

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Ehrlich, Laura

Working Paper

The EU single market and customs policy: Impact on Estonian foreign trade

ETLA Discussion Papers, No. 797

Provided in Cooperation with:

The Research Institute of the Finnish Economy (ETLA), Helsinki

Suggested Citation: Ehrlich, Laura (2002): The EU single market and customs policy: Impact on Estonian foreign trade, ETLA Discussion Papers, No. 797, The Research Institute of the Finnish Economy (ETLA), Helsinki

This Version is available at: https://hdl.handle.net/10419/63664

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



ELINKEINOELÄMÄN TUTKIMUSLAITOS



THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY Lönnrotinkatu 4 B 00120 Helsinki Finland Tel. 358-9-609 900 Telefax 358-9-601 753 World Wide Web: http://www.etla.fi/

Keskusteluaiheita – Discussion papers

No. 797

Laura Ehrlich*

THE EU SINGLE MARKET AND CUSTOMS POLICY: IMPACT ON ESTONIAN FOREIGN TRADE

* Research Department, Eesti Pank, Estonia pst. 13, 15095 Tallinn, Estonia email: lehrlich@epbe.ee

ISSN 0781-6847 19.03.2002

EHRLICH, Laura, THE EU SINGLE MARKET AND CUSTOMS POLICY: IMPACT ON ESTONIAN FOREIGN TRADE. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2002, 24 p. (Keskusteluaiheita, Discussion Papers, ISSN, 0781-6847; no. 797).

ABSTRACT: Foreign trade is an important mechanism for economic integration with other countries, and plays a significant role in economic growth. The possible impacts of EU membership on Estonian foreign trade have been discussed for years without reaching a clear conclusion. Although the current paper does not purport to offer definitive results, it does shed light on the matter by presenting the main arguments raised by the debate. Using economic theory as a framework for analysis, the paper first discusses the effects of EU membership on the volume and structure of trade, followed by an evaluation of the likely impact on Estonia's trading partners. The majority of the studies surveyed here find that, overall, the trade-creation effect will dominate following EU membership, although trade diversion will occur in sensitive sectors of the economy. However, the magnitude of trade diversion is smaller, the more candidate countries join the EU in the first enlargement wave. The paper also reports that specialization in trade is expected to increase and considers the effect of maintaining trade restrictions on the exports of sensitive sectors to the EU.

Key words: Eastern Enlargement of the EU, Foreign Trade, Single Market, CEEC, Estonia

Contents

Introduction	1
1. Trade theory	2
1.1. Trade barriers and regional integration	
1.2. Specialization	
•	
1.3. Indirect effects	
1.4. Empirical methodology	
2. Empirical studies	6
2.1. The effects of the single market on the current member states	6
2.1.1. Changes in trade volumes and trading partners	6
2.1.2. Specialization	
2.1.3. Indirect effects	
2.2. The effects of the single market on CEECs	
2.2.1. Changes in trade volumes and trading partners	
2.2.2. Specialization	
2.2.3. Indirect effects	
2.3. The effects of the single market on Estonia	
2.3.1. Changes in trade volumes and trading partners	
2.3.2. Specialization	
2.3.3. Indirect effects	
2.4. Discussion of results	
Construir	20
Conclusion	20
Literature	21

Introduction

Estonia has a great potential to join the European Union (EU) in the next few years. This means that Estonia has to face new conditions and requirements almost in every field. As the external trade is one of the most important spheres of Estonian economy, the possible changes in the foreign trade relations need to be discussed. This enables us to foresee the possible developments and to give policy recommendations.

The changes in Estonian foreign trade after joining the EU have not been analyzed thoroughly. Still, there is a lot of literature on the eastern enlargement of the EU and on its possible impact on Central and Eastern European Countries (CEECs), including Estonia. Also, to have a clearer picture of the possible developments after joining the EU, one should take a look on the changes in trade of countries that have joined the European Community¹ (e.g. the United Kingdom and Ireland in 1979).

Hence, the objective of this paper is to present possible developments in the external trade of Estonia after joining the EU, based on the published literature. Therefore, the impact of joining the EU on the external trade of some current member countries, CEECs generally and of Estonia is discussed. The member countries under discussion are the United Kingdom, Ireland, Greece, Spain, Portugal, Austria, Sweden, Finland, e.g. the countries of the first and second enlargement waves of the European Community.

As the changes in trade relations include change in trade partners, trade volumes and trade pattern of commodities, these effects should be analyzed separately. Also, there are always indirect effects that cannot be classified under previous groups, and effects that occur through the trade channel. These impacts form the group of indirect effects in this paper.

It needs to be stressed that this paper analyses the impact of joining the EU on the accession country, not the effect of integration on the trade block. Hence, the gains and losses of the integration of the European Union as a whole have not been discussed. Also, the impacts of eastern enlargement of the EU on the member countries are left aside.

The structure of the paper is as follows. First, the possible changes in trade due to the economic integration are observed theoretically, adding the most common empirical methods. Next, the empirical literature of the integration effects on trade joining the EU of accession country is analyzed. Two groups of countries have been distinguished: countries that have already joined the EU (current member countries) and the countries that are going to join the EU. Hence, the effects discussed can be classified as effects already taken place and possible effects. In the end the possible impacts on Estonia are discussed, based on literature. This is followed by combining the results of previous chapters and literature on Estonia.

Before establishing the European Union in 1993, the economic block was called the European Community (EC).

1 Trade theory

1.1 Trade barriers and regional integration

The traditional trade theory shows that tariffs involve a cost for society². The conception is based on consumer surplus³. If the import tariff is applied, the price for consumer increases and the consumer's surplus decreases, which is a cost. Government gets tariff revenue and producers' surplus increases, but the gains are smaller than losses. The tariff causes misallocation of resources, which results in production cost of protection. Consumption cost of protection occurs due to the fact that the tariff brings about an increase in the domestic price of the imported commodity relative to the price of the other commodities and so causes a distortion of consumption. Also usually there occur the administrative cost and the resource displacement cost of tariffs⁴ (Gandolfo 1994, p. 111).

As the protectionist trade policy is a source of cost, several trade agreements have been signed. Traditionally, three types of regional integration agreements can be distinguished ⁵ (Baldwin et al 1995, p. 1597): free trade area, customs union and common market. In the case of FTA tariffs on trade among member nations are removed and members are left in autonomy in setting their tariffs on trade with non-member countries. Customs union applies a common tariff structure to trade with non-members. Common market permits free movement of factors of production as well as goods and services, between member states. Similarly to customs union there is a common tariff structure on trade of non-members in case of common market. The European Community completed its common market in 1968 (Baldwin et al 1995, p. 1597).

Joining the block of countries that constitute a trade area, each enterer experiences changes in its foreign trade. New conditions of trade offer new opportunities inside the trade block but can also affect pre-accession trade relations. After joining the common market the foreign trade of a country can be distinguished into two parts: trade with (or within) the union and trade with the rest of the world. Depending mainly on the level of tariffs following processes can occur: trade creation, trade diversion, trade suppression. According to Viner (Viner 1950), trade creation entails a shift of consumption from the higher-cost domestic source to a lower-cost member-country source. Trade diversion entails a shift of consumption from the lower-cost world source to the higher-cost member-country source (Borkakoti 1998, p. 521). Trade creation is beneficial to the accession country as it obtains cheaper imports from the member country and resources are transferred to produce more of the product in which it has comparative advantage. Trade diversion reduces the home country's welfare, as it imports from a higher-cost source leading to a deterioration of the terms of trade. Trade suppression entails a shift in consumption from imported goods to domestically produced goods.

Also called economic cost of the tariff or cost of protection (Gandolfo 1984, p. 109).

Consumer surplus - the excess of the total price that consumers would be willing to pay rather than go without the commodity, over that which they would actually pay.

