3	15.0
- Advertising	11.8	7.4	56.8	6.9
- R&D	14.3	8.9	51.2	2.7
- Architectural, engineering	18.2	11.4	48.1	2.8
- Agricultural, mining	1.0	0.6	59.8	7.0
- Other business	33.4	20.9	53.9	12.5
- Services between firms n.e.c.	18.3	11.4	61.5	-0.8

Source: OECD (2003), and own calculations

Business services constitutes a key sector target in the proposed EU directive on services trade. Table 2.2 give more details on the trade performance of this group of sub-sectors. Three quarters of *other business service* exports are business, professional or technical services. The rest is trade-related services. For most of these service exports, slightly more than half is directed to other EU countries. For *merchanting* it is a bit less, but the value of these exports is

<sup>7</sup> *Other transport* includes road transport, which is more or less fixed to the European continent.

<sup>8</sup> *Royalties and license fees* is not really a sub-sector; it consists of transactions related to patents, and copyrights.



often related to the distance over which products are exported. Note that since 1992 the average growth in *other business services* is much lower than for the period 1985 to 2001. That is the case for most services sectors. To some extent the decrease in the growth rate is also due to the reclassification of the statistics between 1991 and 1992. Exports in *legal, accounting and consulting services* have grown much faster than the average. As Table 2.2 shows, trade in *R&D* and *architecture and engineering services* nearly stagnated.

### Trade openness

To what extent are EU service sectors oriented towards foreign trade? In some service sectors cross-border trade is more important than in others. The differences in their openness to cross-border trade can be due to the nature of the service or to regulatory barriers.

For a trade openness indicator we use the value of exports by a service sector divided by total production (value added) of that sector. This trade openness indicator shows the 'tradability' of service products in specific sectors. Table 2.3 shows the results.

The service sectors covered by the proposed EU directive on the internal service market are mainly *other business services* and *personal services*. In that latter industry (as in *government services*) we find that tradability is very low across the board. In *business services*, the picture is more mixed among the EU countries. The Netherlands, the UK and to a smaller extent Spain have a strong trade orientation in this sector, whereas the market in France, Germany and Italy appears to be rather inward-oriented.

**Table 2.3 Trade openness for various EU countries, 2001.**

	France	Germany	Italy	Netherlands	Spain	UK
Transport and communication	20.4	17.7	9.2	70.8	13.1	20.2
Finance and insurance	3.2	7.8	2.2	4.0	6.4	52.6
Other business services	5.8	5.3	7.4	20.8	10.7	15.8
Personal services	3.1	0.4	1.3	4.1	2.4	3.4
Government services	0.5	3.7	0.9	3.2	1.0	5.2

Source: OECD (2003a, 2003b), and own calculations. Openness is defined as value of exports divided by value added times 100.

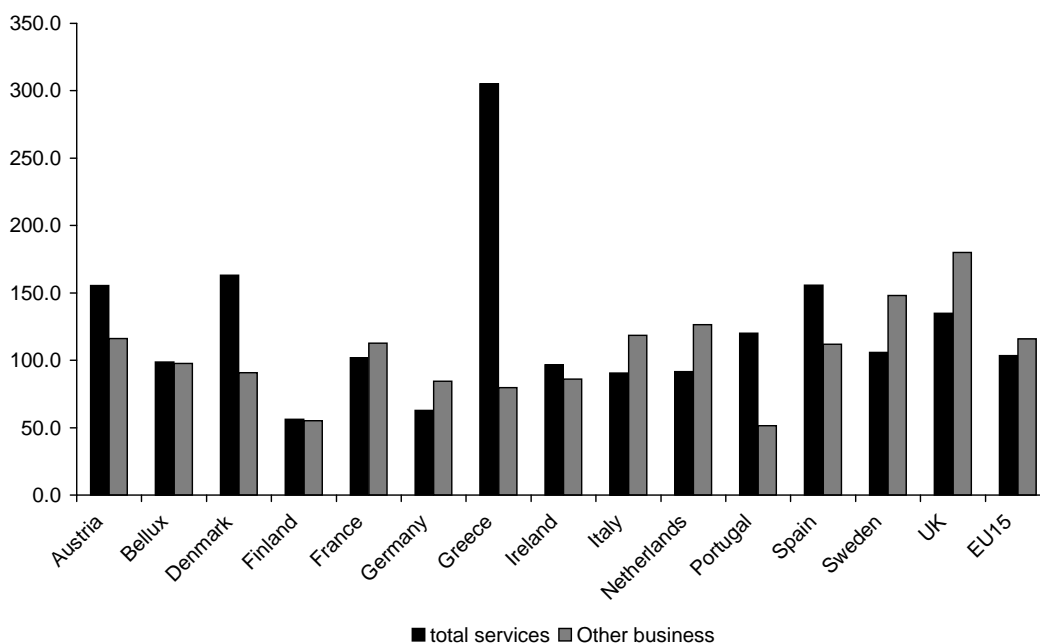
Table 2.3 also shows that exports in *transport and communication* are relatively high in all EU countries. Only in the UK openness in *finance* is higher than in *transport and communication*. That reflects the special position of the UK as financial centre. Its trade orientedness is higher than holds for the *financial services* sector in other EU countries.

## 2.3 Trade specialisation

At the eve of the introduction of the EU directive on service trade, it is of importance to know what the current intra-EU service trade specialisations are. It would also be useful to know what part of this specialisation pattern is caused by national regulatory factors and what part is caused by other factors (natural endowment, culture, and local availability of production factors).

An often-used indicator for trade specialisation is the so-called Balassa index. This index compares the actual export structure of a country relative to the export structure a set of reference countries. If a country has a relatively large share (i.e. relative to the benchmark group of countries) of a particular good or service in its export package, it is considered to be specialised in that good or service. We use the OECD as benchmark group, except for Table 2.5 in which the EU15 is the benchmark.

**Figure 2.3 Balassa indices for total services and other business services in the EU countries, 2001**



The Balassa index is defined as the share of a good or a service in total exports of a country divided by the corresponding share of a set of reference countries multiplied by 100. So if the index exceeds 100, a country exports relatively more of that good or service compared to the reference countries: it is thought to be specialised in producing and exporting that good or service. In case the index is lower than 100, the country is not specialised.

Figure 2.3 presents the Balassa indices for total services and other business services of the EU countries. Austria, Denmark, Greece, Portugal, Spain and the UK appear to have a relative

specialisation in service trade, while this clearly is not the case for Finland and Germany. The other countries do not deviate much from the OECD average, as is also the case for the EU as a whole. The very strong service specialisation of Greece and Spain is mainly based on tourism services.

Figure 2.3 also displays the Balassa index for *other business services*. Denmark, France, Italy, Netherlands, Spain, Sweden, and the UK are specialised in this sub-sector. The relatively weak position of Finland and Germany in this sector explains their weak position in total service trade. Also Portugal, Greece and Ireland are not specialised in *other business services* exports.

**Table 2.4 Service trade specialisation: Balassa indices for large EU countries in 2001**

	France	Germany	Italy	Netherlands	Spain	UK	EU-15
Total services	102.0	62.8	90.5	91.7	155.8	134.9	103.3
Transport	100.4	64.5	56.3	149.0	98.8	94.0	103.2
Travel	133.1	42.8	141.4	40.4	305.7	77.0	99.8
Communication	93.1	53.7	104.1	147.4	98.6	103.9	110.1
Insurance	64.3	64.7	96.5	22.3	138.4	381.3	139.9
Financial	22.0	46.4	10.0	21.6	59.2	361.2	114.4
Other business	112.8	84.4	118.5	126.5	111.9	179.9	115.8
Personal	116.6	15.4	54.4	59.5	107.0	120.6	72.3
Government	22.9	105.7	31.2	57.1	33.1	91.9	64.0

Source: OECD (2003), and OECD (2004) and own calculations. The Balassa indices are calculated with the service and goods trade of the OECD countries as a benchmark.

Table 2.4 provides more sectoral details on the specialisation pattern for individual large countries and the EU as a whole. The EU as a whole is specialised in *insurance and financial services* and *other business services*. Compared to other OECD countries, the EU does not export much *personal and government services*. Due to the large weight of EU exports in total OECD exports, the values of the Balassa index do not deviate much from the average (i.e. 100). The specialisation in *travel services* of some countries (France, Italy, and Spain) reflects their natural endowments and popularity as holiday destinations.

The UK is specialised in *insurance and financial services*, and *other business services*. Most of the other large European countries also specialise in *other business services*, but their position in *financial services* is relatively weak. It seems that the UK is in particular responsible for the relatively good position of the EU in that sector. The Netherlands specialises in *transport and communication services*.<sup>9</sup>

Table 2.5 zooms in on specialisation indices for *other business services*. Trade in this industry is particularly affected by regulatory influences of various kinds (cf. Kox 2001: Ch.6). Since

<sup>9</sup> Comparing the results in Table 2.4 for 2001 with the results reported in Lejour and Linders (2002) for 1996, we conclude that the service trade specialisations of Italy and the Netherlands have deteriorated slightly.

data for the other OECD countries are lacking, the EU15 is used as a benchmark here. The largest category of *other business services* is formed by the *business, professional and technical services*. In particular the UK has a very strong position there, in nearly all sub sectors. This also holds for the Netherlands, though to a smaller extent than the UK. Also Spain has an export specialisation in *business, professional and technical services*, whereas Germany, France and Italy are relatively weak in this sub-sector. On closer inspection, it appears that relative to the EU average, the only business service in which Germany has a relatively specialisation, is *contract R&D*. France has a relative advantage in *services related to agricultural, mining and on-site processing*, but it is weak in most other business services.

