ESTONIA'S TRADE IN THE WORLD OF GLOBALISATION

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The world trade grows faster than the economy as a whole. The fast development in the field of science and technology, co-operation of the enterprises also condensates, and the manufacturing process of the goods is also divided between different countries. That means the ever more increasing volumes of exports and imports while the goods crossing the border of the country, are reflected in the foreign trade statistics. How does that influence the Estonian exports? What is the relationship between exports and economy?

Introduction

The aim of the article is to study how the trade and economy are integrated with each other, and how the trade of Estonia's open economy is influenced by the world economy.

The trade is decomposed by the classification which divides the goods into capital, intermediate and consumption goods. The article also describes the changes in the structure of Estonian trade during the last decade. Also contract works and re-exports (commodities in the exports are not of Estonian origin) in Estonia's total exports are observed in the article.

Globalisation could be defined also as associating of the world's economy as a single entity which has been assisted by the free-trade (the diminishing of customs tariffs on the borders of the countries), quick technology development as well as the quick extension of big enterprises – corporations among the different countries in connection with the improvement of the business environment.

World trade and its connection to the economy

The world trade boosted in the eighties of the 20th century. It was the time when also exports and imports of services were first taken into account. Nowadays in the era of globalisation – the differentiating of trade in goods and services has becoming more and more complicated. So – globalisation does not mean only the integration of the international markets but also closer connections of the manufacturing process of the goods (Escaith 2008), where the exports and imports are closely entwined with each other.

In 2010, the total exports of the world amounted to 15.2 trillion US dollars (nearly the same amount of goods were also imported) (Figure 1, p. 7). The exports of services accounted for nearly four trillion US dollars. While in the period of 2000–2010 the world population grew by 13%, then during the same period exports increased by 140% or 2.4 times. In addition to bigger consumption, it also indicates that half-made goods or intermediates cross the borders of the countries and the share of such kind of transactions has grown. In earlier studies, it has been found out that intra-corporation trade comprises nearly 60% of the intra-corporation trade. For example, an Estonian enterprise also imports different parts for the manufacturing of the apparatus of cellular network. Here, the production or assembling of the final-use or intermediate goods is taking place and then the commodities are exported back to the same country or to another country. Manufacturing in different countries increases also the volume of the trade of the country. When earlier it was easy to label the commodity as "Made in Germany", then now, in the era of globalisation – a lot of goods might be labelled also as "Made in the World".

In 2010, world exports per capita accounted for 24% of world GDP per capita. For comparison, in 2000, the same indicator was 20%. In the preceding years of the last world-wide financial crisis, *in 2007–2008, exports accounted for 25–26% of the world GDP. For sure, it is connected with the wider extension of the open market in the world.*

In 2010, GDP per capita was 9,100 US dollars (in 2000 it was 5,300 USD) (Figure 2, p. 7). Exports of goods per capita were 2,200 US dollars in 2010 (1,100 USD in 2000). So, in the period of 2000–2010 exports per capita increased twofold, but the GDP 1.7 times in the world.

If in 2000, the total exports of goods of the world amounted to 6.5 trillion US dollars, then by the year 2010 the exports had increased by 2.4 times (to 15.2 trillion US dollars). In the same period, the world GDP grew from 32 to 63 trillion US dollars – the increase was nearly twofold (Table 1, p. 8). The annual growth rate of exports was registered as 13% and of GDP as 10%. It could be mentioned that the growth of exports was significantly faster than that of the GDP.

In 2010, the fast growth in exports was an important factor in the overall recovery of the world economy – exports increased by 22% compared to 2009 and the GDP by 9%. During the economic recession in 2009, the decline of exports was significantly deeper than the decline of GDP: if exports declined by 22% compared to 2008, the GDP decreased only by 6% (Figure 3, p. 8).

In conclusion, exports is more volatile than economy, which means that exports respond to the economic recoveries and recessions more rapidly than the world as a whole (Figure 3, p. 8). Consequently, exports are able to recover faster and help the economy to recover.

