

Keskusteluaiheita - Discussion papers

No. 539

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**REGIONAL INTEGRATION IN THE
BALTIC RIM - FDI AND TRADE-BASED
INTEGRATION IN THE
TRIANGLE OF FINLAND, ESTONIA
AND ST. PETERSBURG***

This document has been prepared by The Research Institute of the Finnish Economy (ETLA) for the OECD Policy meeting which took place in Helsinki, Finland, 19-20 June 1995.

* Final version in February 1995.

Borsos, Julianna and Erkkilä, Mika, REGIONAL INTEGRATION IN THE BALTIC RIM - FDI AND TRADE - BASED INTEGRATION IN THE TRIANGLE OF FINLAND, ESTONIA AND ST. PETERSBURG, the Research Institute of the Finnish Economy, Elinkeinoelämän Tutkimuslaitos, 1995, 85p. (Discussion Papers, Keskusteluaiheita, ISSN 0781-6847; No. 539)

Abstract: FDI and trade flows in the triangle suffer from (1) unnecessarily complicated and unclear trade procedures (including non-tariff trade barriers) in the case of Russia, even though several bilateral agreements have been signed between Finland and the Russian Federation and between the EU and the Russian Federation; (2) hampered economic and political relations between Russia and the Baltic States, particularly Estonia, due to the unwillingness of Russia to undertake measures that would decrease the presently high tariffs to Estonian products and improve market access as a whole; (3) the poorly implemented Baltic Free Trade Agreement; and (4) political and economic unrest in Russia, which affects negatively the investment climate in the whole region, particularly in St. Petersburg.

The following improvements in regional integration schemes could be considered: (1) regional policies should be better integrated with existing national development policies of the member of the triangle; (2) policy-makers and investors should view the industrialisation and internationalisation pattern and programmes from a regional rather than a national perspective; (3) a pre-condition for progress in integration is intensified political co-operation between all the countries of the triangle; and (4) the promotion of integration at the firm level should not be neglected. Adequate information on investment and trade opportunities in the triangle countries is essential and should be provided in order to create the conditions by which institutional arrangements for integration can be realised by market agents.

Keywords: FDI, trade, regional economic integration, the Baltic Rim, Finland, Estonia and St. Petersburg.

Borsos, Julianna ja Erkkilä, Mika, REGIONAL INTEGRATION IN THE BALTIC RIM - FDI AND TRADE - BASED INTEGRATION IN THE TRIANGLE OF FINLAND, ESTONIA AND ST. PETERSBURG, Elinkeinoelämän Tutkimuslaitos, the Research Institute of the Finnish Economy, 1995, 85 s. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; Nro. 539)

Tiivistelmä: Itämeren alueen suotuisan kehittymisen ja alueellisen integraation ja yhteistyön syvenemisen tiellä on mm. seuraavia esteitä: (1) epäselvät kauppaan liittyvät muodollisuudet (ml. epäsuorat kaupan esteet) Venäjän ja Suomen sekä Baltian maiden välillä, johtuen sopimusten pitämättömyydestä; (2) Venäjän haluttomuus parantaa taloudellisia suhteitaan mm. alentamalla epätavallisen korkeita tulleja Baltian maiden, erityisesti Viron, kanssa; (3) Baltian maiden keskinäistä vapaakauppasopimusta ei käytännössä ole riittävästi noudatettu; ja (4) poliittinen ja taloudellinen epätasapaino Venäjällä heikentää erityisesti Pietarin taloudellista ilmapiiriä.

Tutkimuksen mukaan (1) aluepolitiikkaa tulisi integroida paremmin olemassaoleviin kansallisiin kehitysohjelmiin kolmion maissa; (2) poliittisten päättäjien ja sijoittajien tulisi nähdä teollistumis- ja kansainvälistymiskehitys sekä -ohjelmat alueellisesta näkökulmasta kapean kansallisen näkökulman sijaan; (3) taloudellisen edistymisen perusedellytys pohjautuu syventyvään poliittiseen yhteistyöhön; ja (4) yritysten tasolla tapahtuvaa integraatiota ei pidä laiminlyödä. Kauppaa ja sijoitustoimintaa koskevan tiedon saanti on välttämätöntä yrityksille. Tiedonkulku on taattava, jotta markkinoilla toimivat operoijat olisivat perillä institutionaalisiin järjestelyin luoduista toimintaolosuhteista.

Avainsanat: Suora sijoitus, kauppa, taloudellinen integraatio, Itämeren alue, Suomi, Viro ja Pietari.




YHTEENVETO (Finnish summary)

Tutkimuksen tavoitteena on analysoida nykyisten suorien sijoitus- ja kauppavirtojen kehitystä Suomen, Viron ja Pietarin välillä. Samalla arvioidaan potentiaalinen taloudellisen yhteistyön ja integraation syveneminen 'kolmion' maissa sijoitusten ja kaupallisen toiminnan kautta. Tutkimuksessa esitellään aluksi analyttinen katsaus aiheeseen, jonka jälkeen työtä on pohjustettu laajalla kolmion maiden yleisen taloudellisen tilanteen, viimeisimpien Itä-Euroopan sijoituskehitysten sekä institutionaalisen perustan kuvauksella. Luvuissa 4 ja 5 käydään läpi suorien sijoitus- ja kauppavirtojen kehitys kussakin maassa, niitä määrääviä tekijöitä, pääasiallisia suorita ja epäsuoria esteitä sekä sijoitusten ja kaupan potentiaali ja nykyinen kokonaismerkitys Itämeren alueen kannalta. Lopuksi pohditaan Suomen, Viron ja Pietarin alueen orastavia ja vahvoja keskinäisiä sijoituksellisia ja kaupallisia riippuvuuksia, näiden riippuvuuksien merkitystä alueellisen integraation kannalta sekä esitellään seuraavat johtopäätökset ja politiikkasuositukset.

Itämeren alueen suotuisan kehittymisen ja alueellisen integraation ja yhteistyön syvenemisen tiellä on mm. seuraavia esteitä: (1) epäselvät kauppaan liittyvät muodollisuudet (ml. epäsuorat kaupan esteet) Venäjän ja Suomen sekä Baltian maiden välillä, johtuen sopimusten pitämättömyydestä; (2) Venäjän haluttomuus parantaa taloudellisia suhteitaan mm. alentamalla epätavallisen korkeita tulleja Baltian maiden, erityisesti Viron, kanssa; (3) Baltian maiden keskinäistä vapaakauppasopimusta ei käytännössä ole noudatettu; ja (4) poliittinen ja taloudellinen epätasapaino Venäjällä heikentää koko alueen yhteistyötä ja erityisesti Pietarin taloudellista ilmapiiriä.

Tutkimuksen mukaan (1) aluepolitiikkaa tulisi integroida paremmin olemassaoleviin kansallisiin kehitysohjelmiin kolmion maissa; (2) poliittisten päättäjien ja sijoittajien tulisi nähdä teollistumis- ja kansainvälistymiskehitys sekä -ohjelmat alueellisesta näkökulmasta kapean kansallisen näkökulman sijaan; (3) taloudellisen edistymisen perusedellytys pohjautuu syventyvään poliittiseen yhteistyöhön; ja (4) yritysten tasolla tapahtuvan integraation edellytyksiä ei pidä laiminlyödä. Kauppaa ja sijoitustoimintaa koskevan tiedon saanti on välttämätöntä yrityksille. Tiedonkulku on taattava, jotta markkinoilla toimivat operoijat olisivat perillä institutionaalisiin järjestelyin luoduista toimintaolosuhteista.

Inhabitants of city regions:

-  over 1 million
-  500 000 - 1 million
-  100 000 - 499 999

 international traffic corridor

 39 million inhabitants

 200 million inhabitants

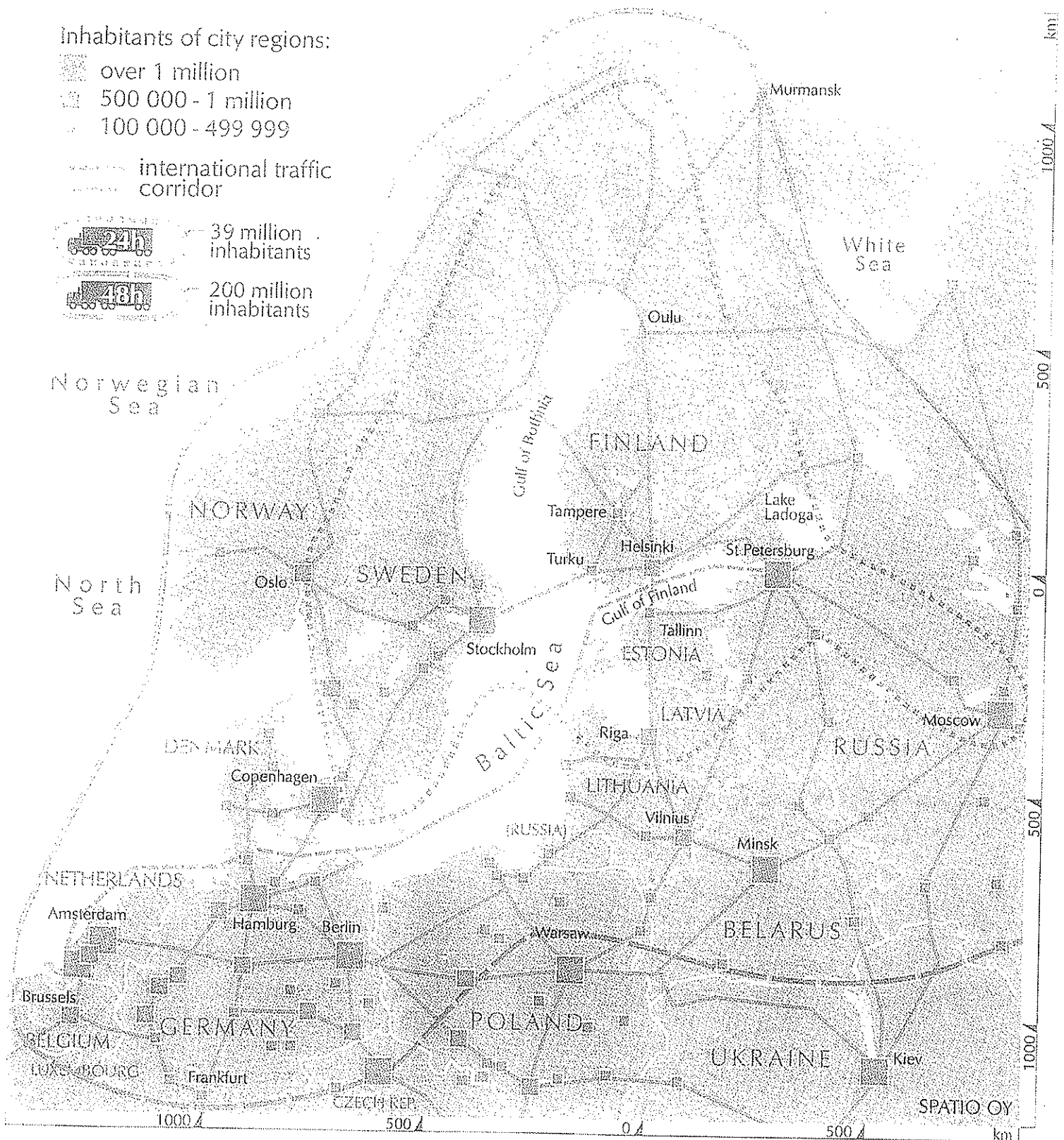


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EXECUTIVE SUMMARY

Purpose of the Study

The purpose of this study is to review the progress in regional integration between selected countries of the Baltic Rim and to assess the potential for deepening economic integration and co-operation among others. Two aspects of regional integration are analysed, namely FDI and trade flows.

The opening up of Central and Eastern Europe has also increased the scope for trade and FDI in the Baltic Rim. Regional proximity has turned out to be a major determinant for FDI and trade flows between West and East European nations. A number of regional clusters can already be identified including typically a few Western countries and certain transition economies. This is the case of the triangle of Finland, Estonia and St. Petersburg and the Leningrad region.

Progress in Regional Integration in the Triangle

Finnish FDI in Eastern Europe has increased rapidly, especially in Estonia and the north-western regions of the Russian Federation with concentration in St. Petersburg and Moscow. The manufacturing sector has attracted the majority of these Finnish investments. However, Finnish FDIs in Eastern Europe are still of minor importance, being less than 5 per cent of total outward FDI. As measured by the number of registrations (excluding joint ventures with CMEA countries), Finland annually ranked from first to third during the period 1987-1992 in investment in the former Soviet Union (FSU) and later in the Russian Federation. Since Estonia's re-independence that took place in August 1991, Finland has been the number one investor country there, and is still a major investor in St. Petersburg as well.

Some 4.1 billion kroons (some USD 400 million) in foreign capital have flown into Estonia in the form of foreign direct investments since 1991. The number of foreign capital companies has increased steadily since 1987, and at a more rapid pace since 1991. The total amount of registered companies with foreign capital is now 7612. During the three first quarters of 1994, some 1300 new, either totally or partly, foreign-owned companies were registered with foreign investments amounting to some 1.3 billion kroons (more than USD 100 million). Those countries that are the main trading partners of Estonia, have accordingly been the most active in registering joint ventures.

The major investor countries in Estonia according to the cumulative invested capital are: Sweden, Finland, the Russian Federation, the USA and Germany. Irish, Russian and (former) Yugoslavian investors have increased their share considerably over the January to October period. Surprisingly, Egypt has undertaken two major FDI projects in which 288 millions kroons have been invested. The reason behind sharp increases in Russian and Yugoslavian investments is to be found in a few larger investment projects. The same investor countries are to be found in St. Petersburg, where the US investors rank first, followed by Germany, Finland and Sweden. The distribution of foreign investments by the type of economic activity in Estonia is similar to that of St. Petersburg: manufacturing, trade and business services are the most important sectors attracting investments.

FDI flows in Estonia and St. Petersburg are not yet necessarily connected to active, functioning companies. Several companies have been established with the minimum of capital required, aiming at keeping these as shell companies waiting for a consumer market to develop. In St. Petersburg, several Finnish companies operate through commercial representative offices, the main objectives of which are to establish presence for their products and, on the other hand, follow the economic and political development in Russia, in order to be able to undertake investments when suitable. Currently, production activities in Russia, including St. Petersburg, are still considered as risky.

Trade - particularly Finnish exports which has practically doubled every year - between Finland and Estonia has increased rapidly in the past three years. The value of Finnish exports to Estonia was 1883 mill. FIM and imports amounted to 762 mill. FIM in 1994. The value of exports had grown to 3028 mill. FIM in January-November 1994. Imports reached 989 mill. FIM in the same period.

An analysis industry by industry (manufacturing) also reveals that the trade pattern of Finland's exports to Estonia deviates from that of Finland's overall exports. On the other hand, Estonia's exports to Finland is more in line with Finland's overall import pattern. Finland's comparative advantage in her trade with Estonia lies in oil products, machinery and equipment, radio- and telecommunications and vehicles. Estonia specialises in textiles, wood and wood products and base metals. Finland's comparative advantage in her total exports lies in wood and wood products, pulp and paper, base metals, machinery and equipment and, which has expanded in recent years, radio- and telecommunications. The share of the five largest export industries in the trade with Estonia amount to 19 per cent, while the corresponding share in Finnish imports from Estonia is 43 per cent. Estonian exports to Finland are thus much more concentrated and

one-sided compared to the Finnish export specialisation. It also bears witness to the degree of competition on the Estonian and Finnish markets.

Finnish and Estonian firms might also become competitors on third markets in goods intensive in unskilled labour. The commodity pattern in the trade between Finland and Estonia will undergo changes as the countries adjust and their production shifts to industries in which they have a comparative advantage, provided market forces are allowed to work.

Finnish imports from St. Petersburg and the Leningrad region amount to twice the value of exports. Finnish imports reached 258 mill. USD in 1993. Some 80 per cent of Finnish overall exports to St. Petersburg and Leningrad went to St. Petersburg, whereas roughly 50 per cent of the imports origin there. The strong industries of the Leningrad region are nuclear energy and pulp and paper, but it mainly serves St. Petersburg as a source of agricultural products and recreation. The commodity pattern of St. Petersburg's exports in 1992 was biased towards raw materials (60 per cent) - exclusive of oil. Machinery and equipment (7 per cent) and consumer goods (9 per cent) were relatively unimportant. The exports of the Leningrad region was heavily dominated by oil products (98 per cent). Imports of St. Petersburg and the Leningrad region in 1991 consisted mainly of consumer goods and food (50 per cent of total imports). Consumer goods, agricultural products and processed food products are the traditional industries that dominated the trade between Finnish companies and the Leningrad region. Growing areas are the products of the metal and chemical industries. Fresh and processed food, clothing and footwear, cosmetics, furniture and furnishing are regarded as having unexploited opportunities.

Exports from St. Petersburg to Estonia in 1992 amounted to 31157 mill. roubles and the value of the exports from the Leningrad region to Estonia reached 2607 mill. roubles, adding together to 33764 mill. roubles.

The study indicates that FDI is both multiplying and deepening the trade and production linkages among Finland, Estonia and the region of St. Petersburg. Four types of trade-related FDI can be identified in the triangle:

First, a great part of FDI today is undertaken as a complement to trade. FDI flows increase trade or do not affect trade flows adversely between the host and home countries. In this case the foreign firm wants to expand its production capacity since demand in the host economy has increased or because it is otherwise deemed necessary to be present in the foreign market, e.g.

local market conditions differ from those at home and improved knowledge of local markets make it easier to penetrate them.

Another rationale for FDI today is that it is undertaken as a substitute to trade, i.e. FDI flows lead to decreased exports from the home to the host country or do not (at least) increase exports. To the extent that FDI replaces domestic production, it should show up in increased imports from the host country if the domestic (home) market is also being supplied from the host country.

The third factor which affects the relationship between FDI and trade is the height of external tariffs and other barriers to trade. Given that tariffs are higher on final products than on intermediates and inputs, a firm can try to circumvent them by FDI. FDI motivated by protectionist policies give rise to so-called screwdriver plants or transplants with a low value-added. The final product is assembled in the host country and sold on the local market.

Fourth, some multinational enterprises in Estonia and St. Petersburg service/produce for the surrounding Baltic and Russian national markets and so promote their sales through FDI. In the future trade promoting FDI is going to play a more important role as, for instance, the Baltics will try to put into effect their free-trade agreement. Furthermore, as Russian and Baltic companies internationalise, Finland as a location for their trade promoting FDI will be more attractive due to her EU membership.

The experiences of the past few years in the triangle suggest that outward and inward FDI and trade are closely related to each other and have generated significant production and trade benefits to the economies involved, that is Finland, Estonia and the region of St. Petersburg. Based on such considerations no persistent reversal of what has been achieved in terms of free trade and relatively large flows of FDI should occur. However, trade and FDI in the triangle are very vulnerable not only to economic cycles, but also to political uncertainties in the Russian Federation.

Within the triangle, the development of economic regionalization is being reshaped to what it was before World War I. The difference is that each party now maintains a different status vis-à-vis their economic relationships: Finland is a full member of the EU and is actively involved in Nordic co-operation schemes, Estonia is part of the Baltic free trade area and will soon conclude an Europe Agreement with the EU, whereas the region of St. Petersburg has already become one of the most important economic centres in Russia. As our analysis on institutional arrangements, FDI stocks and flows and on the trading potential shows, economic co-

operation *within* the triangle has already reached a relatively important dimension. Consequently, FDI and trade flows are rather intensive between Finland, Estonia and St. Petersburg, especially between Finland and Estonia. Estonia makes an interesting exception in the triangle, as the country is unusually open to all trade and FDI flows. The triangle as a whole forms an attractive, rapidly evolving economic region, wherefrom EU markets, the Baltic area and Russian markets can be served.

The role of individual investors, of various associations and chambers of commerce, of bilateral and multilateral co-operation programmes and other international schemes is significant in enabling overcoming the previously cited obstacles to greater FDI and trade and eventually to regional integration. The Baltic region has been recognised as an important market and centre of economic activity by the Union. It is against this background that bilateral relations are being actively developed with the countries of the region, jointly with considerable assistance funds.

Factors behind FDI and Trade

Foreign investors in Eastern Europe are motivated by a number of factors, i.e. the combination of generally low wage levels and a relatively well-educated labour force, expectations of future market growth and eventual recovery of Eastern European transition economies. The main reason behind Finnish FDI in Estonia or St. Petersburg is that investors want to get an early foothold in a market that has enormous future potential, a market that not only covers the whole Baltic Rim, but that can also be extended to cover the large Russian market. In many of the cases, factors such as low cost production, cheap resources or investment incentives fall much further down the list of priorities. The geographical proximity of these regions makes them even more attractive for manufacturing production as political and economic conditions are improving.

In certain industries, such as the building materials industry or the foodstuffs industry, large Finnish FDIs, especially in Estonia, are driven by the strategy to buy potential competitors. Thus, market expansion takes place in the form of extended (Finnish) home markets. Furthermore, an already significant number of companies have moved into the region to serve their major clients. This ripple-effect has further affected the domestic economies of Estonia and the St. Petersburg region via foreign investors' increasing use of local suppliers and services and by paving the way for further investment by their major suppliers and for industrial manufacturers.

Some USD 30 billion of Russian capital is estimated to have been transferred abroad during the 1990-1993 period, out of which only a fraction is expected to flow back into the country via legal channels. The reasons behind relatively large amounts of Russian FDIs, more precisely 473 millions of kroons (approx. USD 50 millions) in Estonia in 1993 and early 1994 are to be found in the unstable political and economic situation in Russia. Russian investors are not confident with the current domestic development. Estonia is a more interesting and attracting destination for their FDIs mainly because of the country's extraordinarily positive development, which entails more significant profits and lower risks than in Russia.

Until now, no significant direct investments have been made by Estonian and Russian investors in Finland. Finland's EU-membership should improve its outlook for inward FDI also from Estonia and Russia. Some Estonian and Russian companies export via their Finnish parent companies or subsidiaries in order to penetrate more easily the EU market. This applies also in the other direction, e.g., exporting to Russian markets has been considerably easier through Finland due to clearer procedures brought by agreements signed between the EU and Russia. For instance, Estonian exports directly to Russia have been difficult due to the high tariff barriers.

In the longer run, Estonia could compete for the same type of inward FDI with Finland, as its production characteristics are already showing signs of a future shift to higher value-added production. The St. Petersburg region is likely to become even more important destination for Western investors, who are looking for expansion in the Russian markets and, to some extent, in the CIS. St. Petersburg will be even more attractive, if plans to transform the region into a free economic zone end up into realisation. Among foreign investors, the region is considered as one of the most important future business centres in the Baltic Rim and Eastern Europe.

Obstacles to greater FDI and Trade

There are several key elements determining FDI flows in the Baltic Rim. These include the level of economic activity, regulatory stability, market access, relative labour costs and infrastructure. Over the short run these conditions have affected negatively FDIs in Estonia and, to a larger degree, in St. Petersburg. Foreign investors feel more confident with the Estonian economic development than with that in St. Petersburg. Notwithstanding the relatively good development of the business environment in Estonia, there are still various substantial problems, which are inhibiting even greater volumes of FDI and, indirectly, additional trade flows. These break down into systemic problems, which are a legacy of fifty years of central planning, and difficulties arising from: 1) loopholes in the legislation due to the

fast implementation of new laws - some changing the previously passed, favourable laws; 2) slow bureaucratic administration; 3) vague ownership, especially real estate ownership; 4) other difficulties due to the incomplete transformation of the economy.

St. Petersburg's business environment suffers from the general political and economic instability in Russia and this has deterred many foreign investors from undertaking projects. Other problems are closely related to institutional deficiencies, which are systemic by nature and resemble those listed above in the case of Estonia. However, problems encountered by foreign investors in St. Petersburg will be far more difficult to overcome. As a consequence, some considerable foreign investment projects in St. Petersburg have been interrupted. Potential investors, in turn, are not satisfied with the current investment climate, which suffers from the unstable political situation, the large budget deficit and the weak performance of the public sector, coupled with a large external debt, slow progress in structural reforms, and the overall fluid political and economic situation in the CIS.

Furthermore, trade suffers from the following problems: (1) in the case of Russia, trade procedures are unnecessarily complicated and unclear, even though several bilateral agreements have been signed between Finland and the Russian Federation and between the EU and the Russian Federation; (2) both economic and political relations between Russia and Estonia are hampered by the unwillingness of Russia to undertake measures that would decrease the presently high tariffs to Estonian products and improve market access as a whole; (3) even though all of the three Baltic States have signed a free trade agreement (that does not cover agricultural products), the principles have not been mutually respected, Estonia being the only party putting them into effect; (4) political and economic unrest in Russia affects negatively the investment climate in St. Petersburg.

Actions to promote FDIs have been criticised both in Estonia and Russia, where in some cases FDIs are considered as a threat for domestic economic activities, for national prosperity and even for sovereignty. Main political parties in Russia and some Estonian politicians now advocate some degree of protectionism for the local industry. In Russia, foreign investors even talk about "an aggressive mood against foreign investors". In Estonia, the emergence of large Russian investors into their territory has been subject to intensive political debates, in which the central question has focused on whether these investments should be allowed or not, and what kind of measures are needed.

Policy Considerations

The trading potential was estimated with the help of the so-called gravity model, a method that has been frequently applied in recent years to assess the trading potential among West and Central and East European countries. The potential is taken to be determined by proximity and the level of economic development in the countries concerned. In general, there exists ample potential and unutilised capacity in the trade with St. Petersburg and Leningrad on part of both Finland and Estonia. It can thus be said in conclusion that the regions could profit further from increased trade by exploiting the existing potential.

If and when trade is liberalised, this should change the trading pattern in such a way that production shifts to the country where it is most profitable to locate production. Furthermore, the welfare improving effects will be greater, the lower the external tariffs are, the more the participants trade with each other, the easier it is for exporters to gain market access and the bigger the markets are.

In principle the labour force in Finland and other Western industrial countries will have to compete directly with that of Eastern transition economies. Therefore, particularly unskilled Western labour will lose out in that race as long as Estonia and the St. Petersburg region compete with low wages. But, simultaneously, the demand for and the output of skill-intensive goods should increase in Western industrialised countries. As a whole, Finland will gain from increased trade with Eastern Europe, as the industry specialises in those fields where it possesses a comparative advantage. Thus, as a consequence of expanding trade and increased FDI stocks, resources will shift to those sectors where their marginal productivity is highest. This is one aspect of the dynamics of the Baltic Rim.

A case for deepening integration and increased trade can be made by analysing the trading potential in a medium- to long-run perspective. Typically, the potential is twice the actual value in a 5-year perspective. It increases to three-fold after 10 years and 6-7 times in a 20-year period. The figures show that there is still much to gain and that there exists unexploited capacity. The trade pattern will change over the course of time to better reflect the respective region's comparative advantage and resources.

