

INDUSTRIALIZATION LEVEL AND EXPORT PERFORMANCE

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Abstract. This paper researches of newest tendencies of innovation and business climate in Latvia and Baltic states. The main goal of this paper is to evaluate innovation strategies for export in order to identify successful innovation behaviour. In Latvian industrial low value added branches are dominated. Various studies show that the economy is changing stereotypes, when the driver for growth becomes the most significant creative ideas, knowledge and ability to reinvent. Basis for further successful economic development lies in the innovative development model and behaviour, which is an important competitive factor in the crisis. Comparing different literature, analyzing innovation strategies, we seek for the most crucial properties that have been the most successful in innovation behaviour. It is important to consider the situation in Latvia in respect of creativity and innovation, i.e. the industries with intensive human resource and their ability for sustainable development. We analyze innovative behaviour as an aspect that influences the export activity.

Keywords: innovation, production branch, knowledge management, GDP, innovation scoreboard.

Jel classification: E01, E23, E64, O31, O33, O38

1. Introduction

Innovation level is very important aspect of the competitiveness of a company or a country, thinking about competitiveness we need to intensify the importance of technological innovation to sustain long-term economic growth. Analyzing the competitive advantages of the developed countries usually mention technological level.

The object of this paper is companies' innovative strategies. The aim of this paper is to analyze the crucial aspects of innovation strategy that influence the export growth of the companies, especially to identify commonly successful aspects in the innovative behaviour. Our main hypothesis is that the same innovative strategy has different results in export growth from positive to negative, based on the type of the company's product innovation strategy; this hypothesis is based on the results of the existing literature that shows such relationships, both for developed and developing countries.

There are two methods used in research to test our hypothesis by observing how growth and exports from developing and from industrialized countries differs in relation to innovation behavior. Another method is to test the hypothesis, by conducting the exploratory research in recent studies.

Second method was chosen as basis to analyse the empirical studies provided strong support for the exports from developing and industrialized

countries. It is possible to identify the existence of a relationship between export instability and some successful aspects in innovative strategy.

Empirical findings in studies prove that the export instability of a particular product is not necessarily the same for every exporting country. Thus, factors such as competition from other suppliers, the development of technology in industrialized countries' have (Love 1983).

Nearly all studies report an increasing relationship between different performance measures and innovation output (Duguet 2002).

The broad number of studies indicate that more innovative companies seem to be more competitive, nonetheless that the empirical evidence is not totally conclusive it seems that both in developed and in developing countries innovative activities do influence the export probability, and it is expected that company needs a minimum level of innovation in order to be competitive on the world market, and so the less innovative level company has the lower export probability. Moreover many studies point out that innovative behaviour of the companies has a diverse and broad range of indicators of the innovation processes whose affect the export probability.

Firstly we analyze a modern model (section 2) presenting innovation behaviour as a set of certain activities, then compare existing literature, followed by an explanation of influence these activities have on export probability and successful ex-

porting, also general background for Baltic states are given. Next section (Section 3) reflects certain positive or negative effect between certain innovation behaviour and export probability. Last section (Section 4) offers with some remarks about the interpretation of the relationships of the standard model and includes the main conclusions and interpretations of our work.

This paper analyzes the aspects that influence the export of the companies in developing countries with special attention to their innovative behaviour. The literature shows such a relationship both in developed and developing countries. Although the relationships in both type of countries are not always the same, probably due to the contrast between the importance of innovation for the production process and international competitiveness reflected in companies' innovative strategies, and as mentioned above, especially in the case of product strategy. Most companies in developing countries have a product specialisation strategy - based on low wages and process innovations of standardised and incrementally improved products- to compete on the world market while the enterprises of the developed countries and of some specific sectors of developing countries do have a product innovation strategy.

So an important conclusion for the comparison of the outcome of different innovation strategies, are these differences those probably explain negative results in company behaviour. In some models we are trying to analyse the possible explanatory factors of export probability, the main conclusion shows that innovation efforts have a positive impact on export probability, but there is also an interesting conclusion that product diversification has a negative influence on export probability in developing countries such as Latvia.

