



ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

ISSN 2345-0282 (online) <http://jssidoi.org/jesi/aims-and-scope-of-research/>

2015 Volume 2 Number 4 (June)

PECULIARITIES OF EXPORT STRUCTURE IN LITHUANIA: SYNTHESIS AND ANALYSIS

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Received 13 March 2015; accepted 11 May 2015

Abstract. The research paper discusses the concept of export competitiveness and analyzes export structural change as an indicator of it. The analysis is started by the historical review of integrated system for export classification. Furthermore, the paper presents peculiarities of export structure in Lithuania based on three different types of classification: by goods' nature, by factor-input aspect and by sectorial composition. This study examines structural changes in Lithuanian export supply and demand functions, which can be used as a good reference in understanding the determinants of trade performance of small open economy countries. The recommendations for future investigations are developed at the end of research paper's parts.

Keywords: Lithuanian international trade, export competitiveness, export structural change

Reference to this paper should be made as follows: Travkina, I.; Tvaronavičienė, M. 2015. Peculiarities of export structure in Lithuania: synthesis and analysis. *Entrepreneurship and Sustainability Issues* 2(4): 233-247.
DOI: [http://dx.doi.org/10.9770/jesi.2015.2.4\(7\)](http://dx.doi.org/10.9770/jesi.2015.2.4(7))

JEL Classifications: L16, P45, P51

1. Introduction

The relationships between export competitiveness and export structural change are complex to analyze. Since the late 1990s debates on these relationships have been strongly influenced by the Krugman hypothesis, which states that “national economic welfare is determined primarily by *productivity* in both traded and non-traded sectors of the economy”. There is a significant strand of literature devoted to discussion on productivity factors (Travkina, Tvaronavičienė 2010, 2011; (Lankauskienė 2014; Tvaronavičienė 2014; Raudeliūnienė *et al.* 2014; Dezellus *et al.* 2015; Jefremov, Rubanovskis 2015; Mostenska, Bilan 2015; Ignatavičius *et al.* 2015; Baublys *et al.* 2015).

We adopt an approach, where emphasis is put on domestic structure of an economy and of (Travkina, Tvaronavičienė 2010, 2011). In the article it is assumed that export competitiveness is a derivative from export structural change by three different methods; therefore, properly presented and juxtaposed data on labour, capital and energy productivity/intensity would provide new insights on a character of relations between export competitiveness and change of export structure.

2. Integrated Systems of Export Classifications

It is noticeable, that the average share of Lithuanian export for the total period of 1995-2013 in the GDP structure accounted for 57% of GDP (Fig. 1), and it is 54 per cent higher than EU-28 average share. Such high average is a typical indicator for small open economy countries, whose economic activities are mostly export-oriented, like in Lithuania or the other Baltic States. The export is one of the main driving forces for such economic structures.

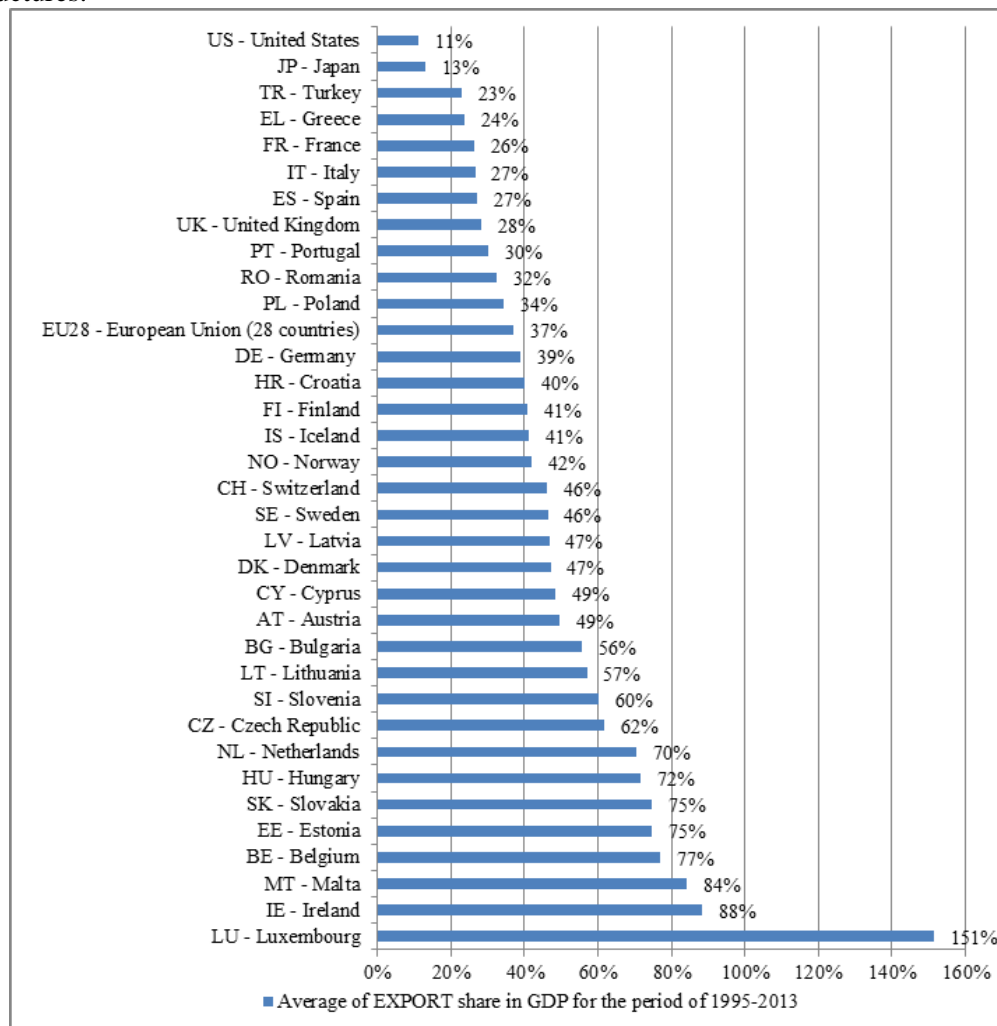


Fig.1. Average of export share in GDP for the period of 1995-2013, in percentage

Source: Absolute values are provided by EUROSTAT, and the percentage expression of export structure is computed by the authors

In this article the export structure' classification systems and their trends in Lithuania during 1996-2013 year period are discussed. Before doing the trend analysis, classification's types of exporting goods will be introduced and explained. Secondly, the authors strives to provide a picture of how particular group of goods were exported during a particular time span; to trace tendencies by identifying which goods expanded their exports, and which otherwise - shrank.

