

THE HUNGARIAN LABOUR MARKET 2014

**EDITORS
KÁROLY FAZEKAS
LÁSZLÓ NEUMANN**

**CENTRE FOR ECONOMIC AND REGIONAL STUDIES, HUNGARIAN ACADEMY
OF SCIENCES & NATIONAL EMPLOYMENT NON-PROFIT PUBLIC COMPANY LTD
BUDAPEST, 2014**

**THE HUNGARIAN LABOUR MARKET
2014**

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Series editor

KÁROLY FAZEKAS

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Fax: (+36-1) 319 31 36
E-mail: biblio@krtk.mta.hu
Web site: <http://www.krtk.mta.hu>

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TRANSLATED BY: Patricia Austin (114–137, 200–215); Attila Balog (217–246);
Márk Edelényi (146–157); Imre Gergely Szabó (193–197); Álmos Telegdy (70–
78); Ágnes Viktória Turnpenny (9–34, 43–54, 57–69, 79–113, 198–199); Júlia
Vajda (37–42, 55–56, 158–179); László Váradi (138–145); Júlia Varga (180–192)

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AUTHORS

- SZILVIA ALTWICKER-HÁMORI – ZÜRCHER HOCHSCHULE
FÜR ANGEWANDTE WISSENSCHAFTEN
 - TAMÁS BAKÓ – CERS-HAS
- ERZSÉBET BERKI – MINISTRY FOR NATIONAL ECONOMY
 - ZSOMBOR CSERES-GERGELY – CERS-HAS
 - ÉVA CZETHOFFER – CERS-HAS
 - MÁRK EDELÉNYI– IAEN, ECUADOR
 - PÉTER ELEK – EÖTVÖS LORÁND UNIVERSITY
 - KÁROLY FAZEKAS – CERS-HAS
 - ZSUZSA KAPITÁNY – CERS-HAS
 - JÁNOS KÖLLŐ – CERS-HAS
- JUDIT LAKATOS – HUNGARIAN CENTRAL STATISTICAL OFFICE
 - ANNA LOVÁSZ – CERS-HAS , EÖTVÖS LORÁND UNIVERSITY
 - GYÖRGY MOLNÁR – CERS-HAS
 - BEÁTA NACSA – EÖTVÖS LORÁND UNIVERSITY
 - LÁSZLÓ NEUMANN – CENTRE FOR EUROPEAN
EMPLOYMENT STUDIES LTD
 - ÁGOTA SCHARLE – CERS-HAS, BUDAPEST INSTITUTE
 - ENDRE SZABÓ – CERS-HAS
 - IMRE GERGELY SZABÓ – CEU
- PÉTER ANDRÁS SZABÓ – REFORMED PRESBYTERIAN CHURCH
 - ÁLMOS TELEGDY – CERS-HAS, CEU
 - LÁSZLÓ VÁRADI – AVENEW MARKETING LTD
 - KITTI VARADOVICS – CERS-HAS
 - JÚLIA VARGA – CERS-HAS

INTRODUCTION

The *Hungarian Labour Market Yearbook* series was launched 14 years ago by the Institute of Economics of the Hungarian Academy of Science with support from the National Employment Foundation (OFA). The yearbook presents the main characteristics of Hungarian employment policy and each year features an in-depth analysis of a topical issue. From the outset, the editorial board has striven to bring relevant and useable information on trends in the Hungarian labour market, the legislative and institutional background of employment policy, and up-to-date findings from Hungarian and international research to policy makers, civil servants, government officials, higher education and research institutions, and the press and electronic media.

It was an important consideration that the research published in the yearbook series would also provide a good source of knowledge for higher education on the topics of labour economics and human resources management. The yearbook presents the main characteristics and trends of the Hungarian labour market in an international comparison using available statistical information, conceptual research and empirical analysis in a clearly structured and easily accessible format. Continuing the previous editorial practice, we selected an area that we consider especially important from the perspective of understanding labour market trends in Hungary and effective evidence-based policy making. The current volume examines the characteristics of public sector employment.

For the first time in its history, the publication of the Labour Market Review was delayed by more than six months. The reason for this was the lack of funding – despite our best efforts. We remain committed to providing the best possible information with the yearbook series to anyone with an interest in the Hungarian labour market and commitment to evidence-based policy making.

The Yearbook has four main parts.

1. The Hungarian labour market in 2012–2013

The Hungarian economy was characterised by a deepening of the second wave of the crisis followed by a weak growth from mid-2012 until the end of 2013. The country's annual GDP in 2013 was 1.2 per cent higher than in 2012. Expanding car production and export, as well as the intensifying of internal demand all played an important role in the growth. Economic investment increased for the first time since the crisis mainly thanks to infrastructure developments financed from EU sources but household consumption also expanded underpinned by rising real wages and strengthening consumer confidence.

The overall activity rate reached 65% in 2013, which has been its highest value in this millennium; however, it is still lower than the EU average. Using the ILO definition the mean unemployment rate was 10.3 per cent in 2013, 0.7 percentage points lower than in 2012. However, the number of unemployed school leavers went up: the monthly average number of unemployed school leavers registered was 66,025 people, 7.4 per cent higher than in 2012. The employment and unemployment rate improved in 2013, the former grew by 1.6 per cent and the latter fell by 2.6 per cent between the first and the last quarter. The favourable employment and unemployment statistics are somewhat dampened by the fact that they are mainly due to a very substantial increase in public works. The number of people in public works employment^{*} has increased steadily in the past three years and with the launch of public works winter projects it reached 172 thousand in the last quarter of 2013. In addition to public works, labour migration from Hungary also had important implications for unemployment and employment rates. The number of people working abroad while maintaining their residency status in Hungary has increased threefold in the last five years, their number was near 100,000 in the last quarter of 2013. In 2008 60 per cent of registered job vacancies were non-subsidised; in 2013 this fell to 20 per cent. The steady increase of subsidised vacancies within all registered job vacancies started with the introduction of the new public works policy. Nevertheless, the number of reported job vacancies increased on average by 14 per cent compared to 2012 suggesting that economic growth was picking up. At the same time an increasing proportion of newly created jobs are part-time or fixed-term. Part-time employment went up by more than 50 per cent between 2008 and 2013, the number of workers on a fixed-term contract, predominantly short-term, was 42% higher in 2013 than in 2008.

Thanks to above-inflation nominal pay rises in recent years, real wages have increased by nine per cent compared to 2008. In contrast, average gross pay in the public sector has been falling more or less steadily: overall by 15 per cent in the past five years. Various measures were introduced in 2013 that increased wages: a more than five per cent pay rise for public workers, wage adjustment of health care workers and a new career model for teachers in 2013, a 5.4 and 5.6 per increase of the minimum wage and guaranteed minimum pay respectively. The labour market was less tight in 2013 than in previous years. This is also suggested by the fact that redundancy was down from its peak at 60.2 per cent (second quarter of 2010) at 58 per cent in the second quarter of 2013 which then fell to 54 per cent by the end of the year. The number of people who handed in their notice doubled in the last quarter of 2013 in comparison to the same period in 2012, which might also indicate a more favourable labour market.

^{*} Average headcount based on the Ministry of Interior's Employment and Public Works Database.

In summary, it might be argued that the labour market improved in 2013 compared to 2012, however this was mainly due to the massive expansion of public works employment rather than economic growth.

2. In Focus

The topic of this year's *In Focus* is the public sector which is a relatively neglected area of research compared to the private sector. It examines the public sector from a dual perspective: on the one hand, it looks at its labour market processes, and on the other hand it explores its institutional background. *In Focus* is comprised of an introductory and four thematic chapters. The short introduction gives a brief overview of the topic, highlights the main current issues in Hungary and abroad, provides a review of earlier literature, and presents the topics of the main chapters.

Chapter 1 summarises the key facts. *Köllő's* study examines the size and composition of the public sector and the development of public sector wages in Hungary. In international comparison the most prominent feature of the public sector in Hungary is the very large fluctuation of the wage differential between the public and private sector (unprecedented among OECD countries), and – in the light of current trends – the widening pay disadvantage between similar employees (in terms of demographic characteristics, education, labour market experience) in the public and private sector. The chapter also addresses the impact of pay rises and decreases on relative wages, the development of graduate pay over the career-span and the methodological difficulties in defining and measuring the public sector. The chapter includes two boxed texts (brief highlights). *Neumann and Varadovics* present the trends in the size and wages of state/local government owned corporations. According to their findings the restrictions affecting the public sector since 2006 or the economic downturn hitting the private sector between 2008 and 2010 had no effect on wage dynamics in this sector. *Scharle* addresses a particular segment of the broader public sector: the size and cost of public works employment. She provides an overview of the number of participants and the cost of public works programmes between 2000 and 2013 and compares this – in terms of its size – to other parts of the public sector and the practices of other countries.

Chapter 2 examines the public sector primarily from a labour economics perspective. Most of the more recent research presented here addresses the interaction between the different labour markets and labour market flows. The study by *Altwickler-Hámori and Lovász* examines the wage differential between the private and public sector at different segments of the wage distribution in the decades before and after the large pay rise in 2002. The authors set out to answer the following questions: who are at a relative disadvantage in the public sector and who benefitted most from the pay rise? Also, did the wage increase really make public sector employment a more attractive option for the highly

educated? Or differently, did the pay rise have a lasting effect on public-private sector wage differentials? Was it effective? *Lovász's* boxed text addresses labour market discrimination in the public and private sector: the gender pay gap and occupational segregation in the hiring process and promotions.

The other three subchapters investigate the interactions between the labour markets of the public and private sector. *Telegdy* examines the effect of the 2001–2002 pay increases on corporate compensations. He has shown that a 10-per-cent higher public sector presence in a given labour segment increases wages by 1.5 per cent. The spill-over effect is particularly strong for low-paid corporate workers in occupations with a high concentration of public sector workers, in the service sector, or if they were hired after the large pay rise. In his paper *Köllő* examines the effect of large wage gap variations between the private and public sector (especially the large pay rises before and after the 2002 general election) on the number and quality of private sector workers moving to public sector jobs. An increase of one per cent in public sector pay for a given gender and age increased the average wage of workers moving from the private sector by over 0.5 per cent compared to stayers. The effect was much stronger for young people than older workers. The heavy decline in the inflow to the public sector dampened the effect of positive selection on the public sector workforce. *Elek and Szabó* explore labour flow in the opposite direction: they examine the number, composition and future labour market behaviour of people leaving the public sector, including the probabilities of re-employment in jobs that match their education. The re-employment intensity of people who are made redundant in the public sector is about 5–25 per cent lower – on average they take this much longer to find a new job compared to people who lost their job in the private sector. At higher education levels the difference disappears. People who move from the public to the private sector are not significantly more likely to be over-qualified for their new job than people who move jobs within the private sector – if the effect of education is controlled for.

The study by *Molnár and Kapitány* investigates the distinctive selection mechanisms of the public sector. They present non-monetary motivations, risk-minimising family strategies that support the decision to work in the public sector. Their boxed text examines whether the general trend that public sector workers are more satisfied than others is also valid in Hungary.

Chapter 3 addresses the institutional background of the public sector labour market. Due to limited space this publication does not aim to present public sector labour law and the system of interest reconciliation in a comprehensive way, instead the focus is on the latest trends. *Nacsa's* subchapter reviews the most important changes in labour law after 2010: the rules of dismissal without cause, their repeal by the Constitutional Court, the new regulations from 2011 that in essence re-established the pre-repeal situation through the dismissal causes of loss of confidence and unworthiness. *Berki* presents the mechanisms of in-

terest reconciliation and wage determination in the public sector highlighting the post-2010 changes. The sub-chapter provides a detailed description of different wage systems, compares the main similarities and differences between different employment statuses, wage levels (internal differentiation of pay scales, differences, other pay components), and changes within the last three years. The other main focus of the sub-chapter is the national consultation and collective bargaining in the public sector. (The main topics are: operational and non-operational forums – the implementation gap, subjects of interest reconciliation, the lack of collective agreements, collective agreements that are ending, consultation and direct action.) In the discussion *Berki* provides an assessment of the relationship between unilateral wage determination (legislation) and interest reconciliation/collective bargaining. The boxed text in this sub-chapter considers the collective agreements of the central and local government owned corporations, and the likely effect of recent (2012) legislation that limits the scope of collective bargaining in “community owned” companies.

The next subchapters present a European outlook on public sector reforms. *Váradi* adopts a human resources management approach to describe the objectives and instruments of the *new public management* and the neo-Weberian approach that seeks to comply simultaneously with the requirements of efficiency and impartiality that ensure a professional and fair functioning of the public service. Developments in the early 2000s were in line with this and they increased flexibility but still preserved most of the security elements. However, the financial and economic crisis hampered these – quite diverse – initiatives. The countries that got into financial difficulties gave up more and more of the security elements without any coherence or clear direction in their policy making. Only some of the rich and stable countries could implement countercyclical measures in public sector employment as well. *Edelényi and Neumann* give an overview of public sector labour law models, wage determination systems and the role of social dialogue in the European Union, as well as recent changes and responses to the 2008 economic and financial crisis. Before the crisis in the Member States of the European Union there were two opposite models of public sector employment statutes: statutes based on Prussian or Napoleonic traditions and the statutes of the Anglo-Saxon countries based on common law traditions. Accordingly there were also two main models in wage determination: unilateral wage determination and collective bargaining. However, there exist other forms of interest reconciliation and in the German-French model different groups have different status in the public sector. In addition to the direct impact of the economic crisis (budget restrictions, redundancies and pay cuts/freezes), wage determination systems also underwent major changes: unilateral wage determination is clearly on the rise and agreements are being decentralised. In line with the objectives of New Public Management, the composition of the public sector workforce changed, the number of jobs “protected”

by status laws is falling and the number of people employed under private sector labour law is growing as well as the number of people in different atypical forms of employment.

The other study by *Neumann and Edelényi* focuses on the local government sector. In accordance with the practices of New Public Management, an increasing number of public services are provided by private or non-profit organisations – in a variety of forms – and the boundaries between sectors have become blurred. The first part of the sub-chapter gives an overview of privatisation, outsourcing/insourcing and public procurement practices in some Member States of the EU. The involvement of the private sector raises questions around the interaction of different labour market regulations: differences in the regulation of transfer of undertakings and employment clauses in procurement contracts between countries. On the other hand, the sub-chapter attempts to map similar practices in Hungary: it reviews the management, service provision and interest reconciliation practices of local governments, and the local government motives and counter-motives behind privatisation, outsourcing and insourcing practices. It also addresses the key trend of recent years: the transfer of local government services to central government management and then to religious organisations. Changes in the employment status and working conditions of affected employees are also discussed. The boxed text for this sub-chapter presents the employment implications of outsourcing and insourcing and transfer to religious organisations through two case studies from 2012.

Chapter 4 of *In Focus* combines labour economics and institutional approaches to present selected job markets within the public sector. *Varga* discusses teachers' pay, selection and attrition, while *Köllő and Szabó* address doctors' pay, gratuities and attrition as well as the characteristics of interest reconciliation in the health care sector including a regional outlook on similar processes in the Czech Republic, Poland and Slovakia. The two studies by *Berki, Czethoffer and Szabó* look at the employment situation of people who leave their career for different reasons. One of the studies examines the career path of nurses and other health care professionals after they leave the national health sector. The other sub-chapter explores the career path of law enforcement and armed forces staff after retirement: whether they worked, if yes in what occupations and how much they earned. Both studies review the main legislative changes affecting these occupations: the new pay scale in the health care sector and the abolition of early retirement pension that resulted in possibly the greatest protest of all to the post-2010 government measures which affected the public sector.

The time horizon of the sub-chapters in *In Focus* is different: labour economics analyses generally cover the period between 2008 and 2010, statistical data are usually available until 2013, and even the descriptive studies attempt to address – where possible – the most recent trends.

3. The institutional environment of the labour market between September 2012 and January 2014

There were various changes in the institutional environment of the labour market in 2013 that also affected the tax and contribution burden of employment. The most important change was the introduction of an employment promotion package by the job protection action plan that replaced the Start cards. School leavers under the age of 25 years, people under 25 or over 55 years, long-term jobseekers, women on, or returning from, maternity leave, unskilled workers, mothers with three or more children returning to work, and employers in free enterprise zones can receive a discount on the contribution payment.

Public works employment continued at a high rate similarly to previous years. However, unlike in previous years, at the end of 2013 it increased even further instead of entering a decline. While the average headcount was 140 thousand during most of 2013, in December it settled at around 200 thousand. In the winter months the programmes also allow basic skills development for approximately 50 thousand people. Weekly pay was replaced by a monthly wage for public workers. A wage minimum was introduced for supervisors in public works.

There were important changes towards the end of the period which affected net wages. As of 2013 the tax system became truly single-rate and the upper limit for pension contribution was also abolished. A new contribution discount scheme was introduced for families to supplement the existing family tax discount scheme. As a result low-earners with multiple children have been able to take better advantage of available discounts for children from 2014. The child care allowance was amended to include new measures for people who are having children and people who return to work following parental leave.

The accreditation of businesses employing people with disabilities became simpler and their funding system changed as well. The rules of public sector employment were amended for people who are eligible for old age pension. They can no longer claim their state pension while in employment; however they retain their pensioner status. Health care workers and tutors in art and vocational education are exempt from the new rules.

4. Statistical data

This section gives detailed information on the main economic trends, population, labour market participation, employment, unemployment, inactivity, wages, education, labour demand, regional disparities, migration, labour relations and social welfare assistance as well as an international comparison of selected labour market indicators following the structure developed in previous years.

The data in the chapter come from two main sources: on the one hand the regular institutional and population surveys of the Central Statistical Office (CSO): Labour Force Survey (LFS), institution-based labour statistics (ILS), labour force accounting census (LFAC); on the other hand the register of the

National Labour Office (NLO) and its data collections: the unemployment register database (NES REG), short-term labour market forecast (PROG), wage tariff surveys (WTS), and the NLO's Labour Relations Information System (LRIS). More information is provided on these at the end of the statistics section. In addition to the two main data providers, the Central Administration of National Pension Insurance has provided the data on old age and disability pensions and assistance. Finally, some tables and figures are based on information from the online databases of the CSO, the National Tax and Customs Administration (NTCA) and the Eurostat.

All tables and figures in this chapter can be downloaded in Excel format following the links provided. All tables with labour market data published in the Hungarian Labour Market Yearbook since 2000 are available for download from the following website: <http://adatbank.krtk.mta.hu/tukor>.

*

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*

It is with great sadness that we remember our colleague and friend *György Lázár* who passed away after the completion of this manuscript. He was a member of the Yearbook's editorial board and not only helped us to find and make sense of data but also showed us an example in humanity and integrity.

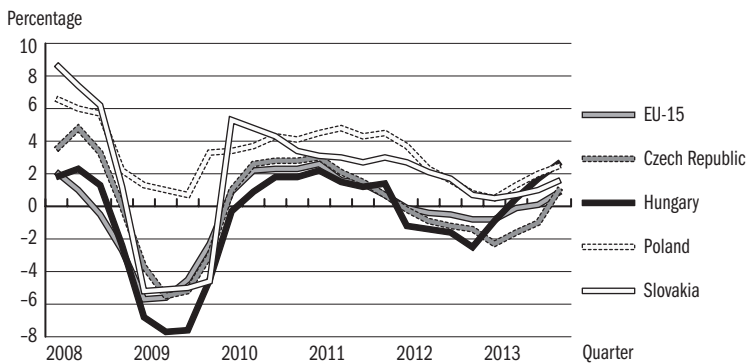
**THE HUNGARIAN
LABOUR MARKET
IN 2012–2013**

TAMÁS BAKÓ

ECONOMIC ENVIRONMENT AND EMPLOYMENT

The Hungarian economy was characterised by a deepening of the second wave of the economic crisis followed by weak growth from mid-2012 until the end of 2013. The country's GDP fell by 1.7 per cent in 2012, which was the largest decline among the Visegrád countries (*Figure 1*). Both external and internal factors played a role in this. The Eurozone went into recession again in 2012 and the weakening of Hungary's main export markets meant a contraction of international trade. Household consumption declined¹ as a result of a decrease in the real value of wages and cash transfers as well as the reduction of debt accumulated before the crisis. Unused capacities and limited credit supply prompted businesses to postpone or limit their investments.

Figure 1: GDP growth in the region (percentage change compared to the same period in the previous year)



Source: Eurostat online database.

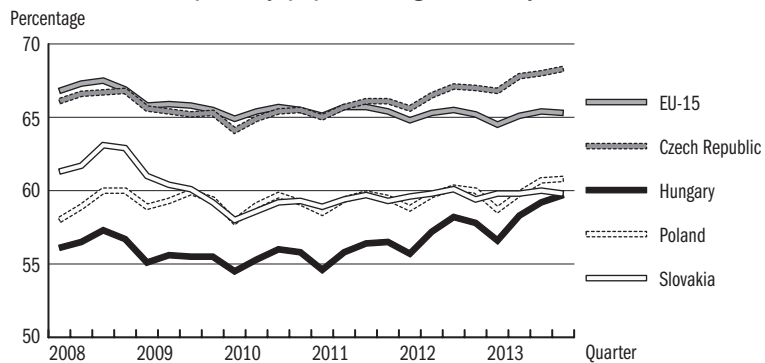
The economy of the European Union was characterised by a slow recovery from the recession in 2013; annual economic output effectively stagnated (+0.1 per cent). The German economy – considered the engine of the European economy – expanded by 0.4 per cent and this also had a positive impact on the Hungarian economy whose output grew in the last three quarters of 2013 compared to the same periods of the previous year. The annual GDP of Hungary was 1.2 per cent higher than in 2012.

Expanding car production and export, as well as the intensifying of internal demand all played an important role in the growth. Economic investment increased for the first time since the crisis mainly thanks to infrastructure developments financed from EU sources but household consumption also expanded underpinned by rising real wages and strengthening consumer con-

¹ The annual consumer price index was 5.7 per cent in 2012 (NBH, 2013a).

fidence (NBH, 2013c). The economic performance of East-Central Europe improved gradually in 2013, and the region's growth exceeded the EU average in the last quarter of 2013. The improving economic performance had a positive impact on employment in the region. Of the Visegrád countries Hungary and the Czech Republic achieved the greatest improvement in employment between the last quarter of 2012 and the last quarter of 2013, while employment in Slovakia stagnated during the same period. By the end of 2013 employment rates in all Visegrád countries – apart from Slovakia – exceeded their pre-crisis level (Figure 2).

Figure 2: Employment rates in the Visegrád countries, quarterly, population aged 15–64 years



Source: Eurostat online database (lfsq_ergan).

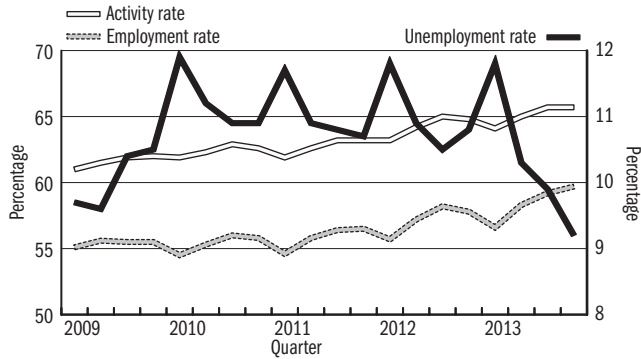
The economically inactive population decreased by nearly 10 per cent in Hungary between 2008 and 2013, which can be considered a positive development in recent years. This was due to a decline in the number of 15–64-year olds by about 100,000 and a nearly four-per-cent increase in the activity rate. The unemployment rate peaked at 11.9 per cent as a result of the crisis in the first quarter of 2010 and remained above 10.5 per cent for almost two and a half years. Unemployment began to rise again during the 2012 recession in Hungary and reached 11.8 per cent in the first quarter of 2013. The employment and unemployment rate improved in 2013, the former grew by 1.6 per cent and the latter fell by 2.6 per cent between the first and the last quarter. It is worth noting that although the employment rate of 15–64-year olds was around 60 per cent in the last quarter, which is the highest value since the early 1990s, it is still well below the European Union average (Figure 3).

The favourable employment and unemployment statistics are somewhat dampened by the fact that they are mainly due to a large increase in public works (Figure 4). From January 1, 2011 earlier public works programmes were replaced by a new public works scheme that makes participation in a public works project a special form of employment. The number of people in public works employment² has increased steadily in the past three years and with

2 Average headcount based on information from the Employment and Public Works Database [in Hungarian: Foglalkoztatási és Közfoglalkoztatási Adatbázis] of the National Labour Office compiled for the Ministry of Interior.

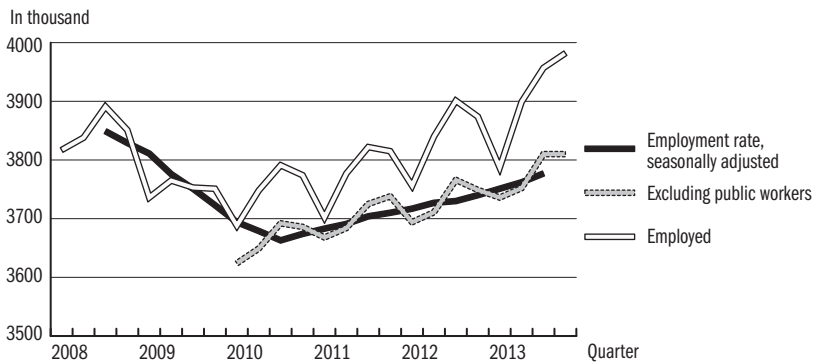
the launch of winter public works projects reached 172 thousand in the last quarter of 2013.

Figure 3: Main labour market indicators (axis on the right: unemployment rate)



Source: KSH Stadat.

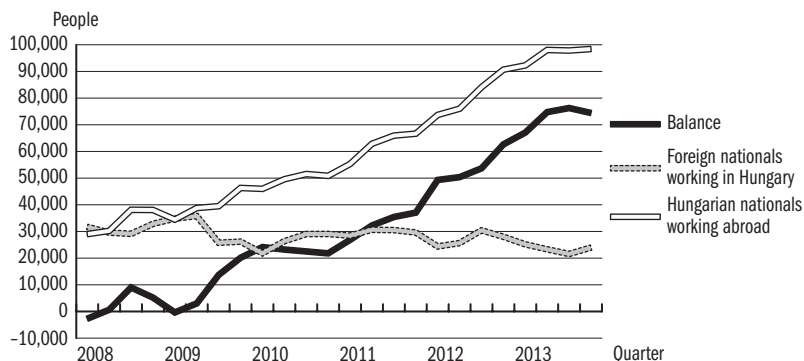
Figure 4: Number of people in employment, population aged 15–64 years



Source: Own calculations based on CSO Stadat and brief report on *Earnings*.

An increasing number of people are working abroad because of the crisis and this has important implications for unemployment and employment figures. Some of the migrant workers are settled abroad and planning to stay long-term or indefinitely, however a sizeable group of migrants are commuting or only planning a short stay, or they moved recently and some of their family are still in Hungary. The latter group of workers are still part of the households in Hungary and thus they are also observable by the CSO's Labour Force Survey; their number was only 28,977 at the beginning of 2008, nearly 2,000 people less than the number of foreign nationals employed in Hungary. Although the exact number of Hungarian nationals working abroad cannot be determined on the basis of the CSO's Labour Force Survey, certain trends can be identified. It is clear that labour migration had already been on the rise before the crisis, which only intensified this trend (*Figure 5*).

Figure 5: Balance of Hungarian nationals working abroad and foreign nationals working in Hungary, population aged 15–64 years, 2008–2013



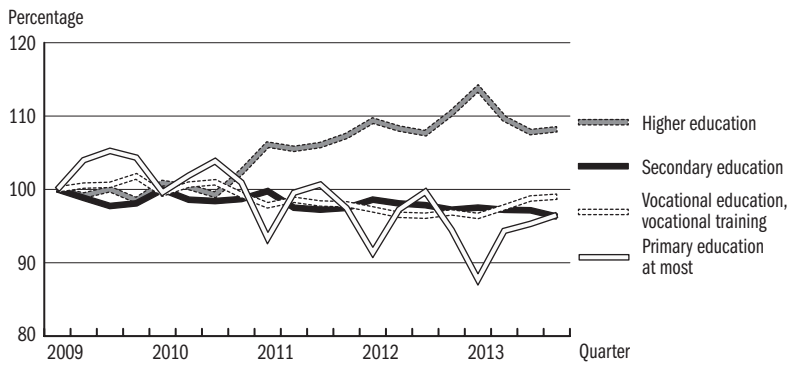
Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

The number of people working abroad while maintaining their residency status in Hungary has increased threefold in the last five years, their number being near 100,000 in the last quarter of 2013. Two thirds of them work in German-speaking countries; 46 per cent of migrants work in Austria (more than 44,000 people). The majority of people working in Austria live near the border to Hungary; which also supports the argument that the CSO Labour Force Survey is most suitable to detect cross-border commuters. People working in the United Kingdom also represent a fairly large share at just over nine per cent. It is worth noting that 46 per cent of the migrant workers observed by the Labour Force Survey have a vocational or vocational training school qualification, substantially higher than their share in the total population. The share of people with a vocational qualification increased at the expense of people with only primary education who are much underrepresented compared to their share within the total population aged 15–64 years. There are differences in the composition of migrant workers by education level across countries. In Germany and Austria there are more males with vocational or secondary education while in the United Kingdom the share of graduates and females is higher. It is important to emphasise that Hungarian citizens who work abroad but do not appear in these surveys might be significantly different from the observed population in terms of the demographic characteristics.

The number of foreigners employed in Hungary fell slightly after the crisis and stabilised – at this lower level. It is not possible to determine the nationality of foreign employees on the basis of the CSO Labour Force Survey, only the country where their parents were born. Based on this it might be concluded that at least 44 per cent of foreign nationals employed in Hungary have parents who are ethnic Hungarians born outside Hungary. Foreigners employed in Hungary have a higher education level than Hungarians working abroad and the total working age population. Employment in Hungary

and the retention of jobs is promoted by the job protection action plan. This has supported job creation and job retention for disadvantaged people on the labour market by providing social contribution tax discounts and training subsidies since January 2013. One of these clearly defined groups is unskilled people who are the most excluded from the labour market (see *Figure 6*) (the social contribution tax is reduced from 27 per cent to 12.5 for employers who hire them). As a result of the expansion of public works programmes³ the employment rate of people with a primary education or lower increased in 2013, but despite this growth it has remained below its early 2009-level.

Figure 6: Employment rate by education level, population aged 15–64 years



Source: Own calculation based on CSO *Stadat*.

Although the largest decline was in the employment of unskilled people, the employment rate fell for all education levels apart from graduates compared to the first quarter of 2009. In the past four years the employment rate of graduates grew by three percentage points in the 15–64-year-old active population and after a slight drop graduate employment approached its pre-crisis level. Other important target groups of the job protection action plan are young people aged under 25 years, people aged over 55 years, and employees with young children.⁴ Of these three groups, people aged 55–64 years are the largest group (since the second quarter of 2011) in the working age population and their number is continuously rising, while the number of 15–24-year-olds is rapidly decreasing. Despite this, changes in the employment of young people are a lot less favourable than in the 55–64 years age group (*Figure 7*).

The unemployment rate within each disadvantaged group increased between 2008 and 2013, the greatest increase (73 per cent) was among mothers with young children (*Figure 8*).

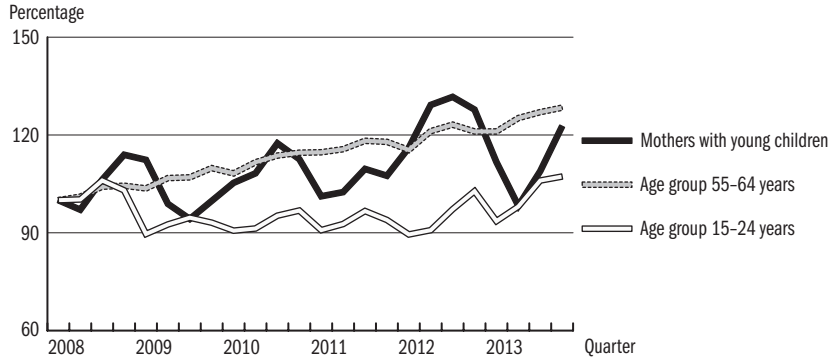
Even before the crisis one in five young people were out of work; their unemployment rate has increased by 36 per cent since then and reached 24 per cent in the last quarter of 2013. It is worth noting however, that the unemployment rate of young people fell substantially, by six percentage points,

³ Using the Employment and Public Works Database *Molnár et al.* (2014) found that half of public works participants had primary education at most.

⁴ According to Act CXLVI of 2012 on the Amendment of certain legislation for the implementation of the job protection action plan, the employers of people returning to work following parental leave are entitled to reduced rates of contribution payment: no contribution payment is required in the first year and 14.5 per cent in the second year as opposed to 27 per cent. This study considers mothers who have a child aged under three years in the household disadvantaged in the labour market; this definition is slightly broader than the official definition set out in the legislation.

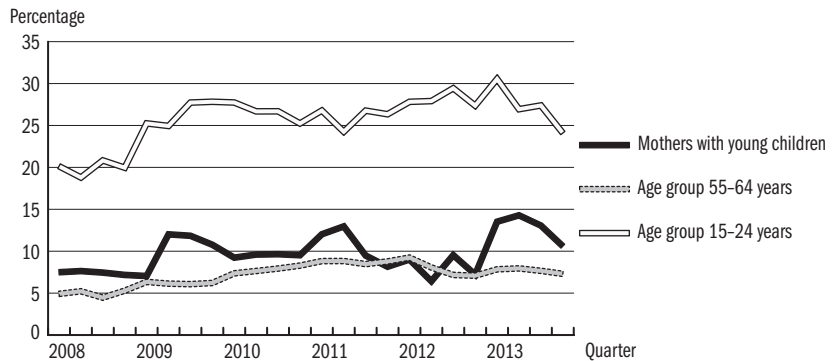
during the year. Although people aged 55–64 years are in the best situation in terms of unemployment, their unemployment rate also increased by 54% between 2008 and 2013.

Figure 7: Changes in the employment rate of disadvantaged groups in the labour market, 2008–2013 (first quarter, 2008 = 100)



Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

Figure 8: The unemployment rate of disadvantaged groups in the labour market



Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

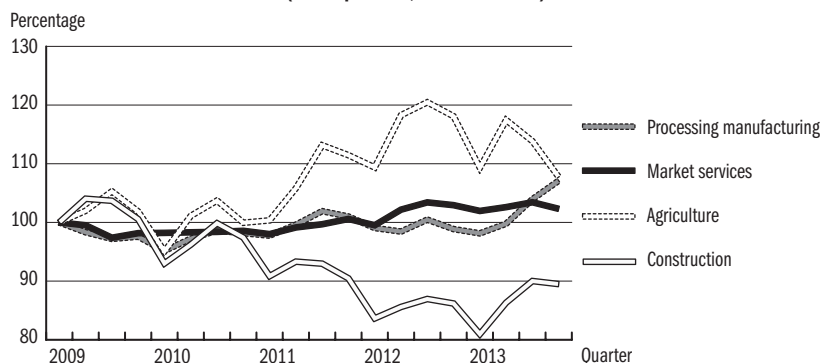
There is a question as to whether older people “crowd out” youngsters from the labour market. Is it possible to promote the employment of both groups at the same time if one can only grow at the expense of the other? Research so far does not give a clear-cut answer. Looking at workplace-level data from the public sector, *Cseres-Gergely (2013)* concluded that there is a crowding-out effect in employment and wages as well, but it is limited: it affects the youngest and least experienced. Using time series data from Belgium *Jousten et al. (2008)* argued that there is no evidence of a crowding-out effect but the employment of both groups is sensitive to business cycles, especially the employment of younger people. However, there might be other mechanisms as well: cost-cutting can be vital for companies during periods of downturn

and it might make sense to replace more experienced but higher-paid older workers with lower-paid entrants. On the other hand, people retire later due to the rising state pension age and therefore there are not enough job vacancies for young entrants.

LABOUR DEMAND AND WAGES

In recent years, labour demand in the different sectors has been largely shaped by the effects of the economic downturn and responses to it (*Figure 9*). The construction industry had the largest decline: it had 15 per cent fewer employees in 2013 than in 2009. Within the market service industries the greatest expansion was achieved by the information and communication (22 per cent growth) and the administrative and support services (18 per cent increase) subsectors between 2008 and 2013. To a large extent this was due to the creation of service centres by international companies in Hungary that provide financial, accounting and IT services to the companies' own subsidiaries or external customers.

Figure 9: Employment in the main industries, population aged 15–64 years (first quarter, 2009 = 100)

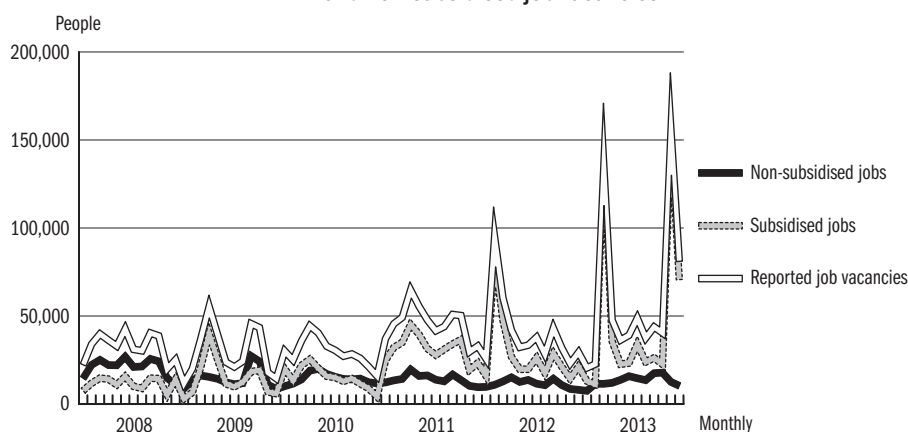


Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

Manufacturing in Hungary fell in 2012 and this had implications for labour demand as well: in the first quarter of 2013 the number of workers employed in manufacturing was two per cent lower than in the previous year. Car manufacturing was especially badly hit but thanks to new investments it recovered quickly and its workforce has increased by more than 30 per cent since early 2011. In the second quarter manufacturing started to expand and by the end of 2013 the number of workers employed in process manufacturing was four per cent higher than in 2009. Employment in agriculture has been steadily increasing since 2009 according to the Labour Force Survey, however to a large extent this is due to the expansion of the public works programmes.

From the perspective of labour demand, it is an important question as to how many and what types of jobs are created and destroyed. Although not all new vacancies are reported to the National Employment Service, their records still provide valuable information on the economy (*Figure 10*). In 2008 60 per cent of registered job vacancies were non-subsidised; in 2013 this fell to 20 per cent. The steady increase of subsidised vacancies within all registered job vacancies started with the introduction of the new public works policy. Nevertheless, the number of reported job vacancies increased on average by 14 per cent compared to 2012 suggesting that economic growth was picking up.

Figure 10: The number of newly reported subsidised and non-subsidised job vacancies



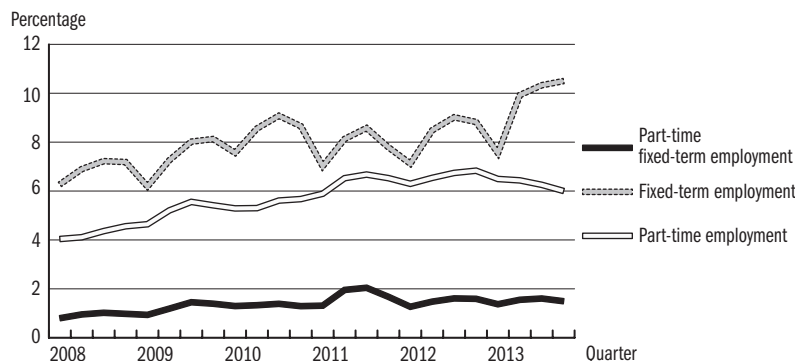
Source: *National Employment Service*.

The new downturn that followed the brief period of growth in 2010–2011 encouraged the development of new forms of employment to help adjustment of labour demand. The new Labour Code that entered into force in 2013 further promoted this process by the regulation of new flexible forms of employment (such as stand-by employment, job sharing, and employment by multiple employers). Companies in uncertain times and in recession can only plan short-term and they not only create fewer new jobs but those jobs also tend to be of shorter duration. If employers can only plan short-term but with a fair amount of certainty, then more people will be employed on a fixed-term contract.

Changes in labour law introduced in 2012 made it possible to terminate fixed-term employment contracts (with justification) and dismiss employees due to their performance or external factors that make it impossible to retain the job. In these cases the general redundancy rules apply, therefore employees are entitled to a period of notice and redundancy pay, however they do not need to be paid their wage for the remaining duration of the fixed-term contract. The quickest and cheapest way for flexible adjustment of labour de-

mand is reducing working time, therefore it is not surprising that in addition to the increase in fixed-term employment, part-time employment also became much more common (by more than 50 per cent between 2008 and 2013) in the years since the crisis (*Figure 11*).

Figure 11: The rate of people in fixed-term or part-time employment, population aged 15–64 years



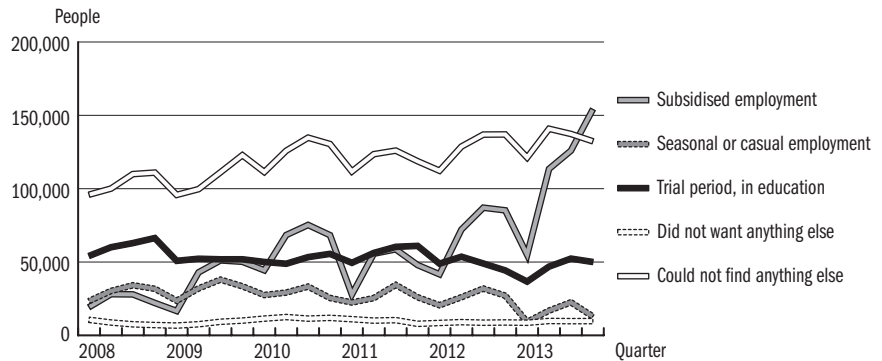
Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

The wide fluctuations in fixed-term employment during the year suggest a strong seasonal effect and the use of short-term contracts. There is little overlap between the two forms of employment; part-time workers tend to have a permanent contract. An important difference however, is that the number of men and women on fixed-term contracts is very similar, more women work part-time and their share is increasing.

For all forms of atypical employment the question of whether their expansion is driven mostly by demand factors (employer's intention) or supply factors (employee's intention) also plays a role. The CSO Labour Force Survey asks respondents why they are on a fixed-term contract or work part-time. For both forms of employment demand factors seem dominant: people did not find another job even though they would have liked to. For fixed-term contracts the demand factor is much stronger and the number of people who said that they did not want a permanent contract is negligible. More broadly seasonal and casual employment can also be attributed to the demand effect: it can be assumed that most workers have no other option but to accept these jobs. The expansion of public works employment also played a key role in the increase in the number of fixed-term contracts (*Figure 12*). Most people indicated subsidised employment as the main justification for a fixed-term contract in 2013.

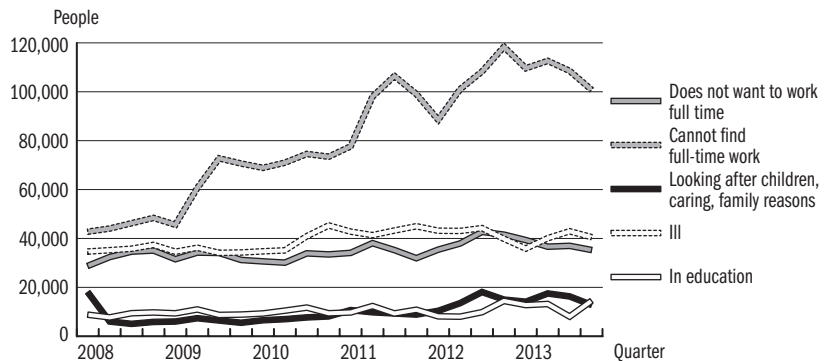
For part-time employment the supply effect is somewhat more prominent, a relatively large number of people do not want to or – due to other commitments (studies, family) – cannot have a full-time job (*Figure 13*).

Figure 12: Reason for fixed-term employment contract, population aged 15–64 years



Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

Figure 13: Reason for part-time employment, population aged 15–64 years



Source: Own calculation based on basic data from the *CSO Labour Force Survey*.

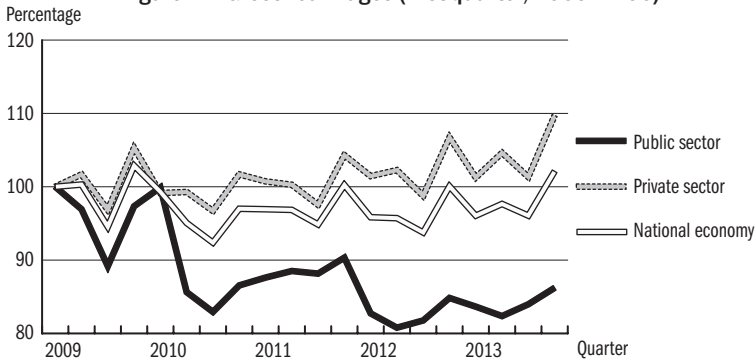
⁵ The CSO employment statistics differentiate between the gross monthly earning and gross regular monthly earning of employees. The latter excludes any bonuses and additional pay, and if we use this figure in the analysis, there is no fall in the average nominal wage. The difference suggests that the first response of companies to the external shock brought about by the downturn was cutting bonuses and other payments to employees.

The number of people who could not find full-time employment was steadily increasing even during the period of growth in 2010–2011. This suggests that involuntary (demand-driven) part-time employment might have other drivers than economic cycles. Although the number of involuntary part-time workers (people who could not find full-time employment) increased on average by three per cent compared to 2012, if only the last quarters are compared there is a substantial (15 per cent) drop between 2012 and 2013. In terms of sectors, part-time employment is more common in agriculture and services. In addition to quantitative adjustment discussed so far, wage adjustment is also important. The behaviour of public and private sector is quite different in this respect (*Figure 14*).

According to CSO's wage statistics, average nominal wages fell in the private sector during the second half of 2009,⁵ however thanks to above-inflation pay rises in recent years, real wages have increased by nine per cent compared to 2008. In contrast, average gross pay in the public sector has been falling more

or less steadily: overall by 15 per cent in the past five years. Various measures were introduced in 2013 that increased wages: a more than five per cent pay rise for public workers, the wage adjustment of health care workers and a new career model for teachers in 2013, a 5.4 and 5.6 per increase of the minimum wage and guaranteed minimum pay respectively.

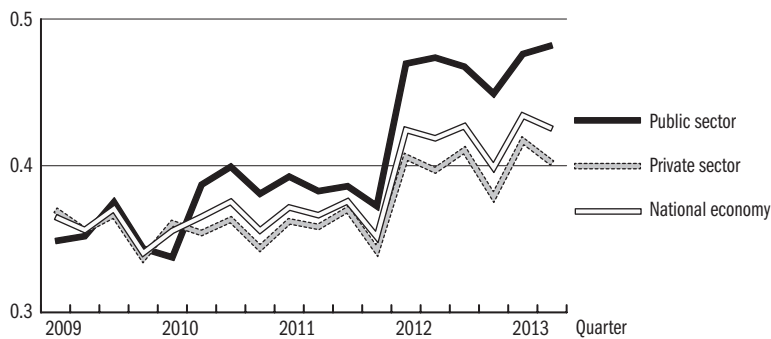
Figure 14: Gross real wages (first quarter, 2009 = 100)



Source: Own calculation based on CSO *Stadat*.

The crisis and fragile growth made companies very cautious when increasing wages; therefore it is worth using the Kaitz-index⁶ that is the ratio of the minimum wage to the median or mean wage (*Figure 15*). The greater its value, the bigger the negative employment effect (*Dolton–Bondibene, 2012*). The increase of the minimum wage by more than 25 per cent between January 2011 and 2012 boosted the value of the Kaitz index; however its 2013 value of 42 per cent, calculated using the national average wage, is not especially high – it puts Hungary in the mid-field by international comparison.

Figure 15: Value of Kaitz index, population aged 15–64 years (quarterly)



Source: Own calculation based on CSO employment statistics.

The impact of the minimum wage on employment might have been mitigated by new forms of taxation and funding for companies introduced by the job protection action plan, in addition to the wage compensation scheme. Em-

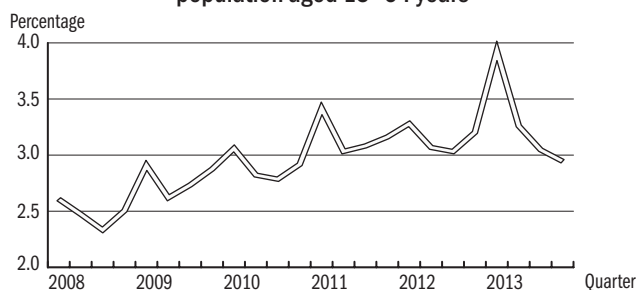
⁶ Due to the asymmetrical distribution of wages, the median wage is lower than the average wage, so the Kaitz index calculated with the median wage is higher than the index calculated with the mean wage. However, there is a strong correlation between the values of the two indexes in a given country at different times.

ployment was growing steadily in manufacturing and services in the first three quarters of 2012 then fell slightly from the fourth quarter until the end of the second quarter in 2013 and then starting growing again. This suggests that the minimum wage rises between 2011 and 2012 did not have a substantial impact on employment or only affected a relatively small number of employers negatively. This is also supported by the fact that labour market institutions provide more opportunities for wage adjustment to Hungarian companies, who tend to use these (NBH, 2013b). Gál *et al.* (2013) argue that Hungary experienced the largest wage-adjustment after the 2008 crisis among the 20 OECD countries which they examined, however in terms of quantitative adjustment it was the third lowest.

LABOUR SUPPLY

The overall activity rate reached 65% in 2013, which is its highest value in this millennium; however, it is still lower than the EU average. Recent increase in activity was largely due to government measures (review of disability pensions, increase of state pension age). To explore how much further labour market activity can potentially increase, it might be useful to disaggregate inactive people into different groups. One of these groups is people who want and are available to start work (within two weeks). *Figure 16* shows that the number of these inactive people who can be termed “passive jobseekers” increased from 2.6 per cent in early 2008 to four per cent in early 2013, then it fell below three per cent.

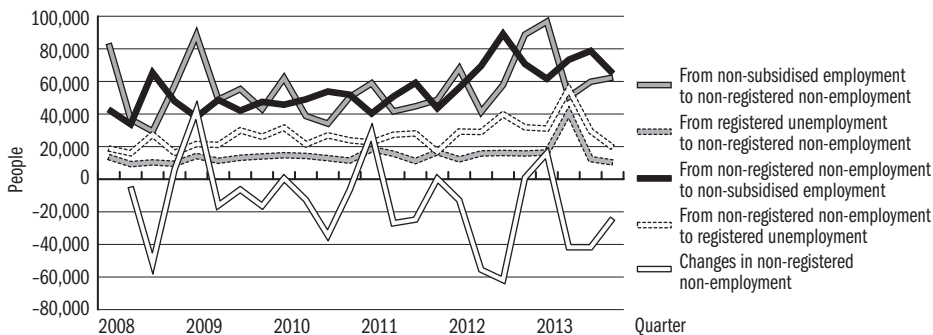
Figure 16: Inactive but wants to work and is available to start work; population aged 15–64 years



Source: Own calculation based on basic data from the CSO Labour Force Survey.

In terms of disadvantaged groups in the labour market, the share of passive jobseekers was highest in the group of 55–64-year olds and lowest among people on parental leave by the end of the period. The higher the share of passive jobseekers, the more likely it is that the activity rate will increase further if wages go up. The large fall in inactivity in 2012 diminished in 2013 (*Figure 17*). At the beginning of 2013 outflow from inactivity into registered unemployment was rising, however later in the year this trend became less intense.

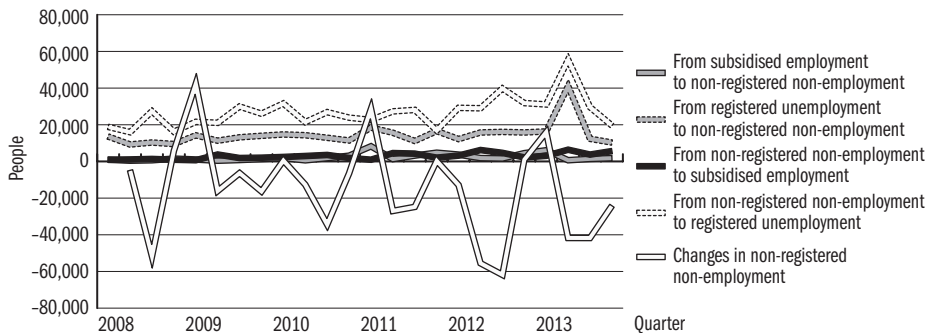
Figure 17: Changes in inactivity and flows to/from non-subsidised employment and unemployment, 2008–2013, population aged 15–64 years (excluded: subsidised employment)



Source: IE databank, calculation using *Cseres-Gergely's* (2011) method consistent with stock and flow.

A positive development was the substantial fall in the inflow into inactivity from non-subsidised employment during 2013 compared to its very high level at the end of 2012 and the beginning of 2013. Available data show that the flow into registered unemployment is greater than the flow into inactivity from subsidised employment (*Figure 18*).

Figure 18: Changes in inactivity and flows to/from subsidised employment and unemployment, 2008–2013, population aged 15–64 years (excluded: non-subsidised employment)



Source: IE databank, calculation using *Cseres-Gergely's* (2011) method consistent with stock and flow.

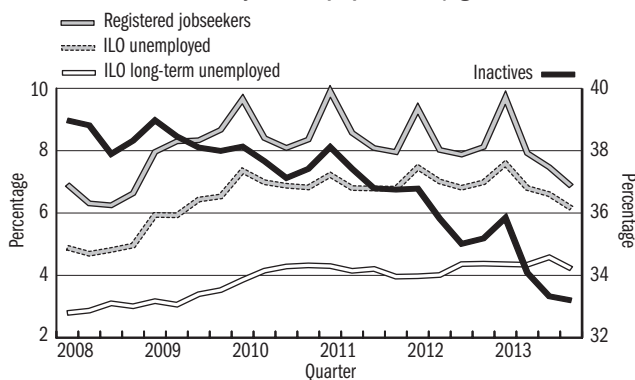
Labour supply is also affected by taxation and this has undergone major changes over the past few years. In 2011 a single-rate – 16 per cent – personal income tax was introduced alongside generous family tax breaks; in 2012 the tax refund to low-paid workers was abolished and “super gross” personal income taxation (where personal income tax is paid on gross income before the deduction of any social security contributions) was being phased out; in 2013 “super gross” was abolished together with the upper limit of personal pension contribution. When considering the impact of labour taxation on labour sup-

ply it is useful to examine decisions concerning the number of hours worked (intensive margin) and decisions concerning entry into the labour market (extensive margin) separately because the first is mainly influenced by changes in the marginal tax rate, while the latter is affected by the actual tax rate on the attainable wage for a given employee. It is not yet possible to fully assess the impact of tax reforms due to the short time scale, however a number of earlier studies (*Bakos et al., 2008, Benczúr et al., 2012a*) found that changes in the marginal tax rates do not have a significant impact on the labour supply of lower paid people, however high-paid people (earning above 2 million forints/year) were more sensitive to changes in taxation. *Benczúr et al. (2012b)* found that at the extensive margin, taxes had a stronger effect on disadvantaged groups in the labour market and women of childbearing age.

UNEMPLOYMENT

The mean unemployment rate according to the ILO definition was 10.3 per cent in 2013, 0.7 percentage points lower than in 2012. The rate of jobseekers registered with the NES within the 15–64-year old population was consistently higher than the unemployment rate based on the ILO definition throughout the observed period; however it showed a declining trend (*Figure 19*).

Figure 19: Rate of different out-of-work groups (partly overlapping) within the 15–64-year old population (right axis: inactives)

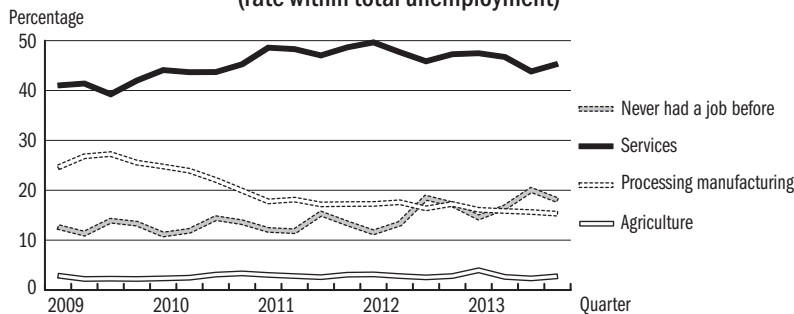


Source: CSO Labour Force Survey (inactives, ILO unemployed, ILO long-term unemployed) NES register (registered jobseekers).

The monthly average number of registered jobseekers in the records of the National Employment Service was 527,624 people in 2013, 31,478 people less than in the previous year. However, the number of unemployed school leavers went up: the monthly average number of unemployed school leavers registered was 66,025, 7.4 per cent higher than in 2012. As *Figure 20* indicates, the rate of those who had never had a job increased within total unemploy-

ment after the first quarter of 2012. The share of those who were made redundant in the service sector grew by 11 per cent compared to the first quarter of 2009 and reached 45 per cent by the end of 2013. The manufacturing industry recovered from the downturn and this was also indicated by the fall in the share of people made redundant in manufacturing among the unemployed: down from 26 per cent in the second quarter in 2009 to just over 15 per cent at the end of 2013.

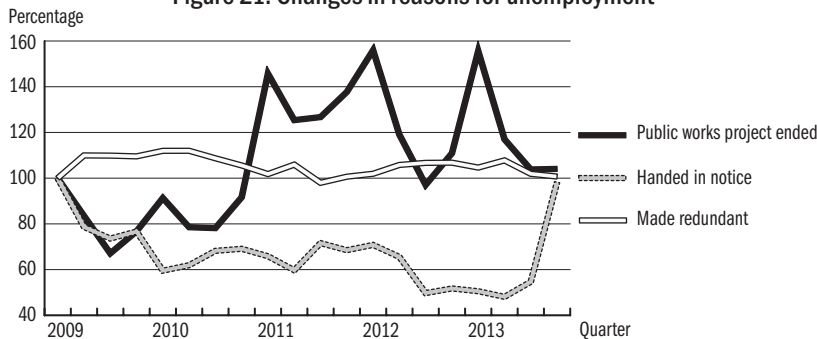
**Figure 20: Previous work of the unemployed, by sector
(rate within total unemployment)**



Source: Own calculation based on CSO Labour Force Survey.

The labour market was less tense in 2013 than in previous years. This is also suggested by the fact that redundancy was down from 57.7 per cent in 2012 to 55.8 per cent in 2013 as a reason for unemployment. The number of people who handed in their notice doubled in the last quarter of 2013 in comparison to the same period in 2012, which might also indicate a more favourable labour market.⁷ The share of people who became unemployed when the public works project they were employed in finished shows a substantial increase after 2010. The large fluctuations in this compared to redundancy as the reason for unemployment (*Figure 21*) suggests that public works programmes can only provide short-term solutions to labour market problems.

Figure 21: Changes in reasons for unemployment



Source: Own calculation based on CSO Stadat.

⁷ The employee handed in notice due to working conditions, financial or other reasons.

An unfavourable development was the growth in long-term unemployment (more than one year) that exceeded 35 per cent in 2013. There is increasing agreement on the causes of high unemployment and particularly long-term unemployment: these are not caused by economic cycles only but also by structural reasons. The most important structural factors are those that are caused by the mismatch between labour demand and supply. Employers might be looking for people with different qualifications or skills than those which jobseekers have, or labour demand and supply are concentrated in different geographical areas. Large disparities in local unemployment rates suggest that low workforce mobility has also played an important role in the growth of long-term unemployment. The general education level has been improving since the early 2000s and there are fewer people with no or low education in the total population and the economically active population. In the first quarter of 2000, 3.75 per cent of the long-term unemployed had a degree and 24.4 per cent had a general secondary education, while in the first quarter of 2013 the same figures were 9.83 and 29.9 per cent. Although educational attainment is improving, labour demand is shifting even faster towards people with higher levels of education. The number of graduates among people in employment was 17.05 per cent in the first quarter of 2000 and had already reached 27.49 per cent by the first quarter of 2013. People with no or low education had a negative, while graduates had a positive, contribution to the expansion of employment since the early 2000s. This suggests that labour demand is gradually shifting towards workers with higher levels of education.

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IN FOCUS

**LABOUR MARKET
OF THE PUBLIC SECTOR**

Edited by
LÁSZLÓ NEUMANN

INTRODUCTION

LÁSZLÓ NEUMANN

Compared to the market sector, the public sector is a neglected area of research in terms of both the labour market and industrial relations, namely the institutions determining the terms and conditions of employment and wages. Disproportionately less attention has been given traditionally to the public sector in Hungary despite the fact that, as in other Member States of the European Union, the employer of one-third to one quarter of employees is – directly or indirectly – the state.¹ Such a swelling in the size of the public sector is connected historically to the expansion of the public-sector services and the emergence of the welfare state, even if sometimes we tend to forget this in the Eastern European version of it, called “premature” by János Kornai, because of the poor quality of the services and inequalities in our access to them. Regardless of the positive or negative perception of the community services, in many ways they play a key role in the reproduction of the labour force, especially through the public education sector, and in the spheres of health, cultural and social services.

The reform and modernization of the public sector has been at the centre of attention in the world of public policy ever since the 1970s. There is no doubt that the traditional Weberian “closed” model of bureaucracy and public service provision is expensive, since here public servants and public service providers have to receive reliable, sustained income of an appropriate standard, even after they retire. The price of their incorruptibility and loyalty is also to provide them with a so-called “lifelong career” – long-term promotion opportunities and ongoing training –, which, at the same time, protects them against unjustified dismissal.

Modernization was a necessity brought about by greater or lesser economic crises – such as the 2008–2010 financial and economic crisis, or more precisely the budget problems emerging as a result. The obvious way of reducing budget expenditures is by cutting public service spending. This can be achieved simply by reducing the number of civil servants, by curbing their benefits and/or improving their efficiency, for example by bringing the public service HR closer to that of the business sector. This is what the so-called *New Public Management* trend does. As a result of the reforms the “closed”, “career-based” system is replaced by hiring/dismissal, evaluation and incentives for a position or a task – in other words: the “open” public sector. The instruments of more flexible employment – already applied before the recent crisis – are not limited to fixed-term contracts, but include also the privatization of some

¹ Through the central government or various levels of local government apparatus or companies owned by the state/local governments.

services or outsourcing some tasks to private companies or to the appearance of atypical, precarious employment relations known from the private sector.

The public sector is also a determining entity from the perspective of the analysis of labour market phenomena. Since in the public sector the proportion of employed women, university graduates and older people is above the average, the level of earnings of public employees and its fluctuation strongly influence overall wage inequalities, the wage differentials between gender and age groups and the rate of return of higher education. Although the public sector is becoming less and less the world of lifelong “retirement jobs”, it still offers a relatively safe and predictable career. Both the civil servant body and health as well as social services require a sense of vocation and commitment from employees, for whom this provides a sense of social usefulness. This opens up particular employee preferences and selection mechanisms, whether regarding career choices, staying in the profession or leaving it.

Of course the need for commitment and maintaining the “public service ethos” – particularly within the bureaucratic body – required also some specific legal regulation of the employment conditions, and public sector labour law was born from the regulations traditionally belonging more to the administrative law. In the last decades the regulation of public sector employment has come closer to that of the private sector driven by the needs of the New Public Management, while the labour law of the private sector itself has also changed due to the reforms supporting more flexibility.

The public sector is also special from the point of view of industrial relations since here the state as employer is at the same time the creator of the rules regarding negotiations and consultations with trade unions, therefore it is difficult to ensure in labour relations – particularly in collective bargaining – the independence of the partners as required in the private sector. In fact in areas where state power is exercised in the public sector – to a different extent in various countries and ages – the collective rights of employees, the freedom of association, the right of collective bargaining and strike can be limited. The direct or indirect employer role of the state represents also a certain amount of interference in the private sector conditions – beyond the fact that public sector wages affect the private sector labour market. Therefore the state is widely considered to have a *role model* provider as an employer for the private sector, too.

The traditional attitude of the public sector trade union – due to the special selection of the employees already described – has been less confrontational than that of the private sector. In the last few decades, however, in many Western countries – particularly ones exposed to budget problems during the recent crisis – the public sector trade unions have become stronger and more “militant” exactly because of the challenges brought about by the modernization of the public sector and the crisis management afflicting its employees.²

2 The importance of this issue is shown by the fact that the last volume of the biennial series of the European Commission, entitled *Industrial Relations in Europe*, is dedicated mainly to the public sector and the crisis.

In Focus views the public sector from two perspectives: the labour market processes and their institutional background. However, this duality has imposed thematic limitations: while the authors of the sub-chapters analyse several professional and sectoral areas and subdivisions, they have had to largely ignore the perspective of the policies and disciplines dealing specifically with these areas – mainly those related to the service performance, quality or effectiveness. *In Focus* is structured in four chapters.

In the first chapter *János Köllő* writes about the most important facts in the Hungarian public sector, dealing with areas such as the headcount, the composition and the trend of wage level. The most distinctive feature of the Hungarian public sector when compared internationally is the extreme fluctuation – unprecedented in the OECD countries – of wage levels relative to the private sector, and – in the light of the current trends – the increasingly significant wage disadvantage compared to private sector employees with similar (demographic, educational, labour market, etc.) characteristics. The study also deals with the impact of income hikes and cuts on wage ratios between different groups, with the specific wage-path of university graduates over their life-long career and the methodological difficulties of studying public sector statistics. In writings in boxed texts (brief highlights) *László Neumann* and *Kitti Varadovics* present the trends of state/local government owned companies' headcounts and wages, *Ágota Scharle* deals with the size and costs of a segment of the labour market of the wider public sector – that of the public works programme. These two areas deserve special attention because in recent years their size has shown a significant increase due to the government's labour market policy and property policy that has reversed the previous privatization trend.³

Chapter 2 analyses the public sector mainly from the perspective of labour economics. The majority of recent research published here addresses the interaction between the various labour markets as well as the labour market flows. Most of the studies investigate the issue of the public-private wage gap which also influences the quality of the services and workforce selection. The paper of *Szilvia Altwicker-Hámori* and *Anna Lovász* examines the differences between private and public sector wages in the various segments of wage distribution before and after the big 2002 wage hike. The writing in boxed text by *Anna Lovász* deals with labour market discrimination in the public and private sector: with the gender wage gap and with occupational segregation through hiring and promotion. The next three sub-chapters focus on the interactions between the labour markets of the public and the private sector. *Álmos Telegdy* analyses the influence of the public sector wage increase from 2001–2002 on business sector wages. *János Köllő* is concerned with the influences of the widely varying wage gap between the two sectors – particularly the large increases before and after the 2002 elections – on the number

³ It should be noted that the majority of the studies limit their analysis to the public sphere – to the civil servants referred to under changing names and public service employees – in the strict sense; it is indicated, if otherwise. It is also worth noting that within the public sector in the strict sense different laws have been applying to government and municipality civil servants as well as armed forces personnel in executive power and for employees providing public service (e.g. in health care, education, social care.) See in detail in sub-chapters 3.1 and 3.2.

and quality of professionals coming from the private to the public sector. The papers of *Péter Elek* and *Péter Szabó* show the opposite direction transitions, presenting the composition and subsequent labour market behaviour of public sector leavers, including the chances of their re-employment in positions suitable to their educational attainment. The two papers written by *György Molnár* and *Zsuzsa Kapitány* contribute to the research on the already mentioned specific selection mechanisms of the public sector. One presents those non-monetary motivations and risk-minimizing family strategies that favour the choice of jobs in the public sector. The second piece a boxed text examines whether the general trend, that public sector employees are more satisfied than other workers, is valid in Hungary.

Chapter 3 covers the institutional background of the public sector labour market. Due to limited space we could not aim to present public sector labour law and the interest reconciliation system as separate treatises, instead here too, we focussed on the latest trends. *Beáta Nacsa's* sub-chapter reviews the most important changes since 2010 from the perspective of labour law: the rules of dismissal without justification, their repeal by the Constitutional Court, the new regulations from 2011, which has in essence re-established – through the dismissal cause of loss of confidence and indignity – the pre-repeal situation. *Erzsébet Berki's* paper presents the mechanisms of interest reconciliation and wage determination in the public sector, also highlighting the post-2010 changes. The collective agreements' coverage data of the *Statistical Data* chapter referring to the public service employees' field are related to this sub-chapter (*Table 10.9*). The boxed text looks at collective bargaining in the state-local government owned business sector. It also deals with the expected effect of the new law that limits the possible themes of collective bargaining at “community owned” companies. The next sub-chapters present an outlook on the reform efforts of the public sector taking place in Europe. *László Váradi* writes from a human resource management approach to describe the objectives and instruments of the *new public management*, and the neo-Weberian approaches that seek to simultaneously comply with the requirements of efficiency and of impartiality that ensure a professional and fair functioning of the public service. *Márk Edelényi* and *László Neumann* give an overview of the European Union countries' public sector labour law models and wage determination systems and the role of social dialogue, respectively their recent changes, including the reactions following the 2008 economic and financial crisis. *László Neumann* and *Márk Edelényi's* other study focuses on the local government sector. Firstly, it introduces the efforts of privatization, outsourcing and reorganizing within the European Union countries, as well as their effects on employment and the regulatory attempts connected to this. Secondly, it gives a brief review of similar efforts in Hungary and an insight into the labour relations of the local government-run in-

stitutions and local government-owned companies. This is complemented by a boxed text with two case studies from 2012 connected to the sub-chapter describing the labour-related consequences of outsourcing – in-sourcing and of handing over to the church.

Chapter 4 of *In Focus* presents the sub-markets of some principal occupations of the public sphere, combining the institutional approach with that of labour economics. *Júlia Varga* writes about teachers' wages, selection and those leaving the profession, while *János Köllő* and *Imre Szabó* consider the situation of physicians. The first deals with wages, tips and gratuities and with leaving the career path, the latter about the peculiarities of the interest reconciliations of the health sector, also providing, at the same time, a regional outlook on similar processes in the Czech Republic, Poland and Slovakia. *Erzsébet Berki*, *Éva Czethoffer* and *Endre Szabó* also publish two papers about the labour market position of those leaving their profession. They analyse the occupational trajectory of nurses and other health care professionals after their departure from the state health care-system and they also look at law enforcement employees after their retirement, whether they worked, and if so, in what field and how much they earned. In both cases they present the regulation changes within the field: the new pay scale in the area of health care and the abolition of the early retirement scheme, which triggered perhaps the biggest wave of protests of the post-2010 government measures in the public sector.

*

The studies in *In Focus* have various time frames: labour economics analyses are largely from 2008 to 2010, the statistics generally are available until 2013, and some descriptive studies were also able to attempt to deal with the latest developments. Each chapter, then, where possible, shows the main statistical data on time series up until 2013 and analyses the changes in the interest reconciliation institutions also up to 2013. In addition – following the tradition of the annals – we publish in *In Focus* the results of previous research that have already been published by their authors in professional journals. Their publication here is justified by our endeavour to share their important findings on the processes of the public sector in a more comprehensible form with the wider public. Although these studies explore the period between 2008 and 2010, or are based on international data collection that does not have a more recent available database, the results – according to the opinion of the editors – are still relevant today. Where possible, the authors have updated their previous studies with assessments that take into account the changes (for example, the effects of the crisis, the growing disadvantage of public sector salaries against the private sector, the erosion of the job security advantages due to the frequent reorganizations and the further impairment of the

principle of irremovability), and have evaluated their relevance in the light of these results, respectively the likely deviations resulting from the changes.

The studies do not seek to directly make public policy recommendations, although, of course, their approach is far from being value-neutral. *In Focus* is not homogenous in this respect either: the various authors do not only touch upon public policy decisions to a different extent, and approach the public sector from different disciplines, but they also have different attitudes to the very same phenomenon (for example to the modernization of employment relations). The aim of the editors of the book was to bring the authors' different approaches into contention in order to present a diverse picture to the readers interested in public policy. Of course, as always in science, and on this occasion too, the authors are the only ones responsible for the views expressed in their study and for the possible factual errors and mistakes.

1. WHAT DO WE KNOW ABOUT PUBLIC SECTOR EMPLOYMENT?

JÁNOS KÖLLŐ

There have been surprisingly few studies looking at the public sector both in Hungary and internationally. One of the reasons is the absence of strong exogenous shocks: the size and relative earnings in the public sector have changed little in most countries and over time and this makes it difficult to differentiate between real and spurious differences, as well as cause and effect. Another barrier is the lack of information: data often does not even allow us to distinguish between the public and private sectors. Another factor that quite possibly contributes to the lack of research interest is the fact that the objectives of decision makers in the public sector are more difficult to define than those in the private sector and therefore it is difficult to put forward and test behavioural models (that are not based on *ad hoc* assumptions), and this is a serious competitive disadvantage to getting published.

Economists in Hungary are in a favourable position: measures of consecutive governments – including the “Bokros package”, large pay rises before and after the 2002 general elections, pay cuts implemented after 2004 and recent austerity measures that also affect employment – created quasi experimental situations that allow the examination of a range of relationships which would be difficult to analyse under more stable circumstances. At the same time the availability of statistical data is relatively good. However, as will be argued below, even finding the key facts is a challenging task.

Size of the public sector

It is not easy to define who is part of the public sector. The law distinguishes between *those with a work contract* on the one hand, and *public servants, civil servants, judges and prosecutors*, or more recently *governmental employees* and *public workers* on the other. Those in employment are categorised according to the legal source of regulation (i.e. the Labour Code, Public Service Act etc.). A similar approach is adopted in the labour statistics of the Hungarian Central Statistical Office (CSO), and the Wage Tariff Survey of the National Labour Office. Other sources of economic data distinguish the *publicly-funded sector* and the *business sector*, the latter including publicly-owned companies. International comparison is made practically impossible by the fact that most datasets that would be potentially suitable for this only differentiate entire sectors that are predominantly public (education, health care, social care), however there is a large number of private companies operating in these sectors.¹ At the same time there are many companies in the private sector that are fully

¹ With the exception of public administration where there are some international comparative studies (for example *OECD*, 2011).

dependent *on public institutions*, either because they carry out outsourced activities or because they only supply central or local government organisations. In Hungary, the picture is further complicated by an unusually large number of workers involved in publicly useful work programs. Where possible, they are excluded from analysis, however in some datasets it is impossible to separate them from regular employees.

Table 1.1 shows that according to the CSO's labour statistics and the Wage Tariff Survey public sector employees made up approximately 30% of the total number of people working in companies with 5 or more employees and government-funded organisations in 2013. Other types of data are available from the CSO's Labour Force Survey. This makes no distinction between civil servants and public servants, however it does differentiate based on sector and ownership. According to this, employees of state-owned corporations and public institutions make up 27% of employment as defined by the ILO-OECD and 33% of employees in 2011. (See *Box 1.2* for an estimate of the workforce in public/local government-owned corporations). People employed in public administration, public education, health care and social care constituted 28% of employees and 22% of total employment. Although the figures vary with the definitions of "public sector" and "employment", and affected by the inclusion or exclusion of public workers, the differences are relatively small: *according to the latest available figures, approximately 30% of all employees and around one in four of those in employment worked in the public sector.*

Table 1.1: Percentage of public sector workers in total employment and employee jobs in 2013 based on various sources

	As % of total employment	As % of employees	Time period
Institutional labour statistics			
Public sector employees	-	29.1 ^a	2013
Wage Tariff Survey			
Civil servants, public servants, judges, prosecutors, public workers	-	31.4 ^b	May, 2013
Civil servants, public servants, judges, prosecutors	-	27.2 ^b	May, 2013
Labour Force Survey			
Employees of public corporations, public institutions, local governments ^c	27.2	32.5	1 st quarter, 2013
Employees of central or local government institutions in education, health care or social care	22.4	27.8	1 st quarter, 2013

^a CSO Stadat Table 2.1.33 (Data from June 23, 2014). The target population is public institutions, companies with five or more employees and some non-profit organisations.

^b Author's own calculation, observations weighted with coefficients provided by the National Labour Office. The target population is public institutions and businesses with five or more employees and non-profit organisations.

^c Labour Force Survey, author's own calculation. People in employment includes everyone who had done at least one hour of paid work in the previous week or who did not do any paid work but were away from work only temporarily.

Naturally, it is considerably more difficult to estimate the number of private companies that are closely linked to the public sector. Using data from the CSO's labour force survey *Elek and Szabó* (2013) concluded that 40% of shifts from the public to the private sector between 1998–2002 did not involve a job change, suggesting large-scale outsourcing (for a summary of their study see Chapter 2.4 of this *In Focus*). Later, between 2002–2008, this was a lot less common. The number of private companies dependent on government purchases cannot be estimated without specialised surveys.

Within the public sector, the share of public administration and education is 39 and 36 per cent respectively, while health and social care make up 25 per cent. Fifty-seven per cent of public sector workers were employed by local governments in 2011, however this share had shrunk to 45 per cent by 2013. Currently, central government constitutes the largest segment of the public sector (*Table 1.2*).

Table 1.2: Distribution of public sector employees by sector and level in the first quarter of 2013, in sectors dominated by public provision

	Central Government	Local Government	Total
Public administration	25.2	14.0	39.2
Education	16.3	19.6	35.9
Health care	12.2	8.3	20.5
Social care	1.4	2.9	4.3
Total	55.1	44.8	100.0

Note: The definition of public sector is based on the sector and the ownership status of the employer. Figures also include the number of public workers.

Source: *CSO Labour Force Survey*, 1st quarter, 2013. Author's calculation.

The probability of employment in the public sector largely depends on gender, education and age: in 2011 the share of public sector workers was 19% among men and 45% among women; 15% among those with completed primary education and a vocational qualification, 27% among those with completed secondary education, 54% among those with higher education and 82% among those who did not complete primary education. The latter figure is so high because it includes people in public works programmes. Data from the Wage Tariff Survey show that the share of public sector employment increases with age (it is 22% among people in their twenties, 26% for those in their thirties, 36% in their forties and it is 40% among those aged over 50).

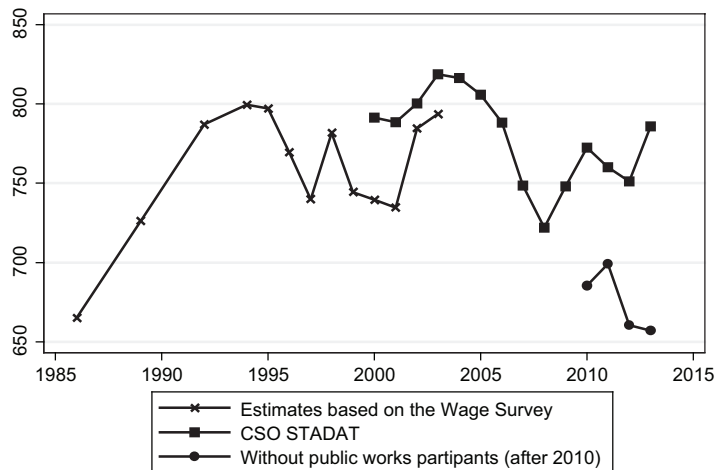
Trends in employment and pay over time

The size of the public sector increased from 650 thousand to 800 thousand during the years of political transition when a number of activities previously carried out by the Party apparatus or state-owned enterprises were transferred to publicly-funded institutions (inspection, planning, supervision, welfare and

children’s services) and when new types of services were also created. The expansion was halted by the “Bokros package” launched in March 1995 that also resulted in a 10-per cent decrease in the number of public sector employees.

After the turn of the millennium their number started to increase again until 2006 when a high budget deficit resulted in measures to reduce employment (*Figure 1.1*). However, the size of the public sector declined only up to 2008 and during the years of the crisis it stabilised – it even increased considerably if the number of public workers is taken into account. The number of employees was 3% higher in the public sector in January – March 2011 than in the same period three years earlier, while in the private sector there was a 4.8% fall. Nonetheless, the size of the public sector also later started to decline. Its current size is best compared to its 2000 level when the number of public workers was still negligible: data indicates a loss of 130 thousand people since that time. If the number of public works participants is included in the public sector workforce then an *increase* can be observed since 2008 and particularly since 2013 when public works programmes did not decline during the cold season in November and December.

Figure 1.1: Employment in the public sector, 1986–2013 (thousand people)

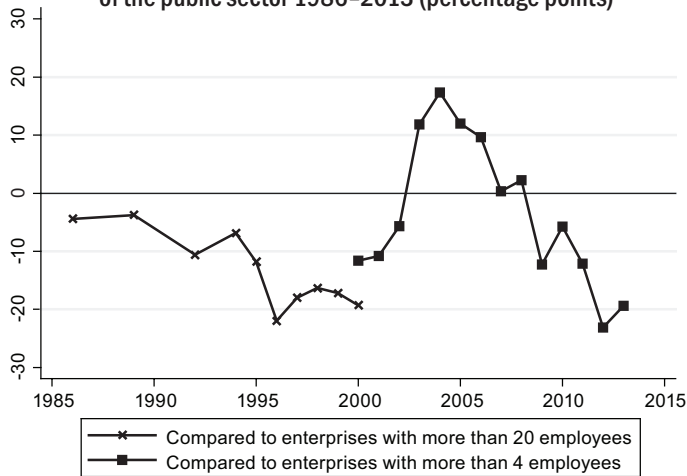


Note: No comparable data is available on the numbers of the workforce in public works programmes before 2010.

Source: CSO Stadat and Wage Tariff Survey 1986, 1989, 1992, 1994–2003.

The employment statistics suggest a high level of instability – a 130-thousand increase after transition, followed by a decline of 60 thousand, and then an increase of the same magnitude, followed by another decrease by nearly 150 thousand – but fluctuations in the level of *public sector pay* were even more marked. The public sector pay advantage or disadvantage compared to similar employees in terms of gender, age and education in the private sector fluctuated within the range of -22 and +17 percentage points (*Figure 1.2*).

Figure 1.2: Regression-adjusted pay advantage/disadvantage of the public sector 1986–2013 (percentage points)



Note: Regression estimates: on the left side of the equation it is the logarithm of pay and on the right side it is gender, number of years in education, labour market experience, its square and a public sector variable. The points measure the effect of the latter in percentage points.

Source: *Wage Tariff Survey*, 1986, 1989, 1992, 1994–2011. (Data is from May for each year. Prior to 1995 the Wage Tariff Survey only included companies with more than 20 employees, and until 2000 with more than 10 employees.)

The “Bokros package” worsened the pay position of the public sector by more than 10 percentage points relative to the private sector. The narrowing of the pay gap continued between 1997–2000 but was later followed by a sharp increase. The increase of the minimum wage by Mr. Orbán’s first Government had a strong impact on the public sector because in 2000, 60% of non-graduate public sector workers were earning less than 50 thousand forints per month, the minimum wage in 2002. (The same number was 40% in companies with more than four employees in the private sector.) Secondly, before the general election in May 2002, the Orbán Government significantly increased the pay of civil servants. As a result the average real pay increased by 17% in the public sector between May 2001 and 2002, compared to seven per cent in the private sector. Thirdly and most importantly, when the Medgyessy-led Government entered into office in May 2002 they increased the basic pay of public servants by 50% in line with their pre-election pledge (the increase was endorsed by all parliamentary parties). As a result the average pay of public servants increased by 29% in real terms between May 2002 and 2003, compared to an increase of “only” 11% in the private sector. The pay disadvantage of the public sector (–6 percentage points in 2002) turned into a substantial pay premium: 11-percentage points in 2003 and 17 per cent in 2004.

The pay advantage, however, disappeared within three years. On the one hand, as is shown by *Telegdy* (2013) – summarised in Chapter 2.2 of this *In*

Focus – pay in the private sector, particularly in jobs where workers can easily move between sectors, increased faster than average after 2003. On the other hand, the austerity measures introduced to reduce the large internal and external deficit in 2006 rapidly eroded the pay advantage of the public sector. Finally, the abolition of the additional 13th month pay of civil and public servants in 2009 meant an immediate drop of 12 percentage points in the relative pay level of the public sector. This was compounded by an informal but effective freeze of the basic pay of civil and public servants at the 2008-level. In 2012 the gradual pay increase of doctors and nurses was decided and in 2013 teachers’ pay also increased, but these had not reversed the worsening trend by May 2013: public sector employees were paid 20% less than their counterparts – based on gender, age and education – in the private sector; just as in 1996, the second year of the “Bokros package”.

On instability in the public sector

This section presents some of the characteristics of Hungarian regulation that are essential for understanding the public sector labour market. The first is the *extreme instability* of the public sector’s relative pay level.

As has been shown the relative pay level of the public sector compared to the private sector fluctuated between the extremes of a more than 20-percentage-point pay disadvantage and a nearly 20-percentage-point wage premium since 1986. Such fluctuation of the pay gap was unprecedented in the European Union before the 2008 financial and economic crisis. (Even since then, only Romania experienced a loss of advantage comparable to Hungary, see *Vasile, 2012.*)

Table 1.3: The range of pay gaps between the public and private sectors in selected countries between 1993 and 2000 (percentage points)

Country	Minimum	Maximum	Difference
Austria	1.5	4.3	2.8
Finland	-1.3	0.0	1.3
France	-3.2	7.7	10.9
Germany	7.9	10.4	2.6
Greece	9.6	21.8	12.2
Holland	3.6	7.5	3.9
Ireland	16.3	21.9	5.6
Italy	10.3	12.1	1.8
Portugal	16.7	23.0	6.3
Spain	13.8	20.3	6.5
Hungary 1993-2000 ^a	-22.0	-3.8	18.2
Hungary 2001-2008 ^b	-11.6	17.7	29.3

^a Compared to companies with more than 20 employees.

^b Compared to companies with more than four employees.

Note: Positive (negative) values indicate the pay advantage (disadvantage) of the public sector. Control variable in the *Campos and Centeno* (2012) study: gender, age, square age, education, marital status, years in service. Control variables for the Hungarian data: gender, age, square age, education.

Source: European Community Household Panel (ECHP) data from Table 5.1 in *Campos and Centeno* (2012). Values for Hungary are the author's calculation based on data from the Wage Tariff Survey.

As data in *Table 1.3* (based on *Campos and Centeno*, 2012 and our own calculations) indicate, the difference between the minimum and maximum value of the pay gap nowhere exceed 6.5 percentage points between 1993 and 2000, apart from in Greece and France. Meanwhile in Hungary the difference was 18.2 percentage points in the same period and 29.5 percentage points in the following eight years. It should also be highlighted that in Greece the pay gap reached the 12.2 percentage points range as a result of a steady increase, and in France the pay gap ranged between -3 and $+8$ percentage points. Fluctuations similar to the Hungarian ones – as well as the large pay disadvantage at the nadirs – are rather exceptional in developed market economies.²

The effect of pay rises and reductions on relative earnings

The second characteristic can be seen in the differences within the public sector: the highly paid benefitted more from the pay rises between 2000 and 2004; however the decrease during the “Bokros package” in 1994–1996, and particularly the decline since 2004 also affected them the most. This is illustrated in *Figure 1.3* with public servants who make up the largest group in the public sector. To create the figure, public servants were ranked into 100 groups based on their pay for each year. For each percentile the ratio of their average pay to the national average was calculated. The graphs of *Figure 1.3* illustrate the *changes* in these relative pay indicators. A value of 1.0 means that the rate of increase or decrease was the same as in the general economy.

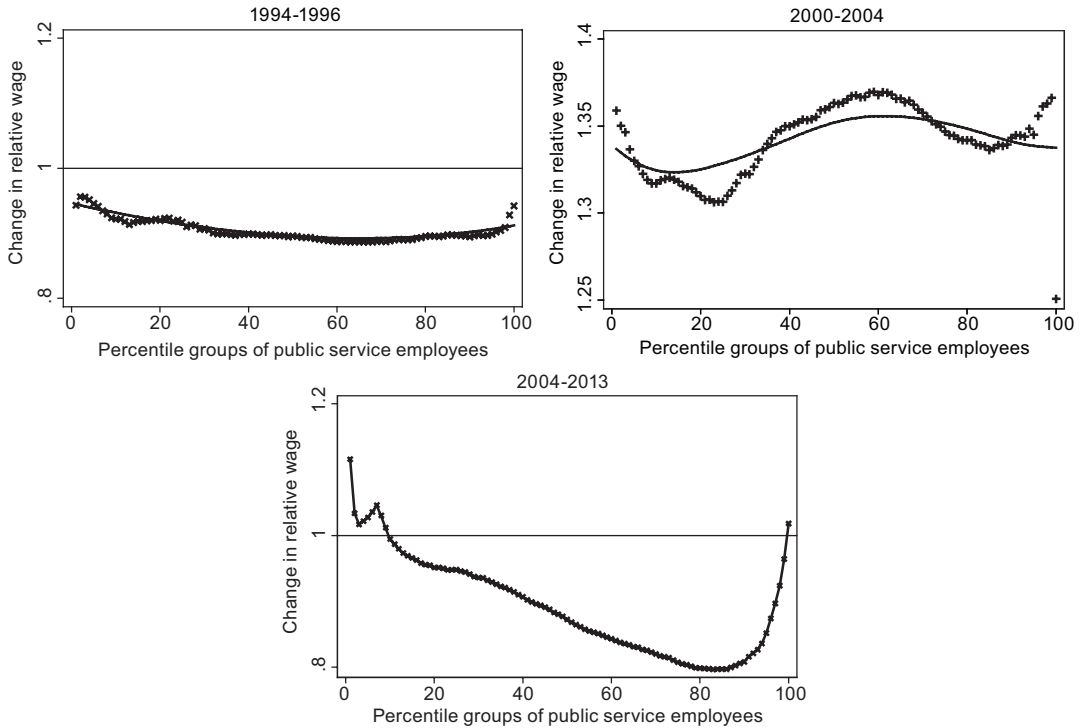
The austerity measures of the “Bokros package” had a somewhat stronger effect on the high earners except for the highest paid two per cent (99th and 100th percentiles). In the “years of plenty” between 2000 and 2004, when the pay of public servants increased well above the national average, the pattern was more complex. There is a relatively large gain at the bottom of the distribution. There is a rapid increase in pay between the 10th and 70th percentiles, especially towards the higher ranks. In the top third of the distribution – where basic pay constitutes a smaller part of pay and thus the effect of an increase is also smaller – the rate of pay increase is smaller; however it is still about a third higher than the national average.

Pay changes showed a *U-shaped* curve between 2004 and 2013. The pay of the lowest paid workers kept up with the national average thanks to the minimum wage; however higher in the pay hierarchy there are increasing relative pay losses with the exception of the highest paid 10%, where towards the top

² However, *Gimpelson and Lukiyanova* (2009) find a very substantial pay disadvantage (26–28 percentage points according to their regression estimates) in the Russian public sector in the early 2000s.

the data show smaller relative losses. The top two per cent avoided the (relative) pay decrease affecting the majority of public sector workers altogether and they even had a modest increase.

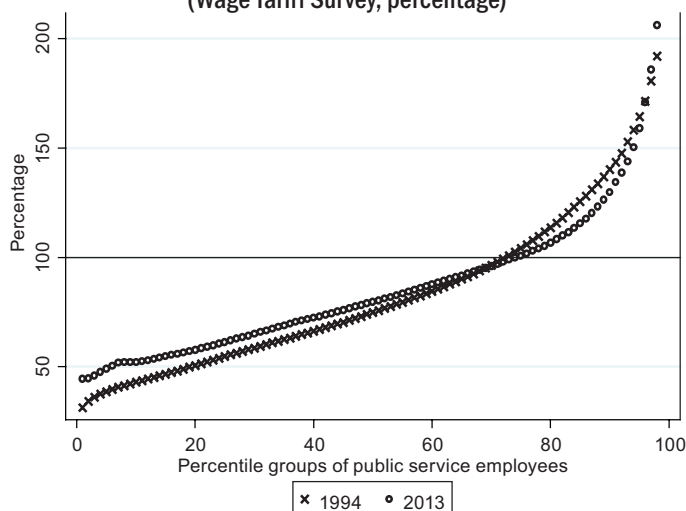
Figure 1.3: Changes in the pay of public servants in comparison to the national average by pay percentiles, between different time periods (ratio)



Source: *Wage Tariff Survey*.

As a result of austerity measures since 2004, public sector pay declined to the level of the last “peace year” before the Bokros package. *Figure 1.4* shows that the lowest paid public sector workers (percentiles 1–10, first decile) earned 30–40% of the national average in 1994, and 40–50% in 2013. In both years, approximately one in four public servants was paid more than the national average. At the same time, the distribution of earnings became more balanced: the gradient towards the lower end of the distribution was less steep in 2013 than in 1994.

Figure 1.4: Pay of public servants compared to the national average, 1994, 2013
(Wage Tariff Survey, percentage)



Note: To calculate the national averages only data from companies with more than 20 employees was taken into account. The 200–300 percentage values for the 99th and 100th percentiles were not included to ensure clarity of the figure.
Source: *Wage Tariff Survey*, 1994, 2013.

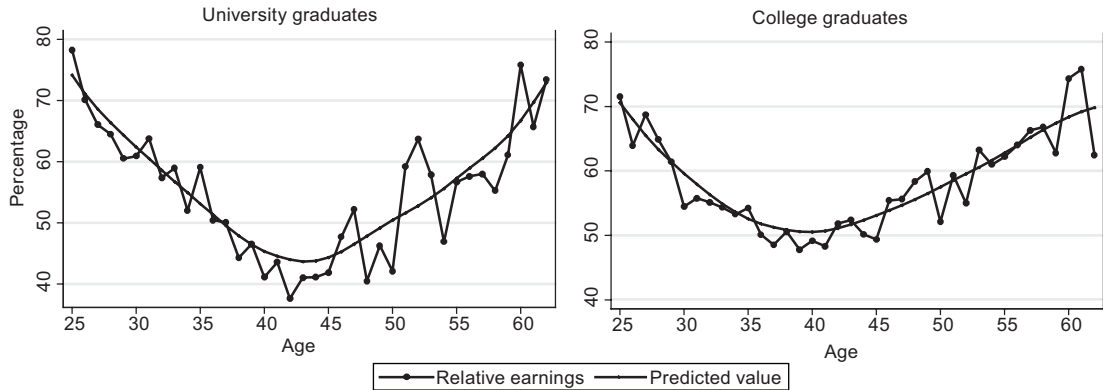
The age-earnings profile of college/university graduates

The third characteristic is the distinctive age-earnings profile of *graduate* public and civil servants. Earlier studies (see for example Varga's 2008 paper on the teacher labour market) have already highlighted the *U-shaped* relative pay profile of graduate public servants: the pay disadvantage of the youngest and the oldest is considerable smaller than in the middle cohorts. This is because the regulations set a linear wage path for public servants and civil servants while in the private sector graduate – particularly university graduate – pay follows a strongly non-linear pattern: starting from a low level it increases rapidly then starts to decline towards the end of the career path.

Figure 1.5 shows that graduate school leavers earn 20–30 per cent less than their counterparts with a similar education and age in the private sector. Their disadvantage increases to 50–60 per cent around the age of 40. The disadvantage is smaller in the older cohort, it returns to the 25–30 per cent range. The pay disadvantage of college graduates is somewhat smaller, but the relative age-earnings curve shows a similar pattern.

The *U-shaped* curve, which essentially resulted from a legislative error in the early 1990s that has not been corrected since, has important implications. Firstly, young graduates entering public service face a continuous decline in relative pay in the first 15 years of their career and thus staying in public service means an increasing relative pay loss each year.

Figure 1.5: Graduate pay in the public sector compared to private sector employees of similar age and education, 2013 (percentage)



Source: *Wage Tariff Survey*, 2013.

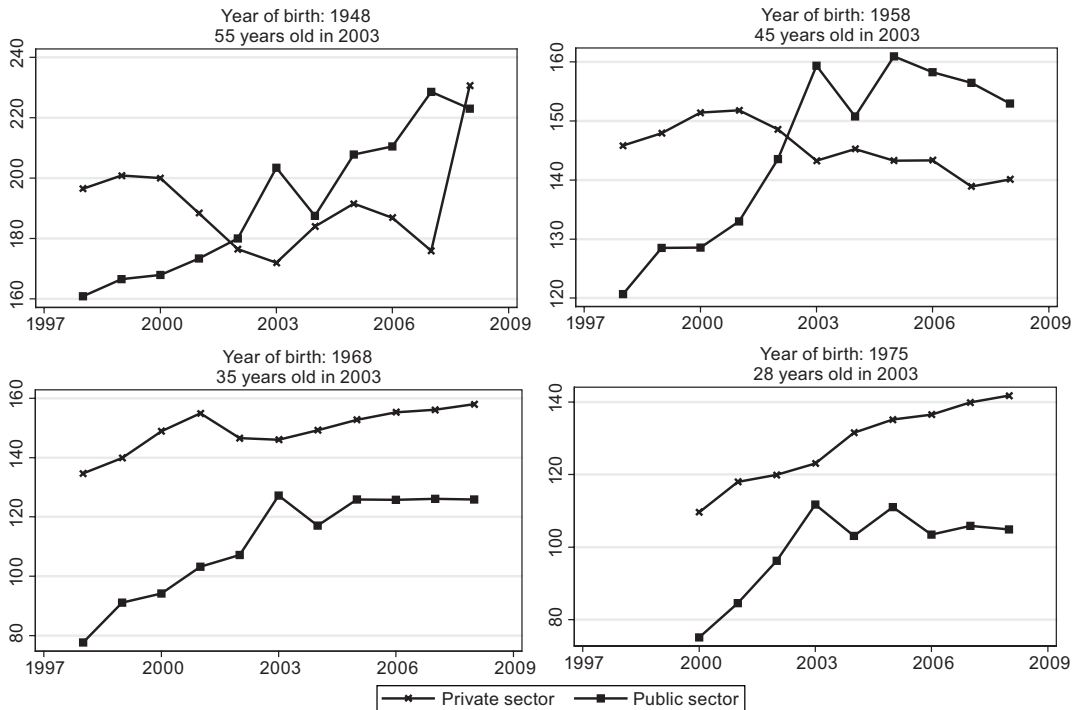
Secondly, in austere years, such as 2013, the disadvantage of middle cohorts can become extreme. Even if there are a number of non-pay rewards to set against the pay disadvantage (such as greater job security, longer holiday entitlement, feeling of usefulness, power in some areas, privileges, gratuities and income from corruption in others), according to international experience, a pay disadvantage of this extent – 50–60 per cent – is generally not permitted by legislation in developed market economies.

