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## **EUROPEAN LABOR MARKET: EXPERIENCE FOR UKRAINE**

## **ЄВРОПЕЙСЬКИЙ РИНОК ПРАЦІ: ДОСВІД ДЛЯ УКРАЇНИ**

## **ЕВРОПЕЙСКИЙ РЫНОК ТРУДА: ОПЫТ ДЛЯ УКРАИНЫ**

*The article focuses on the analysis of changes occurring in the labor market and the search for ways to overcome the crisis on the labor market in Ukraine. The purpose of the article is to explore the labor market in some groups of European Union countries and to research the development of “creative economy” and “economy of knowledge” with the further identification of suitable measures for Ukraine to improve the labor market and economy of the country. The authors singled out the main trends of employment in European countries, paying particular attention to the post-Soviet countries and Ukraine. By analyzing the data of how the Share of Service Sector influences the total GDP in different groups of countries authors verify, that correlation between this two indicators is significant enough. For Germany and France the correlation coefficient is 94,5 %, which can be interpret as a direct dependence. In Baltic region correlation is a bit lower, R=77,6 %, but still enough to say that total GDP of analyzed countries depends on the share of the service sector in that country. The result of the analysis is the justification of the likely scenario of the development of the labor market in Ukraine, the implementation of which will increase Ukraine’s competitiveness in the world.*

*Стаття присвячена аналізу змін, що відбуваються на ринку праці та пошуку шляхів подолання кризи на ринку праці в Україні. Автори виокремили основні тренди зайнятості в Європейських країнах, приділивши особливу увагу пострадянським*

країнам та Україні. Результатом аналізу є обґрунтування імовірного сценарію розвитку ринку праці в Україні, реалізація якого дозволить посилити конкурентоспроможність України в світі.

Стаття посвячена аналізу змін, що відбуваються на міжнародному ринку праці і пошуку шляхів подолання кризи на ринку праці в Україні. Авторами виділено основні тенденції зайнятості в європейських країнах, зокрема звернувши увагу на пост-радянські країни і Україну. Результатом аналізу є обґрунтування імовірного сценарію розвитку ринку праці в Україні, реалізація якого дозволить посилити конкурентоспроможність України.

**Keywords.** Labor market of European countries and Ukraine, Employment, Service sector, Wages, Creative economy, Industry 4.0.

**Ключові слова.** Ринок праці європейських країн та України, Зайнятість населення, Сектор послуг, Заробітна плата, Креативна економіка, Індустрія 4.0.

**Ключевые слова.** Рынок труда европейских стран и Украины, Занятость населения, Сектор услуг, заработная плата, Креативная экономика, Индустрия 4.0.

## INTRODUCTION

Economic development is closely linked to the development of the labor market. Unhealthy economy is characterized by high unemployment rates, distortions in the structure of the employment and falling productivity. For example, three years after the start of the 2008 global crisis, real GDP in Greece continued to decline (falling by 3.7 % in 2010 and 6.9 % in 2011), it was accompanied by the rise of the unemployment rate. In 2011, as compared to the previous period, the unemployment rate in the country was 17.7 % (including youth unemployment — 44.4 %) [4]. The consequence of this situation was the reduction of incomes by 14 % (EUR per inhabitant) [4].

All countries have suffered crisis, but losses to the economies varied from country to country. As already mentioned, in Greece the consequences of the crisis were substantial, but some European countries managed easily to overcome these problems. These countries include France, Germany, the countries from Scandinavian Peninsula, etc. And the growth of the economies resumed in all EU countries, with the exception of Greece, as the revival in the labor market gave rise to consumption growth, which compensated a record low level of investment and a decline in exports. At the same time, the economic growth rates in the EU countries stays low. In the first half of 2017, the growth in the EU countries was 1.5 %, which is 0.6 % less than in the second half of 2016, but it is higher than that in the US.

Why these countries managed not to lose control over economic processes? The answer to this question will allow us to understand how to prevent the negative effects of the financial and economic crisis. And this is especially true for Ukraine, where it is possible to see a constant decline in GDP (for example, GDP in 2011 was 90.2 % of the previous year with the increase in unemployment (from 6.4 % in 2008 to 9.3 % in 2016, according to the State Statistics Committee of Ukraine [10].