As indicated above, in the scientific literature we can find a variety of types determining export structure. In this Section the authors focuses on the following criteria:

- The statistics downloaded from EUROSTAT or Statistics Lithuania official web-sites;
- The change of the currency into Euro;
- The statistical information used for this research is based on "data adjusted for working day and seasonal effects" only. Seasonally adjusted Euro zone and EU series are calculated by aggregating the seasonally adjusted national data (EUROSTAT).

- d) The period under examination is 18-year period of 1996-2013.
- e) Only quarterly information was used for this article's research.

The authors designed to determine the relationship between export and different types of export structure; and examine if distinguished types of structure demonstrate similar effect on trend analyse. The survey of global academic literature indicated various determinants for the classification of export structure:

- a) Nature of exported goods;
- b) Factor-input aspect of exported goods;
- c) Type of industries which export goods (or sectorial aspect);
- d) The Lithuanian-origin aspect of exported goods.

3. Integrated Systems of Export Classifications

Classifications serve as a basis for data collection and dissemination in any area of statistics. They provide standardized concepts applicable for description of phenomena, such as economic activity, products, expenditures, occupation or health. They are necessary to consistently measure these phenomena within and across countries and geographical regions (Eurostat, 2015).

The authors dedicate the introduction to statistical classifications. This sub-section includes the introduction to the typology of classifications based on the degree of integration between different systems of classifications. This kind of an integrated system allows completing the comparability of statistics produced in different statistical domains. As a consequence, for instance, statistics on the production of goods (reported in the EU according to Prodcom surveys) could be compared with statistics on trade (in the EU produced according to CN). It is noticeable that the beginning of the compilation of an international integrated system of classifications of activities and products related to the resolutions adopted by the 17th meeting of the United Nations Statistical Commission (1972) and the 21st meeting of the Conference of European Statisticians (1973) (Eurostat, 2015). However, today, the key European economic classifications are fully harmonized with the global ones. Under the relevant European regulations, this also applies to the national classifications of the Member States of the European Union and, under the EEA Treaty, to the EFTA-EEA countries. In Europe the requirement for harmonization between the central economic classifications and any special survey classifications are also available. The central economic classifications thus form the core for an international, European and national group of classifications. From the European point of view, this system can be represented as follows (Fig.2):

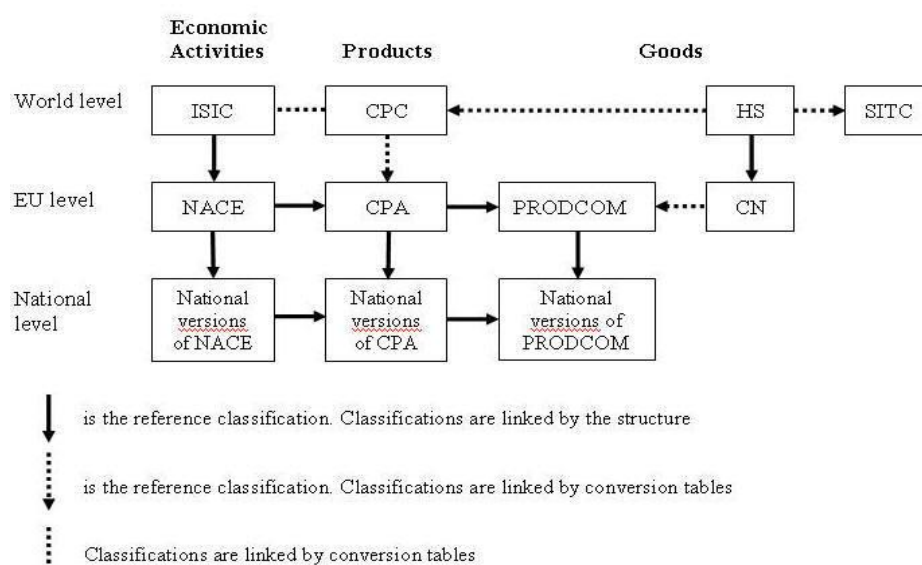


Fig.2. International integrated system of classifications of activities and products, from the European point of view

Source: EUROSTAT, explanation of classification systems presented by the authors (below):

- | | |
|---|--|
| 1) ISIC is the United Nations' International Standard Industrial Classification of all Economic Activities; | industry standard classification system consisting of a 6 digit code; |
| 2) CPC is the United Nations' Central Product Classification; | 6) CPA is the European Classification of Products by Activity; |
| 3) HS is the Harmonized Commodity Description and Coding System, managed by the World Customs Organisation; | 7) Prodcom is the classification of goods used for statistics on industrial production in the EU; |
| 4) SITC is the Standard International Trade Classification; | 8) CN stands for the Combined Nomenclature, a European classification of goods used for foreign trade. |
| 5) NACE is the statistical classification of economic activities in the European Community; a European | |

Therefore, the authors provide all available types of international trade classifications, prepared by governmental financial statistics divisions, and introduce the purpose of the analysis, for the particular type of classification which is more informative and advisable:

- a) The international Harmonized System (HS) is used mainly to classify physical goods for export to another country. HS has corresponding tables with CN, SITC and BEC.

The Lithuanian international trade data is available at 2-4- and 6-digit HS headings and subheadings, for the period of 1996-2014.

- b) The Combined Nomenclature (CN) is based on the Harmonised System and it is applied at both the tariff classification and the compilation of statistics within the European Community. CN is the common nomenclature of the European Community and it is used as an 8-digit product classification system in export declarations and in statistical declarations for trade in the European Community. All products and goods exported from the European Union or imported into the European Union must be classified for Customs purposes. Every product is assigned to a particular product classification code (EUROSTAT).

The CN code is subdivided into a hierarchical, 8-digit code structure followed by a description. The categories at the highest levels are called Sections, followed by Chapter, Sub-Chapter, Heading, and Subheadings. The first six digits relate to the harmonized system (HS) nomenclature, presented earlier, and the last 2 digits relate to the CN subheadings. CN has correspondence tables with HS and SITC.

