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## Deviation of employment in the EU member states from the target values of the Europe 2020 Strategy

**Abstract.** The article is focused on the analysis of changes in the employment rates in the EU countries with regard to the target values of the Europe 2020 Strategy. The trend of employment has been considered via the analysis of variability and disaggregation by gender. Following the period of successful realisation of the objectives of the Europe 2020 Strategy the situation changed due to the impact of economic crisis and the employment rate began to decline. It is hard to expect that the forecasted value for employment rate will have been achieved in all of the EU member states by 2020. Portugal, Italy, Greece, and Spain are experiencing an economic downturn and have a difficult situation in their labour markets. The economic recovery of the abovementioned four countries is very slow, thus, it is not realistic to expect that they will reach the expected employment rates.

**Keywords:** Employment; Europe 2020; Target; Coefficient of Variation; Poverty

**JEL Classification:** A13; E24; C40

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### **Відхилення за показниками рівня зайнятості в державах-членах ЄС від цільових значень, передбачених Європейською стратегією забезпечення зайнятості та розвитку до 2020 року**

**Анотація.** Стаття присвячена аналізу змін у показниках зайнятості в державах-членах Європейського Союзу відносно цільових значень, передбачених стратегією «Європа 2020». За допомогою проведеного аналізу варіабельності було досліджено тенденцію зайнятості населення за ознакою статі. Після періоду успішної реалізації цілей, визначених стратегією «Європа 2020», ситуація змінилася у зв'язку з наслідками економічної кризи з тенденцією до зниження рівня зайнятості населення. При цьому малоімовірним є те, що цільові значення показника рівня зайнятості будуть досягнуті до 2020 року. Португалія, Італія, Греція, а також Іспанія, переживають економічний спад і мають складну ситуацію на своїх ринках праці. Відновлення економік вищезазначених країн відбувається дуже повільно. Отже, розраховувати на те, що ці країни досягнуть показників очікуваного рівня зайнятості населення не доводиться.

**Ключові слова:** зайнятість; стратегія «Європа 2020»; ціль; коефіцієнт варіації; бідність.

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### **Отклонения по показателям уровня занятости в государствах-членах ЕС от целевых значений, предусмотренных Европейской стратегией обеспечения занятости и развития до 2020 года**

**Аннотация.** Статья посвящена анализу изменений в показателях занятости в государствах-членах Европейского союза по отношению к целевым значениям, предусмотренным стратегией «Европа 2020». Посредством анализа вариабельности была изучена тенденция занятости населения по признакам пола. После периода успешной реализации целей, обозначенных в стратегии «Европа 2020», ситуация изменилась в связи с последствиями экономического кризиса с тенденцией к снижению уровня занятости населения. При этом маловероятным представляется то, что целевые значения показателя уровня занятости будут достигнуты к 2020 году. Португалия, Италия, Греция, а также Испания, переживают экономический спад и имеют сложную ситуацию на своих рынках труда. Восстановление экономик вышеназванных стран происходит очень медленно. Следовательно, ожидать того, что данные страны достигнут показателей ожидаемого уровня занятости населения, не приходится.

**Ключевые слова:** занятость; стратегия «Европа 2020»; цель; коэффициент вариации; бедность.

### **1. Introduction**

Nowadays, we are facing a problem of lower volumes of investment and higher unemployment rates (Ten priorities for Europe, 2015) [13]. Unfortunately, this is a typical problem of the countries affected by the global economic crisis. One of the main priorities of the EU is to create such conditions that will make their economies competitive and provide

higher employment rates (Europe 2020) [3]. An increase in employment could solve a very sharp problem concerning job cuts. In Slovakia, more than 20.6 % of the population is at risk of falling below the poverty line poorness or experiencing some kind of social exclusion. However, it should be noted that the regional differences are very high (Zelinsky & Stankovicova, 2012) [14].

**2. Brief Literature Review**

Actual problems of employment, as well as those described in the Europe 2020 Strategy, were elaborated by studying a number of publications presented by different authors and institutions of the European Union.

