

Karolina Ekholm

# Industrial Structure and Industry Location in an Enlarged Europe

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Swedish Institute for European Policy Studies

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## PREFACE

Sieps, the Swedish Institute for European Policy Studies, conducts and promotes research, evaluations, analyses and studies of European policy issues, with a focus primarily on the areas of political science, law and economics. The institute's mission is to act as a bridge between academics and policy-makers and to contribute to increased interest in current issues in European integration and to the debate on the future of Europe.

The author of this report is Karolina Ekholm, Associate Professor in economics at the Stockholm School of Economics. Her main interests are in the fields of international trade and investments and in international macroeconomics, and her work is published in journals such as the *European Economic Review*, *Scandinavian Journal of Economics* and *Canadian Journal of Economics*.

The subject matter for the report is how the enlargement of the European Union affects industry structure and industry location. The focus is on Sweden, but the effects on a European level are also considered. Both trade and investment flows is likely to increase as a result of the enlargement. The paper discusses the effects of this on employment, wages, immigration, specialization patterns and technological diffusion. Regional policy and institutional competition are also discussed in the context of the EU enlargement.

Stockholm in November 2003

*Mats Hellström*  
Chairman of Sieps

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Stockholm in November 2003

Karolina Ekholm

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# **INDUSTRIAL STRUCTURE AND INDUSTRY LOCATION IN AN ENLARGED EUROPE**

## **SUMMARY**

In 2004, ten new countries will join the European Union: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia. Three additional countries are applying for membership: Bulgaria, Romania, and Turkey. The enlargement of EU is likely to lead to important changes in Europe.

This study deals with the expected consequences of EU enlargement on industrial structure and industry location in the current member countries, in particular Sweden. The starting point is that enlargement will ensure better access to markets in the current EU members for firms located in the accession countries and that it will create an environment conducive for a more stable development of economic institutions in these countries.

The study emphasizes that enlargement is likely to bring substantial gains to the accession countries as well as the current member states. However, the realization of gains from increased specialization will involve a restructuring of the economies in current member states. In the short-run, the accession countries are likely to increase their specialization in labour intensive industries and labour intensive stages of the value added chain. This will potentially hurt labour in the current EU countries, especially in the countries in Southern EU, which presently constitute the low-wage region within the union. However, the study point to a number of factors that might mitigate a negative impact on employment and wages in Western Europe:

- The possibility of Western European firms to locate labour intensive segments of the production in low-wage countries in Central and Eastern Europe will strengthen these firms competitiveness vis-à-vis firms from the US and Japan, thereby enabling them to gain market shares and expand production.
- The accession countries constitute new and growing markets for Western European firms to operate in.

- Available evidence on the labour market effects of increased trade and FDI suggest that while increased import competition from low-wage countries and increased FDI to such countries seem to lead to an increased relative demand for skilled labour, the effect on the relative wage between skilled and unskilled labour is quantitatively small.
- Available evidence on the effects on labour demand from an expansion of MNEs in low-wage countries does not give any support for the idea that such an expansion leads to reduced employment in the parent firm. On the contrary, most studies suggest that an expansion in low-wage countries is associated with an increased employment in the parent company.

The study discusses briefly the consequences of increased migration of labour from the accession countries to current EU members. Available studies suggest that the effects on real wages in the current members will be small. However, the effects may be more substantial in some service sectors where prices are not determined in world markets. Whereas a fall in real wages in such sectors will hurt workers employed in those sectors, it will reduce costs and thereby create scope for increased purchasing power for consumers.

The study also discusses the consequences of regional policy in EU and the risk of increased tax and regulation competition leading to a “race to the bottom”. It is argued that with the present design of regional policies in the EU, a shift from poor regions in the current EU members to poor regions in the accession countries may lead to an even more inefficient allocation of resources in R&D intensive industries. It is also argued that while enlargement may contribute to increased tax and regulation competition within the EU, the outcome is not likely to be a “race to the bottom”. Concerning tax competition, the outcome is more likely to be a shift from more to less mobile tax bases.



# 1 INTRODUCTION

In 2004, ten new countries will join the European Union: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia. Three additional countries are applying for membership: Bulgaria, Romania, and Turkey. How this will affect the economies of the new member countries as well as of the current ones is one of the most important questions for Europe today.

The opening up of the economies in Central and Eastern Europe since the beginning of the 1990s has already led to considerably changes in the economic landscape of Europe. Several of the countries in Central and Eastern Europe (CEE) have made considerable progress in transforming their economies to market economies and in becoming an integrated part of the world economy. However, full membership in the European Union will lead to a further integration of the CEE countries with Western Europe and is likely to generate more substantial changes in the industrial structure of Europe.

This study deals with the prospective changes in the industrial structure of Western European countries, focussing particularly on Sweden, as a consequence of an enlargement of the European Union. The study deals primarily with the effects of a further integration between Western Europe and the eight accession countries in the CEE region. The two accession countries in Western Europe; Cyprus and Malta, are so small and geographically distant from Sweden that increased trade and factor mobility are likely to have negligible effects on the Swedish economy.

For the purpose of this study, enlargement is taken to imply two things; further integration of the accession countries' markets for goods, services, capital and labour with the corresponding markets in EU and the development and sustainability of economic institutions of the type today found in the EU countries. It might be argued that many product markets and capital markets of the accession countries are today already fairly well integrated with the EU. However, although most

formal barriers to trade in manufactures and capital movements have been dismantled, it seems fairly evident that many informal barriers remain. Similarly, it might be argued that in many cases the accession countries have already remodelled their economic institutions on the ones found in the EU. However, taking into account the economic turmoil faced by many countries in the CEE region, the sustainability of these institutions remains uncertain. Membership in the union is likely to make it much more difficult for political opposition within these countries to challenge these institutions.

A starting point for the study is that enlargement may affect the location decisions of Western European firms, implying changes in the industrial structure of regions and countries and the location of specific industries. It is argued that one likely effect is an increased fragmentation of certain industries in Europe where the CEE countries and the Western European countries become involved in the production of different parts of the value chain. Such increased specialization within industries is likely to bring benefits to both consumers and producers in Western Europe; consumers on account of lower consumer prices and producers on account of an increased competitiveness in world markets. It is also argued that it is likely that the accession countries will attract more investments in production destined for sales in Western Europe. Such investments will probably not only be made by Western European firms, but by US firms as well.

The study also deals with the fears that a closer integration between Western and Eastern Europe is going to hurt workers in the West as Western firm relocate productions to the low-wage economies in CEE. Of course, Western European firms already have the opportunity to locate production in countries with the same or even lower wage levels as in the CEE region. However, the geographical proximity to and close integration with Western Europe and the fact that the work force is relatively skilled compared to many developing countries make CEE a potentially more attractive region for Western European firms. Here, it is argued that, in the short run, workers in the accession

countries are likely to be more close substitutes for workers in the Southern European countries than for workers in high-wage countries in Northern Europe.

The report starts with an account of Sweden's trade and investment relations with the accession countries. In sections 3–5, we then discuss the economic consequences of increased trade and increased capital and labour mobility between Western Europe, focusing on Sweden in particular, and the accession countries in CEE. The discussion in these sections deals with effects on the industrial structure, labour markets, and welfare. The two subsequent sections are devoted to a brief discussion about the consequences of enlargement for EU:s regional policies and of the risk of entering into a race in reducing corporate taxes and regulations because of increased competition within the union for investments. Finally, the last section, section 8, summarizes the conclusions.

## **2 TRADE, FOREIGN DIRECT INVESTMENT AND DIFFERENCES IN PRODUCTION COSTS**

An important characteristic of the new member countries is that they are low-wage countries. The pattern of trade and investment between these countries and the current EU countries reflects the fact that it involves one low-wage region and one high-wage region. Underlying the differences in wage costs are differences in labour productivity, which in turn stem from differences in the relative supplies of physical and human capital and from differences in access to technology.

This section presents descriptive evidence on the pattern of trade between Sweden and the accession countries and the pattern of Swedish foreign direct investment to these countries. The purpose is to give a picture of what current economic transactions between Sweden and the accession countries look like. Important issues to address are how important the accession countries are for Swedish trade and investment today and in what sectors trade and investments are particularly large. The section ends with a discussion about the differences in production costs between the accession countries and current member countries in the EU.

### **2.1 Trade volumes and net exports in Swedish trade with accession countries**

Table 1 shows the distribution of Swedish exports and imports across regions in 2002. It shows that Swedish trade is very concentrated to Western Europe; about 65-75 per cent is with other Western European countries. Trade with Central and Eastern Europe makes up about five per cent of total Swedish trade. As is clear from Table 1, almost all of this trade involves the accession countries. It is also clear that the accession countries in Western Europe, i.e. Cyprus and Malta, are essentially negligible in terms of their trade with Sweden.

Out of the eight CEE accession countries, Poland is the most important in terms of its trade with Sweden. Between 1.5 and 2 per cent of Swedish trade takes place with Poland. The other

**Table 1. Swedish exports and imports in 2002**  
(shares in per cent)

	<b>Exports</b> (million SEK)	<b>Share</b>	<b>Imports</b> (million SEK)	<b>Share</b>
<b>Western Europe</b>	<b>497046</b>	<b>63,9</b>	<b>474643,7</b>	<b>75,5</b>
<i>EU(15)</i>	<i>413764</i>	<i>53,2</i>	<i>414065,3</i>	<i>65,8</i>
Austria	7807	1,0	7260,9	1,2
Belgium	36398	4,7	24523,9	3,9
Denmark	46415	6,0	55651,6	8,9
Finland	43074	5,5	32652,7	5,2
France	39701	5,1	34333,2	5,5
Greece	3504	0,5	1181,7	0,2
Ireland	3869	0,5	10495,7	1,7
Italy	27407	3,5	21225,4	3,4
Luxemburg	323	0,0	1123,2	0,2
Netherlands	40923	5,3	43662,9	6,9
Portugal	3984	0,5	3151,9	0,5
Spain	18921	2,4	9916,0	1,6
UK	63237	8,1	53559,3	8,5
Germany	78201	10,0	115327,0	18,3
<i>Non-EU</i>	<i>83281</i>	<i>10,7</i>	<i>60578,4</i>	<i>9,6</i>
Cyprus and Malta	803	0,1	107,1	0,0
Norway	69866	9,0	51063,0	8,1
Switzerland	10673	1,4	9063,2	1,4
<b>Central and Eastern Europe</b>	<b>39490</b>	<b>5,1</b>	<b>35678,7</b>	<b>5,7</b>
<i>CEE accession countries</i>	<i>33281</i>	<i>4,3</i>	<i>34067,5</i>	<i>5,4</i>
Czech Republic	4234	0,5	3942,1	0,6
Estonia	5060	0,7	6168,5	1,0
Hungary	4071	0,5	2873,0	0,5
Latvia	2486	0,3	4172,4	0,7
Lithuania	2642	0,3	2614,4	0,4
Poland	12666	1,6	12533,8	2,0
Slovakia	1285	0,2	946,7	0,2
Slovenia	837	0,1	816,6	0,1
<i>Other CEE</i>	<i>6209</i>	<i>0,8</i>	<i>1611,3</i>	<i>0,3</i>
<b>North America</b>	<b>101340</b>	<b>13,0</b>	<b>33444,3</b>	<b>5,3</b>
Canada	9569	1,2	2521,7	0,4
US	91747	11,8	30903,3	4,9
<b>Asia</b>	<b>104202</b>	<b>13,4</b>	<b>71661,9</b>	<b>11,4</b>
Russia	10738	1,4	10315,8	1,6
<b>South America and the Carribean</b>	<b>14668</b>	<b>1,9</b>	<b>8979,5</b>	<b>1,4</b>
<b>Australia and Oceania</b>	<b>9662</b>	<b>1,2</b>	<b>2360,8</b>	<b>0,4</b>
<b>Africa</b>	<b>11766</b>	<b>1,5</b>	<b>2059,7</b>	<b>0,3</b>
<b>World</b>	<b>778207</b>	<b>100</b>	<b>628829</b>	<b>100</b>