At a first glance, the problems of European countries seem less interesting for Ukraine. However, a detailed analysis shows that the labor markets have many commons, and the causes of the problems may be similar. Bill Conerly says, «The great gains in standard of living have come from higher output per hour. That was

true of the United States and Europe during the industrial revolution, and it's true of Asia in recent years ... Rising incomes result from rising productivity» [2].

Previously, it was possible to force an economic development by investment streams, but they are unlikely to return to the pre-crisis levels. Moreover, it will be difficult to stem the decline in the working-age population. As a result, human resources and the service sector remain the main lever that can contribute to fast recovery and sustainable growth in most European countries, especially due to the emergence of new innovative spheres, accompanied by changes in business processes and structure of employment.

The study of the labor markets is the subject of the work of many authors, both in Ukraine and abroad, among them: K. Armstrong, G. Esping-Andersen, P. Regnard, A. Sapir, Y. J. Hopkin, I. Bondar, V. Bliznyuk [1], L. Lisogor, A. Kolot [5], I. Petrova, L. Shchetinina and others. Authors pay considerable attention to the analysis of decent working conditions and substantiation of ways to overcome unemployment in Ukraine, investigate the causes of rising unemployment rate and the interconnectedness of the labor productivity and the level of economic development in the world. They study the possible risks from the development of «industry 4.0». At the same time, further research is needed to study relationship between the development of the innovative labor and the state of the labor market, the impact of working conditions on the efficiency of the economy, and as a result the justification of measures to overcome the current crisis in the Ukrainian economy.

**The purpose of the article** is to explore the labor market in some groups of European Union countries and to study the development of the «creative economy» and the «economy of knowledge» with the further identification of suitable measures for Ukraine to improve the labor market and economy of the country.

#### **THE MAIN RESEARCH MATERIAL**

By understanding the processes on the labor market in Europe and Ukraine it will be possible to analyze the dynamics of the population, level and structure of employment, wages and GDP of countries.

Because of a huge stream of economic migrants and internally displaced persons that poured into Europe in 2015, traditional economic indicators — for example the unemployment or the general level of wages — have partially ceased to be a reliable indicator of the perception of the economic course, but they still remain a relatively significant illustrative index (Figure 1).

From this graphs we get an opportunity to see, that population growth in Germany and France is almost two times faster than in EU as a whole. At the same time, the Baltic States show the steady decrease by 2–3 % during the last four years. The situation is different only in Estonia, where the downward trend in 2016 was replaced by a slight increase of the indicator to the level of 2014.

At the first glance, the positive dynamics of the population is a prerequisite to improve the situation on the labor market, since more of the workforce can be employed and generate income. At the same time, the real situation shows a number of problems faced by European countries after the crisis. «Estimating labor market

slack in the European Union» report (Eurofound, 2017) states: «As the economy has recovered in the EU, notably since 2013, increased labor demand is evident in improving employment and participation rates and in declining unemployment rates. Nonetheless, at aggregate level, much higher EU unemployment rates (8.2 % in 2016 Q3) than in Japan (3 %) or the USA (5 %) are a simple indication that, of all developed market economies, labor slack is greatest in the EU. This is so particularly in those seven Member States with unemployment rates above 11 % in 2015» [3].