The Lithuanian international trade data is available by 2-4- and 8-digit HS headings and subheadings, for the period of 1996-2014. *The data classified by CN and HS could be of interest for the export analysis by nature of goods.*

- c) The Standard international trade classification, abbreviated as SITC, is a product classification of the United Nations (UN) used for external trade statistics (export and import values and volumes of goods), allowing international comparisons of commodities and manufactured goods. The groupings of SITC reflect upon: the production materials, the processing stage, market practices and uses of the products, the importance of the goods in the world trade, and technological changes. The main categories are: food, drinks and tobacco (Sections 0 and 1 - including live animals), raw materials (Sections 2 and 4), energy products (Section 3), chemicals (Section 5), machinery and transport equipment (Section 7) and other manufactured goods (Sections 6 and 8).

SITC has corresponding tables with HS, BEC and ISIC. The Lithuanian international trade data is available by SITC for the period of 1996-2014.

- d) The Classification by Broad Economic Categories (BEC) provides export-data within the categories related to the capital, intermediate and consumption goods. BEC distinguishes the five categories specified by food, industrial supplies, capital equipment, consumer durables and consumer non-durables. BEC was originally designed to be mainly used for the summarization of the data on the international trade by large economic classes of commodities.

BEC has corresponding tables with SITC, CN and HS. The Lithuanian international trade data is available by BEC for the period of 1996-2014. Data classified by BEC and SITC could be applicable for the export analysis by goods used in certain production stages (similar to BEC classification; such as capital, intermediate and consumption goods).

The authors have chosen the CN classification in order:

- a) To explore the nature of exported goods (by CN2);
b) To analyse the exported goods by LT-origin aspect (only with CN8 classification this analysis is possible).
The export structure by CN2 could be split into CN8, *if the research by LT-origin aspect requires*;

- c) To ensure the comparability of the data on the structure of the international trade' and the industry in Lithuania. The corresponding table is researched by Peneder (Peneder 2002), and more information about this correspondence would be an idea for the further research.

4. Analysis of Export Structure by Goods' Nature

The research was based upon analyzing the Lithuanian export structure by the nature of goods, according to CN2 classification for the period of the last 18 years, i.e. for the period of 1996-2013.

Firstly, the authors analyse 2-digit CN classification, reviewing similar research performed by Lithuanian scientists (Rudzkis, Kvedaras 2003), and grouping 97 CN2 sections into 10 categories by the nature of exported goods (Table 1).

Table 1. Main categories of exported goods by their nature

Main groups of exported goods	Group abbreviations
Mineral products (CN 25-27, 68-70)	MINERAL (for fig.), "Mineral" in the text
Machinery, electrical and other related equipment (CN 37, 84-89, 91)	MACHIN (for fig.), "Machin" in the text
Food, beverages and tobacco products (CN 02, 04, 07-09, 15-24)	FOOD (for fig.), "Food" in the text
Furniture and other miscellaneous articles (CN 49, 71, 90, 92-97)	MISS (for fig.), "Miss" in the text
Chemicals and pharmaceutical products (CN 28-36, 38, 54-55)	CHEM (for fig.), "Chem" in the text
Rubber and plastic products (CN 39-40)	PLASTIC (for fig.), "Plastic" in the text
Textiles, apparel, leather and related products (CN 41-43, 50-53, 56-59, 60-67)	TEXTILE (for fig.), "Textile" in the text
Agricultural products (CN 01, 03, 05-06, 10-14)	AGRICULTURE (for fig.), "Agriculture" in the text
Wood and products of wood, paper and paper products (CN 44-48)	WOOD (for fig.), "Wood" in the text
Metals (CN 72-76, 78-83)	METAL (for fig.), "Metal" in the text

Source: investigated and grouped by the authors

Secondly, the authors examine the annual growth or decline of exported goods for the chosen period, investigates key structural changes and trends in Lithuanian export structure. Due to globalization processes during the years 1996-2013, Lithuanian export competitiveness changed rather significantly, and towards different directions; i.e. some goods gained additional competitiveness, whereas the other goods had losses (Travkina et al. 2009).

The graphical picture of Lithuanian export during the period of 1996-2013 reflected upon the indicated categories of exported goods by their nature (Fig.3), first of all, reveals the growth of overall export during the 18-years period: the nominal value of export increased about 8 times¹; and the annual average export growth was at about 14 per cent². Secondly, this graphical view stresses the increase in all indicated categories of goods, and, herewith, emphasizes different tendencies of increase: significant growth and positive increase (Fig.4).

¹ Increase of nominal value about 8 times was calculated as "the nominal value in 1996 / the nominal value in 2013"

² Annual export growth rate is a measure of the rate of change that the export goes through from one year to the other. Annual average export' growth is the average of all calculated export growth rates for the period of 1996-2013.

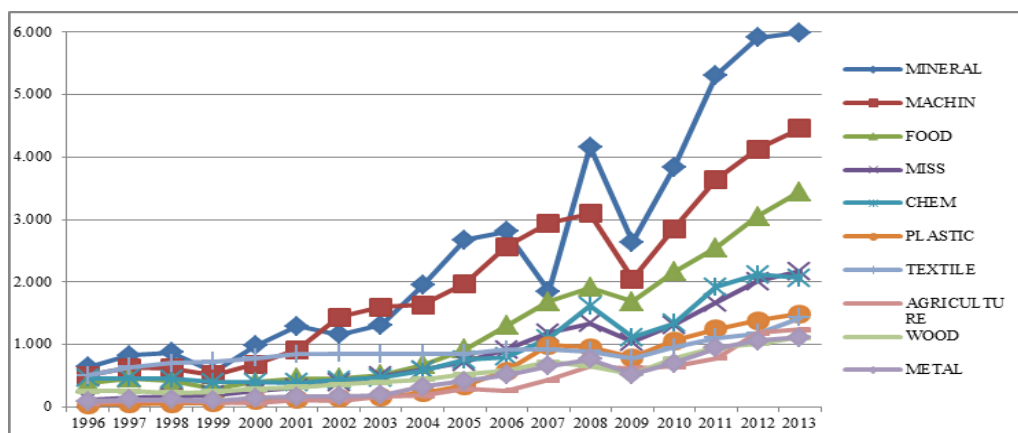


Fig.3. Lithuanian export during the period of 1996-2013 reflected by indicated categories of exported goods by their nature (Table 1), mln. EUR

