

PRODUCTIVITY TRENDS AND INCOME INEQUALITY IN LATVIA

Daira Baranova, University of Latvia

Olegs Baranovs, Ministry of Economics

Irina Skribane, University of Latvia

Abstract. Increasing labour productivity is a key driver for prosperity. Although Latvia's productivity growth rates are among the highest in the EU, productivity growth has declined in recent years. With the productivity dynamics slowing down, the pace of convergence is also slower. The benefits of the recent economic recovery in Latvia have not been evenly distributed among households and income inequality has not diminished significantly. The recent OECD and academic studies point to a correlation between falling productivity and increasing income inequality. The more unequal a society is, the more it affects productivity growth and the sustainability of growth. Improving productivity has the potential to affect inequalities in a positive and negative way. To find suitable policy answers therefore is extremely challenging.

The research describes the dynamics of productivity and income inequality, their interaction in Latvia. The research is based on existing data, studies, and policy documents. It aims to integrate the available data from a broad range of international and domestic sources from the perspective of Latvia. The research argues that easy gains from catching up are over, keeping productivity dynamic will not be easy, as the factors that provided relatively high productivity rates in previous periods are likely to be exhausted and companies are approaching the limits of existing technology. Continued progress in implementing structural reforms will be needed to reduce the productivity gap, only systemic implementation of all policies and structural reforms can provide a desirable outcome. In order to reduce income inequality, it is important to strengthen the competitiveness of the regions of Latvia and to improve the tax and benefit system.

Keywords: *productivity, income inequality, economic policy.*

JEL code: E24, E25, O15, O47, J24

Introduction

Productivity growth is an important factor in ensuring higher living standards. The large difference in per capita income between countries is directly linked to differences in productivity. The recent OECD and academic studies show that there is a close correlation between the decline in productivity and increasing inequality. While promoting growth and market efficiency is a prerequisite for raising living standards, it does not in itself solve the problems of inequality and inclusion.

Strengthening the potential for long-term economic growth by increasing productivity and growth rates, while reducing income inequality, is one of Latvia's key challenges in the face of globalization, an aging population, rapid technological progress and the need to increase climate-related investment.

Dynamics of productivity and its impact on inequality are influenced by a number of factors, the identification and study of which is important not only for researchers and entrepreneurs, but also for policy makers. Without understanding the factors driving productivity dynamics and inequalities, it is impossible to apply the appropriate policy instruments to ensure sustainable economic growth.

The aim of this study is to analyse the dynamics of productivity and income inequality and its interaction in Latvia. The research is based on existing data, studies, and policy documents. It aims to integrate the available data from a broad range of international and domestic sources from the perspective of Latvia.

The research questions need to be answered: What are trends and dynamics of productivity? How reforms could be translated in higher productivity growth? What is relationship between productivity and income inequality? What reforms are key to diminish income inequality?

The first section of the study gives an insight into the literature on the subject. In the second chapter, the authors describe the dynamics of productivity in Latvia (general trends, sectoral trends, cross-country comparison). The third chapter deals with the development of productivity in regional terms, which is one of the main causes of income inequality in Latvia. The fourth, concluding chapter gives a description of income inequality in Latvia, comparisons with other countries, and the correlation between income inequality and productivity. The article concludes with the main conclusions, proposals and recommendations of the study.

Literature Review

Addressing productivity and inequalities is gaining more momentum in scientific, public and political debate. While in the past income inequality was seen as accommodating growth, there is now rising awareness that income inequality may under certain circumstances be negatively correlated with economic growth. The recent OECD report on the Productivity-Inclusiveness Nexus gathers the most recent empirical evidence on the main factors behind slowing productivity gains and rising inequality (OECD, 2018a). This report proposes a new comprehensive approach to promote better productivity performance and reduce inequalities. It not only gathers the most recent empirical evidence on the main factors behind slowing productivity gains and rising or persisting inequalities but also suggests possible common foundations and linkages between these two trends.

This OECD study provides good guidance for analysing these issues also in the Latvian context. However, it should be noted that so far these issues have not been sufficiently researched in Latvia, especially on the relationship between productivity and income inequality. Mostly these phenomena are studied independently of one another.

The thorough literature review shows that before 2019, only one Latvia Competitiveness Report (which includes both productivity and sustainable developments aspects) has been produced (Stockholm School of Economics, 2013). This was done in 2011 by the Stockholm School of Economics in Riga (SSE), written by the team of authors from the Baltic International Centre for Economic Policy Studies (Zane Cunska and Alf Vanags), Harvard Business School (Christian Ketels) and SSE Riga (Anders Paalzow). Since then analytical studies on productivity and competitiveness in Latvia have mostly been limited to the papers and assessments elaborated by international financial institutions like the OECD, the EU and the IMF.

The OECD studies on economic trends in Latvia highlight several factors that hamper productivity. For example, the OECD *Economic Surveys: Latvia 2017* (OECD, 2017) note that Latvia's low productivity is due to the relatively low participation in global value chains and the specialization of exporting companies in low-tech manufacturing. Reference is also made to the slow uptake of modern technologies, hampered by skills shortages and inadequacies. Conversely, limited access to vocational and higher education for low-income students and limited affordability of affordable housing in the region of Riga, which has the highest employment growth, are hampering skills development and better matching. Productivity growth is also hampered by underinvestment in R&D and weak innovation and cooperation between science and industry.

Productivity issues have also been discussed in the International Monetary Fund (IMF) reports on Latvia. The IMF researchers point out that productivity growth is key to maintaining the pace of income convergence and that Latvia has made significant progress in raising productivity. At the same time, it is stated that maintaining productivity growth will not be simple, as easy gains have likely already been exhausted and firms are approaching their technology frontiers. Continued progress in implementing structural reforms will be needed to reduce the productivity gap improving the governance of public enterprises, improving the business environment, modernizing public infrastructure, and strengthening the judiciary (International Monetary Fund, 2016).