Source: Statistics Sweden

countries' trade with Sweden makes up less than one per cent of total Swedish trade. Thus, in terms of volume, the CEE countries do not seem very important for Swedish trade. The trade volume is for instance about half of Swedish trade with Asia. Still, this does not mean that Swedish trade with the CEE countries may not have important economic effects.

In order to analyse the effects of Swedish trade with CEE, we need to know in what way this trade pushes the economies in terms of their specialization patterns. According to standard trade theory, net trade arises in response to differences in resources and technology. Countries tend to net export in industries in which they have comparative advantage, either based on relative abundant supplies of resources used intensively in these industries or based on relatively advanced technology. Trade in itself will contribute to a specialization of the economy towards export industries and away from import competing industries.

However, the gross trade we observe cannot be fully explained in these terms. A large part of observed trade is simultaneous exports and imports within an industry. There are several reasons why such intra-industry trade may arise. One is that firms producing differentiated products, such as cars and household appliances, often operate with increasing returns to scale and have therefore a tendency to concentrate their activities in one country, at the same time as their products may be demanded by consumers in many countries. Another reason why intra-industry trade may arise is that trade leads countries to be specialised in the production of different segments of an industry. For instance, final production and the production of components and intermediate inputs may require different types of resources; final production may be labour intensive while intermediate input production is capital intensive, or vice versa. A firm producing intermediate inputs in a relatively capital abundant country such as Sweden may decide to locate labour intensive assembly activities in a country where labour is less costly. The exports of intermediate inputs from Sweden and the imports of the final good to Sweden would then show up as intra-industry trade.

One way of studying how trade affects specialization is to construct measures of revealed comparative advantages based on industry-distributed data on trade flows.<sup>1</sup> By calculating net exports (i.e. exports minus imports) as a share of total trade in an industry (i.e. exports plus imports), we get a measure of the degree of net exports in an industry. Table 2 shows such measures of revealed comparative advantages. All figures in bold are positive numbers which are greater than 0.1. They represent instances where Sweden's net exports are greater than ten per cent of the bilateral trade in the industry. These may be considered cases where Sweden is revealed to have a comparative advantage *vis-à-vis* the trading partner. Figures in italics are numbers ranging from -0.1 to 0.1. They represent instances when the bilateral trade is relatively balanced and most of the trade is intra-industry in nature.

There are three industries in which Sweden is revealed to have a comparative advantage *vis-à-vis* essentially all of the accession countries; pulp, paper and paper products, metal products, and medical and precision instruments. In two industries, Sweden is revealed to have a comparative disadvantage *vis-à-vis* all the accession countries; mining and furniture. Sweden also seems to have a comparative disadvantage in textile and apparel *vis-à-vis* most of the countries.

This picture corresponds fairly well with what we would expect based on differences in resources and factor supply between Sweden and the accession countries. Sweden is net exporting products whose production relies on the abundant supply of forest and physical capital. It is also exporting products that are relatively advanced technologically, such as medical and pre-

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<sup>1</sup> This will only be an accurate way of measuring comparative advantages in the absence of distortions affecting trade patterns. For instance, sufficiently large export subsidies can make a country net exporter in industries in which there are comparative disadvantages. However, the trade policies pursued by Sweden and the accession countries do not appear to be very distortionary. Therefore, a measure based on actual trade flows probably gives a reasonable picture of the countries' comparative advantages.

**Table 2. Measures of revealed comparative advantage in Swedish trade with CEE accession countries**

	<b>Czech Republic</b>	<b>Estonia</b>	<b>Hungary</b>	<b>Latvia</b>
Agriculture, forestry, fishing	-0,71	-0,94	-0,71	-0,98
Mining	-0,96	-0,96	-0,96	-0,96
Food, beverages and tobacco	<b>0,35</b>	<b>0,65</b>	<b>0,35</b>	<b>0,35</b>
Textile, apparel and leather	-0,04	-0,27	-0,04	-0,15
Wood products	<b>0,62</b>	-0,67	<b>0,62</b>	-0,96
Pulp, paper and paper products	<b>0,85</b>	<b>0,17</b>	<b>0,85</b>	<b>0,91</b>
Chemical products, rubber and plastic	<b>0,46</b>	-0,01	<b>0,46</b>	-0,14
Mineral products	-0,74	-0,02	-0,74	<b>0,72</b>
Metal products	<b>0,26</b>	<b>0,23</b>	<b>0,26</b>	0,00
Transport equipment	-0,69	<i>0,10</i>	<b>0,17</b>	<b>0,76</b>
Machinery	-0,04	<i>0,01</i>	<i>0,05</i>	<b>0,65</b>
Medical, precision and optical instruments	<b>0,50</b>	<b>0,24</b>	<b>0,60</b>	<b>0,52</b>
Furniture	-0,50	-0,70	-0,45	-0,22

**Table 2. (cont.)**

	<b>Lithuania</b>	<b>Poland</b>	<b>Slovenia</b>	<b>Slovakia</b>
Agriculture, forestry, fishing	-0,85	<b>0,18</b>	-0,93	<b>0,67</b>
Mining	-0,96	-0,96	-0,96	-0,96
Food, beverages and tobacco	<b>0,29</b>	-0,29	-0,54	-0,72
Textile, apparel and leather	-0,47	<i>0,10</i>	-0,15	-0,42
Wood products	-0,70	-0,41	-0,23	-0,57
Pulp, paper and paper products	<b>0,94</b>	<b>0,72</b>	<b>0,32</b>	<b>0,34</b>
Chemical products, rubber and plastic	-0,07	<b>0,30</b>	<b>0,66</b>	<i>0,07</i>
Mineral products	<b>0,21</b>	-0,24	-0,80	-0,01
Metal products	<b>0,38</b>	<b>0,33</b>	<b>0,22</b>	<b>0,31</b>
Transport equipment	<b>0,49</b>	-0,26	-0,20	-0,75
Machinery	<b>0,65</b>	-0,12	<b>0,36</b>	<b>0,17</b>
Medical, precision and optical instruments	<b>0,45</b>	<b>0,61</b>	<b>0,85</b>	<b>0,25</b>
Furniture	-0,77	-0,72	-0,83	-0,85

Source: Statistics Sweden and own calculations.

Note: Revealed comparative advantage has been measured as Swedish net exports divided by the sum of exports and imports in the industry. Positive values greater than 0,1 are indicated in bold. Values ranging between -0.1 and 0.1 are indicated in italics.



cision instruments. The accession countries, on the other hand, are net exporters of resources such as mineral and gas and products whose production relies on relatively cheap labour, such as textiles and furniture. The picture also corresponds fairly well with what previous studies have found when analysing the CEE countries' comparative advantages *vis-à-vis* Sweden and other Western European countries. For instance, a government report on the economic effects of Eastern enlargement for Sweden (SOU 1997:156) concluded that the CEE countries tended to be primarily specialised in labour intensive production, while they tended to be net importers of knowledge and research intensive products. Similar conclusions were reached in a report about the effect of Eastern enlargement on the Swedish economy at a regional level (Eliasson et al., 1998). A recent study of the industrial structure in the accession countries concluded that these countries tend to be specialised in labour intensive industries, such as food and beverages, textile, wood products and basic metal industries, while they tend to be revealed to have comparative disadvantages in chemicals, rubber and plastic, pulp and paper, machinery, and electrical and optical equipment (Havlik, Landesmann, and Stehrer, 2002). According to this study, all accession countries have improved their comparative advantages in transport equipment, and most of them in food and beverages. Estonia and Hungary are the countries exhibiting the largest export shares in skill intensive industries. Latvia and Lithuania are the countries exhibiting the largest export shares in low skill-intensive industries.

One observation that can be made in relation to Table 2 is that most trade between Sweden and the accession countries would seem to be net trade; very few industries are characterized by a low absolute value of the measure of revealed comparative advantage. In some industries, such as food, beverages and tobacco, wood products and transport equipment, Sweden has substantial net exports to one set of countries and substantial net imports from the other set of countries.

As mentioned above, an important part of observed intra-industry trade seems to be trade in intermediate inputs within in-

dustries. Even if the share of intra-industry trade currently is small in Swedish trade with the accession countries, a further integration may very well lead to more of this type of trade because of an increase in trade in intermediate inputs.