In case of full employment to increase the domestic production of the protected commodity, the labor has to be shifted from other sectors. This shift involves a cost.

Synonymos to preferential trade agreement (Baldwin et al 1995, p. 1598).

Accession should raise both exports to the EU and imports from the EU. If this is at the expense of other imports, trade diversion has occurred. If it is at the expense of home sales, or is purely additional, trade creation has occurred. Rises in imports from the rest of the world would indicate trade creation, while rises in home sales at the expense of exports of the rest of the world would indicate trade suppression. All of these changes must be measured not just through time but rather relative to what trade would have been in the absence of integration.

It is also very important to distinguish between short run and long-run effects (Mayes 1989, p. 100). In short run there are so-called static effects, the change in trade barriers results in single change in trade and its pattern. In the long run there are dynamic effects, where the economic variables over time are permanently affected by economic integration.

1.2 Specialization

In addition to change in trade volumes due to joining a trade block, the changes in the commodity groups' pattern occur. After reduction of trade barriers for the accession country, it can realize its comparative advantage⁶. According to the theory, a difference in comparative costs of production is the necessary condition for international exchange to occur (Gandolfo 1989, p. 7). Comparative cost can be defined in two ways: as the ratio between the unit costs of the two commodities in the same country, or as the ratio between the unit costs of the same commodity in the two countries. The sufficient condition for international trade is that the international terms of trade⁷ lie between the comparative costs, without being equal to either. When both conditions (necessary and sufficient conditions) are met, it will be beneficial to each country to specialize in the production of the commodity in which it has the relatively greater advantage. This theory shows, that trade is beneficial to all participating countries, but only under the assumption of free trade.

Hence, if there are no trade barriers that distort the prices, accession country can realize its comparative advantage on the union's market. As common market applies common tariff system on trade with non-members, the accession country can loose its comparative advantage in the trade with non-members after joining the common market (depending on the level of new tariffs after accession).

After specialization by sectors and products had taken place, there was still increase in international trade. It has been found that varieties and differentiated products determine the volume of trade to a remarkable extent, especially between countries with similar levels of per capita income (Borkakoti 1999, p. 377). If a trading country exports and imports commodities belonging to the same well-defined product category, the intra-industry trade takes place. Usually the products covered by intra-industry trade are similar, but not identical.

⁶ Also called comparative cost (Gandolfo 1994, p. 7).

The ratio according to which the two commodities are exchanged for each other between the two countries, or international relative price.

⁸ Questionable term, usually 4 or higher digit level.

The level of intra-industry trade is considered to be a reasonable measure of integration. Specialization on relatively specific products in trade indicates close economic relation and trust in trading partner, especially in case of qualitative products. Intra-industry trade can also occur as a subcontracting trade relation, where intermediate products are imported and after some improvement exported back.

To distinguish between different types of intra-industry trade, horizontal and vertical intra-industry trade are usually analyzed separately. If the products traded are not the same type but different in quality, then there is a vertical intra-industry trade. If the similar products are also with the same quality, the trade is considered to be horizontal intra-industry trade.

1.3 Indirect effects

Changes in trade flows will occur not only as a result of the exploitation of comparative advantage when international discrimination is reduced or altered and from changes of the terms of trade. They also occur from derived effects on such variables as business efficiency, the exploitation of economies of scale, the abolition of non-tariff barriers, international standardization and changes in the rate of economic growth.

In case of trade liberalization, according to the endogenous growth literature, firms have the opportunity to buy intermediates and equipment that allows them to improve their productivity and to learn-by-exporting to more mature markets (Clerides et al 1996). Static efficiency gains may be augmented by a medium-run growth bonus (Keuschnigg *et al* 2000, p. 120).

New trade theory stresses the importance of imperfect competition and scale economies (Krugman 1994). Through regional integration, expansion of output in the sectors characterized by imperfect competition and scale economies raises welfare, since the cost of producing an additional unit is lower than its marginal value. Furthermore, regional integration increases the range of varieties available to producers and consumers, which might increase both productivity and utility (Dixit et al 1977).

Removing tariffs on trade between two countries does not mean, that there are no trade restriction between these countries anymore. There can be several non-monetary restrictions, e.g. as quotas, export subsidies, technical, safety, health and other regulations. The extra costs due to technical barriers might be regarded as additional cost of production for the export market. Removing the trade barriers can favour the increase in trading.

In case the country's exports are concentrated in goods with relatively large content of unskilled labor, after joining a customs union the widening of wage gap between high and low skill labor is predicted⁹. This contributes to a more uneven income distribution. Gains and losses that typically accompany sectoral restructuring in response to trade reorientation add to these distributional concerns. Finally, with slow capital accumulation the gains in real income materialize only after a considerable number of transitional periods of low aggre-

⁹ The extension of wage gap is predicted, if joining the customs union results in liberalisation of trade (trade restrictions decrease).

gate consumption. The effect is that only future generations will capture the full gains of integration (Keuschnigg *et al* 2000, p. 122).

Several other effects of joining the EU have been named that do not primarily and directly affect trade flows, but might increase trade through the stimulus of economic activity. These additional channels are e.g. migration (Hille et al 2000) and demand side effects (Piazolo 2000).

The opening of trade between countries with different factor endowments leads to the convergence of factor proportions and relative factor prices. As increases in trade will be accompanied by sectoral and regional changes in output and hence, in employment, a rise in frictional unemployment is to be expected (Andersen et al 1994, p. 27).

1.4 Empirical methodology

Integration effects can be measured by different models. Two main types of models can be distinguished (Mayes 1989, p. 101): residual models and analytic models. Residual models have the common characteristic that they seek to quantify the hypothetical situation (often referred to as *anti monde*) of what would have happened, had the trading agreement not been implemented. These are ex post models, measuring the effects occurred in the past. The difference or residual between actual and hypothetical results is considered to be the integration effect.

The second type of models, analytic models are meant to provide an economic explanation of the actual post-integration situation (Mayes 1989, p. 112). This is a necessary requirement for all ex-ante models as the actual values of trade flows in the future are unknown. The major advantage of analytic models is that they can be tested after the event and can be used for forecasting as well as ex post estimation.

To evaluate the so-called "normal" bilateral trade flows, that are determined by the distance between the countries, their size and e.g. cultural similarities, the gravity model is used. The gravity model assumes that a particular country tends to have trade relations with a large and rich partner (Paas 2000, p. 25). The trade is more probable between geographically close countries. Calculating the trade flows by gravity model and comparing the results to the actual data of trade flows enables to draw conclusions if the trade flows are smaller or bigger than the model shows. The difference between actual and calculated trade flows can be interpreted as a potential of trade (in case the actual trade is smaller) or the integration effect (in case the actual trade is bigger).

2 Empirical studies

2.1 The effects of the single market on the current EU member countries

Derived from the objective of the paper, next only the effects of joining the EU on the trade of the accession countries¹⁰ are discussed. Hence, the impacts of several enlargement waves on the EU have been left aside. Also, the Single Market effects as a whole have not been considered, only its effects on trade.

2.1.1 Changes in the trade volumes and trading partners

In 1980s Greece, Spain, and Portugal joined the European Community, the changes in their trade due to the accession were different. The share of the EC in the trade increased in Spain and in Portugal but not in Greece (The Single...1997, p. 189).

Winters found that in 1979, six years after joining the European Community, the imports of the UK from member countries in manufacturers had increased 62-89% (Winters 1989, p. 133) as integration effect. The imports with Sweden (that did not belong to the EC this time) decreased 9%, imports from Canada decreased 44%. Still, the imports from the Japan increased 49% and from the USA 32%. Hence, the trade creation effects were high in trade with member countries and considerably lower with great trade partners not belonging to the EC. The trade diversion occurred in trade with non-member countries. Exports to member countries increased, denoting trade creation effect, exports to Japan and the USA decreased, denoting trade diversion. These results confirm the theory, that joining the customs union increases trade with the member states and also shows, that there can occur trade diversion, concerning trade with non-members. Similar results were also found by other authors (The Single...1997, p. 189). Both sources denote that accession declined the domestic production and home sales.