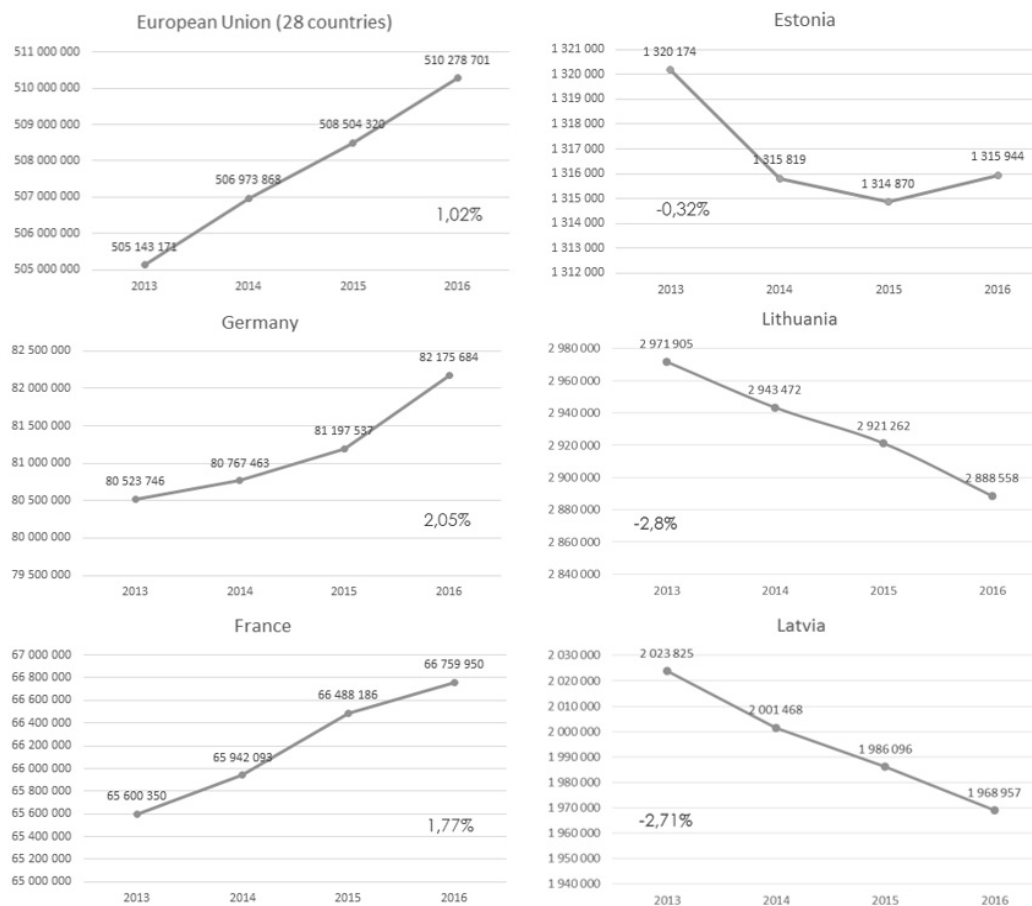


Figure 1. Population on the 1st of January 2013–2016 years and total change\*

\*as calculated by authors using the stat data [6].

In an effort to revitalize the economy and to reduce the unemployment, more and more countries are developing sectors of the creative economy, which include service sector companies, because by reforming the service sector it becomes possible to improve productivity and total output in the EU countries, ensure the creation of new and better jobs, stimulate investment and lead to further deepening of the integration. This idea is evidenced by the following authors' research (Figure 2 and Figure 3).

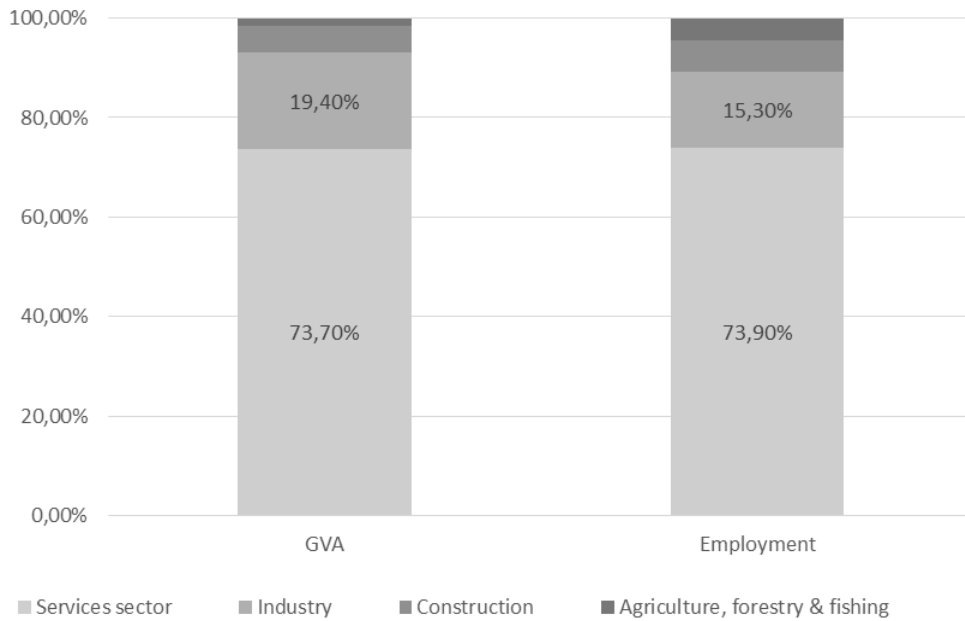


Figure 2. Share of Services in GVA and Share of Services in Employment, 2015 in EU 28 [9]

The outstanding feature of the next two graphs is that in Services in Germany & France are employed 10 % more people than in LLE (Latvia, Lithuania, and Estonia) region.

