

2.5. PUBLIC WORKERS IN THE LEGAL LABOUR MARKET

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Information on the employment of public workers in market jobs had been missing until recently and has remained scarce. It is only the follow-up surveys of the National Labour Office (abbreviated in Hungarian as NMH) performed since 2011 that provide some information on their labour market status six months following the termination of their status as a public worker. The lessons learnt from these surveys (*Molnár et al*, 2014, *Cseres-Gergely–Molnár*, 2014) are summed up in chapters 2.3. and 2.6. of ‘In Focus’.

However, the follow-up surveys tell only part of the story for two reasons. First, the surveys are based on administrative data while the majority of the jobs taken by public workers before and after their public works spells are unregistered. (*Farkas et al*, 2014). Second, the entry of public workers into market jobs should not be viewed as arrival in a safe haven: in most cases it only means an episode in a hectic labour market career. This chapter seeks to draw attention to the latter problem using data on 25 thousand public workers observed on a monthly basis over an eight year wide time window. Lack of observations on off-book employment remains a problem that awaits future research.

Data

Our sample is drawn from a large longitudinal data set covering 50 percent of Hungary’s population aged 5–74 in 2003. The data collects information from registers of the Pension Directorate, the Tax Office, the Health Insurance Fund, the Office of Education, and the Public Employment Service. Each person in the sample is followed from January 2003 until December 2011 or exit from the registers for reasons of death or permanent out-migration. We have information on whether the person observed was in employment in a given month, for how many days, in what jobs and contractual arrangements, with what employers and for what compensation.

Public workers can be distinguished in the database since the third quarter of 2011, though their numbers reached the level known from other sources of data only in the last quarter of the year. In October–December 2011, 97 thousand persons are indentified as an entrant to a public works programme at least once; on average, these persons worked three months as a public worker, performing a total of 195 thousand man months, which leads us to estimate the average stock at 65 thousand.¹ This figure is bigger than the 54 thousand published in the institutional labour market statistics of the Hungarian Central Statistical Office, but smaller than the calculations made by *Cseres-Gergely–Molnár* (2014) on the basis of the NMH register

¹ The 195 thousand man months would have been accomplished by 65 thousand people, if they were at work for the entire period of the three months.

(77.6 thousand). Due to lack of further data no explanations can be made as to the reasons for these differences, however, it can be stated that our database covers the majority of persons involved in public works programmes in the period observed.

In the present study we will observe the labour market career between January 2003 and December 2010 of persons involved in public works programmes in the fourth quarter of 2011. The calculations presented are made on the basis of a 50% sample (that is a 25% sample of the whole population) drawn from the public administrative panel database. The sample is made up of 24,195 persons and as many as 2.323 million monthly observations. The constriction of the sample was necessitated by the limited computing capacities at the author's disposal.

The key question of the analysis is to what extent the persons involved in public works programmes at the end of 2011 formerly had market jobs. This cannot be observed directly, since public works – as mentioned before – was not listed among the available labour arrangements in the period between 2003 and 2010. Alternatively, we will rely on the fact that before 2011 the vast majority of public workers were *public employees* earning the *minimum wage*. Market jobs are defined as (i) employment in incorporated and unincorporated companies, business partnerships and self-employment including assisting family members (ii) employment in a public institution at a wage exceeding 110% or 150% of the daily minimum wage. The two cut-off points result in upper and lower estimates of market employment, respectively.

Of course, this approach of estimation is not free of mistakes because: i) public workers receiving a significant supplement from the local government above their standard compensation appear to have a market job; ii) persons in standard public sector jobs, who earn less than 110% or 150% of the daily minimum wage appear as public workers.

Since the bias from the second source is obviously larger, our calculations underestimate the share of market jobs.

In the rest of the chapter we first look at the roles that market jobs and public works participation played in the labor market careers of the 24,195 persons under examination. Second, we analyze the incidence and duration of market jobs. Finally, we are taking a look at how the *number* of market jobs held by members of the sample affected their average employment rate in 2003–2010.

Public works participation and market jobs – estimations

As shown in *Table 2.5.1* the employment rate of those involved in public works programmes at the end of 2011 was rather low in 2003–2010, 25% on average, well below the national average of those with a primary education attainment.² We estimate that 14–16% came from market jobs and 9–11% from public works participation. As expected, employment in market jobs

² The rate of employment of the population aged 15–59, not in education, having finished 0–8 classes in primary education was 45.6 per cent in the spring of 2005. (The Author's calculation based on the April–June 2005 wave of the Labour Force Survey.)

declined in the period of the crisis, and public works employment made up for it only by 2009. In the year when the Orbán-government took office the rate of public works participation decreased for a while, recessing the employment rate of the population observed here below 20%.