As Spain joined the European Community, the exports to the EC and imports from the EC to Spain increased, but the increase in imports was fivefold higher. Greece is a special case concerning the countries that have joined the EU. Due to the lack of trust of foreign investors in Greece's economy the only group that gained from accession were producers of agricultural sector in Greece (The Single...1997, p. 190). The Benelux countries' trade in average more with the EU countries comparing the share of intra-EU to extra-EU trade in 1998 (Kaminski 2000, p. 19). These countries are more integrated into the EU in terms of trade than some EU members.

It has been estimated that for Austria the reduction in the real trade costs from decreases in border costs and standardization costs sum up to 2.5 percent of the value added (Harrison et al 1996).

EU countries Austria, Germany, Italy and Spain import more from the EU partners than one would "normally" expect (Buch 2000, p. 22). As by gravity model a similar result for the export side has not been found, one could conclude, that exports are somewhat less de-

¹⁰ Accession country is considered to be a country that joins the trade block, not certain country (e.g. CEEC).

pendent on the existence of a regional block than theoretical considerations might have suggested.

European integration has been possible without significant trade diversion. There is one important exception - agriculture. As such, it is peripheral to the internal market. Nevertheless, it is worth noting that the inclusion of Sweden, Finland and Austria (and particularly the first two) in the EU had a significant trade-diversion effect for agricultural products (Norman 1995, p. 34).

Integration impacts on trade of member countries can also be measured by the share of intra-EU trade of the total trade of the country. In the period 1980-1990 a significant increase was registered in this share of both, exports and imports for the nine countries comprising the EU in 1980 (Buigues et al 1995, p. 51). In Ireland the share has been generally much higher than for most other member states (over 70% compared to others' 50-60%). On average, intra-EU trade was about 10 percentage points higher for imports in 1990 than in 1980 and nearly 6 points higher for exports. However, for exports the increase occurred mainly after 1985, suggesting that the Internal Market program has had an impact on developments after 1985. For Greece, Spain and Portugal, that all joined the Community in 1980s, the combined effects of accession and the developing internal market led to remarkable increases in the export and import shares of 10 to 20 points between 1985 and 1990. For almost all member states the share of intra-EU exports was higher than intra-EU imports in 1980-1992. For Belgium, Luxembourg, Germany and the UK, their intra-EU trade shares are very similar to their intra-EU trade in manufacturers. For Italy and Spain there are remarkable differences comparing trade in manufactures and trade in other commodities (Buigues et al 1995, p. 54). This denotes that the main trade articles of Italy and Spain are not manufactures.

2.1.2 Specialization

Economic integration of countries can be reflected by intensity and pattern of trade. One indicator for that is distinguishing between one-way trade and two-way trade¹¹. The higher the share of two-way trade between two countries, the higher the economic integration. In 1980-ties there was a high share of one-way trade concerning France, Germany, Italy and United Kingdom (The Single...1997, p. 168). After establishing the Single European Act in 1985¹², the share of two-way trade started to increase, especially great change occurred in the United Kingdom in the beginning of 1990-ies.

The Single European Act also favored the increase of the share of the intra-industry trade of the member countries. As the two-way trade in vertically diversified ¹³ products increased, increase in the share of intra-industry trade was remarkable especially in France and Ger-

One-way trade occurs if a country mainly only exports or imports certain commodities, two-way trade is described by both, exports and imports of certain type of commodity by one country (The Single... 1997, p. 167).

The objective of the Single European Act was to eliminate the trade restriction between the member countries of the European Union.

¹³ Vertically diversified products - products that are of similar type but of different quality.

many (1986), United Kingdom (1989) and Benelux countries (The Single...1997, p. 169). In Italy, Denmark and Ireland generally the one-way trade maintained.

In the beginning of 1990-ies the share of intra-industry trade was found to be highest in France and Germany, followed by Benelux countries and United Kingdom. The trade of Greece and Portugal was described by low share of intra-industry trade (The Single... 1997, p. 169). The greatest increase of intra-industry trade occurred by Portugal and Spain. It is remarkable that these changes started already before joining the EU. Hence, the expectations (i.e. accession expectations) have a great influence on trade structure.

2.1.3 Indirect effects

Integration should lower the costs that are different in different industries after accession. Some industries (food processing, airlines) of Finland, Sweden and Austria started from highly sheltered position and were gradually subjected to international competition as the integration process proceeded (Norman 1995, p. 35). For such industries and thus possibly for the countries more generally, a process of gradual integration with uncertain end-point could be the worst possible case. Such process could lead to gradual erosion of peripheral production and end, at some point, with complete collapse. Rapid and complete integration might be much better, the industry would be viable in its present location after the period of transformation.

Welfare analysis of the UK shows that benefits of accession to Britons as users and consumers of manufacturers could be substantial enough to outweigh any losses to producers thereof (Winters 1989, p. 139). Differently from this analysis, Grinols found that accession was costly for the consumers, resulting in 2-3% of GDP over the period 1973-79 (Grinols 1984).

2.2 The effects of the single market on CEECs

2.2.1 Changes in trade volumes and trading partners

It has been found relying on gravity equations that the opening-up of CEECs holds an impressive potential for East-West trade, even without the EU membership. Trade flows might increase by a factor in the vicinity of four (quadrapling of trade) - Baldwin (1994), Faini *et al* (1995). Gros *et al* (1996) find relatively little scope for a further increase in the level of East-West trade relative to GDP.

Even after successful systemic transformation CEECs will find their trade with Eastern Europe hampered by all the tariff and non-tariff barriers, such as border controls, as well as regulations and standard requirements that the EU enforces on its external trade (Keuschnigg *et al* 2000, p. 125).

The EU membership of the CEECs will lower east-west trading costs up to 10 percent of the value added of the trade and experiment even with a 15 percent reduction in trading costs (Baldwin et al 1997). The mutual abolition of tariffs was already agreed upon in the

European Agreements that the EU has signed with several of the more ambitious CEECs (Keuschnigg *et al* 2000, p. 125).

The structure of tariff protection in CEECs differs markedly from the external EU tariffs. The EU, for example levies much higher tariffs on agricultural goods than CEECs. Consequently, tariffs on Austria's imports of farm products from the CEECs are reduced more than on Austria's exports towards the CEECs (Keuschnigg *et al* 2000, p. 125).

All CEECs except for Estonia have higher external tariff barriers against third countries than the EU. Therefore after accession these tariffs are lowered and therefore it can be a possible source of liberalized trade increase (Buch et al 2000, p. 11).

According to Buch and Piazolo (Buch et al 2000, p. 28), Hungary is the only accession country that had already by 1998 reached (and actually passed) its expected level¹⁴ for imports from the OECD countries. Poland, Romania and the Czech Republic follow and reach between 72-86% of the expected imports from the OECD countries. For all others, the ratio of actual and expected imports from the OECD is less than 67%. Austria and Germany are the most active exporters of EU members to candidate countries. Other OECD countries had reached only about half of expected exports to the EU candidates by 1998. Bulgaria (40%) and Hungary (69%) appear to be the two countries where the OECD's imports are the closest of the expected levels. All other candidates feature actual values of less than 50% of the expected levels. From OECD countries, again Austria and Germany seem to be the ones with the actual closest to the expected values. All other OECD countries have imported from the EU candidates far less than expected.

CEEC exports and imports increased 1989-1998 much more than those of the European Union (Kaminski 2000, p. 22).

Because of the trade barriers, CEECs have not had the possibility to realize their comparative advantage in agricultural and textile products. As these commodity groups belong still among sensitive commodities of the EU, the removal of the trade barriers even after accession is put under question (Kulu et al 2001, p. 372).

