

**THE HUNGARIAN  
LABOUR MARKET  
IN 2014**

**TAMÁS BAKÓ & JUDIT LAKATOS**



## ECONOMIC BACKGROUND

Changes in the external economic environment had complex impacts on the Hungarian economy in 2014. The performance of the main economic partner countries moderately increased in previous years (the European Union's performance was 1.4 percent while that of Russia 0.6 percent higher than in 2013). As a result of the long lasting fall in raw material prices, in particular of oil, and of low demand, inflation was universally moderate. The major central banks of the world pursued a lax monetary policy which created a favourable interests and liquidity environment throughout the year worldwide (*MNB*, 2015). However, at the same time, the escalating conflict between Russia and the Ukraine and the ensuing embargo had a negative effect on the Hungarian economy. Nevertheless, Hungary's gross domestic product grew by 3.6 percent in 2014 (*HCSO*, 2015a) since the previous year, which places Hungary among the top countries of the EU member states. This growth is predominantly due to the greater output in agriculture and industry – the latter driven by the growth in vehicle production and related supply chains (*HCSO*, 2015b). Furthermore, the economy grew as a result of a 14 percent increase in investments relative to the previous year, basically made possible by favourable interest rates as well as the Hungarian National Bank's lending program for growth and the accelerated transfer of EU funds. In terms of domestic regulatory efforts, raising the minimum wage, increased funding for public works programmes, raising the family tax allowance and introducing the supplementary child care benefit have had the greatest impact on the labour market. The purpose of the new child care benefit introduced as of 1st January 2014 is to encourage families to raise children and help mothers to return to the labour market.

## LABOUR FORCE DEMAND AND SUPPLY

After a slow increase in employment between 2003 and 2007, a period of stagnation took place, followed by the number of employed dropping to the level of a decade earlier after the autumn of 2008, when the economic crisis hit the Hungarian labour market. While the loss of around 150 thousand jobs was incomparable to the labour market shock of the 1990s, and the impact of the crisis on the labour market in Hungary proved to be smaller than in the rest of the EU countries, it had implications other than just the drop in numbers. Most jobs ceased to exist in the industrial sphere, and the middle

aged with a secondary education were hit the hardest, i.e. those who earlier had taken their employment for granted. The two main ways of coping with the employment situation were going to work abroad and the inactive element returning to the labour market.

The main earner's losing his/her job or merely increasing bank debts forced many inactive household members to go back to the labour market to try and find a job. Using the EU-SILC database, this so called added worker effect was found in 28 European countries (see *Bredtmann et al.*, 2014): women with an unemployed husband are more likely to enter the labour market and find a full time job than those with an employed husband. As a result of increased activity, up until 2014 the increase in employment did not involve a similar drop in the rate of unemployment.

The employment level was the lowest in 2009 and 2010, which was followed by a short stagnation period. A favourable change started as late as in 2012. According to the findings of the Labour Force Survey, in 2013 the annual average employment was 3 million 892 thousand persons, basically the same number as in the years directly before the crises and nearly 160 thousand more than at the lowest level in 2009 and 2010. This increase had three sources:

- The number of persons commuting to work abroad grew by about 50 thousand, triggered by the crisis and made possible by Austria's and Germany's – the two main target countries – opening up of their markets to the Hungarian labour force in May 2011.
- From 2012, public works programmes grew significantly: the annual average shows that around 60 thousand more worked in these programmes in 2013 than in 2010. This is partly due the special winter public works programmes introduced in 2013 which helped keep the number of public works employees at the summer peak level over the latter months of the year. (Owing to the same programmes, the number of public works employees was equally high in the first quarter of 2014.)

New jobs were created in the private sector (for instance in vehicle manufacturing), and investments grew a little, bringing the loss of jobs in construction to an end.

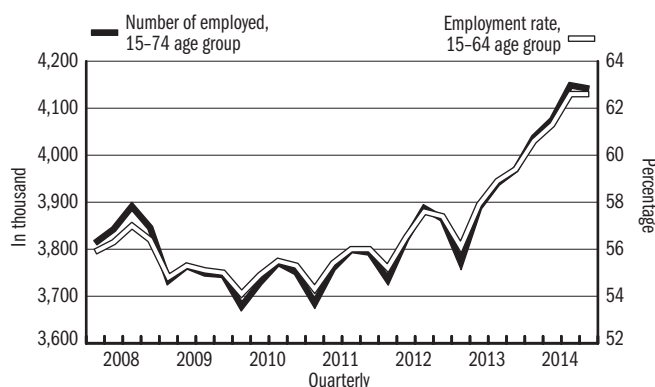
The Labour Force Survey of the Hungarian Central Statistical Office found a significant, 208 thousand growth in the number of employees in 2014 relative to a year earlier, of whom

- 45 to 50 thousand, about one quarter of the total increase, were employees in the expanded public works programmes;
- similarly, about 50 thousand more worked in enterprises employing 5 or more in the private sector;
- partly due to taking over some of the welfare responsibilities and partly to establishing new agencies, 20 to 25 thousand employees were added to the labour force of budgetary institutions;

- the numbers working abroad seemed to change only minimally, with daily about two thousand more persons reporting work outside Hungary, yet the unrecorded labour market migration probably grew at an even higher level.