Thirdly, the *U-shaped* curve is so marked that it can influence the development of the relative pay of some *birth cohorts* in *calendar time*. If pay goes up in the public sector, its effect can be partly or fully offset by the fact that young people lose relative to their counterparts in the private sector each year until the age of 30–35 years. However, in older groups the effect of age adds to the effect of pay increase along the age-earnings profile: after the age of 35 years graduates in the public sector move closer to private sector employees even without a sectoral pay increase.

This is illustrated by *Figure 1.6* which follows the development of pay of four birth cohorts whose members were 55, 45, 35, or 28 years old in 2003. (People who were 25 in 2003, were still secondary school students at the beginning of the observations, therefore a slightly older cohort was selected.) The figures are based on information from the Electronic Register of the Central Administration of National Pension Insurance (in Hungarian: Országos Nyugdíjbiztosítási Főigazgatóság Központi Elektronikus Nyugdíj-nyilvántartási Rendszere; “Kelen” for short) that has enough observations to enable an analysis by birth cohorts. The curves show the effect of pay rises before and after the 2002 general election. The substantial disadvantage of the two older cohorts turned into a significant advantage, while in the case of the younger cohorts, the pay increases were enough only to stabilise their position – they

were still at a substantial disadvantage compared to their counterparts in the private sector even in the best years. This also implies that in years when pay is decreasing, younger cohorts are especially worse off.

Figure 1.6: Pay in graduate jobs in selected cohorts, 1998–2008 (percentage)

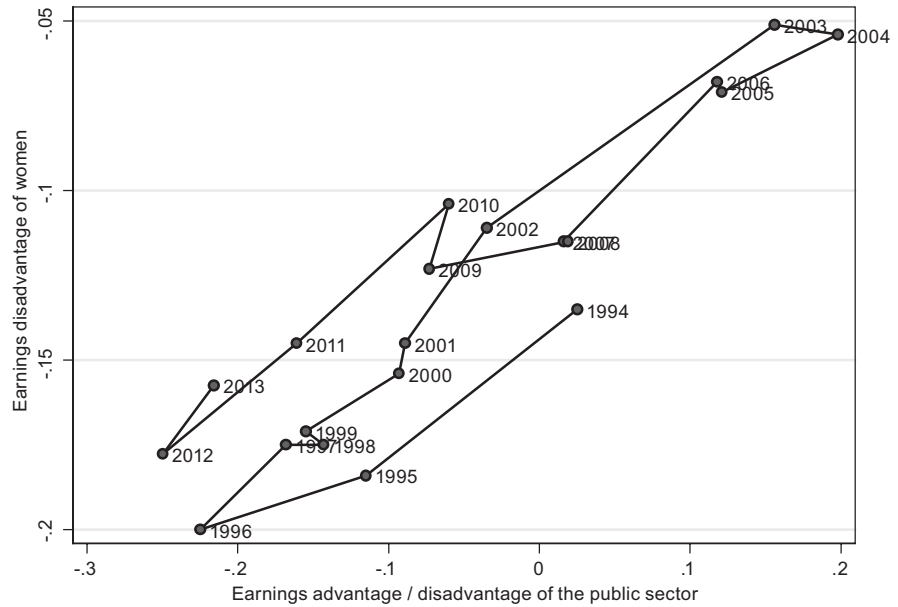


Indicator: employment status and daily pay calculated from the annual income of public servants/civil servants who had been in continuous employment during the year, expressed as a percentage of the average of the total sample.
Source: *Kelen*, 20 per cent sample.

Public sector pay and the gender wage gap

The fourth characteristic that should be highlighted is the impact of pay fluctuations in the public sector on the situation of *women*. If the size of the two sectors, the proportion of women within the sectors and their pay disadvantages remains stable (the latter stabilised after 1993 in Hungary), then there will be a linear relationship between public sector pay and the gender pay gap. This is a rather trivial relationship, however its *strength* is noteworthy – this is highlighted by *Figure 1.7*. The horizontal axis of the graph indicates the regression-adjusted pay disadvantage (controlled for age and education) of the public sector. The vertical axis represents the gender pay gap in the *overall economy* using similar controls. The curve and the years indicate how the labour market moved within these coordinates in Hungary between 1994 and 2011.

Figure 1.7: Public sector and the gender pay gap, 1994–2013 (points on the logarithm)



Source: *Wage Tariff Survey*.

3 It emerges that the disadvantage of women is about five percentage points lower now – despite the fact that the overall wage disadvantage of the public sector is back at its mid-1990s level. This might be related to the narrowing of wage differentials in the public sector as depicted in Figure 1.4.

The points are essentially aligned on a straight line that has a gradient of 0.32. In other words, a 10-per-cent decline in the pay level of the public sector, increases the pay disadvantage of women by 3.2 per cent.³ Considering the wide fluctuations of relative pay in the public sector, it seems justified to argue that the budgetary and political cycles of the past 20 years had the strongest effect on the labour market disadvantage of women.

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1.1 Number of employees and average wages in government and municipality owned businesses

LÁSZLÓ NEUMANN & KITTI VARADOVICS

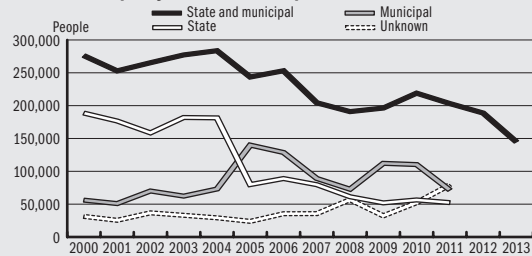
Given that the state-municipality owned business sector is, as a rule, classified as a part of the market sector – since the Labour Code is relevant also for employees of this sector –, this “hidden” public sector is virtually an unexplored area for statistical analysis. It is this shortfall that we have attempted to address by analysing data from the individual wage surveys conducted by the National Labour Office (Nemzeti Munkaügyi Hivatal, NMH) between 2000 and 2013. These data allow a breakdown of the market sector according to ownership structure into enterprises with a majority of state-local government ownership and to “genuine” private companies, where the state or the municipality has no, or only minority, ownership. Further fine-tuning of the analysis is possible if, within public assets, we separate state assets from municipal ones by relying on data from corporate tax returns, which are connected to the wage surveys of the KRTK data bank.

We are aware that for methodological reasons wage surveys are far from ideal for estimating the number of employees, nevertheless, for want of a better approach, we have to accept it as a first estimate. According to the data, the number of employees in the government and municipal business sector has decreased by 100,000 over the past decade, but still numbered 190,000 people in 2012 and 145,000 in 2013 (*Figure B1.1.1*). Taking this into consideration significantly enriches the well-known institutional statistical data on public sector employment (see Chapter 1).

Over the decade employment at companies owned by the central government decreased sharply and steadily, but grew at municipally owned enterprises. There was a radical change from 2004 to 2005, the explanation for which as yet remains unknown. On figure B1.1.1., up until 2011 (the last year when we were able to separate state and municipal ownership) we put “unknown” for the number of employees at companies where there was no

information on whether the owner was the government or a municipality. Such headcount figures differed each year (ranging between 11 and 39%) and the outstanding changes in 2008 and 2011 are, as it were, complements of municipal employment, therefore we can assume that the outlier data (more or less the part over 30,000) also represent municipal companies. With this correction it seems that since the 2006 austerity measures the employment level at municipality-owned companies has stabilized at around 100,000 employees. It can only be increasing because of expanding participation in the public works programme, although our estimate based on the wage survey suggests that until 2012 in this sector the increase of the full or part time workforce within the public works programme did not go beyond 5,000.

Figure B1.1.1: Number of employees at state and municipally owned enterprises, 2000–2013



Source: *Wage Tariff Survey* and the connected data on corporate tax returns from the *National Tax and Customs Administration of Hungary*.

The dynamics of earnings, non-adjusted for inflation, is almost unchanged in this sector, showing a steady increase (*Figure B1.1.2.a*). In the public sector (public servants and public service employees, without the public works programme) however, the increasing of wages ceased after 2008 and as a result of the crisis the dynamics of the genuine private sector was broken by 2010. Thus neither the government’s austerity measures, nor the impact of the crisis prevailed in the sector studied. The only marked change can be noted in connection with

the central state assets between 2006–2008, when the sector fell behind the municipal sector which was enjoying a steady increase in earnings, and also fell below the private sector. This disadvantage was overcome by an outstanding growth in 2009. (We do not know the exact reason behind the fluctuation but the assumption is that the Gyurcsány government had the state asset management organisations implement its austerity measures in the first two years, while the successor Bajnai government gave in to corporate efforts in this respect.)

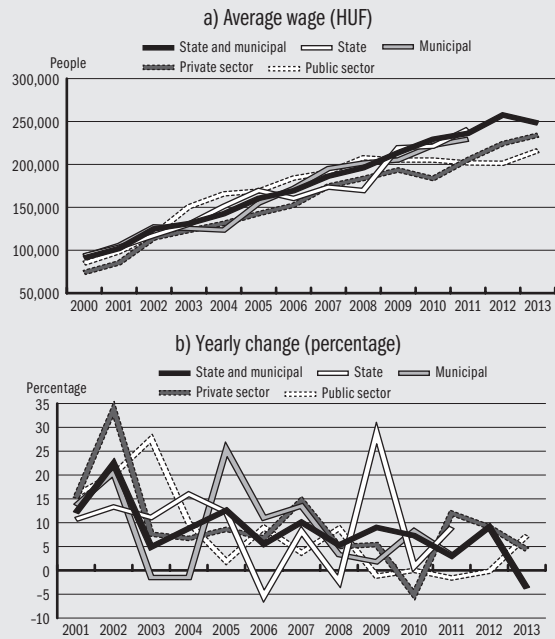
Differences between state- and municipality-owned companies are even more striking when we consider the fluctuation of yearly wage increases (*Figure B1.1.2.b*). The minimum wage hike in 2001–2002 can be perceived in every sector, as can also companies’ reactions to it: pay increases were withheld in the following years. This was a particularly powerful process, causing an explicit decline in wages and lasting two years in the sector of municipal enterprises, despite the statistics showing that the proportion of low wage earners is no higher here than in the private sector or among public servants and public service employees. Another noteworthy phenomenon is the central government’s “tightening-loosening” wage policy after 2006, which produced almost regular two-year cycles.

In order to define income disparity within sectors we used the inter-decile wage ratios of gross salaries (D9/D1, pertaining to the breakpoints of the first-second and ninth-tenth deciles) (*Figure B1.1.3*). As was expected, income disparities (the maximum being 5.1) are greatest in the real private sector, which decreased significantly in 2012 and remained low in the following year, probably due to the government’s “wage compensation” measure that impelled the mandatory increase of low wages. The entire governmental-municipal sector is closest to the aggregated public sector (excluding public works programmes).

The minimum wage hike in 2001–2002 squeezed the pay scale in the private and the municipal sector but its impact was hardly visible at companies owned by the central government. In 2013 the smallest income disparity (3.0) was detected in the public sector, which can be explained by the squeeze-

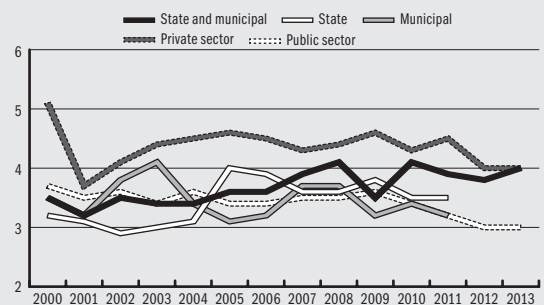
ing of the pay scale, which on this occasion was due to the minimum wage arriving at a level which exceeded frozen wages in pay scales. (See sub-chapter 3.2 of the present volume). Although the indicator of enterprises owned by municipalities and the central government has shown great swings over the decades – not independently from the annual wage increases –, it has nevertheless remained in the range between 3.0 and 4.0.

Figure B1.1.2: Average wage and its yearly change at state- and municipally-owned companies, 2000–2013



Source: See: Figure B1.1.1.

Figure B1.1.3: Wage differentials (D9/D1) in different sectors



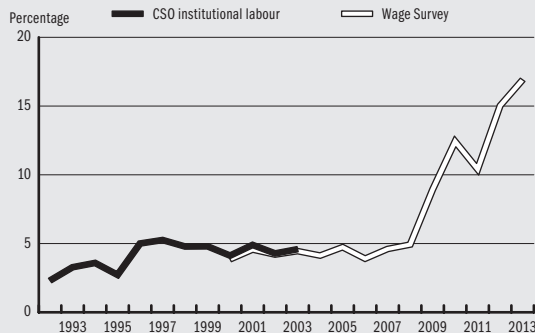
Source: See: Figure B1.1.1.

1.2 The size and cost of public works employment

ÁGOTA SCHARLE

One of the characteristics of the public sector in Hungary is the large and expanding public works sector, which employed more workers than the textile industry or water management and almost as many as the public health care sector in 2010 (*Figure B1.2.1*). In Hungary on average 30–40 thousand people worked in some form of public works each year between 1996 and 2008. This number increased to 60–100 thousand after 2009 and in 2013 it surpassed 130 thousand. This means that on any given day of the year, on average 10–14 per cent (21% in 2013) of the registered unemployed were employed in public works programmes, and this was approximately equal to the total number of people in re-training, wage subsidy and other active labour market programmes.* The total cost of the various public works programmes was around 0.1–0.2 per cent of the GDP before 2008, which increased to 0.2–0.5 per cent after the launch of the “Road to Work” programme.

Figure B1.2.1: Share of public works employment within the public sector, 1992–2013



Source: Number of people in public works programmes: IE CERS HAS Database and Annual Reports of the NLO, *Cseres-Gergely (2014)*. Public sector workforce: CSO institutional labour statistics and János Köllő’s estimate based on the NLO’s Wage Tariff Survey.

* More precisely, the number of people employed in public works programmes was compared to the sum of registered unemployed and public works participants.

According to OECD data from 2010, only Belgium had similarly high public spending on public works programmes (0.39% of the Hungarian and 0.36% of the Belgian GDP). Expenditure in Ireland, France and Slovenia was also high, but more modest than in Hungary, while other European countries spent below 0.1% of their GDP. The number of participants in public works programmes is also extremely high. In Hungary 2.4 per cent of the active population worked in some form of public works in 2010, in Belgium 3.2 per cent. The number of participants was also relatively high in Slovakia, Ireland and France (1.6, 1.1 and 1.0 per cent respectively), while in other countries it was below one per cent.

There have been public works programmes in Hungary since 1987. Similar public works programmes, although under different names and somewhat different conditions, were run by local councils from 1987, then by labour offices/centres from 1990, by the Public Works Council from 1996 as well as by municipal governments from 1997. However, their scope reached this spectacularly high level only after the launch of the Road to Work programme in 2009.

According to current regulation, people in public works programmes are employees in some respect: they pay pension and health care contributions, they are entitled to sick leave and annual leave, however their pay is somewhat under the statutory minimum wage.** Municipal governments can organise public works programmes for activities that promote the “public good”, except for core municipal tasks. Therefore, for example health visitor, nursery worker and social welfare officer jobs cannot be filled with public works employees.

Public works provides cheap labour, but only that. Therefore it only represents good value for municipalities if it is used for tasks that do not re-

** Another difference is that (unlike regular employees) if they refuse to take part in public works (or hand in their notice and leave) they cannot re-register as unemployed and claim benefits for 60 days.

quire substantial capital, highly specialised skills and expertise, or major organisation and management. On the one hand, this encourages local communities to use highly labour intensive technologies to carry out the tasks that are most useful to them. On the other hand, it also encourages them to choose projects that can be efficiently accomplished using mainly manual labour. In the first case, the municipality is contributing to the public good, however in a wasteful manner. In the second case, although they are using their resources efficiently, there is no guarantee that they are carrying out tasks that are most useful for the public. Whichever option municipalities follow, the sub-

stantial amount spent on public works fails to maximise the public good. ***

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*** Public works programmes are not inspected on a regular basis, which might create an opportunity for fraud; however this is not related to the size of the programmes or the number of participants, therefore it was not considered here.

2. WAGE LEVEL AND SELECTION IN THE PUBLIC SECTOR

2.1 Wage differential between the public and private sector in Hungary between 2002 and 2008

– the long term effect of wage increase

SZILVIA ALTWICKER-HÁMORI & ANNA LOVÁSZ

Contrary to experiences in Western European countries, in Hungary the average wage in the public sector is lower than in the private sector. The growing wage inequality between sectors in the 1990's resulted in social discontent and a decline in the demand for public sector jobs. To alleviate the situation the Government made pledges and introduced various measures: in line with their election campaign promises they increased the basic wage in the public sector on average by 50 per cent. In addition to improving fairness and appeasing public opinion, this also aimed to attract and retain highly qualified workers in the public sector. This chapter explores trends in the development of the wage gap between the public and the private sector in the context of wage reform between 2002 and 2008 using data from the National Employment Office's Wage Tariff Survey. It aims to answer the question of whether the wage increase helped the public sector to compete for a high quality workforce. The analysis is limited to public servants because they were affected by the 50% wage rise, and it concentrates on trends over time between sectors.

The analysis follows *Machado and Mata's* (2005) counterfactual decomposition method using quantile regression that enables us to identify different sources of wage differential: those that arise from the different characteristics of workers and employers, and the unexplained (residual) difference. The latter difference provides a better estimate of the real wage differential between public and private sector workers than the overall wage gap. The method of quantile regression also enables us to analyse the difference at various points of the wage distribution, rather than using the means.¹ Given that the shape of distribution is different in the private and public sector, it is difficult to assess the effect of wage rise for different groups using only the mean.

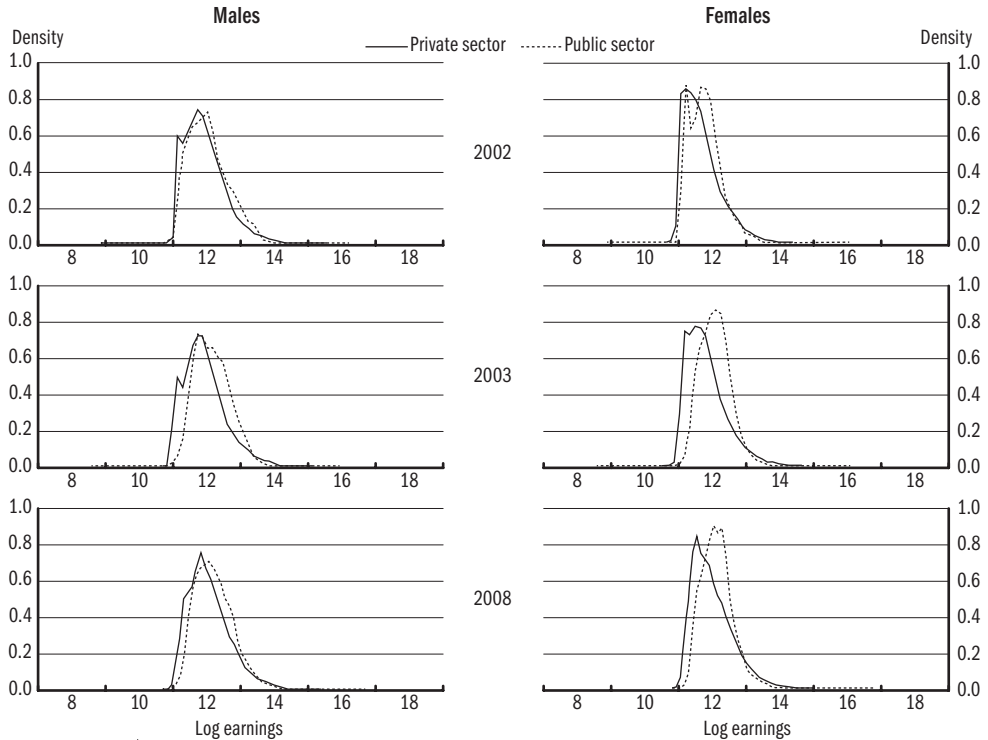
Wages in the public and private sector

Wage setting in Hungary is under political pressure – this is not unique – thus the wage scale is set in a way that ensures that workers in low-skilled jobs are not paid too little and highly skilled workers are not paid too much. Therefore, the spread of wages in the public sector is smaller than in the private sector where the primary aim is competition and wages are based on productivity. These differences can be observed on the density estimation of

¹ Difference between average wages was examined by *Telegdy* (2007). The average wage was 18 per cent higher in the public sector than in the private sector in 2004 as a result of the pay rise. Based on estimated unexplained wage differentials, public sector pay was higher than private sector pay in nearly all educational and occupational categories in 2004 (with the exception of graduates where the differential was under four per cent). This suggests that the government was successful in aligning and even increasing public sector wages.

wage distribution by sectors and gender (*Figure 2.1.1*). For the public sector (public servants) the distributions are more pointy (condensed), while in the private sector the tails of the distributions are flatter. The figures also illustrate the problem of fictitious minimum wages (under-reporting of wage) because there is a clear peak – particularly for men – at the level of minimum wage in the private sector.²

Figure 2.1.1: Unconditional wage distribution in the public and private sector by gender, 2002, 2003, 2008



2 Various studies look at the prevalence and effect of under-reporting of wages, especially “fake minimum wage earners”; see for example *Elek et al.* (2012).

3 The public service pay scale has fixed salary bands while the civil service pay scale sets out of minimum pay level for people in the same occupational group with the same level of education and experience. The pay scale is progressive both horizontally and vertically: wages increase according to 10 educational categories (A–J), within each educational category pay increases according to experience

continued

Note: Estimated Kernel-distribution of the logarithm of wage in the private and public sector, for women and men, 2002, 2003 and 2008. Public sector refers to public servants and the private sector is defined as workers employed by companies with at least 20 employees. Wage is real wages, deflated for 2008 prices using the consumer price index

Source: *Wage Tariff Survey* database.

The Government introduced differential wage increases for different groups of public sector workers (government officials, police, army and judiciary employees) between 2001 and 2003. The most significant wage reform was implemented in 2002 – an average of 50 per cent wage increase for public servants – that affected approximately 20 per cent of the total workforce in Hungary. The Government also modified the existing wage scale³ after it had become squeezed as a result of the minimum wage increase and there-

fore it also changed relative wage. *Figure 2.1.1* shows the impact of changes on the distribution of wages in the two sectors during this period. In 2003, compared to 2002, wage distribution in the public sector moved right as a result of large wage increases; however, in 2008 the distributions became more similar again. The next section takes a closer look at the changes in the relative position of workers in the two sectors and the groups that were most affected by the reform.

Data

The empirical analysis uses the database of the Wage Tariff Survey – this is an annual, representative, cross-sectional survey – that includes information on both private and public sector employees. *Public sector* institutions include public servants, civil servants, judges and prosecutors; however, this analysis focuses on public servants because the 50 per-cent wage increase affected only this group. Public servants make up approximately 85–89 per cent of all public sector employees. Judges and civil servants have separate wage scales. The Wage Tariff database includes a sample of all workers employed by public sector organisations. The *private sector* (business sector) refers to employees of businesses in Hungarian, international or public ownership in Hungary. The sample was limited to those aged between 25 and 55 years and people working part-time (less than 36 hours per week) were excluded.⁴ Businesses with fewer than 20 employees were also excluded because under-reporting of wages is most common among small enterprises (*Elek et al.*, 2009, *Tonin*, 2007).

The database also includes the gross monthly wage of workers as well as the total income defined as the monthly average of gross wage and any regular or incidental benefits in the previous year. Values for the latter are presented here, although trends are very similar for gross wage as well. Income is on 2008 real value, deflated using the Consumer Price Index. In addition to wage and income, the analysis uses covariates related to the characteristics of employees (education, professional experience, years of service, job) and organisations (region, size of organisation). Finally, as a further covariate, variables related to the work environment (whether there is a lunch break, type of contract, difference between actual and official working hours) are also used, even though their scope is somewhat limited.

Table 2.1.1 gives an overview of the mean values of the variables in the first and last period of the analysis. In 2002 average real wage for both men and women was higher in the private sector than in the public sector. In terms of education, the education level appears higher in the public sector:⁵ in the public sector approximately 40–49 per cent of women and 42–45 per cent of men are graduates, while in the private sector the same number is 10–16 per cent and 13–16 per cent respectively. Professional experience is broadly similar in both sectors; however public sector employees have had a longer

in 14 grades. In the revised pay scale in the lowest educational category and grade (A1) pay equals the statutory minimum wage, and in the highest educational category with minimal experience (J1) it is 2.65 times the minimum wage. For graduates the lowest monthly wage was set at 100 thousand forints (in grade F1) which was twice the amount of the statutory minimum wage.

⁴ Part-time employees in the private sector were not included in the data in 2002. The estimation was carried out on the full sample of employees between 2003 and 2008, which produced similar results. The samples from these years show that the proportion of part-time workers was really low, on average 3 per cent of all workers.

⁵ This is also true for many other countries, such as the United States (*Poterba and Rueben*, 1994) and Western European economies (*Dustmann and van Soest*, 1997, *Lucifora and Meurs*, 2004, *Melly*, 2005).

tenure with their current employer. It is important to note for the analysis of trends over time, that there were no significant changes in the composition of the sample within the time frame of the analysis.

Table 2.1.1: Covariate descriptive statistics, 2002 and 2008

Variable	2002				2008			
	Men		Women		Men		Women	
	private	public	private	public	private	public	private	public
Average income ^a (forint, 2008 value)	189,472	155,990	233,020	207,681	188,004	176,512	155,125	132,546
Education (percentage)								
Primary school	16	14	13	10	18	13	25	19
Vocational school	45	22	43	20	24	9	25	10
Secondary education	26	21	28	21	41	33	40	32
Degree	13	42	16	49	16	45	10	40
Experience ^b (years)	22.2	22.9	22.1	22.5	22.6	23.6	23.7	23.4
Time at current employer (month)	104.6	113.7	94.3	115.2	85.9	133.6	106.0	131.4
Region (percentage)								
Central Hungary	31	36	36	39	41	32	36	28
Central Transdanubia	13	7	14	6	14	8	11	10
Western Transdanubia	13	8	11	7	11	8	13	9
Southern Transdanubia	9	10	7	11	7	11	8	10
Northern Hungary	11	11	10	9	9	11	9	14
Northern Great Plain	12	15	12	16	10	16	11	17
Southern Great Plain	12	13	10	13	9	14	11	13
Lunch break ^c (percentage)	46	92	50	96	43	98	40	98
Actual working hours (hours/week)	6.8	7.1	2.9	2.8	2.6	2.5	6.5	6.8
Permanent contract (percentage)	94	94	96	88	94	92	94	97
N	50,859	6,947	53,284	5,465	36,407	22,048	35,689	29,815

^a *Income* is the sum of monthly gross wage and average monthly benefits, Hungarian forints, 2008 value, deflated with the annual consumer price index.

^b *Experience* is potential professional experience: age of employee *minus* years spent in education *minus* six.

^c The *Lunch break* variable indicates whether the work contract provides for a lunch break.

⁶ The method of quantile regression has been applied to the analysis of wage differential between the public and private sector among others by *Lucifora and Meurs* (2004), *Melly* (2005), *Mueller* (1998), *Nielsen and Rosholm* (2001) és *Poterba and Rueben* (1994). *Hámori* (2008) showed that similarly to international experiences the estimation of pay differential between the public and private sector is very sensitive to its position in the distribution.

Methods

For a closer examination of distributions, the method of quantile regression is used (*Koenker and Bassett*, 1978) that enables us to analyse the effect of covariates at different segments of the income distribution.⁶ While in the OLS estimates, the effect of covariates on the dependent variable is measured at conditional means, here the extent of income differential between sectors is estimated at the 10th, 25th, 50th, 75th and 90th conditional percentiles. Therefore, we are not measuring average effect but allow for a different sector effect on the bottom, middle and top parts of the wage distribution. There is good reason to do this: more equal wage practise in the public sector might

mean that those on the bottom of the wage distribution are better off, while those at the top are worse off – this is also shown by the graphs. Quantile estimates provide a more accurate picture on how wage for a certain group of employees would differ in the private sector.

Total wage differential is decomposed using wage functions by quantile.⁷ The Blinder–Oaxaca method (*Blinder, 1973, Oaxaca, 1973*) decomposes the difference between mean wages into a part explained by observable mean differences in characteristics and an unexplained, residual part. The method of quantile decomposition does not decompose wage differential only at the mean but at the quantiles as well. With *Machado and Mata's* (2005) method we are simulating what the income of public sector workers would be if they were working in the private sector (and would be paid the same for their characteristics), or differently we are looking at a counterfactual income distribution. Then this distribution will be compared to the actual distributions of private and public sector by separating the total income difference into a part that is explained by different characteristics and an unexplained part that is due to the fact that different characteristics are paid differently in the two sectors. Results are presented for total differences, differences explained by different characteristics and residual differences, for each year, by quantiles and gender.

Results and conclusions

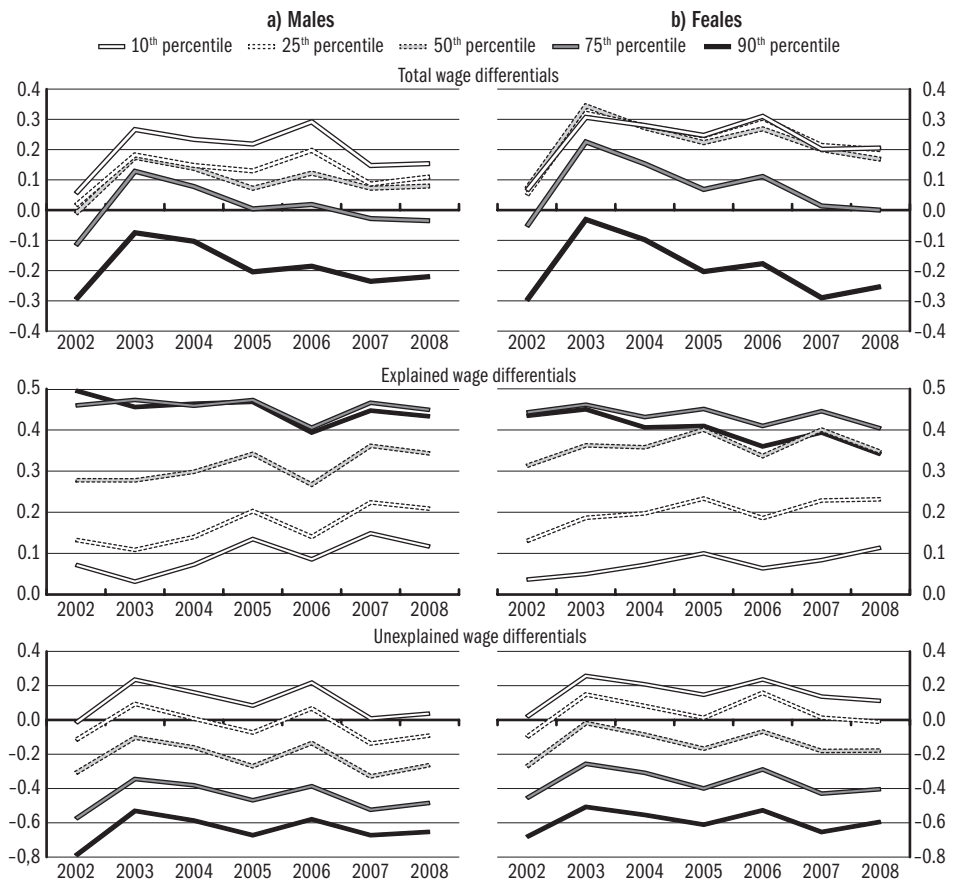
Part a) of *Figure 2.1.2* shows total, explained and unexplained differences between the private and public sector for men. The total difference at the median was 0.02 in 2002; in other words the median income of men (50th percentile) was two percentage points lower in the public sector than in the private sector, while in 2003 this difference was 0.17 in favour of the public sector. This advantage was diminishing between 2004 and 2008; however the advantage of the public sector remained. Looking at the quantiles, a different picture emerges due to the narrow wage structure of the public sector: those at the bottom of the distribution in the public sector and those at the top in the private sector have a wage advantage. Prior to the wage reform the public sector's disadvantage at the 90th percentile was –0.3. After the reform, in 2003, this dropped to –0.07, however it again increased to –0.22 by 2008. The public sector had more favourable employee and organisational indicators for each estimated quantile throughout the studied period, especially because of the higher education level of employees: the explained difference was positive for each quantile.

In terms of the unexplained difference, the private sector has a more substantial advantage than anticipated on the basis of the raw differences: apart from the 10th percentile, the difference is mostly negative. At the median the unexplained difference was –0.28 in 2002 that fell to –0.11 as a result of the

⁷ Selection bias is an issue when estimating the differential between sectors. *Kézdi* (2002) argues that the working conditions are very different in the private and the public sector in Hungary: in the public sector the actual working time is shorter, benefits are more predictable and there is greater job security. We try to filter out this effect by including variables related to working conditions. These provide a weak measure of workplace characteristics; however there was little change over time (*Table 2.1.1*).

wage reform in 2003, then gradually returned to its pre-reform level at -0.27 by 2008. Along the income distribution the unexplained difference, in absolute terms, is increasing towards higher incomes and it is very high around the top percentiles. The difference at the 90th percentile was -0.75 in 2002 that decreased to -0.47 in 2003 and – similarly to other percentiles – it returned close to its pre-reform level at -0.62 in 2008. All in all, it can be argued that relative income in the public sector improved at each estimated percentile, however the unexplained difference at the median (and above) remained negative. By 2008 income differences returned close to their 2002 levels.

Figure 2.1.2: Quantile decomposition, 2002–2008 (logarithms of income differences: total, explained by individual and organisational covariates, and unexplained)



Note: The top part of figure a) and b) shows the unconditional income differences in the public sector in comparison to the private sector at different percentiles; negative values indicate public sector disadvantage. Graphs in the middle show explained differences, and graphs at the bottom depict unexplained income differences.

Part b) of *Figure 2.1.2* shows the comparison of income difference for women. Overall, the graphs show similar trends to men with some notable differences. Women's situation in the public sector is more favourable than men's: they enjoy a bigger advantage over the private sector between the 10th and 50th percentiles. However, at the top end of the distribution the total difference was also -0.3 for women, and by 2008 it was larger than for men, at around -0.25 . As far as the unexplained differences are concerned, after the initial effect of the wage reform these also return close to their original levels.

To put the estimates for Hungary into perspective it is worth highlighting that in Germany the estimated unexplained difference between the public and private sector for men (between 1984 and 2001) was consistently five per cent at the 10th percentile and -17 per cent at the 90th percentile (*Melly, 2005*). The same estimate for Hungary was -10 per cent -75 per cent in 2002, and two per cent and -65 per cent in 2008. This suggests that the public sector wage around the top end of the distribution is not only low in absolute terms compared to Germany – this alone would encourage “brain drain”, especially among health care professionals – but is also low in relative terms compared to the private sector. In order to retain highly skilled workers in the public sector, any future strategies should aim to improve the relative situation of highly skilled or high level employees. This cannot be achieved through a general wage rise for all public servants because its effect on relative wages vanishes in the long run; therefore a more targeted approach is needed.

This study has examined the long term impact of the large and rapid public sector wage rise implemented in 2003. From a researcher's perspective, this wage rise provided a quasi-experimental opportunity to examine the adaptation process following the rapid increase of relative wage. Data for the analysis was available until 2008, and it was clear that the effect of the 50-per-cent wage rise in 2003 had been eroded by then; the situation of public sector employees – especially the highly skilled – did not improve substantially compared to the private sector. There have been no similarly large or rapid increases in relative wage since 2008; however the measures introduced during the economic crisis that affected the public sector – the abolition of the 13th month wage, wage freeze – has probably had an adverse effect on the relative situation of public sector workers and intensified the exit of the highly skilled workforce from the sector.

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2.1.1 Do women have better opportunities in the public sector? An analysis of the gender pay gap and occupational segregation in the public and private sector

ANNA LOVÁSZ

In Hungary, similarly to many other countries, a large number of working women are employed in the public sector. There might be various reasons for this: women are more likely to choose traditional female occupations – teacher, nurse etc. – that are mainly in the public sector, or some features of public sector jobs (e.g. job security, working time and expectations, less stress) are more popular among women. Furthermore, women might prefer public sector jobs because they might think they are less likely to face discrimination thanks to stricter workplace policies (e.g. pay scales, promotion). However, the latter assertion is difficult to prove or quantify because pay (relative to men) and occupation depend on a number of other factors (individual or workplace characteristics previously highlighted) that are often unobservable.

International findings (*Barón and Cobb-Clark, 2010, Chatterji, Mumford and Smith, 2011, Melly 2005, Mora and Ruiz-Castillo, 2004*) suggest that there is less discrimination in the public sector. It

might be valuable to examine the extent of discrimination by sector; in the event that there is a difference, it might have a significant influence on women's decisions. Estimates for the extent of discrimination are compared in two ways: the pay gap and the probability of achieving a management position. The analysis uses data from the Wage Tariff Survey covering the period between 2002–2008; this is a representative sample of both sectors and enables us to take into account both worker and institutional characteristics. *Table B2.1.1.* compares the ratio of women and mean wages in the two sectors.

Labour market discrimination can be manifested in pay – if a woman with comparable characteristics (productivity) is paid less than a man. Mean wage difference is the most commonly used indicator of gender differences in the literature (*Altonji and Blank, 1999*), but unexplained wage differential is a better approximation of discrimination because it also eliminates the effect of covariates re-

Table B2.1.1: The ratio of women and mean pay by occupation and sector, 2002–2008

	Ratio of women		Mean pay (forint)	
	private sector	public sector	private sector	public sector
Managers: HSCO first digit = 1	0.312	0.653	384,400	370,320
Managers: using more precise definition	0.246	0.713	364,503	333,562
Tertiary independent	0.402	0.754	355,545	235,637
Tertiary and secondary	0.599	0.863	203,527	163,815
Clerical	0.905	0.951	148,094	135,503
Services	0.528	0.728	105,552	117,844
Agriculture	0.258	0.277	101,930	109,655
Manufacturing	0.198	0.118	128,995	126,334
Machine operators	0.232	0.017	137,642	137,324
Unskilled	0.466	0.803	90,956	99,721

Note: The public sector includes public service employees, civil servants, judges and prosecutors, while the private sector includes employees of businesses. In the first row managers were defined based on the first digit of the HSCO code, in the second row a more precise definition was used for each industry.

Mean pay was computed from individual pay based on total monthly gross income (mean of basic pay and incidental benefits in the previous year), in forints, at 2008 value deflated with the annual consumer price index.

Source: *Wage Tariff Survey*.

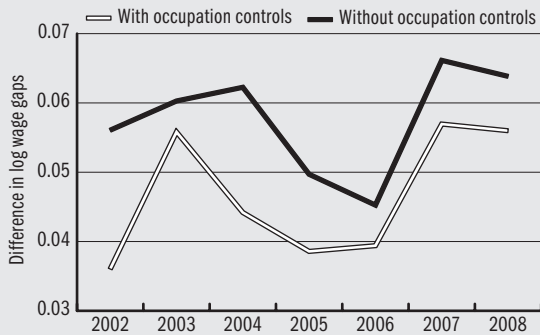
lated to worker and workplace characteristics. This study will estimate individual wage equations using observable worker and employer characteristics, gender and sector dummy variables, and their interaction as control variables. The estimated coefficient of the interaction is the measure of the unexplained pay differential between the two sectors.* *Figure B2.1.1.* shows the development of this measure over time, while *Table B2.1.2.* summarises the main coefficients of wage equations estimated by quantile. In the public sector unexplained wage difference is on average 5–6 per cent lower. Nevertheless, there is a significant – around eight percentage points – unexplained difference between the mean wage of men and women. Looking at different points of pay distribution, it emerges that the disadvantage of women is greater at the higher end of the distribution, suggesting a glass ceiling effect (*Arulampalam, Booth and Bryan, 2007*);

* It should be emphasised that the unexplained pay gap should be considered the upper range limit of discrimination because there are other, unobserved differences in employee characteristics that might skew upwards the estimated extent of discrimination. When comparing wage differentials between sectors, selection bias between sectors is an issue. This is not corrected here due to the lack of data but it might be argued that it can potentially lead to underestimating the relative advantage of the public sector (*Tansel, 2004, Greene and Hoffnar, 1996*).

however the increase of the difference is smaller in the public sector.

Another form of discrimination can be manifested in hiring and promotions – if employers are

Figure B2.1.1: Difference in unexplained gender pay differential between sectors, 2002–2008



Note: The figure represents the estimated interaction coefficient of the *public sector* and *women* dummy variables based on wage equations for each year between 2002 and 2008. The control variables are: employee characteristics (education, potential work experience and its square), institutional characteristics (size and region), and job characteristics (lunch break, type of work contract, difference between actual and official working time). For the estimations individual and institutional weightings were used. Occupation control variables are dummies generated from the first digit of HSCO codes.

Source: *Wage Tariff Survey*.

Table B2.1.2: Unexplained pay differentials between the two sectors, percentiles

	Percentiles				
	10 th	25 th	50 th	75 th	90 th
Women	-0.041 (0.001)	-0.078 (0.001)	-0.126 (0.001)	-0.185 (0.002)	-0.236 (0.002)
Public sector	0.246 (0.003)	0.153 (0.003)	0.002 (0.004)	-0.148 (0.006)	-0.255 (0.008)
Public sector × women	0.019 (0.003)	0.040 (0.003)	0.057 (0.004)	0.084 (0.005)	0.121 (0.007)
N	1,401,418				

Notes: Columns contain the coefficients of individual wage equations estimated by quantiles (standard error in brackets). The coefficients of *Women* dummy variable indicate the disadvantage of women compared to men in the private sector. The coefficients of *Public sector* dummy variable measure the advantage or disadvantage of the public sector in comparison to the private sector, for both genders.

Interaction coefficients of the two variables measure the disadvantage of women in the public sector compared to the private sector. For a description of the dependent and other control variables – such as experience – the definition of public sector and weighting see the note for Table 1 in *Lovász (2013)*. *N* is the number of individual observations.

Source: *Wage Tariff Survey, 2002–2008*.

less likely to hire women than men or promote them to higher positions (the “glass ceiling” effect). To grasp this phenomenon we will compare the likelihood of women and men with similar characteristics to get to management positions in the two sectors. The ratio of women in management positions is considerably higher in the public sector; however this might be due to their higher ratio within the public sector workforce. Therefore their ratio within occupations is also included among the control variables. The results of probit estimations (Table B2.1.3) suggest that the odds of women are no smaller in the public sector, while in the private sector they have an approximately two-percent disadvantage compared to men with similar characteristics.

These results suggest similar trends to wage differentials: the estimated extent of discrimination against women is smaller in the public sector than in the private sector. Although there are significant unexplained gender pay differences in the public sector, overall it seems that regulation limiting the employer’s scope for individual discretion can be successful in improving the opportunities of women in the labour market. It is unlikely that there have been major changes in unequal gender treatment since 2008 in the absence of substantial gender-related changes that would affect the regulation of the public sector. It is likely that data in 2013 would still show that limiting the possibilities of employers for individual discrimination improves

the labour market opportunities of women in the public sector in comparison to the private sector, although the difference is not too big.

Table B2.1.3: Odds of management occupations, probit estimations, 2002–2008

	Private sector		Public sector	
Estimated coefficient				
Women	-0.438	(0.011)	-0.080	(0.018)
Vocational school	0.426	(0.032)	0.447	(0.077)
Secondary education	1.295	(0.030)	0.960	(0.067)
Degree	2.143	(0.031)	1.929	(0.065)
Experience	0.025	(0.000)	0.028	(0.001)
Marginal effect				
Women	-0.021	(0.000)	-0.003	(0.001)
Vocational school	0.020	(0.001)	0.016	(0.003)
Secondary education	0.061	(0.001)	0.035	(0.003)
Degree	0.100	(0.001)	0.071	(0.002)
Experience	0.001	(0.000)	0.003	(0.000)
Observations	1,098,965		370,002	
Pseudo R^2	0.3006		0.1984	

Note: Standard errors in brackets. Probit estimations, the dependent variable is probability of getting to a management position. The control variables are: employee characteristics (education, work experience and its square), institutional characteristics (size and region), and the ratio of female employees in the organisation. Experience is potential work experience; it is obtained by subtracting the sum of years spent in education and the compulsory school age from the employee’s age. Public sector refers to public service employees. For the estimations individual and institutional weightings were used.

Source: *Wage Tariff Survey*.

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2.2 Wage spillovers between the public and corporate sectors

ÁLMOS TELEGDY

The aim of this section is to analyse the effect of public sector wages on corporate compensation. This indirect effect of the State's activity on labor markets has largely been neglected from research on wage spillovers over recent decades although the interaction of public and corporate wages is an important ingredient to wage setting policies.¹ If public and corporate workers compete on the same labor market, corporate employees may consider the public sector as an alternative to their current employment. If total compensation, including the net value of amenities and disamenities derived from various job attributes, is high in the public sector, private employers may face difficulties in the hiring process or have to cope with large quit rates among incumbent employees. To prevent such mechanisms taking place, they have to increase wages to keep a high-quality workforce and to prevent their current employees moving to the public sector.

May spillovers between public and corporate wages exist, their estimation is not straightforward, to say the least. Public and corporate labor markets are distinctly different in all countries. Public sector employees work fewer hours, enjoy longer paid vacations, have more secure jobs and the required effort, worker motivation and job satisfaction may also differ across the two sectors (*Delfgaauw and Dur, 2008; Heywood et al., 2002*). Workers therefore self-select themselves into one or the other sector based not only on observable, but also on unobservable characteristics such as their innate ability, risk aversion, willingness to work hard in exchange for higher wages and faster promotions and so on (*Roy, 1951*). Another problem contaminating the measurement of wage differentials of private and public sector employees is that public sector workers typically cluster in a few industries – predominantly in state administration, health care and education – where the share of corporations is small or non-existent. This makes it impossible to control for industry wage effects, which may be sizable (*Krueger and Summers, 1988*). Any of the factors discussed above may create co-movements of the wage levels in the two sectors; to identify a causal relationship, an exogenous variation of public sector wages is necessary.

The Hungarian institutional context is particularly useful in analysing public wage spillovers as it provides the exogenous variation of public wages which permits overcoming many of the identification problems discussed above and the interaction of public and corporate wages can be measured more accurately than is usually possible. The Hungarian government executed a large wage increase in 2001 and 2002 and thus created the conditions to establish

1 A thorough search of the literature resulted in only a few papers analysing public wage spillovers: for example, *Jacobsen (1992)* studies this question in the United States and *Lacroix and Dussault (1984)* in Canada.

the effect of public wages on corporate compensation. The large and rapid increase of public sector wages provides a unique opportunity to identify wage spillovers as the exogenous wage increase breaks co-movements between public and private sector wages. The sector-specific differences discussed above, which may bias the estimation, do not present a problem here as it is unlikely that the composition of workers, job attributes or industrial wage differentials changed considerably in such a short period of time.²

Data description

The dataset used in this study is the Hungarian Wage Tariff Survey Data, hosted by the National Employment Office. It provides yearly information on workers' year of birth, gender, highest level of education, occupation, earnings, tenure and type of contract (corporate and two types of public sector labor relation, as discussed below). These data are recorded for May of a given year. I use the years between 1998 and 2006 in this chapter as the public wage increase took place in the middle of this period.

I keep in the sample only full time employees between 18 and 60 years. The police, military, firemen and border guards are not included in the public sector data, and I excluded the legal professions as their employment relation is regulated by a special law and they were not subject to the wage increase. The final sample includes 379–487 thousand public sector employees and 106–153 thousand corporate workers. The comparison of the sample and the population data reveals that the sample of corporate and public sector employees is about 7–8 and 70 per cent, respectively.

Composition of employment and the evolution of wages in the public and corporate sectors

Composition of the public and corporate employment. Public and corporate employment differs in a wide variety of dimensions. The public sector is present in health care, education and public administration while the share of corporations in these economic sectors is minuscule. As presented in *Table 2.2.1*, the demographic attributes of employees are very different in the two sectors. Three-quarters of public sector workers are female which is almost twice as large a share as in corporations. Corporate employees' potential labor market experience is shorter by two years.³

Given the peculiar industrial structure of the public sector, it is not surprising that the occupational structure of employees is very divergent across the two sectors. Professionals and associate professionals are the most typical occupations in the public sector and 60 per cent of all employees belong to these categories. This is in sharp contrast with such occupations' share of 20 per cent in corporations. As expected, skilled workers are the most typical workers in the corporate sector as 46 per cent of all occupations are in

² Employers may raise wages even if actual mobility does not take place between the two sectors due to threat effects. See *Borjas et al. (1997)* on threat effects in the context of international trade and *Farber (2005)* on wage effects resulting from the threat of unionization.

³ Potential experience is computed as age – years of education – 6.

this category while such occupations' share is only 6 per cent in the public sphere. Managers are more prevalent in the corporate sector: their share is 9.5 per cent, 1.5 percentage points higher than this occupation in the public sector. Elementary occupations have a share of 14 per cent in the public sector, almost twice as high as in corporations.

Table 2.2.1: Composition of the workforce in the public and private sectors

	Public	Corporate
Gender (Female)	73.5	39.8
Labor market experience	23.8 (10.6)	22.0 (10.1)
Occupation		
Manager	8.0	9.5
Professional	30.6	4.9
Technician, associate professional	28.4	14.9
Clerk	6.4	6.7
Service	6.7	10.3
Skilled agricultural, craft industrial	6.0	45.7
Elementary	13.9	8.1
N	3,969,046	1,185,909

Notes: Pooled data. All variables are dummy variables, except average experience (in years, standard deviation in parentheses).

Public sector wage policies. The period between 1997 and 2006 is characterized by a steady growth of the Hungarian economy. Gross domestic product (GDP) grew each year between 3 and 5 per cent (Hungarian Statistical Office), and private wages followed this pattern, as we document below. Public sector wages, however, presented a more volatile behaviour which was probably rooted partly in the need to increase these relative to corporate wages and partly through political considerations.

Wages in the public sector are determined by a wage grid, which consists of a base wage and multipliers. Compensation may change either by raising the base wage (in this case the relative wages in the public sector are not affected) or the multipliers can be changed (which implies that relative wages within the public sector will vary).

During the period studied the multipliers concerning public servants' wages did not change so their relative wages were also stable, but the base wage was raised considerably. Most importantly, a large and universal wage increase raised each public servant's base wage (but it did not affect civil servants). While the base was increased steadily between 1998 and 2002 such that relative wages between the public and corporate sectors were stable, in 2002 it was suddenly increased by 50 per cent. The following year it did not change but in 2005 it was raised again by 14 per cent. This was, however, accompanied by a decrease in multipliers which further reduced the wage differentials

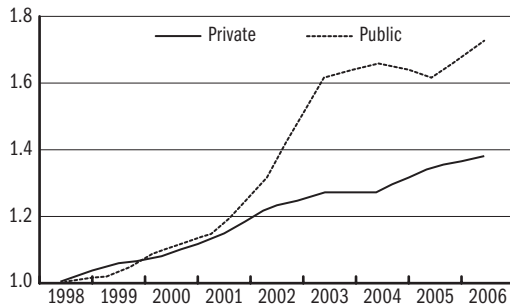
within the public sector. The last year in these data was election year and the base wage was raised again by 10 per cent.

Civil servants' wages were increased in 2001 (15 per cent of the sample are made up of these employees, who are typically highly skilled and work in public administration). Wage policy in their case was used to motivate civil servants to work in the public sector for their whole career. The base wage was almost constant, but the multipliers were changed such that it increased the relative wages of university graduates and those with long experience.

It is important to note that the wage grid serves only to set the minimum compensation for various categories of workers (defined by the level of education and experience). Total compensation may be larger due to allowances (such as a managerial allowance) and public sector organizations also have the right to pay higher wages if they have the funds for it. Public sector employees also received a 13th month's salary during the period studied.

During the first several years of the analysis public sector employees had indeed very low wages.⁴ Despite the fact that the share of university graduates is much larger in the public sector than in corporations, average wages are about 11 per cent lower in this sector before 2002. *Figure 2.2.1* shows that public and corporate wages had experienced widely different growth patterns.

Figure 2.2.1: Wage growth in the public and corporate sectors (1998 = 100, N = 1,184,604)



While corporate real wages steadily increased by 3–6 per cent each year (except in 2004 when they did not change), wages in the public sector follow a distinctly different pattern. In the first three years of the analysis the overall growth rate is quite similar in the two sectors, but between 2001 and 2002 – the year when civil servants experienced a wage growth – public sector wages grew by 15 per cent. This is followed by an increase of 22 per cent in 2002, which is more than a 5 times larger wage growth than in corporations.⁵ Our data therefore show that over a two-year time period, real wages in the public sector increased by 40 per cent while those in corporations by only 12 per cent. In the last years of the analysis the overall growth rates are quite similar (but the timing varies). During the whole period studied, therefore, cor-

⁴ The wage measure used in this chapter is the monthly wage paid in May, and it includes the base wage, overtime pay, regular payments other than the base wage (such as language and managerial allowances), and 1/12th of the previous year's irregular payments (e.g., end-of-year bonuses and the 13th salary in the public sector).

⁵ The policy was labeled as a 50 per cent increase, but it was not applied to civil servants and referred to the base nominal wages. We computed the growth of nominal base wages for public employees between 2002 and 2003 which is indeed very close to 50 per cent.

porate wages increased by 38 per cent while public sector wages increased by 72 per cent – the large difference between the two growth rates was built up in only two years.

Identification strategy, results

The starting point in the measurement of the degree of interrelatedness of public and corporate wages is the classification of corporate workers by their “closeness” to the public sector: how similar they are to public employees. This is important to identify those workers who are likely to be affected by the wage increase. If, for example, a corporate worker has an occupation which does not exist in the public sector and his or her abilities are also very different from what is demanded, a switch to the public sector is almost impossible due to a lack of demand or is very costly for the worker as most of his human capital will be lost. Therefore, the employer of such workers does not need to take into account their earnings potential in the public sector, which can be seen as an outside option in wage bargaining.

The variable measuring public sector proximity of a corporate employee is the proportion of public sector workers in labor market segments defined by gender, occupation and work experience. More precisely, I segment the labor market by gender, potential labor market experience (5-year intervals making up 8 groups) and 7 occupational dummies (manager, professional, associate professional, clerk, service worker, skilled worker and elementary occupation). I call this variable PSHARE.⁶

I regress the log of corporate sector wages on PSHARE, which is interacted with two periods of time which represent the periods before and after the public wage increase (1998–2001 and 2002–2006, respectively). To control for average wages by worker type, I include fixed effects of the variables used in the construction of PSHARE (Z_{ijt}) as well as year effects, 21 regional (county) effects and a full set of 2-digit industries to partial out any differences between local labor markets, consumer prices, and industrial wage differentials. As the level of public sector wages may also affect the strength of the spillover, I also control for the average public sector wage within labor market cells (WP_{ijt}). The unemployment rate (UE_{ijt}) at the cell level is included as well, as it can also affect spillovers: if there are many unemployed, the bargaining power of workers declines and they cannot ask for higher wages, regardless of the proximity of the public sector (*Blanchflower and Oswald, 1990*).⁷ The estimation equation is the following (i indexes workers, j the labor market segment and t indexes time):

$$\begin{aligned} \log(w_{ijt}) = & \alpha_0 + \gamma_{before} PSHARE_{jt} BEFORE_t + \gamma_{after} PSHARE_{jt} AFTER_t + \\ & + \alpha_{wp} \log(WP_{jt}) + \alpha_{ue} \log(UE_{jt}) + \alpha x Z_{ijt} + \sum \alpha_{ind} INDUSTRY_k + \\ & + \sum \alpha_{reg} REGION_r + \sum \alpha_t YEAR_t + \varepsilon_{ijt} \end{aligned}$$

6 The average value of PSHARE is between 22 and 27 per cent during the period studied, its median is 13–14 per cent. The standard deviation of the variable is large relative to the mean showing that the variable covers most of the interval on which it is defined.

7 The unemployment rate is computed for each labor market segment defined by gender, experience and education, using the Hungarian Labor Force Survey.

The estimated spillover effect is the difference between γ_{after} and γ_{before} : this measures the change in the effect of the presence of the public sector on corporate wages.

The results suggest that private wages do not vary by the exposure of workers to the public sector before the public sector wage increase as the coefficient on the interaction of PSHARE and the period before the wage increase is only 0.001. In the period subsequent to the public sector wage increase, however, the level of corporate compensation increases in the sectors exposed to the public sector: the estimated coefficient of PSHARE after 2001 is equal to 0.143 (and is highly significant in statistical terms). Taking the difference between the coefficients associated with PSHARE before and after the wage increase as a measure of the wage spillover, this analysis finds that during a period of a 40-per cent increase in the public wage, a 10-per cent difference in public sector exposure induced a larger wage growth of 1.4 percentage points. Compared to the wage increase of about 12 per cent during this period, this result translates to a faster wage growth of over 10 per cent, which is quite sizable.

To gauge how the spillover effect evolves in time, we present the same regressions as before, but with a full set of interactions between years and PSHARE. These results are shown in *Table 2.2.2*. In the first three years of the analysis the coefficients of PSHARE are between -0.027 and -0.017 with no conceivable trend. In 2001, in the year of the civil servant wage increase, the effect of public sector exposure on corporate wages is 3.3 per cent and one year later it grows to 7.1 per cent (both coefficients are statistically significant). In 2003, after the large public employee wage increase affecting almost all public sector workers, the coefficient becomes 0.176 further increasing to 0.2 the following year. The difference between the coefficient in 2001 and 2004 is 0.167 which we take as the estimate of the wage spillover. As the public wage premium starts to stagnate, the coefficients decrease somewhat.⁸

Table 2.2.2: The yearly effect of public sector size on corporate wages

PSHARE × 1998	-0.027	(0.018)	PSHARE × 2003	0.176***	(0.014)
PSHARE × 1999	0.017	(0.017)	PSHARE × 2004	0.200***	(0.014)
PSHARE × 2000	-0.019	(0.017)	PSHARE × 2005	0.158***	(0.015)
PSHARE × 2001	0.033**	(0.015)	PSHARE × 2006	0.112***	(0.017)
PSHARE × 2002	0.071***	(0.013)			
R^2		0.445			
N		1,184,604			

Notes: Each regression includes controls for gender, experience, education, year, industry, and region. Robust standard errors in parentheses.

*** Significant at the 1-per cent level; ** significant at the 5-per cent level.

Wage spillovers may also vary along the occupational structure of the corporate sector. Workers with occupations which are abundant in the public sector are likely to have a higher wage increase, as they can find a job more easily

⁸ The last year of the analysis was election year which resulted in an increase of public sector wages. As the budget deficit was 10 per cent of the GDP, it was expected that the new government would cut back spending. As such interventions make the public sector less attractive to employees, this may be the reason for a declining spillover effect.

and will not lose their occupation-specific human capital if they move (e.g., *Kambourov and Manovskii*, 2009). To test this, I construct a dummy variable which categorizes each 3-digit occupation by its public sector share: the dummy equals 1 if this is larger than 40 per cent.⁹ This variable enters the estimation equation in a three-way interaction between the time periods before-after the wage increase and PSHARE (and I also control for its level). The estimated coefficients, presented in *Table 2.2.3*, indeed demonstrate that the spillover effect is larger for such workers. The interactions term just described is associated with a coefficient of -0.18 before the wage increase which shrinks to -0.115 in the period subsequent to it. Therefore the wages of such workers increase faster if the worker is exposed to the public sector.

Table 2.2.3: The effect of occupation on wage spillovers

PSHARE - BEFORE	0.057***	(0.013)	PSHARE - OCCPREV - BEFORE	-0.179***	(0.016)
PSHARE - AFTER	0.173***	(0.012)	PSHARE - OCCPREV - AFTER	-0.115**	(0.017)
R ²	0.446				
N	1,184,604				

Notes: Before = 1998–2001, After = 2002–2006. Occprev = 1 if occupation prevalent in public sector. Each regression includes controls for gender, experience, occupation, year, industry, region, and the Occprev interacted with “Before” and “After.” Robust standard errors in parentheses.

*** Significant at the 1-per cent level; ** significant at the 5-per cent level.

Another feature of the labor market which may alter wage spillovers is the proportion of new hires in the public sector. If there are no employment opportunities, corporate workers cannot switch sector. We compute the rate of new hires in the public sector relative to the number of workers in corporations within each labor market segment, and we add this variable to the regression.¹⁰ The results (presented in *Table 2.2.4*) show that public sector hiring does not have an effect on corporate wages before the wage increase (the estimated coefficient is essentially zero), but after the public sector wage increase this coefficient becomes 0.12. Although the coefficient is not significant, its large magnitude provides partial evidence that more public vacancies induce a significantly faster wage increase in the corporate sector.

Table 2.2.4: The effect of public sector vacancies on wage spillovers

PSHARE - BEFORE	0.017	(0.017)	PROPORTION HIRED - BEFORE	-0.007	(0.125)
PSHARE - AFTER	0.152**	(0.014)	PROPORTION HIRED - AFTER	0.120	(0.078)
R ²	0.444				
N	951,303				

Notes: Before = 1998 to 2001; After = 2002 to 2006. Each regression includes controls for gender, experience, occupation, year, industry, region, and proportion hired. Proportion hired is measured relative to the size of the corporate sector. Robust standard errors in parentheses.

*** Significant at the 1-per cent level; ** significant at the 5-per cent level.

⁹ Out of 136 occupations, there are 42 which satisfy this condition, and they cover 10 per cent of corporate workers.

¹⁰ This variable is not interacted with PSHARE because it is proportional to it by construction. The average public sector hiring rate (standard deviation) relative to private sector employment is 0.024 (0.065).

Conclusions

This chapter analysed public wage spillovers, using for identification a fast and large wage rise which increased public sector wages by 40 per cent over a two year time period while corporate wages increased by only 12 per cent. Measuring public sector proximity by the share of public workers in labor market cells defined by gender, labor market experience and occupation, it finds that a 10 per cent higher share of public sector employment in the labor market cell caused a faster corporate wage increase by about 10 per cent.

The above analysis therefore suggests that public wages do have an effect on the wage policies of corporations: not only may average wages increase inducing therefore larger personnel costs, but wage differentials may also change as those workers, who are typical in the public sector, will be affected by spillovers to a larger extent than those who are not. It is also likely that such spillovers not only existed in Hungary in the early 2000s, but they occurred everywhere. This study used the periods before and after the public sector wage increase only to have a credible identification strategy – in the lack of an exogenous movement of public wages it is difficult to obtain an unbiased estimate of wage spillovers.

Using the results of the chapter, we can drive insights about the public sector wage spillovers in contemporary Hungary. Looking at the evolution of wages over the last decade or so, it is likely that their effect on corporate wages declined. As the information of the Hungarian Statistical Office suggests, between 2006 and 2013 public sector wages declined both in real and nominal terms and also relative to corporate wages. While the unconditional relative wage between the two sectors was 14–16 per cent in 2007 and 2008 (showing that public sector workers obtained a premium on average), during the following four years this was continuously falling resulting in a public wage penalty of 15 per cent in 2012 (despite the fact that the proportion of highly skilled workers is much larger in the public sector than in corporations). The current policy which increased the wages of several occupations in the public sector is not shown yet in the data, but it is likely that in the absence of a large wage increase, public sector wages will lag behind the compensation in corporations which decreases wage spillovers. This tendency, however, can be attenuated by longer job search in the corporate sector and less job security, which can make public sector jobs look more attractive to employees.

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2.3 Pay level and selection to the public sector

JÁNOS KÖLLŐ

This chapter is based on a study by Köllő (2013) that examines changes in the *number* and *quality* – as measured by their residual earnings in the private sector – of graduates moving from private sector to public sector jobs as a result of the large pay increases implemented before and after the 2002 general elections.¹

The analysis is based on a large administrative panel dataset covering a relatively long period (1998–2008) but limited in terms of the number of variables. It explores the development of mobility between the two sectors and then draws conclusions on the quality of inflows from the private to the public sector based on the *mean residual wages* of those shifting from the private to the public sector. (Residual wage is the difference between the actual wage and the expected wage on the basis of gender, age and education). The analysis concludes with a panel estimation that directly quantifies the relationship between the sectoral wage gap and private sector residual wages of workers moving to the public sector.

Earlier literature and methodological considerations

Surprisingly few studies examined inter-sector mobility and the selection effects of public sector wages over recent decades. Some studies draw conclusions about selection effects from the between-sector earnings differentials – without actual data on mobility [see e.g. Foguel *et al.* (2012) on Brazil, Tansel (2005) on Turkey or Assad (1997) on Egypt]. Other studies (Bellante and Link, 1981, Blank, 1985) analyse selection directly, without data on wages. Obviously, even “lopsided” studies like these can have valid conclusions on the relationship between wages and selection if they can reliably estimate how much public sector employees would be earning in the private sector and vice versa. For example Stelcner, van der Gaag and Vijverberg (1989), Heitmueller (2006) or Gimpelson and Lukiyanova (2009) use this approach (*switching regression*) to address this problem.

Nickell and Quintini (2002) draw conclusions from comparing time series of the wage gap and various quality indicators. Quality is measured as test results in early teenage years and they show the deterioration of these results alongside the weakening in the wage position of the public sector in Britain. Katz and Krueger (1993) find a strong positive relationship between relative wages in the public sector and changes in educational attainment *within* public service occupations in the United States.

Borjas (2002) captures the quality of people moving to the public sector using *the residual wage they achieved in the private sector*, assuming that to some

¹ In the absence of data on education, “graduate professionals” are defined as employees who worked in occupations that require higher education or in a managerial position for any length of time in the observed period between 1997 and 2008.

extent this reflects their productivity. In this study Borjas basically provides an adaptation of the Roy-model (Roy, 1951, Borjas, 1987) to the issue of selection between the private and public sector. Thus, its main focus is the relationship between the quality of entrants and wage *dispersion* within sectors. If both sectors value more or less the same skills and the dispersion of wages is much smaller in the public sector, more productive workers will select themselves to the private sector, even if mean wages in the two sectors are equal – this is one of the key conclusions of Borjas' version of the Roy-model. The study presented here also follows this approach in measuring quality, however it does not aim to adopt Borjas's (2002) model mechanically because dispersions within sectors did not change at all in Hungary in the period observed; however mean wage differentials between the two sectors fluctuated within a very wide range. Therefore, it is worth concentrating on the effects of the latter and keeping the measurement method of the Borjas study.

The use of residual wage as an indicator of quality needs a qualifying note here. The actual wage of people moving from one sector to the other can differ from the wage that would be expected on the basis of their gender, age and educational attainment due to a variety of unobserved factors. Residual wages that are controlled for only these factors might reflect characteristics associated with quality, such as management position, diligence or talent, but they will also contain items that compensate for non-wage advantages or disadvantages, industry rents, trade union premiums, bonding schemes and other factors that divert the actual wage from actual marginal productivity. Of course, it cannot be posited that in the comparison of two individuals higher residual wage indicates higher productivity.

However *changes over time* in *mean residual wages* of people who move between sectors – especially if these changes are not trend-like – can indicate increases or decreases in mean productivity, particularly if there are no changes or no trend-like changes in the composition of the private sector in terms of sub-sectors, company size, ownership or trade union membership. A large sudden increase or decrease in residual wages among those who move between sectors, in otherwise stable circumstances, is likely to indicate a positive or negative selection effect, which is the focus of this analysis.

Further questions can be raised. First, are there any factors, in addition to the pay gap, that might cause sudden changes in the composition of people considering a sector change? Moving to a job in the public sector can be motivated by a variety of considerations. These can include changes in risk tolerance or preferences to do with age and family status. (On the role of risk tolerance in selection between sectors see for example Bellante and Link 1981, Pfeifer, 2008, Buurman et al., 2009.) It is also possible that some people who are made redundant accept a job in the private sector, but later, when the opportunity arises they reconsider this decision and move to a more preferred

job in the public sector. And vice versa: somebody who is at risk of unemployment in the private sector, might decide to accept a job in the public sector immediately rather than risk unemployment, even if their preferred option would be a private sector job at the given wage. However, the influence of these factors is unlikely to fluctuate if the age distribution of the work force is stable (or changing steadily) and the labour market is near equilibrium. On the contrary, an abrupt increase in the relative pay position of the public sector makes it suddenly profitable for higher paid, more productive workers to move to a public sector job as well.

Secondly, it is arguable whether changes in *intentions* to move to another sector can be captured through time series on actual mobility. The supply effect can only be demonstrated from data on actual moves if public institutions are intending to select the best applicants at the given pay level. This seems like a reasonable assumption for most jobs; apart from those positions that are filled according to explicitly political criteria.

Based on these considerations this study uses the following methods: we observe, over a long period of time (1997–2007), all cases when a graduate employed in the private sector in year t moves to the public sector in year $t + 1$ without any unemployment or other interruptions in between. After this, changes in the residual wage of people who changed sectors are examined. Finally, we estimate how the between-sector pay differential affects the residual wage of switchers. The procedure is presented in Annexe 2.3.

Data and variables

The Central Administration of National Pension Insurance (CANPI) has a centralised electronic register that holds records of contribution payments (“Kelen”) starting from 1997. This chapter uses a 20-per cent random sample of individuals who were registered in Kelen between 1997 and 2008; it includes a total of 15,464,904 annual records for 1,288,742 individuals. In the database there were 738 thousand individuals employed in “graduate occupations” in 1997 and 852 thousand in 2008.² For further information on the sample and the key concepts see the original paper (Köllő, 2013). Here we only summarise how coding in the “Kelen” data base affects the definition of public and private sector employees and switchers.

Private sector employees are defined as employees whose income came exclusively from one or several private sector jobs in a given year. Switchers are those who worked as public service employees or civil servants for any length of time in the following year, without any time spent in unemployment, on parental leave, or as self-employed or independent contractors.

For *public sector employees* the only certainty is that they worked in the public sector *for any length of time* in the given year, thus their income might also include earnings from the private sector. Furthermore, direct mobility

² The CSO Labour Force Survey found 773 thousand and 900 thousand college or university graduates in these years. Obviously some of those who are considered “graduates” on the basis of their work history do not have a degree, while some graduates would probably not meet the above criteria based on their work history. Nevertheless the figures are reassuringly similar.

from the public to the private sector is only observed if the individual was employed in the private sector for the whole of the following year and had no other earnings. Also, particularly at the beginning of the period, it was common that public sector workers moved to the private sector without a change of jobs through outsourcing or privatisation. On the extent of this and job moves from the public to the private sector see Chapter 2.4 of this *In Focus* and for more detail *Elek and Szabó's* paper (2013). Thus, shifts from the public to the private sector are not examined in this chapter. We focus on direct moves from the private to the public sector.

The *earnings data* relate to total annual earnings subject to social insurance contributions while the number of qualifying days is also known. The wage level is measured as *earnings per day* and is expressed as a percentage of the total sample's mean.³

Development of wages in the private and public sector

Figure 2.3.1 shows the development of the wage differential between the two sectors, controlled for gender, age and educational attainment, based on data from the Wage Tariff Survey and Kelen. In the latter case, the wages of those who worked for the whole year were taken into account. Based on administrative data the wage level of the public sector seems higher, but this is not unexpected as, unlike the Wage Tariff Survey, the Kelen data base includes the low-paid workers of companies with fewer than five employees. However, the development of the wage gap over time is similar, apart from 2004. This might be explained by the differences in recording earnings data: the Wage Tariff Survey of May 2004 recorded regular earnings in May plus 1/12 of the bonuses and premiums received in 2003, while Kelen records earnings in the year they are actually paid.⁴

Mobility

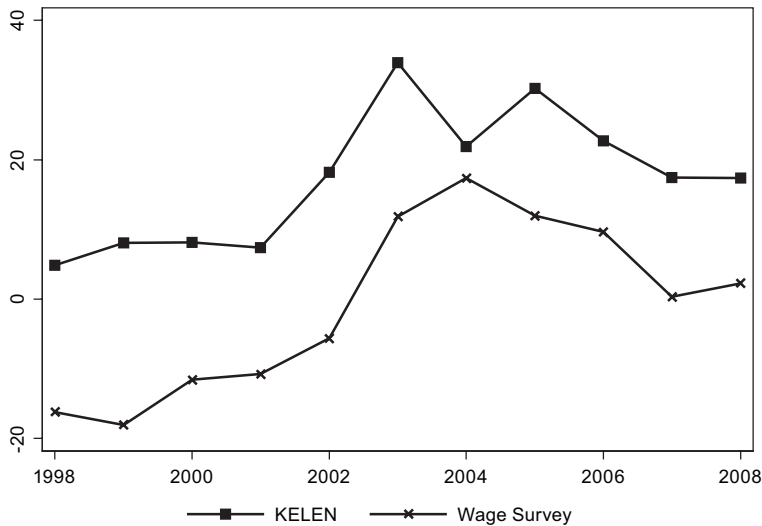
Public institutions can use their increased resources in a variety of ways that has implications for our expectations about the development of job mobility. Pay rises can – even without any additional action – slow down the exodus of high-quality workforce and thus reduce entry mobility. At the same time public institutions could also take advantage of higher wages and recruit more and better workers from the private sector. (They could have done this all the more as the number of public sector workers – including employees in graduate occupations – was rising until 2005.) This latter strategy increases the rate of entry to the public sector and may also increase the exit rate if the number of jobs is held constant.

The data clearly show that wage rises during the Medgyessy and Orbán governments increased the number of direct moves from private to public sector jobs only in 2003 (*Table 2.3.1*). (Note that the rows indicate the last year

³ Information on wages for 1997 had considerable amounts of missing data and seemed unreliable – the mean and dispersion are much smaller than in subsequent years – therefore wage data for only 1998–2008 was used. The time-scale of employment statistics is 1997–2008, for mobility it is 1997–2007, and the analysis of the relationship between wages and mobility is for the period between 1998 and 2007.

⁴ The Wage Survey records regular earnings for the month of May minus irregular bonuses in May plus the monthly average of irregular bonuses from the previous year.

Figure 2.3.1: The earnings advantage/disadvantage of public sector employees, 1998–2008 (percentage points, private sector employees with similar observable characteristics = 0)



Note: The curve represents e^{β} values calculated from β parameters. For public sector employees some of the qualifying days might be from the private sector.

Wage Tariff Survey. Wage: Gross wage in May excluding irregular bonuses but including 1/12 part of the total bonuses in the previous year. Sample: employees of companies with five or more (in 1998–1999 10 or more) employees, and public service employees and civil servants in the public sector. Dependent variable: the logarithm of wage. Control variables: gender, age, age square, educational attainment, number of paid working hours.

Kelen. Wage: monthly breakdown of annual earnings from employment or public service/civil service status. Sample: everyone who paid contributions on labour income for the whole year. Dependent variable: the logarithm of wage. Control variables: gender, dummies for single years of age, proxy for educational attainment (see main text).

spent in the private sector, therefore moves that happened in 2003 are shown in the row of 2002!) The block on the left side of the table displays the unadjusted transfer rates for everyone and also separately for people aged under and over 40 years. The block on the right shows year fixed effects from probit models that estimate the probability of transition between sectors controlled for gender and single years of age. Both the raw data and the estimates suggest that the transfer rate was slowly declining in 1998–2002, slightly increased in 2003, and then dropped sharply to well below any previous levels and remained there, fluctuating within narrow ranges.⁵

It might be argued that the transfer *rate* could have decreased without a decline in the absolute number of job movers as a result of the steady increase in

⁵ The statistical tests also confirm that the transfer rate fell significantly both in the older and younger group in 2003. In earlier or later periods fluctuations were not statistically significant.

the number of graduates employed in the private rather than the public sector. The data disprove this: the fall in the transfer rate was sudden and much greater than would have been justified by a steady decline in the relative weight of the public sector (that was even interrupted by a slight increase in 2002–2003). The question might also be raised of whether the remarkable decline in flows from the private sector was caused by an (implicit) hiring freeze introduced alongside the wage increases. This is clearly not the case because the number of graduates working in the public sector steadily increased from 290 thousand in 2001 to 306 thousand in 2004 and only started to decrease as a result of austerity measures taken in 2006.

Table 2.3.1: Job moves from the private to the public sector – transfer rates and year fixed effects, 1997–2007 (probability that a private sector worker moves to a public sector job in the subsequent year)

Last year in the private sector	Unadjusted transfer rates ^a			Year fixed effects controlled for gender and age		
	All	25–40 years	41–61 years	All	25–40 years	41–61 years
1997	1.95	2.14	1.68	2.24	2.13	2.13
1998	2.08	2.21	1.89	2.40	2.19	2.45
1999	1.69	1.92	1.35	1.75	1.73	1.58
2000	1.83	2.07	1.48	1.95	1.90	1.80
2001	1.79	2.12	1.28	1.85	2.00	1.48
2002	1.97	2.35	1.41	2.13	2.34	1.69
2003	1.43	1.72	0.99	1.30	1.46	0.99
2004	1.48	1.72	1.10	1.39	1.50	1.19
2005	1.41	1.69	0.96	1.28	1.47	0.94
2006	1.34	1.57	0.97	1.18	1.32	0.96
2007	1.25	1.45	0.93		reference	

^a Transfers to public sector as a percentage of private sector workers.

^b Probit marginal effects at the sample mean, percentage.

Dependent variable: worked in the public sector for any length of time in the subsequent year.

Independent variables: gender, age, age square, dummies for single years of age. All year effects are significant at 0.01 level.

Table 2.3.2 presents time series data on mobility from the public to the private sector in a similar structure to *Table 2.3.1*; however it must be emphasised that these data differ from data on moves in the opposite direction. The slump in 2002 is clearly noticeable in the total sample as well as in the older and younger groups. Job moves from the public to the private sector – and any vacancies as a result – decreased considerably: in the four years when the public sector paid high wages, moves to the private sector were over 30 per cent lower than either before or after. The increase later, in 2006–2007 could already be related to the redundancies that had begun to commence in the public sector.

Table 2.3.2: Job mobility from the public to the private sector, 1997–2007
(the probability that somebody who [also] worked in the public sector
in year t would have earnings only from the private sector in year $t + 1$)

Last year in the public sector	Unadjusted transfer rates (percentage)			Year fixed effects controlling for gender and age ^a		
	All	25–40 years	41–61 years	All	25–40 years	41–61 years
1997	4.63	5.90	3.05	3.29	4.34	2.31
1998	3.92	5.38	2.19	2.45	3.62	1.32
1999	3.96	5.35	2.42	2.59	3.57	1.64
2000	4.17	5.81	2.41	2.90	4.18	1.68
2001	3.59	5.05	2.10	2.24	3.20	1.33
2002	2.64	3.83	1.46	1.04	1.57	0.51
2003	3.00	4.40	1.62	1.54	2.36	0.80
2004	3.03	4.32	1.79	1.64	2.30	1.06
2005	2.90	4.21	1.66	1.50	2.22	0.88
2006	3.55	5.12	2.08	2.41	3.52	1.46
2007	3.39	4.85	2.05		benchmark year	

^a Probit marginal effects at the sample mean, percentage.

Dependent variable: only has earnings from the private sector in the subsequent year. Independent variables: gender, age, age squared, dummies for single year of age. All year effects are significant at the level of 0.01.

Wages of job movers in the public sector

The wages of job movers are first examined using repeated cross-sectional regressions. *Table 2.3.3* indicates that the daily wage of graduate job movers controlled for gender, age and working time (“residual” hereafter) was 2.5–8 per cent lower, than the daily wage of stayers in 1998–2001, and the difference was significant at 0.05 in three out of the four years.⁶

The number of observations increased at a steady rate over time: ranging from 91,439 to 116,682 in the full sample, from 49,480 to 69,944 in the younger group and between 44,756 and 50,139 in the older group.

In the years of large pay rises (2002–2004) the wage of movers – as expected – exceeded the wage of stayers by 4.4–5.6 per cent. However, alongside the decline in the relative wage level of the public sector this advantage first disappeared and then in 2007 turned into a significant and rather large 6.6 per cent disadvantage. It would be difficult to attribute the sudden changes to anything else than the temporarily high public sector pay, which made it profitable for high earner private sector employees to move to the public sector. Public institutions used positive selection and chose applicants that appeared to be more productive.

The development of residual wages over time in the younger and the older age groups was similar, however according to estimations by age group the selection patterns were different. Earnings of young movers (aged 25–40) were below the earnings of stayers in each year. Their disadvantage was statistically significant and substantial (10–16 per cent) in 1998–2001. During

⁶ The coefficients show the wage advantage or disadvantage of employees moving between sectors in logarithm points. For example, the value in the upper left corner indicates that the wage of people moving between sectors is 0.0512 logarithm points – or approximately 5.1 per cent – higher than the wage of stayers all other things being equal.

the pay rises of the Orbán and Medgyessy governments, this gap disappeared and the group of movers was comprised of average earners. However, the gap re-appeared with the decline in public sector pay in 2005–2007 and movers – increasingly – came from the lower tail of the wage distribution.

Table 2.3.3: Wage premium/disadvantage of graduate job movers from the private to the public sector compared to stayers in the private sector, controlled for gender, age and number of years worked (logarithmic point, linear regression coefficients estimated with the method of ordinary least squares)

Last year in the private sector	Full sample	Younger people (25–40 years)	Older people (41 years and over)
1998	-0.0512** (2.33)	-0.1082*** (3.65)	0.0233 (0.74)
1999	-0.0824*** (3.36)	-0.1609*** (5.10)	0.0478 (1.28)
2000	-0.0239 (1.04)	-0.1095*** (3.70)	0.1149*** (3.22)
2001	-0.0696*** (3.30)	-0.1427*** (5.65)	0.0811** (2.31)
2002	0.0448** (2.35)	-0.0360 (1.55)	0.2066*** (6.48)
2003	0.0442* (1.94)	-0.0119 (0.43)	0.1685*** (4.32)
2004	0.0550*** (2.49)	-0.0159 (0.59)	0.2016*** (5.35)
2005	-0.0104 (0.46)	-0.0782*** (2.93)	0.1580*** (3.93)
2006	-0.0285 (1.27)	-0.1058*** (3.90)	0.1427*** (3.74)
2007	-0.0655*** (2.95)	-0.1334*** (4.93)	0.0757* (1.99)

Note: *t-values* in parentheses.

Dependent variable: the logarithm of daily earnings.

Independent variables: male, dummies for single year of age variables, days in work during the year, dummy for movers set to 1 if the individual worked in the public sector in the subsequent year and 0 otherwise).

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In the older group, movers’ earnings *exceeded* that of stayers in each year, although the difference was not yet significant in 1998–1999. During the time of large pay rises the average residual wage of older switchers jumped to 20 per cent. It then started to fall and drop below 8 per cent in 2007.

So far the argument that fluctuations in the residual wage of movers were related to variations in the sectoral pay gap was based on *the similarity in their time series*. The following sections will attempt to show – using the panel equation presented in *Annexe 2.3 (A2.3.1)* – that there is a direct relationship between them. First, we form $K = 640$ groups of private sector workers on the basis of their gender, single year of age and calendar years. Second, we regress the wages of private sector workers on a set of controls, a *MOVER* dummy and its interaction with the deviation of the k^{th} group’s annual average public sector pay (w_{kt}) from its intertemporal average (w_k). The coefficient of the *MOVER* dummy measures the average difference between movers and stayers. The coefficient for the interaction term [$MOVER \cdot (w_{kt} - w_k)$] measures how fluctuations in the public sector pay of a given group affect the residual wages of movers (relative to stayers) in that group.

The estimated wage equation is controlled for gender, age, age square, the number of days in work during the year and calendar year fixed effects – the coefficients of these variables are not presented here. Younger and older age groups are distinguished on the basis of their year of birth rather than their age – to make sure that categories are stable. The two age groups are: people younger than 40 years in 2003 and anyone older than this.⁷

As for the results presented in *Table 2.3.4*: according to estimations for the full sample, the difference between the wages of movers and stayers *entirely* depended on variations in earnings potential in the public sector. The wage of stayers is only 0.85 per cent higher if the level of public sector pay is at its intertemporal mean. By contrast, if the public sector wage is 10 per cent higher in a group than its intertemporal mean, the residual wage of movers is increased by approximately 6 per cent compared to stayers.

Table 2.3.4: The effect of public sector pay level on the wages of people moving from the private to the public sector, 1998–2007 (panel estimation assuming individual random effects and using the method of least squares)

	Full sample	Younger people ^a	Older people ^b
β_1 : <i>MOVER</i>	0.0085** (2.00)	-0.0213*** (3.76)	0.0364*** (5.86)
β_2 : <i>MOVER</i> × (ln w_{kt}^k - ln \bar{w}_k^k) ^c	0.5780*** (8.14)	0.6280*** (7.55)	0.3975*** (2.71)
Internal R^2	0.0422	0.0613	0.0052
External R^2	0.0727	0.0611	0.0452
Total R^2	0.0622	0.0663	0.0292
Mean number of years observed	6.7	6.5	7.0
Number of observations	1,313,629	783,390	530,239
Number of individuals	207,597	126,222	81,375

Dependent variable: logarithm of relative wage.

Sample: private sector employees.

^a Born before 1963.

^b Born after 1963.

^c : $(w_{kt}^k - \bar{w}_k^k)$ deviation of the mean wage in group k (based on gender and age) in year t from the intertemporal (between 1998 and 2007) mean wage in the public sector.

Z values in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The effect of public sector wages is much stronger in the group of younger people born after 1963 than in the older group: elasticity is above 0.6 in the first group while it is below 0.4 in the second. This is most probably related to the fact that people who move to a public sector job at an older age are more likely to be at a senior level. Some of the moves might be part of politically motivated reshuffles of senior government officials or people might move to the public sector as elected officials.

⁷ The estimation was carried out using GLS panel regression assuming random effects for the reasons presented in the discussion of equation (A2.3.1). Due to the presence of predicted variables in the equation, standard errors were estimated with a 500-step *bootstrap* method also taking into account that there are multiple, possibly correlated observations for each individual. Therefore we adjust the standard errors for “clustering by individuals”.

Conclusions

The substantial increase of public sector pay – first for civil servants, then for public service workers – in 2002–2003 made the sector more attractive even for higher paid private sector workers. At the same time thanks to the large pay rises, which were not accompanied by redundancies, the number of employees leaving the public sector for a job in the private sector fell and so did the number of vacancies. Public institutions could hire fewer people from a pool of better quality applicants and this led to an improvement in the quality – as measured by the residual wage – of new entrants.

With the erosion of the wage advantage from 2002 and the “slimming down” of the public sector that started in 2006, the number of people coming from the private sector continued to decline as well as their overall quality. The large pay rise temporarily – for three years strongly and for a further two years moderately – improved the *composition* of workers moving to the public sector, however any positive effect on the public sector workforce was limited by a large fall in the entry rate – to two thirds of its previous level. The public sector could have benefited more from the higher wage level if at the same time it would have “sifted through” its existing workforce.

Measures introduced during the economic crisis – especially the abolition of the additional 13th month salary and an unofficial but effective pay freeze – pushed the relative pay level of the public sector into a low not seen since the early 1990s. Considering Hungary’s current growth and fiscal prospects it is unlikely that this will change in the foreseeable future. At the time of writing this chapter, in 2013, the wage level of the public sector was 20 per cent below the private sector for people of the same gender, age and educational attainment – this has been unprecedented since 1996, the second year of the Bokros package.

Based on the estimations presented in this study it is expected that the public sector will become even less attractive for workers, and it is likely that much of this deterioration has already happened. (Of course there is no way to verify this prediction until micro data covering 2013 is available.) At the same time it is unclear whether a general pay rise similar to 2002 would lead to the desired outcome: improvement in the quality of the public sector workforce. In addition to pay rises, this also requires selection based on performance and skills.

Annexe 2.3

The effect of the fluctuation of public sector wage on the residual wage of movers was estimated with the following panel regression:

$$\ln w_{ikt}^M = \alpha X_{ikt} + \beta_1 MOVER_{ikt} + \beta_2 MOVER_{ikt} \times (\ln \bar{w}_{kt}^K - \ln \bar{w}_k^K) + \gamma t + u_{ikt} \quad (\text{A2.3.1})$$

The left side of the equation represents the annual income from year t for t^{th} private sector worker in group k , X_{ikt} includes the indicators of gender, age and working time, and t is a set of dummy variables for calendar years. The upper case K (public sector) and M (private sector) indicate the two sectors. We distinguish those who are known to have worked in the public sector in year $t + 1$ (*MOVER*). The expression $w_{kt} - w_k$ measures to what extent the mean public sector wage of a given group differs from its own intertemporal mean. For the estimation we calculate mean public sector pay for 640 age years \times gender \times year interactions. Separate estimations are carried out for younger and older workers.

The estimation was carried out using the method of generalised least squares (GLS), assuming *random effects*. A fixed effects model would not answer the question that we are interested in – are higher paid people selected if public sector wages are temporarily high – but would answer the question of whether the wage of movers increases in the year of move compared to their own personal average if the pay advantage (disadvantage) of the public sector is growing (falling) compared to its mean advantage (disadvantage). In other words: our aim is not to filter out but to measure the selection bias arising from the non-random selection of movers.

The reason why the wage component in the interactive term is defined in the way it has been is that we only want to capture the variance of group-level average wages over time. (In an equation that uses the *public sector pay* variable without removing the mean, parameter β_2 would simply measure that the wage of movers is likely to be higher in groups where wages are high in both sectors. In the equation (A2.3.1) β_1 measures the mean residual wage of movers, while β_2 measures the effect of fluctuations in public sector pay on the selection of movers.

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2.4 Labour outflow from the public sector in Hungary

PÉTER ELEK & PÉTER ANDRÁS SZABÓ

This chapter concentrates on the outflow from the public sector in Hungary in the period between 1998 and 2010; a more detailed analysis can be found in *Elek and Szabó's* (2013) paper. First, the rate of job mobility and outflow into unemployment or inactivity from the public sector will be compared to the same rates from the private sector and we will consider whether the public sector is more stable in any of these aspects. It will be shown that the likelihood of moving into unemployment or another job from the public sector was approximately half of that from the private sector between 1998 and 2010.

Secondly – as a possible implication of the public sector's higher stability – it will be examined whether people who leave the public sector end up in a significantly worse position than similar workers leaving the private sector. This will be assessed by examining the re-employment probabilities of those made redundant and overqualification rates of those who left to move to another job. The results will show that – with the exception of the low-skilled – workers coming from the public sector are not at a disadvantage in terms of finding a new job and they are not at increased risk of ending up in a “worse” job position compared to people from the private sector.

An important contribution of this study is that it uses two large micro-level panel data sets [the Labour Force Survey (LFS) of the Hungarian Central Statistical Office (CSO) and the 200,000-strong sample from the register of the Central Administration of National Pension Insurance (CANPI)] to examine these questions.

Data and definitions

CSO Labour Force Survey. The CSO's Labour Force Survey (LFS) is a quarterly survey on a representative sample of 70,000 individuals. It provides information on self-reported labour market status and other characteristics. From the perspective of the present study, an important feature of the survey is that it asks about the reason for terminating previous employment (dismissal, redundancy, leaving the job etc.) and thus it is possible to distinguish between people who left the public sector voluntarily and people who were forced to leave. The survey follows participants for six quarters and thus consecutive quarters can be linked to create a panel dataset.

This study adopts a relatively narrow definition of the public sector when using CSO Labour Force Survey data: an employee is part of the public sector if they work in, public administration and defence, education, health and

social care or research and development branches¹ and their employer is not fully privately owned. Thus, the definition excludes people who work in privately owned hospitals or schools, as well as people who work in state-owned businesses in manufacturing or services (for example the Hungarian National Rail). We also exclude people who are employed in public works programmes because they are significantly different from the rest of public sector employees.²

CANPI pension insurance database. The other data set comes from the Central Administration of National Pension Insurance, and contains an anonymised administrative panel data of 200,000 people between 2000 and 2006. It records social security insurance status (for example work contract, public service employee or civil servant status, self-employed etc.) and corresponding income as well as transfers (sick leave, family benefits, pensions) received by the individuals in the sample for each month. In addition the data set includes some demographic and personal information (age, gender, post code), and the occupation (SCO) code for most social security statuses (except for self-employed statuses and alike). Thus the CANPI database makes it possible to follow the (official) labour market and transfer status of individuals on a large sample over a longer period than the LFS.³

Since the CANPI administrative database has no direct information on branch, public sector was identified jointly on the basis of social security status and the SCO code. An employee is considered to be part of the public sector if they are employed in public service, public administration, judiciary, law enforcement, armed forces or “premium years” status (the latter is designed for the employment of public employees just before the pension age limit), *or* if their SCO code indicates an occupation that is highly likely to be in the public sector (doctor, nurse, teacher etc.). Thus, the CANPI dataset (unlike the CSO Labour Force Survey) includes doctors and teachers in private hospitals, schools etc. among the public sector workers.⁴ In the analysis private sector means employees outside the public sector; the self-employed and entrepreneurs are excluded. The CANPI database does not have information on educational attainment, but this is approximated on the basis of occupation by assigning the typical (median) educational attainment of employees with the same SCO code in the Labour Force Survey to the SCO code of the individual in the administrative data.

1 This includes Hungarian NACE–2003 codes 73, 75, 80 and 85, that correspond to codes 72, 75, 84–88 in NACE–2008 (the latter has been used in the definition since 2009).

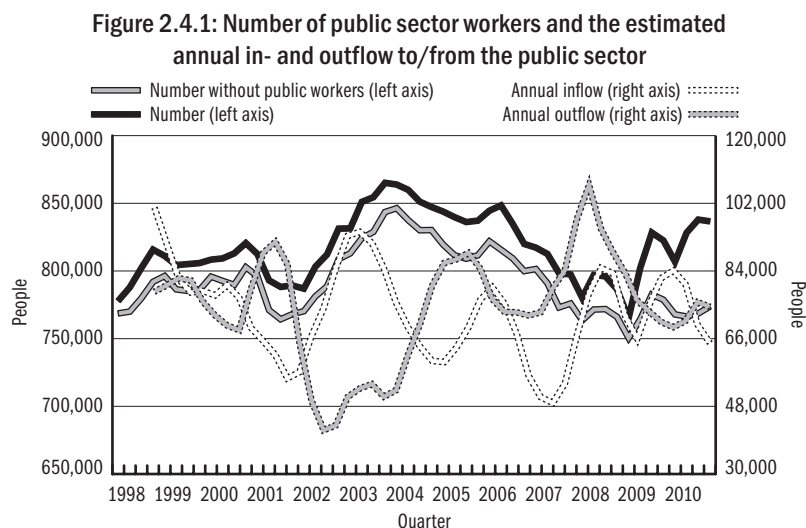
2 For details of the narrower definition of the public sector see *Elek and Szabó* (2013).

3 For a detailed description of the database see *Elek et al.* (2009a).

4 The exact definitions can be found in Table F2 in the Annex of the more detailed version of this study (*Elek and Szabó*, 2013).

The characteristics of people leaving the public sector

According to *Figure 2.4.1* the public sector comprised approximately 800,000 people between 1998 and 2002. Then, this number started to increase rapidly and reached its peak at around 850,000 by 2003–2004. By 2008, it dropped to 790,000, which was again followed by a rapid rise but only due to the rising number of participants in public works programmes.



Note: The number of people entering or leaving the public sector are presented after iterative proportional fitting and (symmetrical) moving average smoothing over four quarters.

Source: Own calculations based on *CSO Labour Force Survey* data between 1998–2010, public sector without public works participants.

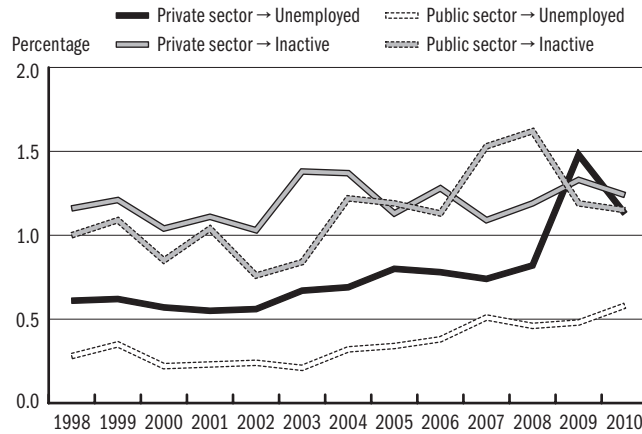
Figure 2.4.1. shows the estimated outflow from, and inflow to, the public sector (without public works participants) in this period.⁵ The probability of entry to, or exit from, the public sector was around nine per cent on average annually, and changes in the number of people entering or leaving the public sector all had a clear role both in the rapid rise between 2002 and 2004 and the decline later. In the following the first component, the outflow, will be examined. (On inflow see Chapter 2.3 by *János Köllő* in this *In Focus*.)

