Labour market of the new Central and Eastern European member states of the EU in the first decade of membership\textsuperscript{125}

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Introduction

The Central and Eastern European countries that accessed the EU until 2007 (EU10\textsuperscript{126}) have integrated into the global economy successfully in the past decades. They have liberalized their trade, privatized and deregulated their economies, made efforts to adapt to the EU’s legal and institutional systems and have been able to attract the investments of global companies. Since the middle of the 1990s but especially after 2000, when the transformation crisis\textsuperscript{127} was already more or less over in the region, the gross domestic product per inhabitant of the CEE-countries in purchasing power standard (PPS) has been approaching to the average of the older 15 member states (EU15). In the meantime the ratio of total inward foreign direct investment stock of the ten countries to the inward FDI-stock of the EU15 has grown faster than the weight of their GDP relative to the GDP of the EU15.

The economic growth of these new member states has been more dynamic in the past decades than that of the older 15 members. Between 1995 and 2008 the aggregate GDP of the EU10 at market prices has grown from 3.9 to 8.4 per cent of the aggregate GDP of the EU15. After that period this catching up process has come to a halt and in 2013 the relative ratio of the GDP of the ten new members together to the aggregate GDP of the older ones was equal with the 2008 level. Even though between 2004 and 2013 the real GDP per capita enhanced more in the EU10 than in the EU15 and in eight out of the ten CEE countries the per capita GDP grew faster even than in Germany or Austria. Between 2004 and 2008 all EU10 but Hungary increased their real per capita production more rapidly than any other EU-country. Concerning the speed of catching up the least successful country within the EU10 group was Hungary. In 1995 within the group of the EU10 the Hungarian GDP per capita was the third highest in percentage of the average of the EU15. In 2013 it was only higher than the corresponding Bulgarian and Romanian data.

In the last decade the real labour productivity per hour worked and GDP per employee also grew at a higher pace in the EU10 than in the EU15.

All these facts represent that the new Central and Eastern European member states of the EU have played an important role in the extension of the production of the European capital after 2004.

Generally, economic growth involves the increase of employment and wages. This has happened in Central and Eastern Europe too during the first years of the EU-membership, giving rise to the standard of living on average and decreasing poverty and inequality in the region. The crisis of 2008, however, and its long-lasting consequences have broken these trends by slowing down the processes of improvements or even resulting in deterioration.

\begin{footnotesize}
\textsuperscript{125} This work was supported by the Hungarian Scientific Research Fund (OTKA Grant No 104210K).
\textsuperscript{126} Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Slovenia.
\textsuperscript{127} Kornai (1994).
\end{footnotesize}
This is a natural pattern of *catching up*: the high economic growth reflects competitiveness but the concomitant growth of wages evaporates this competitiveness. This process passes off frequently by and under the coverage of a credit boom as it happened for example in the 1970s in the developing countries and in the 2000s on the periphery and semi-periphery of Europe (Southern and Eastern members). After such kind of a “pseudo” growth the correction according to the rules of the market economy is always painful for the wage-earners, unemployed and pensioners.

At the end of the process which begins with a catching up phase, with the concomitant increase of employment and wages, the reduction of the unit labour cost via pressing down wages and social benefits on average relative to the GDP, becomes inevitable. The decrease of wages does not mean the reduction of all wages nominally. It usually happens by appearance or with the expansion of cheap labour segments on the labour market, as for example increasing employment of women and youth, growing share of part time workers, public work programs (e.g.: in Hungary), or the “mini jobs” (e.g.: in Germany), increasing immigration, etc. These low-wage labour market segments exert a pull-down effect on other segments of labour market too. The easiest and most frequent and “spontaneous” way of wage cuts is the fall of real wages in the face of soaring inflation, when the rise of nominal wages is under the inflation rate.

Although the reduction of real unit labour cost is a consequence of austerity policies of the governments, it is also a natural consequence of the crisis. In crisis unemployment grows that depreciates the price of labour.

In the following, statistical data is presented in order to exemplify the above mentioned processes, using Eurostat databases. The analysis is conducted for the period between 2004 and 2013. In most cases EU10 and EU15 data are used, however due to limited data availability in a few cases the average of the new member states (NMS12) given by the Eurostat and the average of the EU are applied in the analysis. The relationship between the data of the EU27 and the EU10 (or NMS12) characterizes the relationship between the new member states and the EU15 very well. If, for example, an indicator for the EU10 (or for the NMS12) grew more than that of the EU27 this indicator grew even more relative to the EU15.