A picture of regional integration emerges thus in that St. Petersburg with surrounding areas engage in foreign trade that differs both with respect to its country composition and commodity pattern from the equivalent Russian. The same holds for Finland that trades in

different goods with her nearby markets and her total trade. The determining factors of the dynamics of this area differ from those factors that account for the three countries' overall foreign trade. A pattern of local and regional integration emerges that does not follow the general pattern of development of the countries' exchange of goods. Neither does it fit in nor correspond perfectly to the three countries' position in the global division of labour. One could thus envisage a very distinct pattern of development with commercial ties, above-average trade intensiveness and a relatively high growth rate feeding into each other and leading to a virtuous circle.

If the deficiencies cited above were eliminated or at least reduced, the Baltic Rim and in particular Finland, Estonia and the region of St. Petersburg would be able to deepen integration at all levels and could attract additional inward and intra-regional FDI. In order to develop an integrated, dynamic regional economy, a strong commitment to the promotion of economic growth, to the development of both technological and physical infrastructure and enhancing human capital is necessary. The mechanism of integration should bring increased specialisation, an overall rise in the level and rate of technological progress in the region, stimulated by increased competition, rising incomes and a larger market. This development should further boost FDI activities in and among Finland, Estonia and St. Petersburg. Furthermore, FDI from this region, especially from Estonia and St. Petersburg, could increase as companies and industries become stronger and more competitive both domestically and internationally.

Thus, in the future, FDI from Estonia and St. Petersburg should increase and Finland's EU membership should improve its outlook for inward FDI from Estonia and Russia. Yet, in the longer-run, Estonia could compete for the same type of FDIs with Finland, as its production characteristics are already showing signs of a future shift to higher value-added production. The development towards internationalisation and better competitiveness of Estonian and St. Petersburg indigenous firms should be further encouraged through industrial policies, e.g. upgrading innovative capacity, supporting training and education, by national governments, if their objective is to maintain the current positive economic progress and further enhance economic growth and catching up.

The study shows that there are significant benefits to be reaped from deepening integration and intensified trade linkages. This is not only important for the exporting country, but also for the importing country, which in turn is able to benefit from better market access, that a mutual freeing of trade means. Russia has much to gain by lowering its tariffs and giving preferential treatment to both the countries of the EU and Estonia. The Interim Agreement should hence be

brought into force and the ratification process of the PCA also started. At the same time the EU should aim for a trade regime where all products are given equal market access, i.e. quotas on certain sensitive products (textiles and steel) should be gradually abolished. Free-trade (in goods and services) should be aimed for after the transition period.

The implementation and the monitoring of the commitments of the trade agreements are crucial for Estonia. As in general in international trade relations, small countries stand to lose most if the players do not stick to the rules of the game. Given the relative bargaining positions of Estonia and Finland as an EU-member, a development towards aggravating market access and retaliation would affect Estonia relatively much. On the other hand, Finland would not remain indifferent either, given the current level of trade with Estonia. From a St. Petersburg point of view, especially future trade prospects look promising.

A distinct pattern of FDI and trade has evolved in the triangle. This is how regional economic integration manifests itself. It should be understood as an evolving and dynamic process which is bound to change with the regions' changing levels of development and as their mutual economic ties strengthen. Due to its dynamic nature, capacity to adjust is required. The liberalisation of trade will also have an influence on the allocation of resources and production. Besides improved efficiency in production, adjustment costs will rise as factors of production become redundant, even if temporarily. The dominating part of trade is of an inter-industry kind and is likely to be so for the foreseeable future, unless wealth levels converge substantially.

FDIs are vital in the path towards a market economy. In order to attract additional FDIs in Estonia and St. Petersburg, policy-makers must be able to muster a high degree of credibility and there must be a preparedness to support clear, simple and market-oriented policies. The most important task in the short term are the effective implementation of FDI policies, ensuring their coherence, predictability and institutional co-ordination.

Public policy plays an important role in influencing the region's dynamics. Governments can create a favourable environment for trade and FDI through the development of e.g. infrastructure and logistics. The role of industrial policy is seen as securing a stable and predictable environment in which firms act and intervention is foreseen only to correct market failure. Part of this is also the design of e.g. proper capital market regulations and tax policies.

Trade policy is closely linked to industrial policy in that, if poorly designed, the outcome is suboptimal. An industrial policy which is directed towards securing a stable policy environment

and framework conditions for industry is best complemented by liberal trade policies and vigorous competition policies. Protectionist trade policies, the aim of which is to limit foreign competition, will counteract the promotion of competition in domestic markets. A liberal trade policy complements competition policy insofar as it encourages an efficient allocation of resources, economies of scale in production and dynamic effects, i.e. increased competition, restructuring and innovation. Trade policy, in conjunction with competition policy, is a powerful tool against price fixing, restricting production, market sharing and all agreements between firms, tacit or explicit, that affect trade between and within the regions. In other words, it is largely about granting market access for foreign producers and competitors.

Several observations can be made regarding possible improvements of regional integration schemes. First, regional policies should be better integrated with existing national development policies of the members of the triangle. Second, policy-makers and investors should view the industrialisation and internationalisation pattern and programmes from a regional rather than a national perspective. Third, and of most importance, a pre-condition for progress in integration is political co-operation - involving also relinquished economic sovereignty. Last, the promotion of integration at the firm level should not be neglected. Adequate information on investment and trade opportunities in the triangle countries is essential and should be provided in order to create the conditions by which institutional arrangements for integration can be realised by market operators.

Furthermore, the private sector should also support integration through institution building, e.g. chambers of commerce, and provision of advice to governments. Finally, as both St. Petersburg (and Russia) and Estonia have not been able to fully absorb the international financial assistance, it should be allocated to the most productive projects. This includes monitoring the eligibility criteria and control mechanisms.

1 INTRODUCTION

Background

The disintegration of the Soviet Union accompanied with political and economic liberalisation in the Central and Eastern European countries, has brought these countries into the international division of labour. Although they face severe problems and challenges of an unprecedented nature, they form an important region and lucrative markets in the future.

The opening up of Central and Eastern Europe has also increased the scope for trade and FDI in Finland's nearby regions. Due to geographical proximity, these markets offer interesting opportunities for Finnish firms and vice versa. Regional proximity has turned out to be a major determinant for FDI and trade flows between Western and Eastern nations. A number of regional clusters can already be identified including typically a few Western countries and certain transition economies. This is the case of the triangle of Finland, Estonia and St. Petersburg and the Leningrad region.

After the disintegration of the Soviet Union, economic ties have indeed strengthened in terms of e.g. free-trade agreements, first between Finland and Estonia, and since the beginning of this year between Estonia and the EU, which also contains provisions for FDI flows. The next step is the conclusion of a so-called Europe Agreement, estimated to be ready for signature at the European Council summit in Cannes this summer. Also Russia takes part in this pan-European liberalisation process. The EU and Russia have negotiated a Partnership and Co-operation Agreement (PCA) and an Interim Agreement, meant to bring into force the commercial paragraphs of the PCA. In addition to providing new markets for Finnish exporters, the recipient countries will also benefit from FDI in terms of employment opportunities, know-how and, in the end, higher welfare. Similarly, Finland provides promising outlets for the exports of Estonia and St. Petersburg with surroundings.

Objectives of the Study

The scope of the study is limited to the triangle of Finland, Estonia and St. Petersburg. The study is an exercise oriented at the empirical assessment of the actual and future situation of regional integration through FDI and trade flows in this area. The study not only looks at FDI and trade flows from Finland to the two neighbouring transition economies, but also to such flows in the reverse direction and, additionally, to trade and FDI flows among the two

transition economies. The objective of the study is to examine the role of FDI and trade for regional economic integration, and to find out what kind of policies are needed in the countries of the Baltic Rim in order to promote FDI and trade. In order to accomplish the objective of the study, the recent economic and institutional situation is described; FDI and trade flows as such and their interaction are examined, including an assessment of FDI and trade determinants; the trade/FDI potential between Finland and its neighbouring Eastern markets (Estonia and St. Petersburg) are analysed; and, finally, obstacles to greater FDI and trade flows are identified.

Hence, the study seeks to reveal both the formal and informal aspects of the economic, political and firm level (via FDI and trade) relationships between the three countries and to assess future trends. The findings of the study are subsequently translated into recommendations for FDI and trade policies aiming at improving regional integration.

Methodology

The data on FDI and trade flows have been acquired from various sources: the Finnish Statistical Office, the Statistical Bureau for foreign Trade, St. Petersburg and Estonian authorities and co-operating research institutes. Extensive use of ETLA's previous empirical studies has been made.

The analysis of FDI flows, their determinants and relative impact and corporate strategies is based on case company interviews, national statistics, reports and various articles. FDI designates operations undertaken outside the firm's home country and risk capital from one country is directly invested in another. Usually, FDI is made to create or expand a permanent interest in a foreign company. This may take place by enacting an acquisition, either totally or partially, by the setting up a joint venture (or other co-operative arrangements) with a local partner or by establishing a new wholly owned company (greenfield investment).

The long-run trading potential between the three regions is modelled with the help of the so-called gravity model, which purports to explain the trading potential between any given pair of countries as a function of their mutual distance, their GDP/capita incomes, their size (measured as GDP) and adjacency. The study also includes a discussion of comparative advantage (measured as net trade over total trade and adjusted for overall trade imbalances) and likely future trade patterns. The three regions will specialise along the lines of comparative advantage for many years to come as a result of differences in their development and economic structures and hence, the commodity pattern of trade is also liable to change.

Part of the problem has been to find reliable and up-to-date data. Therefore, one may object to some figures used in the study, but given the state of national statistics in Estonia, Russia and St. Petersburg - not to mention problems related to measurement and definition and exchange rates - the authors are acutely aware of all deficiencies of the report in this respect. Partly this has also been a data collecting exercise with the aim of gathering together data from different sources and presenting them in a coherent and concise way.

This study was completed by Research Fellows Julianna Borsos and Mika Erkkilä at the Research Institute of the Finnish Economy (ETLA). Julianna Borsos has written the text for chapters 2.1, 2.2 and 4. Mika Erkkilä has written the text for chapters 2.3 and 5. Chapters 3, 6 and 7 are an outcome of our joint efforts. We have much benefited from discussions with Counsellor Pertti Valtonen at the Ministry of Trade and Industry and Research Director Kari Alho at ETLA. Rolf Alter of the OECD, who has been responsible for the whole project, has provided us with valuable data and useful advice.

The results of this study will be presented to government officials from the countries of the region, to experts and to the private sector at an OECD meeting in Helsinki in June 1995.

Structure of the Study

The conclusions of the study can be found in the executive summary. Chapter 2 contains a presentation of the analytical framework used in this research. First, an overview on the various FDI explanations is made in order to offer the reader the possibility to get better acquainted with the central determinants related to foreign direct investment and internationalisation. Second, the authors describe the relationship between FDI and regional economic integration on the one hand, and the relationship between trade and regional economic integration on the other. These descriptions are essential in understanding the emerging FDI and trade -based regional integration in the triangle of Finland, Estonia and the region of St. Petersburg.

Chapter 3 includes an analysis of the current institutional framework conditions, which usually determine the level of FDI and trade activities. In transition economies, locational factors such as the economic development, the legislative framework and international agreements trigger additional FDI and trade flows, if they are appropriate. The chapter further includes an overview on recent FDI trends in the Nordic countries and Eastern Europe as a whole, in order to reveal the main characteristics of these FDIs.

Chapters 4 and 5 focus on the actual FDI and trade patterns in the triangle and offer a detailed analysis of FDI and trade flows, on the major investors and trading partners, on the driving forces of FDI and trade within the triangle, on obstacles to greater FDI, on the trading potential and revealed comparative advantage, and, finally, on the relative importance and impact of FDI in the triangle.

The development of regional economic integration within the triangle through FDI and trade is thoroughly discussed in chapter 6. The chapter contains an analysis of the interaction between trade and FDI within the triangle and their core characteristics shaping production and trade. The evolution and prospects of regional integration through FDI and trade in the triangle are then presented, followed by the last chapter, which includes the conclusions of the study as a basis for policy considerations.

2 ANALYTICAL FRAMEWORK OF THE STUDY

2.1 Explaining Foreign Direct Investment

FDI is a distinctive form of international capital flow for two reasons: first, the capital involved in direct investment is entrepreneurial or risk-bearing by nature. Secondly, FDI is strongly industry-specific. FDI does not only finance the construction of plant and equipment, but - in its entrepreneurial role - it is usually linked to the transfer of managerial skills and knowledge from one country to another. Furthermore, its economically significant traits arise from the transfer of capital from a home country's certain industry to a host country's same industry (Caves & Jones, 1985).

Specifically, FDI flows along two industrial channels: Horizontal investment occurs when a company producing a product in the source country establishes a subsidiary to produce the same good in the host country. Vertical investment occurs when it establishes a subsidiary to perform the next stage forward, or the next stage backward, in the fabrication and sale of its product. Furthermore, there is also a third strategy of expansion where direct investments are involved: conglomerate expansion. It takes place when a company manufactures an internationally diversified range of products.

Horizontal investment enables the firm to transplant its intangible assets and, to a degree, its reputation with customers to foreign markets. Also, owning local production facilities facilitates penetrating foreign markets. These facilities make it easier to design products for the special requirements of foreign markets, and to modify the new product if needed. Such activities may also improve product performance (Vernon 1971). Two specific features characterise these markets: product differentiation and the size of the firm.

The reasons for vertical FDIs are quite different from those of horizontal FDIs. Vertical FDI in any industry reduces risk (Caves & Jones 1985). For example when vertical FDI is undertaken for the supply of raw materials, certain problems and uncertainties that would otherwise occur with the other party involved are avoided. Vertical investment is undertaken, because the companies extracting raw materials must be located where the resources are and the firms processing and selling them where the markets are. In general, horizontal FDIs are more common than vertical FDIs.

A firm operating in a foreign country is faced with certain additional costs in comparison with a local competitor. These arise from institutional, legal, cultural and linguistic differences, lack

of knowledge of local markets, and the increased expense in terms of communications and misunderstandings of operating at a distance. Therefore, for foreign direct investment to prove profitable, the foreign firm is assumed to have some advantages not shared by its local competitors. These advantages are, at least in part, specific to the firm and readily transferable within the firm and across distance. Such ownership advantages are not, however, a sufficient condition to FDI, even though they are a necessary condition. In order to further understand why this mode of operation has been chosen over other alternatives (such as exporting or licensing), the locational factors must often be taken into consideration. Such locational factors include relative costs of production, market characteristics, trade barriers, and the like.¹ This is the starting point for the most recent theories and models explaining FDI and internationalisation. These have been developed through attempts to synthesise past theories.

Buckley and Casson (1976 and 1987), Swedenborg (1979) and Dunning (1977 & 1988) hypothesise that the mere existence of imperfect markets and competitive advantages for oligopolistic firms is not sufficient to guarantee FDI. For FDI to take place, competitive advantages must be firm-specific, not easily copied and in a form that allows them to be transferred to foreign markets. FDI is undertaken due to transaction costs incurred in intermediate products markets. These costs can be reduced by internalising these markets within the firm. Here, the key element for maintaining firm-specific competitive advantages is possession of proprietary information and control of knowledge that can generate new information.

The "eclectic paradigm" (Dunning 1981), which seeks to explain international production and FDI determinants, principally hypothesises that a firm will engage in FDI if three conditions are satisfied: Firstly, it possesses net *ownership* (e.g., firm-specific) advantages vis-à-vis firms of other nationalities in serving particular markets and they take the form of the possession of intangible assets. Secondly, assuming the first condition is satisfied, it must be more beneficial to the company possessing these advantages to *internalise* them through an extension of its own activities rather than externalise them through licensing and similar contracts with independent firms. Finally, if the first and the second conditions are satisfied, it must be profitable for the firm to utilise these advantages in conjunction with at least some factor inputs (including natural resources) *located outside* its home country; otherwise foreign markets would be served entirely by exports and domestic markets by domestic production.

¹ See Caves 1971, Dunning 1981 and 1993, Hood & Young 1984.

The greater the ownership or firm-specific advantages, the more the incentive the firm has to exploit these itself. Thus, the probability of a particular country to engage in international investment depends on whether its own firms possess such advantages. Furthermore, the extent to which FDI is undertaken also depends on the country's locational features compared to those of other countries (Dunning 1993). In the case of Finland, one must take into account that only some ten companies can be considered as large MNCs by international standards. Even though Finnish companies are significantly smaller, this paradigm can be used to explain Finnish FDI in Eastern Europe in a narrower sense, as this study will indicate that in most investments, the firms have indeed had certain ownership, internalisation and locational advantages. Finnish firms have gained new competitive advantages as nearby Eastern markets have opened up; they now have access to cheap raw materials, labour force, low price energy, etc.

Explaining Strategic Motives

The strategic factors are often viewed as more important and the locational factors are further considered as sufficient for FDI to take place. There are two types of locational advantages that are narrowly linked to each other: Firstly, there are the traditional locational advantages based on cost considerations, e.g., costs of inputs and transaction costs. Secondly, there is the strategic locational advantage, which is more relevant and which motivates firms to undertake FDI (Jacquemin 1989). The basic assumption is that firms make FDI to increase/defend their market power; their strategic behaviour can for instance take the form of showing their long-term commitment to be established into a given geographical market. Here, the search for reducing transaction costs and the search for market power are not considered as two independent motivations of FDI. FDI can be more profitable than other modes of operation, if specific assets exist (physical, locational, informational and human). Their existence, in turn, gives rise to market imperfections which make FDI "a credible strategy of controlling a market" (Jacquemin 1989, 507).

In general, strategic motives are divided into five main types of considerations which act as a basis for undertaking FDI and which are not mutually exclusive (Behrman 1981): (1) Market seekers, (2) Raw material seekers, (3) Production efficiency seekers, (4) Knowledge seekers, and (5) Political safety seekers.

Corporations that are market seekers are primarily in search of better opportunities to enter and expand within markets. This type of seekers produce in foreign markets either to satisfy local demand or to export to markets other than their home market. When markets are closed

or access is restricted, corporations particularly have incentives to undertake FDIs in order to locate in them. Several studies analysing motives for making FDIs have concluded that market-related factors are the dominant ones². Access to technology has also been identified as a dominating motive (Ajami & Ricks 1981).

Raw material seekers extract raw materials wherever they are available, either for export or for further processing and sale in the host country. Raw material resources are mainly based on mineral, oceanographic or agricultural advantages; thus for example firms in the oil, forest, plantation or mining industries fall into this category. Production efficiency seekers manufacture in countries where one or more of the factors of production are underpriced relative to their productivity. Thus, the aim is to obtain the most economic sources of production by having affiliates in various markets that are highly specialized in product lines or components and by exchanging production.

Knowledge seekers make FDIs to obtain access to managerial or technology expertise. Finally, political safety seekers acquire or establish new activities abroad in order to minimize, among other things, expropriation risks. Their main aim is to disinvest from politically unsafe countries (Boddewyn 1988).

In addition to the five types of strategic motives, there are other reasons that are not necessarily related to those described previously. Dunning (1993) classifies these into three separate groups: Firstly, *escape investments*, which are made to avoid restrictive legislation or macro-organisational policies by home governments. These originate from countries whose governments conduct strongly interventionist macro-organisational policies or in countries where some sectors are limited. Secondly, *support investments* are undertaken to support the activities of the rest of the firm, which often results in high costs but also brings major benefits to the whole firm. Such affiliates often function as trade-related subsidiaries that also provide, among other things, marketing and public relation services for parent companies. Finally, these activities may be conducive to the establishment of market seeking or resource seeking production facilities.

Thirdly, *passive investments* that resemble portfolio investments but that could be considered as direct investment even though the degree of active management is almost non-existent. This is the case, for instance, with large institutional conglomerates that specialise in the buying and selling of companies. Sometimes this type of investment is made to improve technological,

² See, for instance, Davis 1987; Hedlund and Kverneland 1984.

marketing, organisational, etc. capabilities. Passive investments are also in question, when small firms and individuals acquire, for instance, real estate. This study will not include passive investments, as these have more the attributes of portfolio investments.

2.2 Regional Economic Integration and FDI

We will here discuss how regional economic integration might affect FDI from, within and to the integrated area. A key concern is whether integration within the triangle attracts new inflows of FDI into the region. This discussion is needed in order to understand the empirical analysis in chapter 6.

There are several reasons for the rising level of FDI. In order to produce in a region which is surrounded by trade barriers and free trade prevails within the region, some firms "jump the tariff" or non-tariff barriers to produce inside that region (e.g., defensive export substituting FDI). This is usually associated with manufacturing rather than service firms. This type of FDI strategy is conducive to increased FDI inflows in the region in the short-run. However, this situation is static by nature, falling off rapidly once the needed adjustments to the integration have been undertaken by companies.

Another reason to increase FDI in the integrated area are the greater economic efficiency gains and lower operating costs (economies of scale) brought by the creation of a larger market (rationalised FDI). Finally, firms decide to allocate their FDI in a certain region in anticipation of market share, to ensure market penetration and gain early positions in markets which are expected to grow rapidly (e.g., offensive export substituting FDI; see also chapter 3 concerning FDI determinants and strategic motives). Thus, rationalisation and offensive FDI strategies lead to an increase in FDI flows by manufacturing and service firms both into the region from third countries and within the region among member countries. Furthermore, greater FDI by manufacturing firms should result in an increase in activities related to business services, such as accounting, banking, insurance services, etc., as firms offering these services tend to follow their clients abroad. This is the case for the three parties of the triangle (see chapter 3.5 on the relative importance and impact of FDI in the triangle). The effects of rationalisation and offensive FDI are dynamic and self-perpetuating and occur over the medium and long term.

Thus, regional economic integration produces an investment creation effect in the above mentioned strategies. But, the elimination or lowering of trade barriers can also cause an investment diversion effect within the region or a re-alignment of investment capital to reflect

the regional rather than a strictly national market. In the long run, the rationalisation of the region's industries and services generated by the re-organisation of value-adding activities should lead to an increased inflow of FDI, as new opportunities arise from technical progress, economies of scale, higher productivity and higher returns to capital (see table on the following page).

2.3 Regional Economic Integration and Trade

In this subchapter, we will briefly review the theoretical framework commonly used to analyse the effects of the mutual lowering or removal of tariffs between the participants in a regional integration scheme. It is assumed that the members mutually reduce their tariffs in their trade with each other, but keep them unchanged towards third countries. We will equally restrict ourselves to tariffs, i.e. to government intervention at the border. The results should, however, apply also to the lowering or removal of non-tariff barriers, like technical standards, differing tax treatment and discriminating public purchasing, i.e. intervention that takes place inside the borders.

Integration schemes affect the trade volumes between the participating countries through four channels: (1) trade creation, (2) trade diversion, (3) cost reduction and (4) trade suppression. The first effect arises when the imports of any given member increase from the partner countries as a consequence of reduced trade barriers between them and lower prices. This is at the expense of domestic producers in the importing country. Trade diversion takes place when the (originally cheaper) imports from third countries is replaced by (originally dearer) imports from member countries. This is at the expense of non-members and consumer welfare. In the presence of economies of scale, two additional effects are felt. Cost reduction arises if integration increases the scale of domestic production, which benefits from access to larger markets. Trade suppression implies that imports from non-members are replaced by domestic production, which would not survive without protection despite decreasing average costs. Trade creation and cost reduction are welfare-improving while trade diversion and trade suppression are detrimental to welfare. The net effect depends on their relative magnitudes.

The following factors are usually regarded as a precondition for improving welfare: a large number of participating countries, a high share of intra-area trade before integration, low common external protection. The more members there are, the higher the intra-area trade share is and the lower the external tariff is, the likelier it is that trade creation will dominate trade diversion. The effects of trade suppression will be greater the more protectionist the trade regime is. Finally, cost reduction will benefit from bigger markets and many participants in the integration scheme.

Table 1 Foreign Direct Investment Effects of Economic Integration

Macroeconomic effect of integration	Strategic response of foreign investor	Net trade effect	Net FDI effect
Intra-regional trade more attractive than extra-regional trade *	Replaces exports with FDI (defensive export substituting investment)	<i>Negative effect</i> Sales by regionally-based foreign affiliates replace exports to the region by foreign company	<i>Positive effect</i> Increased investment in regionally-based foreign affiliates
New configuration of locational advantages among members of the region	Adjusts existing investments in the region to reflect free intra-regional trade (re-organisation investment)	<i>Neutral/possible positive effect</i> Intra-regional trade could rise if re-organisation leads to increased plant and country specialisation. Extra-regional exports could rise if regions' industries become more competitive in world markets.	<i>Neutral effect</i> for the region as a whole, gains in some countries offset by losses in others
Cost reduction and efficiency gains	Increases value-adding activities within the region; integration with other offshore investments (rationalised investment)	<i>Neutral/possible positive effect</i> Same as for re-organisation, but <i>Neutral/possible negative effect</i> , if less is imported into the region	<i>Positive effect</i> as foreign firms increase sourcing in the region
Market expansion, demand growth and technical progress	Gains first-mover advantages via FDI (offensive export substituting investment)	<i>Neutral effect</i> if demand in regional market grows faster than supply from new inward FDI, otherwise <i>Neutral/possible negative effect</i>	<i>Positive effect</i> same as for defensive export substituting investment

*Assumes that integration does not result in lower external tariffs than previously existed among individual countries, and that non-tariff barriers do not prevent the growth of intra-regional trade. Source: UNCTC, Nr. 15, 1990.

The commodity pattern of trade depends to a large extent on relative costs in production and the extent and scope of scale economies in production. Different factor endowments lead to inter-industry specialisation along the lines of pure cost effectiveness and comparative advantage. Oligopolistic competition is dominating in industries characterised by economies of scale and product differentiation. This also leads to intra-industry specialisation and trade, i.e. the exchange of goods of the same industries. A lowering of barriers to trade and entry (tariffs and other levies and costs which hamper market access) which improve the degree of market integration leads to greater market shares of the exporting firms. The existence of economies of scale in production means that firms can lower their unit prices that access to a greater market and greater production volumes makes possible. The lowering of trade barriers enables consumers to choose between a greater variety of goods and to benefit from lower prices of the original goods. Domestic firms will be subject to stiffer competition from imports that either will lead them to shut down or rationalise their production and increase the scale of production. Intensified competition through increased imports will improve the allocation of resources from society's point of view, but the existence of economies of scale implies also imperfect competition. The outcome will, however, be welfare improving for consumers (through lower unit prices and access to a greater variety of the same product and entirely new ones). The government will lose some receipts from lower tariffs, firms will see their profits shrink in the domestic market, but the gains of exporters will compensate the losses emanating from increased imports. The net effect or the change in overall welfare will depend on their relative magnitude.

Market integration between two countries with widely differing factor endowments will usually strengthen specialisation based on comparative advantage. The relative cost of producing a given good differs to such a degree that profitable production by the less efficient producer is not sustainable in the long-run, given that market processes are allowed to work³. The outcome will be an exchange of goods between different industries. In industries where production is characterised by economies of scale and product variety, trade will take place even if factor endowments resemble each other. As a consequence of the demand for different varieties of the same good firms will specialise in a very narrow range of varieties of one or several goods because of the benefits to be reaped from access to larger markets and decreasing unit costs. The outcome is thus an exchange of goods with similar factor requirements.

