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Productivity and its Impact on the Competitiveness of Latvia

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Abstract:

Productivity is the main key factor for Latvia to increased prosperity, ensuring efficient use of resources. Due to limited availability of resources and the increasing competition in the global markets, it is important for Latvia to support its economic growth through increased productivity.

Since 2010 the productivity of Latvia's economy has been at the level of 40-45% of the EU average (Eurostat Database, 2017). A further increase in labour costs is inevitable in the open labour market conditions, therefore, strengthening the competitiveness of Latvian is largely determined by the ability to reduce the productivity gap with the advanced economies.

One of the main challenges for Latvia is the creation of new competitive advantages that are associated with investments in the latest technologies, innovation, research, human capital, efficient allocation of resources and redistribution that comes with the behavioural changes of economic subjects. Economic structural transformation process is largely dependent on the quality of the institutional framework, which provides goods and resources market efficiency, minimizing the redistribution process costs and risks, thereby strengthening the country's competitive benefits.

The aim of the research is to assess the potential for productivity growth to improve competitiveness of Latvia to identify the main obstacles that limit the attraction of resources and redistribution of higher value-added products and prepare recommendations for policies on the micro, sectoral and macro level.

Research has high practical value that is related to OECD recommendation to monitor productivity in Latvia.

Keywords: *added value, labour cost, productivity, structural transformation*

JEL code: *E61, O11, O47*

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1. Introduction

During the period from 2011 to 2014, the growth of the Latvian economy on average reached 3,8% annually, but in the last two years the growth has slowed down (Ministry of Economics, 2016). During post-crisis period Latvia's economy has experienced significant macroeconomic adjustments (including stabilization policies) that prevented economic imbalances, but they were insufficient to increase productivity and strengthen competitiveness, which are the main prerequisites for a stable growth momentum to ensure the prosperity and convergence. In the future Latvia needs a sustainable economic model where the ability of production of goods and services with higher added value is essential and that would generate higher income (Jēkabsone and Skribāne, 2016; Dzhukha *et al.,* 2017; Frank *et al.,* 2016).

Economy with high added value leads to economy with high productivity level which is a necessary precondition to increase welfare. Unfortunately, Latvia's competitiveness is still based on cheap labour advantage. But we must consider that increasing labour cost is inevitable process in the open labour market conditions. This means that Latvia could lose low labour cost advantage faster than gain higher added value production. This is known as poor balance and delay in this situation increases the probability to get middle-income trap with minimal convergence possibilities (Im and Rosenblatt, 2015; Thalassinos *et al.,* 2013; Havlicek *et al.,* 2013; Tyaglov *et al.,* 2017; Ryzhkova and Prosvirkin, 2015).

Therefore, Latvia's sustainable convergence and competitiveness can only be ensured by reducing the productivity gap with the advanced economies. Productivity growth rate is slowing around the world - in the period from 2010 to 2015 the EU average productivity growth was 0.7% per year (Eurostat Database, 2017). Although Latvia's productivity growth rate in recent years was faster than the EU average, labour costs are above almost twice the rate of EU and therefor with negative impact on the competitiveness of local producers. Since labour cost inevitable will rise in Latvia, to keep international competitiveness it is necessary to increase productivity of Latvia and reach at least half of EU level within next 3 years.

The main research sources include the information available in the databases of the CSB and Eurostat, as well as the studies and publications on the productivity by the Ministries of Economics Republic of Latvia, Bank of Latvia, European Commission (Pashev *et al.,* 2015), OECD, World Bank and IMF (International Monetary Fund, 2014).

Results of the analysis highlighted the potential economic policies to improve productivity on the micro, sectoral and macro level. One of the main conditions for a balanced development of the economics is the ability to reduce the productivity gap, achieving the most rapid productivity convergence with the EU average, while maintaining high wage increase rates. This can be done either by attracting additional investments, which is currently problematic considering investors'

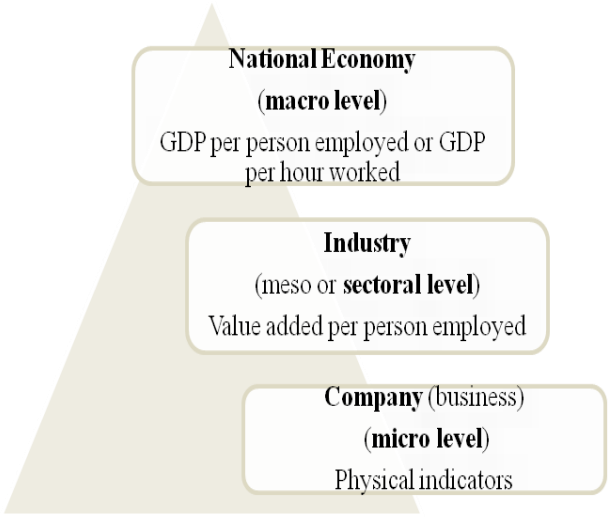
uncertainty, or to increase total factor productivity through structural reforms, improving innovation capacity, efficient use of resources and developing the high-tech industry.