Figure 2.4.2. and *Figure 2.4.3.* show quarterly outflow rates from the public sector – without public workers – into inactivity, unemployment or other jobs in another sector compared to the corresponding rates from the private sector between 1998 and 2010.⁶ A large part of the outflow from the public sector was comprised of people who become inactive (retire, claim child care benefits or enter another inactive status). The quarterly probability of outflow to inactivity was on average 1.1 per cent and showed an increasing trend, although it was not substantially different from the same rate in the private sector. The probability of becoming unemployed and of job mobility were considerably lower in the public sector, on average around 0.3–0.4 per cent each, well below the same transition probabilities of private sector workers. It is noticeable that while the risk of unemployment increased considerably in the private sector after the 2009 crisis, it did not grow at all in the public sector until 2010. Hungary was still characterised – as shown by *Boeri and Flinn* (1997) in their earlier study on three transition countries (Poland, Hungary and Slovakia) – by lower mobility in the public sector compared to the private sector.

⁵ In the calculations we did not use unadjusted transition probabilities that were computed directly from Labour Force Survey panel data, but we adjusted these using *iterative proportional fitting* to ensure the consistency between stock and flow figures.

⁶ In addition to the above transitions, outflow from the public sector formally includes outsourcing as well. See the more detailed version of this study (*Elek and Szabó*, 2013) on the number of people affected by this.

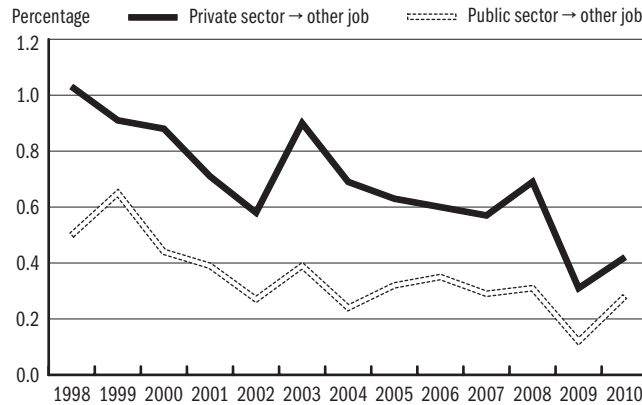
Figure 2.4.2: Quarterly transition probabilities from the public and the private sector into unemployment and inactivity



Note: The figure depicts the quarterly probabilities of outflow into inactivity and unemployment from the public sector (without public workers) and from the private sector.

Source: Own calculations based on CSO Labour Force Survey data between 1998–2010

Figure 2.4.3: Quarterly probabilities of job mobility from the public and private sector



Note: The figure depicts the quarterly probabilities of job mobility into other occupation and industry from the public sector (without public workers) and from the private sector.

Source: Own calculations based on CSO Labour Force Survey data between 1998–2010

7 On outflow into retirement see for example *Cseres-Gergely* (2008), on family benefits see *Scharle* (2008). On the “crowding-out” dynamics between younger and older employees in the public sector see *Cseres-Gergely* (2013).

In the following we will focus on two out of the three important transitions: outflow into unemployment and another job. As has been shown the probability of the third type of transition (into inactivity) is not substantially different in the two sectors, thus the mechanisms at work are likely to be broadly similar as well, and the general patterns of retirement have already been examined by various studies.⁷

Transitions into unemployment from the public sector

The raw data in *Figure 2.4.2* hide large variations in outflow in terms of educational attainment and other factors. A more detailed analysis of the risk of becoming unemployed shows that its probability in the public sector is approximately half of that in the private sector at each educational level.⁸ If a logit regression model is used to control for factors known to influence the probability of unemployment (for example gender, age, type of settlement), then the results show that people with higher educational attainment (at least general secondary education) in the public sector are in an even better position than those with lower education; the relative risk of unemployment (compared to the private sector) among the highly educated is 20–30 per cent better than the corresponding relative risk among low-skilled workers.⁹

Probability of re-employment. Using LFS and CANPI data the widespread belief that public sector workers who are made redundant remain unemployed for longer (i.e. are less likely to be re-employed) than similar workers in the private sector can be examined. The labour market status of redundant workers was observed quarterly for up to four quarters in the LFS; and monthly even for years – depending on the date of redundancy – in the CANPI data. We use *Prentice and Gloeckler's* (1978) proportional hazards discrete-time duration model that is often referred to as the *Jenkins* model in the literature based on *Jenkins* (1995). Similarly to continuous-time duration models, this expresses the hazard function $\lambda(t)$ of unemployment's duration T (or the “intensity” of re-employment) as the product of baseline re-employment intensity $\lambda_0(t)$,¹⁰ and a factor depending on individual characteristics:

$$\lambda(t) = \lambda_0(t) \times \exp(X\beta),$$

where β is the parameter vector to be estimated and X indicates the individual variables. Thus, individual characteristics have the same multiplicative effect on re-employment intensity in each period. If, for instance, $\beta = 0.1$, then the given variable increases the intensity of re-employment by about 10 per cent at each time point. (So if the probability of re-employment is five per cent in the sixth month of unemployment, then the given variable increases this to 1.1×5 per cent = 5.5 per cent.)

For the analysis of re-employment probabilities two approaches are used on both LFS and CANPI data to define people who flow out of employment. The first, narrower definition includes people who probably were made redundant.¹¹ The other definition is broader and includes all employees who become inactive or unemployed (the “total” columns on *Figure 2.4.4*).¹² The sample has been constrained to include only people aged between 25 and 54 years and not in a public works programme.

8 Obviously people with at least a general secondary education are a lot – by about a third – less likely, in both sectors, to become unemployed than those with at most a vocational education.

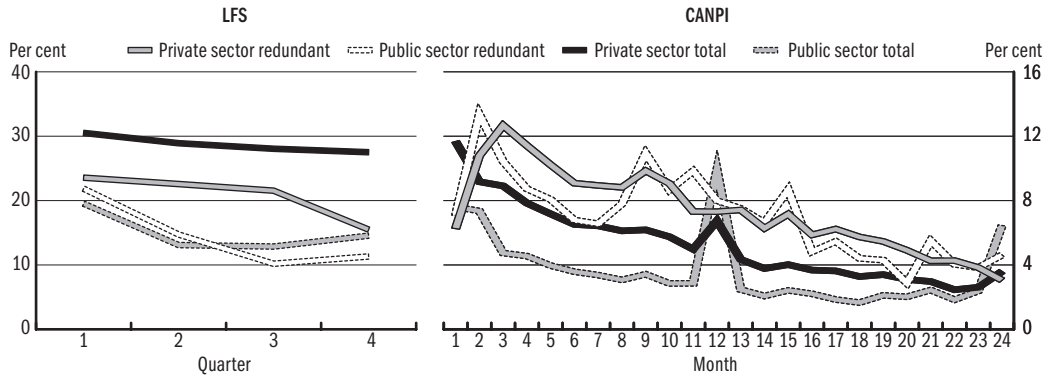
9 For the estimation results see the more detailed study (*Elek and Szabó, 2013*).

10 This is specified as non-parametric on LFS data and as a modified Weibull-distribution for the CANPI data (see the more detailed *Elek and Szabó, 2013* study).

11 In the LFS-based analysis these are people who were in employment at observation –1 and were out of work at observation 0 and reported that they had lost their job (or their temporary contract had come to an end). In the CANPI database people are considered “displaced” (“made redundant”) if they received unemployment benefit for any length of time within two months from the termination of their employee status. Thus, this is an even smaller group than the LFS definition because not all displaced workers are entitled to unemployment benefits.

12 In the LFS this includes people who became unemployed or inactive in a given quarter, while in the CANPI it includes people who are out of work due to the termination of a previous employment status or to long-term leave (because of illness or parental leave etc.).

Figure 2.4.4: Re-employment probabilities of people leaving the public and the private sector by length of time out of work, based on LFS and CANPI data (percentage)



Note: Re-employment intensity of employees aged 25–54 years after leaving a job, excluding public workers.

Source: Own calculations based on quarterly CSO LFS 1998–2010 and monthly CANPI 2000–2006 data.

Figure 2.4.4 shows that raw re-employment probabilities are consistently smaller for people who leave the public sector compared to employees from the private sector; however the difference is smaller among those who “lost” their job than among the broader groups. The results of the discrete-time duration models, presented in Table 2.4.1, also support this. (The detailed model specifications can be found in *Elek and Szabó’s* 2013 paper.) Results for people who are made redundant (groups of columns 1 and 3) indicate that the raw re-employment intensity after public sector work history was 25 per cent (LFS) or five per cent (CANPI) lower in each period compared to private sector work history. (However, only the LFS-based difference in re-employment rates is significant.) The difference essentially remains the same even after controlling for demographic (educational attainment, gender) and other variables (job tenure, transfer status): in the LFS model it is highly significant (at around 25 per cent) and in the CANPI model it is still not significant.

It is worth considering whether there is any difference in the re-employment probabilities of employees made redundant in the public and the private sector by educational attainment. In the bottom section of *Table 2.4.1* the interaction variable of public sector and educational attainment is also shown in addition to the control variables of the previous model. The results reveal that former public-sector employees with low educational attainment (primary education or vocational training school) are 20–40 per cent less likely to be re-employed according to LFS data and 10–20 per cent less likely according to CANPI than similar workers made redundant in the private sector. There is no such difference between graduates and in the CANPI specification between people with general secondary education. Overall the moder-

ately lower re-employment probabilities (25 per cent lower according to LFS and no significant difference according to CANPI)¹³ are entirely caused by the worse prospects of lower skilled employees, and this conclusion seems robust regardless the available datasets (LFS and CANPI).

Table 2.4.1: Re-employment intensity of the non-employed leaving the public sector (compared to the private sector) based on LFS and CANPI data

	LFS		CANPI (re-employment within 12 months)	
	"Redundant"	"Total"	"Redundant"	"Total"
Baseline models (raw difference between the two sectors)				
Public vs. private sector	0.762*** (0.056)	0.510*** (0.023)	0.945 (0.032)	0.635*** (0.012)
Models with control variables				
Public vs. private sector	0.766*** (0.061)	0.581*** (0.029)	0.962 (0.035)	0.794*** (0.019)
Models with interactions and control variables, benchmark = public sector × primary education)				
Public sector	0.606*** (0.091)	0.634*** (0.073)	0.790*** (0.059)	0.811*** (0.043)
Public sector × vocational training school	1.260 (0.266)	1.003 (0.154)	1.109 (0.118)	0.838** (0.063)
Public sector × general secondary education	1.195 (0.276)	0.844 (0.123)	1.381*** (0.133)	1.023 (0.067)
Public sector × higher education	2.141*** (0.521)	0.887 (0.132)	1.552*** (0.194)	1.018 (0.074)

Note: Calculations are presented for the age group 25–54 years (former employees only, excluding public works participants). The pension variable in the CANPI data was available for 2000–2004 only, therefore models including the transfer status were estimated for this period. In the CANPI models education is approximated as the median educational attainment for a given occupation (SCO code).

Discrete-time hazard models, where the table displays relative risks [$\exp(\beta)$], and standard errors are reported in parentheses. Hence there is no effect if the parameter estimate equals one.

Models with control variables: education, gender, age and other factors that affect re-employment are included. The full list of control variables and their estimated parameters are reported in *Elek and Szabó* (2013).

*** $p < 0.01$. ** $p < 0.05$. * $p < 0.1$.

Source: Own calculations based on *CSO LFS* 1998–2010 and *CANPI* 2000–2006 data.

Finally, groups of columns 2 and 4 in *Table 2.4.1* show the difference between the re-employment rates of people who leave their job for whatever reason by their sector of origin (public/private). Results based on both LFS and CANPI suggest that the raw intensity of re-employment is about 35–50 per cent lower for people leaving the public sector, which drops to 20–40 per cent in models with control variables. This means that although there is no significant difference between the re-employment probabilities of those who become redundant, inactivity is more likely to be a permanent exit from the labour market in the case of public sector workers compared to private sector employees. The main reason is that people who retire from the public sector or leave it due to “other reasons” (according to the LFS) are a lot less likely to return to work than those who leave the private sector for the same

¹³ The difference between the LFS and CANPI results is due to differences in the databases and the definition of the public sector.

reasons. In contrast to those who are made redundant, in these models there is no significant difference in the relative re-employment rate of public sector workers by educational attainment.

Job mobility from the public sector

As has been shown above, the public sector was not only more stable in terms of outflow into unemployment but also in terms of job mobility compared to the private sector between 1998 and 2010: in both cases the appropriate transition probabilities were around half of those observed in the private sector (*Figures 2.4.2 and 2.4.3*). However, raw data in *Figure 2.4.3* conceal which public sector groups – in terms of education, age or branch – are more likely to move to the private sector. Using a logit regression model, it emerges that people who are disadvantaged on the labour market (low skilled, living in rural areas) moved to the private sector with a greater probability in the last 12 years. There are also substantial differences in the raw probabilities of exit to other jobs from the three main branches of the public sector. However, these get much smaller after the inclusion of control variables, when only health care appears to still have a lower exit rate by about 25–30 per cent compared to the other two branches, public administration and education. (For details see *Elek and Szabó's* (2013 paper).]

Overqualification in the new job

It is a widespread belief that people who leave the public sector are likely to accept jobs for which they are overqualified (for example a teacher becomes an administrator). Transition from the public to the private sector provides an opportunity to examine this: if it can be shown that people who move from the public sector are more likely to be overqualified for their new job, then this might indicate the lower quality of the public sector workforce – compared to the private sector.

To address this question on the LFS database we assign to each occupation group (four-digit SCO code) the median educational attainment (MEA) of workers within that occupation group. Overqualification occurs when an employee has a higher educational attainment than the MEA corresponding to their occupation. Therefore being overqualified is not only an individual characteristic but also a characteristic of the occupation group. For example – at the level of detail of the current SCO classification – overqualification is much less common among people with general secondary education in the public sector than in the private sector. Overall, 14 per cent of public sector workers and 25 per cent of private sector workers are “overqualified”.

Therefore, it is not surprising that people who leave the public sector for another occupation in the private sector have a higher probability – around

37–39 per cent – of being overqualified in their new job than the 14 per cent average in the public sector. This raw ratio is also significantly higher than the ratio observed among movers to a different occupation and branch within the private sector (30 per cent). However, after controlling for other factors that are important for overqualification (especially education) the difference basically disappears. The logit regression models of *Table 2.4.2* show this.

Table 2.4.2: Probability of overqualification among people moving to a new job in the private sector by the sector of origin (public or private) (logit models)

	Odds ratio	
Raw odds ratio		
Public vs. private sector	1.664***	(0.147)
Model with control variables		
Public vs. private sector	1.040	(0.108)
Educational attainment (benchmark = vocational training school)		
General secondary education	7.313***	(0.349)
Higher education	13.627***	(0.987)
Sample size	14,063	
LR χ^2	2237.1	
Pseudo R^2	0.1726	

Dependent variable: Is the individual overqualified? Unweighted logit estimation. Sample: people moving to another occupation and branch (in the private sector), without public workers.

Note: The table shows the odds ratios, standard errors in parentheses. Raw odds ratio: odds ratio of being overqualified for people moving from the public sector *versus* people changing jobs within the private sector.

In the model with control variables: education, gender, age, age squared, and the dummy of at least two years' tenure in previous job are included. For the estimated parameters of control variables see *Elek and Szabó's* (2013) study. Control variables do not include primary education because people with primary education cannot be overqualified by definition.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Own calculations based on *LFS* 1998–2010 data.

The raw odds ratio of being overqualified for people leaving the public sector compared to people moving within the private sector is 1.66 (highly significant). After controlling for education and other parameters this drops to 1.05 and is no longer significant. So if people with similar educational attainment are compared then the widespread belief that people who come from the public sector are more likely to end up in “worse” jobs than those moving within the private sector can be refuted. This view might have developed because graduates are overrepresented in the public sector and they – naturally – are more likely to be overqualified in a new job compared to people with lower educational attainment.

Conclusions

This chapter has concluded that the public sector was considerably more stable both in terms of outflow into unemployment and into other jobs than the private sector between 1998 and 2010. The question of whether greater stability was related to adverse selection – “poorer” quality of public sector workers – was examined by looking at the re-employment rates of people who became unemployed and at the flow of workers from the public to the private sector.

The results have shown that the re-employment probability of workers made redundant in the public sector is moderately (by 5–25 per cent) lower than the same rate in the private sector; however the difference disappears in groups with higher educational attainment. Similarly the overqualification rate of movers to another job is no greater than in the private sector after controlling for educational attainment and other factors. Thus, these estimates do not support the widespread belief that people who leave the public sector face greater difficulties in finding a job and are more likely to accept jobs below their qualification level. The findings are especially interesting given the fact that our estimation strategy is more likely to overestimate rather than underestimate the quality differences due to a possible selection bias – people are much less likely to be made redundant in the public sector. However, related to its greater stability, people who leave the public sector for whatever reason are significantly less likely to be re-employed (the intensity of re-employment is 20–40 per cent lower even after controlling for other factors), mainly because pensioners who have retired from the public sector are significantly less likely to return to work.

The number of public sector workers increased between 2010 and 2013, although a large share of this increase was due to the expansion of public works programmes. It will be interesting to examine in the future how the re-employment prospects of people made redundant in the public sector have changed since 2010, when the Hungarian economy started to expand following the period of stagnation and recession after 2007. To answer this question the panel database of the Labour Force Survey as well as the database on individual social security contributions will have to be extended until 2013.

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2.5 Why do people choose to work in the public sector? The role of subjective factors

GYÖRGY MOLNÁR & ZSUZSA KAPITÁNY

Selection between public and private sector jobs is influenced by a variety of factors in addition to potential pay. An important objective factor is the relatively higher demand for highly educated employees in the public sector. The main subjective factor is greater security in the public sector in a number of ways: greater job security, more regulated working conditions, and more predictable promotion opportunities. Those who value these are more likely to choose to work in the public sector even if it means lower pay. Another important subjective difference is that people are often motivated by a stronger sense of mission or social responsibility when choosing to work in the public sector.

The decision can also be influenced by family circumstances. This study will identify a number of life scenarios that support this hypothesis. The effect of motivations related to social responsibility will be examined through participation in voluntary work and attitudes towards income redistribution.

The study will address three related questions: 1) What are the family factors which influence public sector employment? 2) Are public sector employees more likely to be involved in voluntary work? 3) Are there any special characteristics of public sector workers in terms of their attitude to centralised income redistribution?¹

Background

It was *Bellante and Link* (1981) who first suggested that risk averse people are more likely to choose to work in the public sector than in the private sector. Their study was mainly based on *Bloch and Smith's* (1977) finding that public sector employees – *ceteris paribus* – are less likely to become unemployed than private sector workers. *Gregory and Borland* (1999) highlighted a potential issue with the interpretation of results: *Bellante and Link's* (1981) findings only show that public sector employees are more likely to be risk averse than those in the private sectors. It is possible, however, that the effect mechanism works in the opposite direction and that the public sector prefers risk averse employees. Furthermore, there is a possible third explanation: public sector employees become risk averse as a result of the job requirements. *Hartog et al.* (2002) examined factors associated with risk aversion: public sector employees are more, while entrepreneurs are less, risk averse, private sector employees are in the middle.

In addition to security, the feeling of social usefulness can also play a role in choosing to work in the public sector. Various studies showed that the motive of doing socially useful work is stronger among public sector employees (see

¹ This chapter is a shorter and simplified version of the paper by *Molnár-Kapitány* (2013), which includes a more in-depth literature review and descriptive statistics.

for example *Dixit*, 2002). Dixit concludes that this motive is much stronger in the early stages of the establishment of institutions than later on, and is more characteristic of employees who work directly with people than managers.

Most studies examined the relationship between social responsibility and public or private sector employment using questions about social responsibility. However there is a risk of social desirability bias here; the responses of public sector employees might be influenced by social expectations towards them. In a behavioural experiment *Buurman et al.* (2009) showed that the motivation to help others is stronger than average among people in the early stages of their public sector career.

Perception of the extent and dynamics of income inequalities can strongly influence preferences for income redistribution (see for example *Meltzer and Richard*, 1981), and that might be an indicator of social responsibility. This is often assessed using the following question: “Do you agree that the Government should reduce income differences?” The answer to this question is influenced by a number of additional factors: absolute and relative financial and wealth situation, mobility, expectations towards the future, personal history, education, family structure, and so on. *Alesina and Giuliano* (2010) provide an in-depth review of the literature on preferences for redistribution, while *Molnár and Kapitány* (2006) analyse the issue on Hungarian data. Different factors might be important in different countries, nevertheless support for redistribution generally decreases with the increase of income and more positive expectations towards the future.

There are few studies that look at working in the public sector in the context of attitudes towards redistribution. *Jaime-Castillo* (2008) found a positive but not significant relationship between working in the public sector and preference for income redistribution in Spain. *Finseraas and Ringdal* (2012) using data from 23 European countries including Hungary found a very strong relationship. According to their analysis, employees who work in the public sector – *ceteris paribus* – are more likely to support the welfare state than others. In international comparison the Hungarian data suggests a paradox situation. Hungary is among the countries with a strong preference for a range of welfare state activities. However, when asked to indicate the desirable extent of taxes and welfare provisions on a scale between 0 and 10, Hungary produces the lowest value. One of the possible reasons for this contradiction is the low level of tax awareness in Hungary and undervaluing the tax cost of public services (see *Csontos et al.* 1998, *Gábos et al.*, 2007 and *Tóth*, 2009). Very low trust in public institutions in international comparison might also contribute to this phenomenon (*Tóth*, 2009). Therefore people think that it would be possible to provide more welfare services from the taxes they pay.

Linder (2010) examined the situation of civil servants in Hungary. In her dissertation she used the findings of a 2003 survey that asked public service

employees about the most attractive aspects of their job as a civil servant. Most respondents (75%) mentioned benefits for the community and security (70%), and any financial aspects only came after these. However, the author also raised the question of whether the frequent mentioning of community aspects might reflect social desirability (Linder, 2010, pp. 203–204.). At the same time, frequent reorganisations, large scale redundancies, and the weakening of the principle of irremovability raise the question of whether greater public sector job security is still the case in Hungary.

About the data

The analysis uses Hungarian data for the two-year EU–SILC (*European Union Statistics on Income and Living Conditions*) household panel survey collected by the Central Statistical Office in 2005–2006. The sample includes around 5,000 households and 13,300 individuals, out of which 12,800 people took part in both years. The selection of these years is justified by the inclusion of questions on life satisfaction and attitude towards income redistribution in the 2006 survey. The 2006 questionnaire also includes a question on voluntary work and there is information on the ownership of the workplace for both years. In the analysis the public sector includes civil servants, public service employees and employees of state or local government owned businesses. Household income was computed using the “OECD1” equivalence scale because this is the most appropriate within the Hungarian context (see also Cseres-Gergely and Molnár, 2008).

Why do people choose to work in the public sector? The role of family factors

In life situations when job security and predictability of working conditions is very important, the decision to work in the public sector might be an advantage. Such life situations might include *raising children*, the *health status* or *long term condition – not work-related* – of the individual or other family members, and factors related to other family circumstances. In terms of health status, people with a long-term condition – who are able to work – are more likely to work in the public sector. In addition to their own illness, the presence of long term conditions in the family and any caring commitments might also influence decisions about jobs.

The rate of people who had been unemployed previously is considerably lower in the public sector than in the private sector (28 and 42 per cent respectively). In addition to different education levels, this might be due to higher job security in the public sector or the fact that the public sector is less likely to recruit unemployed people for jobs. A two-year panel survey is very short for making any general conclusions, however it is indicative that only 2.6 per cent of public sector employees had been unemployed in the previous year

compared to 5.9 per cent of employees in the private sector. Therefore, in terms of the preference for job security, earlier unemployment in the family might be a relevant factor.

The sample has been limited to employees, excluding entrepreneurs and casual workers in the private sector. In the data set approximately 35 per cent of employees worked in the public sector. A logistic model was used to estimate what factors influenced the likelihood of working in the public or private sector and to what extent. The results of the estimation are summarised in *Table 2.5.1*; this presents not the coefficients but the estimated marginal effects. (For continuous variables the marginal effect shows the average effect of a one-unit increase in the explanatory variable. Categorical variables with multiple values were compared to reference groups, so for example a difference of 46.5 percentage points shows the difference in the probability – expressed as a percentage – of a female university graduate to work in the public sector compared to a male with a vocational school education. For dichotomous variables the marginal effect shows how much their occurrence increases or decreases probability.)

Each life year – taking all other explanatory factors as constant – increases the likelihood of working in the public sector on average by 0.5 per cent. Women with a vocational school or vocational secondary education or lower are 8–9 percentage points more likely to work in the public sector than men with the same level of education. Men whose highest education is general secondary education are as likely as women with the same education to work in the public sector and there is no significant difference between the two values. This means that the public sector provides better opportunities for men with a general secondary education and no vocational qualification than the private sector. There is no difference between men with a general secondary education and men with a college degree in this respect.

In terms of gender differences, it is greatest among graduates, particularly college graduates. Women with a college degree are 15 percentage points more likely to work in the public sector than men with a similar education, while among university graduates the gap is somewhat smaller: 12 percentage points. The likelihood of working in the public sector increases with education.

There are no differences in terms of the number of children; however there are two types of households that stand out. Single parents are more likely to work in the public sector than people in other types of households. This effect no longer prevails if there is another adult (for example a lineal relative) in the household. The result suggests that the public sector provides better opportunities for single parents to manage their child care responsibilities and therefore they are more likely to work here rather than in the private sector.

In cohabiting households the likelihood of working in the public sector is smaller than in other households. A possible explanation is that people

who value formalised security less are also less likely to get married or have a more secure job.

Table 2.5.1: Factors influencing selection between the public and private sector among employees, 2006 (logit estimate, dependent variable: selection of public sector job, N = 4,200)

Variable	Marginal effect (percentage)
Age	0.5***
Vocational training school or lower, male	reference group
Vocational training school or lower, female	8.3***
Vocational secondary school, post-secondary vocational qual., male	8.9***
Vocational secondary school, post-secondary vocational qual., female	17.6***
General secondary education, male	21.2***
General secondary education, female	24.1***
College, male	24.2***
College, female	40.9***
University or higher, male	34.2***
University or higher, female	46.5***
Single	-0.1
Married couple without children	-3.3
Married couple with child(ren)	1.5
Single parent with child(ren)	7.7**
Single parent with child(ren) + another adult	0.9
Cohabiting partners	-6.3**
Other type of household	reference group
Spouse or partner worked in the public sector in the previous year	11.5***
Long-term condition	6.4***
Spouse/partner or child in the household has long-term condition	7.3***
Husband had been unemployed before 40 th birthday of wife	7.3**
Wife had been unemployed before 40 th birthday of husband	3.7
Logarithm of regional unemployment rate	10.9***
Pseudo R ²	0.127

Note: We used robust estimation clustered for households. The estimated odds ratios and standard errors are available in Table 1, *Molnár and Kapitány (2013)*.

*** Significant at 1% level, ** significant at 5% level.

People who have a self-reported long term condition are significantly more likely to work in the public sector than those who do not have a long-term condition. One of the possible reasons is that the public sector provides better employment opportunities for people with long term conditions, or the public sector makes more of an effort to employ people who are disadvantaged due to a long term condition. This effect does not only prevail for their own illness; people whose spouse/partner or child has a long term condition are also more likely to work in the public sector.

Women whose husband had been unemployed before they (wife) turned 40 (or any time in the case of those aged under 40) are more likely to work in the public sector than others. There is no similar significant effect in the case of cohabiting couples or men (whether their wife had been unemployed).

Finally, in terms of regional effects, contrary to international experience, in Hungary people who live in the capital are less likely to work in the public sector than others. (More precisely this is only true for public sector employees, not for civil servants.) The phenomenon is related to the regional distribution of unemployment. The higher the unemployment in a region, the more likely it is that people in employment are working in the public sector. There are numerous small regions in the country where only the public sector provides any employment opportunities.

In summary, it might be concluded that attributing the decision to work in the public sector to individual risk aversion is overly simplistic; it is often the result of family rather than individual strategies. Nevertheless, these strategies will only remain valid in the long run if the public sector does provide greater security in these life situations. There have been some opposite trends in recent years: the economic and financial crisis might have increased the advantage of the public sector in terms of job security over the private sector; however frequent reorganisations and the further weakening of the principle of irremovability might have worked in the opposite direction.

Voluntary work

Voluntary work is considered a possible proxy variable for social responsibility. The number of people involved in voluntary work is rather low and less than half of them undertake it at least once a month. The frequency of voluntary work in the total adult population is just under 15 per cent, and 18 per cent among the economically active.

Estimates for factors associated with participation in voluntary work are presented in *Table 2.5.2*. The model was estimated for the *total* adult population rather than employees only. It is assumed that involvement in voluntary activities is cumulative within the family. To examine this, a variable was created that indicates the ratio of adults involved in voluntary work in the household. The augmented model that includes this variable is shown in the second column of the table.

People employed in public education, research and culture are around 10 percentage points more likely to be involved in voluntary work than people who are private sector workers. For people who work in health care or social care the difference is approximately six percentage points. Somewhat surprisingly, there is no significant difference between public administration and private sector workers in terms of involvement in voluntary work; *there is no evidence* of a greater than average social responsibility among people who work in public administration. This finding supports *Linder's* (2010) argument above that civil servants tend to respond according to social expectations in surveys. The indirect measurement, based on voluntary work most probably provides a more realistic picture.

Table 2.5.2: Factors influencing voluntary work in the adult population (logit estimation, dependent variable: does any voluntary work, N = 10,664)

Dependent variable: does any voluntary work	Marginal effect (percentage)	
	Model 1	Model 2
Employed in the private sector	reference group	
Employed in public administration	1.3	0.7
Public education, R & D, culture	10.7***	9.5***
Health and social care	6.3***	5.9***
Other public sector	1.4	2.0
Entrepreneur	1.9	0.6
Casual worker, public worker	6.8**	6.8***
Retired	0.6	0.6
Student	14.8***	11.0***
Other unemployed and inactive ^a	-1.4	-1.0
Logarithm of household income	1.7	0.7
19–29 years, not in education ^b	reference group	
30–39 years	6.6***	5.7***
40–49 years	8.2***	5.2***
50–59 years	9.3***	7.8***
60–69 years	8.9***	7.7***
70 years or older	6.8***	6.4***
Poor health	-6.2***	-5.3***
Female	-0.9	-0.7
Primary education or lower	reference group	
Vocational training school	6.0***	4.6***
Vocational secondary school	11.0***	8.8***
General secondary education	9.9***	7.8***
College	18.3***	14.7***
University	17.8***	13.3***
No children under 15 in the household	reference group	
1 child	5.1***	2.5***
2 children	6.7***	3.2***
3 children	10.2***	5.6***
4 or more children	8.1	4.5
Rate of adults involved in voluntary work within the same household ^c	-	21.0***
Budapest	reference group	
City with county rights	4.3***	3.4***
Town	2.6*	2.3**
Village	9.1***	6.8***
Pseudo R ²	0.098	0.189

Note: See comments for *Table 2.5.1*.

^a Includes: unemployed not in public works, full-time parents, homemakers, other non-working.

^b 99% of students age over 18 are between 19–29 years, therefore – as students are in a different variable – the reference group is comprised of 19–29 year olds not in education.

^c The indicator was obtained by dividing the number of adults who do voluntary work by the total number of adults in the household. The observed individual was not included in the numerator nor in the denominator. If there were no other adults in the household the value of the variable is zero.

*** Significant at 1% level, ** 5% level, *10% level.

For public service employees another question is whether voluntary work is truly altruistic and genuine or if it is forced upon the individual by the employer. This was examined by comparing old and new public service employees in the paper by *Molnár and Kapitány* (2013) mentioned earlier. The detailed findings of this study are not presented here, nevertheless they seem to suggest that even if there are expectations from employers, the people who work in human services have a higher level of social commitment than others.

It is worth considering what other factors influence involvement in voluntary work based on *Table 2.5.2*. Among students (mainly students in higher education) participation in voluntary work is very high, then it declines and again it slightly increases with age. As the level of education goes up involvement in voluntary work also goes up, and this is especially true for graduates. Voluntary work is partly related to children. The probability of voluntary work is higher in villages than in towns and especially Budapest. The financial situation does not play a role but family factors have a very strong effect.

More recent developments, radical re-organisations and increasing centralisation weaken the sense of mission. To test this hypothesis it would be important to include questions on voluntary work and other factors suitable for measuring social commitment in household surveys on a more regular basis.

Attitudes towards income redistribution and the public sector

In relation to income redistribution respondents answered two questions: “Do you agree that the Government should limit the income of the rich?” and “Do you agree that the Government should provide higher income to the poor?” There was a similar survey in 2002 as well, see *Molnár and Kapitány* (2006b). In the four-year period between 2002 and 2006 the rate of respondents who *strongly agreed* increased considerably by about 10 percentage points against those who *somewhat agreed* in both categories (*Table 2.5.3*). The share of those who strongly or somewhat agreed reached 91 and 80 per cent respectively in 2006.

Table 2.5.3: Attitudes towards income redistribution, 2002 and 2006 (percentage)

	Higher income for the poor		Limiting the income of the rich	
	2002	2006	2002	2006
Strongly disagree	4	3	6	9
Somewhat disagree	7	6	14	11
Somewhat agree	29	21	30	21
Strongly agree	60	70	50	59
Total	100	100	100	100

The starting hypothesis was that public sector employees are more likely to support income redistribution than others. There might be various reasons for this: the desire to reduce inequalities related to social responsibility; soli-

darity with the poor; funding of the public sector, including their own job comes from income redistribution; envy of the rich.

Attitudes towards the two directions of income redistribution were first examined using an ordered logit model; detailed calculations are presented in *Molnár and Kapitány* (2013). A simpler analysis was also carried out by merging the three categories other than *strongly agree*. There are no fundamental differences between the two results; however the second version – presented in *Table 2.5.4* – allows an easier presentation and interpretation of marginal effects.

Table 2.5.4: Factors influencing attitude towards income redistribution in the adult population (logit estimation, dependent variable: dichotomous variable of attitude towards income redistribution, N = 10,219)

Variable	Marginal effect (percentage)	
	Higher income for the poor	Limiting the income of the rich
Employed in the private sector		reference group
Employed in public administration	1.1	-1.7
Public education, R & D, culture	-0.4	2.3
Health and social care	5.6*	8.4**
Other public sector	3.7	3.0
Entrepreneur	-3.5	-8.0***
Casual worker, public worker	0.0	1.4
Retired	0.9	2.6
Student	-8.4***	-8.1***
Other unemployed and inactive	1.6	5.5***
Logarithm of household income	-7.8***	-10.2***
Age	-0.1	0.1
Poor health	4.9***	5.1***
Female	1.4*	1.0
Primary school education or lower		reference group
Vocational training school	-1.4	2.8*
Vocational secondary school	-6.4***	-5.1***
General secondary education	-7.9***	-3.5*
College	-13.0***	-14.7***
University	-13.5***	-21.5***
No children under 15 in the household		reference group
1 child	0.5	-3.9*
2 children	-9.0***	-9.7***
3 children	0.2	-7.6*
4 or more children	-13.8	-3.3
Budapest		reference group
City with county rights	7.0***	8.6***
Town	9.0***	11.3***
Village	9.0***	13.7***
Pseudo R ²	0.044	0.069

Notes: See comments for *Table 2.5.1*. The categories of the dichotomous variable for attitudes to income redistribution are “strongly agree” and all other categories combined. *** Significant at 1% level, ** 5% level, *10% level.

Contrary to our initial assumption, in the public sector only people who work in health care or social care support are more likely to support income redistribution than workers in the private sector. They are also more likely to agree with limiting the income of the rich. The question as to why there is a difference between health and social care, and education, science and culture in this issue might be raised. The review of literature has highlighted that attitude towards income redistribution can be related to the perception and attitudes to inequalities. The results suggest that these are different in the two areas of human services.

Entrepreneurs are less supportive of limiting the income of the rich than others. However, students are the least likely to agree with income redistribution in both categories. This is probably associated with their student status and positive expectations towards the future. Interestingly, “other inactives” (including the unemployed) are in favour of limiting the income of the rich, however there is no significant effect for supporting the poor.

As income increases, there is a noticeable decrease in the preference to income redistribution in both areas. Poor health increases preference for income redistribution; here self-interest is probably a motivating factor as people with a long term condition benefit from income redistribution. There is a negative relationship between educational attainment and preference for income redistribution. People with children are more likely to support limiting the income of the rich. There is a negative relationship between the size of settlement and preference for redistribution.

In conclusion, characteristics associated with preference for redistribution and voluntary work often work in the opposite direction, although not always. The correlation between the two factors is near zero, they are independent of each other. Therefore, attitude towards redistribution is not always a suitable indicator to measure social responsibility.

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2.5.1 The satisfaction of public sector workers

GYÖRGY MOLNÁR & ZSUZSA KAPITÁNY

Luechinger at al. (2007, 2010) examined selection between public and private sector alongside satisfaction. Their starting assumption is that people allocate themselves into the public or private sector based on their individual characteristics; they choose – if they have the possibility – between sectors based on their life situation and preferences, and this results in additional satisfaction. They argue that the public sector is chosen primarily by people who are more risk averse or committed to social issues, while people who aspire to work in the private sector value more highly the opportunity of a dynamic career. Thus, the sectors might offer different sources of additional job satisfaction to different workers. By comparing actual allocation and satisfaction with a hypothetical random allocation and related satisfaction they show that self-selection produces a non-trivial amount of additional satisfaction.

When looking at job selection, the question might be raised of whether there are hidden advantages in the public sector that are not possible to measure directly due to their nature. The analysis of life satisfaction (in a different terminology – subjective well-being) might provide answers to such questions. *Luechinger at al.* (2008) examined whether there was a difference between the subjective well-being of public and private sector workers based on data from the European Social Survey and the Latinobarometer. If public sector workers are more satisfied with their life than workers in the private sector that indicates the existence of hidden rents other than higher wages, and it also suggests that entry into the public sector does not depend only on education and skills but also connections. In their international comparison they found a greater than five per cent difference in satisfaction between the public

and private sector in four countries (Czech Republic, Greece, Poland and Paraguay). Unfortunately Hungary was not included in the international comparison because there were no questions on the ownership status of the employer in the period they looked at.

Therefore subjective well-being in Hungary was examined. In an earlier paper (*Molnár and Kapitány, 2006*) we concluded that the sharp increase in household real income between 2000 and 2002 increased subjective well-being less than expected, especially among private sector employees. The reason was that people were uncertain about the sustainability of growth and prospects for the future. At the same time there was no significant difference in the subjective well-being of public and private sector workers.

Using the database from 2005–2006 the question was examined again using the same methods. We found no significant difference between the subjective well being of public sector employees, and also more closely civil servants, compared to those who

are employed in the private sector. This suggests that working in the public sector does not have systematic hidden benefits in Hungary. The 2013 wave of EU-SILC again had questions on subjective well-being. As soon as the dataset becomes available it will be possible to examine whether there have been any changes over the past few years.

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3. THE INSTITUTIONAL ENVIRONMENT OF THE PUBLIC SECTOR LABOUR MARKET

3.1 Trends in labour law – the dismantling of job security in the public sector

BEÁTA NACSA

This section offers an overview of the regulation process leading to the dismantling of public sector job security, exploring the issue through the lens of broad-based labour law. First, we will look into the factors – that continue to be valid – that justify designing guarantees of job security and that argue in favour of sustaining legal protections. We will discuss the need for legal protections for a legally employed person and on the relationship between the guarantee of job security and the neutrality and professionalism of public service. Then, we will summarize the reasons behind the introduction of dismissal without stating cause and of the Constitutional Court and European Court of Human Rights overruling of that law. We will look at new regulations that replaced the overturned laws, which formally comply with the court rulings but which continue to contradict them in substance. Finally, we will briefly explore other flows in Hungarian labour law regulation that have eroded job security. In the beginning, we will underline the legal concept of civil servant (a term which has been changed repeatedly over time), but will also look at the public servant, albeit to a lesser extent.

Reasons in support of establishing and maintaining guaranteed job security

Traditionally, the legal status of the civil servant as used in the current sense was not considered a private law contract between equal parties but a status-based relationship regulated by public law derived from the principle of state sovereignty. The reasoning that sums up this approach is: “The state and the servant working for it cannot be set one against the other as contracting parties of equal rank ... The servant is not merely the executor of the will of the state but is also the implement by which the state fulfils its calling.” (*Mártonffy* unknown date, p. 667) The state bureaucracy assured the civil servant of life-long protection and a stable legal status.

The principle of state sovereignty was significantly reduced over the course of the 20th century insofar as interpretation of the various legal relationships of the state was concerned. Distinctions between the “external” and “internal” legal relationships of the body exerting public power became increasingly accepted. In fact, it was recognized that in external legal relationships the state

might appear not only as the entity exercising public power but also as a private entity, for instance when signing a lease or a purchase or sales contract.¹ By the start of the latter half of the 20th century it became clear that the principle of sovereignty did not cover the essence of the “internal” legal relationship between the state and the civil servant. Therefore, professional articles emanating from the west began exempting the civil servant from labour law arguments. Starting with the 1960s a new approach began taking over in which the body of public administration, as employer, was not exercising state power but was employing natural entities to meet specific functions, just like any other employer. State officials are no longer considered representatives of the state in the legal relationship surrounding employment. Instead, they are employees who work for the state and who – in this capacity – are far more conscious of their employee status than their status as a representative of a sovereign power (*Ozaki, 1990*).

The legal conditions of employment in the private and public sectors are identical in that the employee is subordinate to the employer and that the employee performs the tasks assigned by the employer, following employer instructions on any and all components of the job, doing so regularly and continuously, in return for remuneration. It is clear from the content of this work relationship (in the broad sense of the term) that the civil servant is economically and personally dependent on their employer, which is the outcome of the economic and organizational supremacy of power. At the same time, there are specifics to employment by the state that justify maintaining some unique features in the regulation of the legal relationship governing employment (*Horváth, 2008*). The lowest, fundamental feature of the civil servant fits within the broader concept of legal employment, and the secondary characteristics stemming from the civil service nature of the relationship form a superstructure.

The regulation of job security is essential to both layers, albeit the dogmatic arguments for them differ. It follows from the concept of legal employment in the broader sense that a tenet of principle to protect the weaker entity, as is typical of all legal employment, is needed here, too (*Morris and Fredman, 1993*). The civil service character – as a secondary characteristic – also justifies the regulation of job security guarantees as has been pointed out by experts in labour law and public administration law alike, since this is how to provide professionalism, reliability, and an absence of prejudice in public administration. In this context it is worth exploring how Hungarian professional literature has described the guiding principles of public administration law. István György underlined the principles of political neutrality, lawfulness, subordination, career and professionalism, and heightened responsibility.

Political neutrality is the outcome of the separation of civil service and politics. “...the personnel involved in public service need to be separated from

¹ If the state (body) appears as a private law entity within a legal relationship, then the rules of private law – with possible but not necessary modifications – are the ones to be followed. Privity is based on contract and not on a unilateral act of the state.

the venues of political infighting, and must be rendered independent of party politics.” (György, 2007. p. 47) The political neutrality requirement is the defining principle of public administration from which numerous other principles of modern public administration are derived. The principle of political neutrality includes the requirement of loyalty between the civil servant and whichever authority is in power. The civil servant is mandated to accept the legitimately elected power and execute every lawful instruction coming from it (Gajduschek, 2006).

The *requirement of loyalty* gives rise to the promise that a change in government will not result in large scale replacements among staff and that political neutrality is, in the final analysis, the ultimate factor securing the evolution and operation of professional public servants.

In public administration the *principle of lawfulness* is slightly different from its primary definition in the private sector. In the private sector, everything is legal unless prohibited by law. In the public sector, the civil servant may only do what the law explicitly permits or prescribes. At the same time, the law places a more powerful responsibility on the civil servant than would be the case otherwise, since it requires not only that the civil servant obey the law, but also that they compel others to do so.

The *principle of subsidiarity* on the one hand set public administration as subordinate to the elected bodies and on the other, it establishes a strict hierarchy within the official apparatus, which includes the ensuing right to give orders.² Morris and Fredman (1993) added that the strict hierarchy of superior and subordinate in an office ensures a clear chain of command that goes up to the minister’s responsibility to parliament on the one hand, and on the other, makes sure that the official staff exercises its public function vis-à-vis the citizens in a transparent, fair and unbiased way. Lőrinc and Takács (2001) have summed up the basic principles of public administration as manifest in the democracy and effectiveness of public administration. In this context they view the principle of democracy as the restriction on public administration. All of these principles will directly or indirectly reinforce the requirement derived from the specifics of employment, that a civil servant may only lose their job if, for some reason, the purpose for which they were employed no longer exists.

Regarding the other basic form of public sector employment, the public servant, a unique approach in Hungarian laws has existed regarding this form of employment since it was established in 1992. The public servant fits in somewhere between the general employment condition and the civil service. In this case the employer performs a public service³ that does not require the exercise of some form of public power or state prerogative. The public servant employment status was established by Act XXXIII of 1992 on public service employment (hereinafter: Kjt.). The basic feature of this employment

2 The right to give orders, which is generally typical of work as an employee, becomes reinforced because of the principle of subsidiarity.

3 Therefore, the regulation of the public servant is exceedingly diverse, since any number of sectoral laws (on public education, higher education, health care, etc.) and ministerial decrees regulate the specifics of people employed under this title.

status is that it was established to meet topical political and – even more so – budget circumstances. In other words, it is the product solely of pragmatic considerations and not legal dogma (*Horváth, 2008*).

The dismantling of job security in labour law in general and in the public sector (among civil servants and public servants) in particular

The labour law of 1992 regulated public sector employment separately, separating it from private sector employment, and also separating the civil services, the public services, and the professional members of the armed services (the latter includes law enforcement and firefighting) within the public sector. The 1992 regulations introduced a set system of terminating employment in the public sector. The text of the law included an exhaustive list of the factors, which, should they occur, would allow or require the employer to unilaterally terminate employment. The guiding principle of Act XXIII of 1992 on the legal stature of civil servants (hereinafter: Ktv.) regarding job security was that the people employed were career civil servants who did their work professionally, and in exchange the state would guarantee them job security and regular opportunities for advancement.⁴

In contrast, the private sector worked under the principle of the semi-restricted job termination system as set down in sequential Labour Codes. In other words, it listed the specific types of causes for which dismissal became possible, which were concretized over a lengthy timeframe by day-to-day practices and court interpretations of the law (Act I of 2012, Paragraph 66, Section 2). This regulation faithfully reflected public thinking in terms of labour law in the 1990s, which also coincided with the above reasoning. In other words, labour law accepted job security as the goal and requirement of the regulation.

In the meantime Hungarian labour law underwent significant changes. Labour law protections were reduced drastically and it seems reasonable to assume that current Hungarian regulations offer one of the lowest levels of work protection in all of Europe and North America.

Although arguments in favour of reducing job protections can be heard often by a wide range of analysts, convincing dogmatic arguments are sorely absent from this position. They cite the dismantling of labour protections as a way to expand employment and improve competitiveness without demonstrating exactly how the reduction in protections will do this, or through what mechanisms, albeit their goals are valid and necessary. The literature covering labour law lacks systematic investigation into how the past two decades of labour law, which deregulated employment, has impacted job creation and competitiveness. Has it improved them and if not then why do we believe that future deregulation will do the job? To my knowledge related sciences have also failed to prove a cause/effect relationship. Actually, they seem to dem-

⁴ These regulations are the most important guarantees of the principle of closed public administration discussed above.

onstrate the opposite. Labour economy research (domestic and international alike) have verified that the dismantling of labour law protections has not influenced employment levels. At most it has had a statistically insignificant impact on the composition of the workforce. (*Esping-Andersen and Regini*, 2000, *Cazes and Nesporova*, 2007, p. 36–39) Among the goals thought to be attainable with deregulation is increasing employment (something which can be quantified and monitored) and the much less palpable goal of improving competitiveness. However, generally such analyses fail to offer concrete information on the content of competitiveness or the desired goal. This makes it harder to explore and monitor cause/effect relationships.

In the public sector, reducing job security was intended to, in part, meet other goals. Partly it was a move to cut budget outlay and partly – as of 2010 – it was to adjust public sector staff to meet political preferences. The eroding of job security among public sector employees started in about 2000. After facing the legal consequences of unlawful dismissals – which the Constitutional Court reversed in Decision 4/1998 (III. 1.), the job of eliminating the legal consequences of unlawful dismissal got underway by amending the law.

An amendment to Kjt. on 1 September 2007 essentially redrew the set of legal consequences for the unlawful dismissal of civil servants (Kjt. Paragraph 34.) The amendment started by discarding the principle of *restitutio in integrum*, under which the violator of the law was mandated to return the unlawfully dismissed employee to their original job. Under the new rule the civil servant only could request being returned to their original job if the employer's decision violated the principle of equal treatment, if the person was under special protection prohibiting or restricting dismissal, or if the move violated special workplace protections afforded to elected union officials (a member or chair of a civil service council or a public employee representative) or a labour safety official. (Kjt, Paragraph 34, Section 1., Subsections a and b). Among the factors requiring the return of someone to their original job, the changed legislation – effective 1 January 2010 (Subsection c) – cited dismissal without legal cause or disciplinary dismissal that was found to be a disproportionately severe sanction.

All other violations of the law – in fact every single violation usually committed – were cited among the violations regulated by Section 4., where the legal consequence was limited to a payment obligation on the part of the employer, the amount of which was determined by the court. Therefore, if the employer gave no cause for dismissal or if the cause was a falsehood (which occurs quite often), the civil servant could not request a return to their former job. In fact, under decrees that took effect in 2007 and are still in effect, albeit in changed form, these regulations, which were full of fault legally, were considered valid, and the job was classified as legally terminated at the time specified in the notice of termination. In other words, an employer could

deliberately flaunt the law and dismiss a civil servant without risking the consequence of having to return the civil servant to the job, since the risk of having to return the person to the job was non-existent except in the specific cases listed in the law.

The driving force of this 2007 amendment was an attempt to save central budget monies. Ending the need to return someone to a job also prevented a returned employee from demanding back pay and, should the employee again be dismissed, severance pay. Limiting the amount of back pay a person was owed saved the budget from having to pay out multiple years' worth of salary that the civil servant had not worked for when court proceedings were lengthy. While the regulation did save money it was dogmatically inconsistent, since limiting the chance to return to the job to a very limited circle broke with the fundamental legal principle which declared that an action which seriously violated the law was null and void and could have no legal consequence.⁵ At the same time, the lengthy court proceedings and consequentially, the employer's growing payment obligation occurred for circumstances unrelated to the civil servant since the lengthy proceedings generally could not be blamed on the malevolent efforts of the civil servant trying to drag out the proceedings.⁶ In fact, the drawing out of the court proceedings was disadvantageous to the plaintiff civil servant since the outcome remained in limbo, requiring them to secure a living through other means while remaining uncertain of receiving any compensation (sometimes for years on end) even if there were solid grounds for the lawsuit. It would have been in the interests of both sides for the government to have taken measures to get the courts to move faster in labour disputes and had this been done legislative amendments running counter to labour law dogmatics could have been averted.

Another amendment to the detriment of civil servants limited their right to back pay. A provision declaring that an income covered through another source did not have to be paid out by the employer who had violated the law was already in effect. In other words, if the civil servant had found another job in the interim and received a salary, or had been receiving unemployment benefits, the amounts received were to be subtracted from the amount the employer had to pay. The 2007 amendment added the twist that a civil servant who did not display proper diligence in seeking another source of income was not entitled to back pay either. Failure to display proper diligence particularly meant that the person did not cooperate with state employment agencies in looking for a job, did not conclude a job-seeking agreement with them, or that the employee had rejected what the employment agency qualified as a satisfactory job offer – in keeping with the conditions in the law on job seeking – and was not actively seeking employment otherwise (Kjt. Paragraph 34, Section 5.) If the court found an absence of proper diligence it could investigate all circumstances surrounding the case before setting back pay, if any.

⁵ Act I of 2012 on the new labour code cited this logic *expressis verbis* as an exception to the principle of said action being null and void.

⁶ Cases got dragged out far more often by unrealistically long (sometimes six-month) interruptions between two court proceedings, delayed evidence submitted by the employer (the employer did have some obligations) and lengthy expert evidentiary proceedings.

Shortly after the new labour code was adopted the legal consequences of unlawful dismissal underwent further erosion in the sphere of public service. As of 1 July 2012, the abovementioned regulations on the legal consequences of unlawfully dismissing a civil servant as specified in Kjt. were declared null and void and replaced by regulations in the new labour code containing even weaker sanctions.

As regards public service employment regulations, public service itself was essentially redesigned between 2010 and 2012. Parliament adopted Act LVIII of 2010 (Hereinafter: Kjt.) on the legal status of government officials.⁷ The new legal status of government officials brought two essentially new approaches into the regulation of public sector employment conditions. 1) It introduced dismissal without cause, drastically reduced notice time, and separated the duration of notice time from the length of time the person had spent on the job. (Kjt. Paragraphs 8 and 9).⁸ 2) Instead of overtime pay for overtime work government officials became entitled only to time off, on an hour-for-hour basis (Kjt. Paragraph 15). These regulations were later incorporated into the rules governing civil servants.⁹ The reasoning in the law on the legal status of government officials stated that the amendment was necessary to establish balance among the subjects covered by the law, i.e. employer and employee. Therefore, the obligation to provide cause in the unilateral termination of employment had to be identical for both as did the period of notice.¹⁰ This regulation was extended to civil servants as of 1 January 2011. Under the new regulation there was no need to offer cause for dismissal – much the same as when termination was initiated by the employee – and notice time, previously adjusted to years on the job, was reduced to two months for termination by either employer or employee.

The reasoning behind this law contradicted the basic principle governing labour law. The argument, which set a body of public power on the same footing as a private individual not only broke with the principle of sovereignty but also rejected the existence of the difference in economic and organizational power as it exists in employment situations, and treated the legal status of the government official and the civil servant as equals under civil law. Consequently, it rejected the protective function of labour law based on the principle of proportionate interest, which is the principle that labour law regulation had to protect the weaker party, the one performing the work, at the points where they were vulnerable, and to offer sufficient protection through legal regulation to counterbalance that vulnerability (*Hepple*, 1996–1997). Under the generally accepted principle of labour law dogmatics, in all regulated systems (including the labour law of the United States which is considered the most liberal) the employer is more restricted in job termination than the employee. The economic justification for the regulation significantly favouring the employee is the excessive economic power of the employer, while the

7 This new legal status of government officials replaced the old one as part of the legal status of employment in bodies of public administration.

8 For an early albeit well-developed critique of the law see: *Kocsis* (2011).

9 Ktv. Paragraph 18, Ktv. Paragraph 71, Section 2, Subsection a) stated that the regulations in the labour code calling for cause to be given for dismissal was no longer to be applied to civil servants as of 1 January 2011.

10 This is the portion of the reasoning quoted by the Constitutional Court in its decision to overturn the law discussed below.

legal justification is the right to work (*Collins*, 1991). The demand for protection of the employee when employed by the state is even stronger, since the state is an employer whose excessive power is vastly heightened. In addition, the requirement for job security is derived from the guiding principles of public administration (particularly those of neutrality and efficiency), as was discussed in greater detail earlier in this analysis.

In 2011 both of these laws were struck down by the Constitutional Court as unconstitutional. The Constitutional Court struck down the decree on the status of the government official in Decision 1068/B/2010. It began its justification with the general characteristics of public service regulation and the specifics of a closed public administration system. Then it focused on the issue on the basis of the right to work and the constitutional regulations on the right to bear public office, and on past Constitutional Court interpretations of these rights. Finally, it drew the conclusion that Ktjt. Paragraph 8, Section 1, Subsection b) allowing the termination of government official employment without cause was unconstitutional because it violated the principle of the rule of law regulated in Paragraph 2, Section 1 of the Constitution, the right to work regulated in Paragraph 70/B, Section 1, the right to bear public office regulated in Paragraph 70, Section 6, the right to seek redress from the courts in Paragraph 57, Section 1, and the right to human dignity in Paragraph 54, Section 1. The date given for overturning the law on government officials was – surprisingly – 31 May 2011, which allowed nearly another six months to continue the dismissals without cause although it was based on regulations declared unconstitutional for multiple reasons. The Constitutional Court gave its reason for the nullification date as the fact that parliament had to enact a new law for which it needed several months to prepare.

In a separate decision the Constitutional Court overturned the same provision allowing dismissal without cause in Ktv. § 17., offering a reasoning that essentially coincided with the above, based on constitutional principles.¹¹ The termination of the regulations governing public official legal status was retroactive although, since the effect of the earlier regulations was restored with the overturning of the new ones the given decree was overturned with *ex nunc* validity.

The legislation that followed the Constitutional Court decision was CX-CIX of 2011 on public service. While less obvious, it retained the right to terminate employment without legally relevant cause despite a 2011 government document called the Magyary Program that declared itself to be establishing the basics of “good governance” and “good public administration.” On the surface the dismissal system returned to the former one but the reasons the employer was required to give were as abstract as “becoming unworthy of the position” and even “loss of confidence in the person by the manager.”¹²

One can cite objective considerations within the rubric of becoming unworthy of a position. Therefore at least in principle it is possible to offer a concrete

¹¹ Constitutional Court Decision 29/2011 (IV. 7.)

¹² Act CX-CIX of 2011 on public service officials, Paragraph 63, Section 2, Subsections a) and e)

reason, and which limits challenges in the courts. While it is possible that losing the confidence of the manager can be the result of objective circumstances, in cases when rational and consistent reasoning could describe how confidence was lost, the wording itself suggests that subjective considerations could play a much bigger role than objective ones when coming forward with that argument. In other words, the dismissal could be the outcome of a completely subjective factor, such as that the manager personally disliked the civil servant and did not want to work with them. This extreme interpretation makes possible not only politically motivated discrimination but discrimination by gender, age, family status, or disability, which conflicts with European Union *acquis* and international legal norms.¹³ The concepts of “unworthy” and “loss of manager confidence”, though the former is the less serious of the two, are hardly different from the legislation thrown out by the Constitutional Court, unless judicial practice can restrict their use.¹⁴

Summary

The new labour law has almost completely eliminated job security with labour regulations covering civil servant employment conditions. The first moves towards this end were in the mid-2000s, when regulations governing job termination that no longer rested in dogmatic principle were first introduced, exclusively to reduce budget expenditure. The regulations that diminished basic labour laws tended to “go around and come around.” In other words, if a regulation withstood Constitutional Court scrutiny it was included into additional laws and thus reduced labour law protections for all categories of public sector workers. The process peaked in 2010 when dismissal without cause was introduced. At this time political factors appeared to have been more important than budget considerations, given that a new political party moved into office. The excuse, however, was to establish true equality among partners (i.e. employer and employee). The inconsistency of the argument and the absence of a foundation of principle were underlined by the fact that in addition to the reference to the equality (non-existent) of state and civil servant, – the law also argued for state sovereignty, i.e. its overwhelming authority – while calling for the termination of other rights. Taken separately, neither argument holds water. Applying them together is self-contradictory and spotlights the absolute superficiality of the reasoning given for the laws.

The regulation allowing dismissal without cause was overturned by both the Constitutional Court and the European Court of Human Rights,¹⁵ in part for overlapping reasons. In its decision the Constitutional Court underlined the right to work and the right to bear public office while the European Court of Human Rights found the right to fair procedure to have been violated by the *de facto* impossibility of court control.

13 Lawsuits continue to remain possible despite the new regulation, but given that the highest level of this strange regulation is that of employer subjectivity, it is possible that anti-discrimination regulations would also be violated in Hungarian practice. Balancing out the two norms will require very circumspect interpretation of the laws.

14 For more on the uncertainties related to the new regulations, see *Mrs. Nagy* (2012) and *Ferencz* (2012).

15 European Court of Human Rights, Section Two. *K.M.C vs. Hungary, case* (submission 19554/11) Strasbourg, 10 July 2012. Final. 19 November 2012.

The new legal regulation formally complied with court conditions but the new reasons which allowed termination of employment, in particular, the loss of confidence on the part of the manager, retained the opportunity to terminate employment for purely subjective reasons. This has opened the door to all manner of discriminative and unlawful employer practices.

In addition to rewriting the causes for which an employer or the employee could give notice, sanctions for unlawful dismissal were reduced. Reducing sanctions to a minimum along the entire spectrum of labour law leads to a situation in which employees will not protest even flagrant violations of the law in workplace practices. Formally, this will lead to an improvement in statistics on labour-related lawsuits but in practice will lead to deteriorating working and living conditions.

At the same time the regulations are dysfunctional from the aspects of organization development and human resource management because they reinforce servility and stifle opportunities for independent thinking and action. Thus, they could lead to the deteriorating performance of businesses, government administration, and the institutions that service them, possibly within the very near future.

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3.2 The specifics of setting salaries and interest reconciliation in the public sector

ERZSÉBET BERKI

The portions of the Hungarian legal system covering public sector employees that evolved between 1992 and 1996 divided up the public servant sector which until then had been nearly a single entity. The divisions were partly along the lines of branches of service and were partly linked to the role of their employers. Three major public servant groups were established within the government power structure: armed services (including law enforcement and the military), public servants, and public service employees. Without offering details on the specifics of these legal relationships, we do need to say that the first two are related to public administration and power functions while the employers of public service employees provide residential services. Therefore, employment specifics related to armed forces and public servants tended to make up “closed systems”, while the regulation of the public service employees was less restricted and more like that of the business sector.

Wage systems for public sector employees

The differences appear in the pay scales even though all three operated with set remuneration systems based on education level and years of service that determined both rank and wages. There was one significant difference regarding public service employees, in that while the minimum was set, anything higher could be negotiated. The regulation of labour relations was set in accordance with that difference. Among public service employees wage agreements and collective agreements were possible, while both were out of the question for the other two categories.

The pay scale for the armed service and for public servants had little room for employer decisions and there was no such thing as collective bargaining, albeit the system did contain a smidgeon of flexibility. The law governing public servants allowed local governments to set their own “base salary”¹ for pay scales. As far as civil servant salaries were concerned, over time the law allowed deviation from the pay scale, initially by ± 20 per cent and then over a range of from minus 20 per cent to plus 30 per cent. In addition, it introduced a configuration called “personal remuneration” which was completely divorced from the pay scales. As of 1996 there were two separate pay scales for armed forces personnel. One was a remuneration scale linked to position and the other linked to rank. Remuneration under the first system differed from the pay scale in that it operated along a 100–120 per cent scale. Promotion dates were set into zones, which meant that when time for a mandatory promotion arrived (this was the lowermost section of the waiting time zone) the remuneration also increased.

¹ The “base salary” (*illetmény-alap*) is a basic point of the pay scales, regularly set by the law. Mandatory basic salaries in all brackets of the pay scale are defined by tariff multipliers combined with the “base salary”. While salary increase can be given for everyone by establishing a higher “base salary”, the wage proportions across different brackets remain unchanged. (Editor’s note: there is a similar technique in the French public sector pay scale, the common English translation for the French counterpart of “base salary” is “index point”.)

For all three categories, a broad range of bonuses topped on the basic salary. For public servants the remuneration was made up of the salary set by the pay scale plus a remuneration supplement, while for armed forces remuneration for rank was added to this.

Although all three remuneration systems were based on nearly identical principles and centrally set wages were the rule, actually salaries were quite different from one another. This was because of differences in the pay scale (more specifically, the structure of the pay scale and the various multipliers) as well as the fact that the “base salary” for public servants and civil servants (the latter’s “base salary” has to be applied for armed forces) was quite different. We have summarized mandatory pay for the three categories under the rules valid for 1994 in *Table 3.2.1*.

Table 3.2.1: Extreme values of mandatory pay for employees with the same education level in 1994 (HUF, minimum wage at the time: HUF 10,500)

	Soldier ^a	Civil Servant	Public Service Employee
“Base salary”	18,000	18,000	8,000
Minimum	30,096	9,900	8,000
Maximum	122,760	63,360	44,000
Maximum/minimum	4.08	6.40	5.50
By education level, with 10 years of service			
Eight grades primary school	-	21,780	10,500
Secondary school completed	32,640	31,680	16,800
College/university	75,240	46,530	27,200

^a Given that Act XVIII that regulated armed services was only adopted in 1996, the calculations here are based on Defence Minister 50/1987 and 8/1994 Ministry of Defence Commands, which are limited to soldiers.

Source: *Berki* (1994a) p. 16.

In 1994 – after the civil servant pay scale was introduced but before the public service one came out² – the average monthly income of civil servants according to a survey in May was HUF 43,342 while the average for public service employees was HUF 41,052.³ In other words, there was hardly any difference at this time, but by the end of the decade they were quite different. According to a report published annually by the ministry responsible for labour, in 1998 comparative earnings⁴ took the shape seen in *Table 3.2.2*.

Table 3.2.2: Comparative earnings in the public sector, 1998

Sector/sub-sector	Comparative earnings ratio compared to the private sector (per cent)	Actual amount, monthly	As compared to the average for the public sector (per cent)
Public sector total	64.2	64,158	100.0
Civil servants ^a	90.3	98,519	153.6
Public service employees	59.3	54,934	85.6

^a No data available for armed forces.

Source: *KSH Informative database* – Gross average earnings of civil servants and public service employees in public institutions.

² It took effect on 1 January 1995.

³ See: Briefing on the income evolution over the first half of 1994 and valid collective agreements. Ministry of Labour, September 1994 (quoted by *Berki*, 1994b, p. 12).

⁴ When comparing earnings, standardized data for education level and length of service were used.

In other words, some of the differences in income were built into the pay scale and others were the outcome of the lower “basic salary” of public service employees, when legislators built a huge gap into the pay system even though the difference in the social status of the three groups at the time of the regime change did not justify it.

The forums for interest reconciliation and the main issues

When the interest reconciliation system took shape (*Table 3.2.3*) there were regular negotiations between the government and the public sector unions, which reached and signed onto agreements. Until the 2000s, the most important venue for bargaining was the Interest Reconciliation Council for State-financed Institutions (KIÉT),⁵ and later the salary issue became the central theme of the National Labour Council for Public Service Employees (KOMT).⁶ Dialogue was essentially between the government and the unions with the positions of local government associations determined by central government budget resources. The complete set of vertical and horizontal forums for public service interest coordination was ready by 2002. Every trade union federation and confederation organizing public servants within the government’s power structure participated in the coordination on nationwide, sectoral, sub-sectoral, settlement and workplace level alike.

Table 3.2.3: Peak interest reconciliation forums in the public services

Time of operation	Forum
September 1991 to October 2001	Interest Reconciliation Council for State-financed Institutions (KIÉT)
July 1993 to July 2001	Interest Reconciliation Forum for Civil Servants (KÉF).
October 2001 onward	Labour Council for Public Service Employees (KOMT)
July 2001 to March 2012	Interest Reconciliation Council of Civil Servants (KÉT), National Local Government Civil Servants’ Interest Reconciliation Council (OÖKÉT)
November 2002 to October 2006	Intergovernmental Interest Reconciliation Forum of Law Enforcement Bodies (RSZTÉF)
December 2002 onward	National Public Service Interest Reconciliation Council (OKÉT)
October 2006 to July 2012	Interest Reconciliation Forum of Armed Forces Members (SZÉF)
March 2012 onwards	Interest Reconciliation Council of Public Servants (KÉT)

5 This was a four-party forum operating from 1991 to 2001. The members were the government, the federations of public sector unions, the federations of local governments and several organizations of institutional employers, the latter without voting rights.

6 The governments were generally careful to keep salary levels satisfactory in central government public administration, while regulations also made it possible for local governments to do the same.

Given the significant differences in systems of remuneration and in earnings levels, the unions involved in the various interest reconciliation forums were focused on reducing the income gap that, as already mentioned, had been built into the system. The players in the system were also pushed towards bargaining upon the “base salary” by the knowledge that if the “base salary” were increased pay for the entire circle of employees under their authority would increase quasi automatically. As following the central bargaining the “base salary” is legally set finally, its value determines what the outcome of bargaining will be during the sectoral or local phases.

In the late 1990s and primarily on trade union initiative a spontaneous effort was made to decentralize wage bargaining,⁷ which resulted in separate wage multiplier systems used for the various public service employee groups. The profession/sectoral wage multiplier was intended to provide a measure of extra earnings, in addition to the public service employees' pay scale, to the employees in the various sectors. The rationale was 1) to be able to raise pay in selected sectors without changing the pay scale but while keeping in step with the differentiation in it, and 2) to deny the increase to other sectors employing public service employees. The size of the multiplier was strongly differentiated, depending primarily on which sector had a stronger influence on government decisions.

The outcome was a higher education and R + D pay scale that is still in effect, that adjusted the mandatory (guaranteed) salaries⁸ of teachers and researchers to the system of professional promotions. At this time KIÉT still existed formally but was no longer in operation. Given the decentralized bargaining mechanism it might have appeared to no longer be necessary.⁹

However, it soon became clear that decentralized bargaining had numerous disadvantages. The government conceded to the demands of some groups of public service employees while other groups (sectors and professions) fell behind wage-wise while no one was really controlling labour market impacts. Another argument against decentralized bargaining was that the unions – for the most part, the ones in the Trade Unions' Cooperation Forum (SZEF) – soon realized that they were unable to influence the distribution of central budget resources between ministries or sectors, which could easily be played one against the other. So, to prevent internal conflict, they tried once again to negotiate within the KIÉT framework. This saved the ministries supervising the sectors and acting as executors from tough wage negotiations, by enabling them to turn the talks over to the one minister responsible for labour affairs and the finance minister.¹⁰

The government that took office in 2002 opted for a consistent interest reconciliation system and a reduction in the wage gap discriminating against public service employees. The result was two important measures, the establishment of the National Public Service Interest Reconciliation Council (OKÉT), and a “50 per cent” wage hike for public service employees. The result of the latter was a substantial decline in the wage gap. In 2003 the public service employees got 92.97 per cent of the average earnings for the public sector while civil servants got 133.93 per cent. In 2002 the difference was nearly double that amount.¹¹

From 2002 to 2006 there was comparative calm in interest reconciliation forum operations and in public sector wage flows. Interest reconciliation became centred on the mass layoffs that began in 2003 and the human resource policy measures announced by the government to update public service. As

7 The agreements reached through interest reconciliation lacked the power of the collective agreements. The only way adherence could be guaranteed was through legislation that included the content of the agreements or by an administrative entity involved in the process issuing a decree to that effect. Therefore, most authors refer to bargaining negotiations occurring here as quasi (wage) bargaining.

8 For instance, as of September 2001 the professional multiplier was 1.43 in public education. As of January the multiplier in health and social care was 1.2. As of September the multiplier for college/university graduates in social care was 1.26, while as of September the multiplier was 1.2 for institutes of general culture and public collections. For more details see *Berki* (2000).

9 Seven plenary meetings were convened in 1998 and none in 1999. In 2000 there were three plenary meetings – but from 1998 on, not a single agreement was reached (*Berki and Dura*, 2012)

10 Though momentary interests appeared to coincide, the real underlying problem was that no one dared to touch the issue of establishing a direct ranking of public service employees by salary since there was no foundation of principle to establish that the work of a doctor was more valuable – and therefore should be paid more – than a teacher, or vice versa.

11 Own calculations based on KSH data.

far as public servants were concerned it introduced a performance-evaluation-based system – something it was said to be considering for the other sectors, too. It transformed the target-based bonus system and reshaped the rules under which public service employees could bargain collectively, and so on. But, these efforts bore very little result. In the autumn of 2006, the Gyurcsány administration announced – as an austerity measure – that it wanted to discontinue payment of certain income components, which is why no wage agreement had been reached for 2007 within OKÉT. Negotiations with the united public service strike committee established in the wake of the announcement did end with an agreement but in the autumn of 2008 the government declared that it did not have the means to honour that agreement (*Berki, 2008*). The strike committee, suspended earlier, was reactivated and negotiations continued until 15 October 2009. The agreement signed then however left the pay scale unchanged, discontinued the 13th month salary, introduced the super-gross income, allowing the portion of incomes deducted *ab ovo* for social insurance to also be taxed, and introduced a single compensatory factor, an earnings supplement of HUF 98,000 gross, for incomes lower than HUF 340,000 (*SZMM, 2009*). The series of negotiations in themselves demonstrated that as long as negotiations remained balanced they had a place in the interest reconciliation system, but when a collective dispute occurred the interest reconciliation system did not have the ability to handle it.

Interest coordination after 2010

“The interest reconciliation system was fundamentally changed after the new government took office in 2010, since the position of the new government was to govern employers and employees as though they were one and the same and to focus on the interests of both when governing.” (*Berki and Dura, 2012, p. 89*.) The National Interest Reconciliation Council ceased to function after a few meetings, and after a bit of a delay, it was taken over by a tripartite forum operating far from the public eye and devoid of legal authorities.¹² As far as the reconciliation of public sector interests was concerned, the government believed that persons affected by changes in public service had to be notified of said changes so it retained that mode of communication while otherwise changing part of the system.

The National Public Service Interest Reconciliation Council is still in operation. The employee side was significantly changed twice since 2010. Currently there are five trade union confederations in it, but FRDÉSZ¹³ (the Armed Services and Law Enforcement Interest Protection Federation) is not among them. OKÉT held talks on altering the legal profile of public service on more than one occasion. It also negotiated regarding public sector wages but no agreement was reached on substantive issues. In the autumn of 2013 OKÉT’s union side called for 20 per cent salary increases. The National Labour Coun-

12 The Private Sector and the Government Standing Consultative Forum (VKF) was established by a tripartite agreement in February 2012, which included three employer organization and three trade union confederations that had been members of the defunct National Interest Reconciliation Council.

13 The Armed Services and Law Enforcement Interest Protection Federation, which quit the Liga Trade Union Confederation and lost some of its member organizations in disputes among trade union associations.

cil of Civil Servants (KOMT) is also in operation but limits itself to peripheral issues. It has not discussed the transformations undergone in the various branches or the changes in the remuneration system of civil service employees (health care, education) to any substantive extent.¹⁴ At the same time legislative regulation has altered the area for which KOMT was responsible. Under Subsection a) of Section 1, Paragraph 6 of the Act on Public Sector Employees on labour relation issues and matters impacting the legal status within the entire public service employee sector, the minister in charge of the sector may negotiate with the union representative of the branch within KOMT or with the sectoral interest reconciliation forum, but must include the national local government interest advocates, too. This rule has overwritten the old one, namely, while issues affecting all public sector employees should be negotiated at KOMT, sectoral issues should be on the agenda of sectoral forums only.

KÉT and OÖKÉT were replaced by a revived Public Service Interest Reconciliation Forum while the law divided the civil servants into government civil servants and other civil servants. In 2011 Act CXCIX on public servants put them in the same service employment relationship, although it was a civilian service relationship. The forum raised every single issue affecting the public services under the law, so when the government civil servant legal category was introduced, the issues of job termination without specifying a reason and the 98 per cent excise tax on severance pay were debated at the forum but the unions failed to get their points across. For that reason they chose a variety of possible remedies which they proposed to their members. The situation is similar today with restrictions on voicing opinions, the legal issues surrounding loss of confidence (see sub-chapter 3.1 in this volume), and other legal questions.

The Interest Reconciliation Forum of Armed Forces Members (SZÉF) was terminated. It was replaced in part by the Internal Affairs Interest Reconciliation Council since in the meantime, all law enforcement bodies excepting the tax and customs tariff services, were placed under the authority of the Ministry of the Interior. The Hungarian Law Enforcement Faculty/Body (MRK),¹⁵ established in 2011, was granted an interest protection function under the law so it took over the role of the trade unions in sectoral interest reconciliation, which were otherwise significantly weakened by amendments to Hszt.¹⁶ and the Labour Code (hereinafter Mt.).¹⁷ The Armed Services Interest Reconciliation Council, which in recent years has faced problems similar to those of the unions and law enforcement workers, continues to operate. However, these forums were unable to substantively influence the transformation of the armed service pension system (see in sub-chapter 4.4) or to prevent the deterioration of their own operation conditions.

There have also been problems with sectoral interest reconciliation, which used to be ministerial level issues. These forums – particularly the ones covering public education, higher education, culture, and health care – had once

14 Today nearly half of the brackets in the pay scale is “un-marked” since the guaranteed salary included in it is higher than the minimum wage and the guaranteed minimum wage for skilled workers – more about this later.

15 The Hungarian Public Administration Faculty/Body, whose members are government officials, did not receive such clear-cut union rights.

16 Act XLIII of 1993 on the service conditions of armed forces professionals (hereinafter: Hszt.)

17 Hszt. amended the provision on deducting trade union dues and actually terminated the mandatory dues deduction – without giving the unions time to prepare. The outcome was that the unions lost a significant portion of their members. The position of the unions was also weakened by the establishment of the MRK – the Hungarian Law Enforcement Body/Faculty, which fostered the illusion among many members of the armed forces that it was an interest advocacy group that didn't charge dues.

operated in part as information disseminating and consultative channels that substituted for sector-level collective bargaining. Today, the structure of the bodies serving to maintain these areas is being transformed (the public schools and some health care facilities are being shifted out of local government control and placed directly into the hands of the central government), and this – in accordance with the government’s human resource policy outlook – has led to the introduction of lifelong career models and the transformation of civil servant remuneration. The second of the sectoral interest reconciliation forums has been the public education,¹⁸ health care and armed services sector interest reconciliation forum, and an agreement on the renewal of the forum in the social care sector was reached in September 2013.

The failure of the transformation of public education and of the lifelong career model of teachers led to the establishment of a strike committee in which every single union organized in public education originally participated. Despite the fact that the government reached agreement with the members of the strike committee – with the exception of one union, the Democratic Teachers’ Union – innumerable disputed issues remained. The circle of participants in health care reconciliation talks has been haphazard, with professional and interest advocacy organizations participating jointly. The main issue here has been the sector’s human resource strategy, which is seeking a resolution to the problem of people leaving the professions and the labour shortage. The forum is an opportunity for the invited participants to directly notify the state secretariat of the issues where quick intervention would be desired (such as the home paediatric practitioners employed by local governments whose salaries had fallen well behind), but there were no institutional guarantees that there actually would be any government decisions to remedy the problems raised here.

Effective wage systems for public services

At this point, we would like to explore the main components of the remuneration system, including starting salaries and highest attainable salaries under the various legal formations. In the professions where introduction of lifelong career models is currently under negotiation (health care, public education) separate pay scales have been devised. Therefore, a number of ranking systems will be established (although the original public service employee and the higher education pay scales will be retained) and the uniform remuneration system for public service employees will be terminated. Introduction of the lifelong career model will trigger a significant rise in earnings,¹⁹ albeit over a lengthy timeframe, so people for whom the old public service employee pay scale remains in effect can expect their incomes to drop back (as happened with the social care sector, for which the unions set up demonstration committees in August 2013).²⁰ In parallel, under the rules, collective agreements²¹

18 Act CXXXIX of 2013 amending several laws regulating education did establish a National Teachers’ Body/Faculty. Its functions, however, were not enumerated in the law so we cannot say anything about its connection to interest advocacy.

19 For instance, teachers in public education are to be categorized in accordance with the new system by 2017.

20 The main demand of the unions is increasing salaries but updating the interest reconciliation system and even concluding a new sectoral collective agreement were also included among their demands.

21 For business entities that became budget-sponsored institutions, Act CIII of 2013 amended the National Budget Act. “Collective agreements in effect in these entities lose their validity at the time the government takes over the responsibilities of these entities” (Paragraph 11/F, Section 12). “Any works council in operation at the company shall be terminated at the time the government takes over the responsibilities of these entities” (Paragraph 11/F, Section 13).

are being terminated in business entities that the government has taken over, which will lead to employees here losing the benefits listed in those agreements.

In *public education* the future of the collective bargaining agreements is unclear. The benefits that local governments had funded were not provided by the central government in 2013. In the other variations, according to the regulations governing wages that have been made known²² the “base salary” for remuneration is not uniform. For people with a secondary education it is 120 per cent of the minimum wage, for people with a higher education at bachelor level it is 180 per cent of the minimum wage, and for people with Masters degrees, it is 200 per cent. In 2013 the minimum wage was HUF 98,000, and civil servants starting their careers were entitled to 100 per cent of that amount. The pay scale contains five remuneration classifications, with 15 levels of payment. The highest multiplier is 265 per cent, which means that HUF 519,400 could be paid as a basic salary. For people employed in non-teaching jobs, the old public sector employees’ promotion system is to be applied.

In *health care*, two pay scales,²³ introduced in 2012 and operative since 1 January 2013, have been in effect. Under them, attempts were made to cover any salary increases due but left unpaid through differentiated lump sums in compensation. For doctors the pay scale set up three pay grades (*H, I, and J*) and 15 levels within that (for years of service from zero to 45). The base remuneration is HUF 108,000 and the lowest multiplier is 1.809. The highest is 3.415. For professional health care workers the pay scale retained the 11 classifications of public service employees and also includes 15 levels. Salaries range from HUF 103,000 to HUF 330,725. The starting level of Category *D* is HUF 118,000, higher than the 2013 guaranteed mandatory wage minimum for skilled staff.

The *higher education* remuneration system was retained (with, however, the chance to differentiate to a greater degree than the original system made possible), in which the university professor occupation is the “base salary” on the pay scale, and 40 to 106 per cent is a guaranteed salary. The guaranteed remuneration for university professor No. 1, was HUF 437,300 as of 1 January 2013. Forty per cent of that is HUF 174,920 and 106 per cent is HUF 463,538.

The public service employees not cited here separately continue to be paid according to the public service employee pay scale. Since the minimum wage is regularly increased and the “base salary” has not been changed, about half of the pay scale is now “empty” (61 of the 140 cells appearing in *Table 3.2.4* are in gray) since the minimum wage or the mandatory guaranteed minimum for skilled workers is now higher than the guaranteed pay in the pay scale. (Every group of public service employees has the right to conclude a local collective agreement but the wage agreements within it can only regulate the amount of the add-ons and salary extras that the law explicitly assigns to collective bargaining to regulate. This latter only may be paid out at the ex-

22 See the version of the Public Education Act valid as of 1 September 2013.

23 See the appendices to Act LXXXIV of 2003 on certain issues within the realm of health care activity.

pense of the institution's own (market) income, which means that additions of the type controlled by collective agreements are very rare.

Table 3.2.4: Remuneration set as mandatory under the public service employee pay scale for the different wage categories and payment levels

	A	B	C	D	E	F	G	H	I	J
1	69,000.0	77,000.0	78,000	79,000.0	89,000.0	122,000	127,000.0	129,500.0	142,000	154,500.00
2	70,207.5	783,47.5	79,560	80,975.0	91,447.5	126,270	131,445.0	135,975.0	148,390	163,770.00
3	71,415.0	79,695.0	81,120	82,950.0	93,895.0	130,845	136,207.5	142,450.0	156,555	175,357.50
4	72,622.5	81,042.5	83,070	84,925.0	97,010.0	135,420	140,970.0	148,925.0	165,785	186,945.00
5	73,830.0	82,390.0	85,020	86,900.0	100,125.0	139,995	145,732.5	155,400.0	176,435	198,532.50
6	75,037.5	83,737.5	86,775	88,875.0	103,240.0	144,570	150,495.0	163,170.0	187,085	210,120.00
7	76,417.5	85,277.5	88,725	91,047.5	106,577.5	149,145	155,257.5	172,882.5	197,735	219,390.00
8	77,797.5	87,780.0	90,675	93,812.5	109,915.0	154,330	161,607.5	182,595.0	208,385	229,046.25
9	79,350.0	90,282.5	93,210	96,775.0	113,252.5	159,515	169,227.5	192,307.5	216,905	238,702.50
10	80,902.5	92,977.5	95,940	99,737.5	116,590.0	166,835	177,165.0	202,020.0	225,425	248,358.75
11	82,455.0	95,672.5	98,865	102,700.0	119,927.5	174,155	185,102.5	210,437.5	233,945	258,015.00
12	84,007.5	98,367.5	101,790	105,662.5	122,597.5	181,475	193,040.0	218,855.0	242,465	267,671.25
13	85,560.0	101,062.5	104,715	108,625.0	125,267.5	188,795	200,977.5	227,272.5	252,405	278,486.25
14	87,112.5	103,950.0	107,640	111,587.5	128,382.5	196,115	208,915.0	235,690.0	262,345	289,301.25

Act LVIII on the legal status of government civil servants, no longer in effect, was adopted in 2010. It did nothing to change the essence of government civil servant salaries but certain incomes were significantly reduced because of it.²⁴ Act CXCIX of 2011 on *public servants* regulates the legal status of civil servants and government civil servants. The law retained the basic features of the earlier pay scale. For government civil servants the remuneration range ran from –20 per cent to +50 on a performance basis (in the ministries and the prime minister's office, the maximum is +30 per cent. The salaries of office workers with lower qualifications are set by the office chief and must be as high as the guaranteed wage minimum for skilled staff but may not exceed six times the "base salary". The other considerations for setting the basic salary must be set down in the public service regulations of the given administrative unit. The wage of a public service employee can be set between the minimum wage and ten times the average national economy-wide gross monthly wage for the previous year. For priority government bodies salary supplements for people with a university or college education is 50 per cent and for people with secondary education it is 15 per cent. For bodies on the lower level of the hierarchy it is 10 per cent for people with a university or a college education. The salaries of the top managers can be set by their superior body without fitting it into a category, in which case the manager is not entitled to any salary supplement. Depending on the organization, remuneration may range from 28 times to 17 times the "base salary" level. For offices not part of the central

²⁴ The institutions subordinated to the county public administration bureaus established in the reorganization of public administration of 2010–2011 were dropped down a level in the public administration hierarchy. The outcome was that salary supplements were also dropped down by one level, which meant a loss of earnings for the government officials. [According to the tariff chart the salary supplement is to be determined as a percentage of the (job category) salary, for instance, if the worker has a college or university degree and works in a parliamentary office the multiplier is 80 per cent, if in a ministry it is 50 per cent, if in a public administration body it is 30 per cent and if in a body subordinated to it, it is 10 per cent].

government, and those in local government, there are two important differences in the remuneration systems. Add-ons to remuneration and leader remunerations differ. The law does not limit the civil servant salary insofar as how much it can deviate from the remuneration set for a person's given rank, and a personal remuneration can be set without limits.

Under currently valid regulations, employers and the representative bodies of local governments have far greater scope in setting salaries than earlier.

For persons in the *armed services* the "base salary" is the same as in public administration, but the pay scale is unique. Despite amendments to Act XLIII of 1996 on the service relations of professional members of the armed forces the basic remuneration system was retained. The remuneration system was made up of a position salary, rank salary, salary supplement, service time supplement and other supplements. The position salary and rank salary combined made up the basic salary. The system contains two pay scales (categories), for officers, high ranking officers and generals (requires college or university degree) in Category I, non-commissioned officers and second lieutenant equivalent (with a secondary education), in Category II. Both pay scales are projected onto the public servant "base salary". The service time bonus functions as a partial salary booster with the starting amount at 12.5 per cent and the highest amount at 25 per cent. (The wages of defence employees working under the Labour Code (Mt.) cannot be higher than 10 times the national economy-wide average income.)

The remuneration for soldiers is governed by Act CCV of 2012 on the legal status of armed forces personnel and is of a similar structure (except that it uses a "defence" multiplier instead of a rank-based salary.) The salary is made up of a position salary, a defence bonus, a salary supplement, a service time supplement, a salary add-on, and at times, an additional salary component. The position salary and the defence bonus together make up the basic salary. Officers must be in Category I while rank-and-file personnel and non-commissioned officers are in Category II²⁵ with each category made up of a ten-point scale. The defence bonus is equal to the multiple of the "base salary" and the defence multiplier.²⁶ A minister's decree can allow the commander exercising the rights of employer to raise the salaries of subordinates by 30 per cent for a timeframe extending to 31 December of the given year. For persons with a university or college education the salary supplement is to be 20–50 per cent of the position salary depending on the place where the service is performed. For persons without college or university degrees it is 10–15 per cent of the position salary. The service time bonus ranges from 5 to 35 years and is 10–22.5 per cent of the "base salary".

The public sector salaries (if we ignore possibilities to deviate because of performance or qualifications and calculate maximums with the highest salary supplements) are summed up in *Table 3.2.5*.²⁷

25 Since there is a shortage of soldiers who contract for a number of years, non-commissioned soldiers and service personnel with lower commissions are also granted other benefits not detailed here.

26 Please note that in the Defence Forces the tables of service personnel state that positions and ranks are subordinated to one another as specified by law, and therefore specific ranks are required to hold the various positions. If someone is mandated to advance to a higher rank for which the given position is no longer suitable, the position must also be re-shuffled to a higher level. Considering that there are not a sufficient number of higher positions to cover the people with higher ranks, the law contains an interim solution that acts as an incentive for people to remain in their previous positions.

27 Please note that the law for teachers was amended at the end of August 2013, and on the one hand it extended the scope of regulation to teachers working outside of the public education, while on the other, it reduced the starting salary. The system called for a 3.5 year interim to transit to the new pay scale, so for the moment the sections of the law referring to them are fiction.

Table 3.2.5: Internal differentiation of the public service pay scales and the extreme values compared to the 2013 minimum wage

Categories of public sector employees	Mandatory maximum salary at the end of a career compared to starting minimum	Starting mandatory minimum compared to minimum wage	Mandatory maximum at the end of a career compared to the minimum wage
Salary set by the Act on Public Service Employee	4.19	0.70*	2.95
Teachers (with college/university degrees)	2.94	1.80	5.30
Health care			
Doctors	1.89	1.99	3.76
Skilled health care workers	3.21	1.05	3.37
Higher education, researchers	2.65	1.78	4.73
Public servants			
University/college graduates	2.90	1.22	3.55
Secondary school graduates	2.83	0.71*	2.00
Office workers	2.03	1.16	2.37
Law enforcement			
University/college graduates	3.34	1.22	4.08
Secondary school graduates	3.73	0.63*	2.36
Defence			
University/college graduates	5.00	1.18	5.92
Secondary school graduates	2.81	0.79*	2.22

* The minimum wage must be paid in the public sector too, so in practice the multiplier = 1.

The calculation does not include the special bonuses available in some occupations that are not available to all, or non-wage benefits that can be chosen from among alternatives, which amounted to HUF 200,000 among civilians whose salaries are paid by the central budget. When discussing these pay scale configurations we particularly wanted to show the internal ratios, so when conducting our calculations we also sidestepped the items that go below the HUF 98,000 minimum wage and HUF 114,000 guaranteed wage minimum of 2013.

Summary

Table 3.2.5 and the history of interest reconciliation over past years allow us to draw the following conclusions.

- The salaries of people working in the public sector are far from uniform. Today there are even significant differences among public service employees. There are a total of 14 different pay scales in the public sector if we ignore the public institutions' employees operating under the labour code.
- The differentiation of pay scales was not the outcome of different interests and negotiations at public sector interest reconciliation forums – it was primarily the result of government intentions influenced by pressures from

some professions, but the latter was random and the bargaining was decentralized to professions rather than sectors.

- Chances of advancing in the various careers are quite different. Within the services, the best chances of income growth were among military officers while the new system of advancement for doctors does not even see to it that their incomes will double during their careers. The only ones whose initial earnings can go up by threefold are law enforcement personnel and skilled health care workers.
- For persons with a secondary education and no specific profession, the wage scale is below the minimum wage everywhere except in public education. For government office workers it is equal to the guaranteed wage minimum – which is quite low.
- The difference between maximum earnings and the minimum wage is much smaller than the difference in the private sector. People with a secondary education will barely earn more than double the minimum wage even at the end of their careers.
- The new pay scales replacing the old ones create new disparities which cannot be justified or explained on a theoretical basis.

While the Act on Public Service Employees formally allows collective wage bargaining there is no scope for them in practice, and in the other sectors even the formal possibility of collective agreements has been denied. The multitude of pay scales prevents any centralized wage agreements based on higher level interest reconciliation from taking place. There is little likelihood that bargaining, should it occur within sectors or even professions if allowed by law would lead to proportionate outcomes keeping the labour market balanced. The failure of the decentralized bargaining taking place in the late 1990s should serve as a warning to today's negotiators.

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3.2.1 Collective bargaining in businesses owned by central and local governments

ERZSÉBET BERKI

In 2011 there were 13,991 businesses in Hungary employing over 20 people each.* These are businesses in which it was realistic to establish collective agreements. Trade unions can conclude collective agreements, and unions are more likely to exist in public sector companies than elsewhere.**

The Information System of Labour Relations (MKIR), which rests on the mandatory requirement to report collective bargaining agreements, has a registry of 964 valid collective agreements at employers in the business sector (of which labour relations are regulated by the Labour Code.) (Table B3.2.1) This amounts to 6.9 per cent of the businesses employing more than 20 people.*** look at all collective agreements in existence shows us that 355 of them (26.4 per cent) are in the public sector (owned by central or local government).

In September 2013 there were a total of 65 multi-employer collective agreements, and the scope of two of them included public sector employers. Of the 18 sector-level collective agreements (concluded by employers' associations), the scope of three included public sector employers and one was an extended agreement (valid for all employers in the given sub-sector) which covered public ones as well.

* Source: *KSH*.

** According to research conducted within the TÁMOP 2.5.2 programme there are trade unions operating at about 15 per cent of employer premises, and within that, at 58 per cent of facilities owned by the government. Similarly, the public sector businesses stand out regarding the union density level, with average unionization at 22 per cent and public sector unionization at 43 per cent (see: *Neumann and Simonovits*, 2010, p. 53–55).

*** Please note that the real number of collective agreements is likely to be less than this, on the one hand because as of 1 January 2013 the agreements concluded with unions at lower unionization levels than 10 per cent were declared invalid, while on the other, the parties involved do not always comply with the obligation to register that their agreements had been terminated.

Table B3.2.1: Number of valid single-employer collective agreements in the business sector and breakdown by the owner of the business^a

Majority owner	Number of collective agreements	Breakdown (%)
Central government	135	14,0
Local governments	120	12,4
Private	709	73,5
Total	964	100,0

^a As of 8 September 2013.

Source: *Labour Relations Information System* (Munkaügyi Kapcsolatok Információs Rendszere).

This tells us that collective agreements are far more common in the public enterprises (central or local government owned ones) than in the business sector as a whole. However, the Labour Code (Act I., of 2012) that came into effect on 1 July 2012 limited opportunities to conclude collective bargaining agreements with public sector employers. The new law contains two sections with restrictions (Paragraphs 205 and 206), stating that collective bargaining agreements cannot deviate from the law with regard to

- the duration of notice period,
- the regulations governing the conditions for granting severance pay and the amount of said pay,
- the regulation of time that does not qualify as working hours, and in this regard daily working time amounting to less than a full working day (eight hours) cannot generally be accepted as a full working day,
- the regulations governing the works council, or
- the regulations governing trade unions.

These restrictions lead to a weakening in the positions of the traditionally strong workplace unions in the state/local government owned businesses. Additionally, the unions stand to lose a portion of their incomes and may not come up with any other form of support, and thus their financial opportunities (for instance for training courses or to con-

sult with experts) are reduced. This leads to the deterioration in the quality of collective bargaining.

The above bans remove issues that are typically regulated in collective agreements. Thus, they expressly damage the positions of the employees, who, for instance, lose the extra notice time, the higher severance pay and the shorter working hours set under the former collective agreement (*Nacsa and Neumann, 2013*). One consequence of the deterioration in worker positions could be a further decline in trade union density.

Prohibitions on the organization of working time can also create significant problems for employers, too, primarily because in many places a break in the midst of working hours was a part of the working day, as well as because they are no longer allowed to operate with special reduced-hour working days. Several major state-owned firms were forced to redesign their working time schedules to more or less comply with the law.

In the longer term, the prohibitions, stating that collective bargaining agreements cannot deviate from the law on labour relations, works councils, and trade unions, can damage the quality of labour relations. With this move the public sector employers as well as their unions and works councils are deprived of the possibility to jointly conclude innovative solutions. According to some interpretations of the law the collective bargaining agreement may not even regulate an issue on these matters not covered by the law because that too would be a deviation from the law.

When the collective bargaining agreements cover only one employer it is easy to formally adhere to

these prohibitions since any agreement conflicting with the law is automatically void and therefore, does not have to be applied. However, when the collective bargaining agreements are sectoral and when the employer organisation involves a combination of central government, local government, and private sector businesses the parties involved have no idea regarding when they are in compliance with the law, since the same provision that is unlawful for the government employer can be lawful for the private sector employer. Another question concerns whether the collective bargaining agreement under which the ruling was agreed can discriminate against some of the employees under its auspices, depending on the form of ownership of their employers. On the whole, these prohibitions on public sector labour relations lead to the deterioration of the quality of labour relations, a decline in the number of collective bargaining agreements, a reduction in their regulatory power and, in the final analysis, they could result in a competitive disadvantage that could hurt employers.

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3.3 Crises and waves – changes in the system of public employment in Europe

LÁSZLÓ VÁRADI

The recent decades of public employment have passed in a continuous wave between the maintenance of the Weberian “bureaucratic ideal” (*Weber, 1978, pp. 220–221*) and the new trend of the seventies, the 3Es (*economy, effectiveness, efficiency*) The essence of the “fight” can be summarised in the way how, and by how much, individual countries deviate from the ideal of the public servant independent of the daily fluctuations of politics towards the direction of a public employment that operates cheaply, effectively and efficiently (*OECD, 1999, pp. 8–14*).

Different countries have built up distinct public employment systems depending on their actual economic situation, social conditions and traditions and, even today, they also react differently to the challenges. As far as the systems of public employment are concerned literature applies numerous types or categories (*Linder, 2010, Gajduschek, 2005*), but the substance of them is the same in an employment aspect, where the individual public employment systems are situated at some point on an imaginary Weberian – open employment scale.