³ We will leave aside considerations of a strategic trade policy nature, i.e. that governments subsidise firms in oligopolistically competed industries with strategic interaction. These industries are also characterised by high-value added.

3 OVERVIEW OF THE CURRENT ECONOMIC AND INSTITUTIONAL SITUATION

3.1 Economic Situation in the Triangle

This chapter provides an overview of the cyclical and structural position of the economies in the three respective regions and the relevant agreements governing trade and FDI flows.

3.1.1 Finland

Finland's extraordinary long and deep recession is coming to an end. GDP decreased by some 14 per cent between 1990 - 93. Growth was 4 per cent in 1994 and is projected to be 6 per cent in 1995, while inflation is still low - 1 per cent in 1994 and 2 per cent in 1995. The competitiveness of Finnish exporters is still good, despite the strengthening of the exchange rate since early 1994. Exports grew by 11.5 per cent in 1994 and are expected to grow by 8.5 per cent in 1995 in volume terms. Imports grew by 12 per cent in 1994 and is expected to grow 12.5 per cent in 1995. After a period of mounting foreign indebtedness, Finland's current account surplus reached 1 per cent of GDP in 1994 and is forecasted to be 2.5 per cent in 1995. The share of exports to GDP was 36 per cent in 1994 and is projected to be slightly higher in 1995. Unemployment will remain very high - 18.5 per cent in 1994 and 16.5 per cent in 1995.

GDP (1993) is made up as follows: the primary sector 5.5 per cent, secondary production 31.8 per cent and services 62.7 per cent. Table 2 pictures the breakdown of manufacturing, which is composed of metal and engineering industries (33.8 per cent), forest industries (17.7 per cent), chemical industries (10.5 per cent), food industry (11.4 per cent), textile, wearing apparel and leather industries (2.8 per cent) and other manufacturing (13.3 per cent).

Finland has been a part of the European Union's Common Commercial Policy (CCP) and its Common External Tariff (CET) since the beginning of 1995. The greatest changes are felt in the rules governing Finnish imports, while those affecting exports have not changed much. The trade between Finland and Estonia is governed by the free-trade agreement concluded between Estonia and the EU which entered into force in the beginning of 1995. The transition to the GSP means that import quotas are being practised in certain industries, e.g. steel and textiles, towards third countries. The share of Estonia and Russia (1993) in the Finnish steel imports is 8.3 per cent (0.1 per cent and 8.2 per cent, respectively). Their share of the total imports of

Box 1 Basic Statistics of Finland

Population as of December 1993:	5.067 mill.
Currency:	markka (floating) approx. 0.2 USD, 0.3 DEM
GDP/capita, PPP-corrected (1993):	14 751 USD
Inflation 1994:	1 per cent (forecast for 1995: 2 per cent)
Unemployment 1994:	18.5 per cent (forecast for 1995: 16.5 per cent)
Real GDP growth 1994:	4 per cent (forecast for 1995: 6 per cent)

Foreign trade by country groupings (percentage share) in 1993:

Country	Exports	Imports
EU 15	58	58
Germany	13	16
France	5	5
The UK	11	9
Sweden	11	10
EFTA	6	7

textiles is 2.2 per cent (1.9 per cent and 0.3 per cent, respectively). The EU, however, has changed its GSP-regime. Quotas were replaced by tariffs. The imports of textiles and steel are, however, governed by separate agreements and still subject to quotas.

As will be evident from chapter 5, the opening-up of Estonia to the international division of labour is of such a recent date that the patterns of trade and comparative advantage have not yet fully developed in the trade between Finland and Estonia, but should do so in a not too distant future if market forces and allocation are allowed to work properly. The same applies to the trade between Finland and St. Petersburg, which, however, is governed by tariffs and different kinds of quotas and other levies.

The country composition of Finnish foreign trade (1993) is dominated by the European Union - including Sweden and Austria - (58 per cent both of exports and imports). Present EFTA counts for 6 per cent of exports and 7 per cent of imports. The rest of Europe stands for 10 per cent of exports and 11 per cent of imports (Estonia's share is 1.4 per cent and 0.7 per cent and Russia stands for 4.5 per cent and 7.6 per cent, respectively). 9.5 per cent of total exports go to the USA and Japan. Their import share is 13 per cent.

Table 2 Manufacturing in Finland in 1993

Industry	Percentage share of output	Output in 1993, 1990=100
Food and beverages	12	102.9
Textiles, wearing apparel, leather goods and footwear	3	72.9
Wood and wood products manufacture	6	92.3
Pulp, paper and paper products manufacture	21.6	99.1
Petroleum and coal products	1.9	106.4
Chemicals and chemical products	6.5	97.5
Rubber and plastic products	3	94.2
Glass, clay and stone products	3.5	69.3
Basic metal	10.3	94.7
Machinery and equipment	10.4	76.8
Electrical products	14.1	142.9
Transport equipment	4.1	80.9
Other	2.9	81.8

Source: Statistics Finland 1994c

Machinery and transport equipment is the single most important export industry, its share is 31.5 per cent (34 per cent of imports). Paper, paperboard and articles thereof make up 25 per cent of exports and 1.6 per cent of imports. Leather, rubber manufactures, wood and cork manufactures, textiles, iron and steel and manufactures of metals make up 15.5 per cent of exports and 12.5 per cent of imports. 8.7 per cent of total exports is crude materials (excl. fuels). Both chemicals and products related to them and mineral fuels stand for 13 per cent of total imports.

3.1.2 Estonia

Radical changes have taken place in the Estonian economy in recent years. The former resource-constrained and centrally planned economy turns demand-driven and market oriented. Prices were liberalised, the Estonian kroon was introduced in 1992 and made convertible. Fiscal policy has been restrictive and the budget kept in surplus. The new orientation has also been felt in Estonia's foreign trade. The economy that earlier was oriented towards the all-Soviet Union market, has adjusted to western markets and opened up to the international division of labour. The free-trade agreement with the EU entered into force in the beginning of this year.

The liberalisation and the freeing of prices caused an initial decline in economic activity. GDP decreased by 17 per cent in 1992. The stabilisation policy has, however, been quite successful, since GDP fell by only 2 per cent in 1993. The preliminary data for 1994 show an increase of 4 per cent. GDP is expected to grow by 2 per cent in 1995. At the same time the unemployment rate has been remarkably low - 0.9 per cent in 1992, 1.9 per cent in 1993 and 2.1 per cent in the first six months of 1994. Inflation reached 452 per cent in the first half of 1992, but fell to 90 per cent in the second half due to the currency reform. It fell further to 36 per cent in 1993 and climbed again to 42 per cent in 1994.

Table 3 pictures manufacturing by sector in 1991, 1993 and 1994. The most important industry at the end of 1994 was food (36 per cent), followed by the production of electricity, gas and water (energy) (12 per cent). Compared to 1991, the light industries, forestry and chemical industries have decreased in relative terms, although their shares seem to be increasing again after the slump in 1993. The production of energy, fuel and food has increased steadily since 1991. The shares of the construction materials industry and engineering and metals have remained constant by and large.

The overall picture that emerges is one of sudden changes and, by the end of 1994, a stabilisation and consolidation of the relative shares of construction and engineering and metal industries. Estonia's industrial base has undergone profound changes in a few years time, a fact which is reflected in the sharp increase of energy, fuel and food production, all which use relatively much of unskilled labour and physical capital. But, on the other hand, the light industries, which also are labour intensive, have lost in importance. The forest and chemical industries, which are intensive in human and physical capital, have also experienced declining shares of total manufacturing output in the beginning of the 1990's. The light industries' reduced importance illustrates well Estonia's position in the internal division of labour in the former Soviet Union, i.e. that of a supplier of consumer goods and other products with a relatively high value-added. Their importance has been on the decline after Estonia opened up to trade with countries outside the CMEA. This could also give some indication as regards the skills and the educational level of the labour force.

Box 2 Basic Statistics of Estonia

Population as of December 1993:	1.57 mill.
Currency:	kroon (tied to the D-mark. 1 DEM = 8 EEK)
GDP/capita, PPP-corrected (1993):	5 000 USD (approx.)
Inflation 1994:	41.7 per cent
Unemployment 1994:	2.1 per cent (first half of 1994)
Real GDP growth 1994:	4 per cent (preliminary)

Foreign trade by main partners (percentage share), first eleven months of 1994:

Country	Exports	Imports
Russia	23.4	16.7
Finland	18.1	30.1
Sweden	10.8	9
Latvia	8.3	n.a
Germany	6.9	9.9
Other Western European countries	17.7	16.1

As a result of deliberate policies, e.g. a liberal trade regime and exposure of practically all the economy's sectors to international competition, the Estonian economy is very open by international standards. The share of exports of goods and services to GDP was 67 per cent in 1993. The share of imports was of the same order of magnitude. The foreign trade regime is characterised by practically no import barriers. Former EFTA (Finland, Iceland, Liechtenstein, Norway, Sweden and Switzerland) occupied the first place among Estonia's trade partners

Table 3 Manufacturing in Estonia in 1993

Industry	Percentage share of output in 1994, 11 months	Percentage share of output in 1993	Percentage share of output in 1991
Energy production	12.4	11	10
Fuel production	5.6	4.3	2.9
Food industry	36.2	32.7	27
Light industry	10.5	9.5	18.9
Forest industry	7.4	5.7	9.7
Chemical industry	10.1	6.9	11.8
Construction materials	4.4	2.7	4.6
Engineering and metals	11.7	6.6	11.5

Source: Ministry of Economic Affairs 1994

(31.5 per cent of exports and 38.1 per cent of imports). 30.3 per cent of exports went to CIS and 21.6 per cent of imports origin there (1993). The share of the EU12 is 17.8 per cent of total exports and 23.2 per cent of imports. The CEECs stand for 14.9 per cent of exports and 7.1 per cent of imports. Estonia's single most important trade partner in 1994 was Finland (41 per cent of imports origin there, 20 per cent of exports go there), with whom Estonia showed a trade deficit. The trade with Russia, which comes second, is in surplus. The overall trade deficit was 1259 billion EEK, showing that Estonia is a net borrower of foreign capital.

The most important export articles are: textiles and clothing (12 per cent), foodstuffs, transport vehicles and base metals and products thereof (all 11 per cent each), mineral fuels and oils (8 per cent) and wood and articles of wood (8 per cent). Imports consist of machinery and mechanical appliances, electrical equipment (18 per cent), mineral products (15 per cent), transport vehicles (14 per cent), textiles and articles thereof (11 per cent), foodstuffs and beverages (10 per cent), chemicals (6 per cent) and base metals (5 per cent).

3.1.3 St. Petersburg

The area of St. Petersburg consists of the city itself with a population of 4.4 million and the surrounding 8 minor towns. The population of the whole agglomeration reaches 5 million. The city is administratively independent from the surrounding Leningrad oblast-area, with some relatively strong industries (pulp and paper, nuclear energy), possessing a population of 1.7 million. The population of the whole Leningrad and St. Petersburg area is hence 6.7 million. Since all figures concerning the area's economic structure and development are at best only indicative, the following figures should be treated with caution. The distorted price structure - overemphasising the food, clothing and footwear industries and undervaluing the engineering sector - makes output figures unreliable (Eronen 1994). Deficiencies in the data collecting and its incomplete coverage also add to the problem. Comparisons on a year-by-year basis are therefore impossible.

The Leningrad oblast was assigned specific tasks in the Soviet Union's internal division of labour. This determined its production structure, which was biased towards the production of arms and specific manufactures (mainly textiles, footwear and food). It is also an important scientific centre. Total employment reached 2.1 million in 1993, of which the manufacturing industries employed 31 per cent or 661 000. Agriculture and forestry stood for 0.6 per cent. transport and communication for 10.2 per cent, construction for 9.4 per cent, trade and public catering for 9.8 per cent, housing for 5.3 per cent, health care for 6.8 per cent, public

education for 10.7 per cent and research for 10.6 per cent of the total labour force in St. Petersburg ("other" accounted for 5.7 per cent).

Table 4 Manufacturing in St. Petersburg in 1993

Industry	Percentage share of output	Output in 1993, 1990=100
Electricity	13.6	82.4
Ferrous metals	1.7	43.3
Non-ferrous metals	2.5	60.2
Chemicals and petrochemicals	4.0	63.2
Machinery, equipment	36.5	81.8
Wood products	3.4	70.9
Building materials	3.3	71.7
Textiles, leather goods	8.8	60.8
Food products	18	61.9

Source: Statistics Finland 1994 and own calculations

As can be seen from table 4, machinery and equipment are the most important and also food production is relatively dominant in terms of output shares. The engineering industries have predominantly manufactured military hardware. An important part of the clothing and footwear industries were also destined for military use. Column three of table 4 tells us that output has declined most in the metal and chemical industries, in food and textiles production from 1990 to 1993. The economy is undergoing a profound transformation from a centrally planned and led production structure to market oriented solutions and from production for military to civilian use. Output has fallen dramatically in all manufacturing industries, although some have fared better, e.g. machinery and equipment, than other.

The industrial production in St. Petersburg was still on the decline in the first nine months of 1994, when it was 28 per cent lower compared to the same period in 1993. The same applies to the surrounding Leningrad region. Industrial production fell by 34 per cent compared to January - September 1993. The decline was heaviest in the light industries, e.g. consumer goods production. A great deal of the collapse can be attributed to domestic factors (Eronen 1994). The former main client - the state - is near insolvency and has thus cut purchases of arms and civilian goods. The real incomes of consumers have fallen and the deliveries to the ex-Soviet republics have decreased. As payment for deliveries between enterprises are prolonged or made subject to default, indebtedness increases. The common response by the companies is to freeze wages, making it possible to avoid a surge in unemployment. 20 per cent of the city's firms are on the wedge of bankruptcy according to an official estimate. Large scale unemployment has been prevented only through state subsidies and soft loans. After

the privatisation programme - due to come to completion in the autumn of 1995 - has come to an end, unemployment will increase and non-competitive businesses will be wiped out.

Unlike the more successful transition economies (The Czech Republic, Hungary, Poland and Estonia) output decline has continued rapidly (see table 4 above). Output can be expected to level out and even increase very moderately in 1996 at the earliest. Concerning manufacturing, a favourable investment climate is of primary importance so as to improve growth prospects. The city's industrial managers are not very optimistic regarding domestic private investment. Neither will the state be a source of major capital expenditure. What remains thus is foreign investment and trade, in addition to consumer demand, as sources of growth. Official estimates indicate that the output level in 2000 will barely exceed 65 per cent of the 1990 level (Eronen 1994). As foreign trade figures of the Leningrad region are subject to considerable uncertainty or simply do not exist, we will return to the issue in chapter 5.

The relations between the EU and Russia will be governed by the Partnership and Co-operation Agreement. It has, however, not yet been ratified neither by the Russian Parliament nor by individual member states of the EU or the European Parliament.

Box 3 Basic Statistics of St. Petersburg and the Leningrad Region

Population as of December 1993:	5 mill. (St. Petersburg) and 1.7 mill. (Leningrad Oblast)
Currency:	rouble (1 USD = 3 900 ROU)
GDP/capita, PPP-corrected (1993):	6220 USD (approx.. the World Bank)
Inflation:	n.a.
Unemployment in 1993 (official estimate):	7 per cent
Real GDP growth:	n.a.

Foreign trade by main partners (percentage share) in 1992:

Country	Exports	Imports
Finland	37.6	36
Belgium	24.7	n.a.
Sweden	18.4	17.1
Greece	8.5	n.a.
Norway	3.3	14.6
Denmark	1.3	4.7
Other Western European countries	4	23.4

3.2 Recent FDI Trends in the Nordic Countries and Eastern Europe

3.2.1 The Nordic Countries

A worldwide surge of foreign direct investment (FDI) took place in the 1980s; FDI from OECD countries increased fourfold in the 1980s and grew more rapidly than domestic capital formation or world trade. International investment in manufacturing and raw materials accounted for a smaller portion of total FDI, whereas investment in services and high technology increased substantially. Mergers and acquisitions and strategic alliances became more significant due to firms' need to penetrate new markets and to tap new sources of technology fast and at low costs.

Nevertheless, the growth in FDI was unevenly distributed, as most of it took place amongst the industrialised countries and not between the developed and developing countries. In effect, the bulk of FDI flows in the latter part of the 1980s was heavily concentrated in the Triad: the USA, the European Union and Japan. Inside Europe, the formerly socialist countries have become a more and more attractive destination for FDIs since the early 1990s.

The decline in global FDI flows in the early 1990s now shows signs of recovery, following the same geographical pattern as previously though outflows are lagging behind. In 1993, the decline in outflows from OECD countries slowed down to 3 per cent against the previous year, while inflows had increased by 10 per cent against that same period (OECD 1994a). Even though there are wide differences in the performance of FDI flows between and within individual countries, the 1993 tendencies for FDI flows in the case of OECD countries as a group indicate that industrialized countries are re-establishing their attraction as an investment location.

The overall direction is increasingly towards a more balanced relationship between inward and outward FDI flows in industrialized countries (Dunning 1993). The Nordic countries, except Denmark, seem to form an exception to that general trend when comparing to other industrialized countries. Both in the case of Finland and Sweden the stock of outward investments was 2-4 times as high as the stock of inward investments in the beginning of the 1990s, as the following table reveals.

These large imbalances that have occurred in the latter half of the 1980s and the early 1990s are unique and indicate, at an aggregate level, signs of remarkable industrial restructuring. In terms of net flows of FDI as a percentage of GDP among OECD countries Sweden shows the highest gap between outward and inward investment (3.44 per cent outward and 0.56 per cent inward) for 1986-1990. The corresponding figures for Finland also reveal a large gap with 1.96 per cent for outward investment and 0.46 per cent for inward investment. The corresponding figures for Norway are 1.44 per cent and 0.90 per cent, whereas for Denmark 1.04 per cent

Table 5 The Ratio of Outward FDI Stock to Inward FDI Stock in the Nordic Countries and Selected Other Countries

Country	1980	1985	1990	1992
Finland	1.36	1.38	2.36	2.32
Norway	0.35	0.97	1.27	1.45
Sweden	1.68	2.60	4.24	3.56
Denmark	0.49	0.50	0.80	0.97
France	1.04	1.11	1.27	1.35
Netherlands	2.20	1.91	1.48	1.57
Belgium & Luxembourg	0.83	0.53	0.79	0.81
Spain	0.24	0.23	0.23	0.24
Austria	0.17	0.31	0.43	0.64
Germany	1.18	1.62	1.27	1.38
Japan	0.53	1.27	5.85	6.47
USA	2.65	1.36	1.09	1.17

Source: UN World Investment Report 1994 and Puhakka 1995.

and 0.54 per cent, respectively (Oxelheim & Gärtner 1994). At the same time, all of the Nordic countries, except Denmark, have exhibited a rather significant decrease in the manufacturing sector as a percentage of GDP during the last two decades until the 1990s. Even though the manufacturing sector is small in these countries, this decrease is important due to the fact that the major part of exports comes from this sector.

Underlying the internationalisation of firms through FDIs, and partly driven by it, are domestic deregulation, international liberalization of markets and their integration, the globalisation of business, the growth of regional economies, and technological innovation. Structural reforms, the liberalization of foreign exchange controls and foreign investment regimes have also contributed substantially. In the case of the Nordic countries, the smallness of the domestic markets has also enforced the internationalization of their firms.

3.2.2 Eastern Europe

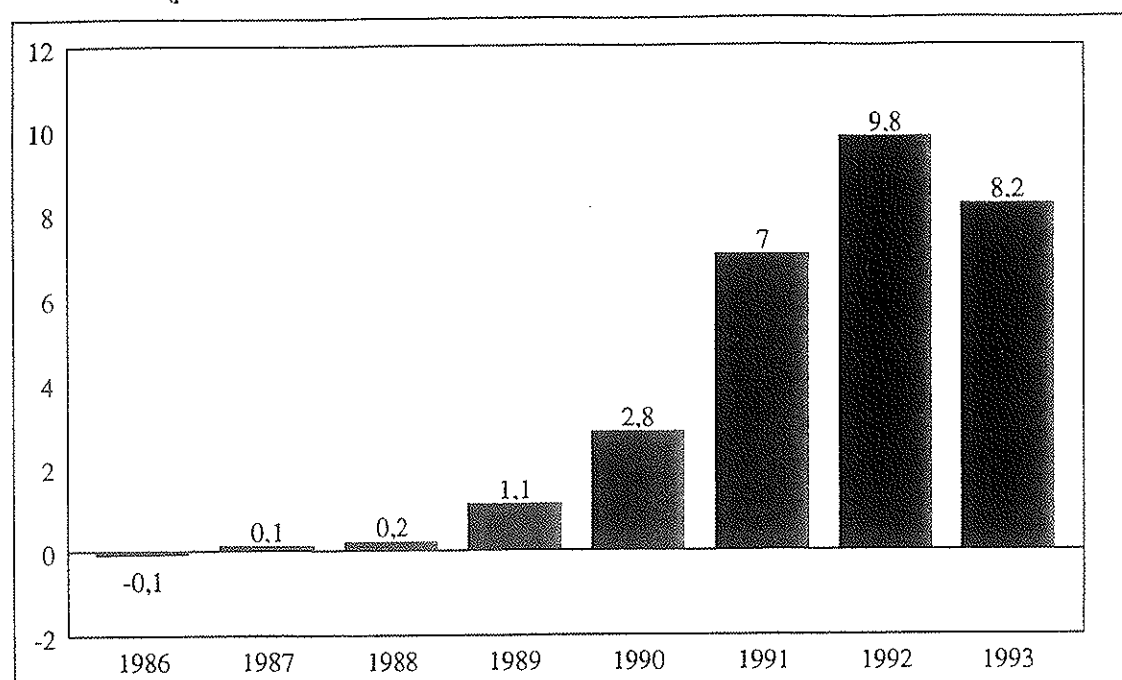
Since 1989, all of the former European centrally planned economies (CPE) have embarked on the path of transition in order to establish market-based systems. The majority of these countries involved in this process have opened up their economies to FDI, though in varying degrees. These favourable policies were initially triggered by the capital needs and by the expectations related to FDI as a powerful catalyst for economic change. These expectations were further reinforced by international organizations which have been providing financial and technical support particularly to FDI projects, as they considered them as crucial in the process of change.

Even though investment flows increased rapidly from an almost zero base, the overall volume of FDIs in Eastern Europe falls dramatically short of the external capital required for a rapid increase in the standard of living and the development of the whole economy. In 1994, the total FDI inflow is estimated to have been some USD 5 billion, whereas cumulated FDI stock invested in an estimated 50 000 foreign affiliates amounted to some USD 13 billion by January 1994 (UN 1994). In 1993 the corresponding amount of FDI inflows to Mexico alone was USD 5 billion! (OECD 1994). Hence, the share of Eastern Europe in total FDI into non-developed countries has risen considerably since 1990, but still remains modest with a share of 8.2 per cent in 1993, as indicated in figure 1.

Furthermore, there is a significant difference between registered and operational affiliates, as many are keeping their registered affiliates as shell companies waiting for the economy's eventual take-off or for a consumer market to develop. Uncertainties related to the political environment, especially in Russia, further enhance these cautious steps. The ratio of operational to registered FDI projects is the highest in Hungary (80 per cent) and the lowest in Belarus (30 per cent), whereas the corresponding ratio in Estonia is assessed to vary between 40 and 50 per cent (ECE 1994). In general, the share of greenfield investments of the total FDI funds announced or actually invested, or both, has remained rather low in the region, accounting for less than 10 per cent (Robinson 1993). Furthermore, the average size of foreign affiliates is small in Central and Eastern Europe, where the average foreign investment in equity capital is USD 260000. The corresponding figures for developed and developing countries are USD 18 million and USD 4 million, respectively (UN 1994).

The inflow of FDIs has been heavily concentrated in a few countries. Hungary, the Czech Republic and Poland account for about three-fourths and the Russian Federation accounts for

Figure 1 Net FDI inflows into Eastern Europe
(per cent share of total inflows into non-developed countries)



Source: World Debt Tables 1994/1995, World Bank.

less than one-tenth of the total net inflow of FDI in the region since 1990¹. In per capita terms, Hungary ranks first with average annual net inflows of USD 130 per head in 1992-93, followed by the Czech Republic and Slovenia, where net inflows per capita are about USD 70. Estonia follows these countries with USD 46 per capita net inflows, whereas other countries - including Poland - have to content themselves with less than USD 20 per capita (*European Economy*, 1994). In relation to population, FDI stock is the highest in Hungary (USD 407 per capita), the former Czechoslovakia (USD 199), Estonia (80 USD) and Poland (USD 51).

Although significant growth of FDI took place in Poland, Estonia and Slovenia in 1993 and 1994, the total net inflow of FDI in the region stagnated during 1993 and increased only moderately in 1994. The reductions in inflows were the greatest in Hungary and the Czech Republic. There are several causes for this slight fall in FDIs: First, the main investor countries such as Germany where hit by deep recession. Second, in some of the transition economies (e.g., the Visegrád countries), privatization has lost steam and the most attractive or profitable investment opportunities have already been exploited. Finally, political instability still sets obstacles in Russia and its neighbouring newly independent states.

¹ Based on national statistics. World Debt Tables (World Bank), and ECE, 1994.

Table 6 Cumulative FDI registrations in Central and Eastern Europe, 1991-1993

Country	1991		1992		1993		
	Number	Millions of dollars	Number	Millions of dollars	Number	Millions of dollars	Per cent
Bulgaria	900	130.0	1 200	170.0	2 300	200.0	1.0
Former Czechoslovakia	4 000	1 076.0	-	-	-	-	-
Czech Republic	-	-	3 120	1 573.5	5 000	2 053.0	10.6
Slovakia	-	-	2 875	231.2	4 350	380.0	2.0
Hungary	9 117	3 137.0	17 182	3 680.0	21 468	6 005.7	30.8
Poland	5 583	479.5	5 740	1 545.6	6 800	2 100.0	10.8
Romania	8 022	268.7	20 684	539.8	29 115	755.0	3.9
Former Soviet Union	4 206	4 462.2	15 300	5 566.5	27 200	6 800.0	34.9
CIS	2 593	4 300.0	8 007	5 250.0	17 200	6 300.0	32.3
Russian Federation	2 022	2 827.4	3 252	2 850.0	7 989	3 153.2	16.2
Ukraine	400	440.0	2 000	480.0	2 800	600.0	3.1
Belarus	283	..	714	265.5	1 250	340.0	1.7
Estonia	1 100	84.2	2 662	142.0	4 150	220.0	1.1
Latvia	295	45.0	2 621	84.5	2 850	150.0	0.8
Lithuania	220	33.0	2 000	90.0	3 000	140.0	0.7
Former Yugoslavia
Slovenia	1 000	650.0	2 815	962.2	3 300	1 200.0	6.2
Total	32 828	10 203.4	68 916	14 268.8	99 533	19 493.7	100.0

Source: UN World Investment Report, 1994; ECE 1993 and 1994.