Essential progress has been achieved in the domain of climate change, education, whereas progress related to R&D expenses was limited. It should also be noted that the gap between the real employment and poverty reduction goals has increased (Eurostat newsrelease, 2015) [6]. Paid employment is a decisive factor in achieving adequate living standards. It helps to enhance the performance of economies, promote social inclusion and maintain well-being (Eurostat statistical books, 2015) [5]. According to the conducted cluster analyses (Loster & Pavelka, 2013) [9] of a selected dataset for the EU member states in 2008 and 2011, we observe the following: an increase in GDP per capita in purchasing power standards, a decline in total revenues from taxes and social contributions (% of GDP), a decline in annual inflation rates, an increase in the real GDP growth rates, an increase in the long-term unemployment rates, a decline in employment rate. Hence, it is obvious that the crisis has had a negative impact on some of the selected indicators.

Slovakia has higher unemployment rates in comparison with other economically developed countries. If we assess Evaluating the level of unemployment, Slovakia has the worst results among the V4 countries (Tancosova, 2014) [12]. Nowadays, unemployment is a permanent social aspect of reality leading to a situation when people without a job cannot live a life which fits the societal standards for material well-being. Generally, well-educated and motivated people are able to get a better paid job (Britton, 1998) [2]. Longer unemployment is associated with an exclusion of an individual from social and economic life (Beleva, 1997) [1]. The economic crisis has affected labour market conditions. Unemployment has a cyclical nature and is associated with the output of the economy. A lower output of the economy is therefore associated with higher unemployment rates (Pivonka & Loster, 2014) [11]. Therefore, employment can indicate the level of social and economic status of selected countries (Grzebyk & Stec, 2014) [7]. Unemployment is an expressive problem (Zibrinova et al., 2015) [15], which can strongly affect human migration trends. (Janotka et al., 2013) [8].

**3. Purpose**

The purpose of the article is to conduct an analysis of the employment in the EU member states to decide whether it is possible to realise the set objectives in the area of employment.

**4. Results**

A positive development of employment in the EU was typical for the period before the crisis. The highest employment rate (ER) was reached in 2008. Later, the trend reversed (Figure 1), which was due to a clear impact of the global crises in Europe. After a drop of the ER to 68.9% in 2009, the rate was low till 2014 when a small increase in the ER was typical for the majority of EU countries. The difference between the real ER and the end goal of the Europe 2020 Strategy reached 4.7 percentage points (p.p.) in 2008. Unfortunately, the difference increased to 5.8 p.p. in 2014 (Eurostat statistical books, 2015) [5]. There exists a marked contrast between the ER through all the EU countries. In 2002, the ER was only 55.8% in Bulgaria, whereas the ER in Sweden peaked at 78.5% in the same year. The variability between the ER of the EU countries remained high in the period of the best performance in the labour market. Sweden again was at the top of the ER (80.4%), whereas while the worst situation in the labour market was typical for Malta (59.2%). In 2014 which was the latest available year in terms of getting access to statistical data related to the ER figures from all the twenty-eight EU countries, Sweden again achieved the best ER (80.0%), whereas Greece had the worst ER (53.3%). We expect that the annual data on the ER for 2015 will be available very soon, but unfortunately such statistical data were unavailable at the end of March, 2016.

Sigma-convergence coefficients can be used as a measure of disparity reduction among the regions (Monfort, 2008) [10].