2. Background

As already mentioned, the broad of literature shows us that a higher innovative intensity increases export probability (Wagner 1995, 2001; Wakelin 1998; Smith *et.al.*2002; Basile 2001; Soderbom, Teal 2000; Lefebvre *et.al.* 2001). In order to understand what properties of innovation behaviour has been more successful and has positive effect we need to group them under aspects of innovation behaviour in Table 1.

In our research based on analysed studies we found that mostly, as the result of empirical findings, a positive effect between innovation efforts and export probability is discussed.

Table 1. Aspects of innovation behaviour (Based on Basile 2001; Rankin 2001; Sterlacchini 1999; Wagner 1995)

INNOVATIVE BEHAVIOUR
R&D efforts (Expenditures by sales, formal R&D activities, R&D strategies)
Acquisition of incorporated/non-incorporated technologies New machines, equipment, production(manufacturing) technology/ (Licenses for patents, royalties or agreements for know-how transfers, technological services, consultancy, etc)
Human capital
Other innovative activities (Product Engineering, design, improvement of products or processes, marketing, training and formation etc.)
Innovation/Technological results (Patents, innovation, new products, percentage of sales related to new or improved products, etc.)
Product Diversification
External relations and networking

The high R&D intensity means a more complex innovative activity- and the number of engineers by total employment, which can be interpreted as a measurement of innovative effort related to more simple innovative activities or as an indicator for the presence of human capital. For example, the data of Kumar Siddhartan (Kumar 1994) indicate that R&D is only important to predict export behaviour in Indian companies with a medium or low technological level. They conclude that it is almost impossible -for companies of developing countries- to obtain competitive advantages in the high-tech sectors. Probably the companies in developing countries use R&D to adapt the existing products and improve their quality (Zhao *et al.* 2002).The studies of the companies in developed countries -using a broad range of different indicators indicates that the presence of highly qualified human capital increases export probability. In this paper we do not discuss this aspect.

The acquisition of technologies as an aspect for export behaviour is analysed by a large number of studies. The studies include, on the one hand, the investment in incorporated technologies (usually new machines and equipment), the capital intensity, and the improvements in the production technology as well as the acquirement of non-incorporated technologies (licenses, know-how, technological services, consultancy, etc.) especially in the case of developing countries. (Sterlacchini 1999; Basile 2001; Rankin 2001; Wagner 1995)

Most studies show a positive relationship between the innovative level and the level of the company affected by acquisition of incorporated technologies on the probability to export (Kumar

1994, Sterlacchini 1999, Wakelin 1998, Van DiMk 2002). The positive influence of purchasing incorporated technologies on export behaviour is explained by the existence of learning and the scale effects related to the introduction of new machinery and equipment (Wakelin 1998; Van DiMk 2002). This means that a higher degree of capital intensity (as a measurement for incorporated technologies) does not improve the export behaviour of low or medium tech companies or, even has a negative effect, while for some of the high tech sectors investment rates do spur export behaviour. In these sectors labour-intensive processes appear to be inefficient despite low wages (Kumar 1994). Talking about Innovation/Technological results, we see that aspects reflecting the acquirement of technologies are mainly related to the innovation process. Companies more oriented to the national market seem to have a higher level of diversification based on innovation, the introduction of a higher number of new products, a higher level of sales related to improved products and they produce a broader range of different products (diversification strategy).

On the other hand, those companies that specialise in one sole product are more dynamic on the international market. Taking into account the role of innovative behaviour in the modern models, we observe product differentiation or marketing is some unstable and possibly has contradictory results. The question is if these instabilities generate problems, or reflect the particularities of different type of companies. E.g. the apparent contradictory results reflect the different role of some specific aspects of innovative behaviour in different type of companies (Roper, Love 2001).