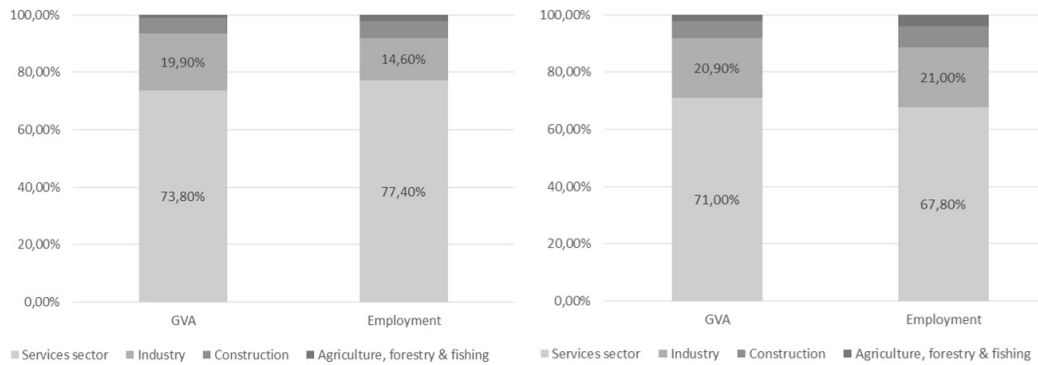


Figure 3. Share of Services in GVA and Share of Services in Employment, 2015 in Germany and France (left) and LLE region (right)\*

\*according to the stat data [9]

Services account for almost three-fourths of GVA in Europe in general. There are, however, some significant differences in the share of value added for services across EU member states and country groups. For instance, Germany's and France's services' share of value added are the same as in Europe, but employment rate is 5 % higher. While in LLE region, both indicators are just close to 70 %. Especially, it is

important to note, that the service sector employment is 6 % lower than the European average and 10 % below that of central region.

The second thing is deregulation. The EU's Services Directive was adopted in 2006 to create a Single Market for services. Its aim was to give firms the freedom to establish businesses in other EU countries and the freedom to provide or receive services in any EU country outside the company's country of residence.

The Directive covers services that make up nearly half of the EU's GDP, including: retail, tourism, construction and business services. However, implementation of the Services Directive has been difficult. In many countries, the regulatory environment for services is very complex and highly decentralized. Regulatory bodies, which are sometimes trapped by interests in the sectors that they regulate, often implement reforms; this tends to create a bias against those reforms that are intended to increase competition. Additionally, many professions and industries thrive on rents generated by regulatory constraints, and consumers are seldom aware of the costs imposed on them by these regulations. There is in fact a widespread perception in the EU among its citizens that reducing a regulatory burden leaves the public worse off [11].

While comparing the detailed structure of the Service sector, it becomes obvious, that in Baltic countries the service sector is substantially one-sided.

More than 50 % is taken by wholesale & retail sectors together with the Public administration. Although, in Germany and France these two sectors are also occupying the largest shares, both are near 19 %, the whole structure remains more diversified (figure 4, figure 5, figure 6).