The European Commission finds that after canceling the non-tariff trade restrictions, the trade between the EU and CEECs can increase remarkably (Agenda... 1999, part II). It has been measured, that the exports of the CEECs should increase 30-45% and imports should increase 15-45% after joining the EU. Some authors have connected the trade increase to the condition that the reforms should continue in CEECs. Otherwise the trade relations are not expected to develop.

Trade diversion effect for CEECs is expected to be relatively small after accession for CEECs as already today over 50% of the CEECs' foreign trade is connected to the EU. The trade creation effect will dominate (Kulu et al 2001, p. 383). Also, generally the country with small economic power (as most of the CEECs) should gain joining the great economic block. Fidrmuc found that being a member of the EU increases the bilateral trade with the

¹⁴ Expected level of trade is calculated by gravity model.

EU about 1,5 times. Also, the perspective to become a member of the EU very soon has found to be one of the reasons, why the trade relations of Estonia, Slovakia and Czech Republic with CIS countries have cooled down (Fidrmuc 2000, p. 18).

It is very important that all the three CEECs that have applied for membership would become the members together, not in two or three waves (Kulu et al 2001 p 383). Otherwise a remarkable trade diversion could occur concerning trade between several CEECs currently (e.g. trade between Czech Republic and Slovakia).

2.2.2 Specialization

CEECs comparative advantage is based more on low-skill-intensive manufacturing sectors, but it has become more heterogeneous in the intensity of labor skills compared to the beginning of 1990-ties (Kaitila 2001, p. 34). Hungary and Estonia have found to be moved towards a more skill-intensive comparative advantage. Hungary has become comparable to France and Germany in this respect, while Estonia is similar to Austria and Greece.

In Hungary, the export has become more diversified, the share of high value-added products has been on the increase, while that of unskilled labor intensive products has been on the decline. The process of industrial restructuring has produced internationally competitive industrial capacities, second, recently accelerating growth of exports of engineering products suggests an advanced integration of Hungarian firms into EU-wide distribution and production networks. Third, the shift from natural resource and unskilled labor intensive products to technology and human capital-intensive products in EU-oriented exports suggests the potential for integration of higher end of the value-added spectrum (Kaminski 1998, pp. 26-27).

According to Neven classification it is reasonable for CEECs to specialize on labor-intensive products (Kulu et al 2001, p. 372). The trade structure by commodity groups of CEECs is similar to the one of Greece, Spain and Portugal. As the labor in CEECs is considered to be cheaper and more qualified compared to less developed EU members, the so called "left-aside-effect" can occur (Kulu et al p. 378): importers can prefer trade with the CEECs and decrease the trade with current EU members characterized by lower costs. But as said before, the labor-intensive sectors as agriculture and textile industry are very much protected by the EU and the comparative advantage cannot be realized. The rise of "left-aside-effect" is therefore questionable until the trade restrictions remain.

The composition of CEEC trade in terms of end-use categories with the EU has been converging towards that of the EU (growing similarity between composition of exports and imports of CEECs and the similarity between respective compositions of EU trade and CEEC trade with the EU (Kaminski 2000, p. 19). The combined share of food and beverages and industrial supplies in CEEC imports has moved very close to that of the EU (Kaminski 2000, p. 24). There is a definite shift in CEEC EU-oriented exports from agriculture-based products and industrial raw materials towards manufactured goods. Products, traded by CEECs are at increasingly advanced stages of production on both export and import side. Although unskilled labour intensive products still account for a dominant portion of CEEC exports to the EU, their share is declining (Kaminski 2000, p. 25.), the share of

natural resources in exports declines, too. Similar trends in CEEC imports from the EU provide strong argument about significant returns stemming from integration to the EU markets. Products with high content of technology and human capital have a similar effect as technology transfers. The shift in composition of CEEC trade indicates growing participation in more sophisticated and higher value-added production activity (Kaminski 2000, p.26). This participation has been generating demand in EU markets for skilled labor intensive and technology based products.

Trade in parts as well as trade falling within "information revolution" has driven developments in trade in manufacturers between CEEC-10 and the EU (Kaminski et al 1999, p. 51) CEECs are trying to readjust their production structures to international markets, mainly those of the EU. The convergences in the composition of CEEC-10 trade in parts and components to that of the EU trade suggest that the catching up be already underway. Many producers from CEEC-10 seem to have already become part of intra-product division of labor organized around the EU, especially in furniture, automobile industry and "information revolution" networks. So-called second-tier countries are not much integrated into EU networks, as they do not have a comparative advantage in assembly in EU markets. Measuring horizontal trade specialization, in 1997 Slovenia had the most active horizontal links with the EU, followed by Czech Republic and Estonia.

CEFTA countries (Bulgaria, Poland, Romania, Slovakia, Slovenia, Czech Republic, Hungary) have not (fully) been able to utilize the comparative advantages attributed to them and not turned them into corresponding growth factors (Gabrisch 1997, p. 574) There are supply restrictions (textiles and agricultural products), strong growth of domestic demand, above all for investment goods and the real appreciation of the CEFTA currencies. This means erosion of protection against imports provided by exchange rates number of sectors and the simultaneous disappearance of labor cost advantages in some export-oriented sectors. Trade balance was dominated by appreciation factor according to the empirical test.

It has been found that more advanced CEECs have already intra-industry trade levels comparable to their average levels in trade with the EU (Kaitila 2001, p. 33). Taking CEECs as an aggregate, in 1998 the share of intra-industry trade in their trade with individual EU countries has continued to increase and this share is the highest in trade with some of the core EU countries - Germany, Austria, France (Kaitila 2001, p. 34).

2.2.3 Indirect effects

There is a general consensus that an inflow of Western capital and technology into the CEECs will allow their agricultural producers significantly undercut EU competitors (Keuschnigg *et al* 2000, p. 125).

It has been found that shifts in the pattern of imports of intermediates – and reorientation in export production – towards global markets are positively correlated with TFP growth. This supports the theory according to which firms that reorient their trade – which has been argued to be the most appropriate measure of trade integration for economies of transition patterns – tend to have higher growth rates of TFP (Djankov et al 1996, p. 18).

Analyzing the increase in competition and scale economies, it has been found that Eastern enlargement of the EU results in substantial increase in trade and considerable economic gains based on increase in competition (Gasiorek et al 1995; Baldwin et al 1997).

CEECs transition countries can expect from accession the effects of economies of scale, more intensive competition, increase of investments, technology transfers (Kulu et al 2001, p. 383).

Effects of trade have a remarkable impact on the real GDP growth. Hungary is expected to reach the highest GDP growth 3,95% by 2005/2006 among the CEEC, followed by Poland and Czech Republic (1,95% and 1.79%). By 2008/2010 the growth of GDP is expected to be even higher, e.g. 4,2% in Hungary (Breuss 2001).

2.3 The effects of the Single Market on Estonia

2.3.1 Changes in trade volumes and trading partners

Estonia has a very liberal trade policy compared to other CEECs. At the time the average customs tariff of CEECs is higher than average customs tariff of the EU, Estonia did not have any trade barriers for its imports until 2000. Today, the average custom tariff of Estonia is the lowest among CEECs¹⁵ (Reiljan et al 2001, p. 403). Also, Estonia has signed more free trade agreements than any other CEEC. Hence, Estonia is in a very unique situation in the accession process, as when other CEECs discuss the loosening of their trade restrictions, Estonia has to consider more protectionist trade in the near future compared to nowadays'.

The common customs tariff system requires to establish over 10 700 different tariffs on Estonian trade with non-members (Toming 2000, p. 49). These requirements are not found to be restrictive on Estonian imports as the main import partners of Estonia (see Figure 1) are the EU members (Kattai 2001, p. 45).