**Table 2.5 Balassa indices for 'other business services' in the EU, 2001**

	France	Germany	Italy	Netherl.	Spain	UK
Other business services	97.4	72.9	102.3	109.2	96.7	155.4
of which:						
Merchanting and other trade related	111.3	107.1	140.5	73.4	52.1	95.2
- Merchanting	168.8	136.4	10.4	56.6	50.3	50.9
- Other trade related	65.3	83.7	244.4	86.8	53.7	130.5
Operational leasing	65.4	58.0	166.7	136.3	23.3	47.1
Miscellaneous business, professional and technical services	94.8	63.2	87.5	118.7	113.9	179.1
- Legal, accounting, management & PR consulting	96.9	93.7	43.0	129.1	76.2	172.8
- Advertising, market research and opinion polling	57.4	44.3	84.9	150.8	142.5	133.3
- Contract Research and Developm.	75.9	101.9	56.3	104.4	52.2	198.3
- Architectural, engineering and other technical	89.2	67.1	74.0	114.7	85.2	216.5
- Agricultural, mining and on-site processing services	177.7	19.2	10.1	223.3	31.6	55.7
- Other business activities	85.8	42.7	168.1	104.5	134.5	233.7
- Between related enterprises, n.e.s.	148.5	46.2	35.8	121.5	182.7	70.6

The Balassa indices are calculated with the service and goods trade of the EU countries as a benchmark. Source: OECD (2003), and own calculations.

Finally, Italy has a strong relative specialisation in *merchanting and other trade related services*, while the Netherlands and Spain are clearly not specialised in this area. In *operational leasing services*, the Netherlands and Italy have a strong position.

## 2.4 Conclusions on intra-EU trade patterns in services

Service industries in most EU countries still tend to stand with their back towards the world market and the intra-EU market. Service exports are only very modest, when compared to manufacturing. EU service exports amount to only slightly more than a quarter of EU goods exports, despite the fact that service industries represent some 70 per cent of EU economies. In 2001, a bit more than half of EU service exports goes to other EU member states, up from

41 per cent in 1985. Nonetheless, service exports still represents only a very modest one-fifth of total intra-EU trade.

The bulk of EU service exports nowadays consists of *travel and tourism*, *business services* and *transport services*, in that sequence. Trade in *travel and tourism services* is mostly driven by natural endowments rather than by the regulatory environment. Intra-EU trade in *construction* and *personal services* is very small. This leaves *business services* as the most important trade category.

If we consider EU service markets by their export trade openness, it first appears that all EU markets for *personal services* are virtually closed. In *business services*, the picture is more mixed among the EU countries. The Netherlands, the UK and to a smaller extent Spain have a strong trade orientation in this sector, whereas the market for *business services* in France, Germany and Italy appears to be rather inward-oriented. This pattern is likely to be correlated to the regulatory environment, as we will see in section 4.

For a more detailed consideration we also looked into specialisation patterns for *business, professional and technical services*, which is the largest sub-sector within *business services*. It was not surprising to find again that in particular the UK, and to a slightly smaller extent also the Netherlands, have a strong position there, in nearly all of its constituting sub-sectors. Again, Spain was found to have an export specialisation in *business, professional and technical services*, whereas Germany, France and Italy are relatively weak in this sub-sector.

### **3 Intra-EU patterns in service provision through foreign subsidiaries (FDI)**

*Because the production and consumption of services is sometimes difficult to separate in time and space, service providers may themselves move to a foreign market, through foreign direct investment. This section describes the actual situation with regard to intra-EU foreign direct investment in services.*

Several studies estimate that the largest share of international service supply is provided by service firms that establish themselves in a foreign market.<sup>10</sup> Hence, FDI may well be the dominant form of providing services in foreign markets.

A complication that we meet in describing the actual situation with regard to intra-EU direct investment patterns in services is that the availability and quality of bilateral direct investment data for services is much worse than for border-crossing trade in services. It implies that in some cases we have to revert to indicators at an aggregation level that is higher than desirable.

Ideally, the type of data that we need is direct data on service sales by foreign affiliates. Until present, such data is only sparsely available. The data that we have been able to lay our hands upon, is presented in section 3.1.

Given the incompleteness of these data we also have to use foreign direct investment (FDI) data. FDI stock data represent the established, cumulative FDI positions in a particular country. FDI flow data represent the annual cross-border flows that may change the established cumulative FDI positions.<sup>11</sup>

Section 3.2 uses FDI flow and cumulative FDI stock data to present additional insights on intra-EU transactions related to commercial presence in service industries.

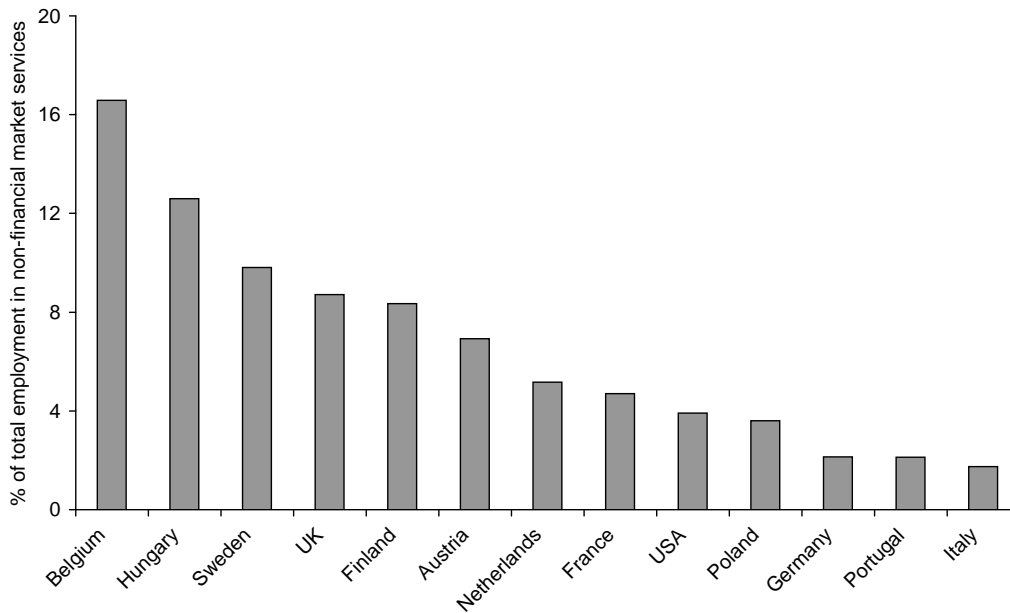
#### **3.1 Foreign services sales by foreign affiliates**

As a proxy for the role of foreign service subsidiaries in the EU, figure 3.1 shows the share of majority-owned foreign subsidiaries in total employment of the non-financial commercial services. Even though minority-owned foreign subsidiaries and joint-ventures with foreign firms are not captured in this way, the foreign-owned employment share still ranges between 2 and 17 per cent in the EU. Individual EU member states differ quite strongly in the share that affiliates of foreign service multinationals have in the employment of the domestic service

<sup>10</sup> See Karsenty (1999) and World Bank (2003) for estimates of the FDI share in worldwide service supply. Kox and Lejour (2004b) come to similar results for the Netherlands.

<sup>11</sup> FDI flows form not the only factor that may change year-to-year cumulative FDI positions. The latter can also change due to profit reinvestment by local subsidiaries, by changes in asset values, and by independent borrowing practices of the local subsidiary. FDI flows do not only include the acquisition of equity, but also real estate investments by the parent company, and current account financing flows from the parent company.

**Figure 3.1 The share of majority-owned foreign affiliates in total employment of the non-financial market services, selected EU countries, 1997-98**



Sources: activity data of majority-owned foreign affiliates in specific industries of OECD countries derived from the OECD FATS database. These data are compared with data on total employment of domestic firms in the same industry aggregate (using OECD STAN).

**Table 3.1 Country differences in the employment share (%) of foreign affiliates<sup>b)</sup> in services sectors covered by the EU directive, selected Member States, 1997-1998**

	Foreign affiliates from EU-15			Foreign affiliates from non-EU origins		
	Wholesale & retail trade	Tourism, hotels & rest.	Business activities <sup>a)</sup>	Wholesale & retail trade	Tourism, hotels & rest.	Business activities <sup>a)</sup>
EU median per sector	2.8	3.9	2.0	1.6	1.6	2.3
<b>Differences with EU median:</b>						
* Italy	-2.7	-0.9	-2.0	-0.7	-0.8	-1.6
* Germany	-2.1	-1.9	-1.6	-0.6	0.0	-1.7
* France	-0.8	-0.3	-0.9	0.0	-1.3	3.1
* Poland	-0.3	-0.7	-0.2	-0.7	2.6	-1.7
* Portugal	0.3	1.4	6.3	-0.8	0.0	0.0
* Netherlands	0.3	1.1	-0.5	1.1	-0.4	-0.7
* UK	-0.3	0.3	0.3	2.1	3.2	6.9
* Austria	4.4	-1.2	0.2	1.6	-0.8	0.9
* Finland	3.3	1.0	4.1	1.7	4.9	0.2
* Sweden	1.4	2.7	5.5	3.3	0.8	2.2

a) This category includes mostly business services (ISIC 70-74).

b) Only majority-owned foreign affiliates.

Data sources: calculated from OECD FATS database and OECD STAN database

sector. Belgium and Hungary are found at the high end, while Germany, Portugal and Italy have the lowest employment share of foreign service multinationals.