Similar conclusions can be found in the European Commission's materials. For example, the Staff Working Document states: "Latvia remains a catching-up economy and its main national development focus is on increasing

its GDP per capita. As evidenced by falling productivity growth rates, the easy gains of the early catch-up stage have been exhausted. This means that productivity growth will have to increasingly rely on knowledge-intensive activities. Latvia's weakest point has been innovation, which requires investments in research and development, in developing people's knowledge and skills, and in other intangible assets. Latvia would also benefit from boosting the economic potential of its peripheral regions - increasing their accessibility, and promoting energy efficiency, employment and investment opportunities. Finally, investments in social inclusion and healthcare are needed in order to tackle high inequality and uneven access to employment and public services "(European Commission, 2019a, p.4).

Productivity-related aspects have also been studied in the annual Certus Competitiveness Reports. For example, the Latvia Competitiveness Report 2015 covers challenges affecting important aspects of the Latvian economy - depopulation and regional development, access to finance for small and medium-sized enterprises, as well as analysis of individual sectors of the Latvian economy. The Latvia Competitiveness Report 2017 provides more analysis of opportunities and challenges for ICT, transit, and industrial development.

Certain aspects of productivity in the Latvia's context have been also looked at in the following research publications: productivity measurement (Fadejeva, Melihovs, 2009); effects of export entry on productivity, employment and wages (Benkovskis, Masso, Tkacevs, Vahter, Yashiro, 2018); effects on productivity due to resource misallocations in Latvia during 2007–2014 (Benkovskis, 2018). However, the research has been rather fragmented and did not provide the overarching and comprehensive picture.

Monitoring of Latvia's productivity trends and policy issues to promote productivity are included in several policy planning documents, such as *Latvia's National Reform Program for Europe 2020 Strategy Implementation, the National Development Plan, Latvia's Smart Specialization Strategy* and others.

One of the most recent researches on productivity development in Latvia, including the income inequality aspect, is the monograph "*Raising Productivity: Trends and Future Challenges*" (editor-in-chief – Inna Steinbuka), published in May 2019. The core study of the monograph (O.Baranovs, D.Baranova, G.Berzins, I.Skribane) provides comprehensive insights into the existing research on productivity in Latvia, identifies the topicality of productivity research, and the factors determining productivity. The authors analyse the dynamics of productivity in Latvia, including sectoral aspects. This study has identified main productivity enhancing policies in Latvia, in particular ensuring a stable macroeconomic environment, improving the quality of the business environment, improving the availability and quality of the workforce, promoting higher value-added production, and ensuring sustainable development; strengthening the competitiveness of Latvian regions and Riga. The authors discuss each policy domain in detail and argue that only systemic implementation of all policies and structural reforms can provide a desirable outcome (Steinbuka, 2019, p.8).

There are many studies on income inequality in Latvia. For example, in 2017, a Task Force by SSE Riga was created to carry out an unorthodox, cross-disciplinary research on income and social inequality in Latvia from the perspective of economic, financial, social, educational and health policymaking. Certain aspects of income inequality have been also looked at in the following research publications: the tax-benefit system role to address poverty and inequality (Ivaškaitė-Tamošiūnė V., *The Effect of Taxes and Benefits Reforms on Poverty and Inequality in Latvia*. European Economy Economic Briefs 039, October 2018), effects of tax reform package on income inequality (Pluta, A., Zasova, A. 2017 "Latvia stumbling towards progressive income taxation: episode II", FREE network, Policy brief series).

This article mainly uses the OECD, the European Commission, the United Nations etc. works of international organizations as well as some Latvian experts.

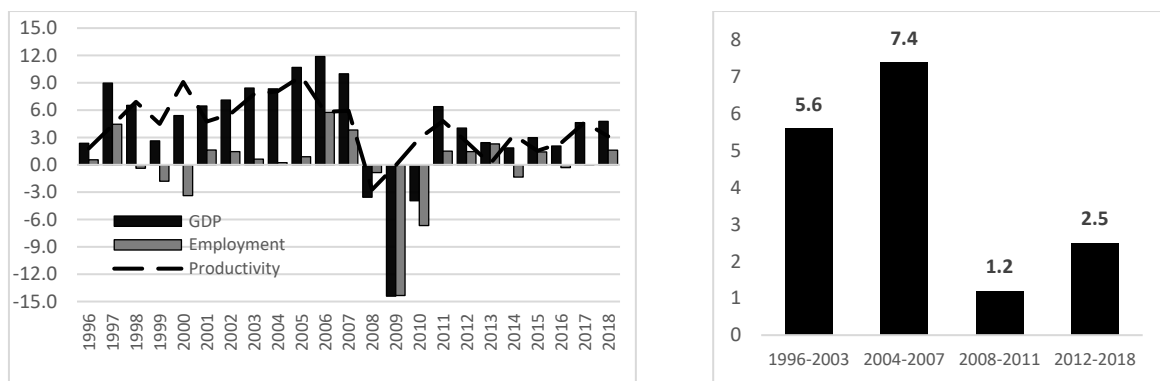
Overall, in Latvia, research on productivity related aspects, in particular their link to the problem of income inequality, is fragmented and lacks a systemic approach.

2. Productivity dynamics in Latvia

Productivity dynamics in Latvia have been quite rapid over the last twenty years. Productivity has grown at an average annual rate of 4.2% since 1995 and in 2018 was almost 2.6 times higher than in 1995. However, during the post-crisis period productivity has slowed down. Over the period 2012-2018, annual productivity growth in Latvia averaged 2.5% (Figure 1).

Increase over previous year (%)

Average annual growth rates (%)



