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FEATURES OF SOCIO-ECONOMIC DEVELOPMENT OF THE BALTIC STATES AND UKRAINE

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Abstract. It is proved that ensuring stable economic growth is now an important task for the governments of all countries. The purpose of the study is to compare socio-economic conditions of the Baltic states and Ukraine in the period of 2006–2016. The subject of the study is peculiarities of social development identified as a result of the analysis of the main components - real GDP, general government spending, and minimum wages. Methodology. It is based on views of recognized Western economists, as well as works of scholars from the Baltic countries and Ukraine. The main method of research is systemic, which allows analysing complex open unbalanced socio-economic systems. In the process of research, such methods also used - comparison, historical, analysis and synthesis, correlation and regression. The views of scholars on the processes of social development are generalized, the dynamics of real GDP are compared, and the correlation-regression analysis of the influence of general government spending and minimum wages on real GDP is performed. In the course of the study, some features of this development are identified by indicators of real GDP, general government spending, minimum wages, and also individual countries. Results. It is proved that peculiarities of socio-economic development of the Baltic countries and Ukraine are an important basis for ensuring the dynamics of this development; they allow forming strategic and current vectors of the development of economies of these countries and, therefore, are socially significant theoretical content. The GDP rates of all countries for the period of 2010–2016 were lower than those that were in 2006–2008, and in relation to Ukraine, these rates were significantly lower for the period of 2006–2016, which confirms the presence of significant social problems. The dynamics of real GDP per person demonstrated the weakness of the financial system of Ukraine to counteract negative factors, where this figure is less than in the Baltic states roughly three times. The indicator of General Government Spending, % of GDP, showed that after the financial crisis, any of the countries failed to reach the pre-crisis level, and this indicator in the Baltic states for 2010–2016 ranged from 35% to 40%, and in Ukraine – from 32% up to 35%. According to the index of minimum wages, it is determined that in the Baltic States it increased more than three times during the analysed period, and in Ukraine it decreased, which was caused both by the global financial crisis and the depreciation of the domestic currency for the period of 2014–2016 more than three times. Practical implications. Ukraine, in order to increase GDP, is recommended to implement measures of the strategic direction, in particular: to summarize documents of strategic content; form a new strategy of social development for up to 20 years; develop appropriate development programs in view of industry and region; provide priority to an innovation vector of development with a focus on universal values. Value/originality. The revealed features of the socio-economic development of the Baltic countries and Ukraine reflect their national specificity and will contribute to a better understanding of the essence of these processes.

Key words: socio-economic development, GDP, general government spending, minimum wages.

JEL Classification: A13, B26, G01, G28

1. Introduction

Socio-economic development of any country is formed taking into account its potential opportunities. In the realities of the beginning of the XXI century, some countries have achieved significant success and have provided a high standard of living for the population, while others are in difficult conditions and the welfare of most of the population is negligible. It should be noted that issues of social development were permanently relevant in the research of scholars. So, in 2010, D. Arthur for the contribution to macroeconomic research, and A. Deaton in 2015 for the analysis of consumption, poverty, and well-being processes were awarded the Nobel Prize in Economics. In the context of identifying

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features of socio-economic development, it is relevant to compare the main indicators of this development on the example of the Baltic countries - Estonia, Lithuania, Latvia, and Ukraine. After the collapse of the Soviet Union, these countries chose different vectors of development. Estonia, Lithuania, Latvia in 2004 became members of the EU and NATO and at the end of the second decade of the XXI century were able to ensure a stable development and a reasonable standard of living for the population, but Ukraine is behind these indicators in recent places in Europe. That is why the purpose of the study is to identify peculiarities of socio-economic development of the Baltic states and Ukraine, and the tasks: to compare the basic indicators of development of these countries; reveal differences in the dynamics of development; determine the effect of minimum wages and general government spending on real GDP in view of these four countries; develop recommendations for a strategic plan for Ukraine to increase the rate of real GDP. To carry out the research, an appropriate methodology based on the works of leading economists of the world, scholars of the Baltic states and Ukraine using a systematic approach is formed. The research stages are developed in a logical sequence, which include searching for statistical data, analysing them, performing analytical calculations, identifying differences in the dynamics of development between countries, developing relevant recommendations for Ukraine.