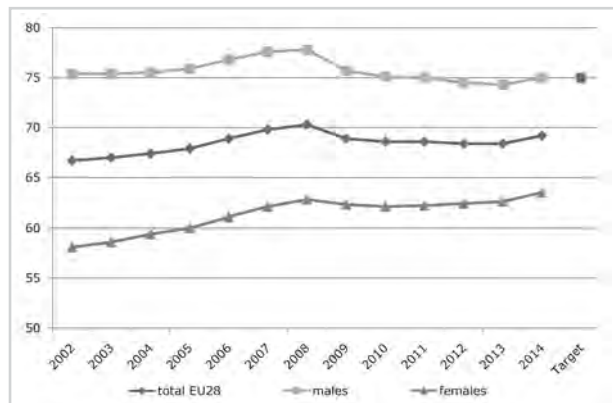


Fig. 1: Employment rate in %, EU-28 (age group 20-64)  
Source: Own processing based on Eurostat [4]

The Sigma-convergence coefficients can be analysed through variability measures like a standard deviation or coefficient of variation (CV). The variability of the ER in the EU developed very positively from 2002 till 2009, because the CV decreased from 9.3% in 2002 to 7.5% in 2009. The variability of the ER, due to the impact of the economic crisis, in the European labour market began to grow in 2009. The CV boosted to 9.1% in 2013 and dropped to 8.6% in 2014. According to the target value for the ER, the CV should be only 5.2%. Based on the trends, the latest data available and due to a very slow post-crisis recovery of the EU economies, it seems that the pretentious plan to increase the ER in all the 28 European member states to 75% and to decrease the CV to only 5.2% seems to be very optimistic and out of reach.

A visible comparison of the ER and the target rate is presented in figures 2-4. Since the expected values for 2020 are different for the EU member states, the charts can determine a clear condition for the achievement of the targeted goals. The ER in Croatia should reach 62.9% in 2020 (see Table 1), however the ER should be 80% in the Netherlands, Sweden and Denmark. At the beginning of the analysis, in 2002, the highest negative deviation from the expected ER was typical for the new EU member states, especially for Bulgaria (-20.2 p.p.). On the other hand, the planned value was exceeded only in Ireland (yet the expected ER for Ireland for 2020 is not very high and varies between 69% and 71%) and Cyprus.

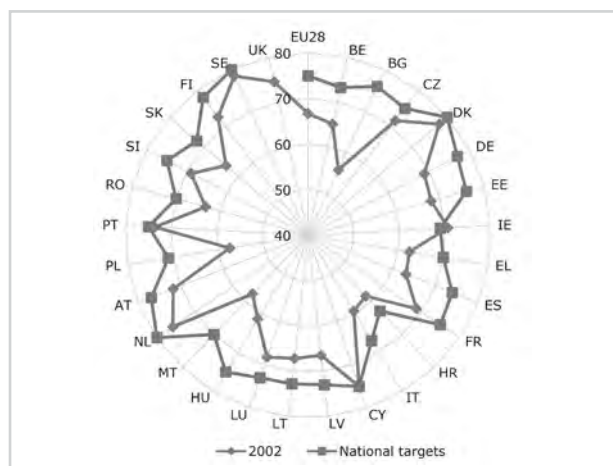


Fig. 2: Employment rate in EU-28, %, 2002

Source: Own processing based on Eurostat [4]

Country codes: BE - Belgium; BG - Bulgaria; CZ - Czech Republic; DK - Denmark; DE - Germany; EE - Estonia; IE - Ireland; EL - Greece; ES - Spain; FR - France; HR - Croatia; IT - Italy; CY - Cyprus; LV - Latvia; LT - Lithuania; LU - Luxembourg; HU - Hungary; MT - Malta; NL - the Netherlands; AT - Austria; PL - Poland; PT - Portugal; RO - Romania; SI - Slovenia; SK - Slovakia; FI - Finland; SE - Sweden, UK - the United Kingdom.