Source: Absolute values are provided by the Statistics Lithuania (CN2), and conversion of LTL into EUR computed by the authors

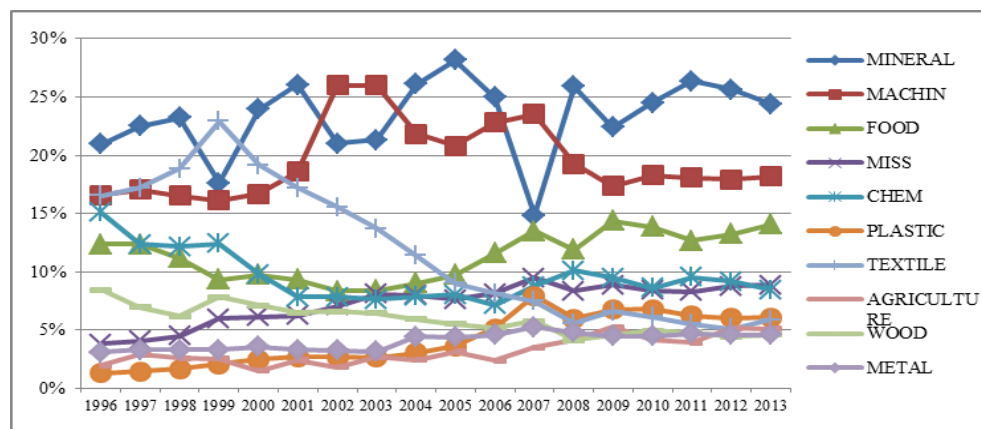


Fig.4. Lithuanian export structure during the 1996-2013 period reflected by share of overall export of indicated categories, by per cent

Source: Absolute values are provided by the Statistics Lithuania (CN2), and percentage expression of export structure and conversion of LTL into EUR computed by the authors

A close look at data presented in Fig.3 and Fig.4 lets the authors group particular goods regarding their performance during the whole period:

- According to the aspect of ‘*significant growth*’, the authors mark two groups: the first “Mach&Food” (consisting of Machin and Food groups; amounting to 1/3 of total export in 2013) and the second “Other” (consisting of Plastic, Miss, Agriculture, Wood, Metal groups; the Miss group includes such goods as furniture and other manufacturing). Fig.5 and Fig.6 present the summarized view on this assumption.
- According to the aspect of ‘*positive growth*’, the authors separate another two groups: “Chem” and “Textile”, as key Lithuanian industries in the late 20th century (details in Fig.5, 6).
- The group of exported mineral products is eliminated from the next graphical view (Fig.5, 6) because of the following assumptions: the manufacturer of mineral goods is not an equivalent player at the competitive international market, as compared to the other Lithuanian companies. The volume of the stock’s import and minerals’ export is determined only by one company “PKN Orlen”, and any structural factors mentioned before (as factor-input et al.) do not affect this volume.

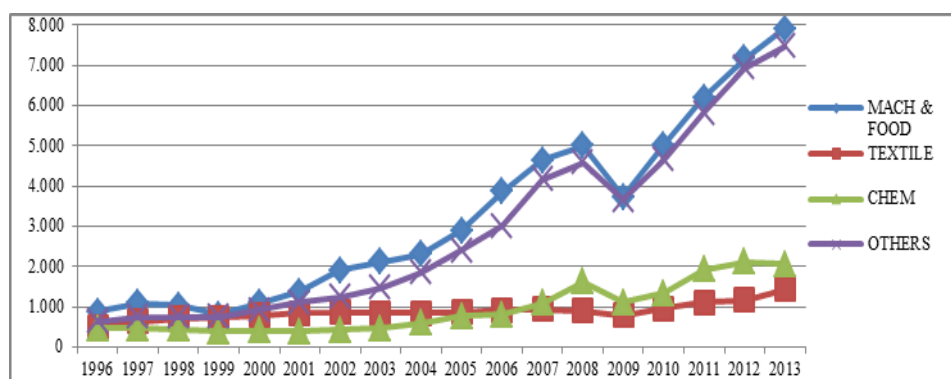


Fig.5. Lithuanian export during the period of 1996-2013 reflected by additionally summed indicated categories of exported goods by their nature, excluding mineral fuels (CN27), mln. EUR

Source: Absolute values are provided by the Statistics Lithuania (CN2), and conversion of LTL into EUR computed by the authors

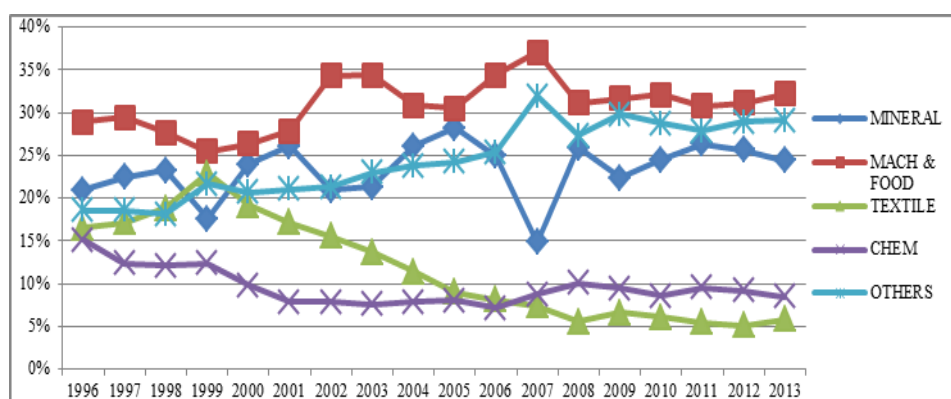


Fig.6. Lithuanian export structure during the 1996-2013 period reflected by share of overall export of additionally summed indicated categories, by per cent

Source: Absolute values are provided by the Statistics Lithuania (CN2), and percentage expression of export structure and conversion of LTL into EUR is computed by the authors

After in-depth analysis of export's structural variation by the nature of exported goods, the results indicate the following aspects:

- in "Mach&Food" group, there is *the significant increase* of their export value which is about 9 times larger during 18 years, with annual average growth rate of 15 per cent, as well as the further growth of their international competitiveness and significant share in Lithuanian export structure (1/3 of overall export in 2013);
- in "Other" group (as plastic, agriculture, wood, metal, furniture and other manufacturing goods), there is *the most significant increase* of its export value which is about 13 times larger during 18 years, with the annual average growth rate of 17 per cent, as well as the strengthening of their international competitiveness and occupation of significant share in Lithuanian export structure (1/3 of overall export in 2013);
- in "Chem" and "Textile" groups, there is *the positive increase* of their export value which is about 3 times larger during 18 years, with annual average growth of 9 per cent, as well as the weakening in their international competitiveness and loss of share in Lithuanian export structure from 1/3 in 1996 to 14 per cent in 2013.