The economic situation in the Baltic countries has been more positive than in most other advanced economies over the last year (Eastern European outlook 2010). The Baltic countries have successfully managed to return to growth after a recession. After significant growth during the first half of the year, GDP forecasts improved for 2011, to 4.3 % and 4.2 % in Latvia, and to 6.3 % and 6.7 % in Lithuania and in Estonia, respectively. Although Latvia's economy has grown slower than Estonia and Lithuania during the recovery, in the second quarter growth accelerated (Swedbank... 2011). The euro introduction in 2014 is still included in government main scenario; however, there are considerable risks for the euro introduction, such as defeating inflation while cutting the deficit. In a worse global scenario, it may become more difficult to cut the deficit but easier to fulfil the inflation criterion. Even if there is a political goal to fulfil the euro criteria, challenges for Latvian economy will appear. In the second quarter of

2011, the Latvian GDP grew by 5.3% in annual terms (CSB 2012). Investments and consumption all contributing. The first-quarter growth was based on strong increase in export, improving the contribution of net exports to GDP growth. The situation with budget balance in Latvia looks rather confident in comparison to other world economies. As fiscal policy in Latvia in the years after EU accession was procyclical, the necessary reserves were not created. Consequently, the fall in tax revenues due to the recession, the government's need to lead out the largest domestically owned bank, forced Latvia to turn to the IMF and the EC for financing its expanding budget deficit. Unfortunately, too often the most attention is given to specific consolidation numbers, not to the specific result. The most important goal for the government is to return to a situation in which government revenues compensate expenditures. In March 2011 industrial output rose 1.4 % compared with February (EXIM 2011). Manufacturing showed the increase of 3.7 % achieved in manufacture of computers and electronic equipment, metal products, wood and wood products, pharmaceutical and chemical products, which in March reported growth by more than 6 %. Due to a lower base effect in annual terms industrial output in March grew by 9.8%, of which manufacturing industry posted an increase by 12.5 %. Therefore the growth of industrial output in annual terms will decrease. Although domestic consumption is gradually recovering and thus allowed increase turnover in the local market. Industrial growth in Latvia mostly depends on exports, including the increase of prices for the exported products. The price growth indicated over the last year in a number of production industries has allowed raising the profits without increasing output. For example, in 2011 Q1, excluding the impact of pricing – in constant prices, exports grew by 21.1 %, and imports – by 23.9 % (SEB Unibanka 2011). The biggest growth was observed in the group of intermediate consumption goods. However, the price increase strategy cannot be exploited permanently and will have to be replaced with rising of competitiveness by increasing the production capacity and boosting of productiveness. Latvia meanwhile is following the well-beaten path of increasing the quantity of existing goods and raising the prices. The growth of manufacturing industry will depend on the ability of businesses to increase the sales of their products in the foreign markets, the demand in which is steadily rising; in 2011 the manufacturing volume may increase by 8-10 %. In March exports of goods made another record exceeding the mark of 500 million. Compared with March 2010, exports have risen by 38.5 % to 502.9 mil-

lion lats. Even faster growth of 39 % has been registered in imports. Consequently, in March foreign trade balance deteriorated and a deficit of 122.3 million Ls appeared (Foreign trade portal... 2011). Significant growth was observed in manufacture of metal where exports rose by 72.6 % compared with March 2010. In the coming months the export growth rate will gradually slow down apart from separate monthly peak performances. It should be noted that Latvia's export volumes still lag far behind those of the other two Baltic States.

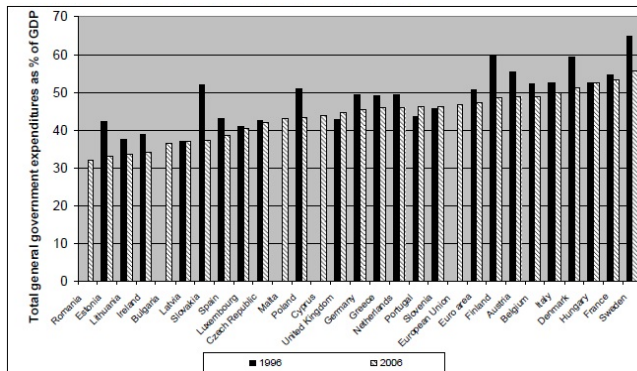


Fig.1. Level of public spending (1996, 2006) as percentage of GDP (Source: Eurostat)

As in Latvia's exports mostly the goods with low added value are dominating. There are several empirical connections between economic development and fiscal policy. First, the relative size of government trends upward as an economy develops a phenomenon that is known as Wagner's Law. This feature is exhibited in Figure 1, which gives the historical ratio of government purchases to GDP, averaged over 29 currently developed countries (Wagner 1995).