Table 3.1 provides further information on the structure of foreign-affiliate activities in national service sectors that are covered by the proposed EU measures.<sup>12</sup> For the ten EU countries together, we found that majority-owned foreign affiliates from other EU countries on average accounted for between 2% and 4% of domestic employment. This is a quite modest employment share. Moreover, the largest activity by EU multinationals is found in tourism-related services. Table 3.1 also shows for *wholesale and retail trade* that EU multinationals have a large employment share in Austria and Finland, but a very low share in Italy and Germany. For *business services* the highest employment shares are found in Finland, Sweden and Portugal, and the lowest in Italy, Germany and France. It is remarkable that the EU's peripheral countries attract relatively more activities by majority-owned affiliates from other EU countries. This could indicate that physical distance plays a role here.

Table 3.1 also shows the service employment shares of multinationals from non-EU origins. The picture that arises is quite similar, except for the fact that the UK and France are to be found among the countries that apparently have a high presence of non-EU multinationals in their service sectors.

Some of the alleged advantages of the having more domestic activities by foreign multinational companies are that they generate productivity spillovers and an innovation spillovers. We found some evidence – presented in table 3.2– that multinational firms in EU service industries might have a higher productivity than their domestic competitors, although this is not the case for all countries.

### **3.2 Services share in intra-EU FDI inflows**

The share of service multinationals in domestic employment reflects the direct investment patterns from the past. When we want to know how the role of foreign service providers is changing, we must look at recent direct investment flows. At a micro-economic level, the relation between FDI flows from the parent company to the subsidiary, and the latter's local sales is not stable over time. For an individual firm, the relation between FDI flows and sales of a foreign affiliate tends to have three phases. In the first phase, this ratio is very high due to start-up costs, then stabilising as FDI only reflects the contribution of the parent company in financing of current working capital requirements, and in the final stage getting negative as the

<sup>12</sup> For ten EU countries we use FATS data on the sector structure of local employment by foreign affiliates; this is compared to national employment data for service sectors by country (from OECD STAN).



**Table 3.2 Productivity differences <sup>a)</sup> between majority-owned foreign affiliates and domestic firms in the non-financial market services sector, selected EU countries 1997-1998**

Country	Value added per person engaged in total commercial services (in 1000 US \$)	Productivity gap between foreign affiliate and domestic firms (%) <sup>b)</sup>
FA have higher productivity		
Austria	63.4	20.6
United Kingdom	49.4	2.8
Netherlands	53.5	1.7
Germany	64.9	11.5
Italy	66.5	9.3
Belgium-Luxembourg	68.4	1.2
Hungary	15.4	7.8
FA have lower productivity		
Poland	13.3	-0.1
Portugal	28.4	-1.4
United States	58.6	-0.5
Finland	65.3	-0.4
France	72.5	-1.1
Sweden	73.1	-0.5

<sup>a)</sup> Productivity is expressed as value added per employee. For Germany, Austria, Belgium, Italy and Poland we use turnover per employee because only these data are available; for consistency this second-best productivity indicator is compared with total production per employee in the host-country service sector.

<sup>b)</sup> Non-financial commercial services.

Source: calculated from OECD FATS and STAN databases.

**Table 3.3 Inflow of foreign direct investment in services, by destination country, period averages 1998-2000**

	In billion US \$	in % of EU-25
Austria	4.7	1.2
Belgium-Luxemburg	102.6	26.6
Denmark	14.9	3.9
Finland	6.2	1.6
France	28.0	7.3
Germany	85.6	22.2
Greece	1.0	0.3
Italy	5.5	1.4
Netherlands	29.3	7.6
Portugal	2.0	0.5
Spain	18.8	4.9
Sweden	7.4	1.9
UK	69.	17.9
EU-15	375.4	97.2
Czech	3.1	0.8
Hungary	1.3	0.3
Poland	4.9	1.3
Slovak	1.3	0.3
EU-25	386.0	100.0

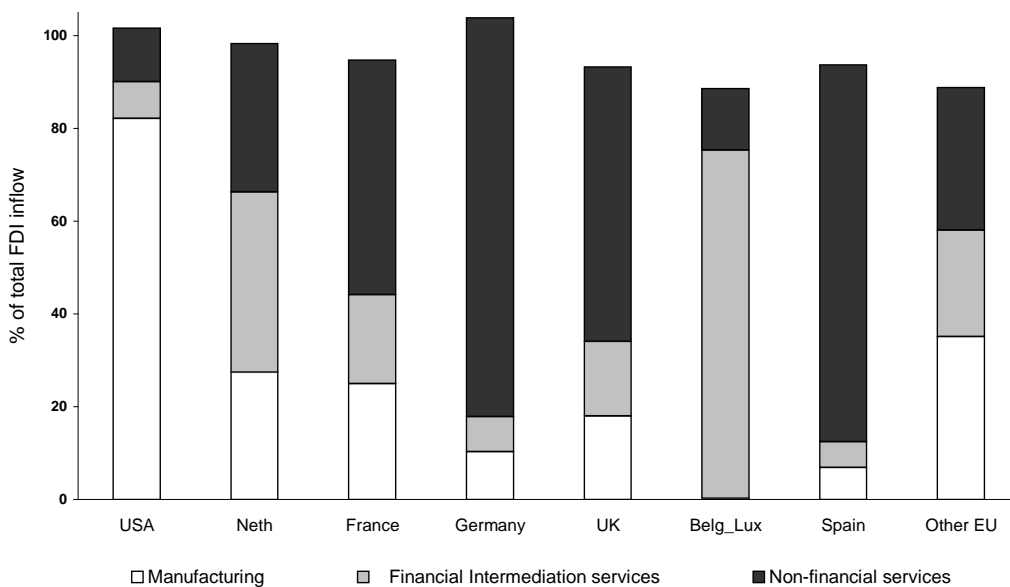
Data source: OECD\_2Csector\_april2004.ivt., OECD, Paris.

establishment is dismantled. Caution is needed also at a higher aggregation level. This is so because individual FDI transactions can be chunky, coming in lump sums at a particular moment in time. Single large transactions in a particular year may blur a more structural pattern, so that a country's FDI flows and its sectoral composition tend to be rather volatile. We took 3-year averages (1998-2000) for each country to reduce the volatility. Table 3.3 offers an overview of the magnitude of service FDI inflows in the EU countries.

A first remarkable fact is that the total inflow of service FDI in the EU is about 12 times higher than the inflow in US service industries. We will comment on this fact in section 3.3 in relation to cumulative FDI stock data. Secondly, we would like to highlight the concentration of direct investment flows into a few EU countries. Germany, Belgium-Luxemburg and the UK together attract two-thirds of all FDI in EU service industries.<sup>13</sup> A bit surprising is the small magnitude of annual direct investment flows in the French, Italian and Spanish services industries. The direct investment flow into the Dutch service industries is larger than in France. It is also larger than service FDI flows into Italy and Spain together. Thirdly, Table 3.3 shows a very high share of service FDI inflows going to Belgium-Luxemburg. It can be shown that this is explained by large FDI flows in the financial intermediation services.

<sup>13</sup> Luxembourg is important for its banking sector, which attracts large money flows due to its fiscal secrecy.

Figure 3.2 Structure of total FDI inflow by main sector, 1998-2000\*



Note: US data refer only to 1998. Calculated on the basis of OECD data.

There is a striking difference between the structure of FDI inflows in the EU and in the US, with the share of manufacturing-related FDI being much stronger in the US. Figure 3.2 pictures the structure of total FDI inflows by main economic sector.<sup>14</sup> Service FDI dominate in the European countries, with Sweden as only exception. In the most important EU countries, services nowadays account for more than 75 per cent of FDI inflows. That is slightly higher than the share of services in the EU economies.

The activities by foreign service multinationals tend to be spread quite unevenly over domestic service industries in the EU. This can be illustrated via the use of "FDI inflow intensities", i.e. the share of a particular sector in total service FDI inflows to the sector's share in total domestic service production. This indicator would be 1 (unity) if a service sector attracts a share of FDI inflows that corresponds with its share in domestic production. However, table 3.4 indicates that service sectors covered by the EU directive on average<sup>15</sup> account for much less FDI inflows than would have corresponded with the share these sectors have in domestic service production.

<sup>14</sup> The bars in Figure 3.2 do not add up to 100 per cent, because the primary sector is not shown here. Some EU countries reported a negative FDI inflow (i.e. a net outflow) in their primary sector. Annex Table A1 gives more detailed data on the overall sectoral structure of FDI inflows.

<sup>15</sup> Germany being the exception.

**Table 3.4 FDI inflow intensity: sectoral share in total service-FDI inflows divided by the sector's share in total domestic service production, selected countries, 1998-2000<sup>a)</sup>**

	Germany	France	UK	Spain <sup>c)</sup>	Neth.	USA <sup>b)</sup>
Sectors covered by directive						
Trade, distribution	0.1	-0.4 <sup>e)</sup>	0.5	0.3	0.5	1.3
Business services and real estate	1.9	1.5	0.4	1.9	0.2 <sup>d)</sup>	0.4
Tourism and other services	0.0	0.1	0.2	0.1	0.2	1.0
unweighted average	0.66	0.42	0.35	0.76	0.33	0.90
Sectors not covered by directive						
Communication	1.2	0.8	6.4	4.3	3.0	-1.3
Transport services	0.0	0.2	0.0	0.1	0.1	0.6
Financial intermediation	1.1	4.5	2.6	0.7	7.9	4.1
Insurance (incl. (auxiliary services))	-0.1	0.5	1.0	0.0	1.2	3.0
unweighted average	0.56	1.50	2.51	1.27	3.04	1.59

a) service sector shares in total domestic service production are for the year 1999, except for Germany (1998).

b) USA FDI inflow data refer to 1998.

c) For Spain, production data for Real Estate and Business services, and for Tourism and Other Services refer to 1998, while data on Communication, Financial Intermediation, and Insurance refer to 1997.

d) This does not count the FDI inflows in financial holding companies.

e) The negative value reflects a net FDI outflow (disinvestment).