In 2014 the number of employees was higher than 4.1 million, while the employment rate of those aged 15 to 64 grew by 3.7 percentage points in one year, from 58.1 percent to 61.8 percent, the latter being the highest of the past almost 25 years (*Figure 1*). Regarding this index, Hungary jumped to the 19<sup>th</sup> and 20<sup>th</sup> place in the European Union at the end of 2014, coming before Ireland, Poland and Slovakia. However, 0.6 percentage points of the increase is due to a demographic factor, notably the shrinking of this age group population.

**Figure 1: The number of employees and the employment rate, 2008–2014\***



\* Inflated and weighted data based on the 2011 census.

Source: HCSO Labour Force Survey.

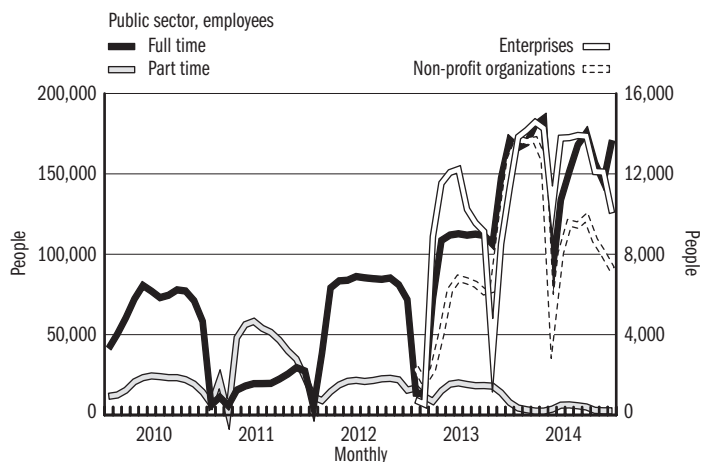
With the improving employment situation the labour force supply grew, too. With the gradual raising of the retirement age, the number of those in the labour market grows every year, which, however, is partially counterbalanced by the option for women to retire after 40 years of employment. At the same time, the labour force supply in young generations grew because of the lowering of compulsory education to 16 years and because of fewer students deciding both in 2013 and 2014 to go on to higher education after having earned a secondary school certificate. The introduction of the supplementary child care benefit appears to encourage typically those mothers to return to the labour market who have a higher education and live in communities with a relatively large number of day care institutions for children. The supply also increased with the expansion of the public works programmes which offer employment to the long term absentees from the labour market.

The most important factor influencing the demand side is the expansion of the public works programme, not only because they increase the number of employed but also because they offer work to people who otherwise have no

chance whatsoever in the open labour market (for instance persons living in depressed regions or having low education levels). Consequently public works programmes thus have implications for a wide range of employment indices. By 2014, the change of paradigm in addressing unemployment – ensuring public works employment instead of unemployment provisions – created a huge segregated labour market. In 2014 the annual average showed that 182.4 thousand worked in public works programmes; however, as such jobs typically do not last 12 months, at least one and a half times as many worked in public works programmes for some time.<sup>1</sup> Only 13.1 percent of persons having worked in public works programmes could later find a job in the open labour market, the rest live on social aid and wait for the next public works vacancies (see Cseres-Gergely Zsombor in Section 2.9 in *In Focus*). Public works employees are not paid based on performance, but earn the public work wage which is three quarters of the minimum wage.

In 2014 the number of public works employees ceased to heavily fluctuate within the year, with a sharp drop only in May as the winter season was over and new jobs were not yet launched. A further change is that public works jobs became almost exclusively full time (which, however, is hardly a solution for carers of elderly persons or of young children in the household). The main area of public works programmes remains the public sector with 159.5 thousand employees while in the organizations of the private sector (typically in enterprises with a majority state ownership) and in non-profit organizations (performing public duties) the number of public works employees grew more than the average rate in 2014 (*Figure 2*).

**Figure 2: Monthly changes in the number of public works employees, 2010–2014\***

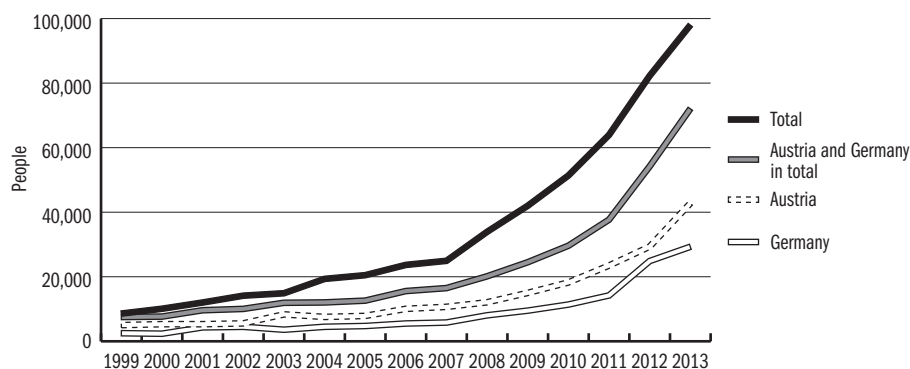


<sup>1</sup> Public works programmes starting between January 1, 2011 and December 31, 2012.

\* Until 2012 information is only available on the public sector. Right axis: enterprises and non-profit organizations, left axis: public sector. Source: Monthly Labour Reports.