Second, economic growth rates have typically risen, or at least remained constant, in the face of strong upward trends in taxation and government expenditures (Glomm, Ravikumar 1997). Finally, the relative size of economy differs significantly across countries at similar levels of development. Tax rates and government expenditure level in today's developing countries are not much below those of today's developed countries. Tax policy worldwide is influenced by the globalization process and the greater international mobility of economic activity, as capital and labour are now easier to move across the borders. The general trend worldwide is thus to use expenditure taxes (e.g., value-added tax (VAT), excise) more than income taxes (Myles 2009). The latest OECD study of possible tax responses to the financial crisis argues that the focus should be shifted to property and general consumption taxation (the taxes least harmful for growth) (OECD 2009). The key problem with the current tax system in Latvia is that,

although the total tax burden is relatively light (ca 30 % of GDP vs. an average of ca 40 % in the EU25), it is not well-balanced, and distorts the economic structure and the motivation to pay taxes. There is a relatively high tax on wage income, which is subject to tax evasion due to difficulties in collection. The personal income tax rate is flat at 23 %, although due to tax allowances the effective tax rate is progressive in its essence. Comparing tax revenues in Latvia with the average EU level, it can be seen that capital taxes currently constitute a much smaller part of government revenues, while the shares of labour and consumption taxes are closer to the EU average. At the same time, the implicit tax rate on labour in Latvia is only 31 % (36 % in the EU25). In order to receive further funding, the Latvian government needs to fulfil the obligations to which it has committed. The general government budget deficits are capped at 10 % of GDP (ESA basis) in 2009, 8.5 % in 2010, 6 % in 2011, and 3 % in 2012. Production prices have been growing since the last quarter of 2010, founded heavily on a pickup in labour costs, while other inputs (machinery and material) have grown only marginally.

3. The results

There is no doubt about the fact that innovative behaviour is an important explanatory factor for export probability. We made clear that innovation is important to explain export behaviour, however, in addition to this literature we state that there are some significant differences in innovation strategy for developed and developing countries. We analysed seven aspects of innovative behaviour (Table 1), the more innovative the company is the higher its export probability, although there are some interesting contradictions.

The relatively low export probability of companies with a low innovative effort -reflected by the purchase of machinery and equipment or the number of engineers or new products- can also be interpreted by taking into account the particularity of innovative activities. The theory shows that innovation - especially R&D - is an activity with a high level of indivisibilities (Arrow, Kenneth 1962), which requires a minimum level innovation to make it profitable. The companies with a low level of innovative activities probably do not reach the critical mass or minimum threshold that makes innovation profitable for the world market as reflected in export activities. However, companies that clearly have innovation activities are competitive at an international level. So, on the one hand, the company needs a minimum level of innovation and therefore the less innovate ones do not export.

This fact probably could explain the low export probability of less innovative companies. On the other hand, on the international markets a combination of an intermediate innovative level with low wages seems to be a good competitive strategy, especially for developing countries. The results of the standard model shows us that a higher innovative intensity (aspect of Innovation/Technological results), measured by R&D efforts by sales and by the number of engineers by total employment, increase export probability. Also contracting external services related to innovation has a positive effect on export probability (aspect of External relations and networking).

A negative effect was found in relation to the variables that indicate the results of innovative activities in sales (product diversification strategy does not increase their export probability). Companies with a high number of new products are usually more oriented to the national market. However, those companies that specialise in one product are more dynamic on the international market. The aspect that shows irregular results is the expenditures in marketing for new products by sales. This aspect is significant for the small, individual and medium companies. It seems that especially these type of companies need a marketing strategy to assure a positive image in the international market. As for the large companies (large companies, companies belonging to national or foreign groups or holdings) a diversification strategy does not increase their export probability. Also for new companies, this variable is not statically significant, possibly due to the low number of new companies that export. The positive relationship for the mature companies could be explained by their particular situation in which they have an established image.

