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**LABOUR MARKET OF THE COUNTRIES  
OF THE CENTRAL AND EASTERN EUROPE BLOC –  
AN ANALYSIS OF THE DYNAMICS  
AND PERSPECTIVES OF CHANGES**

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**RYNEK PRACY PAŃSTW BLOKU EUROPY  
ŚRODKOWO-WSCHODNIEJ –  
ANALIZA DYNAMIKI I PERSPEKTYWY ZMIAN**

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**Summary:** One of the aspects of progressing globalisation processes is the change in the structure of labour market, especially in the employment and unemployment level. The scale of these changes is indirectly dependent on the potential of the labour resources in the local (national) labour markets. The main objective of the paper is to indicate the similarities and differences in changes in parameters that describe the labour market in selected states of the EU with reference to globalisation processes. The paper also makes an attempt to define (on the basis of simple statistical methods) the future reaction of the labour market, in the form of forecasts of selected parameters describing its condition. Detailed analyses include discussion on the dynamics of changes in occupational activity factor and employment rates. They include the dynamics of changes in employment structure in terms of the progressing process of ‘servicisation’, and the aforementioned forecasts are constructed for these parameters. The time range of the research includes the period 2004-2013, and the prognosis for 2014, 2015 and 2016; the selected group of countries includes countries of Central and Eastern Europe belonging to the European Union.

**Keywords:** labour market, occupational activity, employment rate, servicisation, bloc of states of Central and Eastern EU.

**Streszczenie:** Artykuł poświęcony jest analizom dynamiki zmian parametrów charakteryzujących rynek pracy wybranych państw UE w nawiązaniu do procesów globalizacyjnych. Autorka podejmuje również próbę określenia – w oparciu o proste metody statystyczne – przyszłych zachowań rynku pracy w postaci prognoz wybranych parametrów określających jego kondycję. Analizy szczegółowe obejmują dyskusję dynamiki zmian współczynników aktywności zawodowej, wskaźników zatrudnienia z uwzględnieniem dynamiki zmian struktury zatrudnienia w ujęciu postępującego procesu serwicyzacji i dla tych parametrów konstruowane są wspomniane prognozy. Zakres czasowy badania to lata 2004-2013, prognozy dotyczą najbliższych lat, czyli 2014, 2015 i 2016, a wybrana grupa państw to państwa Europy Środkowo-Wschodniej należące do struktury Unii Europejskiej.

**Słowa kluczowe:** rynek pracy, aktywność zawodowa, zatrudnienie, serwicyzacja, blok państw Europy Środkowo-Wschodniej.

## 1. Introduction

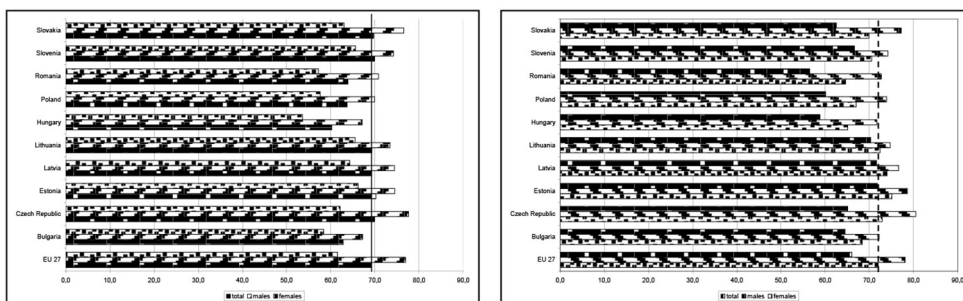
1st May 2004 and then 1st January 2007 were decisive moments in the sphere of the economy and history for the group of states from Central Europe and some countries of the former Soviet Union. Accession to EU structures had specific consequences and also caused a series of changes in everyday life for the populations of those countries. Joining the EU was associated with the hopes of many people for the improvement in the standard of living, for instance through the possibility of getting a better paid job. Often it was associated with the necessity to retrain, to change the place of residence or to change the work place, finally, however, the change in the economic structure of the state should affect its population's affluence. The situation on the labour market is a direct reflection of the living standards a in global perspective. Monitoring the parameters of the labour market allows for an assessment of its situation and thus, through the analysis of their dynamics, the trends of changes can possibly be determined and assessed. At the same time, it is possible to assess its efficiency and the need to introduce possible corrections or changes while taking into account the activities of administrative units. Detailed analysis in the paper include such countries as Poland, the Czech Republic, Slovakia, Hungary, Bulgaria, Romania, Slovenia, Lithuania, Latvia and Estonia.