After dynamic growth between 2011 and 2013, there was no change in the number of persons working abroad in 2014 – at least of those covered by the Hungarian Labour Force Survey (Lakatos, 2015). The overwhelming majority of the nearly 100 thousand persons having reported working abroad on a daily basis commuted between their families in Hungary and the workplace abroad (Figure 3). That probably large numbers commute is corroborated by the fact that about half of the 43 thousand persons having reported to work in Austria in 2014 lived in neighbouring counties Győr-Moson-Sopron and Vas.

**Figure 3: Number of employees reporting to be working in Austria and Germany, 1999–2013**



Resource: HCSO Labour Force Survey.

It is difficult to estimate the actual number of persons currently working abroad, and the classical definition of migration is not really useful either in the environment of free movement of labour. In terms of workers in a foreign country, Hungarian surveys provide more or less reliable data only on those who are earners in Hungarian households, which however, appear to exclude young people supporting only themselves, even if their permanent address is still their parents' homes. Furthermore, there is no information available about people moving abroad with their families, even if only for a short period.

The aggregation of labour force surveys of EU member countries in 2013 found about 200 thousand Hungarian employees in EU countries, while a Hungarian project (SEEMIG) estimated the number of Hungarians living abroad at 350 thousand (HCSO, 2014). As the inflation of Labour Force Survey data is based on a population that excludes this kind of migration, those who work abroad but are not included in the Labour Force Survey count as employed due to the inflation. Furthermore, the above average employment rate of the so called labour market migrants can be a distorting factor. The further increase of the number of Hungarians working abroad in 2014 makes it highly probable that Hungary is one of the very few EU member states where

the migration rate in the working population had consistently been low and has only started to dynamically grow in recent years.

Even with the lack of accurate data it is certain that the increasing labour market migration of recent years improved the labour market prospects of those staying in Hungary; it is however a cause for worry that in a few occupations in high demand migration is threatening the proper functioning of services in Hungary. While currently this is only true for health care, several other services or occupations even in industry are likely to face labour force shortages in the future.

Economic trends were more favourable in 2014 than in earlier years. Household incomes grew, resulting in increased consumption and hence new jobs. The amelioration of the labour intake capacity of the private sector is confirmed by every important data source: the Institutional Labour Statistics found a nearly 50 thousand work force increase in enterprises employing 5 or more, while according to the data of the National Tax and Customs Administration 80 thousand more were employed in some form by enterprises than in the previous year, in addition to 10 thousand more employees in self-employment and in partnerships, and 20 thousand more in public institutions.

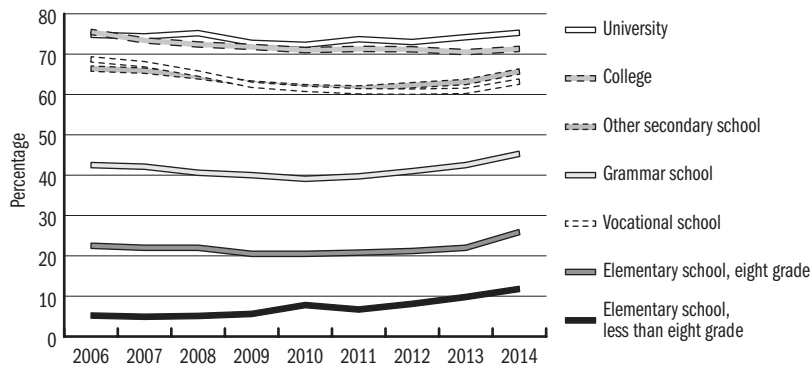
According to the labour statistics, the number of jobs grew by 20 thousand in the industrial sector, the greatest increase happening in energetics divisions and vehicle manufacturing. The Labour Force Survey, covering the entire employed population including employees of small enterprises, self-employed and partnerships as well as persons performing income earning activities in the reference week on an *ad hoc* basis, found a much greater, nearly 70 thousand increase in this section of the national economy. Similarly, both data sources indicate a growth in employment in construction, with the Labour Force Survey showing a more dynamic change, while both sources show little change in trade. In the area of non-financial services, institutional statistics clearly show a growth while according to the Labour Force Survey the increase did not take place in all service sections universally.

The survey designed to forecast labour market trends in compliance with the EC decree to record unfilled vacancies found a significant increase in 2014 too. In the private sector there were 23 thousand unfilled vacancies, only 2.7 thousand fewer than in 2007, the last year before the crisis and almost twice as many as in 2009 – the year showing the lowest level.

The overall increase of the employment rate involves a set of differences, depending on the variable. The various indices are heavily influenced by the substantial role of public works employment in the labour market. Thus, the differences in the employment rate by educational attainment diminished, though still being great, as in the majority of public works jobs lower educational attainment tends not to be a problem (*Figure 4*).



**Figure 4: The breakdown of the employment rate by educational attainment, 2006–2014\***

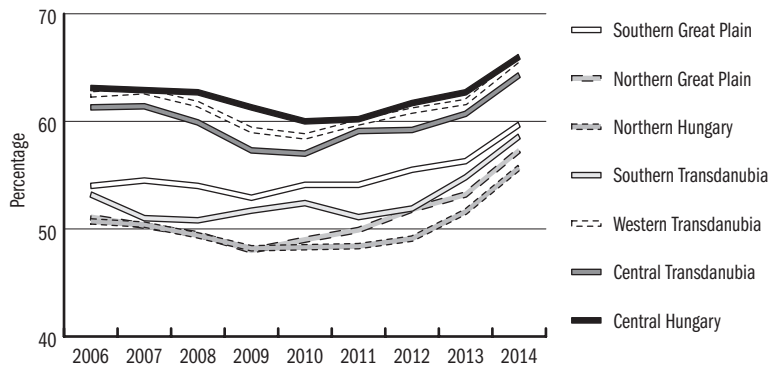


\* Due to the specific age group, students currently in secondary education are included in the population with only primary education.