New Public Management

The conditions of public employment that used to operate in a Weberian framework had changed at the end of the seventies: the pressure of the socialist world order disappeared, taxes were reduced in order to increase competitiveness, the middle class extended, and the new toolkit of management became available (summarized by *Hajnal, 2004, p. 34*, and about the reasons: *Pollitt and Bouckaert, 2000, pp. 25–27*). And the answer is: the *New Public Management* (NPM), which intends to integrate the system of public management into the economy as a whole.

As *Christopher Pollitt* summarizes:

“... I will here assume that the NPM is a two level phenomenon: at the higher level it is a general theory or doctrine that the public sector can be improved by the importation of business concepts, techniques and values, while at the more mundane level it is a bundle of specific concepts and practices, including:

- Greater emphasis on ‘performance’, especially through the measurement of outputs.
- A preference for lean, flat, small, specialized (disaggregated) organizational forms over large, multi-functional forms.
- A widespread substitution of contracts for hierarchical relations as the principal coordinating device.

- A widespread injection of market-type mechanisms (MTMs) including competitive tendering, public sector league tables and performance-related pay.
- An emphasis on treating service users as ‘customers’ and on the application of generic quality improvement techniques such as TQM.” (*Pollitt, 2007, p. 1.*)

New Public Management has completely changed principles in employment that were believed previously untouchable. The system of “jobs until retirement”, life-long employment that used to be considered as a basic condition has been suppressed, although not radically.

“This suggests that the principle of life-long employment seems to belong – as opposed to promotion criteria or pay systems – to those traditional elements of the civil service that have been subject to the least modification during the reform processes in the EU Member States and particularly in career systems. While the principles of recruitment and pay are increasingly being influenced by current practices in the private sector, this does not seem to be the case for life tenure.” (*Bossaert, 2005, p. 18.*)

Nevertheless, significant changes have occurred in its content. Dismissal of public servants has become easier. As the most important element of change is that performance is taken into consideration, though we cannot speak about its widespread expansion.¹ Even so public servants remained safe from “rationalisation” type dismissals in most countries. If it has occurred then the conditions of the dismissal for them are more favourable than in the market.

Although measures to increase flexibility had poor results in this area, financial difficulties and the constraints and spread of the *New Public Management* also brought another solution: the fixed term contract. Of course, it has nothing to do with lifelong employment, i. e. it is far from the principles of Weberian public management. At the same time, in systems where employees are hired for concrete tasks this also fits logically. Many countries have increased the rate of fixed term contracts in order to bridge the headcount and generate cost reductions due to the economic changes (as in Germany where the volume of public servants is definite).

Occasionally, these measures created situations where employees of different status may be used in the same workplace or even in the same job. However the basic question for these clerks having a differing status but working at the same time or even together is the following: if a non public servant can perform the task why do we need clerks with a specific status? Although, from many aspects we would expect the expansion of this more flexible employment in Europe – whilst the picture is very colourful – this tendency cannot be clearly observed.

Probably, the largest impact on the traditional employment was effected by the performance measurement systems. Earlier, individual public servants

¹ We should note that the new EU member states mostly chose less stringent solutions just in this field (*Bossaert, 2005, p. 23.*)

were remunerated according to the competences demanded by their jobs or the time spent in service. When the remuneration of the personnel is bound to performance, numerous problems have to be faced and the predictability of a public servants' existence, the unidirectional nature of the path are generally questioned. In order to let the whole system completely "come into play" in the public servant's life, not only does the traditional order of remuneration have to be broken but the model of promotion, the strict order of hierarchy changed, traditional values questioned, and public servants easily fired. Depending on an individual countries' determination to break with tradition, varying systems were introduced. This is true as to the system itself (its size, elements, etc.) as well as the way of the introduction, the methods used, the range of stakeholders, the person of the appraiser, etc. The experiences of the EU member states concerning the introduction are listed by *Cardona* (2006) based on a report from May 2002:

- Performance-related pay systems are costly and time-consuming to implement.
- In many cases such systems are only applicable at senior levels.
- Discretion of managers is confined to issues such as measurement of performance and distribution of the small pool of money available for performance-related pay.
- Some systems have been introduced as pilot projects with a view to wider application at a later date, but in absence of rigorous analyses of the effects of the pilot projects it is not clear how wider application could be introduced.
- Almost none of the current schemes addresses the issue of underperformance (no punishment for failure to deliver).
- Measurement of performance, particularly in areas where there are no obvious quantifiable outputs, is a very difficult issue.
- No evidence has been found that performance-related pay schemes have contributed to an improvement in performance, in human resource management or in the quality of the service delivered.
- Additional remuneration was not a significant motivator for the employees concerned.
- The regular, annual or more frequent, formalised discussions between managers and employees on performance, targets and progress achieved have positive effects on motivation (recognition of the contribution of an individual to the organisational performance) (*Cardona*, 2006, pp. 3–4).

The author of the report draws our attention to two aspects. One of them is the complexity of the system. "Performance management needs to be based on strategic management according to which goals and results are established in a consistent way during the political, policy-making and managerial processes." (*Cardona*, 2006, pp. 4–5) That is, while the higher level political and institu-

tional objectives and consequences are not yet unambiguous, and are not obviously defined, it is also very difficult to establish a consequent performance management system at a managerial – even more at an individual – level.

The key of the other aspect is that objectives and results are different for the political institutions and for the individual institutions and their managers. It is a very rare “state of grace” in the development of public institutions when subsequent governments are able to modify the operation of the public management along similar lines with similar aims, although the introduction of such large systems concerns more than only the government actually in power.

It does, however, seem evident that the system of performance management can contribute not only to the introduction of the performance based remuneration. The system can be specifically useful – even economical and efficient – if the other, hidden opportunities of the performance management system receive more emphasis, such as having goals focused on development and improvement, to enforce the relationship between leader and follower, and the development of human resource management. The aspect not really favoured by many people is also important, that performance appraisal supports measurability of the differences between the public sector and the market, increases permeability, and thus makes the internal and external assessment of the public management more realistic.

The aim of the reforms as mentioned earlier is to make employees of the public sector work more economically, efficiently and effectively. To this end, the next step would be to motivate employees by giving them some tools to do this. It has already been widely determined that the most important motivation tool is money, a higher income, and this supports experiments connected to performance based remuneration.

Of course, contemporary motivation theory doesn't support this one-sided approach to a great extent. As different research works proved public employees' wages significantly surpassed market wages on average in pre-crisis Europe – this is partly explained by the higher average age, and the higher rate of those with higher education and in managerial positions (concerning these see the 2.5 sub-chapter of this actual *In Focus*) –, while the working hours of public employees are less everywhere (at least according to the legal regulation) than of those employed in similar jobs in the private sector. These considerations would imply that the conditions of public employees do not justify their motivation through higher salaries. Numerous research papers concerning the motivators of public work testify (see e.g. *Steen, 2006, Cerase and Farinella, 2006, Forest, 2006*), that higher income doesn't appear as the primary factor among the motivators for public employees. Well regulated work, activity for the public good, or political neutrality are much more important for them (*ILM, 2010. p. 6*). (Although, only very few analytic works have been prepared in this field based on facts, we can probably state that in the poorer

European countries where the public servants' incomes are more moderate the wages play a significantly more important role. Here, public opinion is fairly steadfast that salaries are good tools to reach long term performance improvement. About this topic see also the 2.5 sub-chapter of this In Focus.)

Analysing the impacts of the New Public Management we can establish in general that it has generated significant but not radical changes in public administration. In countries more open to change – in Scandinavia, in the United Kingdom, etc. – not only has the structure of public administration essentially altered but also its model of operation. Numerous activities have been outsourced thus radically reducing the number of public employees and management of the institutions has been decentralised, both of which has basically modified the operation of these institutions. Less open countries also took steps in this direction – Germany, France, etc. – but we cannot speak about a real breakthrough in this respect in their cases. Between the two extremes we can find several countries (Mediterranean countries, etc.) which are radical in the transformation of the public administration only in their political slogans.

“What was an option ten years ago is not an option anymore today. I would say that in PA [public administration – *ed.*]

- in 1995, it was still possible to believe in NPM, although there were the first strong and substantial critiques
- in 2000, NPM was on the defensive, as empirical findings spoke clearly against it as well
- in 2005, NPM is not a viable concept anymore.

Yet, in many areas, both of scholarship and of the world, as well as in policy, NPM is very alive and very much kicking. It is, therefore, necessary to look both at the concept itself and at the reasons for its success.” (*Drechsler, 2005, p. 17*)

Search for equilibrium – Neo-Weberian approach

In the light of experience both theoretical and practical approaches tended towards some mixture of the Weberian and the market elements. The essence of the thus born Neo-Weberian concept is that the principals of public service with a distinct status, culture and conditions should remain in employment associated with “A professionalization of the public service, so that the ‘bureaucrat’ becomes not simply an expert in the law relevant to his or her sphere of activity, but also a professional manager, oriented to meeting the needs of his or her citizens/users.” (*Lynn, 2008, p. 11*)

Lesser or greater changes have taken place in the public administration of each country, and practically in all the countries which have had to face the fact that – as quoted – the traditional instruments are already not necessarily effective, while the new market oriented tools also haven't brought about the

impact demanded. It has meant a specific difficulty for the decision makers of the EU because, in the enlarging organisation, diversity – not only in general but very concretely in public administration and in public employment – has further increased. In addition, one of the main objections against the New Public Management was that it couldn't operate as a generally accepted best practice, as it didn't take into consideration the traditions, the situation and the specifics of the individual countries. Therefore, the EU could only suggest an initiation that is sufficiently flexible, and, at the same time, presents a certain direction for the member states.

In reaction to the above mentioned problems the European Union created and announced the principle of flexible security (flexicurity) in 2006–2007 (EC, 2007). The concept was intended to provide a solution framework essentially to the market problems, however, the same two directions also had to be harmonised in the case of public employment. Through the announcement, as we said, they wanted to combine the flexibility created by the incorporation of the market models with the elements of traditional employment security. This comprehensive approach was also embraced by the public administrations themselves. Multiple trends are outlined again in the implementation 1) countries with systems based on a secure public service (*career-based*) (Austria, Belgium, France, Germany, Greece, Ireland, Romania, Spain, etc.); 2) more flexible but secure systems based on given tasks (*position-based*) (Denmark, Finland, Netherland, Sweden and the United States) and 3) neither flexible, nor secure systems (Bulgaria, Czech Republic, Estonia, Hungary, Slovakia and Slovenia, etc.) (Kuperus and Rode, 2010, p. 21).

Decomposition – effects of the crisis

However, the crisis in 2008 interfered in the debate concerning how to proceed. The majority of countries introduced austerity measures in the employment of public employees either sooner or later. They made a choice from the possible methods or we might say the different options of escape, basically according to their budget situation (Glassner, 2010, p. 32).

As Christopher Pollitt states, the solution of the situation of the European public administration can be centralised around three key areas: 1) reduction, liquidation of waste, 2) renovation of processes, innovation, and 3) cooperation of the different social actors to find the common solutions. In an optimal case, measures in all the three areas, should work in synergy together strengthening each other in the long run, or in a better scenario even in the short one (Pollitt, 2011).

Although, these intentions sound good, there is only a vague chance for their implementation in reality. Most countries introduced radical constraints in the field of employment: froze or rather decreased wages, cut allowances, benefits, ordered a recruitment shut down, or even fired large numbers, and en-

gaged in short term, occasionally “special” employment contracts.² The results of these measures were growing workloads, deteriorating quality and consequently evaluation, risk evasion due to fear, decisions being pushed to higher levels, centralisation, and thus overwhelming bureaucracy, as well as growing costs. Under these circumstances, fear of the employees in public administration from privatisation is increasing, as well as their resistance towards cooperation with the private sphere. Accordingly, the chance to renovate the systems, to find the multilaterally useful and successful solutions is very limited.

Of course, in the countries where they were not forced to introduce widespread and long run constraints we can observe excellent examples of systematic reform measures. In many countries the number of public employees remained stable, and the tool of dismissing people was not used or only used to a limited extent. The numbers of personnel in industries that they considered strategic (education, health care) were increased, or women’s share in the numbers of employees was improved thus implementing a highly anti-cyclical economic model.

Nevertheless, measures have had their impacts along the same lines in most countries.

- Fairness of the system deteriorates, *ad hoc* measures smash the hierarchy, disrupt responsibility relationships.
- Different employment or contract relations tilt the balance within the public administration (between sectors, age groups, social cohorts, etc.).
- Decreasing financing, growing workload, increasing internal and external expectations, remuneration changes and deteriorating workplace atmosphere – as we mentioned above – degrade working conditions.
- Social dialogue transforms. The weight of the trade unions that are generally very strong in the public administration declines, employees’ vulnerability increases.
- Development in general is suppressed due to the austerity measures, consequently there is less process development and thus less training and other personal development. The quality of public administration worsens and therefore, its authority and attraction reduce.
- Promotion of the employees slows down and may even be blocked for a period. Career programs are often frozen, most talented young people can only with difficulty be kept in public administration.
- If there is an option, migration reaches a high level from public employment (policemen, firemen, doctors, teachers, IT professionals, etc.), and international migration can also increase in some jobs.
- Earlier reforms may become partially or totally meaningless. The performance based remuneration becomes a nonsense by the freezing of wages, just like fixed term contracts by the constraints on benefits, and the appraisal system by the blockage of promotions.

2 Here we don’t speak about the public works programme just designed to eliminate the effects of the crisis. Professional literature assesses its impacts as doubtfully positive even for the individuals in the long run, and evidently negative for the market (EC, 2010, p. 86).

Certainly, there could be procedures to improve the situation, even though they could hardly significantly change the essence of it. Nevertheless, it would be important that governments a) fix the timely and the economic limits of the constraints, b) negotiate with the stakeholders (even if they fail to agree), c) choose solutions that cause less damage in the long run, d) support strengthening social solidarity with their decisions, endeavour to draft a widely acceptable public employee career path. With these measures they can improve the chances for the acceptance of the crisis measures and also of their implementation.

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3.4 Crisis driven changes in wage setting systems in the EU

MÁRK EDELÉNYI & LÁSZLÓ NEUMANN

Data from 2010 shows that slightly more than 50 million employees worked in the public sectors of the EU member states which accounts for a quarter of all persons employed in Europe (EC, 2012).¹ Naturally, the share of the public sector varied greatly among member states, exhibiting more than an 18% difference between the higher Scandinavian data (between 2008 and 2011 in Denmark and Sweden it was 32% on average) and a lower share in South Eastern Europe (during the same time period the public sector employed 18% in Bulgaria and only 14% in Romania) (EC, 2013, p. 94). Though it goes beyond the scope of this sub-chapter we must draw attention to the fact that one of the main obstacles in comparing European public sectors is the lack of adequate statistical information.²

Data from 2010 is important given that this was exactly the time when the mortgage and credit crises that hit the United States in 2008, and which reached Europe, at least in the sense of the labour market as a production and economic crisis, transformed into a fiscal one. This was mainly the result of three factors: the state founded bail-outs of the troubled bank sector, falling tax revenues and the extra pressure on social and welfare benefits due to the shrinking labour market. As a consequence of this process the retraction of the labour market, felt thus far only in the private sector spilled over to the public sector (Anxo *et al.*, 2013). Our aim in the present sub-chapter is to show the impact of the crisis on the public sector of European Union member states paying special attention to its effects on the wage setting mechanisms.

The first part of the sub-chapter maps the legal statutes of employment which govern the public sectors of EU member states with a special emphasis on the wage determination systems. The second part reviews European wage setting mechanisms including the state's role in that process. The third shows the direct impact of the crisis on the situational positions of the public sector employees of EU member states highlighting wage cuts and workforce reductions. Finally, the fourth part analyses the indirect effects of the crisis concerning mainly the changes in the structure and the role of collective bargaining. Our inquiry here is primarily directed towards that part of the public sector at central government level including those institutions directly dependent on the central government. A deeper analysis of the local government sector can be found in sub-chapter 3.5. Notwithstanding, this distinction often proves to be extremely cumbersome especially in times when the responsibility of many service provisions are shifting between governance levels as a part of the reforms and of crisis responses.

1 This data was elaborated using NACE codes so it contains data on private employees working in health and in education.

2 On related methodological problems please refer to the study of János Köllő, the first chapter of this present volume; and also EC (2013) p. 26 and 36. The demand for better quality statistical data was clearly formulated by the President of the European Commission Herman Van Rompuy in a conference dedicated exclusively to address this issue (Rompuy, 2013)

Traditional public sector models in Europe

The historical development of the modern state's administration gave birth to two traditional types of legal models of employment relationship in Europe: the Prussian-Napoleonic model and the Anglo-Saxon model based on the civil law tradition.

The main features of the *Prussian-Napoleonic model* are the following: young employees enter into the system following completion of appropriate studies and remain a part of it throughout their careers until retirement. Entry requirements may also include the successful completion of a competitive public exam. Expulsion from the system may only occur in the event of serious legal wrongdoing. The legal regulations that govern employment relations in the public sector are separated from those governing the rest of the labour market and expressly emphasize seniority based promotion. (For this reason the literature refers to it on numerous occasions as a career-based or “closed” public sector model). Wages are usually set according to the pay-scales codified by law and mostly dependent on service period and education level. These pay-scales may be indexed for instance by the level of inflation. Contrary to this, in the public sector model based on the *Anglo-Saxon civil law tradition*, employees are subject to the same legal regime as those in the private sector. Accordingly, employees in the public sector do not enjoy a “preferential status” and additionally restrictions on entry and leaving (including being dismissed) are relaxed. All vacancies (including senior positions) are offered in public announcements and filled through public competition open to all so consequently, neither the concept of the career nor the notion of seniority play a major role within the system. Wages are mainly dependent on the position occupied and its development is regulated by individual and collective agreements instead of mandatory pay-scales. (This model is also known as position based or “open” public sector model). (*EC*, 2013, p. 104)

Two classical examples of the *Prussian-Napoleonic model* are worth mentioning as an illustration. For the German *Beamter* (civil servant) the state guarantees the means for an adequate lifestyle through a suitable economic recompense, based on a legally established pay scale (*Bosch et al.*, 2012). Civil servants employed by the French *fonction publique* are in a similar situation as far as their income is concerned. According to the text of the legislation instead of a salary (*salairé*) they receive a stipend (*traitement*) dependent on various factors, such as the corps they belong to, the education level, the post and the seniority (*ancienneté*) of the employee. This “stipend” depends on the pay scale of the public sector (*grille*), which establishes a multiplier (between 308 and 1501 in 2012) that can be applied to the “index point” (EUR 55.56 since 2010) to arrive at the annual income of any given employee (*Audier et al.*, 2012, p. 8). The reform of 1982 cancelled the previous inflation based automatic indexation of the “index point” (*Audier et al.*, 2012, p. 11). Even

though the German and the French public sector model are different in many ways, neither the *Beamter* nor the *fonction publique* status is restricted to public administration officials, so the majority of those who would be considered in Hungary a public service employee, (i.e. the majority of teachers and physicians) belong to their ranks.

It is interesting to note that while the European Union through its politics indirectly yet efficiently, encourages the reform of its member states' public sectors its own bureaucracy corresponds to the Prussian-Napoleonic model. Applicants to the "EU bureaucrat" positions can gain entrance through public contest to its two bodies – *administrators* and *assistants*. While the former group is made up of 12 rank levels (AD05-AD16) the latter has only 11 (AST01-AST11). Thus wage categories are divided into 16 levels and each level has 5 seniority steps (with the exception of the 16th level which has only 3). Monthly base wages (from 1st of July 2010) are between EUR 2,654.17 (first level, first seniority step) and EUR 18,370.84 (16th level, third seniority step).

Three examples are worth reviewing to illustrate the *Anglo-Saxon civil law based model*. The UK is the first example given that its public sector is unique in many ways. First of all, only 9% of those employed in the public sector are civil servants, working mainly for the ministries and for state agencies and employed directly by the Crown. The remaining 91% are public services employees and their employment contracts are regulated by the "regular" private sector labour legislation (*Administration*, 2008). Also, until recently the legal standing of civil servants was governed by custom and not by law.

The second characteristic example is Sweden. Here labour regulations are the same for both public and private sector employees. Even though those who work for the state have no separately legislated labour status they do enjoy advantages of some particular legal conditions only applicable to them. The previous, seniority based system was reformed and replaced by the new position based "open" public sector model in the 1990's. However, employees of the diplomatic corps, of the army and of the police are subject of specific norms and regulations (*Public...*, 2010).

The last example is Estonia, which established a position based public sector in 1995 while the vast majority of the new Eastern European Member States have a public sector that could be described as a Prussian-Napoleonic one. Dissimilar from the other countries that use a position based public sector, in Estonia a separate legislation regulates the sector and further special legislation applies in those positions with the highest relevance for the state (diplomatic corps, police, army and judges). At the same time those employed in health care and education are under the private sectors' labour law (*Public...*, 2010).

These examples clearly indicate that there are no pure and model-like cases. Although member states could be classified by their dominant public sector model, this would only blur the characteristic differences of how each of them

mixes the two models to be able to take advantage of both. A pure position based model is difficult to implement in certain areas, such as the army or police, where special emphasis is put on hierarchical subordination and on a predictable promotion system. And inversely, more and more member states exclude from the secure public sector positions not only auxiliary jobs (such as cleaning and catering) but also complete areas of health and education, reorganizing them as contracted services either from market based actors or from state/municipality owned enterprises. (Outsourcing and in-sourcing is an issue treated in detail in sub-chapter 3.5). In summary, it can be indicated that member states blend the two pure (ideal-type) models into a country specific mixture, that, generally speaking, are similar in their internal segmentation despite the palpable differences.

Wage setting mechanisms

In wage determination there are also two opposite poles, corresponding to the two ideal types of legal models of employment.

Unilateral wage setting can be directly related to the Prussian *Rechstaat* model. According to this the employer of the public sector (for the sake of simplicity: the state) unilaterally, within its own limits of power, decides on the public employee's income thus ensuring their independence both economically and politically (EC, 2013, p. 104). Given that idealistically "wage" is not subject of an agreement, an incidental wage dispute may require litigation. Thus the court is to decide on whether a "salary reduction" impedes the adequate way of life guaranteed by law for the German public servant.

Collective bargaining as a wage setting mechanism is mainly used in the case of those employees who have a (fixed-term or open-ended) work contract regulated by labour law. The two sides participating in the collective bargaining are the representatives of the employees and the state or municipality (and their agencies and enterprises). A particularity of the situation is that the state is as much a negotiator as the actor laying down the rules for the same negotiation. This obviously results in an advantageous negotiating position. In Sweden to counterbalance the possibility of direct state interference a specialized state agency is accredited to carry out the negotiations (Berki et al., 2007). Also, in the UK during the 1970s, Pay Preview Bodies were established in the 6 areas of the public sector to address the same problem, replacing collective bargaining with annual proposals for wage development based on hearings with the participation of three groups – employees' representatives, those representing the employers and also independent scientific experts (Grimshaw, Rubery and Mariano, 2012a).

Besides these two main systems some EU member states use a hybrid structure to determine wages in the public sectors (or in some of its areas). This means that wage setting is *de facto* carried out through negotiations between

the state and the trade unions; however the deals forged in these negotiations *de jure* are enacted through legislation or promulgated through the declaration of the pertinent executive body. This form of wage setting is relatively common in Eastern European member states and a similar system is used in both Italy and Spain (*Glassner, 2010*). Naturally, in this system the negotiating position of the state is stronger without even taking into consideration the fact that agreements forged in these negotiations may fail to enter into force.³

The review of the European wage determination systems also shows that there are member states that use more than one system simultaneously to set wages in the public sector. First and foremost, it is possible that those working in the central state administration and those working in offices of the municipalities are subject to unilateral wage setting, while the rest of the sector is governed by collective agreements or by a hybrid wage setting mechanism. The situation can, however, be even more complex: in some member states, for instance in Italy and in Spain, “salaries” of central administration employees also depend on the type of contract used and also on the level of administration at which the employee is employed (*Glassner, 2010*). This may lead to the situation where two persons, employed in the same position, are subject to different wage setting mechanisms.

The two wage determination models in the public sector correspond to two types of state role: the state (or the municipality) can be a *sovereign employer* (which makes unilateral decisions) or it can be *role-model employer*. In this latter case, characteristic of the Anglo-Saxon civil law based model, the state, by those agreements forged in the public sector, sets a model for the private sector. In these agreements the state guarantees employees job security, income security (sick money, pensions, etc.), equal opportunities, fair processes and that the employees’ representations are taken into account through adequate channels. Last but not least the state guarantees a “fair payment” based on just comparisons (*Grimshaw, Mariano and Rubery, 2012b, p. 32*). Naturally, these are not rigid and mutually exclusive roles given that the state as a sovereign employer can set models for the private sector while, though this is a paradox, the role of the state as a model employer is not exempt from elements of guarantee, particular within the career based systems. Furthermore, even in those EU members where the state acts as a model employer there are sub-sectors and areas (the army could be a suitable example here) where the state can only act as a sovereign employer.

³ This can occur for formal reasons: the entity with due authority – e.g. the Parliament – refuses to accept the negotiated results and thus declines to promulgate it, or – especially in times of crisis – the wage increase can become mired down in the governmental hierarchy due to the lack of funding.

The impact of the crisis on the public sectors of EU member states.

Prior to the crisis employment in the public sector had been increasing modestly. For instance, the headcount of public administration grew by 2% between 2004 and 2008, though the speed of growth was on the decline. Employment of the sector remained more or less intact by the first phase of the

crisis (that is to say between 2008 and 2010). During this period dismissals took place predominantly in the private sector, and as a consequence, the share of the public sector in the total employment figures even rose in a number of member states, at least statistically (*Anxo et al.*, 2013). Since 2010, however, packages of fiscal restraints impacted on the public sector directly.

Due to the external pressure exercised by foreign investors, various European member states applied for help to the “troika” (made up of the International Monetary Fund, the European Central Bank and the European Commission).⁴ In exchange for the financial bail-outs governments offered severe austerity packages in order to curb the expenses of the central budget. Given that a really important part of this derives from the public sector’s employment costs (salary and other), it was not surprising that the primary and immediate effects of these measures were wage freezes, wage cuts and layoffs in the sector. Additionally, these fiscal restriction packages in some cases contained dispositions designed exclusively to limit the scope and influence of the social dialogue (*Ghellab and Papadakis*, 2011, p. 85).

At the same time, this “wave of restrictions” had a negative impact on the public sector (as far as its employment, salaries and the role in the social dialogue are concerned) even in those member states such as Poland where the effects of the crisis had less of an impact compared to other member states which required external help. The spread of austerity measures was stimulated by two factors: on the one hand, in recent years low state spending on the public sector became the main benchmark of the “fitness and healthiness” of the state (*Anxo et al.*, 2013). On the other hand, in 2011 the stability and growth pact was replaced by the Euro Plus Pact that contains much stricter regulations. Only four member states opted out of the new agreement: Sweden, the UK, Hungary and the Czech Republic (*Bach and Stroleny*, 2013).⁵

Before turning our attention to the crisis reactions it is worth highlighting the fact that traditionally trade unions are stronger in the public sector than in other sectors of the economy though union density has fallen remarkably since the beginning of the crisis. While *Glassner* (2010) using data from 2003 found that trade union density was not higher in the public sector than in other sectors only in 2 member states, a more recent report of the European Commission (using different data sets from between 2009 and 2012) indicated 6 member states where union density is equal in the public sector and in other sectors of the economy and 3 where it was actually lower (*EC*, 2013, p. 44, chart 1.11).⁶

The easiest way to reduce wage expenses of the public sector is by *reducing its workforce*. Naturally, there are many different ways to complete this task. One of the most widespread procedures is by not filling vacancies. This was used for instance in France where only one vacancy was made available for each two persons leaving the public sector. A much more drastic “exchange

4 In 2008 Hungary, Romania and Latvia, in 2009 Greece, Portugal and Ireland, in 2010 Spain and finally in 2011 Cyprus.

5 It might be mentioned that the wave of austerity reached the administration of the EU with a surprising delay only in 2012. Also this happened only thanks to the sustained personal pressure of the English Prime Minister David Cameron. As a result a 10% restriction on the EU bureaucracy was agreed to be implemented during the fiscal period of 2014–2020. Naturally, employees contested with strikes.

6 The countries of the Glassner study are Belgium and the Czech Republic. And those of the EC report are: Latvia, Lithuania, Hungary, the Slovak Republic, Slovenia and Belgium in the former category and the Czech Republic, Poland and Estonia in the latter.

rate” was offered in Greece where first a 1 to 5 rate was agreed, later modified to 1 to 10. Incidentally this latter exchange rate also applies to many areas of the Spanish public sector (*EC*, 2013, p. 142).

Another way is to allocate “surplus” labour into a “reserve force” as a first action. Besides being a direct income reduction for the employee concerned, this also means that if a new workplace cannot be found for the individual within a limited time period their eventual dismissal becomes possible. Such a solution was planned in Greece affecting some 15,000 employees, though in the end the measure was never implemented (*EC*, 2013, p. 142).

Thirdly, headcount reduction can be completed through outsourcing and privatization. “Internal externalization” is a special instance of this. Such a process happens when a public sector employee, holding a protected employment status (which implies a higher degree of job security and correspondingly a more advantageous position), is replaced by an employee having a private sector contract (for instance, instead of a public servant an employee is hired according to private sector labour regulations). In the French public service, even before the crisis, it had become common to hire employees using various contracts under the private sector law rather than employing them in accordance with status based legal dispositions of the *fonction publique*. In other words the private sector’s labour conditions had been “smuggled” through this process behind the safety barriers of the public sector (*Audier et al.*, 2012). Instead of a replacement it is also possible that the legal position of the given employee is transformed though this has much higher transactional costs.

Finally, work force reduction could also mean effective dismissals that, no doubt, also entail high expenses, whether we speak about severance payments accompanying dismissals or early retirement (*Public...*, 2010).⁷ It must be emphasized that layoffs in the public sector affected mainly those working in administration and in management. Also in various countries the most affected were those with a fixed-term contract due to the possibility of refusing renewal (*EC*, 2013).

Freezing wages has a great potential in political communication: it sends the message to voters that the otherwise privileged public sector employees also share the burdens of the crisis. A wage freeze, however, does not necessarily mean a real worsening of the public sector employees’ wage position. This may be the result of the fact that only freezing the pay scales does not exclude the effective wage increase of a given employee. Firstly, because the employee can advance on the job ladder, and secondly, because seniority related wage development can also take place. So it is not so surprising that many member states opted to implement this measure.

A more drastic expense cutting measure is to *cut wages*. This generally triggers wide-scale refusal by trade unions who usually argue that public employees are not to be blamed for either the unfolding of the crisis or for its delayed

⁷ This can impact heavily on the pensions systems. In 2010 in Portugal so many people requested pre-retirement that the government had to suspend the whole pre-retirement program.

effects (EC, 2013 p. 150). These wage cuts mainly targeted those extra benefits that are unusual in the private sector (such as the 13th and 14th month salary and other social and fringe benefits). At the same time, in some member states the lowest earners were excluded from the negative effects of a wage decrease (EC, 2013). Such positive discrimination was implemented in Ireland, Italy and in the UK. It is interesting that on many occasions decisions on dismissals and wage freezes/cuts entered into force with considerable delay, there was even a case where an austerity package was implemented according to the original plan only following the national elections.

Reforms of the wage setting systems

Prior to the crisis, in various member states the ongoing reforms were driving the given state's wage determination systems closer to the model dominated by collective bargaining. This process originally started in the 1970s when Finland changed its unilateral wage setting system and established one based on collective agreements (EC, 2013, p. 39). A move in the same direction can be observed in the Spanish reforms of 1984, in the reforms of 1993 in Italy, and also in the one in 1998 in Portugal (*Anxo et al.*, 2013). The appreciation of negotiations could also be observed in the expansion of the European level sectoral social dialogue with the inclusion of 4 areas of the public sector: local and regional public administration (in 2004) hospitals and healthcare (in 2006), education (in 2010) and central public administration (also in 2010). These committees, formed after lengthy negotiations between 2004 and 2011, permit trade unions and employer representation organizations of the different sectors to engage in direct negotiations. Additionally, immediately before the crisis these forums were looking for ways to extend and thus upgrade even further the traditionally bilateral relation in this sector via the inclusion of other stakeholders, such as users for instance (EC, 2013, p. 144).

The majority of EU member states' governments acted in a prompt and determined manner to counterbalance the impacts of the crisis. One of the side effects of the immediate reactions was that governments ignored the traditional channels of social dialogue (*Anxo et al.*, 2013). Therefore, the role of the government in wage setting and thus unilateralism has increased, while social dialogue began to decline. *Glassner* (2010) already lists 10 member states where crisis reactions made governments take unilateral decisions on salaries in the public sector. Also, this approach to set wages unilaterally as a response to the crisis reached beyond the original group of countries that had used hybrid wage setting systems, for instance and now also includes the UK, which had previously used, almost exclusively, collective agreements to set wages.

Despite this in some of those countries hardest hit by the crisis agreements were forged within the framework of social dialogue. However at least in the Lithuanian and Hungarian cases analysts cast doubts on how meaningful and

real these negotiations were (*Glassner, 2010*). Only Ireland was an exception to this tendency. There, within the framework of a nationwide accord called the Cork Park Agreement parties agreed on a 4 year framework for action. Thanks to the agreement actual dismissals were avoided through a strict “no replacement” measure that ruled out the possibility of opening new vacancies, while wages were frozen too (*EC, 2013, p. 145*). It must be highlighted though that the above mentioned is only a pale imitation of those social pacts that were characteristic of Ireland in the 1980s and 1990s – the scope of the Cork Park Agreement was obviously limited to the public sector. The strength of the agreement was also put into question by the *Irish Federation of University Teachers* when it refused to sign it. Another warning sign was seen when, in 2009, the biggest employer association, *IBEC (Irish Business and Employer Confederation)*, left the national wage negotiations and suggested its members carry on with consultations at local level. By the middle of 2013 even its last supporter, the government, backed out of the Cork Park Agreement and started to sign bilateral agreements with a series of trade unions of the public sector within the new framework of the public sector stability agreement (2013–2016) better known as the Haddington Road Agreement. The government opted for this solution once negotiations of a Croke Park II Agreement became stranded thus making it impossible to come up with sector wide accord. Nonetheless only three trade unions, working in the area of education, declined to sign one of these bilateral agreements (*Sheehan, 2013*).

Unfortunately, European level social dialogue in the public sector failed to play any prominent role in managing crisis driven conflicts of interests. From the four sectoral social dialogue committees, only two: the one on municipalities and the other on central government were able to come up with something and this was only a joint statement on the crisis (*EC, 2013, pp. 109–110*).

Three main crisis related tendencies can be observed in the field of social dialogue (*Bach and Stroleny, 2013*). Firstly, many governments responded with *restriction*, primarily in member states where social dialogue had no deep historical roots. In some EU member states this restriction included the suspension of nationwide social dialogue. This led in some cases to protests and demonstrations and also to the decentralisation of social dialogue from the blocked governmental level to local and sectoral levels. This process can be observed clearly in the case of the Netherlands and also in Italy, though in these cases government interference was less drastic than in others.

The second tendency was a move in the direction of *flexibility*. This process produced some positive outcomes predominantly in member states where legal dispositions require joint consultation. It was this requirement that opened the channel that social partners could use to debate issues that traditionally were addressed at the central (higher) negotiation level. Although this was a positive consequence it must be mentioned that the results mostly served

the interests of the employers, as issues like outsourcing, flexibility and rising service quality, were overrepresented in the final outcome.

Finally, governments could also try to *reform the system of the social dialogue* as such. One of these reforms was implemented successfully in Denmark. Here the municipality level of the social dialogue was reinforced with a permanent forum that works with the participation of the elected chief negotiators even between the collective negotiation rounds. Another example is the Bercy agreement in France (which entered into force in 2011 with the exception of local governments where it applies only from 2014). The agreement, which imported solutions from the private sector's labour relations, tied representativeness of the trade unions directly to workplace level elections and extended the scope of the collective negotiations (to include issues of working conditions, career and training among other new topics). At the same time however, collective agreements in the public sector did not become legally enforceable so those parts of the unilateral system that benefited the state remained intact (*Tissandier, 2010*).

In Italy the Brunetta-reforms (2009–2011) must be mentioned, which had the specific aim of raising the efficiency of the Italian state bureaucracy. Named after the Minister of Public Service and Innovation, Mr Brunetta, the reform package changed the system of the wages (from one which was seniority based to one production based) and made it possible to dismiss workers from the public sector. The implementation of the reform was completely unilateral; the opinion of the trade unions was ignored as much during the preparatory phase as during the implementation of the reform itself. As a consequence of the changes it became possible to make wage decisions related to the state bureaucracy without any involvement of the trade unions. In addition the agency (*Agenzia per la Rappresentanza Negoziabile delle Pubbliche Amministrazioni, ARAN*) representing the state as the employer in wage negotiations was reorganized. All these actions resulted in strong resistance from the trade unions. In the end, mainly as a result of the impossibility of creating a unified workplace level trade union structure (which the reform also aimed at) and also because of the political changes at national level, it became inevitable to initiate negotiations with the trade unions (*Rinolfi and Paparella, 2008, DellaTorre, 2008*). In May 2012, the agreement, signed with the participation of the municipalities, modified in various aspects the original Brunetta-reforms, which was a clear success for the trade unions (*Sanz, 2011*).

Along with differences in member state specific responses to the crisis, there were clearly observable topic related differences too. Strict restrictions were common in “hard” questions (such as wages and salaries) while on “softer” issues a posture closer to flexibility was permitted to govern. As a conclusion, however, it must be stated that in numerous member states changes were contrary to the dynamics that had prevailed in the labour relations of their

public sectors before the crisis. (Furthermore, as the Italian example shows, the opposite of the contrary to the previous direction might even materialise as the winning resolution.) As far as the transformation of the social dialogue is concerned both decentralization and centralization can be observed as growing in importance. As indicated above the “negotiation avoiding” behaviour of the central government greatly helped the decentralization, upgrading the regional and municipality level social dialogue. Notwithstanding, it is a fact too that public sector dismissals first affected those employed in a flexible contractual way, and as a result the share of the workforce with a better job security has risen. This of course, permits a higher centralization in wage negotiations.

Conclusions

The public sectors of EU member states can be located in between the two fundamental end points of some dimensions of a continuum. The opposing poles are usually described in Prussian-Napoleonic vs. Anglo-Saxon civil law tradition terms as far as the legal model of employment relationship is concerned; unilateral vs. collective bargaining in terms of wage setting and finally in dimension of the role the state plays as the employer: sovereign vs. role-model employer. At the same time each member state’s public sector is a particular. It is a country specific mixture of these approaches whereas employees employed according to different models work together, sometimes directly in the same workplace. Yet, these country specific resolutions of the member states are really similar in many ways.

This duality, similarity and divergence, was characteristic of the crisis driven transformations in all segments of the public sector. There was a great similarity among the various state’s responses, moreover the harder the economic pressure on a country resulted in a higher similarity in the austerity measures implemented. Meanwhile the possibility and viability to execute the proposed measures, again, varied greatly among the member states. There were member states where a unilateral state position was possible and others where it produced such resistance (in the form of strikes and protests) that it could not be implemented successfully. Furthermore there were examples (as in the case of Germany and Austria) where, even though unilateralism is the legally codified way of procedure, it did not become necessary to ignore and exclude the opinion of the social partners in addressing the crisis. Moreover, the dominance of the unilateral state approach was independent of the established legal model of employment, of the traditional form of wage setting and also of the role the state usually plays as an employer. Apparently, an early statement of Marsden (1994, p. 17, cited by Grimshaw *et al.*, 2012b) still applies. According to this, unilateral wage setting may help states to reach the desired fiscal objectives effectively. However a process of the wage setting mechanism

involving employers and trade unions is a “much more flexible tool for legitimating changes”. In other words the risk of immediate fiscal control is the conflict between employers and employees. Also, the sustainability of wage reforms presupposes employees’ approval too.

In any event, it is thought-provoking to consider how the European Union and also the majority of its member states, so proud of their institutes of social dialogue, could ignore in a such a uniform manner all those resources which have been invested in the building up of the institutional structure of the social dialogue. Furthermore, they did so, just at the moment when these institutions could have demonstrated their efficiency in these critical times.

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3.5 Privatisation of municipal services, outsourcing and in-sourcing efforts and their employment impacts in the European Union countries and Hungary*

LÁSZLÓ NEUMANN & MÁRK EDELÉNYI

In December 2012 some unusual news appeared in daily newspapers regarding a “strike” at the public transportation company of a Hungarian town. At dawn on a Monday morning one third of the bus drivers refused to start work, therefore many bus lines were not operating during the morning peak hours. The director of the company alluded to a coup attempt, suggesting that although bus drivers were citing the technical condition of buses, their refusing to work was in fact due to their wage claims. The trade union leader’s statement, of course, immediately rebutted this assumption. By the end of January 2013, the news reported that the trade union leader, who had long been protesting because of the condition of the buses, was laid off, the company justifying it through a loss of trust. The trade union took legal action against the unlawful dismissal. A report in mid-February 2013 revealed that a police investigation was underway for “disturbing the operation of works of public interest “. In his statement the town’s mayor promised full support to the company director who had gone to the police, calling it unacceptable that the town’s life should be paralyzed by a wildcat strike that no one could prepare for.¹

*The authors would like to thank Erika Steiner (National Federation of Local Governments, TÖOSZ) for her help with the research.

1 The news reports appeared in the local media, national newspapers and at the Hungarian News Agency. Unfortunately we have to omit the exact references and verbatim quotations for the sake of anonymity which we must ensure for every interviewee who participated in the research.

2 The research project “Public sector pay and social dialogue during the fiscal crisis” covered five countries (France, Germany, Hungary, Sweden and the United Kingdom) and was funded by the European Commission (VS/2011/0141), Research coordinator: Damian Grimshaw, Manchester Business School (Grimshaw, Rubery and Mariano, 2012). This chapter builds greatly on the results of the research gained both in Hungary and internationally.

The case gained nationwide publicity and exposes, to some extent, a field of industrial relations which has so far received little attention in studies: the specificities of the municipality-owned enterprises sector. Coincidentally, half a year before the above-mentioned case we had actually conducted interviews at the company in question in the framework of an international research project² and could not detect any signs of the coming conflict. Therefore we will return to the case at the end of the present sub-chapter and attempt to give an explanation as to the developments that ensued in the meantime.

The original field research, conducted in the framework of an international research project, took place in two country towns that provide a wide range of public services, involving the private sector and church institutions in different ways (Berki *et al.*, 2012). The two towns, differing in size, were indebted to different degrees and party politics appeared differently in their lives. In both towns we conducted interviews with the heads of the municipality and its institutions/companies, as well as interest representation organisations – wherever they existed. In both places we focused on five service areas: public transportation, geriatric care, provision of school meals, cleaning and waste management. Hereby we would like to thank our interviewees for their cooperation.

In line with the practice of New Public Management (NPM), described in Chapter 3.3 of the current volume, an increasing part of municipal public services are provided – in various structures – by private or non-profit organisations, and the disintegration of sharp divisions between sectors can be seen. The first part of the sub-chapter provides a brief overview of the motives behind outsourcing and in-sourcing, (public) procurement, its prevalence and regulation, as well as its impact on the labour market in some of the EU member states. The second part attempts to map the relevant Hungarian experience – the starting point being the specificities of management, service provision and interest reconciliation in the Hungarian municipal system –, giving a description of interests and counter-interests that are behind organisational changes. Finally, we will take two case studies to illustrate the employment impact of outsourcing and re-municipalisation, as well as the involvement of the church in service provision. Our article focuses mainly on labour market segmentation and the transition between various employment statuses, so many other parts of the topic will have to be covered in outline only.

Municipalities' crisis reactions and outsourcing in some EU member states

a) *The impact of austerity measures at the level of municipalities.* An ILO study (Vaughan-Whitehead, 2012) exploring European crisis reactions, and more closely the adjustment of the public sector, between 2008–2010, distinguishes between quantitative measures (redundancies, wage freeze and wage cuts) and structural reforms. Differences among countries in this respect are significant: while in Greece or Portugal it was necessary to significantly reduce the size of the public sector, other countries – such as the UK or the Netherlands – chose a combination of two adjustment approaches: in the case of some public services the responsibility of provision was decentralized and delegated to the municipalities. In many countries the direction of structural changes was privatisation, outsourcing, purchasing services from the private sector – that is processes that began with the New Public Management (NPM) (see sub-chapter 3.3) have been bolstered. According to OECD data, calculated on the basis of the national accounts, the total volume of buying services from the private sector between 2007 and 2010 increased on average from 12% of the GDP to 13%. In Holland, Finland and Canada particularly significant increases were registered. Hungarian figures are close to the average but show an approximately 1% decrease (OECD, 2013).

Research on the reactions to the crisis focused initially on national responses (see sub-chapter 3.4) and only the most recent studies have come to study the level of municipalities. This is despite the fact that a considerable element of public services are provided in the framework of municipalities, therefore budgetary constraints introduced after the onset of the crisis appeared most-

ly at this level. Our topic requires that we address the economic autonomy of municipalities and local systems of wage agreements and interest reconciliation channels (*Leisink et al.*, 2013). While the wide range of municipal services is very similar in different countries, there are significant differences as to the division of labour among governmental levels and the financial approaches applied; therefore there are considerable differences with respect to the financial autonomy of local governments. OECD data show that the proportion of transfers from the central budget (subsidies, shared taxes, etc.) is high in the United Kingdom (70%) and in Hungary (59%); it is smaller in France (29%), in Germany (18% in the constituent states and 35% at the level of municipalities) and Sweden (24%).³ The order of course is reversed when looking at the proportion of local taxes and other revenues.

Depending on their fiscal autonomy, local governments can decide about how to react to the austerity measures introduced by the central government. They may choose to reform the local tax system, shrink the range of services they provide, or – under some circumstances – it can be the opposite: they may be prompted to experiment with a “countercyclical policy”, to ameliorate the impacts of the economic crisis by increasing wages or concluding outsourcing contracts on better terms, etc. – thus endangering the implementation of the central government’s budgetary goals. In the absence of autonomy, however, municipalities may be instructed or impelled – by changing political and economic conditions – to curb their services, investments, employment level and, if possible, increase taxes. Such reforms may be followed by what is called the vision of the “Big Society” (UK), which encourages citizens’ self-reliance, volunteer activities and the involvement of not-for-profit organisations (*Bach*, 2012). In welfare states settlements with a greater proportion of low-paid or unemployed inhabitants are more affected by subsidy cuts, as they are more dependent on targeted subsidies for the disadvantaged sections of the population. In the United Kingdom these include a large part of centrally provided subsidies, which the current administration decreased by 25% on average, while in the poorest locations central support dropped by 72% (*Grimshaw, Rubery and Mariano*, 2012). If the central government cuts support for local governments, while also delegating to them the responsibility for service provision, there will be strong pressure at the local level to organise services more efficiently.

All this must have an impact on the employment of those providing public services locally. In their paper *Leisink et al.* (2013) sum up the conclusions of another international research project, where case studies were conducted in three countries (Italy, the Netherlands, United Kingdom), describing two municipalities in each country, exploring industrial relations at municipal level in the wake of the crisis and examining if they are similar or different in the case of the municipalities studied. When austerity measures reach the level of mu-

³ 2011 data, source: [OECD Fiscal Decentralization Database](#), Table 17.

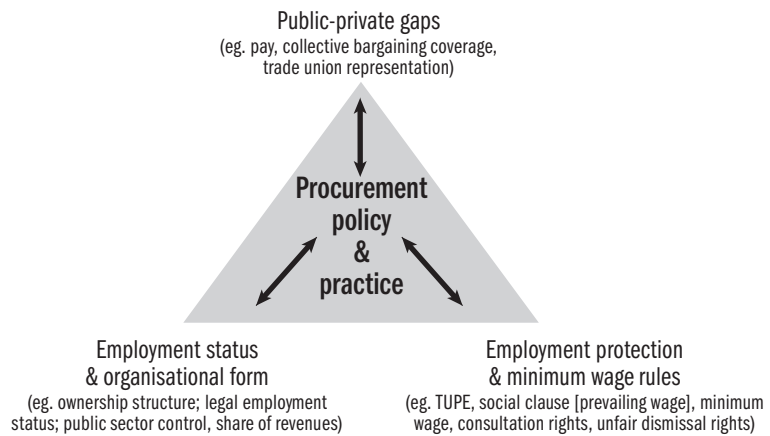
municipalities then interest reconciliation channels prove to be an important factor: whether there is a sectoral or local forum of social dialogue, whether trade unions are strong or not, and the level of institutionalization, all play a role.

From this point of view institutions in Italy and the Netherlands are strong, whereas in the UK they do not really have a place in the liberal economic model. Despite the traditional dual-level collective bargaining, municipalities in Italy, for instance overrode the central government's unilateral decision on a wage freeze, while in the Netherlands interest representation bodies of local governments drew on a 1994 law to retain their entitlement to conclude collective agreements in the face of pressure from the central government to implement a wage freeze. In the United Kingdom, however, municipalities were able to exempt themselves from the scope of national wage bargaining – in the few areas, that is, where they had such a role. Thus in the Netherlands and the UK municipalities and trade unions had a legitimate scope of action against the central will, while in Italy the unilateral government decision on wages allowed no such opportunity. In the latter case, however, municipalities' financial potentials were decisive and the fairly wealthy local governments negotiated employment terms without formal authorization as well. So despite the fact that fiscal constraints in the three countries prompted municipalities to act, the implementation of restrictions at the local level was determined by national intermediary institutions and the structure of the local government – thanks in main to their autonomy *vis-à-vis* the central government and the institutions of social dialogue. Thus local governments and employee representation bodies had some freedom in deciding how to react to the central austerity measures. There were, however, significant differences within the countries, and therefore the differences despite a similar institutional set-up suggest that the strategies and decisions of local actors also had an impact.

b) *Decisions on outsourcing, labour market regulation and the role of interest representation.* The extensive body of literature on privatisation and outsourcing decisions generally emphasizes two main labour market factors: the public sector's wage advantage over the private sector and the different influence in interest representation (works council entitlements or the trade unions' bargaining power). The latter is usually weaker in the private sector, which is evidenced by the rough indicator of trade union density. The wage advantage of the public sector is typically considerable in the Anglo-Saxon countries, therefore in these countries there is a possibility to decrease costs by restraining wages; no wonder this approach was mostly emphasized in the Anglo-Saxon studies. Large wage gaps provide a strong impetus for outsourcing low-wage jobs, especially in times of austerity. Obviously, wherever wage differences are smaller or of the opposite direction, then it can hardly be the main motivating factor.

Grimshaw, Rubery and Mariano (2012) suggest that beside wage differences and the strength of interest representation, a third factor also plays an important role the different levels of legal protection of employees in the two sectors, whether it concerns the status of civil servants or other public sector employment statuses (non-civil servant). The difference in employees' legal protection within the public sector manifests itself in labour market segmentation as well: in differences concerning employees' remuneration, access to promotions and job security. These three factors of course carry different weight from country to country when it comes to decisions about outsourcing (see: *Figure 3.5.1*).

Figure 3.5.1: Procurement policy and the labour market



Source: *Grimshaw, Rubery and Mariano (2012)*.

Decision-making is further complicated by two additional factors. On the one hand service provision often does not take place in pure community or private frameworks but in a varied combination of ownership structures: there may be countless variations for this from 100% privately owned, profit-oriented companies to 100% publicly owned, not-for-profit enterprises.⁴

On the other hand, beside the consequential external and internal labour market segregations, other aspects are taken into account when considering outsourcing. These may include regulations about the transition, most prominently the regulations concerning transfer of undertakings and wages following the outsourcing (for more details see later). These regulations differ from country to country and if they prove effective, then they make the transition to outsourcing a smoother process and alleviate the impact of the consequential labour market segmentation. Decisions about outsourcing seek to be sensitive to the specificities of the service concerned, while reacting sensitively to financial constraints and the legal regulations related to (public) procurement. The choice of organisational form is influenced by the

⁴ In an extreme case, for instance, the municipality contracts the self-employed, keeping its *de facto* control over service providers. It is a typical decision in many countries to use an enterprise with the municipality having majority ownership, thus retaining control over the operation, which may also be a source of income and may provide the opportunity to circumvent the headcount limitation in the public sector, while applying employment regulations valid for the private sector.

VAT regulations as well. In Germany, for example, VAT is applicable where the local government is participating in service provision, which is a way to encourage decisions towards favouring the private sector. At the same time acquiring investment sources is another important incentive for outsourcing, while the establishment of municipal enterprises is justified by the revenues generated by the sale of shares, which is a way to decrease debts.

In France there is some pressure to in-source, which is, in all likelihood, due to the disappointment at the obscure, uncontrollably complicated organisational structure and the great costs and low quality of previously outsourced services. The decision to outsource/contract a private provider thus – according to the literature – is the result of decisions made on the basis of various viewpoints, and not only a reaction to price signals.

Outsourcing decisions are by no means exempt from ideological aspects – political motives play a role too. In the United Kingdom it is essentially up to the municipalities to decide how they cope with the cuts in subsidies from the central budget, while they have to retain the responsibility of service provision. In connection with geriatric care, for instance, they often had to cut the fees of outsourced services, laid down in the contracts, meaning they had no choice but to economize at the cost of service quality. On top of that, the current government is encouraging outsourcing by financial means as well, as local governments may apply for funding if they involve the private sector. Therefore every new school is built in such a setting without any real supervision of municipalities. Joint financial structures of the public and private sectors are encouraged in the entire municipal sector, not least for the purpose of decreasing the amount of recorded debts within local governments and the employment level in the public sector.

c) *Interaction between regulation and outsourcing practices.* The appearance of private sector actors in the provision of public services raises the question of interaction between different labour market regimes, including the nature of labour market segmentation and the possibility of a regulation to prevent the emergence of considerable differences between the two sectors. A general presumption is that employees working in jobs outsourced to the private sector receive lower wages, their promotions lack predictability, and they are more exposed to changes in market demand, therefore additionally making their jobs more at risk. This logically follows from the fact that the goal of outsourcing is to ensure more efficient work for lower pay and/or more flexible working conditions. Experience shows, however, that this is not always the case. Our first counter-example is not about outsourcing to the private sector, it is only about organisational decentralization. During the reforms of the 2000's in France, as many as 128,000 employees (mainly primary school teachers) were transferred to the municipalities. Most of them accepted this move voluntar-

ily in the hope of better payment conditions, as the municipalities' scope for action was greater despite the fact that salaries – as determined by the civil servants' pay scale – were lower than those set in the central pay scales.

It is also an experience in France that in-sourced employees usually lose their benefits in-kind that they are entitled to in the private sector, such as the supplementary health insurance, and those other benefits that the works council at the private enterprise have achieved. Having returned to the public sector, they constantly suffer disadvantages compared to those employees with long-term employment in public service. Although their salaries are unchanged following their transfer later on they are excluded from seniority-based pay rises because their years spent in the private sectors are only partially taken into consideration. All this explain why employees and their trade unions are reluctant to support in-sourcing. An in-depth study revealed that interest representation bodies always consider the conditions of the concrete transition and its expected outcome when deciding whether to support or oppose the proposed changes (*Audier et al.*, 2012).

The study conducted by *Grimshaw et al.* found that of the four Western European countries there are only two where the outsourced private sector offers lower wages: Germany and the United Kingdom. In Germany, however, this difference is decreasing following the introduction of a new lower tariff category (see later) in the public sector and the minimum wage in certain services, while in the UK the collective agreement concluded with the local governments may improve the situation. In France the situation is similar, although the private sector allows longer working hours and greater work intensity, while in Sweden the collective agreement is applicable in each sector. Trade union reactions to outsourcing correspond to wage considerations. There is no resistance in France and Sweden, but there is general opposition from the trade unions in Germany (because of worse working conditions and because there are no guarantees warranting the application of the collective agreement) and in the United Kingdom (due to less favourable working conditions and the loss of pension entitlement).

The transition is tempered by the regulation of the relevant public service act, insofar as it may maintain status change over time, for instance by applying the more flexible conditions of the private sector to the new employees only. This is what happened in Germany, where in the 1990s the transfer of employees with a civil servant status led to complicated legal problems because they sought to both keep their special legal position and also facilitate the application of the wage setting mechanisms and working conditions of the private sector. Similarly, in France, when state-owned companies were privatized – e.g. in telecommunications and the electricity industry – employees who had already been employed were able to keep their status based on a separate law and the conditions pertaining to the private sector only applied to newcomers.

Transition between the two sectors, and competition among labour regimes may be moderated by more general regulations as well: a relatively high minimum wage, the rules concerning the transfer of undertakings, the law on the prevailing wage, the extension of collective agreements and social clauses added to the outsourcing contract – the practices differ from country to country (*Schulten and Brandt, 2012*). A high national minimum wage may imply a lower limit in the wage competition (especially in those countries and sectors, where the proportion of low-paid employees is relatively high). The connection between the minimum wage and the wage regulations in the public sector is also interesting, especially when the minimum wage catches up with the lower wage categories of the public sector pay scale as a result of the faster rise of the former.

Of course the reforms of the public sector may result in a decreasing difference between the two sectors if pay and employment are made more flexible. There are reforms with the opposite intentions as well, such as the overhauling of the tariff agreements in the public sector in Germany in 2005, when a new, lower wage category was introduced for “extremely simple activities” (*einfachste Tätigkeiten*) that in Hungary would be called unskilled labour requiring no qualifications. The new tariff was introduced explicitly to ensure that wage differences do not necessarily lead to outsourcing. Its reception was quite controversial even in trade union circles (as the goal of job protection clashed with the principle of fair wages) and there is no convincing evidence that it successfully prevented outsourcing (*Bosch et al., 2012*). Examples of more successful interest representation are connected mainly to consultations preceding concrete decisions of outsourcing or in-sourcing. In France it was trade unions, while in Germany the works council, that were able to intervene proactively, partly using formal channels (e.g. at local governments’ committee meetings preparing economic decisions, where they are regularly heard) or through informal ones (that is, through their political channels) (*Grimshaw, Rubery and Mariano, 2012*).

Transfer of Undertakings (Protection of Employment) – “a change in the person of the employer”, as the new Hungarian Labour Code terms it – have been regulated by EU’s TUPE directives since 1977; however, there are great differences between countries as to their interpretation and the protection they ensure. For instance some countries allow employees to “refuse” “automatic” continuation of the employment relationship at the new company, in which case the rules that apply are those related to the termination by the employer. In the United Kingdom, for instance, the application of the directive ensures only a relatively small degree of protection. Although the government has included in the regulation the right “to refuse” it did so in a way that there would be practically no legal consequences if those rights were to be infringed (*Hartzen et al., 2008*, citation by *Grimshaw, Rubery and*

Mariano, 2012, p. 70). Refusal practically entails resignation but it does not entitle employees to any kind of compensation, there is no protection against an unlawful procedure. (The Hungarian regulations in the market sector are basically on these lines.) In these countries there is no guarantee for the long-term maintenance of employment, while elsewhere the successor (transferee) employer is obliged to maintain employment for a certain period of time: for 15 months in France and 12 months in Germany and Sweden.

The application of social (employment) clauses stipulating equal treatment in the context of outsourcing contracts was introduced by a 1949 ILO convention.⁵ The ruling of the European Court of Justice on the *Rüffert case* in 2008 concluded that the employment clauses in contracts with private enterprises restrict competition, which practically determines the European Commission's stand as well.

The practice of the extension of collective agreements including wage tariffs also differs from country to country. Nowadays they are widely applied in the German constituent states. In North Rhine-Westphalia – where case studies for the research were conducted – the first law regulating wages in the course of outsourcing was passed in 2002 (*Schulten et al.*, 2012).⁶ They were later abolished after the governmental change in 2006 – when the red-green alliance was replaced by the CDU/FDP. The new government argued that they did not fulfil their goals effectively enough. In 2008, a law in Lower Saxony, similar to the above-mentioned Rüffert decision, led to the reappraisal of contractual clauses on wages. However, in 2010–2011 a new wave of legislation on “prevailing” wages (*Tariftreugesetz*) swept through the constituent states, which complied with the requirements of the European Court of Justice. Their essence is that during outsourcing entrepreneurs in the private sector should comply with wage tariffs included in collective agreements, provided the agreement has been extended to the entire sector.

In the United Kingdom, however, there are examples of the voluntarily application of the standards common in the public sector, when – at the initiative of local governments and trade unions – certain employers apply the wages common in the public sector without any legal or contractual pressure. An example for such an initiative is the so-called living wage in London, which tracks living costs that are far above the average, its main supporter being the city's mayor (*Grimshaw, Rubery and Mariano*, 2012).

5 Convention No. 94 – Hungary did not ratify this convention.

6 At this point about half of the German constituent states applied similar laws, mainly for construction works and in public transportation, but their scope was extended to other services as well.

Outsourcing and in-sourcing of municipal services in Hungary

a) *Local governments' system and economic management.* In the West European countries rather different local government systems have been evolved, depending on the size of the country, the local traditions and the level of economic development. Despite recent convergence in the level of economic development and of cohesion efforts of the EU, there have remained sub-

stantial differences in terms of the number of local governments, autonomy of municipalities and the division of tasks between various governance levels. We cannot enter into a detailed discussion due to limited space, and the following presentation of features of the Hungarian local government system will also necessarily remain sketchy. The principle “one settlement–one local administration” became established in Hungary in the 1990s. The Local Government Act assigns the responsibility of provision of a wide spectrum of mandatory services (public education, health care and social welfare services, maintenance of the local infrastructure, environmental protection, social housing, fire services, public safety, etc.) to local governments – regardless of their largely varying size in terms of population and economic power. At the same time they are given a free hand to determine the organizational framework of service provision and how to spend their own revenue. The “Hungarian model” resembles the Mediterranean one with respect to its fragmented nature, and is similar to the Scandinavian system in terms of the wide range of local government functions (*Vigvári*, 2011).

Despite the existing legal framework providing for strong decentralization, centralization occurred from the early 1990s, mainly as a result of fiscal incentives. Local administrations’ own revenues are generally modest, primarily based on revenues from property sales, local business tax and top-down income tax distributions, a system which has generated considerable financial disparity among local administrations. This has led to the state periodically intervening to provide uniform per capita support for mandatory services, development subsidies and by reorganizing the tax system. In order to guarantee their continuing functioning, local administrations that are “in a disadvantaged situation through no fault of their own” – are entitled to supplementary state support. According to OECD statistics, government transfers accounted for a relatively high share, 59 per cent, of local government expenditure in Hungary in 2011. Due to the decrease in state subsidies, EU tenders emerged as the sole source of funds to finance development works.⁷

State subventions for local government functions have been continuously decreasing since 1995. On joining the EU, the state undertook the obligation of observing budgetary discipline, based on the Maastricht criteria. Thus the 2006 convergence programme brought about a new phase in budget cuts in the local government system. The brunt of stabilization costs was borne by local government. Direct cutbacks in the municipal subventions are estimated to have improved the balance by 0.7% of the GDP (*Vigvári*, 2011). In addition, cutbacks in the healthcare and other sectors affected local governments’ ability to maintain their institutions, from hospitals to fire brigades. (Then local government expenses made up 11% of the GDP.) Cuts in subsidies provided from the central budget for mandatory functions did not necessarily take the form of limiting the wage bill paid to local government employ-

⁷ The importance of EU grants is indicated by the fact that their winning prompts an opportunistic approach; as one interviewee, a mayor, put it, before they sought grant opportunities for what the community needed, today they would apply to any open call for proposals, like for building a football pitch, as is the case now: “if the prime minister is mad about football, ... then we will build a football pitch next to the pool, we will join the crowd. What we build stays here and adds to the town’s assets.”

ees. Unfortunately, no statistics are available concerning the extent of budget cuts for an unchanged, comparable set of mandatory services. According to a study conducted by the State Audit Office, between 2007–2010 in the cities of county status, cuts varied in different services (1% in child welfare, 6% in primary schools, 16% in school dormitories). In this period the lack of resources which emerged was compensated for by institutions' own revenues and increasing local government support (*ASZ*, 2011).

Municipalities reacted to government austerity measures by raising considerable external funds, predominantly by issuing bonds denominated in foreign currencies. Even the credit limit stipulated in the Local Government Act was not enough to close the loopholes that used various “financial innovations”. The financial crisis triggered a major increase in interest payments, accompanied by dwindling local tax income and increasing claims for social assistance due to the economic crises. There were substantial differences among municipalities as to the level of their indebtedness, and in some towns bankruptcy was an everyday threat by 2012. With the decrease in revenues, local governments had to adopt a new approach towards private enterprises – in some settlements this meant a withdrawal of benefits (for instance, tax-exempt status) provided for them earlier. Others opted for a strategy of not only maintaining the level of levies imposed on enterprises but also made efforts to retain their presence by easing their situation, hoping that they would expand their operation after the crisis and that tolerance on the part of the local government would pay off later in employment creation and the increase in local business tax.)

With the majority of mayors affiliated to the governing party, local government indebtedness became a political issue. In October 2012 the Prime Minister announced a fiscal consolidation programme for municipalities, under which the state budget would take over the debts of small municipalities (under 5000 inhabitants, i.e. a total of 1700 villages), and on average 40 per cent of the debts of larger ones. However, in practice the government negotiated conditions town by town in 2013, with the process lacking in transparency and strongly influenced by party politics.

Although the law defines the minimum standards of services, the government itself sought to narrow the extent of certain service provisions in response to the crisis, The Law on Social Care assigns the duty of providing care for the elderly to local government. Paradoxically, however, municipalities can freely decide as to the scope of beneficiaries, as well as on the quality of services provided and also regarding the extent of co-payment. In 2009, however, a ministerial decree ordered that entry to residential care facilities, run by the state (local government), ought to be subject to a doctor verifying the need for care of a minimum of four hours per day in the case of each person. Although the number of beneficiaries did not decrease in residential care

facilities (KSH, 2011). According to our case studies however, it resulted in a dramatic increase in the proportion of in-patients with dementia, whose care implies a far greater workload and is subject to specific standards.

The government in power has taken a number of steps promoting the centralization of public administration and institutions providing public services. As of 2013, local governments' public administration functions have been transferred to government agencies, either at central government level or at district (micro-regional) level. This process began in the health care sector, affecting hospitals belonging to small municipalities. From January 2013 a large share of public education was transferred to state management, meaning that all teachers are now employed by a single government agency. School facility management has however mostly remained with the local administrations. Parallel to centralization the current government is facilitating the transfer of certain services (education, health care and social care) to church-based institutions by providing these with higher per capita subsidies compared to those run by municipalities. The current wave of public service centralization and their transfer to church-based institutions is motivated more by ideological and political considerations than based on evidence or on negotiations with key stakeholders.

b) *Interest reconciliation and employment policy in local government.* Either directly or indirectly (through their institutions and business companies) the municipalities employ about half of the public sector employees in Hungary. Despite local governments' budgetary autonomy, the base salary of public sector employees and civil servants is defined according to the pay scales specified in the relevant laws. As we have shown in sub-chapter 3.2, in national level interest reconciliation related to legislation and government policies local government alliances also take part, in their capacity as employers, besides trade union confederations. (Pluralism prevails here as well, as there are three such organisations.)

Employees of municipal companies are subject to the Labour Code (which applies to the genuine private sector, too) and the mandatory minimum wage that implies there is no tariff system to apply to their wages. Sectoral level interest reconciliation takes place at the Subsectoral Social Dialogue Committee on Communal Services. The Committee has no direct influence over wages; its members did not conclude a sectoral collective agreement. As to the typical remuneration practice of local government organisations, a recently conducted survey found that although a large proportion, 84%, of local government organisations carry out performance evaluation, only at 17% of them did the results influence annual pay (Bordás, 2012).

In the local government sector collective agreements are concluded only at company level. On the employer side, the agreement is signed by the com-

pany's management. Although the lack of management autonomy is a common barrier to collective wage bargaining in the entire public sector, this is particularly the case in certain municipal companies. According to the head of the sectoral trade union, local governments, as owners, are not represented at the bargaining table, and the management does not have the necessary authorization. Moreover, the management is often unable to meet its legal obligation to provide information because the local government as owner disallows it. As a consequence, there is no consultation on important or strategic decisions of the owner. The competence of the local company's management to enter into negotiation is further curbed by the practice that larger towns set up a holding-organisation over their municipal companies, which determines company managers' scope for action and centralizes resources.

As a result, trade unions in the municipalities do their best to negotiate directly with the owner, i.e. the local administration. In larger towns there is an interest reconciliation forum where trade unions can have direct negotiations with the local administration's chief officials. For instance, the Budapest Public Service Consultative Forum has been in existence since 1993, with the vice-mayor consulting with trade unions on such topics as restructuring. Although, legally speaking, this is not collective bargaining, each year they develop guidelines acting as recommendations for local wage agreements. It seems that a prerequisite to operating such a forum is to have a large number of institutions and companies, as well as well-organized trade unions. One of our case studies also shows that in a small town, however, there was no evidence of any collective bargaining, and wages in the public service companies were low, corresponding to conditions on the local labour market. According to our interview data, everyone is paid "on the minimum wage". This means that employees receive the lowest level of remuneration allowed by the law. Two organisations had previously had collective agreements (in a vocational secondary school and at the local hospital). However, subsequently, both organisations were integrated with a third that is non-union and as a result their collective agreements will become void 12 months after the merger. In any event, the collective agreement at the hospital included no provisions on wages and benefits. Because employees of local government organisations and local government-owned companies practically have no interest representation whatsoever, there is an absence of collective wage bargaining that could influence employment conditions and remuneration practices. (*Berki et al., 2012.*) All in all, municipal-level social dialogue remains immature in Hungary.

c) *Local government policies of outsourcing and re-municipalisation.* The Local Government Act and other sectoral laws specify the services that local governments, depending on the settlement's population size, are obliged to provide. Additionally, the municipalities may undertake other services on a voluntary

basis. As we have seen, local governments are free to decide how service provision will be organised. A traditional arrangement is for local governments to maintain institutions with public service employees providing services. In such institutions the administration of finances is carried out in line with the – rather rigid – protocol, customary in budgetary institutions. According to this arrangement, the maintainer (i.e. the local government) may determine, beyond the institutions' budget, the number of employees and also the wage costs. The other arrangement implies that the local government outsources some public services, which might take the following forms:

- The municipality establishes and operates a business company. It does not necessarily need to maintain 100 per cent ownership, and may sell some of its shares or involve an external investor. This was the most common form of the privatization of public utilities in the 1990s.
- The municipality runs a public procurement procedure to select an enterprise for providing the service or offering it a concession.
- The municipality concludes an agreement, generally with civil organizations or churches, for providing the mandatory tasks.
- It forms a consortium with other local administrations to provide the public service using any of the above three approaches.

In each of the above-mentioned outsourcing forms, the municipality signs an agreement with the selected enterprise/non-profit organisation. Nevertheless, the local government bears a secondary liability for ensuring the uninterrupted delivery of public services; if the contracted enterprise is unable to provide an adequate level of service, then the municipality has to take back the responsibility of provision. Depending on the contract and the legal provisions, for services the local government continues to have the competence to determine service fees (e.g. water bill, public transportation fees) (*Dicső, 2010, Horváth et al, 2002*).

According to a survey conducted in 2011, 55% of local governments have shares in business associations and in 28% of such associations local governments have controlling stakes (*Bordás, 2012*). Privatisation of local government operated corporations, and involving external investors, became a major trend in the mid-1990s. The reasons behind privatisation of local government businesses were the same as that of state enterprises: intention to modernize financially weak corporations that had partially lost their markets, with the involvement of foreign technology and expertise in marketing and management. On the other hand, the budget revenue generated by privatisation was equally important for an indebted municipality. However, municipality level privatisation was even less transparent than that of state corporations; instead of the central State Property Agency, decisions were made by the elected general assemblies. A great deal of publicity was given to contracts that had been scandalous in being greatly disadvantageous for the local community.⁸

⁸ A study, prepared on the basis of a research by the State Audit Office on corruption, also uses the conditional tenses when discussing this issue: "Ownership in a business association is, among others, a risk factor from the point of view corruption because the motivation behind owners' decisions is not necessarily to serve public interest, and there are no legislative or other kind of controls. In the case of privatisation, it would require an extensive study on efficiency and cost-effectiveness to decide whether an enterprise, selected to run a public utility service, is any better at it – or put otherwise, if privatisation serves the public interest or not –, and to answer the question whether they were undersold." (*Bordás, 2011.*)

Outsourcing certain auxiliary activities (cleaning, security and maintenance services, etc.) has for decades been a common practice at state and local government institutions. As of 2004, however, service providers, or the beneficiary of a concession, have to be selected through a procurement process. The motives behind local governments' outsourcing decisions are not sufficiently well known, however, and public statements rely on the same rhetoric as in the privatisation (increasing efficiency, bringing in special tools and knowledge, etc.). It is probable that the attempt to evade regulations on headcount may have been a more important factor here than in the private sector, although this is more likely to hold true for centrally managed institutions than for local governments which have more flexible financial administration. According to the above-referred survey from 2011, 31.7% of local governments outsource services; 25.1% of the outsourced services pertain to mandatory services of municipalities, 9.6% to specialized tasks, while 65% are linked to voluntarily undertaken functions of municipalities. As much as 37.9% of local governments have long-term cooperation agreements with civil organisations, although it is unknown what proportion of these covers the outsourcing of public services (Bordás, 2011).

The present government – referring in part to some well-known examples of privatization debacles – has been pursuing a policy of re-nationalization. Local politicians are also keen to regain full control over service providers and follow a re-municipalisation policy. Service-providing enterprises and beneficiaries of concessions constitute a different story: the government's approach in these cases is to renegotiate the contracts, i.e. not necessarily to nationalize them but instead starting a new procurement process and possibly replacing former providers. The emphasis here is on providing opportunities for Hungarian rather than foreign companies. Such attempts have however engendered scandals, such as when the new beneficiary turned out to be an entrepreneur from the clientele of the party in power, or a family member or friend of a well-known politician of the ruling party. Our case studies confirmed that such “political advantages” are prevalent among the motives of local decision-makers and similarly influence outsourcing or the redistribution of profitable businesses in line with a partisan-clientele rationale.

d) *Impact of outsourcing and in-sourcing on employment and wages.* Probably our most interesting research question was connected to transitions (privatisation, outsourcing, in-sourcing) between various service providers. We tried to reveal the motives of related decision making as well as the consequences, namely their influences on employment and wages.

Whether it is a private company, a church or other non-profit organisation that takes over service provision from the local government, employees' legal status will change regardless of the new provider: instead of the Act on the

Legal Status of Public Service Employees, they will be subject to the Labour Code following the transfer.⁹ In the event that public sector employees refuse to accept a position offered to them, they receive a lower amount of severance pay than they would otherwise be entitled to.¹⁰ Given that Hungarian law is in compliance with the TUPE Directive, dismissals cannot be effected at the moment of transition. However, as in many other EU member states there is a possibility to do that before and after. In our case studies we have come across restructuring, implying lay-offs of moderate scale, and the narrowing of the scope of services. In the case of institutional transferrals to church institutions, looking to the higher per capita subsidy for which they are eligible, there is no point in narrowing the scope of service, at least as long as the relevant law is in effect, although the issue of rationalizing operations is raised because of efforts at cutting costs. In the same manner, management is more rationalized in the case of services provided by the private sector than by state institutions. All in all, however, our case-study data suggest that the stability of employment has been retained despite the transfer. Moreover, in some cases some improvement in employment security has been noted, compared to the precarious situation which existed before.

In general – and particularly after the relevant changes in legislation effected in 2012 – the Labour Code implies far less constraints for the employer than the Act regulating the employment of public service employees, especially when it comes to pay: instead of applying mandatory wage tariffs, only the two-level statutory national minimum wage system must be observed.

With respect to wage levels and wage bargaining after outsourcing, the case studies allow only limited conclusions. Outsourcing and the subsequent remunicipalisation of public utility services in the bigger town in our scrutiny, where trade unions have a strong bargaining position, had practically no impact on the advantageous position of employees. Interestingly enough, in this town the geriatric care organization acquired by the church made no changes to pay conditions. As the new provider, the church was in a position to do so without any risk in the short term, since the majority of employees were paid the minimum wage anyhow and a large state subsidy covered additional costs. It is telling, however, that the new collective agreement for this particular organization does not set base wages or benefits. Therefore it is possible that in the longer run it will be easier to deviate from the wage scale. Moreover it also indicates that the employer does not foresee any wage bargaining taking place.

In the other small town investigated, wages in the local government sector are low, irrespective of whether the service is run by the municipality or a private company. Although drivers working at the bus company, operated by a private entrepreneur, earn somewhat more than the minimum wage their salaries are precisely half of that which bus drivers in the other bigger town receive, not to mention the difference in fringe benefits. (a strikingly higher

9 Both laws refer to the question of transition, more or less in compliance with the Transfer of Enterprises Protection of Employees (TUPE) Directive.

10 This is an exceptional ruling in Hungarian labour law, as in other cases employees do not have the right to refuse a transfer and are automatically taken over by the new employer.

difference than the usual 20–30 per cent disparity between regional averages). Wage differentials between different local labour markets are thus boosted in the case of services outsourced by the local administration, while the public service employees' pay scale – though very depressed – has had a levelling effect.

The law prescribes the obligation to provide information when public service employees become subject to the Labour Code, which may ideally facilitate collective bargaining. The case studies of the two towns indicate that such bargaining takes place only if the trade union has engaged in robust interest representation beforehand. Similarly, even in the towns where municipal-level information and consultation forums formally exist they hardly ever allow employee representatives to have a say in restructuring, outsourcing and re-municipalisation decision-making.

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However, as the excerpts cited in the introduction suggest, the industrial relations climate has radically changed at the bus company since the field-work in 2012. As was promised at the beginning of the sub-chapter, we now return to the case highlighted in the introduction – and presented in Box 3.5.1 – in order to shed light on the background to the events which have unfolded at the public transport company since December 2012. Though related labour court cases are still pending at the time of writing, one can pose the question as to what has changed over a half year period. What are the new circumstances which strengthened the employer position so much that it has become able to challenge the union's long-established bargaining power? It is very likely that the position of the city's right-wing dominated leadership has been consolidated since the general election of 2010. In addition to direct political support – and by no means independent thereof – the town's economic situation has been improving. The timing is noteworthy: negotiations with the government had just ended in a 70 per cent bailout – much higher than could have been expected from the initial announcement of the prime minister – and now the city is considering purchasing buses. If the city were able to upgrade its run-down fleet, this would mean less demand for experienced drivers and there would be no grounds for the drivers' work-to-rule actions.

In addition, legislation also contributed to the strengthened management position. The sectoral law on essential services established a level of service provision so high that it practically ruled out any lawful strike at the company. The new Labour Code erodes the position of local unions, especially that of maintaining the position of full-time president. The law also imposes specific limits on the scope of collective bargaining in the state and municipality-owned company. Sanctioning of unfair dismissal has also been weakened drastically. Moreover, a new ground for dismissal is an employee's inappropri-

ate behaviour. This includes violating the obligation to “behave in accordance with the necessary trust relationship related to the given job”.¹¹ It worth noting that the CEO went further in terms of legal tools by criminalising workers engaging in a wildcat strike. In his report to the police the employer accused the trade union leader with “disturbing the operation of works of public interest” (*Közérdekű üzem működésének megzavarása*), a statutory definition in the Hungarian Penal (Criminal) Code, which threatens the perpetrator of the offense with a two to eight year period of imprisonment.

Final thoughts

While studying the local governments’ response to the crisis, trends of privatisation and outsourcing, the researcher may find a lot of similarities between Hungary and Western European countries. Nonetheless, it is difficult to draw far-reaching conclusions owing to the striking differences in local government systems, traditions of local autonomy and division of labour between various levels of governance. Constraining the conclusions to the core issue of our investigation, the privatisation and outsourcing efforts, one can witness diverging trends in Western countries. While in a part of the countries the ongoing process of building New Public Management (NPM) was reinforced (most characteristically in the UK), elsewhere numerous examples of in-sourcing or “re-municipalisation” emerged, partly as a result of the autonomous deeds of local actors, partly due to the regulatory efforts of the central governments or Lands in federal states. In the long run, however, in western countries these changes seem to occur in an *ad hoc* manner. Recent changes in Hungary, however look very strange by international comparison, and neither follow the model of UK moving to NPM, nor that of the other countries which pursue parallel outsourcing and in-sourcing policies. The Hungarian processes, namely the systematic re-nationalisation, “re-municipalisation” or centralisation of control over public services, as well as government incentives to reverse secularisation cannot be matched to any Western mainstream crisis responses and seem to be rather unique developments.

Relatively few foreign research projects have dealt with the impact of adverse economic conditions on social dialogue at the local level. In their theory focused on developed market economies, *Marchington and Kynighou* (2012) sketched various alternative scenarios concerning changes in employee involvement and participation. One of the extreme poles is the expected marginalisation of participative institutions, for employers/decision makers are becoming less interested in the meaningful operation of employee participation. At the other pole, a more intense operation of institutions can be imagined, for employers/decision makers are well aware that they can utilize the institutions with a view to legitimizing their measures and thus they can rely on employees’ participative support. According to the authors, the actual fate

¹¹ Article 52(5) of the Labour Code contains this obligation of employees. Legislators basically incorporated previous court jurisprudence into the new Code. (For the latter explanation, special thanks to *István Horváth*.) On the other hand, such justification of the dismissal may be attributable to the similar option recently introduced in the public servants’ employment relationship (see sub-chapter 3.1).

of employee involvement and participation depends both on the actors' strategic choice and on the institutional context. Stated differently the first means whether the representatives of the employers/decision makers and those of the employees are willing to cooperate in order to promote changes or not. The well-known theory of "Varieties of Capitalism" (Hall and Soskice, 2001) embraces one set of important factors of institutional context – whether the given country can be classified as a liberal or as a coordinated market economy. Another important factor is the established trust relationship between employers and employees. Although Hungary can hardly be classified as one of the main models of "Varieties of Capitalism", an evaluation of the above mentioned preconditions would be highly topical.

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3.5.1 Case studies on municipalities' service provision

LÁSZLÓ NEUMANN & MÁRK EDELÉNYI

Reorganisation of geriatric care in a big town

In the past two years, the indebted town has transferred the provision of the majority of social services as well as three public educational institutions to churches. In both areas, outsourcing was justified by financial gains: churches being immediately entitled to higher per capita funding than local governments. The difference between per capita amounts is calculated every year on the basis of the financial resources provided by the municipalities to supplement state funds for service provision.

Prior to the transfer, the system of social service provision had been reorganized twice for cost reasons. In the 2007 reorganization, services were centralized and bringing back in-house the delivery of cleaning services previously outsourced. From 2009, in the second reorganization further streamlining occurred, with just three organizations retained in-house: day care services, care for people with disabilities and geriatric care. In the latter case, the number of residents decreased, with residential geriatric care being transferred to a church organization in 2011. Four workplaces and 343 employees were taken over by the Hungarian Baptist Aid. Two of the remaining three sites were closed, with the third taken over by the Jewish Community.

Having outsourced these activities, the town is no longer obliged to subsidize elderly care, and saved 0.5 billion HUF (EUR 1.8 million) per year (1.25% of the entire town budget); moreover, it proved to be advantageous despite the fact that the municipality undertook the responsibility of renovating some of the buildings after the transfer. The

outsourcing contracts include a clause stipulating that the municipality is obliged to “re-municipalize” geriatric care homes should there be any changes in financing. This would be relatively easy to put into practice, as the outsourcing is restricted to the operation of the organization and does not cover its assets and property. At the same time, the contract contains no guarantees as to the quality and price of services beyond that laid down in the relevant law. In 2012 the new provider was thus allowed to increase fees significantly. Not only did the local administration not interfere with this action but it also appreciated the advantages of not having to take such an unpopular measure itself.

In the residential care home taken over by the Hungarian Baptist Aid, a church organization, the largest employee group is made up of nurses and mental health professionals. As services are not outsourced, cleaners, laundry and kitchen personnel and drivers are also employed. Given the nature of the work, the majority of the workforce are women. Prior to the takeover, employees experienced a great deal of uncertainty, not only because of the previous lay-offs, but also because – aware of the municipality’s serious financial problems – they were very much concerned that their wages would not be paid. Such concerns were not unfounded, given that the local administration had previously revoked certain fringe benefits (the so-called cafeteria package and other benefits). On the other hand, they were afraid that the new provider would bring in its own people to replace existing personnel.

The local trade union has a 60–65 per cent unionization rate, although this has been in decline. Before the transfer, two trade unions had local or-

ganizations operating here as well, but they have since merged. In the spirit of union renewal, young people were taken on as shop stewards. Since the new provider was not going to take over more employees than the minimum prescribed in the Law on Social Services, the transfer was preceded by a collective redundancy of 49 people. Those who were laid off in this way included mainly two groups of employees: those who were eligible for retirement, since they did not have to be paid severance pay; and those whose work the new provider was planning to dispense with. Contrary to the general practice in Hungary, the consultations with the trade union and the works council also included the selection of the jobs to be eliminated and persons to be dismissed. Among those selected for transfer to the church employer, an estimated 20–30 people refused to accept the particular job they were offered. Some were planning to find employment abroad, others had hoped to get, in addition to the severance pay, a notice period together with the respective salary. The local government, however, refused to pay the latter, referring to the transfer of undertaking regulations according to which it was not due.

In the negotiations preceding the transfer, the church's representative promised to take over employees under the same terms and to retain the system of base salaries, defined according to the public sector employees' pay scale, and additionally bonuses as set out in the collective agreement. Following the takeover, the collective agreement was renegotiated but only minor changes were made, with the scale of bonuses and other benefits retained. The weakness of the new agreement, however, is that it is completely lacking a pay scale. This could also be explained by continuity, given that its predecessor also omitted it. However there is a crucial difference in the conditions: previously, under the scope of the public sector law, it was not necessary given the mandatory pay scale. In 2012 there were works council elections at the organisation, in compliance with the legislation for employees covered by the Labour Code.

With regard to pay, the new employer maintained salaries in line with the public sector pay scale, although the national minimum wage for skilled workers applied to the majority of employees. In addition, the employer re-launched the cafeteria package and resumed paying premiums that had been abolished by the local government. In essence, HR management practices remained the same. The only novel element concerns employees with a higher education degree, being given the possibility to attend a theology college free of charge.

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Since the case study was completed a dispute has unfolded between the management and the trade union because the employer intended to terminate the collective agreement without providing the trade union with any justification. In the meantime many employees have quit voluntarily, partly because of an announced collective dismissal, partly due to the weakening protection of employees. It is likely that the 2012-3 measures to increase wages in the health care sector (see sub-chapter 4.3) also motivated quitting and moving to the public health care, as it did not apply to nurses in the social care sector. Given these worsening working conditions, the local trade union asked the local government to consider the possibilities of "re-municipalisation".

Outsourcing and in-sourcing of a big town's public transport

The local administration has been the sole owner of the former state-owned public transport company since 2002. In the hope of replacing old vehicles with modern ones, partial privatization took place in 2008. A private investor acquired a minority shareholding (32 per cent) and received exclusive management rights. According to the original strategy the new investor, together with the town's transport company, started off by establishing a new company with only minimum initial capital. This was followed by a business transaction, in the course of which the municipal transport company sold the old buses to the newly established entity

for HUF 2bn (EUR 7.2m), only for the former to lease back the vehicles at a high fee for the following 10 years. In exchange for this the new company agreed to upgrade vehicles.

A couple of months later the opposition party, FIDESZ, came to power in the municipal elections, and decided that the contract concluded by the previous town administration was disadvantageous for the community. At this point the story becomes extremely complicated, tainted by contract abrogation, pressing charges, tax authority investigations and court cases. A bitter dispute ensued, at the end of which the municipality decided to take public transportation into its own hands. The local administration set up a new 100 per cent-owned company and signed a contract with it for providing public transportation. Buses were returned to the original transportation company and now the latest company is leasing buses from the old one.

There seem to be two fundamental reasons behind “re-municipalisation”. On the one hand, the local administration was unable to fulfil the long-term leasing contract for purchasing new vehicles due to its financial difficulties. On the other hand, it may well be that the politicians leading the new city administration had no intention to do so, given the perception that the private investor’s profit was too high.

Although change in the ownership implied changes in the company management, it did not affect employment relations, as it still remained subject to the Labour Code. Similarly, there was no change with respect to payment conditions or other acquired rights of employees neither as a result of the company’s partial privatisation, nor their return to the new company fully-owned by the municipality. Trade unions had no role whatsoever in the transformations, although information provision always took place as required by law.

As a result of the unsuccessful privatization, the number of buses suitable for transportation has decreased since 2008, having a major impact on the

number of employees. In addition, the municipality’s budgetary problems prompted a 7 per cent cut in the number of services. The new municipal enterprise employs 460 people, while four years ago the number was over 500.

A trade union with considerable bargaining power exists at the company. It has a 100 per cent organization rate among drivers, and 87 per cent overall. Although there has not been a strike there since a two-hour warning strike in 1995, the trade union is adept at using other forms of pressure (which they are forced to do, given the tightening of strike laws). Their most common action is a work-to-rule. For instance, when the municipality attempted to cancel fringe benefits (i.e. the so-called cafeteria package), as it was able to do in the case of public service employees, the bus drivers’ trade union organized action ostensibly related to road safety. Bus drivers refused to drive buses other than those in perfect working order.

There is a collective agreement at the company which is renewed every year. The agreement includes a seniority-based pay system for drivers (which the trade union considers its greatest achievement), proportional (per cent) benefit rates, the extent of overtime and details of working time arrangements. As a rule, annual wage increases rarely exceed the forecast inflation rate but the trade union is sometimes able to achieve higher wage increases for certain groups. More recently, the company started introducing performance-based pay. In addition to their base wage, drivers receive shift bonuses, commission dependent on the number of tickets sold, an annual bonus and a cafeteria package (amounting to HUF 200,000 per year (EUR 722)). An important source of income is the overtime bonus, especially as the company makes full use of the 300-hour quota allotted to each employee. Nevertheless, salaries are high only by local standards. At present the average monthly income of blue-collar workers is HUF 211,000 (EUR 762).

4. OCCUPATIONAL LABOUR MARKETS

4.1 Teacher salaries, teachers' selection and turnover

JÚLIA VARGA

Becoming a teacher is not a result of a single decision, but of a series of subsequent ones. Prospective teachers first have to choose teacher training as a field specialization in their higher education studies, and then, after graduating (or later) they have to decide on entering the teaching profession and continuing therein. The composition of teachers is the result of this series of self-selection processes.

How do wages affect a teacher's decision to enter and remain in the teaching role? Can teacher attrition be reduced by means of wage increases? How does an overall wage increase affect teacher attrition for different groups of teachers? The answer to these questions is of central policy importance. As teachers constitute a large proportion of public servants and as the salary costs of teachers, and other school employees make up around 80 per cent of current educational expenditures a wage increase for teachers also has importance from a budgetary respect. This chapter investigates how teachers' salaries affect the composition of teachers, more specifically, how the 2002 year public servants' wage increase effected attrition of the different groups of teachers.

Earlier research has found that teacher salaries have an effect on who chooses the teaching profession (*Dolton, 1990, Chevalier et al., 2002, Wolter and Denzler, 2003*). For Hungary *Varga (2007)* found that the decisive factor in the choice of the teaching profession is the difference of attainable earnings between non-teaching and teaching jobs. The same study also found that there are self-selection processes at every point in the process of becoming a teacher – applying for teacher training, finding employment as a teacher after finishing higher education, and continuing teaching in the fifth and sixth years after qualifying. Those who apply for college-level teacher training have less advanced abilities than those who apply for other specialisations. The less talented graduates are more likely to take teaching jobs, and they are more likely to be found among those in their fifth or sixth year of a teaching career.

Nevertheless concerning the role of the attractiveness of higher-paying alternative occupations in teacher attrition research findings are mixed. A part of the studies found that there is a connection between teacher attrition and teachers' relative wages. *Murnane and Olsen (1989)* show that higher wages have an important influence on how long teachers stay in teaching. Similar results were presented by *Podgursky et al. (2004); Imazeki (2005); Krieg (2006); Ondrich et al. (2008); Dolton and van der Klaauw (1995), (1999);* and

Chevalier et al. (2002). Other studies found that very few teachers who leave teaching take jobs that pay more than their prior salaries as teachers. *Scafidi et al.* (2006); *Frijters et al.* (2004); and *Vandenberghe* (2000) found that a large share of teachers who leave teaching relinquish employment entirely or earn less pay in other occupations within the public sector. Other studies show that working conditions are as important in teachers' leaving decisions as relative salaries (*Hanushek et al.* (2001). *Stinebrickner* (1998) found that the role of family circumstances, such as maternity and marriage is decisive in teachers' leaving decisions. *Gilpin* (2011) found that the wage differential between a teaching and a non-teaching occupation matters only for inexperienced teachers – teachers with less than six years of teaching experience – while the work environment affects the leaving decisions of both experienced and inexperienced teachers.

This chapter is based on a study which investigated the role of wages in teacher attrition in Hungary; the differences in the effect of wages between differently aged teachers and the effect of the 2002 year salary increase on teacher attrition (*Varga*, 2013).

Data

The base data-set used in the study was a merged dataset collecting information from the Pension Directorate (ONYF), the Health Insurance Fund (OEP), the Treasury (MÁK) and the Public Employment Service (ÁFSZ). The sample was created by a fifty per cent random draw from the Hungarian population aged 5–74 in January 2002. Each individual in the sample is followed from January 2002 until December 2008 or exit from the social security system (for reasons of death or permanent emigration). Out of the base dataset a “teacher” subsample was created. All individuals who were in a teaching job for at least one month between January 2002 and December 2008 were included in the teacher subsample. We have data for 57,546 individuals. The unit of observation is the monthly status of individuals and the maximum number of observations for an individual is 84 months.

Our data contains information on demographics (age, gender), educational attainment (for those with at least one unemployment spell), employment status, occupation code, wages for the occupation codes, and transfer receipt.

Methods

For analysing, the effect of the 2002 wage increase on teacher decision to leave the profession duration models were used. Duration models estimate the conditional probability that a teacher leaves the profession given that she/he has not left it prior to the month of investigation.

First, we used *binary choice Cox proportional hazard models* (leaving the teaching profession or not), then *competing risk models*¹ that distinguish exits

¹ In the Cox model the base hazard is non-parametric, no form is pre-specified for the baseline hazard, the hazards are proportional to each other, and do not depend on time, but time-dependent covariates also can be incorporated to the analysis. Censored data are handled in the Cox model: both left truncated data, that for those who work as teachers in the first observation there is no information as to how long have they worked as a teacher and the model also handles the right censored data, that we only know that the event of interest had not happened for an individual during the time that was the subject of the study, but we do not have information if it happened later.

to another occupation and exits to a non-working state. In the Cox-model, the risk given covariates are the product of the baseline hazard and a relative risk:

$$\lambda[t, x(t)] = \lambda_0(t)e^{x(t)B(t)},$$

Where λ_0 stands for the base hazard; t for time; x for the observable characteristics of the individual. The Cox-model can allow for time-varying covariates $x(t)$. The model also handles time-dependent effects, where the coefficients are a parametric function of time $\beta(t)$, so the effects of covariates are not proportional.

A number of those who leave teaching do not go on to another job, but intentionally or non-intentionally arrive at a non-employment state: become inactive, go on to child-care pension, retire, become unemployed, etc. As the determinants of these decisions might be different from the determinants of going to a non-teaching job teacher attrition was also analysed with the help of a competing risk model (*Fine and Gray, 1999*) which distinguishes exits to a non-teaching job (*NT*), and exits out of active status (*NF*). Competing risks are present when those who are working as teachers are at risk of more than one mutually exclusive event, and the occurrence of one of these will prevent any other event from happening. In our case the individual either goes on to a non-teaching job or becomes inactive or unemployed. Competing risk models define a separate hazard function for each event: going to a non-teaching job $\lambda_{NT(t)}$ and becoming inactive or unemployed $\lambda_{NF(t)}$. The total hazard of leaving teaching is the sum of the sub-hazards.

The effect of the single, high level wage increase of public servants was analysed with the help of models where the independent variables contained dummy variables which indicated the year of the observation using 2002, on the one hand, as the reference category. On the other hand as the Cox-model makes it possible to split the data by episodes and check whether the effect of the covariates differs by episodes this method was used as well. The effect of the wage increase was also investigated using episode splitting. The public servants' wage increase came into force in September 2002. The data from January to August 2002 describe the state before the wage increase and the data from September 2002 the state after the wage increase. Thus, the data were split into two episodes and checked to determine if the effect of given covariates differed before and after September 2002.

Independent variables in the analysis were: gender, age-group dummies in the models that used the whole sample, and region of residence. Regional effect may reflect different effects: the differences in local labour markets, differences in the work environment, and differences in the quality of education caused by, for instance, differences in pupils' composition or other factors. Further independent variables in the models were if the individual had worked as a teacher in primary or secondary education. The effect of wages was measured

by the (log) wages of the individual at January 2002 constant prices.² In addition, the monthly unemployment rate of the region of the individual's residence was also included. Finally, a dummy variable indicated if the month was September. School years begin in September and prior to that there is a long summer holiday, so it might be worthwhile to delay an exit from teaching until September and use the full the summer holiday.