The labour markets of those countries changed significantly after 2004 as they had to be adjusted to EU requirements and needed to comply with a number of common economic strategies (e.g. the Lisbon Strategy) or simply the consequences of the so-called "opening of borders" and the intensified wave of economic migration observed after 2004. Therefore the years between 2004 and 2013 are the common period of research for all the states even though Bulgaria and Romania joined the EU a little later. As mentioned before the study comprises rates that characterise the labour market, including occupational activity rates and employment levels. Data accessible from the Eurostat database and from national statistical offices provided the database for the study. Simple statistical relations, and the rate analysis in particular, was the research method, and when necessary, graphic interpretations of selected rates were applied. The level of the mean pace of changes in rates was determined for the purpose of forecast construction and on this basis an assessment of the future level of their values was made.

## 2. Occupational activity and the level of employment

Analysing the fundamental labour market measure, that is the rate of occupational activity defined in the simplest way as the percentage share of occupationally active people (that is working people or people who do not work but are interested in starting work, the unemployed) in the total population of a particular category distinguished by age, the level of education and gender. Firstly its general shape is analysed for the age group 15-64. The intensity of the measure was definitely different for selected states which, considering various economic conditions, is not surprising. In 2004,

the lowest level of occupational activity was observed in Hungary (60.2%) and the highest in Estonia (70.2%). In subsequent years in the case of all the countries there occurred a slight increase in the level of occupational activity. On average, the annual increase was not higher than 1%, however it brought a definite improvement in the level of occupational activity on the scale of the ten studied years. The strongest dynamics of changes measured on the basis of geometric mean was observed in the case of Hungary and Bulgaria, and the weakest in the case of Slovenia and Slovakia (about 0.95% and 0.032% respectively). Taking into account the mean level of the measure for all EU states in 2013, only Estonia, Lithuania, Latvia and the Czech Republic were slightly higher than its level, whereas other states did not reach the mean EU level, which was 69% in 2004 and 72% in 2013. This regularity is also retained if the gender of a potential worker is taken into account (Fig. 1).



**Fig. 1.** Occupational activity rate of selected countries of Central and Eastern Europe including gender in 2004 and 2013

Source: own case study after [http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do?&state=new&currentDimension=DS-053514INDIC\\_EM](http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do?&state=new&currentDimension=DS-053514INDIC_EM) (accessed 15.05.2014).

The situation on the labour market is described more precisely by the employment rate, therefore its value is usually applied in detailed analyses, including additional factors. Analysing the dynamics of the level of employment between 2004 and 2013, it can be generally stated that employment increased in 2013 compared to 2004 (Fig. 2), however the pace of growth was not the same in all the states. In the case of some of them (Lithuania, Latvia, Estonia or Slovenia) even a diverted direction of changes was observed in 2008. The reasons for disorder in the growing tendencies of changes can be perceived in the financial crisis that occurred in 2008. Unfavourable changes in the financial markets occurring at that time significantly influenced the economic situation of the states and thus the very labour market, or maybe elsewhere it was the financial crisis that negatively influenced the labour market through a reduction in employment, which, in turn, brought economic collapse. Therefore the declining tendency of the level of employment observed after 2008 is not surprising.