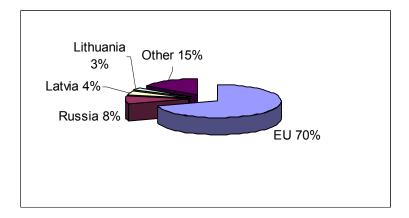


Figure 1. The main import partners of Estonia in 2001 (Source: Bank of Estonia)

¹⁵ In 2000 the average real custom tariff of Estonia was 0,2% (Reiljan et al 2001, p. 403).

Still there are some commodity groups (e.g. bananas) that are currently imported mainly from non-EU countries. Concerning these commodity groups trade diversion after joining the EU can be remarkable but as said before it does not affect foreign trade of Estonia generally.

Joining the EU means for Estonia better access to the EU markets and restricted imports from third countries. Expected changes in the foreign trade political background are the following (Toming 2001, p. 20):

- the customs tariffs on Estonian exports to the EU are to be eliminated,
- Estonia has to implement the common customs tariff system of the EU concerning the third countries,
- Estonia has to implement the non-tariff trade restrictions of the EU concerning the third countries,
- Estonia has to harmonize and take over the trade agreements of the EU.

The commodity groups, which exports to the EU are currently restricted by the EU (e.g. agricultural and food products) will be traded freely after Estonia has joined the EU. Import tariffs and export subsidies cannot be used against Estonia anymore, Estonia is included to producer subsidies' and regional assistance programs. Still, the developments in trade of sensitive products depend on compromises (Reiljan et al 2000, p. 280). The market with purchasing power opens to Estonian producers, but there is still the question of overproduction of the agricultural products in the EU already (Toming 2001, p. 39).

The common customs tariff system can influence the foreign trade of Estonia differently, depending on the differences of the effectiveness of the producers and also on the level of custom tariffs. Several scenarios of implementing the common customs tariff system have been discussed (Toming 2001, pp. 36-38):

- trade diversion from current most effective trade partner to less effective member of the EU; the volume of imports decreases and prices increase; imports become even more expensive, as member states lose the possibility to export to Estonia with export-subsidies; the price of raw materials would not increase much;
- trade restriction: imports from third countries can be replaced by domestic production; the volume of imports from the EU can decrease;
- if imports of the third countries are still cheaper than equilibrium price even after tariffs, importing from third country continues, although in smaller amount.

In addition to commons custom tariff system, non-tariff barriers also have great impact on foreign trade of Estonia. The quotas, producer and export subsidies and standards are the main problems for Estonia to develop the trade cooperation (Reiljan et al 2001, p. 407).

The quotas influence mainly imports of black metals, textiles and bananas (Varblane 2000), that form essential share of Estonian imports (see Figure 2).

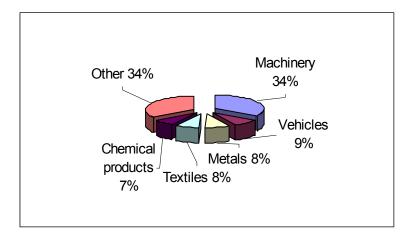


Figure 2. Estonian main commodity groups of imports in 2001 (Source: Bank of Estonia)

It is discussed that the trade of black metals with Russia is going to continue. The imports of textiles should not decline either, still, the increase in prices is expected, as the production costs in CEECs will reach the cost level of the EU. In case of bananas the prices are expected to increase 70-90%, as Estonia imports bananas today from the countries against which the EU has high trade restrictions in quotas (Toming 2001, p. 47).

Technical trade restrictions determine the duty to follow the standards in production, which exports is directed to the markets of the EU. Following the standards requires investments especially into meat, fish and dairy industry in Estonia. It has been even found that most of the Estonian exporters of these fields could not meet the standards and there can be a wave of bankruptcies in Estonia after joining the EU (Reiljan et al 2000, p. 280). The investments in that large amount increase the production costs that result in higher prices. Higher prices can damage the relative advantage of Estonian products on foreign markets (Toming 2001, p. 47). Also a chain can be brought out: increase in customs tariffs and investments to the EU standards leads to higher prices and those in turn lead to the decline of competitivness based on prices (Reiljan et al 2001, p. 410). Smaller competitiveness restricts export opportunities.

It is found that the EU members have easier access on Estonian than Estonia has to the EU markets. Still, it should be noted, that in the long run, the level of imports of Estonia can only be raised if Estonia's export become competitive on foreign markets (Reiljan et al p. 280).

In order to start harmonizing Estonian trade legislation with the one of the EU, there are some trade restrictions on imports from third countries since 1 Jan 2000. With these countries Estonia does not have free trade agreements. The tariffs were applied to food products, including ca one third of the food imports (Reiljan et al 2001, p. 407). Also, the share of trade with these countries is very low in total trade of Estonia, hence the impact of these

restrictions is not remarkable. The main part of this kind of imports is diverted by customs free zones (Reiljan et al 2001, p. 407).

As Estonia should take over the trade agreements of the EU, current trade relations of Estonia can change remarkably. Estonia has free trade agreements with Latvia and Lithuania and also with Ukraine. The share of trade with these countries is relatively high in total trade of Estonia (see Figure 3).

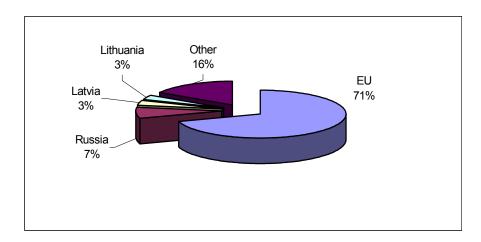


Figure 3. Total trade of Estonia in 2001 (Source: Bank of Estonia)

If these countries become third countries for Estonia, the following scenarios can occur (Toming 2001, p. 60):

- trade in food and agricultural products with Latvia and Lithuania becomes more expensive;
- if the customs tariff starts to restrict the trade¹⁶, imports from Latvia and Lithuania stop; production in Estonia can increase until it covers the whole demand or the previous trade with southern neighbors is substituted by more expensive imports from the EU member states (e.g. tobacco products that are not currently produced in Estonia).
- the EU does not currently have free trade with Ukraine the steel imports can be diverted to some EU member.

As the Estonian free trade agreements with Latvia and Lithuania end in case Estonia joins the EU before Latvia and Lithuania do, the trade balance of Estonia can worsen sharply. This happened, after Estonia had applied the customs tariffs in 2000 (Reiljan et al 2001, p. 408).

There is also one positive effect for Estonia concerning trade with Russia. As Estonia becomes a member of the EU, Russia should treat Estonian exports according to the trade agreements with the EU. The EU as a powerful trade partner could not be discriminated against by Russia (Reiljan et al 2000, p. 281). Hence, Russia cannot use double customs tariffs against Estonian exports, which can improve the perspectives of Estonian producers

¹⁶ Imports from third country are more expensive than the equilibrium price on the market.

to sell on Russian markets. The exports to Russia can be expected to increase (Toming 2001, p. 60).

Also, Estonia differs from other CEECs by its main trade partners. Estonia trades mainly with countries belonging to the Baltic Sea area, mainly with Finland and Sweden. As the other CEECs trade mainly with Germany, the opportunities and problems arising from accession can be somewhat different (Kulu et al 2001, p. 382). Estonia does not compete on Scandinavian markets with other CEECs, the two main common trade partners are Germany and Netherlands.

As after Estonia joins the EU, some trade restriction will change and they will influence Estonian foreign trade. Hence, Estonian trade is not stabilized yet (Reiljan et al 2000, p. 282). There is also the opinion by Eichengreen and Irwin (1996) according to which the integration in foreign trade does not become faster after joining the EU. The reorientation in trade structure from third markets to the EU is going to slow down (Kattai 2001, p. 46),

2.3.2 Specialization

As the role of foreign direct investments increases in Estonia, the potential of intra-industry trade increases (Reiljan et al 2001, p. 410). But, analyzing the period 1993-1998, it has been found that the share of intra-industry trade has declined (Kaitila 2001, p. 33). It is expected that foreign direct investments from the EU into Estonian manufacturing industry enable to raise the share of high value added exports to the EU (Chua 2000, p. 8).

