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Introduction

During the years after the collapse of the Soviet regime, Estonia has forged a close economic relationship with the Member States of the European Union. Early reforms and rapid liberalisation provided an attractive environment for foreign direct investments and stimulated foreign trade.

Estonia has tight trade flows with its northern neighbours and the major part of foreign direct investments into Estonia come from these countries as well. While these have provided some help to the Estonian economy during the transition process, there are some reasons of concern for the future prospects of Estonian economy:

- Estonia has become quite dependent on the economic situation in Scandinavia and, therefore, the lack of diversity in its partners could become a source of vulnerability.
- Estonia is also benefiting from subcontracting exports; therefore, the potential gains for the economy are not clearly addressed. More generally, Estonia has further access to financial resources (FDI) and international markets (exports), but at the same time imports are also maintained to a rather high value, that induces a stable and substantial deficit of the current account.

Hence, the aim of the present research is to evaluate the benefits and challenges facing Estonian economy stemming from close relations with Finland and Sweden through foreign direct investments and foreign trade.

The paper is organised as follows. In Chapter 1 the main features of the Swedish and Finnish economies are discussed in order to understand the background of their relations with Estonia and to examine the effects of closer integration with transition countries. Chapter 2 analyses the main characteristics of FDI in Estonia from Sweden and Finland, ascertains what determines these flows and if there exist any risks for the future. Chapter 3 analyses the determinants of external trade with Finland and Sweden and evaluates the advantages and risks stemming from trade with these countries. The service sector is excluded from trade analysis, as there is no disaggregated data available for Estonia in this sphere¹.

¹ For descriptive and graphical analyses, data from 1994 to 2000 are used, gathered by Statistics Department of the Bank of Estonia and Statistical Office of Estonia. For Finland and Sweden OECD data are used supplemented by data from Statistical Office of Sweden and the Bank of Finland. More rigorous analytical methods are left aside, as the comparable data is available for a very short period and the results would not be reliable.

1. Finnish and Swedish Economies

In this Chapter the main features of Finnish and Swedish economies are described to analyse the future prospects for Estonia (see Chapters 2 and 3). Basically these economies have rather similar structures and are specialised in high-tech products. As the former Soviet economies have been transformed into market economies, Finnish and Swedish producers and investors look for new markets in those countries, as they provide lower labour cost and competitive raw material prices.

1.1. The Basic Structure of Economy and Industry

Finnish and Swedish economies are broadly similar (see Tables 1.1 to 1.3 in the Annex). In comparison with many OECD countries, Finland and Sweden stand out for their high share of industry in GDP. The share of manufacturing in Finnish output has even increased². For Finland, more disaggregated data on manufacturing production in the 1990s is available (see Table 1.4. in the Annex). As in Sweden, manufacturing of electrical and optical equipment has, by far, been the leader of manufacturing growth. Manufacturing of wood and wood products, metal products and machinery has also exhibited strong growth.

The structure of trade in Finland and Sweden broadly corresponds to industrial structure, the share of machinery and electronics being the highest (see Tables 1.5 to 1.8 in the Annex). While all manufacturing industries are export-oriented, electrical equipment industry is perhaps the best example: less than two per cent of Nokia's production is for domestic market. Hence it is worth pointing out that both Finnish and Swedish economies depend substantially on foreign demand and therefore Estonian economy may face substantial fluctuations because of its dependency on those two economies. This emphasises how fragile the growth recovery that has occurred in Estonia can be, even if Estonia is now generally considered as having completed the transition process.

Whereas services dominate output in the Nordic countries just like in other European Union countries, the share of market services is a little lower. Comparing the change in the share of employment with the change in the sector's share in total gross value added, it is evident that during the past decade, productivity growth has lagged behind in services. Whereas on average market services form about 50 per cent of GDP, in Finland they account for only 40 per cent (Böckerman 1999). A study by Kurjenoja (1998) suggests that a high level of taxation encourages formation of the underground economy in the fields of private services: high level of public services and taxation has crowded out the volume of private services in Finland. Given that both Finland and Sweden can be considered "welfare states", the same line of argument can be used for Sweden. These factors may give a comparative advantage to nearby Estonia, encouraging Nordic investments in Estonian services' sector and trade in services.

² The share of industry (excluding construction) in total value added increased from 22.4% in 1993 to 26.5% in 1999 in Sweden and from 25.6% to 30% in Finland.

1.2. Some Reasons for High-tech Specialisation

Within the European Union, Finland and Sweden stand apart, evidencing a high degree of specialisation in high-tech value added, exports, research and development. A number of structural changes took place in the 1970s and 1980s. The liberalisation of capital markets in the 1980s changed the environment for corporate finance and induced foreign investment. Foreign investment inflows have been crucial for relatively small economies such as Sweden and Finland in developing, for instance, a dynamic information and communication technology sector. In the 1990s, the emergence of venture capital financing provided opportunities for high-risk technology start-ups.

Traditionally, investment-intensive industries have also been investing in research and development (R&D). In 1997, Sweden ranked first and Finland third among OECD countries in ratio of R&D investments to GNP (NUTEK 2000). The governments' technology policy, adopted in the 1980s, has regarded public and private sector R&D investments as complements, and together important in supporting long-term growth. More generally, the Finnish and Swedish governments have seen their role as creators of a favourable environment for supporting innovation. Private sector R&D has been supported by the relatively less expensive highly skilled labour in Finland and Sweden than in much of the OECD. OECD also reports that Sweden and Finland rank second and third, respectively, in average expected years of education (OECD 2000).

Finnish and Swedish industrial clusters are basing their advantages on high technology and human capital. Innovations in technology and processes have led to productivity growth most evident in manufacturing of electrical and optical equipment, but also of food processing, wood products, machinery, and, to a lesser extent, in textile and chemical industry. Clusters with greatest potential include telecommunications, services and environment-related industries. Labour intensive and low-skill sectors have had the lowest growth rates in recent years.

1.3. The Effects of Closer Integration with EU Applicant Countries

While Finland and Sweden have specialised in high-tech industries, they are increasingly looking towards transition economies for new and high-growth markets as well as sources of labour and raw materials. There has been a rapid increase of intra-industry trade between EU countries and accession countries that stems from the re-organisation of the production process where, for example, labour-intensive phases of the process have been shifted to countries having cheaper labour (intra-firm trade). When intra-firm trade is a consequence of re-organisation of production process, it usually means that this has substantial implications on foreign investment flows. Intra-industry trade and FDI patterns that affect firms' location stem from at least four sources:

- concentration of demand – leads to concentration of production near bigger markets;
- comparative advantage – main reason for trade within the Northern Dimension;
- input-output linkages – demand created within a firm;
- non-tariff barriers – higher barriers lead to higher concentration of production.

Such input-output linkages, low trade costs and lower production costs increase trade between firms in Finland, Sweden and Estonia. However, countries closer to the EU core (Poland), and thus closer to where demand is concentrated, offer strong competition to relatively peripheral countries such as Estonia.

A study by Alho, Hazley *et al* (2001) points out which and how are industrial clusters in Finland affected by closer ties with applicant countries. Alho, Kaitila *et al* (2001) broadly confirm these results:

- **Food industry:** Baltic countries offer competition with lower level of raw material prices and labour costs but also investment opportunities for production of goods under Finnish brand names.
- **Textile and clothing industry:** Baltic countries also have a competitive cost advantage. Subcontracting and acquisitions (mainly from Nordic countries) lead to improvements in production process and productivity in the transition economies and loss of jobs in Finland and Sweden.
- **Forest cluster:** Nordic companies are interested in raw materials, locations for labour-intensive production, and vicinity to Continental Europe export markets. Transition economies can benefit from technological transfers.
- **Information communication technology cluster:** transition economies constitute an emerging market area and a source of components for the electronics industry.
- **Construction and building materials industry:** applicant countries constitute both a promising potential market and a production area as well as a source of cheap labour.³ For logistical reasons, relations near “mother country” can be expected to develop.
- **Traffic and transport:** competition for transit trade (eg from Russia to Western Europe) based on cheaper costs.
- **Commerce and service sector:** companies have already started to penetrate new markets in telecommunications, wholesale, banking and insurance.

In parallel with trends observed in other industrial countries, low-skill and resource-intensive industries or processes move to less developed countries that have the cost advantage. Thus, from the viewpoint of Finland and Sweden, Estonia may have a relative advantage (compared to other transition economies) as an investment location due to lower production costs and as a trade partner due to relatively simple logistics. These and any additional “created” factors in investment and trade decisions will be discussed in the following Chapters.