2. Review of theory and literature

Given the peculiarity of the problem, only in the last 100 years, a considerable amount of work has been published in the relevant research areas. Of particular significance are works of the classics of economics -J. R. Hicks (1937, 1965), J. Scumpeter (1939), P. Samuelson (1948), E. Domar (1952, 1989), R. Solow (1956), R. Harrod (1959), E. Denison (1962), M. Alle (1989). In their papers, they laid the foundations for the theory of economic growth, substantiated the corresponding mechanisms. At the beginning of the XXI century, globalization processes have caused new challenges; taking them into account, the dynamics of development in certain countries acquired certain features. The inability of the entire world community to resist chaotic development was over the global financial crisis of 2007-2009. In the report of The Clube of Rome prepared by E. Weizsaecker and A. Wijkman "Come ON! Capitalism, Short-termism, Population and the Destruction of the Planet" (2018), it is noted that the current crisis is not cyclical but intensifies. It is not limited to the nature around us but includes social, political, cultural, and moral aspects; besides this, there is a crisis of democracy, ideologies, and the capitalist system. Ninety-eight percent of financial transactions are now speculative. In offshore areas, it is hidden from twenty-one to thirty-two trillion dollars. There is a surplus of capital in fictitious but profitable areas, while the directions, on which the future of the planet depends, feel the lack of funds. Economists are not able to see the problem because they are still inclined to consider ecological, financial, and industrial capital as equivalents: "while financial capital is increasing – everything is good."

Taking into account new features of development in the XXI century, works of scientists, which highlights national specifics, are published. E. S. Reinert (2007) made a meaningful analysis of the causes and conditions of poverty and wealth of different countries; R. Gordon (2012) and J. Fernald (2014) studied the peculiarities of USA development; P. Petrakis, P. Kostis, D. Valsamis (2013) – EU; J. Heller, J. Kluge, R. Lehmann (2014) – Germany. Clear scientific interest is caused by the works of scholars from the Baltic states and Ukraine. Thus, some issues of growth dynamics were investigated by: M. Kitsing (2016), Estonia; J. Ramanauskas (2011), Lithuania; I. Vaidere (2011), Latvia; N. Davydenko (2015), O. Kyrylenko (2013), E. Libanova (2012, 2015), Y. Pasichnyk (2016), Y. Schedrin (2017), O. Shevchuk (2015), Ukraine. The scholars in these countries analyse processes associated with the policy of governments to ensure the pace of socio-economic development, the efficiency of the use of financial resources, especially in the public sector, the response of business structures to the factors of the impact of internal and external environment, and suggest appropriate measures.

3. Analysis of the main indicators of socio-economic development

The problem of development in modern realities is sufficiently cleared both in theoretical and practical dimensions, but unpredictable globalization challenges make their adjustments to the specifics of both a country and the entire world community, as evidenced by the financial crisis of a decade ago. Taking into account that now all the experience accumulated during the evolution of mankind is being put into the concept "socio-economic development", and now there are ongoing discussions about the present essence, purpose, components, criteria, mechanisms of realization, strategic guidelines, etc. Such discrepancies can be explained by the fact that each individual country is at an appropriate stage of social development, forms its own tasks and strategy, and defines concrete mechanisms of implementation. However, it is clear now that socio-economic development must ensure qualitative changes in society as a whole, both in the production sector and in the spiritual, with the adequate formation of the country's power and welfare of the population. A set of indicators is used to estimate the level of this development. In this study, to compare development levels, we choose real GDP, general government

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spending, and minimum wages. The choice of such indicators is conditioned by traditional approaches, the possibility of obtaining statistical data, the use in the practice of international organizations. Regarding real GDP as one of the main indicators, we note that not all scholars consider it the best criterion; however, it is used by all the official statistical services of countries. As a criterion, real GDP is determined in several dimensions: in absolute terms relative to national or other currencies; in relative value to the relevant period; in a comparison in a specified currency per one average resident. In addition, real GDP can be determined according to a certain methodology and also at the level of the administrative unit of a particular country. In this study, we will select real GDP, % to the previous period. The data are given in (Fig. 1).