As the non-skilled labor-intensive exports formed 50% of total exports of Estonia in 2000, after joining the EU two different scenarios can occur (Chua 2000, p. 9): first, Estonia can become a periphery of the EU and export non-skilled labor-intensive products to the EU as Portugal and Spain currently do, or secondly, the share of skilled labor-intensive exports to the EU can increase. It is positive that most of Estonian technology-intensive exports ¹⁷ go to the EU. Still, one here should remarked that this kind of exports is currently mainly subcontract exports to Finland and Sweden (Vesilind et al 2001, p. 18). In case of subcontracting the volatility and uncertainty of the trade should not to be forgotten.

It has been found that transition from inter-industry trade to intra-industry trade should rebalance the effects of a decreasing number of export articles (that has happened in Estonia) which in turn results from increasing specialization (Reiljan et al 2000, p. 280).

2.3.3 Indirect effects

The more open is the trade with the EU, the greater are the effects through the trade channel on the GDP of Estonia. In the long run this leads to the bigger capital stock in the whole EU, including Estonia (Chua 2000, p. 3).

Joining the EU can raise the competitiveness of Estonia (Chua 2000, p. 7). In the long run this is the possibility for Estonia to have influence on the world market as a part of the EU.

 $^{^{17}}$ Or skilled labor-intensive exports, according to other classification.

It is said that integration into the EU will significantly change the Estonian foreign trade position in the world market (Reiljan et al 2000, p. 280). The EU applies export subsidies and export tariffs against third countries that widen also to the Estonian exports to third countries, when Estonia is a member of the EU. Also, the requirement of the EU of high quality could influence positively the image of Estonian products on the world market (Reiljan et al 2000, p. 282).

Concerning the producer and export subsidies the welfare of producers of dairy and meat products in Estonia should increase as after accession the EU cannot subsidize its exports to Estonia. This leads to more fair competition, also called natural competition (Reiljan et al 2000, p. 282). For consumers the accession results in higher prices of this kind of products. This is due to the fact that consumer should pay all the production costs if there are no subsidies anymore.

2.4 Discussion of results

There are several standpoints on the impact of joining the EU on the external trade in the literature. Every enlargement of the EU is different as the level of development and integration of the countries has increased in time. Also, there have been considerable changes inside the EU and in its internal market compared to e.g. beginning of 1980s, when the Single Market program had not been started yet.

There are registered statistics and analyses of the current member countries, how did the accession influence their external trade. As discussed before, the impacts were different on different countries, depending on their economic development and other circumstances. In case of CEECs, the difference from previous accession waves is that all these are transformation countries. These economies have not fully implemented the traditions of market traditions, the transition is still continuing. Hence, there are two processes going on at the same time: accession to the EU and the transition from the planned economy to the market economy. Therefore, some authors have stressed the importance of continuing the reforms in CEECs as an assumption of accession.

The impact of the accession on the foreign trade depends on the range of the enlargement: whether all CEECs become member states at one time or whether there will be several minor enlargements. As it has been discussed lately in the European Commission, the single enlargement is more probable. This has also been the practice before, as new members have been taken up.

One single enlargement means that the Baltic States join the EU together and there will be no additional restrictions on trade between Estonia and Latvia and Lithuania. Hence, the imports of agricultural products would not stop or become sharply more expensive. Also there would not be the worsening of the trade balance with Latvia and Lithuania because of establishing customs tariffs.

Differently from other CEECs Estonia has a very liberal trade policy. Therefore after joining the EU the turn to protectionism can be expected because of the common customs tariff system of the EU. Still, assuming the one single enlargement, the great protectionism

would not take place, as the main trade partners were all the members of the EU. Hence, the tariffs would be established on the trade with less important trade partners and it would not influence the foreign trade of Estonia much.

Although the foreign trade of Estonia as a whole does not suffer much from the common customs tariff policy, there are certain commodity groups (bananas, grain, metals etc.) that are currently imported from non-member states in remarkable amount. Concerning these products, the probable trade diversion can be foreseen. As these commodities belong mainly among the so called sensitive products, the restrictions of the EU on the non-members are expected to stay high for a long time.

Also, several authors find that it is questionable, if the EU will cancel the trade restrictions on the agricultural products in trade with new members, including Estonia. It has been assumed that even if there will be trade liberalisation in other sectors, agriculture is not opened up for free trade. This means that Estonia cannot realise its comparative advantage in exporting agricultural products. Also, it has been discussed that there is an overproduction of agricultural products in the EU and it is not easy to enter the market. Still, the lower prices due to the lower production cost could offer the advantage.

Specialisation is one way of integration and extending the trade. Accession of the EU should increase the specialisation. Estonia has tight trade relations with Finland and Sweden in technology-intensive products, that is characterised by intra-industry trade. This is dominated by subcontracting, yet, but is expected to become a part of Scandinavian networks. Joining the EU should favor extension of networks to Estonia that should increase the trade with the EU.

Estonia is a transition country and the integration to the EU is a transition process, too. The structure of Estonian economy, including the structure of the external trade has not been completely stabilised. Hence, it is not correct to argue that Estonian foreign trade does not change after joining the EU. In case there is one single eastern enlargement, the accession with the EU is dominated by the factors that favor the foreign trade. Therefore the possible impact on Estonian external trade is that the trade with the EU (including new member countries) increases, the tradable products become more diversified, the share of the high-value added products in trade is expected to increase.

Joining the EU should raise the competitiveness of Estonia as only the efficient firms can face the competition on the EU markets. Belonging among member countries can be positive on the image of Estonian products, increasing the competitiveness, too. Expected trade creation effect should increase the exports to the EU which would favour more intensive production and result in more jobs, increasing the employment. Increased market enables to use economy of scales and lower unit costs that could increase the competitiveness. Still, it is questionable, whether the economies of scale dominate the expenses on investments to meet the requirements of the EU market. Among other prices the labor cost is expected to converge to the level of the EU and that diminishes the outlooks of increasing competitiveness.

Economies of scale, large production volumes and great investments are mainly possible in large enterprises, which in turn refers to closing of small firms that cannot meet the new conditions. Hence, joining the EU can result in higher unemployment, depending on the proportion of number of job creation and number of jobs cancelled. As the agricultural policy of the EU favours large farms, the unemployment can be expected to decrease in countryside that can result in emptying the countryside and concentration of living in towns.

These and other social problems can come up through the trade channel after joining the EU, but they are and will be discussed under other topics.

Conclusion

Joining the European Union can have different results on foreign trade of an accession country. Much depends on the pre-accession level of customs tariffs and level of integration to the structures of the EU. Accession is a transition process, where the country adopts the rules of the EU that more or less influence the economy of the country, including external trade.

According to the theory, three types of processes can take place, when a country joins a trade block: trade creation, trade diversion and trade suppression. The countries that have joined the EU have experienced all these types of processes, but the trade creation is found to be dominant. Trade diversion is mainly denoted in trade of agricultural products, as these belong to the sensitive sector of the EU. This is also expected to happen to Estonia.

Estonia differs from other accession countries by the liberal trade policy. While the trade of other CEECs becomes more liberal after joining the EU, Estonian external trade is going to be more protectionist. The reason is that the common customs tariff system determines tariffs on the trade with non-members. The tariffs are in some commodity groups lower than the CEECs' current tariffs. According to the European Agreements, generally the tariffs on trade between the EU and CEECs, including Estonia are removed. There are still restrictions on agricultural and textile industry products. It has been discussed that these barriers may stay for years even after accession.