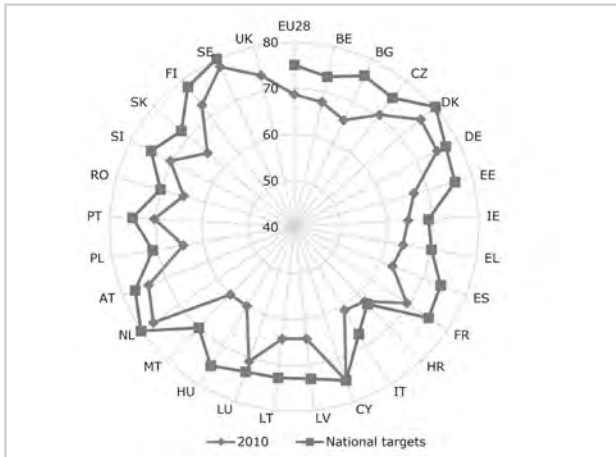


Fig. 3: **Employment rate in EU-28, %, 2010**  
Source: Own processing based on Eurostat [4]

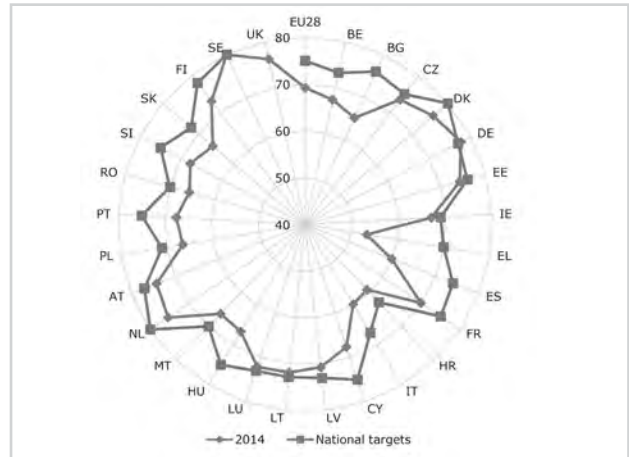


Fig. 4: **Employment rate in EU-28, %, 2014**  
Source: Own processing based on Eurostat [4]

Country codes: BE - Belgium; BG - Bulgaria; CZ - Czech Republic; DK - Denmark; DE - Germany; EE - Estonia; IE - Ireland; EL - Greece; ES - Spain; FR - France; HR - Croatia; IT - Italy; CY - Cyprus; LV - Latvia; LT - Lithuania; LU - Luxembourg; HU - Hungary; MT - Malta; NL - the Netherlands; AT - Austria; PL - Poland; PT - Portugal; RO - Romania; SI - Slovenia; SK - Slovakia; FI - Finland; SE - Sweden, UK - the United Kingdom.

Tab. 1: **Employment rates in EU-28, % (age group 20-64)**

	European Union	The highest employment rate, year	The highest employment rate, %	TARGET	Difference: highest - target	Employment rate in 2014, %	Difference: rate 2014 - target
	EU - 28	2008	70.30	<b>75.0</b>	-4.7	69.2	-5.8
1	Belgium	2008	68.0	<b>73.2</b>	-5.2	67.3	-5.9
2	Bulgaria	2008	70.7	<b>76.0</b>	-5.3	65.1	-10.9
3	Czech Republic	2014	73.5	<b>75.0</b>	-1.5	73.5	-1.5
4	Denmark	2008	79.7	<b>80.0</b>	-0.3	75.9	-4.1
5	Germany	2014	77.7	<b>77.0</b>	0.7	77.7	0.7
6	Estonia	2008	77.1	<b>76.0</b>	1.1	74.3	-1.7
7	Ireland	2007	73.8	<b>69.0</b>	4.8	67.0	-2.0
8	Greece	2008	66.6	<b>70.0</b>	-3.4	53.3	-16.7
9	Spain	2007	69.7	<b>74.0</b>	-4.3	59.9	-14.1
10	France	2008	70.4	<b>75.0</b>	-4.6	69.9	-5.1
11	Croatia	2008	64.9	<b>62.9</b>	2.0	59.2	-3.7
12	Italy	2008	62.9	<b>67.0</b>	-4.1	59.9	-7.1
13	Cyprus	2007	76.8	<b>75.0</b>	1.8	67.6	-7.4
14	Latvia	2008	75.4	<b>73.0</b>	2.4	70.7	-2.3
15	Lithuania	2007	72.7	<b>72.8</b>	-0.1	71.8	-1.0
16	Luxembourg	2014	72.1	<b>73.0</b>	-0.9	72.1	-0.9
17	Hungary	2014	66.7	<b>75.0</b>	-8.3	66.7	-8.3
18	Malta	2014	66.3	<b>70.0</b>	-3.7	66.3	-3.7
19	Netherlands	2008	78.9	<b>80.0</b>	-1.1	75.4	-4.6
20	Austria	2013	74.6	<b>77.0</b>	-2.4	74.2	-2.8
21	Poland	2014	66.5	<b>71.0</b>	-4.5	66.5	-4.5
22	Portugal	2002	73.6	<b>75.0</b>	-1.4	67.6	-7.4
23	Romania	2014	65.7	<b>70.0</b>	-4.3	65.7	-4.3
24	Slovenia	2008	73.0	<b>75.0</b>	-2.0	67.8	-7.2
25	Slovakia	2008	68.8	<b>72.0</b>	-3.2	65.9	-6.1
26	Finland	2008	75.8	<b>78.0</b>	-2.2	73.1	-4.9
27	Sweden	2008	80.4	<b>80.0</b>	0.4	80.0	0.0
28	United Kingdom	2014	76.2	x	x	76.2	x