Data sources: OECD FDI data (OECD\_2Csector\_april2004.ivt); production shares calculated from OECD STAN database.

Unlike the USA, all EU countries in the table attract remarkably little FDI in the *trade and distribution services*. The predominantly consumer-oriented *tourism and other services* are underrepresented in FDI flows. In the UK, the Netherlands and Spain *business services and real estate* attracts a relatively low share of direct investment compared to the sector's size; the opposite holds for France and Germany. *Communication* gets relatively strong attention from foreign investors, which may well be due to deregulation that took place in the late 1990s, combined with the auctions for mobile phone licenses. Except in the Netherlands, the banking sector (financial intermediation) attracts more FDI than one would expect on the basis of the sector's relative size. The strong national disparities in the structure of FDI inflows are much larger than justified by national differences in the domestic size of specific service industries. Golub (2003) and Golub and Nicoletti (2004) find that regulation factors, including tax regimes, are important determinants of intra-European FDI-flows in services. Apart from policy factors this FDI inflow pattern could also be determined by network factors, scale effects and sector-specific transaction costs.

**Table 3.5 Origin of total FDI inflows in selected EU countries and the USA, 1989-1994 and 1995-2001**

	%-age share originating from EU-15			%-age share originating from USA		
	89-94	95-2001	period difference	89-94	95-2001	period difference
Greece	83	92	9	4	2	-2
Portugal	75	84	9	3	4	1
Italy	64	79	15	10	10	0
France	53	78	25	7	13	6
Finland	72	76	4	17	6	-11
Germany	64	76	12	20	16	-4
Spain	71	74	3	7	17	10
Belgium-Luxembourg	75	74	-1	14	8	-6
Denmark	70	62	-8	7	22	15
Sweden	59	53	-6	8	16	8
Netherlands	55	51	-4	16	31	15
United Kingdom	40	43	3	36	40	4
Ireland	24	12	-12	62	82	20
United States	52	62	10			

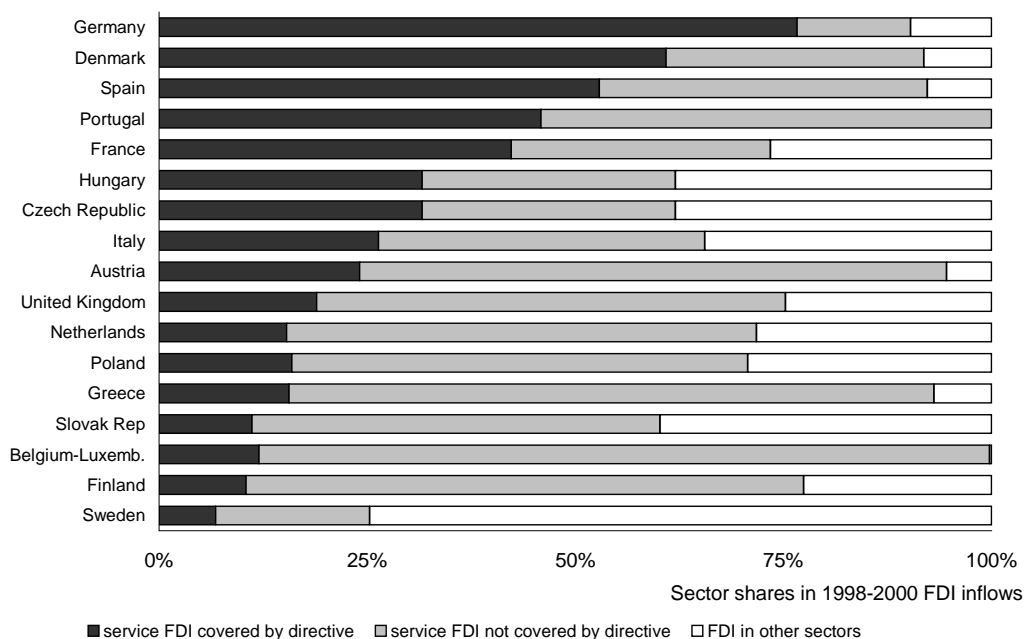
Source: Calculated from OECD data

There are a few marked differences between EU member states in the structure of their FDI inflows. For most EU countries it holds that FDI inflows originate mainly from other EU countries. A few countries (UK, Netherlands, Ireland, Denmark) have markedly a more 'trans-Atlantic' orientation with respect to the origins of the FDI. Table 3.5 shows the average 1995-2001 shares of US and EU transnationals in the FDI inflows, and how the FDI origin changed since the first half of the 1990s.<sup>16</sup> The Netherlands, Ireland, Denmark and Sweden got more US-oriented during the 1990s, whereas Germany, Finland and the new EU accession countries enjoyed relatively strong FDI attention from multinational companies in other EU countries. In France and Italy, FDI from the EU and the USA increased at the expense of third-party countries like Japan.

Finally, figure 3.3 displays which share of the EU direct investment inflows is covered by the proposed EU directive. For the EU-15 countries together, this is about one-third of the total inflow. The remainder of the direct investment inflow is accounted for by service sectors *outside* the domain of the directive, and by non-service sectors. For the interpretation of Figure 3.3 it is good to keep in mind that the present structure of the FDI inflows is partly an endogenous result of the strong intra-EU regulation differences for services.

<sup>16</sup> The right panel shows how the pattern of the 1995-2001 average per country has shifted compared to the average pattern in the period 1989-1994.

**Figure 3.3 Average FDI inflows 1998-2000 and coverage of by EU directive, selected EU member states**



Services sectors covered by the proposed EU directive are: Distribution, Business Services, Hotel and Restaurant Services, and Construction. Commercial services sectors not covered by the directive are: Financial Services, Transport, Telecommunications, and Energy (Gas, Electricity). Data source: OECD data on the sectoral structure of FDI inflows.

### 3.3 Conclusions on intra-EU direct investment in services

Bilateral data on direct investment for the EU service sector are non-existent at present. Therefore, we have combined data from various sources to construct a picture of the present situation.

The share of foreign affiliates from EU origins in the employment of service sectors in EU countries is generally very low: between 2 and 4 per cent of the employment in the sectors that are most affected by the proposed EU measures. Digging further in the data we find that EU multinational affiliates account for higher shares of domestic service employment in the more peripheral countries of the EU (Finland, Sweden, Portugal), whereas that share is generally very low in Germany, Italy and France. This could imply that physical distance plays a role, for instance by its impact on the trade-off between exporting and setting up a local affiliate.

The strong national disparities in the structure of FDI inflows are much larger than justified by national differences in the domestic size of specific service industries. Apart from policy factors this FDI inflow pattern could also be determined by network factors, scale effects and sector-specific transaction costs. Regulatory policies might also play a role, but further

analytical research is required to establish this.<sup>17</sup> OECD research established that regulation factors, including tax regimes were important determinants of intra-OECD FDI-flows in services.

<sup>17</sup> Cf. main report (Kox, Lejour and Montizaan 2004, chapter 5).

## 4 The present role of regulation in intra-EU service markets

*The proposed EU Directive for the Internal Market in Services aims to reduce the trade-hampering impact of national regulations for service markets. This section describes the current state of regulation and recent changes in the EU for product markets and foreign direct investment.*

Recently, the European Commission (2002) presented an alarming survey of national regulations that hamper the functioning of a EU internal market in services. That study contains a lot of anecdotic examples of trade-affecting regulations. This section examines the regulation intensity of the EU countries from a broader perspective. We use regulatory indicators of the OECD to get an overview of the current pattern of regulation in the EU countries.

Section 4.1 presents research findings on regulatory intensity in EU service industries, while in section 4.2 we discuss the regulatory barriers in Foreign Direct Investment (FDI). Section 4.3 summarises the conclusions.