Source: HCSO Labour Force Survey.

In 2013, again owing to public works programmes, regional differences in the employment rate diminished (*Figure 5*), while in 2014 a growth in demand for non-subsidised jobs increased the difference in favour of the developed and industrialized regions of the country. Labour migration within the country remains low, migration or commuting motivated by better employment chances is typically transborder.

**Figure 5: Employment rate in the various regions of Hungary, in the age group 15 to 64, 2006–2014**

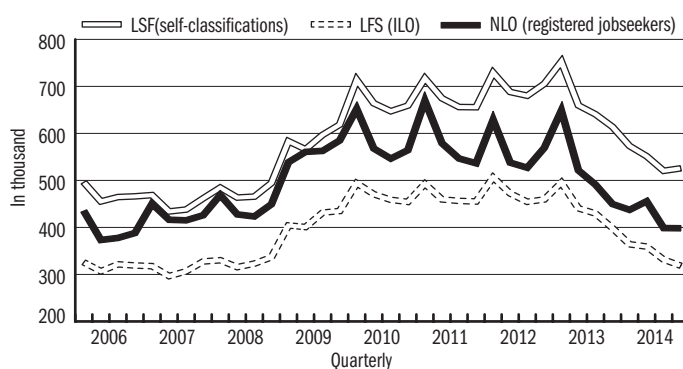


Source: HCSO Labour Force Survey.

## UNEMPLOYMENT AND THE POTENTIAL ADDITIONAL LABOUR FORCE

While the number of employed steadily grew from 2010, and essentially reached the pre-crisis level in 2013, unemployment numbers did not change until as late as 2012 and the drop in 2013 was far smaller than expected given the growth in employment. The reason for this is that large numbers of inactive persons became unemployed (and employed), which is partly connected to the expanded public works programmes ensuring work for people who, knowing the constraints of the local labour market, had given up active seeking (and did not qualify as unemployed according to the ILO definition based on three criteria). In addition, escaping the inactive status was motivated by the increased importance of the multi-earner household model in the crisis. In 2014, however, the number of unemployed, as defined by ILO, also dropped significantly, from 441 thousand to 343.3 thousand, that of registered job seekers from 527.6 thousand to 422.4 thousand, and that of those reporting themselves unemployed in the Labour Force Survey from 666.5 thousand to 538.8 thousand in one year (*Figure 6*).

**Figure 6: The number of registered job seekers, unemployed by the ILO definition and self-reported unemployed, 2006–2014**



Source: National Employment Service/Ministry for National Economy/HCSO Labour Force Survey.

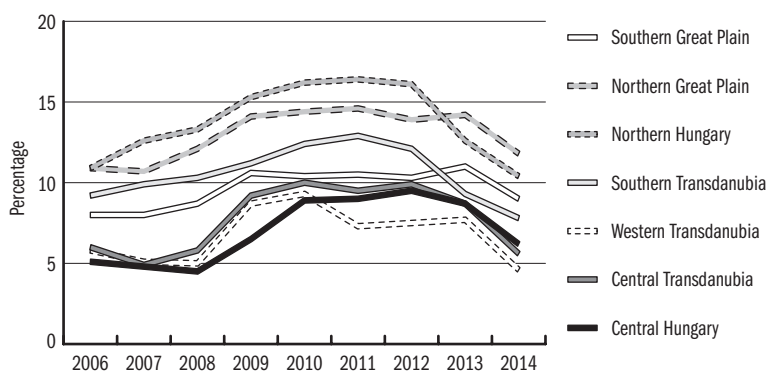
The number of ILO unemployed in the Labour Force Survey database decreased according to all main variables. In 2014 57.5 thousand fewer men and 40.2 thousand fewer women were unemployed by annual average than a year earlier. One of the consequences of the crisis was that the unemployment rate in men was higher than in women, but from 2013 it switched back to a higher female unemployment rate. In 2014 the difference between the two rates was 0.3 percentage points as opposed to 0.1 percentage points in 2013.

While the youth unemployment rate dropped from 23.5 percent to 20.1 percent, the 67.6 thousand unemployed aged 15 to 24 still make up nearly one fifth of all unemployed.

The number of unemployed with only primary education fell by 22.8 thousand, the number of persons with a secondary level final exam certificate – counting as unskilled in the labour market – by 7 thousand, that of persons having vocational education or apprentice training by 41.2 thousand and that of people with special vocational education by 20.2 thousand. There were 6.7 thousand fewer unemployed with higher education than a year earlier, who in 2014 made up the smallest, 35.4 thousand strong, group of unemployed. The improving employment situation benefitted those with vocational secondary education (both special and regular) the most, the majority of whom seem to have found a job in the private sector.