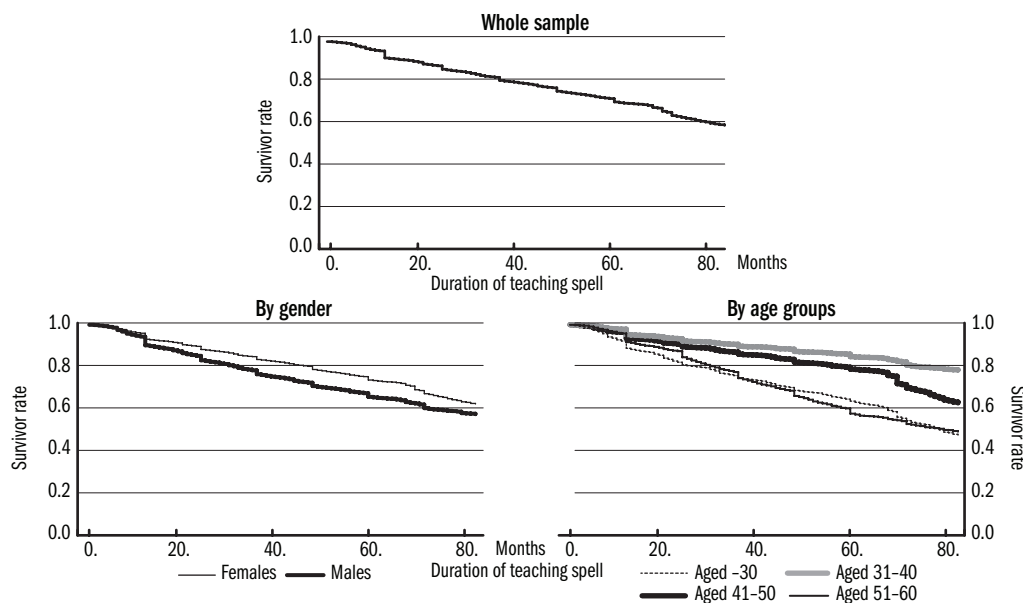
Teacher attrition

Figure 4.1.1 shows the empirical Kaplan and Meier survival functions by gender and age-group.³ The figure shows in the months observed the proportion of teachers who are still working as teachers. The figure for the whole sample shows that for those teachers who began teaching between January 2002 and December 2008 the unconditional exit rate was quite steady between 2002 and 2008. Exit rates of men and women were similar between January 2002 and September 2002, but thereafter the exit rates of men were higher than the exit rates of women.

² We estimated also three further specifications using different measures for teachers' relative wages. The detailed estimations results are reported in Varga (2013).

³ Censored cases are not regarded as exits.

Figure 4.1.1: Kaplan–Meier empirical survival (remaining in the teaching profession) functions by gender and age-groups



There are marked differences after September 2002. Only half of the teachers who were younger than 30 years of age and older than 51–60 remained in teaching by December 2008. Survival was the greatest among teachers who were 41–51 years of age. Exit rates of the younger and older teachers were slightly higher by January 2008 than for middle-aged teachers, but thereafter

exit rates of the younger and older teachers accelerated. The smallest survival can be observed among young teachers.

How much do teachers earn after leaving the profession?

Table 4.1.1 shows average monthly earnings of current and former teachers one month after former teachers had left teaching at constant prices. Average earnings of former teachers are smaller one month after leaving teaching than the average earnings of those who remain in teaching posts because a large proportion of former teachers become inactive, go on to childcare pension or retire. Average earnings of former teachers who remain active and are working in a non-teaching job is higher than earnings of current teachers

Table 4.1.1: Average monthly earnings of current and former teachers (in constant prices – 2002 January, HUF)

	All	-30 years old	31-40 years old	41-50 years old	51-60 years old	61- years old
Current teachers	149,818	106,531	130,229	169,783	192,820	159,807
All former teachers	123,480	84,294	104,286	151,043	172,909	107,529
Former teachers who remain working	152,031	113,220	138,516	170,804	181,320	104,384
Former teachers who are on child-care pension	47,348	47,030	46,858	37,013	-	-
Former teachers who are non-employed for other reasons	48,977	49,931	46,900	39,003	39,4712	43,890

There are differences *by age groups*. Inexperienced, young, former teachers, those who are younger than 30 and those who are 31–40 years of age earn more on average than those who remain in teaching. Average earning gain of former teachers is not too high at 6–7 per cent. Older teachers do not achieve any earnings gain from attrition. There is no difference between the earnings of former and current teachers for those who are 41–50 years of age. Earnings of former teachers who are older than 50 are even lower than the earnings of their counterparts who remain in teaching.

The effect of salaries and the effect of the public servants’ wage increase

In September 2002 the base salary of public servants was increased uniformly by 50 per cent and, as a consequence, average real salaries of teachers increased by 20.5 per cent. Nevertheless in the subsequent years the wage increase of teachers slowed down, and then stopped, and the relative earnings of teachers began to deteriorate. (See “Teacher salaries in the public sector”; in Box 4.1.1).

Table 4.1.2 reports the results of the binary choice Cox-model split for two episodes. The table shows the sub-hazard rates. The first part of the table reports the results of the base model. The second part of the table shows the

results of the estimations where the variables in the equation were split into two episodes (months 0–9 and months 10–84), to check if there was a difference in the probability of attrition before and after the public servants' wage increase. That is, it was checked to see if the probability of attrition differed during the first eight months of the observations and during the subsequent months for teachers with certain characteristics (belonging to different age-groups; teachers teaching in secondary education as compared to teachers teaching in primary schools; male teachers as compared to female teachers). A hazard ratio greater than one implies an increased probability of attrition while a ratio less than one implies a decreased probability.⁴

**Table 4.1.2: Binary choice Cox proportional hazard models
(leaving teaching profession or not) split to episodes**

	Hazard rate
Base model	
Gender (Male)	1.142***
Teaching in secondary school	1.043*
Monthly unemployment rate in the region (log) real salary	0.926***
September	0.096***
-30 years old	2.282***
31–40 years old	1.599***
51–60 years old	3.373***
Older than 60 years	12.438***
tvc (variables in tvc equation interacted with $t < 9$)	
Gender (Male)	1.219**
Teaching in secondary school	1.219**
-30 years old	1.255***
31–40 years old	n. s.
51–60 years old	0.433***

*** Significant at the 1 per cent level. ** Significant at the 5 per cent level. * Significant at the 10 per cent level. n.s. not significant.

Other controls: Regions Reference category: Female, teaching in primary or lower secondary education, region Southern Transdanubia, another month than September, 41–50 years old.

Results of the base model show that the lower the salary of the teacher the higher the probability of attrition. Teachers who are younger than 30 leave the profession with more than twice the probability as that of teachers who are 41–50 years of age. Teachers who are 41–50 years of age remain in teaching with the highest probability compared to the other age groups. The high probability of attrition for the 51–60 years of age group and teachers who are older than 60 is due to retirement.

The results of the interactions with duration show that the effect of gender is different in months 0–9 and 10–84. The estimate shows a 21.9 per cent

⁴ For instance in the base model the hazard ratio of men is 1.142 indicating that the probability of leaving for men is 14.2 per cent higher than for women. Similarly a one percentage point increase in the regional unemployment rate will decrease attrition by 7.4 per cent (the hazard rate is 0.926).

larger effect in the second, post wage increase period for men and a 21.9 per cent larger effect for teachers teaching in secondary schools. There is no evidence that the effect is different for the 31–40 year old teachers in the two periods. Young, inexperienced teachers left teaching with 25.5 per cent larger probability after September 2002 than before compared to teachers belonging to the reference group – those in the 41–50 years of age group. The probability of attrition of older, 51–60 years of age teachers decreased by 56 per cent after the wage increase.

Table 4.1.3 summarizes the results of the separate competing risk models for age-groups that analysed the effect of the 2002 year wage increase with the help of dummy variables which indicated in which year was the month under observation. The reference year was 2002. The competing risk models which consider the effect of wages on multiple causes of attrition were going to a non-teaching job and becoming inactive or unemployed.

**Table 4.1.3: The effect of wage increase – Competing risk models (subhazard rates).
Risks: Working in a non-teaching job/ Inactive or unemployed**

	-30 years old		31-40 years old		41-50 years old		51-60 years old	
	Working in non-teaching job	Inactive or unemployed	Working in non-teaching job	Inactive or unemployed	Working in non-teaching job	Inactive or unemployed	Working in non-teaching job	Inactive or unemployed
Gender (Male)	1.511***	0.700***	2.031***	0.397***	1.707***	n. s.	1.241***	0.734***
Log real salaries	0.745***	0.670***	0.847***	0.660***	0.597***	0.464***	0.773***	0.788***
2003	0.777**	n. s.	0.760**	n. s.	0.561***	1.674***	0.920	0.864
2004	n. s.	2.355***	n. s.	n. s.	0.594***	1.769***	0.711***	0.682***
2005	n. s.	3.739***	n. s.	1.736***	0.591***	2.171***	0.676***	0.595***
2006	n. s.	3.581***	n. s.	1.884***	0.728**	2.256***	0.681***	0.234***
2007	1.667***	7.157***	1.518***	6.791***	n. s.	5.271***	n. s.	0.182***
2008	1.392***	8.258***		10.060***	n. s.	4.532***	n. s.	0.229***

*** Significant at the 1 per cent level. ** Significant at the 5 per cent level. * Significant at the 10 per cent level. n.s. Not significant.

Other control variables in the model: teaching in secondary school, monthly unemployment rate in the region, September.

Reference category: female, teaching in primary school, region Southern Transdanubia, another month than September, year 2002.

Low salaries increase the probability of moving to another job or becoming inactive. As for the effect of the public servants' wage increase: in 2003 young teachers (younger than 30), and those teachers in the 31–40 years of age group left teaching for a non-teaching job with a lower probability than in 2002. The results show no difference in the probability of attrition after 2004, compared to 2002. After 2007 young teachers left teaching with a greater probability than in 2002. The probability of becoming inactive increased after 2004 both for teachers under 30 and teachers between 31–40 years of age. Teachers who are younger than 30 became, with twice as much prob-

ability, inactive or unemployed in 2004 than in 2002, and with an eightfold larger probability in 2008. For the 31–40-year-old teachers, the probability of becoming unemployed is tenfold greater in 2008 than in 2002.

The effect of the wage increase lasted longer for older teachers and was stronger than for the young. The probability of going to a non-teaching job decreased for older teachers after the wage increase. Both the 41–50 year old teachers and the 51–60 year old teachers exited teaching for another job with lower probability from 2003 to 2006 than in 2002. The effect was the strongest for the 41–50 year old teachers. They exited teaching with a 40–45 per cent smaller probability than in 2002. The probability of becoming inactive had been decreasing for the 41–50 year old teachers from 2003. The older, 51–60 year old teachers had become inactive with a much lower probability after 2002 than in 2002.

The public sector wage increase had reduced the probability of going to a non-teaching job for young teachers only for one year. The effect lasted longer for older teachers. After the wage increase young teachers for some years went to another job and became inactive with larger probability than before the wage increase. On the contrary, older, 51–60 year old teachers had not only gone to another job with smaller probability, but they had also become inactive with a smaller probability after the wage increase. Older teachers were the group of teachers that were retained in teaching by the wage increase.

Where do teachers work after having left the profession?

To get a fuller picture of the determinants of teachers attrition it is worthwhile to summarize where teachers work after having left teaching. According to the results of earlier research (*Gilpin*, 2011) a large part of the teachers who leave teaching stay in the education sector in an administrative or non-teaching job. Our data contains information on the occupation codes of former teachers, and it is also possible from the data to identify the sector of employment of former teachers. *Table 4.1.4* shows by age-group if former teachers are working in the education sector or outside the education sector. *Table 4.1.5* shows the distribution of former teachers who are working outside the education sector by occupation group.

The majority of teachers who leave teaching remain in the education sector in Hungary too, but there are large differences between age-groups. More than 70 per cent of former teachers who are younger than 30 years of age leave the education sector and more than half of the 31–40 year old group who exit teaching go to work outside the education sector. On the contrary more than 60 per cent of older teachers remain in the education sector in non-teaching jobs. That is older teachers leave teaching for other possibilities within the education sector – administrative or management jobs. Only one-third of former teachers who are older than 41 find a job outside the education sector.

**Table 4.1.4: Distribution of former teachers
by sector of employment after attrition (per cent)**

	Whole sample	-30 years old	31-40 years old	41-50 years old	51-60 years old
Working outside the education sector in non-teaching job	51.77	70.57	51.24	37.52	39.89
Working in the education sector in non-teaching job	48.23	29.43	48.76	62.48	60.11
All	100.00	100.00	100.00	100.00	100.00

**Table 4.1.5: Distribution of former teachers who left education sector
by occupation group (per cent)**

	Whole sample	-30 years old	31-40 years old	41-50 years old	51-60 years old
Managers	33.1	11.6	32.0	50.6	47.9
Other professionals	29.7	31.9	32.3	25.5	28.6
Clerical support workers	29.9	43.9	25.4	15.8	17.1
Service and sales workers	3.9	7.9	5.5	3.7	1.1
Elementary occupations	3.4	4.7	4.8	4.4	5.3
All	100.0	100.0	100.0	100.0	100.0

The table indicates that inexperienced former teachers who exited the education sector work not only in other professional jobs, but they also go to other employment for higher earnings. 44 per cent of former teachers who are younger than 30 years of age work as office or administrative support and about 8 per cent as service and sales workers. The majority of 31–40 year old former teachers work as managers or professionals, a quarter of them become clerical support workers, and 5 per cent of them go to service and sales jobs. More than half of the former teachers who are older than 41 become managers, a quarter of them go to other professional jobs, and 16–17 per cent of them obtain employment as clerical support. About 5 per cent of former teachers work in elementary occupations in all age groups of former teachers.

Conclusions

This chapter investigated the effect of salaries on teachers attrition. Results show that earnings matter. The lower the salary of a teacher the larger is the probability that the teacher will go to another job or becomes inactive in all age-groups of teachers, but the effect is stronger for young teachers. The majority of exiting young teachers leave the education sector and find a job outside the education sector. Teachers aged 41–50 remain in teaching with the highest probability, all other age groups find another job or become inactive with a larger probability. The public sector wage increase in 2002 did reduce attrition rates of young teachers' temporarily, but the effect disappeared as the relative earnings of young teachers began to deteriorate again thereafter.

Attrition rates of young teachers who are younger than 30 or the 31–40 year old group returned to the level where it had been before the salary increase or even worsened. Attrition rates of older teachers decreased after September 2002. In 2013, the so-called “teacher career model” was introduced in Hungary, and the base salary of teachers was increased in certain parts of the pay scale. At the same time, a number of earlier bonuses and supplements were abolished. So, we do not know yet if the total salary of teachers or certain groups of teachers has increased or decreased and how relative salaries of teachers have changed. Further analysis will be needed, when micro-level data on teacher salaries for 2013 and for the subsequent years will be available, to evaluate how the new conditioning of teacher salaries has affected the relative wages of teachers and the attractiveness of the teaching profession.

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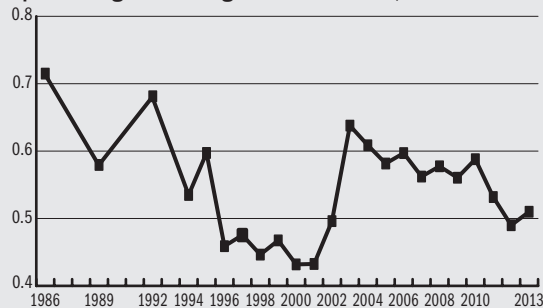
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4.1.1 Teacher salaries in the public sector (1986–2013)

JÚLIA VARGA

Before the transition teachers earned about 70 per cent of other graduate salaries. After 1989, there was a dramatic decrease in the relative wages of teachers that was temporarily tempered by wage increases in some years: in 1992 and 1995. At the lowest point, in 1999–2000, the relative wages of teachers slightly exceeded 40 per cent of average graduate salaries. After the 2001 and 2002 year wage increase for public servants the wage lag of teachers ameliorated to a 1989 year level, but following that point the lag worsened once again from year to year. The increase in salary levels had lost its value within a few years. In 2012 the average teacher earned 49 per cent of average graduate salaries and, in 2013, 51 per cent (*Figure B4.1.1*).

Figure B4.1.1: Average teacher salaries as a percentage of other graduate salaries, 1986–2013

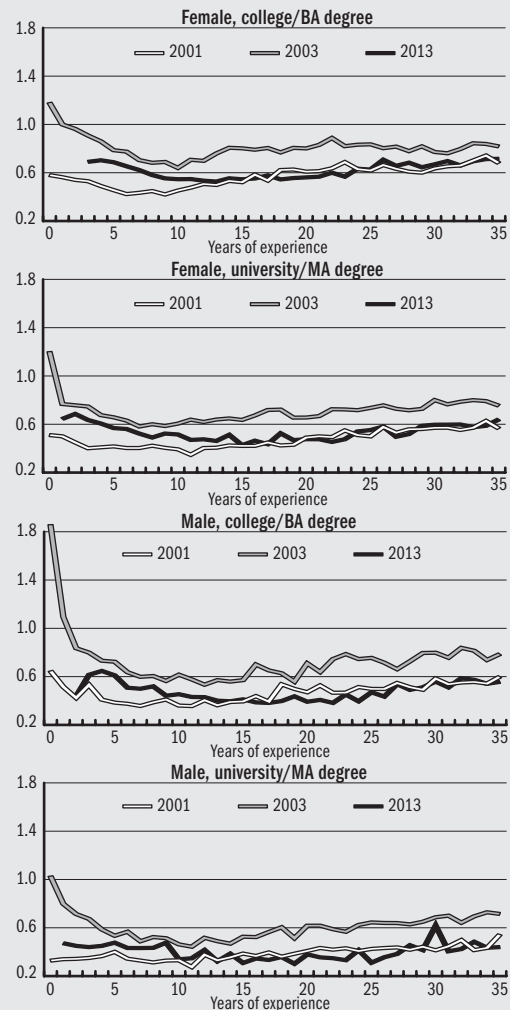


Source: Based on data of Wage Tariff Surveys of the *National Employment Service*.

There are marked differences in the relative position of teachers by educational level, years of experience and gender (*Figure B4.1.2*). The lag is larger for men than for women, larger for those teachers who have a master’s degree than for those who have a bachelor degree. By years of experience, the relative wage profile of teachers takes a U-shaped line. The relative wage lag for the youngest and oldest teachers is much smaller than for those who have 10–15 years of experience. In the first 10–15 years of experience, there are widening differentials. The reason for this is that the salary schedule of teachers is quite different from the structure of

compensation in the non-teaching labour market – the teachers’ pay scale rewards only degree level and experience.

Figure B4.1.2: Teachers’ relative salaries by years of experience and level of educational attainment 2001, 2003, 2011



Source: Based on data of Wage Tariff Surveys of the *National Employment Service*.

The wage increase was uniform for all teachers. The base salary was increased by 50 per cent. The sal-

ary increase only lessened the widening lag behind other graduates' salaries during the first ten years of experience but did not correct it. (See the study of János Köllő János, in *In Focus*). In 2013 the relative wage lag was increasing by years of experience to a smaller extent than it was in 2003, but it still holds true that young teachers during the first 10–15 years of their career find themselves in a worse and worse relative position from year to year compared to other graduates.

Hungarian teachers' relative salaries compared to other graduates earnings are low by international comparison. Teachers' statutory salaries for those with 15 years of experience were much lower in 2011 at all educational levels compared to earnings for tertiary educated workers as the EU or OECD average shows (*Figure B4.1.3*).

International comparable statistics on teacher

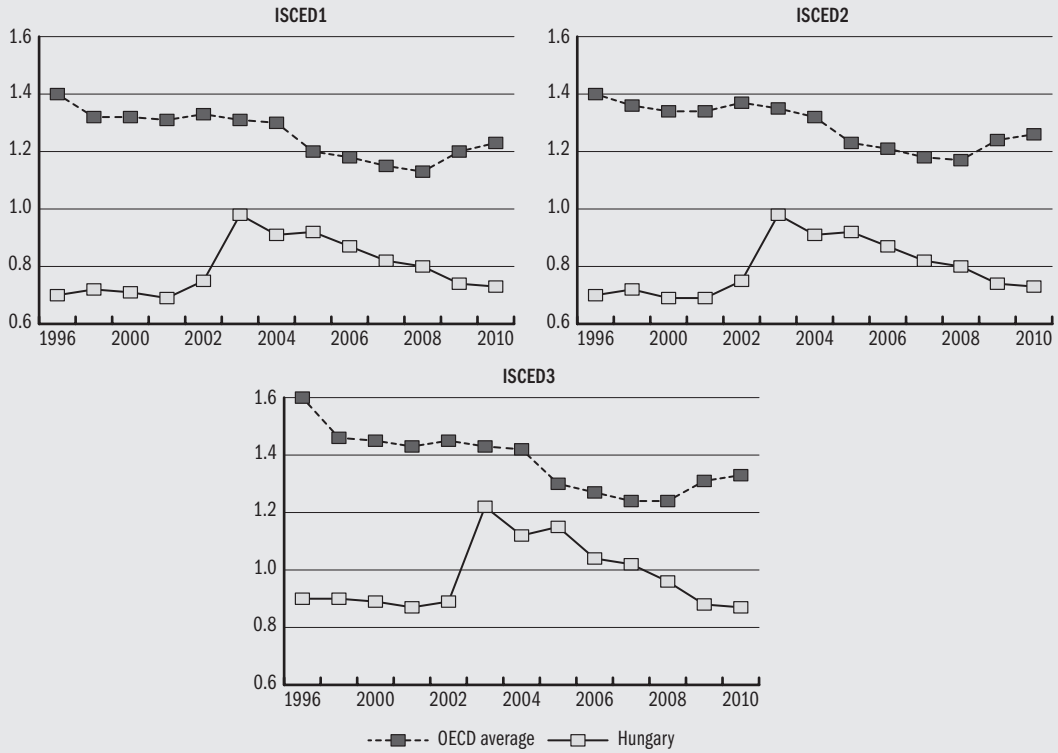
salaries relative to earnings for tertiary educated workers are available only for recent years so long-run changes cannot be tracked in this respect. Data are available for longer periods on teacher salaries relative to per capita GDP (*Figure B4.1.4*). Between 1996 and 2010 teacher salaries relative to per capita GDP were lower at all educational levels than the OECD average. In consequence of the public servants wage increase in 2002 the difference had decreased between Hungarian teacher salaries relative to per capita GDP and the OECD average, but thereafter the difference began to increase again. Between 2008 and 2010 the increase in the difference was due to the fact that between 2008 and 2010 in a part of the OECD countries teacher salaries increased relative to per capita GDP, in spite of the economic crises, while in Hungary teacher salaries decreased during the same period.

Figure B4.1.3: Teacher salaries relative to earnings for tertiary educated workers aged 25–64 (2011)*



* Teachers with 15 years of experience. ■ Source: Based on data of OECD *Education at a Glance 2013*. Table D.3.2.

Figure B4.1.4: Statutory salaries of teachers* compared to per capita GDP, 1996–2010



* Teachers with 15 years of experience. ■ Source: Based on data of OECD *Education at a Glance 2013*. D.3.4.

4.2. Labour mobility and employee bargaining power in healthcare – Regional overview

IMRE GERGELY SZABÓ

In Hungary, the wages of government workers were frozen and in some cases reduced between 2008 and 2012. Within this very diverse set of employees, resident physicians were the only group capable of taking successful collective action and achieving wage increases that were extended to the entire healthcare sector. However, the 2011 mass resignation campaign organized by the Hungarian Association of Resident Physicians was not unique in the Visegrád region.¹ Similar protest events took place in Poland, Slovakia and the Czech Republic. Most importantly, in all these cases (including Hungary) the protest organizers took advantage of the issue of medical emigration and the resulting labour shortages. After the 2004 EU-enlargement, the westward migration of healthcare professionals from these countries intensified, causing further deterioration in health service coverage and quality. On the other hand, large-scale emigration increased the bargaining power of employees who remained in their home countries. Trade unions and professional associations used the issue of emigration to justify their wage demands and claimed that the only way to stop the exodus of professionals was to raise salaries at home. Furthermore, knowing how easy it is to find a job abroad, trade unions and professional associations of doctors launched mass resignation campaigns to back up their claims. Results were similar across the region: in all four countries, significant wage increases were achieved for all healthcare workers, but above all for doctors. Besides, in all cases, contentious action – most importantly in the form of resignation campaigns – proved to be more effective than collective bargaining. Protesters addressed their claims not to employer associations but directly to the central government. Similarly, in most instances the results were underwritten by statutory laws or government orders rather than by collective agreements. This was the case even in Slovakia and the Czech Republic where industry-level collective bargaining is stronger than in Hungary. Nevertheless, there were serious cross-country differences with regard to the timing of the events, the main actors involved and their relationship. The most pronounced conflicts between the government and trade unions and amongst trade unions could be observed in Slovakia, while disputes in Hungary were resolved in a relatively peaceful manner.

Within the region, *Poland* experienced the first major wave of emigration-related healthcare protest in 2007. The bargaining dispute lasted for almost a year and revolved around doctors' call for a starting monthly salary of 5000 zlotys (approximately 1300 euros at 2007 ECB reference exchange rate) for resident physicians and 7500 zlotys (2000 euros) for specialists. Doctors also

¹ This overview relies on the following news sources: English-language news sites *Spectator* on Slovakia and *Prague Post* on the Czech Republic, Hungarian-language sites *rezidens.hu*, *eduline.hu* and *uj szo.com* on Slovakia and Hungary.

demanded that these sums should be included in an industry-level collective agreement. Similarly to Hungary, industry-level collective bargaining traditionally plays a minor role in Poland. After failed negotiations at the hospital level, the trade union of doctors turned directly to the Ministry of Healthcare. Having deemed the ministry's offer unsatisfactory, the union launched a strike that affected almost 200 of the country's 700 hospitals (*Czarzasty, 2007*). In some hospitals, doctors collectively handed in their notice, paralyzing entire departments. Eventually, the 2007 crisis was solved by local level agreements, but the government later on gradually increased wages at the industry level as well, which may have contributed to the slowing down of medical emigration from the country (*Kautsch and Czabanowska, 2011*).

While emigration is a less severe issue in the Czech Republic, the Czech doctors' union was the first to organize a structured resignations campaign. While Polish doctors walked out spontaneously from hospitals, their Czech colleagues did this as part of a pre-planned action. The main trade union of physicians (Lékařský odborový klub, LOK) launched its "Thank you, we are leaving" campaign in March 2010, encouraging medical doctors employed in hospitals to resign prior to December 31 of the same year. Setting the wages of doctors between 1.5 and 3 times the national average featured prominently within the 13-point demands list issued by the union. As of 20 December 2010, 3,513 out of the 18,000 physicians employed in Czech hospitals handed in their notice, taking effect from 1 March 2011 (*Veverková, 2011*).

This move triggered a crisis that lasted until February 2011 and ended with the government granting an immediate wage increase of between 5 and 8 thousand korunas for doctors (the average wage in 2010 ranged between 45–50 thousand korunas, equalling 1800–2000 euros at 2010 ECB reference exchange rate). The government also committed itself to a long-term settlement under which doctors' salaries would reach 1.5 times the national average by 2013. The rest of the hospital workforce was not covered by the agreement, but right after the doctors' protest, the nurses' pay scale was upgraded and they were also promised a 10 per cent wage increase from January 2012. Further debates erupted on how to secure the resources for these undertakings. Doctors' pay increase was supposed to be financed by cutting the number of acute care beds and by restructuring the hospital procurement system. Those hospitals that were not run by the health ministry – but typically by the regions – did not receive any extra funds to cover the increases, neither from the central government nor from health insurance companies.

Emigration is not a new topic of bargaining disputes in Slovak healthcare, but until 2011 these debates were mostly contained within the existing industry-level bargaining forums (*Kaminska and Kahancová, 2011, 199*). This changed in autumn 2011, when following the Czech example, the Slovak Trade Union of Doctors (Lekárske Odborové Združenie, LOZ) called for

mass resignation. Responding to the call, around 2,500 doctors handed in their notice, mostly anaesthetists, whose work is crucial for most hospital departments. LOZ addressed the Radicova government with three major demands: doctors salaries should be raised to a level of between 1.5 and 3 times the national average, the hospital financing system should be restructured and hospital corporatization should be stopped.²

Compared to the other cases, Slovak protests caused the most serious disruption in the healthcare system. After their notice period ended on 1 December 2011, 1,200 doctors indeed refused to take up work. In response, the government declared a state of emergency extending to 15 hospitals and asked neighbouring countries (including Hungary) to provide substitute medical staff. The conflict was resolved by an agreement between the government and LOZ in late December 2011 that guaranteed the termination of corporatization and a three-stage wage increase. The first two stages were executed prior to June 2012, increasing resident salaries to 1.2 times and specialist salaries to 1.9 times the national average wage. The final step is still to be completed, but it will result in 1.25 times the national average for resident doctors and 2.3 times for specialists (*Czíria*, 2012a).

In the wake of the 2011 autumn doctors' resignation campaign, internal conflicts ensued both on the employer and on the employee side of Slovak healthcare. Employers were divided on the issue of how to split up the costs among the central budget, the health insurance companies and the hospitals. On the employee side open hostilities broke out between LOZ and the nurses' unions. Shortly after the agreement was reached between the doctors and the government, the Slovak parliament also raised the statutory wages of nurses – to a range of 640 to 928 euros per month depending on qualifications and years in service. Nevertheless, the medical chamber – being closely associated with the doctors' trade union – attacked the law at the constitutional court, claiming that due to the lack of allocated fiscal resources, it endangers the functioning of hospitals (*Czíria*, 2012b). It seems that this time, doctors overrepresented in hospital management acted as employers not as employees. In 2013, the court ruled in favour of the Medical Chamber and annulled the wage increase for nurses.

Despite the fact that on purchasing power parity, Hungarian physicians' wages are the lowest in the Visegrád region, (*Reginato and Grosso*, 2011, p. 4) Hungary was the last to be reached by the wave of protests. One of the reasons might have to do with the fact that medical emigration from the country accelerated only after 2007.³ Besides, the resignation campaign was not organized by traditional trade unions but by the Hungarian Association of Resident Physicians, a relatively new formation. Nevertheless, once protests started, the Medical Association (MOK) and its trade union branch (MOSZ) expressed support. Due to the nature of the main organ-

2 Corporatization denotes the process during which public sector institutions change legal status and become corporations. In Slovakia, between 2003 and 2006, municipality-run hospitals were turned into corporations while public ownership remained intact. The aim of the reform was to introduce stricter rules of financial management for hospitals. In 2011, the Radicova government was going to extend corporatization to university hospitals as well.

3 According to the Office of Health Authorisation and Administrative Procedures, after a slight decrease between 2005 and 2007, the number of physicians applying for overseas recognition of their medical qualification increased from 695 to 1108 from 2007 to 2012.

izer, demands focused on the improvement of wages and working conditions for young doctors, but more general claims were also formulated, including the long-term goal of increasing practising physicians' wages three times above the national average. As of December 2011, the Association of Resident Physicians collected 2,500 resignation letters, which would have been handed in to employers in January 2012 and would have taken effect in March the same year. Direct confrontation was avoided however, as in the final days of 2011, the government offered a deal that the resident doctors found suitable as a basis for negotiations. According to the agreement that was finalized in March 2012, doctors earning below a monthly gross of 350,000 Forints (1150 Euros, without on call duty), were entitled to an increase of 66,000 Forints. Above this level, the increase was gradually capped, deducting 5,000 Forints from the increase after every 10,000 Forints of higher original wages. Moreover, the government launched new, or expanded already existing, scholarships for resident physicians (*Girasek and Szél, 2014*). The wage increases extended to qualified nurses as well: 32% of them could expect a wage increase of 20,000 Forints per month while another 47% 15 thousand per month. A new round of wage increases followed suit in 2013. It would be too early to assess how these recent wage increases affected emigration trends. In 2013, 955 physicians applied for a certificate of good standing necessary for taking up employment abroad, a drop in numbers compared to the years 2010–2012, but still higher than in the pre-crisis years (*Girasek and Szél, 2014*). Besides, the leaders of the Association of Resident Physicians gained countrywide recognition in the wake of the events, which they also want to exploit in a bid to influence policies of the Medical Chamber. It remains to be seen whether they succeed, but the “Residents” are getting involved in much broader issues of health politics. For instance in 2013 they launched an awareness campaign to fight against the widespread practice of informal payments.

The protest wave in the medical sector that spread through the region between 2007 and 2012 has several features that highlight the contradictions of collective bargaining within the public sector. First of all, despite decentralization and public management reforms, the ultimate responsibility for public sector employment relations is still born by the central government. Even in countries where the autonomy of hospitals is stronger than in Hungary, healthcare employees addressed their claims directly to the central government. Besides, it seems that within the public sector only healthcare employees have a generally favourable labour market position as a result of the migration opportunities they enjoy (*Kaminska and Kahancová, 2011*). Other public sector professions such as teachers or members of the armed forces have much less demand for their services and much less job opportunities abroad, which decreases their bargaining power.

The weaker bargaining position of teachers became evident during recent events in Slovakia and Hungary. In autumn 2012, one year after the doctors' resignation campaign, the Slovak teachers' union OZPŠaV started collective action in a bid to achieve a 10% wage increase, which was modest compared to that which the doctors received (Czíria, 2013). Reacting to a short warning strike in October 2012, the government offered 5 per cent but ruled out a more generous offer, referring to the difficult fiscal situation. The union rejected this and launched an open-ended strike, affecting three quarters of the country's schools. Demonstrating a willingness to yield, the government proposed 7.5%, but a portion of this increase should have been covered by municipalities. The leadership of OZPŠaV accepted the offer despite several school-level strike committees expressing dissatisfaction with it. Problems with the implementation of the deal and the government's lack of commitment to a long-term solution triggered a renewed strike threat from OZPŠaV in 2013, but no actual steps were taken. In Hungary, starting from 2012, and after four years of a wage freeze, the government carried out a wage settlement in education from above, in parallel with the re-centralization of schools and with the establishment of the National Board of Teachers, a corporative professional organization with compulsory membership. The two main trade unions in education (PSZ and PDSZ) fiercely criticized the centralization of the school system. They claimed that the new wage system was unfair and also that the new representative body was just a puppet of the government. Nevertheless, they were not able to influence government decisions to a significant degree.

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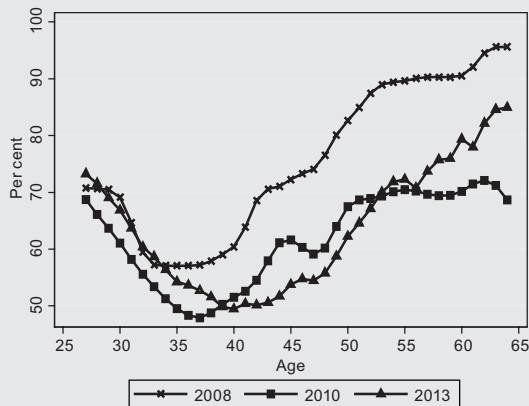
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4.2.1 Doctors' pay and gratuities

JÁNOS KÖLLŐ

Official pay in the health sector is low by any standards and it even declined substantially during the crisis. As it is shown by *Figure B4.2.1* graduate professionals in the sector – predominantly doctors – were earning significantly less already in 2008, than graduates with similar education and age employed in the private sector. Similarly to other graduates in the public sector, the gap was widest at the age of 35–40 years for doctors as well – on average 43%. As a result of the abolition of the 13th month pay and other measures, the gap increased to 51 per cent in this cohort by May 2010. At the same time the (official) relative pay of the most highly paid doctors – those aged over 55 – dropped even more drastically: from 90 per cent to 70 per cent.

Figure B4.2.1: Monthly gross pay of graduates in the health care sector expressed as a percentage of monthly gross pay of graduates in the private sector, May 2008, 2010 and 2013



Source: *Wage Tariff Survey*, 2008, 2010 and 2013.
Moving means by three years.

Between May 2010 and 2013 the pay of doctors aged under 40 years increased by around seven or eight percentage points, however the pay of older doctors declined even further with the exception of those near retirement. The selection bias resulting from the increased exit of low-paid older employees might have also paid a role in this. Even now, doc-

tors aged 40 earn no more than half of what their counterparts in the private sector are paid.

A distinctive feature of the struggle of doctors and nurses for higher pay in Hungary has been its initial link to the fight against *gratuities*. Although patients across Eastern Europe and in some Southern European countries routinely pay gratuities for health care (see e.g. the paper by *Chawla, Berman and Kawiorska*, 1998 on Poland, *Delcheva, Balabanova and McKee's* 1997 on Bulgaria, *Sabirianova and Zelenska's* 2011 study on Russia, *Burak and Vian's* 2007 research on Albania and *Liaropoulos et al.* 2008 report on Greece), but as far as we know, only in the Hungarian “pay movement” the idea of replacing gratuities with higher pay was put forward in the past years. The Hungarian Resident Association started the “green cross” movement at the end of 2010. Doctors supporting the movement would have given up gratuities for a 100 per cent pay rise (they would have expressed their support to the movement by wearing a green cross badge). However, the proposal was against the interest of older doctors benefitting from gratuities and therefore, with pressure from professional bodies (Hungarian Medical Council, Hungarian Medical Association, Association of Hospitals), it was rapidly taken off the agenda of pay negotiations.

There are various obstacles to tackling gratuities. Firstly, the opposition of senior doctors should be expected because it is unlikely that official pay would be brought into line with actual pay that includes gratuities, which widely vary with age, rank and field of practice.

Secondly, replacing gratuities with pay would also have major budgetary implications: *Bognár, Gál and Kornai* (1999) estimated annual gratuity payments at 33 billion forints in the early 1990s, *Szinapszis Ltd* at 45 billion forints in 2008, and *Patika Health Fund* at 73 billion in 2009.*

* The last figure was considered exaggerated by experts of *Szinapszis Ltd*, see *Kiss* (2009).

Last but not least, the reluctance of tax payers should also be considered: although they would happily get rid of the burden of gratuity payments and they overwhelmingly support a major pay rise for doctors,** at the same time over 80 per cent of voters rejected co-payment (a small fee for medical consultations and a daily fee for hospital stays) on top of social insurance contributions to create additional funding for health care – among others, to combat gratuity payment – at a referendum in 2008. Since Fidesz – who initiated the referendum – came to government, the introduction of any general co-payment scheme is very unlikely. In the current context, demand and supply of gratuities can be reduced by additional government spending and the introduction of new taxes (such as the “hamburger tax”), or by supplementary insurance and additional fee-paying services. Obviously, the last two can only provide a solution for the better-off upper- and middle classes for whom the “obligation” of gratuity payment is a lesser burden anyway (Szende and Culyer, 2006). Pay agreements that set out a gradual increase of wages signed in 2012–2013 created a necessary but insufficient condition to tackle the issue of gratuity: competitive and fair pay, and a health care sector free from gratuity payment are no longer as interconnected as in the original programme of the Hungarian Resident Association.

** According to a survey by Szinapszis Ltd 88 per cent of the population would support the pay increase of health care workers. One third of the population would consider a 50 per cent rise fair, and 11 per cent would double pay (Nógrádi Tóth, 2010).

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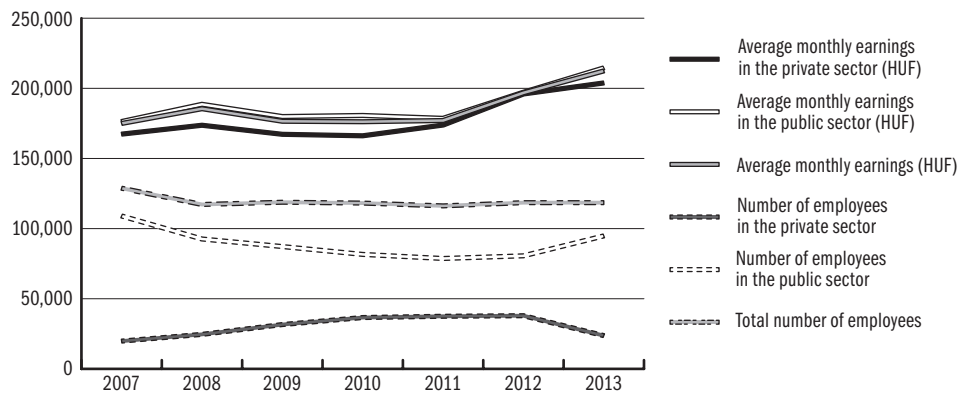
4.3 Nurses and other health care professionals

ERZSÉBET BERKI, ÉVA CZETHOFFER & ENDRE SZABÓ

The wage demands of health care professionals have been very much in the public eye in recent years. The Association of Hungarian Residents has organized a number of actions, and regular media reports on the emigration of health care workers have spotlighted working conditions in the health care sector (for details see sub-chapter 4.2 of this issue of *In Focus*). This article explores the status and movement of health care professionals on the labour market.

Both the public (central and local governments) and the private sectors have been equally involved in health care for many years. The outcome has been a patchwork of conditions set by various employers. Some people work as public service staff while others are straightforward employees, while overtime work and a variety of special contracts including ones that legally transform health care workers into private entrepreneurs try to fill in the gaps generated by a shortage of labour. The entanglement of the private as well as central and local government sectors in this area even muddles up the statistics, but overall trends can be unearthed by using a variety of databases (*Figure 4.3.1*)

Figure 4.3.1: Number of health care workers and average earnings



Source: *Central Statistics Office Statistical Database* (KSH STADAT) Annual time-lines (labour market, Tables 2.1.33., 2.1.35, and 2.1.38 and 2.1.43) and own calculations.

KSH data covering employment from 2007 to 2012 very clearly shows that employment in the public (central government) health care sector has been declining steadily while in the private sector – which includes businesses in which the government is a minority or majority owner – it has been on the rise. Overall however, the numbers have gone neither up nor down since 2008. There was one break in this picture, in 2013, when what till then had been private business entities were turned into central-budget-run institutions. That

year private sector employment went down by roughly 14,000 persons, while the number of people working in the public sector increased.

At this same time, mean earnings in the private sector were slightly below the average for the public sector (the biggest difference was in 2010, when it amounted to HUF 14,000/month). For all intents and purposes, earnings stood still between 2008 and 2011, and then began to rise in 2012–2013. Data for 2013 reflects a more significant rise in average earnings in the public sector than in the private one (these numbers also reflect the earnings levels of the staff that had been moved from the private to the public sector). By that time the earnings difference between the two sectors amounted to over HUF 11,000/month to the benefit of the public sector.

Public (central and local government) health care professionals and their career paths from 2002 to 2008

There are a number of factors within the overall trend cited above that surface when exploring the career paths of health care professionals working in the public (central and local government) sector. We used data available in the databank of the Hungarian Academy of Sciences Centre for Economic and Regional Studies (MTA KRTK) to investigate this. In 2002, the sample covered half of the population between ages 15 and 74, of whom 114,089 people spent at least one month of the timeframe under investigation working in health care. This sample was made up of workers in the health care professions,¹ who constituted 4 per cent of total employees, a number that was slowly declining. During the period of the study (2002–2008) 32,809 members of the sample worked exclusively for private employers, and were therefore excluded from the sample on which the study focused. Some 81,283 people worked as public service employees or civil servants for at least a portion of the period, and were therefore included in this study. Together, they were employed for 88.5 per cent of the timeline under observation, were unemployed for 2 per cent, and were inactive for 0.65 per cent.² Some 8.77 per cent of the sample was not in any of the above groups. They were recipients of some sort of social transfer for 70 per cent of the months observed. Thirty-four per cent received old-age pensions, 12 per cent disability pensions or disability pensions following workplace accidents, and 16 per cent received benefits linked to small children (child-care aid/assistance/job substitution pay/support/maternity-confinement aid). The remaining 38 per cent received some other social transfer (e.g. a pension transferred through a different configuration, a family-member benefit, an allowance, or a fee for nursing a family member).

Our investigation revealed that 39,331 people or nearly half (48 per cent) of the 81,283 people in the sample quit the sector³ during the period under exploration. A growing number of people left the public sector each year between 2002 and 2006. In 2002 the number of people from the sample who quit was

1 The selection was based on ISCO codes. 23 occupations listed with ISCO codes were included. Doctors obviously were not. Therefore, the data in the sample cannot be compared with the sectoral data of the NACE employer codes. At the same time it is obvious that most health care occupations are in the health care sector. The number of components in the sample tells us that a far larger number of people enter and leave the health care sector than reflected in the annual average data given by KSH, something also supported by the high ratio of people quitting the profession. (See below).

2 We call a person inactive if based in OEP (National Health Insurance) data the person is not insured in his/her own right or was unable to appear on the labour market. People unable to appear are (a) below the age of 18, (b) have been placed in live-in welfare/social facilities, (c) are homeless, (d) are receiving sanatorium-type care (aged 18–24), (e) pay an 11 per cent health care contribution, (f) are dependent family members or g) receive cash benefits following termination of their insurance.

3 Since a person has the option of quitting more than once, the number of quitters (40,213) is higher than the number of people leaving the sector for good. (The quitters do not include people who terminated employment and then re-established it within one month. Quitting can also mean leaving a position for another job, or leaving it and becoming inactive/unemployed.)

3,349. By 2008 the number was up to 6,541 (it peaked in 2007 when 6,950 left, meaning that the 2008 figure shows a slight decline compared to 2007).

We have reliable information on the status of roughly 75 per cent of individuals after they quit public (central or local government run) health care. Over the 2002–2008 timeframe there was a 6 per cent increase in the ratio of people who quit and found other jobs, and a 9 per cent rise in the proportion of people who remained jobless after leaving the sector (*Table 4.3.1*). About 2 per cent became inactive, and the ratio of those receiving some other miscellaneous social transfer dropped significantly (by 8 per cent). Of the group within the “other care” column 78 per cent received some sort of social transfer. Some 62 per cent of these received old age pensions while 8.52 per cent were granted some child-related benefit.

Table 4.3.1: Breakdown of people quitting public health care service in the years of the survey by their ensuing labour market status (%)

Year	Employed	Unemployed	Inactive	Other care	Total
2002	64.88	0.85	1.94	32.32	100.00
2003	66.99	0.74	2.31	29.96	100.00
2004	64.88	0.85	1.94	32.32	100.00
2005	55.47	13.14	2.19	29.20	100.00
2006	55.81	12.26	2.14	29.79	100.00
2007	68.43	12.14	2.17	17.25	100.00
2008	70.23	9.75	2.11	17.90	100.00
Total	63.02	10.03	2.06	24.89	100.00
Total, capita	25,342	4,032	830	10,009	40,213

We know the type of jobs to which 21,031 people switched. These were the people who were re-employed. Some 36 per cent remained in health care (most of them in the private sector – here we do not know how many were transferred due to the tendency of outsourcing from the public sector), 9 per cent went into social and labour market services, 14 per cent into some other service, and 5.8 per cent into a health care activity requiring a college degree. Three per cent of the latter remained public service employees or civil servants. The rest, which is about half of the people finding new jobs, chose from a wide variety of options ranging from catering to machine operation. Most of the people remaining in the health sector were general or specialist nurses and specialist assistants who found new jobs which statistically shifted them to a different economic sector, even though they actually continued working in the same occupation. A comparatively high ratio (6.7 per cent) of people who left the sector took jobs as social service nurses.

If we look at the above numbers in their entirety we have to conclude that half the people employed in public sector health care left the sector and one quarter have also quit the profession during the seven-year timeframe of the

study. Since the overall number of people working in the sector showed only a slight decline, the obvious conclusion is that the sector attracted almost the same numbers of new workers as the number that departed.

The people the statistics lost

As already mentioned, we know to where 75 per cent of the people in the study went and what their status was on the labour market after they left public sector health care. Exactly 10,009 people in the sample (24.8 per cent of the quitters) left the labour market altogether (see *Table 4.3.1*).

Table 4.3.2 shows us the kind of social transfers they received, and also shows that 2,204 people received no assistance of any kind (this is equivalent to 22 per cent of all the people leaving the labour market and 5.4 per cent of all the people leaving the public health care sector).

Table 4.3.2: Social transfers received by the people who left the labour market

Social transfer	Received by (number of persons)	Breakdown (%)
Gyes (child care aid)	321	3.21
Gyed (Salary replacement for child care)	109	1.09
Gyet (Support for raising children)	360	3.60
Tgyás (Maternity/confinement assistance)	63	0.63
Old-age pension	4,847	48.43
Disability pension	1,320	13.2
Disability pension (for accident victim)	12	0.12
Other pension	31	0.31
Disability support	54	0.54
Welfare-type support	166	1.66
Nursing fee (for nursing family member)	113	1.13
Care for family member	408	4.08
Benefit/assistance received, total	7,804	456.00
No data	2,204	22.02
Grand total	10,009	100.00

This sample tells us that there are really about 4,000–5,000 people for whom we have no data following their departure from public health care, and who apparently have no job and receive no social transfer of any sort. We presume that they are among the people working on the health care black market or some other black market, or that they have left the country to work elsewhere without the knowledge of the domestic authorities. We believe that although the study period has ended, the number of people disappearing from the statistical rolls has continued to rise since there were no measures prior to the salary increases of 2013 that would have reduced the number of people leaving the sector, while it became even more difficult to access social transfers.

Changes in the incomes of people leaving public sector health care

We have seen that the overall number of people in the sample leaving the sector was 39,331 (40,213 in all who quit), while the number of people who quit to do other work was 25,342. In other words, about 63 per cent of the quitters are still working (they are the ones who the health care sector could continue to employ if working conditions were satisfactory). When looking at the changes in incomes following the job changes we took the mean⁴ earnings for a maximum of six months of the previous year to be the income before the job change (which led to the loss of some of the sample, because people who began working later did not have an income that fit the criteria). The post-job-change income we used was the mean salary for a maximum of six months on the new job, which did not include the salary for the first month. We had sufficient data on 16,561 people and when calculating their earnings we discounted them to the 2008 level.

Incomes for most of the job-changers – 51 per cent – went down. For 40.7 per cent incomes rose and for 8.3 per cent we were unable to make the comparison. The earnings of the individual people compared to their own specific earlier earnings yielded a 110.7 per cent combined average (standard deviation 1.35). The investigation based on income levels showed that when “before” earnings were below HUF 120,000/month the changes resulted in higher earnings, but when they had been higher, the “after” earnings declined. When earlier earnings were above HUF 160,000 the decline was over 10 per cent. The high ratio of people suffering earnings losses suggests that the majority of the people quitting public (central or local government-run) health care were unable to sustain their earnings. To be more precise, wherever they went they were faced with the same downward pressure on earning levels that were frozen somewhere in the vicinity of the minimum wage or guaranteed minimum wage for skilled workers. This was particularly true for people who abandoned health care and switched to a different skilled profession or to a job that did not require professional skills.

To double-check our calculations we also ran the numbers reflecting the earnings changes using current (non-discounted) data. Using current earnings data the earnings of 38.5 per cent of the sample went downward. However, on the whole, the average of post-job-change earnings was 20 per cent higher than pre-job-change earnings had been. This tells us that for those people whose incomes rose, they rose significantly. Losses in earnings are partially explained by movement between sectors (*Table 4.3.3*).

The number of people switching from public sector health care to the private sphere between 2002 and 2008 was 8,431 (about 1,200/year, rising slightly from one year to the next). Differences in average earnings – noting that average earnings were lower in private health care (see *Figure 4.3.1*) – were suf-

⁴ We used this option to prevent earnings from being distorted upwards by possible severance pay. (The severance pay is included in the earnings data of the year of job-termination, divided up into months.)

ficient to explain a portion of the decline in earnings,⁵ underlining that a shift to the private sector did not automatically increase earnings.⁶ Overall 2,002 people switched from jobs in public sector healthcare to social care employment. This came to nearly 300 people a year. Given that in the period under investigation, average earnings in the social care sector were lower than in health care, we feel safe in assuming that people only switched to jobs in social care if their earnings were higher or at least as high on the new job. This is why a higher percentage of people in this sub-category saw their earnings increase. People who switched from jobs in the social care to ones in health care had the best chance of increasing their earnings – true at the time of the study and just as true today. In the period under investigation 1,185 people or an average of 169/year made this switch, albeit the actual number in 2002 was only 126, rising to 187 in 2008. (For information of flows in 2012–2013, see *Erzsébet Berki* in sub-chapter 3.2 of this volume.)

Table 4.3.3: Movement between sectors, per annum

Year	From public ^a health care to private health care	From public ^a health care to social care
2002	558	137
2003	764	291
2004	1,158	333
2005	999	282
2006	1,092	268
2007	1,903	311
2008	1,957	380
Total	8,431	2,002
Available income data	7,036	1,475
Proportion of people whose earnings increased (%)	42.08	57.08
Changes in earnings (%)	107.25	117.05

^a Central and local government-run combined.

An investigation by age shows us that this is also a factor in the decline in earnings. By using the data in the Individual Wage Survey we demonstrated that earnings for 18–44-year-olds tended on average to rise, while above the age of 45 earnings went down. This is connected with the fact that earnings in the higher income brackets tend to drop more drastically after a job change (for more on this, see *János Köllő* in Chapter 1.) It is also probable that earnings prior to a job change include a significant amount of overtime, shift bonuses, and other bonuses, which older people lose because they are no longer willing to make the effort. In other words, they halt their earlier “self-exploitation” strategy.

An investigation of post-job-change occupations shows that the people whose earnings went up the most found jobs in areas requiring a college/university degree. For instance, 81 people became family doctors, and their

5 In 2007 the government pushed forward the 13th month salary that would have been due in January 2008, by paying half of it in monthly instalments starting on 1 July. Then, at the start of 2008 it paid the remaining half of the 13th month salary for 2007, but given that the advance had been paid earlier, the move reduced everyone’s monthly earnings in the public sector. Over the course of the year, a uniform HUF 15,000 was paid out twice to every public sector worker. 2008 also marked the last wage tariff increase (an average of 5 per cent). For more details see *Berki et al.* (2012). Thus, the government only offered compensation for the loss of the 13th month salary to low-income people in the public sector but not in the private one, while outsourcings continued.

6 We do not know how many of the shifts were voluntary – in other words, how many were actual job changes – and how many were the outcome of outsourcing, when a health care facility changed its profile from public to private sector and the person remained in the same job despite the sectoral shift.

⁷“According to a briefing from the ministry to our paper, and to data from the Permit-Granting and Public Administration Bureau, by 30 June 2013 some 454 people had submitted requests for certificates enabling them to work abroad from the authorities as against 542 in 2012. This year, 247 of them were doctors while last year, 342 were doctors. As far as other health care personnel with professional skills are concerned, in the first half of 2012, 300 had requested certificates enabling them to work abroad while this year the number of requests for certificates was 360. There was a significant drop in the migration of doctors and residents under the age of 35. This is probably the outcome of the Lajos Markusovszky Stipend Program offering extra money for professions in short supply, and of gradual wage increases.” Népszabadság online (nol.hu) wrote on 31 August 2013 in an article on health care called “I Have No Concept Regarding the Future.”

earnings went up 2.4-fold. The people whose incomes rose the most steeply were among the ones who quit health care altogether. People who went into sales (121 people) saw their earnings go up 2.5-fold, while others (65 people) who took jobs in miscellaneous office occupations received a 2.8-fold jump in earnings.

In contrast, the biggest losers were people who took unskilled service industry jobs (such as driving a car, cleaning, or other unskilled work). The earnings of people working in occupations not requiring the type of degree needed in health care were more or less unchanged (1.0–1.2-fold differences) in other words, if their earnings went up as a result of the job change, it was not by much.

On the whole, it seems safe to say that the people with the greatest chance of increasing their earnings were college or university graduates who switched from the public sector to the private one and moved out of health care, unless he or she became a doctor or a dentist in the interim.

This brief analysis was intended to demonstrate that deeper-reaching changes within a segment of the labour market can be explored with the appropriate data, and that once the causes are exposed it becomes possible to seek new tools to remedy the labour market problems of a given professional area. Since quitting from health care appears to have remained at a high level over the timeframe following the conclusion of this study,⁷ and while government measures taken between 2009 and 2013 (primarily the wage increases and opportunities for women to retire after 40 years of employment) have generated new flows, long timelines of data are worth analysis using similar methods, to investigate subsequent changes.

Reference

BERKI, E.–NEUMANN, L.–EDELÉNYI, M. AND VARADOVICS, K. (2012): [Public Sector Pay and Procurement in Hungary](#). National Report.

4.4 Law enforcement workers, before and after retirement

ERZSÉBET BERKI, ÉVA CZETHOFFER & ENDRE SZABÓ

Significant legislative changes

The retirement system in Hungary has been under debate for decades. One topic under fire concerned the people who became entitled to pensions when comparatively young, and how to regulate the extensive group that took advantage of this perk.¹ One distinct group within the individuals affected by this legislation has been made up of retirees from armed public service-employment relationship, more specifically from law-enforcement occupations.² The issue of this group and of revamping retirement regulations for it came up repeatedly in the government administrations holding office from 2002 to 2010, but trade union opposition, arguments from the group in question, and a spotlight on wage issues halted any real reforms.

However, the administration that took office in 2010 did introduce a number of important retirement-related measures that impacted on this group. On 28 November 2011 Parliament adopted Act CLXVII. on Termination of Early Retirement, on Social Transfers before Retirement Age, and on Public Service Allowances. The law was promulgated on 9 December, 2011, just 22 days before it actually went into effect. Given its retroactive validity, the people affected had no way of preparing for the significant change in their living conditions.

The most important components of the law and the related amendments to the public service act that affected public servants (including law enforcement workers) and defence workers were as follows.

- As of 1 January 2012 armed service pensioners born in 1955 or earlier will now receive a service allowance instead of their armed service pension until they reach the retirement age for a standard old-age pension.
- The amount of the service allowance will be the same as the armed service pension, but is subject to a deduction equivalent to the legal personal income tax deduction (currently 16 per cent). The amount received will not be less than 1.5 times the amount of the minimum wage valid on 31 December (or HUF 117,000).
- For people in public service (including armed service) the standard retirement age will now apply.
- If a person has completed 30 years of armed service, then five years prior to the retirement age valid for their age, they may request a transfer to pre-retirement service in the “reserve corps”. The salary received will be the same amount as they would receive as a full pension at that particular time.
- If a person has completed 25 years in armed service, they may request lighter duties. The service time with this option is 35 hours/week. The person may

1 According to data from January 2011, there were 42,600 armed service retirees and the combined number of early retirees under various pension schemes was 238,400, meaning that benefits to people who retired prior to standard retirement age amounted to HUF 657 billion (*Scharle and Kocsis*, 2011).

2 In this chapter we generally use the terms “armed service” and “armed service pension”, nevertheless the legal changes also affected people in other occupations not necessarily using weapons but whose service employment relationship was regulated by the same law until 2012. (For instance, fire fighters, custom officers. See the list of occupations affected in detail in *Table 4.4.2 – Editor’s note*).

only work between 6 a.m. and 10 p.m. and may not be assigned overtime. The monthly salary in this case will be equal to the amount of absence pay the individual would receive for the last month spent in regular service.

- A recipient of the service allowance who is below the age of standard retirement may request admission to a special services (senior services) unit. (In this case the person would be transferred to the police force.) In this event the service allowance would be replaced by a net salary that must be at least as high as the service allowance had been, and may not be less than 1.5 times the minimum wage. This salary must be increased annually by the same amount as the old-age pension. Weekly working hours and limits on the work schedule are the same as lighter duty service. Members of this service may be ordered to assist civil services (such as local governments, to supervise public works programmes). These regulations resulted in a significant decline in the number of people choosing to retire (*Table 4.4.1*).³

Table 4.4.1: Trends showing numbers of individuals leaving the National Police Force

	2008	2009	2010	2011	2012	2013 (until May 31)
Total number of persons leaving the police force	3,872	2,732	2,298	2,974	n. a.	668
Professional officers leaving	n.a.	1,428	1,512	1,279	308	73
Professional officers retiring	1,857	n. a.	n. a.	774	55	2

n.a. = no data available.
Source: *Csikász* (2013).

The introduction of the above measures was preceded by an extensive media campaign that, in essence, called it a travesty that robust and able-bodied people clearly able to work should receive pensions. This argument shifted the problem to a moral plane. Countering this argument the unions – and other advocacy groups such as the Hungarian Solidarity Movement – possibly brought about precisely because of this type of legislation – argued that most of the people affected had completed 25 years of service, after which they were no longer fit either physically or psychologically for heavy-duty work of this kind. They cited a great many examples. They also objected to the government renegeing on a “social contract”, which they termed a tacit agreement with these people to the effect that they would spend 25 years in low-wage, physically demanding or risky jobs after which they would receive a pension and be free to launch a second career.

Retirement – when?

First of all, we set out to determine whether the rumours of “young people” enjoying armed service pensions were true or not. We used data available in the databank of the Hungarian Academy of Sciences Centre for Economic

³ There is no data on the number of allowance recipients. The data is not consistent but since, according to *Csikász* (2012), the average age of the police officers working actively on the force is 26, we do get some idea of proportions.

and Regional Studies (MTA KRTK), which includes information on the various legal setups under which people in the law enforcement professions are employed. Fully 50 per cent of the people involved were included in the sample, including 27,411 people whose work history included service in an armed service or law enforcement body, in either a military (defence) or law enforcement occupation between January 2002 and December 2008. Nearly 90 per cent of the sample, we found, was made up of people in four professions (*Table 4.4.2*)

Table 4.4.2: Employment categories listed in the International Standard Classification of Occupations (ISCO), with the number of persons in the given occupation, as of the dates on which they were first reported

ISCO 08	Occupation	Number of persons	(%)
110	<i>Commissioned armed forces officers</i>	5,917	21.59
210	<i>Non-commissioned armed forces officers</i>	9,315	33.98
310	<i>Armed forces occupations, other ranks</i>	7,499	27.36
3351	Customs and border inspectors	748	2.73
*	Civil defence employee	2	0.01
3355	Police inspectors and detectives	21	0.08
5412	Police officers	754	2.75
5411	Fire fighter	2,043	7.45
5413	Prison guards	765	2.79
5414	Security guards	6	0.02
5419	Protective services workers not elsewhere classified	341	1.24
	Total	27,411	100.00

* Occupation defined by the Hungarian system (FEOR 97) with no equivalent in ISCO 08.

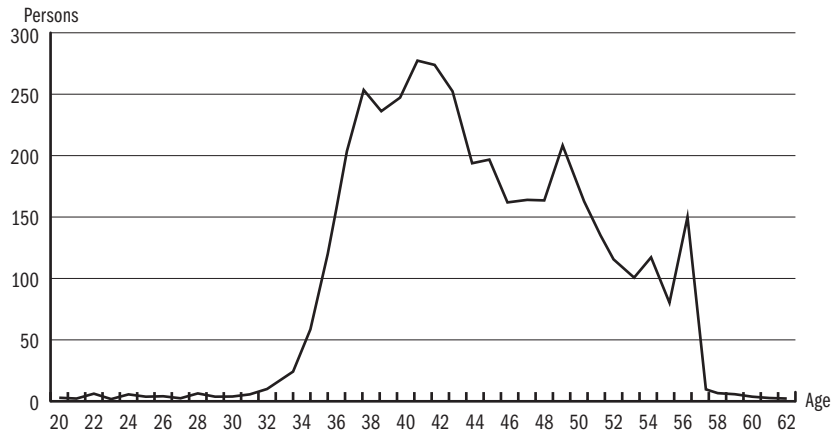
Exactly 4,949 (18 per cent) of the people who spent any time at all between 2002 and 2008 in any law enforcement occupation, retired during that period. These people either retired from their law enforcement position or from some other employer and occupation. The first group (those retiring from a law enforcement role) consisted of 4,519 people, not a particularly large number, even if we set up ratios and round out numbers and say that ten thousand people took armed service retirement over the seven years. In fact the annual average number of retirees was less than 1,500. There were exactly 3,954 people, or 87.5 per cent of all retirees, serving in a law enforcement body at the time of their retirement or in the three months prior to it. (The people not included in this category were last observed in law enforcement positions on the database 4 to 78 months prior to their retirement.)⁴

Figure 4.4.1 shows an overall age profile. We can see that there are three significant age groups: 40–41 year olds, 49–50 year olds, and 56 year olds. The particularly high level of 40–41 year olds is clearly because of the law. This group has been building service time since the age of 15 when it entered voca-

⁴ In this connection please note that when determining whether a person has the necessary service time, the years of service were added to the years of civilian service using a multiplier, so the rules of the service pension also influence the possible date on which the person may retire as a civilian.

tional secondary school and at age 40, obtained the 25 years of service required to retire. (Anyone retiring earlier does not receive a full pension, and anyone retiring later is not likely to have begun their career in law enforcement, and thus needs to put in more time to reach the 25 years. However, some people eligible for retirement may simply want to work longer. These latter factors are particularly true for officers with full secondary or college educations.)

Figure 4.4.1: Age profile of retirees from law enforcement bodies, by age at retirement (2002–2008)



The average 45-year-old armed service retiree with 25–30 years of service is clearly younger than a civilian retiree. However, this configuration made it possible for these people to begin a second career, particularly if they had a profession they could use in civilian life. From a social point of view they are therefore in a positive and not a negative position. It was this second career path that was partially stifled by the law on early retirement and by a decree introduced in 2013 which banned recipients of pensions and allowances from working for public (central government) bodies.⁵

We do need to point out that there was a very significant difference between the overall number of people in the sample and the ISCO breakdown of the retirees. According to *Table 4.4.3*, occupations requiring a college education accounted for 21.6 per cent of the sample entering the field and for 48.2 per cent of those leaving to retire. The situation was exactly the reverse for occupations not requiring a secondary education, where 27.4 per cent of the sample entered the field in the period in question and only 1.1 per cent retired (the differences were not this great in the other categories). This suggests that people with college educations tend to follow the career paths expected of them and obtain their entitlement to pensions within the organization, while a significant portion of the low-education group leaves after a time and does not retire from law enforcement.

⁵ To be precise: if the person receiving the benefit is employed by a non-public sector employer and their annual earnings are less than 18 times the monthly minimum wage (which in 2013 was HUF 1,764,000) that person may receive their full retirement benefits along with the salary. For more details see: <http://nyugdij.adohirek.hu/> and Act CCVIII of 2012. Note that since benefits granted before retirement age do not qualify as pensions and that the 16 per cent deduction does not qualify as personal income tax, this raises a number of problems. For instance, these incomes are not eligible for family tax deductions. The 16 per cent is not deducted from the remuneration given to reserve soldiers.

Table 4.4.3: Breakdown of occupations at the time the person first appeared in the database and at the time of retirement, and the age of retirement, 2002–2008

ISCO 08	Occupation	When first appearing	When retiring	Difference	Average age at retirement
110	<i>Commissioned armed forces officers</i>	21,59	48,15	26,56	48
210	<i>Non-commissioned armed forces officers</i>	33,98	37,66	3,68	42
310	<i>Armed forces occupations, other ranks</i>	27,36	1,11	-26,25	40
3351	Customs and border inspectors	2,73	0,35	-2,38	49
*	Civil defence employee	0,01	0,03	0,02	-
3355	Police inspectors and detectives	0,08	0,03	-0,05	-
5412	Police officers	2,75	1,77	-0,98	42
5411	Fire fighter	7,45	9,96	2,51	45
5413	Prison guards	2,79	0,68	-2,11	43
5414	Security guards	0,02	0,03	0,01	-
5419	Protective services workers not elsewhere classified	1,24	0,23	-1,01	50
	Total	100,00	100,00	0,00	45

* Occupation defined by the Hungarian system (FEOR 97) with no equivalent in ISCO 08.

There are differences in the mean retirement age depending on occupation. Customs and financial service workers were the last to retire (age 49), while police and people with a secondary education retired earliest in all areas. People with college degrees worked six years longer than their counterparts with secondary education but four of those six years were likely to have been spent full-time in college and another four years would have been spent in secondary school, which cuts the actual number of years spent working to 26.

Re-entering the workforce

Post-retirement employment data was available for 1,448 of the overall number of law enforcement retirees (3,954), or 36 per cent of the sample. Within this, only 6 per cent continued working in the same occupation, while the others found new occupations. The sample included retirees working in 37 different occupations⁶ (see *Table 4.4.4*).⁷

The largest number of retirees in any one category was in *non-material services* (227), within which 182 people (80 per cent) again chose a law enforcement type occupation.

6 Using the combined (two digit) ISCO group and the four-digit ISCO code, there are 217 different occupations.

7 Note that the first data on post-retirement employment for 82.5 per cent of people was from 2007–2008. The reason is that the requirement to pay a contribution on a pension when employed dates from this time, thus this is when pension + employment became visible in the database.

Table 4.4.4: Occupations of retired law enforcement workers

Occupation	Number of people ^a	Breakdown (%)	Cumulative breakdown
Occupations in non-material services	227	15,7	15,7
Commissioned armed forces officers	125	8,6	24,3
Simple service occupations	91	6,3	30,6
Miscellaneous, highly qualified, administrators	79	5,5	36,1
Operators of moving machinery	75	5,2	41,2
Heads of businesses or budget-sponsored organizations	75	5,2	46,4
Non-commissioned armed forces officers	74	5,1	51,5
Administrators in business or financial institutions	69	4,8	56,3
Miscellaneous administrators	64	4,4	60,7
Technicians and similar technical occupations	51	3,5	64,2
Miscellaneous	414	28,5	92,9
No data available	104	7,2	100,0
Total	1,448	100,0	

^a Details provided for only those occupations in which over 50 people worked.

Earnings before and after retirement

Earnings data have been summarized in *Table 4.4.5*, discounted to the 2008 level.⁸ We had wage data for 3,823 of the 3,834 people in law enforcement occupations. We also had other wage-type income data for 143 people.

Table 4.4.5: Monthly earnings of retirees from public servant status prior to retirement (HUF)

ISCO 08	Occupation	Average wages of law enforcement personnel exclusively from law enforcement job	Other income from wages	Wages of law enforcement personnel from all jobs ^a
110	Commissioned armed forces officers	525,167	99,250	528,986
210	Non-commissioned armed forces officers	313,382	85,047	316,618
310	Armed forces occupations, other ranks	244,747	34,800	247,357
3351	Customs and border inspectors	277,326		277,326
*	Civil defence employee	274,500		274,500
3355	Police inspectors and detectives	530,372		530,372
5412	Police officers	407,031	38,194	407,180
5411	Fire fighter	345,857	79,186	347,528
5413	Prison guards	274,049		274,049
5414	Security guards	304,240		304,240
5419	Protective services workers not elsewhere classified	263,181		263,181
	Overall mean	419,279	90,407	422,494

^a The earnings data of the various occupational groups cannot be added up because of the differing numbers of people in each group.

* Occupation with no equivalent in ISCO 08.

⁸ Earnings data include all extras received before departure (including possible severance pay and/or disarmament assistance, etc.) Given the practice of granting people extra benefits before retirement from public administration in order to jack up the pension, the earnings level prior to quitting is generally higher than the normal earnings level. The two, three, and four month average of wages prior to retirement are 4.5 per cent higher than the average of the seven, eight or nine months of wages prior to retirement.

The first thing we see from the data is that the earnings of people with college degrees are significantly higher than the other groups – a conclusion we can also draw from the wages system (see this issue of *In Focus* sub-chapter 3.2). We also can see that there are significant differences from one occupational group to the next. For instance, investigators/detectives and police officers earn significantly more than people working in non-police organizations. Average earnings were also relatively high for private security guards, a comparatively new profession only a few decades old. People with college degrees tended most often to augment their law enforcement earnings with some other work-related income. Overall earnings were highest for this group but other work-related income also significantly improved the earnings status of people with a secondary education.

Post-retirement wage data are available for the occupations qualifying as valid at the time of retirement. We have no data on the amount of pension money received so we were unable to compare overall incomes. But we did compare earnings. Our point of departure when making this comparison was the mean wage for all occupations (which differs just minimally from the incomes of law enforcement personnel within the sector, but is more precise in describing changes in the wages of the persons and groups we are observing.)

As we can see from *Table 4.4.6*, we were able to link up the pre and post retirement earnings of 1,333 people. We were only able to obtain post-retirement wage data for 1,162 people, which is rather a small sample. When interpreting the data we need to be aware that the earnings data include inflow to a person employed in a public service configuration that did not come from the person's full-time job, meaning the job from which the person actually retired. Thus, post-retirement earnings may be made up of wages from this secondary work or from a new occupation or a different job.

As we can see, retirement came with a 50–70 per cent loss of earnings. However, given the rules of pension calculation, if the person had been continuously employed their pension would not have been much less than their earnings from their full time job. Thus, we have estimated the overall income of retirees working in other jobs to come to 130–150 per cent of their pre-retirement incomes. At the same time, we need to point out that this is not a particularly high income level although it is substantially higher than nationwide average earnings.

This was the income status which was reduced by changes in the law in 2012 and 2013, partly by slapping a 16 per cent deduction onto the incomes of people below full retirement age and partly by requiring anyone continuing to work in the public sector to suspend their pension or allowance. The result is that the 130–150 per cent earning position could sink to one of 84–95 per cent in roughly a month. This is why the measures generated so high a level of dissatisfaction among armed service workers.

Table 4.4.6: Mean wages before and after retirement

ISCO 08	Occupation	Before retirement		After retirement		Change from pre-retirement, wages in per cent
		average earnings from all jobs, HUF	number of people	average earnings from all jobs, HUF	number of people	
110	<i>Commissioned armed forces officers</i>	529,284	739	263,264	642	49,7
210	<i>Non-commissioned armed forces officers</i>	313,595	472	121,401	413	38,7
310	<i>Armed forces occupations, other ranks</i>	225,623	17	82,383	16	36,5
3351	Customs and border inspectors	269,680	4	82,107	3	30,4
*	Civil defense employee		0		0	
3355	Police inspectors and detectives	530,372	1		0	
5412	Police officers	421,122	13	202,730	12	48,1
5411	Fire fighter	325,919	80	170,689	69	52,4
5413	Prison guards	231,667	5	72,187	5	31,2
5414	Security guards		0		0	
5419	Protective services workers not elsewhere classified	201,779	2	147,681	2	73,2
	Total/overall mean	433,402	1,333	203,514	1,162	47,0

* Occupation with no equivalent in ISCO 08.

The position and actions of interest advocacy groups

All the trade unions operating in the area sought to protect the pension system and organized demonstrations and rallies to that effect starting in the spring of 2011. As opposed to outcomes prior to 2010, these interest-advocacy negotiations failed. They based their legal stance primarily on the portion of the law that transformed pensions to allowances for people who had already retired, in other words, on the retroactive nature of the law. The principle of legal security was also violated, they argued, when the people impacted by the change were not notified in sufficient time to have been able to prepare for the changes in their living conditions. Unions operating in the area, in particular the Trade Union of Interior Affairs, Law Enforcement, and Public Service Workers, and the Independent Police Union – as well as other NGOs – began preparations in December 2011 to take the case to the European Court of Human Rights in Strasbourg, and eventually ended up with 13,000 individual submissions. In the first half of 2013 the court resolved to call upon the Hungarian government to submit its position in writing regarding the petition for legal remedy, giving the government four months to do so.

The Independent Police Trade Union also called on the Ministry of Human Resources, proposing that it amend the law given that the people whose entitlement qualification was changed from entitlement to an armed service pen-

sion to entitlement to a service allowance, could be hit by the reduced amount until the age of 65. The Ministry rejected the proposal on the grounds that the 16 per cent deduction was not a tax. As we have seen the deduction is neither a tax nor a contribution. According to the website of the Independent Police Trade Union “it is quite simply a deduction!”

The unions also petitioned the Constitutional Court, which after five days of debate issued the decision that neither the termination of pensions for early retirement nor the 16 per cent deduction on public service allowances was unconstitutional. At the same time, in 2011, the Hungarian Helsinki Committee (OSCE) stated its position, declaring that the withdrawal of the pensions ran contrary to the legal practices of the European Court of Human Rights, and the issue could therefore be taken before the court in Strasbourg. The ombudsman was one of the entities taking the issue to the Constitutional Court (szakszervezetek.hu). The investigation conducted at the request of the trade unions found that the portion of the decree banning dual benefits for retirees working in the public sector ran counter to the right to property, to protection of rights equivalent to assets, and violated the requirement for proportionality if significant changes were introduced to the pension system within a short period of time (For more detail see szakszervezetek.hu).

Individuals submitted petitions to the European Parliament, but only a portion of these proceedings have progressed to a conclusion).⁹ According to a legally binding decision reached by the Strasbourg court in 2014, transforming service pensions to allowances and taxing them for people who have not reached standard retirement age did not violate the European Convention on Human Rights.

As to the extent to which the decisions of 2010–2013 altered the careers of law enforcement workers, as yet the timeline has not been sufficient to draw a chart, but the media has reported that in 2013, for instance, the average age of police officers on the force was 26. In the first five months of 2013 fully 688 people quit the police force. Of these, 73 retired and only two continued working in public services as retirees (*Csikász*, 2013). The overwhelming presence of young people on the current police force is likely to cause human resource management problems later on. Therefore it is definitely worth monitoring labour turnover in an occupation-by-occupation breakdown.

⁹ Please note that as far as the retirement age of judges is concerned, the government accepted the position of the European Union, that a measure like this may not be introduced without a preparatory period because it violates social security.

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**LABOUR MARKET
POLICY INTERVENTIONS
SEPTEMBER 2012 – JANUARY 2014**

ZSOMBOR CSERES-GERGELY

&

KITTI VARADOVICS

SERVICES¹

1. Labour market policy services

A) Services of the National Employment Service

New tasks related to support and subsidies were assigned to labour centres. Labour centre branch offices have been in charge of the housing subsidy introduced as of 1 October 2012. Since 1 April 2013 branch offices have registered requests for subsidies submitted by working age citizens.

A number of services have become accessible electronically: requests for unemployment benefits, registration, reporting changes, meeting obligations for regular check-ins, or requests from employers for new labour demand. Applicants must also turn up in person in the case of the first two services, with no effect whatsoever on the eligibility period which commences on the date of filing the request for subsidies or registering in the electronic system.

As part of the development of information services, a new web-application has been opened for unemployed people and employers (at: <http://vmp.munka.hu>) to facilitate interaction between labour supply and demand. At the time of finalizing the present study 14,785 new job openings and 40,436 CVs are registered in the electronic system.

*On-line accessibility
of services*

B) Further activities of the National Employment Service

The service-related tasks of labour centres have been extended to providing for labour market services and operating the institutional background thereof. Labour centre branch offices are involved in this task in the geographical area where they operate.

Major regulations: Government Decree 323/2011. (XII. 28.) on the roles and responsibilities of the National Labour Office and the bodies directed and professionally supervised by it; Ministerial Decree 30/2000. (IX. 15.) issued by the Minister for the Economy on labour market services and related subsidies.

New regulations: Government Decree 7/2013. (I. 18.) amending Government Decrees related to the Government decree stipulating the detailed rules of market supervision activities; Ministerial Decree 44/2012. (XII. 22.) issued by the Minister for the Economy on the roles and responsibilities of the la-

¹ The present section was elaborated on the basis of the Eurostat *Labour Market Policy* (LMP) database and the LABREF database of the Directorate General for Economic and Financial Affairs (DG ECFIN). Interventions are listed along the same ordinal numbers (see *Busch, Cseres-Gergely and Neumann, 2013, p. 277*).

bour centre branch offices of the district-level (in Budapest: city district-level) branches of the Budapest and County Government Offices.

On-line source: <http://munka.hu>.

ACTIVE LABOUR MARKET POLICIES (ALMPS)

2. Training

*New legal background
in adult training*

The reform of vocational education as of 1 January 2012 has been followed by the renewal of the legal background of adult training. The new law, which has been in force since 1 September 2013, aims at higher quality expectations by stipulating administrative rules for the official licensing of adult training activities, the general requirements for specific training programmes, as well as the support framework and the supervision of institutions. Tasks related to the licensing procedure and the supervision and registration of licensed training institutions are performed by the National Labour Office.

The financing system of vocational education has become more regulated. The decentralized funds available for training and the development of the training system have been divided into two equal parts. Half of the funds are used to finance the costs related to the development of the physical infrastructure of school-based vocational education, while the other half is used for the operational costs of vocational educational institutions and the modernization of vocational education. The calls for applications for grants are implemented by the state vocational education and adult training body, financed from the funds available, up to 1% of the total amount.

*Changes in the rules
regulating vocational
contribution*

A specific percentage of the financing plans governing the Training Sub-fund of the Labour Market Fund is allocated to finance further tasks. As of 1 January 2013 the range of legal entities obliged by law to pay a financial contribution to vocational training has been extended to companies established or owned in part by higher educational institutions. As of 1 September 2012 companies can fulfil the obligation for a financial contribution to vocational training by organizing practical training in training locations outside institutions and by signing student employment contracts with students taking part in basic training with a mandatory practical training element.

As of 1 January 2013 companies can allocate their vocational training contribution to the professional training or language courses offered to their own employees provided that the company offers practical training places for at least 45 students having a student employment contract. The amount of vocational training contribution can be accounted for up to the amount covered by student employment contracts, to a maximum of 16.5 per cent of the gross amount of the obligation. The training of the company's own employees is

considered as state aid to the company. The extent of state aid is 60 per cent of the eligible costs for general training and 25 per cent for special training. As regards general training the extent may be increased to 80 per cent if the employees participating in the training are disabled or disadvantaged people, or the aid is used by a micro, small or middle-sized enterprise.

The rules regulating requests for return on extra payments have also changed. Regulations differ on the basis of the share of student employment contracts as compared to the share of cooperation agreements within the overall amount of the obligation.

Major regulations: Act IV of 1991 (Section 14) on promoting employment and unemployment benefits; Act CLV of 2011 on contributions to vocational education and promoting the development of training; Act CLXXXVII of 2011 on vocational education; Government Decree 280/2011. (XII. 20.) on the amounts of practical training normative support and the calculation of amounts subject to reductions which can be accounted for as the cost of practical training incurred as vocational education contribution; Government Decree 150/2012. (VII. 6.) on the National Register of Qualifications and the procedure of its amendment; Ministerial Decree 27/2012. (VII. 27.) issued by the Minister for the Economy on the professional and exam requirements for qualifications in the responsibility of the Minister for the Economy.

Ministerial Decree 6/1996. (VII. 16.) issued by the Minister of Labour on financial support promoting employment and on tackling employment crisis situations from the Labour Market Fund; Ministerial Decree 3/2011. (II. 11.) issued by the Minister of Public Administration and Justice on the management and tasks of the regional training centres in charge of adult training and coordinating action tackling regional disparities.

New regulations: Act CLXXXVIII of 2012 amending specific acts on taxation and related acts; Act LXXVII on adult training; Government Decree 314/2013. (VIII. 28.) on vocational education agreements; Government Decree 393/2013. (XI. 12.) on the detailed regulations stipulating the licensing procedure and requirements to be met, the registration and the system of checks concerning adult training institutions Ministerial Decree 21/2013. (VI. 18.) issued by the Minister for the Economy for companies implementing practical training on accounting for the cost of training the company's own employees as vocational education contribution.

3. Job rotation and job sharing

The only tool referred to this category is still the reduced rates related to part-time employment introduced as of January 2011. The social contribution tax introduced on 1 January 2012 is subject to the same conditions and works

in the same manner. Its extent is 7 per cent of either the gross salaries of the two employees added together, or, as a maximum, double the minimum wage.

Major regulations: Act CXXIII of 2004 on promoting the employment of career starters, unemployed people over the age of 50 and those seeking employment after parental leave or taking care of a family member, and employment with an internship (Section 8/B).

4. Employment incentives

Important changes have occurred in the field of employment incentives, mainly introduced as part of the Job Protection Act. These changes are meant to promote the employment of young people below the age of 25, people over the age of 55, the permanently unemployed, employees having small children and employees working in jobs requiring no vocational qualifications through reduced rates of the social contribution tax and the vocational education contribution. Reduced rates can be effected for both those already employed and those just recruited.

Depending on the target group of employees, the rates of employers' public dues can be reduced either fully or in part, to an extent of 14.5 per cent. Reductions can be effected in any case only up to a HUF 100 thousand (approx. EUR 323) part of a gross salary.²

As part of the Job Protection Act the following rates can be effected for the specific target groups:

- *Career starters below the age of 25* (where career starter means a person having been employed and having paid social security contributions for a maximum of 180 days): in the first two years of employment – up to the amount of a gross salary of HUF 100 thousand (approx. EUR 323) – the rate of social contribution tax is reduced by 27 percentage points and the vocational education contribution by 1.5 percentage points, which means no tax burden at all up to the amount of a gross salary of HUF 100 thousand (approx. EUR 323).
- *Employees below the age of 25 and over the age of 55:* the rate of social contribution tax to be paid by the employer is reduced by 14.5 percentage points of the gross salary up to a HUF 100 thousand (approx. EUR 323) part per month.
- *Permanently unemployed people* (i.e. those registered as unemployed people for at least 6 months in a period of 9 months prior to entering employment): in the first two years of employment – up to a HUF 100 thousand (approx.

² We use an exchange rate of 1 EUR = 310 HUF throughout the chapter.

EUR 323) part of a gross salary – the rate of social contribution tax is reduced by 27 percentage points and the vocational education contribution by 1.5 percentage points. In the third year of employment the rate of social contribution tax to be paid by the employer is reduced by 14.5 percentage points of the gross salary up to a HUF 100 thousand (approx. EUR 323) part per month.

- *Persons receiving or having received child-care allowances, child-care benefits or child-care support:* the rates are the same as those for permanently unemployed people and can be effected for up to the 45th month after the termination of the unemployment benefit, for a maximum of 3 years. The action plan has been changed as of 1 January 2014 to allow for a longer tax credit period for employees returning from a parental leave and having three or more children. In the first three years of employment the employer will be fully exempt from paying the social contribution tax, and in the following two years the rate will be reduced by 14.5 percentage points.
- *Employees working in jobs requiring no vocational qualifications* (i.e. jobs listed in group no. 9 in the unified system of occupations called FEOR, issued in 2008 by the Central Statistical Office): the rules to be applied for tax credits are identical with those applicable for employees below the age of 25 and over the age of 55.

The measures listed above have replaced the most important tools applied in this field over recent years in the framework of the so called Start programmes. The opportunity for applying for the so called Start cards has been terminated, while the tax credits can be effected for a while for already issued and still valid cards. Tax credits can be effected until 31 December 2014 for Start cards issued to young career-starters, and could be effected until 31 December 2013 for Start Extra, Start Plus and Start Bonus cards.

As of the 1 January 2013 the so called free enterprise zones have been operational to promote the development of the most deprived regions. The label is valid for 5 years and can be prolonged. Employers installing investment worth at least HUF 100 million (approx. EUR 322,581) and increasing the statistical number of staff simultaneously are entitled to a tax credit. When employing new employees in the territory of the free enterprise zones the rate of social contribution tax payable after the HUF 100 thousand (approx. EUR 323) part of a gross salary per month is reduced by 27 percentage points in the first two years and by 14.5 percentage points in the third year of employment. As for the vocational education contribution the 1.5 percentage points tax credit can be effected for the first two years of employment up to the amount of HUF 100 thousand (approx. EUR 323) per month, which means full exemption for the first two years up to a HUF 100 thousand (approx. EUR 323) part of a gross salary. The tax credit can be effected for 5 years as of the date of instalment.

Start cards phasing out

Establishment of the free enterprise zones

*Wage compensation
also in 2013*

The tax credits counter-balancing the changes regulating the personal income tax levels and compensating for the expected level of pay-rise were introduced in 2012. Despite the fact that the tax system did not change for the worse as regards net salaries, tax credits could be still effected to a lesser extent, regardless of whether employers made the pay-rise expected. Tax credits in the private sector have been terminated as of 2014, and can be effected only by employers in the public sector.

The new incentives presented above must not be effected simultaneously. Besides the still existing Start Extra, Start Plus and Start Bonus cards however, the support aimed at the preservation of the net value of salaries is still accessible.

*Programme entitled
“First job guarantee”*

The programme entitled “First workplace guarantee” started in 2012 and has continued ever since – throughout 2013 and 2014. The programme finances the whole salary and the related tax burden of permanently unemployed people and those below the age of 25 with no qualifications up to 150% of the mandatory minimum wage. As opposed to 2012 which had no such obligation, now the six-month subsidized period must be followed by a three-month period of further employment. During the period of further employment the tax credits payable in the framework of the Job Protection Act may be effected.

*Budget support for
employment with
an internship*

A further incentive for employing young career starters, unemployed people over the age of 50 and those seeking employment after parental leave or taking care of a family member is subsidizing employment with an internship. The subsidy may be effected to the extent of 50% of the allowance disbursed to those employed with a contract including an internship by central state administration bodies or their affiliated local bodies. The subsidy, however, may not exceed 80% of the smallest amount of basic salary disbursed to full-time employees. A pre-condition for applying for the subsidy is that the employer should employ employees with an internship to a number exceeding 1.5% of the total staff. The subsidy was attainable in the first half of 2013.

Major regulations: Act IV of 1991 on promoting employment and unemployment benefits; Act CXXIII of 2004 on promoting the employment of career starters, unemployed people over the age of 50 and those seeking employment after parental leave or taking care of a family member, and employment with an internship; Government Decree 69/2012. (IV. 6.) amending the Government Decree on the subsidies available for preserving the net value of salaries and on the amount of pay-rise expected in 2012 to preserve the net value of salaries and the amounts of fringe benefits to be considered; Ministerial Decree 6/1996. (VII. 16.) issued by the Minister of Labour on financial support promoting employment and on tackling employment crisis situations from the Labour Market Fund (Sections 11 and 18).

New regulations: Act CXLVI of 2012 amending specific acts necessary to implement the Job Protection Act; Act CLXXVIII of 2012 amending specific acts on taxation and related acts; Act CCXVI of 2012 amending specific acts on employment in relation to the Magyar Simplification Programme and other objectives; Act CCXXIV of 2013 amending specific acts in relation to the modification of child-care allowances and to the extension of tax credits concerning the social contribution tax; Government Decree 388/2012. (XII. 19.) on the subsidies to be applied for by central state administration bodies or their affiliated local bodies as employers of employees with a contract including an internship; Government Decree 27/2013. (II. 12.) on the establishment and operation of free enterprise zones and the rules stipulating tax credits.

5. Sheltered employment and vocational rehabilitation

The regulations stipulating the accreditation procedure and the system of central budget subsidies for sheltered employers employing disabled people (in Hungarian terminology: people with a changed working capacity) have changed. The rules must be applied for requests submitted as of 17 December 2012 and the subsidies disbursed beyond 1 January 2013.

Instead of the former types of basic, rehabilitation, principal and conditional accreditation certificates, from now on only one type of certificate can be obtained. The eligibility criteria unite the characteristic features of the former types, therefore the conditions for obtaining the certificate are in some cases stricter. For accreditation the employer is required to employ a staff of 30 disabled people, or employ a quarter of the total number of employees from this group. Further conditions are that the employer:

- should have a professional programme for vocational rehabilitation;
- undertakes to elaborate personal vocational rehabilitation plans;
- provides for the necessary assisting services;
- employs a vocational rehabilitation mentor, a counsellor and an assistant;
- facilitates employment in job openings where a qualification is required;
- provides for the training opportunities necessary for successful vocational rehabilitation.

The latter provision was formerly in effect only for obtaining a principal certificate necessary to qualify as a sheltered employer. What is made easier, however, is the provision in the new regulation concerning the amount of time spent in operation, which may now be less than the 12 months expected formerly.

The tasks of the former rehabilitation trustee will be taken over by a vocational rehabilitation mentor and a vocational rehabilitation counsellor. The provisions for assistants have also become stricter, depending on the number of employees with a changed working capacity. At the same time the obliga-

The system of rehabilitation accreditation certificates became simpler

The procedure of accreditation

tion of employers with a principal certificate to operate a three-member vocational rehabilitation committee has been abolished.

Accreditation is performed by the National Office for Rehabilitation and Social Affairs, and the office has the license to involve an expert and perform on-the-spot checks during the accreditation procedure. A simplified accreditation procedure may be applied if the employer was accredited within the year when the regulation entered into force and as a result of which the accreditation certificate remained valid for one more year. The same rule applies to employers with a principal certificate and accredited as a sheltered employer after 1 January 2011. The fee of the accreditation procedure has also changed. The rehabilitation accreditation certificate has an open-ended validity period. The former validity period for the basic accreditation certificate was five years, for the rehabilitation certificate three years, for the principal certificate two years and for the conditional certificate it was one year, respectively.

The National Office for Rehabilitation and Social Affairs is in charge of checking for compliance with the provisions of accreditation and whether subsidies are used appropriately. Evaluation scores are negative if the check reveals non compliance with the legal regulation, and the rehabilitation accreditation certificate is withdrawn if negative scores amount to 12.

Permanent and transit employment

Following the introduction of the system of comprehensive qualification the employability and classification of disabled people changed. As a result, the definition of permanent employment means the sheltered employment of persons with health impairment below the level of 60% and whose vocational rehabilitation is not recommended on the basis of external factors and not on the basis of their health status – regardless of the kind of assistance that their rehabilitation would necessitate, be it permanent or on-going assistance. These people are employed for three years and their contract can be prolonged without limitations.

Transitional employment means the employment of disabled people whose health impairment is below the level of 60% and whose vocational rehabilitation is recommended both on the basis of their health status and their external circumstances (including those who might also need permanent rehabilitation). The aim of transitional employment is the preparation of individuals for employment in the open labour market. The vocational rehabilitation professional programme must therefore comprise an action plan presenting the stages of transition and cooperation with employers in the open labour market. The contract of employment is for three years. Transitional employment is considered successful if the employee is employed without interruption for a period of at least six months in the open labour market.

Support for employers changed

In line with the change of certificates and forms of employment the system of subsidies also changed. The old type cost compensation subsidies and rehabilitation subsidies were disbursed until 31 December 2012.

From this time on only salary costs (salaries and employers' taxes) incurred by the employment of people with a changed working capacity and extra costs closely related to their changed working capacity are eligible for financing from the central state budget. Salary costs may be subsidized up to 75%. The amount of subsidy might reach 100% for NGOs and public benefit organizations such as associations, foundations or non-profit companies. Extra costs may be subsidized up to 100%. The individual amount of subsidy for the transitional employment of a person with a changed working capacity is decreased gradually, year by year: it is 100% of the individual subsidy in the first year, then 90% and finally 80%.

Only accredited employers are eligible – after submitting an application – for subsidies on salaries and extra costs. Subsidies are disbursed on the basis of three-year framework contracts signed by the National Office for Rehabilitation and Social Affairs and the employer. The contract can be prolonged each year for the period of one year. Beyond that, individual employment agreements must be signed for each employee.

From September to October 2013 accredited employers had the opportunity for one month to submit an application for adapting the workplace environment for vocational rehabilitation purposes within a one-year period. The condition for being eligible for the job creation subsidy was to sustain the new or the adapted workplace for a period of two years commencing after the 90th day following the investment, and to recruit and employ a number of people with a changed working capacity, as specified in the contract on job creation.

Further incentives for employing people with a changed working capacity are the tax credits deducted by using the so called rehabilitation card, exemption from the rehabilitation contribution and a set of programmes financed from EU-funds in the framework of the Social Renewal Operational Programme (SROP, called TÁMOP in Hungarian). The programmes aiming at the promotion of the employment of people with a changed working capacity are entitled “Promoting the vocational rehabilitation and employment of people with a changed working capacity” (no. 1.1.1-12/1-2012-0001), “Transitional employment in the construction industry” (no. 1.4.6-13/1), “Supporting employers in providing motivational training and related services to enhance the labour market opportunities of the most disadvantaged groups” (no. 5.3.8.A2-12/1).

Major regulations: Act CXCI of 2011 on the allowances of people with a changed working capacity and the amendment of specific acts; Government Decree 327/2011. (XII. 29.) on the procedural rules related to the allowances of people with a changed working capacity; Government Decree 95/2012. (V. 15.) on the National Office for Rehabilitation and Social Affairs and on

the roles and responsibilities of the bodies under its professional supervision; Ministerial Decree 7/2012. (II. 14.) of the Ministry of National Resources on the detailed rules related to comprehensive qualification; Ministerial Decree 8/2012. (II. 21.) of the Ministry of National Resources on vocational rehabilitation experts.

New regulations: Government Decree 238/2012. (VIII. 30.) amending Government Decree 177/2005. (IX. 2.) on the central budget subsidies for the employment of people with a changed working capacity; Government Decree 317/2012. (XI. 13.) amending specific Government Decrees on social affairs, child well-being and child protection services; Government Decree 327/2012. (XI. 16.) on the accreditation of employers of people with a changed working capacity and on the central budget subsidies for the employment of people with a changed working capacity; Government Decree 335/2013. (IX. 20.) amending Government Decree 112/2006. (V. 12.) on licensing social employment and Government Decree 327/2012. (XI. 16.) on the accreditation of employers of people with a changed working capacity and on the central budget subsidies for the employment of people with a changed working capacity; Ministerial Decree 38/2012. (XI. 16.) of the Ministry of Human Resources on the rules governing the fees to be paid for the accreditation procedure by the employer of people with a changed working capacity.

6. Direct job creation

In Hungary public works programmes, listed among ALMPs, are still the most important measures. In the period observed its operation is more or less the same as previously, and the aim of the most important changes has been the promotion and extension of the tool. Public works model programmes could be launched up to 1 July 2014 in seven areas in cases defined as model programmes by the Minister of the Interior. The costs of these programmes are reimbursed to the extent of 70 to 100% by the central state budget.

After the closure of the public works model programmes which are deemed successful, further programmes can be launched based on the same idea. Investment and material costs of such programmes can be reimbursed to the extent of 50 to 100% by the central state budget, based on a decision by the Minister of the Interior. The condition for subsidies as of November 2013 has been that the public works employer must reinvest the income generated by the public works model programme into further financing the public works programmes or the operation of social cooperatives.

The extension of the implementation of public works programmes has been promoted by the National Fund of Land by a transfer of certain pieces of land for five years of free use to the local governments involved in public works programmes.

The types of settlements where public works programmes may be launched has been extended. The definition of the small region which has a special importance in public works programmes has been settled: small regions where half of the settlements have a special importance in public works programmes are considered especially important.