**Employment**

In parallel with increased inward foreign capital investments, employment of Central and Eastern European countries has grown as well as a result of the EU10 countries’ integration into the global and European economy. *Until the outbreak of the crisis in 2008* employment grew also in Western Europe but at a slower pace than in the Central and Eastern European countries. Mainly due to Poland’s favourable labour market performance, the share of the ten new Central and Eastern European member states together within the total employment of the European Union has been growing. Between 2004 and 2008 3.4 million new jobs were created within the EU10 region, of which 2 million jobs in Poland alone. It is remarkable that Hungary was the only country within the group where the level of employment decreased in these years.

The global economic crisis has had a well-known negative effect on employment all around in Europe and the EU10 countries have been among the most affected EU member states. From 2008/2009 to 2011 the
The employment share of the EU10 in the EU27 decreased to the 2004/2005 level. Since 2011 this share has been gradually growing again although it has not reached the level of 2009 yet (Figure 1.).

Figure 1: Level of employment in the EU10 and share of EU10 in the employment of the EU27
1000 persons (left scale) and per cent (right scale), 2004-2013

Source: Own calculation on the basis of the Eurostat, Statistics by them, Labour market, Employment and unemployment

Considering the whole decade after 2004, that contains the effect of the crisis, the data show that within the EU10 region EU-membership has not resulted in significant improvement of the labour market performance, with the only exception of Poland. The share of the ten new member states together within the total employment of the EU28 increased from 19.4 per cent in 2004 to 19.6 per cent in 2013. Without Poland the aggregate share of the nine new member states has decreased from 12.8 per cent in 2004 to 12.5 per cent in 2013.

On the long run the EU-membership could revitalize employment only in Poland, where the initial level of employment was the lowest (51.7 per cent) at the time of accession. Polish labour market has been characterized by high rate of temporary contracts, which share grew from 22.7 in 2004 to 26.9 in 2013 within the Polish employment. The latter is the double of the EU27 average.

On the one hand part time employment is less common in the EU10 than in the EU15. In the last decade the share of part-time employees was one tenth or less within the EU10-countries, while their share in the EU15 grew from 19.4 per cent in 2004 to 23.6 per cent in 2013 on average. In the EU10-countries the share of part-time workers grew either very slowly or in a few cases decreased between 2004 and 2013, partly due to the high share of the shadow economy in the region (see later).

On the other hand the employment rates in the 15-64 years of age cohort grew faster in all EU10 countries than the average of the EU15 with the exception of Slovenia, where the employment rate decreased by two percentage points during the examined period. In 2004 Slovenia had the highest employment rate in the group of EU10 and was even higher than the average of the EU15. However, after 2008, the first year of the crisis, the Slovenian employment rate has decreased considerably.

132 Eurostat, Statistics by theme, Labour market, Employment (main characteristics and rates) - annual averages [lfsi_emp_a]
Since 2004 the employment rate of the youth (15-24 years of age) has been lower in the new member states than in the EU15 on average and has decreased in the majority of the CEE countries.

The real number of people who work is likely to be higher in the CEE countries, than the above data prove because the shadow economy (undeclared and underreported work) is more extended in these countries (and in Southern Europe) than on the Western and Northern part of the EU. In the period before the crisis the shadow economy (measured as a percentage of GDP) has decreased across Europe. Since 2009 its share has continued to decrease in Western and Northern Europe, while in Southern and Eastern Europe the progress has come to a halt. According to estimations in 2013 the weight of the shadow economy reached 15 to 31 per cent of the GDP of the EU10, 19 to 24 per cent in the Southern member states and 8 to 16 per cent in other EU-countries. The persistence of the extended shadow economy is the consequence of the insufficient demand for formal employment.

The different incentives as for example flat tax rates and reduced social security contributions that have been phased in by the governments to encourage participation in the formal economy have not proved to be successful on the long run. Bulgaria, the Czech Republic, Hungary, Latvia, Romania and Slovakia have made similar steps in the last decade. Moreover, Slovakia, the country that has one of the longest experiences with the flat tax rate, abolished it in 2013 introducing a progressive income tax system in the frame of the austerity package. This might also happen in other flat tax rate countries in the coming years if the expected results concerning the contraction of the shadow economy do not occur. Correlation between the extension of electronic payment systems and shadow economy shows that the spread of electronic payment systems can also improve the situation by making tax evasion more difficult.