At the first sight, the performance of groups "Mach&Food" and "Other" is mostly significant for the Lithuanian export and its competitiveness, because their share in overall export structure comprises more than 50 per cent during the whole period and presents regular double-digit annual growth with 16 per cent average growth rate, i.e. more than total EU-28 export average growth by 6 per cent for the same period (Fig.7). Facing this, it can be noted that goods from these groups went through particular transformations concerning their ability to compete

in the international markets and strengthened their international competitiveness more than the other goods. However, the demand for these goods is fluctuating: for instance, their volume increases during countries' prosperity period, and decreases during the recession time-span. Taking into consideration the high elasticity of export demand, the analysis of exported goods regarding their LT-origin and re-export aspects cannot be over-estimated.

The performance of the "Chem" and "Textile" groups has been discussed further as well. Noticeable, that its significance for Lithuanian exports becomes increasingly important during certain business cycles in Lithuania, i.e. on the initial stages of recession and during the prosperity period. In addition, the demand for these goods tends to be more constant than elastic.

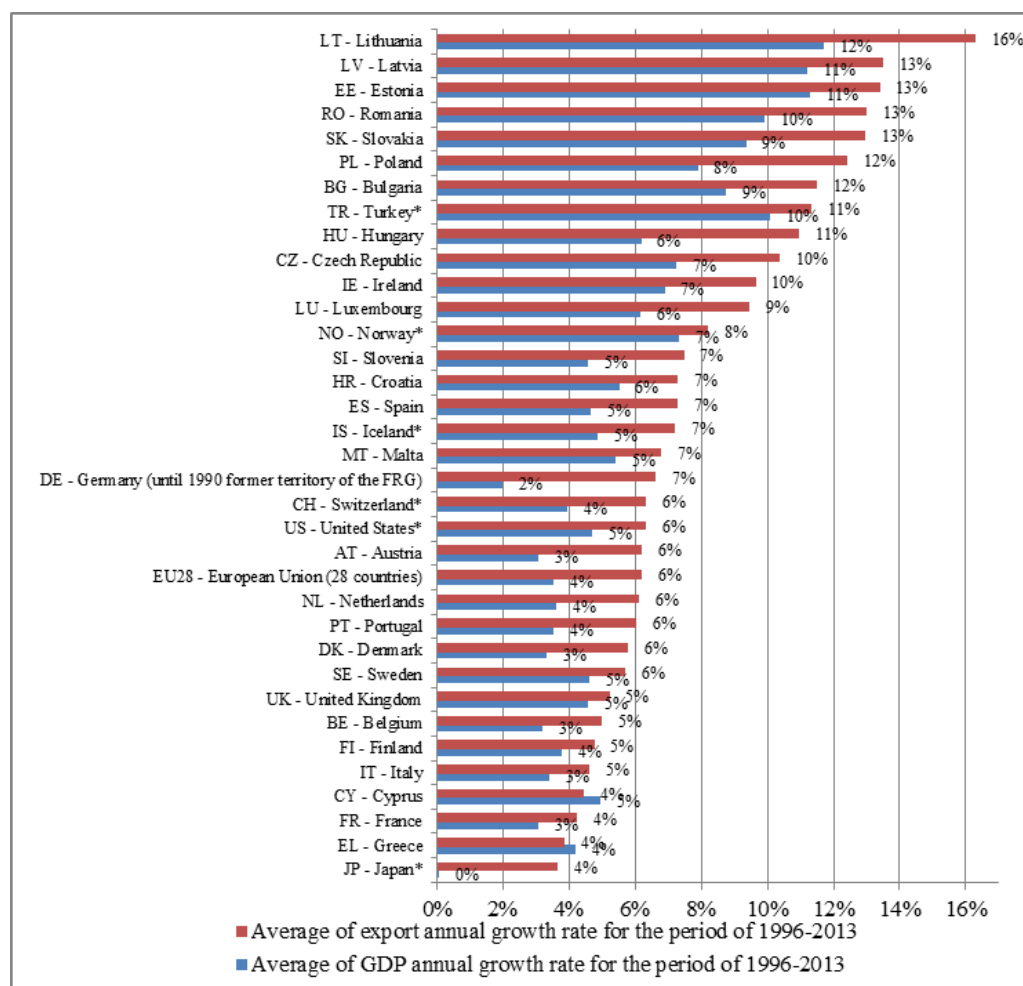


Fig.7. Annual average growth rate of GDP and export for the period of 1996-2013, by per cent

Source: Absolute values are provided by EUROSTAT, and percentage expression is computed by the authors

* - countries are not in the number of EU at the time of development of this dissertation

The conclusion the authors can draw from this review is that:

- Exported goods, which comprise more than 50 per cent of export, are as follows: food, beverages and tobacco products ("Food"); mineral products ("Mineral"), and furniture and other miscellaneous articles ("Miss"), rubber and plastic products ("Plastic"), agricultural products ("Agriculture"), wood and of products of wood, paper and paper products ("Wood"), and metals ("Metal");
- Exported goods, which comprise up to 15 per cent of export, are as follows: chemicals and pharmaceutical products ("Chem"); textiles, apparel, leather and related products ("Textile").

5. Analysis of Export Structure by Factor-Input Aspect

The classification is done based upon the typical combinations of factor inputs, incurred by industries, in order to produce goods. This classification is mainly used by EU researchers in order to gather information about differences across industries with regard to the dominant modes of building competitive advantage in specific marketplaces (Peneder 2002; European Commission, 2007-2014). In particular, the typology is directed towards distinction between:

- a) Exogenously given competitive advantage based on factor endowments, and
- b) Endogenously created advantage based on strategic investment in intangible assets such as marketing and innovation.