The EU countries as a group are the most important investors in Hungary, Poland, Romania and Slovenia. The most significant investments are made by Germany, Italy and the United Kingdom, whereas the former EFTA countries Finland and Sweden are dominating investors in Estonia and the Slovak Republic. Furthermore, Turkey, Iran and some Asian countries have undertaken larger FDIs in the CIS. As a whole, the countries of Western Europe are responsible for 92 per cent of FDI in Slovenia, 78 per cent in Hungary and Estonia, 45 per cent in Lithuania and 35 per cent in Belarus.

Manufacturing has attracted half or more of foreign capital, and services form a considerable share, too. In some cases, single FDI projects in the manufacturing sector have represented a large share of the overall FDI flow into a specific region. A good example of this phenomenon are FDIs in the Czech (Volkswagen/Skoda) and Polish (Fiat/FSM) automobile industries. The present large share of Egyptian FDIs in Estonia can also be explained by one large undertaking. The share of FDIs (cumulative number of projects) in trading activities are particularly high for

Estonia (about 40 per cent), and more modest for the Slovak Republic (23 per cent) and Poland (16 per cent), which follow Estonia (ECE 1994)

3.3 Institutional Arrangements in the Triangle

3.3.1 Institutional Arrangements for Trade

The free-trade agreement between Estonia and the EU entered into force on January 1st, 1995. It establishes free-trade in industrial products, with the exception of textile and clothing products. The export of certain agricultural products (e.g. butter, cheese, potatoes and swine meat) to the EU is subject to quotas, while Estonia sets no limits to her imports from the EU. No tariffs, quantitative restrictions or measures having an equivalent effect are allowed in their mutual trade in industrial products. Estonia benefits from zero tariffs for all textile quotas. Quantitative aspects of trade in textile and clothing products are governed by a separate protocol, which lists exports of Estonian textile products not subject to quotas unless otherwise specified (e.g. safeguard clauses and provisions for dumping). A reform of the Union's GSP regime would replace the quotas with tariffs. Estonia has been given certain quotas for her exports of agricultural products, which enjoy a 60 per cent reduction of the Union's import levies and duties within the limits of these quotas. Estonia grants free access to the EU's exports of agricultural products. The agreement provides also for the approximation of Estonia's legislation concerning trade, dumping, competition rules, technical rules and standards.

Following the six CEECs (Hungary, Poland, the Czech Republic, Slovenia, Bulgaria and Romania), Estonia, Latvia and Lithuania have started negotiating similar Europe-agreements. The talks are scheduled to end by mid-1995. As regards Estonia's accession to the Central European Free Trade Agreement (CEFTA), it is estimated that she could join at the end of 1995 or in early 1996. The three Baltic states have institutionalised their trade relations in the form of free-trade agreements, which do not work very well in practice, i.e. the principles are being respected only by Estonia. They establish free-trade in industrial products, but do not, however, cover agricultural products. Latvia and Lithuania were given transitional periods, during which their tariffs are successively reduced, to adjust their industries. Estonia granted tariff-free access to the imports from Latvia and Lithuania from the same day the agreement entered into force. Generally speaking, one can say that Estonia profits more from the free-trade agreements than her trading partners, since Estonia's external tariff is very low or non-existent. Thus, the free-trade agreements do not make any difference to her trade partners, as

the tariffs would be zero irrespectively. Estonia has secured a certain minimum standard of treatment and access for her exports to the partners' markets.

Any disputes that arise between the Contracting Parties shall be settled by a Joint Committee. The decisions shall be binding. The Joint Committee may also make appropriate recommendations as it sees fit.

The EU and Russia signed a Partnership and Co-operation Agreement (PCA) in 1994, which has not been ratified by either party so far (as of February 1995). Neither has the Interim Agreement, meant to bring into force the central articles on trade and investment of the PCA. It is estimated to enter into force by the summer of 1995. Finnish-Russian relations are governed by the agreement on trade and co-operation, signed by the EU and the then Soviet Union in 1989. According to this, the EU commits herself to removing the quotas on the imports from Russia (apart from certain sensitive industries) and Russia abstains from discriminating the exports of the Union. Otherwise Russia applies a tariff of 15 per cent on average to her imports from Finland (it is as high as 20 - 50 per cent on certain goods, i.e. luxury articles). In addition to pure import tariffs, Russia applies also other charges on her imports, e.g. value added and excise taxes. Apart from the trade agreement, the bilateral relations are governed by a specific agreement on co-operation between St. Petersburg and the Leningrad region (it covers also the regions of Murmansk and Karelia) on the one hand and primarily the Finnish border regions of Lappi, Oulu, Mikkeli, Pohjois-Karjala and Kymi. It is intended to grant some degree of preferential treatment to the Finnish exports from these regions with respect to taxes and the different surcharges. Despite hopes to the contrary, it has not led to any kind of automaticity, instead all projects are subject to monitoring from case to case.

The PCA provides for political dialogue and conditions for freedom of establishment of companies, of cross-border trade in services and of capital movements as well as of goods trade. Article 3 foresees negotiations on a free-trade area between the contracting parties at a future date (it will be decided in 1998 whether the conditions for opening of such negotiations exist). The agreement contains also reference to MFN treatment (frontier traffic with adjacent countries being one of the exceptions), as does also the agreement signed in 1989. The EU commits herself to removing the quotas on Russia's exports, except sensitive industries such as steel and textiles. Russia may introduce new quotas on imports originating in the Union, provided they give rise to particular difficulties in certain sectors of the Russian economy. Import tariffs will be gradually lowered and are subject to prior consultation. At the moment of Russia's accession to the GATT, this stipulation will become obsolete. At the moment of

writing, Russia's average tariff on her imports from the EU is 12 - 14 per cent, while the corresponding rate for the EU is less than 1 per cent (Rautava 1994).

Concerning safeguard measures, it must be shown that domestic producers are caused substantial injury or threat thereof, before proper action can be taken. Finally, reference is made to the relevant GATT provisions on anti-dumping and countervailing measures. The PCA does not impede the application of the said measures.

The dispute-settlement mechanisms of the PCA agreement are inspired by the Europe Agreements. The Co-operation Council, established by the PCA, may settle a dispute by means of recommendations, which, however, are not binding. Concerning the relations between St. Petersburg and Estonia, Russia's average tariff on imports from Estonia is 30 per cent, twice the average tariff rate on imports from the EU. This has led to that Estonian exporters often circulate their deliveries through Finland in order to get a more favourable treatment. It is estimated that over-all transit-trade (which does not show up in the foreign trade statistics) via Finland to Russia reached FIM 2 billion in 1993. It is, however, hard to measure how much of it origins in Estonia.

3.3.2 Institutional Arrangements for FDI

The following provides an overview on basic legislation and other institutional arrangements for foreign investment in Finland, Estonia and Russia (St. Petersburg region).

Finland

Before the mid-1980s, the Bank of Finland maintained a system of control over capital movements and inward direct investment that was rather restrictive and complex - as in all Nordic countries. Practically all exchange controls were abolished and sector specific restrictions on inward direct investment were relaxed between September 1986 and January 1991. Commercial and financial credits were liberalised and applications for establishment or to purchase a company, in a majority of sectors, are now accepted. The real estate sector is also fully liberalised.

Specific conditions are set for carrying business activities in areas involving safety or health hazards or financial risks. These activities are regulated by the Trade Act and they include, among other things, banking and insurance, mining, manufacture and sale of pharmaceutical products, dangerous chemicals and explosives, private security companies, travel agencies,

restaurant and catering services as well as real estate brokerage. In order to be able to undertake activities in these sectors, entrepreneurs (including domestic ones) need a permit granted by the authorities or a notification made to the authorities (in most cases the Ministry of Trade and Industry, MTI). These documents are required in order to be able to enter in the Trade Register, which in turn is requested before starting business activities.

The most common forms of business organization are the limited company, general partnership and limited partnership. Foreign organisations or foundations are also allowed to establish branches in Finland. Non-EU residents need a specific concession given by the MTI if they act as private entrepreneurs. The same applies to non-EU residents, who wish to act as partners of a general partnership company or as general or silent partners of a limited partnership company. As to the limited company, at least half of the founders must have their residence or, if the founder is a legal person (foreign organization or foundation), their statutory place of residence within the EU unless the MTI grants an exemption. The nationality of the founder is thus irrelevant. In the case of the limited company, there are no general partners but only shareholders, whose liability for the debts of the company is limited to the value of a share. The minimum capital required is 15 000 FIM divided into shares (at least three) that must be of equal monetary value.

Foreign-owned companies are eligible for government incentives on an equal footing with Finnish-owned companies. There is a large scale of different incentives aiming at promoting and supporting investments in the form of regional investment schemes, business subsidies, financial incentives, R&D incentives, transportation cost subsidies, export incentives, personnel training grants, and new investment grants. etc. For instance, in the case of financial incentives, long and short-term loans and guarantees are given and temporary investments in equity are undertaken by Kera Ltd., which is a state-owned risk financing company serving both domestic and foreign investors. The Ministry of Trade and Industry and the Invest in Finland Bureau are the two institutional bodies that implement FDI policies and provide information and other services on a regular basis. Finnish FDI legislation is compatible with that of other EU countries and with OECD guidelines on FDI.

Estonia

Foreign investment flows to Estonia were permitted again already during the country's last socialist years, as early as in January 1987, when the Decree on the Establishment and Operation of Joint Ventures in the Territory of the USSR with the Participation of Soviet Organizations and Firms from Capitalist and Developing Countries took effect. In September

1991, the Estonian Law on Foreign Investments came into force, thus forming the main pillar of the framework for foreign investments together with the Law on Tax Concessions for Foreign Capital Enterprises. Foreign investments can be greenfield investments or investments to already existing companies. Any company having foreign capital is considered as a foreign-owned company. This also concerns companies that are subsidiaries and/or affiliates of companies with foreign capital. According to the Law on Foreign Investments:

- Foreign investors and Estonian citizens or juridical persons have equal rights and liabilities.
- Foreign investors have an unrestricted legal right of ownership of land or assets and their property cannot be nationalized, confiscated or expropriated.
- Foreign investments are guaranteed by the Republic of Estonia.
- No limits are set to the repatriation of profits (unless taxes are unpaid).

In addition to protection by law, foreign investments are protected through bilateral agreements with several countries. The United States, Finland, Scandinavian countries, the Netherlands, Switzerland, Poland and China have already ratified the agreements. Several other countries have signed the agreement, but have not ratified it yet.

So-called foreign investment licences are required in the following sectors:

- Air transport and railway;
- waterways, ports, and other hydraulic structures;
- energy, gas- and water supply;
- commercial banking; and the sale of medicine
- mining ; and
- telecommunications as well as communication networks.

These licenses are issued by the Ministry of Finance, usually within one month upon the date of filing the application. If obtained, the investor does not need to apply for a state license which, in turn, is required from all companies operating in Estonia (e.g. including fully domestic ones), when engaging in certain business activities. State licenses are issued by the Ministry of Economics or a body authorized by it, usually within 30 days after the submission of the required documents. There are some 40 business activities where such state licenses are requested, ranging from the arrangement of air and sea transport to stock and trade exchange and private detective offices. The licenses are valid for a certain period or to fulfil a certain task.

Foreign-owned companies are now basically treated in the same way as fully domestic companies. Some tax concessions and other investments incentives were previously offered, but these benefits now concern only firms established before 1994. The current tax treatment of foreign-owned companies is specified under the terms of the Law of the Republic of Estonia on Income Tax, dating from January 1994. The income tax is levied at the rate of 26 percent of profit before taxation.

The most common mode of company among foreign investors is the joint-stock company. In any of the company forms, investments made by foreign investors must be in kroons and non-monetary investments must be mutually agreed between partners according to world market price levels. This also concerns intellectual property. Until now, the minimum stock capital required has been 300 kroons. In the beginning of 1996, a new Commercial Law should take effect, which should change substantially the existing legislation. For instance, in the case of the above mentioned stock capital, the minimum amount in joint-stock companies now is 400 000 kroons. Existing joint-stock companies are probably given a transition period of maybe even three years to increase their stock capital or change themselves into another company form. Furthermore, the new Commercial Law increases the rights of minority stockholders and at least half of the board members of a company must be Estonian residents. Further details concerning the new Commercial Law are not available yet. The recently established Estonian Investment Agency is expected to play an important role in attracting and promoting foreign investments as well as in organizing appropriate cooperation networks.

St. Petersburg

Joint ventures between foreign and former Soviet Union companies were first accepted by a decree in January 1987, which also regulated foreign corporate activities in the Baltic States (see the above subchapter on Estonia). Currently, the legislative basis for state policy in attracting foreign capital is the Law on Foreign Investments in the Russian Federation, which further governs FDIs in the country's various regions. This law specifically states that foreign investors in Russia can be (1) foreign juridical entities having legal rights to invest in accordance with their home country laws, (2) foreign citizens and persons without citizenship, (3) foreign states, and (4) international organizations. The law further allows greenfield investments (either 100 per cent ownership or less), acquisitions of existing companies or purchases of their shares, and purchases of rights to use natural resources (including land). Foreign investors are also allowed to acquire real estate, bonds and other equities.

The protection of foreign direct investments is guaranteed by the state. This refers to nationalization or confiscation. The legislation separately specifies exceptional situations, under which these measures are possible when they are undertaken "in the interest of the public". In such cases an adequate compensation is envisioned. Additionally, repatriation of profits and transfers of hard currency payments are liberalized. When foreign capital in a company situated in the Russian Federation varies between 30 and 100 per cent, exports of the company's own products or imports for own needs can take place without any license. Likewise Estonia, the Russian federation offers special treatment for imported property that forms a share of the investment: it is free from customs duties and import taxes.

The registration of companies with foreign capital is proceeded according to whether the value of FDI in roubles exceeds 100 million roubles or not. If it does, the company is registered by the Ministry of Finance of the Russian Federation with regard to the opinion of local authorities. If the foreign investment is below 100 million roubles, registration is carried out by the governments of the Russian republics, by regional and district authorities and by city administrations.

After registration, companies receive a temporary certificate which enables them to operate during 30 days. Within this period, the companies have to fulfill certain conditions in order to be granted a permanent certificate. The registration procedure is rather complicated and includes, among other things, obtaining classification codes at the State Statistics Committee of the Russian Federation, opening a local bank account and giving detailed information on it to the respective authorities, procuring documents certifying that the company is registered at the territorial Department of Taxation, and documents proving that at least 50 per cent of the stock capital has been deposited. These needed actions are complicated by the further requirements related to these steps. For instance, opening a bank account involves presenting an application to the board of the bank joined with a certified copy of the registration certificate, and samples of the signatures of the executives and the chief accountant of the company. The territorial taxation department in turn requires documents certifying the rights for privileged taxation, a legal copy of the registration certificate as well as an application signed by the chief executive of the company. In St. Petersburg it is the Registration Department of the Mayor's Office Committee on International Economic Relations that finally issues the company a permanent registration certificate.

There is no unified and finalised procedure for servicing foreign investors, nor a unified organisation in charge of all contacts with foreign investors in St. Petersburg. Plans have been made by policy-makers and requests have been made by foreign investors to create a regional

development agency with specific emphasis in projects where FDI is involved. Currently, foreign investors have to deal with the following Mayor's Office Committees in St. Petersburg: The Foreign Relations Committee, the Committee of Economic Development, the City Property Management Committee, to mention the most relevant ones. Finally, all official contacts with foreign investors are regulated by the "Temporary Rules for interaction between investors and the City Administration (the Mayor's Office)".

Table 7 Summary of the Legal Environment for FDI in Finland, Estonia and St. Petersburg

	Finland	Estonia	Russia (St. Petersburg)
Foreign investment laws	No specific foreign investment law; national treatment; laws compatible with EU legislative framework.	Law on Foreign Investments (Sept. 1991), some amendments by Act on Implementation of the Rights in Things (Dec. 1993). Commercial Law (probably 1996).	Law on Foreign Investment (July 1991), Law on Currency Regulation and Control (Oct. 1992), Law on Enterprises and Entrepreneurship (Sept. 1993), a number of Government Decisions concerning various aspects of foreign investor activity. "Regulation governing the activity of joint-stock companies" (Decision No. 601, Dec. 1990).
Restrictions on activities	Specific conditions for carrying activities in areas involving safety or health hazards or financial risks (banking and insurance, mining, manufacture and sale of pharmaceutical products, dangerous chemicals and explosives, private security companies, etc.)	No restrictions on sector. Specific licenses for foreign investors required in banking, mining, energy, certain utilities, transport, retail sales of medicines and communication.	No restrictions, unless imposed by law or by Presidential Edicts. Certain types of activities, such as insurance and banking, are subject to license issued by the state authorities.
Profit & capital repatriation	No restrictions since 1991.	No restrictions. Reporting requirements on foreign exchange abolished in May 1994.	No restrictions. Non-resident dividend withholding tax. Must convert at authorised banks. Use of cash foreign currency banned, but other forms of foreign currency allowed.

Property ownership	No restrictions.	Property ownership allowed with approval for offices and business purposes. Land not yet subject to trade, but can be owned, if part of production premises. Uncertainty due to restitution.	May buy land and buildings used for business, but difficult in practice. May own land occupied by firms bought during privatisation. In certain regions only lease rights are available (Moscow & St. Petersburg).
Tax treatment & incentives	Corporate tax rate 25 per cent. No specific tax holidays. Companies are eligible for government incentives on an equal footing with domestic companies. Various incentives. (see above text)	Corporate tax rate is 26 per cent. Special tax holidays for FDI eliminated in new tax law, Jan. 1994. Does not concern FDIs made before 1994.	National treatment. Max. rate of profit tax 38 per cent, but 43 per cent for banks and insurance companies. In certain activities small firms (<100 employees) with less than 25 per cent state participation exempt from profit tax for 2 years after registration. Various regional & local taxes, but also regional incentives (see St. Petersburg).
Participation in privatization	Some large Finnish state-owned companies are being privatized. Foreign investors are not restricted from buying shares.	No restrictions. Evaluation of "entire bid" takes employment and investment into consideration	National treatment with various exceptions. Participation in certain branches of industry subject to approval of RF government or local authorities. If foreign investor is only participant in an auction or tender, a special price applies.
Other	-----	-----	Free economic zones, 60 per cent tax on personal items brought in by expatriates employees, if > USD2000. Exporters obliged to sell minimum 50 per cent of currency earnings to Republican Fund or 30 per cent to foreign currency exchanges.

N.B. RF = Russian Federation

Source: compiled by Julianna Borsos, 1994.

4 FDI PATTERNS WITHIN THE TRIANGLE OF FINLAND, ESTONIA AND THE ST. PETERSBURG REGION

4.1 FDI Flows in the Triangle

Data on Finnish direct investments in the CEECs are incomplete, as foreign payments and capital movements between Finland and all other countries are fully liberalized (see previous chapter) and due to the underdeveloped banking system in the eastern European countries. Some estimates have been made on the overall amount of Finnish direct investments in Eastern Europe, which are shown on the following page, in figure 2. These are based on information given by individual banks through which these investments flow. Furthermore, investments undertaken in the form of physical capital (equipment & machinery) are not included in the statistics.

Although the data are incomplete, the tendency which emerges is one of rapid growth of Finnish FDI in Eastern Europe, especially in Estonia and the north-western regions of the Russian Federation with concentration in St. Petersburg and Moscow. The manufacturing sector has attracted the majority of these Finnish investments. However, Finnish FDIs in Eastern Europe are still of minor importance, as depicted in appendix 1. The major destination countries are Sweden, the USA and Germany. The EU is the main recipient of outward Finnish direct investments, accounting for about 70% (including former EFTA countries: Austria, Norway, Sweden, Switzerland and Iceland). North America accounts for almost 25% of all FDIs and the rest constitutes of outward FDIs to other non-EU European countries, including Eastern Europe, and to third world countries.

As measured by the number of registrations (excluding joint ventures with CMEA countries), Finland annually ranked from first to third during the period 1987-1992 in investment in the former Soviet Union (FSU) and later in the Russian Federation. Austria and West Germany were other significant investors. Since Estonia's re-independence that took place in August 1991, Finland has been the number one investor country in Estonia. As figures 3 and 4 indicate, Finland continues to be a major investor both in Estonia and St. Petersburg.

Figure 2 Finnish Outward FDIs in Eastern Europe in 1988-1994; Annual Net Investment Flows (Millions of FIM, excluding re-invested profits)

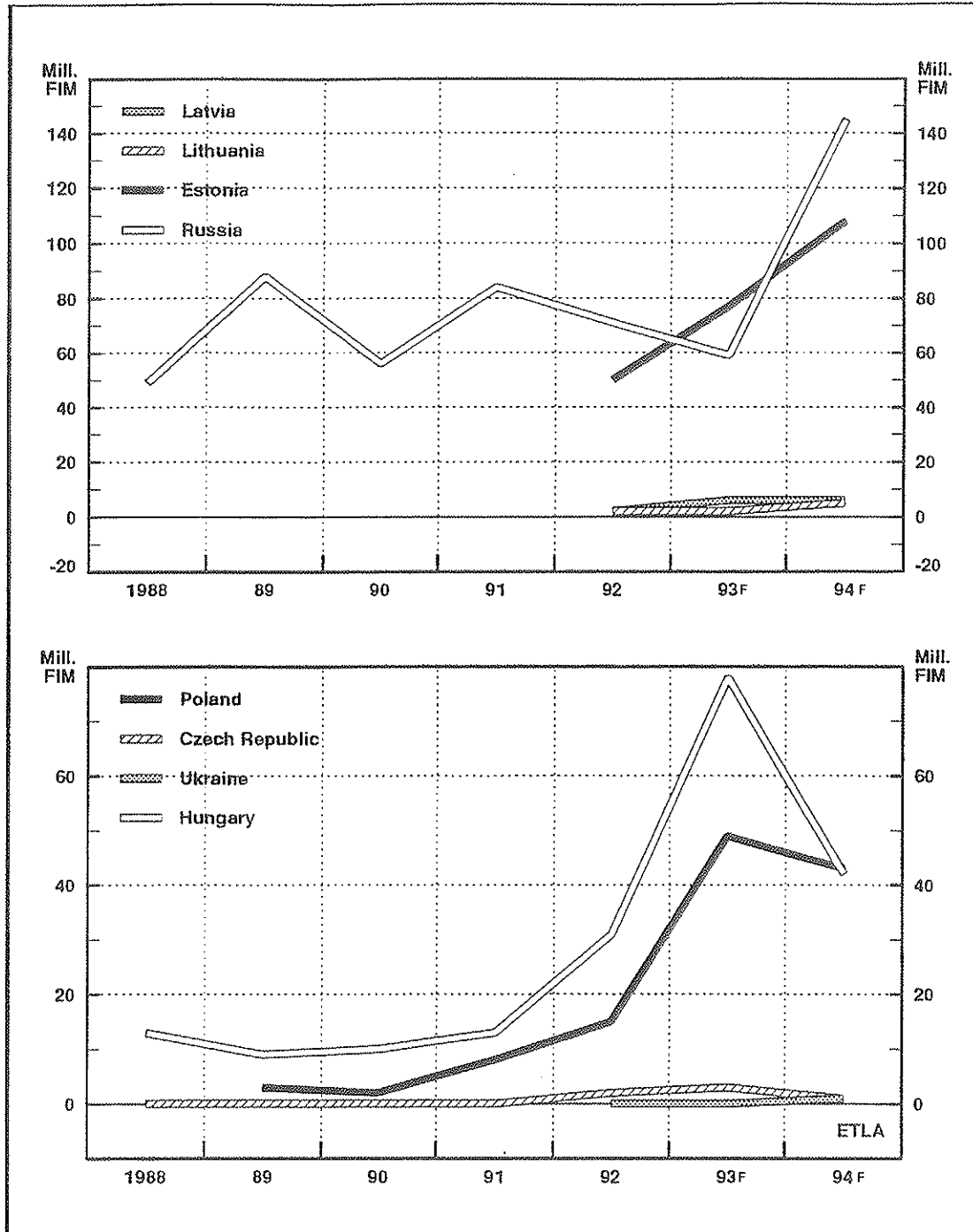
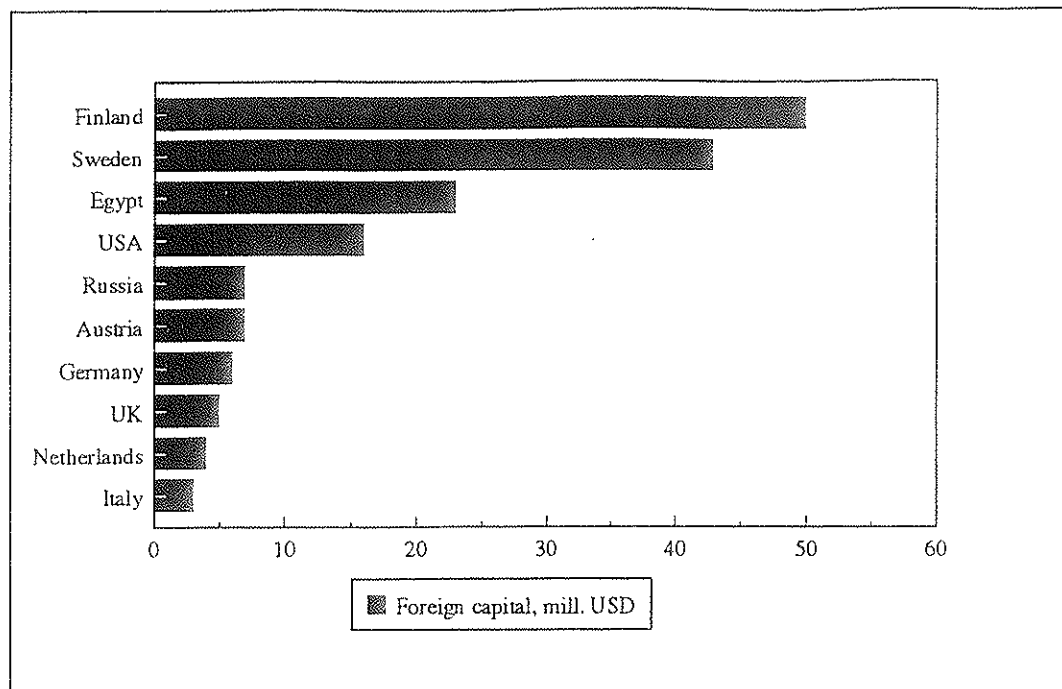
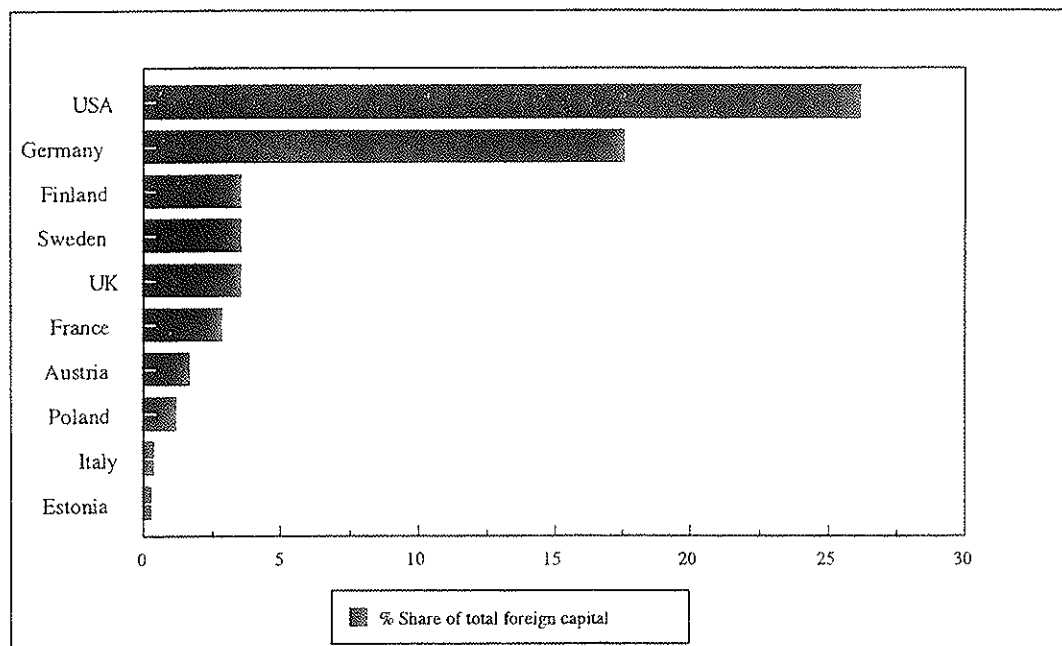


Figure 3 Firms with Foreign Capital in Estonia by Major Foreign Partner (January 1994)



Source: Statistical Office of Estonia, 1994.