Source: author's construction based on the Eurostat data, 2019

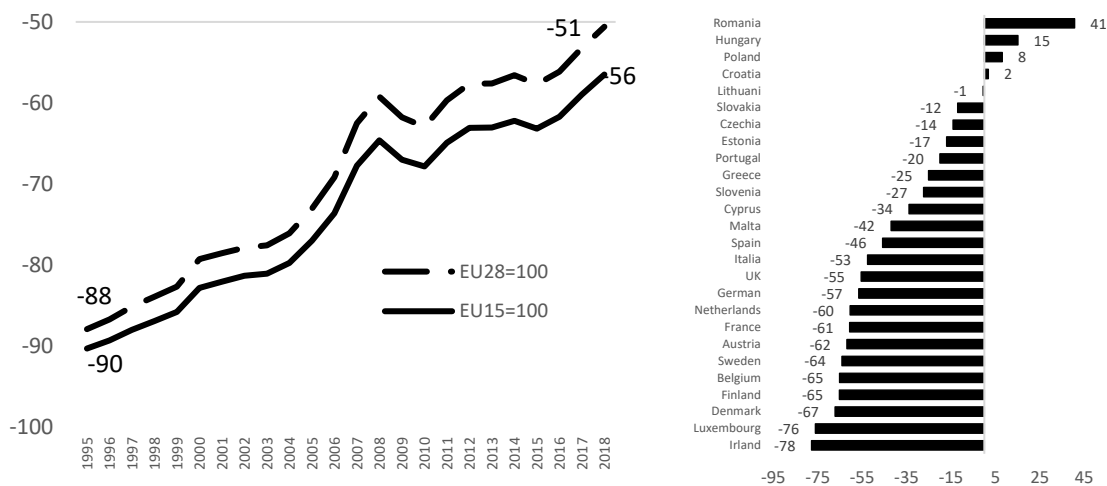
Fig. 1. Annual productivity growth rates in Latvia

Latvia's productivity growth rates are among the highest in the EU. Productivity in Latvia has increased by 18.9% since 2011 (4.8% in the EU28) and the productivity gap continues to narrow (Figure 2). However, there is still a significant backlog compared to several developed countries. Productivity in Latvia in 2018 was only 49.4% (67.3% in PPS) of the EU average, one of the lowest in the EU.

Convergence also slows as productivity dynamics slow down. By 2007, Latvia's lagging behind the EU average had declined by almost 2 percentage points annually, but since 2008, the pace of convergence had slowed to 0.9 percentage points per year. Such trends may exacerbate the risks of a loss of competitiveness, even more so given that wage convergence has accelerated in recent years.

Latvia's productivity gap (lagging behind EU28 and EU15 average, percentage points)

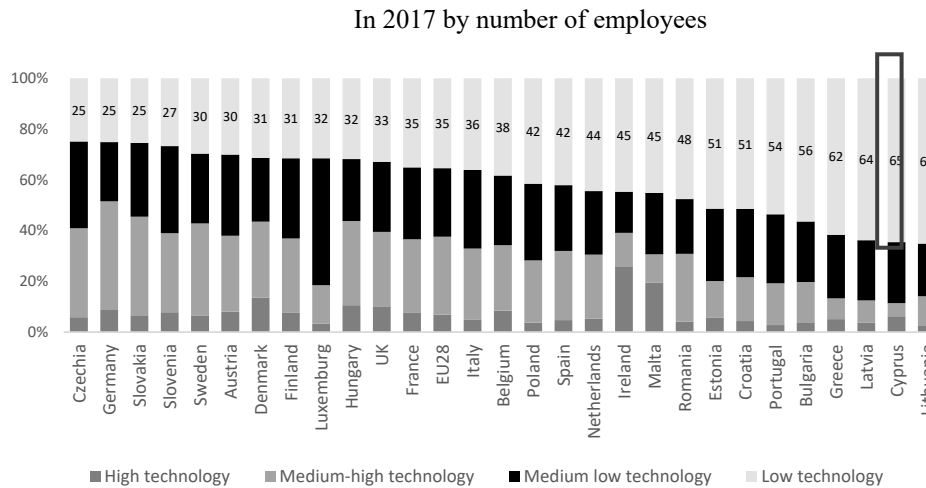
Latvia's productivity gap in 2018 (lagging behind EU level, percentage points)



Source: author's construction based on the Eurostat data, 2019

Fig. 2. Productivity convergence of Latvia with EU28 and EU15 average

The low average productivity in the economy is largely due to the extremely low productivity in manufacturing. According author’s calculation based on the Eurostat data, in Latvia, manufacturing productivity in 2017 was only 98% of the national average, while in almost all EU Member States industrial productivity was above the national average (in the EU in average – 118%). But it is the manufacturing industry that plays an important role in raising overall productivity, which can be explained by the industry's potentially higher innovation capacity. The manufacturing industry is largely oriented towards external markets, which offer wide export opportunities, and has a higher degree of integration in global value chains.

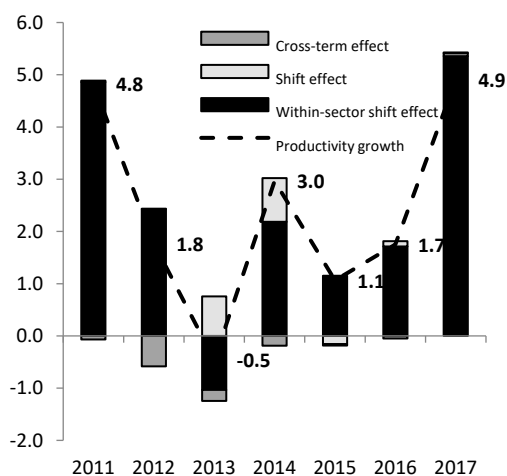


Source: author’s construction based on the Eurostat data, 2019

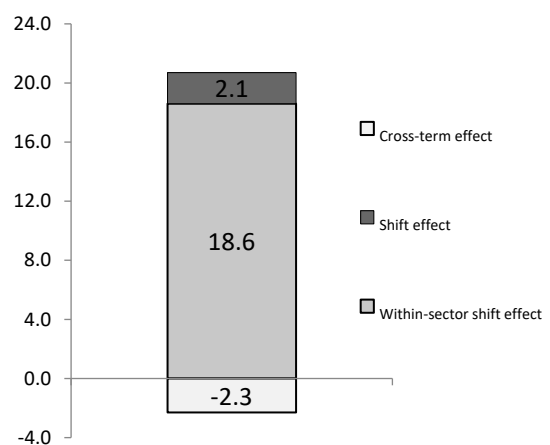
Fig. 3. Structure of manufacturing by technological intensity in the EU

Low value added sectors dominate in Latvia while in the EU its share are much lower (Figure 3). Although the share of high technology sectors in manufacturing has been gradually increasing since 2000 (from 3% in 2000 to 8.2% in 2016), their impact on the productivity of the manufacturing sector and the total productivity in the Latvian economy is still insignificant. The problems of increasing the productivity level of Latvian industry are mainly related to its ability to carry out technological modernization and innovation, expand its participation in global value chains, raise the qualification of the labor force and improve internal labor mobility in the country. The structural transformation of manufacturing and the Latvian economy as a whole to higher value added and higher productivity activities is also crucial.

