## 1.5 SHORTAGE AND UNEMPLOYMENT

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In order to describe the changes in the Hungarian labour market in the context of shortage and unemployment within the conceptual framework presented in the introductory chapter, further methodology problems must be tackled. The primary cause of the difficulty is that – due to the uncertain status of the massive public works schemes – Hungary has no clear indicator for unemployment at present.

### The difficulties of measuring unemployment

*Unemployment according to the LFS.* The unemployment indicator measured in the Hungarian Labour Force Survey (LFS), which follows the ILO and OECD guidelines, and which is generally accepted and suitable for international comparison, defines the unemployed as persons who did not undertake income-generating work in the week prior to the survey, actively sought a job in the previous month and are able to start work within two weeks. The unemployment measured in this way had dropped below 250 by the end of 2016; however, it contains hardly any public works participants looking for a job. The LFS does not provide meaningful information about on-the-job search (including public works participants regarded as employees in the survey). Only one per cent of employees reported job search while in employment in the 2015–2016 LFS on average and only one-tenth of them entered a new job (and stayed there until the following quarterly survey), and conversely, only one-fifteenth of new entrants to a job reported a job search three months prior to entering the job. This clearly indicates that the majority of employees do not reveal to the interviewer if they are looking for a new job and therefore the indicator compliant with the ILO–OECD standards is not suitable for measuring unemployment in the entire population also including public works participants, who do not have a real job.

The registered unemployed. The figure of the unemployed registered by the employment service is distorted by the removal of the unemployed temporarily in public works schemes from the registry for the period of their participation in the schemes. As opposed to the practice adopted in the majority of other countries, they are regarded as employees rather than active labour market program participants, even though the majority of them return to the register within a short time.<sup>2</sup>

The registered unemployed and public works participants together. Considering the unemployed and public works participants together is not without distortions either. This is because participation in public works schemes does not require registration as an unemployed person and in this way it is

1 Authors' calculations based on the 2015–2016 data collections of the LFS.

2 See the Chapter of *In Focus* on public works in the 2014 issue of the Hungarian Labour Market Yearbook (*Varga*, 2015).

problematic to simply "return" public works participants in the register. Furthermore – partly because of getting caught up in public works (*Molnár et al*, 2014) – some of the public works participants do not search and do not wish to have a job in the primary labour market and thus cannot be regarded as unemployed in the usual sense of the word.

Apparently, there is no "best option" in selecting an unemployment indicator and when selecting the second best option, the key issue is how to regard public works. There are several counterarguments against saying that anyone undertaking income-generating work is considered an employee:

- Public works wages fall by 36 per cent, or in the case of qualified workers by 33 per cent behind the minimum wage of the primary labour market and the guaranteed minimum wage for qualified workers (data from 2017).
- The wage does not depend on the productivity of the worker even over the long run.
- Terminating or not entering employment results in severe sanctions: the person loses their eligibility for unemployment assistance for three years.
- There is a huge difference between the levels of labour turnover: it is an order
  of magnitude higher in public works than in the primary labour market.<sup>3</sup>
- The majority of public works participants move back and forth between public works and unemployment. See *Box K1.5*.
- The government does not regard public works participation as "proper" employment: it is planned that from 2018 onwards only 12 months in three years could be spent in public works.<sup>4</sup>

3 The LFS has been measuring the number of entries to public works since 1999. Entry mobility (the proportion of those entering the program in the month of the interview or in the previous month relative to the total number of employees) was 21.6 per cent on average among public works participants between 1999 and 2016, as opposed to 2.4 per cent in the primary labour market. (Authors' calculations.) 4 Government regulation 1139/ 2017. (III. 20.) on certain labour market measures, Section 1.e): "...the regular re-entry of public works participants into public works schemes must be prevented by the gradual introduction. from 1 June 2018, of a maximum length of participation of one year within a period of three years, unless the business sector does not provide a realistic job opportunity for the individual, that is, he/she is unable to find employment".