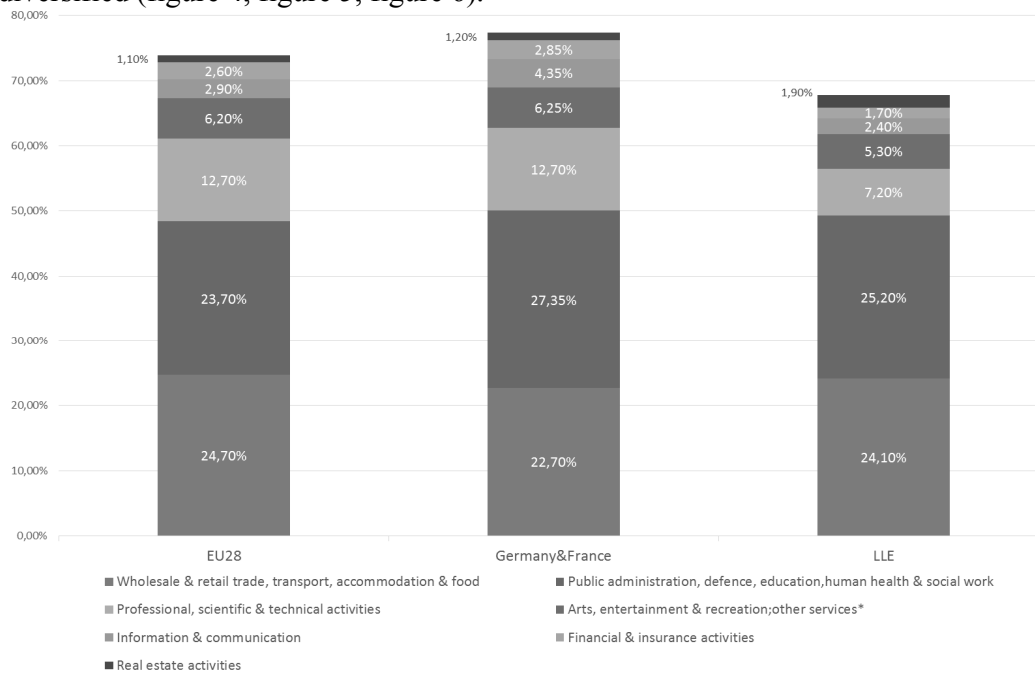


Figure 4. Detailed shares of Service Sectors in GVA, 2016 by regions\*

\*according to the stat data [11]

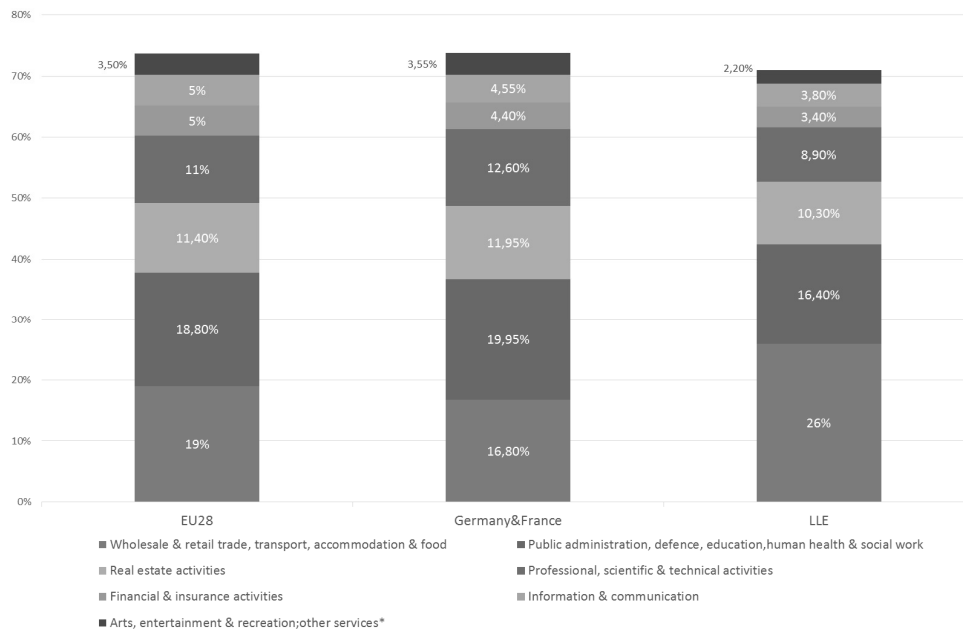


Figure 5. Detailed shares of Service Sectors in Employment, 2016 by regions\*

\*as per World Bank Group data [11]

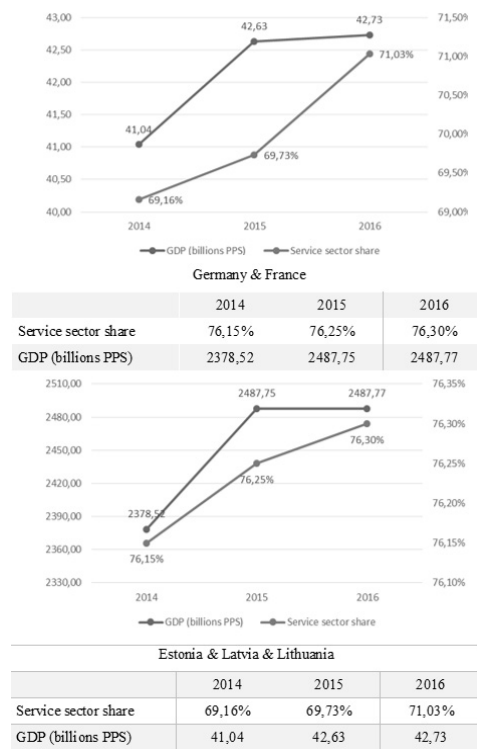


Figure 6. Correlation between Share of Service Sectors and GDP, 2014–2016 by regions [11]

By analyzing the data of the total GDP and the Share of Service Sector in both groups of countries, it is possible to see, that correlation between this two indicators is significant enough. For Germany and France the correlation coefficient is 94,5 %, which can be interpret as a direct dependence. In Baltic region correlation is a bit lower,  $R=77,6\%$ , but it is still enough to say that the total GDP of analyzed countries depends on the share of the service sector in that country.