Maintaining the barriers, the EU does not enable to realise the comparative advantage of Estonia in trade of sensitive products. This means that exports of Estonia is disturbed. The imports from the EU are expected to become more expensive, as the EU should not subsidise it anymore. This gives an opportunity to the domestic producers that currently compete with subsidised imports.

Domestic producers have also an incentive to specialise more after accession as the large market of the EU expects diversified products. Specialisation is also determined by intense competition with foreign firms. Intra-industry trade is one way to extend the volume of trade and integrate more with the European networks. Joining the EU should favor the specialisation process.

The impact of joining the EU on the foreign trade of Estonia depends much on the number of the countries that are accepted with Estonia. If there is one single eastern enlargement of the EU, the Baltic States become members of the EU simultaneously. As Latvia and Lithuania belong to the main trading partners of Estonia, the trade with these countries would not be disturbed in this case. As there is much uncertainty concerning the accession process, the impact on the trade relations is not clear. The assumed developments in different scenarios offer some explanations.

Literature

Agenda 2000. The effects on the Unions Policies of Enlargement to the Applicant Countries of Central and Eastern Europe (Impact Study). 1997, part II.

Andersen, P., Dittus, P. (1994) Trade and Employment: Can We Afford Better Market Access for Eastern Europe? OeNB WP 17, 46 p.

Baldwin, R.E., Venables, A.J. (1995) Regional Economic Integration. - Handbook of International Economics, vol. III, Edited by Grossman, G. and Rogoff, K.. Elsevier Science B.V., pp. 1597-1644.

Baldwin, R.E. (1994) Towards an Integrated Europe. London: CEPR Working Paper, 34 p.

Borkakoti, J. (1998) International Trade. Causes and Consequences. An Empirical and Theoretical Text. Macmillan Press 1998, 602 p.

Breuss, F. (2001) Macroeconomic Effects of EU enlargement for Old and New Members. WIFO WP, No. 143, WIFO, Vienna, March.

Buch, C.M., Piazolo, D. (2000) Capital and Trade Flows in Europe and the Impact of Enlargement. Kiel Working Paper No. 1001, 46 p.

Buigues, P., Sheehy, J. (1995) The Impact of the Internal Market Program on European Integration. - European Free Trade Association. 35 years of free trade in Europe. Messages for the Future. Editor Ems, E. Proceedings of EFTA's 35th Anniversary Workshop. Geneva, 9 and 10 March 1995, pp. 38-64.

Chua, E.-M. (2000) Impact of the 3rd Stage of EMU on Estonia's Foreign Trade and Financial Sector. Bank of Estonia, 33 p.

Clerides, S., Saul, L, Tybout, J. (1996) Is Learning by Exporting Important?, mimeo

Dixit, A.K., Stiglitz, J. (1977) Monopolistic Competition and Optimum Product Diversity. American Economic Review 67(3), pp. 297-308.

Djankov, S., Hoekman, B. (1996) Trade Reorientation and Post-Reform Productivity Growth in Bulgarian Enterprises. World Bank, 23 p.

Eichengreen, B., Irwin, D. A. (1996) The Role of History in Bilateral Trade Flows. NBER Working Paper No w 5565, May, 53 p.

European Commission (1997) Trade patterns inside the single market. The Single Market Review. Subseries IV: Vol. 2. Kogan Page-Earthscan, 269 p.

Faini, R., Portes, R. European Union Trade with Eastern Europe: Adjustment and Opportunities. London: CEPR Working Paper, 24 p.

Fidrmuc, J. (2000) Disintegration and Trade. CEPR Working Paper, 32 p.

Gabrisch, H. (1997) Eastern Enlargement of the European Union: Macroeconomic Effects in New Member States. Europe-Asia Studies, Vol. 49, No. 4, pp. 567-590.

Gandolfo, G. (1994) International Economics I. The Pure Theory of International Trade. Second Edition. Springer-Verlag, 344 p.

Gasiorek, M., Smith, A., Venables, A. (1995) Modelling the Effect of Central and East European Trade on the European Community. In European Commission - Directorate General for Economic and Financial Affairs: The Economic Interpretation between the European Union and Eastern Europe, European Economy - Reports and Studies 6, pp. 519-538.

Grinols, E.L. (1984) A thorn in the lion's paw: has Britain paid too much for Common Market membership. Journal of International Economics, Vol 16, pp. 271-293.

Gros, D., Gonciarz, A. (1996) A Note on the Trade Potential of Central and Eastern Europe. European Journal of Political Economy 12, pp. 709-721.

Harrison, G.W., Rutherford, T.F., Tarr, D.G. (1996) Increased Competition and Completion of the Market in the European Union: Static and Steady State Effects. Journal of Economic Integration11(3), pp. 332-365.

Hille, H., Straubhaar, T. (2000) Assessment of the Amount of Potential CEEC-EU Migration and Analysis of its Effects Using a Computable General Equilibrium Model. Paper presented at the Workshop "Borders, Migration and Labour Market Dynamics in a Changing Europe" at the University of Kent at Cantebury.

Kaitila, V. (2001) Accession countries' comparative advantage in the internal market: A Trade and factor analysis. Bank of Finland, BOFIT Discussion Papers, no. 3, 45 p.

Kaminski, B. (2000) How the Accession to the European Union Has Affected External Trade and Foreign Direct Investment in Central European Economies. Revised version of backround paper prepared for the "Prague 2000 Accession" session at the IMF/World Bank annual meeting held in Prague, September 2000, 43 p.

Kaminski, B. (1998) Hungary's Integration into EU Markets: Production and Trade Restructuring. World Bank, 28 p.

Kaminski, B., Francis, N. (1999) Trade and Production Fragmentation: Central European Economies in EU. Networks of Production and Marketing. World Bank, 70 p.

Kattai, R. Euroopa Liiduga integreerumise mõju Eestisse tehtavatele otsestele välisinvesteeringutele ning väliskaubandusele. Eesti Pank, 2001, 70 p.

Keuschnigg, Ch., Kohler, W. (2000), Eastern Enlargement of the EU: A Dynamic General Equilibrium Perspective. - Using Dynamic General Equilibrium Models for Policy Analysis. Elsevier, pp. 119-170.

Krugman, P.R. (1994) Rethinking International Trade. Cambridge, Mass.: Massachusetts Institute of Technology Press, 78 p.

Kulu, L., Riik, H. (2001) Kesk- ja Ida-Euroopa riikide majandussuhted Euroopas Liiduga enne ja pärast Euroopa Liidu idalaiendust. - Muutused Eesti majanduses Euroopa Liiduga ühinemisel. Tartu Ülikooli Kirjastus 2001, pp. 341-397.

Mayes, D. (1989) The Effects of Economic Integration on Trade. - The European Internal Market. Trade and Competition. Selected Readings. Edited by Jacquemin, A., Sapir, A. Oxford University Press, pp. 97-121.

Norman, V.D. (1995) The Theory of Market Integration. A Retrospective View. - European Free Trade Association. 35 years of free trade in Europe. Messages for the Future. Editor Ems, E. Proceedings of EFTA's 35th Anniversary Workshop. Geneva, 9 and 10 March 1995, pp. 19-37.

Paas, T. (2000) Gravity approach for modeling trade flows between Estonia and the main trading partners. University of Tartu, Faculty of Economics and Business Administration, no. 4, 49 p.

Piazolo, D. (2000) Poland's Membership in the European Union: An analysis with a Dynamic Computable General Equilibrium (CGE) Model. LICOS Discussion Paper 89, Centre for Transition Economics, Leuven, 34 p.

Reiljan, J., Andresson, K., Reiljan, E. (2001) Läänemere regiooni roll Eesti integreerumisel Euroopa Liitu. - Muutused Eesti majanduses Euroopa Liiduga ühinemisel. Tartu Ülikooli Kirjastus 2001, pp. 398-441.