2. Foreign Direct Investments

The following Chapter analyses what are the main characteristics of FDI in Estonia from Sweden and Finland as well as ascertains what determines these flows and whether there exist any risks for the future.

2.1. Determinants of Foreign Direct Investments

Traditional theories of foreign direct investment (FDI) try to explain why firms produce abroad, but there is generally no accepted model that provides the basis for empirical work. Instead, Dunning's OLI paradigm (1977, extended in 1981, 1988, 1993, and 1995), which incorporates several theories that explain the existence of FDI, is the most common basis for empirical work. The basic premise of the paradigm is that FDI is undertaken if three conditions are met simultaneously:

- The firm needs ownership advantages such as property rights, intangible assets, advantages arising from common governance.

³ ETLA expects the wage level of professional workers in Estonia to reach Finnish level in five years (starting from 2000/01).

- The host country must possess location advantages, like factor cost, proximity to market, legal-political-social frameworks.
- Internalisation incentives must make it more efficient for a multinational enterprise (MNE) to use its competitive advantage by selling components internally rather than in the marketplace.

The main problem of this framework is that, although it does explain the existence of MNEs, it has had difficulties explaining the recent surge in FDI in similar countries (horizontal FDI; Di Mauro, 2000). However, as FDI in transition economies is usually not horizontal, OLI paradigm is the most commonly used framework in explaining FDI flows into transition economies.

Several studies among transition economies attempt to find the determinants of FDI. Usually cross-sectional analysis has been applied to analyse aggregate FDI flows into transition economies. Table 1 summarises the results of six studies. In the left column is the name of the determinant and in the right column the paper where it has been found to be significant. It has to be noted, however, that these studies were not focused on the same variables and did not use same methodologies and samples.

Table 1. Determinants of FDI in CEE countries in different studies

Size of the host market (Host country GDP, population)	Bevan, Estrin, Meyer (2000) Bevan, Estrin (2000) Brenton, Di Mauro, Lücke (1998) Reiljan (1999)
Financial ability of the source country (home country GDP)	Bevan, Estrin, Meyer (2000)
Distance between countries	Bevan, Estrin, Meyer (2000) Bevan, Estrin (2000) Brenton, Di Mauro, Lücke (1998)
General progress in transition (institutional development, share of private sector in economy)	Bevan, Estrin, Meyer (2000) Barrel-Holland (1999) Holland-Pain (1998) Reiljan (1999)
Labour costs	Bevan, Estrin (2000) Holland-Pain (1998)
Trade (exports divided by GDP, share of EU exports in total exports)	Barrel-Holland (1999) Holland-Pain (1998)

From the Table above one can see that the most common significant determinants of FDI in transition economies are the size of the host market, distance between countries and general progress in transition. In theoretical literature labour costs are usually mentioned as main determinants of FDI but in several studies labour costs appeared to be an insignificant factor. This may be due to the multicollinearity: labour costs are associated with low income and thus low local demand (Meyer, 1998 p. 65). Also financial ability of the source country (which covers push factors) occurred to be a significant determinant in one study.

According to the results of the survey *Foreign Investor 1999* the main determinants of FDI made in Estonia are similar to the ones mentioned in the above studies. Among investors coming to Estonia for the first time, the main determinants are potential market growth, financial stability (convertibility of Estonian currency and free movement of capital) and political stability. Among those investors who are reinvesting in Estonia main determinants were labour, financial stability and production costs. Table 2 presents the results of the same survey on the main determinants of the Finnish and Swedish FDI in Estonia (the first column

provides the determinants significant for investors making their first investment; the second column outlines the determinants for investors reinvesting in Estonia).

Table 2. Determinants of FDI from Finland and Sweden

Finland		Sweden	
first investment	Reinvestment	first investment	reinvestment
market growth	Labour	production costs	financial stability
Entering the market	financial stability	free movement of capital	labour
Production costs	production costs	convertibility of Estonian kroon	production costs
Political stability		political stability	

The main conclusion from the Table above is that Swedish investors are more concerned about political and financial stability than Finnish investors, whereas market growth and entering the local market are more important for Finnish investors. In conclusion we can say that the survey of foreign investors in Estonia show that their priorities are somewhat different but still quite similar to the ones that have been found important in other studies. The survey does not cover any push factors affecting the decision of investment as firms who are studied have already made their investments in Estonia, and they only answer to the question why they chose Estonia (not why they chose to invest abroad rather than in Finland).

Borsos-Torstila (1999) came to the same results when she analysed Finnish MNEs. She found that even in the case of small markets (like Estonia), market growth has been a key determinant of FDI. Attractiveness of Estonia has been fostered further by its proximity to the home country. Borsos-Torstila also found that push factors (financial ability, etc) affect the FDI decision, but alone do not lead to FDI. As we can see from further analyses of FDI from Finland, push factors are in some cases also very important in Estonia.

In the following part we shall analyse a little deeper the dynamics and the structure of FDI flows in the recent history.

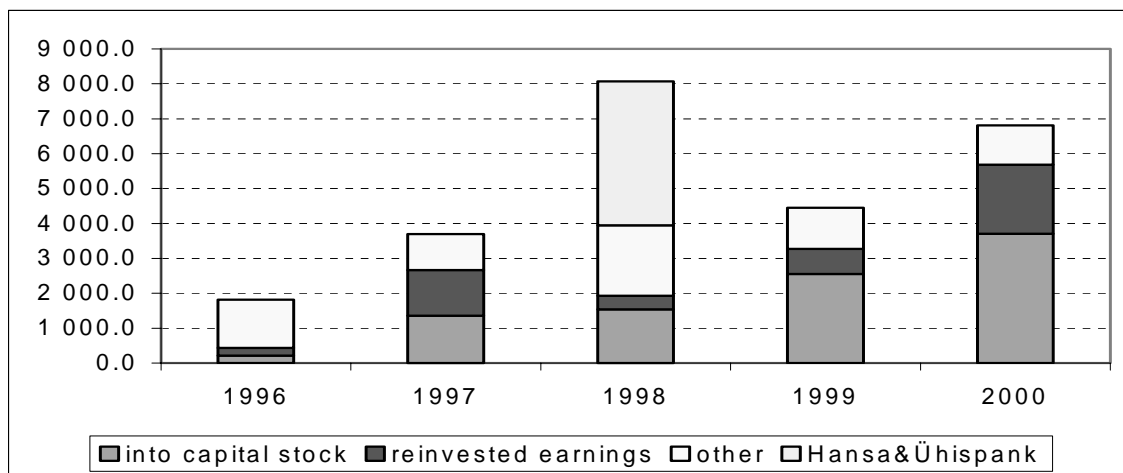
2.2. Foreign Direct Investment Flows into Estonia

2.2.1. The Structure of Foreign Direct Investment Flows

In the beginning of the transition period FDI flows into Estonia were mainly caused by the privatisation process. In Estonia the privatisation process was nearly completed in the end of 1995. Until 1996 main state owned large enterprises were sold by tenders in the form of privatisation rounds and a strong correlation can be found between privatisation rounds and FDI inflow until 1996 (Varblane, 2000).

As we can see from Figure 1, the flow of FDI in Estonian economy has grown steadily since 1996. The year 1998 is an exception: although the FDI flow was the largest, it was due to the fact that foreign investors acquired majority shares in two biggest commercial banks *Hansapank* (Hansabank) and *Ühispank* (Union Bank of Estonia). This accounts for almost half of the FDI made in 1998.