**Table 3. Share of imported intermediate inputs in output according to the input-output table for 1995**

	<b>Imported intermediate inputs (mill. SEK)</b>	<b>Output (mill. SEK)</b>	<b>Share (per cent)</b>
Refined petroleum products, nuclear fuels	16800	23296	72.1
Textile, apparel and leather	4101	13347	30.7
Elect. and office machinery, computers, TV	28952	94680	30.6
Transport equipment	42482	140400	30.3
Chemical products, rubber and plastic	24233	94778	25.6
Machinery and equipment	25971	115967	22.4
Other manufacturing	11141	50508	22.1
Metal and metal products	31100	145509	21.4
Mineral products	2968	19649	15.1
Food, beverages and tobacco	14453	109762	13.2
Construction	17885	139162	12.9
Mining	1536	12990	11.8
Wood products	5671	49012	11.6
Pulp, paper and paper products	17137	160556	10.7
Transportation, postal and telephone service	27135	257776	10.5
Business services	24121	278829	8.7
Retail trade, hotel and restaurant	26251	332252	7.9
Electrical energy, gas, steam, water	5642	71991	7.8
Public administration	10915	149098	7.3
Agriculture, forestry, fishing	5001	69845	7.2
Other services	15503	444898	3.5
Finance and insurance	10049	434213	2.3
<i>All sectors</i>	<i>369047</i>	<i>3208518</i>	<i>11.5</i>

*Source:* Statistics Sweden and own calculations

In order to assess the current importance of intermediate inputs trade for Sweden, we examine the share of imported intermediate inputs in output in 1995, which is the latest year for which this information is available. Table 3 shows information on this share across industries based on the input-output table

for 1995. Industries have been ranked according to the value of the share of imported intermediate inputs. As is shown by the table, refined petroleum products holds an exceptional position in that the share of imported intermediate inputs is much larger than in any other industry. However, below refined petroleum products we find a group of industries with the share of imported intermediate inputs ranging between 20–30 per cent; textile, electrical and office machinery, transport equipment, chemical products, machinery, and metal products. The textile industry is interesting in the sense that a substantial part of the imports in this industry, in which Sweden is revealed to have a comparative disadvantage not only relative to the accession countries, but to other countries as well (see Ekholm, 2003), apparently is intermediate inputs used in the textile industry in Sweden. All the other industries with a high share of imported intermediate inputs are industries in which Sweden's pattern of revealed comparative advantage is more mixed. They appear to be relatively capital and/or skill intensive, but the imports of intermediate inputs may very well be relatively labour intensive components.

## **2.2 Swedish FDI in accession countries**

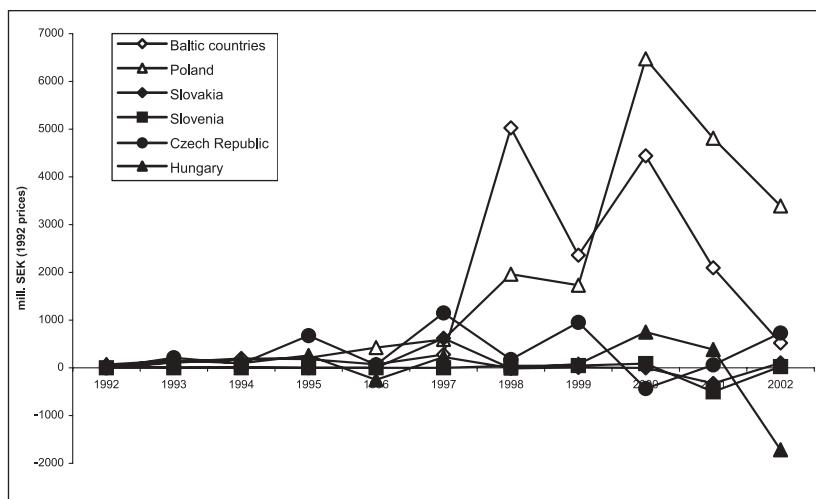
Figure 1 shows the development of Swedish foreign direct investments (FDI) in the accession countries in CEE. Foreign direct investments are those financial flows between countries that are judged to involve control over the foreign investment.<sup>2</sup> They are thus intimately associated with the expansion of multinational enterprises (MNEs). As can be seen from Figure 1, the FDI flows from Sweden to the countries in CEE were fairly small until around 1997, when they picked up considerably.<sup>3</sup> Thereafter, Swedish FDI has been primarily destined for Poland and the Baltic countries.

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<sup>2</sup> In practice, this is usually taken to be the case if the investor owns at least ten per cent of the shares of the company in which it invests.

<sup>3</sup> The instances of negative FDI flows relate to situations when the foreign affiliate is transferring funds to the Swedish parent, e.g. repayments of loans.

**Fig 1. Swedish FDI into CEE accession countries**

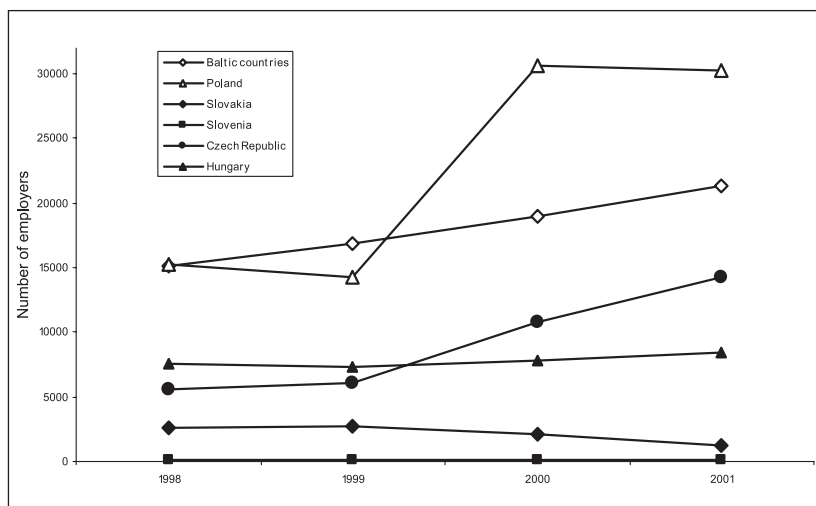


Source: Riksbanken

Because FDI is a purely financial measure, it does not always give an accurate picture of the development of the activities of MNEs. A more accurate picture is given by direct information about the MNEs' activities, such as employment and production. Such information is much harder to find, however. Figure 2 shows the employment of affiliates of Swedish MNEs in the accession countries in CEE between 1998 and 2001. The figure confirms that Poland has attracted the most affiliate activity by Swedish firms. In 2001, more than 30 000 people were employed in Polish affiliates of Swedish MNEs. That is more than double the affiliate employment in the next most important host country of Swedish MNEs in the region, which is the Czech Republic. The Baltic countries taken together were host countries of affiliates with slightly more than 20 000 employees. More than half of these were employed in Estonia.

Are these numbers large in relation to the Swedish MNEs' employment in Sweden and elsewhere? Affiliate employment in Poland makes up about 3 per cent of the Swedish MNEs' total affiliate employment. The corresponding shares for the Baltic states and the Czech Republic are 2 and 1.5 per cent,

**Fig 2. Employment in affiliates of Swedish MNEs, 1998–2001**



Source: Institutet för Tillväxtpolitiska Studier (ITPS)

respectively. When put in relation to the Swedish MNEs' total employment, i.e. including their employment in Sweden, Poland hosts about 2 per cent of employment, while the Baltic states and the Czech Republic host 1.2 and 1 per cent, respectively. Once more, this indicates that current transactions with the accession countries are fairly limited.

Table 4 gives information about the industry distribution of Swedish FDI into the CEE accession countries. Because industry-distributed information about affiliate employment is not readily available, here we rely on information about FDI to tell us about the industry composition of the Swedish MNEs' activities in the accession countries. The information given by the table is the accumulated FDI flows during the eleven-year period between 1992 and 2002.<sup>4</sup> This gives us a crude measure of the size of the accumulated investments that have taken place in the region. The penultimate column of the table shows the

<sup>4</sup> These should not be interpreted as FDI stocks, as constructing stocks would involve taking depreciation of capital and changing price levels into account.

**Table 4. Industry-distributed accumulated Swedish FDI inflows 1992–2002 (shares in per cent)**

	<b>Czech Republic</b>	<b>Estonia</b>	<b>Hungary</b>	<b>Latvia</b>	<b>Lithuania</b>
Agriculture, forestry, fishing	0	143	0	157	-1
Mining	0	0	0	0	0
Food, beverages and tobacco	162	104	-3	-11	64
Textile, apparel and leather	0	71	0	0	0
Wood products	6	0	0	0	0
Pulp, paper and paper products	612	32	29	12	75
Chemical products, rubber and plastic	45	-2	231	30	69
Mineral products	552	-24	0	-13	-3
Metal products	-29	16	31	0	0
Machinery and transport equipment	677	199	-556	122	-137
Other manufacturing	0	0	0	0	0
Electrical energy, gas, steam, water	741	68	0	3	3
Construction	1260	18	-213	97	31
Retail trade, hotel and restaurant	-2	135	50	627	388
Transportation, postal and telephone service	356	859	-252	3430	2704
Finance and insurance	98	6238	161	22	1381
Public administration	0	17	71	0	0
Other	-372	304	396	253	-88

*Note:* The table continues on the next page.

accumulated FDI flows summed over the eight accession countries in CEE. In the last column this information is used to show, in percentage terms, the share of accumulated FDI flows of each industry in the total for all industries in all eight countries.

A striking feature of the industry distribution that comes out of the last column of Table 4 is that FDI has been mainly directed to the service sector. Utilities, construction, and finance, make up about two thirds of the total accumulated FDI flows. Within the manufacturing sector, the most important industries seem to

**Table 4. (cont.)**

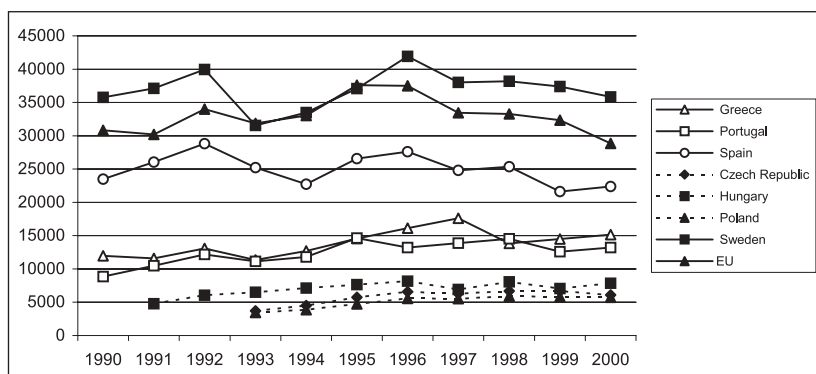
	<b>Poland</b>	<b>Slovenia</b>	<b>Slovakia</b>	<b>All CEE acc. countries</b>	<b>Industry's share of total FDI</b>
Agriculture, forestry, fishing	-35	0	0	264	0,6
Mining	0	0	0	0	0,0
Food, beverages and tobacco	559	7	0	882	2,0
Textile, apparel and leather	6	0	0	77	0,2
Wood products	9	0	0	15	0,0
Pulp, paper and paper products	1022	0	153	1 935	4,3
Chemical products, rubber and plastic	361	0	0	734	1,6
Mineral products	1010	0	26	1 548	3,5
Metal products	1639	1	-2	1 656	3,7
Machinery and transport equipments	1679	29	234	2 247	5,0
Other manufacturing	67	0	0	67	0,2
Electrical energy, gas, steam, water	5023	0	0	5 838	13,1
Construction	3550	0	0	4 743	10,7
Retail trade, hotel and restaurants	1849	0	46	3 093	6,9
Transportation, postal and telephone service	2129	-421	0	8 805	19,8
Finance and insurance	3865	0	0	11 765	26,4
Public administration	6	0	0	94	0,2
Other	158	50	52	753	1,7

be machinery and transport equipment and pulp, paper and paper products. However, these industries together make up less than 10 per cent of the total accumulated FDI flows. The Swedish FDI in the machinery and transport equipment industries may be related to vertical specialization within these industries. We saw previously that these industries have relatively high shares of imported intermediate inputs. The Swedish firms' investments in these industries may thus reflect a tendency for locating component production in low-cost locations, while keeping downstream activities at home.