As the result, high quality labor force and a big demand on workers in service sectors make wages grouse (figure 7). Authors think that low-cost services in Ukraine can enhance an overall competitiveness. For the last 5 years we have been constantly observing a more rapid growth of the average wages in the services sector (the level of wages has approached the level of wages in the industry). This was not previously observed.

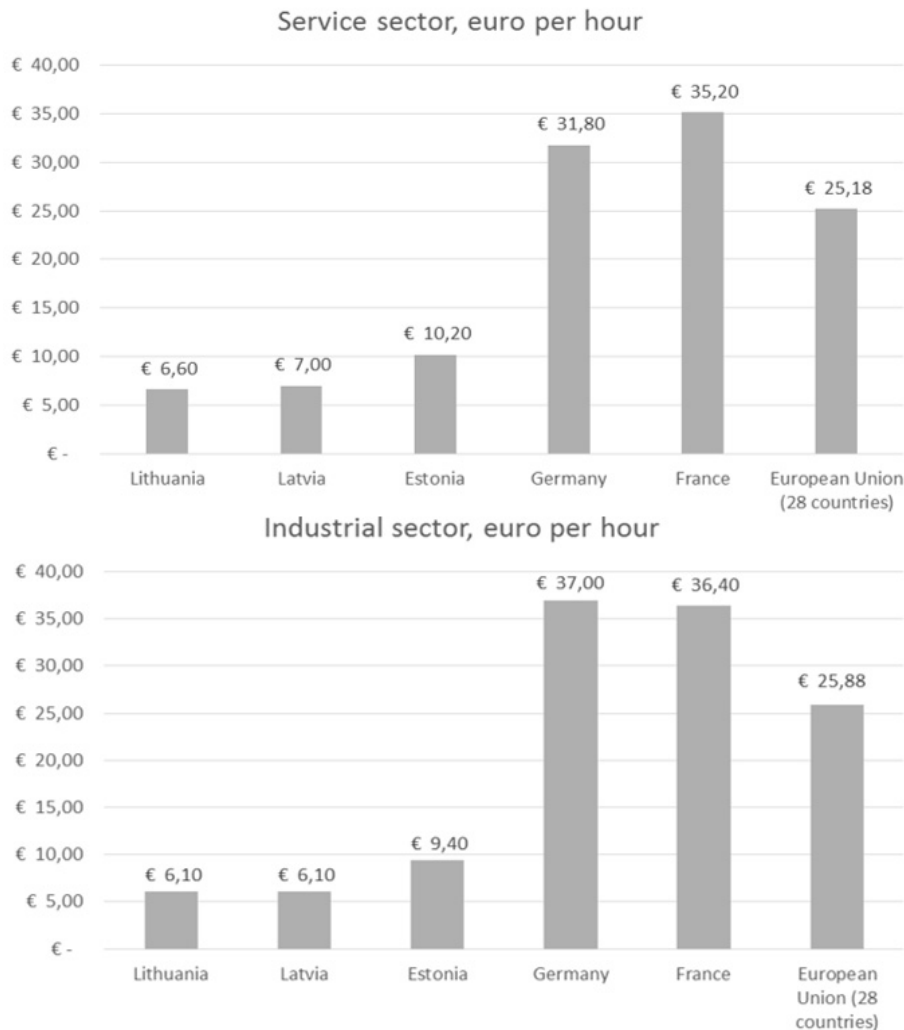


Figure 7. Average wages € per hour in Services and industry, 2016 by regions\*

\*according to the stat data [8]



But still, several important steps should be made, both by the government and by the business environment. First, the average level of salaries in the service sector should become a significant incentive [8]. In all of the analyzed countries this stage is already passed: all-three post-Soviet counties have higher wages in service sector, as well, lower hour price in Germany and France can be partly explained by the excessive supply of qualified personnel, but its level remains high enough, even in comparison with EU28.