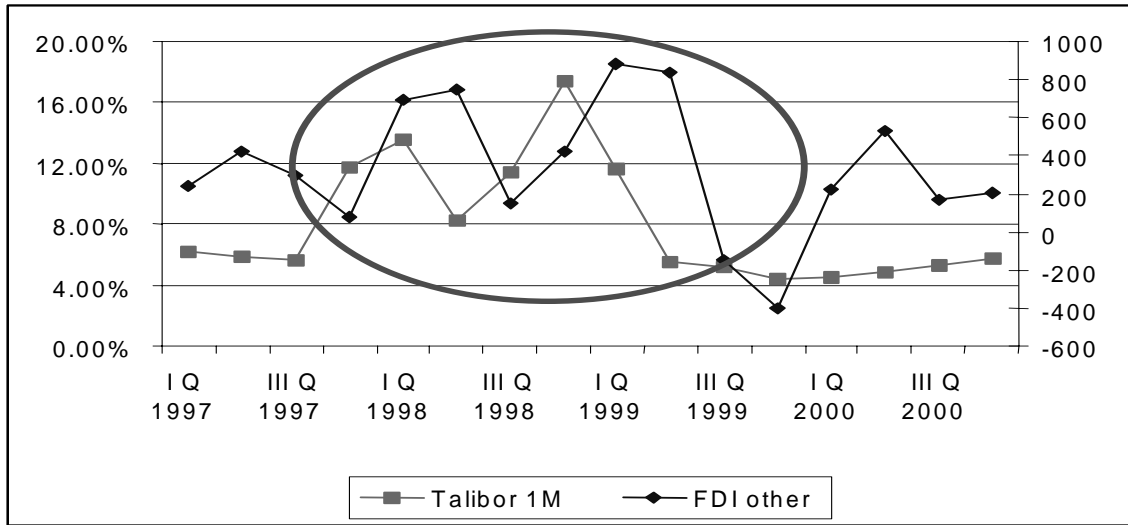
Figure 1. FDI flows into Estonia and their structure (Source: Statistics Department of the Bank of Estonia) (EEK m)



Considering the structure of FDI flows into Estonia, it can be seen that the share of investments into capital stock is increasing as the share of other investments is decreasing. This can be interpreted as the evidence of increasing confidence among investors. The only exception is the year 1998, but as one can see from Figure 2, the dynamics of the share of other investments is closely connected to the dynamics of short-term interest rates. This can be explained by the so-called capital markets approach to FDI, where multinational companies use FDI to overcome barriers to international capital flows. They finance themselves in countries with a relatively high capital endowment and hence lower interest rate and invest to countries with high interest rate and high capital cost (Meyer 1998). In case of Estonia, shocks in short-term interest rates at the end of 1997 and in 1998 have caused inflows of other direct investments in the next quarter (periods in the circle in Figure 2), because multinational companies could get cheaper money from abroad.

The share of reinvested earnings is also increasing. The main reason for that is probably the rapid growth of FDI stock. It is reasonable to assume (in absence of any major shocks) that these trends (increasing share of investments into capital stock and decreasing share of other investments) are going to continue in future.

Figure 2. Other investments in FDI structure (right scale, EEK m) and one-month Talibor (left scale)



2.2.2. Geographical Distribution of Foreign Direct Investment Stock

As Estonian economy is rather small, an investment from one country may have a big impact on geographical distribution of FDI. As one can see from the first column of Table 3, FDI in Estonia is very concentrated among source countries. The two dominant countries, Sweden and Finland, make up over 70 per cent of investments, and almost 80 per cent of investments originate from Scandinavian countries. This can be due to Estonia's proximity (not only geographical but also cultural) to these countries, which is reinforced by tight trade relations.

Table 3. Geographical distribution of FDI stock in the Baltic States (Source: Bank of Estonia, Bank of Latvia and Bank of Lithuania Bulletins, 31 December 2000)

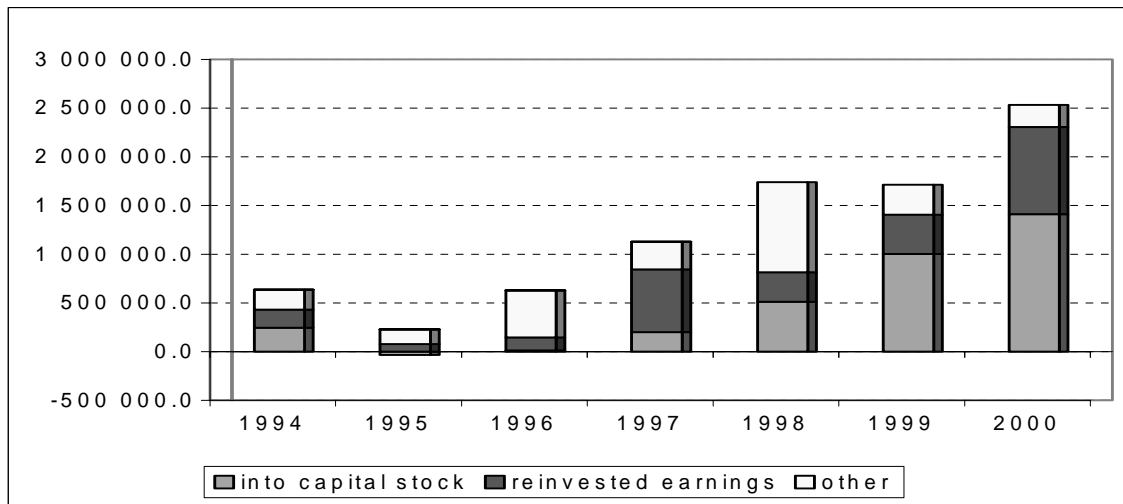
Estonia		Latvia		Lithuania	
Sweden	40.46%	Sweden	12.60%	Denmark	18.25%
Finland	29.81%	Germany	11.10%	Sweden	17.33%
Norway	4.26%	Denmark	10.51%	USA	9.83%
USA	4.21%	USA	9.37%	Germany	7.38%
Denmark	4.04%	Finland	6.18%	UK	6.68%
Germany	2.61%	Russia	5.98%	Estonia	6.40%
Great Britain	2.36%	Norway	5.55%	Finland	6.03%
Netherlands	2.21%	UK	5.00%	Switzerland	4.84%
Liechtenstein	1.46%	Netherlands	2.76%	Norway	4.25%
other	8.58%	Other	30.95%	other	19.01%

As Table 3 indicates the regional distribution of FDI in Latvia and Lithuania is much more diverse than in Estonia. It is also remarkable that USA is a much more important investor in Latvia and Lithuania than in Estonia. Still it can be concluded that geographical structure is very concentrated in case of Estonia, which may involve higher risks than in the neighbour countries.

2.3. Foreign Direct Investment flows from Finland

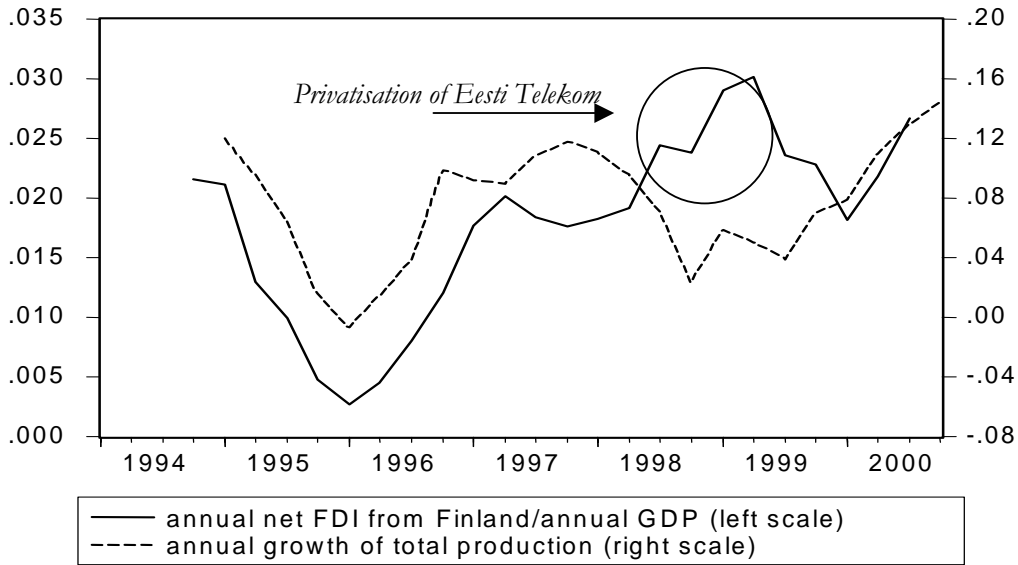
Even if the amount of FDI is bigger from Sweden, more than half of it is due to Swedish majority ownership in Estonia's two largest commercial banks Hansabank (*Hansapank*) and Union Bank of Estonia (*Eesti Ühispank*). For this reason, Finland may still be considered as the most important foreign investor in Estonia. The structure of FDI flows from Finland in Figure 3 features trends similar to total FDI flows: the share of investments into capital stock and reinvested earnings is increasing and the share of other investments is decreasing.