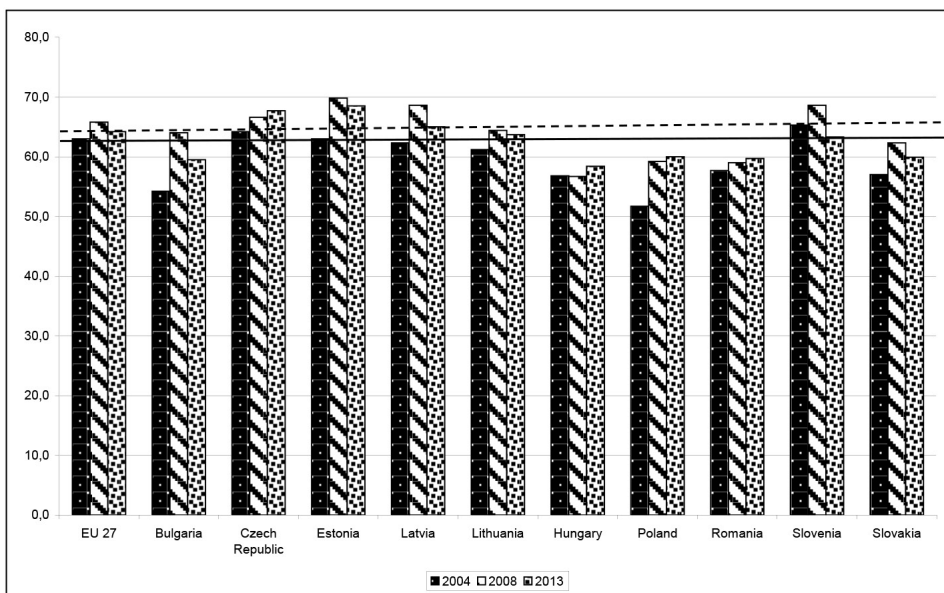


Fig. 2. Employment rate in selected EU states in 2004, 2008 and 2013 (in %)

Source: own case study after [http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do?&tate=new&currentDimension=DS-053312INDIC\\_EM](http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do?&tate=new&currentDimension=DS-053312INDIC_EM) (accessed 22.05.2014).

Analysing the dynamics of changes in the level of employment in the period of ten years between 2004 and 2013 with the use of geometric mean, it can be stated that in each of the analysed states, except for Slovenia, an insignificant, but definitely different from zero increase in the value of the measure, was observed every year. The dynamics of growth was varied and so for example in Poland on average every year the level of employment increased by around 1.6% and in Hungary only by 0.34%, whereas in the whole EU the increase was even smaller that is by 0.2%. Making an attempt to construct the forecasts on the basis of the mean pace of changes for the subsequent years (Tab. 1) we can state that the highest level of employment will remain the same for Estonia, the Czech Republic and Latvia and only in these countries it will be higher than the EU level. On the other hand, in the case of the other countries, the dynamics of changes will be observed but the value will not reach the average level of employment in the EU. It is obvious that these are only forecasts. Their reliability is based on the currently observed pace of changes in the rate and the level of employment. Apart from measurable determinants directly related to economic processes, they are remarkably influenced by factors of a non-measurable nature, e.g. social and political. Therefore the presented forecasts ought to be approached with a lot of caution, however they present some guidance as for the shaping of the values of the measure for their future states.

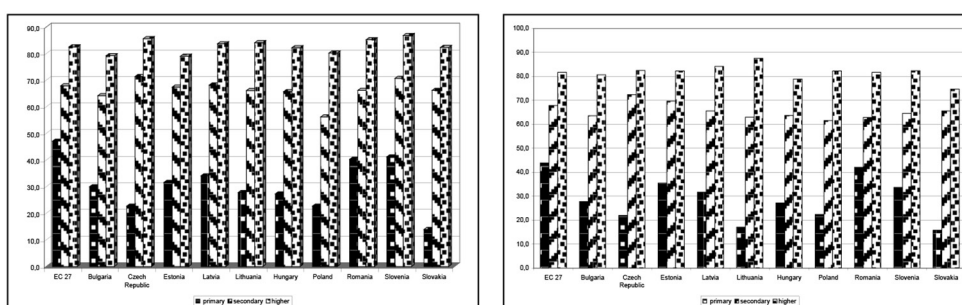
**Table 1.** Forecasts of employment rate in % for the years between 2014 and 2016 on the basis of mean pace of changes

Geo/time	EU27	BU	CzR	ES	LV	LT	HU	PL	RO	SL	SV
2014	64.33	60.12	68.10	69.14	65.31	63.98	58.58	61.00	59.93	63.08	60.23
2015	64.47	60.75	68.50	69.79	65.62	64.27	58.76	62.02	60.15	62.86	60.56
2016	64.61	61.38	68.91	70.44	65.93	64.56	58.94	63.05	60.38	62.65	60.90

Source: own case study.