Source: Own processing based on Eurostat [4]

In 2006, the changing situation in labour markets of the EU member states appeared to be positive for the ER. The highest negative difference from the target value of the ER declined, if compared to 2002, and reached 12.4 p.p. for Hungary. Altogether, three EU member states achieved the expected ER for 2020 in 2006, namely Latvia, Cyprus and Ireland.

The negative impact of the economic crisis affected the ER in 2010 when it began to fall, as can be seen from Figure 3. In 2010, the ER reached the target value only in one country (Cyprus). The highest negative difference was in Hungary (15.1 p.p.).

The situation in the labour market of the EU member states slightly improved in 2014. In the same year, the target value

of the ER for 2020 was achieved in Germany and Sweden. Unfortunately, the economic crisis in Greece began to destroy the Greek labour market. The employment in Greece declined from 66.3% in 2008 to only 53.3% in 2014. The highest negative deviation from the target value was calculated for Greece and it was as high as 16.7 p.p.

The highest ER was in 20 EU Member States attained before the economic crises, mostly in 2007 and 2008 (Table 1). In the period of 2013-2014 only eight EU member states achieved the highest ER. The cumulative deviation of the highest ER (within the period of 2002-2014) from the target value of the EU member states reached 54.3 p.p. In 2014, the cumulative difference of the ER from the target value set for 2020 exceeded 143 p.p. It means that during the years with the highest ER the

target values for 2020 were achieved only by some of the EU countries, namely Germany, Estonia, Ireland, Croatia, Cyprus, Latvia and Sweden.

According to the latest available datasets, the ER targeted for 2020 was achieved only in Germany, whereas in Sweden no difference between the employment rate in 2014 and the target rate was observed.

The deviation of the employment in 2014 and the target value higher than the average for the EU was achieved in the following countries: Belgium (5.9 p.p.), Slovakia (6.1 p.p.), Italy (7.1 p.p.), Slovenia (7.2 p.p.), Cyprus (7.4 p.p.), Portugal (7.4 p.p.), Hungary (8.3 p.p.), Bulgaria (10.9 p.p.), Spain (14.1 p.p.), Greece (16.7 p.p.). Due to the economic and debt crisis, Portugal, Italy, Greece and Spain had a very bad situation in their labour markets, with quite a low ER and a high negative deviation from the targeted value for 2020.

The disaggregation of the ER figures by gender reveals interesting evaluations. The total ER for all the EU countries peaked in 2008 (70.3%). In the same year, the ER for men also peaked showing 77.8%. The ER for women peaked surprisingly in 2014 and reached 63.5%. The gender gap of the ER (the difference between the ER for men and women) in 2002 was the highest and reached 17.3 p.p. Between 2002 and 2014, the ER of men declined by 0.4 p.p., but increased by 5.4 p.p. for women. This resulted in narrowing of the gender employment gap.