This classification known as the Taxonomy I was created by the Austrian Institute of Economic Research (WIFO) in a series of research projects undertaken on behalf of the European Commission in the preparation of its annual reports on European Competitiveness. Firstly this factor of Taxonomy I was applied in 1998 Competitiveness Report (European Commission 2014; Peneder 1995, 2002; Peneder et al. 1999).

The typology divides manufacturing industries at the 3-digit NACE-level in five industry types, according to the traditional factor intensity of labour and capital but also takes into account the inputs spent on research and development as well as advertising. A residual fifth category, labelled as mainstream, uses factor inputs in similar proportions with regards to the total manufacturing volumes. The five types are the following:

- a) Mainstream manufacturing (MM)
- b) Labour-intensive industries (LI)
- c) Capital-intensive industries (CI)
- d) Marketing driven industries (MDI)
- e) Technology driven industries (TDI)

As mentioned above, linking manufacturing structure to export structure requires sectoral classifications, which go beyond the official NACE classification. The latter basically establishes manufacturing sectors based on what they produce, while the analysis requires information on how manufacturers incorporate an input perspective into output indicators, in this instance, into exported goods.

The ratio table between international trade indicators as referred to the CN2 classification and manufacturing sectors referred to NACE-2-digit level of disaggregation, was prepared by the authors after completion of the in-depth studies of the Taxonomy I exports and annual reports on European Competitiveness.

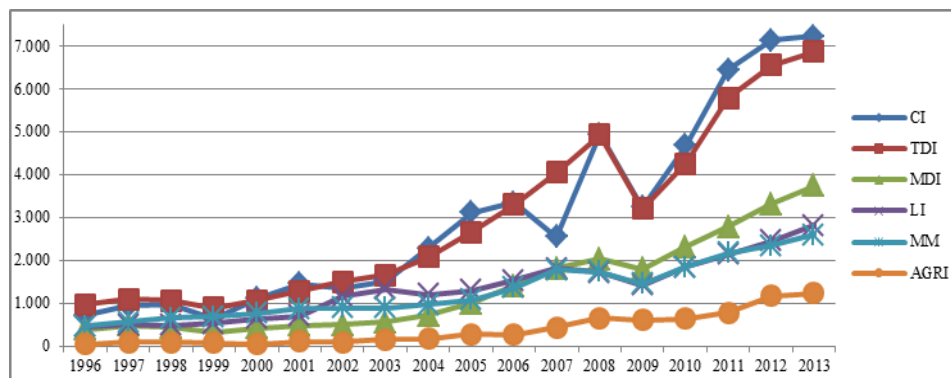


Fig.8. Lithuanian export during the period of 1996-2013 reflected from perspective of factor inputs in exported goods, mln. EUR

Source: Absolute values are provided by Statistics Lithuania (CN2), and the conversion of LTL into EUR is computed by the authors

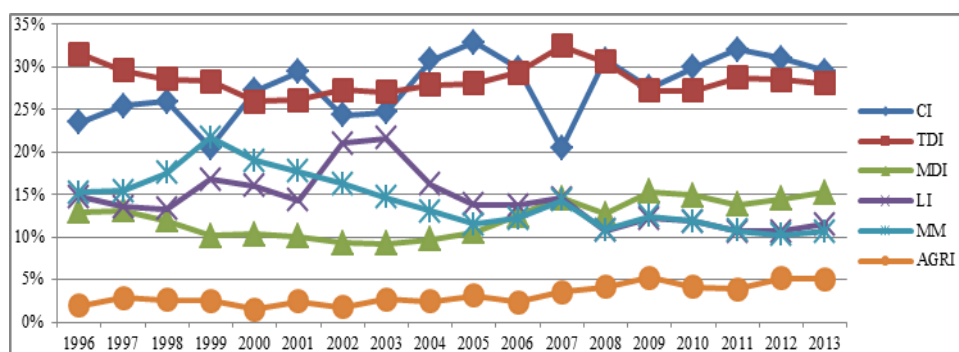


Fig.9. Lithuanian export structure during the period of 1996-2013 reflected from perspective on factor inputs in exported goods by share of overall export, by per cent

Source: Absolute values are provided by the Statistics Lithuania (CN2), and the percentage expression of export structure and conversion of LTL into EUR is computed by the authors

Figures 8 and 9 provide the initial graphical view of export structure regarding factor-input aspect: the significant share in the export structure is covered by goods produced by capital-intensive and technology driven industries. Notable that growing trend in the graph of goods produced by capital-intensive sectors is similar to the graph of mineral products' export ("Mineral") from Fig.3 (80 per cent of capital-intensive goods are mineral products by 2013). Considering the fact, mentioned before, that manufacturing of mineral products seems to be more 'monopolistic' sector, and the next graphical view presents the same export structure without mineral products (Fig.10, 11).

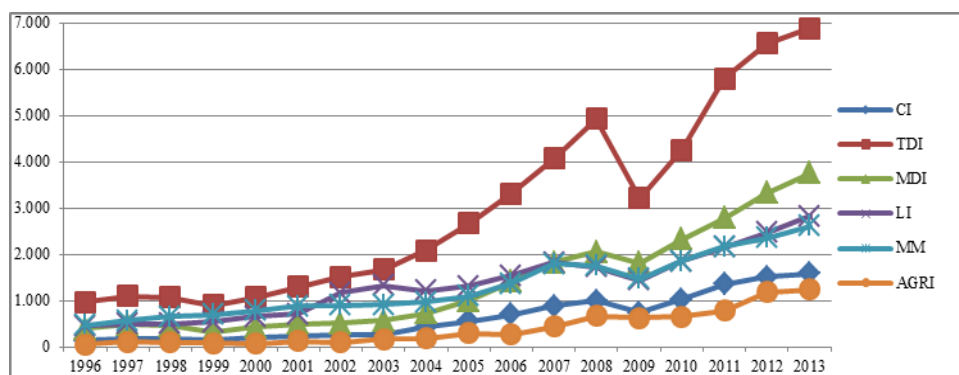


Fig.10. Lithuania's export during the period of 1996-2013 reflected from perspective on factor inputs in exported goods, excluding mineral fuels (CN27), mln. EUR

Source: Absolute values are provided by the Statistics Lithuania (CN2), and conversion of LTL into EUR computed by the authors