Unemployment

Ten years ago unemployment was a more severe problem in the CEE countries than in the EU15. In 2004 unemployment rate was only lower in three CEE countries than the average of the older member states (EU15). However, in the last decade unemployment has improved in the EU10. Until 2008 unemployment decreased both in the EU10 and in other member states, but the improvement was faster in the former group. In 2008 there were only three countries where the unemployment rate was higher than the average of the EU15. Between 2008 and 2010 the unemployment rate grew both in the ten CEE countries and in the EU15 on average. After 2010, however, unemployment started to decrease in seven CEE countries and increased in only two CEE countries, but at a slower pace than the average of the EU15. It was only Slovenia where unemployment rate continued to grow considerably. As a result, in 2013 there were only four countries within the EU10 group where the unemployment rate exceeded the EU15 average and even among these four countries two recorded a decreasing trend (Figure 2.).
This also means that on aggregate level the joblessness of the EU10 group decreased more between 2004 and 2008 and increased more between 2008 and 2010 than that of the EU15. After 2010 the trend reversed again. Since 2010 the aggregate unemployment of the EU10 has been more or less on the same level with an increase in four and a decrease in six countries. In the EU10 group the rise of unemployment stopped in 2010 and since then it has remained relatively stable with slight increase in four and modest decrease in six countries. In the EU15, mainly due to the unfavourable labour market situation in the most crisis-hit Southern member states, unemployment has continued to deteriorate. In the whole period, i.e. between 2004 and 2013 unemployment within the group of the EU10 growth of unemployment rates measured in percentage point exceeded that of the EU15 average only in Hungary and Slovenia (Figure 3.).
In the last decade this difference in the unemployment trends of the two country groups has resulted in a declining share of unemployment of the EU10 within the total EU level unemployment. This is also valid for youth unemployment (unemployed under 25 years of age). In 2013 the number of unemployed was more by 6.4 million in the EU15 than in 2004, whereas their number decreased by 1.4 million in the EU10 group during the same period. In the case of youth unemployment the trend is similar. In the last decade the number of unemployed under 25 years of age grew by close to one million within the EU15 while decreased by 1.4 million in the EU10.

As a result, the weight of both the total and youth unemployment of the EU10 in the corresponding figures of the EU27 was lower in 2013 than 2004 (Figure 4.).

Figure 4: The share of the EU10 in the total and youth unemployment of the EU27 between 2004 and 2013

Source: Own calculations on the basis of the Eurostat online, statistics by theme, Labour market, Employment and Unemployment

The unemployment rate of young people aged less than 25 years in the new member states has been higher in the whole examined period than that of the EU15 on average but has increased less than the average of the EU15 or in some CEE-countries has even decreased until 2014. The only exception is Hungary where the youth unemployment rate grew dramatically, from 15.5 in 2004 to 27.7 per cent in 2013 (Figure 5.).


Labour compensation, unit labour cost

As we have seen until now the growth of employment in the EU10 has not been buoyant but more dynamic in the majority of the last decade than the labour market of the older member states. This reflects a competitive advantage of the Eastern members relative to the Western ones. This competitive advantage consists of low wages of the relatively well educated population plus the shadow economy. The latter has advantageous effects on the reproduction of capital and hence on economic growth. The shadow economy on the one hand decreases wages indirectly on the registered labour market and on the other hand ensures extra effective demand for goods and services of the registered economy. Besides, on the input side shadow economy cuts down costs for the industries and services that use its products.

Figure 6: Compensation of employees per GNI and GDP, 2004-2013 percent

Source: Own calculations on the basis of the Eurostat, Statistics by theme, Annual national accounts, GDP and main components, Current prices141
In EU10 the profitability of foreign investments could have been higher than in the more developed European countries that are characterized by higher wages. The wages in the new member states are low enough for ensuring cost competitiveness even with the social contributions payable by employers. The unit labour cost has been much lower in the EU10 in the past decade than in the EU15, and labour compensation per GDP or GNI is by 8-10 percentage point less in the former than in the latter (Figure 6.).

This has supported the integration of the Eastern European countries into the global and European economy through providing higher profit margins to foreign direct investments in the new member states than in the more developed European countries. With the on-going relocation of technologies from the West to the East the productivity of the EU10 has been growing faster than in the EU15 on average. Figure 7 shows the productivity index measured as the GDP per employee. Between 2004 and 2013 the productivity of the ten new member states (EU10) grew faster than the average index of the EU15.