As of January 2013 public works require an expert's opinion on employability. Beyond 1 September 2013 unemployed people may be excluded from public works programmes either if they are subject to a procedure investigating or proving a default of their school-age child, or if they fail to meet obligations concerning the tidiness of their living environment as specified by local government decrees. It is the responsibility of the labour centre's branch office to issue a formal decision on the exclusion from the programme.

Between December 2013 and April 2014, both public works and training were available in the framework of the wintertime public works programmes. Programmes were mainly targeted at the development of core competences and offer a catch-up training for grades 7 to 8 of the primary school. Participants received payment during training on the basis of the six hours a day spent in training. The number of participants was around 50 thousand. As a result of the wintertime public works programme the number of people involved in public works programmes increased from 88 thousand to 203 thousand, a large gain compared to the same month in the previous year.

As of 1 January 2014 the yearly amount of contracted work in public works programmes must not exceed 11 months for a single person. This rule can be overridden only by permission from the minister in charge of public works programmes for cost-efficiency considerations and without risking people's chances of getting admitted to the public works programme.

Major regulations: Act CVI of 2011 on public works and amending acts related to public works and other acts; Act I of 2012 on the Labour Code, Government Decree 375/2010. (XII. 31.) on the subsidies related to public works programmes; Government Decree 170/2011. (VIII. 24.) on setting the wage for public works and the guaranteed minimum wage for public works.

New regulations: Act XLI of 2013 amending specific acts in relation to social cooperatives and in relation to public works; Government Decree 85/2013. (III. 21.) amending specific Government Decrees in relation to public works.

Government Decree 382/2013. (XI. 4.) amending Government Decree 375/2010. (XII. 31.) on the subsidies related to public works programmes; Ministerial Decree 41/2012. (XII. 20) of the Ministry for the Economy amending specific Ministerial Decrees on health in employment; Government Decision 1141/2013. (III. 21.) amending Government Decision 1044/2013. (II. 5.) in relation to decisions concerning public works programmes; Government Decision 1142/2013. (III. 21.) to transfer certain

pieces of land by the National Fund of Land for free use to the local governments to implement public works programmes; Government Decision 1624/2013. (IX. 5.) to prepare for the implementation of training related to public works programmes.

7. Start-up incentives

The system of subsidies promoting entrepreneurship for unemployed people and coordinated by the labour centres did not change significantly in 2013.

As of November 2013 funding for starting micro enterprises became available in the framework of the Social Renewal Operational Programme call for proposals entitled “Promoting entrepreneurship for young people in the convergence regions” (no. 2.3.6/B). Young people between the ages of 18–35 successfully accomplishing their tasks in project no. TÁMOP 2.3.6/A and who have elaborated their business plans become entitled to a non-refundable grant. The envisaged budget of the programme is HUF 5 billion (approx. EUR 16,129 thousand), co-financed by the European Social Fund and the central state budget. 90% of the costs incurred in the course of launching an enterprise can be reimbursed by using the grant.

As of 1 January 2014 the former condition of eligibility for the subsidies promoting entrepreneurship for unemployed people was reduced from three months to one month spent on the register for unemployed people.

Major regulations: Act IV of 1991 on promoting employment and unemployment benefits (Section 17); Ministerial Decree 6/1996. (VII. 16.) issued by the Minister of Labour on financial support promoting employment and on tackling employment crisis situations from the Labour Market Fund (Section 10). *New regulations:* Ministerial Decree 66/2013. (XII. 23.) of the Ministry for the Economy amending specific labour-related Ministerial Decrees.

On-line source: <http://www.nfu.hu/doc/3581>.

SUBSIDIES

8. Subsidies and support for the unemployed (job-seekers)

The characteristic features of the system of subsidies and the conditions of access to these subsidies did not change over the period observed. The maximum amounts of subsidies at the end of the period are calculated as a percentage of the minimum wage, as shown in *Table 1*. The minimum amount of old age pension did not change, so the extent of the employment substitution subsidy (in Hungarian: foglalkoztatást helyettesítő támogatás) also remained the same.

Table 1: The amount of subsidies paid to unemployed people and working age unemployed people on 1 January 2014

Type of subsidy	Amount of subsidy
Unemployment insurance	60% of the total of social security contributions on the basis of which the contribution payable to the Labour Market Fund is calculated, maximized at 100% of the minimum wage in effect on the first day of eligibility, which is HUF 101,500 (approx. EUR 327) per month, HUF 3,383 (approx. EUR 10.9) per day;
Unemployment benefit prior to old age pension	40% of the minimum wage, which is HUF 40,600 (approx. EUR 131) per month, HUF 1,353 (approx. EUR 4.4) per day;
Employment substitution subsidy	80% of the all-time minimum amount of old age pension: HUF 22,800 (approx. EUR 74) per month
Regular social benefit	The amount depends on the income-level of the family, a maximum amount of HUF 45,568 (approx. EUR 147) per month, or a maximum of HUF 22,768 (approx. EUR 73) per month if a family member receives an employment substitution subsidy.

As of 1 April 2013 regular social benefits must not be disbursed during the period of participation in a public works programme, although the person's income from a public works programme is not taken into account upon the calculation and revision of the amount of regular social benefits.

With these changes the rules regulating public works programmes became identical with the rules applied on regular social benefits and the employment substitution subsidy.

Major regulations: Act IV of 1991 on promoting employment and unemployment benefits; Act III of 1993 on social administration and social benefits (Section 25).

New regulations: Act XXVII of 2013 amending acts on social affairs and child-protection in relation to the Simplification Programme and other acts.

Changes of regular social benefits in relation to public works programmes

9. Early retirement

As of 1 January 2012 early retirement is not an option. Instead of the pensions previously awarded below the age threshold for old age pensions, eligible persons receive a subsidy preceding old age pensions, without further rights that old age pensioners have.

COMPREHENSIVE INTERVENTIONS (COMPREHENSIVE PROGRAMMES)

The Social Renewal Operational Programme remains the most important comprehensive programme during the period. The modifications of the action

Extension of the range of participants

plans approved for the years 2011–2013 were mainly related to the funds allocated to the individual programmes. The funds allocated to the measure entitled “Supporting training at the workplace” (no. 2.1.3) increased significantly.

Within the “Decentralized programmes for the employment of disadvantaged groups” (no. 1.1.2.) and the “Programme for the employment of disadvantaged groups in the region of Central Hungary” (no. 1.1.4.) the groups of eligible participants were extended to persons receiving child-care allowances, child-care benefits or child-care support provided that they had no paid work, and also to young people below the age of 25 no longer registered as unemployed as of 1 October 2012 only because they are involved in labour market services. Eligible costs were also extended in the programme to finance housing support and support promoting entrepreneurship.

Major regulations: Government Decree 132/2009. (VI. 19.) on the types of support eligible in the framework of the programmes entitled “Decentralized programmes for the employment of disadvantaged groups” (no. 1.1.2.) and “Promoting the vocational rehabilitation and employment of people with a changed working capacity” (no. 1.1.1) in Priority 1 of the Social Renewal Operational Programme; Government Decree 175/2010. (V. 13.) on the types of support eligible in the framework of the programme entitled “Programme for the employment of disadvantaged groups in the region of Central Hungary” (no. 1.1.4.).

New regulations: Government Decree 272/2012. (IX. 28.) amending specific Government Decrees on employment; Government Decision 1527/2012. (XI. 28.) on the approval of Priority 1 of the action plans for the years 2011–2013 related to Priority 1 of the Social Renewal Operational Programme and on the modifications related to the funds allocated to the individual programmes; Government Decision 1016/2013. (I. 18.) on the approval of Priority 1 of the action plans for the years 2011–2013 of the Social Renewal Operational Programme and of individual calls for proposals.

POLICY TOOLS WITH AN EFFECT ON THE LABOUR MARKET

10. System of taxes and social security contributions

The major changes in the system of taxes were manifested in changes related to employees’ income tax burden and the new taxation opportunities introduced as part of the Job Protection Act for small and medium-sized enterprises.

In the system of personal income tax the 27% gross-up factor added previously to the tax base in the case of incomes above HUF 2,424 thousand (approx. EUR 7,819) per year was abolished. As a result, the system of per-

Changes with an effect on the net salary

sonal income tax became a one-key system with a unified tax rate of 16%. As compared to the personal income tax rules in effect in 2012 this change resulted in the decrease of the tax rate for people with an income above HUF 2,424,000 (approx. EUR 7,819) per year, while the change had no effect on those with an income below this threshold. In 2014 the personal income tax rules in effect in 2013 remain.

The rules concerning family tax credits did not change in 2013. As of 1 January 2014, besides tax credits, family-level credits on social security contributions may also be effected, in other words, the amounts deductible as per the number of children can be effected by reducing either the personal income tax or social security (pensions- and health-care) contributions.

A further change with an effect on the net income is the termination of the upper ceiling of the social security contribution to pensions whose base amount in 2012 was HUF 7,942,200 (EUR 25,620). Thus for people with an income above this amount the payable social security contribution to pensions, the rate of which is 10% of the tax base, significantly increased.

The amount of social security contribution to health-care increased in 2013 to HUF 6,660 (approx. EUR 21) per month, HUF 222 (approx. EUR 0.72) per day, and in 2014 to HUF 6,810 (approx. EUR 22) per month and HUF 227 (approx. EUR 0.73) per day.

The elements of fringe benefits are identical with the former ones. The amount of employers' contribution to health-care payable after income taxed separately increased from the former 10% to 14% in 2013.

The Job Protection Act introduced new taxation opportunities for small and medium-sized enterprises, targeting the improvement of tax conditions. The first time the new forms of taxation could be selected was in 2013.

The tax for small taxpayers (in Hungarian: KATA) can be selected by entrepreneurs, individual businesses and small enterprises owned exclusively by individuals. The small taxpayer enterprise is required to pay a rate of HUF 50 thousand (approx. EUR 161) per month for each full-time contracted small taxpayer employees and a rate of HUF 25 thousand (approx. EUR 81) per month for each non-full-time contracted small taxpayer employees. If the enterprise has a contracted employee who is not considered a small taxpayer, the regular tax rates apply. Beyond that, a tax rate of 40% is to be applied above the amount of HUF 6 million (approx. EUR 19,355) per year.

Another new type of tax is the small enterprise tax (in Hungarian: KIVA), which can be selected by individual businesses and small enterprises, limited liability companies, public limited companies and cooperatives if the number of employees stays below 25 and the income and balance sheet total below HUF 500 million (approx. EUR 1,613 thousand) in the given tax year. The tax base for those applying the small enterprise tax is calculated by adding together the cash income and the personnel costs, and the related tax rate is 16%.

*Tax for small taxpayers
and small enterprise tax*

By applying this type of tax enterprises are exempt from paying the corporate tax, the social contribution tax and the vocational education contribution.

As regards the tax for small taxpayers the administrative burden of enterprises is significantly reduced. Since the rate is fixed below the amount of HUF 6 million (approx. EUR 19,355) per year, the enterprises that operate at low costs and whose income stays below this amount can save on tax-paying liabilities by applying this type of tax.

The small enterprise tax aims primarily at the increase of employment, since the amounts of contributions payable after employees are significantly lower by applying this type of tax.

Major regulations: Act CXVII of 1995 on the personal income tax; Act LXXXI of 1996 on the corporate tax and the tax on dividends; Act LXXXI of 1997 on social security pensions; Act XCII of 2003 on the procedures of taxation; Act CXX of 2005 on the simplified contributions concerning public dues; Act CXXVII of 2007 on the value-added tax; Act LXXV of 2010 on simplified employment.

New regulations: Act CXLVII of 2012 on the tax for small taxpayers and the small enterprise tax; Act CLXXVIII of 2012 amending specific acts on taxation and related acts.

On-line source: <http://www.nav.gov.hu/>.

11. Other transfers

Child-care benefits

The child-care benefits available in 2013 are characterized by the content of Table 5 by *Busch and Cseres-Gergely* (2012).

As of 15 July 2013 social security child-care benefits are calculated solely on the basis of the income received from the employer from whom the employee takes parental leave. For a transitional period the amount of benefit must be calculated in both the old and the new way for children born before 11 May 2014, and the bigger amount must be disbursed.

As of 1 January 2014 a number of new rules came into effect to motivate people to have children and in favour of the improvement of the labour market situation of parents with small children. Persons receiving child-care allowances or child-care benefits are free to enter employment after their child is one year old. People having more children – provided that the younger child was born after 1 January 2014 – are entitled to a child-care benefit for each child below the age of three. Persons having an active full-time student status are entitled – within one year after pausing or terminating their status – to a child-care allowance which is available also to persons studying in higher edu-

Changes in calculating maternity benefits and child-care allowances

cation, regardless of whether they are in employment or not. The base of the benefit is the guaranteed minimum wage for persons studying for a master's degree, and the minimum wage for persons studying for a bachelor degree.

Major regulations: Act LXXX of 1997 on the eligibility rules concerning social security benefits and private pensions, and the financial cover of these services; Act LXXXIII of 1997 on the services of mandatory health insurance; Act LXXXIV of 1998 on the support for families; Government Decree 328/2011. (XII. 29.) on the fees payable for basic child-care well-being services and professional child protection services and the evidence acceptable when applying for such services.

New regulations: Act CXXVII of 2013 amending specific acts on health-care and health insurance and related acts; Act CCXXIV of 2013 amending specific acts related to the modifications of child-care benefits and to the extension of the range of exemption from paying the social contribution tax.

12. Contractual terms of employment, labour law

The new Labour Code, which was in effect from 1 July 2012, comprised a number of stipulations which came into effect only later, on 1 January 2013. On forms of employment different from contractual agreements, the rules concerning leave and disbursements during permanent leave of absence see in detail *Busch, Cseres-Gergely and Neumann* (2013). The Labour Code is analyzed in detail in the section entitled *In Focus* in the present yearbook.

The first amendments of the new Labour Code are primarily corrections based on the arguments of the Court of Justice of the European Union related to labour law. As of 1 August 2013 the rules stipulating holidays were also corrected. The conditions of entitlement for fathers' five-day extra holidays were amended to include people with a health-impairment of at least 50% and people entitled to disabled subsidies or to blind people's personal allowances. The five-day paternity leave means five full days, even if the employment contract was signed in the same year. From this point on only holidays calculated on the basis of the employee's age are allowed to be transferred up to the end of the following year, in contrast to previous rules allowing for a transfer of one third of the regular holidays and the extra days calculated on the basis of the employee's age.

The method of calculating remuneration for leave and other allowances was corrected. Thus the amount of salary is not subject to change depending on the month the holiday is taken. On calculating remuneration for leave, extra allowances for Sunday work must be taken into account if the employee spent their work time with scheduled work on at least one third of the Sundays in the period in question.

*The new Labour Code
coming into effect
– the last step and the
first amendment*

Major regulations: Act LXXV of 2010 on simplified employment; Act I of 2012 on the Labour Code.

New regulations: Act CIII of 2013 amending specific acts in relation to the calculation of remuneration for leave and the regulation of public funds.

13. Old age and disability pensions – disability subsidies

Retirement prior to the statutory pension age was abolished as of 1 January 2012, but entitlement can be obtained for the new type of allowances up to 31 December 2014 on the basis of the old rules applied before the changes in the system.

As of 1 January 2013 the amounts of old age pensions are calculated in the same gradually decreasing way as in 2012. It has been changed, however, so that instead of regulations in decrees the law itself specifies the limits of decrease. As a consequence of the former termination of the cap on social security contribution, it is now payable without maximum.

*In the public sector
one must choose between
old age pension
and employment*

An important change relates to those retiring from the public sector, inasmuch as the disbursement of pensions is temporarily paused as of 1 July 2013 for those employed in the public sector on 1 January 2013, with no effect on their status as old age pensioners whatsoever. Due to the labour demand of the public health-care system, however, public service employees and government civil servants who are considered health-care employees may be exempted from this rule. Public service employees remaining in employment – with a license – in health-care are entitled to extra income the net amount of which must not exceed the amount of old age pension to which they are entitled and which they do not receive temporarily by reason of being in employment. After three years their legal status must be authorized again.

Employers operating from central budget funds may apply for financing of the extra income.

Disability pensions – disability subsidies

The amounts of rehabilitation and disability subsidies must be calculated on the basis of a changed rule as of 1 January 2013. The essence of this rule is that the subsidy may be calculated – instead of the minimum wage – on the basis of the period of 180 days immediately preceding the period of 180 days which forms the basis of calculation if the entitled person has no income in the whole period due to an accident or received decreased amounts as payments on sick leave.

Rehabilitation subsidies are temporarily paused if the entitled person is employed and earns an income, participates in a public works programme by working more than 20 hours a week, or is unable to earn an income. In any of these cases the subsidy must be reduced in the following month by the

amount disbursed for the period of temporary pause. The deduction must not exceed 50% of the rehabilitation subsidy. Tasks related to the calculations are performed by the Central Administration of National Pension Insurance.

As of 1 January 2014 the condition of entitlement to subsidies for disabled people became less constrained. Entitlement is obtained by proving the payment of social security contributions for 1,095 days in five years, or, if this is not feasible, the payment of social security contributions for 2,555 days in ten years or 3,650 days in 15 years, which are also accepted.

Major regulations: Act LXXXI of 1997 on social security pensions; Act CXCI of 2011 on the allowances of people with a changed working capacity and the amendment of specific acts; Government Decree 327/2011. (XII. 29.) on the procedural rules related to the allowances of people with a changed working capacity.

New regulations: Act CCVIII of 2012 on the amendment of specific acts related to the establishment of the act on the central budget and to other objectives; Act CCXXV of 2013 amending Act CXCI of 2011 on the allowances of people with a changed working capacity and the amendment of specific acts; Government Decision 1150/2013. (III. 22.) on the implementation in the public health sector of Government Decision 1700/2012. (XII. 29.) on the pension policy principles to be applied in the public sector; Government Decision 1599/2013. (IX. 3.) on the implementation in education and vocational education of Government Decision 1700/2012. (XII. 29.) on the pension policy principles to be applied in the public sector.

14. Wage bargaining, wage regulation and interest representation

As of 1 January 2013 the types of set minimum wages were differentiated by introducing the minimum wage and wage minimum to be paid to workgroup leaders employed in public works programmes. In a job requiring no vocational qualification or secondary school qualification the monthly minimum wage in 2013 was HUF 83,050 (approx. EUR 268), while the guaranteed wage of a workgroup leader working in a job requiring a vocational qualification or secondary school qualification was HUF 106,480 (approx. EUR 343). In 2014 the amounts increased to HUF 101,500 (approx. EUR 327) and HUF 118,000 (approx. EUR 381) respectively. The types and amounts of minimum wages currently in effect are summarized in *Table 2*.

The system of wages also changed for those employed in public works programmes. The former system of weekly wages was replaced by the disbursement of monthly salaries as of 1 April 2013. In specified sectors employers had the opportunity also in 2013 to receive financial support from the labour

Regulation of the wage minimum to be paid to workgroup leaders employed in public works programmes

centres to compensate for the increase in the minimum wages. Employers may apply for such support for employees employed on 31 December 2012 and whose salary remained below the relevant minimum wage set as of 2013. The maximum amount of support is the sum total of the amounts calculated on the basis of the difference between the minimum wages set for each year, including employers' taxes. Employees financed from other sources of support are not eligible for this support.

Table 2: Amounts of minimum wages on 1 January 2014 (HUF/day)

	Minimum wage	Guaranteed wage minimum
Regular	4,510	5,250
Employed in a public works programme	3,560	4,568
Workgroup leader employed in a public works programme	3,820	4,900
Simplified employment	3,834	4,568

Major regulations: Act XCIII of 2011 on the National Economic and Social Council; Government Decree 170/2011. (VII. 24.) on setting the minimum wage and the guaranteed wage minimum to be applied in public works programmes.

New regulations: Government Decree 390/2012. (XII. 20.) on setting the mandatory minimum wage and the guaranteed wage minimum; Government Decree 421/2012. (XII. 29.) amending specific Government Decrees in relation to public works programmes; Government Decree 103/2013. (IV. 5.) on the financial support to compensate for the increase in the mandatory minimum wage and the guaranteed wage minimum by employers operating in specific sectors and on the amendment of Government Decree 323/2011. (XII. 28.) on the roles and responsibilities of the National Labour Office and the bodies directed and professionally supervised by it; Government Decree 483/2013. (XII. 17.) on setting the mandatory minimum wage and the guaranteed wage minimum; Government Decree 496/2013. (XII. 29.) on the amendment of Government Decree 170/2011. (VII. 24.) on setting the mandatory minimum wage and the guaranteed wage minimum to be applied in public works programmes.

15. Measures related to migration and mobility

Supporting mobility

In order to facilitate mobility by financial means, housing subsidies are disbursed to persons entering at least 20 hours of employment for six months after three months of registered unemployment and whose permanent address and place of work are located at least 100 kilometres apart, or for whom the amount of time spent commuting would reach six hours a day. As of 6 June

2013 the conditions of support became less constrained. The time limit spent commuting was reduced to five hours and another condition set for eligibility was abolished, namely the condition that the new place of work must not be the same as the former place of work. The condition that the employer must be the same remains unchanged. As of 6 June 2013 the duration of registered unemployment is not checked in the case of unemployed people laid off in mass redundancies and those entering public works programmes. Support may be disbursed to career-starters as well, with no modification of the conditions which are irrelevant in their case.

A further condition of support is that the monthly salary must not exceed three times the minimum wage. The request for support must be made prior to employment, however, as of 6 June 2013 this request may be made within 30 days after the starting date of employment.

In the case of rentals the housing support can be used to pay rents and overheads. The duration of support is a maximum of 18 months and its amount was set at HUF 100 thousand (approx. EUR 323) for the first six months, HUF 60 thousand (approx. EUR 194) for the second six, and HUF 40 thousand (approx. EUR 129) afterwards. In the case of more entitled persons the housing support may be increased. As of 6 June 2013 the maximum limits of support are divided into thirds.

The conditions of issuing work permits for citizens from third countries were loosened. Reporting labour demand and submitting a request for a work permit to the labour centre can be done simultaneously. As regards work permits that are valid for more than one county, it is possible to include counties where an appropriate labour force is not available. Considering multiple requests for work permits, these can be issued in a number equalling the shortage of an appropriate labour force in the register.

Work permits must be prolonged without checks, if the request was reported 15 days prior to the expiry date.

The rules of rejection changed, too. If an employer was penalized for employing people without a permit, but failed to pay the fine to the National Employment Fund, the issue of work permits to such an employer could formerly be rejected for three years. This duration has now been reduced to one year. The request for a work permit can be rejected if the employer offers payment to a third country employee at an amount below 80% of the national average in the relevant job, or, if the employer submits fake or forged documents as proof of qualifications and of schools attended.

The duration of permits for agricultural seasonal work increased from 150 to 180 days. For employment contracts below the duration of 60 days permits must be issued without checking the labour market situation.

As of 1 January 2014 the issue of work permits for citizens from third countries can be made on the basis of united and non-united request procedures.

*Changing conditions
of work permits*

*Changes of the procedure
of requesting work permits*

On the basis of a united request procedure the employee has the opportunity to obtain a residence permit allowing for both staying in the country and entering employment. The immigration authority makes a decision on the request on the basis of the official opinion of the labour centre operating in the area where the employer is based. After the issue of the permit the employer and the citizen from a third country sign a preliminary agreement establishing a legal relationship aimed at employment for a period of a maximum of two years. Exceptions are the residence permits issued for family reunification (valid for a maximum of five years), requests for the EU blue card (valid for a maximum of four years) and humanitarian residence permits (valid for a maximum of six months, one or three years, depending on the cause of issue).

The practical arrangements for non-united request procedures are identical with the procedure followed formerly. The cases when united request procedures are not required are regulated in detail.

Major regulations: Act IV of 1991 on promoting employment and unemployment benefits; Government Decree 39/1998. (III. 4.) on support aimed at the reduction of burdens related to commuting to work, and on the support of labour force recruitment; Government Decree 355/2007. (XII. 23.) on the transitional rules related to the free movement of the labour force applied by the Republic of Hungary for persons having the right to free movement and residing in the country; Government Decree 355/2009. (XII. 30.) on the rules regulating the employment of citizens from third countries without a work permit in the territory of the Republic of Hungary; Government Decree 168/2011. (VIII. 24.) on the rules regulating the official opinion of the labour centre of the county (capital) government office on the issue of the EU blue card, and on the amendment of specific Government Decrees on migration and other Government Decrees; Ministerial Decree 16/2010. (V. 13.) of the Ministry of Social Affairs and Labour on the regulation of the procedure of issuing a work permit to citizens from third countries to be employed in Hungary.

New regulations: Act CLXXXIX of 2013 amending specific acts on employment; Government Decree 272/2012. (IX. 28.) amending specific Government Decrees on employment; Government Decree 167/2013. (V. 29.) amending Government Decree 39/1998. (III. 4.) on support aimed at the reduction of burdens related to commuting to work, and on the support of labour force recruitment; Government Decree 445/2013. (XI. 28.) on the issue of work permits for citizens from third countries on the basis of non-united request procedures, on the exemptions from the obligation for obtaining a work permit; on the tasks of the labour centre of the county (capital) government office on the issue of an opinion as an official authority in the united procedure, on reporting the employment of citizens from third countries who can be employed without a work permit in Hungary, and the reimbursement of re-

munerations; Ministerial Decree 35/2012. (XII. 14.) of the Ministry for the Economy amending specific Ministerial Decrees on employment.

16. The institutions of management, financing and evaluation of employment policy

By 2013 the transformation of the institutional system of employment policy had basically ended by the establishment of government offices, the shortening of the period of passive unemployment benefits, the transformation of the former National Employment Service and the focus on public works programmes.

The Minister for National Economy enforced in a Ministerial Decree the rules of managing and using the National Employment Fund. The tasks of planning the allocations of the Fund and setting the central and decentralized budgets and the independent allocations provided to the government office labour centres belong to the Minister responsible for employment policy. The professional and financial activities of the county labour centres are supervised by the National Labour Office. The National Labour Office is also in charge of coordinating the employment and related programmes financed from EU funds and other foreign funds.

The financing structure of the National Employment Fund did not change considerably. The number of separate allocations within the National Employment Fund increased by the amount of support available for increasing the mandatory minimum wages. The government allocated HUF 3.7 billion (approx. EUR 11,935 thousand) in the framework of the Social Renewal Operational Programme to the National Labour Office to enhance the efficiency of labour inspection, and HUF 6 billion (approx. EUR 19,355 thousand) in the framework of the Social Infrastructure Operational Programme to improve the infrastructural circumstances of the services and to increase the capacities of the public employment service, and also to install the facilities necessary to perform the new tasks of the service.

Developments throughout the year are related primarily to the EU-funded programmes and to the continuation of former policy action. Especially important is the transformation related to the infrastructure of implementation and evaluation of EU-funded programmes, which also forms a basis for future programmes.

The implementation of EU-funded programmes were supervised until the end of 2013 by the individual managing authorities of the National Development Agency, while the evaluation of programmes was performed by the relevant department of the National Development Agency by involving external experts.

As of 1 January 2014 the situation changed. The managing authorities were integrated in line ministries and the task of evaluation was transferred, among

National Employment Fund

European Union Funds and their infrastructure

other central tasks, to the Prime Minister's Office. The change in the status of the managing authorities has no major effect in the programming period ending in 2013, since their major task is to implement current programmes till their conclusion, without launching new calls for proposals. It is particularly true for the major employment policy programmes implemented under the Social Renewal Operational Programme, whose coordinator, the Human Resource Programmes Managing Authority, was integrated into the Ministry of Human Resources. The influence of these changes will be manifested in the next programming period when the management of EU-funded programmes will be close to policy-making. An advantage of this arrangement could be better coordination between national and EU-funded measures, while it is a potential risk that professional and political decisions become more closely linked and generate overlaps.

The elaboration of the documents of the 2014–2020 programming period was simultaneous with the transformation of the institutional set-up. Among these we must mention the so called partnership agreement, to be signed between the EU and Hungary as a member state, which will be the basis for the individual operational programmes and the related action plans. The support schemes that serve the implementation of the employment policy will belong to the Economic Development and Innovation Operational Programme. Although the new period starts in 2014, the new programmes and action plans will not be settled before the middle of the year, and the first calls for proposal are therefore not expected before the end of the year. The new programmes will reveal the emphatic areas of intervention in employment policy.

The importance of employment policy programmes and the changes of their importance are shown by the data derived from the source of financing. The starting point is again the National Employment Fund (the former Labour Market Fund). *Table 3* shows the income and the disbursement sides of the Fund in the structure used beyond 2011, with some add-ups and extensions, and occasional renaming of elements.

The government formed in 2010 accomplished the change of the structure of employment policy in two stages – in 2011 and 2012, and later reinforced the changed structure. The employment policy budget in 2010 was determined by two major items: passive unemployment benefits and the extended public works programme entitled “Road to work”, organized by local governments. The first item accounted for HUF 137 billion (approx. EUR 441,935 thousand) and the latter for HUF 101 billion (approx. EUR 325,806 thousand) in the labour market budget of HUF 389 billion (approx. EUR 1,254,839 thousand) (2010 final report on the state budget and State Audit Office of Hungary, 2013). In 2011 a major change commenced. Except for vocational education, almost all items were heavily reduced, and the total amounts were reduced by some 25%. With the reorganization of the tasks of labour

Table 3: Income and expenditure related to employment policy in the central state budget 2011–2014 (in million HUF)

	2011		2012		2013	2014
	allocated	disbursed	allocated	disbursed	allocated ^c	allocated
Expenditure						
1. Active measures						
Employment and training subsidies	40,519.8	25,774.8	25,600.0	22,017.2	27,000.0	27,000.0
EU co-financing for employability (and adaptability)	4,820.7	3,970.7	6,967.0	6,967.0	16,279.6	17,130.0
<i>Public works programmes^a</i>	64,000.0	59,799.8	132,182.5	131,910.7	179,897.8	183,805.3
Social Renewal Operational Programme (SROP, TÁMOP), Measure 1.1. Employment services and assistance	30,925.2	19,754.4	37,900.0	29,772.3	35,000.0	41,000.0
Social Renewal Operational Programme (SROP, TÁMOP), Measure 1.2. Normative employment incentives	5,500.0	9,774.8	8,500.0	16,250.1	11,000.0	3,200.0
Reimbursement of contribution discount	5,800.0	5,147.7	6,000.0	4,784.1	6,000.0	5,000.0
Pre-financing of 2014–2020 labour market programmes						10,000.0
2. Vocational training and adult training subsidies	33,091.1	27,921.1	23,483.0	16,516.0	27,500.0	26,400.0
4. Expenditure on passive measures						
Unemployment benefits (job seekers' assistance)	134,800.0	124,543.2	57,000.0	64,067.2	59,000.0	56,000.0
Transfer to Pension Insurance Fund	681.3	1,221.5	1,700.0	907.0	361.9	313.9
5. Wage guarantee payments	7,000.0	5,363.0	6,000.0	6,606.6	6,000.0	6,000.0
6. Operating costs	100.0	86.7	300.0	100.0	300.0	1,600.0
9. Technical expenses of debt release incurred upon equity		303.6				
13. Retention balance and risk management allocation	10,000.0		2,000.0		2,919.3	
15. Employers' supplemental support				5,222.9		
16. Sectoral support to the increase in the minimum wage					10,000.0	
Total expenditure	337,238.1	283,661.3	307,632.3	305,121.1	381,258.6	377,449.2
Income						
25. Income from the Social Renewal Operational Programme (SROP, TÁMOP) measures	30,588.1	26,247.6	41,065.2	42,827.3	39,000.0	46,000.0
26. Other income						
Territorial other income	800.0	734.2	830.0	559.0	850.0	750.0
Central other income	2,600.0	1,316.8	1,000.0	1,113.6	1,000.0	1,000.0
Vocational training and adult training other income	1,000.0	781.2	1,000.0	1,020.1	800.0	650.0
31. Vocational training contribution	49,000.0	49,415.5	52,700.0	80,352.5	54,814.6	57,071.1
33. Redemption of wage guarantee support	1,000.0	977.8	1,000.0	792.0	1,000.0	1,000.0
34. Technical income from debt release incurred upon equity		303.6				
35. Share of the health insurance and labour market contribution payable to the Labour Market Fund	187,700.0	186,596.3	119,900.0	127,096.6	120,133.3	125,041.5
36. Central budget support	64,000.0	64,000.0	50,000.0	71,273.8	20,000.0	
Share of the social contribution tax payable to the Labour Market Fund			73,630.0	67,284.5		
Contribution related to the Job Protection Act					91,542.7	95,936.7
Total income	337,238.1	330,373	341,125.2	392,319.4	329,140.6	327,449.3
Pending items ^b	550.0	202.0		270.3		
Changes in deposits		46,913.7	33,492.9	87,468.6	-52,118.0	-50,000.0
Total	337,238.1	330,596.9	341,125.2	393,040.4	381,258.6	377,449.3
Deflating by 3% per year at 2011 prices	337,238.1	330,596.9	331,189.6	381,592.5	359,372.8	345,419.6

^a Including the expenditure on public works programmes in 2011 and the expenditure on the Start Employment Programme beyond 2011.

^b In 2011 also including income from the European Globalisation Adjustment Fund.

^c Including interim amendments of the budget.

Source: Act on the central state budget (plan) and the implementation of the central state budget of the related year, 153 779,8 in 2013 amended by the stipulations of Government Decisions 1507/2013. (VIII. 1.) and 1783/2013. (XI. 4.) (HUF 26 118 million extra funds allocated to public works programmes).

centres in the government offices, the operational costs were reallocated and taken from the Fund. As of 2011 public works programmes are financed from funds within the National Employment Fund. After the termination of the rehabilitation contribution the balance of the Fund is maintained by transfers from the central budget.

After the preparation in 2011, in the years 2012 and 2013 the focus was shifted from passive benefits – and to a lesser extent from active labour market programmes – to public works programmes. The proportions of expenses on public works programmes versus passive benefits measured before at the levels of 20:40 changed to the opposite by 2012, and the target is a proportion of 50:15. The change is significant: in parallel with the reduction of passive benefits the costs of public works programmes goes back to, or even beyond, the levels measured in 2010. Although the structure of the new programme is very much different from that of the 2010 programme, no major difference is observed in the results of the two programmes (*Mód*, 2013).

The significance of balanced finances for the National Employment Fund is marginal. The appearance of items related to budget subsidies, deposits, and later on transfers within the framework of the Job Protection Act all diminish the separated nature of the Fund. The Fund operates more and more as a regular budget heading of the state budget, so its existence facilitates the gathering of information by structuring items that are logically inter-related.

Previously we summed up how the expenses of the National Employment Fund should be complemented in order to obtain a realistic picture (see: *Busch, Cseres-Gergely and Neumann*, 2013), but it turned out that by using the available data most corrections cannot be made in a methodologically appropriate manner. As a consequence, we corrected only the expenses of EU-(co)funded projects, more specifically of Priorities 1 and 2 of the Social Renewal Operational Programme, with the costs actually incurred. Fact-based data show that the correction entails an increase of HUF 10 billion (approx. EUR 32,258 thousand) on a yearly basis, which is a significant amount, but it has no major impact on the conclusions drawn.

As part of the European Semester the European Council examined the national reform programme of Hungary for the year 2013 and made a number of so called country-specific recommendations, including employment policy. The Europe 2020 growth programme of the European Union for the period 2010–2020 is implemented in the form of yearly cycles called European Semester. The European Commission publishes the annual growth report at the beginning of the given year (for the first time on 12 January 2011), on the basis of which member states submit their convergence and national reform programmes in April. In these programmes they respond to suggestions made in the report and also give an account of earlier results. Comparing these to the plans the Commission establishes its opinion which is then

Country-specific recommendations – more attention to marginalized groups

published in June in the form of country-specific recommendations. Member states are required to reflect on these recommendations in the programme for the following year.

The 2013 country-specific recommendations for Hungary (*EC*, 2013) list a number of recommendations related to employment policy, more specifically to taxation, active labour market programmes, public works programmes and the operation of the public employment service:

- “3. ... Continue making taxation of labour more employment-friendly by alleviating the tax burden on low wage earners, inter alia by refining the eligibility criteria for the Job Protection Act, and by shifting taxation away to environmental taxes. ...
4. Address youth unemployment, for example through a Youth Guarantee (2). Strengthen active labour market policy measures and enhance the client profiling system of the Public Employment Service. Reduce the dominance of the public works scheme within employment measures and strengthen its activation elements. Reinforce training programmes to boost participation in lifelong learning. Continue to expand child-care facilities to encourage women’s participation...” (*EC*, 2013, p. 7).

Major regulations: Act CXXX of 2009 on the 2010 central budget of Hungary; Act CLXIX of 2010 on the 2011 central budget of Hungary; Act CXXX-III of 2011 on the implementation of the 2010 central budget of Hungary; Act CLXXXVIII of 2011 on the 2012 central budget of Hungary; Government Decree 169/2011. (VIII. 24.) on the Employment and Public Works Database; Government Decree 248/2011. (XII. 1.) on the establishment of the Office for National Economic Planning; Government Decree 323/2011. (XII. 28.) on the roles and responsibilities of the National Labour Office and the bodies directed and professionally supervised by it.

New regulations: Act CLV of 2012 on the implementation of Act CLXIX of 2010 on the implementation of the 2011 central budget of Hungary; Act CCIV of 2012 on the 2013 central budget of Hungary; Act CXCI of 2013 on the implementation of Act CLXXXVIII of 2011 on the implementation of the 2012 central budget of Hungary; Act XLI of 2013 amending specific acts on social cooperatives and on public works programmes; Act CCXXX of 2013 on the 2014 central budget of Hungary; Government Decree 7/2013. (I. 18.) amending specific Government Decrees related to the Government Decree on the detailed rules of market supervisory activities; Government Decree 414/2012. (XII. 29.) amending specific Government Decrees related to the operation of the capital and county government offices; Government Decision 1426/2012. (X. 4.) on the approval of the special project no. TÁMOP 2.4.8-12/1 (entitled “Development of health and safety at work, development of labour inspection”) and its inclusion in the action plan; Gov-

ernment Decision 1507/2012. (XI. 16.) on the approval of the special project no. TIOP-3.2.1-12/1-2012-0001 (entitled “Establishment of an integrated system by developing the infrastructure of the public employment service”) and its inclusion in the action plan; Ministerial Decree 18/2013. (VI. 11.) of the Ministry for the Economy on the management and use of the National Employment Fund.

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STATISTICAL DATA

Edited by

ÉVA CZETHOFFER

Compiled by

ZSOMBOR CSERES-GERGELY

KÁROLY FAZEKAS

JÁNOS KÖLLŐ

JUDIT LAKATOS



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Statistical tables on labour market trends that have been published in The Hungarian Labour Market Yearbook since 2000 can be downloaded in full from the website of the Research Centre for Economic and Regional Studies: <http://adatbank.krtk.mta.hu>

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DATA SOURCES

CIRCA	Communication & Information Resource Centre Administrator
KSH	Table compiled from regular Central Statistical Office publications [Központi Statisztikai Hivatal]
KSH IMS	CSO institution-based labour statistics [KSH intézményi munkaügyi statisztika]
KSH MEF	CSO Labour Force Survey [KSH Munkaerő-felmérés]
KSH MEM	CSO Labour Force Account [KSH Munkaerő-mérés]
NAV	National Tax and Customs Administration [Nemzeti Adó- és Vámhivatal]
NEFMI	Ministry of National Resources [Nemzeti Erőforrás Minisztérium]
NEFMI EMMI STAT	Ministry of National Resources, Educational Statistics [Nemzeti Erőforrás Minisztérium, Oktatásstatisztika]
NFA	National Market Fund [Nemzeti Foglalkoztatási Alap]
NFSZ	National Employment Service [Nemzeti Foglalkoztatási Szolgálat]
NFSZ IR	NFSZ integrated tracking system [NFSZ Integrált (nyilvántartási) Rendszer]
NFSZ REG	National Employment Service Unemployment Register [NFSZ regisztere]
NGM	Ministry of National Economy [Nemzetgazdasági Minisztérium]
NMH	National Labour Office [Nemzeti Munkaügyi Hivatal]
NMH BT	National Labour Office Wage Survey [NMH Bértarifa-felvétel]
NMH PROG	National Labour Office Short-term Labour Market Projection Survey [NMH Rövid Távú Munkaerőpiaci Prognózis]
NSZ	Population Census [Népszámlálás]
NYUFIG	Pension Administration [Nyugdíjfolyósító Igazgatóság]
ONYF	Central Administration of National Pension Insurance [Országos Nyugdíjbiztosítási Főigazgatóság]
TB	Social Security Records [Társadalombiztosítás]

EXPLANATION OF SYMBOLS

(-)	Non-occurrence
(..)	Not available
(n.a.)	Not applicable
(...)	Data cannot be given due to data privacy restrictions

Table 1.1: Basic economic indicators

Year	GDP ^a	Industrial production ^b	Export ^c	Import ^c	Real earnings ^d	Employment ^d	Consumer price index ^d	Unemployment rate
1989	100.7	95.0	100.3	101.1	99.7	98.2	117.0	..
1990	96.5	90.7	95.9	94.8	94.3	97.2	128.9	..
1995	101.5	104.6	108.4	96.1	87.8	98.1	128.2	10.2
1996	100.2	103.4	104.6	105.5	95.0	99.1	123.6	9.9
1997	103.1	111.1	129.9	126.4	104.9	100.1	118.3	8.7
1998	104.7	112.5	122.5	124.9	103.6	101.4	114.3	7.8
1999	103.2	110.4	115.9	114.3	102.5	103.2	110.0	7.0
2000	104.2	118.1	121.7	120.8	101.5	101.0	109.8	6.4
2001	103.7	104.0	107.7	104.0	106.4	100.3	109.2	5.7
2002	104.5	103.8	105.9	105.1	113.6	100.1	105.3	5.8
2003	103.9	107.2	109.1	110.1	109.2	101.3	104.7	5.9
2004	104.8	107.9	118.4	115.2	98.9	99.4	106.8	6.1
2005	104.0	106.9	111.5	106.1	106.3	100.0	103.6	7.2
2006	103.9	110.2	118.0	114.4	103.6	100.7	103.9	7.5
2007	100.1	107.9	115.8	112.0	95.4	99.9	108.0	7.4
2008	100.9	99.9	104.2	104.3	100.8	98.8	106.1	7.8
2009	93.2	82.1	87.3	82.9	97.7	97.5	104.2	10.0
2010	101.1	110.8	116.9	115.1	101.8	100.0	104.9	11.2
2011	101.6	105.5	109.9	106.7	102.4	100.8	103.9	10.9
2012	98.3	98.3	100.7	99.9	96.6	101.7	105.7	10.9
2013	101.2	101.4	104.8	105.0	103.1	101.6	101.7	10.2

^a Data adjusted for seasonality and variations in the number of workdays. After 1996 there was a change in the methodology for accounting the undivided service fee of financial intermediation. Previous year = 100.

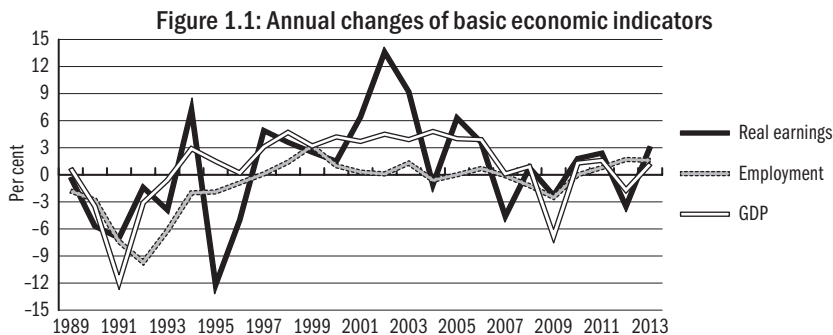
^b 1989–2000: those with more than 5 employees, 2001–: without water and waste management, including businesses with fewer than 5 employees. Previous year = 100.

^c Volume index. Previous year = 100.

^d Previous year = 100.

Source: GDP: 1989–2013: STADAT (2013. 03. 30. version), Industrial production index: 2001–: STADAT (2014. 02. 12. version); Export and import: 2001–: STADAT (2014. 03. 05. version); Employment: 1989–1990: KSH MEM; 1995–: KSH MEF. Consumer price index: 1989–: STADAT (2014.01.05. version). Unemployment rate: 1989–: STADAT (2014.03.05. version). Other data: CSO.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent01_01

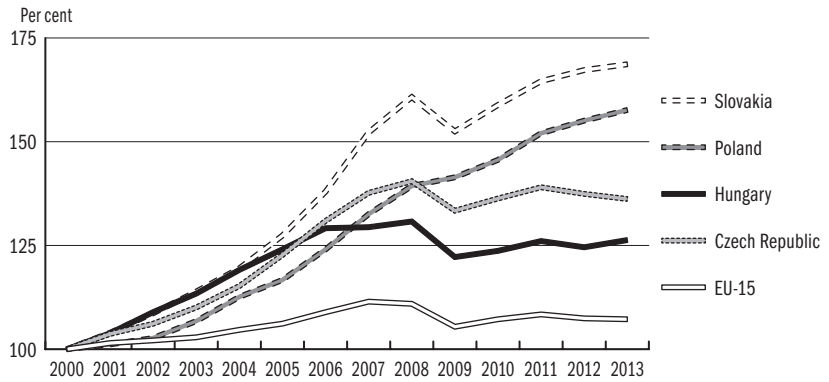


Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena01_01



Figure 1.2: Annual GDP time series (2000 = 100%)

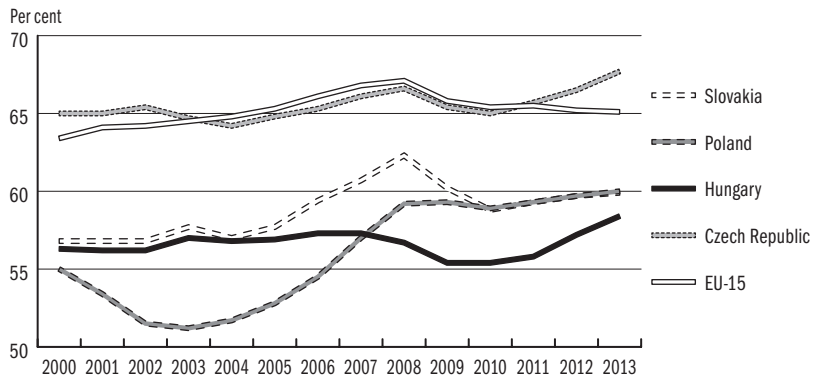


Source: Eurostat.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena01_02



Figure 1.3: Employment rate of population aged 15-64



Source: Eurostat.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena01_03

Table 2.1: Population^a

Year	In thousands	1992 = 100	Annual changes	Population age 15–64, in thousands	Demographic dependency rate	
					Total population ^b	Old age ^c
1980	10,709	103.6	n.a.	6,918.9	0.54	0.21
1990	10,375	100.4	-0.2	6,870.4	0.51	0.20
1995	10,337	99.6	-0.1	6,986.9	0.48	0.21
2000	10,221	98.5	-0.3	6,961.3	0.47	0.21
2005	10,098	97.3	-0.2	6,940.3	0.45	0.23
2006	10,077	97.1	-0.2	6,931.8	0.45	0.23
2007	10,066	97.0	-0.1	6,931.3	0.45	0.23
2008	10,045	96.8	-0.2	6,912.7	0.45	0.24
2009	10,031	96.7	-0.1	6,898.1	0.45	0.24
2010	10,014	96.5	-0.1	6,874.0	0.46	0.24
2011	9,986	96.3	-0.2	6,857.4	0.46	0.24
2012	9,932	95.7	..	6,815.7	0.46	0.25
2013	9,909	95.5	-0.2	6,776.3	0.46	0.25

^a January 1st. The data for 1980 and 1990 are based on the censuses of those years. Those for 1995–2011 are estimates based on the 2001 census and demographic data (reference date 2001.02.01.). Those for 2012 and 2013 are estimates based on the 2011 census (reference day 2011.10.01.) and demographic data.

^b (population age 0–14 + 65 and above) / (population age 15–64)

^c (population age 65 and above) / (population age 15–64)

Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent02_01

Table 2.2: Population by age groups, in thousands^a

Year	0–14	15–24	25–54	55–64	65+	Total
	years old					
1980	2,341.2	1,464.4	4,399.8	1,054.7	1,449.4	10,709.5
1990	2,130.5	1,445.5	4,231.4	1,193.5	1,373.9	10,374.8
1995	1,891.7	1,610.1	4,250.6	1,126.2	1,458.0	10,336.7
2000	1,729.2	1,526.5	4,291.4	1,143.4	1,531.1	10,221.6
2005	1,579.7	1,322.0	4,409.1	1,209.2	1,577.6	10,097.6
2006	1,553.5	1,302.0	4,399.8	1,230.0	1,590.7	10,076.6
2007	1,529.7	1,285.9	4,393.9	1,251.5	1,605.1	10,066.1
2008	1,508.8	1,273.3	4,377.1	1,262.3	1,623.9	10,045.4
2009	1,492.6	1,259.9	4,346.1	1,292.0	1,640.3	10,030.9
2010	1,476.9	1,253.4	4,293.7	1,326.9	1,663.5	10,014.4
2011	1,457.2	1,231.7	4,257.7	1,367.8	1,671.3	9,985.7
2012	1,440.3	1,214.1	4,164.6	1,437.0	1,675.9	9,931.9
2013	1,430.9	1,196.4	4,144.8	1,435.0	1,701.7	9,908.8

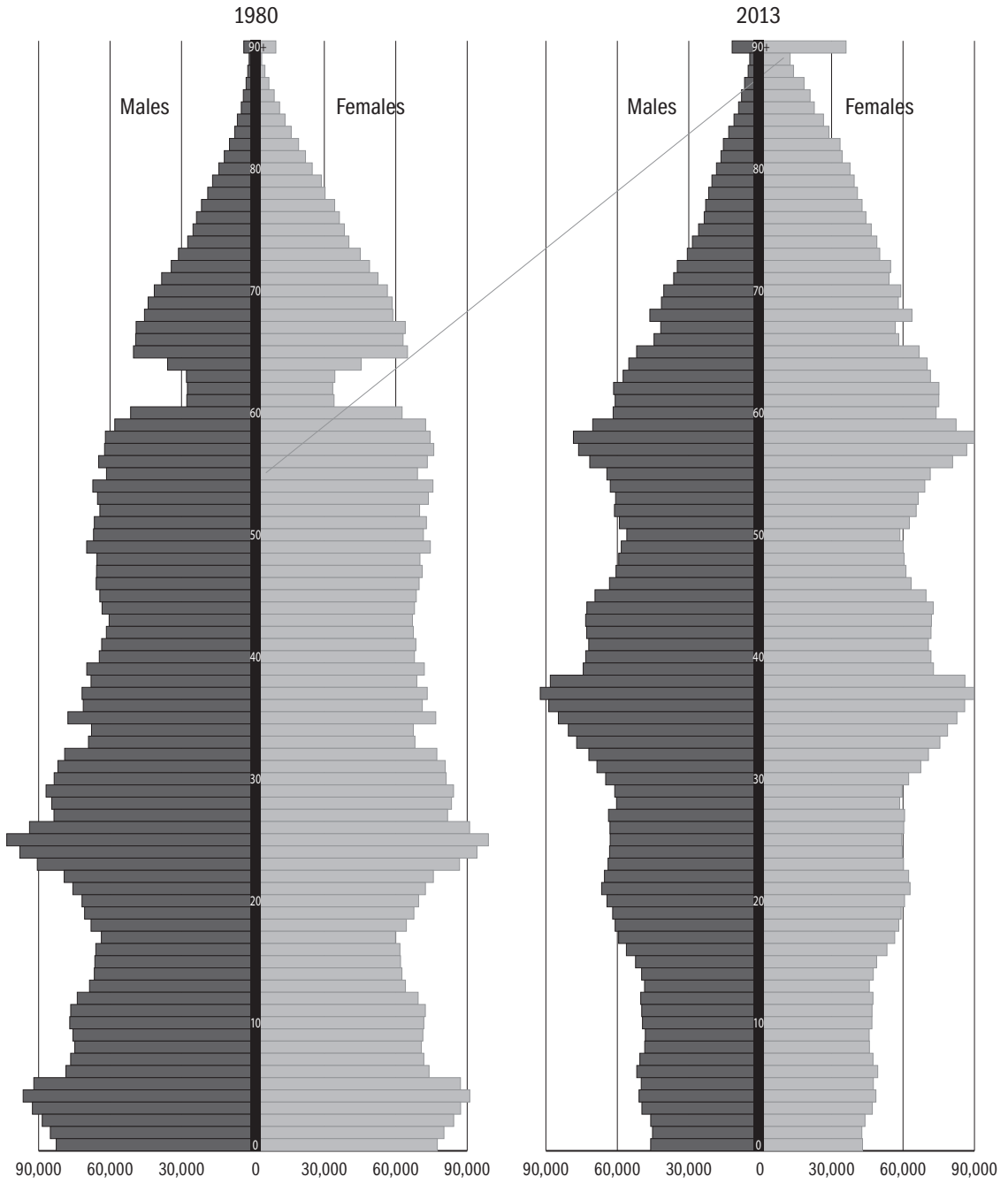
^a January 1st. The data for 1980 and 1990 are based on the censuses of those years. Those for 1995–2011 are estimates based on the 2001 census and demographic data (reference date 2001.02.01.). Those for 2012 and 2013 are estimates based on the 2011 census (reference day 2011.10.01.) and demographic data.

Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent02_02



Figure 2.1: Age structure of the Hungarian population, 1980, 2013



Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena02_01

Table 2.3: Male population by age groups, in thousands^a

Year	0-14	15-24	25-59	60-64	65+	Total
	years old					
1980	1,205.4	749.9	2,475.6	170.5	587.3	5,188.7
1990	1,090.4	740.3	2,366.9	259.9	527.5	4,984.9
1995	967.4	824.0	2,353.3	246.1	550.8	4,941.6
2000	885.0	780.9	2,403.8	224.8	570.8	4,865.2
2004	823.0	691.9	2,470.3	244.4	574.5	4,804.1
2005	809.5	674.6	2,480.0	252.2	576.8	4,793.1
2006	796.7	664.0	2,493.7	249.3	580.9	4,784.6
2007	784.5	655.4	2,503.7	249.4	586.1	4,779.1
2008	773.9	649.2	2,501.3	252.5	592.8	4,769.6
2009	765.8	642.7	2,497.0	258.4	599.2	4,763.1
2010	757.7	640.4	2,488.8	261.7	608.3	4,756.9
2011	747.6	629.7	2,480.4	274.7	611.5	4,743.9
2012	739.5	623.1	2,449.9	294.1	617.9	4,724.6
2013	734.7	614.4	2,439.4	297.0	630.5	4,716.0

^a January 1st. The data for 1980 and 1990 are based on the censuses of those years. Those for 1995–2011 are estimates based on the 2001 census and demographic data (reference date 2001.02.01.). Those for 2012 and 2013 are estimates based on the 2011 census (reference day 2011.10.01.) and demographic data.

Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent02_03

Table 2.4: Female population by age groups, in thousands^a

Year	0-14	15-24	25-54	55-59	60+	Total
	years old					
1980	1,135.8	714.5	2,232.8	365.3	1,072.4	5,520.8
1990	1,040.1	705.2	2,144.4	327.6	1,172.5	5,389.9
1995	924.4	786.2	2,151.0	312.6	1,221.0	5,395.1
2000	844.3	745.6	2,170.5	334.8	1,261.3	5,356.5
2004	783.1	663.1	2,220.8	338.5	1,307.1	5,312.6
2005	770.2	647.4	2,221.9	341.7	1,323.1	5,304.3
2006	756.8	638.6	2,213.0	356.6	1,327.0	5,292.0
2007	745.1	630.6	2,206.8	369.6	1,335.0	5,287.1
2008	734.9	624.1	2,194.5	373.2	1,349.1	5,275.8
2009	726.8	617.2	2,176.0	381.8	1,366.1	5,267.9
2010	719.2	613.1	2,145.5	396.8	1,382.8	5,257.4
2011	709.6	601.9	2,124.0	404.4	1,401.9	5,241.8
2012	700.8	590.9	2,079.5	416.2	1,419.9	5,207.3
2013	696.2	582.0	2,066.5	411.2	1,436.9	5,192.8

^a January 1st. The data for 1980 and 1990 are based on the censuses of those years. Those for 1995–2011 are estimates based on the 2001 census and demographic data (reference date 2001.02.01.). Those for 2012 and 2013 are estimates based on the 2011 census (reference day 2011.10.01.) and demographic data.

Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent02_04

Table 3.1: Labour force participation of the population over 14 years, in thousands^a

Year	Population of male 15-59 and female 15-54							Population of males over 59 and females over 54				
	Employed	Unem- ployed	Inactive				Total	Employed	Unem- ployed	Pensioner, other inactive	Total	
			Pensioner	Full time student	On child care leave	Other inactive						Inactive total
1980	4,887.9	0.0	300.8	370.1	259.0	339.7	1,269.6	6,157.5	570.3	0.0	1,632.1	2,202.4
1990	4,534.3	62.4	284.3	548.9	249.7	297.5	1,380.4	5,977.1	345.7	0.0	1,944.9	2,290.6
1991	4,270.5	253.3	335.6	578.2	259.8	317.1	1,490.7	6,014.5	249.5	0.0	2,045.2	2,294.7
1992	3,898.4	434.9	392.7	620.0	262.1	435.9	1,710.7	6,044.0	184.3	9.8	2,101.7	2,295.8
1993	3,689.5	502.6	437.5	683.9	270.5	480.1	1,872.0	6,064.1	137.5	16.3	2,141.2	2,295.0
1994	3,633.1	437.4	476.5	708.2	280.9	540.7	2,006.3	6,076.8	118.4	11.9	2,163.8	2,294.1
1995	3,571.3	410.0	495.2	723.4	285.3	596.1	2,100.0	6,081.3	107.5	6.4	2,180.6	2,294.5
1996	3,546.1	394.0	512.7	740.0	289.2	599.4	2,141.2	6,081.3	102.1	6.1	2,184.6	2,292.8
1997	3,549.5	342.5	542.9	752.0	289.0	599.9	2,183.8	6,075.8	96.9	6.3	2,189.0	2,292.2
1998	3,608.5	305.5	588.8	697.0	295.5	565.7	2,147.0	6,061.0	89.3	7.5	2,197.6	2,294.4
1999	3,701.0	283.3	534.7	675.6	295.3	549.8	2,055.4	6,039.6	110.4	1.4	2,185.2	2,297.0
2000	3,745.9	261.4	517.9	721.7	281.4	571.4	2,092.4	6,099.7	130.3	2.3	2,268.0	2,400.6
2001	3,742.6	231.7	516.3	717.9	286.6	601.6	2,122.4	6,096.7	140.7	2.4	2,271.8	2,414.9
2002	3,719.6	235.7	507.1	738.3	286.8	593.0	2,125.2	6,080.5	164.1	3.2	2,263.9	2,431.2
2003	3,719.0	239.6	485.0	730.7	286.9	595.0	2,097.6	6,056.2	202.9	4.9	2,245.6	2,453.4
2004	3,663.1	247.2	480.5	739.8	282.4	622.4	2,125.1	6,035.4	237.3	5.7	2,236.1	2,479.1
2005	3,653.9	296.0	449.7	740.8	278.6	590.3	2,059.4	6,009.3	247.6	7.9	2,258.3	2,513.8
2006	3,679.6	308.8	432.9	810.9	270.0	500.7	2,014.5	6,002.9	250.5	8.4	2,268.0	2,526.9
2007	3,676.6	303.7	426.8	832.6	267.2	475.8	2,002.4	5,982.7	249.5	8.2	2,296.1	2,553.8
2008	3,631.4	318.5	408.6	819.6	279.8	493.1	2,001.1	5,951.0	248.1	10.7	2,327.7	2,586.5
2009	3,516.8	406.4	364.5	814.6	278.7	529.3	1,987.1	5,910.3	265.1	14.3	2,348.0	2,627.4
2010	3,485.7	455.2	338.7	814.6	267.0	500.7	1,921.0	5,861.9	295.5	19.6	2,356.0	2,671.1
2011	3,484.2	444.1	290.7	794.4	280.5	519.0	1,884.6	5,813.0	327.7	23.8	2,357.6	2,709.1
2012	3,552.2	451.6	250.6	770.0	269.2	496.5	1,786.3	5,790.1	325.6	24.0	2,376.2	2,725.8
2013	3,599.2	425.1	245.8	751.2	257.2	368.4	1,622.6	5,647.0	339.2	23.8	2,346.2	2,709.1

^a Annual average figures.

Note: Up to the year 1999 the weighted figures are based on the 1990 population census, since 2000 the data is updated based on the 2001 population census.

Data on 'employed' includes conscripts and those working while receiving pension or child support. The data on students for 1995-97 are estimates.

'Other inactive' is a residual category calculated by deducting the sum of the figures in the indicated categories (i) from the population of January 1, 2012., in 2012 (ii) from the mid-year population, in other years, so it includes the institutional population not observed by MEF.

Source: Pensioners: 1980-91: NYUFIG, 1992-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990-91: NFSZ REG, 1992-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_01

Table 3.2: Labour force participation of the population over 14 years, males, in thousands^a

Year	Population of males 15-59							Population of males 60 and over				
	Employed	Unem- ployed	Inactive				Total	Employed	Unem- ployed	Pensioner, other inactive	Total	
			Pensioner	Full time student	On child care leave	Other inactive						Inactive total
1980	2,750.5	0.0	173.8	196.3	0.0	99.1	469.2	3,219.7	265.3	0.0	491.8	757.1
1990	2,524.3	37.9	188.4	284.2	1.2	80.3	554.1	3,116.3	123.7	0.0	665.5	789.2
1991	2,351.6	150.3	218.7	296.5	1.5	115.0	631.7	3,133.6	90.4	0.0	700.7	791.1
1992	2,153.1	263.2	252.0	302.4	1.7	174.8	730.9	3,147.2	65.1	3.2	722.1	790.4
1993	2,029.1	311.5	263.2	346.9	2.0	203.3	815.4	3,156.0	47.9	4.5	735.7	788.1
1994	2,013.4	270.0	277.6	357.1	3.7	239.6	878.0	3,161.4	41.6	3.8	740.0	785.4
1995	2,012.5	259.3	282.2	367.4	4.9	237.8	892.3	3,164.1	37.1	2.1	742.6	781.8
1996	2,007.4	242.4	291.9	372.8	3.3	248.3	916.3	3,166.1	28.9	1.3	746.3	776.5
1997	2,018.0	212.2	306.0	377.6	1.5	251.6	936.7	3,166.9	25.5	1.9	743.5	770.9
1998	2,015.5	186.5	345.4	350.4	1.0	264.2	961.0	3,163.0	26.2	2.8	737.3	766.3
1999	2,068.4	170.3	312.7	338.8	4.2	261.5	917.2	3,155.9	34.7	0.4	727.2	762.3
2000	2,086.0	158.2	315.2	358.2	4.1	261.7	939.2	3,183.4	39.8	0.7	758.8	799.3
2001	2,087.6	141.6	311.0	353.4	4.3	283.2	951.9	3,181.1	41.1	0.9	763.0	805.0
2002	2,080.4	137.3	307.5	370.3	5.0	273.4	956.2	3,173.9	45.2	0.7	764.4	810.3
2003	2,073.5	137.6	293.6	367.9	4.3	288.1	953.9	3,165.0	53.0	0.9	762.5	816.4
2004	2,052.7	136.2	293.5	371.2	4.6	300.2	969.5	3,158.4	64.6	0.6	758.8	824.0
2005	2,050.7	158.2	278.8	375.4	5.8	288.8	948.8	3,157.7	65.4	0.9	763.9	830.2
2006	2,076.5	163.6	268.1	404.1	7.0	239.3	918.5	3,158.4	60.5	1.0	770.9	832.8
2007	2,082.6	163.2	267.7	412.3	3.8	225.2	909.0	3,154.8	60.4	1.0	779.0	840.4
2008	2,052.0	173.4	266.3	408.2	4.8	240.4	919.7	3,145.1	58.8	0.9	791.7	851.4
2009	1,983.6	232.3	241.8	410.8	4.6	261.6	918.8	3,134.4	61.6	1.3	800.7	863.6
2010	1,960.1	262.5	228.3	410.2	4.6	254.0	897.1	3,119.7	62.6	1.9	813.6	878.1
2011	1,987.3	250.4	198.8	399.6	3.8	261.6	863.8	3,101.6	70.0	2.9	819.6	892.5
2012	2,013.4	259.0	178.8	390.8	4.0	247.1	820.7	3,093.1	68.9	3.6	826.4	898.9
2013	2,047.1	238.8	167.8	379.6	4.1	164.6	716.1	3,002.0	81.4	4.3	819.4	905.1

^a Annual average figures.

Note: Up to the year 1999 the weighted figures are based on the 1990 population census, since 2000 the data is updated based on the 2001 population census. Data on 'employed' includes conscripts and those working while receiving pension or child support. The data on students for 1995-97 are estimates.

'Other inactive' is a residual category calculated by deducting the sum of the figures in the indicated categories (i) from the population of January 1, 2012., in 2012 (ii) from the mid-year population, in other years, so it includes the institutional population not observed by MEF.

Source: Pensioners: 1980-91: NYUFIG, 1992-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990-91: NFSZ REG, 1992-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_02

Table 3.3: Labour force participation of the population over 14 years, females, in thousands^a

Year	Population of females 15–54							Population of females 55 and over				
	Employed	Unem- ployed	Inactive				Total	Employed	Unem- ployed	Pensioner, other inactive	Total	
			Pensioner	Full time student	On child care leave	Other inactive						Inactive total
1980	2,137.4	0.0	127.0	173.8	259.0	240.6	800.4	2,937.8	305.0	0.0	1,140.3	1,445.3
1990	2,010.0	24.5	95.8	264.7	248.5	217.3	826.3	2,860.8	222.0	0.0	1,279.4	1,501.4
1991	1,918.9	103.1	116.9	281.8	258.3	201.9	858.9	2,880.9	159.1	0.0	1,344.5	1,503.6
1992	1,745.3	171.7	140.8	317.6	260.4	261.1	979.9	2,896.9	119.2	6.6	1,379.6	1,505.4
1993	1,660.4	191.1	174.3	337.0	268.5	276.8	1,056.6	2,908.1	89.6	11.8	1,405.5	1,506.9
1994	1,619.7	167.4	198.9	351.1	277.2	301.1	1,128.3	2,915.4	76.8	8.1	1,423.8	1,508.7
1995	1,558.8	150.7	213.0	356.0	280.4	358.3	1,207.7	2,917.2	70.4	4.3	1,438.0	1,512.7
1996	1,538.7	151.6	220.7	367.2	285.9	351.1	1,224.9	2,915.2	73.2	4.8	1,438.3	1,516.3
1997	1,531.5	130.3	236.9	374.4	287.5	348.3	1,247.1	2,908.9	71.4	4.4	1,445.3	1,521.1
1998	1,593.0	119.0	243.4	346.6	294.5	301.5	1,186.0	2,898.0	63.1	4.7	1,460.3	1,528.1
1999	1,632.6	113.0	222.0	336.8	291.1	288.3	1,138.2	2,883.8	75.8	1.0	1,458.0	1,534.8
2000	1,659.9	103.2	202.7	363.5	277.3	309.7	1,153.2	2,916.3	90.5	1.6	1,509.2	1,601.3
2001	1,655.0	90.1	205.3	364.5	282.3	318.3	1,170.4	2,915.5	99.6	1.5	1,508.8	1,609.9
2002	1,639.2	98.4	199.6	368.0	281.8	319.6	1,169.0	2,906.6	118.9	2.5	1,499.5	1,620.9
2003	1,645.6	102.0	191.4	362.8	282.6	306.9	1,143.7	2,891.2	149.9	4.0	1,483.2	1,637.1
2004	1,610.2	111.0	186.8	368.6	277.8	322.2	1,155.4	2,876.6	172.8	5.1	1,477.3	1,655.2
2005	1,603.2	137.8	170.9	365.4	272.8	301.5	1,110.6	2,851.6	182.2	7.0	1,494.4	1,683.6
2006	1,603.1	144.8	164.8	406.8	263.0	262.0	1,096.6	2,844.5	189.6	7.4	1,497.1	1,694.1
2007	1,594.0	140.5	159.1	420.3	263.4	250.6	1,093.4	2,827.9	189.1	7.2	1,517.1	1,713.4
2008	1,579.4	145.1	142.3	411.4	276.0	252.7	1,082.4	2,806.9	189.3	9.8	1,536.0	1,735.1
2009	1,533.5	174.1	122.7	403.8	274.1	267.7	1,068.3	2,775.9	203.5	13.0	1,547.3	1,763.8
2010	1,525.6	192.8	110.4	404.4	262.4	246.6	1,023.8	2,742.2	233.0	17.7	1,542.3	1,793.0
2011	1,496.9	193.7	91.9	394.8	276.7	257.4	1,020.8	2,711.4	257.7	20.9	1,538.0	1,816.6
2012	1,538.8	192.6	71.8	379.2	265.2	249.4	965.6	2,697.0	256.7	20.4	1,550.0	1,826.9
2013	1,552.1	186.4	78.0	371.6	253.1	203.8	906.5	2,645.0	257.8	19.4	1,526.8	1,804.0

^a Annual average figures.

Note: Up to the year 1999 the weighted figures are based on the 1990 population census, since 2000 the data is updated based on the 2001 population census. Data on ‘employed’ includes conscripts and those working while receiving pension or child support. The data on students for 1995–97 are estimates.

^b ‘Other inactive’ is a residual category calculated by deducting the sum of the figures in the indicated categories (i) from the population of January 1, 2012., in 2012 (ii) from the mid-year population, in other years, so it includes the institutional population not observed by MEF.

Source: Pensioners: 1980–91: NYUFIG, 1992–: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990–91: NMH REG, 1992–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_03

Table 3.4: Labour force participation of the population over 14 years, per cent

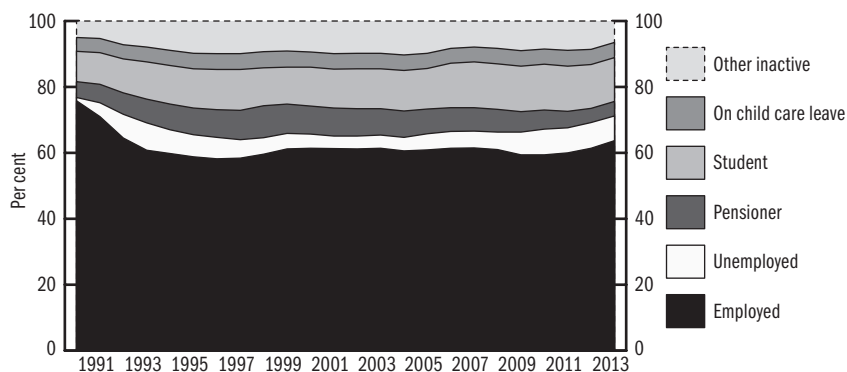


Year	Population of male 15-59 and female 15-54							Population of males over 59 and females over 54				
	Employed	Unem- ployed	Inactive				Total	Employed	Unem- ployed	Pensioner, other inactive	Total	
			Pensioner	Full time student	On child care leave	Other inactive						Inactive total
1980	79.4	0.0	4.9	6.0	4.2	5.5	20.6	100.0	25.9	0.0	74.1	100.0
1990	75.9	1.0	4.8	9.2	4.2	5.0	23.1	100.0	15.1	0.0	84.9	100.0
1995	58.7	6.7	8.1	11.9	4.7	9.8	34.5	100.0	4.7	0.3	95.0	100.0
1996	58.3	6.5	8.4	12.2	4.8	9.9	35.2	100.0	4.5	0.3	95.3	100.0
1997	58.4	5.6	8.9	12.4	4.8	9.9	35.9	100.0	4.2	0.3	95.5	100.0
1998	59.5	5.0	9.7	11.5	4.9	9.3	35.4	100.0	3.9	0.3	95.8	100.0
1999	61.3	4.7	8.9	11.2	4.9	9.1	34.0	100.0	4.8	0.1	95.1	100.0
2000	61.4	4.3	8.5	11.8	4.6	9.4	34.3	100.0	5.4	0.1	94.5	100.0
2001	61.4	3.8	8.5	11.8	4.7	9.9	34.8	100.0	5.8	0.1	94.1	100.0
2002	61.2	3.9	8.3	12.1	4.7	9.8	35.0	100.0	6.7	0.1	93.1	100.0
2003	61.4	4.0	8.0	12.1	4.7	9.8	34.6	100.0	8.3	0.2	91.5	100.0
2004	60.7	4.1	8.0	12.3	4.7	10.3	35.2	100.0	9.6	0.2	90.2	100.0
2005	60.8	4.9	7.5	12.3	4.6	9.8	34.3	100.0	9.8	0.3	89.8	100.0
2006	61.3	5.1	7.2	13.5	4.5	8.3	33.6	100.0	9.9	0.3	89.8	100.0
2007	61.5	5.1	7.1	13.9	4.5	7.9	33.5	100.0	9.8	0.3	89.9	100.0
2008	61.0	5.3	6.9	13.8	4.7	8.3	33.6	100.0	9.6	0.4	90.0	100.0
2009	59.5	6.9	6.2	13.8	4.7	9.0	33.6	100.0	10.1	0.5	89.4	100.0
2010	59.5	7.8	5.8	13.9	4.6	8.5	32.8	100.0	11.1	0.7	88.2	100.0
2011	59.9	7.6	5.0	13.7	4.8	8.9	32.4	100.0	12.1	0.9	87.0	100.0
2012	61.3	7.8	4.3	13.3	4.6	8.6	30.9	100.0	11.9	0.9	87.2	100.0
2013	63.7	7.5	4.4	13.3	4.6	6.5	28.7	100.0	12.5	0.9	86.6	100.0

Source: Pensioners: 1980-90: NYUFIG, 1995-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990: NFSZ REG, 1995-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_04

Figure 3.1: Labour force participation of population for males 15-59 and females 15-54, total



Source: Pensioners: 1990-90: NYUFIG, 1992-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990-91: NFSZ REG, 1992-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2013hua03_01



Table 3.5: Labour force participation of the population over 14 years, males, per cent

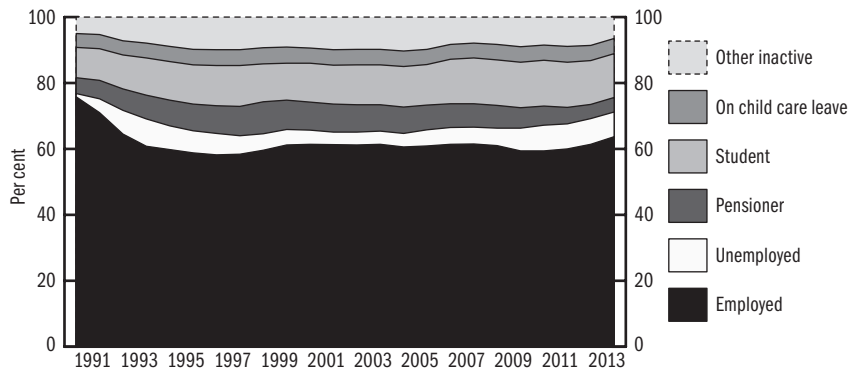
Year	Population of males 15-59							Population of males 60 and over				
	Employed	Unem- ployed	Inactive				Total	Employed	Unem- ployed	Pensioner, other inactive	Total	
			Pensioner	Full time student	On child care leave	Other inactive						Inactive total
1980	85.4	0.0	5.4	6.1	0.0	3.1	14.6	100.0	35.0	0.0	65.0	100.0
1990	81.0	1.2	6.0	9.1	0.0	2.6	17.8	100.0	15.7	0.0	84.3	100.0
1995	63.6	8.2	8.9	11.6	0.2	7.5	28.2	100.0	4.7	0.3	95.0	100.0
1996	63.4	7.7	9.2	11.8	0.1	7.8	28.9	100.0	3.7	0.2	96.1	100.0
1997	63.7	6.7	9.7	11.9	0.0	7.9	29.6	100.0	3.3	0.2	96.4	100.0
1998	63.7	5.9	10.9	11.1	0.0	8.4	30.4	100.0	3.4	0.4	96.2	100.0
1999	65.5	5.4	9.9	10.7	0.1	8.3	29.1	100.0	4.6	0.1	95.4	100.0
2000	65.5	5.0	9.9	11.3	0.1	8.2	29.5	100.0	5.0	0.1	94.9	100.0
2001	65.6	4.5	9.8	11.1	0.1	8.9	29.9	100.0	5.1	0.1	94.8	100.0
2002	65.5	4.3	9.7	11.7	0.2	8.6	30.1	100.0	5.6	0.1	94.3	100.0
2003	65.5	4.3	9.3	11.6	0.1	9.1	30.1	100.0	6.5	0.1	93.4	100.0
2004	65.0	4.3	9.3	11.8	0.1	9.5	30.7	100.0	7.8	0.1	92.1	100.0
2005	64.9	5.0	8.8	11.9	0.2	9.1	30.0	100.0	7.9	0.1	92.0	100.0
2006	65.7	5.2	8.5	12.8	0.2	7.6	29.1	100.0	7.3	0.1	92.6	100.0
2007	66.0	5.2	8.5	13.1	0.1	7.1	28.8	100.0	7.2	0.1	92.7	100.0
2008	65.2	5.5	8.5	13.0	0.2	7.6	29.2	100.0	6.9	0.1	93.0	100.0
2009	63.3	7.4	7.7	13.1	0.1	8.3	29.3	100.0	7.1	0.2	92.7	100.0
2010	62.8	8.4	7.3	13.1	0.1	8.1	28.8	100.0	7.1	0.2	92.7	100.0
2011	64.1	8.1	6.4	12.9	0.1	8.4	27.9	100.0	7.8	0.3	91.8	100.0
2012	65.1	8.4	5.8	12.6	0.1	8.0	26.5	100.0	7.7	0.4	91.9	100.0
2013	68.2	8.0	5.6	12.6	0.1	5.5	23.9	100.0	9.0	0.5	90.5	100.0

Source: Pensioners: 1980-90: NYUFIG, 1995-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990: NFSZ REG, 1995-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_05



Figure 3.2: Labour force participation of population at male 15-59



Source: Pensioners: 1990-90: NYUFIG, 1992-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990-91: NFSZ REG, 1992-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena03_02

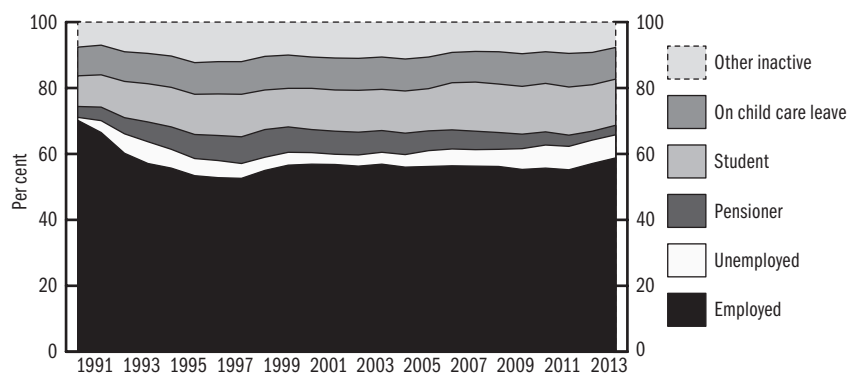
Table 3.6: Labour force participation of the population over 14 years, females, per cent

Year	Population of females 15-54							Population of females 55 and over				
	Employed	Unem- ployed	Inactive				Total	Employed	Unem- ployed	Pensioner, other inactive	Total	
			Pensioner	Full time student	On child care leave	Other inactive						Inactive total
1980	72.8	0.0	4.3	5.9	8.8	8.2	27.2	100.0	21.1	0.0	78.9	100.0
1990	70.3	0.9	3.3	9.3	8.7	7.6	28.9	100.0	14.8	0.0	85.2	100.0
1995	53.4	5.2	7.3	12.2	9.6	12.3	41.4	100.0	4.7	0.3	95.1	100.0
1996	52.8	5.2	7.6	12.6	9.8	12.0	42.0	100.0	4.8	0.3	94.9	100.0
1997	52.6	4.5	8.1	12.9	9.9	12.0	42.9	100.0	4.7	0.3	95.0	100.0
1998	55.0	4.1	8.4	12.0	10.2	10.4	40.9	100.0	4.1	0.3	95.6	100.0
1999	56.6	3.9	7.7	11.7	10.1	10.0	39.5	100.0	4.9	0.1	95.0	100.0
2000	56.9	3.5	7.0	12.5	9.5	10.6	39.5	100.0	5.7	0.1	94.2	100.0
2001	56.8	3.1	7.0	12.5	9.7	10.9	40.1	100.0	6.2	0.1	93.7	100.0
2002	56.4	3.4	6.9	12.7	9.7	11.0	40.2	100.0	7.3	0.2	92.5	100.0
2003	56.9	3.5	6.6	12.5	9.8	10.6	39.6	100.0	9.2	0.2	90.6	100.0
2004	56.0	3.9	6.5	12.8	9.7	11.2	40.2	100.0	10.4	0.3	89.3	100.0
2005	56.2	4.8	6.0	12.8	9.6	10.6	38.9	100.0	10.8	0.4	88.8	100.0
2006	56.4	5.1	5.8	14.3	9.2	9.2	38.6	100.0	11.2	0.4	88.4	100.0
2007	56.4	5.0	5.6	14.9	9.3	8.9	38.7	100.0	11.0	0.4	88.6	100.0
2008	56.3	5.2	5.1	14.7	9.8	9.0	38.6	100.0	10.9	0.6	88.5	100.0
2009	55.2	6.3	4.4	14.5	9.9	9.6	38.5	100.0	11.5	0.8	87.7	100.0
2010	55.6	7.0	4.0	14.7	9.6	9.0	37.5	100.0	13.0	1.0	86.0	100.0
2011	55.2	7.1	3.4	14.6	10.2	9.5	37.6	100.0	14.2	1.2	84.7	100.0
2012	57.1	7.1	2.7	14.1	9.8	9.2	35.8	100.0	14.1	1.1	84.8	100.0
2013	58.7	7.0	2.9	14.0	9.6	7.7	34.3	100.0	14.3	1.1	84.6	100.0

Source: Pensioners: 1980-90: NYUFIG, 1995-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990: NFSZ REG, 1995-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_06

Figure 3.3: Labour force participation of population at female 15-54



Source: Pensioners: 1990-90: NYUFIG, 1992-: KSH MEF. Child care recipients: up to the year 1997 TB and estimation, after 1997 MEF. Unemployment: 1990-91: NFSZ REG, 1992-: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena03_03



Table 3.7: Population aged 15–64 by labour market status (self-categorised), in thousands

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Together													
In work	3,827.4	3,827.1	3,843.6	3,834.4	3,852.2	3,864.1	3,857.2	3,800.7	3,715.3	3,709.8	3,746.7	3,799.9	3,872.5
Unemployed	414.5	410.4	431.8	451.0	488.2	468.1	448.3	481.4	592.5	676.0	678.7	697.9	675.8
Students, pupils	739.9	763.1	767.7	783.8	792.0	847.8	870.4	868.9	864.5	861.8	848.3	811.5	772.9
Pensioner	990.8	940.4	856.4	800.3	755.6	617.8	568.6	611.0	600.9	579.3	570.3	605.1	593.6
Disabled	251.0	284.4	338.3	370.4	359.7	520.4	560.3	530.0	495.5	482.1	448.4	343.5	330.5
On child care leave	272.3	278.3	281.7	274.7	272.4	273.5	279.7	292.4	290.5	280.5	288.3	271.5	260.7
Dependent	170.7	160.4	135.1	133.3	134.6	116.1	111.9	106.2	105.6	100.4	110.5	96.7	102.7
Out of work for other reasons	184.7	185.7	181.7	178.4	160.0	108.0	103.3	103.6	106.4	79.3	83.8	89.7	77.4
Total	6,851.3	6,849.8	6,836.3	6,826.3	6,814.7	6,815.8	6,799.7	6,794.2	6,771.2	6,769.2	6,775.0	6,715.7	6,686.1
Males													
In work	2,089.5	2,090.2	2,087.3	2,082.8	2,088.3	2,105.0	2,108.9	2,074.0	2,013.1	1,989.1	2,026.4	2,042.3	2,090.1
Unemployed	255.2	239.3	244.2	247.7	265.2	251.6	241.9	257.5	334.2	376.5	373.4	379.5	368.3
Students, pupils	363.6	380.9	383.7	391.1	398.5	418.9	430.2	431.5	432.9	431.2	425.5	411.2	390.5
Pensioner	386.3	368.1	337.4	322.5	304.5	236.0	205.2	233.8	235.1	240.4	243.4	241.8	223.2
Disabled	134.2	148.1	169.9	184.5	178.7	250.4	269.9	259.4	237.1	231.0	212.7	168.4	158.8
On child care leave	4.0	4.9	4.7	4.9	6.1	5.5	4.1	5.8	6.0	6.7	4.7	4.0	4.3
Dependent	6.3	5.1	5.3	6.0	7.0	5.8	6.6	7.2	7.3	10.3	10.0	7.5	10.3
Out of work for other reasons	100.8	101.2	97.5	89.6	80.1	54.9	52.1	52.1	50.1	36.1	37.5	41.0	36.1
Total	3,339.9	3,337.8	3,330.0	3,329.1	3,328.4	3,328.1	3,318.9	3,321.3	3,315.8	3,321.3	3,333.6	3,295.6	3,281.6
Females													
In work	1,737.9	1,736.9	1,756.3	1,751.6	1,763.9	1,759.1	1,748.3	1,726.6	1,702.2	1,720.7	1,720.4	1,757.7	1,782.2
Unemployed	159.3	171.1	187.6	203.3	223.0	216.5	206.4	223.8	258.3	299.5	305.4	318.4	307.5
Students, pupils	376.3	382.2	384.0	392.7	393.5	428.9	440.2	437.4	431.6	430.6	422.8	400.3	382.4
Pensioner	604.5	572.3	519.0	477.8	451.1	381.8	363.4	377.2	365.7	338.9	326.9	363.4	370.4
Disabled	116.8	136.3	168.4	185.9	181.0	270.0	290.4	270.6	258.4	251.1	235.7	175.1	171.8
On child care leave	268.3	273.4	277.0	269.8	266.3	268.0	275.6	286.7	284.5	273.9	283.6	267.4	256.4
Dependent	164.4	155.3	129.8	127.3	127.6	110.3	105.3	99.1	98.3	90.1	100.4	89.3	92.4
Out of work for other reasons	83.9	84.5	84.2	88.8	79.9	53.1	51.2	51.4	56.3	43.1	46.3	48.7	41.3
Total	3,511.4	3,512.0	3,506.3	3,497.2	3,486.3	3,487.7	3,480.8	3,472.8	3,455.3	3,447.9	3,441.5	3,420.1	3,404.4

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_07

Table 3.8: Population aged 15–64 by labour market status (self-categorised), per cent

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Together													
In work	55.9	55.9	56.2	56.2	56.5	56.7	56.7	55.9	54.9	54.8	55.3	56.6	57.9
Unemployed	6.0	6.0	6.3	6.6	7.2	6.9	6.6	7.1	8.8	10.0	10.0	10.4	10.1
Students, pupils	10.8	11.1	11.2	11.5	11.6	12.4	12.8	12.8	12.8	12.7	12.5	12.1	11.6
Pensioner	14.5	13.7	12.5	11.7	11.1	9.1	8.4	9.0	8.9	8.6	8.4	9.0	8.9
Disabled	3.7	4.2	4.9	5.4	5.3	7.6	8.2	7.8	7.3	7.1	6.6	5.1	4.9
On child care leave	4.0	4.1	4.1	4.0	4.0	4.0	4.1	4.3	4.3	4.1	4.3	4.0	3.9
Dependent	2.5	2.3	2.0	2.0	2.0	1.7	1.6	1.6	1.6	1.5	1.6	1.4	1.5
Out of work for other reasons	2.7	2.7	2.7	2.6	2.3	1.6	1.5	1.5	1.6	1.2	1.2	1.3	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Males													
In work	62.6	62.6	62.7	62.6	62.7	63.2	63.5	62.4	60.7	59.9	60.8	62.0	63.7
Unemployed	7.6	7.2	7.3	7.4	8.0	7.6	7.3	7.8	10.1	11.3	11.2	11.5	11.2
Students, pupils	10.9	11.4	11.5	11.7	12.0	12.6	13.0	13.0	13.1	13.0	12.8	12.5	11.9
Pensioner	11.6	11.0	10.1	9.7	9.1	7.1	6.2	7.0	7.1	7.2	7.3	7.3	6.8
Disabled	4.0	4.4	5.1	5.5	5.4	7.5	8.1	7.8	7.2	7.0	6.4	5.1	4.8
On child care leave	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Dependent	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3
Out of work for other reasons	3.0	3.0	2.9	2.7	2.4	1.6	1.6	1.6	1.5	1.1	1.1	1.2	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females													
In work	49.5	49.5	50.1	50.1	50.6	50.4	50.2	49.7	49.3	49.9	50.0	51.4	52.4
Unemployed	4.5	4.9	5.4	5.8	6.4	6.2	5.9	6.4	7.5	8.7	8.9	9.3	9.0
Students, pupils	10.7	10.9	11.0	11.2	11.3	12.3	12.6	12.6	12.5	12.5	12.3	11.7	11.2
Pensioner	17.2	16.3	14.8	13.7	12.9	10.9	10.4	10.9	10.6	9.8	9.5	10.6	10.9
Disabled	3.3	3.9	4.8	5.3	5.2	7.7	8.3	7.8	7.5	7.3	6.8	5.1	5.1
On child care leave	7.6	7.8	7.9	7.7	7.6	7.7	7.9	8.3	8.2	7.9	8.2	7.8	7.5
Dependent	4.7	4.4	3.7	3.6	3.7	3.2	3.0	2.9	2.8	2.6	2.9	2.6	2.7
Out of work for other reasons	2.4	2.4	2.4	2.5	2.3	1.5	1.5	1.5	1.6	1.3	1.3	1.4	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent03_08



Table 4.1: Employment

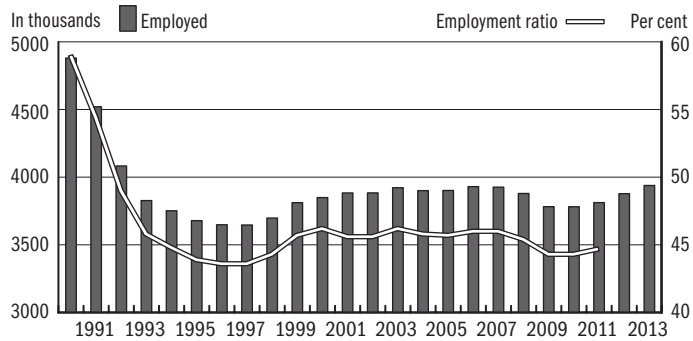
Year	In thousands	1992 = 100	Annual changes	Employment ratio ^a
1980	5,458.2	133.7	..	65.3
1990	4,880.0	119.5	..	59.0
1991	4,520.0	110.7	-7.4	54.4
1992	4,082.7	100.0	-9.7	49.0
1993	3,827.0	93.7	-6.2	45.8
1994	3,751.5	91.9	-2.0	44.8
1995	3,678.8	90.1	-1.9	43.9
1996	3,648.2	89.4	-0.9	43.6
1997	3,646.4	89.3	0.0	43.6
1998	3,697.8	90.6	1.4	44.3
1999	3,811.4	93.4	3.2	45.7
2000	3,849.1	94.3	1.0	46.2
2001	3,883.3	95.1	0.3	45.6
2002	3,883.7	95.1	0.0	45.6
2003	3,921.9	96.1	1.2	46.2
2004	3,900.4	95.5	-0.5	45.8
2005	3,901.5	95.6	0.0	45.7
2006	3,930.1	96.3	0.7	46.0
2007	3,926.2	96.2	0.0	46.0
2008	3,879.4	95.0	-1.2	45.4
2009	3,781.9	92.6	-2.4	44.3
2010	3,781.2	92.6	0.0	44.3
2011	3,811.9	93.4	0.8	44.7
2012	3,877.9	95.0	1.7	..
2013	3,938.4	96.5	1.6	..

^a Per cent of the population over 14 years of age.
 Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
 Source: 1980–91: KSH MEM, 1992–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_01



Figure 4.1: Employed



Source: 1990–91: KSH MEM, 1992–: KSH MEF.
 Online data source in xls format: http://www.bpdata.eu/mpt/2014ena04_01

Table 4.2: Employment by gender

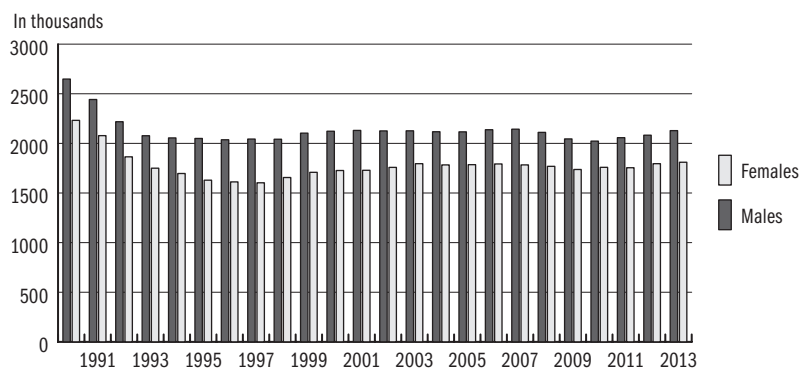
Year	Males		Females		Share of females (%)
	In thousands	1992 = 100	In thousands	1992 = 100	
1980	3,015.8	136.0	2,442.4	131.0	44.7
1990	2,648.0	119.4	2,232.0	119.7	45.7
1991	2,442.0	110.1	2,078.0	111.5	46.0
1992	2,218.2	100.0	1,864.5	100.0	45.7
1993	2,077.0	93.6	1,750.0	93.9	45.7
1994	2,055.0	92.6	1,696.5	91.0	45.2
1995	2,049.6	92.4	1,629.2	87.4	44.3
1996	2,036.3	91.8	1,611.9	86.5	44.2
1997	2,043.5	92.1	1,602.9	86.0	44.0
1998	2,041.7	92.0	1,656.1	88.8	44.8
1999	2,103.1	94.8	1,708.4	91.6	44.8
2000	2,122.4	95.7	1,726.7	92.6	44.9
2001	2,128.7	96.0	1,754.6	94.1	45.2
2002	2,125.6	95.8	1,758.1	94.3	45.3
2003	2,126.5	95.6	1,795.4	96.2	45.8
2004	2,117.3	95.5	1,783.1	95.6	45.7
2005	2,116.1	95.4	1,785.4	95.8	45.8
2006	2,137.4	96.4	1,792.7	96.1	45.6
2007	2,143.0	96.6	1,783.2	95.6	45.5
2008	2,110.8	95.2	1,768.6	94.9	45.6
2009	2,044.9	92.2	1,737.0	93.2	45.9
2010	2,022.6	91.2	1,758.6	94.4	46.5
2011	2,057.3	92.7	1,754.6	94.1	46.0
2012	2,082.4	93.9	1,795.5	96.3	46.3
2013	2,128.5	96.0	1,809.9	97.1	46.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.