However, in 2014 the gap was higher than 11 p.p. In 2002, the employment rates for men in the EU member states ranged from 59.4% (Bulgaria) to 86.2% (Cyprus). The employment for women was lower and ranged from 34.4% (Malta) to 76.6% (Sweden) in the same year. The highest gap of the ER in 2002 was observed in Malta, where the employment of men overpasses the employment for women by 46.6 p.p. The lowest gender gap of ER was only 3.7 p.p. in Sweden. The variability of employment measured by the CV is higher for women (15.3%) than for men (8.3%). The smallest gender gap of the ER was achieved in 2014 by Finland (1.9 p.p.). The gender gap is still very high in Malta (28.4 p.p.). The employment rates of 2014 indicated a bad situation in the labour market in Greece. There, the employment rates for both sexes were the lowest among the EU member states (with the employment of men equal to 62.6% and employment of women comprising 44.3%). In 2014, the variability of the employment was higher for women (11.9%) than for men (7.1%).

In 2015, the ER in Slovakia increased to 67.7% from 65.9% in 2014. The positive trend was observed with regard to both the ER of men (from 73.2% in 2014 to 75% in 2015) and women (from 58.6% to 60.3%). It means that the employment of men in Slovakia already overstepped the goal for 2020 set at 72%.

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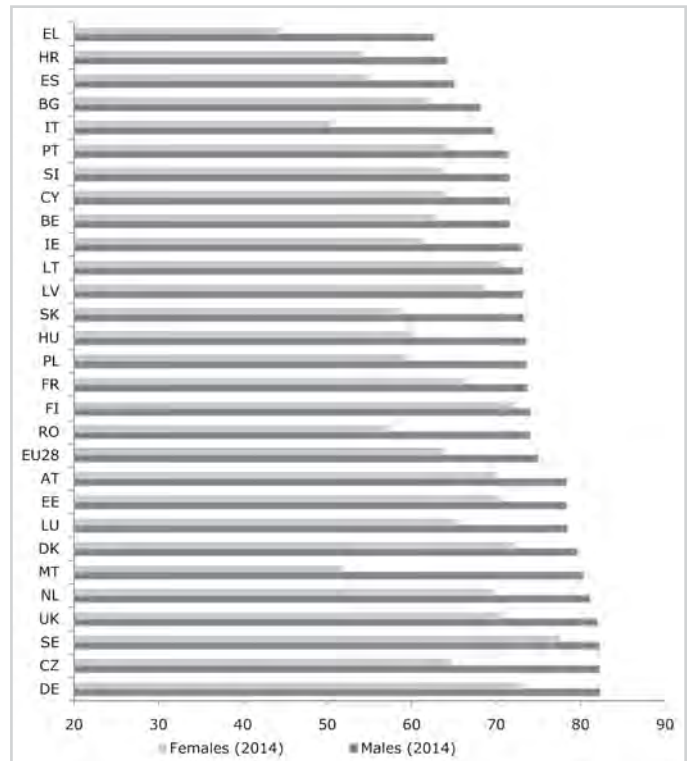


Fig. 1: Employment rate by sex in EU-28, %, 2014  
Source: Own processing based on Eurostat [4]

5. Conclusions

The main goal of the Europe 2020 Strategy in the area of employment is very ambitious. The latest employment trend is not very positive and it may happen that some countries will have difficulties while meeting these ambitious targets for 2020. The situation is especially serious in the labour market of Greece, Spain and Bulgaria. In those countries, the deviation of the ER from the target values is higher than 10 p.p. In the situation when the recovery of the economies of the EU member states is very moderate, it is hard to expect that the ambitious plan can be implemented in the countries with a very high difference of the actual employment rate compared to the target value. Among those living in the EU, young people are most exposed to the risk of unemployment. A better policy related to the labour market of the EU countries regarding youth employment and the employment of women could be the best way to bring the employment rates closer to the target values.