Product specialisation is related to a higher export probability, however from the other side for some of the companies the higher export probability is related to a strategy of product differentiation and product development. This is the case for large companies with their financial and organisational power that possibly allows them to be competitive on the international market through a diversification strategy, whereas smaller companies have to specialise to compete worldwide. We find a negative relationship also for the medium sized companies; these types of companies usually need specialisation strategy based on a few relatively good products instead of a broad range of differentiated products. Concluding, the restriction based on diversification strategy, our general findings are regarded to the market orientation (domestic or foreign markets) versus the product specialisation or diversification. This indicates that the strategy of

product specialisation improves export probability for medium sized companies.

The results of the studies that analyses these companies (only large companies or only small ones, some specific sectors etc.) could be the result of the different role of those aspects and they explain apparently contradictory results.

Observing the results we can define two results groups. The first one includes results that reflect similar relationships to those found in the general model. Thus, the less innovative companies have the lowest export probability while the companies with an intermediate innovative level have more export probability. These general results were confirmed.

A second group of results are contradictory ones, where only one or the other aspect of the innovative behaviour shows a positive significant relationship with the export probability. The new companies, results show that most aspects of their innovative behaviour are not related to their export probability. For these companies the product diversification is negatively related to their export probability. This means probably that companies that invest to compete on the domestic markets have a strategy of product diversification while the international ones that invest to export competition of their product on the international market compete on prices and therefore produce only one or a few standardised products taking advantage of the low wages (in developing countries).

Leaving aside the R&D activities, acquisition of incorporated/non-incorporated technologies, human capital, innovation/technological results, external relations and networking (see section 2), we found some contradictions in product diversification strategy as a part of innovation strategy which positively affect export growth. As already mentioned, probably this relationship could be connected to the type of products they export, related to their position in the product life cycle. The innovation process-except R&D- is a way to increase competitiveness for standardised products. The purchase of incorporated technologies (acquisition or investment in machinery and equipment) or good human capital can bring down production costs. So more innovative companies are more competitive, that is, they have a higher export probability. So the product diversification strategy can bring down company focus on standardised products.

However, the fact that the most innovative companies -with the highest relative innovative efforts- have a lower export probability is more difficult to understand. A possible explanation could be that position of these highly innovative companies within the production chain is provid-

ers of exporting companies. A second reason could be explained by the fact that developing countries like Latvia compete on the world market by low prices and acceptable quality. They need innovative efforts to compete accordingly with their low cost strategy, however due to their limited innovative level it would be almost impossible to compete on the world market with an innovation strategy. Therefore it could be possible that the “highly innovative” Latvian companies are ready to compete in the local market rather than on export markets. The companies oriented to the local market have to compete with the most competitive national. These companies have to be more innovative than their competitors, because it is not possible to compete only with low wages and costs strategy in the home market, nonetheless their competitors have the some or slightly superior innovation level. Another explanation, not applicable to the Latvian case, could clarify is a relationship for small highly innovative companies in some specific developed countries such as Germany, Japan. In this case it could be that the most innovative companies do not export because the market of the highly innovative products needs a high level of income, or they are providers for larger companies, so their export is mostly indirect.

These are only several possible and reasonable interpretations of the contradictory relationship. Most of those studies indicate a positive effect of diversification and product innovation on export probability. This is not surprising because the developed countries compete on the world market not by price competition; rather they penetrate world markets by good quality and highly innovative products, while low wage countries offer cheap technologically standardised products with an acceptable quality.

Our result does not conflict with examined literature. But there are still insufficient amount of studies that analyse the innovative results for exporting in developing countries. Nevertheless, there is also a negative effect was found in relation to the aspects that should increase the results of innovative activities.

We need to look at diversification strategy. Companies from developing countries use diversification strategy that are more oriented to the national market, but from the other hand companies that specialise in just one product (most of their sales are generated by their main product) are more dynamic on the international market.