Figure 4 Joint Ventures in St. Petersburg by Major Foreign Partner (January 1994)



Source: Statistics Finland, 1994.

Foreign investors have clearly taken notice of Estonia's efforts to build a strong foundation for its developing economy; some 4.1 billion kroons (some USD 400 million) in foreign capital

have flown into the country in the form of direct investments since re-independence. The number of foreign capital companies has increased steadily since 1987, and at a more rapid pace since 1991. After the first quarter of 1993, there were 4012 foreign capital enterprises in Estonia for a total capital of 6.8 billion EEK, out of which 2.2 billion EEK or 32% represented the share of total FDIs. The total amount of registered companies with foreign capital is 7612. During the three first quarters of 1994, some 1300 new either totally or partly foreign-owned companies were registered with foreign investments amounting to some 1,3 billion kroons (more than USD 100 million). Those countries that are the main trading partners of Estonia, have accordingly been the most active in registering joint ventures.

Table 8 Cumulative Number of Foreign-Owned Companies in Estonia by Country and Invested Capital (only major investors; as of October 1994)

Country	Number of companies	Invested capital (millions of kroons)
Finland	4190	827
Russia	979	473
Sweden	875	1051
Germany	319	126
USA	287	276

Source: Ministry of Finance in Estonia, 1994.

The majority of FDIs come from OECD countries, whose dominance can be explained by their significant experience in FDI activities as well as by their more competent utilization of the market potential in Estonia. As table 8 indicates, when major investors are listed according to the invested capital, the top investor country list differs: After the third quarter Sweden was the leading investor, Finland came second and the Russian Federation came third. Irish, Russian and (former) Yugoslavian investors have increased their share considerably over the January to October period: Russian firms increased their capital stake in Estonia by 300 million kroons, Yugoslavian firms by almost 300 million kroons, and Irish firms by 150 million kroons. Surprisingly, Egypt has undertaken two major FDI projects in which 288 millions kroons have been invested. The reason behind sharp increases in Russian and Yugoslavian investments is to be found in a few larger investment projects.

The largest single investment in the January to September (1994) period was made by Russian and (former) Yugoslavian investors who brought 480 million kroons into the capital of Ceosil, a washing detergents manufacturer. The Egyptian Monir El Noba & Abu Simbil came second with an investment of 250 million kroons into its own wholesale trading subsidiary. The Irish investment of 150 million kroons was allocated to a wholesale trading company as well. Finally, the Swedish Televerket provided 150 million kroons to the Estonian Telephone

company. As a consequence, the distribution of foreign investments by economic activities now is as follows:

Table 9 Distribution of Foreign Investments by Type of Economic Activity in Estonia, 1993

Activity	Foreign direct investment (millions of kroons)	% share
Industry	409.5	45
Trading	235.9	26
Financing and insurance	74.4	8
Business services	67.4	7
Transport and communication	55.5	6
Agriculture	28.1	3
Hotel and catering	20.9	2
Others	14.8	2
Total	906.9	100

Source: Mets, 1994.

FDIs undertaken in Estonia are concentrated in the capital, Tallinn, where 75% of all FDIs have been allocated. This is followed by the District of Harju (11,8%) and the town of Tartu (1,4%). The majority of FDIs in the Western part of Russia are also concentrated in St. Petersburg (and Moscow). This can simply be explained by the clearly more sufficient infrastructure, vaster number of potential customers and labour as well as by the wider spectrum of activities in these regions. Differences between the service sector and the industrial sector naturally exist: Tallinn and St. Petersburg, which have a remarkably good geographical situation, are preferred among service-oriented companies and labour intensive industrial companies, whereas those industrial companies that are more resource-oriented (e.g. raw materials) prefer locating their activities near these resources. The latter holds good, though much has had to be done before foreign companies have been able to operate in such a location.

One must note that all FDI flows in Estonia and St. Petersburg are not yet necessarily connected to active, functioning companies. In fact, enquiries have revealed that several companies have been established with the minimum of capital required, aiming at keeping these as shell companies waiting for a consumer market to develop. In St. Petersburg, several Finnish companies operate through commercial representative offices, the main objectives of which are to establish presence for their products and, on the other hand, follow the economic and political development in Russia, in order to be able to undertake investments when suitable. Currently, production activities in Russia, including St. Petersburg, are still considered as risky.

The first investors were typically representing foodstuffs and consumer goods industries. A greater demand for capital-intensive products has not accelerated yet, due to unstable local economic and political circumstances, but there should be a significant change in the near future, as St. Petersburg is becoming more more attractive for foreign investors. The third group of investors constitutes of those who offer supporting and related services or products and who are involved in large infrastructural projects, which last several years and require international financing.

Table 10 Joint Ventures in St. Petersburg by Economic Activities, 1993

Sector	Number of JVs	% share of total JV output
Industry	277	67.7
Light industry	28	33.4
Wood processing, pulp & paper	65	21.2
Food industry	21	20.6
Mechanical engineering	104	8.6
Housing and personal services	15	15.6
Transport and communication	35	5
Construction	48	3.7
Trade and public catering	286	2.3
Health care, social Welfare, sport	36	2
Research	33	1.3
Business services	33	0.7
Other	106	1.7
Number of active JVs	854	100

Source: Statistics Finland, 1994.

4.2 The Driving Forces of FDI

As for all FDIs in general, FDIs in Eastern Europe are a result of increasing regional integration and deepening international division of labour. Also Finnish investors in Eastern Europe are partly motivated by the combination of generally low wage levels and a relatively well-educated labour force, partly by expectations of future market growth and eventual take-off of Eastern transition economies. Many of the Finnish investors have additionally been attracted by the generous incentives and investment concessions offered to foreign investors. Their significance in contributing to FDI decision, however, has decreased, as several Eastern countries - such as Hungary, Poland and Estonia - are gradually abandoning these measures. Estonia abandoned all its tax incentives oriented to foreign investors on January 1st, 1994. Yet, there is another important source of support for FDI in Eastern Europe: the various international and national organizations giving grants and relatively cheap loans for a whole range of joint East-West projects in Eastern Europe.

Until now, Finnish operations in Estonia and St. Petersburg have been supplementing rather than crowding out operations elsewhere (Borsos 1994 and 1995). The geographical proximity of these regions makes them even more attractive for manufacturing production as political and economic conditions are improving. Both large and smaller firms are to an increasing degree looking forward to not only entering new markets and securing permanent presence, but to further exploit cross-country differences in factor costs.

The majority of Finnish firms investing in Estonia primarily think in terms of overall Baltic markets where the Estonian joint ventures or wholly owned companies are used as bridgeheads. Manufacturing units in the Baltic states are often used as an export base from which to exploit Western Europe's markets, including Finnish markets. Subcontracting in Estonia has become an important mode of operation for a majority of Finnish firms in the field of electronics, textiles and furniture, which brings benefits in the form of lower labour costs. This partly explains the increased level of exports to Finland. In this respect Finnish firms in the Russian Federation differ greatly from those in Estonia. According to a survey undertaken by the Bank of Finland, firms with Finnish ownership in Russia mainly concentrate on Russian markets: 60 per cent of the total sales revenue comes from sales to Russia, more than 20 percent from sales to Finland and the rest from sales to third countries. Furthermore, that same survey revealed that sales per employee were larger in Russia than Estonia (Laurila, 1994).

The springboard position of the Baltic states into Russian markets has also been an important reason for Finnish investors in Estonia, as Russian politico-economic tensions are considered as rather problematic and as having a negative effect on the Russian investment climate. Many of these investors are looking forward to taking advantage of their Baltic experiences in Russia, after uncertainties will have diminished to a meaningful degree.

As a whole, the main reason to Finnish FDI in Estonia or St. Petersburg is that investors want to get an early foothold in a market that has enormous future potential, a market that not only covers the whole Baltic Rim, but that can also be extended to cover the large Russian market. In many of the cases, factors such as low cost production, cheap resources or investment incentives fall much further down the list of priorities. An already significant number of companies have moved into the region to service their major clients. This ripple-effect has further affected the domestic economies of Estonia and the St. Petersburg region via foreign investors' increasing use of local suppliers and services and by paving the way for further investment by their major suppliers and for industrial manufacturers. As competing firms in the same line of business have succeeded in their activities, would-be investors have been reassured, which finally has led to direct investments.

In certain industries, such as the building materials industry or the foodstuffs industry, the reasons behind large Finnish FDIs, especially in Estonia, are to be found in the strategy to buy potential competitors, though the transport cost of these products are often substantial and their markets are local by nature. Thus, market expansion takes place in the form of extended (Finnish) home markets. As to FDIs made in other Estonian or St. Petersburg industries that are labour-intensive (textiles and electronics), proximity and cost together have played a major role, as these nearby sites have provided an easily accessible alternative to domestic production. In Estonia, low cost is not considered as a major cause to FDI, due to the sharp increase in wages. However, investors point out that in both host regions, unit labor costs might as well remain stable or even fall in the medium term, because productivity is rising and will inevitably rise considerably. This phenomenon has already been noticed in Hungary and Poland, where unit labour costs in 1993 fell by 17 per cent and 9 per cent, respectively (Vienna Creditanstalt, 1994). In the long-run perspective, however, both theory and experience suggest that the increase in productivity will be broadly matched by a further rise in wages or by an appreciating exchange rate.

The reasons behind large amounts of Russian FDIs in Estonia and other countries in 1993 and early 1994 are to be found in the unstable political and economic situation in Russia. Some USD 30 billion of Russian capital is estimated to have been transferred abroad during the 1990-1993 period (Kahiluoto 1994), out of which only a fraction is expected to flow back into the country via legal channels. Russian investors are not confident with the current domestic development. They consider Estonia as an interesting and attracting destination for FDI for two reasons: Firstly, they are able to run their business in Russian (one third of the Estonian population is ethnically Russian) and secondly, Estonia is experiencing an extraordinarily positive development which entails significant profits with low risks (political risks). Considering the current development, Russian investors will probably find it more convenient to invest in the Russian Federation from abroad under the status of foreign investor, due to the more beneficial taxation system for foreign companies.

Until now, no significant direct investments have been made by Estonian and Russian investors in Finland. Finland's EU-membership should improve its outlook for inward FDI also from Estonia and Russia. Establishing subsidiaries in Finland permits enjoying the benefits brought by being able to penetrate the EU markets and by being inside the bloc (see subchapter on the effects of economic integration on FDI). Several Estonian and Russian companies are already now exporting via their Finnish subsidiaries for these reasons. Additionally, exporting to Russian markets has been considerably easier through Finland due to clearer procedures brought by agreements signed between the EU and Russia. Estonian exports directly to Russia

have been difficult due to the high tariff barriers. For the time being Finland's package of tax and expenditure policies are keeping it competitive with other EU-member countries as a potential location for Estonian and Russian FDIs.

Currently, a debate is taking place on whether Finland is going to compete with Estonia and St. Petersburg (Oblast) for FDI. When newcomers such as Spain entered the EC, the expansion of inward FDI clearly was an outcome of EC entry. That same tendency can already be seen in the increasing flows of FDI in Finland: The net inward stock of FDI increased by approximately USD 1 billion in 1993 solely, which was more than ever before, and this upward trend is continuing. Nevertheless, the inflows are not expected to exceed substantially that annual amount. The difference in the consequences of EU membership between Spain and Finland is caused by the fact that the cost level is far more lower in Spain. Finland is not even able to compete with low wage countries, not to mention those of Eastern Europe. But can the upward change of FDIs take place in a greater magnitude in Estonia after its possible EU membership? And what kind of role will St. Petersburg play?

In the case of Estonia, the likely signing of the Europe Agreement next June will lead to a better access to EU markets but still prevent from fully liberalized exports to EU markets, thus potentially deterring investors. In the longer run, however, several investors seem to consider Estonia as one of the best candidates for EU membership, as the country's economy is rapidly being restructured and the harmonization of the institutional framework towards that of the EU countries has already started. In the longer run, Estonia could compete for the same type of inward FDI with Finland, as its production characteristics is already showing signs of a future shift to higher value-added production (see Hyvärinen and Borsos, 1994).

As to the future role of St. Petersburg region, it is likely to become in the longer run an even more important destination for Western investors, who are looking for low-cost production sites and expansion in the Russian markets and, to some extent, in the CIS. St. Petersburg will be even more attractive, if plans to transform the region into a free economic zone end up into realization. Among foreign investors, the whole of the Baltic Rim and the Northern Europe region is considered as one of the most important future business centers in Europe. The Nordic countries together with the Baltic countries and the western regions of Russia cover over 60 million of consumers.

Nevertheless, there are several key elements determining FDI flows - such as regulatory stability, market access, relative labour costs and infrastructure - which in the short run affect negatively FDIs in Estonia and, to a larger degree, in St. Petersburg, as the following subchapters reveal. Therefore, in the short and medium term, FDI into Finland is unlikely to be

affected by investments flowing to Estonia or the St. Petersburg region. Firstly, Finnish inward FDI is not based on cost advantages, which are the key competitive tool in both host regions, and secondly, FDI flows into Finland have been the result of a set of locational advantages (including access to specialized resources).

4.3 Obstacles to Greater FDI Flows

The major problems faced by foreign investors are discussed here, based on case company interviews. They are further analysed and detailed in other chapters, when related to the subject.

Notwithstanding the relatively good development of the business environment in Estonia, there still exist a number of substantial problems, which are inhibiting an even greater magnitude of FDI. These break down into systemic problems, which are a legacy of fifty years of central planning, and difficulties arising from: 1) Loopholes in the legislation and fast implementation of new laws - some changing the previously passed, favorable laws; 2) slow bureaucratic administration; 3) vague ownership, especially real estate ownership; 4) other difficulties due to the incomplete transformation of the economy. (Borsos 1994)

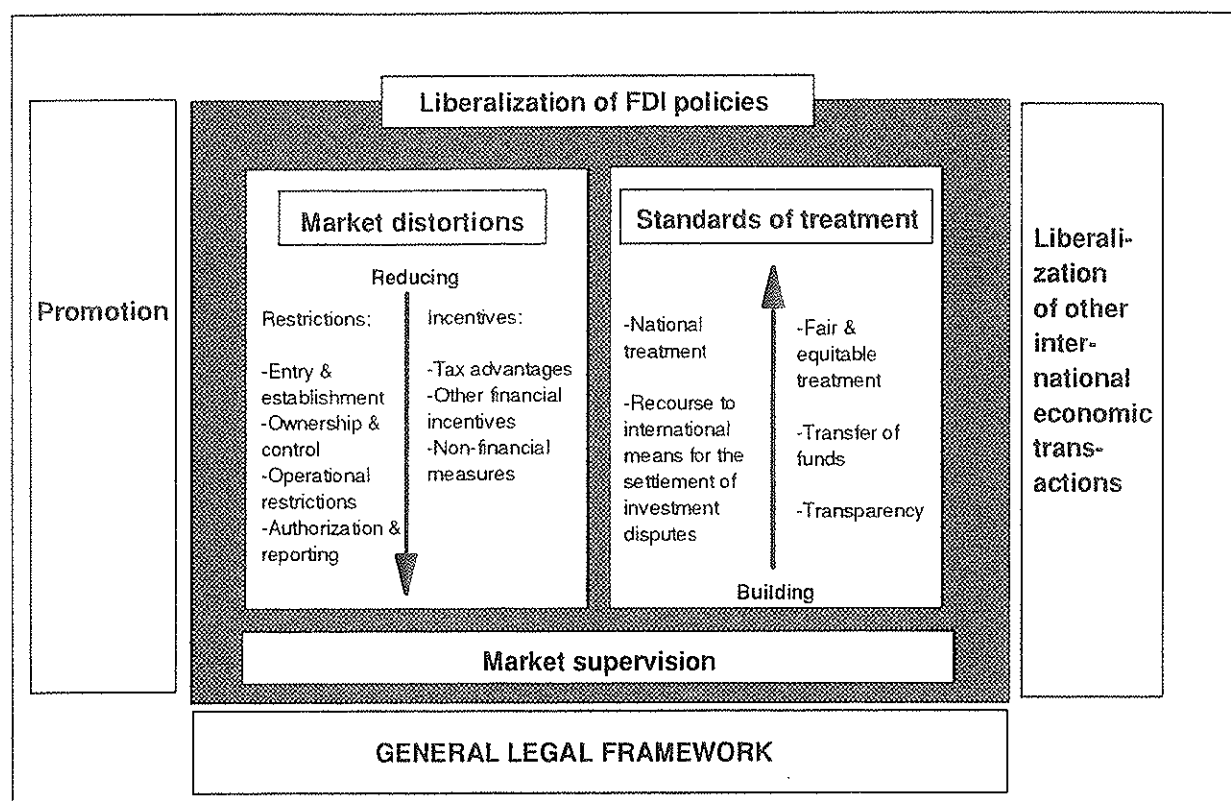
St. Petersburg's business environment suffers from chronic political and economic instability in Russia and this has deterred many foreign investors from undertaking projects. Other problems are closely related to institutional deficiencies, which are systemic by nature and resemble to those listed above in the case of Estonia. However, problems encountered by foreign investors in St. Petersburg are far more difficult to overcome. As a consequence, some considerable Finnish investment projects in St. Petersburg have been interrupted due to these deficiencies, especially those met in the banking sector. Potential investors, in turn, are not convinced with the current investment climate, which suffers from the unstable political situation, the large budget deficit and the weak performance of the public sector, coupled with a large external debt, slow progresses in structural reforms, and the overall fluid political and economic situation in the CIS.

The large differences in the nature or extent of problems are reflected in the strategies of foreign investors. Among Finnish investors, the Russian Federation - including St. Petersburg - is considered as clearly more unstable both politically and economically than Estonia. Estonia has already moved to a phase in which foreign investors feel confident with the current and future economic development. Companies do not hesitate to undertake greenfield investments or acquisitions there, whereas exports and partnerships are still considered as the safest modes of operation when doing business in St. Petersburg or any other Russian site.

Actions to promote FDIs have been criticized both in Estonia and Russia, a phenomenon well known in other Eastern European countries, too, as these are experiencing a severe economic and structural crisis. In these circumstances, FDIs are considered as a threat for domestic economic activities, for national prosperity and even for sovereignty. These factors have further had a negative effect on the investment climate in Russia, and, therefore, some companies have postponed or even avoided FDI in production facilities. Main political parties in Russia and some Estonian politicians now advocate some degree of protectionism for local industry. In Russia, foreign investors even talk about "an aggressive mood against foreign investors". In Estonia, the emergence of large Russian investors into their territory has been subject to intensive political debates, in which the central question has focused on whether these investments should be allowed or not, and what kind of measures are needed.

Despite these difficulties, it is recognized that FDIs are still vital in the path towards a market economy. In order to attract additional FDIs in Estonia and St. Petersburg, policy-makers must be able to muster a high degree of credibility and there must be a preparedness to support clear, simple and market-oriented policies. The most important task in the short term are the effective implementation of FDI policies, ensuring their coherence, predictability and institutional coordination.

Figure 5 Main Elements of a Favourable Investment Climate



Source: UNCTAD 1994.

4.4 Relative Importance and Impact of FDI

To the extent that Estonia and the region of St. Petersburg have benefited from FDI, it is primarily through linkages with Western European firms. The contribution of FDI does not only comprise offering financial resources, bringing new technology, management and marketing knowledge as well as access to foreign markets. It also entails the contribution to creating a corporate business culture, and, thus, helping in reshaping the attitudes of a population that has not been confronted with a foreign presence for a long time.

The change for the domestic market has been radical. Former state-owned companies and new indigenous companies are forced to evolve quickly to become competitive in a free-market environment. They face not only increasing domestic competition, but also competition from abroad either directly or through imported products. FDI in current key industries - such as the foodstuffs, textile, electronics, and building materials industries - seems to have contributed significantly to the rapid development of insurance, banking, economic and commercial services, which formerly did not contribute significantly to domestic production.

Changes will gain a more permanent nature as the indigenous industrial and technological base gradually improves. For Estonia, whose neighbours are suffering from more severe political and economic problems, the presence of foreign companies rather secures than limits its independence and future position in Europe.

According to the Estonian Statistical Office estimates, foreign affiliates contributed 11 per cent of the total output of the Estonian economy in 1992. Companies with foreign participation played an even more important role last year, as this proportion increased to 16 per cent. The corresponding indicator for the Russian Federation was 0.9 per cent in 1992, whereas the average contribution of foreign affiliates to the GDP in Central and Eastern Europe as a whole was 3 per cent in 1992. Foreign affiliates in Estonia account for 3 per cent of total employment and the average for Russia is much more lower, about 0.3 per cent. The average for the CEECs is 0.5 per cent. Hence, Estonia is a notable exception as a host country for FDI. St. Petersburg is viewed among foreign investors as an economic region that could replicate Estonia's development in the medium term.

The employment-creation effects of FDI, apart from those stemming from greenfield investments, have often been overshadowed by employment-reduction effects related to the modernization of privatized state companies. However, these have been necessary actions in order to be able to increase productivity and re-establish profitability. In addition, Western

investors have helped create new trade linkages between the European Union and Estonia as well the EU and the St. Petersburg region. The share of foreign affiliates in foreign trade appears to be quite high in both host economies: in exports it is approximately 10 per cent for Estonia and 5 percent for Russia, whereas the corresponding figures for imports are 7 per cent and 6 per cent. As a result, to the extent that trade plays a central role in accelerating growth and facilitating the economy's adjustment process, the role of foreign companies is somewhat larger than other indicators would suggest.

The possibility for foreign investors to operate in Estonia and St. Petersburg brings not only export and employment opportunities, but also technology (referring here to the output of both technological and organizational capacity, which determines the way in which tangible and intangible resources may be physically converted into intermediate and finished goods or services). FDI has made crucial production, management and marketing knowledge available through the substitution of foreign physical and human capital for absent local factors. Significant knowledge transfers and the emergence of synergies are inevitable. Consequently, foreign companies are an important source of dynamism and change for the exploitation of Estonia's and the St. Petersburg region's innovative potential. Thus, their presence stimulates the productivity of competitors, increases competition, speeds up cross-border transfer of technology and, in the longer run, enhances human capital.

Beyond the above direct impacts, foreign companies play an indirect role in the establishment of a market economy. Their impact on the creation of a general institutional framework in Estonia and the region of St. Petersburg has probably been of paramount importance in the areas of institution-building, privatization and in stimulating competition.

FDI generates constant pressure for institution-building. For instance, the legal framework needed in a market economy either did not exist or what existed was largely inadequate in the former Soviet Union. As the primary objective of both Estonia and the Russian Federation has been to acquire quickly capital needed in the transition process, and FDI was considered as the best source of such capital, FDI-related legislation constituted the first step in a series of changes in the legislative framework. In Estonia, FDI laws are the core of that legislation around which other basic laws evolve. These actions have been necessary, as foreign companies usually only operate within a legal framework conducive to FDI. In the Russian Federation, the newly established legal framework has, in many cases, not resulted in a favourable legal environment for foreign business: registration procedures are complex, some laws have been enacted without considering their implications, and conflicts caused by the unclear legal relationship between regional and central government institutions.

Privatization is expected to increase the amount of economic agents, create a risk-taking management together with owners' control over it, as well as to promote competition. Foreign investors have contributed to the Estonian and Russian embarkment on comprehensive privatization programmes by participating in medium and large-scale privatization. FDI plays a marginal role in small-scale privatization processes which mainly concern small shops, restaurants and the like, and where domestic ownership is preferred. These privatization measures are necessary in the process of ownership diversification, while foreign financial resources help bridging the gap between savings and investment, which are acute due to low savings rates, savings erosion caused by high inflation and the underdevelopment of local financial institutions and capital markets.

In Estonia, the scope for foreign involvement in privatization currently seems to be limited by the availability of attractive assets. Furthermore, the country has experienced several scandals related to the privatization of larger firms, which were considered as national "jewelleries" among the people, who criticize for selling off state assets to foreigners too cheaply or corruptly. As a result, controversy about unwelcome foreign takeover is confined to press and parliamentary debates. Ownership reform is also concerned with the difficult, sometimes impossible, task to accord justice to former owners, whose property was nationalised during the socialist period.

Recently, basic telecommunication services and related services have attracted more and more foreign involvement both in Estonia and St. Petersburg, where major Nordic players in the field are present, e.g., Nokia, Ericsson, Benefon, the Swedish Televerket and the Finnish Tele, etc. Several Finnish companies in the foodstuffs and building materials industries, such as Partek (building materials) or Cultor (foodstuffs) have had positive experiences with their FDI in privatized state-companies. However, in Russia, privatization procedures are very complicated and limited, due to the application of preferential conditions for company employees and /or citizens. Additionally, there are great uncertainties in privatization approaches and the privatization legislation is vague. The situation is further worsened by political uncertainties and different policies pursued by different institutions.

In Finland, one of the most controversial issues concerning the internationalisation of Finnish firms is whether their investments abroad have positive or negative effects on domestic employment. The debate has accelerated as Eastern nearby regions, especially Estonia and the St. Petersburg region, have become more and more attractive as alternative locations of production. Furthermore, foreign investment is no longer the exclusive domain of large multinational companies. In fact, a large pool of small and medium-sized Finnish companies are

operating in neighbouring transition economies. As a consequence, the discussion has mainly focused on one central question: Do these firms "import" or "export" jobs?