The expansion of the public works programme in 2014 primarily mitigated unemployment in the unskilled. While the unemployment rate in county Győr-Moson-Sopron was down at, and in county Vas near, 3 percent, which counts as full employment, in counties Hajdú-Bihar and Szabolcs-Szatmár-Bereg it was 13 percent or a little higher. Regional differences in the unemployment rate somewhat grew once again in 2014 because public works programmes played a smaller role in removing differences, and the larger part of the growth in employment took place in the private sector and was concentrated in the more developed industrial regions of the country. The relatively good indices of the Western border area and hence of the West-Transdanubia region are heavily connected to commuter job opportunities in Austria (*Figure 7*).

**Figure 7: Regional unemployment rates in Hungary, 2006–2014**

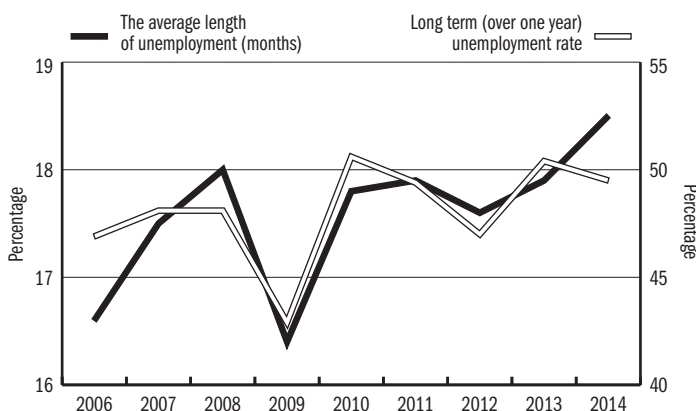


Source: HCSO Labour Force Survey.

The average unemployment time spell grew by 0.7 month, from 17.9 months to 18.6 months in one year (*Figure 8*), with the Central Hungary region having the longest period and the biggest increase. Due to their nature, public works programmes eliminated some of the long term unemployment by re-

ducing temporarily the average time requirement to find a job. However, this effect ceased to work in 2014 as participants in public work programmes were more or less the same persons. People spending a relatively short period as unemployed appear to be more eligible for the new jobs available in the private sector created recently in the growing economy because they still have their full employability potential. At the same time, however, persons who live in regions with scarce public works programme jobs (e.g. central region) and who have low education and obsolete or non-existing work experience making them largely unemployable in the private sector tend to get stuck in unemployment.

**Figure 8: The average unemployment spell (left axis) and the rate of long term (over one year) unemployed in all unemployed (right axis), 2006–2014**



Source: HCSO Labour Force Survey.

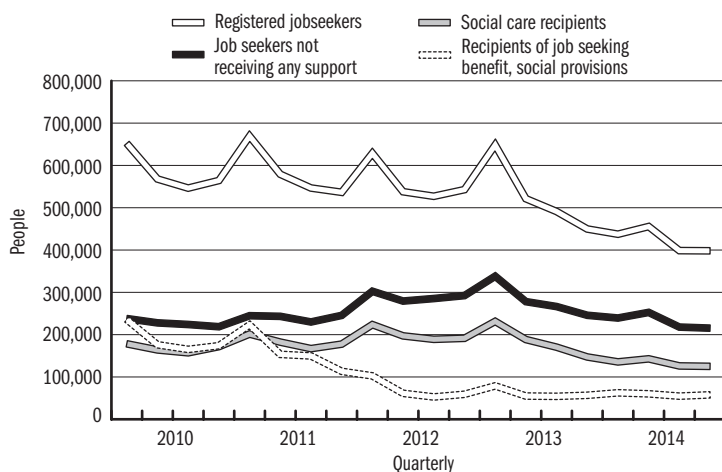
Public works programmes have a stronger and more direct impact on the number of registered job seekers than on the number of ILO unemployed. In May 2014, when there were 100 thousand fewer public works employees than in the previous month, the number of registered unemployed grew by about the same number. By July the number of public works employees was a steady 160 to 200 thousand while that of registered job seekers at around 400 thousand.

The share of first job seekers was 13 percent in 2014, which is higher, even if not substantially, than in the previous year despite the fact that a significant part of active tools designed to help the young to find work (for instance, the First Job Guarantee program, the state's taking over taxes and public dues in the framework of the job protection action plan, subsidising workplace scholarships from the central budget, a variety of start-up programs) were in place. One explanation is that 20 thousand of the first job seekers had only primary education (some even dropped out of primary school), with hardly any chance of finding a job in the open labour market. To avoid long term unemployment, they would need to be involved in personally-tailored train-

ing programmes, however the current labour market policy seems to concentrate on public works programmes rather than training.

The impact of the reform of the system of unemployment provisions (cutting back the job seeking benefit period to three months, limiting eligibility for job seeking aid to persons having not more than five years to work before retirement, linking income-tested benefits to participation in public works programmes and in other active programs) peaked in 2014. On average, 59 thousand persons per month were given job seeking provisions, of which nearly one third received the special pre-retirement allowance. As the job seeking benefit period was typically already three months in 2013 because earlier types of benefits were expiring, the number of recipients was essentially stable. In 2014 nearly 30 percent fewer registered job seekers received regular social assistance than a year earlier in line with the government's plans to replace the small amount of aid with better paid public works jobs. On an annual average 231 thousand of the registered job seekers were not given any pecuniary provision and another 132 thousand received HUF 22,800 as an employment substitution subsidy (*Figure 9*). (Recipients of this subsidy were typically involved in public works programmes and hence earned higher incomes in a part of the year.)