It could be explained by the fact that not all kinds of products can be easily traded on the international market, so the differences in export growth can be explained often by differences in the sectors the company belongs to. Some studies

decided directly to analyse only situations by sector while other studies include the sector as an independent aspect (Zhao et al. 1997; Basile 2001) but all of them find clear differences. Basile-using the same sectoral aggregation, based on Pavitt findings, - found a higher export growth for companies belonging to the sectors dominated by specialised suppliers and traditional or supplier-dominated sectors (Basile 2001). There specific sectoral differences, explained by the fact that most

In the innovation strategy models regarding the small companies -most of them specialised in one or a few products- do not reflect any statistically decent relationship between product innovation and export. The situation with large companies shows a positive effect between the number of new products and export probability. The companies belonging to an international group or holding show a positive relationship between the percentage of sales corresponding to innovated products and their national export growth. The medium sized companies and the ones with foreign capital show a positive relationship between product diversification and export.

Those differences in diversification strategy vs. export growth seem to be logical. The competitive strategy of larger companies (including those of international groups or holdings) is more often related to product innovation and diversification. The highly technological and science-based companies do not gain better export growth by introducing a lot of new products or diversification strategy; rather, their international competitiveness seems to increase by better incremental innovation reflected in product improvements. So our results have to be reasonable and introduce only a new aspect into the international literature about the explanatory factors of export behaviour and innovation strategy. Nonetheless, the product strategy as a part of innovation strategy should be analysed more broadly as causal and significant factor of export, especially in the case of the developing countries.

As for the differences in developing and developed country business climate, we need to note that the rise in government and taxation are associated with rising or constant economic growth rates. Today's developing countries have larger government sectors than did today's developed countries at similar stages of development (Table 2).

Table 2. Aspects of innovation behaviour which are significant for export activity. Developing vs Developed countries Source: authors)

INNOVATIVE BEHAVIOUR	Developing countries	Developed countries
Increase size of the company	Very Significant	Very significant
Company's age	Not important	Not important
R&D efforts (Expenditures by sales, formal R&D activities, R&D strategies)	Significant	Rather significant
Acquisition of incorporated technologies, new machines, equipment, etc)	Significant	Rather significant
Acquisition of non-incorporated technologies Licenses and etc)	Not important	Not important
Human capital	Significant	Slightly Significant
Other innovative activities (Product Engineering, design, improvement of products or processes, marketing, training and formation etc.)	not important	not important
Innovation/ Technological results (Patents, innovation, new products, percentage of sales related to new or improved products, etc.)	Significant	not important
Product Diversification	not important	not important or negative
External relations and networking	Significant	not important

The increasing rate of government investment works against the diminishing returns to investment, and may result in a constant or even rising growth rate. Thus, fact may also simply be a by-product of the economic transformation. The economic transformation increases the tax base, leading to a rise in tax rates. The rise in both the tax base and tax rates increase the rate of government investment over time, which helps to offset or mediate the diminishing returns associated with a growing stock of public capital.

Governments that place less weight on the private sector's welfare will set higher tax rates. As noted by Glaeser, LaPorta, Lopes de-Silanes, (Glaeser *et.al.* 2004), almost all developing countries after World War II were dictatorships. A lack

of institutional constraint on executive power is likely to be correlated, although not perfectly so, with relatively low regard for private sector welfare. Acemoglu, Johnson, Robinson and Yared (Acemoglu *et.al.* 2006) provide evidence that Europe and its Western offshoots had institutions that placed constraints on executive power early on in their development, where currently developing countries do not. Thus, the relatively high tax rates of currently developing countries could stem from a government with relatively few institutional constraints on its power. Thus, high tax rates may appear in developing countries that fail to limit the disproportionate influence of the wealthy. To the extent that this combination is commonplace among developing countries.

Concluding our research, first of all we observe that as one of the successful aspects of innovation strategy on the one hand, the company needs a minimum level of innovation and therefore the less than crucial minimum innovate ones do not export. This fact probably could explain the low export probability of minimum level innovative companies.