### 4.1 Regulatory intensity in EU service markets

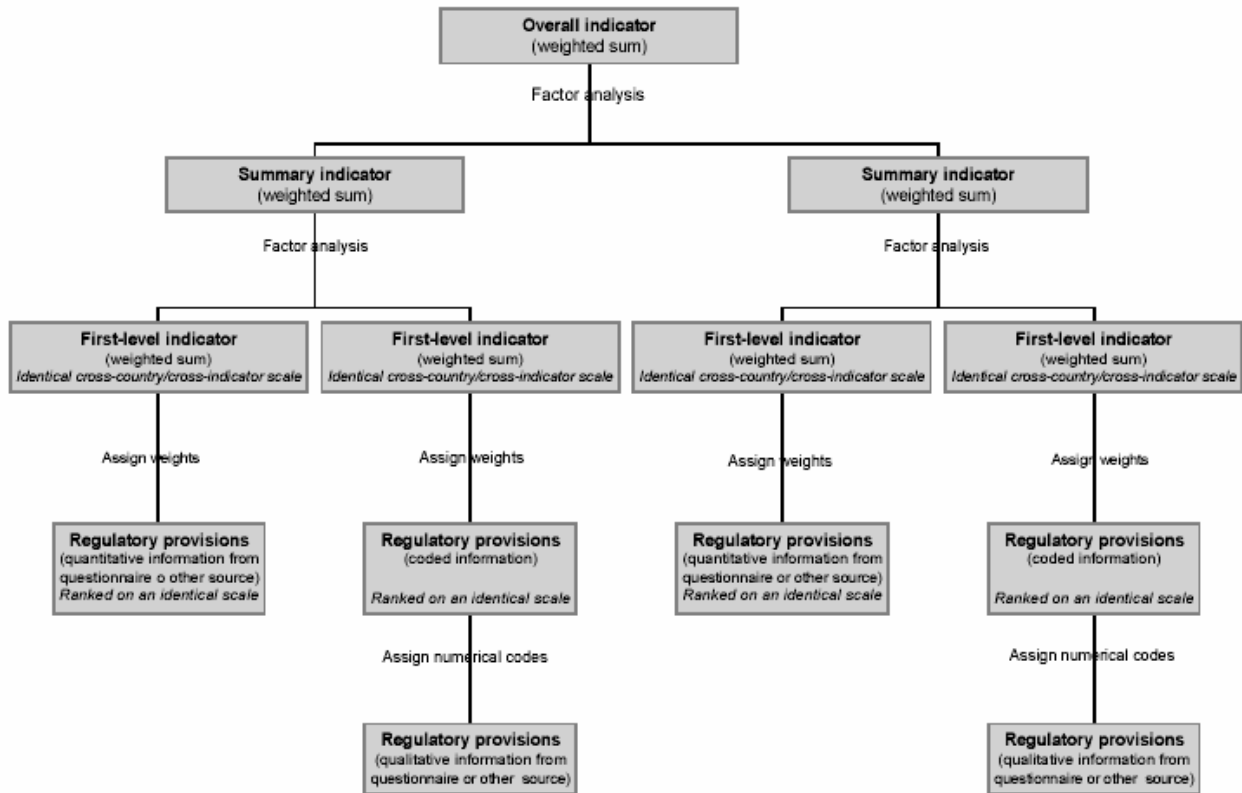
It is very difficult to give an extensive overview of the degree of regulation within the EU and its effects on trade patterns. This can be explained by the fact that service trade barriers mainly consist of non-tariff barriers (Chen and Schembri 2002). A main characteristic of non-tariff barriers is that they are extremely hard to quantify in a reliable way. As a result, the amount of available data on barriers for the EU service trade is very limited. Despite this data problem, it is possible to draw some conclusions about the level of regulation in the service trade in the EU.

The OECD developed a detailed database with indicators of product market regulations and employment legislation for most of its member states. The database is mainly formed by official government responses to the OECD Regulatory Indicators Questionnaire. For each country some 1600 regulation items related to the product-markets are collected in this database. The answers are coded and ordered (weighted) in a scale ranging from 0 to 6, and aggregated according to a methodology that is described in Nicoletti, Scarpetta and Boylaud (2000). From detailed answers on regulatory items they develop summary indicators for the strictness of regulations by country, by policy area, and to some extent also by economic sector. The summary indicators are obtained by means of factor analysis, in which each component of the regulatory framework is weighted according to its contribution to the overall variance in the data. Figure 4.1 describes the OECD aggregating procedure. The resulting indicators are cardinal measures that increase in the strictness of regulation. The OECD researchers distinguish the following policy domains: *economic regulation* concerning market access, the use of inputs, output choices, pricing and international trade and investment; *administrative*



regulation (i.e. the interface between government agencies and economic agents) including means for communicating regulatory requirements to the public as well as compliance procedures. They also developed separate indicators for *employment protection legislation*.

Figure 4.1 Description of OECD method for aggregating national regulation intensity indicators



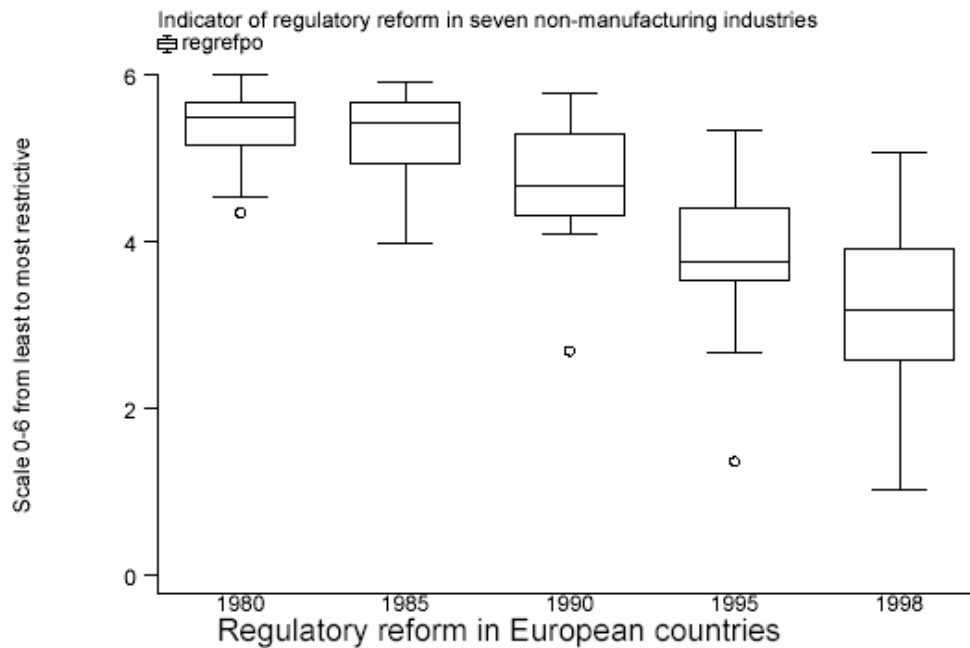
Source: Nicoletti, Scarpetta and Boylaud (2000).

The OECD database contains some detailed information on regulation items in a few specific service sectors (retail trade, telecommunication, transport, energy distribution), but on the whole the information concerning the product regulation in the OECD member states is of a more general nature. Nicoletti and Scarpetta (2003) present information about the regulatory environment reform in seven non-manufacturing industries in OECD countries and the EU over the time period 1980-1998.<sup>18</sup> On this basis it is possible to show the development over time of regulation intensity in the non-manufacturing industries of the EU, using a single policy

<sup>18</sup> The seven non-manufacturing sectors are: Electricity, gas and water; Wholesale and Retail Trade, Hotels and Restaurants; Transport and Storage; Post and Telecommunications; Financial Intermediation; Professional Business Services.

indicator. Figure 4.2 presents the distribution of regulatory approaches in the EU over the past two decades.<sup>19</sup> The chronologically juxtaposed boxes reveal the time-series aspects of the data, in particular the evolution of the median and the variance of the regulatory indicator.

**Figure 4.2** Indicator of regulatory reform in seven non-manufacturing industries in 1980-1998



Note: The box plot shows in each year, the median EU value of the regulatory indicator (the horizontal line in the box), the third and second quartiles of the cross-country distribution (the three lines that form the box are drawn 25%, 50%, and 75% of the way through the data) and the extreme values (the two whiskers extending from the box). Dots identify outlier observations (these are not included in the analyses). A 0-6 indicator is used from least to most restrictive. Source: Nicoletti and Scarpetta (2003).

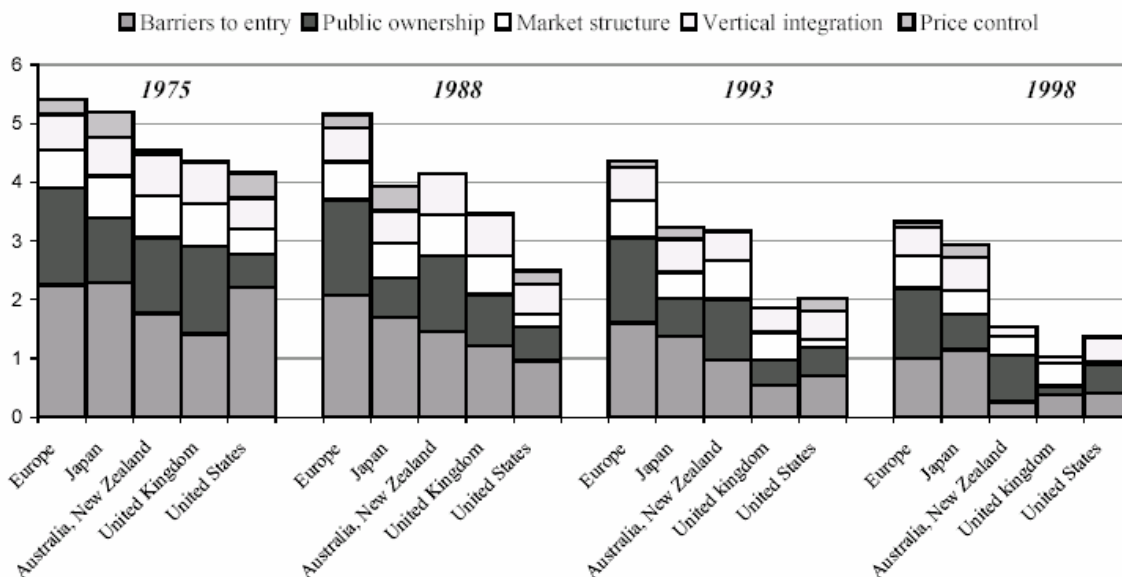
Figure 4.2 shows two different regulatory developments. Firstly, we see that the average regulation intensity diminished over time, indicating that EU governments leave more issues to the market mechanism. Secondly, we also see that the policy variance in the EU has increased over time: some EU governments deregulated substantially more than others did. The variance of regulation intensity increased across European countries in Europe, especially in the later part of the 1990s. Nicoletti and Scarpetta (2003) find that the recent regulation divergence is stronger in the EU than in the OECD as a whole. This happened despite the efforts of the European Commission to harmonise the business environment in the 'single market'. European countries apparently use very different policies towards regulation in non-manufacturing

<sup>19</sup> Regulations of individual countries have been assigned a score, from least (score is 1) to most restrictive (score is 6).

(service) sectors. This finding indicates that service firms wanting to export to or invest in other EU member states may be subject to very different product-market regulations.