The changes of exports and GDP are in a positive correlation, which means that as the economy grows, then exports also grows and also vice versa. As exports declines more than economy during the recession period, then one of the reasons might be also the decrease in the number of external orders of the enterprises. Also countries may start to protect their economies and restrict the importation of the country (the so-called protectionism).

Trade in intermediates

One of the indicators which show the level of globalisation is the increasing role of trade in the intermediates between the countries – according to their end-use commodities are divided into capital, consumption and intermediate goods (see methodology) (Miroudut et al. 2009).

Intermediates account for more than a half of the world's trade. Intermediates comprise 56% of the trade of the OECD countries (ibid.). It may be concluded that the trade of the countries is strongly influenced not by goods meant for consumption, but by the goods for further manufacturing – or by the cross-country value-chains.

As the enterprises have become more international, the enterprises are also operating in different countries. The parent company is operating in the home country, but its affiliates produce the parts or accessories of the products, where the goods are manufactured in the countries with the lower costs. At the same time, such kind of trade is enclosed in the foreign trade which significantly increases the volume of the trade of the countries as well as of the whole world.

The country's ability to thread into the world's economy can be described with such an indicator as the share of intermediates in the country's total imports (Miroudut 2011). In 2010, the intermediates accounted for the largest share of the country's imports in Slovakia and Bulgaria (two thirds of the total imports). In EU 27 the same indicator was 58% and in Estonia 56% (Figure 4, p. 9).The share of intermediates in the total imports was the lowest in the small countries like Malta, Cyprus and Luxembourg.

It is safe to say that trade in intermediates is increasing due to the globalisation and the same can be said also with regard to the developed countries. Also in the USA the trade in intermediates has increased (Chen et al. 2005).

Comparison of trade and GDP in Estonia and the world

As Estonia is a small country, whose share of trade and economy in the world is marginal, then for the better comparability the per capita indicators are used.

In 2010, Estonia's exports per capita was fourfold bigger than in the world – 8,600 US dollars vs. 2,200 US dollars (Figure 5, p. 10). In the period of 2000–2002, the difference of Estonia's exports was only twofold (2,300 vs. 1,100 US dollars). The gap began to widen in 2006.

Estonia's exports per capita also slightly exceeded the EU average indicator. In 2011, exports in Estonia per capita were 9,000 euros (8,600 euros in the EU average). Regarding this indicator, Estonia exceeded also the old EU countries as France, Italy, the United Kingdom, but also Latvia and Lithuania (Eurostat).

Consequently, Estonia's economy has strongly threaded into the world economy. As exports respond faster to the rises and declines in the world (more than economy as a whole), consequently Estonia's economy is strongly influenced by the fate of the world economy.

Also Estonia's economic growth has been faster than that of the world's (Figure 6, p. 10). If at the beginning of the 2000s, the world GDP was bigger than Estonia's (in Estonia 4,000 and in the world 5,000 US dollars per capita), then in Estonia the economy began to grow rapidly and in 2003 it already exceeded the volume of world's economy. By the year 2008, the same indicator was 18,000 US dollars in Estonia and 9,000 US dollars in the world. During this period, Estonia's GDP grew 3.6 times, the world's GDP – 2.3 times.

As a conclusion, in the period of 2000–2010 both Estonia's exports as well as economy, grew faster than in the world. Estonia's exports per capita exceeded the world's indicator by four times, Estonian economy per capita exceeded the world's economy by 1.6 times.

The reasons for the increasing trade of Estonia

The fast internationalisation of Estonia's trade started just after achieving the independency in Estonia. For 2000, Estonia's trade in goods accounted for already 56% of the country's GDP (Figure 7, p. 11), slightly decreasing during the following years. Recovering from the last economic crisis, Estonia's exports made up already 75% of the GDP, which is the highest annual share until up to now. This indicates the economy's intense dependence on exports, and also the fact that Estonia's exports – and also economy – is influenced by the economic situation in the destination countries of the Estonian exports.