## 2.3 Differences in production costs

It is a well-known fact that wage costs are substantially lower in the accession countries than in the current EU member countries. Figure 3 gives information about the development of total wage costs in a number of countries in CEE and in the EU. The three bottom curves show the development of wage costs for the Czech Republic, Hungary, and Poland. The two top curves show the wage costs for Sweden and the EU as a whole. In between these two groups with low and high wage costs, we find the Southern EU countries; Greece, Portugal, and Spain.

**Fig 3. Total compensation per employee (USD)**



Source: OECD (2000)

Based on this information, we gain confirmation of the fact that wage costs are substantially lower in the three accession countries shown in the diagram and the EU countries, especially the Northern ones. However, differences in wage costs alone do not imply that there must be strong incentives for firms located in high-wage countries to relocate to low-wage countries. We would expect that the observed differences in wage costs reflect differences in labour productivity. Differences in labour productivity, in turn, are presumably related to differences in capital intensities in production and to differences in skill levels among the workers.



Table 5 shows information about the production in different parts of Swedish MNEs in 1998. This information may tell us something about differences in productivity and skill levels between the CEE countries and other European countries. The first row gives a measure of average unit labour costs in affiliates located in CEE and Southern and Northern Europe and in the Swedish parents. From the construction of this measure, it corresponds to the share of wage costs in value added. As can be seen from the table, this value is the lowest for CEE and the highest for Sweden. The difference, however, between CEE and Southern Europe is relatively small. This suggests that production is relatively similar in CEE and Southern Europe in terms of the capital intensity and skill intensity.

**Table 5. Characteristics of foreign affiliates of Swedish Manufacturing MNEs**

	Sweden	CEE	Northern Europe	Southern Europe
Unit labour cost (wage costs in SEK per SEK value added)	0.65	0.51	0.62	0.54
Wage ratio white collar/ blue collar workers	1.69	2.12	1.62	1.99
Employment ratio white collar/ blue collar workers	0.65	0.29	0.48	0.21
Affiliate exports (share of total sales)	–	0.48	0.38	0.40
Affiliate imports of intermediates from Swedish parent (share of total sales)	–	0.16	0.10	0.02

*Source:* Braconier and Ekholm (2002).

The second row of Table 5 shows a crude measure of skill abundance in the different European regions based on information about foreign affiliates of Swedish MNEs in . It shows the average wage ratio between white-collar and blue-collar workers in these affiliates. A relatively high wage ratio would indicate a relative scarcity of white-collar workers, which to the extent that white-collar workers can be associated with relatively high-skilled workers would also indicate a relative

scarcity of skills.<sup>5</sup> The average wage ratio is about two for both CEE and Southern Europe, defined as Greece, Portugal, Spain, and Turkey, while it is around 1.6–1.7 for Sweden and other Northern European countries, defined as all other European countries except Greece, Portugal, Spain, and Turkey. According to this measure, then, CEE looks more similar to the Southern European countries than to the Northern European countries in terms of their skill abundance.

The third row of Table 5 shows the ratio between white and blue-collar workers, thus giving information about factor intensities in production. This ratio is the lowest for affiliates in Southern Europe and highest for the Swedish parents. The latter is likely to be partly a reflection of headquarter activities being relatively intensive in white-collar workers. The ratio of white-collar to blue-collar workers is somewhat higher for affiliates in CEE than in Southern Europe, but substantially lower than for affiliates located in Northern Europe. Once more, this suggests that production techniques are relatively similar in CEE and Southern Europe, but relatively different from the ones in Sweden and Northern Europe.

## 2.4 Summary

This section has shown that Sweden's trade and investment relations with the accession countries currently constitute a small part of Sweden's overall international transactions. It has described the net export pattern and the pattern of Swedish FDI in the accession countries across industries. Moreover, it has shown that there are large differences between the CEE countries and the high-wage countries in the EU with respect to labour costs and that these differences are reflected in large

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<sup>5</sup> Obviously, the distinction between white-collar and blue-collar workers is not tantamount to a distinction between high-skilled and low-skilled workers, since there are many low-skilled white-collar workers and high-skilled blue-collar workers. However, on average white-collar workers tend to have longer education than blue-collar workers (see e.g. Berman, Bound, and Griliches, 1994).

differences in skill abundance and skill intensity between these regions. The difference in these respects between the CEE countries and the Southern EU countries, on the other hand, seem to be relatively small.

### **3 ECONOMIC CONSEQUENCES OF INCREASED TRADE**

In this section we shall discuss the likely effects of trade between the accession countries and the EU countries. To begin with we shall discuss how this trade may affect the industrial structure in both sets of countries. It is well known from the theory of international trade that while trade according to comparative advantage generates gains for the society as a whole, certain groups with their incomes mainly from import competing industries may lose. In the case of trade between CEE and EU it is evident that one group potentially hurt is relatively low-skilled labour. Therefore, we also discuss the evidence available on effects of trade on employment and wages of low-skilled labour. Finally, we discuss what type of welfare effects are likely to arise from trade between CEE and EU.

#### **3.1 Effects on industrial structure**

Increased trade generates scope for increased specialization both between and within industries. The tendency for the accession countries in CEE to be specialised in industries such as textiles and apparel can be seen as reflecting comparative advantages in labour intensive industries. With increased trade, such inter-industry specialization patterns are likely to be reinforced. At the same time, we would expect increased trade to also lead to increased specialization in activities within industries that reflect the countries' comparative advantages.

When the entire process of producing a final good involves several different activities, such as conducting research and development, producing intermediate inputs, and assemble inputs into final products, there may be benefits from locating these different activities in different countries. Assembly activities are typically relatively labour intensive, and it may therefore be advantageous for a firm to carry out such activities in countries in which labour is cheap. Similarly, the production of labour intensive intermediate inputs will be produced more cheaply in low-wage countries, and therefore it may be

advantageous for a firm to outsource this activity to a foreign firm or, possibly, to carry out the activity in a foreign subsidiary. It has been estimated that about half of the increase in trade between the OECD countries the last couple of decades is related to this type of fragmentation of production (see Yi, 2001).

The evidence on the bilateral pattern of trade and FDI suggests that production networks of this kind typically involve countries located in geographical proximity to one another. So-called gravity analyses of trade show that, all else being equal, countries trade more with countries located close by than with countries located far away. Similar type of analyses carried out for FDI reveal the same type of pattern: all else being equal, countries invest more in countries located close by than in countries located far away (e.g. Ekholm, 1998, Shatz and Venables, 2000). This means that it seems likely that the Baltic States and Poland could be prime targets for firms based in Sweden and Finland looking for low-wage sites for part of their production processes. Countries such as Germany and Austria may be more prone to invest in countries such as the Czech Republic and Hungary. Kaminski and Smarzynska (2001) provide evidence that FDI inflows in Poland have contributed to an increased participation in these types of global production and distribution networks.

It seems reasonable to expect that increased trade between Sweden and the accession countries is going to contribute to a further specialization in skill and knowledge intensive industries and segments of industries and a further movement away from production in labour intensive industries and segments of industries. Which regions in Sweden are likely to be the most affected by this? The previously mentioned report on the effect of Eastern enlargement on the Swedish economy from a regional perspective (Eliasson et al., 1998) shows that Southern and Central Sweden had large employment shares in labour intensive industry in 1995. In particular, this was true for regions located in Småland and Bergslagen. The report also argued that small regions tend to be more specialised in labour intensive industries than large regions, resulting in a pattern

where some small regions are very dependent on labour intensive industries for local employment. The opposite pattern is found for knowledge and research intensive industries. These industries are typically found in relatively large regions, such as regions close to the major cities Stockholm and Gothenburg and to the university towns Uppsala, Lund, and Linköping.

Another relevant question is whether accession is going to affect firms differently depending on their size. It may be easier for large firms to exploit the opportunities of improved access to the accession countries' markets and of outsourcing labour-intensive stages of production. Small and medium-sized enterprises (SMEs) may find it more difficult to reap the benefits of accession, being affected mainly through increased competition from producers in CEE. A study by the Rheinisch-Westfälisches Institut für Wirtschaftsforschung (RWI, 2000) concluded that SMEs in the EU would not be affected strongly by enlargement, except possibly medium-sized firms located in regions bordering the accession countries.

It is apparent that compared to many other countries, a relatively large share of the population in many of the countries in CEE have long formal educations. In this respect, these countries have potentially comparative advantages in skill-intensive production. However, as the previous section has shown, at present the CEE countries appear to be no more skill abundant than the Southern European countries. Moreover, the transition process led initially to a dramatic fall in employment in several of the accession countries (see Commission of the European Communities, 2003). Even if employment levels have recovered somewhat, unemployment is still relatively high. High levels of unemployment should put a cap on wage increases, keeping labour costs relatively low. Thus, in the foreseeable future, it seems unlikely that increased trade would drive specialization away from industries and segments of industries that are intensive in low-skilled labour in the CEE countries.

An issue related to the effects of trade integration on patterns of specialization is the effect of trade integration on firm and in-

dustry location. In industries characterised by increasing returns to scale it may be advantageous for firms to locate in regions with good market access. The reason for this is that if trade is costly and the firm wants to derive economies of scale by concentrating production in a single production unit, total trade costs will be minimized if the firm locates its single plant in the market with best access to consumers. Regions with good market access tend to be regions with large domestic markets and/or a central location *vis-à-vis* other regions with large domestic markets. Thus, in industries with increasing returns to scale we would expect a tendency for firms to cluster in core regions and a tendency for peripheral regions to be at a disadvantage in producing such goods.

It is not completely clear how trade integration in the form of a lowering of trade costs is likely to affect industrial location. In order for the firm to gain from locating where market access is good, trade has to be costly. On the other hand, if trade costs are very high, firms will only sell to domestic consumers and then a high degree of local competition will be a factor that might lead firms to stay away from core regions, since these regions have not only a large number of consumers but also a large number of producers. The theoretical literature on trade integration and industrial location suggests that it is primarily at intermediate levels of trade costs that the attraction of core regions is strong (see e.g. Fujita, Krugman, and Venables, 1999). A consequence of this attraction is a tendency for real wages to be higher in the core than in the periphery. Lower real wages in the accession countries as well as in a country such as Sweden compared to the European core might thus simply reflect a less advantageous geographical location, and might be needed in order to induce firms to remain in the region.