Nicoletti and Scarpetta (2003) analyse in which policy domains the regulatory changes took place, and how this differs between groups of OECD member states. Figure 4.3 shows the evolution over time of the summary indicator for regulatory intensity by country group and by policy domain.<sup>20</sup> The most recent data from the OECD Regulation database show that deregulation of product markets in most OECD has continued during the period 1998-2003 (Conway 2004).

**Figure 4.3 Regulatory reform in selected non-manufacturing industries 1975-1988**



Note: Simple average of indicators for: gas and electricity supply, postal services, telecoms, air transport, railways and road freight. Depending on the industry the indicators cover: barriers to entry, public ownership, market structure, vertical integration and price controls. Europe data are weighted average (1995 GDP PPS) of Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland data. A 0-6 indicator is used from least to most restrictive.

Source: Nicoletti and Scarpetta (2003).

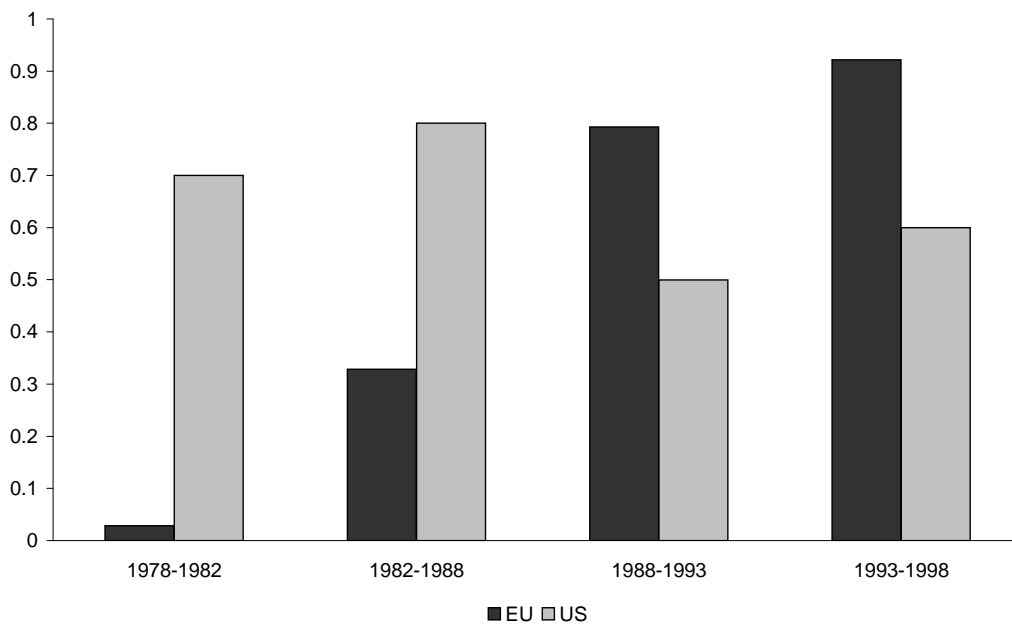
The figure shows the decrease of overall regulation intensity over time. In Europe, most of the deregulation took place in the policy domains *barriers to entry*, *market structure* regulation, *price controls*, and to a smaller extent in regulations concerning *vertical integration*. Comparing country groups in figure 4.3 we must conclude that Europe as a whole is more slowly in removing regulatory barriers than the United Kingdom, Australia and New Zealand. Europe still

<sup>20</sup> The indicator ranges from 0 for the least restrictive to 6 for the most restrictive regulation level.

has the most restrictive policy towards the provision of the services that are analysed in figure 4.3. It is worth noting that the latter service industries do not match the industries covered by the proposed EU directive (EC 2004). The proposed directive focuses on professional business services, trade, construction, personal services, and commercial medical services.

Although the provision of services in Europe is still subject to considerable regulatory intervention, it is useful to note that deregulation in product-market regulation in Europe was much more dynamic than in the USA over the past decades. A reason could be that product markets are less regulated in the USA than in Europe. This could be explained by Figure 4.4 shows the acceleration of deregulation in Europe compared to the USA, especially in the 1990s. This acceleration led to a convergence in regulation intensity between the EU and the USA. Nonetheless, the average intensity level of product-market regulation in the EU is still considerably higher than in the USA.<sup>21</sup>

**Figure 4.4 Acceleration process in deregulation, EU versus USA, 1978-1998**



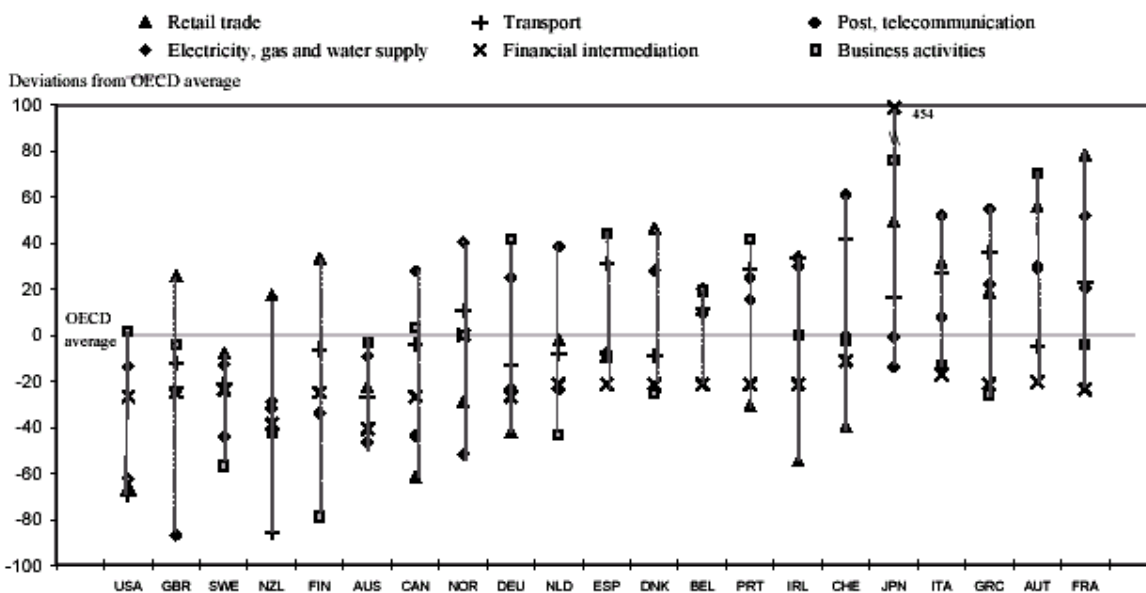
Note: Acceleration of deregulation is computed by taking the difference in the indicator 'regulatory reform' between two time periods. A higher score means that a country is deregulating faster. Source: Nicoletti, Bassanini et al. (2001).

Figure 4.5 describes differences in the OECD countries' regulatory environment for the year 1998, this time including the regulation for professional business services. The graph captures regulatory differences by means of the economy-wide and industry-level indicators of

<sup>21</sup> The regulation intensity levels in 1998 were 3.3 in the EU versus 1.4 in the USA. The 1998 regulation intensity level for the EU was the same as the USA had in 1982 (data: Nicoletti, Bassanini, et al. 2001).

regulation. Both increase in the level of public ownership and restrictions to market mechanisms. It appears from Figure 4.5 that the industry-level environment was widely variable both within and across countries<sup>22</sup>. For example, Finland, Sweden, the Netherlands, Denmark and the United Kingdom are characterized by a relatively low level of regulation in business activities. On the other hand, the level of regulation in business activities is relatively high in Austria, Greece, Spain and Portugal. The level of regulation in retail trade is high for France, Denmark, Finland, and the United Kingdom, while it is relatively low in Ireland, Germany and Portugal.

Figure 4.5 Regulation in non-manufacturing industries, 1998



Note: Depending on the industry, the indicators cover public ownership, barriers to entry, price control, restrictions to business operation, administrative burdens, market structure and vertical integration. Indicators are increasing with restrictions to competition. Source: Nicoletti and Scarpetta (2003).

The OECD indicators for national regulation intensity – for specific items or at a more aggregate level– are innovative and welcome additions to the analysis toolkit for economists. What the regulation intensity indicators still do not fully grasp is the trade-hampering impact of NTB heterogeneity across countries. If the OECD method for instance finds a regulation intensity of say 2.5 for two countries, this does not imply that regulation is a neutral factor in explaining trade patterns between these two countries. If two countries have the same trade regulation intensity, the underlying regulation measures for the two countries may be

<sup>22</sup> For illustrative purposes, countries are ranked according to the deviation of the average indicator across industries from the corresponding OECD average.

completely dissimilar. The magnitude of heterogeneity contributes to additional compliance and information costs, and it takes away a firm's possible scale effects in dealing with national regulations. It has been shown elsewhere that the type of regulatory measures often differs strongly between countries.<sup>23</sup>

## 4.2 Regulatory environment for foreign direct investment

Golub (2003) made another major contribution to the OECD research on economic impacts of regulation. He provided a measure for restrictions on inward FDI. Golub considers several different types of restrictions for FDI:

- limitations on foreign ownership,
- screening or notification procedures, and
- management and operational restrictions.