Increase over previous year (%)



Increase in 2017 compared to 2010 (%)



Source: author’s construction based on the Eurostat data, 2019

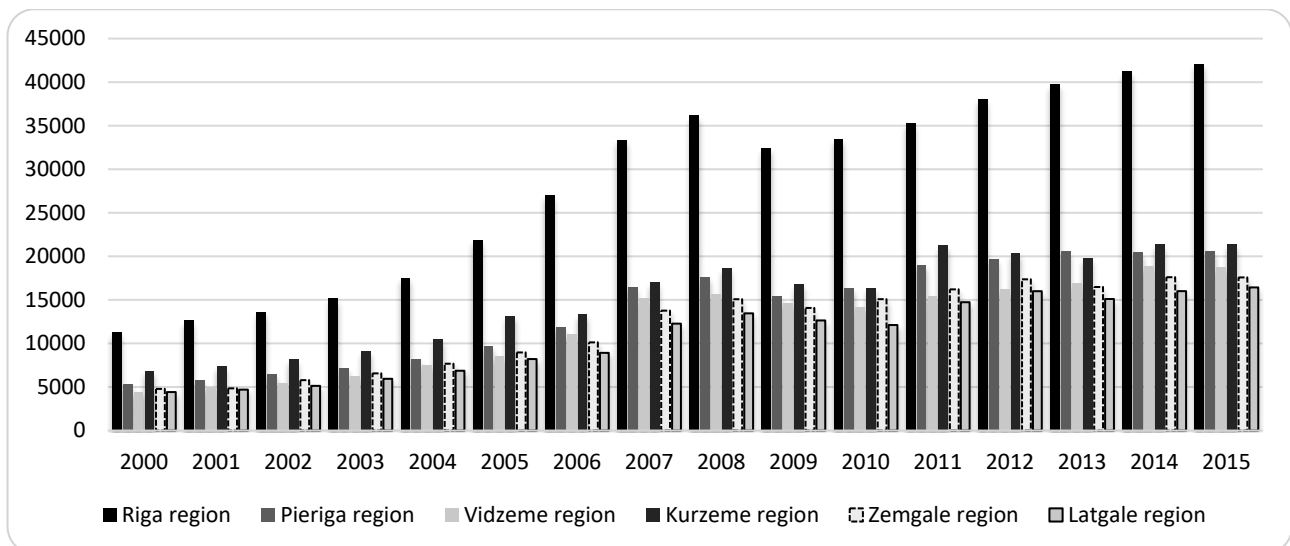
Fig. 4. The contribution of intra-sector productivity changes and resource redistribution across sectors to productivity growth in Latvia

According to the authors' calculations, the dynamics of attracting labour force by sectors in the post-crisis period in the Latvian economy show structural changes in favour of higher productivity sectors, which also positively affects the overall productivity level in the country (Figure 4).

However, the pace of structural change is insufficient and the process of reallocating labour from lower to higher productivity sectors is relatively weak. In the context of resource efficiency, low productivity is partly explained by the high share of small businesses in the economy and their low productivity compared to other EU Member States. In 2016, 95% of Latvian companies were micro-enterprises (less than 10 employees). For small businesses, productivity is lower than for large companies, mainly due to the scale effect. In addition, small businesses are much more likely to have difficulties in raising finance for R&D, which in turn limits their innovation capacity. Latvia's productivity gap between large (over 250 employees) and small (less than 10) companies is 55%, which is much more pronounced than in other EU countries. Thus, it can be concluded that the increase of productivity in Latvia is closely related to the transformation of the economy into the production of higher value added products, which in the era of today's scientific-technological revolution (Industry 4.0) are closely linked to the introduction of new technologies. Easy gains from catching up are over and the risks of falling into the "middle-income trap" are multiplying. Weak innovation performance raise concerns about the economy's ability to expand the share of knowledge-intensive activities. The country's growth model will need to change by shifting the focus to ascending in the global value chains. Participating in global value chains enables companies to "climb" up the production chain ladder. Latvia needs a better strategy for investments into research, innovation and human capital. Without sustained and reliable funding of the science base, strong academy-industry-government cooperation, there cannot be any great leaps forward in the national productivity and competitiveness performance.

3. Productivity dynamics in regions of Latvia

There are large regional disparities in GDP per capita, employment rates, business activity, including productivity, in Latvia, which have not diminished over the last decade (Figure 5).



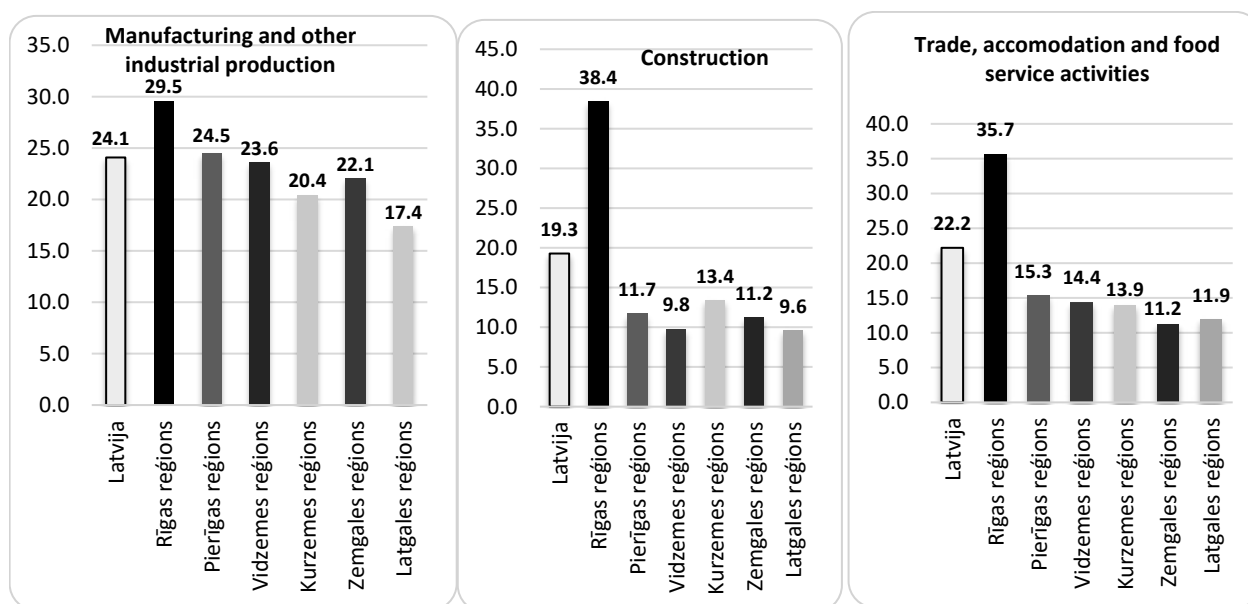
Source: author's construction based on the Central Statistical Bureau of Latvia data, 2019