Figure 3. FDI flows from Finland 1994–2000 and their structure (Source: Bank of Estonia, Statistics Department) (EEK thousand)



It is remarkable that investments in capital stock in 1995 and 1996 were very small (even negative in 1995). Beside other reasons it may be attributed to problems in Finnish economy in the late 1995 and early 1996. Figure 4 demonstrates the sharp contraction in annual growth of total production in Finland in 1995 and the first quarter of 1996. At the same time net FDI of the current year from Finland divided by GDP (to make the measures comparable) also decreased quite significantly. As FDI flows are always very firm specific (especially in case of Estonia as the size of the economy is very small) and the time series are very short; one must evaluate the results very critically. However, it is probable that Finnish firms cut back their investment plans in Estonia quite sharply as they had problems in their homeland. This may also be an indication of the vulnerability of Estonian economy arising from the big share of Finnish investments in total FDI (as we saw in Table 3). When the growth of the production of Finnish firms decelerates, net FDI flows into Estonia are also very likely to decrease.

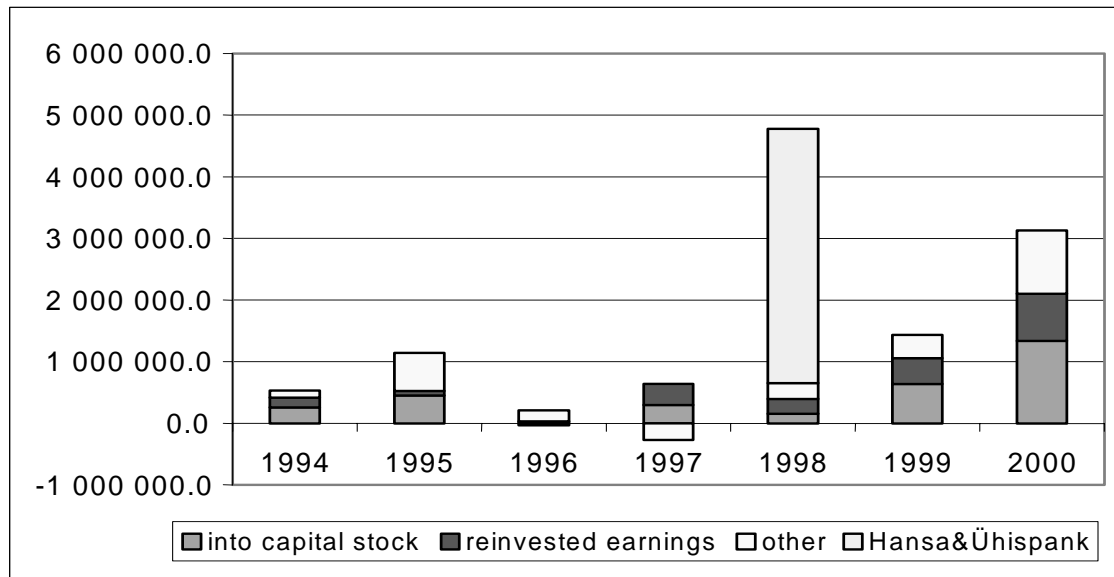
Figure 4. Annual change of total production in Finland and annual net FDI from Finland divided by GDP



2.4. Foreign Direct Investment Flows from Sweden

More than half of the Swedish FDI stock in Estonia has been invested in the two biggest commercial banks in Estonia *Hansapank* and *Ühispank*. As one can see from Figure 5 those investments can be interpreted as quite crucial as FDI flows have started to grow substantially after 1998, when Swedbank and SEB bought their majority in *Hansapank* and *Ühispank*. The results of the survey *Foreign Investor 1999* summarised in Table 2 show that political and financial stability was one of the most important factors for Swedish investors. This may also be the main reason why Swedish investments have started to grow after 1998: as two major banks belong to Swedish owners, the confidence in stable economic situation in Estonia gradually improved.

The authors of the present research made an attempt to analyse also the time-series of Swedish FDI in Estonia, but were unsuccessful in finding reasonable and significant determinants to explain FDI flows.

Figure 5. The Structure of FDI flows from Sweden (EEK thousand)

The main difference between the structure of FDI flows from Finland and Sweden is that while the share of other investments is decreasing in Finnish FDI flows, the opposite is true for Swedish FDI. As only *ca* 30 per cent of those other investments of Swedish FDI has been invested in the financial sector, their rising share is not only because of the Swedish majority ownership in our two biggest banks.

2.5. The Structure of Foreign Direct Investments from Finland and Sweden

Table 4 demonstrates that FDI stock in Estonia is divided mostly (almost 85 per cent) among four sectors – (a) finance (majority of it in *Hansapank* and *Ühispank*), (b) transport, storage and communication (majority of it in *Eesti Telekom*), (c) manufacturing, and (d) wholesale and retail trade. The major difference between Sweden and Finland is financial and wholesale plus retail trade sectors. It is quite reasonable to assume that the reason why Finnish investors invest more in wholesale and retail trade is that the majority of tourists who visit Estonia come from Finland. However, as available statistics do not allow distinguishing services exports by countries, this hypothesis cannot be analysed more deeply.

If we compare the below Table to the conclusions of the first Chapter, we can see that the sectors having attracted more investments are those where Scandinavian economies have some comparative advantages to invest. Manufacturing sector attracts Scandinavian investors with lower production costs which is also confirmed by the fact that export propensity among foreign-owned firms is much bigger than among domestic firms (Varblane 2000). Scandinavian enterprises are world leaders in telecommunications sector, and Scandinavian services sectors are looking for new markets where to grow.

Table 4. The Structure of FDI stock by fields of activity (EEK thousand, as of December 31, 2000)

	Finland		Sweden		All countries	
Finance	673 897.9	5.1%	9 847 870.9	54.8%	11 113 880	25.0%
Transport, storage, communication	3 908 112.6	29.7%	4 123 174.6	23.0%	9 711 613	21.8%
Manufacturing	2 982 874.7	22.7%	2 730 284.5	15.2%	9 548 536	21.5%
Wholesale, retail trade	3 295 488.7	25.0%	708 370.8	3.9%	6 937 609	15.6%
Real estate, renting and business activities	714 151.3	5.4%	159 354.5	0.9%	3 090 333	6.9%
Electricity, gas and water supply	493 881.4	3.8%	70.8	0.0%	1 051 272	2.4%
Hotels, restaurants	45 755.4	0.3%	58 104.0	0.3%	876 396	2.0%
Construction	341 953.4	2.6%	128 869.3	0.7%	648 093	1.5%
Other	701 136.5	5.3%	198 279.6	1.1%	1 515	3.4%

Foreign direct investments are closely related to foreign trade. By investing abroad, firms will influence directly macroeconomic variables such as capital formation, employment, tax revenue and trade. Indirectly foreign investments may also influence the structure of the host economy, as well as the strategies and performance of locally owned firms. As there have been positive spill-overs from foreign owned firms to the domestic owned firms in Estonia (Varblane 2000), among others, the development of export perspectives of Estonia is expected to improve.

3. Foreign Trade

Next, foreign trade with Finland and Sweden is analysed, covering the causes, developments and determinants. The geographical and cultural closeness has enabled tight trade relations that, to a large extent, are influenced by subcontracting.

3.1. Sources of International Trade

Several studies have brought out some country-specific reasons for Estonia that are the incentives of trade. Finland, Sweden and Estonia have historically close economic relations as they all belong to the Baltic Rim (Paas *et al* 1999, p 180). As close neighbours they have common cultural traditions and the communication traditions between these countries are also very old. Other authors denote that many towns of the countries belonging to the Baltic Rim were the members of the Hanseatic League that deepened the economic and political co-operation (Reiljan *et al* 2000, pp 305–306). In the Soviet times Estonia maintained some economic relations with Finland, but not with Sweden. After restoring the political independence of Estonia, the will to renew the historical trade relations increased. Estonia needed capital, new technologies and know-how to rebuild its economy. Finland and Sweden looked at Estonia as a new market and unused resources.

The same authors find that there are the following positive factors influencing foreign trade in Estonia (Reiljan *et al* 2000, p 310):

- the growth of the import demand of West-European countries that makes it easier for Estonia to export and supports economic growth;
- the growth of productivity, using modern technologies and decreasing the number of unnecessary workers;
- the increasing role of foreign direct investments, as the information about new markets should come with capital into Estonia.

The growth of demand of Western countries can be expected as transition countries generally produce at lower cost, having competition advantage against importers' own producers. At the same time there are more and more trade relations that result in larger exporting. The productivity is likely to grow, as the transition country reorganises its economy gradually from planned economy to market economy. The role of foreign direct investments is arguable, as their impact depends greatly on which sector they are made in. Export is mostly supported by investments in industrial sector; investments in service sector can increase exports only indirectly (eg investments in banking sector enable to get loans more easily and the borrowed money can be used to improve production and exportation).