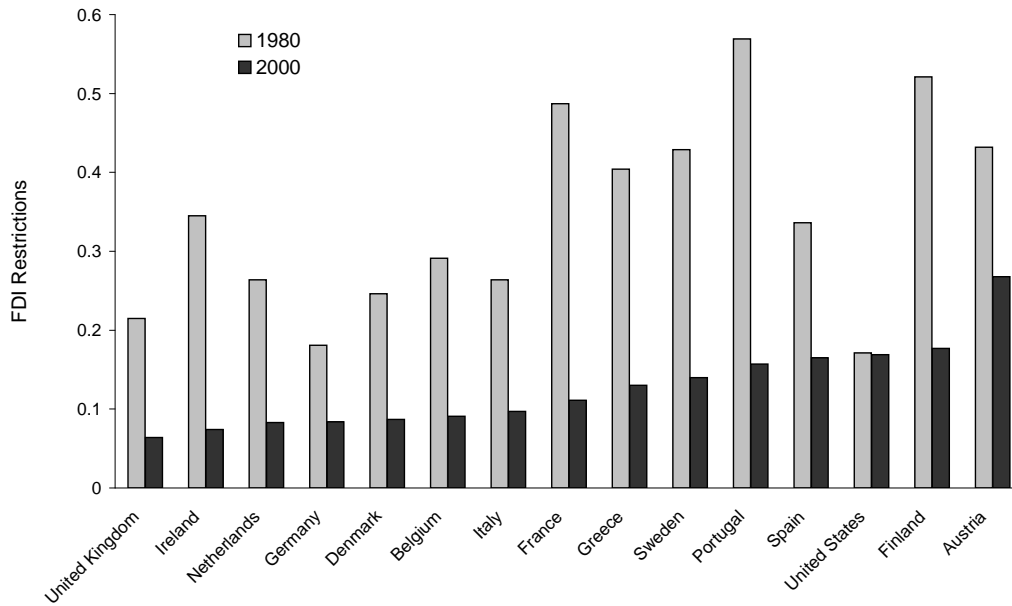
The restrictions are computed for nine sectors and eleven sub-sectors, most of which are in services, and then weighted and aggregated into a single measure for the economy as a whole.<sup>24</sup> Especially equity restrictions are given a high weight because foreign ownership is a vital characteristic for FDI. Golub finds on the basis of his aggregate indicators that the last two decades, and especially the 1990s, have witnessed dramatic liberalisation in FDI restrictions. This is pictured in Figure 4.6. Golub concludes that there remain substantial differences between countries and across industries. The most open countries are now in Europe (as far as statutory restrictions are concerned). Interesting is that the level of total FDI restrictions in the United States remained almost unchanged between 1980 and 2000.

Cumulative indicators for overall FDI restrictions in the service sector in the major EU countries are summarized in Figure 4.7. It shows that in the major EU countries, the overall level of FDI regulation in the service sectors covered by the proposed EU directive, is relatively low. The scores range between 0 and 0.1 (note that 1 is the maximum restrictiveness level). The EU weighted average is slightly higher than the level of protection in the major EU countries, resulting from some important differences in restrictions across the EU. The Netherlands has the lowest level of total FDI restrictions in the service sector. Countries with the lowest levels of restriction for FDI include the United Kingdom, Ireland, Belgium, Germany

<sup>23</sup> A more detailed picture of the heterogeneity of regulation policies between countries for business services is given in OECD (1996); CSES (2001); Kox (2001: Tables 6.2-6.6).

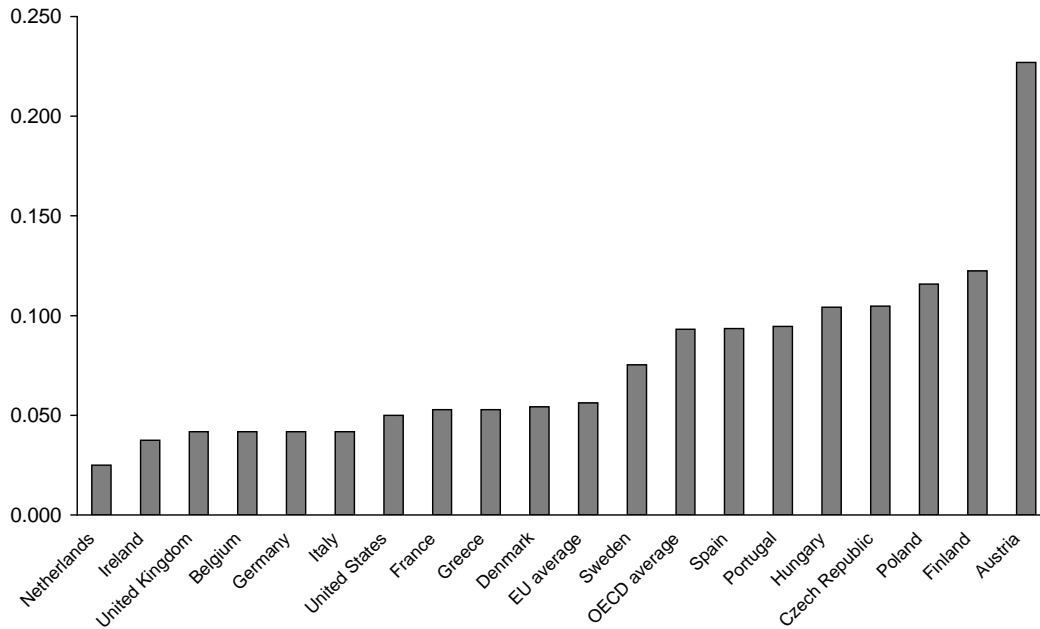
<sup>24</sup> Sectors are: Business services (with Sub-sectors: Legal, Accountancy, Architecture, Engineering), Telecommunications (Sub-sectors: Fixed, Mobile), Construction, Distribution, Finance (Sub-sectors, Insurance, Banking), Hotels and Restaurants, Transports (Sub-sectors: Air, Maritime, Road), Electricity, Manufacturing.

**Figure 4.6 Indices of total FDI restrictions over time, 1980 and 2000**



Note: The indicator ranges from 0 (least restrictive) to 1 (most restrictive). This indicator includes also FDI restrictions in the manufacturing sector. So, services are not isolated. Source: Golub (2003).

**Figure 4.7 Overall FDI restrictions in service sectors covered by the proposed EU directive on the internal market in services, 1998/2000**

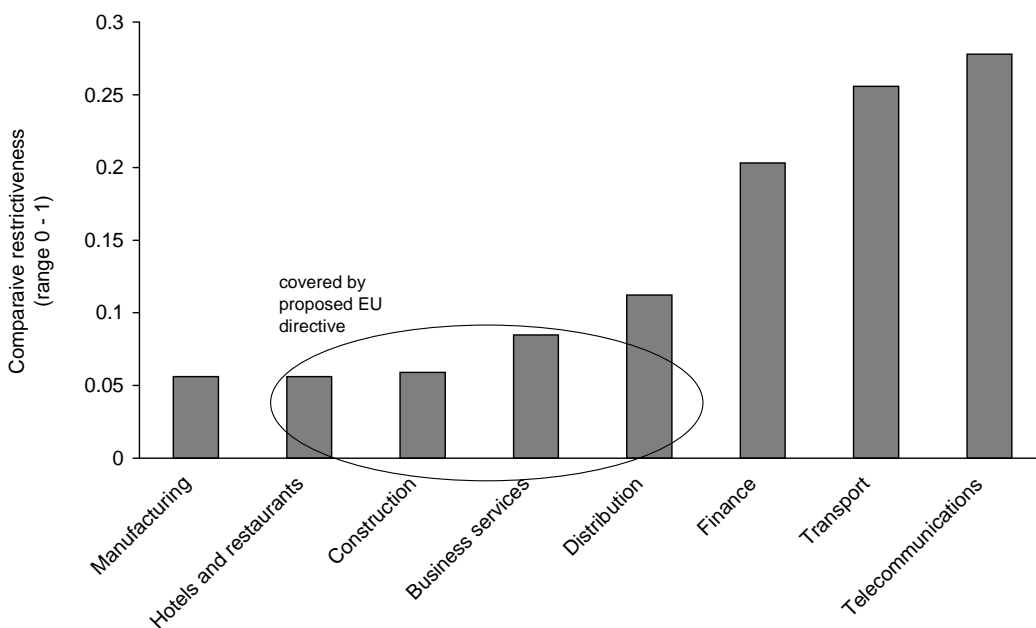


Note: The analyzed service industries are: business services, construction, distribution and hotels and restaurants. The scores for the EU and the OECD are weighted by GDP. Source of original data: Golub (2003).

and Italy. Austria, Finland, Portugal and Spain and the new EU members have a more restrictive policy towards FDI in these sub-sectors. Overall, however, restrictions in most European countries are well below OECD average. Austria is a remarkable exception in this regard.

While Figure 4.7 presented an combined picture for all services industries covered by the proposed EU directive, we may also present a more sector-specific picture. Figure 4.8 shows the overall FDI restrictions per service sector.

**Figure 4.8 Cross-sectoral patterns of FDI restrictions in the EU, 1998/2000**



Note: The indicator ranges from 0 (least restrictive) to 1 (most restrictive). EU countries are included in the category OECD countries. Source: Golub (2003).

The FDI restrictions in the service sectors that are covered in the EU proposal are in all OECD countries higher than those in the manufacturing sector (with *distribution* being the most restrictive covered sector). Besides the fact that the FDI restrictions in the covered sectors are higher than in the manufacturing sector, it should be stated that there exist the possibility of underestimating the degree of restrictiveness. The real degree of restrictiveness may be underrated, because Figure 4.8 only gives information about the relative intensity of FDI restrictions, but it does not show the heterogeneity of regulations across EU countries. It appears that the FDI restrictions in sectors covered by the proposed EU directive are rather mild



in comparison with the restrictions of other service sectors such as *finance*, and network sectors like *rail transport*, *telecommunications* and *electricity supply* (not pictured).