Toming, K. (2001) Muutused Eesti väliskaubanduses Euroopa Liiduga ühinemisel. - Muutused Eesti majanduses Euroopa Liiduga ühinemisel. Tartu Ülikooli Kirjastus 2001, pp. 19-92.

Toming, K. (2000) Euroopa Liiduga liitumise välsikaubanduspoliitiline mõju Eesti majandusele. Dissertatsioon *magister artiumi* kraadi taotlemiseks majandusteaduses nr, 43. Tartu Ülikool, 146 p.

Varblane, U. (2000) Muutused Eesti väliskaubanduspoliitikas Euroopa Liiduga ühinemisel. Euroopa Kolledži loengud, vihik nr. 2., 31 p.

Viner, J. (1950) The Customs Union Issue. Carnegie Endowment for International Peace. New York.

Winters, A.L. (1995) Britain in Europe: a Survey of Quantitative Trade Studies. - The European Internal Market. Trade and Competition. Selected Readings. Edited by Jacquemin, A., Sapir, A. Oxford University Press, pp. 122-142.

ELINKEINOELÄMÄN TUTKIMUSLAITOS (ETLA)

THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY LÖNNROTINKATU 4 B, FIN-00120 HELSINKI

Puh./Tel. (09) 609 900 Int. 358-9-609 900 http://www.etla.fi Telefax (09) 601753 Int. 358-9-601 753

KESKUSTELUAIHEITA - DISCUSSION PAPERS ISSN 0781-6847

- No 762 KARI E.O. ALHO, Catching up and Unemployment in the EU. 05.07.2001. 10 p.
- No 763 PIA WALDEN PEKKA YLÄ-ANTTILA, Skenaariot ja kansantalous 2026. Kansainvälisten skenaarioiden tulevaisuuskuvia Suomen näkökulmasta. 30.07.2001. 21 s.
- No 764 OLAVI RANTALA, EU:n itälaajenemisen vaikutus Suomen väestökehitykseen. 03.09.2001. 15 s.
- No 765 JUKKA LASSILA TARMO VALKONEN, Ageing, Demographic Risks, and Pension Reform. 03.09.2001. 34 p.
- No 766 PERTTI HAAPARANTA HANNU PIEKKOLA, Taxation and Entrepreneurship. 26.09.2001. 39 p.
- No 767 REIJO MANKINEN JYRKI ALI-YRKKÖ PEKKA YLÄ-ANTTILA, Palveluiden vienti ja kansainvälistyminen. 25.09.2001. 42 s.
- No 768 ARI HYYTINEN OTTO TOIVANEN, Asymmetric Information and the Market Structure of the Venture Capital Industry. 03.10.2001. 13 p.
- No 769 MINNA SEPPÄLÄ, Vihreä veroreformi: Laskelmia Suomen aineistolla. 05.10.2001. 28 s.
- No 770 PEKKA MANNONEN, Advancing Information Technology and Financial Intermediation. 10.10.2001. 20 p.
- No 771 MIKA WIDGRÉN STEFAN NAPEL, The Power of a Spatially Inferior Player. 23.10.2001. 20 p.
- No 772 TEEMU HAUKIOJA JARMO HAHL, The Emergence of the New Economy, and its Challenge to Financial Intermediation and Banking: A Survey. 01.11.2001. 30 p.
- No 773 MIKKO MÄKINEN MIKA PAJARINEN PEKKA YLÄ-ANTTILA, Hyvinvointiklusterin vientimenestys ja merkitys kansantaloudessa 1990-luvun jälkipuoliskolla. 06.11.2001. 31 s.
- No 774 ARI HYYTINEN MIKA PAJARINEN, Financial Systems and Venture Capital in Nordic Countries: A Comparative Study. 14.11.2001. 57 p.
- No 775 ARI HYYTINEN IIKKA KUOSA TUOMAS TAKALO, Law or Finance: Evidence from Finland. 19.11.2001. 54 p.
- No 776 ARI HYYTINEN TUOMAS TAKALO, Preventing Systemic Crises through Bank Transparency. 20.11.2001. 17 p.
- No 777 RITA ASPLUND, Koulutus, palkkaerot ja syrjäytyminen. 22.11.2001. 20 s.
- No 778 STEFAN LEE, Financial Analysts' Perception on Intangibles An Interview Survey in Finland. 26.11.2001. 44 p.

- No 779 JYRKI ALI-YRKKÖ PEKKA YLÄ-ANTTILA, Globalisation of Business in a Small Country Does Ownership Matter? 10.12.2001. 20 p.
- No 780 PENNA URRILA, Suhdanneindikaattoreiden käyttö talouskehityksen seurannassa. 12.12.2001. 66 s.
- No 781 JYRKI ALI-YRKKÖ ARI HYYTINEN JOHANNA LIUKKONEN, Exiting Venture Capital Investments: Lessons from Finland. 17.12.2001. 54 p.
- No 782 JUHA FORSSTRÖM JUHA HONKATUKIA PEKKA SULAMAA, Suomen asema EU:n komission vihreän kirjan hahmottelemassa unionin laajuisessa päästökaupassa. 31.12.2001. 56 s.
- No 783 ARLINDO VILLASCHI, An Analytical Framework for Understanding the Finnish National System of Innovation. 10.01.2002. 24 p.
- No 784 AKI T. KOPONEN, Competition in Local Loan Markets, An Application of Linear City-Model with Price Discrimination. 15.01.2002. 15 p.
- No 785 MATHIAS CALONIUS, Findings about Design and the Economy. 30.01.2002. 46 p.
- No 786 PETRI ROUVINEN, Competitiveness in the New Economy. 01.02.2002. 17 p.
- No 787 PASI HUOVINEN HANNU PIEKKOLA, Early Retirement and Use of Time by Older Finns. 25.02.2002. 19 p.
- No 788 PANU PELKONEN, Esitutkimus rekrytointiongelmien ja tuotannon yhteyksistä Suomen teollisuudessa 1987-2000. 18.02.2002. 24 s.
- No 789 ERKKI KOSKELA MARKKU OLLIKAINEN MIKKO PUHAKKA, Saddles, Indeterminacy and Bifurcations in an Overlapping Generations Economy with a Renewable Resource. 18.02.2002. 30 p.
- No 790 MINNA JUKOMAA JUSSI KOIVISTO MARJA TAHVANAINEN, Recruitment of Foreign IT Professionals in Finland. 22.02.2002. 23 p.
- No 791 KARI E.O. ALHO, EU Labour Markets and Immigration Connected to Enlargement. 28.02.2002. 18 p.
- No 792 JYRKI ALI-YRKKÖ, Mergers and Acquisitions Reasons and Results. 05.03.2002. 32 p.
- No 793 HANNU PIEKKOLA ANTTI KAUHANEN, Rent Sharing as Part of Incentive Payments and Recruitment. 20.03.2002. 26 p.
- No 794 HANNU PIEKKOLA, Transferability of Human Capital and Job Switches. 20.03.2002. 22 p.
- No 795 MIKA MALIRANTA, From R&D to Productivity Through Micro Level Restructuring. 18.03.2002. 39 p.
- No 796 MIKA MALIRANTA, Factor Income Shares and Micro-Level Restructuring. An analysis of Finnish Manufacturing. 18.03.2002. 23 p.
- No 797 LAURA EHRLICH, The EU Single Market and Customs Policy: Impact on Estonian Foreign Trade. 19.03.2002. 24 p.
 - Elinkeinoelämän Tutkimuslaitoksen julkaisemat "Keskusteluaiheet" ovat raportteja alustavista tutkimustuloksista ja väliraportteja tekeillä olevista tutkimuksista. Tässä sarjassa julkaistuja monisteita on mahdollista ostaa Taloustieto Oy:stä kopiointi- ja toimituskuluja vastaavaan hintaan.
 - Papers in this series are reports on preliminary research results and on studies in progress. They are sold by Taloustieto Oy for a nominal fee covering copying and postage costs.