Fig. 1. Comparative dynamics of real GDP, % to the previous period

Source: compiled by the authors according to the statistical services of Estonia, Lithuania, Latvia and Ukraine

The comparison of these indicators determines the real possibilities of each country to provide the corresponding rates of economic growth. A characteristic feature of all countries was a significant drop in real GDP during the financial crisis of 2008-2009. It should be noted that, in the post-crisis period, none of them succeeded in achieving the economic growth rates that countries had before the crisis. The difference in this dynamics is that the Baltic states have been relatively stable in ensuring annual development, with the exception of 2008-2009, but Ukraine had significant periods of decline, in particular, in 2009 and 2014–2015. This situation in Ukraine is explained by complex social processes that were caused by the reorientation of the priority of the European vector of development, the tense relations with Russia, the loss of a part of the territory, and the significant depreciation of the national currency - from 8 UAH for 1 USD at the end of 2013 to 27 UAH for 1 USD at the end of 2016 or more than 3 times. At the same time, these difficulties with the real GDP dynamics were overcome

in 2016, and since then Ukraine has demonstrated positive growth rates that are in line with the dynamics of the Baltic states. For a more consistent definition of the level of economic development of countries, let us compare the gross domestic product in market prices per 1 person in US dollars (Fig. 2).



Fig. 2. Comparative dynamics of real GDP (per person, USD)



The specificity of this indicator is that it reflects real possibilities of the government of the country to provide economic growth, taking into account the population size. As for the Baltic countries, there is a tendency of the permanent growth of this indicator, except for 2009. Among all countries, Estonia leads, the last place belongs to Ukraine. It is worth pointing out that the backlog of Ukraine from other Baltic states continues to increase. The reason for this is the ineffective implementation of reforms. It is worth pointing out that the backlog of Ukraine from other Baltic states continues to increase. The reason for this is the ineffective implementation of reforms. A significant obstacle to reform in Ukraine is a series of social problems in the political, demographic, and legal spheres, which are difficult to overcome. According to provisions of the theory of economic development, the dynamics of this development is formed under the influence of many components external and internal factors, defined government policy, investments from different sources of financing, the international situation of financial and commodity markets, etc. The Baltic states have the opportunity to use certain advantages of EU membership, which Ukraine cannot realize, even taking into account the existence of relevant economic agreements with the EU.

From the components that shape the dynamics of economic growth, we choose general government spending, which can be considered as a conditional value of the resource of social development. In total, general government expenditures consist of certain financial resources of central, state and local government bodies, as well as special social insurance funds. This indicator can have different methods of definition, which determines the diversity of approaches of individual countries to the provision of public goods and services, as well as certain types of social assistance. According to international practice, it can be measured in USD in percent of GDP or per capita. In this study, we make an estimate in % of GDP. Data are given in (Fig. 3).



Fig. 3. General government spending, % of GDP



Analysing the level of these expenditures, we conclude that they have a wide range of fluctuations - both by years and by country. In the period of the financial crisis, all countries experienced their growth, which was the consequence of government actions in support of the poor, in particular on social benefits. Ukraine had the lowest level of these expenditures for almost all of the year, despite annual external and internal borrowings of 2-3 billion USD. In this context, we put forward the opinion of B. Danylyshyn (2018), who noted that Ukraine could gain a lot in terms of state stimulation of economic growth from the works of J.M. Keynes and his contemporaries devoted to the events of the Great Depression. But instead, the so-called "agents model", especially the model of "rational agents", became very popular. This type of modelling suggests that government intervention can be both a cause of the crisis and a reason for a slow post-crisis recovery of the economy. Following this popular logic in Ukraine, budget stimulation of the economy is also a form of state policy that cannot bring anything good. But everything is not as clear as the supporters of this point present, who on its rationale give a whole list of arguments with links to popular scholars. Here is the borrowed idea of the famous economist D. Ricardo, according to whom the public, knowing that additional budgetary spending will lead to higher taxes in the future, is already beginning to reduce its costs, saving money for the future. Here is also the opinion of contemporary American economists K. Rogoff and K. Reinhart that the growth of the economy begins to slow down in the country, which public debt is 90% of GDP and above.