**Figure 9: The number of recipients of job seeking benefit, social provisions and of job seekers not receiving any support, 2010–2014**



Source: National Employment Service/Ministry for National Economy.

In addition to the unemployed meeting formal criteria (such as ILO unemployed or registered job seeker), a considerable number are on the labour market who could (would) become employed if certain conditions were in place. The Eurostat definition of potential additional labour force is the ILO unemployment definition supplemented by three further categories: underem-

ployed, i.e. persons wishing to go over from part time jobs to full time employment, job seekers not immediately available for work and persons available for work but not seeking it. In 2014 623.4 thousand persons met the definition of potential additional labour force, of which 96 thousand were under-employed. The 539 thousand persons reporting themselves unemployed is about the same magnitude as the number of unemployed within the potential additional labour force.

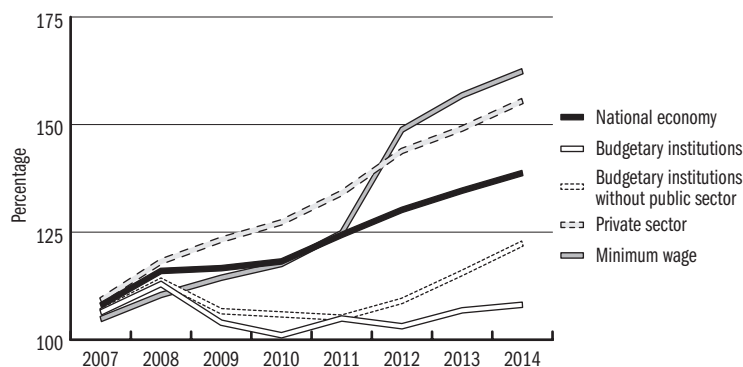
In addition to the 4 million 70 thousand employed and 3427 thousand unemployed in the age group 15 to 64 regarded as active age, there are 2 million 175 thousand who are inactive for various reasons, 7.5 percent less than a year earlier. In each inactive category a decreasing trend was recorded, however to a different extent. In the retired, which is the largest group, this was caused by the incremental increase of the retirement age while in pupils, in addition to demographic changes, by the lowering of compulsory education as well as by fewer of them going on to higher education than in earlier years; as for the recipients of child care support, measures to encourage the return to the labour market (child care benefit supplement) played a crucial role. Due to cut backs on pecuniary unemployment support, the number of inactive on such payments decreased dramatically, while the expansion of the public works programmes and the recovery of the economy made it possible for a larger number of so called other inactives to enter the labour market than before.

## EARNINGS

Gross earnings in the private sector (and partly in the non-profit sector) are shaped by the wage policies and business profits of economic organizations, the only single central intervention being the setting of the minimum wage. As for employees of budget institutions, however, labour policy makers have a wider range of tools, which is reflected in the increase of earnings in these two major areas (public and private sectors) over the past few years.

While in the 2000s gross earnings in the private sector grew basically at an even pace, with some setbacks in the crisis years from 2008 to 2010, the raising of the mandatory minimum wage in 2012 well exceeding the wage growth in the private sector failed to exercise any major impact on the sector overall. At the same time, gross earnings in the public sector decreased between 2008 and 2010 (basically as a consequence of cancelling 13<sup>th</sup> month salaries and later the earning supplement too, originally designed to replace 13<sup>th</sup> month salaries); in the last four years, however, wage adjustments for various groups of employees produced some increase in earnings yet nominal gross earnings in 2014 were still lower than in 2008. Temporal comparison, however, is distorted by the ever growing number of public works employees in the public sector.

Figure 10: Gross earnings and the minimum wage, 2006 = 100 percent



Source: HCSO Institutional Labour Statistics.

While raising the minimum wage from HUF 78 thousand to HUF 93 thousand in 2012 had hardly any effect on the rate of growth of earnings, two consequences need be mentioned. The more important one is the “whitening” of wages in areas of the economy where employers tended to report only the minimum wage and paid employees the rest of their earnings in cash. This was found by *Reizer* (2011) also in his analysis of the “twofold minimum wage rule” introduced in 2006. Such divisions typically are retail trade, food service activities, some of the business services and construction where raising the minimum wage had a significant impact on the level of gross earnings and hence on the rate of earnings increase. Earnings statistics in the private sector cover only enterprises employing five or more, information on smaller organizations are accidental. However, data suggest that earnings in the latter are around the current minimum wage, i.e. the rate of growth of earnings follows the changes in the minimum wage. (Nevertheless, the increase in earnings shown in the statistics does not necessarily mean that employees actually receive higher salaries; their payment can even decrease if earlier the employer and the employee had split between themselves the amount they had not paid in taxes and contributions for the unreported part of the wage.)