In Ukraine situation is a bit different, the services sector remains lower than 60 % and at the same time, the industry remains more than a quarter of the total country's GDP (figure 8). But still, it is possible to note that the services sector grows fast, increasing the influence of external demand and export-oriented service industries, growth of fixed capital investments and internal consumer demand.

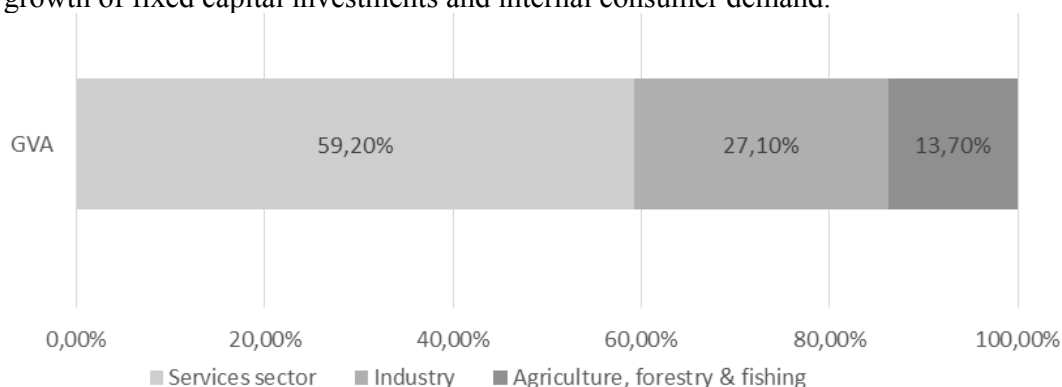


Figure 8. Share of Services in GDP, 2016 in Ukraine\*

\*according to the stat data [12]

Services, such as finance, accounting, transportation, communications, legal services and other commercial services generate economic outputs and are critical for the production of other goods. Empirical studies show that the service sector deregulation, as measured by the OECD Product Market Regulation, have positive effects on capital, output and employment and their effects increase over time. Not surprisingly, services are key drivers of the growth in advanced economies (figure 9).

However, in recent years, these traditional industries of the service sector are losing an increasing share to the creative economy, which provides an opportunity for the development of the 4<sup>th</sup> industrial revolution.

To perform effectively with Industry 4.0, workers will need to apply a variety of “hard” skills. They will have to combine a know-how related to a specific job or process, such as techniques for working with robots or changing tools on machines, with IT competencies that range from basic (using spreadsheets and accessing interfaces) to advanced (applying advanced programming and analytical skills). The need for multiple hard skills and the unprecedented scope of changes on the shop floor mean that «soft» skills will become more important than ever. Employees will have to be even more open to change, possess greater flexibility to adapt to new roles and work environments, and get accustomed to the continual interdisciplinary learning.