Not every industry is likely to be strongly affected by the benefits of having good market access. It is crucial that the economies of scale are such that the firm chooses to carry out its operations in one or a few plants. In some industries, economies of scale at plant level are relatively weak and firms typically operate many plants in different locations. Moreover,

market access is only important if you are producing final goods or inputs potentially bought by many different customers. If the industry is fragmented so that inputs of a specific firm may be produced in one place, whereas the production of the final product takes place in another, the production of final products may very well be attracted to the core, while intermediate inputs production takes place in the periphery.

Whereas there is a considerable literature analysing the theoretical implications of trade integration on industrial location, there is very little empirical evidence to draw on. One study analysing how the location of European industries has evolved in the face of European integration finds very mixed evidence for different industries (Midelfart-Knarvik, Overman, Redding, and Venables, 2002). Some industries seem to have become more concentrated, some more dispersed, while yet some others do not seem to have changed at all. Although countries and regions have become more specialised within the EU, this process has been very slow. There is no evidence of polarisation occurring at the national level, meaning increasing differences in the extent of economic activities, but there is some evidence at the regional level, implying that some regions are in fact losing out (see also Midelfart-Knarvik and Overman, 2002). However the changes, in those cases where there are changes, seem to be very slow.

Thus, the fear that increased trade integration with low-wage countries in CEE will produce drastic changes in the location of industries might not be justified. On the other hand, European integration has not involved countries with such low wages before, so it may very well be the case that there is much greater scope for a relocation of labour intensive industries and segments of industries to the new member countries. Within the group of new member countries, the Baltic States may be at a certain disadvantage compared to countries such as Poland, Hungary and the Czech Republic on account of their more peripheral location. Still, the Baltic States are conveniently located for participation in production networks involving Scandinavian firms.



### 3.2 Effects on labour markets

According to basic trade theory, increased trade between a low-wage region and a high-wage region will lead to an upward pressure on wages in the former and a downward pressure on wages in the latter. However, theory cannot tell us anything about the expected magnitude of these effects. A number of studies have been carried out trying to estimate the effect of import competition from low-wage countries on the relative wage between skilled and unskilled workers in the US and high-wage countries in Europe (e.g. Berman et al., 1994, Feenstra and Hanson, 1996, 1999, Haskel and Slaughter, 1999, Hansson, 2000). Most of these studies conclude that while increased import competition seems to reduce the relative demand for unskilled workers, thus leading to a downward pressure on their relative wage, the effect is quantitatively small. For instance, Hansson (2000) estimates the effect of the average annual change in import competition from non-OECD countries on the employment share of skilled workers in Swedish manufacturing. His data cover the time period 1970 to 1993. The effect that he estimates is statistically significant, but the increase in imports from non-OECD countries during this period only explains about five per cent of the increase in the share of skilled workers. The main part of the increase in the share of skilled workers is explained by accumulation of physical capital and knowledge through investments in research and development.

A reason why the effect of increased import competition from low-wage countries may be small is that it may lead to reallocations of resources within the economy without factor prices ever being greatly affected. For instance, workers that become laid-off as a consequence of increased foreign competition in some sectors of the economy may be employed elsewhere at similar wage levels. The easier it is for workers to move between sectors, the smaller the costs we would expect in terms of temporary unemployment and reduced real wages.

### 3.3 Welfare effects

Increased trade between the accession countries and the EU will facilitate specialization according to comparative advantages and thereby generate economic gains for the countries involved. The economic gains arrive in the form of a better utilization of given resources and thereby increased consumption possibilities for consumers. It is important to understand that the low wages in the candidate countries form the basis for the comparative advantages in these industries. With economic growth and the accumulation of capital, relative wage costs will start to increase and the comparative advantages of the region will shift towards more capital intensive industries. This is more or less what happened in the Southeast Asian countries, Hong Kong, Singapore, South Korea, and Taiwan, as they went through the transition from being low-income to becoming high- or middle-income countries. Specialization in industries with relatively low value added per employee should not be seen as an indication of poor economic performance, but as a way to get the most from available resources and thereby to create the best opportunity for future accumulation of physical and human capital; resources needed in order to specialise in industries with high value added per employee.

Fragmentation of production within industries creates similar types of economic gains, such as specialisation according to comparative advantages; a better utilization of resources and increased consumption possibilities. Whereas inter-industry specialisation tends to reinforce structural differences between the economies, fragmentation of production may mitigate them in the sense of making countries more diverse, participating in the production of all industries. With a fragmentation of production countries specialise in different segments of the industries, but if there is an adverse shock to any industry, it will affect all the countries participating in the production network. This feature of fragmentation of production provides a possible reason why trade integration seems to be helpful rather than detrimental when it comes to synchronising the business cycle (e.g. Frankel and Rose, 1998). This means that, if and when the

accession countries eventually adopt the euro, a fragmentation of production may have contributed to making the business cycle of these countries more aligned with that of the other euro countries, making the loss of an independent monetary policy less costly.

### **3.4 Summary**

This section has dealt with the likely consequences of increased trade between the accession countries and EU. It has been argued that, at least in the short run, trade is likely to lead to increased specialization in relatively low-skill intensive activities in the accession countries and relatively skill-intensive activities in Northern European countries, such as Sweden. However, although the outcome is likely to be a shift away from low-skill intensive activities in the Northern European countries, previous studies suggest that the effects on relative wages of skilled and unskilled workers will be small.

## **4 ECONOMIC CONSEQUENCES OF FDI**

Accession to the EU will most likely increase inward FDI in the accession countries. Previous rounds of enlargement seem to have induced foreign investment in the new members (see e.g. Baldwin, Francois, and Portes, 1997). Moreover, empirical studies of the determinants of inward FDI show that improved market access and a stable institutional environment tends to promote inward FDI. For the accession countries, these investments may come not only from Western Europe but from investing countries outside Europe as well, perhaps most notably the US. This section deals with the likely consequences of an increase in inward FDI in the accession countries. It discusses the consequences for industrial structure and industry location, for the extent to which new technology may spread to the accession countries, and for the labour markets in the current EU member states. Finally, the welfare effects of increased FDI from the EU to the accession countries are considered.

### **4.1 Effects on industrial structure and industry location**

A common feature of low-wage, or low-income, countries is that in the absence of capital movements the limited scope for domestic savings would severely restrict domestic investment. In this sense, foreign capital is instrumental in increasing the pace at which capital accumulation takes place in such countries. Furthermore, low-wage countries are usually scarce in technological knowledge. FDI is associated not only with a financial investment flow, but also with a foreign firm keeping control over the investment project, thereby being able to apply its technology to the project. Thus, an increased inflow of FDI will be very important for industrial development and industrial restructuring in the accession countries.

There are two main reasons as to why the incentives for foreign firms to invest in the accession countries are likely to increase with accession. To begin with, a membership will improve the prospects for high economic growth and a stable development

in these countries. This means that the incentives to invest in order to get better access to a growing market in the accession countries will increase. Furthermore, the improved access to the EU market combined with the low wages will make the accession countries a more attractive location for production for the Western European market. This means that the incentives to invest in order to lower the costs of producing goods for the markets in the current EU members will also increase.

FDI in production intended for exports is sometimes referred to as export-platform FDI. The recent development in Ireland is to a large extent based on such FDI. In particular, US firms have invested heavily in production of goods that are mainly sold outside Ireland itself (e.g. Barry, 1999). The available evidence on FDI in the accession countries during the late 1990s suggests a strong emphasis on export production. Referring back to Table 5, which shows information about the activities of Swedish MNEs in 1998, we see that affiliates located in CEE, on average, has a higher export share than affiliates located in Northern and Southern Europe (48 per cent compared to 38 and 40 per cent, respectively). Marin et al. (2003) report a similar emphasis on export production of affiliates of German firms in CEE, in particular for those located in the Baltic States and the Slovakia.

How would increased export-platform FDI in the accession countries affect the industrial structure of the current EU members? There will be some relocation of activities from the current member states. At the same time, however, the lowering of production costs associated with such relocation will increase the competitiveness of Western European firms. This means that the activities that remain in the home countries may very well expand as a consequence. Referring once more to Table 5, we see from the last row that the affiliates located in CEE had, on average, a substantially larger share of imported intermediate inputs from the Swedish parents than affiliates located in Northern and Southern Europe (16 per cent compared to 10 and 2 per cent, respectively). Thus, in 1998, the affiliates in CEE were very much integrated with their Swedish parents in terms

of intra-firm trade flows, suggesting that an expansion of output in the affiliates would bring with it an expansion of intermediate input production by the parents.

## 4.2 Effects on technology diffusion

An important potential positive effect of FDI for the host country is improved access to technology. We would expect that a precondition for a foreign firm to be able to establish production in a host country would be that it has access to superior technology compared to potential local investors.<sup>6</sup> Assuming that technology is transferred from the parent company to the foreign affiliate, inward FDI would lead the host country to produce with better technology than it would have without the FDI. This implies higher productivity of factors employed by the foreign affiliate than they would have had otherwise. Moreover, the superior technology of foreign firms might spill over to domestic firms, leading to higher productivity of factors employed in domestic firms as well.

One way of studying whether there is evidence of technology transfer is to examine whether foreign affiliates of MNEs tend to be more productive than domestic firms. Several studies have shown that productivity is indeed higher in foreign-owned firms and that wages paid by foreign-owned firms are typically higher than wages paid by domestic firms (Aitken and Harrison, 1999, Aitken, Harrison, and Lipsey, 1996). The difference in productivity and wages between foreign-owned and domestically owned firms would seem to be explained mainly by the fact that foreign-owned firms typically differ from domestic-owned ones along a number of dimensions. For instance, they are typically larger and more capital intensive than their domestic counterparts (Globerman et al., 1994, Howenstine and Zeile, 1994, Feliciano and Lipsey, 1999). It may even be the case that being multinational *per se* is associated with paying higher

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<sup>6</sup> This is one of the ideas underlying the so-called OLI framework, developed by John Dunning (1977), for analysing FDI. For an account of this approach, see e.g. Markusen (2002).

wages. Doms and Jensen (1998), controlling for other factors, find that multinational establishments, be they foreign or domestically owned, pay higher wages than purely domestic ones.<sup>7</sup> Taken together, there is thus evidence that MNEs have technology superior to domestic firms and that their superior technology is at least partly transferred to their foreign affiliates.

A number of studies have tried to assess whether labour productivity is also increased through spillovers. However, the evidence regarding this issue is rather mixed. A number of early studies concluded that there was substantial evidence of spillovers, whereas a number of studies conducted in the 1990s, using more detailed data and more sophisticated econometric techniques, concluded that there was no such evidence. In fact, an influential study found that the presence of MNEs tended to reduce productivity of local firms (Aitken and Harrison, 1999). A possible interpretation of this result is that the MNEs pushed local firms into less profitable segments of the market, which then had a negative effect on measured productivity.