Fig. 5. Productivity in the regions of Latvia (current prices, euro per employee)

In Riga region productivity per capita is about twice as high as in other regions. Between 2000 and 2015, this productivity gap has not narrowed but remained fairly constant. The main cause of the productivity gap is related to structural differences in the economy. Due to higher population density, availability of infrastructure, etc., Riga has

relatively more concentrated economically active companies than other regions, including those with higher added value.

As the authors' calculations show, prices also play an important role, as productivity differences in industry are quite small, while they are much more significant in construction and in several types of services (Figure 6).



Source: author's construction based on the Central Statistical Bureau of Latvia data, 2019

Fig. 6. Productivity in the regions of Latvia in 2015 (at current prices, thousand euro per employee)

In order to remedy this situation, the administrative-territorial division of the country needs to be improved. Currently there are 119 administrative territories in Latvia, including 110 municipalities and 9 cities of the republic. Latvia is characterized by a fragmented administrative-territorial division both in terms of area and population. The smallest county has about 1000 inhabitants and the largest - about 35 thousand inhabitants.

There are several municipalities without strong development centres and insufficient tax revenue base, which are unable to carry out their autonomous functions, concentrate financial resources, perform rational and efficient administration without delegation or joint municipal institutions. Many municipalities lack the financial and human resources to develop their infrastructure, implement EU fund projects, and attract investors.

Thus, one of the prerequisites for economic development and raising productivity is ensuring self-sufficiency of local governments by forming large districts around regional and national development centres.

The core arguments presented in favour of amalgamation are (Centre of Expertise ..., 2017, p. 20-21):

- economies of scale and possible synergies – the assumption that tasks could be performed better and costs reduced in larger territorial units;
- unfavorable demographic trends that cause further population shrinkage in small municipalities and therefore create problems in service delivery – this argument also refers to the unit cost of local services; amalgamation reform in such a case is depicted as a response to the problem of depopulation;
- the need to adapt the administrative division to the developments of settlements and transportation network (mainly in urban areas); in many countries municipal boundaries may be considered ‘outdated’, since formerly separated settlements have become functionally integrated, new settlements have grown or new transportation routes have changed the hierarchical structure of settlement networks;
- economies of scope – the assumption that more public services can be delivered in larger. However, in this case the approaches might be diversified and there has been a very long ongoing debate on the solutions for management of such growing agglomerations.

The forthcoming reform of a new administrative territorial map in Latvia aims to increase the quality and efficiency of local governments. The Environmental Protection and Regional Development Ministry has worked out a new administrative-territorial map of Latvia, cutting the number of local governments to 35 from 119. The new territorial reform would continue the reform started in 1998. The goal would be to complete the reform by 2021, creating administrative territories with a development potential and properly functioning local governments that would be providing high-quality services to residents for adequate costs.

However, regional reform alone is not enough. It is also necessary to strengthen Riga's competitiveness. Slightly more than half (54% in 2015) of Latvia's GDP is generated in Riga region. The value added per capita in Riga is more than twice as high as in other regions. In general, the situation in Riga is much better than elsewhere in Latvia - higher wages, wider job opportunities, etc. As noted in the OECD Economic Survey of Latvia 2017, Riga's international competitiveness is lagging behind equivalent cities in the Baltic Sea region. GDP per capita is on average about 70% of that in other capital cities. Since 2010, the metropolitan Area of Riga performed less well in terms of GDP growth than peer capital cities in Estonia and Lithuania (OECD, 2017, p. 111).

The metropolitan area of Riga is a key driver of growth and employment but lacks adequate governance (OECD, 2017, p. 11). The development of Riga is hindered by inefficient organization of transport and public services, inadequate management of urban sprawl, common regional visions on development of business environment and lack of regional brand.

Ineffective governance is largely due to the lack of cooperation between Riga and its municipalities on traffic organization, capitalization/ spatial planning management, public service organization, location of schools and kindergartens, development of common business environment, use of natural resources (for recreation and tourism), etc. In order to improve the governance of Riga and increase its competitiveness, the OECD recommends create a platform to co-ordinate policies of all municipalities where most residents commute to Riga (OECD, 2017, p. 11).

4. Income inequality in Latvia

OECD and academic studies (for example, OECD, 2018a) show that there is a close correlation between falling productivity rates and increasing inequality. Increasing productivity is a necessary condition for economic growth, but not a sufficient condition for reducing poverty and inequality. What matters is not the rate of economic growth, but its quality, i.e. inclusive growth, which not only enhances labour productivity and contributes to economic growth, but also enables people to benefit from it.