2. Productivity concept and types

Productivity is not just about doing things more efficiently by "doing things right", it is also about achieving maximum effectiveness by "doing the right things". Thus, higher productivity can be achieved through efficient and effective use of resources such as labour, capital, and materials in the production of various goods and services. Productivity can be measured across various levels (e.g. national, industry, organization and operational) and different sectors (e.g. manufacturing and services).

On the national economy level, productivity can be estimated and expressed in GDP per person employed, which shows how much of the total income in a specified period is generated from one worker (Figure 1). Industry level productivity is measured as a value added per employee (by dividing the industry added value with the number of people employed), while the level of individual companies often uses a variety of physical parameters, such as the number of parts produced per 1 employee.

Figure 1. *Different levels of productivity*



Source: *author's construction.*

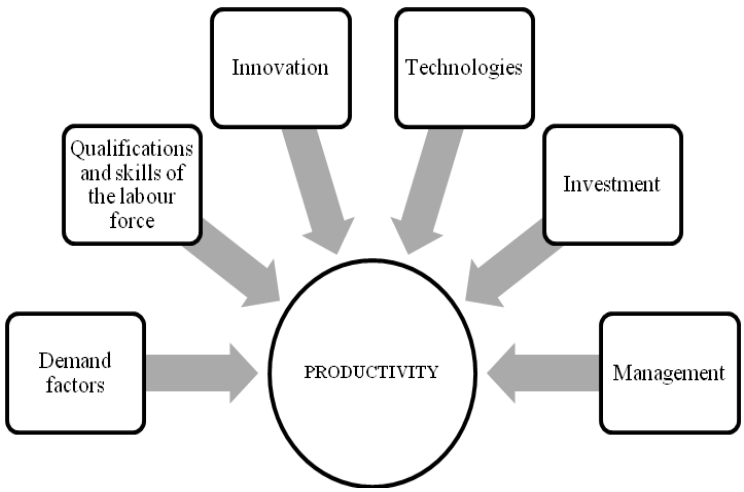
In general, for small and open economies productivity on macro level is determined by average value added of exports per one worker. Exports determine countries competitiveness – either it is based on high technologies or low cost competitiveness (Priede and Pereira, 2015). Export competitiveness in different industries of Latvia is affected by different factors but main challenge of higher added value remains

(Priede, 2011; 2013; Priede and Skapars, 2012). Export promotion is important topic for Latvia, since competitiveness cannot be ensured with internal demand and consumption. From year 2004 till 2007 Latvia experienced inflow of money without according actions to strengthen production and export promotion to repay the external funding. Until 2007 the government did not act to reduce macroeconomic imbalances, even though the unbalanced economic development and overheating was actively discussed by the society and economic experts (Jekabsone and Skribāne, 2014).

3. Productivity influencing factors

Literature review shows that productivity is linked to many influencing factors, starting with R&D spending and innovations (Lopez-Rodriguez and Martinez-Lopez, 2017; Minniti and Venturini, 2017), structural changes in the economy (Duguleana and Duguleana, 2016; Harada, 2015; Hartwig, 2015; Maudos *et al.*, 2008; Padilla-Pérez and Villarreal, 2017), ecological perspective (Yörük and Zaim, 2005; Mahlberg *et al.*, 2011), industry innovation and productivity (Ivanova *et al.*, 2017) and even quality management systems (Albulescu *et al.*, 2016). Factors that influence productivity are related to technologies, knowledge, exclusive resources (specific natural resources), prices of the resources (labour, electricity etc.), management, brand name and many other (Figure 2).

Figure 2. *Productivity influencing factors*



Source: *author's construction.*

The increase in productivity is determined by several factors, such as:

– structures that are related to scientific and technical progress in the role of intensification of production;

- socio-economic, which is mainly related to investment in human capital (education of human capital, training, knowledge, motivating people to be productive);
- organizational, which are related to the production process organization and management, production specialization and concentration of production territorially, as well as horizontal and vertical cross-link establishments (Jekabsone and Skribāne, 2014).