However, there are also some negative aspects influencing foreign trade (*Ibid*, pp 309–310):

- many industries in Estonia are opened one-sidedly to foreign competition;
- the faster growth in wages compared to productivity;
- the faster growth of Estonian domestic prices compared to developed countries;
- the growth of the real exchange rate of Estonian kroon;
- the concentration of Estonian exports on labour and raw material intensive industries, as the rates of value added is lower in these industries compared to capital intensive industries.

One-sided openness harms Estonian current account causing deficit. To improve the situation, Estonian firms should find alternative possibilities to export. Hopefully the trade barriers loosen in time. The growth in wages is desirable to raise the life quality but it should not be higher than the growth in productivity. Reasonable increases in both wages and productivity could prevent closing of firms that have problems with increasing costs and low productivity.

Estonian prices are expected to converge with prices of the developed countries; therefore, the faster growth in domestic prices is inevitable. Estonian firms should concentrate more on the export of quality products rather than low price products. The growth of the real exchange rate of Estonian kroon is a natural development, as well. The low real exchange rate right after the monetary reform was expected to enable the domestic firms to adjust with new market conditions and to enter the new markets. Afterwards the companies should find other possibilities beside price advantage to continue the trade.

Estonian exports are still labour intensive, but the share of raw material exports is decreasing. Moreover, the transition processes are not finished and Estonia is moving towards producing higher value added products.

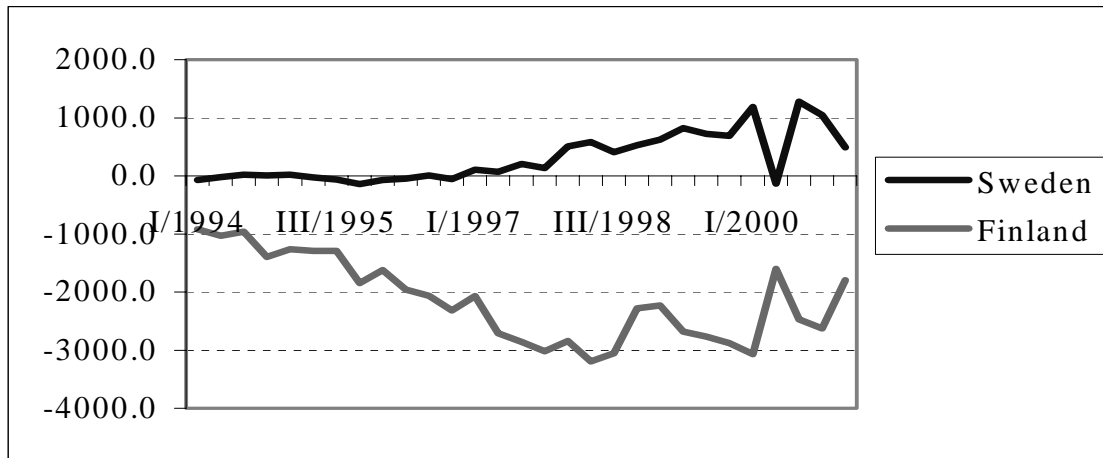
3.2. The Developments and Determinants of Estonian Foreign Trade with Finland and Sweden

In 2000, Finland and Sweden were the two main trade partners of Estonia. The turnover with Finland was 44.5 billion EEK⁴ and with Sweden 18.6 billion EEK, covering 51% of total exports of Estonia and 48% of total imports of Estonia. This structure of the main trade partners is quite similar to the one of the year 1994, except that Russia has lost its importance in exports and imports and the share of Finland and Sweden in exports has increased. The share of Finland and Sweden in imports has been quite stable over the period; the share in exports has been much more volatile.

According to the Bank of Finland, the share of Estonia in Finnish exports was 3.1 per cent in 2000 and the share in imports 2.8 per cent. The share in Swedish imports is 1.2 per cent; the data about Estonia's share in Swedish exports was not available. According to these sources neither Finland nor Sweden has CEE countries among their main trading partners.

If we take a look at the Estonian net exports with Finland and Sweden, it can be seen that Estonia has had a negative trade balance with Finland during the last six years and mainly positive trade balance with Sweden since 1997 (see Figure 6). Some authors find that the large deficit with Finland is caused by the orientation of Estonian importers to Finnish markets, not by the activity of Finnish producers (Reiljan *et al* 2000, p 311).

Figure 6. Trade balance with Finland and Sweden (EEK m)



Trade balance with Finland and Sweden is greatly influenced by subcontracting trade. Therefore Figure 6 does not correctly reflect the usage of comparative advantage of Estonia. Only one large subsidiary company (ie Elcoteq that produces mobile phones and their equipment) in Estonia can remarkably influence the trade balance of Estonia. As the relatively low wage level in Estonia (which is the main motivation for subsidiary companies) tends to increase over time and the demand for the production on the world markets is volatile, this kind of firms are easy to be closed. Subcontracting trade does not influence much the economic development in Estonia in terms of value added and employment. Also,

⁴ Here and afterwards the foreign trade statistics of the State Statistical Office of Estonia, adjusted by the Bank of Estonia, according to the special trade system is used. The special trade system does not include re-exportation from customs warehouses and the placement of goods from customs warehouses to free economic zone. The special trade system is expected to be more adequate to describe a country's ability to export.

subcontracting trade tends to be relatively volatile. When subcontracting trade is eliminated from the data, the structure of trade by commodity groups with Finland and Sweden becomes much more balanced.

Still, one should keep in mind that although potential volatility in subcontracting trade may have a large effect on the value of Estonian trade, it would not actually influence the real economy of Estonia much. There can occur some negative effect (eg on employment) in the short run when the subcontracting exports fall. In the long run there are expected to be positive effects stemming from the subcontracting, for example technology transfers.

Concerning subcontracting exports, a great share can be distinguished in total exports. In 2000 subcontracting exports were 68 per cent of the total exports to Finland, consisting mainly of machinery and equipment⁵. Concerning direct exports⁶, Estonia exports to Finland mainly pulp and machinery. It should be noted that approximately a half of the textile exports is also subcontracting exports and, therefore, holds only the third position in direct exports, compared to the second position in total exports. These main subcontracting trade commodity groups are clear examples of intra-firm trade, concerning labour-intensive phases of production (see Section 1.3).

Exports to Sweden are also characterised by the pulp exports that are much higher than other groups' exports. Similarly to exports to Finland, the pulp exports consist mainly of direct exports. In 2000, 62 per cent of total exports were subcontracting exports, consisting generally of the machinery and equipment group, but also of an important share of the textile group.

Estonian imports from Finland are, to a large degree, influenced by subcontracting, as well. Direct imports⁷ account for 48.5 per cent of total imports. Unlike the main export groups, the share of import in the machinery group is much larger than in the other groups even after excluding subcontracting. The imports of chemical products and metals follow.

The share of subcontracting import from Sweden counted for 42 per cent of total Estonian import from Sweden. This share is much smaller than the share of Estonian subcontracting import from Finland or Estonian subcontracting export to Sweden or Finland. Still, similarly to previous cases, it is caused by the subcontracting imports of machinery and equipment. There are almost no subcontracting imports from Sweden concerning other commodity groups, except for metals. Estonian import from Sweden is relatively evenly distributed between commodity groups.

The amounts of direct exports and imports of Estonia by commodity groups with Finland and Sweden are relatively similar. Trade balance (exports minus imports) is positive with both countries by metals, pulp and paper, textile group (see Figures 1a and 2a in the Annex). Trade balance is negative with both countries in machinery and equipment. Chemical products' trade balance is positive with Finland and negative with Sweden. This distribution has been relatively stable since the beginning of the 1990s and is expected to continue.

⁵ The year 2000 was characterised by a high level of subcontracting due to one firm's (Elcotec) activity. In 1999 and 1998 the subcontracting exports was 56% and 59%, respectively, of total exports to Finland.

⁶ Subcontracting exports, observed as custom procedure 3151, are excluded.