In 2011, Estonian imports accounted for 79% of the GDP. The share of imports in the GDP was the highest in 2006, when it amounted to 80% of the GDP. It was the smallest in 2009, when imports made up 53% of Estonia's GDP.

In 2010 and 2011, the growth in Estonia's exports has been remarkable. The increase in trade has been also influenced by the Estonia's accession to the EU – since then free movement of goods has been applied. But, also the trade of the other countries began to influence the trade of Estonia as well, called ***re-exports*** *(see: methodology) (International…2011). For example, building machines (shovel-loaders, etc.) are imported from the United Kingdom to the Estonian intermediate depot and after warehousing at the place, the machines are re-exported to Russia (to the third country). In such a case it is called as re-exports and such kind of transactions increase also the volume of Estonian trade (both exports and imports).*

Estonia's trade has also increased as a result of the globalisation – the spread of free-market trade, as there is a continuous diminishing of customs tariffs and other trade restrictions. Due to the good climate for the entrepreneurs, several international companies start operating here.

For example, in Estonia there is a cable factory, which is the affiliate of the mother-company in Finland. The connection parts (details) for the cable manufacturing process are imported from Finland and afterwards the cable is exported to Finland again – it is called the exports after contractor works. Such trade also increases the volume of exports and imports.

Estonia's trade relation to the economy

As the world trade grew faster than economy, then also Estonian exports' growth was faster than that of economy (Figure 8, p. 12). It is interesting to observe the growth rate of GDP and trade since 2004, when Estonia joined the EU. In the year 2011, Estonia's exports were bigger already by 2.5 times, the GDP 1.6 times and imports by 1.9 times compared to 2004. Since 2004, the annual average growth rate of exports has been 22% and of GDP by 9% (at current prices).

In 2010–2011, Estonia's growth rate of exports accelerated. In 2011, exports grew by 37% compared to 2010, which has been the biggest annual growth rate ever since. In 2010, exports grew by a third compared to the preceding year. During the economic recession period (in 2009) exports declined by 23% compared to the preceding year (Figure 9, p. 12).

The GDP at current prices grew 12% in 2011 compared to 2010. In 2009 economy fell by 15% (Table 2, p. 13).

The interconnection between trade and economy can be also described by the ratio of exports to the GDP. In 2011, exports ratio to the GDP was 75% (Table 2, p. 13 and Figure 10, p. 13), being one of the most exports-influenced economies in the world. In Finland the same indicator was 30% and in Sweden 35% (Figure 10, p. 13).

As Estonian exports has been growing faster than economy also after the economic crisis, then it may be concluded that Estonian exports is capable to adapt with the new circumstances and able to help to recover from the recession. Hopefully, quick recovering from the recession is also related to the better economic indicators of the exporting enterprises and their increasing competitiveness in the world market.

Trade in intermediate goods in Estonia

Also the trade in intermediate goods of Estonia followed the worldwide trends. Intermediate goods made up almost 61% of Estonia's exports and 55% of imports in 2004 (Figure 11, p. 14) when Estonia joined the EU. In 2011, the intermediate goods accounted for 56% of Estonian exports and 58% of imports.

In Estonia's exports the share of intermediates has slightly decreased (from 61% in 2004 to 56% in 2011), which shows that more capital and consumption goods (final use goods) are being exported from Estonia. When in 2004 the share of capital goods in Estonia's exports was 13%, then in 2011 it was already 20% (Figure 12, p. 14). So, it can be stated that Estonian exports have become more valued.

The share of intermediates in Estonian total imports shows the volume of inputs (incl. inputs for the contractor works) for the country's manufacturing and shows also how intensely the industry is dependent on the imported intermediates. In 2011, intermediates accounted for 58% of Estonia's total imports (Figure 13, p. 15), which is the highest share up to now. When in 2006, the share of intermediates was only 50%, then in the following years the corresponding share has continuously increased (Estonia...2011; Miroudut 2009). This also shows the more intense integration of the Estonian industry into the international global value chains.