Also, an important indicator of development is minimum wages. The role of this criterion lies in the ability of the state to establish the most acceptable lower pay limit for work. Let us match these limits (Fig. 4).



Fig. 4. Minimum wages, EUR/month

Source: compiled by the authors according to the statistical services of Estonia, Lithuania, Latvia and Ukraine

Comparison of these levels revealed significant differences in the real financial capacity of each country to ensure minimum social standards. So, if the Baltic states significantly increased this level for the analysed period more than twice, then in Ukraine it even decreased. As for Ukraine, it is worth taking into account the depreciation of the national currency in 2014–2016 more than twice.

Comparison of the analysed indicators revealed the corresponding differences in the dynamics of the basic criteria of socio-economic development.

4. Detection of the impact of minimum wages and general government spending on real GDP in view of four countries

To determine the impact of minimum wages and general government spending on real GDP in these four countries, let us perform a correlation-regression analysis based on data for 2006–2016. The period of time – eleven years – is sufficient to obtain reliable results of the study. The calculations will be performed using the Excel software. The influence of minimum wages and general government spending on the rate of formation of real GDP will be determined by means of correlation-regression analysis using data from Fig. 1, 3-4. The results are shown in Fig. 5.

It is found that the greatest influence of minimum wages on real GDP is recorded in Ukraine (the determination coefficient – 0.1862); in the Baltic countries, this effect is almost not felt. Changes in public spending have the largest impact on GDP dynamics in Estonia (79.55% of cases), and the smallest – in Ukraine (12.9%). The results of this part of the study confirm the well-known multiplier effect of J. Keynes. As for Ukraine, the share of general government spending directed to economic



Fig. 5. The influence of general government spending and minimum wages on real GDP

Source: calculations by the authors according to the statistical services of Estonia, Lithuania, Latvia and Ukraine

development, in particular, economic programs, does not exceed 10%, which is insufficient and thus does not contribute to economic growth.

The coefficient of multiple correlation (R), which characterizes the tightness of the relationship between real GDP and general government and minimum wages, will be calculated according to the formula:

$$R = \sqrt{1 - \frac{"r}{"r_{11}}}$$
(1)

where: Δr – determinant of the matrix of pair correlation coefficients;

 $\Delta r 11$ – determinant of inter-factor correlation matrix After completing the calculations, we get the following values for each country:

Estonia:
$$\mathbf{R} = \sqrt{1 - \frac{0.136}{0.814}} = 0.9126$$
 (2)

Lithuania:
$$\mathbf{R} = \sqrt{1 - \frac{0.449}{0.943}} = 0.724$$
 (3)

Latvia:
$$\mathbf{R} = \sqrt{1 - \frac{0.374}{0.998}} = 0.7907$$
 (4)

Ukraine:
$$\mathbf{R} = \sqrt{1 - \frac{0.677}{1}} = 0.5677$$
 (5)

Analysing these values, we conclude that the relationship between real GDP and general government and minimum wages is the tightest in Estonia and the least tight one – in Ukraine.

5. Conclusions

The identification of the peculiarities of socioeconomic development in the Baltic states and Ukraine allows forming strategic and current vectors of the development of economies of these countries. Analysis of the dynamics of development according to the criteria of real GDP, general government spending, and minimum wages contributed to the identification