# K1.5 Public works participants in public works schemes and in the primary labour market

The persons included in the Labour Force Survey (LFS) of the Hungarian Central Statistical Office (HCSO) may be followed up for six quarters, at that point those exiting the survey are replaced by a new cohort selected randomly from the general population. *Table K.1.5.1* follows up on the eight and six cohorts observed as public works participants in the first LFS interview.

The work histories observed may be classified into three types. The first group includes persons who were always recorded as public works participants after entering the survey. The second group includes those who in addition to participating in public works were only registered unemployed or inactive, while the third group includes those who

had a market job at least once. A total of 4,775 persons were observed in eight cohorts for four quarters and 981 were observed in six cohorts for six quarters. The survey was limited to people not in education, without a secondary school leaving qualification and aged 15–63.

The data show that the majority of persons observed as public works participants in the first interview (92 and 84 per cent in the two samples respectively) appear again only as public works participant or unemployed/inactive in the subsequent waves. The majority (80 and 70 per cent respectively) of those exiting public works at least once become unemployed for the first time or repeatedly (typically repeatedly).

Table K.1.5.1: The labour market history of public works participants in the Labour Force Survey of HCSO in the one year as well as one and a half years following the first data collection

A) Date of first data collection: Q1 2014 - Q4 2015 (follow-up for four quarters)		
What status did they have in the four consecutive data collections?	Average <sup>a</sup>	Standard deviation <sup>b</sup>
Public works participant on all four occasions	59.3	(5.4)
Only as unemployed or inactive in addition public works participation	32.3	(5.0)
In an actual job at least once	8.4	(3.8)
The number of persons observed	4,775	
B) Date of first data collection: Q1 2014 - Q4 2015 (follow-up for six quarters)	)	
What status did they have in the six consecutive data collections?	Average <sup>a</sup>	Standard deviation <sup>b</sup>
Public works participant on all six occasions	48.5	(3.8)
Only as unemployed or inactive in addition public works participation	36.0	(4.7)
In an actual job at least once	15.5	(4.4)
The number of persons observed		981

<sup>&</sup>lt;sup>a</sup> The average of the four and six data collections.

Persons observed as public works participants in the first data collection of the LFS in the period after 2013 are followed up for four or six quarters. The data are limited to people not in education, without a secondary school leaving qualification and aged 15–63.

Source: Authors' calculation.

Based on the above, the ILO-OECD measure is unfit for describing unemployment in the present situation. The number of the registered unemployed considerably underestimates, while their number together with public works participants to some extent overestimates, what we wish to measure: the number of those who do not have a job similar to workers in the primary labour market (similarly stable, at a similar wage level and providing similar promotion opportunities) but who wish to work and earn an income appropriate for their qualification category.

The major unemployment time series are presented in *Figure 1.5.1*. The unemployment as defined by ILO–OECD (LSF) has decreased considerably, following the increase after 2006 and the fast growth during the crisis, and at present it is near the levels observed around the turn of the millennium. However, this is irrelevant due to the above reasons. The number of the registered unemployed dropped from nearly six hundred thousand to slightly above three hundred thousand between 2010 and 2016. Nevertheless, their number including public works participants still exceeds half a million and is higher than at any time between the so-called Bokros package and the global economic crisis.<sup>5</sup>

The data indicate that while the demand conditions for expanding employment are available for some sectors and companies (major export markets are expanding, Hungarian consumption is improving and, as a result of EU grants,

<sup>&</sup>lt;sup>b</sup> Intertemporal variance of the quarterly values.

<sup>5</sup> The number of public works participants is obtained from the LFS because it is suitable for looking back for a longer period. Data from the LFS and the Institution-based Labour Statistics on public works participants has only differed slightly in the past seven-eight years (see *Eppich–Köllő*, 2014).

demand for investment is also relatively high), these sectors are unable or unwilling to absorb the existing – rather significant – labour reserve.