It may be concluded that the share of intermediates in Estonian exports has decreased and the share of final goods (capital and consumption goods) has increased. The share of intermediates in total imports has grown. That indicates to the revival of the manufacturing, but also the increasing role of the economic integration.

Processing works and re-exports in Estonia's exports

Vertical manufacturing is a widespread trend during the last years – the manufacturing of different parts and accessories, assembling and packaging take place across countries. That goes together also with the more dense cross-country trade. Therefore such terms as "processing" and "re-exports" have been used in the trade terminology.

Re-exports includes exports of commodities with the non-Estonian origin (methodology) and specific value is not added in Estonia.

In case of contractor works or processing – goods are exported for processing under contract – for example processing of fuels, assembling of ambulance-cars with the medicine apparatus, etc. In case of contract works, the affiliate may only be engaged only with certain services to the parent-company in the home country (Connolly 2011). The value of the commodities is also taken into account in the trade statistics, which arrive to Estonia for those service procedures and also after leaving the country.

In 2011, goods for contract works accounted for 13% of Estonia's exports. In 2001, the same indicator was even 37% (Figure 14, p. 15). That indicates that in Estonia the share of processing in Estonia' exports has decreased in the last decade.

But, in 2011 both the turnover of exports after processing as well as re-exports increased more rapidly than direct exports (or exports without re-exports and exports after processing) (Table 3, p. 16). Exports after processing increased by 48% in 2011 (from 1.1 billion euros in 2010 to 1.6 billion euros in 2011). Re-exports grew at the same period even by 57%. Exports without re-exports and processing increased the least – by 30%.

Fuels made up 77% of the Estonian exports after processing (Figure 15, p. 16). For example, motor spirits and medium oils are imported from Russia to Estonia, where some kind of chemical treatment is performed with them. After processing or after works under contract those fuels and oils are mainly exported. As some value is also added, so such transactions are not treated as re-exports or transit, but as exports after processing. Electrical equipment and articles of apparel and clothing accessories made up 7% and 4%, respectively of Estonia's exports after processing.

Re-exports is the re-exportation of goods from Estonia. Goods that have arrived from other Member States are re-exported without giving any value added – goods are only stored in the warehouse (in case of transit there is no warehousing of goods). The share of such kind of transactions (or the share of re-exports) was 22% in 2011 (19% in 2009 and 2010, 5% in 2001).

Also the volume of re-exported goods increased in 2011 – from 1.7 billion euros in 2010 to 2.6 billion euros in 2011 or by 57% (Table 3, p. 16). For example, tractors arrive in Estonia from England and they are stored in the warehouses – in case of finding the purchaser, the tractors are re-exported to the third country (Russia).

It can be concluded that the structure of Estonia's exports has been changing. In 2011, already nearly a third of total exports comprised re-exports or exports after contract works (or processing).

Summary

During the last decade, both world's and Estonia's exports have grown more rapidly than economy as a whole. One of the reasons for the fast growth of exports is the increase in trade in intermediates due to the globalisation and widening of open market.

Estonia's economy is one of the most export-dependent countries in the world – exports made up nearly three quarters of the GDP in 2011, while in Finland and Sweden only nearly a third of the GDP.

In Estonia, the share of intermediates in total exports decreased, the share of capital goods increased. But the share of intermediates in total imports increased – it indicates to the increasing integration into international companies.

In 2011, also the estimated volume of re-exports increased in Estonia's total exports. If the share of re-exports accounted for only 5% of Estonian total exports in 2001, then in 2011 the corresponding indicator was already 22%.

In conclusion it can be stated that Estonian exports and economy have grown fast, caused by the openness and good entrepreneurship climate and the structure of Estonian exports is changing.