Source: 1990–91: KSH MEM, 1992–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_02

Figure 4.2: Employment by gender



Source: 1990–91: KSH MEM, 1992–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena04_02



Table 4.3: Composition of the employed by age groups, males, per cent

Year	years old						Total
	15-19	20-24	25-49	50-54	55-59	60+	
1990	5.0	10.8	64.1	8.6	6.8	4.7	100.0
1998	2.3	13.4	67.6	10.3	5.1	1.3	100.0
1999	1.9	13.2	67.1	10.5	5.6	1.6	100.0
2000	1.5	12.4	67.3	10.6	6.4	1.8	100.0
2001	1.2	10.4	68.6	11.1	6.7	2.0	100.0
2002	0.9	9.4	69.4	11.3	6.9	2.1	100.0
2003	0.7	8.6	69.1	11.8	7.3	2.5	100.0
2004	0.7	7.4	69.5	12.0	7.3	3.0	100.0
2005	0.6	6.8	68.9	12.7	7.9	3.1	100.0
2006	0.6	6.6	68.5	13.0	8.4	2.9	100.0
2007	0.5	6.5	68.7	13.0	8.5	2.8	100.0
2008	0.5	6.3	69.0	13.1	8.3	2.8	100.0
2009	0.4	5.6	69.6	12.2	9.2	3.0	100.0
2010	0.3	5.7	69.3	12.0	9.6	3.1	100.0
2011	0.3	5.5	69.5	11.5	9.7	3.4	100.0
2012	0.3	5.5	69.5	11.2	10.2	3.3	100.0
2013	0.3	5.7	68.4	11.3	10.4	3.8	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
 Source: 1990: Census based estimates. 1998–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_03



Table 4.4: Composition of the employed by age groups, females, per cent

Year	years old					Total
	15-19	20-24	25-49	50-54	55+	
1990	5.2	8.6	66.2	10.0	10.0	100.0
1998	2.3	12.2	71.2	10.5	3.8	100.0
1999	1.7	12.1	70.2	11.6	4.4	100.0
2000	1.4	11.1	69.6	12.7	5.2	100.0
2001	1.1	9.6	70.5	13.1	5.7	100.0
2002	0.8	9.2	69.4	13.8	6.8	100.0
2003	0.5	8.2	68.8	14.0	8.5	100.0
2004	0.5	7.1	68.2	14.6	9.7	100.0
2005	0.4	6.4	67.6	15.4	10.2	100.0
2006	0.4	6.1	66.8	16.2	10.6	100.0
2007	0.3	5.8	67.3	16.0	10.6	100.0
2008	0.3	5.5	67.4	16.1	10.7	100.0
2009	0.3	5.4	67.2	15.4	11.7	100.0
2010	0.3	5.3	66.3	14.8	13.2	100.0
2011	0.3	5.4	66.0	13.8	14.5	100.0
2012	0.2	5.3	66.3	13.9	14.3	100.0
2013	0.2	5.1	66.9	13.6	14.2	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
 Source: 1990: Census based estimates. 1998–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_04

Table 4.5: Composition of the employed by level of education, males, per cent

Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1990	37.6	30.5	20.1	11.8	100.0
2000	16.1	41.6	26.7	15.6	100.0
2001	15.6	42.8	26.0	15.6	100.0
2002	14.6	43.2	26.4	15.8	100.0
2003	14.0	41.3	27.7	17.0	100.0
2004	13.0	40.4	28.0	18.6	100.0
2005	13.0	40.8	27.7	18.5	100.0
2006	12.3	40.8	28.3	18.6	100.0
2007	11.8	40.8	28.7	18.7	100.0
2008	11.7	39.4	29.0	19.8	100.0
2009	10.9	38.6	30.1	20.3	100.0
2010	10.7	38.2	30.6	20.5	100.0
2011	10.6	37.1	30.4	21.9	100.0
2012	10.6	36.9	30.0	22.5	100.0
2013	10.1	37.5	30.0	22.4	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census. Since 2000, slight changes have occurred in the categorisation system by highest education level. Source: 1990: Census based estimates. 2000–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_05

Table 4.6: Composition of the employed by level of education, females, per cent

Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1990	43.4	13.4	31.4	11.8	100.0
2000	19.1	20.9	40.8	19.2	100.0
2001	19.1	21.3	40.3	19.3	100.0
2002	18.5	21.5	40.2	19.8	100.0
2003	16.4	21.5	40.9	21.2	100.0
2004	15.9	20.5	40.2	23.4	100.0
2005	15.4	20.2	40.0	24.4	100.0
2006	14.3	20.7	40.1	24.9	100.0
2007	13.6	21.2	40.1	25.1	100.0
2008	13.3	20.3	39.3	27.1	100.0
2009	12.5	19.9	39.2	28.4	100.0
2010	12.4	20.2	38.7	28.7	100.0
2011	11.5	20.0	38.3	30.1	100.0
2012	11.0	19.5	38.7	30.8	100.0
2013	11.0	19.5	38.1	31.4	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census. Since 2000, slight changes have occurred in the categorisation system by highest education level. Source: 1990: Census based estimates. 2000–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_06



Table 4.7: Employed by employment status, in thousands

Year	Employees	Member of cooperatives	Member of other partnerships	Self-employed and assisting family members	Total
1998	3,088.5	55.8	132.5	397.9	3,674.7
1999	3,201.3	42.5	111.8	435.9	3,791.5
2000	3,255.5	37.1	129.4	407.1	3,829.1
2001	3,313.6	31.4	118.9	404.4	3,868.3
2002	3,337.2	22.5	109.9	401.0	3,870.6
2003	3,399.2	8.6	114.7	399.4	3,921.9
2004	3,347.8	8.1	136.6	407.8	3,900.3
2005	3,367.3	5.8	146.7	381.7	3,901.5
2006	3,431.4	4.8	126.7	367.2	3,930.1
2007	3,439.7	4.4	123.2	358.9	3,926.2
2008	3,405.1	2.3	122.5	349.5	3,879.4
2009	3,309.9	2.0	136.8	333.2	3,781.9
2010	3,317.5	3.0	140.0	320.7	3,781.2
2011	3,352.4	1.9	134.3	323.3	3,811.9
2012	3,424.7	2.4	145.7	305.1	3,877.9
2013	3,501.0	3.5	157.3	276.6	3,938.4

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census. Conscripts are excluded.

Source: 1998–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_07



Table 4.8: Composition of the employed persons by employment status, per cent

Year	Employees	Member of cooperatives	Member of other partnerships	Self-employed and assisting family members	Total
1998	84.0	1.5	3.6	10.8	100.0
1999	84.4	1.1	2.9	11.5	100.0
2000	85.0	1.0	3.4	10.6	100.0
2001	85.7	0.8	3.1	10.5	100.0
2002	86.2	0.6	2.8	10.4	100.0
2003	86.7	0.2	2.8	10.3	100.0
2004	85.8	0.2	3.5	10.5	100.0
2005	86.3	0.1	3.8	9.8	100.0
2006	87.3	0.1	3.2	9.4	100.0
2007	87.6	0.1	3.1	9.2	100.0
2008	87.7	0.1	3.2	9.0	100.0
2009	87.5	0.1	3.6	8.8	100.0
2010	87.7	0.1	3.7	8.5	100.0
2011	87.9	0.0	3.5	8.5	100.0
2012	88.3	0.1	3.8	7.9	100.0
2013	88.9	0.1	4.0	7.0	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census. Conscripts are excluded.

Source: 1998–: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_08

Table 4.9: Composition of employed persons by sector^a, by gender, per cent

	2010			2011			2012			2013		
	Males	Females	Together	Males	Females	Together	Males	Females	Together	Males	Females	Together
Agriculture, forestry and fishing	5.0	1.6	3.4	5.6	2.0	3.8	5.7	2.0	3.9	5.2	1.9	3.6
Mining and quarrying	0.6	0.1	0.4	0.5	0.1	0.3	0.4	0.1	0.2	0.4	0.1	0.2
Manufacturing	26.1	18.3	22.3	27.0	18.6	23.0	26.5	17.9	22.4	26.7	17.9	22.5
Electricity, gas, steam and air conditioning supply	1.5	0.7	1.1	1.6	0.6	1.1	1.5	0.5	1.0	1.3	0.5	0.9
Water supply; sewerage, waste management and remediation activities	2.3	0.6	1.4	2.2	0.8	1.5	2.6	0.9	1.8	2.6	0.8	1.7
Construction	11.7	1.2	6.6	11.0	0.9	6.2	9.9	1.0	5.7	10.1	0.9	5.7
Wholesale and retail trade; repair of motor vehicles and motorcycles	11.4	16.1	13.6	11.5	15.8	13.6	10.9	15.8	13.2	10.5	15.6	12.9
Transportation and storage	10.1	3.8	7.1	9.5	4.1	6.9	9.9	3.7	6.9	9.7	3.8	6.9
Accommodation and food service activities	3.2	5.0	4.1	3.1	5.3	4.1	3.1	5.2	4.1	3.0	5.0	4.0
Information and communication	3.0	1.7	2.4	2.9	1.6	2.3	3.3	1.7	2.5	3.1	2.0	2.6
Financial and insurance activities	1.3	3.6	2.4	1.5	3.3	2.4	1.6	3.4	2.4	1.8	3.3	2.5
Real estate activities	0.4	0.5	0.4	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.5	0.5
Professional, scientific and technical activities	2.4	3.4	2.9	2.1	3.3	2.6	1.9	3.4	2.6	2.2	3.8	3.0
Administrative and support service activities	3.3	2.8	3.0	3.1	2.8	3.0	3.9	2.9	3.4	4.2	2.8	3.5
Public administration and defence; compulsory social security	8.5	9.8	9.1	8.7	9.6	9.2	9.0	10.0	9.5	9.9	11.0	10.4
Education	4.1	15.0	9.4	4.0	14.9	9.2	4.0	14.5	9.0	3.8	14.3	8.8
Human health and social work activities	2.8	12.2	7.3	2.8	11.8	7.1	2.6	12.4	7.3	2.6	12.2	7.2
Arts, entertainment and recreation	1.3	1.7	1.5	1.4	1.8	1.6	1.3	1.7	1.5	1.1	1.5	1.3
Other services	1.0	2.0	1.5	1.0	2.2	1.6	1.2	2.3	1.7	1.3	2.1	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a By TEÁOR'08.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_09

Table 4.10: Employed in their present job for 0–6 months, per cent



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Hungary	8.2	8.5	6.8	7.2	6.3	6.6	7.2	6.8	7.0	6.7	7.5	7.6	7.4	7.9	7.3	8.4	9.1

Source: MEF, IV. quarterly waves.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_10



Table 4.11: Distribution of employees in the competitive sector^a by firm size, per cent

Year	employees				
	Less than 20	20-49	50-249	250-999	1000 and more
2000	20.2	7.0	23.5	22.5	26.8
2001	18.5	7.5	24.3	23.0	26.7
2002	21.6	14.0	21.5	20.1	22.9
2003	23.0	15.3	20.5	19.3	21.8
2004	23.6	14.8	21.3	18.3	22.0
2005	27.0	15.0	20.5	17.5	20.0
2006	15.7	10.7	25.7	24.3	23.6
2007	25.2	14.2	20.0	18.4	22.2
2008	26.0	15.7	20.7	18.9	18.6
2009	23.4	15.7	19.7	18.4	22.8
2010	23.5	15.7	18.6	18.0	24.2
2011	24.9	15.6	18.5	17.7	23.4
2012	24.2	14.7	18.3	18.6	24.1
2013	23.2	14.5	18.1	19.0	25.2

^a Firms employing 5 or more workers.

Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_11



Table 4.12: Employees of the competitive sector^a by the share of foreign ownership, per cent

Share of foreign ownership	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
100%	17.5	19.0	17.7	16.5	17.7	18.6	19.0	19.4	20.4	17.5	19.2	20.2	21.1	21.8
Majority	11.7	11.0	9.2	8.8	7.8	8.5	7.5	7.4	6.4	6.3	5.4	5.7	6.5	7.8
Minority	5.3	4.9	3.6	3.9	3.8	3.1	2.2	2.9	2.2	1.7	1.9	1.6	1.5	2.9
0%	65.5	65.1	69.5	70.8	70.7	69.8	71.3	70.3	71.0	74.6	73.5	72.4	70.9	67.5

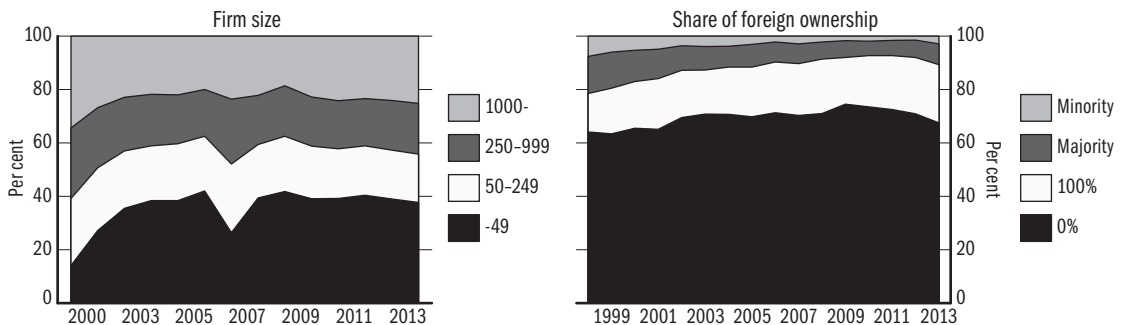
^a Firms employing 5 or more workers.

Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_12



Figure 4.3: Employees of the corporate sector by firm size and by the share of foreign ownership



Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena04_03

Table 4.13: Employment rate of population aged 15–74 by age group, males, per cent

Year	15–19	20–24	25–49	50–54	55–59	60–64	65–74	Total
1992	14.6	64.7	82.8	71.8	48.7	17.1	9.9	58.9
1998	11.4	59.9	78.8	66.0	38.3	10.0	3.2	54.4
1999	10.6	60.3	80.5	69.0	44.0	10.4	3.8	56.2
2000	8.4	58.9	80.9	69.6	49.6	11.8	3.8	56.8
2001	7.9	56.7	81.6	68.2	51.3	13.1	3.1	57.1
2002	5.6	53.1	81.9	68.6	52.8	14.4	3.4	57.1
2003	4.8	51.8	82.2	69.7	55.2	16.8	3.8	57.6
2004	4.5	46.5	82.7	69.7	54.0	20.1	4.3	57.5
2005	4.0	43.6	82.5	70.1	56.6	20.9	4.2	57.4
2006	4.2	43.9	83.3	70.3	58.6	19.2	4.3	58.0
2007	3.7	43.8	83.7	70.7	58.2	18.9	4.7	58.0
2008	3.5	42.2	83.1	71.2	55.1	16.8	4.9	57.2
2009	2.5	36.6	80.5	70.5	57.1	17.2	5.0	55.5
2010	2.1	36.8	79.6	69.6	57.4	16.9	4.8	54.9
2011	2.2	35.9	81.0	72.0	58.1	17.9	5.9	55.8
2012	2.2	35.8	81.4	74.4	62.5	17.4	5.6	56.6
2013	2.8	39.4	82.2	75.1	66.1	22.2	4.9	58.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent04_13

Table 4.14: Employment rate of population aged 15–74 by age group, females, per cent

Year	15–19	20–24	25–49	50–54	55–59	60–64	65–74	Total
1992	16.0	54.0	72.2	58.4	18.2	10.7	5.3	46.6
1998	10.7	47.5	66.3	52.3	13.6	5.0	1.2	41.0
1999	8.7	48.1	67.3	59.4	16.2	5.5	1.6	42.3
2000	8.0	45.9	67.8	62.5	20.0	5.1	1.8	43.0
2001	6.3	44.2	68.0	62.1	23.2	5.5	1.3	43.1
2002	4.3	44.2	67.0	64.0	28.3	6.0	1.5	43.3
2003	3.1	41.9	67.8	65.8	35.1	7.3	2.0	44.3
2004	2.7	37.4	67.2	66.0	39.8	9.0	1.9	44.1
2005	2.6	34.7	67.4	66.6	41.7	9.6	1.5	44.2
2006	2.5	33.9	67.5	67.9	42.6	8.9	1.6	44.4
2007	2.1	32.5	67.8	68.3	40.0	9.7	2.1	44.3
2008	1.9	31.0	67.7	68.7	38.7	10.0	2.3	44.0
2009	1.5	30.0	66.6	68.5	41.1	10.0	2.2	43.4
2010	1.9	30.3	66.5	69.7	46.9	9.8	2.5	43.9
2011	1.6	30.2	66.1	68.9	50.7	11.1	2.6	44.0
2012	1.4	31.1	68.0	73.1	50.5	11.2	2.4	45.1
2013	1.7	30.3	69.0	74.4	51.8	11.3	2.3	45.7

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_14



Table 4.15: Employment rate of population aged 15–64 by level of education, males, per cent

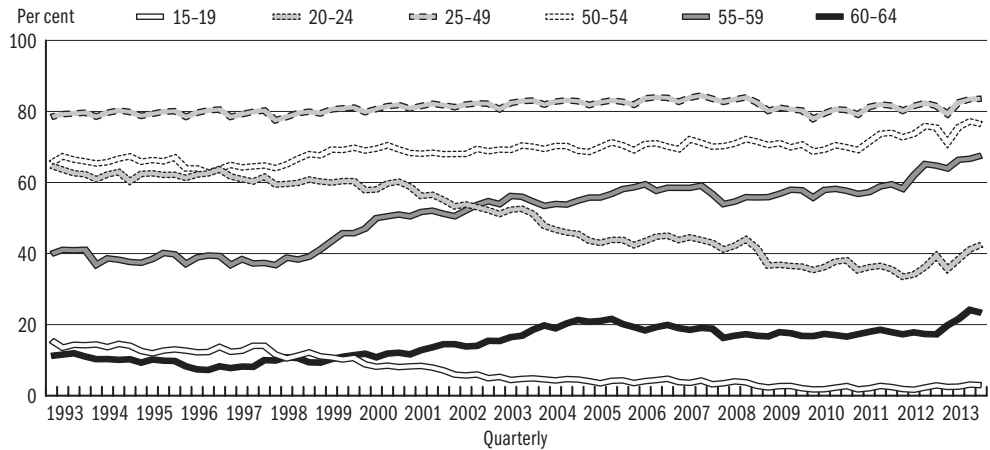
Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1993	35.6	75.8	71.8	86.3	60.0
1998	35.0	75.3	67.0	84.9	60.4
1999	33.6	76.8	68.3	86.8	62.4
2000	33.6	77.4	67.9	87.1	63.1
2001	33.0	77.6	67.3	87.4	62.9
2002	32.0	77.6	67.1	85.8	62.9
2003	32.4	76.5	67.8	86.4	63.4
2004	31.0	75.7	67.3	87.1	63.1
2005	31.6	74.7	66.9	86.9	63.1
2006	31.5	75.2	67.5	85.7	63.8
2007	31.6	74.6	67.5	85.9	64.0
2008	31.3	72.6	66.5	84.7	63.0
2009	29.0	69.9	65.1	83.1	61.1
2010	28.7	68.1	64.6	82.1	60.4
2011	29.6	68.4	64.6	83.8	61.2
2012	30.8	69.7	65.1	85.2	62.5
2013	31.1	71.7	67.7	85.4	64.3

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_15



Figure 4.4: Activity rate by age groups, males aged 15–64, quarterly



Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena04_04

Table 4.16: Employment rate of population aged 15–64 by level of education, females, per cent

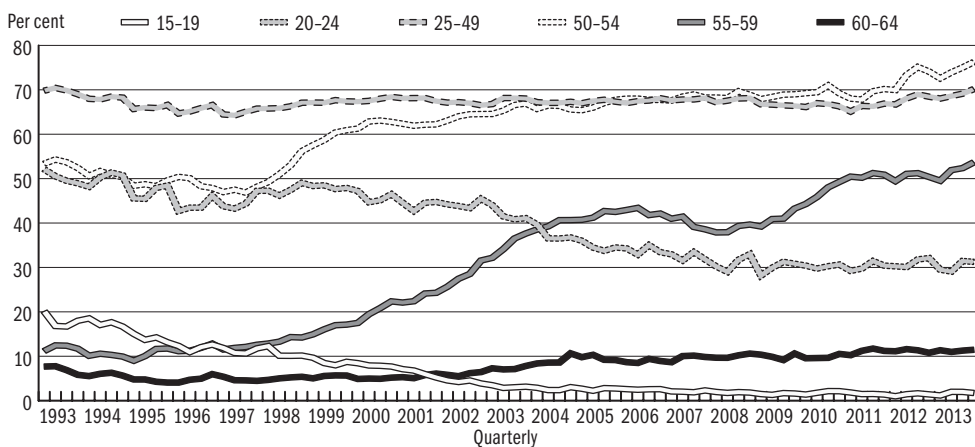


Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1993	30.8	65.0	64.0	79.2	49.3
1998	26.6	60.5	58.1	76.9	47.3
1999	26.1	61.4	59.0	77.5	49.0
2000	26.0	61.0	59.3	77.8	49.7
2001	26.1	60.8	59.2	77.8	49.8
2002	26.0	60.4	58.6	77.9	49.8
2003	25.3	59.7	59.5	78.3	50.9
2004	25.0	58.8	58.1	78.1	50.7
2005	25.1	57.6	57.9	78.9	51.0
2006	24.5	58.2	57.5	77.6	51.1
2007	24.0	57.8	57.2	75.4	50.9
2008	23.9	55.5	56.4	75.5	50.6
2009	23.0	54.3	54.9	74.4	49.9
2010	23.6	56.4	54.3	74.6	50.6
2011	22.5	56.4	54.2	74.4	50.6
2012	23.0	57.1	56.7	74.0	52.1
2013	24.0	57.0	56.8	74.2	52.8

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent04_16

Figure 4.5: Activity rate by age groups, females aged 15–64, quarterly



Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena04_05



Table 5.1: Unemployment rate by gender and share of long term unemployed, per cent

Year	Unemployment rate			Share of long term unemployed ^a
	Males	Females	Total	
1992	10.7	8.7	9.8	..
1993	13.2	10.4	11.9	..
1994	11.8	9.4	10.7	43.2
1995	11.3	8.7	10.2	50.6
1996	10.7	8.8	9.9	54.4
1997	9.5	7.8	8.7	51.3
1998	8.5	7.0	7.8	48.8
1999	7.5	6.3	7.0	49.5
2000	7.0	5.6	6.4	49.1
2001	6.3	5.0	5.7	46.7
2002	6.1	5.4	5.8	44.9
2003	6.1	5.6	5.9	43.9
2004	6.1	6.1	6.1	45.0
2005	7.0	7.5	7.2	46.2
2006	7.2	7.8	7.5	46.8
2007	7.1	7.6	7.4	48.2
2008	7.6	8.1	7.8	47.6
2009	10.3	9.7	10.0	43.0
2010	11.6	10.7	11.2	50.9
2011	11.0	10.9	10.9	49.6
2012	11.2	10.6	10.9	46.7
2013	10.2	10.2	10.2	50.4

^a Long term unemployed are those who have been without work for 12 months or more, the denominator does not include those starting new jobs.

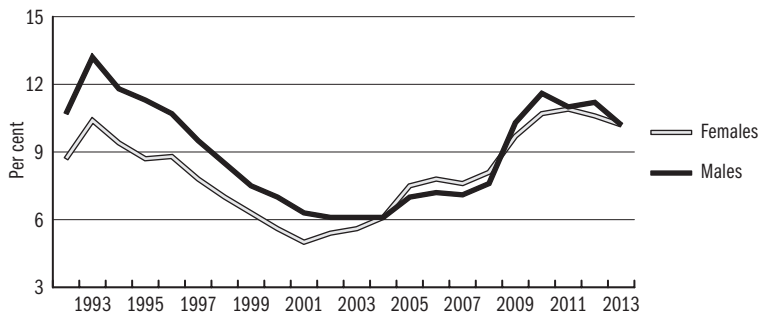
Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census. Conscripted soldiers are included in the denominator.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_01



Figure 5.1: Unemployment rates by gender



Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena05_01

Table 5.2: Unemployment rate by level of education, males, per cent

Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1999	14.3	8.2	5.0	1.5	7.5
2000	13.4	7.7	4.8	1.6	7.0
2001	13.6	6.4	4.3	1.2	6.3
2002	14.1	6.2	4.0	1.4	6.1
2003	13.6	6.6	3.9	1.6	6.1
2004	14.3	6.4	4.1	1.7	6.1
2005	15.6	7.4	4.9	2.3	7.0
2006	17.3	7.0	5.2	2.7	7.2
2007	18.4	6.8	5.1	2.4	7.1
2008	19.8	7.6	5.3	2.3	7.6
2009	24.4	10.6	7.7	3.8	10.3
2010	26.9	12.1	8.4	4.9	11.6
2011	25.0	12.0	8.2	4.3	11.0
2012	25.1	11.8	9.4	4.2	11.2
2013	25.4	10.7	8.3	3.6	10.2

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_02

Table 5.3: Composition of the unemployed by level of education, males, per cent

Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1999	34.5	45.3	17.4	2.8	100.0
2000	32.9	45.8	17.9	3.4	100.0
2001	36.5	43.2	17.5	2.8	100.0
2002	36.7	43.3	16.7	3.3	100.0
2003	34.0	44.7	17.2	4.1	100.0
2004	33.9	42.6	18.6	4.9	100.0
2005	32.1	43.1	19.0	5.8	100.0
2006	33.4	40.0	20.0	6.6	100.0
2007	34.9	38.8	20.3	6.0	100.0
2008	35.2	39.4	19.8	5.6	100.0
2009	31.0	40.1	21.9	7.0	100.0
2010	30.1	40.2	21.5	8.2	100.0
2011	28.8	41.2	22.1	7.9	100.0
2012	28.1	39.4	24.8	7.7	100.0
2013	29.6	39.2	23.8	7.4	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_03



Table 5.4: Unemployment rate by level of education, females, per cent

Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1999	10.5	8.0	5.2	1.3	6.3
2000	9.1	7.4	4.9	1.5	5.6
2001	8.4	6.4	4.0	1.6	5.0
2002	9.3	6.5	4.4	2.4	5.4
2003	10.5	7.2	4.4	1.9	5.6
2004	10.3	8.0	5.3	2.9	6.1
2005	13.0	9.8	6.7	3.1	7.5
2006	15.8	10.1	6.4	2.8	7.8
2007	16.0	9.4	6.2	3.3	7.6
2008	17.5	9.5	6.9	3.2	8.1
2009	21.6	12.4	7.7	4.1	9.7
2010	22.8	12.6	9.5	4.5	10.7
2011	24.3	12.6	9.9	4.6	10.9
2012	24.3	12.6	9.4	4.7	10.6
2013	22.9	12.8	9.1	4.4	10.2

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.
Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_04



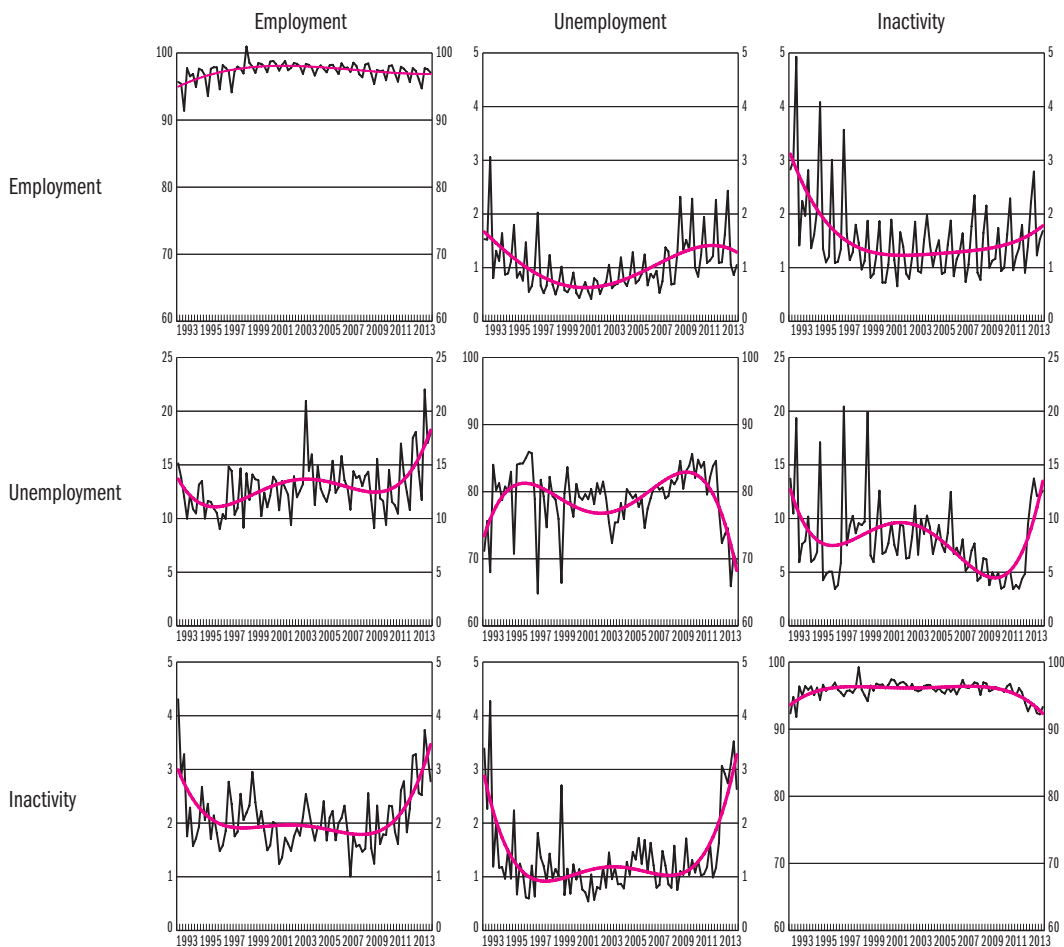
Table 5.5: Composition of the unemployed by level of education, females, per cent

Year	8 grades of primary school or less	Vocational school	Secondary school	College, university	Total
1999	36.2	26.2	33.8	3.8	100.0
2000	31.8	28.2	35.0	5.0	100.0
2001	33.7	28.0	32.2	6.1	100.0
2002	33.2	26.0	32.2	8.5	100.0
2003	32.7	28.3	32.0	7.0	100.0
2004	27.8	27.4	34.2	10.6	100.0
2005	28.2	27.1	35.2	9.5	100.0
2006	31.5	27.5	32.5	8.5	100.0
2007	31.2	26.6	31.7	10.5	100.0
2008	32.2	24.3	33.3	10.2	100.0
2009	32.1	26.1	30.3	11.4	100.0
2010	30.5	24.3	34.0	11.2	100.0
2011	30.2	23.6	34.4	11.8	100.0
2012	29.8	23.6	33.7	12.9	100.0
2013	28.8	25.2	33.4	12.6	100.0

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population
Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_05

Figure 5.2: Intensity of quarterly flows between labour market status, population between 15–64 years



Note: The calculations were carried out for the age group between 15–64 based on KSH labour force survey microdata. The probability of transition is given by the number of people who transitioned from one status to the other in the quarter, divided by the initial size of the group in the previous quarter, which were then corrected to preserve the consistency of stock flows. The red curves show the trend smoothed using a 4th degree polynomial.
 Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena05_02



Table 5.6: The number of unemployed^a by duration of job search, in thousands

Year	Length of job search, weeks [month]							Total	
	1-4 [<1]	5-14 [1-3]	15-26 [4-6]	27-51 [7-11]	52 [12]	53-78 [13-18]	79-104 [19-24]		105- [>24]
1992	43.9	90.9	96.4	110.7	10.6	41.7	38.4	n.a.	432.6
1993	36.2	74.8	87.9	120.5	14.7	75.1	83.7	n.a.	492.9
1994	30.5	56.5	65.0	91.9	8.4	63.0	73.8	40.4	429.5
1995	23.0	51.0	56.5	69.4	20.2	57.2	34.3	93.2	404.8
1996	19.9	46.4	49.3	61.5	18.2	56.1	37.1	100.2	388.7
1997	16.1	43.7	45.9	54.4	15.7	44.5	31.1	77.3	328.7
1998	12.9	44.2	44.5	45.7	16.0	39.0	27.6	63.5	293.4
1999	15.4	44.1	38.8	46.0	13.2	38.1	26.8	62.3	284.7
2000	16.7	38.5	35.1	42.8	12.7	36.9	23.6	55.4	261.3
2001	14.9	37.0	33.2	38.6	11.5	31.6	20.9	44.2	231.9
2002	15.5	39.4	34.8	40.7	11.6	32.7	19.8	42.5	237.0
2003	15.9	42.1	38.9	42.0	14.5	27.6	17.6	43.0	241.6
2004	13.0	42.0	39.9	41.8	13.5	33.4	19.6	47.2	250.4
2005	14.8	48.9	44.1	51.3	14.1	41.0	27.4	54.3	295.9
2006	13.3	50.7	48.3	51.9	17.4	41.5	26.6	58.8	308.5
2007	13.8	49.4	44.3	50.1	12.7	43.3	26.0	64.9	304.5
2008	13.7	50.4	47.8	53.5	13.4	39.6	27.2	74.8	320.4
2009	18.8	71.9	67.0	77.4	18.1	51.2	19.8	88.4	412.6
2010	16.9	64.9	63.1	84.3	23.6	75.9	43.3	95.4	467.4
2011	28.7	70.7	62.8	70.1	18.3	64.6	40.4	105.3	460.8
2012	39.4	65.0	63.3	81.9	22.3	59.5	36.6	100.6	468.6
2013	48.9	50.3	55.1	63.0	25.9	51.5	46.9	96.9	438.5

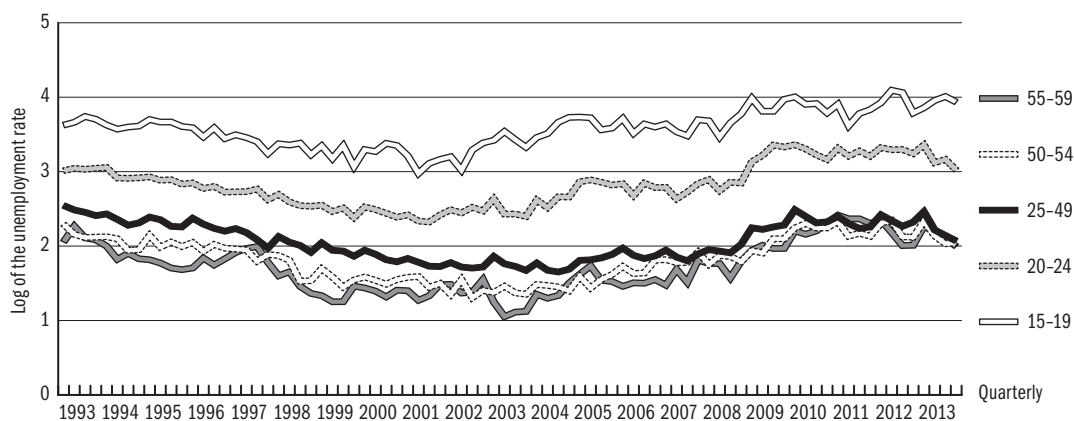
^a Not including those unemployed who will find a new job within 30 days; since 2003: within 90 days.

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_06

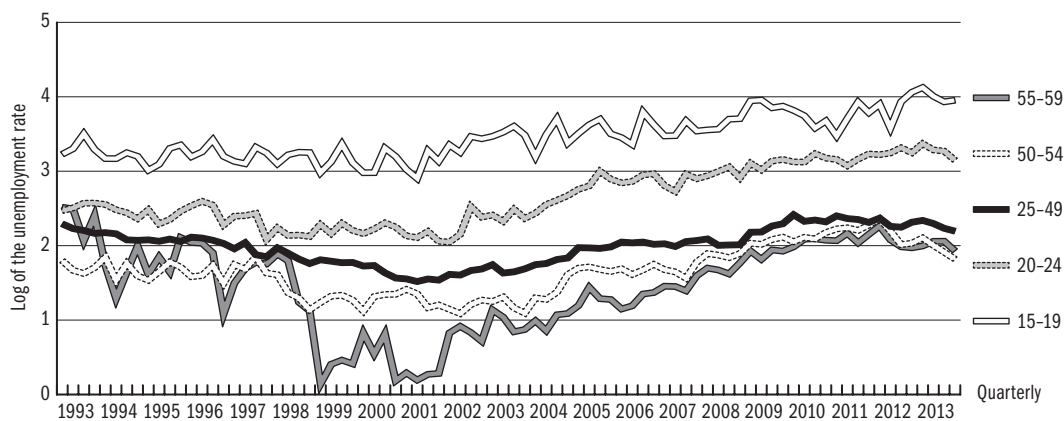
Figure 5.3: Unemployment rate by age groups, males aged 15–59, quarterly



Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena05_03

Figure 5.4: Unemployment rate by age groups, females aged 15–59, quarterly



Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena05_04



Table 5.7: Registered unemployed^a and LFS unemployment

Year	Registered unemployed		LFS unemployed, total		LFS unemployed, age 15-24	
	In thousands	rate in %	In thousands	rate in %	In thousands	rate in %
1990	47.7	-	..	..	..	..
1991	227.3	4.1	..	..	..	..
1992	557.0	10.3	444.2	9.8	120.0	17.5
1993	671.8	12.9	518.9	11.9	141.3	21.3
1994	568.4	11.3	451.2	10.7	124.7	19.4
1995	507.7	10.6	416.5	10.2	114.3	18.6
1996	500.6	11.0	400.1	9.9	106.3	17.9
1997	470.1	10.5	348.8	8.7	95.8	15.9
1998	423.1	9.5	313.0	7.8	87.6	13.4
1999	409.5	9.7	284.7	7.0	78.6	12.4
2000	390.5	9.3	262.5	6.4	70.7	12.1
2001	364.1	8.5	232.9	5.7	55.7	10.8
2002	344.7	8.0	238.8	5.8	56.5	12.3
2003	357.2	8.3	244.5	5.9	54.9	13.4
2004	375.9	8.7	252.9	6.1	55.9	15.5
2005	409.9	9.4	303.9	7.2	66.9	19.4
2006	393.5	9.0	316.8	7.5	64.1	19.1
2007	426.9	9.7	311.9	7.4	57.6	18.0
2008	442.3	10.0	329.2	7.8	61.0	19.9
2009	561.8	12.8	420.7	10.0	79.2	26.4
2010	582.7	13.3	474.8	11.2	79.2	26.6
2011	582.9	13.2	467.9	10.9	76.9	26.1
2012	559.1	12.6	475.6	10.9	84.6	28.1
2013	527.6	11.9	448.9	10.2	84.2	27.2

^a Since 1st of November, 2005: database of registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

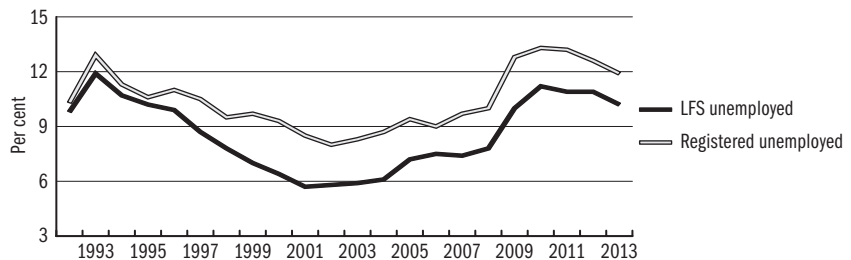
Note: the denominator of registered unemployment/jobseekers' rate in the economically active population on 1st January the previous year.

Source: Registered unemployment/jobseekers: NFSZ; LFS unemployment: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_07



Figure 5.5: Registered and LFS unemployment rates



Note: Since 1st of November, 2005: database of registered jobseekers.

Source: Registered unemployment/jobseekers: NMH; LFS unemployment: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena05_05

Table 5.8: Composition of the registered unemployed^a by educational attainment, yearly averages, per cent

Educational attainment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8 grades of primary school or less	40.6	40.4	41.0	42.0	42.4	42.7	42.3	41.9	42.0	42.4	43.3	40.1	39.3	40.3	40.3	40.5
Vocational school	36.0	35.7	34.9	34.1	33.5	32.9	32.3	32.4	32.1	31.5	30.9	32.5	31.4	29.8	29.2	29.0
Vocational secondary school	12.9	13.2	13.2	13.1	13.2	13.1	13.4	13.5	13.4	13.3	13.1	14.4	15.0	14.9	15.1	15.3
Grammar school	7.9	8.0	8.0	7.7	7.6	7.5	7.7	7.9	8.0	8.2	8.2	8.5	9.1	9.5	9.7	9.8
College	1.9	2.0	2.1	2.2	2.4	2.7	3.1	3.2	3.3	3.3	3.3	3.2	3.7	3.8	3.8	3.6
University	0.7	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.2	1.2	1.5	1.7	1.8	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a Since 1st of November, 2005: registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.
Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_08

Table 5.9: The distribution of registered unemployed school-leavers^a by educational attainment, yearly averages, per cent

Educational attainment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8 grades of primary school or less	23.4	25.3	26.8	31.1	33.7	34.7	35.2	36.1	38.2	40.1	41.3	37.7	35.2	35.6	34.9	35.5
Vocational school	34.1	30.9	27.8	23.7	20.6	20.4	20.2	20.5	19.7	18.1	17.3	18.9	18.9	18.5	19.8	20.1
Vocational secondary school	24.2	25.0	25.4	25.3	25.5	23.2	22.1	21.5	20.3	20.7	21.2	23.1	23.9	23.6	23.7	23.1
Grammar school	14.0	13.6	13.7	12.6	11.6	10.8	10.7	10.8	11.7	12.8	13.3	13.7	14.3	15.0	14.9	14.9
College	3.4	4.0	4.8	5.5	6.2	7.7	8.1	7.8	6.9	5.8	4.9	4.5	4.8	4.2	3.6	3.4
University	1.0	1.2	1.5	1.8	2.4	3.3	3.6	3.4	3.0	2.5	2.0	2.1	2.8	3.1	3.0	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a Since 1st of November, 2005: registered school-leaver jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.
Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_09



Table 5.10: Registered unemployed^a by economic activity as observed in the LFS, per cent

Year	Employed	LFS-unemployed	Inactive	Total	Year	Employed	LFS-unemployed	Inactive	Total
1994	14.4	54.5	31.1	100.0	2005	2.3	59.7	38.0	100.0
1995	11.8	53.7	34.5	100.0	2006	3.9	58.7	37.5	100.0
1996	13.7	51.8	34.5	100.0	2007	3.7	62.6	33.7	100.0
1999	6.7	55.8	37.5	100.0	2008	3.7	63.1	33.2	100.0
2000	4.7	54.3	41.0	100.0	2009	3.7	67.5	28.8	100.0
2001	6.5	45.2	48.3	100.0	2010	3.0	71.1	25.9	100.0
2002	4.4	47.4	48.2	100.0	2011	3.3	67.2	29.5	100.0
2003	9.4	44.1	46.5	100.0	2012	3.5	65.9	30.6	100.0
2004	3.0	53.5	43.5	100.0	2013	4.9	62.2	32.9	100.0

^a Since 1st of November, 2005: database of registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census. The data pertain to those who consider themselves registered jobseekers in the KSH MEF. From 1999 those who reported that their last contact with the employment centre was more than two months ago were filtered from among those who reported themselves as registered unemployed.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_10



Table 5.11: Monthly entrants to the unemployment register^a, monthly averages, in thousands

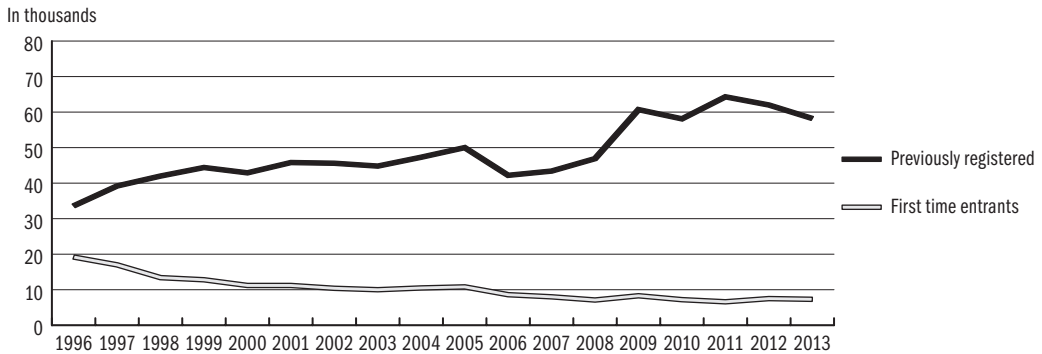
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
First time entrants	12.8	11.2	11.2	10.4	10.0	10.5	10.8	8.6	8.0	7.1	8.3	7.2	6.6	7.5	7.3
Previously registered	44.4	42.9	45.8	45.6	44.8	47.3	50.0	42.2	43.4	46.9	60.7	58.1	64.3	62.0	58.2
Together	57.2	54.1	57.0	56.0	54.8	57.8	60.7	50.8	51.4	54.0	69.0	65.3	70.9	69.5	65.5

^a Since 1st of November, 2005: database of jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers. Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_11



Figure 5.6: Entrants to the unemployment register, monthly averages, in thousands



Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena05_06

Table 5.12: Selected time series of registered unemployment, monthly averages, in thousands and per cent

	1998	1999	2000	2001	2002	2003	2004	2005
Registered unemployment ^a	423.1	409.5	390.5	364.1	344.7	357.2	375.9	409.9
Of which: School-leavers	32.5	29.9	26.0	26.8	28.5	31.3	33.8	40.9
Non school-leavers	390.6	379.6	364.4	337.4	316.2	325.9	342.2	369.1
Male	233.4	221.4	209.7	196.4	184.6	188.0	193.3	210.4
Female	189.7	188.1	180.8	167.7	160.1	169.2	182.6	199.5
25 years old and younger	89.9	85.4	79.1	75.6	71.1	71.6	71.4	78.9
Manual workers	349.0	336.8	321.2	302.0	286.3	296.2	308.5	336.2
Non manual workers	74.1	72.7	69.3	62.1	58.4	61.0	67.4	73.7
Unemployment benefit recipients ^b	130.7	140.7	131.7	119.2	114.9	120.0	124.0	134.4
Unemployment assistance recipients ^c	182.2	148.6	143.5	131.2	113.4	116.2	120.4	133.4
Unemployment rate ^d	9.5	9.7	9.3	8.5	8.0	8.3	8.7	9.4
Shares within registered unemployed, %								
School-leavers	7.7	7.3	6.7	7.3	8.3	8.8	9.0	10.0
Male	55.2	54.1	53.7	53.9	53.5	52.6	51.4	51.3
25 years old and younger	21.3	20.9	20.3	20.8	20.6	20.0	19.0	19.2
Manual workers	82.5	82.3	82.2	82.9	83.1	82.9	82.1	82.0
Flows, in thousands								
Inflow to the Register	55.4	57.2	54.1	57.0	56.0	54.8	57.8	60.7
Of which: school-leavers	9.8	9.3	8.0	7.8	7.8	7.7	7.6	8.2
Outflow from the Register	60.4	57.2	56.8	59.4	55.8	53.5	54.4	59.8
Of which: school-leavers	11.0	9.4	8.2	7.7	7.5	7.6	7.1	7.9
	2006	2007	2008	2009	2010	2011	2012	2013
Registered unemployment ^a	393.5	426.9	442.3	561.8	582.7	582.9	559.1	527.6
Of which: School-leavers	38.7	40.4	41.4	49.3	52.6	52.9	61.5	66.0
Non school-leavers	354.7	386.5	400.9	512.5	530.1	529.9	497.6	461.6
Male	200.9	219.9	228.3	297.9	305.0	297.1	275.8	267.7
Female	192.5	207.0	214.0	263.9	277.7	285.8	283.3	259.9
25 years old and younger	75.8	80.3	75.9	104.3	102.8	102.3	101.1	97.8
Manual workers	321.9	..	..	..	..	..	..	..
Non manual workers	71.6	..	..	..	..	..	..	..
Unemployment benefit recipients ^b	151.5	134.6	136.5 ^e	202.1	187.7	159.9	71.1	61.2
Unemployment assistance recipients ^c	121.8	133.0	147.5	156.0	167.8	182.1	200.3	184.4
Unemployment rate ^d	9.0	9.7	10.0	12.8	13.3	13.2	12.6	11.9
Shares within registered unemployed, %								
School-leavers	9.8	9.5	9.4	8.8	9.0	9.1	11.0	12.5
Male	51.1	51.5	51.6	53.0	52.3	51.0	49.3	50.8
25 years old and younger	16.5	18.8	17.2	18.6	17.6	17.5	18.1	18.5
Manual workers	81.8	..	..	..	..	..	..	..
Flows, in thousands								
Inflow to the Register	50.8	51.4	54.0	69.0	65.3	70.9	69.5	65.5
Of which: school-leavers	7.0	6.2	6.3	7.5	7.9	8.2	10.0	10.8
Outflow from the Register	51.4	48.4	51.3	58.4	66.4	74.2	68.1	78.4
Of which: school-leavers	7.1	6.0	6.2	6.7	7.5	8.1	8.6	11.8

^a Since 1st of November, 2005: registered jobseekers. (The data concern the closing date of each month.) From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

^b Since 1st of November, 2005: jobseeker benefit recipients. From 2011. September 1, the system of jobseeking support changed.

^c Only recipients who are in the NMH register. Those receiving the discontinued income support supplement were included in the number of those receiving income support supplement up to the year 2004, and in the number of those receiving regular social assistance from 2005 to 2008. From 2009, those receiving social assistance were included in a new support type, the on call support. This allowance was replaced by the wage replacement support from January 1, 2011, then from September 1, 2011, the name was changed to employment substitution support.

^d Relative index: registered unemployment rate in the economically active population. From 1st of November, 2005, registered jobseekers' rate in the economically active population.

^e The new IT system introduced at the NFSZ in 2008 made the methodological changes possible:

1) The filtering out of those returning after or starting a break from the number of those entering or leaving the different types of jobseeking support. The main reasons for a break are work for short time periods, receipt of child support (GYES) or TGYÁS, or involvement in training.

2) Taking into account in the previous period the number of those entrants, for whom the first accounting of the jobseeking support was delayed due to missing documentation.

2008 data, comparable to 2009: 141.5 thousand people.

Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_12



Table 5.13: The number of registered unemployed^a who became employed on subsidised and non-subsidised employment^b

	2008		2009		2010		2011		2012		2013	
	Persons	Per cent	Persons	Per cent	Persons	Per cent	Persons	Per cent	Persons	Per cent	Persons	Per cent
Subsidised employment	118,703	34.0	170,464	40.0	198,974	38.5	282,673	48.5	261,631	50.0	359,962	60.2
Non-subsidised employment	230,558	66.0	255,356	60.0	317,622	61.5	299,716	51.5	261,581	50.0	237,795	39.8
Total	349,261	100.0	425,820	100.0	516,596	100.0	582,389	100.0	523,212	100.0	597,757	100.0

^a Since 1st of November, 2005: registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

^b Annual totals, the number of jobseekers over the year who were placed in work. It reflects the placements at the time of their exit from the registry.

Source: NMH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_13

Table 5.14: Benefit recipients and participation in active labour market programmes

Year		Unemployment benefit ^a	Regular social assistance ^b	UA for school-leavers	Do not receive provision	Public work ^c	Retraining ^c	Wage subsidy ^c	Other programmes ^c	Total
1990	In thousands	42.5	-	-	18.6	..	..	..	..	61.0
	Per cent	69.6	n.a.	n.a.	30.4	..	..	..	..	100.0
2000	In thousands	117.0	139.7	0.0	106.5	26.7	25.3	27.5	73.5	516.2
	Per cent	22.7	27.1	0.0	20.6	5.2	4.9	5.3	14.2	100.0
2001	In thousands	111.8	113.2	0.0	105.2	29.0	30.0	25.8	37.2	452.2
	Per cent	24.7	25.0	0.0	23.3	6.4	6.6	5.7	8.2	100.0
2002	In thousands	104.8	107.6	-	115.3	21.6	23.5	21.2	32.8	426.8
	Per cent	24.6	25.2	-	27.0	5.1	5.5	5.0	7.7	100.0
2003	In thousands	105.1	109.5	-	125.0	21.2	22.5	20.1	36.6	440.0
	Per cent	23.9	24.9	-	28.4	4.8	5.1	4.6	8.3	100.0
2004	In thousands	117.4	118.4	-	132.3	16.8	12.6	16.8	28.5	442.8
	Per cent	26.5	26.7	-	29.9	3.8	2.8	3.8	6.4	100.0
2005	In thousands	125.6	127.8	-	140.2	21.5	14.7	20.8	31.0	481.6
	Per cent	26.1	26.5	-	29.1	4.5	3.1	4.3	6.4	100.0
2006	In thousands	117.7	112.9	-	146.4	16.6	12.3	14.6	13.8	434.3
	Per cent	27.1	26.0	-	33.7	3.8	2.8	3.4	3.2	100.0
2007	In thousands	128.0	133.1	-	151.8	19.3	14.6	23.4	6.8	477.0
	Per cent	27.6	28.7	-	32.7	2.7	2.3	3.7	2.3	100.0
2008	In thousands	120.7 ^d	145.7	-	158.2	21.2	21.2	25.0	14.1	506.1
	Per cent	23.8	28.8	-	31.3	4.2	4.2	4.9	2.8	100.0
2009	In thousands	202.8	151.9	-	215.0	135.3	13.6	17.8	54.1	790.5
	Per cent	25.7	19.2	-	27.2	17.1	1.7	2.3	6.8	100.0
2010	In thousands	159.6	163.5	-	222.4	164.5	17.8	26.7	40.3	794.8
	Per cent	20.1	20.6	-	28.0	20.7	2.2	3.4	5.1	100.0
2011	In thousands	122.8	168.2	-	239.8	91.6	13.6	20.4	39.9	696.3
	Per cent	17.6	24.2	-	34.4	13.2	2.0	2.9	5.7	100.0
2012	In thousands	56.3	185.6	-	281.1	92.4	15.4	30.0	2.2	663.0
	Per cent	8.5	28.0	-	42.4	13.9	2.3	4.5	0.3	100.0
2013	In thousands	55.3	169.3	-	264.0	149.5	42.0 ^e	31.7	3.8	715.5
	Per cent	7.7	23.6	-	36.9	20.9	5.9	4.4	0.5	100.0

^a Since 1st of November, 2005: jobseeker benefit recipients. From September 1, 2011, the system of jobseeking support changed.

^b Only recipients who are in the NFSZ register. Those receiving the discontinued income support supplement were included in the number of those receiving income support supplement up to the year 2004, and in the number of those receiving regular social assistance from 2005 to 2008. From 2009, those receiving social assistance were included in a new support type, the on call support. This allowance was replaced by the wage replacement support from January 1, 2011, then from September 1, 2011, the name was changed to employment substitution support.

^c Up to the year 2008 the number financed from the MPA Decentralized Base, since 2009 the number financed from MPA, TAMOP.

Public-type employment: community service, public service, public work programmes.

Wage subsidy: wage subsidy, wage-cost subsidy, work experience acquisition assistance to career-starters, support for employment of availability allowance recipients, part-time employment, wage support for those losing their job due to the crisis.

Other support: job preservation support, support to would-be entrepreneurs, contribution to costs related to commuting to work, job creation support, jobseeker's clubs.

^d The new IT system introduced at the NFSZ in 2008 made the methodological changes possible:

1) The filtering out of those returning after a break or starting a break from the number of those entering or leaving the different types of jobseeking support. The main reasons for a break are work for short time periods, receipt of child support (GYES) or TGYÁS, or involvement in training.

2) Taking into account in the previous period the number of those entrants, for whom the first accounting of the jobseeking support was delayed due to missing documentation.

2008 data, comparable to 2009: 134.1 thousand people.

^e In 2013, 18.1 thousand trainees were simultaneously involved in public works programmes. Note: The closing numbers from October of each year. For the percentage data, the sum of those registered and those taking part in labour market programmes ≈ 100.0.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_14



Table 5.15: The ratio of those who are employed among the former participants of ALMPs^a, per cent

Active labour market programmes	1999 ^b	2000 ^b	2001 ^b	2002 ^b	2003 ^b	2004 ^b	2005 ^b	2006 ^b	2007 ^b	2008 ^b	2009 ^c	2010 ^c	2011 ^c	2012 ^c	2013 ^c
Suggested training programmes ^d	46.8	48.4	45.4	43.3	43.0	45.5	43.8	41.1	37.5	42.2	40.4	49.4	42.6	44.9	55.1
Accepted training programmes ^e	50.0	52.0	49.3	45.8	46.0	45.6	51.4	50.9	47.6	48.0	41.9	48.8	41.6	56.7	65.9
Retraining of those who are employed ^f	94.8	94.9	94.2	92.7	93.3	92.1	90.4	..	92.3	93.9	..	59.9	75.0	65.7	72.7
Support for self-employment ^g	90.5	89.4	89.2	90.7	89.6	90.7	89.6	86.4	87.6	83.6	73.1	76.4	71.5	72.6	74.1
Wage subsidy programmes ^h	59.7	62.3	59.7	62.9	62.0	64.6	62.6	62.3	63.4	65.0	72.4	90.9	69.6	70.3	73.0
Work experience programmes ⁱ	55.8	57.9	64.5	66.9	66.1	66.5	66.8	66.6	66.3	74.6	..	..	72.0	69.9	68.5
Further employment programme ^j	68.5	73.8	71.6	78.4	78.2	71.5	70.9	65.0	77.5	-	-	-	-	-	-

^a The data relate to people having completed their courses successfully.

^b Three months after the end of programmes.

^c Six months after the end of programmes.

^d Suggested training: group training programmes for jobseekers organized by the NFSZ.

^e Accepted training: participation in programmes initiated by the jobseekers and accepted by NFSZ for full or partial support.

^f Training for employed persons: training for those whose jobs are at risk of termination, if new knowledge allows them to adapt to the new needs of the employer.

^g Support to help entrepreneurship: support of jobseekers in the amount of the monthly minimum wage or maximum HUF 3 million lump sum support (to be repaid or not), aimed at helping them become individual entrepreneurs or self-employed.

^h Wage support: aimed at helping the employment of disadvantaged persons, who would not be able to, or would have a harder time finding work without support.

ⁱ Work experience-gaining support: the support of new entrants with no work experience for 6–9 months, the amount of the support is equal to 50–80% of the wage costs. The instrument was discontinued after December 31, 2006. In 2009 they reintroduced the work experience gaining support for skilled new entrants, for employers who ensure employment of at least 4 hours a day and for 365 days. The amount of the support is 50–100% of the wage cost. Monitoring for the first exiters is available from 2011.

^j Further employment programmes: to support the continued employment of new entrants under the age of 25 for 9 months. Discontinued from December 31, 2006.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_15

Table 5.16: Distribution of registered unemployed^a, unemployment benefit recipients^b and unemployment assistance recipients^c by educational attainment

Educational attainment	2005	2006	2007	2008	2008 ^e	2009	2010	2011	2012	2013
Registered unemployed										
8 grades of primary school or less	41.8	41.5	42.8	43.8	-	40.0	39.2	39.9	40.1	40.1
Vocational school	32.6	32.3	31.5	30.7	-	33.1	31.4	29.8	29.1	28.9
Vocational secondary school	13.6	13.6	13.2	12.8	-	14.4	15.0	15.0	15.2	15.6
Grammar school	8.0	8.2	8.2	8.1	-	8.3	9.1	9.7	9.8	10.0
College	2.9	3.2	3.1	3.2	-	3.0	3.7	3.9	3.9	3.6
University	1.0	1.2	1.2	1.2	-	1.1	1.5	1.7	1.9	1.9
Total	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0
	388.1	359.6	402.7	415.6	-	549.0	546.0	553.3	524.4	497.0
Unemployment benefit recipients^d										
8 grades of primary school or less	28.2	25.4	25.4	24.4	26.3	25.7	24.1	23.4	20.2	21.8
Vocational school	39.3	39.5	37.4	37.0	39.2	39.4	36.2	34.5	34.5	34.8
Vocational secondary school	17.9	18.7	19.2	19.3	18.3	18.5	19.7	20.1	21.2	21.2
Grammar school	9.5	10.1	10.9	11.0	10.6	10.1	11.6	12.3	12.7	12.0
College	3.7	4.5	5.0	6.0	5.7	4.5	5.8	6.7	7.6	6.7
University	1.4	1.8	2.1	2.3	2.1	1.7	2.6	3.1	3.8	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	104.9	91.5	119.3	92.5	126.9	200.5	165.8	145.9	53.1	53.0
Unemployment assistance recipients^c										
8 grades of primary school or less	60.4	60.1	60.3	60.3	-	59.4	56.4	56.1	53.4	52.4
Vocational school	27.8	27.7	27.1	26.5	-	26.6	27.4	26.1	26.4	26.6
Vocational secondary school	6.4	6.5	6.8	6.8	-	7.5	8.6	9.0	10.3	10.9
Grammar school	4.3	4.5	4.4	4.7	-	4.8	5.6	6.3	7.1	7.3
College	0.9	1.0	1.1	1.2	-	1.2	1.5	1.8	2.1	2.0
University	0.2	0.3	0.3	0.4	-	0.4	0.5	0.6	0.8	0.8
Total	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0
	127.8	116.5	130.9	145.8	-	144.1	161.7	174.7	193.5	177.4

^a Since 1st of November, 2005: registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

^b Since 1st of November, 2005: those receiving jobseeking support. From the 1st of September 2011, the system of jobseeking support changed.

^c Only recipients who are in the NFSZ register. Those receiving the discontinued income support supplement were included in the number of those receiving income support supplement up to the year 2004, and in the number of those receiving regular social assistance from 2005 to 2008. From 2009, those receiving social assistance were included in a new support type, the on call support. This allowance was replaced by the wage replacement support from January 1, 2011, then from September 1, 2011, the name was changed to employment substitution support.

^d After 1st of November, 2005: jobseeking support. Does not contain those receiving unemployment aid prior to pension in 2004. From the 1st of September 2011, the system of jobseeking support changed.

^e The new IT system introduced at the NFSZ in 2008 made the methodological changes possible:

- 1) The filtering out of those returning after or starting a break from the number of those entering or leaving the different types of jobseeking support. The main reasons for a break are work for short time periods, receipt of child support (GYES) or TGYÁS, or involvement in training.
- 2) Taking into account in the previous period the number of those entrants, for whom the first accounting of the jobseeking support was delayed due to missing documentation.

The right-hand column of 2008 contains the 2008 data in a form comparable to the 2009 data.

Note: Data from the closing date of June in each year.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_16



Table 5.17: Outflow from the Register of Beneficiaries

Year	Total number of outflows	Of which:		Year	Total number of outflows	Of which:	
		became employed, %	benefit period expired, %			became employed, %	benefit period expired, %
1995	370,941	27.7	..	2005	329,738	27.2	63.0
1996	408,828	24.2	58.4	2006	234,273	33.2	53.7
1997	327,486	26.8	58.7	2007	251,889	33.4	46.9
1998	322,496	26.5	64.5	2008	232,151	40.0	48.7
1999	320,132	26.0	67.4	2008 ^a	261,573	43.4	48.9
2000	325,341	28.1	64.6	2009	345,216	37.9	56.0
2001	308,780	27.2	65.1	2010	352,535	38.9	55.8
2002	303,288	27.6	66.7	2011	329,728	39.2	55.7
2003	297,640	26.7	65.2	2012	368,803	21.9	77.8
2004	308,027	27.4	64.6	2013	328,508	21.3	75.6

^a The new IT system introduced at the NFSZ in 2008 made the methodological changes possible:

1) The filtering out of those returning after or starting a break from the number of those entering or leaving the different types of jobseeking support. The main reasons for a break are work for short time periods, receipt of child support (GYES) or TGYÁS, or involvement in training.

2) Taking into account in the previous period the number of those entrants, for whom the first accounting of the jobseeking support was delayed due to missing documentation.

The row of 2008^a contains the data from 2008 in the form comparable to the 2009 data.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_17



Table 5.18: The distribution of the total number of labour market training participants^a

Groups of training participants	1998	1999	2000	2001	2002	2003	2004	2005
Participants in suggested training	48,558	52,045	52,198	53,447	46,802	45,261	33,002	29,252
Participants in accepted training	26,906	28,311	30,949	32,672	31,891	28,599	19,406	9,620
One Step Forward (OFS) programme	-	-	-	-	-	-	-	-
Non-employed participants together	75,465	80,356	83,147	86,211	78,693	73,859	52,407	38,872
Of which: school-leavers	24,359	25,260	22,131	20,592	19,466	18,320	12,158	9,313
Employed participants	4,139	4,408	5,026	5,308	4,142	9,036	7,487	4,853
Total	79,604	84,764	88,173	91,519	82,835	82,895	59,894	43,725
	2006	2007	2008	2009	2010	2011	2012	2013 ^b
Participants in suggested training	36,212	32,747	48,561	41,373	50,853	32,172	43,438	22,574
Participants in accepted training	7,327	5,766	4,939	8,241	6,853	2,495	2,446	22,574
One Step Forward (OFS) programme	-	270	59,347	11,169	2,316	-	-	-
Non-employed participants together	43,539	38,783	112,847	60,783	57,706	34,667	45,884	132,587
Of which: school-leavers	1,365	1,111	18,719	21,103	12,030	7,935	9,976	106,333
Employed participants	3,602	3,467	37,466	12,496	336	908	716	631
Total	47,141	42,250	150,313	73,279	60,358	35,575	46,600	133,218

^a The data contain the number of those financed from the NFA decentralized employment base, as well as those involved in training as a part of the HEFOP 1.1 and the TÁMOP 1.1.2 programmes.

^b The data include 88,004 public works participants simultaneously involved in training.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent05_18

Table 5.19: Employment ratio of participants ALMPs by gender, age groups and educational attainment for the programmes finished in 2013^a, per cent



	Non-employed participants			Supported self-employment ^b	Wage subsidy programme
	suggested training	accepted training	total		
By gender					
Males	53.0	63.6	53.7	72.5	71.8
Females	57.3	69.0	58.0	75.5	73.9
By age groups					
-20	43.7	67.2	45.1	89.5	66.0
20-24	52.6	63.5	53.2	75.6	71.2
25-29	55.1	65.0	55.7	75.8	74.4
-29 together	52.9	64.3	53.5	76.1	71.8
30-34	55.2	64.2	55.6	73.2	75.9
35-39	57.4	66.0	57.9	75.4	74.4
40-44	57.5	61.5	57.7	73.9	73.5
45-49	56.4	68.0	57.1	69.4	73.0
50-54	58.6	74.7	59.6	75.0	75.1
55+	53.9	66.7	54.9	71.6	72.0
By educational attainment					
Less than primary school	61.3	60.0	61.2	50.0	48.0
Primary school	54.0	61.1	54.4	68.7	66.4
Vocational school for skilled workers	56.6	63.2	57.0	74.3	73.8
Vocational school	56.2	60.9	56.4	71.4	69.2
Vocational secondary school	55.3	71.2	56.5	76.4	75.0
Technicians secondary school	55.8	65.2	56.5	75.4	74.8
Grammar school	53.2	68.9	53.9	72.1	72.7
College	56.3	76.2	58.1	76.7	80.7
University	57.9	89.7	60.2	75.8	82.9
Total	55.1	65.9	55.8	74.1	72.9

^a Includes all kinds of wage subsidies except financial support for student work during vacation.

^b Survival rate.

Note: 6 months after the end of each programme.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_19

Table 5.20: Distribution of the average annual number of those with no employment status who participate in training categorised by the type of training, percentage



Types of training	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Approved qualification	77.9	79.8	79.6	78.8	78.7	77.6	78.3	75.1	72.9	71.5	69.0	65.8	63.6	65.2	68.6	71.6	50.2
Non-approved qualification	16.0	14.4	14.7	14.7	14.0	13.6	12.6	15.0	14.5	16.9	19.9	22.8	26.4	25.4	21.1	19.0	44.2
Foreign language learning	6.1	5.7	5.7	6.5	7.3	8.8	9.1	9.9	12.6	11.5	11.1	11.4	10.0	9.4	10.3	9.4	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_20



Table 5.21: The distribution of those entering training programmes by age groups and educational level

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
											training	training for public works participants	together
Total number of entrants	45,092	25,760	27,727	26,459	25,353	42,710	37,467	39,780	18,464 ^a	33,540	28,089	78,052	106,141
By age groups, %													
-20	10.4	9.0	9.7	8.7	7.0	8.1	4.9	3.8	4.0	3.2	5.6	2.8	3.6
20-24	24.1	22.3	23.1	23.0	24.7	26.9	25.1	23.9	27.2	23.4	33.8	12.7	18.3
25-44	54.7	54.9	52.3	52.0	51.3	48.3	51.5	52.4	46.5	46.7	43.8	47.3	46.4
45-49	6.5	7.9	7.8	7.8	8.0	7.0	8.5	8.8	8.3	10.0	7.1	12.9	11.3
50+	4.3	5.9	7.1	8.4	9.2	9.7	10.0	11.0	14.0	16.6	9.7	24.3	20.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
By level of education, %													
Less than primary school	1.3	1.7	2.3	1.2	1.6	2.1	7.5	3.0	0.7	2.7	1.0	9.7	7.4
Primary school	23.1	23.8	26.3	25.1	24.0	28.1	22.8	24.5	28.2	34.4	24.9	53.3	45.8
Vocational school	26.9	26.6	25.7	26.8	24.5	21.9	22.0	25.5	24.8	26.2	22.3	25.6	24.7
Vocational and technical secondary school	25.7	24.5	23.3	23.5	23.9	22.6	24.8	23.7	24.2	19.0	27.1	6.5	11.9
Grammar school	15.5	14.2	14.4	15.0	16.3	15.9	15.3	15.8	15.7	12.9	19.0	4.2	8.1
College, university	7.6	9.2	8.1	8.4	9.8	9.4	7.6	7.5	6.4	4.8	5.8	0.7	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a The drastic decrease in the number of training programmes offered was due to the centralization of decision-making regarding the financing of training programmes, and the concurrent new requirement according to which only training programmes with a verifiable direct effect on employment were approved. Due to these, the number of preventative and general knowledge training programmes among those supported decreased. The majority of training participants were enrolled within the framework of EU programmes.

The significant growth in the number of trainees, during and following 2012, was predominantly explained by the inclusion into training of public works participants. The data for 2013 make a distinction between those and other trainees.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent05_21

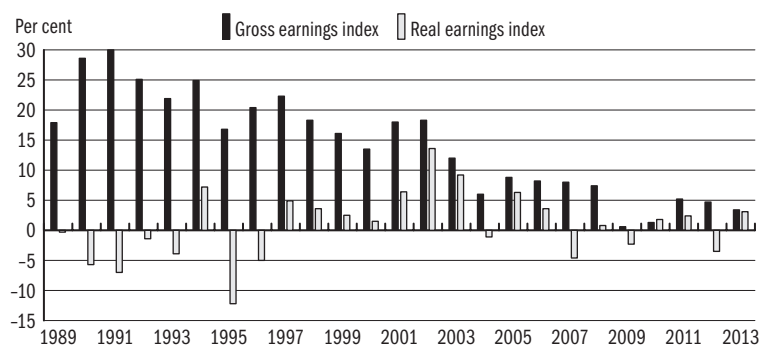
Table 6.1: Nominal and real earnings

Year	Gross earnings	Net earnings	Gross earnings index	Net earnings index	Consumer price index	Real earnings index
	HUF		previous year = 100			
1990	13,446	10,108	128.6	121.6	128.9	94.3
1991	17,934	12,948	130.0	125.5	135.0	93.0
1992	22,294	15,628	125.1	121.3	123.0	98.6
1993	27,173	18,397	121.9	117.7	122.5	96.1
1994	33,939	23,424	124.9	127.3	118.8	107.2
1995	38,900	25,891	116.8	112.6	128.2	87.8
1996	46,837	30,544	120.4	117.4	123.6	95.0
1997	57,270	38,145	122.3	124.1	118.3	104.9
1998	67,764	45,162	118.3	118.4	114.3	103.6
1999	77,187	50,076	116.1	112.7	110.0	102.5
2000	87,750	55,785	113.5	111.4	109.8	101.5
2001	103,554	64,913	118.0	116.2	109.2	106.4
2002	122,481	77,622	118.3	119.6	105.3	113.6
2003	137,193	88,753	112.0	114.3	104.7	109.2
2004	145,523	93,715	106.1	105.6	106.8	98.9
2005	158,343	103,149	108.8	110.1	103.6	106.3
2006	171,351	110,951	108.2	107.6	103.9	103.6
2007	185,018	114,282	108.0	103.0	108.0	95.4
2008	198,741	121,969	107.4	107.0	106.1	100.8
2009	199,837	124,116	100.6	101.8	104.2	97.7
2010	202,525	132,604	101.3	106.8	104.9	101.8
2011	213,094	141,151	105.2	106.4	103.9	102.4
2012	223,060	144,085	104.7	102.1	105.7	96.6
2013	230,664	151,085	103.4	104.2	101.7	103.1

Source: KSH IMS (earnings) and consumer price accounting. Gross earnings, gross earnings index: 2000–: STADAT (2014. 02. 21. version). Net earnings, net earnings index: 2008–: STADAT (2014.02.21.version). Consumer price index: 1990–: STADAT (2014. 01. 15. version). Real earnings index: 1990–: STADAT (2014. 02.24. version).

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent06_01

Figure 6.1: Annual changes of gross and net real earnings



Source: KSH IMS (earnings) and consumer price accounting (STADAT, 2014. 02. 21. version).

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena06_01

Table 6.2.a: Gross earnings ratios in the economy, HUF/person/month

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agriculture, forestry and fishing	89,446	97,219	103,190	112,388	122,231	133,570	137,101	143,861	153,301	164,136	171,921
Mining and quarrying	142,882	158,945	171,465	190,530	202,985	225,650	244,051	234,243	254,607	271,012	279,577
Manufacturing	123,914	136,354	145,997	158,597	172,277	183,081	190,331	200,692	213,281	230,877	241,170
Electricity, gas, steam and air conditioning supply	198,733	223,541	243,039	265,912	294,241	321,569	345,035	363,900	379,606	404,073	410,485
Water supply; sewerage, waste management and remediation activities	119,341	129,486	140,699	151,912	164,572	178,049	181,818	193,604	207,614	223,206	224,654
Construction	94,193	100,124	106,608	117,626	136,301	146,475	152,204	153,130	156,682	163,649	177,790
Wholesale and retail trade; repair of motor vehicles and motorcycles	115,922	122,538	131,068	145,243	158,077	171,780	175,207	185,812	196,942	212,521	218,936
Transportation and storage	124,419	137,526	149,068	162,091	173,776	186,376	196,350	200,129	210,146	217,794	223,410
Accommodation and food service activities	87,115	90,089	95,823	102,908	112,222	120,600	122,561	122,699	125,757	139,731	147,023
Information and communication	250,308	273,606	288,876	306,792	328,902	358,217	366,752	368,113	392,963	410,045	426,460
Financial and insurance activities	274,081	324,295	349,809	401,580	390,511	431,601	427,508	433,458	456,980	459,744	470,966
Real estate activities	122,087	126,388	134,409	145,550	159,225	169,845	177,747	182,903	184,829	219,287	212,391
Professional, scientific and technical activities	167,758	182,970	200,830	212,963	244,998	281,150	292,974	297,489	303,292	330,860	320,422
Administrative and support service activities	107,250	113,276	119,555	128,486	139,127	147,125	149,131	145,576	149,675	163,300	169,223
Public administration and defence; compulsory social security	180,866	184,357	207,356	223,009	253,335	267,657	234,696	242,958	252,848	247,139	258,803
Education	162,293	159,803	181,444	191,211	193,250	204,600	194,958	195,930	192,984	197,344	216,927
Human health and social work activities	129,995	130,509	144,100	151,889	160,050	169,977	161,265	142,282	153,832	151,446	151,287
Arts, entertainment and recreation	137,826	141,957	154,312	161,416	183,898	183,813	179,199	179,976	192,407	209,930	216,869
Other service activities	103,554	127,136	133,846	140,893	153,512	157,950	160,375	150,025	162,490	175,872	174,777
National economy, total	137,193	145,523	158,343	171,351	185,018	198,741	199,837	202,525	213,094	223,060	230,664
Of which:											
- Business sector	127,032	138,926	148,555	162,531	177,415	192,044	200,304	206,863	217,932	233,829	242,191
- Budgetary institutions	160,844	161,559	182,185	193,949	206,225	219,044	201,632	195,980	203,516	200,027	207,191

Note: The data are recalculated based on the industrial classification system in effect from 2008.

Source: KSH mid-year IMS.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent06_02a

Table 6.2.b: Gross earnings ratios in the economy, per cent

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agriculture, forestry and fishing	65.2	66.8	65.2	65.6	66.1	67.2	68.6	71.0	72.0	73.6	74.5
Mining and quarrying	104.1	109.2	108.3	111.2	109.7	113.5	122.1	115.5	119.5	120.9	121.2
Manufacturing	90.3	93.7	92.2	92.6	93.1	92.1	95.2	99.1	100.0	103.4	104.6
Electricity, gas, steam and air conditioning supply	144.9	153.6	153.5	155.2	159.0	161.8	172.7	179.6	178.2	181.1	178.0
Water supply; sewerage, waste management and remediation activities	87.0	89.0	88.9	88.7	88.9	89.6	91.0	95.6	97.4	100.0	97.4
Construction	68.7	68.8	67.3	68.6	73.7	73.7	76.2	75.5	73.5	73.4	77.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	84.5	84.2	82.8	84.8	85.4	86.4	87.7	91.7	92.4	95.3	94.9
Transportation and storage	90.7	94.5	94.1	94.6	93.9	93.8	98.3	98.9	98.6	97.8	96.9
Accommodation and food service activities	63.5	61.9	60.5	60.1	60.7	60.7	61.3	60.6	59.0	62.7	63.7
Information and communication	182.4	188.0	182.4	179.0	177.8	180.2	183.5	181.7	184.4	183.9	184.9
Financial and insurance activities	199.8	222.8	220.9	234.4	211.1	217.2	213.9	214.0	214.5	206.2	204.2
Real estate activities	89.0	86.9	84.9	84.9	86.1	85.5	88.9	90.2	86.8	98.3	92.1
Professional, scientific and technical activities	122.3	125.7	126.8	124.3	132.4	141.5	146.6	146.9	142.4	148.4	138.9
Administrative and support service activities	78.2	77.8	75.5	75.0	75.2	74.0	74.6	71.9	70.3	73.3	73.4
Public administration and defence; compulsory social security	131.8	126.7	131.0	130.1	136.9	134.7	117.4	120.2	118.7	110.8	112.2
Education	118.3	109.8	114.6	111.6	104.4	102.9	97.6	96.7	90.6	88.5	94.0
Human health and social work activities	94.8	89.7	91.0	88.6	86.5	85.5	80.7	70.3	72.2	67.9	65.6
Arts, entertainment and recreation	100.5	97.5	97.5	94.2	99.4	92.5	89.7	88.8	90.3	94.1	94.0
Other service activities	75.5	87.4	84.5	82.2	83.0	79.5	80.3	74.1	76.1	78.9	75.8
National economy, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Of which:											
- Business sector	92.6	95.5	93.8	94.9	95.9	96.6	100.2	102.1	102.3	104.8	105.0
- Budgetary institutions	117.2	111.0	115.1	113.2	111.5	110.2	100.9	96.8	95.5	89.7	89.8

Note: The data are recalculated based on the industrial classification system in effect from 2008.

Source: KSH mid-year IMS.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent06_02b



Table 6.3: Regression-adjusted earnings differentials

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	0.1410	0.1480	0.1490	0.1500	0.1550	0.1790	0.1700	0.1500	0.1550	0.1570	0.1560	0.1330
Less than primary school	-0.4550	-0.4110	-0.3900	-0.4800	-0.4010	-0.4390	-0.3970	-0.5750	-0.5110	-0.5350	-0.4850	-0.5230
Primary school	-0.3640	-0.3550	-0.3670	-0.3730	-0.3800	-0.4170	-0.4010	-0.4540	-0.4280	-0.4220	-0.4160	-0.4140
Vocational school	-0.2730	-0.2550	-0.2650	-0.2750	-0.2840	-0.2920	-0.2770	-0.3050	-0.2810	-0.2640	-0.2660	-0.2260
College, university	0.5400	0.6190	0.5870	0.5900	0.5810	0.5620	0.5580	0.6190	0.6220	0.6160	0.5750	0.6000
Estimated labour market experience	0.0213	0.0216	0.0237	0.0238	0.0252	0.0255	0.0248	0.0259	0.0267	0.0257	0.0238	0.0244
Square of estimated labour market experience	-0.0003	-0.0003	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004
Public sector	-0.0581	0.1120	0.1600	0.1130	0.0876	-0.0009	0.0257	-0.1260	-0.1440	-0.1670	-0.2790	-0.2590

Note: the results indicate the earnings differentials of the various groups relative to the reference group in log points (approximately percentage points). All parameters are significant at the 0.01 level. The region parameters can be seen in Table 9.6.

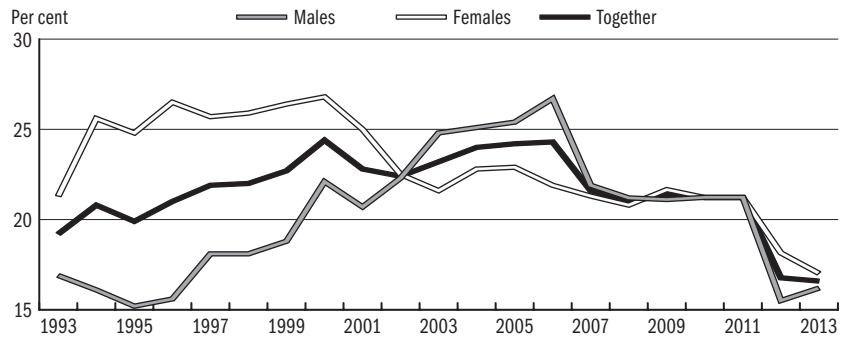
Reference categories: female, with leaving certificate (general education certificate), not in the public sector, working in the Central-Transdanubia region.

Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent06_03



Figure 6.2: The percentage of low paid workers by gender, per cent



Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena06_02

Table 6.4: Percentage of low paid workers^a by gender, age groups, level of education and industries

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
By gender															
Males	18.8	22.1	20.7	22.3	24.8	25.1	25.4	26.7	21.9	21.2	21.1	21.2	20.5	15.5	15.3
Females	26.4	26.8	25.0	22.5	21.6	22.8	22.9	21.9	21.3	20.8	21.7	21.2	20.8	18.2	18.4
By age groups															
-24	37.9	37.0	35.5	37.6	39.9	43.9	44.2	46.3	40.1	34.6	38.9	38.2	36.6	26.4	31.7
25-54	21.3	22.8	21.9	21.8	22.3	23.6	24.0	24.2	21.4	20.6	21.0	20.9	20.4	16.3	16.4
55+	17.2	19.8	18.1	16.2	15.3	16.5	16.5	16.4	15.8	15.5	17.6	18.1	17.6	17.0	15.0
By level of education															
8 grades of primary school or less	43.9	43.4	40.4	38.3	37.1	39.6	41.2	40.1	41.4	41.3	47.4	43.4	45.4	38.6	41.1
Vocational school	28.6	31.2	29.4	32.1	35.4	35.7	36.8	37.9	32.9	32.1	33.5	33.3	31.3	25.2	24.7
Secondary school	15.4	18.8	18.0	16.5	17.7	18.6	18.6	19.7	16.1	15.4	16.4	17.3	17.2	13.7	15.1
Higher education	3.2	4.7	4.7	3.6	3.5	3.9	3.8	4.3	2.5	2.4	2.3	2.9	2.7	2.0	2.0
By industries^b															
Agriculture, forestry, fishing	38.1	38.0	34.3	37.9	37.3	37.1	37.5	41.6	37.9	36.6	36.7	34.6	31.8	21.8	26.2
Manufacturing	18.9	20.0	19.1	19.4	25.4	24.7	22.1	24.1	20.8	23.5	23.0	20.5	19.4	13.7	15.1
Construction	36.7	42.9	41.7	44.8	49.8	51.2	50.2	55.2	43.1	37.5	38.1	43.0	41.9	31.8	34.1
Trade, repairing	36.8	42.8	41.3	44.0	49.0	49.3	51.5	49.4	40.9	35.9	35.2	36.4	35.2	24.2	27.7
Transport, storage, communication	9.0	11.3	10.6	10.5	13.6	12.6	13.8	15.1	13.2	14.6	11.2	13.3	13.1	10.1	10.2
Financial intermediation	21.1	25.3	22.6	20.7	23.1	23.9	24.6	26.2	20.9	20.0	20.5	20.7	19.6	15.0	16.6
Public administration and defence, compulsory social security	16.0	13.7	13.8	9.3	6.6	8.2	6.0	6.3	7.4	6.7	8.7	8.8	9.8	13.4	10.7
Education	23.8	21.5	22.6	16.0	4.8	6.9	8.8	6.1	9.0	7.2	11.9	10.6	11.2	16.3	17.9
Health and social work	28.0	26.7	19.9	16.1	6.3	8.4	10.3	8.6	12.6	11.1	14.5	13.8	14.3	18.2	15.6
Total	22.7	24.4	22.8	22.4	23.2	24.0	24.2	24.3	21.6	21.0	21.4	21.2	20.7	16.8	16.8

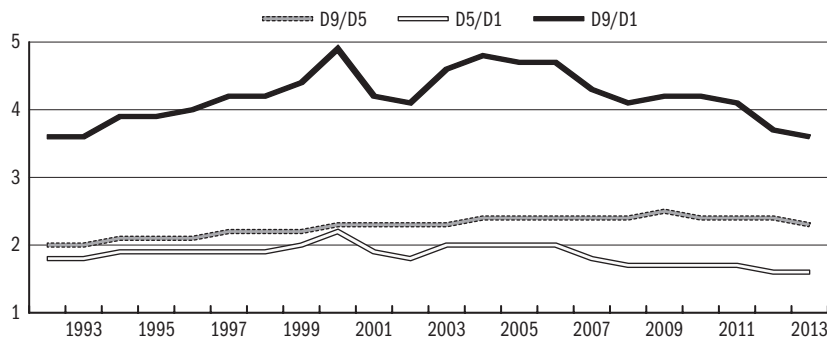
^a Percentage of those who earn less than 2/3 of the median earning amount.

^b 1999–2008: by TEÁOR'03, 2009: by TEÁOR'08.

Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent06_04

Figure 6.3: The dispersion of gross monthly earnings

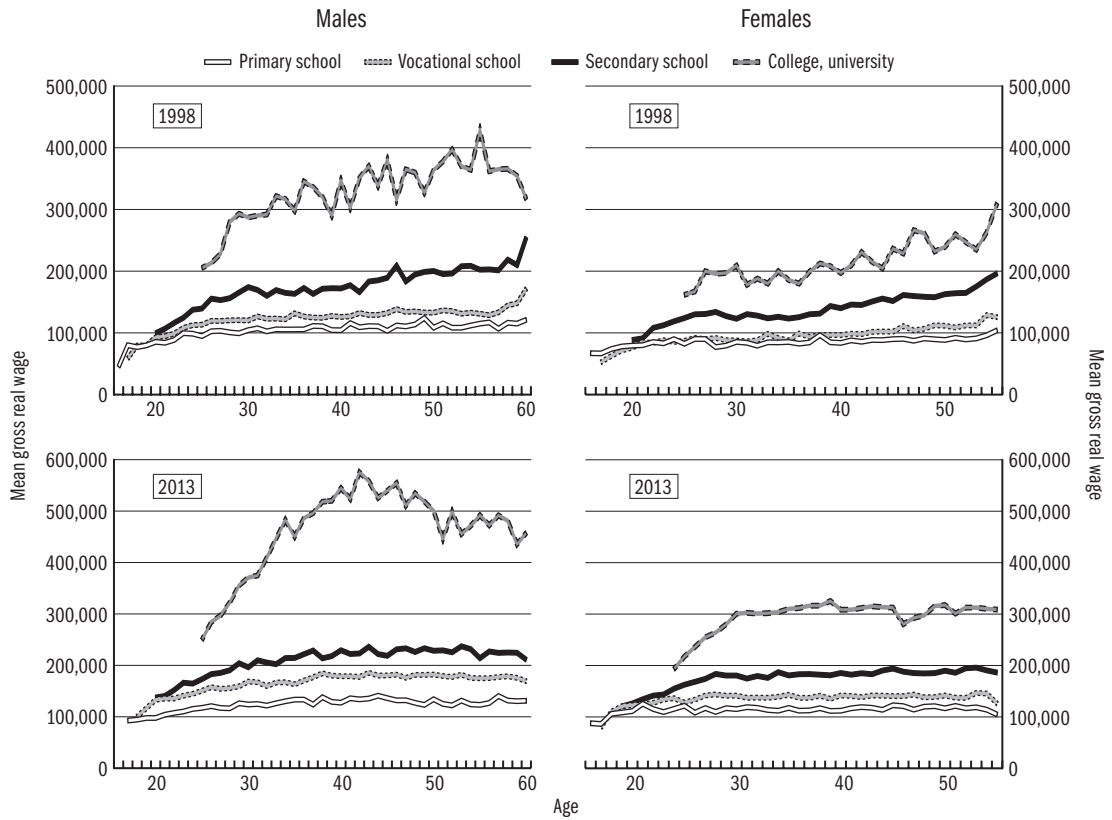


Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena06_03



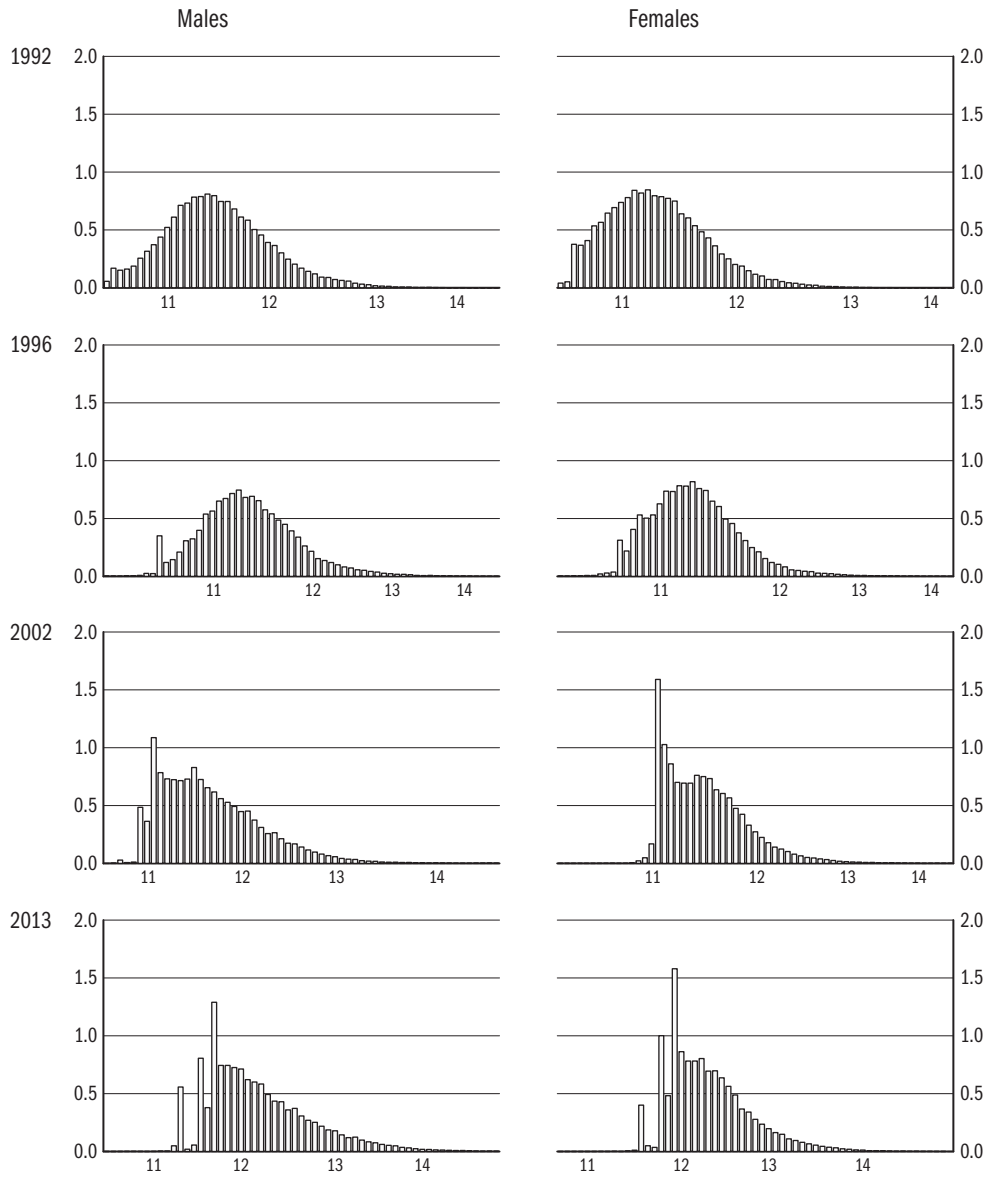
Figure 6.4: Age-income profiles by education level in 1998 and 2013, women and men



Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena06_04

Figure 6.5: The dispersion of the logarithm of gross real earnings (2013 = 100%)



Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena06_05



Table 7.1: School-leavers by level of education, full-time education

Year	Primary school	Vocational school	Secondary school	College, university
1980	119,809	49,232	43,167	14,859
1990	164,614	54,933	53,039	15,963
1991	158,907	59,302	54,248	16,458
1992	151,287	66,261	59,646	16,201
1993	144,200	66,342	68,607	16,223
1994	136,857	62,902	68,604	18,041
1995	122,333	57,057	70,265	20,024
1996	120,529	54,209	73,413	22,128
1997	116,708	46,868	75,564	24,411
1998	113,651	42,866	77,660	25,338
1999	114,302	38,822	73,965	27,049
2000	114,250 ^a	35,500 ^a	72,200 ^a	29,843
2001	114,200 ^a	33,500 ^a	70,372	29,746
2002	113,923	26,941	69,612	30,785
2003	117,747	26,472	71,944	31,911
2004	113,179	26,620	76,669	31,633
2005	115,626	25,519	77,025	32,732
2006	114,240	24,427	76,895	29,871
2007	108,889	17,967	77,527	29,059
2008	106,426	19,289	68,453	28,957
2009	102,798	20,138	78,004	36,064
2010	103,643	20,693	77,930	38,456
2011	96,825	20,720	76,354	35,433
2012	92,254	29,299	73,802	36,262
2013 ^b	88,913	21,948	68,407	37,047

^a Estimated data.

^b Preliminary data.

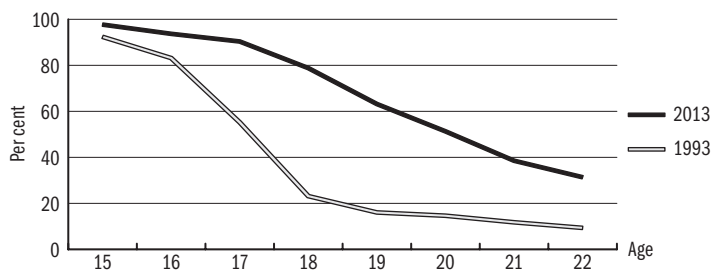
Note: Primary school: completed the 8th grade. Other levels: received certificate. Excluding special schools, from the year 2000 excluding special education. College, university: from 2007 including graduates in BA/BSc, MA/MSc and undivided (joint bachelor and master courses) training.

Source: EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent07_01



Figure 7.1: Full time students as a percentage of the different age groups



Source: EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena07_01

Table 7.2: Pupils/students entering the school system by level of education, full-time education

Year	Primary school	Vocational school	Secondary school	College, university
1980	171,347	60,865	57,213	17,886
1990	125,665	87,932	83,939	22,662
1995	123,997	65,352	82,665	42,433
1996	124,554	58,822	84,773	44,698
1997	127,214	53,083	84,395	45,669
1998	125,875	39,965	86,868	48,886
1999	121,424	33,570	89,184	51,586
2000	117,000 ^a	33,900 ^a	90,800 ^a	54,100 ^a
2001	112,144	34,210	92,322	56,709
2002	112,345	33,363	94,223	57,763
2003	114,020	33,394	92,817	59,699
2004	101,021	32,645	93,469	59,783
2005	97,810	33,114	96,181	61,898
2006	95,954	32,732	95,989	61,231
2007	98,766	31,897	92,957	55,789
2008	97,345	32,774	90,667	52,755
2009	97,083	34,177	87,731	61,948
2010	95,469	35,177	88,644	68,715
2011	96,455	35,420	83,025	70,954
2012	98,013	36,954	78,090	67,014
2013 ^b	105,075	34,927	83,198	96,775 ^c

^a Estimated data.

^b Preliminary data.

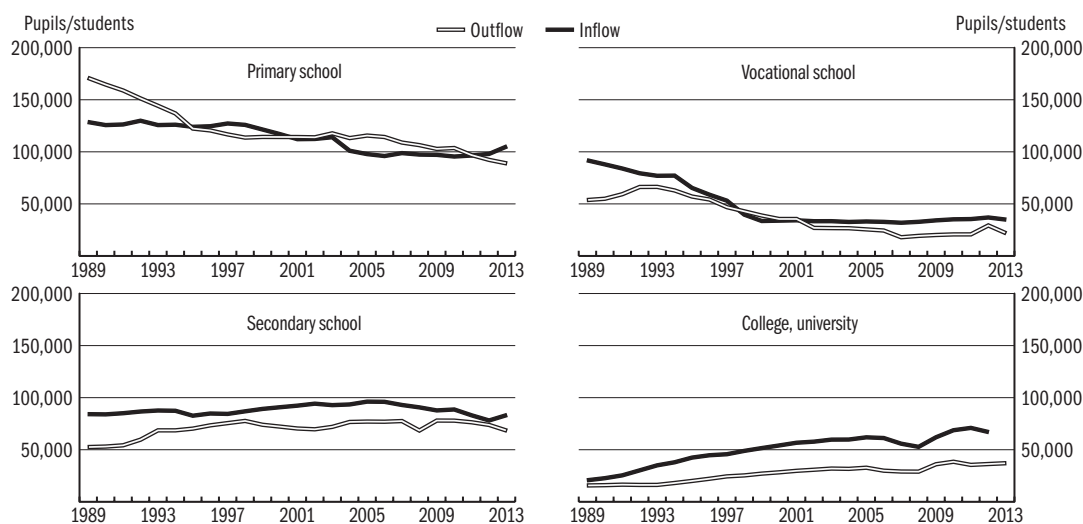
^c Students with less than 60 credits. The figure cannot be compared with earlier data.

Note: Excluding special schools, from the year 2000 excluding special education. College, university: from the 2005/2006 school year including students in BA/BSc, MA/MSc and undivided (joint bachelor and master courses) training.

Source: EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent07_02

Figure 7.2: Flows of the educational system by level



Source: NEFMI EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena07_02

Table 7.3: The number of full time pupils/students by level of education

Year	Primary school	Vocational school	Secondary school	College, university
1990/91	1,130,656	222,204	291,872	76,601
2000/01	918,976 ^a	120,330 ^a	417,800 ^a	176,046
2001/02	905,932	124,615	420,889	184,071
2002/03	893,261	123,069	426,384	193,155
2003/04	874,296	123,206	437,909	204,910
2004/05	854,930	123,008	438,496	212,292
2005/06	828,594	121,815	441,002	217,245
2006/07	800,635	119,520	443,166	224,616
2007/08	783,948	122,973	441,886	227,118
2008/09	765,822	123,640	439,957	224,894
2009/10	752,896	128,479	443,078	222,564
2010/11	736,977	129,076	438,892	218,057
2011/12	729,000	129,250	428,122	218,304
2012/13	725,068	117,356	413,531	214,320
2013/14	730,664	104,927	388,717	209,208

^a Estimated data.