On the other hand, on the international markets a combination of an intermediate or minimum innovative level with low wages and cost level seems to be a good enough competitive strategy, especially for developing countries. We could observe that this strategy is commonly accepted by the companies in the developing countries. As we see usually in developing countries, one of the key factors is size of the company, which from our point of view give "economy of scale" advantage to reduce costs. Next important aspects are R&D activities and new equipment, we think that these aspects usually also affect cost level as new methods of production gained by R&D and new equipment possibilities are common secondary suppliers' strategy. So we can conclude that secondary suppliers in developing countries concentrate mostly on Cost Advantage as one of three sources of competitive advantage. Product differentiation and transaction advantage are giving small or negative effect on export activities. For the secondary suppliers resources are always limited, and they have are limited possibilities for R&D activities.

On the other hand, companies in developed countries use all of competitive advantages in order to increase company value and export volumes. They usually concentrate on high value added products, thus increasing investment and innovation results and giving less attention to new equipment. We think that it is more effective to outsource hard work to secondary suppliers who are usually "cost masters". Transitional advan-

tages are more costly and ask for sophisticated knowledge and change management, both know-how and experience, but cost advantages usually require less expensive and quickly accessible traditional management. Companies in developed countries have better experience and knowledge management traditions, so they have more advantages as they are not only owners of the patents and intellectual property, but they also have good outsourcing possibilities working with secondary suppliers.

As one of the interesting result we observe that product differentiation strategy is not key factor for both developing and developed countries. We think that the main reason is in globalisation era, as new technologies are emerge quickly to markets and there are very few of the companies who are able to maintain high level of cost and transaction advantages for many products. We think that products differentiation strategy is in a direct relationship with company size and so the amount of recourse it has.

Nowadays, as one of the inhibiting factors, currently we see that developing countries have high tax rates and government shares relative to their state of development. The analysis also shows that high tax rates and government consumption at early stages of development can slow the structural transformation and economic growth of exporting companies, and the size of government expands as an economy develops over time. So for the companies in developing countries this is a heavy burden for R&D activities.

In this paper we confirmed the importance of innovative activity as key factor to compete on the world market. This conclusion was confirmed by variety of studies. Also we faced the difficulties in comparing results of the existing literature and in fact the sometimes apparently contradictory results could be explained by the particularities of each of the studies. This was especially so where different studies use different kinds of companies and strategies (large versus small companies, or specific sectors are discussed). This problem was clearly confirmed by the different outcomes from the several models in the studies.

The results of the standard models in studies show that innovation and highly qualified human resources would be a method to reach the international standards of the world market and therefore it is necessary to compete in export markets. We analysed the results of the standard model in the existing literature and found that they are very similar to those of other studies and, and more important, it seems that the existing differences could be interpreted. This paper confirms that the least

innovative companies have the lowest export probability; this relationship is reflected by the number of studies and has no contradictions. Innovation results give for company crucial key for both popular strategies – transitional advantage and cost advantage.

On the other hand, as crucial contribution in identifying commonly successful aspects in the innovative behaviour, the paper defines a certain negative effect for two aspects (product diversification and the size of the company) on export probability. So the companies most specialised in only one or a few products (percentage of sales related to the main product) are more competitive on the world market than the companies with a broad range of products, but regarding the company innovation strategy and size. So the bigger company is the more possibility for successful export activity using diversification strategy. And, of course, diversification strategy has a certain negative effect for the developing countries as secondary suppliers lack on recourses.

4. Conclusions

Our final conclusion is that the innovative activities are related to export; in order to shift for company from the cost advantage strategy to more sophisticated transitional advantage strategy decent innovation strategy are required. New Flagship Initiative Europe 2020 (Innovation Union) could give significant instrument to reach that goal. By taking benefits from Innovation Partnerships available from this initiative, company could reach ultimate goal – to be perfect in all of competitive advantages. We understand that the interpretations for the relationship presented in this paper are theoretical and abstract recommendations do not allow us to clearly define them. However, the modern studies did not specify the strong linear relationship either. Nonetheless, the product strategy as a part of innovation strategy should be analysed more broadly as causal and significant factor of export, especially in the case of the developing countries. As a first step of our research, due to the limitations in our data in this research we were unable to identify do these aspects as part of innovation strategy is critical for high export performance in Latvia, and therefore authors are forced to use in future researches more empirical analysis presented from Latvia's manufacturing branches. This means that the relationship between innovation and international trade has to be analysed more broadly for Latvia.

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