A recent study of spillovers based on Romanian data find evidence of positive intrasectoral spillovers resulting from fully-owned foreign affiliates, but not from projects with joint domestic and foreign ownership (Smarzynska and Spatareanu, 2003). The presence of partially foreign-owned firms seems to increase productivity of domestic firms in upstream industries, suggesting that domestic suppliers benefit from contacts with MNEs acting as customers. However, the opposite holds for fully-owned foreign affiliates, which appear to have a negative effect on domestic firms in upstream industries. A possible interpretation of these results is that fully-owned foreign subsidiaries are less likely to source locally than jointly-owned firms.

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<sup>7</sup> Wages may be higher in foreign-owned firms either because productivity is higher or because the firms are more profitable and profits are to some extent shared with the employees in the form of higher wages (see Budd and Slaughter, 2002).

### 4.3 Effects on labour markets

The aspect of FDI that perhaps creates the strongest worry among the current EU members concerning FDI from the EU to the accession countries is the potential effect on the labour markets in the current member states. Investments made in the accession countries are potentially investments not made in the EU countries, thus implying a negative effect on capital accumulation and eventually on real wages. Whenever a firm decides to relocate activities from Western Europe to CEE, the immediate effect is laid off workers in Western Europe. However, in order to assess the effect on labour demand of FDI from EU to the accession countries we need to be careful about what is the relevant counterfactual. In many cases, the relevant alternative to investing in a country in the CEE region may not be investing in a high-wage country in Western Europe. It may be investing in another low-wage country or, possibly, to go out of business.

When a firm invests in a low-wage country, it is able to reduce per unit costs so that, for instance, skill-intensive headquarters are located in the home country whereas less skill-intensive production plants are located in the low-wage country. There are two effects from this. First, there will be a relocation of production activities from the high-wage country to the low-wage country. Second, the reduction in per unit production costs will make the firm more competitive, which will enable the firm to capture a larger market share and expand its overall activities. Since the increase in home country employment resulting from the increase in firm competitiveness is likely to involve more highly skilled labour than the labour originally employed in the relocated activities, both effects are likely to contribute to an increase in the relative demand for skilled labour as opposed to unskilled labour. The long-run effect is therefore to shift the demand for labour towards skilled labour and to put upward pressure on the relative wage between skilled and unskilled labour in the home country.

In the low-wage host country, the effect may also be to increase



the relative demand for skilled labour. Even if the activity that is relocated from the high-wage country is relatively intensive in unskilled labour from the perspective of the home country, it may still be relatively intensive in skilled labour from the perspective of the host country. That is, it may be skill-intensive relative to other sectors in the host country. This means that an increased specialization in affiliate production might lead to an increase in the relative demand for skilled labour in the host countries as well (Feenstra and Hanson, 1996, 1999).

The short-run effect on the labour market in the home country is less clear. This effect, defined as the change in the demand for labour of the parent firm, will depend on whether the negative effect on employment from a relocation of activities outweighs the positive effect on employment from increased competitiveness.

Slaughter (2000) examines whether a foreign expansion by US MNEs has contributed to an increase in the relative demand for skilled labour in the US. He finds basically no such effect. However, in a similar study based on Swedish data, Hansson (2001) finds some evidence that a foreign expansion in non-OECD economies has led to an increase in the relative demand for skilled labour in Sweden. This effect does not appear to be very strong, however. Still, the result suggests that FDI from high-wage countries to low-wage countries does affect the relative demand for skilled labour in the home country in the direction we would expect.

A number of studies have investigated the short-run effect of FDI on parent employment. Based on data on US multinationals, Brainard and Riker (1997a, b) find a substitution relationship between employees in similar locations (e.g. high wage countries). This is consistent with the view that similar countries tend to be viewed as alternative locations for the same type of activity by the MNEs. However, the relationship between employees in different locations seems to be mainly complementary, meaning that an expansion of employment in affiliates in low-wage countries tends to lead to increased

employment in the parent company and affiliates located in other high-wage countries. Thus, based on this result we would expect a positive effect on parent company employment of an expansion of activities in the accession countries in CEE.

Braconier and Ekholm (2000) carry out a similar study based on Swedish data covering the period 1970–1998. They find weak evidence that an expansion of affiliate activities in high-wage countries has a negative effect on parent employment in Sweden. With respect to an expansion of activities in low-wage countries, they do not find any effect at all. Moreover, Konings and Murphy (2001), who use data on a large number of European MNEs, find very little evidence of employment shifting between low-wage and high-wage countries. Thus, the available evidence suggests that the competition effect of an expansion in low-wage countries tends to outweigh the relocation effect, so that employment is more likely to increase than decrease from such an expansion.

Whether FDI from the EU to the accession countries is going to involve strong relocation effects depends crucially on the type of activities the firms decide to locate in the accession countries. As was argued in section 2, production costs are currently likely to be lower in CEE for relatively labour-intensive activities rather than for skill-intensive or knowledge intensive activities. Thus, we would primarily expect a relocation of relatively labour-intensive activities from Western Europe, at least in the short-run. This means that labour-intensive industries in the high-wage countries in Northern Europe might be especially affected along with the countries in Southern Europe, which in the past have constituted the low-wage region in Europe.

There are a few studies that attempt to carry out explicit analyses of the effect of FDI in CEE on employment in Western Europe. These studies focus only on employment effects within firms and do not take into account how overall employment levels are affected when laid off workers eventually become employed elsewhere in the economy. Konings and Murphy

(2001) examine whether labour employed in CEE tend to be price substitutes or price complements to labour employed in the parents (which were all located in Western Europe). That is, they analyze whether an increase in wage costs in CEE leads to an increase or decrease in parent employment. If it leads to increased parent employment, parent and affiliate employees are said to be price substitutes (the firm substitutes parent employees for affiliate employees in CEE as they become more expensive). If it leads to decreased parent employment, on the other hand, parent and affiliate employees are said to be price complements (the reduction in the number of workers in the affiliate in CEE leads to a reduction in the number of workers in the parent as well). For firms operating in the manufacturing sector they find evidence of neither, suggesting that parent employment in this sector is unaffected by the wage level in CEE. However, for firms operating in some service sectors, such as wholesale trade and construction, labour employed in CEE and labour employed in the parent companies seem to be price substitutes (i.e. a wage increase in CEE has a positive effect on employment in the parent company).

Braconier and Ekholm (2002) find some evidence that an expansion of Swedish MNEs' activities in CEE has led to a reduction in their employment in the Southern European countries, Spain, Portugal, Greece, and Turkey. They base their analysis on information about foreign producing affiliates of Swedish manufacturing MNEs in 1990, 1994 and 1998. Table 6 reproduces some of the results from that study. The top part of the table reports average changes in employment in different locations according to whether the firms expanded in the CEE region during the time period studied or not. According to the table, average employment in all non-CEE locations decreased over the period studied. However, in all three regions, the decrease was substantially larger in firms that simultaneously expanded in CEE.

The total reduction in employment in Sweden, Western Europe and Southern Europe 1990–1998 by firms expanding in CEE was around 50 000. Around 32 500 (65 per cent) of this re-

**Table 6. Mean Changes in MNE Employment and Exposure to Relocation in Different Regions**

	<b>Sweden</b>	<b>Northern Europe</b>	<b>Southern Europe</b>
Expansion in CEE	-1103	-498	-541
Non-expansion in CEE	-216	-124	-109
Share of relocation	0.65	0.24	0.11
Share of employment 1990	0.54	0.42	0.03
Exposure to relocation	1.20	0.57	3.67

*Source:* Braconier and Ekholm (2002).

duction can be attributed to employment in Sweden, whereas around 12 000 (24 per cent) and 5 500 (11 per cent) can be attributed to employment in Northern and Southern Europe, respectively. By comparing each region's share of this employment reduction with its share of MNE employment in 1990, Braconier and Ekholm define a measure of the exposure to relocation due to an expansion in CEE. This measure is shown in the lower part of Table 6. According to this measure, an employee in Southern Europe was three times as likely to be replaced by workers in CEE as a Swedish employee and six times as likely as a Western European employee. On the basis of this analysis, Braconier and Ekholm conclude that the countries in Southern Europe were the ones most strongly affected by the expansion of employment in CEE during the period 1990–1998.

Neither the study by Murphy and Konings (2001), nor the study by Braconier and Ekholm (2002), thus support the idea that a closer integration between Western and Eastern Europe poses a large threat to workers in the high-wage countries in Western Europe. However, the results presented by Braconier and Ekholm (2002) suggest that it might affect workers in the Southern European countries negatively in the short run. Still, it should be kept in mind that these studies are based on a rather narrow view of the labour market effects of FDI; focusing exclusively on the effects at the level of the individual MNE. In order to assess the economic consequences, it would be

desirable to know something about what happens to workers that are laid off as a consequence of a relocation of activities. At present, however, there are no studies examining the labour market effects from this perspective.

#### **4.5 Welfare implications**

For the accession countries, an inflow of FDI should be associated with welfare gains. In some sectors, FDI may be the only way of getting access to advanced technology. Therefore, in these sectors it will be crucial for increasing productivity. Moreover, there may be productivity spillovers on domestic firms, although this is not really needed in order to ensure welfare gains from FDI.

For the current EU members, FDI from EU to the accession countries should also generate welfare gains. FDI will occur if it leads to an increase in the expected profit of the investing firm. Ultimately, a higher profit benefits the owners of the firm. To the extent that they are mainly found in the home country of the firm, it will increase incomes in that country. Only in the case where FDI in the accession countries would lead to a relocation of activities that generate positive externalities for the home country would we expect a counteracting negative effect. This might for instance be the case if the FDI led to a relocation of research and development (R&D), which is thought to have special positive effects for the country hosting such activities. However, it seems unlikely that FDI in the accession countries will lead to substantial relocations of R&D activities. Therefore, the welfare effects are expected to be positive for the current EU members.

#### **4.6 Summary**

This section has discussed the expected consequences of increased FDI in the accession countries. We expect an increase in FDI motivated by the desire to get better access to expanding markets in the accession countries themselves and an increase in FDI motivated by the desire to produce more cheaply for the

large consumer markets in the current EU countries. The accession countries are likely to benefit from this through the superior technology brought by foreign firms and, possibly, through productivity spillovers on domestic firms.

Increased FDI from the current members to the accession countries is sometimes thought to hurt the former countries through reduced employment and lower real wages. The empirical evidence on the labour market effects of FDI gives very little support for this view. If anything, it seems as if FDI in low-wage countries tends to increase employment in the parent firms and to alter the composition of labour demand towards more skilled labour. The current member countries are likely to benefit from FDI in the accession countries through increased profits made by the firms.