^b Preliminary data.

Note: Excluding special education schools, from the 2000/2001 school year excluding special education. From the 2001/2002 school year, students in grades 5–8 who attend a 6 or 8 year secondary general school are included in the number of high school students. College, university: from the 2005/2006 school year, includes students in BA/BSc, MA/MSc and undivided (joint bachelor and master courses) training.

Source: EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent07_03

Table 7.4: The number of part-time pupils/students by level of education

Year	Primary school	Vocational school	Secondary school	College, university
1990/91	11,536	–	68,162	25,786
2000/01	2,940 ^a	1,070 ^a	91,700 ^a	118,994
2001/02	2,793	2,453	95,231	129,167
2002/03	2,785	3,427	93,172	148,032
2003/04	3,190	3,216	93,322	162,037
2004/05	2,766	3,505	90,321	166,174
2005/06	2,543	4,049	89,950	163,387
2006/07	2,319	4,829	91,035	151,203
2007/08	2,245	5,874	83,008	132,273
2008/09	2,083	4,983	74,008	115,957
2009/10	2,035	6,594	70,124	105,511
2010/11	1,997	8,068	76,404	99,962
2011/12	2,264	10,383	74,204	98,081
2012/13	2,127	12,776	72,808	85,316
2013/14 ^b	2,587	12,140	70,783	73,088

^a Estimated data.

^b Preliminary data.

Note: College, university: from the 2005/2006 school year, including students in BA/BSc, MA/MSc and undivided (joint bachelor and master courses) training.

Source: EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent07_04

Table 7.5: Number of applicants for full-time high school courses

Year	Applying	Admitted	Admitted as a percentage of applied	Applying	Admitted
				as a percentage of the secondary school graduates in the given year	
1980	33,339	14,796	44.4	77.2	34.3
1989	44,138	15,420	34.9	84.0	29.3
1990	46,767	16,818	36.0	88.2	31.7
1991	48,911	20,338	41.6	90.2	37.5
1992	59,119	24,022	40.6	99.1	40.3
1993	71,741	28,217	39.3	104.6	41.1
1994	79,805	29,901	37.5	116.3	43.6
1995	86,548	35,081	40.5	123.2	49.9
1996	79,369	38,382	48.4	108.1	52.3
1997	81,924	40,355	49.3	108.4	53.4
1998	81,065	43,629	53.8	104.4	56.2
1999	82,815	44,538	53.8	112.0	60.2
2000	82,957	45,546	54.9	114.9	63.1
2001	84,380	49,874	59.1	119.8	70.8
2002	88,978	52,552	59.1	127.8	75.5
2003	87,110	52,703	60.5	121.1	73.3
2004	95,871	55,179	57.6	125.0	72.0
2005	91,583	52,863	57.7	118.9	68.6
2006	84,262	53,983	64.1	109.6	70.2
2007	74,849	50,941	68.1	96.5	65.7
2008	66,963	52,081	77.8	97.8	76.1
2009	90,878	61,262	67.4	116.5	78.5
2010	100,777	65,503	65.0	129.3	84.1
2011	101,835	66,810	65.6	133.4	87.5
2012	84,075	61,350	73.0	113.9	83.1
2013	75,392	56,927	75.5	110.2	83.2

Note: Including students applying and admitted to BA/BSc, MA/MSc and undivided (joint bachelor and master courses) training. From 2008 students applying and admitted in repeated, spring and autumn admission procedures altogether.

Source: EMMI STAT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent07_05



Table 8.1: The number of vacancies^a reported to the local offices of the NFSZ

Year	Number of vacancies at closing day	Number of registered unemployed ^b at closing date	Vacancies per 100 registered unemployed ^b
1991	14,343	227,270	6.3
1992	21,793	556,965	3.9
1993	34,375	671,745	5.1
1994	35,569	568,366	6.3
1995	28,680	507,695	5.6
1996	38,297	500,622	7.6
1997	42,544	470,112	9.0
1998	46,624	423,121	11.0
1999	51,438	409,519	12.6
2000	50,000	390,492	12.8
2001	45,194	364,140	12.4
2002	44,603	344,715	12.9
2003	47,239	357,212	13.2
2004	48,223	375,950	12.8
2005	41,615	409,929	10.2
2006	41,677	393,465	10.6
2007	29,933	426,915	7.0
2008	25,386	442,333	5.7
2009	20,739	561,768	3.7
2010	22,241	582,664	3.8
2011	41,123	582,868	7.1
2012	35,850	559,102	6.4
2013	51,524	527,624	9.8

^a Monthly average stock figures.

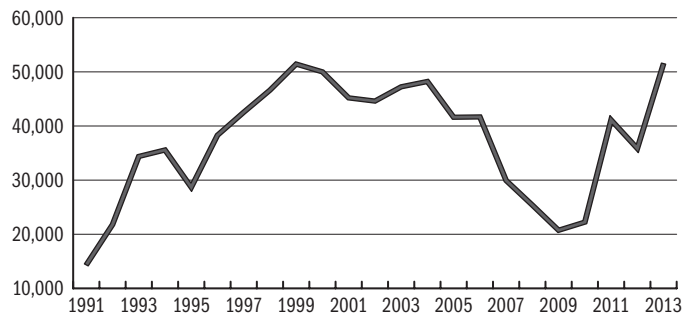
^b Since 1st of November, 2005: registered jobseekers.

Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent08_01



Figure 8.1: The number of vacancies reported to the local offices of the NFSZ



Source: NFSZ.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena08_01

Table 8.2: Firms intending to increase/decrease their staff^a, per cent

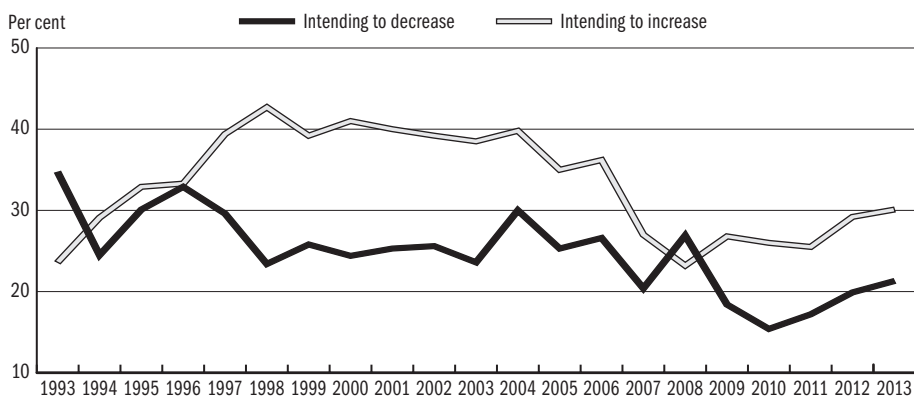
Year		Intending to decrease	Intending to increase	Year		Intending to decrease	Intending to increase
1993	I.	34.7	23.6	2001	I.	25.3	40.0
	II.	28.5	22.3		II.	28.6	32.6
1994	I.	24.5	29.1	2002	I.	25.6	39.2
	II.	21.0	29.7		II.	27.9	35.4
1995	I.	30.1	32.9	2003	I.	23.6	38.5
	II.	30.9	27.5		II.	32.1	34.3
1996	I.	32.9	33.3	2004		30.0	39.8
	II.	29.4	30.4		2005		25.3	35.0
1997	I.	29.6	39.4	2006		26.6	36.2
	II.	30.7	36.8	2007		20.4	27.0
1998	I.	23.4	42.7	2008		26.9	23.2
	II.	28.9	37.1	2009		18.4	26.8
1999	I.	25.8	39.2	2010		15.4	26.0
	II.	28.8	35.8	2011		17.2	25.5
2000	I.	24.4	41.0	2012		19.9	29.2
	II.	27.2	36.5	2013		21.3	30.1

^a In the period of the next half year following the interview date, in the sample of NMH PROG, since 2004: 1 year later from the interview date.

Source: NMH PROG.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent08_02

Figure 8.2: Firms intending to increase/decrease their staff



Source: NMH PROG.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena08_02



Table 9.1: Regional inequalities: Employment rate^a

Year	Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain	Total
1992	62.3	57.7	62.0	57.2	52.2	52.5	57.9	58.0
1993	58.4	55.2	60.5	52.9	49.3	48.4	53.4	54.5
1994	57.2	54.4	59.9	52.4	47.7	47.5	53.0	53.5
1995	57.1	53.1	58.5	48.8	46.3	46.4	53.0	52.5
1996	56.8	52.7	59.3	50.3	45.7	45.6	52.8	52.4
1997	56.8	53.6	59.8	50.0	45.7	45.2	53.6	52.5
1998	57.7	56.0	61.6	51.5	46.2	46.4	54.2	53.7
1999	59.7	58.5	63.1	52.8	48.1	48.8	55.3	55.6
2000	60.5	59.2	63.4	53.5	49.4	49.0	56.0	56.3
2001	60.6	59.3	63.1	52.3	49.7	49.5	55.8	56.2
2002	60.9	60.0	63.7	51.6	50.3	49.3	54.2	56.2
2003	61.7	62.3	61.9	53.4	51.2	51.6	53.2	57.0
2004	62.9	60.3	61.4	52.3	50.6	50.4	53.6	56.8
2005	63.3	60.2	62.0	53.4	49.5	50.2	53.8	56.9
2006	62.7	61.4	62.8	53.6	50.4	51.1	54.3	57.3
2007	62.7	61.8	63.4	51.2	50.8	50.5	55.2	57.3
2008	62.7	60.3	62.1	51.0	49.5	49.9	54.5	56.7
2009	61.6	57.8	59.7	52.1	48.6	48.1	53.2	55.4
2010	60.3	57.3	59.0	53.1	48.7	49.3	54.4	55.4
2011	60.2	59.9	60.2	51.8	48.7	50.3	54.5	55.8
2012	62.2	59.9	61.7	52.9	49.3	52.1	55.8	57.2
2013	62.8	61.0	62.0	55.7	51.7	53.3	56.9	58.4

^a Age: 15–64.

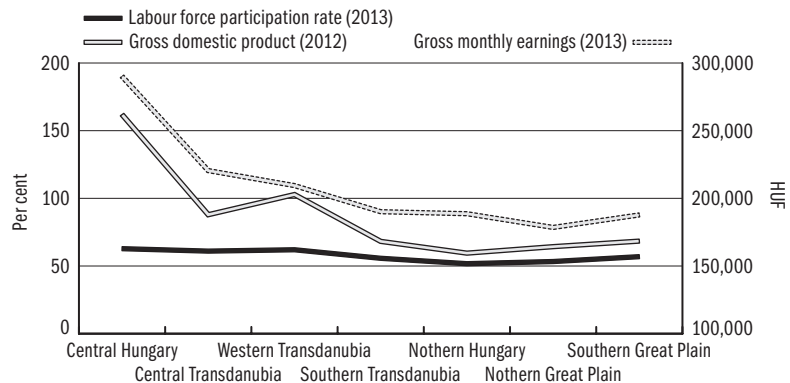
Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent09_01



Figure 9.1: Regional inequalities: Labour force participation rates, gross monthly earnings and gross domestic product in NUTS-2 level regions



Source: Employment rate: KSH MEF; gross domestic product: KSH; earnings: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena09_01

Table 9.2: Regional inequalities: LFS-based unemployment rate^a

Year	Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain	Total
1995	7.4	11.0	6.9	12.1	16.0	13.8	9.3	10.3
1996	8.2	10.4	7.1	9.4	15.5	13.2	8.4	10.0
1997	7.0	8.1	6.0	9.9	14.0	12.0	7.3	8.8
1998	5.7	6.8	6.1	9.4	12.2	11.1	7.1	7.8
1999	5.2	6.1	4.4	8.3	11.6	10.2	5.8	7.0
2000	5.3	4.9	4.2	7.8	10.1	9.3	5.1	6.4
2001	4.3	4.3	4.1	7.7	8.5	7.8	5.4	5.7
2002	3.9	5.0	4.0	7.9	8.8	7.8	6.2	5.8
2003	4.0	4.6	4.6	7.9	9.7	6.8	6.5	5.9
2004	4.5	5.6	4.6	7.3	9.7	7.2	6.3	6.1
2005	5.2	6.3	5.9	8.8	10.6	9.1	8.2	7.2
2006	5.1	6.1	5.7	9.0	11.0	10.9	7.8	7.5
2007	4.7	5.0	5.0	10.0	12.3	10.8	7.9	7.4
2008	4.6	5.8	5.0	10.3	13.4	12.0	8.8	7.8
2009	6.6	9.3	8.6	11.0	15.2	14.2	10.9	10.0
2010	8.9	10.3	9.2	12.1	16.0	14.5	10.6	11.2
2011	8.8	9.3	7.4	12.7	16.7	14.5	10.6	10.9
2012	9.2	9.8	7.4	12.0	16.6	13.9	10.5	10.9
2013	8.7	8.8	7.8	9.1	12.9	14.4	11.3	10.2

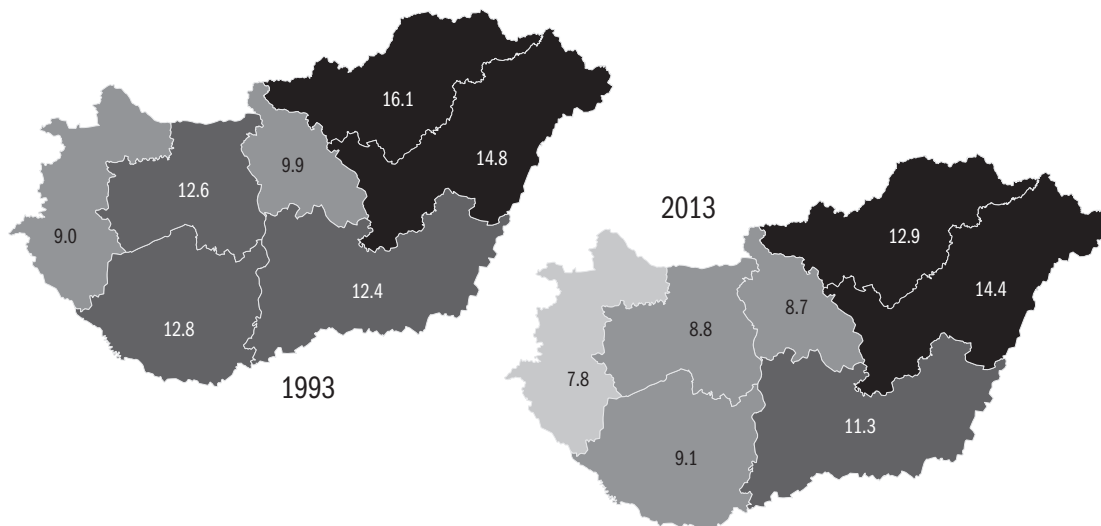
^a Age: 15–74.

Note: Up to the year 2000 data are weighted on the basis of the 1990 Population Census.

Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent09_02

Figure 9.2: Regional inequalities: LFS-based unemployment rates in NUTS-2 level regions



Source: KSH MEF.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena09_02

Table 9.3: Regional differences: The share of registered unemployed^a relative to the economically active population^b, per cent

Year	Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain	Total
1998	4.7	8.6	6.1	11.8	16.0	15.0	10.1	9.5
1999	4.5	8.7	5.9	12.1	17.1	16.1	10.4	9.7
2000	3.8	7.5	5.6	11.8	17.2	16.0	10.4	9.3
2001	3.2	6.7	5.0	11.2	16.0	14.5	9.7	8.5
2002	2.8	6.6	4.9	11.0	15.6	13.3	9.2	8.0
2003	2.8	6.7	5.2	11.7	16.2	14.1	9.7	8.3
2004	3.2	6.9	5.8	12.2	15.7	14.1	10.4	8.7
2005	3.4	7.4	6.9	13.4	16.5	15.1	11.2	9.4
2006	3.1	7.0	6.3	13.0	15.9	15.0	10.7	9.0
2007	3.5	6.9	6.3	13.6	17.6	16.6	11.7	9.7
2008	3.6	7.1	6.3	14.3	17.8	17.5	11.9	10.0
2009	5.4	11.5	9.5	17.8	20.9	20.2	14.4	12.8
2010	6.6	11.8	9.3	17.1	21.5	20.9	15.2	13.3
2011	6.8	10.9	8.0	16.6	21.5	22.0	14.5	13.2
2012	6.6	9.9	7.4	16.4	21.2	21.0	13.6	12.6
2013	6.4	9.5	7.4	15.4	19.5	19.4	19.0	13.0

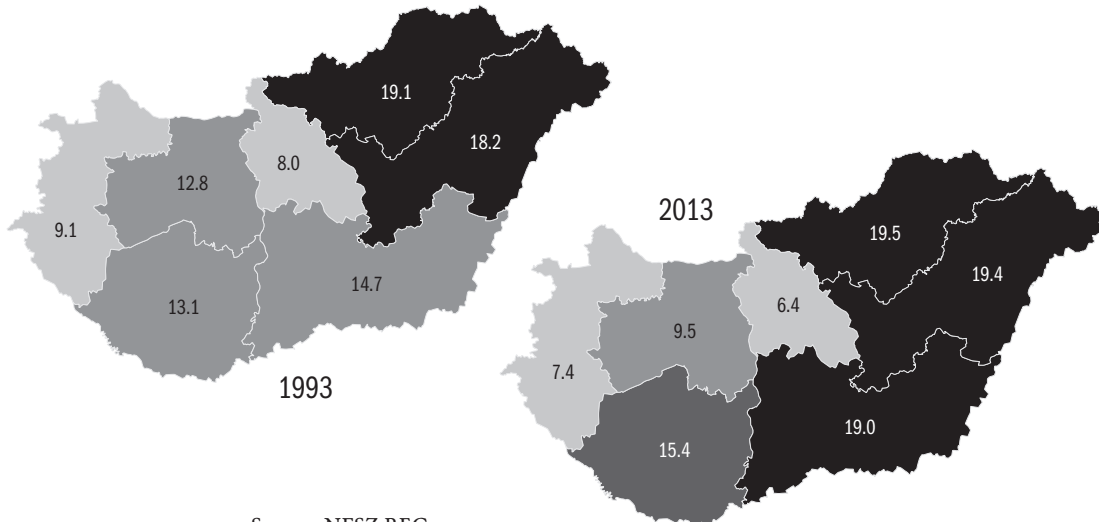
^a Since 1st of November, 2005: the ratio of registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

^b The denominator of the ratio is the economically active population on January 1st of the previous year.

Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent09_03

Figure 9.3: Regional inequalities: The share of registered unemployed relative to the economically active population, per cent, in NUTS-2 level regions



Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena09_03

Table 9.4: Annual average registered unemployment rate^a by counties, per cent^b

County	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Budapest	0.1	5.7	3.0	2.6	2.2	2.4	2.8	2.9	2.6	3.0	3.1	4.6	5.9	6.2	6.1	5.8
Baranya	1.1	11.8	11.6	11.1	11.2	11.9	11.6	13.4	13.3	12.9	13.6	14.7	17.1	16.6	16.4	15.0
Bács-Kiskun	1.1	11.0	10.0	9.3	8.8	9.4	9.9	10.4	10.2	11.4	12.0	17.9	15.6	14.8	13.7	13.3
Békés	1.1	14.0	13.1	11.9	11.2	11.5	12.0	13.0	13.5	15.0	14.8	17.3	18.1	17.8	15.8	14.8
Borsod-Abaúj-Zemplén	2.3	16.7	20.3	19.0	19.1	19.6	18.3	18.9	18.0	19.9	20.1	23.1	23.7	23.5	22.9	20.9
Csongrád	1.0	9.9	8.6	8.3	8.1	8.5	9.7	10.7	8.8	9.2	9.3	11.6	12.4	11.5	11.5	11.0
Fejér	1.0	10.6	7.2	6.4	6.4	7.1	7.3	7.4	7.3	7.1	7.5	11.5	12.4	12.1	10.8	10.1
Győr-Moson-Sopron	0.5	6.8	4.6	4.1	4.0	4.1	4.6	5.4	4.6	4.1	4.1	6.9	6.8	5.7	5.0	4.6
Hajdú-Bihar	0.9	14.2	14.7	13.6	12.8	13.1	12.9	14.0	13.9	15.6	16.5	19.1	20.3	20.7	19.9	18.6
Heves	1.6	12.5	12.0	10.6	9.8	10.0	10.6	11.3	11.1	12.2	12.7	15.8	16.1	16.1	15.7	15.0
Jász-Nagykun-Szolnok	1.6	14.6	13.4	11.5	10.2	10.7	11.2	12.0	11.4	11.8	12.2	15.5	16.4	18.1	16.8	15.4
Komárom-Esztergom	1.0	11.3	8.3	7.0	6.7	6.0	5.8	6.8	5.8	5.4	5.5	10.2	10.4	9.5	8.9	8.7
Nógrád	2.4	16.3	14.9	14.3	13.8	14.6	14.6	16.1	16.1	17.7	17.8	21.2	22.0	22.9	23.9	21.7
Pest	0.5	7.6	5.2	4.4	3.7	3.7	3.8	4.2	3.9	4.3	4.4	6.7	7.7	7.6	7.4	7.2
Somogy	1.4	11.2	11.9	11.6	11.5	12.2	13.4	14.5	14.6	16.2	16.9	19.4	18.9	18.3	18.2	17.1
Szabolcs-Szatmár-Bereg	2.6	19.3	19.5	17.8	16.7	17.7	17.5	18.6	18.8	21.0	22.4	24.7	24.8	26.0	25.0	23.0
Tolna	1.6	12.2	11.8	11.0	10.0	10.7	11.6	11.8	10.5	11.5	12.1	15.2	14.7	14.2	13.7	13.7
Vas	0.4	7.2	5.2	4.9	4.5	5.0	6.0	6.8	6.1	6.2	6.1	9.8	9.6	7.7	6.7	6.9
Veszprém	0.9	10.0	7.2	6.9	6.6	7.0	7.3	8.0	7.7	8.0	8.2	12.6	12.3	10.8	9.6	9.4
Zala	0.8	9.2	7.2	6.5	6.4	7.0	7.4	9.3	9.0	9.3	9.4	13.0	12.9	11.7	11.6	12.3
Total	1.0	10.6	9.3	8.5	8.0	8.3	8.7	9.4	9.0	9.7	10.0	12.8	13.3	13.2	12.6	11.9

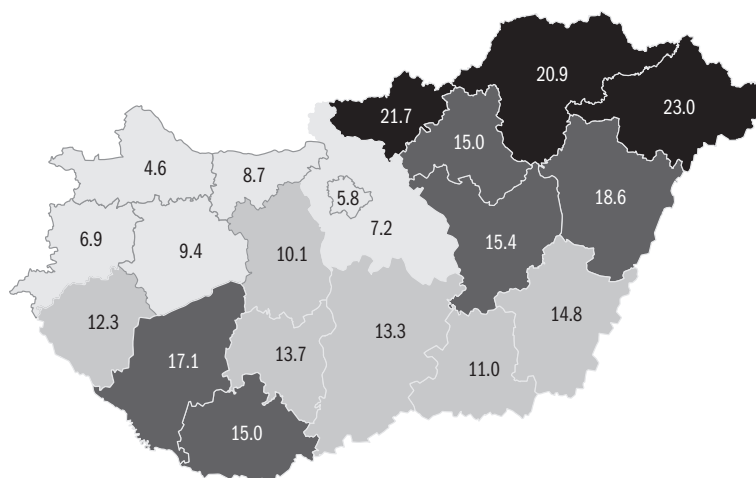
^a Since 1st of November, 2005: the ratio of registered jobseekers. From the 1st of November, 2005 the Employment Act changed the definition of registered unemployed to registered jobseekers.

^b The denominator of the ratio is the economically active population on January 1st of the previous year.

Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent09_04

Figure 9.4: Regional inequalities: Means of registered unemployment rates in the counties, 2013



Source: NFSZ REG.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ena09_04



Table 9.5: Regional inequalities: Gross monthly earnings^a

Year	Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain	Total
1998	86,440	68,297	64,602	60,736	60,361	58,208	58,506	69,415
1999	101,427	77,656	74,808	70,195	70,961	68,738	68,339	81,067
2000	114,637	87,078	83,668	74,412	77,714	73,858	73,591	90,338
2001	132,136	100,358	96,216	86,489	88,735	84,930	84,710	103,610
2002	149,119	110,602	106,809	98,662	102,263	98,033	97,432	117,672
2003	170,280	127,819	121,464	117,149	117,847	115,278	113,532	135,472
2004	184,039	137,168	131,943	122,868	128,435	124,075	121,661	147,111
2005	192,962	147,646	145,771	136,276	139,761	131,098	130,406	157,770
2006	212,001	157,824	156,499	144,189	152,521	142,142	143,231	171,794
2007	229,897	173,937	164,378	156,678	159,921	153,241	153,050	186,229
2008	245,931	185,979	174,273	160,624	169,313	160,332	164,430	198,087
2009	254,471	187,352	182,855	169,615	169,333	160,688	164,638	203,859
2010	258,653	194,794	183,454	171,769	173,696	162,455	169,441	207,456
2011	264,495	197,774	184,311	181,500	185,036	173,243	177,021	214,540
2012	279,073	215,434	202,189	208,895	196,566	191,222	187,187	230,073
2013	290,115	220,495	209,418	190,126	188,635	178,499	187,762	230,018

^a Gross monthly earnings (HUF/person), May.

Note: The data refer to full-time employees in the budgetary sector and firms employing at least 10 workers (1998–99), and at least 5 workers (2000–), respectively.

Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent09_05



Table 9.6: Regression-adjusted earnings differentials

Year	Central Hungary	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain
2000	0.0729	-0.0067	-0.1610	-0.1320	-0.1500	-0.1660
2001	0.0739	-0.0200	-0.1500	-0.1400	-0.1550	-0.1630
2002	0.0903	-0.0378	-0.1120	-0.0950	-0.1170	-0.1070
2003	0.0493	-0.0542	-0.1220	-0.1220	-0.1400	-0.1410
2004	0.0648	-0.0313	-0.1410	-0.0953	-0.1400	-0.1270
2005	0.0291	-0.0372	-0.1310	-0.1010	-0.1450	-0.1390
2006	0.0660	-0.0214	-0.1400	-0.0874	-0.1380	-0.1100
2007	0.0636	-0.0840	-0.1420	-0.1290	-0.1590	-0.1450
2008	0.0446	-0.0904	-0.1750	-0.1350	-0.1920	-0.1660
2009	0.0791	-0.0464	-0.1270	-0.1210	-0.1420	-0.1490
2010	0.0689	-0.0746	-0.1390	-0.1270	-0.1720	-0.1500
2011	0.1060	-0.0301	-0.0806	-0.0058	-0.0886	-0.0947
2012	0.0673	-0.0439	-0.0784	-0.1020	-0.1320	-0.1250
2013	0.0411	-0.0543	-0.1180	-0.1190	-0.1630	-0.1350

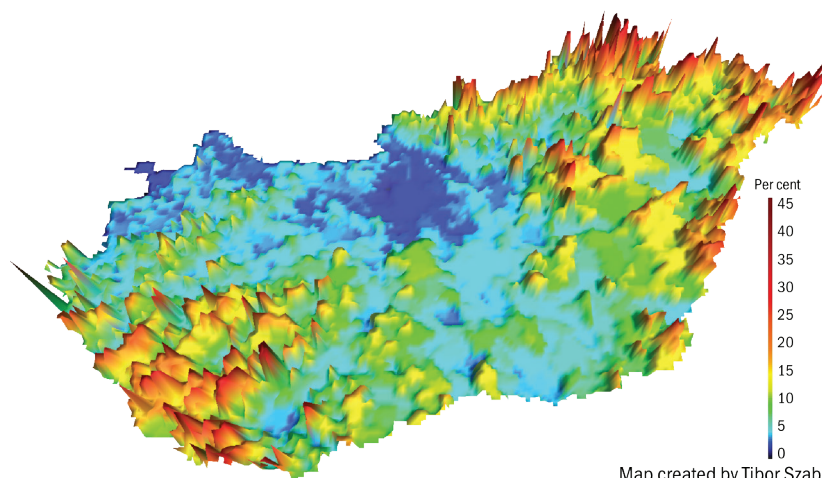
Note: the results indicate the earnings differentials of the various groups relative to the reference group in log points (approximately percentage points). All parameters are significant at the 0.01 level.

Reference category: women, with leaving certificate (general education certificate), not in the public sector, working in the Central-Transdanubia region.

Source: NMH BT.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent09_06

Figure 9.5: The share of registered unemployed relative to the population aged 15–64, 1st quarter 2007, per cent

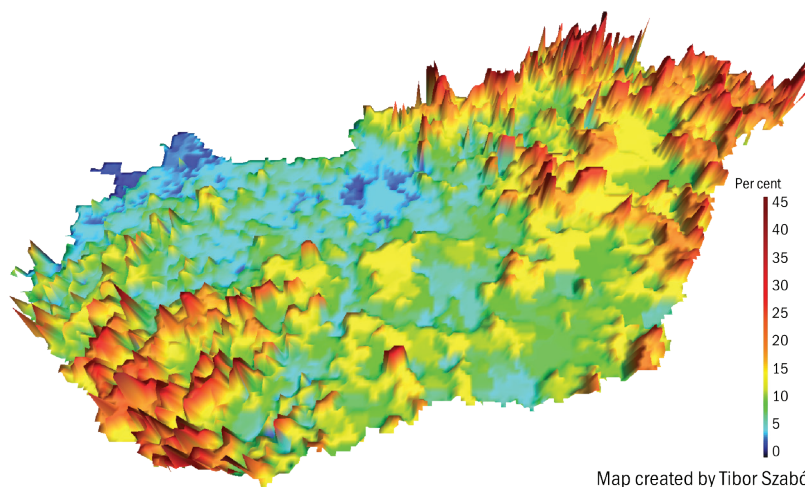


Note: The ratio of registered unemployed was calculated using the following method: number of registered unemployed divided by the permanent population of age 15–64. The number of registered unemployed is a quarterly average. The permanent population data is annual.

Source: Registered unemployed: NFSZ IR. Population: KSH T-Star.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena09_05

Figure 9.6: The share of registered unemployed relative to the population aged 15–64, 1st quarter 2013, per cent



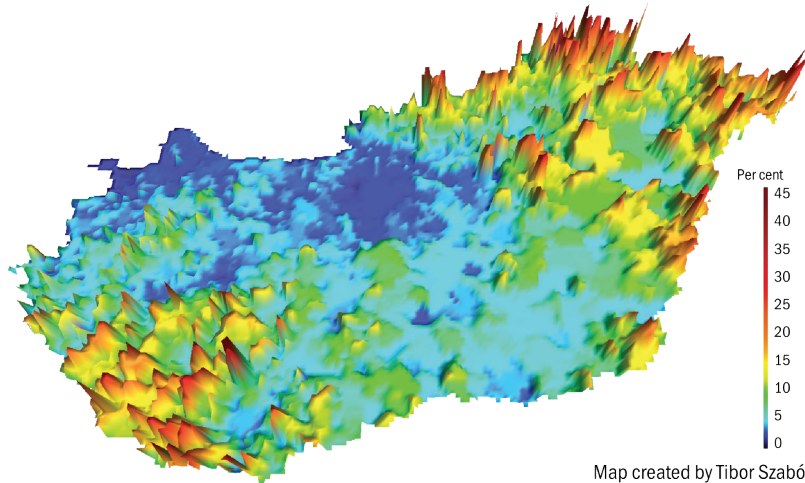
Note: The ratio of registered unemployed was calculated using the following method: number of registered unemployed divided by the permanent population of age 15–64. The number of registered unemployed is a quarterly average. The permanent population data is from the year 2012 (since 2013 data is not yet available).

Source: Registered unemployed: NFSZ IR. Population: KSH T-Star.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena09_06



Figure 9.7: The share of registered unemployed relative to the population aged 15–64, 3rd quarter 2007, per cent



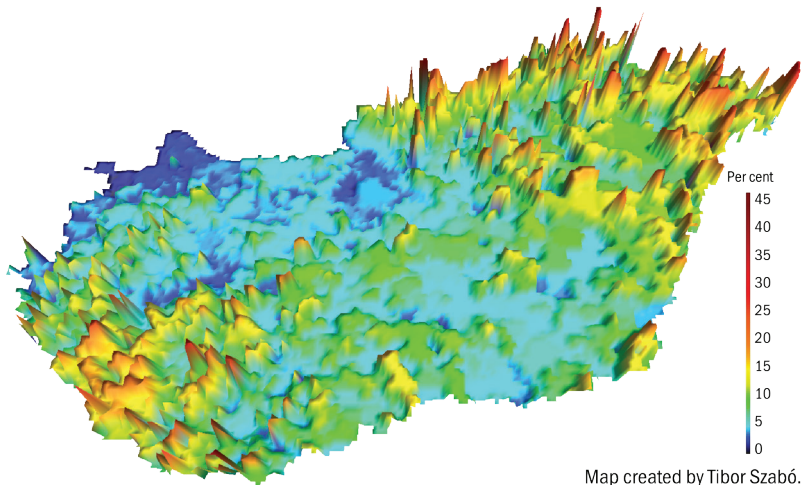
Map created by Tibor Szabó.

Note: The ratio of registered unemployed was calculated using the following method: number of registered unemployed divided by the permanent population of age 15–64. The number of registered unemployed is a quarterly average. The permanent population data is annual.
 Source: Registered unemployed: NFSZ IR. Population: KSH T-Star.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena09_07



Figure 9.8: The share of registered unemployed relative to the population aged 15–64, 3rd quarter 2013, per cent



Map created by Tibor Szabó.

Note: The ratio of registered unemployed was calculated using the following method: number of registered unemployed divided by the permanent population of age 15–64. The number of registered unemployed is a quarterly average. The permanent population data is from the year 2012 (since 2013 data is not yet available).
 Source: Registered unemployed: NFSZ IR. Population: KSH T-Star.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ena09_08

Table 9.7: Regional inequalities: Gross domestic product

Year	Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain	Total
Thousand HUF/person/month								
2000	2,014	1,255	1,468	957	827	815	918	1,290
2001	2,311	1,372	1,539	1,074	947	965	1,031	1,458
2002	2,701	1,462	1,703	1,204	1,050	1,062	1,136	1,648
2003	2,940	1,719	2,001	1,321	1,186	1,213	1,254	1,841
2004	3,237	1,953	2,143	1,468	1,366	1,351	1,439	2,021
2005	3,564	2,056	2,169	1,517	1,439	1,390	1,483	2,185
2006	3,921	2,127	2,359	1,591	1,505	1,487	1,563	2,359
2007	4,105	2,300	2,430	1,691	1,587	1,563	1,643	2,485
2008	4,335	2,401	2,575	1,813	1,652	1,664	1,782	2,644
2009	4,275	2,133	2,390	1,773	1,570	1,664	1,699	2,557
2010	4,355	2,318	2,642	1,812	1,615	1,693	1,733	2,651
2011	4,531	2,436	2,819	1,845	1,648	1,794	1,829	2,771
2012	4,578	2,485	2,905	1,929	1,683	1,817	1,934	2,827
Per cent								
2000	152.2	97.3	113.9	74.8	64.6	63.4	71.8	100.0
2001	158.5	94.1	105.6	73.7	64.9	66.2	70.7	100.0
2002	163.9	88.7	103.4	73.0	63.7	64.4	68.9	100.0
2003	161.1	92.4	107.6	71.6	64.0	65.3	68.0	100.0
2004	157.9	95.3	104.5	71.6	66.6	65.9	70.2	100.0
2005	163.2	94.0	99.2	69.4	65.9	63.6	67.8	100.0
2006	166.2	90.2	100.0	67.4	63.8	63.0	66.3	100.0
2007	165.2	92.6	97.8	68.0	63.9	62.9	66.1	100.0
2008	164.0	90.8	97.4	68.6	62.5	62.9	67.4	100.0
2009	167.2	83.4	93.5	69.3	61.4	65.1	66.4	100.0
2010	164.2	87.4	99.7	68.4	60.9	63.9	65.4	100.0
2011	163.5	87.9	101.7	66.6	59.5	63.7	66.0	100.0
2012	161.9	87.9	102.8	68.2	59.5	64.3	68.4	100.0

Source: KSH.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent09_07

Table 9.8: Commuting

Year	Working in the residence		Commuter	
	in thousands	per cent	in thousands	per cent
1980	3,848.5	76.0	1,217.2	24.0
1990	3,380.2	74.7	1,144.7	25.3
2001	2,588.2	70.1	1,102.1	29.9
2005	2,625.1	68.2	1,221.3	31.8
2011	2,462.8 ^a	62.5	1,479.8	37.2

^a Includes those working abroad but classified by the respondents of LFS as household members.

Source: NSZ, microcensus.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent09_08



Table 10.1: Strikes

Year	Number of strikes	Number of persons involved	Hours lost, in thousands
1995 ^a	7	172,048	1,708
1996	8	4,491	19
1997	5	853	15
1998	7	1,447	3
1999	5	16,685	242
2000	5	26,978	1,192
2001	6	21,128	61
2002	4	4,573	9
2003	7	10,831	19
2004	8	6,276	116
2005	11	1,425	7
2006	16	24,665	52
2007	13	64,612	186
2008	8	8,633	..
2009	9	3,134	8.6
2010	7	3,263	133.1
2011	1	..	..
2012	3	1,885	4.6
2013	1	..	..

^a Teachers strikes number partly estimated.

Source: KSH strike statistics.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent10_01



Table 10.2: National agreements on wage increase recommendations^a

Year	OÉT - from 2013 VKF - Recommendations			Actual indexes	
	Minimum	Average	Maximum	Budgetary sector	Competitive sector
2000	108.5	..	111.0	112.3	114.2
2001	..	..	..	122.9	116.3
2002	108.0	..	110.5	129.2	113.3
2003	..	4.5 % real wage growth	..	117.5	108.9
2004	..	107.0-108.0	..	100.4	109.3
2005	..	106.0	..	112.8	106.9
2006	..	104.0-105.0	..	106.4	109.3
2007	..	105.5-108.0	..	106.4	109.1
2008	..	105.0-107.5	..	106.2	108.4
2009	..	103.0-105.0	..	92.1	104.3
2010	..	real wage preservation	..	100.5 ^b	102.6 ^b
2011	..	104.0-106.0	..	103.8	105.3
2012	-	no wage recommendations	-	98.3	107.2
2013	..	real wage preservation	..	102.9 ^b	103.4 ^b

^a Average increase rates of gross earnings from recommendations by the National Interest Reconciliation Council (OÉT) and the Permanent Consultation Forum of the Business Sector and the Government (VKF, from 2013 onwards). Previous year = 100.

^b Mean real wage index.

Source: KSH, NGM.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_02

Table 10.3: Single employer collective agreements in the business sector

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of agreements	1,333	1,277	1,272	1,295	1,025	1,033	1,032	1,027	962	966	959	942	951
Number of persons covered	698,262	667,634	649,861	637,508	513,118	489,568	532,065	467,964	432,086	448,138	448,980	442,723	448,087

Source: NMH, Employment Relations Information System.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_03

Table 10.4: Single institution collective agreements in the public sector

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of agreements	2,077	2,019	2,026	2,020	1,750	1,435	1,711	1,710	1,737	1,751	1,744	1,735	1,736
Number of persons covered	268,139	251,849	251,352	250,492	228,080	203,497	224,246	222,547	225,434	224,651	222,136	261,401	260,388

Source: NMH, Employment Relations Information System.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent10_04

Table 10.5: Multi-employer collective agreements in the business sector

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of agreements	68	66	71	79	71	75	74	78	80	82	81	81	83
Number of persons covered	213,443	206,729	261,848	263,752	92,196	86,079	83,117	80,506	222,236	221,627	202,005	187,952	173,614

Source: NMH, Employment Relations Information System.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent10_05

Table 10.6: Multi-institution collective agreements in the public sector

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of agreements	10	9	9	10	5	4	2	1	1	1	1	0	0
Number of persons covered	2,081	2,045	2,042	2,072	403	360	238	..	..	..	320	0	0

Source: NMH, Employment Relations Information System.

Online data source in xls format: http://www.bpdata.eu/mpt/2012ent10_06

Table 10.7: The number of firm wage agreements^a, the number of affected firms, and the number of employees covered

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of agreements	471	531	545	515	298	302	214	202	785	905	888	863	874
Number of persons covered	259,033	279,753	316,585	347,223	169,639	151,022	171,259	100,206	377,677	414,522	416,562	415,751	422,887

^a Until 2008, the data relate to the number of 'wage agreements' concerning the next year's average wage increase, in the typical case. In and after 2009, the figures relate to resolutions within collective agreements, which affect the remuneration of workers (including long-term agreements on wage supplements, bonuses, premia, non-wage benefits and rights and responsibilities connected with wage payments).

Source: NMH, Employment Relations Information System.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_07


Table 10.8: The number of multi-employer wage agreements^a, the number of affected firms, and the number of covered companies and employees

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of agreements	19	18	22	19	40	44	40	45	62	68	68	73	74
Number of companies	181	172	243	145	145	162	147	150	2,350	2,460	2,199	1,942	1,096
Number of persons covered	68,882	76,129	88,855	25,175	35,039	42,817	33,735	40,046	191,258	211,753	180,131	191,013	160,092

^a Until 2008, the data relate to the number of 'wage agreements' concerning the next year's average wage increase, in the typical case. In and after 2009, the figures relate to resolutions within collective agreements, which affect the remuneration of workers (including long-term agreements on wage supplements, bonuses, premia, non-wage benefits and rights and responsibilities connected with wage payments).

Source: NMH, Employment Relations Information System.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_08


Table 10.9: The share of employees covered by collective agreements, percent^a

Industries	Multi-employer collective agreements in the business sector ^b					Single employer collective agreements in the national economy				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Agriculture	23.02	27.28	27.80	21.93	23.08	8.13	12.82	12.47	9.81	11.71
Mining and quarrying	5.85	6.16	6.37	5.27	5.36	29.67	36.15	37.84	57.86	40.51
Manufacturing	11.36	11.95	11.40	12.78	11.95	23.32	24.35	23.36	25.94	25.95
Electricity, gas, steam and air conditioning supply	72.48	72.05	69.28	70.27	69.67	63.83	63.69	60.04	59.16	53.09
Water supply; sewerage, waste management and remediation activities	23.31	24.59	25.15	24.32	23.87	52.65	59.58	55.95	46.97	46.61
Construction	99.13	99.40	98.93	98.27	99.88	6.72	6.73	6.74	5.47	5.84
Wholesale and retail trade; repair of motor vehicles and motorcycles	2.88	3.36	3.41	6.71	6.83	12.01	11.07	11.22	7.74	7.82
Transportation and storage	13.17	15.07	15.27	15.69	14.82	45.84	57.57	56.26	58.68	56.65
Accommodation and food service activities	94.44	94.31	94.28	93.24	92.42	10.42	9.98	9.94	8.23	6.49
Information and communication	0.85	0.83	0.82	0.88	0.88	21.59	21.76	20.25	18.93	20.14
Financial and insurance activities	5.90	6.10	4.97	5.72	5.24	31.75	33.94	32.36	35.11	33.41
Real estate activities	37.08	38.06	39.78	16.37	15.73	29.69	30.95	29.30	25.69	24.61
Professional, scientific and technical activities	2.26	2.47	2.32	4.01	4.58	8.72	9.37	8.53	10.97	12.24
Administrative and support service activities	15.57	13.87	12.59	6.33	6.22	7.70	8.43	7.78	8.17	8.01
Public administration and defence; compulsory social security	..	..	..	..	..	6.06	51.22	6.89	14.48	14.52
Education	0.04	..	..	4.79	3.91	41.63	43.03	40.51	44.83	41.94
Human health and social work activities	..	..	..	..	..	42.49	50.35	35.88	38.24	34.48
Arts, entertainment and recreation	0.98	1.31	1.28	0.14	0.16	19.58	22.81	19.79	23.57	24.01
Other service activities	0.71	0.93	0.84	0.62	0.63	13.33	9.70	6.78	7.07	8.76
National economy, total	19.13	20.43	19.86	19.94	19.34	23.20	27.18	23.52	25.05	24.24

^a Percentage share of employees covered by collective agreements.

^b In the observed period only a single multi-employer collective agreement was in effect in the public sector.

Source: NMH, Employment Relations Information System, Register of Collective Agreements.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_09

Table 10.10: Single employer collective agreements in the national economy

Industries	Number of collective agreements					The number of employees covered by collective agreements				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Agriculture	63	65	64	65	66	6,728	9,765	9,310	7,628	8,709
Mining and quarrying	9	10	10	9	9	1,273	1,474	1,491	2,142	1,475
Manufacturing	336	339	344	344	354	140,956	142,402	144,844	157,710	157,659
Electricity, gas, steam and air conditioning supply	50	50	48	47	45	15,998	16,003	14,581	13,807	12,194
Water supply; sewerage, waste management and remediation activities	69	70	69	67	68	23,815	24,236	23,737	19,175	19,010
Construction	49	49	48	45	45	7,917	7,917	7,800	6,153	6,190
Wholesale and retail trade; repair of motor vehicles and motorcycles	127	126	126	119	118	41,485	38,031	37,973	25,686	25,573
Transportation and storage	55	59	60	57	59	85,067	102,452	102,164	104,150	98,748
Accommodation and food service activities	38	38	37	36	35	8,384	8,337	8,342	6,576	4,944
Information and communication	12	15	15	14	15	14,082	14,256	14,256	13,540	13,727
Financial and insurance activities	24	26	27	27	26	22,080	22,729	20,997	22,300	20,892
Real estate activities	32	33	31	31	32	8,781	8,781	8,522	6,957	7,100
Professional, scientific and technical activities	51	54	55	53	54	6,319	6,822	6,795	8,628	10,047
Administrative and support service activities	26	24	25	24	25	8,464	10,507	11,359	11,080	11,206
Public administration and defence; compulsory social security	99	103	105	102	105	17,796	16,433	17,015	37,643	38,313
Education	1,288	1,293	1,292	1,295	1,291	106,785	106,485	106,233	113,995	102,582
Human health and social work activities	245	241	239	236	226	90,648	77,719	88,141	100,879	92,631
Arts, entertainment and recreation	90	92	94	92	91	7,382	7,242	7,109	7,786	7,637
Other service activities	20	19	18	18	19	2,361	1,422	1,482	1,515	1,514
National economy, total	2,683	2,706	2,707	2,681	2,683	616,321	623,013	632,151	667,350	640,151

Source: NMH, Employment Relations Information System, Register of Collective Agreements.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_10

Table 10.11: Multi-employer collective agreements in the business sector^a

Industries	The number of firms covered by the multi-employer ^b collective agreements					The number of employees covered by multi-employer collective agreements				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Agriculture	596	601	601	600	27	17,969	20,724	20,416	16,833	17,098
Mining and quarrying	5	5	5	5	3	251	251	251	195	195
Manufacturing	605	604	601	179	155	66,956	69,871	68,953	75,700	70,908
Electricity, gas, steam and air conditioning supply	30	36	36	34	35	18,164	18,096	16,818	16,393	15,991
Water supply; sewerage, waste management and remediation activities	24	23	23	23	22	9,769	9,769	9,769	9,229	9,229
Construction	494	489	491	486	484	116,643	116,745	113,936	110,173	105,521
Wholesale and retail trade; repair of motor vehicles and motorcycles	124	127	125	68	47	9,934	11,538	11,551	22,258	22,316
Transportation and storage	195	197	155	157	155	23,207	26,780	26,780	26,867	24,972
Accommodation and food service activities	37	37	37	31	29	62,600	65,581	65,410	63,526	61,204
Information and communication	11	10	10	12	12	543	543	543	597	597
Financial and insurance activities	12	12	12	13	7	4,082	4,082	3,215	3,626	3,269
Real estate activities	56	56	56	47	28	10,829	10,579	10,579	4,048	4,048
Professional, scientific and technical activities	48	43	43	39	33	1,486	1,621	1,621	2,755	3,293
Administrative and support service activities	67	87	87	84	82	16,903	16,862	16,862	7,855	7,888
Public administration and defence; compulsory social security	1	0	0	0	0	..	0	0	0	0
Education	21	17	17	17	20	8	..	..	171	171
Human health and social work activities	1	1	1	1	0	..	..	..	..	..
Arts, entertainment and recreation	1	1	1	1	1	127	127	127	13	13
Other service activities	8	8	8	7	2	121	133	121	88	83
National economy, total	2,336	2,354	2,309	1,804	1,142	359,592	373,302	366,952	360,327	346,796

^a In the observed period only a single multi-employer collective agreement was in effect in the public sector.

^b Multi-employer collective agreements are those concluded and/or extended by several employers or employer organizations.

Source: NMH, Employment Relations Information System, Register of Collective Agreements.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent10_11

Table 11.1: Family benefits

Year	Tax credit for families ^a		Child benefit ^b		Regular child protection allowance ^c		Wage related maternity benefit ^d		Flat rate maternity benefits ^d	
	Average monthly amount, HUF	Average number of recipient families	Average monthly amount per family, HUF	Average number of recipient families	Average monthly amount, HUF	Average number of recipient families	Average monthly amount, HUF	Average number of recipients	Average monthly amount, HUF	Average number of recipients
2003	6,841	1,009,660	11,283	1,292,000	4,705	704,000	48,742	77,942	22,091	214,640
2004	6,941	969,512	11,971	1,290,200	5,236	670,000	54,322	83,678	24,174	210,509
2005	6,979	924,263	12,596	1,264,500	5,619	663,000	58,676	87,172	25,706	208,708
2006	9,392	122,883	21,637	1,269,000	-	-	63,221	91,678	27,102	212,741
2007	..	..	23,031	1,224,000	-	-	68,763	93,973	28,496	207,608
2008	..	..	24,521	1,246,600	-	-	74,518	94,514	30,880	208,652
2009	..	..	24,524	1,245,900	-	-	78,725	95,050	30,328	214,416
2010	..	..	24,442	1,224,000	-	-	83,959	94,682	30,041	217,807
2011	..	..	24,528	1,190,707	-	-	84,929	87,717	..	207,550
2012	..	..	24,491	1,167,640	-	-	91,050	81,839	..	206,645
2013	..	..	24,257	1,149,796	-	-	96,661	81,234	..	198,685

^a Introduced in 1999. Beginning in 2006, this became a part of family benefits, only families with 3 or more children are entitled to tax credits to the amount of 4,000 HUF per child.

^b Annual mean. From 1999 to November 8, 2002, the child care benefit includes the family allowance and schooling support. Beginning in 2002, the benefits paid in the 13th month are included as well.

^c Annual average. Was in use from 1998 to 2005. ^d Annual average.

Source: NAV, KSH Welfare Statistics.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_01

Table 11.2: Unemployment benefits and average earnings

Year	Insured unemployment benefit and other non-means tested benefits ^a		Means tested unemployment assistance ^b		Net monthly earnings, HUF ^c		
	Average monthly amount, HUF	Average number of recipients	Average monthly amount, HUF	Average number of recipients	Male	Female	Together
2003	34,762	107,226	15,010	138,127	94,612	84,632	89,906
2004	37,107	109,654	15,864	144,853	98,101	87,710	93,233
2005	39,593	111,732	16,991	158,565	108,139	98,625	103,727
2006	43,344	109,095	23,771	160,426	..	..	110,951
2007	46,208	96,463	25,705	194,779	..	..	114,282
2008	49,454	97,047	27,347	213,436	..	..	121,969
2009	51,831	152,197	23,117	167,287	..	..	124,116
2010	50,073	125,651	27,574	174,539	..	..	132,604
2011	52,107	110,803	25,139	209,918	..	..	141,151
2012	63,428	62,380	21,943	236,609	..	..	144,085
2013	68,730	48,019	..	..	..	..	151,085

^a Average of headcount at the end of the month. Includes the pre-pension allowance (2000).

^b This scheme changed substantially in July 2006, therefore figures for 2006 are given for the period July-December 2006.

^c The average net wage refers to the entire economy, competitive sector after 2001: firms with at least 4 employees.

Source: NFSZ: Labour Market Report, 2001. KSH: Welfare systems 2007, Welfare Statistics, Yearbook of Demographics. KSH Social Statistics Yearbooks. KSH Statat.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_02



Table 11.3.a: Number of those receiving pension^a, and the mean sum of the provisions they received in January of the given year

Year	Old age pension			Disability pension under and above retirement age		
	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF
2005	1,643,409	63,185	67,182	808,107	52,259	55,563
2006	1,658,387	69,145	72,160	806,147	56,485	58,935
2007	1,676,477	74,326	78,577	802,506	59,978	63,120
2008	1,716,315	81,975	87,481	794,797	65,036	69,160
2009	1,731,213	90,476	93,256	779,130	70,979	73,166
2010	1,719,001	94,080	98,804	750,260	73,687	77,500
2011	1,700,800	99,644	104,014	721,973	77,945	81,367
2012	1,959,202 ^b	99,931	104,610	302,990 ^c	..	..

^a Pension: Excludes survivors pensions

^b From 2012 onwards, the disability pensions of persons older than the mandatory retirement age are granted as old-age pensions.

^c Excludes persons older than the mandatory retirement age.

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_03a



Table 11.3.b: Number of those receiving pension^a, and the mean sum of the provisions they received in January of the given year, from 2011

Type of benefit	2011			2012			2013		
	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF
Old age pension	1,700,800	99,644	104,014	1,959,202	99,931	104,610	2,000,128	107,236	112,781
Old age pension of persons above the mandatory retirement age	1,462,449	97,072	101,335	1,487,697	102,332	107,138	1,518,977	109,841	115,521
Pension for women entitled to retire before the mandatory age after having accumulated at least 40 accrual years	0	-	-	62,955	102,402	106,731	90,166	109,803	115,474
Old age pension of persons younger than the mandatory retirement age	238,351	115,427	120,449	11,664	174,326	182,542	9,301	188,664	198,473
Disability pension for persons older than the mandatory retirement age	384,443	84,928	88,662	396,886	88,351	92,507	381,684	94,276	99,151

^a Pension: Excludes survivors pensions

From 2012 onwards, no old-age pension is granted to persons younger than the mandatory retirement age. Exceptions are pensions for women having accumulated 40 or more accrual years, and allotments for miners, ballet dancers and servicemen in the military, frontier guards, police and fire departments. Early retirement pensions granted before 2012 have been transformed to 'allotments' paid prior to the recipient reaching the mandatory retirement age.

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_03b

Table 11.4.a: Number of those receiving social annuities for people with damaged health, and the mean sum of the provisions they received after the increase, in January of the given year

Year	Temporary annuity		Regular social annuity		Health damage annuity for miners		Total	
	Number of recipients	Average amount, HUF	Number of recipients	Average amount, HUF	Number of recipients	Average amount, HUF	Number of recipients	Average amount, HUF
2004	11,949	33,798	207,300	21,370	2,950	69,777	222,199	22,681
2005	13,186	36,847	207,091	22,773	2,839	74,161	223,116	24,259
2006	14,945	40,578	195,954	23,911	2,786	77,497	213,685	25,776
2007	19,158	42,642	184,845	25,050	2,693	80,720	206,696	27,406
2008	21,538	46,537	170,838	27,176	2,601	85,805	194,977	30,096
2009	21,854	46,678	159,146	27,708	2,533	86,165	183,533	30,774
2010	20,327	47,060	148,704	27,645	2,448	86,252	171,479	30,783
2011	16,448	47,096	139,277	27,588	2,371	86,411	158,096	30,500
2012 ^a	13,090	..	127,408	..	2,279	86,542	142,787	..

^a Disability pensions and temporary provisions for disability groups 1-2, granted prior to 2012, have been transformed to 'disability allotments'. The provisions for permanent social benefit recipients born before 1955 have also been transformed to 'disability allotments'. Disability pensions and permanent social benefits granted before 2012 to the members of disability group 3 have been transformed to 'rehabilitation allotment'. The conditions of these provisions will be set in the framework of a complex revision of entitlement and eligibility.

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_04a

Table 11.4.b: Number of those receiving social annuities for people with damaged health, and the mean sum of the provisions they received after the increase, in January of the given year, from 2012

	2012			2013		
	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF	Number of recipients	Average amount before increase, HUF	Average amount after increase, HUF
Support for disabled persons						
Disability and rehabilitation provision	473,360	59,899	62,278	444,014	62,780	66,035
Of which:						
- Disability provision for persons growing older than the mandatory retirement age	15,636	30,320	30,326	41,162	63,260	66,542
- Disability provision for persons younger than the mandatory retirement	237,323	68,542	71,475	209,264	70,753	74,422
- Rehabilitation provision	192,331	49,467	51,244	178,112	51,718	54,398
- Rehabilitation benefit	25,791	73,754	77,164	13,265	80,101	84,256
- Annuity for miners with damaged health	2,279	86,434	86,542	2,211	86,455	90,915

Disability pensions and temporary provisions for disability groups 1-2, granted prior to 2012, have been transformed to 'disability allotments'. The provisions for permanent social benefit recipients born before 1955 have also been transformed to 'disability allotments'. Disability pensions and permanent social benefits granted before 2012 to the members of disability group 3 have been transformed to 'rehabilitation allotment'. The conditions of these provisions will be set in the framework of a complex revision of entitlement and eligibility.

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_04b



Table 11.5: The median age for retirement and the number of pensioners

Pension	Age	Persons	Age	Persons	Age	Persons	Age	Persons	Age	Persons
	2004		2005		2006		2007		2008	
Females										
Old age and similar pensions	57.6	36,806	57.7	45,115	57.5	46,093	57.8	62,015	57.3	39,290
Disability and accident-related disability pension	48.7	19,901	49.1	19,250	49.3	18,488	49.8	15,837	50.5	8,565
Rehabilitation annuity	-	-	-	-	-	-	-	-	44.1	1,604
Total	54.5	56,707	55.1	64,365	55.2	64,581	56.2	77,852	55.7	49,459
Males										
Old age and similar pensions	60.1	36,111	59.9	30,560	59.9	33,134	59.7	50,878	59.8	25,749
Disability and accident-related disability pension	50.1	24,915	50.5	24,565	50.6	23,045	51.1	19,032	51.9	11,069
Rehabilitation annuity	-	-	-	-	-	-	-	-	44.5	1,556
Total	56.0	61,026	55.7	55,125	56.1	56,179	57.4	69,910	56.9	38,374
Together										
Old age and similar pensions	58.9	72,917	58.6	75,675	58.5	79,227	58.7	112,893	58.3	65,039
Disability and accident-related disability pension	49.5	44,816	49.9	43,815	50.0	41,533	50.5	34,869	51.3	19,634
Rehabilitation annuity	-	-	-	-	-	-	-	-	44.3	3,160
Total	55.3	117,733	55.4	119,490	55.6	120,760	56.8	147,762	56.2	87,833
	2009		2010		2011		2012		2013 ^a	
Females										
Old age and similar pensions	59.9	15,243	60.7	13,617	58.5	84,922	59.1	53,581	59.4	38,512
Pension for women entitled to retire before the mandatory age after having accumulated at least 40 accrual years	-	-	-	-	57.6	54,770	57.8	27,588	57.9	20,515
Disability and accident-related disability pension	51.1	9,065	50.8	10,478	50.7	8,667	-	-	-	-
Rehabilitation annuity	44.9	6,574	47.6	6,789	47.2	4,386	..	..	..	..
Total	54.1	30,882	54.4	30,884	57.3	97,975	..	..	..	..
Males										
Old age and similar pensions	59.7	37,116	60.2	37,219	60.3	43,240	62.0	21,996	62.2	19,163
Disability and accident-related disability pension	52.3	11,992	52.1	13,345	51.9	10,673	-	-	-	-
Rehabilitation annuity	44.8	6,278	47.4	6,123	47.0	4,102	..	..	..	..
Total	56.4	55,386	56.9	56,687	57.8	58,015	..	..	..	..
Together										
Old age and similar pensions	59.7	52,359	60.3	50,836	59.0	128,162	60.0	75,577	60.3	57,675
Disability and accident-related disability pension	51.8	21,057	51.5	23,823	51.3	19,340	-	-	-	-
Rehabilitation annuity	44.9	12,852	47.5	12,912	47.1	8,488	..	25,791	..	13,265
Total	55.6	86,268	56.0	87,571	57.5	155,990	..	101,368	..	70,940

^a Preliminary data.

Note: The source of these statistics is data from the pension determination system of the ONYF (NYUGDMEG), so these do not include the data for the armed forces and the police. Data on MÁV is included from 2008.

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_05

Table 11.6: The number of those receiving a disability annuity and the mean sum of the provisions they received after the increase, in January of the given year

Year	Disability annuity		Year	Disability annuity	
	Number of recipients	Average amount, HUF		Number of recipients	Average amount, HUF
2000	25,267	13,746	2007	30,039	30,219
2001	25,490	18,220	2008	30,677	32,709
2002	26,350	20,931	2009	31,263	33,434
2003	27,058	23,884	2010	31,815	33,429
2004	27,923	25,388	2011	32,314	33,429
2005	28,738	27,257	2012	32,560	33,426
2006	29,443	28,720	2013	32,463	33,422

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_06

Table 11.7: Newly determined disability pension claims and detailed data on the number of newly determined old-age pension claims

Year	Disability and accident-related disability pensions	Old-age and old-age type pensions ^a			From the total: at the age limit			From the total: under the age limit		
		Total	Male	Female	Together	Male	Female	Together	Male	Female	Together
1996	59,967	31,770	59,939	91,709	9,893	20,073	29,966	18,681	31,857	50,538
1997	48,262	37,886	32,614	70,500	10,630	1,138	11,768	24,308	28,154	52,462
1998	42,975	12,908	17,841	30,749	385	882	1,267	11,461	15,244	26,705
1999	46,701	15,181	24,418	39,599	2,601	5,808	8,409	11,494	16,922	28,416
2000	55,558	18,071	29,526	47,597	613	813	1,426	16,089	26,859	42,948
2001	54,645	28,759	14,267	43,026	2,200	4,882	7,082	25,175	7,396	32,571
2002	52,211	30,209	25,719	55,928	2,593	646	3,239	26,346	23,503	49,849
2003	48,078	32,574	13,574	46,148	3,058	5,098	8,156	28,064	6,537	34,601
2004	44,196	35,940	36,684	72,624	3,842	989	4,831	30,234	33,817	64,051
2005	41,057	33,175	48,771	81,946	4,035	6,721	10,756	27,719	40,142	67,861
2006	36,904	34,207	47,531	81,738	4,013	732	4,745	29,025	45,675	74,700
2007	34,991	51,037	62,168	113,205	3,722	6,660	10,382	45,731	54,177	99,908
2008	19,832	25,912	39,423	65,335	3,154	288	3,442	22,180	38,761	60,941
2009	21,681	37,468	15,468	52,936	4,193	6,692	10,885	32,452	8,289	40,741
2010	24,094	37,394	13,719	51,113	6,350	7,213	13,563	29,990	5,801	35,791
2011	19,340	43,240	84,922	128,162	9,058	7,938	16,996	32,400	76,019	108,419
2012	-	21,996	53,581	75,577	11,054	9,471	20,525	8,317	42,624	50,941
2013 ^b	-	19,163	38,512	57,675	17,270	12,497	29,767	282	24,991	25,273

^a Old-age type pensions include: old-age pensions given with a retirement age threshold allowance (early retirement), artists' pensions, pre-pension up until 1997, miners' pensions.

^b Preliminary data.

Note: Pensions disbursed in the given year (determined according to the given year's rules).

The source of these statistics is data from the pension determination system of the ONYF (NYUGDMEG), so these do not include the data for the armed forces and the police.

Source: ONYF.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_07

Table 11.8: Retirement age threshold

Birth year	Calendar year															
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1948	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
1949	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
1950	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
1951	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73
1952 I.	57	58	59	60	61	62.5	63	64	65	66	67	68	69	70	71	72
1952 II.	57	58	59	60	60	62	62.5	64	65	66	67	68	69	70	71	72
1953	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
1954 I.	55	56	57	58	59	60	61	62	63.5	64	65	66	67	68	69	70
1954 II.	55	56	57	58	59	60	61	62	63	63.5	65	66	67	68	69	70
1955	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69
1956 I.	53	54	55	56	57	58	59	60	61	62	63	64.5	65	66	67	68
1956 II.	53	54	55	56	57	58	59	60	61	62	63	64	64.5	66	67	68
1957	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
1958	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
1959	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
1960	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

Those persons are entitled to receive an old age pension who are at least of the age of the old age pension threshold indicated in the legislature – marked grey in the table – relevant to them (uniform for men and women), who have fulfilled the required number of years of service, and who are not insured. In the case of full old age pension, the minimum service time is 20 years, for partial pension it is 15 years. The table displays the old age pension age threshold in the case of a “representative person”. The cells show the age, based on the calendar year, of a person born in the given year.

Women who have accumulated at least 40 years towards entitlement (which is not necessarily the same as 40 years of service) are entitled to an old age pension, regardless of their age. According to the 2011 legislature number CLXVII, following December 31st, 2011, no pension can be determined prior to the age threshold. At the same time, the legislature ensures allowances that had been determined earlier to be continued under different legal titles (pre-retirement age pension is replaced by pre-retirement age provision, service pension by service salary), as well as closure of acquisitions, and the opportunity for the enforcement of acquired rights.

Pre-retirement age pension: early and reduced amount early old age pension, pensions with age preference, miner’s pension, artist’s pension, pre-retirement age old age pension of parliamentary and European parliamentary representatives and mayors, pre-pension, service pension of professional members of the armed forces.

Source: 1997. legislature number LXXXI.; 2011. legislature number CLXVII., http://www.jozsefvaros.hu/dokumentumok/234_korhatar_elotti_nyudij_ellatasok.pdf.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent11_08

Table 12.1: The mean, minimum, and maximum value of the personal income tax key, per cent

Year	Mean tax burden, per cent	The personal income tax key projected on the gross wage	
		minimum	maximum
1988	..	0	60
1989	..	0	56
1990	..	0	50
1991	..	0	50
1992	..	0	40
1993	..	0	40
1994	..	0	44
1995	..	0	44
1996	..	20	48
1997	..	20	42
1998	..	20	42
1999	..	20	40
2000	..	20	40
2001	..	20	40
2002	..	20	40
2003	..	20	40
2004	..	18	38
2005	18.89	18	38
2006	19.03	18	36
2007	18.63	18	36
2008	18.86	18	36
2009	18.10	18	36
2010 ^a	16.34	21.59	40.64
2011 ^a	13.78	20.32	20.32
2012 ^b	14.90	16	20.32
2013	..	16	16

^a In 2010 the nominal tax rate was 17% for annual incomes lower than 5,000,000 HUF. For incomes higher than 5,000,001 HUF it was 850,000 HUF plus 32% of the amount exceeding 5,000,000 HUF. In 2011, the nominal tax key was 16%. The joint tax base is the amount of income appended with the tax base supplement (equal to 27%).

^b In 2012 the nominal tax key was 17%. The joint tax base is the amount of income appended with the tax base supplement.

The amount of the tax base supplement:

- does not need to be determined for the part of the income included in the joint tax base that does not surpass 2 million 424 thousand HUF,
- should be determined as 27 % of the part of the income included in the joint tax base that is over 2 million 424 thousand HUF.

Source: Mean tax burden: http://nav.gov.hu/nav/szolgalatasok/adostatisztikak/szemelyi_jovedelemado/szemelyijovedelemado_adostatiszika.html. Other data: http://nav.gov.hu/nav/szolgalatasok/adokulcsok_jarulekmeretek/adotablak.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent12_01

Table 12.2: Changes in the magnitude of the tax wedge in the case of minimum wage and the temporary work booklet (AMK)

Year	Minimum wage				Total wage cost in the case of minimum wage		Minimum wage tax wedge, %	AMK public burden ^a , HUF/day		Total wage cost ^a , HUF/day		AMK tax wedge, % ^a	
	gross, HUF/month	gross, HUF/day	net, HUF/month	net, HUF/day	HUF/month	HUF/day		general	registered unemployed	general	registered unemployed	general	registered unemployed
1997	17,000	783	15,045	693	26,450	1,196	43.1	500	500	1,193	1,193	41.9	41.9
1998	19,500	899	17,258	795	30,297	1,369	43.0	500	500	1,295	1,295	38.6	38.6
1999	22,500	1,037	18,188	838	34,538	1,546	47.3	500	500	1,338	1,338	37.4	37.4
2000	25,500	1,175	20,213	931	38,963	1,746	48.1	800	800	1,731	1,731	46.2	46.2
2001	40,000	1,843	30,000	1,382	58,400	2,638	48.6	1,600	1,600	2,982	2,982	53.6	53.6
2002	50,000	2,304	36,750	1,694	71,250	3,226	48.4	1,000	500	2,694	2,194	37.1	22.8
2003	50,000	2,304	42,750	1,970	70,200	3,191	39.1	1,000	500	2,970	2,470	33.7	20.2
2004	53,000	2,442	45,845	2,113	74,205	3,376	38.2	1,000	500	3,113	2,613	32.1	19.1
2005	57,000	2,627	49,305	2,272	79,295	3,572	37.8	700	500	2,972	2,772	23.6	18.0
2006	62,500	2,880	54,063	2,491	85,388	3,910	36.7	700	700	3,191	3,191	21.9	21.9
2007	65,500	3,018	53,915	2,485	89,393	4,095	39.7	700	700	3,185	3,185	22.0	22.0
2008	69,000	3,180	56,190	2,589	94,065	4,310	40.3	900	900	3,489	3,489	25.8	25.8
2009	71,500	3,295	57,815	2,664	97,403 ^b	4,464	40.6	900	900	3,564	3,564	25.3	25.3
2010	73,500	3,387	60,236	2,776	94,448	4,352	36.2	900	900	3,676	3,676	24.5	24.5

	Minimum wage				Total wage cost in the case of minimum wage		Minimum wage tax wedge, %	Simplified employment ^c , Ft/day		Total wage cost, HUF/day		Tax wedge, simplified employment, %	
	gross, HUF/month	gross, HUF/day	net, HUF/month	net, HUF/day	HUF/month	HUF/day		temporary work	seasonal agricultural/tourism work	temporary work	seasonal agricultural/tourism work	temporary work	seasonal agricultural/tourism work
2011	78,000	3,594	60,600	2,793	100,230	4,619	39.5	1,000	500	3,793	3,293	26.4	15.2
2012	93,000	4,280	60,915	2,803	119,505	5,500	49.0	1,000	500	3,803	3,303	26.3	15.1
2013	98,000	4,510	64,190	2,954	125,930	5,795	49.0	1,000	500	3,954	3,454	25.3	14.4

^a Wage paid at the amount in accordance with the gross daily minimum wage column and in the case of work performed with a temporary work booklet. The basis for the comparison with the minimum wage is the assumption that employers pay temporary workers the smallest possible amount.

^b According to regulations pertaining to the first half of 2009.

^c From April 1st, 2010. the temporary work booklets and the public contribution tickets were discontinued, these were replaced by simplified employment.

Note: The tax wedge is the quotient of the total public burden (tax and contribution) and the total wage cost, it is calculated as: tax wedge = (total wage cost – net wage)/total wage cost. Source: Minimum wage: http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qli041.html.

Public contribution ticket: 1997. legislation number LXXIV. Simplified employment: 2010. legislation number LXXV. Based on calculations of Ágota Scharle.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent12_02

Table 12.3: The monthly amount of the minimum wage, the guaranteed wage minimum, and the minimum pension, in thousands of current-year HUF

Date	Monthly amount of the minimum wage, HUF	As a percentage of mean gross earnings	As a ratio of APW, %	Guaranteed skilled workers minimum wage, HUF	Minimum pension, HUF
1990. II. 1.	4,800	..	40.9	-	4,300
1991. IV.1.	7,000	..	..	-	5,200
1992. I. 1.	8,000	35.8	41.4	-	5,800
1993. II. 1.	9,000	33.1	39.7	-	6,400
1994. II. 1.	10,500	30.9	37.8	-	7,367
1995. III. 1.	12,200	31.4	37.0	-	8,400
1996. II. 1.	14,500	31.0	30.1	-	9,600
1997. I. 1.	17,000	29.7	35.1	-	11,500
1998. I. 1.	19,500	28.8	34.4	-	13,700
1999. I. 1.	22,500	29.1	34.6	-	15,350
2000. I. 1.	25,500	29.1	35.0	-	16,600
2001. I. 1.	40,000	38.6	48.3	-	18,310
2002. I. 1.	50,000	40.8	54.5	-	20,100
2003. I. 1.	50,000	36.4	51.5	-	21,800
2004. I. 1.	53,000	37.2	50.7	-	23,200
2005. I. 1.	57,000	33.6	49.2	-	24,700
2006. I. 1.	62,500	36.5	52.3	68,000	25,800
2007. I. 1.	65,500	35.4	49.2	75,400	27,130
2008. I. 1.	69,000	34.7	49.5	86,300	28,500
2009. I. 1.	71,500	35.8	50.0	87,500	28,500
2010. I. I.	73,500	36.3	49.5	89,500	28,500
2011. I. I.	78,000	36.6	49.8	94,000	28,500
2012. I. I.	93,000	43.6	54.3	108,000	28,500
2013. I. I.	98,000	43.9	..	114,000	28,500
2014. I. I.	101,500	..	..	118,000	28,500

Notes: Up to the year 1999, sectors employing unskilled labour usually received an extension of a few months for introducing the new minimum wage. The guaranteed wage minimum applies to skilled employees, the minimum wage and the skilled workers minimum wage are gross amounts. The minimum wage is exempt from the personal income tax from September 2002. This policy resulted in a 15.9% increase in the net minimum wage. APW: mean wage of workers in the processing industry, based on the NMH BT. In 1990, the data is the previous year's data, indexed (since there was no NMH BT conducted in 1990).

Source: Minimum wage: 1990–91: <http://www.msosz.hu/files/1/64/345.pdf>, 1992–: CSO. Guaranteed wage minimum: http://www.nav.gov.hu/nav/szolgaltatasok/adokulcsok_jarulekmertekek/minimalber_garantalt. Minimum pension: http://www.ksh.hu/docs/hun/xtabla/nyugdij/tablly11_03.html. APW: NMH BT, http://nfsz.munka.hu/sysres/adattar2012/tables/V01_03.html.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent12_03

Table 12.4: The tax burden on work as a ratio of tax revenue and earnings

Year	Tax burden on work as a ratio of tax revenue ^a , %	Implicit tax key ^b	Tax wedge on 67% level of mean earnings	Tax wedge on the minimum wage ^c
1990		..	..	38.2
1991	52.4	..	..	40.4
1992	54.8	..	..	40.9
1993	54.4	..	..	42.3
1994	53.7	..	..	41.2
1995	52.1	42.3	..	44.2
1996	52.5	42.1	..	41.8
1997	54.2	42.5	..	43.1
1998	53.1	41.8	..	43.0
1999	51.5	41.9	..	47.3
2000	51.8	41.4	51.4	48.1
2001	53.1	40.9	50.9	48.6
2002	53.7	41.2	48.2	48.4
2003	51.8	39.3	44.5	39.1
2004	50.1	38.3	44.8	38.2
2005	51.1	38.4	43.1	37.8
2006	51.7	38.8	43.3	36.7
2007	52.0	41.0	46.0	39.7
2008	53.0	42.3	46.7	40.3
2009	51.4	40.2	46.3	40.6 ^d
2010	49.7	38.4	43.6	36.2
2011	48.6	38.4	45.2	39.5
2012	..	..	47.6	49.0
2013	..	..	..	49.0

^a Tax burden on work and contributions as a ratio of tax revenue from all tax forms.

^b The implicit tax key is the quotient of the revenue from taxes and contributions pertaining to work and the income derived from work.

^c The tax wedge is the quotient of the total public burden (tax and contribution) and the total wage cost, it is calculated as: tax wedge = (total wage cost – net wage)/total wage cost.

^d The tax wedge of the minimum wage is the 2009 annual mean (the contributions decreased in June).

Source: 1991–1995: estimate of Ágota Scharle based on Ministry of Finance (PM) balance sheet data. 1996–2009: http://ec.europa.eu/taxation_customs/taxation/gen_info/economic_analysis/tax_structures/index_en.htm. 2010: Eurostat online database. Implicit tax key: Eurostat online database (gov_a_tax_itr). Tax wedge on the 67 percent level of the mean wage: OECD: Taxing wages 2010, Paris 2011, tax wedge at the level of the minimum wage: calculations of Ágota Scharle.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent12_04

Table 13.1: Employment and unemployment rate of population aged 15–64 by gender in the EU, 2013

Country	Employment rate			Unemployment rate		
	males	females	together	males	females	together
Austria	77.1	67.6	72.3	5.0	5.0	5.0
Belgium	66.4	57.2	61.8	8.7	8.2	8.5
Bulgaria	62.1	56.8	59.5	14.1	11.9	13.0
Cyprus	67.0	56.9	61.7	16.8	15.3	16.1
Czech Republic	75.7	59.6	67.7	6.0	8.4	7.0
Denmark	75.0	70.0	72.5	6.9	7.4	7.2
United Kingdom	75.6	65.9	70.8	8.1	7.2	7.7
Estonia	71.4	65.7	68.5	9.2	8.5	8.9
Finland	69.9	67.8	68.9	9.0	7.6	8.3
France	67.9	60.4	64.1	10.1	9.8	9.9
Greece	58.4	40.1	49.3	24.5	31.5	27.5
Netherlands	78.7	69.9	74.3	7.1	6.3	6.7
Croatia	56.5	48.5	52.5	18.0	17.0	17.5
Ireland	65.1	55.9	60.5	15.4	10.8	13.3
Poland	66.6	53.4	60.0	9.8	11.2	10.5
Latvia	66.8	63.4	65.0	12.8	11.4	12.1
Lithuania	64.7	62.8	63.7	13.4	10.6	12.0
Luxembourg	72.1	59.1	65.7	5.5	6.4	5.9
Hungary	64.3	52.8	58.4	10.3	10.3	10.3
Malta	74.1	47.0	60.8	6.6	6.3	6.5
Germany	77.7	68.8	73.3	5.7	5.0	5.4
Italy	64.8	46.5	55.6	11.7	13.2	12.4
Portugal	64.0	58.2	61.1	17.0	17.0	17.0
Romania	66.8	52.6	59.7	8.1	6.9	7.6
Spain	59.2	50.3	54.8	25.7	26.8	26.2
Sweden	76.3	72.5	74.4	8.4	8.0	8.2
Slovakia	66.4	53.4	59.9	14.0	14.6	14.3
Slovenia	67.1	59.2	63.3	9.6	11.1	10.3
EU-28	69.4	58.8	64.1	11.0	10.9	11.0

Source: Eurostat <http://epp.eurostat.ec.europa.eu>.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent13_01

Table 13.2: Employment composition of the countries in the EU^a, 2013

Country	Self employed ^b	Part time	Fix term contract	Agriculture	Industry	Market services	Non market services ^c
Austria	11.4	26.6	9.2	4.7	25.9	41.7	27.6
Belgium	14.2	24.7	8.2	1.4	21.7	40.3	36.6
Bulgaria	11.5	2.7	5.7	6.7	30.2	40.6	22.5
Cyprus	15.9	12.7	17.4	3.1	17.6	48.9	30.4
Czech Republic	16.9	6.6	9.6	3.0	37.5	35.7	23.8
Denmark	8.8	25.4	8.8	2.5	19.4	38.9	38.8
United Kingdom	14.2	26.9	6.2	1.1	18.7	43.9	35.3
Estonia	8.9	10.2	3.5	4.3	30.2	38.9	26.4
Finland	13.0	15.1	15.5	4.1	22.8	38.9	33.7
France	10.8	18.4	16.5	3.1	20.8	37.8	36.1
Greece	32.4	8.4	10.0	13.7	15.7	42.8	27.8
Netherlands	15.6	50.8	20.6	1.9	15.1	41.6	33.0
Croatia	16.5	6.5	14.5	10.8	27.6	37.6	23.9
Ireland	16.5	24.1	10.0	5.7	18.2	44.8	31.3
Poland	18.5	7.8	26.9	12.0	30.5	33.8	23.6
Latvia	10.7	8.1	4.4	8.0	23.9	40.7	27.1
Lithuania	10.6	9.0	2.7	8.4	25.2	39.3	26.6
Luxembourg	8.4	19.2	7.1	1.6	11.6	43.2	40.8
Hungary	10.8	6.7	10.8	4.9	29.9	37.8	27.4
Malta	13.9	15.2	7.8	1.3	21.5	44.8	31.9
Germany	10.7	27.3	13.4	1.4	27.8	40.1	30.6
Italy	23.3	17.9	13.2	3.6	27.3	41.1	28.0
Portugal	20.9	14.0	21.5	9.9	24.2	36.8	29.0
Romania	19.9	9.9	1.5	28.5	28.6	27.3	15.6
Spain	17.2	15.8	23.1	4.3	19.8	45.5	30.4
Sweden	10.4	26.2	16.9	2.0	19.1	40.6	37.8
Slovakia	15.5	4.8	6.9	3.3	35.8	35.1	25.7
Slovenia	12.1	10.1	16.4	8.5	30.9	35.7	24.4
EU-28	15.1	20.3	13.8	4.9	24.2	39.8	30.4

^a Per cent of employment, except for employees with fixed-term contracts: per cent of employees.

^b Includes the members of cooperatives and business partnerships.

^c One-digit industries O-U.

Source: Eurostat (Newcronos) Labour Force Survey.

Online data source in xls format: http://www.bpdata.eu/mpt/2014ent13_02

DESCRIPTION OF THE MAIN DATA SOURCES

The data have two main sources in terms of which office gathered them: the regular institutional and population surveys of the Hungarian Central Statistical Office (CSO, in Hungarian: Központi Statisztikai Hivatal, KSH), and the register and surveys of the National Labour Office (in Hungarian: Nemzeti Munkaügyi Hivatal, NMH).

MAIN DATA SOURCES OF THE KSH

Labour Force Survey – KSH MEF

The KSH has been conducting a new statistical survey since January 1992 to obtain ongoing information on the labour force status of the Hungarian population. The MEF is a household survey which provides quarterly information on the non-institutional population aged 15–74. The aim of the survey is to observe employment and unemployment according to international statistical recommendations based on the concepts and definitions recommended by the International Labour Organization (ILO), independently from existing national labour regulations or their changes.

In international practice, the labour force survey is a widely used statistical tool to provide simultaneous, comprehensive, and systematic monitoring of employment, unemployment, and underemployment. The survey techniques minimise the subjective bias in classification (since people surveyed are classified by strict criteria), and provide freedom to also consider national characteristics.

In the MEF, the surveyed population is divided into two main groups according to the economic activity performed by them during the reference week (up to the year 2003, this was always on the week containing the 12th of the month): economically active persons (labour force), and economically inactive persons.

The group of economically active persons consists of those in the labour market either as employed or unemployed persons during the reference week.

The definitions used in the survey follow ILO recommendations. According to these, those designated employed are persons who, during the reference week worked one hour or more earning some form of income, or had a job from which they were only temporarily absent (on leave, illness, etc.).

Work providing income includes all activities that:

- result in monetary income, payment in kind, or
- that were carried out in the hopes of income realized in the future, or
- were performed without payment in a family business or on a farm (i.e. unpaid family workers).

From the survey's point of view the activities below are not considered as work:

- work done without payment for another household or institution (voluntary work),
- building or renovating of an own house or flat, internships tied to education (not even if it is compensated),
- housework, including work in the garden. Work on a person's own land is only considered to generate income if the results are sold in the market, not produced for self-consumption.

Persons on child-care leave are classified – based on the 1995 ILO recommendations for transitional countries determined in Prague – according to their activity during the survey week.

Since, according to the system of national accounting, defense activity contributes to the national product, conscripts are generally considered as economically active persons, any exceptions are marked in the footnotes of the table. The data regarding the number of conscripts comes from administrative sources. (The retrospective time-series based on CSO data exclude conscripted soldiers. This adjustment affects the data until 2003, when military conscription was abolished.)

- Unemployed persons are persons aged 15–74 who:
- were without work, i.e. neither had a job nor were at work (for one hour or more) in paid employment or self-employment during the reference week,
 - had actively looked for work at any time in the four weeks up to the end of the reference week,
 - were available for work within two weeks following the reference week if they found an appropriate job.

Those who do not have a job, but are waiting to start a new job within 30 days (since 2003 within 90 days) make up a special group of the unemployed.

Active job search includes: contacting a public or private employment office to find a job, applying to an employer directly, inserting, reading, answering advertisements, asking friends, relatives or other methods.

The labour force (i.e. economically active population) comprises employed and unemployed persons.

Persons are defined economically inactive (i.e. not in the labour force) if they were neither employed in regular, income-earning jobs, nor searching for a job, or, if they had searched, had not yet started work. Passive unemployed are included here - those who would like a job, but have given up any active search for work, because they do not believe that they have a chance of finding any.

The MEF is based on a multi-stage stratified sample design. The stages of sampling are defined as follows: primary sampling units (PSUs) are enumeration districts (EDs) and secondary sampling units (SSUs) are dwellings in settlements with 15,000 or more inhabitants, while PSUs are settlements, SSUs are EDs and ultimate sampling units are dwellings in all other cases. In the MEF sample design strata are defined in terms of geographic units, size categories of settlements and area types such as city centres, outskirts, etc.

The size of the sample means that the main indicators of the labour market are representative in terms of regions (NUTS2) as well. The quarterly MEF sample includes a sample of three randomly selected dwellings, and labour market information is collected from one household each month. From 1998, the quarterly sample contains about 33,000 households and 66,000 persons. The sample has a simple rotation pattern: any household entering the sample at some time is expected to provide labour market information for six consecutive quarters, then leave the sample permanently. The intersection of the samples of two consecutive periods tend to be less than the 5/6th that would be obtained at a 100 per cent response rate.

Since 2003, the weights used to make the sample representative are based on the 2001 census population record base. At the same time, the 2001–2002 data was recalculated and replaced as well. The sampling weights for 1992–2000 data are based on the 1990 census. In this publication the LFS data for 2012–2013 have been weighted using population estimates based on the 2001 Census. See the CSO webpage and publications for retrospective time series re-weighted using population estimates based on the 2011 Census.

Institution-Based Labour Statistics – KSH IMS

The source of the earnings data is the monthly (annual) institutional labour statistical survey. The sample frame covers enterprises with at least 5 employees, and public

and social insurance and non-profit institutions irrespective of the staff numbers of employees.

The earnings data relate to the full-time employees on every occasion. The potential elements of the prevailing monthly average earnings are: base wage, allowances (including the miner's loyalty bonus, and the Széchenyi and Professor's scholarships), supplementary payments, bonuses, premiums, and wages and salaries for the 13th and further months.

Net average earnings are calculated by deducting from the institution's gross average earnings the employer's contributions, the personal income tax, the employee's social security contributions, etc., according to the actual rates (i.e. taking into account the threshold concerning the social security contributions and employee deductions). The personal income tax is calculated based on the actual withholding rate applied by the employers when disbursing monthly earnings in the given year, the net values are calculated at the institutional and monthly level.

The size and direction of the difference between the gross and the net (after-tax) income indexes depends on actual annual changes in the tax table (tax brackets) and in the tax allowances. Thus the actual size of the differences are also influenced by the share of individuals at given firms that fall outside the bracket for employee allowances.

The indexes pertain to the comparable sample, taking changes in the definitions, and of the sample frame into account. The KSH traditionally publishes the main average index as the earnings growth measure. Thus the indicator of change in earnings reflects both the changes in the number of observations and the actual earnings changes simultaneously. The change of net real earnings is calculated from the ratio of net income index and the consumer price index in the same period.

Non-manual workers are persons with occupations classified by the standardized occupational code (FEOR) in major groups 1–4., manual workers are persons with occupations classified in major groups 5–9.

Labour Force Accounting Census – KSH MEM

Before the publication of the MEF, the annual MEM gave account of the total labour force in the time period between the two censuses.

The MEM, as its name shows, is a balance-like account that compares the labour supply (human resources) to the labour demand at an ideal moment (1 January). Population is taken into account by economic

activity, with a differentiation between statistical data of those of working age and the population outside of the working age. Source of data: Annual labour survey on employment since 1992 of enterprises and of all government institutions, labour force survey, census, national healthcare records, social security records, and company registry. Data on unemployment comes from the registration system of the NMH.

Other data sources

Census data were used for the estimation of the employment data in 1980 and 1990. The aggregate economic data are based on national account statistics, the consumer's and producer's price statistics and industrial surveys. A detailed description of the data sources are to be found in the relevant publications of the KSH.

MAIN NMH DATA SOURCES

Unemployment (Jobseekers') Register Database – NFSZ-REG

The other main source of unemployment data in Hungary – and in most of the developed countries – is the huge database containing so called administrative records which are collected monthly and include the individual data of the registered unemployed/jobseekers.

The register actually includes all jobseekers, but from these, at a given point of time, only those are regarded as registered unemployed/jobseekers, who:

- had themselves registered with a local office of the NFSZ as unemployed/jobseekers (i. e. he/she has no job but wishes to work, for which they seek assistance from the labour market organisation).
- at the time of the examination (on the final day of any month), the person is not a pensioner or a full-time student, does not receive any rehabilitation provision or benefit, and is ready to co-operate with the local employment office in order to become employed (i. e. he/she accepts the suitable job or training offered to him/her, and keeps the appointments made with the local employment office's placement officer/counselor/benefit administrator).

If a person included in the register is working under any subsidised employment programme on the closing day, or is a participant of a labour market training programme, her/his unemployed/jobseeker status is suspended.

If the client is not willing to co-operate with the local office, he/she is removed from the register of the unemployed/ jobseekers.

The data – i. e. the administrative records of the register – allow not only for the identification of date-related stock data, but also for monitoring flows, inflows as well as outflows, within a period.

The database contains the number of decrees pertaining to the removal or suspension of jobseeking benefits, the number of those receiving monetary support based on accounting items, support transactions, the exact date of entry and exit and the reason for the exit (for example, job placement, the end of entitlement, disqualification, entry into a subsidized employment programme, etc.), as well as the financial data of jobseeking benefits (for example, average monthly amount, average support paid for the number of participants on the closing date, for exiters, and those who found placement).

The jobseeking benefit register can also monitor the average duration of the period of benefit allocation and the average monthly amount of the benefits allocated.

For the period between 1991 and 1996, the register also contains the stock and flow data of the recipients of new entrant's unemployment benefit. Between 1997–2005, the system also contained the recipients of pre-retirement unemployment benefit.

Jobseeking allowance recipients: from September 1, 2011 the conditions for determining and disbursing the jobseeking allowance changed. The two phases of the jobseeking allowance were discontinued and the period of entitlement decreased from 270 days to 90 days. Jobseekers needed to have at least 360 days of worktime counting towards entitlement in the 5 years prior to becoming a jobseeker (prior to September 1, 2011, this was 365 days in the previous 4 years). Its amount is 60% of the allowance base, but maximum the amount of the smallest mandatory wage on the first day of the entitlement (allowance base: the monthly average amount from the four calendar quarters preceding the submission of the application).

Jobseeking assistance recipients: from September 1, 2011 the conditions for determining and disbursing the jobseeking assistance changed. The "a" and "b" type of benefit were discontinued, jobseekers can still request the "c" type of benefit under the title of pre-retirement jobseeking benefit, but the period of entitlement (and depletion) of at least 140 days decreased to 90 days.

Regular social assistance recipients: those from among the regular registered jobseekers who are of active age and are in a disadvantaged labour market position, and who receive social assistance to complement or substitute their income. From January 1, 2009, those

receiving regular social assistance were included in two categories: regular social assistance recipients, and recipients of on call support. This support was replaced by a new type of assistance, the wage replacement support from January 1, 2011, then from September 1, 2011, the name was changed to employment substitution support. (Legislation III. of 1993 pertaining to social management and social assistance).

Based on the records of labour demand needs reported to the NFSZ, the stock and flow data of vacancies are also processed and published for each month.

Furthermore, detailed monthly statistics of participation in the different active programmes, number of participants, and their inflows and outflows are also prepared based on the assistance disbursed.

The very detailed monthly statistics – in a breakdown by country, region, county, local employment office service delivery area and community – build on the secondary processing of administrative records that are generated virtually as the rather important and useful “by-products” of the accomplishment of the NFSZ’s main functions (such as placement services, payment of benefits, active programme support, etc.).

The NMH (and its predecessors, i. e. OMK – National Labour Centre, OMMK and OMKMK) has published the key figures of these statistics on a monthly basis since 1989. The denominators of the unemployment rates calculated for the registered unemployed/jobseekers are the economically active population data published by the KSH MEM.

The figures of the number of registered unemployed/jobseekers and the registered unemployment rate are obviously different from the figures based on the KSH MEF. It is mainly the different conceptual approach, definition, and the fundamentally different monitoring/measuring methods that account for this variance.

Short-Term Labour Market Projection Surveys – NMH PROG

At the initiative and under the co-ordination of the NMH (and its legal predecessors), the NFSZ has conducted the so-called short term labour market projection since 1991, twice a year, in March and September, by interviewing over 7,500 employers. Since 2004 the survey is conducted once a year, in the month of September.

The interviews focus on the companies’ projections of their material and financial processes, their development and human resource plans, and they are also

asked about their concrete lay-off or recruitment plans, as well as their expected need for any active labour market programmes.

The surveys are processed from bottom up, from the service delivery areas, through counties, to the whole country, providing useful information at all levels for the planning activities of the NFSZ.

The survey provides an opportunity and possibility for the regions, the counties and Budapest to analyse in greater depth (also using information from other sources) the major trends in their respective labour markets, to make preparations for tackling problems that are likely to occur in the short term, and to effectively meet the ever-changing needs of their clients.

The forecast is only one of the outputs of the survey. Further very important “by-products” include regular and personal liaison with companies, the upgraded skills of the placement officers and other administrative personnel, enhanced awareness of the local circumstances, and the adequate orientation of labour market training programmes in view of the needs identified by the surveys.

The prognosis surveys are occasionally supplemented by supplementary questions and sets of questions to obtain some further useful information that can be used by researchers and the decision-makers of employment and education/ training policy.

From 2005, the surveys are conducted in cooperation with the Institute for Analyses of the Economy and Entrepreneurship of the Hungarian Chamber of Industry and Commerce (in Hungarian: Magyar Kereskedelmi és Iparkamara Gazdaság- és Vállalkozáskutató Intézet, MKIK GVI), with one additional benefit being that with the help of the surveyors of the Institute, the sample size has increased to nearly 8,000.

Wage Survey Database – NMH BT

The NMH (and its legal predecessors) has conducted since 1992, once a year, a representative survey with a huge sample size to investigate individual wages and earnings, at the request of the Ministry of National Economy (and its legal predecessors).

The reference month of data collection is the month of May in each year, but for the calculation of the monthly average of irregularly paid benefits (beyond the base wage/salary), 1/12th of the total amount of such benefits received during the previous year is used.

In the competitive sector, the data collection only covered initially companies of over 20 persons; it was

incumbent on all companies to provide information, but the sample includes only employees born on certain dates in any month of any year.

Data collection has also covered companies of 10–19 since 1995, and companies of 5–9 have been covered since 2000, where the companies actually involved in data collection are selected at random (ca. 20 per cent), and the selected ones have to provide information about all of their full-time employees.

Data on basic wages and earnings structure can only be retrieved from these surveys in Hungary, thus it is, in practice, these huge, annually generated databases that can serve as the basis of the wage reconciliation negotiations conducted by the social partners.

In the budgetary sector, all budgetary institutions provide information, regardless of their size, in such a way that the decisive majority of the local budgetary institutions – the ones that are included in the TAKEH central payroll accounting system – provide fully comprehensive information, and the remaining budgetary institutions provide information only about their employees who were born on certain days (regarded as the sample).

Data has only been collected on the professional members of the armed forces since 1999.

Prior to 1992, such data collection took place in every third year, thus we are in possession of an enormous database for the years of 1983, 1986 and also 1989.

Of the employees included in the sample, the following data are available:

- the sector the employer operates in, headcount, employer's local unit, type of entity, ownership structure
- employee's wage category, job occupation, gender, age, educational background.

Based on the huge databases which include the data by individual, the data is analysed every year in the

following ways:

- Standard data analysis, as agreed upon by the social partners, used for wage reconciliation negotiations (which is received by every confederation participating in the negotiations).
- Model calculations to determine the expected impact of the rise of the minimum wage.
- Analyses to meet the needs of the Wage Policy Department, Ministry of National Resources, for the analysis and presentation of wage ratios
- Analyses for the four volume statistical yearbook (total national economy, competitive sector, budgetary sector, and regional volumes).

The entire database is adopted every year by the KSH, which enables the Office to also provide data for certain international organisations, (e. g. ILO and OECD). The NMH also regularly provides special analyses for the OECD.

The database containing the data by individual allows for a) the analysis of data for groups of people determined by any combination of pre-set criteria, b) the comparison of basic wages and earnings, with special regard to the composition of the different groups analysed, as well as c) the analysis of the dispersion of the basic wages and earnings.

Since 2002, the survey of individual wages and earnings was substantially developed to fulfill all requirements of the EU, so from this time on it serves also for the purposes of the Structure of Earnings Survey (SES), which is obligatory for each member state in every fourth year. One important element of the changes was the inclusion of part-time employees in the sample since 2002.

SES 2002 was the first, and recently the databases of SES 2006 and 2010 was also sent to the Eurostat in anonymized form in accordance with EU regulations.

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