Figure 7: GDP per employee 2004-2013
2004=100

![Graph showing GDP per employee 2004-2013 for EU15, Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia, Slovakia.](http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/database)

Source: Own calculation on the basis of the Eurostat, Statistics by them, Labour market, Employment[^142] and National accounts[^143]

However, in the EU10 the compensation of employees (CoE) has kept step with the growth of GDP and for this the share of the CoE in the GDP remained on the same level before the crisis, i.e. in 2004-2007. In the EU15, on the other hand, the tendency of the CoE/GDP was decreasing in the same period (Figure 6.).

This means that wage competitiveness of the new member states has gradually lessened relative to the EU15 in the first years of membership. This development has based been on the increase of wages in Eastern Europe which is a natural tendency in less developed or peripheral economies when the production grows dynamically. Either the higher wages of foreign companies or the social policies of governments in time of prosperity give a rise to labour compensation in the whole economy. The new member states have played a leading role in the EU concerning the increase of mean earnings during the last decade and this tendency has continued after the onset of the crisis as well (Figure 8.).

Figure 8: Mean hourly earnings in euro change in percentage point, 2002, 2006, 2010

Source: Own calculations on the basis of the Eurostat, Statistics by theme, Labour market, Structure of earnings survey – main indicators

Figure 9: Total earnings of a single person without children in the new member states as a percentage of the average of the EU15

Source: Own calculations on the basis of the Eurostat, Statistics by theme, Labour market, Earnings

Since 2004 wages and social benefits, consequently total earnings have increased faster in the EU10 than in the EU15, this trend was especially extensive until 2008. After that year the growth of total earnings of the EU10 as a percentage of the EU15 has slowed down, in half of the EU10 countries (in Hungary, Poland, Lithuania, Romania and the Czech Republic) total earnings have even dropped. This decrease was the highest in Hungary. As Figure 9 shows total earnings of a single person without children in the ten Central and Eastern European countries was 5.4–37.4 per cent of the average of the fifteen older member states in 2004, this difference further increased to 11.4–42.8 per cent until 2012.

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146 According to Eurostat the total earnings of a person (or the total labour costs of the earner) equals with the gross earnings plus the employer’s social security.
Measuring in purchasing power standards the rate of the average of the two highest net earnings\textsuperscript{147} in the EU27 (i.e. the average of net earnings of Luxemburg and the United Kingdom) to the average of the two lowest net earnings (i.e. the average of net earnings of Bulgaria and Romania) halved, i.e. decreased from 8.4 to 4.2 between 2001 and 2012. In the same period the average deviation from the average of net earnings decreased from 44.9 to 37.2 of the average earning of the EU27.\textsuperscript{148} A convergence of earnings has taken place in the EU.

Competition, i.e. profitability decreases if wages increase at a larger pace than productivity because in this case unit labour cost (ULC) of the given country or region increases. This results in the loss of competitiveness of the given economy if the unit labour cost of its competitors increases less. In the past decades both in the EU10 and the EU15 wages grew more than productivity. Both the wages and productivity of the EU10 increased more dynamically than the wages and productivity of the EU15. However the wages advanced more relative to the productivity in the EU10 than in the EU15.

Before the crisis real unit labour cost of the majority of EU10 countries has decreased at a slower pace than in the old ones on average or even increased. This means that the majority of the EU10 countries has lost in competitiveness compared to the EU15 on average in the pre-crisis period. Poland, Bulgaria and Slovenia were the exceptions, as these countries could slightly improve their relative position to the EU15 average. The years of the crisis raised real unit labour cost in both the EU10 and EU15 countries for a while which was followed by a correction. Since 2009 real unit labour cost has fallen in Europe and in the majority of the EU10 the drop in ULC has been higher than the average of the EU15. Taking the whole decade between 2004 and 2013 the majority of the EU10 countries has lost their cost competitiveness compared to the average of the EU15 and only four of the ten countries, namely Romania, Lithuania, Poland and Hungary could improve their relative ULC-position to the EU15 by decreasing their ULC more than the EU15 on average (Figure 10.).

![Figure 10: Growth of the real unit labour cost](image-url)

Source: Own calculations on the basis of the Eurostat, Statistics by theme, National accounts, Main tables, Annual national accounts, Real unit labour cost growth\textsuperscript{149}

\textsuperscript{147} Single person without children.


\textsuperscript{149} http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/main_tables
Social conditions, inequality

Since employment, labour compensation and the minimal wages have increased – as for example in Hungary since 2002 – the rate of working poor has decreased in the new member states. The in-work at-risk-of-poverty rate for the 18-64 years old population on aggregate level of the NMS12 declined until 2008 and then, after some years of stagnation, began to rise again but did not reach the level of 2005 until 2012. The trend before the crisis was the opposite in case of EU15, where the in-work at-risk-of-poverty rate grew almost continuously between 2005 and 2012 with the exception of 2009 and 2010. Consequently the rate of working poor for the new member states was converging towards the level of EU15 (Table 1).