In other European countries, manufacturers are not viewing Central Europe (including the Visegrád countries, Slovenia) as just a potential market any more, firms are starting to rely on the region as an alternative manufacturing location to get around their high costs and to battle Asian and American competitors. These host countries have become crucial parts of global networks. Good examples of this are companies like General Electric Co. with its purchase of Hungary's Tungstam already in 1990 and later shift of all its European lightbulb production there, the French consumer-electronics giant Thomson with its production of TV tubes in Poland, or Hugo Boss clothes, the majority of which are now produced in Slovakia and Slovenia.

The above described tendency has further accelerated the Finnish debate on the future role of the Baltic Rim within Finnish production strategies. However, it is too early to "measure" effects, as greater FDI outflows to the east started only 3 years ago. Furthermore, Finnish FDIs in Eastern Europe currently represent a negligible quantity relative to overall outward FDIs. What can be said according to case company interviews, is that a high proportion of intermediate inputs is already now supplied by parent companies, which should have a positive impact on domestic jobs. Furthermore, as FDI motives are market-related, domestic and foreign employment can be assumed to be highly complementary, because this type of FDI is backing trade. Finally, the case company analysis reveals a strong tendency to keep higher value-added activities in Finland and there is a high degree of complementarity between activities in the parent firms in Finland and the affiliates in Estonia and St. Petersburg (Borsos, 1995)¹.

¹ Preliminary results of a forthcoming study on the domestic employment effects of Finnish FDI in Eastern Europe.

5 TRADE PATTERNS IN THE TRIANGLE OF FINLAND, ESTONIA AND ST. PETERSBURG AND LENINGRAD

This chapter describes the trade flows in the region and some measures of comparative advantage. Section 2.3 provides an overview of the analytical framework for analysing regional integration and trade. A description of the gravity model employed for the estimation of the trading potential can be found in appendix 3.

5.1 Trade Flows in the Region

St. Petersburg being a subregion of Russia, it is difficult to find reliable foreign trade figures of the city and the surrounding area. More than usual care should therefore be taken, when interpreting the available figures. The exact value of the transit trade through Finland to Russia, estimated to be around FIM 2 billion in 1993, adds further to the uncertainty.

Table 11 shows the trade pattern in Finland's trade with Estonia in 1993 and the first eleven months of 1994. The total value of Finland's exports increased from 1880 to 3028 mill. FIM or some 60 per cent. The value of her imports increased by 30 per cent from 1993 to November 1994 (in value from 762 to 989 mill.).

The biggest Finnish export industries are machinery and transport equipment, miscellaneous and basic manufactures. The export of food is also relatively important. Looking at Estonian exports to Finland, miscellaneous manufactures and crude materials stand out as the most important industries. Next comes basic manufactures. The import of food and live animals is roughly only a fifth of their export value. The largest trade surpluses as a share of the industry's gross trade in 1993 are thus to be found in food, beverages and tobacco, chemicals and related products and in machinery and transport equipment. The largest trade deficits are to be found in the trade with crude materials. As a comparison, the largest trade surpluses in Finland's total trade can be found in basic manufactures, crude materials and in goods not classified elsewhere. The largest trade deficits are in mineral fuels, animal and vegetable fats, food and in chemicals and related products. The net trade in 1994 was largest in food, beverages and tobacco, mineral fuels, animal and vegetable oils, chemicals and related products, basic manufactures and in machinery and transport equipment.

Table 11 The Value of Finnish Exports to and Imports from Estonia in 1993 and January-November 1994, mill. FIM

Industry	Exports, 1993	Imports, 1993	Exports, 1994	Imports, 1994
Food and live animals	220	47	278	44
Beverages, tobacco	25	0	57	0.2
Crude materials	17	243	27	216
Mineral fuels	100	0	225	0.4
Animal and vegetable oils	0	0	2	0.1
Chemicals and related products	114	12	214	7
Basic manufactures (leather and rubber manufactures, paper, textiles)	341	152	636	148
Machinery, transport equipment	716	52	1059	192
Miscellaneous manufactures (furniture, footwear, clothing)	350	254	529	381
Goods not classified elsewhere	0	0	1	0
Total	1883	762	3028	989

Source: Official Statistics of Finland 1993 and 1994

Crude materials is the only industry to show up a deficit. In Finnish total trade crude materials, basic manufactures and goods not classified elsewhere exhibit trade surpluses. The largest import shares are in mineral fuels, animal and vegetable oils, food, chemicals and related products, miscellaneous manufactures and in beverages and tobacco. This, although at a very aggregated level, confirms the result of an earlier study (Erkkilä and Widgren, 1994), namely that Finland does not specialise in her trade with Estonia in the same industries as she does in her total trade. Finland specialises also in her exports in a much broader range of goods compared to her total exports, where she specialises mainly in industries intensive in capital and relatively intensive in skilled labour on the one hand and industries relatively well endowed with unskilled labour and different degrees of capital on the other (i.e. more or less of it). The import specialisation pattern reminds more of the one in her total imports (Erkkilä and Widgren, 1994).

Table 12 depicts the Estonian exports to selected countries. Russia constituted the most important outlet for Estonian exports in 1993. One fifth of total exports went to Finland, followed by Sweden and Latvia. The combined share of these countries was 63 per cent. Figures for the first quarter of 1994 show that Russia was still the most important export market, then came Finland, Sweden and Latvia. In terms of imports, Estonia's trade was concentrated to Finland, Russia, Germany and Sweden, with a combined share of 65 per cent in 1993. Finland was still the most important exporter in the first quarter of 1994. 19 per cent of imports came from Russia, 10 per cent from Germany and 9 per cent from Sweden. The

Estonian market is characterised by relatively few exporters. The degree of competition is, however, bound to change as more exporters find their way to the market.

Table 12 Estonian Exports and Imports by Selected Countries in 1993 and January-June 1994, %-shares

Exports to	1993	1-6/1994	Imports from	1993	1-6/1994
Russia	23	25	Finland	28	27
Finland	21	19	Russia	17	19
Sweden	10	10	Germany	11	10
Latvia	9	10	Sweden	9	9

Source: Eesti Pank 1994 and Statistical Office of Estonia 1994.

Finnish imports (table 13) was dominated by the EU15, since more than half of all imports originated there in 1993. The EFTA countries, which historically have been important trade partners to Finland, accounted approximately for as much as the rest of Europe. The share of Estonia was 0.7 per cent in 1993. Finnish exports go mainly to the EU15, followed by the EFTA countries and the rest of Europe. Estonia's share was 1.4 per cent. The Estonian export share changed during the first eleven months of 1994. Her share in Finnish imports was 0.9 per cent and in exports 2.2 per cent.

Table 13 Finnish Exports and Imports by Selected Country Groupings and Countries in 1993 and January-November 1994, %-shares

Exports to	1993	1-11/1994	Imports from	1993	1-11/1994
EU15	59	59	EU15	58	56
EFTA	5	5	EFTA	7	7
Estonia	1.4	2.2	Estonia	0.7	0.9
Russia	4.5	5.2	Russia	7.6	8.8
The rest of Europe	10	12	The rest of Europe	11	13

Source: Official Statistics of Finland 1993 and 1994.

In terms of commodity groups, Finnish total imports are made up of machinery and equipment (34 per cent), basic manufactures (14 per cent) and chemicals and related products (13 per cent). Basic manufactures (41 per cent), machinery and equipment (31 per cent) and crude materials (9 per cent) constitute the biggest export items.

For comparison, Russia's main trading partners by export shares are Germany (20 per cent), China (15 per cent), Italy (12 per cent) and France (8 per cent). Finland's share (excl. CIS) was 3 per cent. Germany (27 per cent), USA (11 per cent), China (10 per cent) and Italy (7 per cent) are the main exporters to Russia. Finland's share was 7 per cent (excl. CIS). Russia's

imports consist mainly of machinery and equipment (27 per cent, 37 per cent in 1992), grain (6 per cent), clothing (5 per cent) and sugar (3 per cent). Generally speaking, virtually all categories of goods were in decline. This holds in particular for agricultural products and some manufactured consumer goods. Meat and grain imports fell by 73 per cent and 62 per cent, respectively, from 1992 to 1993. Medicine imports declined by 73 per cent, knitwear and footwear contracted by 49 per cent and 51 per cent, respectively. The commodity composition of Russian exports continued along previous patterns. Mineral products, oil, gas, and other raw materials made up nearly 80 per cent of her total exports. The exports of oil and products thereof and gas all increased substantially compared to 1992. Most other categories, except metals and some chemicals, of Russian exports declined.

Turning to the trade flows between Finland and St. Petersburg, it is immediately clear that the figures are more vague. Table 14 shows the value of the trade in 1993. The figures are derived as follows: given the Finnish export and import shares of St. Petersburg and the Leningrad region in 1992, they were applied to the value of the region's total exports and imports in 1993 to derive the value of the trade with Finnish companies. It is thus implicitly assumed that the Finnish companies kept their market shares from 1992 to 1993.

Table 14 The Value of Finnish Exports to and Imports from St. Petersburg and the Leningrad region in 1993, mill. USD

Region	Exports	Imports
St. Petersburg	84.3	132.5
The Leningrad Region	20.2	125
Total	104.5	257.5

Source: Ministry of Trade and Industry 1994 and Statistics Finland 1994b.

Finnish imports amount thus to twice the value of exports. Some 80 per cent of exports to the region go to St. Petersburg, whereas roughly 50 per cent of the imports origin there. According to Eronen (1994), the strong industries of the Leningrad region are nuclear energy and pulp and paper, but it mainly serves St. Petersburg as a source of agricultural products and recreation. The commodity pattern of St. Petersburg's exports in 1992 was biased towards raw materials (60 per cent) - exclusive of oil. The share of the export of machinery and equipment and consumer goods was 7 per cent and 9 per cent, respectively. The exports of the Leningrad region was heavily dominated by oil products (98 per cent). Imports of St. Petersburg and the Leningrad region in 1991 were divided between consumer goods and food (50 per cent), machinery and equipment (30 per cent) and crude materials (10 per cent). Consumer goods, agricultural products and processed food products are the traditional industries that dominated the trade between Finnish companies and the Leningrad region. Growing areas are the

products of the metal and chemical industries. Fresh and processed food, clothing and footwear, cosmetics, furniture and furnishing are regarded as having unexploited opportunities.

Table 15 reports the share of Finland of the exports and imports of the joint ventures operating in St. Petersburg as well as the value of their exports by industry.

The value of the overall exports from St. Petersburg reached 353 mill. USD in 1993 of which the joint ventures constituted thus 34 per cent (119 mill. USD). Exports by the joint ventures were mainly directed to Finland (33 mill. USD or 28 per cent) and Germany (24 mill. USD or 20 per cent). In terms of imports, Germany (19 per cent), Finland (15 per cent) and the UK (13 per cent) were the three single most important countries. The value of total imports reached 234 mill. USD. The value of imports of all companies (domestically owned and joint-ventures) based in St. Petersburg rose to 203 mill. USD during the period January - September 1994 and the value of their exports reached 323 mill. USD. Finland's share of the total trade was an estimated 30 per cent and the Baltic states' 14 per cent. The value of exports from the Leningrad region amounted to 264 mill. USD, of which 77 per cent went to developed countries.

Table 15 Joint Ventures in St. Petersburg: Exports and Imports by Country and the Value of their Exports by Industry in 1993, mill. USD

By country	Exports (percentage share)	Imports (percentage share)
Finland	33.1 (28)	21.8 (15)
Germany	23.9 (20)	28.3 (19)
Japan	10.7 (9)	0.9 (1)
USA	8.1 (7)	11.1 (7)
Sweden	6 (5)	5.9 (4)
The Netherlands	6.2 (5)	4.8 (3)
The UK	5.6 (5)	19.4 (13)
Others	25.8 (22)	57.5 (38)
Total	119.4 (100)	149.6 (100)

Source: Statistics Finland 1994a

Table 16 depicts the value of exports by joint ventures by industry. Timber and wood products is the most important industry (40 per cent of total exports), followed by services (13 per cent) and aluminium and aluminium products (10 per cent). The value of total exports reached 119 mill. USD in 1993.

The only available figures that refer to the trade between Estonia and the Leningrad region are the exports of industrial and engineering products of the latter to the former. Exports from St. Petersburg to Estonia in 1992 amounted to 31157 mill. roubles and the value of the exports

from the Leningrad region to Estonia reached 2607 mill. roubles, adding together to 33764 mill. roubles.

Table 16 Joint Ventures in St. Petersburg: the Value of Exports by Industry in 1993, mill. USD

Industry	The value of exports (percentage share)
Aluminium, aluminium products	11.4 (10)
Furniture	7.3 (6)
Timber, wood products	47.7 (40)
Leather, leather products	6.8 (6)
Footwear	3 (3)
Ferrous metals	4 (3)
Services	15.9 (13)
Total	119.4 (100)

Source: Statistics Finland 1994a

It represented 10 per cent and 2 per cent of the total exports of the said products of St. Petersburg and the Leningrad region, respectively. It constituted 11 per cent of Estonian total imports (18 per cent of the imports of manufactures). 80 million USD-worth of goods were exported from St. Petersburg to the three Baltic countries in 1994. Imports reached only 3 million USD.

5.2 The Trading Potential

In this subsection we present some calculations of the trading potential between the three regions derived with the help of the so-called gravity model.

When employing the gravity model, one implicitly has to make the assumption that the institutional set-up of the foreign trade of the participating countries will remind of that of the countries used for its estimation, i.e. either a customs union or free-trade area membership. This holds for Estonia and Finland. The gravity model gives the equilibrium value of the long-run trading potential with the countries' GDP/capita, GDP-levels and their mutual distance given. It is therefore likely that the potential trade flows may deviate from their actual values because of the rapid changes that have taken place in Central and Eastern Europe during the past years.

The gravity model consists of essentially four explanatory variables; the distance between the regions, their respective GDP/capita income, their GDP-levels and a dummy for cultural or geographic adjacency¹.

The gravity model purports to explain the long-run equilibrium level of bilateral trade. It is estimated from cross country trade data. It does not directly give an answer to the question of the commodity pattern of trade, only to its overall level.

The central variable is the level of income. A particular source of uncertainty is related to the GDP/capita income estimates in Estonia and St. Petersburg. Since the model is sensitive to changes in this variable, it can generate very different values for the trading potential according to even small changes in the GDP/capita variable (see appendix 3 for a closer description of the model). We use estimated PPP-corrected income levels. The Finnish GDP/capita income is thus 14 751 USD, the Estonian equivalent is 5000 USD and the one proxied for St. Petersburg and Leningrad is 6220 USD (in the absence of a separate estimate, we used the income level that was estimated for Russia as a whole by the World Bank). All refer to 1993. In addition to the current trading potential, some calculations are made according to different catching-up scenarios.

Table 17 reports the actual and potential trade flows in 1993. Finland's actual and potential trade with Russia and Russian trade with Estonia were included on the last four rows for purposes of comparison.

The value of exports from Estonia to St. Petersburg and Leningrad was not available. What is noticeable is that Finland's actual exports to Estonia exceed the potential with a factor of 3, while the actual and potential imports are roughly identical. The potential exceeds three times the actual trade in Finnish exports to St. Petersburg (311 and 105 mill. USD, respectively) and twice the value of actual exports from St. Petersburg to Estonia (35 and 17 mill. USD, respectively). They match roughly each other in the case St. Petersburg - Finland (276 and 258 mill. USD, respectively). As a comparison, Finnish potential exports to Russia exceed the actual value by some 50 per cent (1567 and 1063 mill. USD, respectively), whereas Finnish imports from Russia slightly exceed the potential level (1375 and 1192 mill. USD, respectively). The Estonian - Russian trade is also currently below its potential.

¹ For recent studies where the gravity model has been used to assess the trading potential of Central and Eastern Europe, see Wang and Winters (1991), Hamilton and Winters (1992), Baldwin (1993) and Baldwin (1994).

Table 17 Actual and Potential Trade Flows in 1993, mill. USD

Exporting region	Importing region	The actual trade	The potential trade
Finland	St. Petersburg & Leningrad	105	311
Finland	Estonia	330	108
St. Petersburg & Leningrad	Finland	258	276
St. Petersburg & Leningrad	Estonia	17	35
Estonia	Finland	134	101
Estonia	St. Petersburg & Leningrad	n.a.	18
Finland	Russia	1063	1567
Russia	Finland	1375	1192
Estonia	Russia	182	221
Russia	Estonia	154	181

Source: Erkkilä and Widgren 1994 and own computations.

The reasons that Finnish exports to Estonia significantly exceed their potential were found to be, among other things, (Erkkilä and Widgren, 1994):

- the lack of competition from foreign suppliers on the Estonian market and Finland's close historical and cultural ties with Estonia
- Estonia's own supply is weak, so that pent-up consumption and investment demand will be met from nearby markets
- second-hand machinery and equipment constitute a large part of Finnish exports
- the specific traits of a country in transition and its opening up to specialisation
- possible inaccuracies in the foreign trade statistics, since some goods only pass through Estonia for final use in third countries
- the subsidised food exports to Estonia.

The gravity model gives an estimate of the equilibrium value of the long-run potential, whereby deviations from it can be significant, when trying to capture the trading potential of a country with the above mentioned characteristics which only recently has opened up to international trade. The fact that Finland also specialises in a much broader range of goods in her exports to Estonia than in her total exports, lends some support to the hypothesis. Moreover, Finnish

exports doubled from 1992 to 1993 and the growth in the first eleven months in 1994 was 60 per cent, while the imports grew by 40 per cent and 23 per cent, respectively, at the same time.

Figures 6 - 8 depict the trading potential between the three regions as a function of the GDP/capita income level. The figures can be interpreted as a catching-up scenario, when the GDP/capita incomes in Estonia and St. Petersburg catch up to the Finnish present income level. We will return to the issue in subchapter 6.3.

Figure 6 describes Finland's export and import potential with Estonia. The actual exports to Estonia were worth 290 mill. USD and imports 120 mill. USD in 1993. This corresponds to a GDP/capita income level of some 12 000 USD in Estonia for exports and some 5000 USD for imports. The actual exports clearly exceed that of the predicted potential, at present income levels. However, the import potential corresponds better to the actual imports, at a GDP/capita income of 5000 USD in Estonia. At identical PPP-corrected income levels of 14751 USD in Finland and Estonia, the predicted export potential to Estonia is 310 mill. USD and the import potential is 327 mill. USD.

Figure 6 The Trading Potential between Finland and Estonia in 1993, as a Function of the Estonian Income Level, mill. USD

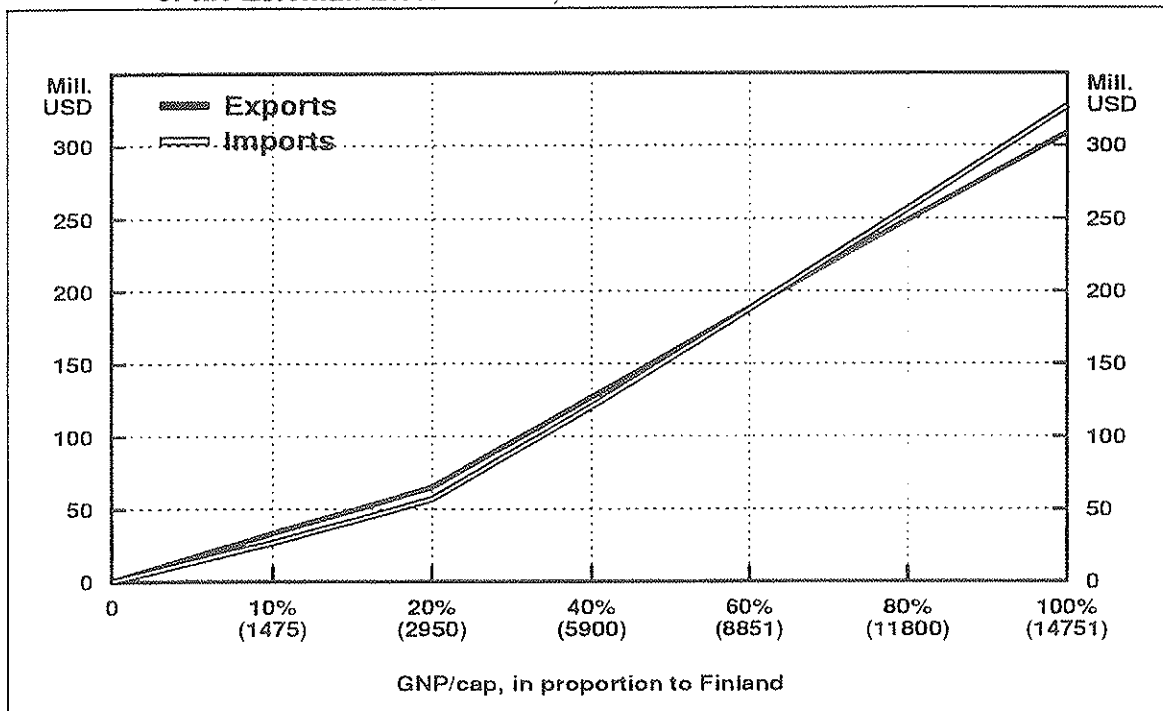
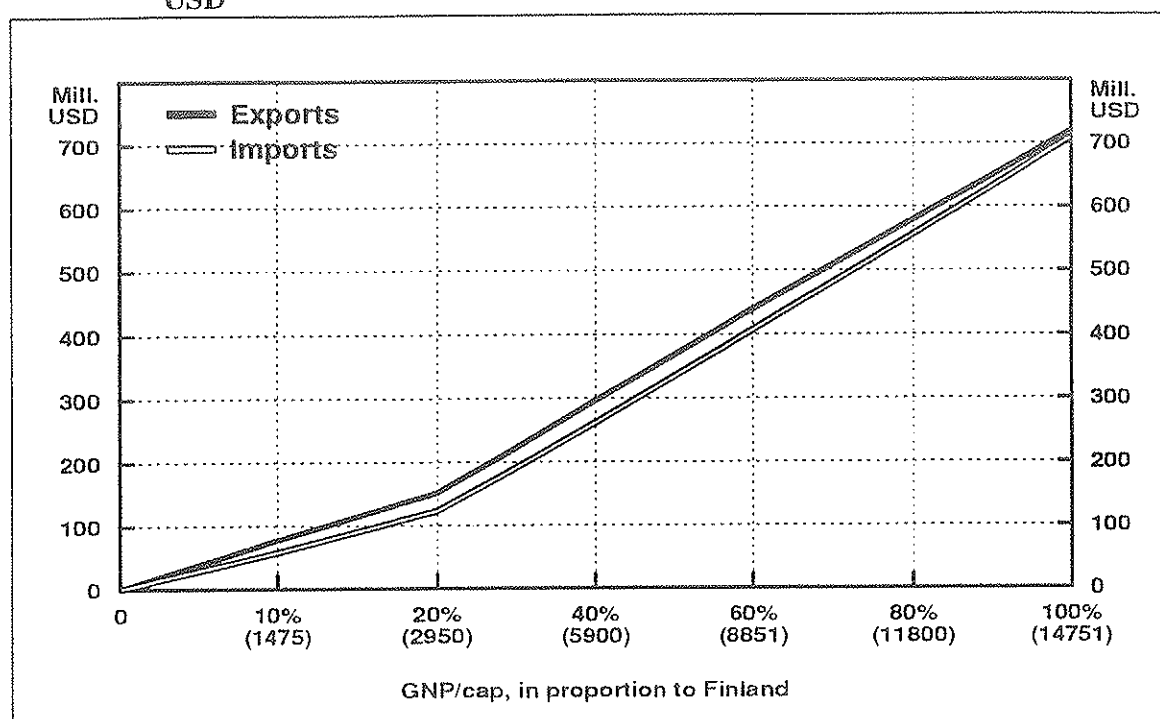


Figure 7 reveals that at current income levels, the Finnish export potential is roughly 330 mill. USD as opposed to actual exports, which amounted to 105 mill. USD in 1993. The predicted import potential is 277 mill. USD compared to 258 mill. USD worth of imports in 1993. They

roughly match each other at current income levels, while the export potential is found to be three times greater than actual exports. Assuming the same income level in St. Petersburg and Leningrad as in Finland, the export potential would grow to 720 mill. USD and the import potential to 710 mill. USD, which is roughly seven times and three times the actual trade, respectively.

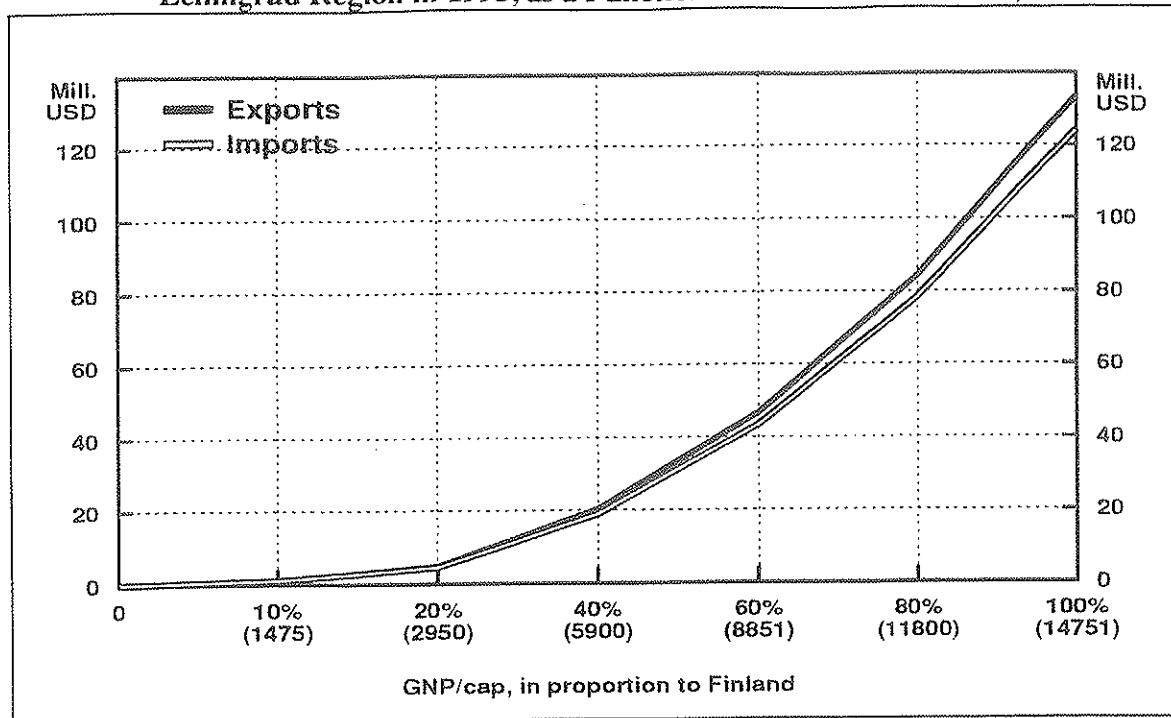
Figure 7 The Trading Potential between Finland and St. Petersburg and the Leningrad Region in 1993, as a Function of the Latters' Income Level, mill. USD



Turning to figure 8, one notes that the actual Estonian exports to St. Petersburg and Leningrad exceed the potential by a factor of two at current income levels. The value of current exports was 35 mill. USD in 1993. At income levels identical to the Finnish, the export and import potentials are roughly identical, 133 mill. USD and 125 mill. USD, respectively.