### 3. Employment rate by education and age

Education is one of the factors that undoubtedly influence offering employment to workers. Education determines not only the possibilities of obtaining a particular job, but also in many cases the capability of a worker's possible retraining or extending the worker's responsibilities through additional training or courses. It is obvious that employers more willingly offer jobs to workers with a higher level of education than a worker of poorer professional preparation, assuming their greater occupational mobility or possibility to change the character of work if such a necessity occurs. Generally, between 2004 and 2013 there occurred an insignificant increase in employment in the whole EU structure (by about 2%). However, in the case of the whole EU and in individual member states the regularity of a higher employment rate in the case of people with university education (that is definitely higher than 80%) than people with primary education is retained (the level of employment lower than 40%) (Fig. 3).



**Fig. 3.** Employment rate by education in EU in 2004 and 2013 (in %)

Source: own calculations.

Together with education, the age of workers is a factor that significantly influences the level of employment. Workers in extreme age groups, 15-24 and 55-

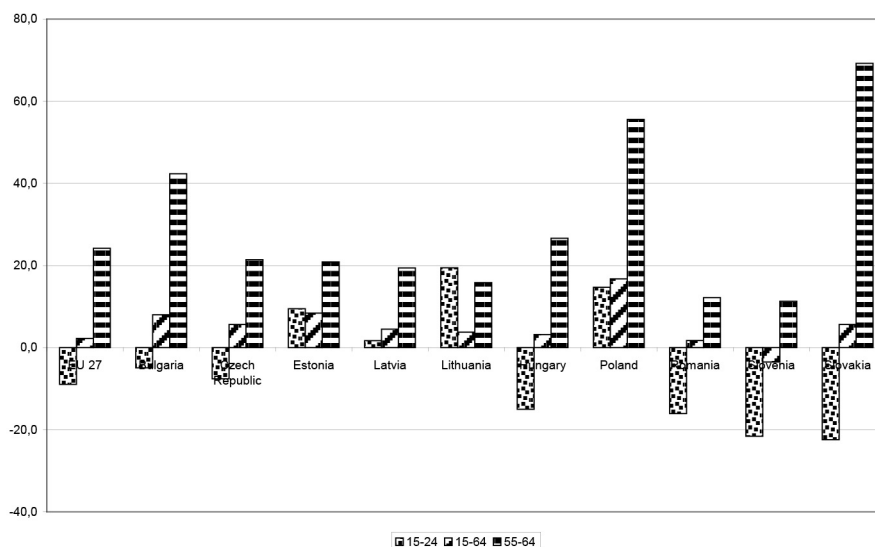
-64 are in the most unfavourable situation. The former is made up of young people, usually graduates from secondary schools and universities, with no or very little professional experience. Considering the social conditions of the labour market, employers' unwillingness to offer jobs to young workers is observed and therefore there is clearly limited sector of available work places for them. This is probably also associated with mobility or its lack in these age groups which is translated into the structure of the labour market. The second group are workers at the end of their professional career who are at the highest risk of non-adjustment to the new economic situation or the consequences of the economy's restructuring.

At the end of the last century, together with economic changes, there occurred the phenomenon of reduction of workplaces, a limitation of the level of employment and a change in the character of labour. In many cases workers' re-training was necessary, however it was not always possible and usually it was expensive. Therefore employers, while reducing employment, used to dismiss workers who were less flexible with respect to change in qualifications, or while they were investing in workers' re-training they were guided by the criterion of their further usefulness in terms of maintaining continuity of the employment period. This had a significant impact on employment rates in the age group 55-64. Detailed analyses of employment rate in total and in the two indicated extreme age groups, 15-24 and 55-64, allow for the formulation of a number of conclusions that are presented below.