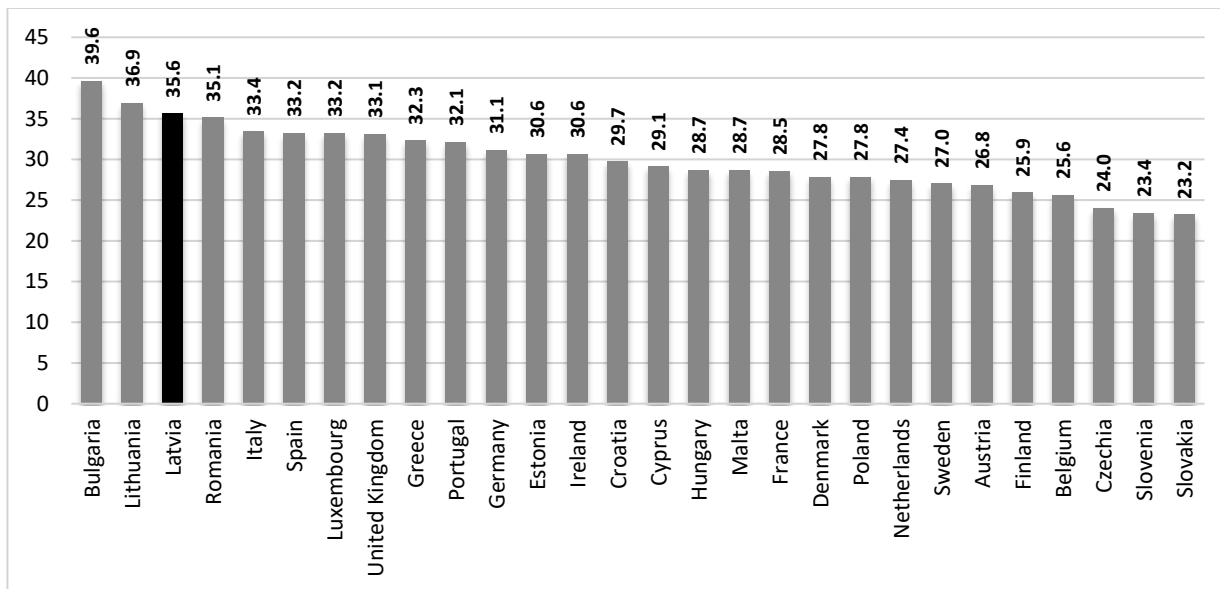
For example, in the OECD countries, GDP per capita grew by 4.9% on average between 2010 and 2016, while real median household disposable income increased by 3.3% over that period; in Latvia - by 21.7% and 7.2% respectively (OECD, 2018b, p. 51). This indicates that the benefits of the recent economic recovery have not been evenly distributed across households and income inequality has increased. However, in some countries, such as Poland, the Czech Republic, Norway, etc. real median household disposable income has grown more rapidly than GDP per capita over this period, resulting in a more even distribution of income.

High inequality is also an economic challenge that can reduce growth potential by depriving the country of development and capitalizing on the talents of all, and enabling everyone to contribute fully to growth, thereby benefiting from better jobs, better wages and better career prospects. For example, low-productivity firms with low-productivity employees do not invest in human capital development and these firms do not grow. Conversely, poor and uneducated parents do not invest their children in education. Income inequality reduces the ability of the poor to acquire skills. The more unequal a society is, the more it affects productivity growth, sustainability and growth resilience.

There are several indicators for measuring income inequality. All of these indicate that there is a high level of income inequality in Latvia.

Although the Gini coefficient has slightly improved from 37.5% in 2008 to 35.6% in 2018, income inequality in Latvia is one of the highest in the EU (Figure 7).

The Gini index shows higher inequality in Latvia in the years of rapid growth before the crisis, but inequality decreased during the crisis. In the post-crisis period, however, the Gini coefficient is lower than in the previous decade and ranges from 34.5% to 35.7%.

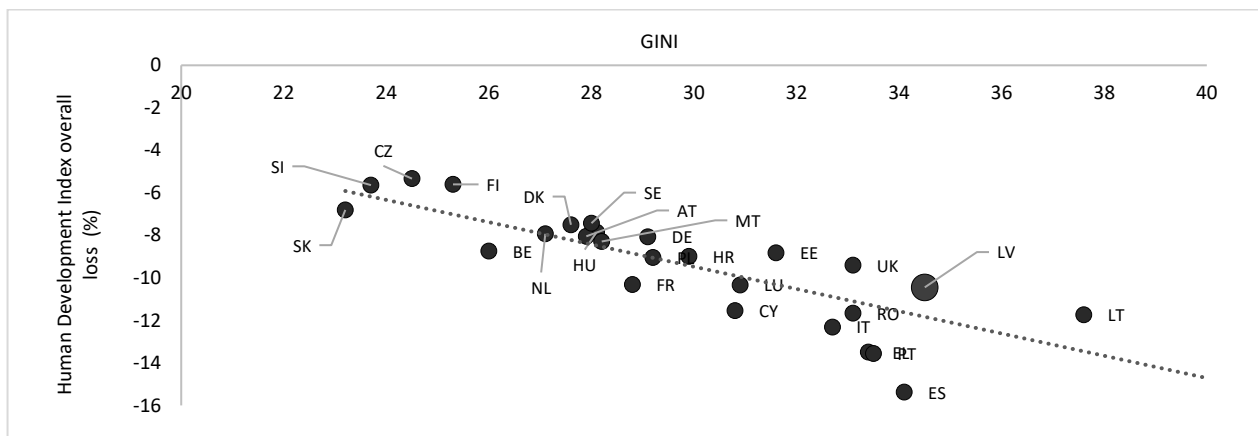


Source: author's construction based on the Eurostat data, 2019

Fig. 7. Gini coefficient in the EU in 2018

Is there a correlation between average income and inequality? As shown in Figure 7, countries with lower average GDP per capita (Bulgaria, Romania, Latvia, Lithuania) also experienced higher inequalities. However, such a relationship cannot be considered a regularity. For example, the UK has a high standard of living but also relatively high inequalities. By contrast, Slovakia, Slovenia and the Czech Republic, while GDP per capita is below the EU average, are among the lowest inequalities in the EU.