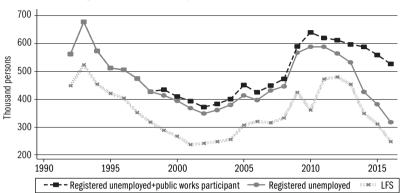
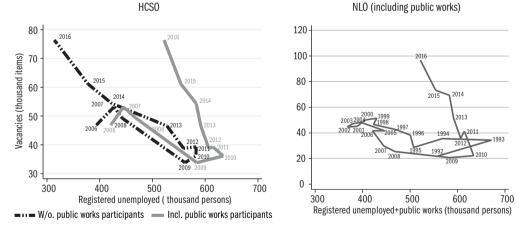


Figure 1.5.1: Unemployment between 1992 and 2016

As discussed in Subchapter 1.1, a "good equilibrium" can only emerge near the origin in the space of unemployment (U) and vacancies (V). Further away from the origin, there is a higher risk that the balance of job loss and job finding can only emerge at high U and V. The two parts of *Figure 1.5.2* show the movement of the Hungarian labour market in the U-V space. Unemployment is presented in the left-hand graph with and without public works participants, while the number of vacancies is depicted through HCSO data (left-hand graph), and the National Labour Office (NLO) (right-hand graph).

Figure 1.5.2: Movement of the Hungarian labour market in the space of vacancies and unemployment



The Hungarian labour market is seen moving outwards in the U-V space, unless public works participants are not regarded as unemployed and the HCSO vacancy statistics of the entire economy is used (left-hand graph,

dashed line). However, if we regard public works participants as an external "reserve" for the primary labour market, similarly to the registered unemployed (in other words, the same jobless person is included in the external reserve when he/she participates in public works and when he/she does not), it becomes obvious that the increase in vacancies did not lead to a significant decrease in the number of jobless persons. It is especially true for the lowest segment of the labour market: along with the huge growth in vacancies registered in job centres, half of which are reported by public works providers, the joint number of the registered unemployed and public works participants did not decline. These trends suggest structural mismatch and frictions, the most important of which will be discussed in Chapters 4 and 5 of *In Focus*.

### Changes in the Beveridge curves in Europe

The movement of European countries in the U-V space – the relationship between unemployment and vacancies – is presented as Beveridge curves in *Figures 1.5.3–1.5.5*. The impact of the economic crisis is evident, just like differences between the countries in the period of recovery. Because the European countries (partly excepting Slovakia) do not have public works programmes similar to the ones in Hungary, the ILO–OECD unemployment indicators are used in the graphs. Vacancy figures are based on the abovementioned Eurostat statistics.

When unemployment and the proportion of vacancies move in opposing directions, it indicates the impact of economic cycles: periods of expansion are characterised by low unemployment and a high proportion of vacancies, while recession is characterised by the opposite. The outward movement of the curve, i.e. when the proportion of vacancies is higher at the same level of unemployment, indicates the deterioration of matching, as discussed in Subchapter 1.1.

The Beveridge curve moved outwards during the crisis, from 2008–2009 onwards, in all European countries except Germany. Following that period differing trends are seen. *Figure 1.5.3* shows the curves of countries that after the crisis achieved better matching compared to pre-crisis times, while *Figure 1.5.4* includes countries that by and large returned to their pre-crisis state and finally *Figure 1.5.5* includes countries with deteriorating matching.

As a result of the crisis, the prior improving matching led to the sudden drop in the proportion of vacancies in Germany but after 2010 matching once again started to improve. There was a relatively small decline in matching followed by improvement in Poland, Slovakia and the Czech Republic and Estonia, where matching started to improve in 2010.

After the recession, the Netherlands, the United Kingdom, Lithuania, Latvia and Bulgaria managed to return to pre-crisis levels of matching. The pro-

portion of vacancies and unemployment rates are also similar to the levels before the crisis. Romania experienced improvement between 2015 and 2016, after which it achieved matching similar to or even slightly better than before the crisis.