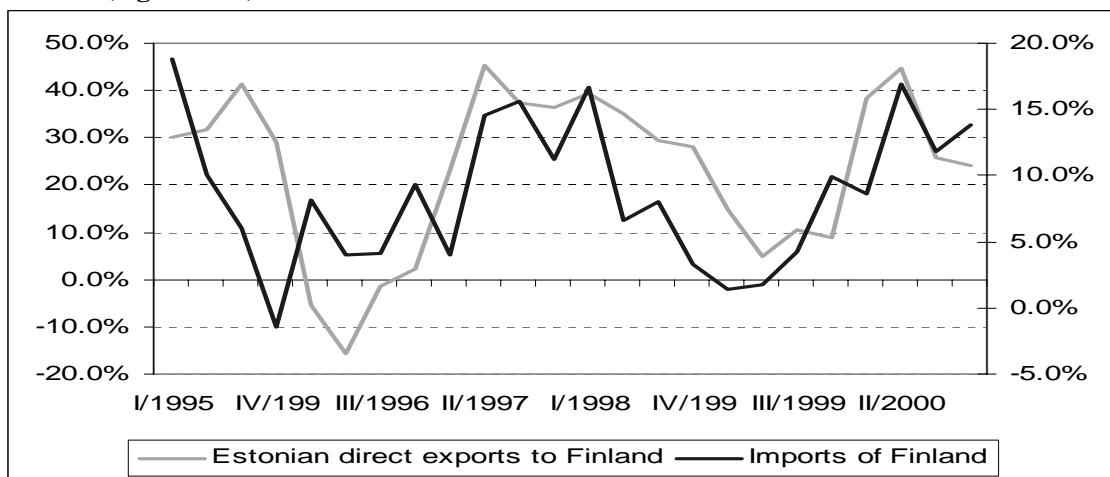
⁷ Subcontracting import, observed as custom procedure 5100, are excluded

As mentioned before, Estonian trade balance is much influenced by subcontracting trade. However, even in case of direct trade, the trade balance is negative in the commodity group of machinery and equipment. This indicates that Estonia imports a large share of capital goods from Finland and Sweden, which can be the engine of the future economic growth of Estonia.

As discussed in Section 1.1, machinery and equipment as well as pulp and paper are important industrial fields for both Finland and Sweden and characterised by strong growth. If we compare the main export and import commodities of Finland and Sweden to the commodities that Estonia trades with these countries, it occurs that they are very similar. Machinery and electronics is a very important commodity group for Swedish exports and imports and its share has increased in both spheres. An especially high increase is evident in the share of electronics, also in exports of Finland. As the main subcontracting exports of Estonia consist of electronic products, and their sales tend to increase, Estonian trade has a good perspective. Pulp and paper and chemical products are also popular trade groups and Estonia has used its opportunity to trade in those commodity groups.

In Section 3.1 it was denoted that one of the positive factors influencing foreign trade in Estonia is the growth of import demand in Western European countries. The argument holds, as the determinants of Estonian exports are mainly demand-sided (see Vesilind *et al* 2000). Among other variables the total imports of Finland determine the demand for Estonian products. Figure 7 shows the growth trend for both indicators.

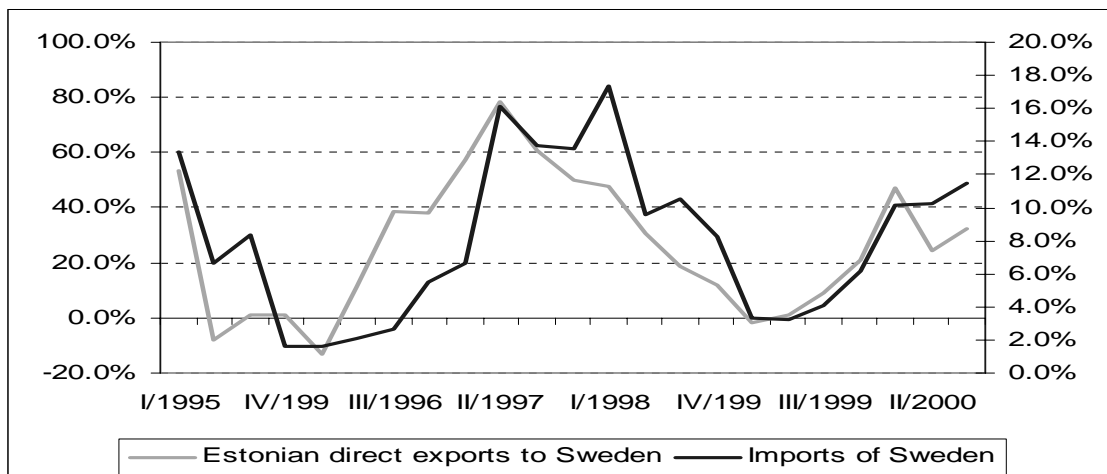
Figure 7. Annual growth of Estonian direct exports to Finland and total imports of Finland (right scale)



The Figure is two-scaled, depicting annual growth of Estonian direct exports to Finland on the left scale and annual growth of total imports of Finland on the right scale. The Figure shows that Estonian direct exports to Finland have increased faster than total imports of Finland, which remarks that Estonia has become a more important trade partner for Finland compared to the period five years ago.

Similarly, Estonian exports to Sweden are affected by the demand in Sweden. Total imports of Sweden and Estonian direct exports to Sweden fluctuate similarly (see Figure 8).

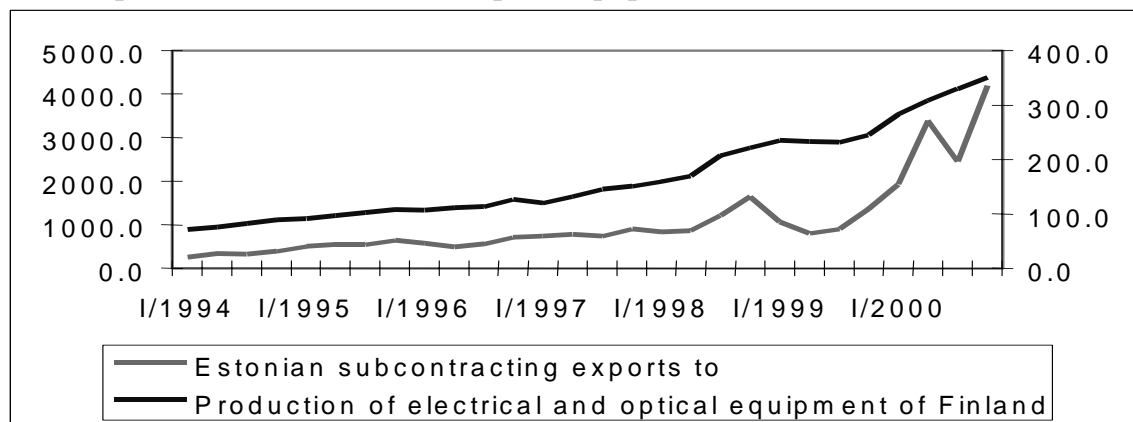
Figure 8. Annual growth of Estonian direct exports to Sweden and total imports of Sweden (right scale)



On the Figure the left scale depicts the growth of direct exports of Estonia to Sweden and the right scale growth of total imports of Sweden. In the Swedish case Estonian direct exports to Sweden have grown faster than total import of Sweden.

As denoted before, subcontracting exports are closely dependent on the demand of the partner country's industry. The data show that Estonian subcontracting exports to Finland have the same tendency as the production of electrical and optical equipment of Finland (see Figure 9).

Figure 9. The dependence of Estonian subcontracting exports to Finland (EEK m, left scale) on production of electrical and optical equipment of Finland (1995 = 100, OECD)

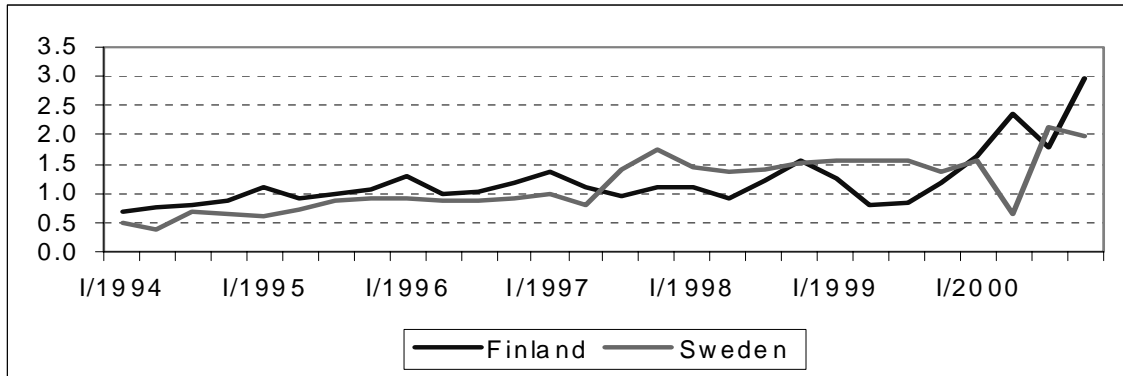


The left scale on the Figure depicts Estonian subcontracting exports to Finland (EEK m, Bank of Estonia) and the right scale depicts the production of electrical and optical equipment of Finland (1995=100, OECD). The data show that since 1999 there has been fast increase in both indicators, which denotes great dependence of Estonian subcontracting exports on the production of a partner country. Subcontracting exports to Sweden from Estonia do not have similar development to the industrial production of Sweden.