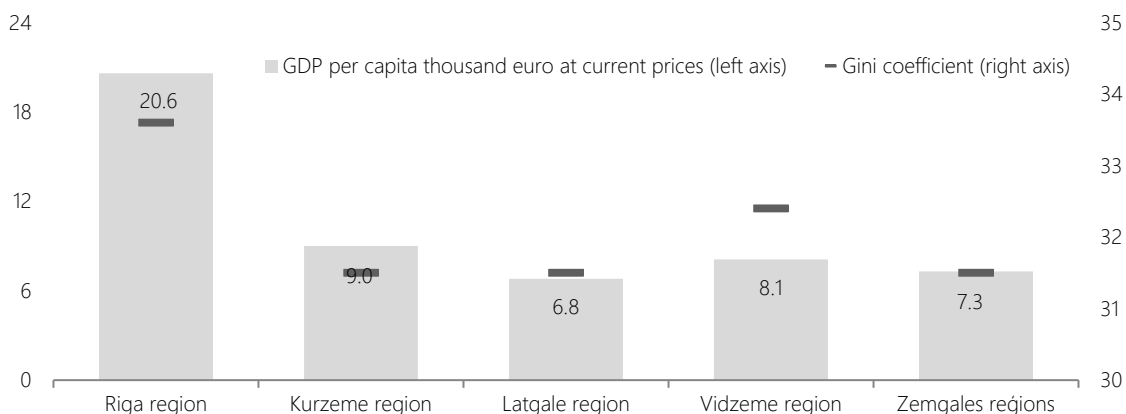
The United Nation Development Programme (UNDP) data shows the negative impact of inequality on the indicators of human development (UNDP, 2019). Among the EU countries, Spain has the largest loss in the human development index due to population inequality (down 15.4%), while the Czech Republic has the lowest loss (down 5.3%). In its turn, Latvia's losses due to inequality are 10.4 percent, mainly due to income inequality (Figure 8).



Source: author's construction based on the UNDP data, 2019

Fig. 8. Level of inequality and total losses of the Human Development Index

Also in Latvia, higher incomes by regions do not guarantee lower income inequality. In 2015, Riga region had the highest GDP per capita, which was more than twice as high as in other regions of Latvia. Nevertheless, the highest income inequality was also observed in Riga region (Figure 9).



Source: author's construction based on the Central Statistical Bureau of Latvia data, 2019.

Fig. 9. Gini coefficient and GDP per capita by the regions of Latvia in 2015

The Gini coefficient is more indicative of the middle class, other indicators are focused on lower income people.

The Eurostat data show, that in 2018, the income ratio of the richest 20% of households and the poorest 20% of households in Latvia was 6.8, which is one of the highest in the EU. In other words, the income quintile (one-fifth) of the wealthiest Latvian population more than 6 times the income of the least wealthy one-fifth. The EU average was 5.1 in 2017, Estonia and Lithuania 5.4 and 7.3, respectively.

Latvia's S80 / S20 income quintile ratio has improved - from 7.3 in 2008 to 6.8 in 2018. True, in 2018, compared to 2017, it increased from 6.3 to 6.8.

One of the quantitative targets defined in the *Europe 2020 strategy* for 2020 is to reduce the number of people at-risk-of-poverty by 20 million. Latvia aims to reduce the number of people at-risk-of-poverty and/ or in low-intensity households by 121 thousand by 2020.

As the European Commission notes, the number of people at-risk-of-poverty and/ or living in jobless households has fallen by 125,000 in 2017 compared to 2008, thus Latvia has met its poverty target (European Commission, 2019, p. 58).

However, the at-risk-of-poverty rate do not show a downward trend in Latvia. Data of the survey conducted by the Central Statistical Bureau show that 446 thousand or 23.3% of the population were at risk of poverty in 2017 or 1.2 percentage points more than in 2016. The unemployed are at a very high risk of poverty - 59.5% and 48.9% in retirement. Single seniors are at very high risk of poverty - 74% if they live alone. The at-risk-of-poverty rate for workers in 2017 was 8.1%. The highest proportion of population at risk of poverty in 2017 was in Latgale (44.2%), the lowest - in Riga (15.6%).

What are the main causes of income inequality and poverty in Latvia?

There is no clear, unique factor that drives the inequality observed in Latvia. Among the factors determining distribution of social returns that most important are unequal regional access to educational resources; migration; the distortive effects of the informal economy. The critical factors differences in private returns are: private rents generated by corruption and the large grey economy; limited redistribution through the tax and welfare system; legacy effects on the skill profile of the labour force by age group (Stockholm School of ..., 2013, p. 130).

In its turn, the European Commission identifies a number of causes of poverty and inequality (European Commission, 2019b, p. 3-4):

- the redistribution through the tax-benefit system is low. Latvia's tax system has been revised and personal income tax progressive. However, the tax burden on labour remains high for low-wage earners and hampers formal employment;
- the shortcomings of the social safety net reflect the high proportion of people at-risk-of-poverty or social exclusion, indicating problems with minimum income, pensions and inclusion of people with disabilities;
- the minimum income level reform, announced in 2014, has not been implemented, which negatively affects the poorest households. The adequacy of social assistance benefits has improved only marginally and remains insufficient;
- the minimum old-age pensions have not been revised since 2006;
- the share of people facing severe housing deprivation is among the highest in Europe and social housing is scarce.

The Baltic International Centre for Economic Policy Studies analysis also confirmed that redistribution through the tax system in Latvia is one of the lowest in the EU and that work incentives are low for the lowest decile of the population because of high participation tax rates and high marginal effective tax rates (Baltic International Centre, 2014, p. 86)

In conclusion it should be mentioned that the aspect of income inequality must be considered when promoting productivity. The more unequal a society is, the more it affects productivity growth, sustainability and the sustainability of growth. The tax and benefit system are a powerful tool for tackling poverty and inequality, but it is still not used efficient enough in Latvia.

Conclusions, proposals, recommendations

1. Addressing productivity and inequalities is gaining more momentum in scientific, public and political debate. However, in Latvia, these issues have not been sufficiently researched, especially on the relationship between productivity and income inequality. Mostly these phenomena are studied independently of one another.
2. Productivity dynamics in Latvia have been quite rapid over the last twenty years. However, during the post-crisis period productivity has slowed down. The dynamics of attracting labour force by sectors in the post-crisis period in the Latvian economy show structural changes in favour of higher productivity sectors, which also positively affects the overall productivity level in the country. However, the pace of structural change is insufficient and the process of reallocating labour from lower to higher productivity sectors is relatively weak.
3. Raising productivity is a multi-faceted challenge, which requires a set of well-balanced policies based on broad economic analysis. In addition, any measure to improve factors affecting productivity must be seen in the context of the overall economic system, where changes in one element undoubtedly require qualitative and quantitative changes in other elements. A country's excellence in one factor of competitiveness cannot compensate for its weakness in other areas.
4. Easy gains from catching up are over and the risks of falling into the "middle-income trap" are multiplying. Weak innovation performance raise concerns about the economy's ability to expand the share of knowledge-intensive activities. The country's growth model will need to change by shifting the focus to ascending in the global value chains. Participating in global value chains enables companies to "climb" up the production chain ladder. Latvia needs a better strategy for investments into research, innovation and human capital.
5. Increasing productivity is a necessary condition for economic growth, but not a sufficient condition for reducing poverty and inequality. What matters is not the rate of economic growth, but its quality, i.e. inclusive growth, which not only enhances labour productivity and contributes to economic growth, but also enables people to benefit from it. Therefore, while promoting productivity and resource efficiency, the potential negative consequences of

economic transformation on the level of population inequality need to be recognized. Productivity promotion policies will be more successful if they are backed up by inequality policies.