- Comparing employment levels in the extreme age groups of workers, it can be stated that usually the lower rate occurs in the case of younger people, which was particularly apparent in 2004 and in the subsequent years until 2008. Slovenia in 2004 was an exception.
- Actually, the world financial crisis had no impact on employment structure by age, and the dynamic increase in employment in the age group 55-64 occurring in the following years ought to be considered the result of the resolution of the Lisbon Strategy which indicated, as one of the key goals, an increase in the occupational activity of people aged over fifty five as long as the level of 50% of the employment rate is achieved in this age group before 2010, and extending the effective retirement age, that is the mean age at which people are actually retired, by 5 years. Unfortunately, the assumptions of the economic strategy from Lisbon were not fully implemented even by 2013. However, they somehow intensified the attempts of governments to achieve them, at least partially.
- The mean employment rate of people aged 55-64 for the EU-27 was 50.3% in 2013, and in some countries it was higher than the level required in postulates of the Lisbon strategy (Estonia, Lithuania, Latvia and the Czech Republic) but in the majority it did not reach the assumed level or was even lower by around 10% (Hungary, Poland and Slovenia).
- Among the countries of the former Eastern bloc, Estonia, Latvia and, to a slightly smaller degree Lithuania, reached one of the highest levels of employment rate and occupational activity in the age group 55-64, which was around 62%.



- The Baltic States are distinguished in the implementation of EU guidelines concerning the employment rate of elderly people. This is the result of the reforms of the pension systems in the 1990s. The possibility to obtain higher pension benefits as a result of working after statutory pension age was reached, made people from the Baltic republics willingly extend their occupational activity. On the other hand the increase in the interest from employers in offering work to elderly people was also influenced by young people's migration abroad, which as a consequence resulted in the shortage of experienced workers on the labour market.



**Fig. 4.** Change in employment level in age groups 15-24, 25-54 and 55-64 in 2013 in comparison with 2004 in selected EU states

Source: own calculations.

While conducting a complementary analysis of the scale of changes in the employment rate in 2013 compared with 2004 (Fig. 4), in particular the age groups of potential workers, it can be stated that the largest increase in the level of employment of people aged 55-64 was observed in Slovenia, Poland and Bulgaria. On the other hand, a definite decline in employment was actually observed for young people in the age group 15-24 in all the analysed states except for the Baltic republics and Poland.

#### 4. Dynamics of changes in the level of employment by trade

The sectorial nature of economy is another factor diversifying the level of employment. Analysing the simplest, three-sector division into industry, services and agriculture, the restructuring of economy in particular EU states somehow forced changes in

the proportions in employment structure. The necessity to start work in the sphere of services rather than in industry was occurring more and more extensively. At the same time, the definition of "services" changed remarkably. This was significantly related to the occurrence of new types of services, the change in their importance and the range which influenced economic development directly or indirectly through the increase in competitiveness of various branches of the economy.

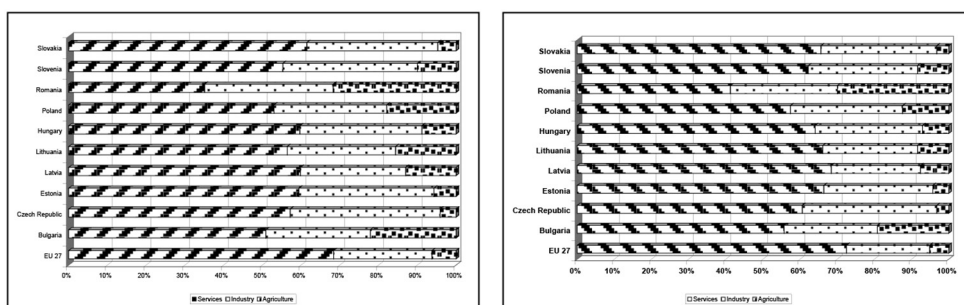
The economic policy of governments of many states, including Poland, initiated in the 1990s within the process of restructuring resulted in the collapse of many state-owned unprofitable enterprises. This brought a significant decrease in the importance of industry and agriculture in general economic structures. The fast growth of the role of trade, mostly due to low capital intensity in the creation of new workplaces, is an additional reason for the development of the service sector in the economy. As a result of the implemented political changes and economy's restructuring, a growth in the infrastructure of services occurred, and the area of its activity increased significantly. Qualitative changes occurring in the sector of services increasingly determined the course of production processes, satisfied the population's needs and brought an increase in the share of services in the creation of national income. The sustainability of proportions on the labour market through significant reduction in employment was apparent. On the other hand, the modernisation of the economy and the improvement in its competitiveness was achieved through the implementation of innovative and totally new types of knowledge-based market services. The development of the sector of services associated with the improvement and development of economic processes influenced their long-term and sustainable development.