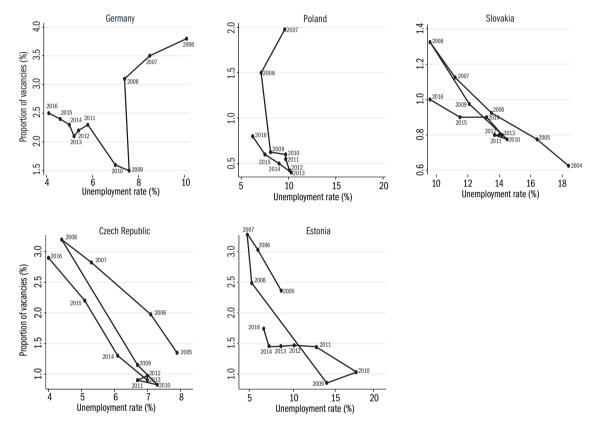


Figure 1.5.3: Countries with improving matching

Source: Based on Eurostat data.

Finally, in some of the countries with deteriorating matching (Ireland, Sweden, Slovenia and Finland) the decrease in unemployment was accompanied by higher level and more intensive increase of vacancies following the crisis. Spain and Greece had a considerably longer crisis than other countries and, despite improvement in recent years, matching is still worse than before. Austria experienced improving matching between 2009 and 2011 but after that time the market moved outwards in the *U–V* space until 2016.

In conclusion, Hungary is not alone in showing increasing frictions and structural tensions: mainly Ireland, Sweden and Slovenia have had similar movements in the U–V space.

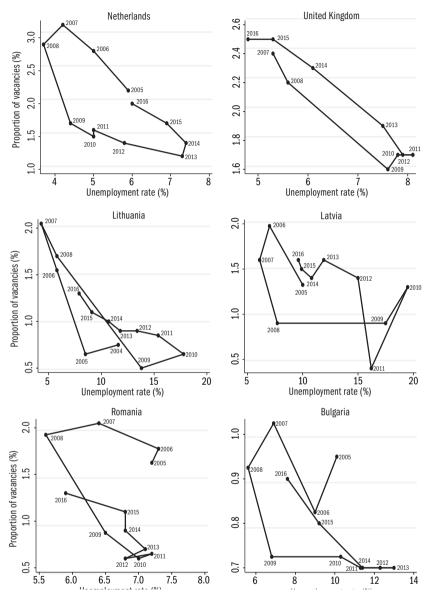


Figure 1.5.4: Countries returning to matching similar to levels before the crisis

Source: Based on Eurostat data.

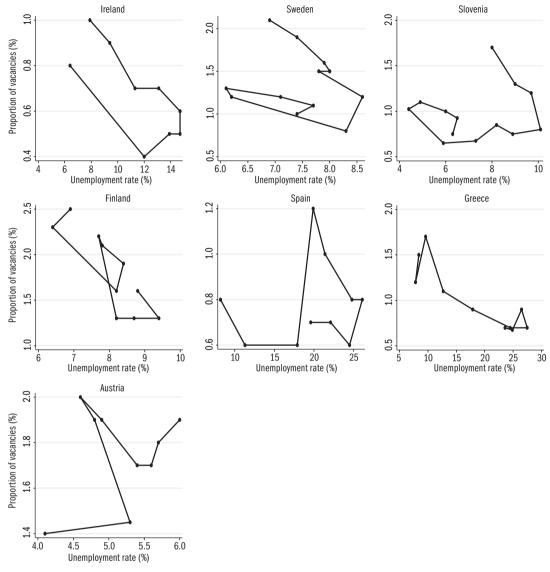


Figure 1.5.5: Countries with declining matching

Source: Based on Eurostat data.

#### References

MOLNÁR GYÖRGY (research manager) (2014): A munkaerőpiac peremén lévők és a költségvetés. (The budget and the persons on the fringes of the labour market) Authors: Bakó Tamás-Cseres-Gergely Zsombor-Kálmán Judit-Molnár György-Szabó Tibor. IE CERS HAS, Budapest.

ЕРРІСН GYŐZŐ-KÖLLŐ JÁNOS (2014): Foglalkozta-

tás a válság előtt, közben és után. (Employment before, during and after the crisis) In: Kolosi Tamás–Tóth István György (eds.): Társadalmi Riport, pp. 157–178. Tárki, Bp.

VARGA JÚLIA (ed.) (2015): In Focus. Public Works. In: Fazekas Károly–Varga Júlia (szerk.): The Hungarian Labour Market, 2015. IE CERS HAS, Bp., pp. 39–171.