6. Income inequality in Latvia is one of the highest in the EU. Regional disparities and limited redistribution through tax and welfare systems are key factors for inequality.
7. Latvia is characterized by a fragmented administrative-territorial division both in terms of area and population. The administrative-territorial division of the country needs to be improved. Although the Riga region is the main driver of growth and employment, it is not properly managed. The development of Riga is hindered by inefficient organization of transport and public services, inadequate management of urban sprawl, common regional visions on the development of business environment and lack of a regional brand.

Bibliography

- Baltic International Centre for Economic Policy Studies, 2014. Tax Reform in Latvia. Riga, July 2014 [Online]. Available at: https://www.em.gov.lv/files/tautsaimniecibas_attistiba/Final_report_ENG.pdf (Accessed: 16 October, 2019)
- Benkovskis K., 2018. Misallocation, productivity and fragmentation of production: the case of Latvia. *Journal of Productivity Analysis*, 49(2), 187-206.
- Benkovskis, K. Masso, J., Tkacevs, O., Vahter, P., Yashiro, N., 2017. Export and productivity in global value chains: Comparative evidence from Latvia and Estonia, OECD Economics Department Working Papers, No. 1448, OECD Publishing, Paris, 2017.
- Central Statistical Bureau of Republic of Latvia, 2019. <https://www.csb.gov.lv/en/sakums> (Accessed: 16 October, 2019)
- Centre of Expertise for Local Government Reform, 2017. Territorial reforms in Europe: Does size matter? Council of Europe, November 2017 [Online]. Available at: <https://rm.coe.int/territorial-reforms-in-europe-does-size-matter-territorial-amalgamatio/168076cf16> (Accessed: 16 October, 2019)
- Certus. Competitiveness Reports [Online]. Available at: <http://certusdomnica.lv/en/> (Accessed: 9 January, 2020)
- Eurostat, 2019. <https://ec.europa.eu/eurostat> (Accessed: 16 October, 2019)
- European Commission, 2019a. Staff Working Document. Country Report 2019. SWD (2019) 1013 final [Online]. Available at: https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-latvia_en.pdf (Accessed: 16 October, 2019)
- European Commission, 2019b. Recommendation for a COUNCIL RECOMMENDATION on the 2019 National Reform Programme of Latvia and delivering a Council opinion on the 2019 Stability Programme of Latvia. COM/2019/514 final [Online]. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0514> (Accessed: 16 October, 2019)
- Fadejeva L., Melihovs A., 2009. *Measuring Total Factor Productivity and Variable Factor Utilisation: Sector Approach, the Case of Latvia, Bank of Latvia Working Paper.*
- International Monetary Fund, 2016. *Republic of Latvia: 2016 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for the Republic of Latvia. June 16, 2016.* [Online]. Available at: <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Republic-of-Latvia-2016-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-43983> (Accessed: 16 October, 2019)
- Ivaškaitē-Tamošiūnē V., Maestri, V, Malzubris, J., Poissonnier, A., Vandeplass, A., 2018. *The Effect of Taxes and Benefits Reforms on Poverty and Inequality in Latvia. European Economy Economic Briefs 039, October 2018.*
- Ministry of Economics of Republic of Latvia, 2019. *National Reform Programme of Latvia for the Implementation of the Europe 2020 Strategy* [Online]. Available at:

https://www.em.gov.lv/en/latvia_in_the_eu/europe_2020_strategy/national_reform_programme_of_latvia/
(Accessed: 9 January, 2020)

OECD, 2017. *OECD Economic Surveys: Latvia 2017*, OECD Publishing, Paris [Online]. Available at: http://dx.doi.org/10.1787/eco_surveys-lva-2017-en (Accessed: 16 October, 2019)

OECD, 2018a. *The Productivity-Inclusiveness Nexus*, OECD Publishing, Paris [Online]. Available at: <https://doi.org/10.1787/9789264292932-en> (Accessed: 16 October, 2019)

OECD, 2018b. *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris [Online]. Available at: <http://dx.doi.org/10.1787/9789264301665-en> (Accessed: 16 October, 2019)

Pluta, A., Zasova, A., 2017. *Latvia stumbling towards progressive income taxation: episode II*, FREE network, Policy brief series [Online]. Available at: <https://freepolicybriefs.org/2017/10/16/latvia-stumbling-towards-progressive-income-taxationepisode-ii/> (Accessed: 9 January, 2020)

Results of Task Force on reducing income and social inequality, coordinated by SSE Riga, 2018 [Online]. Available at: <https://www.sseriga.edu/results-task-force-reducing-income-and-social-inequality-coordinated-sse-riga>
(Accessed: 9 January, 2020)

Steinbuka, I. (editor-in-chief), 2019. *Produktivitātes celšana: tendences un nākotnes izaicinājumi (Raising Productivity: Trends and Future Challenges)*. Riga, 2019 [Online]. Available at: <https://doi.org/10.22364/pctni>
(Accessed: 16 October, 2019)

Stockholm School of Economics in Riga and Baltic International Centre for Economic Policy Studies, 2013. *Latvia Competitiveness Report* [Online]. Available at: <http://www.biceps.org/assets/docs/LCR2013> (Accessed: 16 October, 2019)

UNDP, 2019. *The 2019 Human Development Report to focus on inequality*, UN Publishing, New York [Online]. Available at: <http://hdr.undp.org/en/towards-hdr-2019> (Accessed: 16 October, 2019)