Table 1: In-work at-risk-of-poverty rate for the 18-64 years old employed persons 2005-2012, percent

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Source: Eurostat, Statistics by theme, Income, Social Inclusion and Living conditions, Income distribution and monetary

The extension of the social protection system has also been stronger in the EU10 as in the EU15 on average during the last decade. This is reflected in the development of the social protection expenditures of the EU10 relative to the EU15. In 2004 total aggregated value of social protection benefits in the EU10 countries was equal with 3.8 per cent of the sum that the EU15 devoted to this goal and this rate increased to 5.4 per cent in 2011 (the latest year for what the Eurostat gives data in September 2014).

Growing employment, increasing wages, extended social protection benefits usually result in improving well-being which is valid for the new member states of the EU after 2004 – at least until 2008 – and has been manifested in the easing of poverty. The number and rate of people at risk of poverty or social exclusion declined in the EU10 countries until the outbreak of the crisis and have remained relatively stable afterwards. In the EU15, however, the development was the opposite: the number of people at risk of poverty or social exclusion did not change much before the crisis and subsequently started to rise. Consequently 34 per cent of the poor – as defined above – in the European Union lived in the EU10 countries in 2012 which is much less than in 2005, when their share was 51 per cent.

Similar results can be found also in case of inequality measured by the Gini coefficient before or after social transfer. Gini coefficient of equivalised disposable income was meaningfully higher in the new member states than the average of the EU15 in 2004 and 2005. However, since 2010 this coefficient has been lower for the new member states (in this case: NMS12) than for the EU15. The crisis divided the last decade into two periods. While between 2004 and 2008 the inequality has increased in the EU15 on average, the EU10 countries could mitigate the inequality with the exception of Bulgaria and Romania, where the Gini coefficient grew by 9.9 and 5 percentage points respectively. After the outbreak of the crisis inequality has increased again in about half of the

150 According to the definition of the Eurostat at-risk-of-poverty rate is “the share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers).”
151 http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/data/database
new member states. Between 2008 and 2012 the highest increase within the ten countries was recorded in Hungary where the Gini coefficient grew from 25.2 to 28 per cent (Figure 11.).

Figure 11: Gini coefficient in the new member states
change in percentage point 2005-2012

Source: Own calculations on the basis of the Eurostat, Statistics by theme, Income and living conditions, Distribution of income

Conclusions

The statistical data prove that the growth of employment, the absolute and relative level of wages, the improvement of social conditions are possible in time of economic expansion, i.e. in time of successful reproduction of capital. However, the high rate of economic growth cannot be maintained for a long time, after the advent of the inevitable crisis or recession the improvement of labour market and social conditions usually have to be halted and withdrawn at least partially.

In capitalism, every country that aims to catch up with the more developed economies faces an enormous difficulty, namely that the increasing wages and social benefits during recovery become a burden on competitiveness of the capital in time inevitably. In this dilemma the basic requirement of the competitiveness, i.e. profit making, appears. According to this requirement unit labour cost both on company and national economic level has to be tendencially decreased, meaning that the share of labour in value added has to be decreased after recovery ends.

The labour market and social conditions improved in the EU10 in the first half of the last decade, when an extensive growth has taken place in the region. Since the beginning of the crisis in 2008 this trend has been broken. The statistical data show some convergence between the more and less developed countries of the EU regarding wages and standard of living on average. The convergence is a result of the decrease of the wages relative to the GDP in the more developed countries and the increase of the wages per GDP in the less developed ones. The latter is the consequence of the extensive development that the international division of labour that is determined by the needs of the reproduction of capital results on the peripheral and semi-peripheral countries.

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153 http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/data/database
Similarly, thanks to the increasing wages and social benefits inequality has been reduced in most of the EU10 countries whereas it was on the rise in the majority of the developed EU-countries already in time of the boom before the crisis. The convergence in this respect does not mean improving distribution in all countries either. It means rather a convergence towards a mean value between the values of the two groups of countries (EU10, EU15).

According to the logic of competitiveness, however, this pattern of convergence, where the higher indicators decrease and the lowers increase, cannot be maintained on the long run. On the long run the reproduction of capital requires decreasing unit labour costs, i.e. falling compensation of employees and social benefits in GDP everywhere.
References

Eurostat online database. Statistics by theme.