## **5 LABOUR MIGRATION AND INDUSTRY STRUCTURE**

One obvious potential impact of the enlargement is to create migration flows from the accession countries to the current member states. The current wage differentials are likely to be somewhat mitigated by net inflows of capital to the accession countries and the increased specialization according to comparative advantages. However, most assessments of the potential for reduced wage differentials end up with the conclusion that substantial differentials are likely to remain by 2010, when restrictions on immigration from the accession countries are supposed to be removed. Boeri and Brücker (2001) estimate that the long-run effect is migration of about 4 million people from the accession and candidate countries in CEE to current EU members. This effect is estimated to be reached within about 30 year. The immediate effect is estimated to be an increase in the net immigration inflows in the EU by about 335 000 individuals per year. In their analysis, Austria and Germany are expected to be affected the most by these immigration inflows. Still, according to Boeri and Brücker, wages and employment are not likely to be affected very much even in these countries.

This conclusion may be surprising from the point of view of that a substantial change in the supply is usually expected to have an effect on the price. However, it echoes the results from many studies of wage effects of labour immigration where substantial immigration is found to have only negligible effects in wages (see Boeri, Hanson, and McCormick, 2002). One reason for this can be found in the internationalization of the economy. In sectors that are competitive and in which firms take prices as given by world market prices, there will be no scope for changes in any factor prices. A large inflow of labour will lead to a tendency for reduced wages and increased profitability in labour-intensive sectors. However, with competitive markets this will induce more entry of firms into these sectors and, in the long run, the wage level will remain the same. The only change in the economy will be a changed industrial structure.

There will be an expansion of labour intensive industries and a contraction of other sectors.

However, not all sectors of the economy may be characterized as competitive and as having given world market prices. In particular, in industries producing non-traded goods and services, labour migration might affect wage levels in a more direct way. Several service industries such as construction and household services already seem affected by an increased supply of workers from the CEE. Since most of these workers are currently supplying their labour illegally, it is difficult to assess the impact on wages. When the accession countries become full members in the EU, these workers will be able to supply their labour legally (at least in the countries that have chosen not to exploit the possibility of temporary restrictions on immigration from the accession countries). It seems likely that this will lead to a stronger downward pressure on wages in these sectors compared to the current situation. At the same time, there are potential large benefits from this for the consumers. A lowering of wage costs is likely to be largely passed on to consumers by lowered prices.



## **6 REGIONAL POLICY IN EUROPE AND EU ENLARGEMENT**

In addressing the likely consequences of EU enlargement on the industrial structure in Europe it is important to discuss how regional policies are likely to affect the outcome. One worry sometimes raised is that the need for subsidies related to the European Structural Funds by the accession countries is going to crowd out similar needs by peripheral regions in the current EU members. The fact that these subsidies are given in a way that requires the national governments to pledge resources of similar magnitude should prevent a scenario where increased funding of the new member countries completely crowds out funding of regions within current member states. Still, it seems reasonable to expect that there will be some shift of resources away from current recipients of regional subsidies at the EU level.

There are only a few studies of how regional policies at the EU level have affected industrial structure and industry location up to now. One of the few studies is a paper by Midelfart-Knarvik and Overman (2002). They find that national state aid to industry is very inefficient in attracting economic activity and employment. This means that such policies seem to have little effect, either for good or bad, in terms of the location pattern. However, it does seem to be a waste of tax revenues. European Structural Funds expenditure, by contrast, seems to have an effect on the location of industry, notably by attracting industries that are R&D intensive. A problem with these policies is that they seem to have mostly been acting counter to the countries' comparative advantage. R&D intensive industries have been encouraged by these aids to locate in countries and regions that have relatively small endowments of skilled labour. Midelfart-Knarvik and Overman find that only in Ireland, where Structural Funds reinforced rather than offset comparative advantage, have poor regions been enabled systematically to catch up with the EU average.

One potential implication of this, for the case of shifting funds from current EU members to the new ones, is that it may con-

tribute to an even less efficient location of R&D intensive industry, as these countries may be even scarcer in skilled labour than the ones presently receiving aid. From an efficiency point of view, the current design of the European structural policy does not seem to be very well thought out. To a large extent, however, the outcome of this policy simply reflects the priorities of the national governments. Of course, regional policies may have other objectives than to improve economic efficiency. Still, even taking into account that, ultimately, the main objective of the Structural Funds may be to promote cohesion, one might argue that radical reform is called for (see Tarschys, 2003).

Another area in which enlargement is likely to involve a shift of funds is the Common Agricultural Policy (CAP). This raises the important issue how enlargement is likely to affect the agricultural sector in the current member countries. However, to analyse this issue would require a careful study of CAP and is beyond the scope of this study.

## 7 TAX AND REGULATION COMPETITION

One issue that is often raised in relation to increased economic integration is whether a high level of mobility of firms and capital is likely to lead governments to compete for investments by offering an advantageous business environment. In such a process, governments may lower corporate taxes and relax regulations concerning labour standards and environment protection more than is socially desirable. Another way of expressing this is to say that the competition for investments might lead to a “race to the bottom”, where governments try to outperform each other by lowering taxes and relaxing regulations in a downward spiral until they perhaps become abolished completely. This would be a socially inefficient outcome, but one that might be difficult to avoid without some policy coordination at the supra-national level. The efforts by the EU to create common standards in some areas may partly reflect this kind of concern. The accession countries will have to comply with a number of requirements concerning environmental regulations, health and safety and working conditions in order to get full access to the Single Market. In the short run, this is going to increase relative costs for the accession countries, thereby making them less competitive *vis-à-vis* the current member states.

Although the idea of firm mobility leading to a “race to the bottom” has intuitive appeal, there is in fact relatively weak empirical support for such a mechanism. There are very few systematic studies of the impact of regulations such as labour and environmental standards on investment decisions of firms. Smarzynska and Wei (2001) study whether there is evidence supporting the so-called “pollution haven” hypothesis, referring to the possibility that MNEs operating in highly polluting activities relocate to countries with weaker environmental standards. They use a firm-level data set on investment projects in 24 transition economies, including the accession countries. The analysis gives some support for the “pollution haven” hypothesis, but evidence is weak and does not survive robustness checks.

A number of studies have tried to analyse empirically to what extent MNEs respond to differentials in corporate taxes in their location decisions (see e.g. the survey by Devereaux and Griffith, 2003). Most of these studies find only limited effects of tax differentials on investment behaviour, although there is some evidence suggesting that US MNEs may recently have become more responsive to such differentials (Altshuler et al. 2001).

There are several reasons why the effects may be small. One is that, to some extent, an MNE may be able to transfer profits to low-tax locations through so-called transfer pricing. The MNE would then set prices for intra-firm trade flows that lead to over-invoicing of intra-firm exports from a low-tax to a high-tax location and to under-invoicing of intra-firm exports from a high-tax to a low-tax location. That way, profits would tend to be high in low-tax locations and low in high-tax location. That intra-firm trade flows between high and low-tax locations exhibit this pattern has been shown in a number of studies (see e.g. Clausing, 2002). If transfer pricing can be used to transfer profits, in theory, it would suffice for an MNE to have one affiliate in a low-tax location in order to minimize its overall taxes. In practice, however, there are limits to the extent to which transfer pricing can be used. Nevertheless, the possibility to shift profits implies that the incentives for MNE to locate real activities in low-tax locations may be rather weak.

Even if the practice of transfer pricing may prevent high-tax locations from losing investment in real activity, it might still make the tax base for corporate taxes so elastic that there are incentives to reduce tax rates, working towards a race to the bottom with respect to corporate tax rates. This would be the case if it turns out that a reduction in the tax rate actually increases tax revenue because it leads to less profit shifting through transfer pricing (the country would then find itself to the right on the so-called Laffer curve, which is an inverted u-shaped relationship between tax revenue and tax rate).

Another reason why the effect of tax differentials on the location of real activity may be small is that tax differentials are only

one consideration among many that a firm is likely to have when making investment decisions. Market access is the one factor that seems to be the predominating one for firms investing abroad. Real activities are not likely to be located in regions with poor access to important markets. Furthermore, there is evidence that firms are discouraged by poor economic institutions, such as lack of property right protection (Wheeler and Mody, 1992). In order to assess the impact of tax differentials on the location decisions of firms, one has to take into account that these decisions may involve several stages; e.g. first the decision whether to locate any production abroad, second, the decision in what larger region to invest and, third, the decision in what specific country within this region investment is going to take place. In each stage several factors may influence the decision, tax differentials being one of them.

Since the enlargement can be expected to lead to improved market access and more stable economic institutions for a set of countries that might offer lower taxes than the welfare states in Northern Europe, it may also be expected to lead to an increased tendency for tax competition between these countries. However, it should be kept in mind that a tendency for convergence in tax rates does not necessarily lead to lower rates. Some consumption taxes that have converged within the EU have, on average, increased instead of decreased over time (see Keen, 2002). Thus, it may very well be the case that the countries with lower taxes end up increasing their tax rates, thereby approaching the EU average from below.

A possible prediction is that enlargement would contribute to a downward pressure on corporate income tax rates and to a shift towards labour and consumption taxes. It would be a mistake, however, to think that such a development would necessarily imply that workers are hurt while capital owners benefit. In an open economy, where the return to capital is given by international conditions, taxes on operating capital will eventually be passed on to workers through lower real wages. In the long run, a shift away from taxes on operating capital may therefore have only small effects on the income distribution.

## 8 CONCLUSIONS

This study has dealt with the expected effects of EU enlargement on industrial structure and industry location in the current member countries, in particular Sweden. The starting point has been that enlargement will ensure better access to markets in the current EU members for firms located in the accession countries and that it will create an environment conducive for a more stable development of economic institutions in these countries.

Sweden and other high-income countries within the EU are already affected by a high degree of firm mobility and by the attractiveness of low-wage regions. However, there are two features of the accession countries that might make them especially attractive for Western European firms: the geographical proximity and the skill-level of the labour force.

It was shown that there are large differences in labour costs between the accession countries and EU countries. However, it was argued that these differences are largely due to differences in productivity, created by differences in the availability of the kind of capital, skills and technology that is required when markets are exposed to foreign competition. In the short-run, we therefore expect that the accession countries are likely to specialise primarily in labour intensive activities. Present net trade patterns between Sweden and the accession countries reveal a tendency for the latter to be specialised in labour intensive industries such as textile and apparel. However, apart from increased specialization in such industries, we expect a further specialization within industries as firms in Western Europe increasingly use firms in the accession countries when outsourcing part of the production process to low-wage countries.