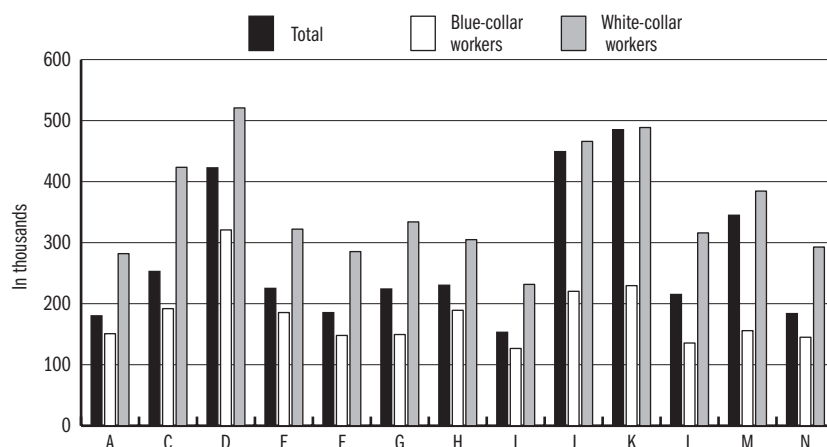
The other consequence of the relatively high minimum wage relative to average earnings is that it worsens the chances of unqualified labour to find a job as their labour is too expensive for the value they produce (*Kertesi-Köllő*, 2004). Consequently, in some respects, it was rightful and reasonable to set the threshold for public works wages some 25 percent lower than the normal minimum wage at the same time as the minimum wage was raised by nearly 20 percent in 2012.

The annual 3 to 5 percent of minimum wage increase over the last three years was more or less in harmony with the rate of increase of gross earnings in the private sector. The average gross earnings of minimum wage earners (excluding employees in jobs requiring vocational qualifications whose so

called guaranteed minimum wage threshold was HUF 118 thousand in 2014, about 16 percent higher than the normal minimum wage) was 40 percent of the average gross earnings in the private sector, and 58 percent of the average earnings in manual jobs in 2014.

In the observed organizations of the private sector, the nominal value of gross earnings grew considerably, though in a somewhat fluctuating fashion, after the crisis: by 7.3 percent in 2012, 3.6 percent in 2013 and 4.3 percent in 2014 compared to the previous year. The over 10 percent growth of the non-regular part of earnings (bonuses, premia), making up about 8 percent of earnings, made a large contribution to the increase of earnings in 2014. On the whole, the larger part of non-regular earnings accrued to non-manual employees; in terms of the individual amounts, differences in non-regular earnings by national economy sections and divisions are several times as big as in regular earnings (*Figure 11*). The average gross earnings of non-manual employees in the private sector is currently 2.2 times as high as in manual jobs, with the earning gap having somewhat narrowed over recent years. The relative distribution of earnings by sections of the national economy is 0.2 in non-manual jobs, which is smaller than the 0.3 percent in manual jobs which means that non-manual earnings are more homogenous than manual earnings – at least in the private sector.

**Figure 11: Gross earnings in the major sections in the private sector, 2014**



A: Agriculture, forestry and fishing, C: Manufacturing, D: Electricity, gas, steam and air conditioning supply, E: Water supply; sewerage, waste management and remediation activities, F: Construction, G: Wholesale and retail trade; repair of motor vehicles and motorcycles, H: Transportation and storage, I: Accommodation and food service activities, J: Information and communication, K: Financial and insurance activities, L: Real estate activities, M: Professional, scientific and technical activities, N: Administrative and support service activities.

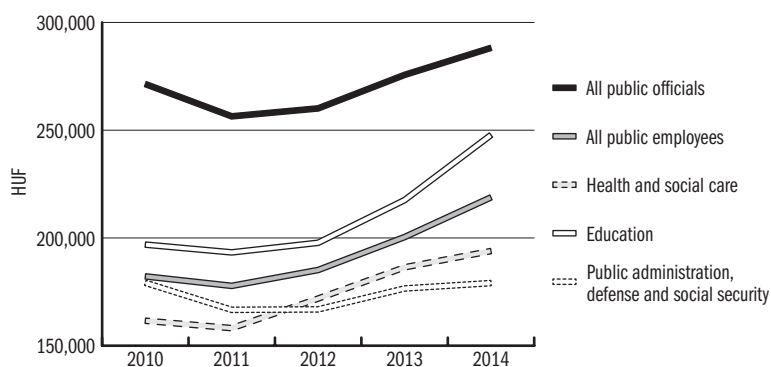
Source: HCSO Institutional Labour Statistics.



In 2014 gross average earnings in the public sector were 17 percent lower than in the private sector (earnings in the private sector were 5 percent if the basis of comparison is average earnings excluding public works employees). While the latter difference does not seem too high it is to be noted that the share of non-manual employees in the public sector is much higher than in the private sector. The difference between average earnings in manual and non-manual jobs was 3 and over 30 percent, respectively, in 2014.

While no overall wage reform took place in the public sector after 2008, corrections were introduced in the various occupational groups and classes of the national economy. The most important measures were introduced in 2013, which had an impact on the earnings index through the basis in 2014 too. In 2013 wages were raised for those health care workers who were left out of the previous round (involving about 90 thousand employees); more important, however, was the wage adjustment in public education with salaries being raised in a differentiated way in September 2013 in conjunction with the introduction of the teachers' career model. In 2014 wages of employees in welfare services were raised, and a minor raise was introduced in the armed forces.

**Figure 12: Gross earnings in the public sector, 2010–2014**



Source: HCSO Institutional Labour Statistics.