Subcontracting exports of Estonia are greater than direct exports of Estonia. This is a risk

factor to Estonian economy. If there is no demand to the production of a partner country, Estonian subcontracting exports fall and total exports decrease significantly. Subcontracting exports' ratio to direct exports to both countries has increased considerably in 2000 (see Figure 10).

Figure 10. Subcontracting exports' ratio to direct exports of Estonia by Finland and Sweden



In the fourth quarter of 2000 the subcontracting exports to Finland were three times higher than direct exports and subcontracting exports to Sweden were two times higher than direct exports. The growth was mainly due to one firm (Elcoteq) and in 2001 this is expected to decrease, as orders to this firm have decreased greatly.

Subcontracting exports' ratio to direct exports needs to be decreased, as subcontracting exports' flows are much more volatile compared to direct exports and they are difficult to forecast. The reason for that is that the company filling the subcontracting orders cannot count on market forces and has great dependence on the parent company's decisions. Therefore, to support Estonian economy and economic growth, direct exporting needs to be favoured. Economic policy has a great part to play here.

Although it is very important to support direct exports, one should remember that subcontracting trade could be an important source of growth in the long run. As long as there is a lack of know-how and capital in Estonia, the FDI and subsidiary companies are the channels to support the economic development in Estonia. There is a tendency in subsidiary companies that the complexity of production process increases in time (see Ali-Yrkkö 2001, p 45). Subcontracting is considered to be the first phase of the co-operation in manufacturing. Through the FDI and subsidiary companies (MNEs generally) the spillover effects also occur on domestic firms (see Section 2.3.3). Productivity growth can be expected, as well as the improvement of position on the world market (through the efficiency and productivity). All this should stimulate the economic growth of Estonia.

Conclusions

Estonian economy is closely connected to the economies of Finland and Sweden via trade and investment linkages. Both natural resources endowment and the so-called created factors have supported the rapid development of industrial sectors in Finland and Sweden. Also, as is typical to a maturing economy, the service sector in these countries is expanding. In past years, Finnish and Swedish companies have made investments and developed trade relations with firms in transition economies in search of new markets, lower production costs and raw materials. These factors have been important in their decision to invest into Estonia and trade with Estonia, although other transition economies offer Estonia strong competition in raw materials (such as Russia for the wood and paper industry investments) and proximity to greater markets (eg Central-European Countries for IT industries).

Finland and Sweden account for over 70 per cent of the foreign investments in Estonia. This can be attributed to tight economic (including trade) relations. The biggest share of Finnish and Swedish FDI in Estonia is allocated into finance, following by transport, storage and communication, manufacturing, wholesale and retail trade. Whereas over 55 per cent of the Swedish FDI in Estonia is in financial sector, Finnish investors are more interested in investing in wholesale and retail trade.

Whereas studies on FDI flows into transition economies point out the size of the host market, distance between countries and general progress in transition as the main determinants of FDI, surveys of foreign investors in Estonia show that the priorities of Finnish and Swedish investors are somewhat different. Finnish companies invest into Estonia for the first time mainly because of the market growth potential, entering market, low production costs and political stability; also proximity to home country is found significant. Swedish companies invest into Estonia for the first time because of the low production costs, free movement of capital, financial and political stability. Both countries reinvest into Estonia because of suitable labour, financial stability and low production costs.

The structure of FDI into Estonia is changing, as the credibility of Estonian economy increases. The share of FDI into capital stock and reinvestments is increasing, and the share of other investments is decreasing. The analysis also showed that the growth in the share of other investments in 1998 was mainly caused by higher short-term interest rates.

In addition this study found that push factors could be quite important in determining FDI flows. When the growth of the production of Finnish firms decelerates, net FDI flows to Estonia are also very likely to decrease. However, no significant determinants were discovered to explain FDI flows from Sweden.

Sweden and Finland have been main trading partners of Estonia since the beginning of 1990s. Foreign trade turnover with Finland was 44.5 billion EEK and with Sweden 18.6 billion EEK, which shows the much larger intensity of trade with Finland. Trade balance with Finland has been negative since the beginning of the last decade, because of the incentives of Estonian companies to import from Finland. The negative trade balance is mainly due to importing capital goods in large extent, which can be a source of the future economic growth of Estonia. The trade balance with Sweden has been mainly positive since 1997, which is distorted by subcontracting trade shocks. Subcontracting trade dominates Estonian trade with Finland and Sweden. To ensure stable economic growth in Estonia, the economic policy should favour direct exports.

Direct exports to Finland and Sweden are relatively evenly distributed among commodity

groups, except that especially export to Sweden is dominated by pulp and paper exports. The commodity group of machinery and equipment dominates the direct imports from both countries. All these named commodity groups belong to the most tradable commodities of Finland and Sweden that denotes the perspective of continuing of this kind of trade structure. More differentiated trade by commodity groups smoothes the risk of the trading partners. Therefore the more commodities are traded in even share, the better for exports and imports. Economic policy can help much here.

The dynamics of Estonian exports to Finland and Sweden are generally determined by the demand factors of Finland and Sweden. As those indicators are deeply analysed and forecasted by local authorities then the flows of Estonian exports can presumably be forecasted by examining them.

This study has revealed some of the benefits and dangers of having Finland and Sweden as predominant foreign investors and trade partners as well as some general policy directions. Besides factors that economic policy cannot influence directly (such as geographical location), surveys of investor opinions emphasise again the importance of policies enhancing macroeconomic stability and growth, financial stability and competitiveness. This analysis also confirms the results of studies by, for instance, IMF, that underline the positive effect of early liberalisation and reform efforts on general investment and foreign trade climate. Not surprisingly, foreign ownership in the financial sector has also increased the confidence in Estonian economy in the eyes of foreign investors. As Estonia is a very small open economy, foreign investment flows are also subject to push factors that have the potential of destabilising capital flows. In this respect, Estonia may have something to gain from encouraging a more diverse distribution of foreign investments such that is evident in Latvia and Lithuania.

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Annex

Table 1.1. Comparison of output by broad sectors of economy

	Agriculture (%)		Industry (%)				Services (%)	
			Total (%)		Manufacturing (%)			
	1998	1988	1998	1988	1988	1998	1988	1998
Finland	3.8	6.4	33.2	35.3	25.6	25.0	63.0	58.3
Sweden	2.2	2.5	29.9	29.0	...	...	67.9	68.5
Germany	1.3	1.5	32.1	37.9	...	...	66.6	60.7
Japan	1.7	2.7	37.2	40.7	24.3	28.2	61.1	56.6
USA	1.7	1.8	26.1	29.7	17.7	19.9	72.2	68.4

Source: OECD

Table 1.2. Civilian employment by sectors of economy

	Total thousands 1998	Change 1998/1988 %	Agriculture, forestry and fishing (%)		Industry (%)		Services (%)	
			1998	1988	1988	1998	1988	1998
			Finland	2,213	-8.6	6.5	9.8	27.7	30.6	65.7	59.6
Sweden	3,979	-9.5	2.6	3.8	25.7	29.5	71.7	66.7
OECD	...	...	8.5	10.7	27.8	30.9	63.5	58.8

Source: OECD

Table 1.3. GDP: output approach (1995 prices)

	Sweden				Finland			
	1993	structure	1999	structure	1993	structure	1999	structure
Total GVA	1,460,582	100.0	1,741,738	100.0	468,376	100.0	614,963	100.0
agriculture, hunting, forestry	37,983	2.6	39,072	2.2	22,302	4.8	24,167	3.9
industry (incl energy)	327,330	22.4	461,507	26.5	119,869	25.6	184,761	30.0
construction	69,103	4.7	71,370	4.1	24,615	5.3	28,363	4.6
wholesale and retail trade; repairs; hotels and restaurants; transport	271,601	18.6	356,148	20.4	94,621	20.2	132,573	21.6
financial intermediation; real estate, renting and business activities	365,789	25.0	415,172	23.8	94,159	20.1	120,201	19.5
other service activities	388,680	26.6	400,713	23.0	112,810	24.1	124,898	20.3
FISIM	65,289		66,331		17,411		16,424	
GVA excl FISIM	1,395,728		1,674,008		450,965		598,539	
Taxes less subsidies on products	194,981		213,023		72,192		86,222	
Statistical discrepancy	-3,711		-31		0		0	
GDP	11,586,998		11,887,000		523,157		684,761	