In spite of considerable foreign investments in recent years, both financial capital and technological knowledge are scarce in the accession countries. Membership in the EU is likely to make these countries more attractive for foreign firms, implying an increased inflow of FDI. Some of this FDI will be motivated by the desire by European and perhaps US firms to get better

access to an expanding market in the accession countries. However, we also expect that an important part of FDI in the accession countries will be of the export platform type, i.e. investment in affiliate production for exports, in this case to the large consumer markets in the current member countries. Whereas there will be some relocation of activities from the current member states associated with such a development, the implied lowering of production costs will at the same time increase the competitiveness of Western European firms.

The study has discussed the available evidence on the labour market effects of increased trade and FDI. The main conclusion drawn from the studies in this area is that while increased import competition from low-wage countries and increased FDI to such countries seem to lead to an increased relative demand for skilled labour, the effect on the relative wage between skilled and unskilled labour is quantitatively small. The evidence on the effects on labour demand from an expansion of MNEs in low-wage countries does not give any support for the idea that such an expansion leads to reduced employment in the parent firm. On the contrary, most studies suggest that an expansion in low-wage countries is associated with an increased employment in the parent company.

We expect that enlargement will generate migration of labour from the accession countries to current EU members. Available studies suggest that the effects on real wages in the current members will be small. However, we expect that the effects may be more substantial in some service sectors where prices are not determined in world markets. A fall in real wages in important sectors such as construction and health care will hurt workers in those sectors. However, at the same time it will reduce costs and thereby create scope for increased purchasing power for consumers.

The last sections of the study have discussed briefly the effect of enlargement of regional policies and tax and regulation competition within the EU. It has been argued that evidence based on aggregate data on the effects of the Structural Funds suggest

that they are not helpful in facilitating specialization according to comparative advantages. The way the Structural Funds are presently used, a shift from poor regions in the current EU members to poor regions in the accession countries may lead to an even more inefficient allocation of resources in R&D intensive industries. With respect to tax and regulation competition, we expect that enlargement will indeed contribute to such competition but we do not expect any large real effects from this. The increased elasticity of the tax base of corporate income taxes might contribute to a further decrease in corporate income tax rates. However, this is likely to constitute a shift from more to less mobile tax bases rather than an overall decrease in taxes. Because labour ultimately bears the burden of taxes levied on operating capital in an open economy, a shift towards taxes on labour may not have important distributional consequences.



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## SVENSK SAMMANFATTNING

Nästa år utökas Europeiska unionen med tio nya medlemmar: Cypern, Estland, Lettland, Litauen, Malta, Polen, Slovakien, Slovenien, Tjeckien och Ungern. Hur detta kommer att påverka de nuvarande medlemsländerna är en mycket viktig fråga. Denna studie analyserar hur utvidgningen kan förväntas påverka ekonomierna i nuvarande EU-länder, med särskild tonvikt på den svenska ekonomin.

Länderna i Central- och Östeuropa har genomgått betydande förändringar sedan Sovjetunionens fall i början av 1990-talet. Flera av dem har nått förhållandevis långt när det gäller omställningen till marknadsekonomi och när det gäller att integreras med ekonomierna i Västeuropa. Medlemskapet i EU kommer att medföra förändringar jämfört med nuvarande situation. För det första kan man förvänta sig att ett medlemskap kommer att ge en förbättrad tillgång till de västeuropeiska marknaderna för varor och tjänster. Det kommer att skapas bättre förutsättningar för upprätthållandet av "goda" ekonomiska institutioner, vilket i sig har stor betydelse för den framtida tillväxten i regionen. Förbättrad marknadstillgång och förbättrade förhållanden för ekonomisk tillväxt förväntas skapa starkare incitament för företag att investera i de nya medlemsländerna. Tillgången till de västeuropeiska arbetsmarknaderna är visserligen begränsad under en övergångsfas, men så småningom kommer också arbetskraft att kunna röra sig förhållandevis fritt mellan de nya och gamla medlemsländerna. Det förväntas uppstå migration från de nya till de gamla medlemsländerna.

Studien visar att det finns stora skillnader i arbetskraftskostnader mellan de inträdande länderna och nuvarande medlemsländer. Dessa skillnader avspeglar emellertid i första hand skillnader i produktivitet, vilka i sig beror på skillnader i tillgången till kapital, kompetens och teknologi. På kort sikt kommer de inträdande länderna att öka sin specialisering i arbetsintensiva branscher och segment av branscher. Nuvarande nettohandelsmönster visar att de blivande länderna tenderar att vara nettoexportörer i arbetsintensiva branscher som t.ex. tekoindustrin.

De inträdande länderna kommer i större utsträckning att delta i produktionsnätverk där olika steg i förädlingskedjan utförs i olika länder. Det handlar dels om västeuropeiska företag som använder sig av leverantörer i de blivande medlemsländerna, dels om multinationella företag som förlägger delar av sin verksamhet till dessa länder. Västeuropeiska företag har visserligen redan idag möjlighet att förlägga arbetsintensiva aktiviteter i låglöneländer. Den geografiska närheten samt det faktum att utbildningsnivån trots allt är relativt hög i flera av inträdesländerna gör emellertid dessa länder potentiellt sett mer attraktiva. I studien argumenteras för att arbetskraften i de inträdande länderna, åtminstone på kort sikt, bör vara ett närmare substitut för arbetskraft i de sydeuropeiska länderna i EU, dvs. Grekland, Portugal och Spanien, än för arbetskraft i nordeuropeiska länder som Sverige.

Ökad handel och ökade direktinvesteringar genererar vinster för ekonomierna både i nuvarande EU-länder och de inträdande länderna. Vinster skapas bl. a. genom att länderna specialiserar sig på aktiviteter som de har relativt goda förutsättningar för, såsom arbetsintensiv produktion i de tillträdande länderna och kunskapsintensiv produktion i länder som Sverige. För att dessa vinster skall realiseras krävs att den ökade handeln och det ökade investeringsflödet medför strukturförändringar i båda typerna av länder. Sådana strukturförändringar kan dock vara kostsamma i sig. De kan ha också ha icke önskvärda fördelningseffekter i länder som Sverige, eftersom det kan innebära en press nedåt på lönerna för lågutbildad arbetskraft.

I studien diskuteras vilken effekt ökad handel och direktinvesteringar tycks ha på relativlöner för hög- och lågutbildad arbetskraft. Ökad importkonkurrens från låglöneländer och ökade direktinvesteringar till sådana länder tycks minska den relativa efterfrågan på lågutbildad arbetskraft och öka den på högutbildad arbetskraft. Effekten på relativlönen mellan hög- och lågutbildad tycks dock vara ganska liten. De studier som försökt uppskatta effekten av multinationella företags utlandsexpansion på sysselsättningen i dotterbolagen finner att en expansion i låglöneländer tenderar att öka snarare än minska sysselsättningen i



moderbolagen. Detta resultat tolkas som stöd för hypotesen att en utlandsexpansion i låglöneländer ofta handlar om att förlägga någon del av verksamhet där arbetskraft är särskilt billig och att den kostnadsminskning som detta ger upphov till skapar förutsättningar för företagen att växa.

De inträdande länderna kan i dagsläget sägas ha relativt ont om både finansiellt kapital och teknologisk kunskap och know-how. Ett ökat inflöde av direktinvesteringar skulle minska bristen på båda. Till en viss del kan dessa direktinvesteringar förväntas vara motiverade av viljan att få bättre tillgång till växande marknader i de inträdande länderna. Vi förväntar oss dock att en annan viktig drivkraft bakom direktinvesteringar i regionen kommer att vara viljan att producera varor för marknaderna i Väst-europa till låga kostnader. Detta förväntas ge upphov till ökade direktinvesteringar i produktion för export. Samtidigt som dessa investeringar kommer att medföra viss omlokalisering av produktion från de nuvarande medlemsländerna, så kommer minskningen av produktionskostnaderna att göra företagen mer konkurrenskraftiga. Detta skapar bättre förutsättningar för företagen att expandera. Därigenom behöver inte nödvändigtvis konsekvenserna för sysselsättning och löner vara negativa.

På sikt kommer inträdet i unionen generera migration från de inträdande länderna till nuvarande medlemsländer. De studier som försökt uppskatta effekten av sådan migration finner att den förväntade effekten på reallönerna i nuvarande EU-länder är små. Man kan emellertid förvänta sig att det finns delar av arbetsmarknaden där effekterna kan vara större. Framför allt gäller det skyddade sektorer där priserna bestäms på den inhemska marknaden, t.ex. byggnadssektorn och sektorn för hushållstjänster. Även vissa offentliga tjänstesektorer skulle kunna påverkas, som hälso- och sjukvårdssektorn. Ett fall i reallönerna i dessa sektorer skulle skada arbetskraft sysselsatt i dessa sektorer. Samtidigt finns det potentiellt stora vinster av detta för konsumenterna, eftersom minskade kostnader skapar utrymme för sänkta priser och därigenom ökad köpkraft.

Konsekvenser av EU:s regionalpolitik diskuteras kortfattat i rapporten. Enligt en av de få studier som gjorts av effekten av EU:s

regionalpolitik på industristrukturen i Europa underlättar inte denna politik en specialisering enligt ländernas komparativa fördelar. Särskilt när det gäller relativt högteknologisk produktion tycks regionalpolitiken snarast bidra till att den hamnar i regioner med komparativa nackdelar i sådan produktion (Irland utgör ett undantag). Med det sätt på vilket regionalstödet ges idag uppstår en risk att en omfördelning av bidrag från fattiga regioner i nuvarande EU-länder till fattiga regioner i de inträdande länderna leder till ett ännu sämre utfall när det gäller lokaliseringen av högteknologisk industri.

Utvidgningen kan komma att bidra till ökad konkurrens mellan medlemsländerna när det gäller skatter och regleringar. De inträdande ländernas förmåga att attrahera företag från Västeuropa kan medföra att skattebasen för företagsskatter blir ännu mer elastisk. Detta behöver emellertid inte ha några dramatiska effekter på ekonomin. Man kan förvänta sig att minskade företagsskatter i stor utsträckning kompenseras genom höjda skatter på områden där skattebasen är mindre elastisk, som t.ex. arbete. I en öppen ekonomi är det arbetskraften som i första hand bär bördan av skatter på arbetande kapital, genom att en höjning av sådana skatter leder till en minskad kapitalstock och därigenom minskad arbetsproduktivitet. Därför behöver inte en förskjutning från företags- och kapitalskatter till skatter på arbete medföra betydande effekter på inkomstfördelningen.

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## INDUSTRIAL STRUCTURE AND INDUSTRY LOCATION IN AN ENLARGED EUROPE

In 2004, ten new countries will join the European Union, eight of them being located in Central and Eastern Europe. Will enlargement hurt workers in the current member states as Western European firms take advantage of low wages in the accession countries? This report argues that there is a number of factors contributing to a beneficial outcome for Western European workers. Karolina Ekholm is Associate Professor in economics at the Stockholm School of Economics.

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