At the same time, attention should be paid to the fact that the increase in employment in services was achieved at the expense of a remarkable loss of workers in two other sectors. Even if it is easy to explain the decline in employment in industry (restructuring, liquidation of unprofitable companies and workplaces or lack of worker's will to retrain), the dramatic reduction in the level of employment in agriculture is alarming and not easy to explain. Here, the lack of willingness to take up hard work can be the only explanation beside the implementation of numerous innovations in agricultural production. The dynamics of the decline in employment in agriculture is significantly larger than in industry.

Analysing the structure of employment by trade in division into three sectors (Fig. 5), it can be stated that in each of the selected states, employment in the sphere of services was at the highest level and it was definitely higher than the level of employment in other branches of the economy. However, in comparison with the mean level of employment in services observed on the EU scale that reached a total of 68.4% in 2004 and 72.5% in 2013, it was lower and clearly diversified in the selected group of states. In 2004 Slovakia, Estonia, Latvia and Hungary were the closest to the mean EU level (around 60%) and the most distant level was observed in Romania and Bulgaria (35% and 51% respectively). In 2013, this arrangement of the sequence did not change, only the values of the measures increased by several



percentage points and still remained lower than the mean EU level. The largest number of people employed in the third sector was observed in the Baltic States, including Latvia (68.4%), Estonia (66.4%), Lithuania (66.1%), and in Slovakia, and the smallest number of people employed in services was reported in Romania (41.3%) and Bulgaria (55.6%).



**Fig. 5.** Employment rate by trade in 2004 and 2013 in selected EU states (in %)

Source: own calculations.

Analysing the causes of these divergences we can indicate different dynamics of economy restructuring, and first of all the slightly later accession of these two states to EU structures. As a result of changes in management, member states had to develop new technologies and change the structure of employment more dynamically. The decrease in importance of industry and the so-called non-employment increase in GDP undoubtedly influenced the increase in employment in the sphere of services and the reduction of employment in other branches. The change in the method of employment toward self-employment, part-time employment or multi-employment is also important. These new forms of employment can be applied more in the sphere of services rather than in industry. If we analyse in detail the mean pace of changes in the level of employment in aforementioned three branches of economy (Tab. 2), in the subsequent years of 2004-2013 period it occurs that the most dynamic changes in terms of annual growth of employment in services were observed in Romania (1.82%) and in Lithuania (1.78%). This was nearly three times higher than the annual increase in employment in services in the whole EU.

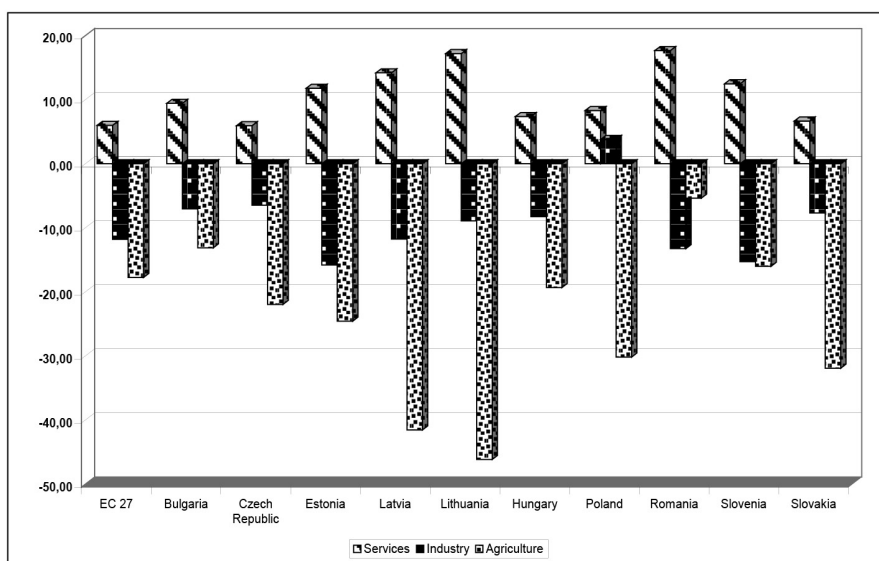
**Table 2.** Mean annual rate of changes in employment rate in 2004-2013 in %