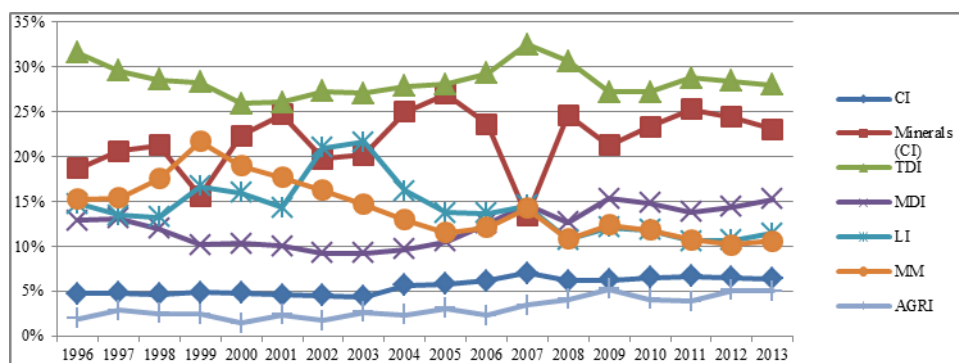


Fig.11. Lithuania's export during the period of 1996-2013 reflected from perspective on factor inputs in exported goods by share of overall export, by per cent

Source: Absolute values are provided by EUROSTAT, percentage expression of export structure and conversion of LTL into EUR computed by the authors

The elimination of mineral products from the export structure by the factor-input principle reveals a different view on the export structure: goods, produced by technology-driven and marketing-driven sectors are ‘favourites’ in export structure. Their growing demand for external markets has positive effect on the competitiveness of export. The technology-driven goods’ graph is rather similar to the “Machin” graph from Fig. 3 and 5: three fourths of the share of this group belongs to machinery, electrical and other equipment goods, and the other share – for chemical products. The group of goods produced by marketing-driven sectors also demonstrates significant growth of demand, particularly based on increase in “Food” and “Furniture” export demand.

Plastic goods, and – partially – textile and mineral goods compose the group of mainstream sectors export; a more vital part of wood, textile and furniture goods structure the group of labour-intensive sectors export. The annual average growth of exported goods produced by mainstream and labour-intensive sectors is similar to EU28 average presented above in Fig.7. The positive annual growth in manufacturing and decrease of their share in the total export structure indicate declining expansion, especially of textile products, to international markets, herewith declining competitive position of export.

The discussion therefore leads to conclusion that:

- a) The first observation, which has identified the importance of *capital-intensive* goods in Lithuanian export structure, was contradicted;
- b) Goods, produced by *technology-driven* and *marketing-driven* manufacturing sectors, i.e. machinery, electrical and other related equipment, also food, beverages and tobacco products represent a significant share in export structure. The elasticity of their export demand is quite high;
- c) The most significant elasticity of export demand is noticed in the dynamics of goods produced by *capital-intensive* sectors;
- d) Interestingly, export of *agricultural* and *labour-intensive* goods has a trend to be marked as *sustainable*, and had been as comparative competitive, supposedly, because of their specialization, which could be additionally proved by calculation and analysis of HHI index.

6. Analysis of Export Structure by Sectorial Composition

This part describes the evolution of the export structure and changes in its sectorial composition, attempting to identify the elements to examine the impacts of macroeconomic changes on the production structure, described above in part 5.

The discussions in the leading literature tend to emphasize the importance of industrial and export analysis, according to the output combinations in parallel with the factor-input perspective. On the other hand, the analysis based on sectorial composition has been used for particular, independent and commercial research, for example, aiming at identification of the HHI index for export, or seeking to determine the level of industrial specialization, etc. In this section, the sectorial composition of the export structure demonstrates to what extent the exported goods are changing: concerning commodities, traditional or technology-intensive character.

The comparative table between international trade indicators, as referred to the CN2 classification, and sectorial composition of manufacturing sectors, as referred to the NACE-2-digit level of disaggregation, was produced by the authors after in-depth scientific studies and Thomson financial security data (Rocha, Kupfer 2002).

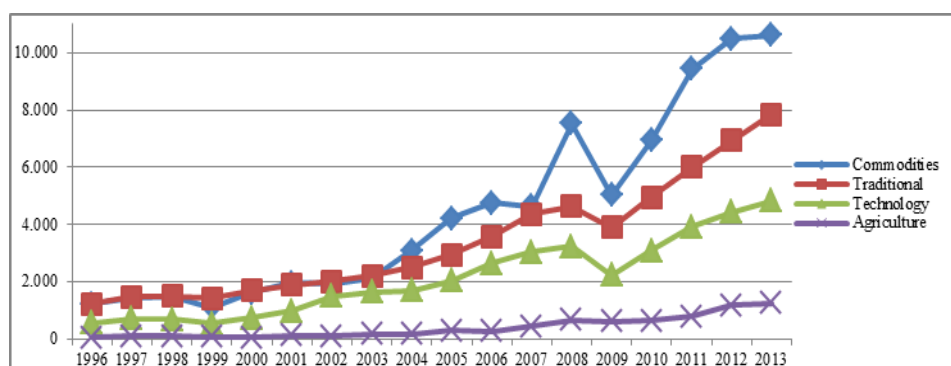


Fig.12. Lithuanian export during the 1996-2013 period reflected by sectorial composition of exported goods, mln. EUR

Source: Absolute values are provided by the Statistics Lithuania (CN2), and conversion of LTL into EUR is computed by the authors

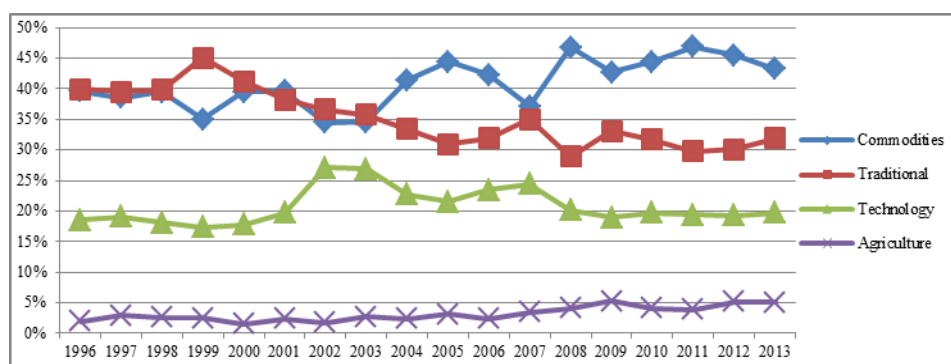


Fig.13. Lithuania's export structure during the period 1996-2013 reflected upon sectorial composition of exported goods in overall export, by per cent