It can thus be said in conclusion that the gravity model shows that the regions could profit further from increased trade and unutilised potential, except in Finland's trade with Estonia. In this case the value of the actual trade flows currently exceed the potential.

Figure 8 The Trading Potential between Estonia and St. Petersburg and the Leningrad Region in 1993, as a Function of their Income Levels, mill. USD



5.3 Revealed Comparative Advantage

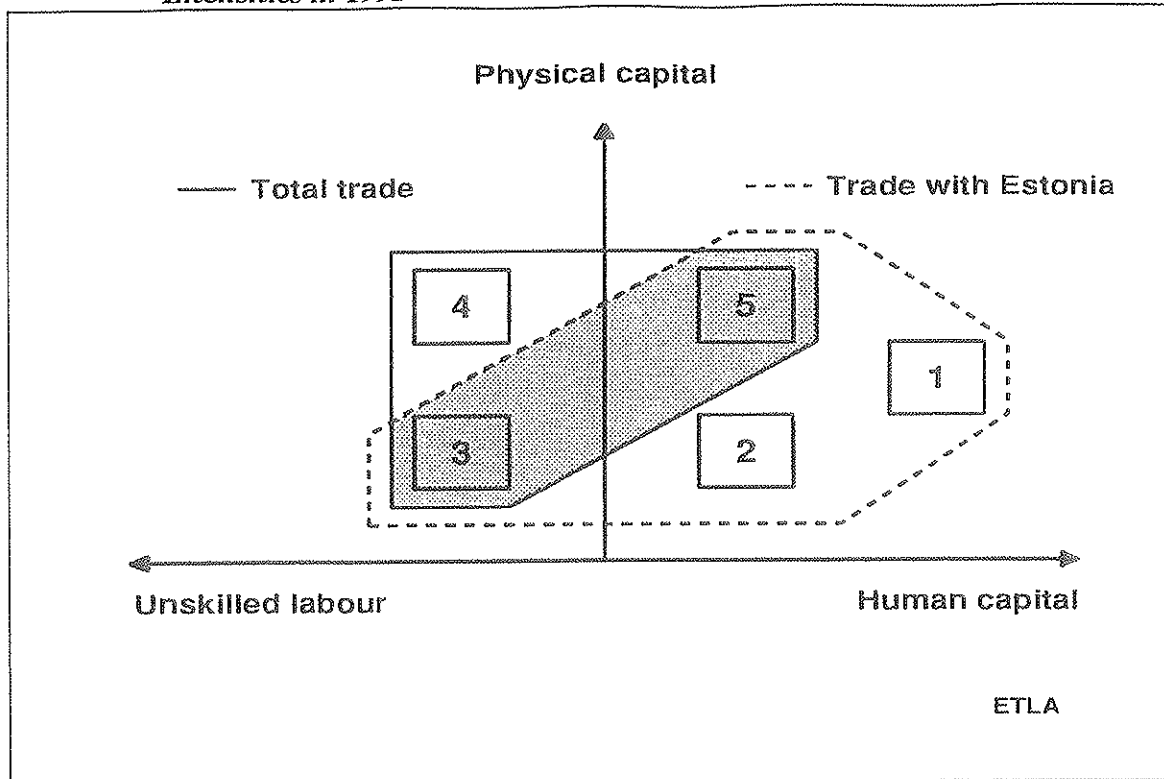
We will shortly analyse how Finland and Estonia specialise in their mutual trade on the basis of NACE 3-digit industries classified according to their factor intensities and along the lines of Erkkilä and Widgren (1994) and Neven (1994) (see appendix 4 for the exact formulation of the indices employed). Comparative advantage RCA is measured as the net trade in proportion to gross trade in a given industry and export (import) specialisation SI(EXP) as the geographical export (import) pattern. A correlation analysis reveals that the correlation between RCA (computed for Finland's total trade) and SI(EXP) is negative (-0.5) and the correlation between RCA and SI(IMP) is positive (0.3). If Finland specialised in her exports to Estonia in the same industries as she does in her total trade, then the correlation would be positive and the opposite would hold for imports. A regression analysis with SI(EXP) as the variable to be explained and RCA as the explanatory variable shows that the latter is highly significant and has a negative sign. When employing the RCA-index adjusted for imbalances in total trade, it is not, however, statistically significant. As already mentioned above, Finland does not specialise in her trade with Estonia according to the same pattern of comparative advantage as she does in her total foreign trade. This can be attributed to three reasons:

1. Estonia is emerging as a competitor to Finland in some industries in their exports to third markets. This means that Finland and Estonia have an identical or close to identical comparative advantage in the given industries
2. Finnish exports to Estonia are to some degree artificial
3. Estonia's pent-up demand, which is directed towards Finnish exports.

The first point is rather straightforward and means that Estonia has acquired a comparative advantage in the same industries as Finnish businesses. Finnish and Estonian firms of given industries compete thus with each other in their exports to third countries. The second explanation implies e.g. that Finnish exports to Estonia are being subsidised. In this case the comparative advantage can be considered as artificial in that the exports of the firms will cease or be significantly reduced when the payment of export subsidies are terminated. A second plausible explanation is linked to point three, namely that Estonia has opened up to international trade very recently. A lack of foreign competition and Estonia's proximity and closeness to Finland gives Finnish exporters a relatively strong position on the Estonian market.

The NACE 3-digit classification distinguishes between 91 manufacturing industries. They were grouped according to relative factor intensities, which gave five classes of industries (see appendix 5 for a classification of the industries). It turns out that Finland specialises in her trade with Estonia in industries characterised by: (1) an intensive use of human capital, (2) a relatively intensive use of human capital combined with physical capital in small amounts, (3) small amounts of physical capital combined with unskilled labour and (4) a relatively intensive use of human capital and an intensive use of physical capital. The advantage in group (3) is almost negligible though (it corresponds to group 3 in figure 9). Finland's disadvantage (and Estonia's comparative advantage) lies thus in industries intensive in physical capital combined with small amounts of human capital. Finland has a comparative advantage in the latter industries in her total trade, but a disadvantage in her trade with Estonia. Moreover, Finland enjoys also an advantage in her trade with Estonia in industries intensive in human capital, but with only small or relatively small amounts of physical capital. These are industries of a comparative disadvantage in Finland's overall trade. The groups of industries where Finland has an advantage both in her trade with Estonia and in her total trade are thus those with a high content of both human and physical capital or a low content of both of them. The Finnish trade pattern in her overall trade and her trade with Estonia is illustrated in figure 9.

Figure 9 The Pattern of Finnish Comparative Advantage According to Factor Intensities in 1992



Source: Erkkilä & Widgren, 1994

A regression analysis further confirms the results. Of the four exogenous variables used to explain the RCA-index in the total trade, only one, namely the average wage, was statistically insignificant². The coefficients for physical and human capital intensiveness are highly significant and explain together Finnish comparative advantage quite well. On the contrary, none of the coefficients are significant when trying to explain the RCA-indices in Finland's trade with Estonia. The link between comparative advantage and relative factor endowments is thus weak in Finnish-Estonian trade. Finland's comparative advantage is spread over a relatively broad range and can thus not be explained with the same factors as in Finland's overall trade.

Russia's exports are biased towards raw materials, such as mineral products, oil and gas, whose share is nearly 80 per cent. Particularly oil and gas exports and products thereof have been on the rise during the past years. Russian imports consist mainly of machinery and equipment and to a lesser extent also of raw materials for agriculture and the food industry, such as grain and

² The exogenous variables are: (1) the wage bill and social security payments as a ratio of value-added (w/y), (2) investment in tangible capital as a share of value-added (i/y), (3) the average wage (w/l) and (4) white-collar workers as a share of the total number of employees (t/l).

sugar as well as consumer goods, e.g. clothing. Whereas Finland does not count among Russia's biggest trade partners, she is the most important country for St. Petersburg and the Leningrad region. Approximately one-third of St. Petersburg's and the surrounding area's foreign trade is with Finland. Russia's main trading partners, on the other hand, are Germany, China, Italy and France. Finnish imports from St. Petersburg consist mainly of raw materials (exclusive of oil), whose share is some 60 per cent. Machinery and equipment and consumer goods are of a lesser importance, they account approximately for 7 per cent and 9 per cent, respectively. Practically the entire exports of the Leningrad Oblast was oil and oil products (98 per cent).

The traditional industries for Finnish exports to St. Petersburg have been biased towards consumer goods and food products. The exports of machinery and equipment are growing industries. Also crude materials have traditionally formed part of Finnish exports, although their importance has been modest. Compared to Finland's overall exports, the exports of food products to St. Petersburg and the Leningrad Oblast are relatively important. The pattern of Finnish overall imports is different from the pattern of imports from St. Petersburg and its surrounding area. Overall imports are traditionally centred around machinery and equipment, while raw materials and oil typically account for one-fifth. The share of consumer goods in overall imports reaches almost one-third. Finland's most important import articles from her nearby market were crude materials and oil. Neither machinery and equipment nor consumer goods stand out as particularly important. Finland specialises thus in different industries in her overall trade than in her trade with St. Petersburg and the Leningrad Oblast. This holds for both exports and imports.

A picture of regional integration emerges thus in that St. Petersburg with surrounding areas engage in foreign trade that differs both with respect to its country composition and commodity pattern. The same holds for Finland that trades in different goods with her nearby markets and her total trade. The determining factors of the dynamics of this area differ from those factors that account for the three countries' overall foreign trade. A pattern of local and regional integration emerges that does not follow the general pattern of development of the countries' exchange of goods. Neither does it fit in nor correspond perfectly to the three countries' position in the global division of labour. One could thus envisage a very distinct pattern of development with commercial ties, above-average trade intensiveness and relatively high growth rates feeding into each other and leading to a virtuous circle.

6 DEVELOPMENT OF REGIONAL ECONOMIC INTEGRATION WITHIN THE TRIANGLE

6.1 The Relationship between FDI and Trade

Trade and investment are closely connected and various linkages exist between them. Our study indicates that FDI is both multiplying and deepening the trade and production linkages among Finland, Estonia and the region of St. Petersburg. Four types of trade-related FDI can be identified in the triangle:

- Trade complementing, e.g., FDI is directed at providing backup and intra-industry support facilities in the export market.
- Trade substituting, e.g., FDI goes into import-substitution activities aimed at the domestic market and/or neighbouring markets.
- Trade diverting, e.g., FDI moves in to take advantage of certain economic blocs, or, for instance, of unfilled quotas under preferential arrangements.
- Trade promoting, e.g., FDI takes the form of offshore operations producing for the international market.

A great part of FDI today is undertaken as a complement to trade. FDI flows increase trade or do not affect trade flows adversely between the host and home countries. In this case the firm wants to expand its production capacity since demand in the host economy has increased or because it is otherwise deemed necessary to be present in the foreign market, e.g. local market conditions differ from those at home and improved knowledge of local markets make it easier to penetrate them. FDI can also be motivated by a desire to increase one's market share by taking over a local competitor or because incentives and investment concessions granted to foreign investors. In this case FDI expands the firm's capacity, but does not entirely replace domestic production, i.e. total sales (foreign subsidiary and exports) increase. Trade may also increase if the firm purchases the inputs from the home country. The majority of Finnish firms investing in Estonia primarily think in terms of the overall Baltic markets. Foreign owned Estonian companies serve as bridgeheads from where to penetrate the other Baltic countries (cf. chapter 4).

Another rationale for FDI today is that it is undertaken as a substitute to trade, i.e. FDI flows lead to decreased exports from the home to the host country or do not (at least) increase exports. To the extent that FDI replaces domestic production, it should show up in increased imports from the host country if the domestic (home) market is also being supplied from the

host country. This is since the host country can offer something the home country cannot, e.g. lower wages if the good is labour intensive, which leads to re - exports.

Finnish operations in Estonia and St. Petersburg have supplemented rather than crowded out Finnish domestic operations. The combination of low wage costs and a relatively well-educated labour force attracts FDI to Estonia from Finland. However, manufacturing units in the Baltic states are also used as an export base in their efforts to sell to Western European or Finnish markets. This seems to be the case in labour intensive industries, which nevertheless also make use of skilled workers, e.g. electronics, textiles and furniture. In this respect there is a significant difference between Finnish FDI to Estonia and Russia. Finnish - owned firms in Russia mainly concentrate on the Russian market, only some 20 per cent of sales origin in Finland. In the case of Estonia part of FDI is motivated by the lower production costs, while at the same time the geographic distance is not an obstacle to export the goods back to Finland.

A third factor which affects the relationship between FDI and trade is the height of external tariffs and other barriers to trade. Given that tariffs are higher on final products than on intermediates and inputs, a firm can try to circumvent them by FDI. FDI motivated by protectionist policies give rise to so-called screwdriver plants or transplants with a low value-added. The final product is assembled in the host country and sold on the local market. The host country can of course try to protect itself by imposing different rules for so-called minimum local content, which prescribe how much of the product's value-added be of domestic origin in order to qualify as duty-free imports or subject to lower tariffs.

Transit-trade is also of importance, if an exporter can circumvent tariffs by circulating the product via another country, which enjoys a more favourable treatment for her exports. As reported in chapter 5, the value of transit-trade to Russia via Finland is estimated to some 2 billion FIM annually. How much of it that origin in Estonia is difficult to quantify, but given that Russia employs on average twice as high tariffs (some 30 per cent) on Estonian exports than on Finnish exports, it can potentially be very significant.

In terms of invested capital (cumulative as of the third quarter of 1994), Sweden has shown the greatest interest in Estonia (cf. also chapter 4). Out of a total of 4.1 billion kroons (in value terms), the share of Sweden is some 25 per cent or 1.051 billion kroons. Finland comes second, her share is one-fifth or 827 million kroons. Russia occupies the third place, the value of FDI amounting to 473 million kroons or 12 per cent. USA and Germany come fourth and fifth, respectively. The value of their FDI reaches 276 and 126 million kroons, respectively. In

terms of the number of registrations of foreign-owned companies, Finland has been the most active: 4190 companies are registered by investors based in Finland.

In terms of exports of goods and services, Finland is the most important source, the value of imports from Finland reaching 3.3 billion kroons in 1993 and some 5.5 billion kroons in 1994. Russia is the second biggest exporter, with some 2 billion kroons worth of exports in 1993. Germany and Sweden come third and fourth. Their exports amounted to 1.3 billion and 1.1 billion kroons. The USA is not among the most important trade partners: the value of her exports reached only 322 million kroons in 1993. The countries are ranked according to the value of their FDI in table 18.

Table 18 The Value of FDI in Estonia and Exports in 1994, mill. EEK

Country	Invested capital (cumulative, third quarter of 1994)	Exports to Estonia (Jan. - June 1994)
Sweden	1051	867
Finland	827	2761
Russia	473	1802
USA	276	219
Germany	126	971

Table 18 reveals that Sweden is the fourth biggest exporter, while leading when measured by invested capital. On the other hand, Finland and Russia are well placed in terms of both trade and foreign investment. In the case of Sweden, the figures could be interpreted as giving evidence to the hypothesis of FDI and trade being substitutes. In the case of Finland and Russia, again, the figures point in the other direction, i.e. to their complementary nature, since they are well placed both in terms of FDI and exports. A thorough analysis requires data on individual industries, which is not obtainable for FDI. Given that the free-trade agreement between Finland and Sweden, on the one hand, and Estonia, on the other, came into force in the beginning of 1994, tariff-jumping seems unlikely as a driving force behind the large amounts of FDI from these countries.

Looking at industry-specific data, Finland exports (in order of importance) to Estonia fuel oils, gasoline, motor vehicles for transport of goods, gas oils and motor vehicles for transport of persons, i.e. all capital intensive goods. The five largest import articles are different kinds of base and scrap metals and wood in the rough, non-coniferous, i.e. crude materials. As mentioned in chapter 5, Finland's comparative disadvantage (measured as the net imports in proportion to total trade) in her trade with Estonia lies in industries intensive in both unskilled labour and physical capital. It would thus seem that Finnish FDI is partly attracted by the lower

wages in Estonia (e.g. textiles). Estonia's main export goods (in the aggregate) to Sweden are textiles and textile articles, wood and articles of wood, base metals and articles of base metal and to a lesser extent raw hides and skins and leather and their products. They are all industries employing intensively unskilled labour. Estonia imports mainly textiles and textile articles, machinery and mechanical appliances, electrical equipment and vehicles, aircraft and vessels. Apart from textiles, they are all typical examples of capital intensive industries with a high content of skilled labour. The trade in textiles and textile articles with both Finland and Sweden is noteworthy in that exports and imports roughly match each other and the high level of this trade.

Subcontracting is important in the production of textiles. In this respect Finnish FDI to Estonia and St. Petersburg and the Leningrad region seem to differ, in that FDI flows into the latter are primarily intended to serve the all-Russian or the local market, while Finnish FDI in Estonia also replace to a certain degree capacity in the domestic markets. Finnish imports from St. Petersburg and Leningrad are heavily biased towards crude materials and oil, while Finnish exports to a large extent consist of consumer goods, food and machinery and equipment, of which food processing is relatively labour intensive. Consumer goods, agricultural products and processed food products are traditional export industries. The importance of the metal and chemical industries has increased in the last years. Fresh and processed food, clothing and footwear, cosmetics, furniture and furnishing have unexploited potential and could prove to be fast-growing export industries as the market develops.

This study further reveals that inward FDI in Estonia and St. Petersburg has exposed some of their industries more directly to international competition by enlarging the tradable sectors and reducing the non-tradable sectors (see subchapter 4.4). As a consequence, competitive and strong clusters are emerging or being created, thus forming the basis for future economic growth. Rapidly developing industries in both Estonia and St. Petersburg are the foodstuffs, textile, electronics and the building materials industries. At present, the main sources of comparative advantages are to be found in the cheap and relatively well-educated labour force (especially engineering) and some raw materials. Furthermore, inward FDI has contributed to the creation and the rapid development of certain business services such as banking, insurance and other commercial services. The competition-enhancing effect of FDI illustrates in efficiency gains that may be even greater than those from trade.

Analysing the relationship between trade and FDI, it turns out that FDI is particularly important - if not vital - for Estonia for several reasons: As Estonian markets are small, exports are the most important source of revenues both for indigenous and foreign-based industrial

firms. Domestic companies have been able to re-establish their international trade relations with the help of foreign investors who, in turn, have been able to take advantage of the Estonian knowledge and experiences in Baltic and Russian markets. In addition, foreign-owned companies often export their products to the home country. These interdependences between domestic and foreign firms, on the one hand, and between parent firms in the home country and affiliates in the host country, on the other hand, have generated the largest part of trade between Finland and Estonia and in the third markets (other Baltic countries and the Russian Federation). The stock of FDI in Estonia now contributes a remarkable 16 per cent of the total output and the share of foreign-owned companies in foreign trade 10 per cent. For Finland, the sharply increasing amount of outward FDI into neighbouring regions (especially Estonia and St. Petersburg) has been conducive to a tremendous increase in trade with the Baltic countries and the Russian Federation. Thus, this tendency is of major importance for Finland as well. In some of the Finnish companies, the impact of FDI can already be identified: their average proportion of profits earned through exports previously was significantly lower than profits generated now from sales by their foreign subsidiaries (Borsos, 1994).

To conclude, the experiences of the past few years in the triangle suggest that outward and inward FDI and trade are closely related to each other and have generated significant production and trade benefits to the economies involved, that is Finland, Estonia and the region of St. Petersburg. Based on such considerations no persistent reversal of what has been achieved in terms of freer trade and relatively large flows of FDI should occur. However, trade and FDI in the triangle are very vulnerable not only to economic developments, but also to political uncertainties in the Russian Federation.

6.2 Regional Economic Integration and FDI in the Triangle

Within the triangle, the development of economic regionalization is being reshaped to what it was before World War I (World War II in the case of Finland and Estonia). The difference now is that each party now maintains a different status vis-à-vis their economic relationships: Finland is a full member of the EU and is actively involved in Nordic co-operation schemes, Estonia is part of the Baltic free trade area and will soon conclude the Europe Agreement with the EU, whereas the region of St. Petersburg has already become one of the most important economic centers in Russia. As our analysis on institutional arrangements, FDI stocks and flows, and the trade potential shows, economic cooperation *within* the triangle has already reached a relatively important dimension. Consequently, FDI and trade flows are rather intensive between Finland, Estonia and St. Petersburg, especially between Finland and Estonia.

Estonia makes an interesting case in the triangle, as the country is totally open to all trade and FDI flows. The triangle as a whole forms an attractive rapidly evolving economic region, wherefrom EU markets, the Baltic area and Russian markets can be served.

However, several problems exist: (1) In the case of Russia, trade procedures are unnecessarily complicated and unclear, even though several agreements have been signed between Finland and the Russian Federation and between the EU and the Russian Federation. (2) Furthermore, both economic and political relations between Russia and Estonia are hampered by the unwillingness of Russia to undertake measures that would decrease the presently high tariffs to Estonian products and improve market access as a whole. (3) Even though all of the three Baltic States have signed a free trade agreement (that does not cover agricultural products), the principles have not been mutually respected, Estonia being the only party putting them into effect. (4) Finally, political and economic unrest in Russia affects negatively the investment climate in St. Petersburg. Hence, political instability is the touchstone of the triangle.

The role of individual investors, of various associations and chambers of commerce, of bilateral and multilateral cooperation programmes and other international schemes is significant in enabling overcoming the above cited obstacles to greater regional integration. For instance, the European Union is a major actor in organizing aid to encourage the economic and political reconstruction of the economies in transition, mainly under the so-called PHARE and TACIS programmes. Aid and other financial support (cheap loans, and the like) have been given on specific conditions which stress the importance of a positive progress towards economic and political transformation; this initially referred to, among the primary factors, ensuring a state of law, respecting human rights, establishing multipartism, ensuring free elections and instituting a market economy. The main goals were and still are to encourage both FDI and domestic investment and to reduce financial risks, in order to accelerate structural change.

The Baltic Sea region has been recognized as an important market and centre of economic activity by the Union. It is against this background that bilateral relations are being actively developed with the countries of the region, jointly with considerable assistance funds. Membership negotiations with three Nordic countries were concluded with the accession of Finland and Sweden on 1 January 1995, a Partnership and Cooperation Agreement with Russia has been established, thus facilitating regional cooperation also with the region of St. Petersburg, and negotiations for the Association Agreements with the three Baltic States are under way.

The involvement of various international organizations, individual countries and associations further facilitate the creation of dense "issue networks" through which companies, governmental agencies and other organizations with an interest in FDI in the triangle participate. This has enabled the freer flow of information among the involved parties, which are concerned with the various terms of entry and operational issues. If the deficiencies cited previously were eliminated or at least reduced, this grouping of Finland, Estonia and the region of St. Petersburg would be able to deepen integration at all levels and could attract additional inward and intra-regional FDI. Here, a strong commitment to the promotion of economic growth, to the development of both technological and physical infrastructure and enhancing human capital is necessary in order to develop an integrated, dynamic regional economy. The mechanism of integration should bring increased specialization, an overall rise in the level and rate of technological progress in the region, stimulated by increased competition, rising incomes and a larger market. This development should further boost FDI activities in and among Finland, Estonia and St. Petersburg. Furthermore, FDI from this region, especially from Estonia and St. Petersburg, could increase as companies and industries become stronger and more competitive both domestically and internationally.

6.3 Prospects of Deepening Regional Economic Integration and Trade

In subchapter 5.2 we analysed the trading potential as a function of the Finnish GDP/capita income level. We let the GDP/capita income of Estonia and St. Petersburg successively reach that of the present level in Finland. We kept, however, the Finnish GDP/capita income constant, which might be regarded a convenient simplification.

In the longer-run, however, the Finnish GDP/capita income will also change. In what follows, we shall assume a catching-up scenario where the Finnish GDP/capita income grows on average at 2.5 per cent per year. The equivalent for Estonia and St. Petersburg and the Leningrad Oblast is 5 per cent. We analyse three different scenarios, i.e. the trading potential after 5, 10 and 20 years.¹ We start from PPP-corrected income levels in 1993, which were 14751 USD in Finland, 5000 USD in Estonia and 6220 USD in St. Petersburg (the two latter being approximations of the World Bank). The GDP/capita in St. Petersburg was thus 42 per cent and 34 per cent in Estonia of the Finnish equivalent. The ratio increases slightly after 5 years to 48 per cent and 38 per cent, respectively. After 10 years it will be 54 per cent and 43 per cent and in 20 years time it will be 68 per cent and 55 per cent, respectively. Income levels will thus converge in the following 20 years and catch-up with the Finnish GDP/capita income

¹The trading potentials are expressed in 1993-prices. The trading potential will thus be affected by changes in export prices.

in such a way that the PPP-corrected per capita income of Estonia and St. Petersburg reach the same levels where e.g. Spain, Hong Kong and Singapore stand today.

Table 19 summarises the export and import potentials between the three regions in the three different scenarios. For purposes of comparison, the potential level of trade between Finland and Estonia, on the one hand, and Russia on the other, are included. All estimates are contrasted to the actual value of trade in 1993.