### **4.3 Conclusions on the regulatory situation in EU service markets**

We found that regulation in the total service sector in Europe has decreased. The different pace of deregulation with regard to product markets caused, however, more rather than less variance in regulation level between the EU member states (Figure 4.2). The Netherlands, Denmark and United Kingdom are the EU countries with the least restrictive product-market regulation for services, whereas Austria, Greece, Spain and Portugal are the most restrictive countries of the EU-15.

The level of regulation in the EU is relatively high in comparison with other OECD countries (Figure 4.3). The pace of deregulation in Europe during the 1990s was higher than in the United States, causing a process of convergence. Nonetheless, the level of product market regulation for non-manufacturing sectors is in the EU still considerably higher than in the USA.

FDI restrictions in the service sector are also decreasing (Figure 4.6). Within Europe, the FDI restrictions are relatively high in the transition countries, Finland, and Austria. The FDI restrictions in the sub-sectors (*hotels and restaurants*, *construction*, *business services* and *distribution*) which are covered by the proposal directive are relatively low in comparison with other sub-sectors (*finance*, *transport*, *telecommunications*).

## 5 Conclusions

This paper has sketched the recent pattern in service trade, foreign direct investment and regulation in the EU. We have concluded that the last decade trade in services has increased substantially, in particular in business services. This is also the case for foreign direct investment (in services). The level of regulation within the EU has decreased. Product-market regulation and FDI restrictions have been lowered. The process of deregulation proceeds with different speed, and this is the cause of an increased variance in the level of regulation over Europe.

Recent empirical OECD work on the relations between national regulation intensity and trade patterns<sup>25</sup> concludes that the level of regulation hampers trade in services and foreign direct investment significantly in their member countries. OECD researchers report that a reduction in national regulation to the level of the least-regulated country – the United Kingdom– could increase bilateral trade in services by about 20%. The foreign capital stock could increase to 10% to 20%. This finding suggests that the proposed EU directive on service trade could have a significant impact on trade and investment, if it could reduce the regulatory burden for foreign service providers effectively.

The EU's stocktaking of regulatory barriers in cross-border trade and commercial presence (EC 2002) learns us that these barriers consists mainly of the extra regulatory costs that service providers face if they want to enter a foreign market. The implication is that the level of regulation in a country is not sufficient as a yardstick for regulatory trade and investment barriers. If two countries have the same trade regulation intensity, the underlying regulation measures for the two countries may be completely dissimilar. The magnitude of heterogeneity contributes to additional compliance and information costs, and it takes away a firm's possible scale effects in dealing with national regulations. The regulatory heterogeneity across countries causes additional information and compliance problems for firms interested in foreign transactions. The service provider must make an effort for becoming accustomed to other policies. If national regulation would be more or less similar (harmonised) in all EU countries, a company could build up scale economies in handling these procedures. The heterogeneity across countries however prevents such potential scale economies.

<sup>25</sup> In particular, Golub and Nicoletti (2004) and Nicoletti *et al.* (2003).

We have tested the impact of regulatory heterogeneity on the volume of service trade and foreign direct investment in the main report of the present project (Kox, Lejour, and Montizaan 2004). We found strong empirical evidence that regulatory heterogeneity has a negative impact on bilateral trade and FDI between EU member states.

## Annexes

**Annex Table A1 Sectoral structure of FDI inflows, average for period 1998-2000, percentage shares**

	USA <sup>a)</sup>	Neth	France	Germ.	UK	Spain	Other EU-15
PRIMARY SECTOR	-1.6	0.4	0.3	-0.2	6.8	0.4	0.4
MANUFACTURING	82.1	27.4	25.0	10.3	18.0	6.9	14.3
SERVICE SECTOR	19.5	70.8	69.8	93.6	75.2	86.8	74.4
Electricity, Gas and Water	0.4	3.7	1.3	0.3	3.9	0.8	0.4
Construction	0.0	0.1	0.5	0.0	-0.2	3.0	0.2
Trade and Repairs	8.2	10.9	-5.3	1.8	8.4	6.2	2.1
Hotels and Restaurants	0.3	0.0	0.2	0.0	0.7	0.7	0.1
Transports, Communication	-1.0	9.5	3.6	6.3	36.0	23.6	4.5
of which: Total land, sea and air transport	0.6	0.7	0.4	0.4	0.3	0.6	0.2
Telecommunications	-1.6	8.4	2.5	5.9	33.9	22.6	2.7
Financial Intermediation services	7.9	38.8	19.2	7.5	16.1	5.5	54.1
of which:							
Monetary intermediation	3.1	2.5	4.2	1.1	3.9	0.0	6.1
Other financial intermediation	2.5	32.4	10.8	7.4	9.5	0.0	46.4
of which: Financial holding companies	0.0	9.7	3.6	-0.1	0.0	0.0	0.2
Insurance	2.3	3.9	1.4	-0.9	2.7	0.0	1.3
Total other financial intermed & insurance	4.8	36.3	12.1	6.4	12.1	0.0	47.6
Real Estate and Business Activities	3.0	6.7	49.8	77.3	9.6	45.7	10.7
of which: Real estate	1.0	3.7	5.6	0.0	0.4	7.2	0.1
Other Services	0.7	1.1	0.6	0.4	0.8	1.3	2.2
UNALLOCATED	0.0	1.4	5.0	-3.6	0.0	6.0	10.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: a) USA data only for 1998. Data source: *OECD\_2Csector\_april2004.ivt*, OECD, Paris.

**Annex Table A2 EU imports of services at sub-sector level, 2001**

Sub-sectors	Value in billion US\$	% share in total imports	% share of intra-EU imports	% annual growth total imports 1985-2001
Total services	628.9	100.0	56.6	8.2
Transport	142.7	22.7	53.6	5.6
- Sea transport	62.4	9.9	47.6	7.8
- Air transport	46.5	7.4	48.9	8.8
- Other transport	33.8	5.4	71.1	-1.1
Travel	175.8	28.0	60.6	9.9
Communication services	17.0	2.7	63.5	8.3
Construction	11.9	1.9	52.0	4.7
Insurance	11.3	1.8	74.1	4.4
Financial	24.5	3.9	58.0	14.5
Computer and information	17.1	2.7	60.9	NA
Royalties and licence fees	32.0	5.1	37.3	11.3
Other business services	170.9	27.2	56.7	12.0
Personal services	12.6	2.0	88.7	NA
Government services	13.1	2.1	59.3	3.4

Source: OECD (2003), and own calculations

## References

- Chen Z., Schembri L., 2002, *Measuring the Barriers to Trade in Services: Literature and Methodologies*, Department of Foreign Affairs and International Trade, Canada.
- Conway, P., 2004, *Product market regulation in OECD countries, 1998 to 2003*, Annex I: Tables and Figures, Economics Department, Working Paper ECO/CPE/WP1(2004)9, OECD, Paris.
- CSES, 2001, *Barriers to trade in business services - final report*, Report commissioned by the European Commission, Centre for Strategy and Evaluation Services / European Commission, Brussels.
- European Commission, 2004, *Proposal for a Directive of the European Parliament and of the Council on Services in the Internal Market (presented by the Commission)*, COM(2004) 2 final/3, Commission of the European Communities, Brussels.
- European Commission, 2002, *Report from the Commission to the Council and the European Parliament on the state of the internal market for services*, Com(2002) 441 final, Brussels.
- Golub S., 2003, *Measures of Restrictions on Inward Foreign Direct Investment for OECD countries*, OECD Economics Department Working Papers, No. 357, OECD, France.
- Golub, S. and G. Nicoletti, 2004, *The influence of policies on foreign direct investment*, mimeographed paper, OECD, Paris.
- Karsenty, G. , 1999, Just how big are the stakes? An assessment of trade in services by mode of supply, Paper presented at conference "Services 2000: New Directions in Service Trade Liberalization" (Washington, June 1-2, 1999), IIIIE, Washington.
- Kox, H., 2004, *Heterogeneity analysis for qualitative data: application to service trade regulation data*, Research Memorandum, CPB Netherlands Bureau for Economic Policy Analysis, The Hague (forthcoming).
- Kox, H., 2001, *Exposure of business services to international competition*, CPB Document No.10, CPB Netherlands Bureau for Economic Policy Analysis, The Hague.

Kox, H. and A. Lejour, 2004b, *A new WTO round for services: possible effects for the Netherlands* (in Dutch), CPB Document No. 51, The Hague.

Kox, H, A. Lejour, and R. Montizaan, 2004, *The free movement of services within the EU*, CPB document No. 69, The Hague.

Lejour, A.M., and G-J Linders, 2002, Globalisering van de diensteneconomie, *Maandschrift Economie* , vol. 66, pp. 208-225 (in Dutch).

Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago and P. Swaim, 2001, *Product and Labour Markets Interactions in OECD countries*, OECD Economics Department Working Papers no. 312, OECD, Paris

Nicoletti, G., S. Golub, D. Hajkova, D. Mirza and K-Y. Yoo, 2003b, *Policies and international integration: influences on trade and foreign direct investment*, OECD Economics Department Working Paper No. 312, OECD, Paris.

Nicoletti G., Scarpetta S., 2003, Regulation, Productivity, and Growth: OECD Evidence, *Economic Policy*, 18:1 (36), April.

Nicoletti G., Scarpetta S., Boylaud O., 2002, *Summary Indicators of Product Market Regulation with an Extension to Employment Protection Legislation*, Economics Department Working Papers No. 226, OECD, France.

OECD, 2004, *Monthly Statistics on International Trade*, OECD, Paris.

OECD, 2003, *Statistics on international trade in services: detailed tables by service category*, OECD, Paris.

OECD, 1996, *International trade in professional services - assessing barriers and encouraging reform*, OECD, Paris.

World Bank, 2003, *Global economic prospects for developing countries*, Washington.