of significant differences between these countries. The use of economic and analytical apparatus on the dynamics of real GDP demonstrated the impact of relevant indicators on GDP. As a result of the study, peculiarities of this development are identified in terms of countries and specific indicators. The following main results are obtained: according to the GDP dynamics during the period of the financial crisis, namely in 2009, all countries had a significant decline in GDP up to 15% compared to 2008, which in general testifies insufficient sustainability to globalization challenges. In addition, the GDP rates of all countries for the period of 2010-2016 are much lower than those that were in 2006–2008. For Ukraine in the period of 2006-2016, these rates were significantly lower, which is evidence of problems in the field of public finance security. The comparative dynamics of real GDP per capita confirmed the least stability of the financial system of Ukraine to external challenges, where this indicator is smaller than that of the Baltic countries, approximately three times. According to the indicator of General Government Spending, % of GDP per capita, it is revealed that the Baltic states had comparable criteria before the world financial crisis, which were determined within the limits of 32-46%, and in Ukraine it was within the range of 31-35%. After the financial crisis, none of these countries reached the pre-crisis level, and this indicator in the Baltic states for 2010-2016 ranged from 35 to 40%, and in Ukraine from 32 to 35%. The revealed dynamics is evidence of

the influence of negative external and internal factors that were failed to properly neutralize.

Concerning minimum wages, it is concluded that economically developed countries of the world attach significant importance to the permanent increase of this indicator, which has an important social significance, and all countries are trying to increase it. Thus, in the Baltic countries, for the analysed period, it has increased more than three times. In Ukraine, this figure has decreased, which was determined both by the global financial crisis and the depreciation of the domestic currency in the period of 2014–2016 more than three times.

In view of the significant decrease in the indicators of socio-economic development of Ukraine in comparison with the Baltic states, it is recommended to implement the following measures of the strategic direction: to generalize the existing normative legal documents of strategic content and to form a new strategy of social development for a period of up to 20 years based on a scientifically grounded paradigm; within the framework of the developed strategy, to formulate appropriate development programs in view of sectors and regions for the short-term; as a basis for development, choose an innovative vector focusing on universal human values. The implementation of these measures will contribute to raising the pace of social development, which is now a topical national task for Ukraine. Identifying the features of development, both for the Baltic states and for Ukraine, is an urgent socially important task, therefore, it is expedient to continue scientific research in this direction.

References:

Danylyshyn, B. (2018). How to achieve organic growth of the economy. New time. January 14, 2018. Electronic resource. Retrieved from: https://nv.ua/ukr/opinion/danylyshyn/jak-dosjahnuti-orhanichnoho-rostu-ekonomiki-2443980.html

Davydenko, N. (2015). Modern paradigm of agrarian units' financial security assessment. Economic journal XXI. 5–6. p. 90–93.

Gross domestic product. Electronic resource. Retrieved from: https://index.minfin.com.ua/economy/gdp/

Kyrylenko, O. (2013). Achievement of strategic guidelines for the improvement of intergovernmental fiscal relations in Ukraine. Finances of Ukraine, 8, Kyiv, p. 19-28

Minimum wage: Ukraine and EU. Electronic resource. Retrieved from: http://edclub.com.ua/analityka/ minimalna-zarobitna-plata-ukrayina-ta-yes

Nominal GDP of Ukraine from 2002 to 2017. (values of GDP in dollars – according to the World Bank). Electronic resource. Retrieved from: http://www.worldbank.org

Pasichnyk, Y. (2016). Strategic Aspects of Sustainable Development of the Ukrainian Economy. Economics and Finance. 8, Dnipropetrovsk, 20-27.

Price of the state. Budget of Ukraine. Retrieved from: http://www.cost.ua/budget/expenditure/elements/

Public spending ratio in the member states of the European Union in 2016 Electronic resource. Retrieved from: https://www.statista.com/statistics/263220/public-spending-ratio-in-eu-countries

Ramanauskas, J., Rimantas S. (2011). The Opportunities and Challenges for Agriculture and Rural Development. Rural Development 2011 The fifth international scientific conference rural development 2011, proceedings volume 5, book, 1 p. 189-19

Schedrin, Y. (2017). Perspective directions for the development of Ukrainian anti-crisis strategy in modern conditions of aggravation of the socio-economic situation. Baltic Journal of Economic Studies, Vol. 3(3), p. 75-85.

Vaidere, I. (2011). The paradigm of competitiveness and impact of innovations on regional development in the EU. Human Resources: The Main Factor of Regional Development. 2011, Issue 5, p. 282-291.