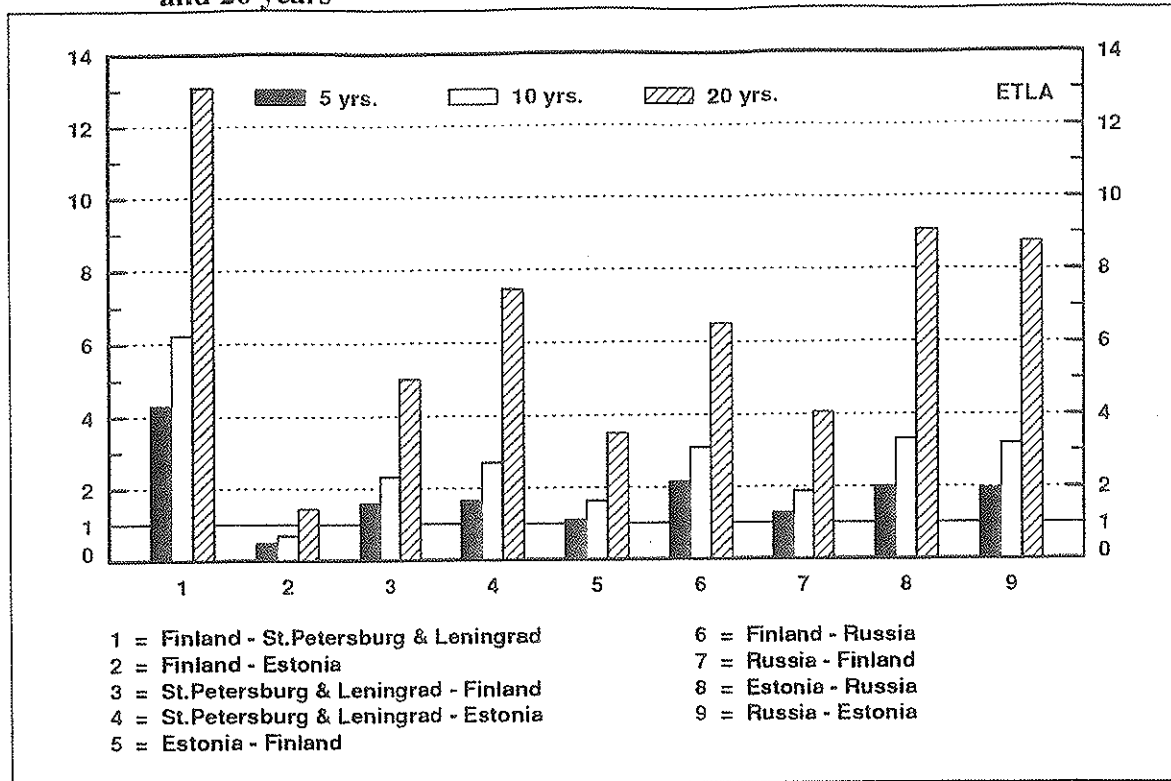
Recalling from table 17 in chapter 5.2, the actual trade between Finland and Estonia and the Russian exports to Finland exceed the potential. The likely reasons for this were also briefly reviewed. The size of the actual exports of Finland to Estonia is further illustrated by the fact that only after 20 years will the potential exceed the actual exports. The table tells us also that there is plenty of unutilised potential in the longer-run, provided that the economy starts growing in Estonia and St. Petersburg with surroundings. The potential after 5 years is typically twice the actual flows in 1993. It has risen on average to three-fold after 10 years and

Table 19 The Trading Potential after 5, 10 and 20 years and the Actual Value of Trade in 1993 in the Baltic Rim, mill. USD in 1993 Prices

Exporter	Importer	The potential in 5 years' time	The potential in 10 years' time	The potential in 20 years' time	The actual trade in 1993
Finland	St.Petersburg	451	654	1374	105
Finland	Estonia	157	227	477	330
St.Petersburg	Finland	407	598	1294	258
St.Petersburg	Estonia	28	46	127	17
Estonia	Finland	148	218	470	134
Estonia	St.Petersburg	29	49	133	n.a.
Finland	Russia	2271	3292	6916	1063
Russia	Finland	1753	2578	5575	1375
Estonia	Russia	365	604	1649	182
Russia	Estonia	299	493	1348	154

6 - 7 times in 20 years from 1993. The individual potentials differ of course from the averages. The largest potential in proportion to the actual trade is to be found in Finnish exports to St. Petersburg and the Leningrad region. Relatively much unutilised capacity seems also to exist in the trade between Estonia and St. Petersburg. For comparison, the potential between Estonia and St. Petersburg on the one hand and between the latter and Finland on the other is quite well in line with what was said above. We have pictured this in figure 10 with the potential in proportion to actual trade.

Figure 10 The Trading Potential in Proportion to Actual Trade in 1993 after 5, 10 and 20 years



As there is unutilised capacity and potential to further expand trade, a case for deepening integration and improving conditions for growth (increased trade also feeding into economic growth) can be made.

When markets are successively opened up to foreign competition, uncompetitive domestic producers will inevitably lose. The adjustment process is also likely to be more the severe, given that the major part of trade is based on comparative advantage and an exchange of goods between industries. Not all parts of society will thus approve of a gradual liberalisation. The welfare improving effects are though greater the lower the external tariffs towards third countries are, the greater the scope for economies of scale in production is and the higher the share of intra-area trade is (cf. chapter 2.3).

The trade pattern in Finland's trade with Estonia is likely to change in the future (see also section 5.3). Finnish exports will thus shift towards wood and wood products, pulp and paper, base metals and their products, machinery and equipment and telecommunication. The exports of coal, briquettes and petroleum products will thus decrease as a share of total trade. In other words, industries (1) intensive purely in human capital and (2) characterised by a relatively intensive use of human capital combined with physical capital in small amounts will lose in

relative terms and (3) industries using intensively both human and physical capital, (4) industries specialising in goods intensive in both unskilled labour and physical capital will benefit. Given that Finland's advantage in products using unskilled labour combined with small amounts of physical capital is negligible in her Estonian trade, it is less clear how these industries will manage when faced with Estonian competition. These are industries of comparative advantage in Finland's overall trade (group 3 in figure 9). Estonia's comparative advantage would thus in future lie in products using relatively much of skilled labour and in industries combining skilled labour with average amounts of physical capital in her trade with Finland. Estonia could also evolve into a competitor to Finland on third markets in products using unskilled labour.

As St. Petersburg's and Leningrad's comparative advantage seems to lie in raw materials (inclusive of oil), their exports are likely to be dominated in the future by industries intensive in unskilled labour and perhaps also in goods that require physical capital. They are likely to specialise in their imports in goods with a high content of skilled labour and goods intensive both in skilled labour and physical capital.

7 CONCLUSIONS OF THE STUDY

The extraordinarily long and deep recession in Finland is coming to an end at the same time as Estonia has opened up to trade and international co-operation and when her economy is showing some signs of improvement. This has also coincided with Finland's membership in the EU. Favourable economic conditions are generally regarded as a necessary prerequisite for deepening integration, which will hence be perceived as a positive-sum game from which everybody can gain. In this respect, intensified economic ties and integration between Finland and Estonia is well under way. This should further be enhanced, given that Estonian exports to Finland is not perceived as a serious threat to Finnish domestic producers or that a substantial part of Finnish manufacturing is relocated to Estonia to take advantage of lower wages.

St. Petersburg and the Leningrad region offer a great potential to Finnish and Estonian producers for increased trade and FDI with its population of 6.7 million - equal to the combined population of Estonia and Finland. The region's relatively outdated production capacity and the decline in production that has not yet come to a halt, make a stabilisation of the economy urgent so as to profit from the unutilised trading potential that exists. At the same time, however, it is evident that the transformation of the production capacity and the partial reorientation of trade that is needed is not an easy task.

As our overview on FDI flows within the triangle indicates (cf. chapter 4), the tendency which emerges is one of rapid growth, especially in the case of Finnish FDI in Estonia and St. Petersburg which are also important FDI destinations for other home countries (the Nordic countries, Germany and the USA). The geographical proximity of these regions makes them even more attractive for manufacturing production as political and economic conditions are improving. As a whole, the main reason to Finnish FDI in Estonia or St. Petersburg is that investors want to get an early foothold in a market that has enormous future potential, a market that not only covers the whole Baltic Rim, but that can also be extended to cover the large Russian market. In many of the cases, factors such as low cost production, cheap resources or investment incentives fall much further down the list of priorities. Furthermore, an already significant number of companies have moved into the region to service their major clients. This ripple-effect has further affected the domestic economies of Estonia and the St. Petersburg region via foreign investors' increasing use of local suppliers and services and by paving the way for further investment by their major suppliers and for industrial manufacturers.

The role of Estonian FDI and FDI originating from St. Petersburg is minimal in the triangle; moreover, there are no significant direct investments made by them in Finland. The reasons behind Russian FDI in Estonia are to be found in the unstable political and economic situation in the Russian Federation. Likewise Finnish investors, linguistic factors and proximity are also considered as important determinants (one third of the Estonian population is ethnically Russian). The presence of Estonian firms in St. Petersburg, in turn, takes place with their foreign partners. In most cases Estonian firms established in St. Petersburg are actually subsidiaries of foreign-owned firms in Estonia.

In the future, FDI from Estonia and St. Petersburg should increase, as companies and industries become more competitive both domestically and internationally. Furthermore, Finland's EU membership should improve its outlook for inward FDI from Estonia and Russia. Yet, in the longer-run, Estonia could compete for the same type of FDIs with Finland, as its production pattern is already showing signs of a future shift to higher value-added production. The development towards internationalisation and better competitiveness of Estonian and St. Petersburg indigenous firms should be further encouraged through industrial policies by national governments, if their objective is to maintain the current positive economic progress and further enhance economic growth and catching up.

Trade - particularly Finnish exports which has practically doubled every year - between Finland and Estonia has increased rapidly in the past three years. This is in part a reflection of the lack of competition on the Estonian markets, partly a consequence of Estonia's own weak supply so that pent-up consumption and investment demand will initially be met from nearby markets. Other characteristics are the large part of second-hand machinery and equipment (e.g. second-hand cars) in the Finnish exports and the subsidised food exports. It is also unclear how big a share of the exports to Estonia only pass through for final use in third countries. Finland's close historical and cultural ties are also of importance. For the time being, the actual value of trade - both exports and imports - exceed the potential.

An analysis industry by industry (manufacturing) also reveals that the trade pattern of Finland's exports to Estonia deviates from that of Finland's overall exports. On the other hand, Estonia's exports to Finland is more in line with Finland's overall import pattern. Finland's comparative advantage in her trade with Estonia lies in oil products, machinery and equipment, radio- and telecommunications and vehicles. Estonia specialises in textiles, wood and wood products and base metals. Finland's comparative advantage in her total exports lies in wood and wood products, pulp and paper, base metals, machinery and equipment and radio- and telecommunications, which has expanded in recent years. The share of the five largest export

industries in the trade with Estonia amount to 19 per cent, while the corresponding share in Finnish imports from Estonia is 43 per cent. This illustrates further how much more concentrated Estonian exports to Finland are, compared to the Finnish export specialisation in a relatively broad range of products. It also bears witness to the degree of competition on the Estonian and Finnish markets.

Finnish comparative advantage in the trade with Estonia will thus likely shift towards products intensive in (1) unskilled labour and physical capital and (2) skilled labour and physical capital. Finland's disadvantage will in the same manner shift towards industries (1) intensive purely in skilled labour and (2) relatively intensive in human capital with small amounts of physical capital. This does not exclude a future scenario in which Finland and Estonia might evolve into competitors in third markets in goods intensive in unskilled labour. The most likely scenario is that the commodity pattern in the trade between Finland and Estonia will undergo changes as the countries adjust and their production shifts to industries in which they have a comparative advantage, provided market forces are allowed to work.

Finnish imports from St. Petersburg and Leningrad area are dominated by crude materials and oil. Finland exports consumer goods, food, machinery and equipment and crude materials. The metal and chemical industries are growing export industries.

In general, there exists ample potential and unutilised capacity in the trade with St. Petersburg and Leningrad on part of both Finland and Estonia. If trade is liberalised, this should change the trading pattern in such a way that production shifts to the country where it is most profitable to locate production. Furthermore, the trade diverting and suppressing effects will be smaller, the lower the external tariffs are and the more the participants trade with each other. Economies of scale and cost reduction will be greater, the easier it is for exporters to gain market access and the bigger the markets are.

Until now, the countries of the triangle have experienced rather significant mutual benefits from the described economic regionalization pattern. Even Finland, though fears have been expressed that Finnish companies relocate their production to Estonia and the St. Petersburg region. The study shows that such doubts are not well-founded. Finnish operations in Estonia and St. Petersburg have been supplementing rather than crowding out operations elsewhere. Furthermore, Finnish FDIs in Eastern Europe currently represent a negligible quantity relative to overall outward FDIs (being less than 5 per cent). Instead of fearing, it would be more fruitful for the Finnish policy-makers to concentrate on the measures that have to be undertaken in order to be able to manage the ongoing industrial structural change, which

started already before the neighbouring Eastern countries opened up. The home country effects in Finland have currently much more to do with export stimulation, supporting firm employment effects and home office employment effects than with actual displacement effects (See Borsos 1995).

Nonetheless, problems caused by the adjustment period will not be easy to solve, as a new international division of labour is inevitably emerging in the Baltic Rim. The adjustment problem emerges when free trade prevails, because - in principle - the labour force in Finland and other Western industrial countries will have to compete directly with that of Eastern transition economies. Therefore, some groups of workers, particularly the unskilled labour force, will lose out in that race so long as Estonia and the St. Petersburg region compete with low wages. But, simultaneously, the demand for and the output of skill-intensive goods should increase in Western industrialised countries. As a whole, Finland will gain from increased trade with Eastern Europe, as the industry specialises in those fields where it possesses comparative advantages. Thus, fears that firms having foreign production "export" jobs should not be based on the fallacious idea that the world's output is fixed.

The study also shows that there are significant benefits to be reaped from deepening integration and intensified trade linkages. This is not only important for the exporting country, but also for the importing country, which in turn is able to benefit from better market access, that a mutual freeing of trade means. Russia has much to gain by lowering its tariffs and giving preferential treatment to both the countries of the EU and Estonia. The Interim Agreement should hence be brought into force and the ratification process of the PCA also started. At the same time the EU should aim for a trade regime where all products are given equal market access, i.e. quotas on certain sensitive products (textiles and steel) should be gradually abolished. Free-trade (in goods and services) should be aimed for after the transition period.

A distinct pattern of FDI and trade has evolved in the triangle. It differs from the three countries' overall FDI and trade patterns. This is how regional economic integration manifests itself. It should be understood as an evolving and dynamic process which is bound to change with the regions' changing levels of development and as their mutual economic ties strengthen. Due to its dynamic nature, capacity to adjust is required. The liberalisation of trade will also have an influence on the allocation of resources and production. Besides improved efficiency in production, adjustment costs will rise as factors of production become redundant, even if temporarily. The dominating part of trade is of an inter-industry kind and is likely to be so for the foreseeable future. Unless wealth levels converge substantially, trade will be based on the

exploitation of the differences among the regions. In this case trade will consist of an exchange of goods between industries, not within industries.

Notwithstanding the relatively good development of the business environment in Estonia and St. Petersburg, there is a number of commonly shared substantial problems, which are inhibiting an even greater optimisation of FDI. These are mainly systemic problems, which are a legacy of 50 years of central planning, and difficulties arising from, among other things, loopholes in legislation and the fast implementation of new laws, slow and complicated bureaucratic administration, vague ownership, and other problems generating from the incomplete transformation into a market economy.

Due to the very dynamic pattern of FDI within the triangle and the changing configuration of assets determining industrial competitiveness in the region, the members should regularly review their investment policies, especially Estonia and St. Petersburg. For instance, the decision to put an end to the various tax incentives for FDI in Estonia seems to have been the right decision, as this caused a large tax burden in the budget. Furthermore, this study has also revealed that foreign investors in St. Petersburg and Estonia do not react upon certain incentives, as their main motivation for FDI was strategic by nature and market-related (cf. chapter 4). The general investment climate is more determining, depending thus on the political, social and economic environment (see figure 5, subchapter 4.3). Attracting FDIs with the help of special incentives should be understood as a need to act quickly and to restore the competitiveness of the economy. The policies should, however, continuously take into account the role of foreign companies as active agents in the process of permanent and accelerated restructuring through their FDIs. The role of foreign investors is clearly rather significant both in Estonia and St. Petersburg (cf. section 4.4 on the relative importance and impact of FDI in the triangle). In addition, FDI is both multiplying and deepening the trade and production linkages within the triangle (see chapter 6).

Thus, FDIs are vital in the path towards a market economy. In order to attract additional FDIs in Estonia and St. Petersburg, policy-makers must be able to muster a high degree of credibility and there must be a preparedness to support clear, simple and market-oriented policies. The most important task in the short term is the effective implementation of liberal FDI policies, ensuring their coherence, predictability and institutional co-ordination.

There are several deficiencies - mainly political by nature - that inhibit a deeper economic integration within the triangle. First, in the case of Russia, trade procedures are unnecessarily complicated and unclear, even though several agreements have been signed between Finland

and the Russian Federation and between the EU and the Russian Federation. Second, both economic and political relations between Russia and Estonia are hampered by the unwillingness of Russia to undertake measures that would decrease the presently high tariffs to Estonian products and improve market access as a whole. Third, even though all of the three Baltic States have signed a free trade agreement (that does not cover agricultural products), the principles have not been mutually respected, Estonia being the only party putting them into effect. Finally, political and economic unrest in Russia affects negatively the investment climate in St. Petersburg and, to some degree, the whole Baltic area. Hence, political instability is the touchstone of the triangle.

Public policy plays an important role in influencing the region's dynamics. Governments can create a favourable environment for trade and FDI through the development of e.g. infrastructure and logistics. The role of modern industrial policy is seen as securing a stable and predictable environment in which firms act and intervention is foreseen only to correct market failure. Part of this is also the design of e.g. proper capital market regulations and tax policies.

Trade policy is closely linked to industrial policy in that, if poorly designed, the outcome is suboptimal. An industrial policy which is directed towards securing a stable policy environment and framework conditions for industry is best complemented by liberal trade policies and vigorous competition policies. Protectionist trade policies, the aim of which is to limit foreign competition, will counteract the promotion of competition in domestic markets. A liberal trade policy complements competition policy insofar as it encourages an efficient allocation of resources, economies of scale in production and dynamic effects, i.e. increased competition, restructuring and innovation. Trade policy, in conjunction with competition policy, is a powerful tool against price fixing, restricting production, market sharing and all agreements between firms, tacit or explicit, that affect trade between and within the regions.

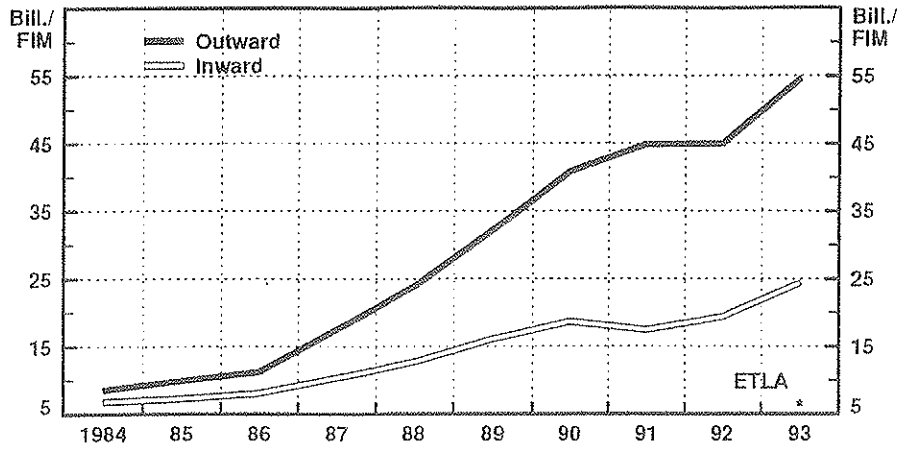
A potent competition policy and a liberal trade policy (both towards each other and towards third countries) is also justified from the perspective of trade creation and cost suppression, as opposed to trade diversion and trade suppression (ch. chapter 2.3). While trade policy is directed towards formal and explicit trade barriers, competition policy can be said to tackle implicit and tacit agreements and practices that inhibit trade. Trade creation will dominate over trade diversion if the removal of trade barriers leads to cheaper imports from the partners and the tariffs towards third countries are low enough so as to exclude any replacement of imports from third countries with imports from the triangle.

The next logical step in Estonia's closer integration into Europe would appear to be a regime which allows the free movement of factors of production and the removal of discriminating measures inside the borders (fiscal, physical and technical non-tariff barriers), complemented by appropriate compensation mechanisms for regions or groups most likely to lose from further liberalisation measures. Regarding St. Petersburg and the Leningrad region, a move towards free-trade in goods is desirable largely because of the factors enumerated above.

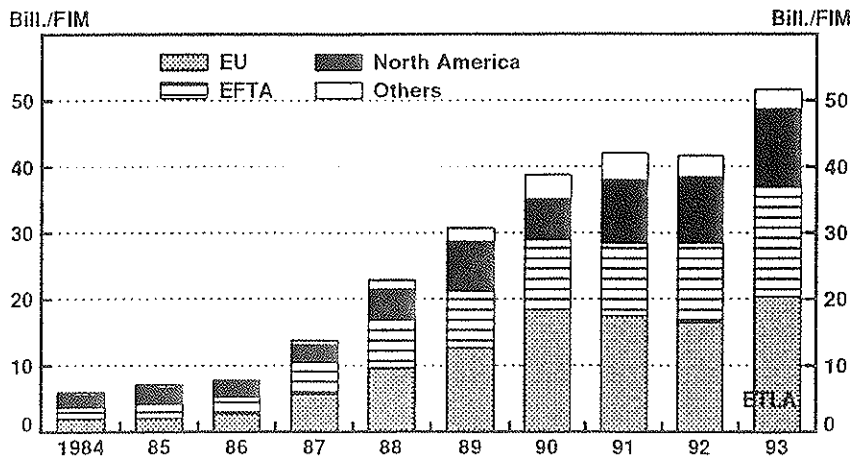
The whole region of the Baltic Rim and Northern Europe could become one of the most important future business centres in Europe. The Nordic countries together with the Baltic countries and the western regions of Russia cover over 40 million consumers. Here, policy-makers and firms of the region have an important role to play in order to attract additional FDIs and enhance the growth of trade. Significant competitive advantages are to be found and therefore functioning regional co-operation - both economically and politically - has to be set as a primary task.

As a result of the above analysis, some observations can be made regarding possible improvements of regional integration schemes. First, regional policies should be better integrated with existing national development policies of the members of the triangle. Second, policy-makers and investors should view the industrialisation and internationalisation pattern and programmes from a regional rather than a national perspective. This is needed in order to avoid duplication and establish complementarity in regional industrial production. Third, and of most importance, a pre-condition for progress in integration is political co-operation and consensus - involving also relinquished economic sovereignty. Last, the promotion of integration at the firm level should not be neglected.

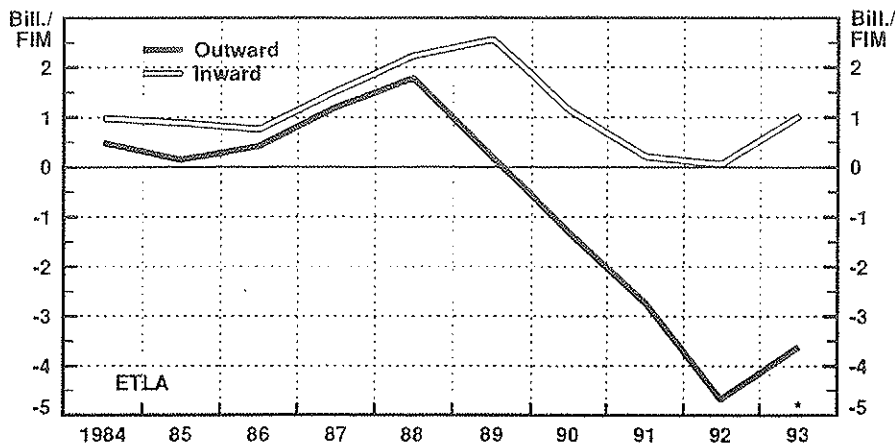
Inward and outward FDI in Finland, FDI stock



Outward FDI stock by market area



Inward and outward FDI in Finland, Profits



Number of Registrations of Foreign-owned Firms in the Soviet Union (end-1989), the Russian Federation (mid-1993) and Estonia (end-1993), by Country

Soviet Union end-1989, ^a		Russian Federation mid-1993, ^b		Estonia end-1993, ^c	
Finland	28	USA	1433	Finland	3365
Austria	26	Germany	1141	Russia	850
West Germany	26	UK	557	Sweden	730
Italy	14	Italy	511	Germany	231
USA	13	Austria	475	USA	203
Switzerland	10	Poland	438	Ukraine	75
UK	9	Finland	429	Denmark	62
Total					
-registered	191	-registered	9125	-registered	6316
-operating	na	-operating	6488	-operating	2502

a PlanEconReport 24.3.1989, Volume V, p. 14.

Source: Laurila, 1994

b Jakovleva, Kuzmin

c Finland's Trade Center in Tallinn

The Gravity Model: a Short Description

The gravity model has been employed recently in many studies that have tried to measure the trading potential of the Central and Eastern European countries following their opening up. Formally:

$$X_{ij} = C + b_1 \ln D_{ij} + b_2 \ln N_i + b_3 \ln N_j + b_4 \ln Y_i + b_5 \ln Y_j + b_6 \ln P_{ij} + b_7 \ln A_{ij}$$

The variables are expressed in logarithms. The importing country's GNP/capita-variable (N_j) denotes her demand for imports and the exporting country's GNP/capita (N_i) stands for the supply of goods. The demand for imports rise with higher GNP/capita incomes as does the supply of exports as the country grows richer. The GNP/capita income can alternatively be interpreted as an indicator of relative endowments of capital to labour, whereby a rich country specialises in capital intensive goods and the country with a low GNP/capita income level specialises in labour intensive products.

The GNP-level - which measures size - (Y_i) determines the range of goods that the country exports. A large country measured by its GNP is able to specialise in a broader range of products compared to its smaller neighbour, as larger countries usually have more resources - raw materials, labour and capital - at their disposal. The importing country (Y_j) will in a similar way demand a broader range of goods the bigger it is, since size and heterogenous preferences go hand in hand. Trade flows are adversely affected by a growing distance (D_{ij}), since transportation costs and other costs of doing business usually grow with a growing distance.

The exports from country i to country j are negatively correlated with their mutual distance, positively correlated with their respective GNP/capita income levels and their respective GNP-levels. A dummy was introduced to count for membership in the same trading block (an EU-dummy, P_{ij}). Cultural adjacency (A_{ij}) was likewise captured by a dummy.

The model was estimated from an average of the bilateral trade flows between 17 West European countries in 1988-90. This gave 272 observations.¹

¹ The model used here is essentially an up-dated version of the one in Wang and Winters (1991). Their model is estimated from a much more heterogeneous data set compared to the model used in this study.

Revealed Comparative Advantage and Export Specialisation

We use two indices to describe the degree of specialisation: revealed comparative advantage - (RCA) - of a given industry and a specialisation index - SI(EXP) - which compares the exports (imports) of a given industry to (from) different countries or regions. The former is: $RCA = ((X_{jk_i} - M_{jk_i}) / (X_{jk_i} + M_{jk_i})) * 100$ and the latter is: $SI(EXP) = ((X_{jk_i} / SX_{jk_i}) / (X_{jl_i} / SX_{jl_i}))$. The RCA-index can also be adjusted for trade imbalances. The former measures comparative advantage as the net trade in a given industry i . The latter measures specialisation as the ratio between the exports of a given industry i of country j 's total exports to country k and the exports of the same industry i compared to its total exports to region or countries l .

The Determining Characteristics for Industry Groupings

The NACE 3-digit classification contains 91 manufacturing industries. They were classified according to the following characteristics:

- (1) the wage bill and social security payments as a ratio of value-added (w/y),
- (2) investment in tangible capital as a share of value-added (i/y),
- (3) the average wage (w/l) and
- (4) white-collar workers as a share of the total number of employees (t/l).

Combining these variables we get five groups:

- (1) a high w/y , w/l and t/l ,
- (2) a low i/y , a high w/l and w/y ,
- (3) a low i/y and w/l , a high w/y ,
- (4) a high i/y and low w/l and t/l and
- (5) a high i/y and w/l and a low t/l .

A high wage bill as a proportion of value-added and a low wage signify labour intensive industries. A high ratio of investment to value-added means capital intensive industries and human capital intensive industries are characterised by a high share of white-collar workers to the total number of employees. Group 1 is characterised by human capital intensive high-tech industries, groups 2 and 3 include labour intensive industries, which differ with respect to the average wage. Groups 4 and 5 are both capital intensive, but differ with respect to the relative importance of white-collar workers.

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