The share of re-exports in Estonian exports has increased. It can be estimated that in 2011 nearly a third of Estonian exports of goods comprised re-exports or exports after processing.

Methodology

A classification of Broad Economic Categories (BEC) has been used in the paper where goods are divided into groups by their end-use (Kerner et al. 2010).

There are 19 BEC categories of goods which, in turn, are divided into three larger classes of goods in the System of National Accounts (SNA): capital goods, intermediate goods and consumption goods.

Capital goods are defined as goods meant for producing other goods (e.g. machinery and equipment and industrial transport equipment), intermediate goods are semi-processed, semi-manufactured and industrial supplies. Consumption goods are final products and goods meant for final consumption. Motor spirits, and passenger motor cars are not classified into any of those main classes of SNA (Annex 1, p. 26).

Intermediates are defined also as the goods for the inputs of the manufacturing process and which are previously manufactured as well. Unlike capital goods, intermediates are used in production (Miroudut et al. 2009; Glossary 2006).

Both, data of exports and GDP are at current prices, so the changes of prices have not taken into account. Both, the data of exports and GDP have been used without any seasonal adjustment.

As the world exports is close to the imports (the exports of all countries should equal to the imports), then describing the world trade data, only the volume of exports has been used. A slight difference in the value of exports and imports comes from the use of different delivery term. The value of imports of the commodity includes also the transportation and insurance costs up to the border of the importing country (CIF-value).

***Exports** – exportation of goods produced in Estonia, exportation of goods imported from a foreign country (re-exports), temporary exportation of goods for the purpose of processing abroad, re-exportation after inward processing and supplies for foreign vessels and aircraft stores. Exports exclude transit and services.*

***Imports** – imports of goods into Estonia for domestic consumption and for resale to a foreign country, imports for inward processing with notification of intended return and re-imports after processing outside of Estonia. Imports exclude transit and services.*

***Contractor works** – processing of goods under contract; processing.*

***Re-exports** – exportation of goods imported from a foreign country (International...2011). Regarding Estonian re-exports, the data are estimated, as there is no national methodology for compiling re-exports. In the article, re-exports is defined as the exports of the commodities where the origin of the commodity is not Estonia or the EU, until 2004 that the country of origin is not Estonia. Re-exports are not the same as transit, because also some kind of warehousing takes place.*

***Transit trade** – goods are crossing the country's territory under the monitoring of the customs and transit is excluded from exports.*

***Processing** – works under contract, while new commodities are made or change significantly the quality of the commodity (e.g. sewing of clothes, metal treatment, oil refining, assembling of motor vehicles, etc.).*

The public databases of IMF, WTO and Eurostat and Statistics Estonia have been used.

Annex 1. Broad Economic Categories classification of goods according to main use

Classification by Broad Economic Categories (BEC)	*Basic Classes of Goods in the System of National Accounts*
1. Food and beverages	
11. Primary	
111. Mainly for industry	*Intermediates*
112. Mainly for household consumption	*Consumption*
12. Processed	
121. Mainly for industry	*Intermediate*
122. Mainly for household consumption	*Consumption*
2. Industrial supplies not elsewhere specified	
21. Primary	*Intermediate*
22. Processed	*Intermediate*
3. Fuels and lubricants	
31. Primary	*Intermediate*
32. Processed	
321. Motor spirit	*Not classified*
322. Other	*Intermediate*
4. Capital goods (except transport equipment), and parts thereof	
41. Capital goods (except transport equipment)	*Capital*
42. Parts and accessories	*Intermediate*
5. Transport equipment, and parts thereof	
51. Passenger motor cars	*Not classified*
52. Other	
521. Industrial	*Capital*
522. Non-industrial	*Consumption*
53. Parts and accessories	*Intermediate*
6. Consumer goods not elsewhere specified	
61. Durable	*Consumption*
62. Semi-durable	*Consumption*
63. Non-durable	*Consumption*
7. Goods not elsewhere specified	*Not classified*

Source: Miroudut et al. 2009