Source: OECD 2000

Table 1.4. Gross Value Added and employment in manufacturing (Finland)

	GVA												Employment					
	Absolute value						Change (%)			Structure			Absolute value			Change (%)		
	1991	1994	1999	1999/91	1999	1999/91	1991	1994	1999	1991	1994	1999	1991	1994	1999	1991	1994	1999
Manufacturing of	99,440	118,544	168,554	69.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	460	396	446	100.0	100.0	100.0	100.0
food products, beverages and tobacco	11,100	11,657	13,136	18.3	11.2	9.8	7.8	44	55	45	20.0	27	18	17	12.0	11.4	9.9	9.9
textile and textile products	3,168	3,118	2,835	-10.5	3.2	2.6	1.7	17	27	18	-37.0	6	4	3	5.9	4.5	3.8	3.8
leather and leather products	676	610	539	-20.3	0.7	0.5	0.3	3	34	30	-50.0	34	30	31	1.3	1.0	0.7	0.7
wood and wood products	5,071	6,932	8,705	71.7	5.1	5.8	5.2	71	86	74	-8.8	86	74	71	18.7	18.7	15.9	15.9
pulp, paper and paper products; publishing and printing	28,106	32,678	38,428	36.7	28.3	27.6	22.8	3	4	3	-25.0	4	3	3	0.9	0.8	0.7	0.7
coke, refined petroleum products and nuclear fuel	1,220	1,491	1,686	38.2	1.2	1.3	1.0	19	20	18	-5.0	20	18	19	4.3	4.5	4.3	4.3
chemicals, chemical products and man-made fibres	6,820	8,094	9,741	42.8	6.9	6.8	5.8	18	14	13	28.6	14	13	18	3.0	3.3	4.0	4.0
rubber and plastic products	2,890	3,472	4,344	50.3	2.9	2.9	2.6	16	20	15	-20.0	20	15	16	4.3	3.8	3.6	3.6
other non-metallic mineral products	3,983	3,482	4,344	9.1	4.0	2.9	2.6	44	49	44	14.3	49	44	56	10.7	11.1	12.6	12.6
basic metals and fabricated metal products	10,704	13,179	17,312	61.7	10.8	11.1	10.3	59	59	51	1.7	59	51	60	12.8	12.9	13.5	13.5
machinery and equipment n.e.c	10,509	12,398	16,481	56.8	10.6	10.5	9.8	39	39	42	71.8	39	42	67	8.5	10.6	15.0	15.0
electrical and optical equipment	7,482	13,583	41,763	458.2	7.5	11.5	24.8	23	27	23	-14.8	27	23	23	5.9	5.8	5.2	5.2
transport equipment	4,679	4,801	5,605	19.8	4.7	4.0	3.3	21	21	16	-9.5	21	16	19	4.6	4.0	4.3	4.3
n.e.c	3,032	3,049	3,635	19.9	3.0	2.6	2.2											

Source: OECD 2000

Table 1.5. Swedish external trade, main products

	Export (f.o.b.)					Import (c.i.f.)				
	Structure			Change in value (%)		Structure			Change in value (%)	
	1997	1998	2000	1997/ 1987	1999/ 2000	1997	1998	2000	1997/ 1987	1999/ 2000
Wood and paper	18.8	18.2	13.3	1.0	13.0	3.5	3.5	3.4	7.9	19.0
Minerals and metals	15.5	14.6	8.1	-1.7	18.0	10.9	10.8	7.7	5.0	20.0
Chemicals, rubber and plastics	14.1	14.2	10.1	5.8	11.0	12.7	12.8	11.0	7.0	5.0
Energy products	0.0	0.0	3.3	10.2	62.0	7.2	5.0	9.1	-26.1	76.0
Machinery and equipment	44.2	45.4	55.6	7.3	13.0	31.9	32.9	50.7	9.8	18.0
Electronics and optical equipment	19.5	21.9	23.1	16.8	20.0	21.1	22.3	22.1	12.9	26.0
Other products	7.4	7.6	9.5	6.2	6.0	12.7	12.8	18.1	7.8	6.0

Table 1.6. Finnish external trade, main products

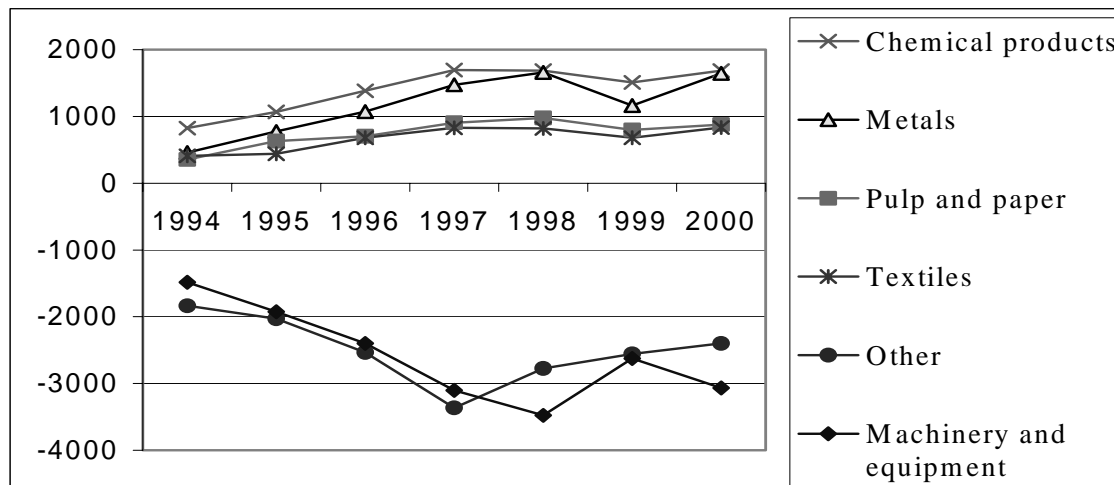
	Export (f.o.b.)				
	Structure			Change in value (%)	
	1997	1998	2000	1998	2000
Wood and paper products	6.7	6.2	5.4	0.4	10.0
Pulp, paper and paper products	23.4	23.5	21.7	8.8	18.0
Chemicals, rubber and plastics	7.7	7.4	7.0	3.4	20.0
Minerals and metals	10.2	9.4	8.7	-0.7	27.0
Machinery and equipment	17.9	17.5	16.0	5.6	21.0
Electrical and optical equipment	22.5	25.8	31.0	24.2	39.3
Other goods	11.5	10.3	10.1	-3.4	27.6
	Import (c.i.f.)				
	Structure			Change in value (%)	
	1997	1998	2000	1998	2000
Intermediate goods	42.2	41.5	40.8	5.5	23.2
Energy	9.9	7.7	12.3	-16.3	70.5
Capital goods	25.6	27.4	24.0	14.9	14.7
Consumer goods	22.3	23.4	22.9	12.8	16.6

Table 1.7. Swedish trade – main trading partners

	Export		Import	
	Share 2000	Volume change 99/00	Share 2000	Volume change 99/00
Germany	11.0	13	17.5	14
USA	9.5	17	6.7	35
Great Britain	9.4	11	9.6	8
Norway	7.5	10	8.2	30
Denmark	5.8	9	7.5	20
Finland	5.6	13	5.6	16
Netherlands	5.0	-7	7.6	8
EU	54.7		65.5	
o/w EU-11	38.8		48.4	
Other European	12.2		13.4	
o/w Estonia			1.2	51

Table 1.8. Finnish trade – main trading partners

	Export		Import	
	Share 2000	Volume change 99/00	Share 2000	Volume change 99/00
Germany	12.5	20.7	17.5	15.7
USA	7.4	18.6	6.7	10.9
Great Britain	9.1	25.6	9.6	20.7
Norway	2.6	17.8	8.2	36.6
Denmark	2.5	12.6	7.5	30.4
Sweden	9.3	17.6	5.6	14.0
Netherlands	4.0	15.2	7.6	16.9
EU	55.7	21.4	54.4	16.1
o/w EU-11	34.0	21.8	33.6	14.7
Other European	17.8	26.3	20.8	51.2
o/w Estonia	3.1	27.7	2.8	51.0

Figure 1a. Trade balance with Finland by commodity groups (excluding subcontracting trade) (EEK m)**Figure 2a. Trade balance with Sweden by commodity groups (EEK m)**