While it is not part of gross earnings (they count as welfare costs), those employees in public institutions whose income would have decreased because of the tax reform in 2011 are paid a so called 'compensation'. The share of recipients of compensation in the sector excluding public works employees dropped from two thirds to under one third (around 210 thousand persons) in 2014 as the increase in earnings counterbalanced (or surpassed for the lucky ones) the negative impacts of the tax reform hitting low earning employees. The average amount of the compensation was HUF 9700 per month, which, if counted as income, would have resulted in an approximate HUF 4000 higher average gross monthly income in the public sector excluding public works employees.

Income from work outside the regular wages (i.e. remuneration in direct income or saving on expenditures, such as cafeteria) was an average HUF 14 thousand per month in the private sector and HUF 12 thousand per month in the public sector. In the latter, excluding public works employees, who do not get this type of remuneration, the monthly remuneration was on average a little over HUF 15 thousand, or HUF 180 thousand a year, which is slightly higher than that in the private sector.

In addition to the rate of increase of gross earnings, net earnings are shaped by the current regulations of taxation and contribution payments, which have greatly changed over the last three years. Contributions payable by the employer were raised by 0.5 percent in 2011 and by another 1 percent in 2012 to a total of 18.5 percent (of which 1.5 percent is solidarity contribution, 10 percent is pension contribution and 7 percent is health insurance fee). In 2013 rates of contributions did not change and the upper threshold of pension contribution was removed, which however, only applied to the highest earners and only to an extent which was set off by new personal tax rules favouring them. With the phasing out of the super gross income, the personal income tax became a truly flat rate tax, increasing net earnings for those making over HUF 200 thousand per month and proportionately with the gross income. As in 2014, quite uniquely, neither the tax rate nor the rate of contributions changed, gross and net incomes grew in the same way and, owing to the 0.2 percent decrease in consumer prices, real earnings grew more than nominal wages.

While raising the rates of contributions has the same effect on net earnings for all employees, making the personal income tax a flat rate in 2011 (although the super gross earning still worked as a kind of second bracket at that time) and phasing out the tax relief increased the net income only in the case of gross incomes higher than an annual HUF 3 million. For lower earning employees raising children “the loss” was set off by the introduction of the tax relief for dependents (*Table 1*). From 2011, HUF 62,500/months/beneficiary for one and two dependents and HUF 206,250/months/beneficiary for three or more dependents can be deducted from the tax base. Couples could share the benefit but not all families with many children could write off the full amount from their tax base. For them 2014 brought a positive turn with the write-off being made deductible from wage contributions. The micro simulation model used by HCSO suggests that the benefit introduced in 2014 resulted in an 11 percentage points higher net earnings increase for employees with three or more children, making up 6 percent of all employees, than for employees not entitled to the dependency benefit.

**Table 1: Net and real earnings calculated with the family tax relief introduced in 2014**

Number of dependent children	Net earning* (HUF/person/ month)	Net earning change compared to 2013 Q1 to Q4 (percent)	Real earning**	Share of employees by number of children (percent)
0 child	152,538	3.3	3.5	48.6
1 child	159,445	2.7	2.9	25.5
2 children	178,694	2.7	2.9	20.0
3 or more children	202,006	14.9	15.1	6.0
National economy total	162,485	3.8	4.0	100.0

\* Net earning calculated including the family tax relief.

\*\* Real earning calculated at the 99.8% consumer price index in 2014.

Source: Labour Market Trends, 2014 Q4, HCSO, March 2015.

## REFERENCES

- BREDTMANN, J.–OTTEN, S.–RULFF, C. (2014): Husband's Unemployment and Wife's Labor Supply. The Added Worker Effect across Europe. *Ruhr Economic Papers*, No. 484.
- KERTESI GÁBOR–KÖLLŐ JÁNOS (2004): A 2001. évi minimálbér-emelés foglalkoztatási következményei. [The employment consequences of the 2001 rise in the minimum wage.] *Közgazdasági Szemle*, Vol. 51. No. 3. pp. 293–324.
- HCSO (2014): Helyzetkép a magyarországi elvándorlásról. SEEMIG – Managing Migration in South East Europe transznacionális együttműködési projekt sajtótájékoztatójának sajtóanyaga. [Migration from Hungary. Press Package for the Press Conference of the Transnational Cooperation Project SEEMIG – Managing Migration in South East Europe.]
- HCSO (2015a): A KSH jelenti: Gazdaság és társadalom. [HCSO Report. Economy and Society.] Statisztikai Tükör, 2015/32.
- HCSO (2015b): A KSH jelenti. 2014. I–IV. negyedév. [HCSO Report, Q 1–4.]
- LAKATOS JUDIT (2015): Külföldön dolgozó magyarok, Magyarországon dolgozó külföldiek [Hungarians Working Abroad, Foreigners Working in Hungary], *Statisztikai Szemle*, Vol. 92. No. 2. pp. 93–112.
- MNB (2015): Jelentés az infláció alakulásáról. Magyar Nemzeti Bank, Budapest, március. [Inflation Report, Hungarian National Bank, March 2015.]
- REIZER BALÁZS (2011): A 2006-os „kétszeres minimálbér szabály” hatása a szürkegazdaságra Budapesti Munkagazdaságtani Füzetek, BWP, 2011/4. [The Effect of the “Twofold – Minimum Wage” Rule on the Labour Market in 2006. Budapest Working Papers on the Labour Market.]