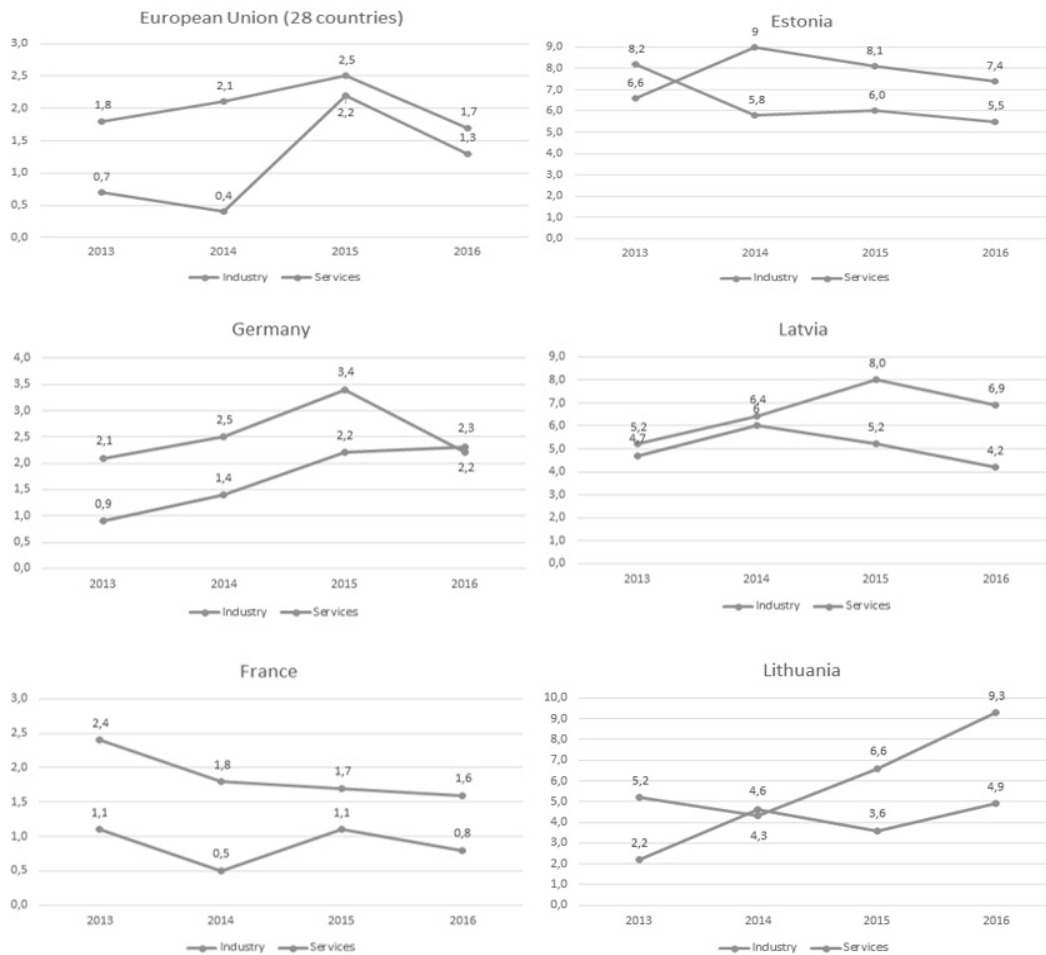


Figure 9. Percentage change in wages on previous period in Services (orange line) and Industry (blue line) sectors\*

\*according to the stat data [8]

In other words, Industry 4.0 is not about the destruction of the previous eras. It is adapting existing tools, the infrastructure and skills to take a full advantage of the Internet of Things.

A recent report by McKinsey Global Institute says automation technology will replace about 5 percent of all jobs globally, but it will take decades. In addition, the report found that 49 percent of all tasks currently being done by workers, from clerks to CEOs, could be automated by 2055 with the technology that already exists today [11].

They also project a growing importance of the continuous learning, training and education in order for the workforce to be able to adapt to future qualification requirements derived from Industry 4.0 technologies. Because of those developments, a transformation of the tax system is suggested, away from the current focus on labor taxes.

## CONCLUSION

Common features can characterize the changes taking place in the labor market of the European Union countries and in Ukraine: rising unemployment, changing the structure of employment, strengthening the role of innovative labor are among them. In addition, the main development trends of the EU labor market are:

1. the growth of structural unemployment, especially among unskilled workers and youth;
2. a significant influx of migrants across the EU borders, which changes the model of reproduction of labor resources (with the involvement of highly skilled migrants and young people);
3. increased labor mobility within the EU;
4. an increase in the outflow of highly skilled professionals outside the EU and an increase in dependence on the influx of such migrants from third countries.

The analysis of two groups of countries indicates that the structural difference between most indicators is insignificant and logical in relation to the level of development of the economic and social conditions of these countries.

At the forefront of the EU, there is the challenge of reducing unemployment and improving labor market flexibility. Its solution is closely linked to innovative development. Due to the implementation of innovations, new industries should be created and existing ones should be expanded, which will create additional jobs. Apart from the influence of productivity and technological innovations, different social innovations should be considered. The main directions of the EU innovation recovery should be: improving education, expanding informatization, better working conditions and supporting innovation activity.

We have already mentioned that the development of innovative labor reduces the labor potential of the country, and, therefore, conduct the risks of social danger (emigrational, motivational, etc.), which are mostly cumulative, have chain reactions [7]. This is especially important for Ukraine.

Therefore, in terms of stimulating economic development, it is important for Ukraine to take into account the experience of the European countries, and implement the following steps:

- to form the sphere of the creative economy stimulated by the development in the service sphere, including a social entrepreneurship;
- to orient the educational space mostly on the formation of soft-skills;
- to coordinate fiscal policy with the goals of social development in order to bring incomes of both enterprises and citizens out of the shadow;
- to create the most favorable conditions for innovative business, investment in R&D and practical science.

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Стаття надійшла до редакції 12.01.18 р.