Geo/time	EU27	BU	CzR	ES	LV	LT	HU	PL	RO	SL	SV
Services	0,65	1,01	0,64	1,25	1,49	1,78	0,79	0,89	1,82	1,32	0,72
Industry	-1,39	-0,81	-0,74	-1,89	-1,38	-1,03	-0,95	0,41	-1,57	-1,82	-0,89
Agro	-2,15	-1,55	-2,72	-3,08	-5,79	-6,65	-2,36	-3,91	-0,61	-1,92	-4,18

Source: own calculations.

At the same time the dynamics of decline in the level of employment in industry and agriculture was observed. As could be expected, the decline in employment in agriculture was definitely stronger than in industry and more severe in the states in which employment in services was increasing most intensively. This happened in Lithuania (-6.65%), Latvia (-5.65%) and in Slovakia (-4.18%). The smallest mean annual decline in employment in agriculture was observed in Romania (-0.61%).

If we assess the scale of growth and decline in employment in individual sectors in 2013 in comparison with 2004 for each of the states (Figure 6), it can be seen that in services an increase was observed in each of the selected states, a slightly growing tendency in industry was observed only in Poland, and finally in agriculture the decline was significant and reached a level of even over 40% (Latvia and Lithuania).



**Fig. 6.** Dynamics of changes in employment rate by trade in 2013 in comparison with 2004

Source: own calculations.

**Table 3.** Forecasts of employment rate in 2014 by trades (in %)

Geo/time	EU27	BU	CzR	ES	LV	LT	HU	PL	RO	SL	SV
Services	72,97	56,26	60,99	67,23	69,42	67,28	64,61	57,91	42,05	63,02	66,07
Industry	22,09	24,90	35,93	28,75	23,67	25,24	28,62	30,32	28,35	28,86	30,92
Agro	4,99	18,90	3,11	4,17	7,16	7,84	6,93	12,01	29,82	8,24	3,07

Source: own calculations.

Applying the mean annual pace of changes in employment rates in individual economic sectors we can make an attempt to determine its level for 2014. Forecasts

for the coming years can be loaded with significant error resulting from changes in the economy's structure or migration processes. The forecasts are presented in Tab. 3. The regularity of disproportionality of employment structures in individual branches observed before seems confirmed.

## 5. Conclusions

The dynamically changing economic reality occurring on a global scale undoubtedly influences the economies of individual states in the face of universal globalisation. These changes enforce a number of further changes in the attitudes of behaviour of producers of consumer goods and the consumers themselves. A change in the model of consumption is seen on economic macro and micro scale, in the scale of production entities and households, and it is translated into the demand and supply sphere of the labour market. This, in turn, brings a change in consumers' expectations and a change in the structure of employment in particular sectors of economy. Structural changes in the economy have their origins in new technologies and transform industrial civilisation into a service-oriented civilisation created by a knowledge society. The scale of these changes depends indirectly on the potential of labour forces that occur on the local labour markets. The article shows a number of regularities observed in the labour market of particular EU states. The states struggle with a lot of economic problems as they are historically burdened with the structures of the old economic systems. It can be seen that economic changes have an evolutionary character rather than a revolutionary one. It is not possible to implement changes in the structure of employment quickly while approaching them as the results of technological changes. In many cases technological changes, particularly in the recent decades, are rather revolutionary and the labour market may not always fully follow them. The consumers' market has this capability because it is easy to get accustomed to a better product or service that is easier to operate. However, the producers' market does not have such a capability. The labour market is not a single person – consumer but a group of people-producers that have their own demands. Thus the principle of specific balance between the spheres of supply and demand in the labour market is important, which in general has not been observed in the case of any EU state in recent years. The labour market is additionally determined by demographic or demographic and social phenomena that have objective nature in view of the processes occurring on the labour market. Gender, age and the education of a potential worker are important in a contemporary, new labour market and these three major demographic criteria actually shape the structure of the contemporary labour market most significantly.

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