The main problem of all these above-mentioned activities is how to allocate investments to increase productivity between employers, workers, and the state. Technology development key contributions, of course, are done by operators. State aid is related to the promotion and scientific research base. However, it was the state that had a key role to play in development, but it also increases the individual contribution. Less developed is the collaboration between business and vocational education and lifelong learning programs and has its own reasons. Return from investment in business education is not clear and has a higher risk (the workers can change jobs, employee qualifications obtained by visiting these or other training programs may not meet a host of needs, it requires time). Organizational factors are mostly corporate responsibility. Latvia has currently poorly developed such macro-level measures, such as clusters and all related activities are not conscious of their role in increasing productivity.

In a well-functioning economy productivity growth drives:

1. global frontier firms innovate and these technologies diffuse to other firms, raising within-firm productivity;
2. efficient reallocation underpins the growth of productive firms, also via new entry and the downsizing and exit of less productive firms;
3. as the most productive firms gain market shares aggregate productivity grows.

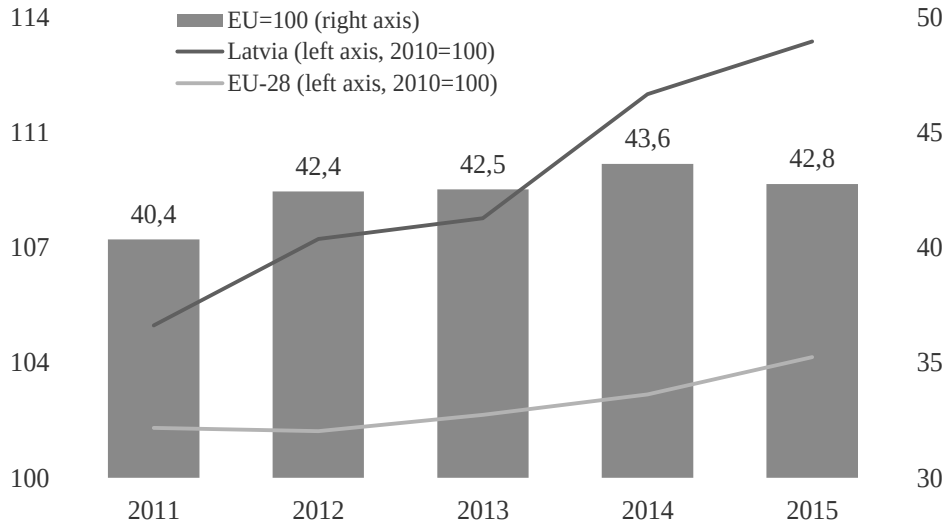
In the free market conditions these changes should appear in natural way. But in the reality, there are several obstacles for this to happen, like unfair competition, administrative barriers (“red tape”), etc. that doesn’t allow to relocate resources in the most efficient way - to the companies and industries with the highest efficiency and productivity.

4. Productivity and competitiveness of Latvia

After the global financial crisis, the model of economic growth in Latvia changed, the economy has become more stable and balanced because of macroeconomic adjustments and decreasing internal and external proportions. Nevertheless, in the rankings of competitiveness which are regularly published by the World Economic Forum (WEF), Latvia significantly lags other recent EU countries (the Czech Republic, Poland, Slovenia, Slovakia and the other Baltic States), and particularly in

indicators related to the development of innovation systems (Jekabsone and Skribāne, 2016). This is mostly because manufacturing is a small proportion of Latvian GDP and because of the industrial sub-sector's technological structure, where low technology industries are dominating (they amount to 60% of total manufacturing added value), altogether therefore there is such low level of productivity in manufacturing and in whole national economy (Figure 3).