Source: Absolute values are provided by the Statistics Lithuania (CN2), the percentage expression of export structure and conversion of LTL into EUR computed by the authors

A first look at the data presented in Fig. 12 and 13 illustrates the predominance of the commodities export. Its share in the overall export structure is topping during the whole period and accounts for 35-45 per cent of the overall export. The group of commodities consists of chemicals, wood, mineral and metal products. The share of goods presented by the 'traditional' sectors, such as food, textile, furniture and other manufacturing products, shows the decrease in the position by 10 percentage points during the 18-years period. It is noticeable that technology-intensive goods (mostly machinery, electrical and other related equipment) and agriculture products occupy the least, but rather stable share in the overall export.

Taking into consideration the series of research, presented in parts 4 and 5, the authors further present the following graphical view excluding mineral fuels (Fig. 14, 15).

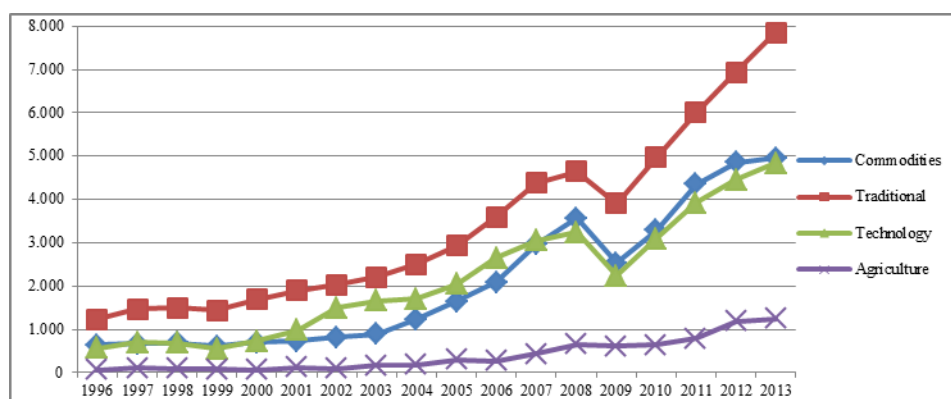


Fig.14. Lithuanian export during the period 1996-2013 reflected by sectorial composition of exported goods, excluding mineral fuels (CN27), mln. EUR

Source: Absolute values are provided by the Statistics Lithuania (CN2), and conversion of LTL into EUR is computed by the authors

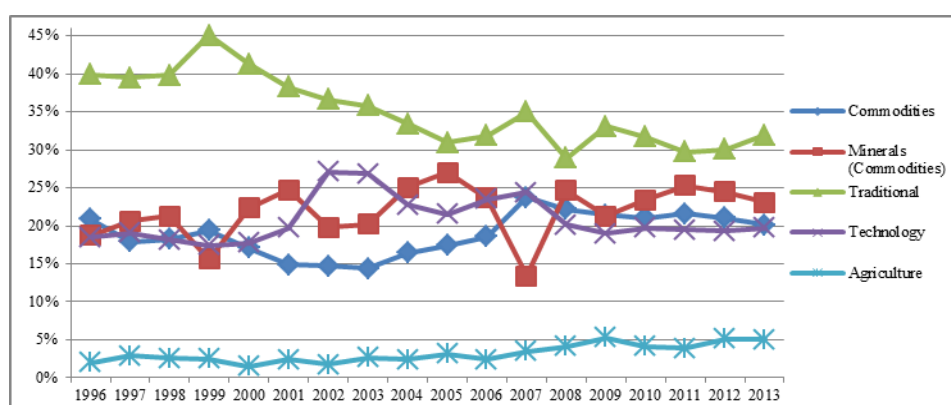


Fig.15. Lithuania's export structure during the period 1996-2013 reflected upon sectorial composition of exported goods in overall export, by per cent

Source: Absolute values are provided by EUROSTAT, percentage expression of export structure and conversion of LTL into EUR computed by the authors

Upon excluding mineral fuels, the evolution of the export structure and trends of changes in its sectorial composition was possible to examine. Notably, the most important for Lithuanian export are traditional industrial goods like food, textile, and furniture. Commodities and technology-intensive goods comprise the second significant group for export.

The performed analysis allows concluding that:

- The export structure is slowly changing from the specialised into the so called traditional industries comprising diversified structure. Today the important role goes to traditional goods, but the position of commodities and technology-intensive goods is growing.
- The classification by sectorial composition shows the high elasticity of the export of industrial goods's. The analysis presented in parts 4 and 5 had predicted this possibility, and the analysis from this part gives the evidence to the main exported goods' dependence on business cycles and the high impact of macroeconomic changes over the output structure. This assumption could be the area for further research.

Conclusions

After in-depth analysis of export's structure, the results indicate the following aspects:

- 1) The structural analysis by the nature of exported goods provided in the part 4 shows, that relation between export structure and export international competitiveness have been revealed.
 - a. The *strongest positive relationship* is between "Other" group of exported goods (as plastic, agriculture, wood, metal, furniture and other manufacturing goods) and its strengthening of international competitiveness.
 - b. The *positive relationship* is between "Mach&Food" group of exported goods and their furtherance growth of international competitiveness.
 - c. The *failing relationship* is between "Chem" and "Textile" groups of exported goods and their weakness in the international competitiveness.
- 2) The structural analysis from the factor-input perspective of exported goods provided in the part 5 shows, the country exports the significant share of goods produced by *technology-driven* and *marketing-driven* manufacturing sectors, i.e. machinery, electrical and other related equipment, and food, beverages and tobacco products. The significance of *capital-intensive* goods characterised as high elastic for export demand, was contradicted. Except, the export of *agricultural* and *labour-intensive* goods has tendency to be marked as sustainable, and has been as comparative competitive, supposedly, regarding their specialization.
- 3) The analysis of export structural evolution and of its changes in sectoral composition of output provided in the part 6 shows, export' output structure is slowly changing from *specialised into traditional industries to diversified structure*. Today the important role has *traditional goods*. The position of *commodities* and *technology-intensive* goods is slightly growing.

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