Figure 3. *Productivity (GDP per person employed) in Latvia and EU*

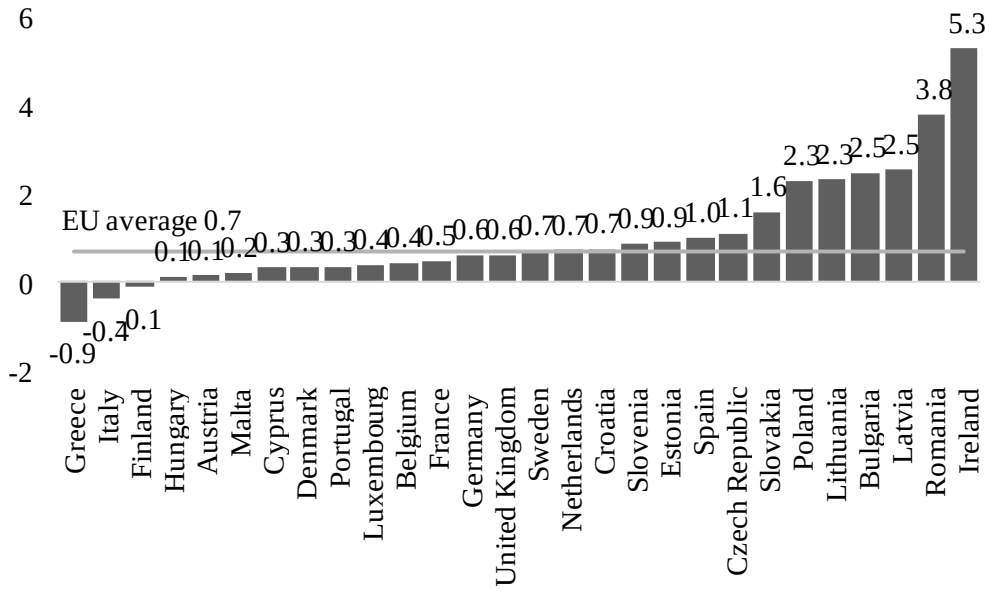


Source: *author's construction based on Eurostat databases.*

In 2015 GDP per hour worked was 55.8% from the OECD average, meanwhile GDP per capita was 59.5% (OECD, 2017). Even though Latvia's productivity has grown significantly since 2000, it's still far behind OECD's average level. At the same time, Latvia's productivity is one of the fastest growing in the EU and more than five times faster than EU average (Figure 4).

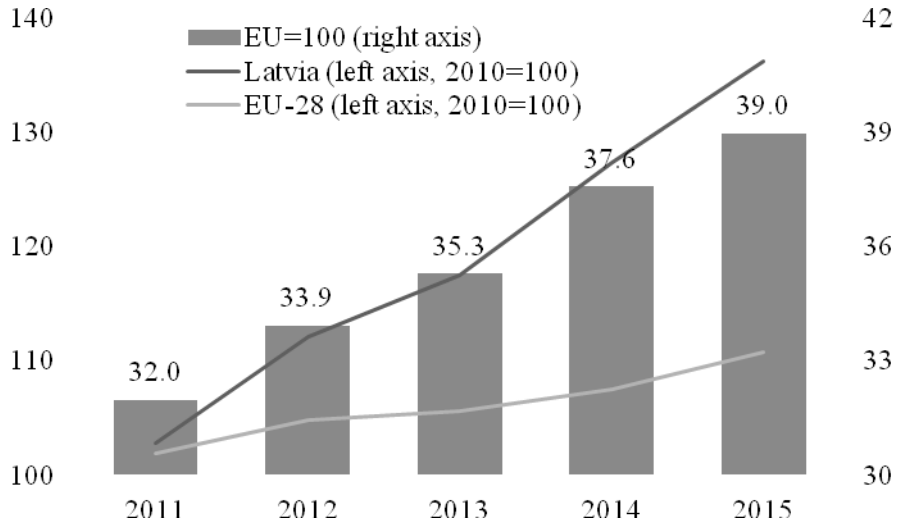
From 2010 to 2015 Latvia's lagging behind in terms of productivity index in the national economy fell by 6 percentage points in total, but in the industry – by 1.5 percentage points. At the same time, we can observe rapid growth of labour cost (see Fig. 5). It is mainly related to low cost level (in 2015, labour costs per employed in the economy of Latvia were 39% of the EU average in total, whereas in the manufacturing industry – 29.8%). From 2010 till 2015 average growth of wages in Latvia reached 6.4% that is three times larger than in EU average (Eurostat Database, 2017).

Figure 4. *Productivity growth in EU countries 2010-2015 (% changes, annual average)*



Source: *author's construction based on Eurostat databases.*

Figure 5. *Labour cost in Latvia and EU*

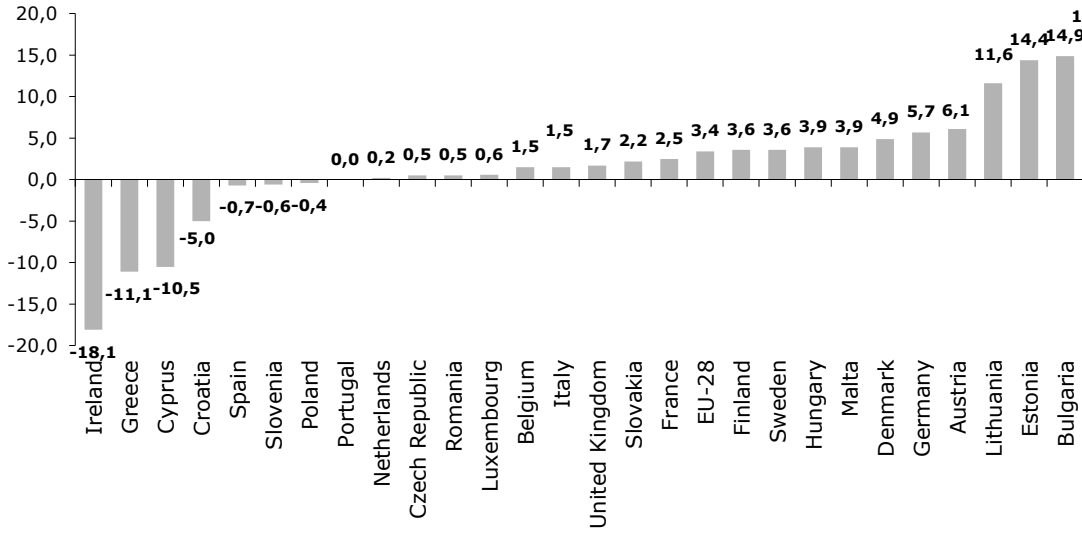


Source: *author's construction based on Eurostat databases.*

In recent years, the dynamics of labour costs and productivity were largely determined by factors of structural nature. With the economic growth resuming, wage growth is becoming more rapid, substantially due to the growing competition in the EU labour market and the low competitiveness of Latvia in the said market. By contrast, growth of productivity has been more moderate. It means that the advantages of cheap labour cost competitiveness are being gradually lost.

As shown by the unit labour cost (ULC[5]) dynamics, wages increased almost five times faster than productivity from 2004 to 2007, negatively affecting the international competitiveness of Latvia. Adjustments in product and labour markets due to the crisis reduced the gap between productivity and labour cost dynamics, resulting in Latvia's competitiveness improving gradually in foreign markets. However, there has been an increase in the ULC in recent years, which have been more rapid than the EU average (Figure 6).

Figure 6. *Nominal unit labour cost (2015, 3 years % change) (The indicative threshold is 9% for the euro area countries and 12% for the non-euro area countries)*



Source: *author's construction based on Eurostat databases.*

[5] *ULC is the ratio between labor costs and productivity. If productivity grows faster than wages, then ULC decreases, which indicates that the national cost competitiveness is increasing, and vice versa.*

ULC dynamics in the recent years show that Latvia's entrepreneurs are at risk of losing competitiveness in the EU market. That's why productivity issues are more topical than ever. Low productivity is a sign that economic system is uncappable of distributing resources to produce the highest added value goods.

Shift-share analysis of labour productivity growth shows that within-sector productivity increases largely explain overall productivity development. However, productivity gains resulting from the movement of labour from less productive to more productive sectors (the so-called "shift effect") were relatively small (about 0,5 percentage points of labour productivity growth in the period of 2010-2015). Process of effective resource distribution in Latvia is a sign of weak institutional environment. Therefore, it is important not just to promote innovation, but also increase effectiveness of resource market mechanisms minimizing the cost and risks. This will allow to increase competitiveness in production and competitive advantage to attract more investment.

5. Conclusions, Proposals, Recommendations

Since 2010 the productivity of Latvia's economy has been at the level of 40-45% of the EU average (Eurostat Database, 2017). Although in recent years productivity growth rate was faster than the EU average, but labour costs grew almost twice the rate and this can adversely affect competitiveness of Latvia. A further increase in labour costs is inevitable in the open labour market conditions, therefore, strengthening the competitiveness of Latvian is largely determined by the ability to reduce the productivity gap with the advanced economies.

One of the main challenges for Latvia is the creation of new competitive advantages that are associated with investments in the latest technologies, innovation, research, human capital, efficient allocation of resources and redistribution that comes with the behavioural changes of economic subjects. Increasing entrepreneurs' motivation is a major structural change in policy making. Economic structural transformation process is largely dependent on the quality of the institutional framework (legislation, state aid and economic and political institutions), which provides goods and resources market efficiency, minimizing the redistribution process costs and risks, thereby strengthening the country's competitive benefits.

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