Table 2.5.1: The rate of employment in 2003–2010 of those involved in public works programmes at the end of 2011 (estimates, yearly average of monthly observations, per cent)

| Year | Employed in public works | Employed in a market job | Not employed in a legal job | Total of observations |
|---------------------------------|-----------------------------|-----------------------------|--------------------------------|--------------------------|
| | estimation | | fact | |
| Upper estimates | | | | |
| 2003 | 7.0 | 17.0 | 76.0 | 100.0 |
| 2004 | 6.9 | 17.1 | 76.0 | 100.0 |
| 2005 | 8.2 | 16.1 | 75.7 | 100.0 |
| 2006 | 8.7 | 16.7 | 74.6 | 100.0 |
| 2007 | 8.4 | 16.3 | 75.3 | 100.0 |
| 2008 | 9.5 | 16.2 | 74.3 | 100.0 |
| 2009 | 17.4 | 13.1 | 69.5 | 100.0 |
| 2010 | 4.1 | 14.7 | 81.2 | 100.0 |
| On average between 2003–2010 | 8.8 | 15.9 | 75.3 | 100.0 |
| Lower estimates | | | | |
| 2003 | 8.6 | 15.4 | 76.0 | 100.0 |
| 2004 | 8.3 | 15.5 | 76.0 | 100.0 |
| 2005 | 9.8 | 14.5 | 75.7 | 100.0 |
| 2006 | 10.8 | 14.8 | 74.6 | 100.0 |
| 2007 | 10.4 | 14.3 | 75.3 | 100.0 |
| 2008 | 11.8 | 13.9 | 74.3 | 100.0 |
| 2009 | 20.4 | 10.3 | 69.5 | 100.0 |
| 2010 | 8.5 | 10.3 | 81.2 | 100.0 |
| On average between 2003–2010 | 11.1 | 13.6 | 75.3 | 100.0 |

The number of observations: 2,322,720 man months, 24,195 persons. See the text for the definitions of market employment. Source: administrative panel data of persons involved in public works programmes in the fourth quarter of 2011.

Table 2.5.2 presents a range of indicators related to the persons observed. As shown, a majority of these people had a real, legal job at least once in the period between 2003 and 2010. Those entering a job at least once worked there for 17–20 months on average out of the 96 months observed and earned an income equal to 50–51% of the national daily average, as opposed to the income earned in a public works programme, which equals 37–41% of the national daily average.

Table 2.5.2: Selected indicators of persons involved in public works programmes in the fourth quarter of 2011, 2003–2010

| | Lower estimation | Upper estimation |
|------------------------------------------------------------------------|------------------|------------------|
| Employed in a market job at least once (percentage) | 70.9 | 75.3 |
| Months worked by those working in a market job at least once (average) | 17.2 | 19.6 |
| Average daily income in a market job ^a (percentage) | 49.8 | 50.5 |
| Average daily income in public works (percentage) | 37.3 | 41.0 |

The number of observations: 24,195 persons.

^a As a percentage of the daily amount of the national minimum wage.

Source: Administrative panel data of persons involved in public works programmes in the fourth quarter of 2011

The data presented contradict general public opinion that public workers “are unemployable” and “have no idea what a real job is”: three quarters of them have already been in a real, legal job. Their labour market employment in the long run is still very low, which leads us on to the questions of the incidence and duration of market jobs.

The incidence and duration of market jobs³

As shown in *Table 2.5.3* persons entering the labour market at least once in 2003–2010 took up three market jobs on average over a period of eight years: a little less than one third of them are one-time entrants, a quarter of them are two-time entrants, another quarter are three- or four-time entrants, and one fifth of them entered even more times (18 times for the record-holder).

The average duration of market jobs amounted to 5.6 months. This is a downward biased estimate since it includes employment spells on-going as of 1 January 2003 and/or continuing beyond 31 December 2010. The completed duration of these left and right censored spells may be longer or in some cases considerably longer than their observed duration. Among the uncensored episodes that started and terminated within the eight years observed, short-term labour arrangements are, of course, over-represented: their average completed duration was 4.1 months.

We take a closer look at these labour arrangements in *Figure 2.5.1*, which shows the distribution of market work episodes by completed duration. The points of the curve show what percentage of these labour arrangements had a duration shorter than 1, 2, ..., 96 months. As we can see, 60% had a duration shorter than three months, almost 80% had a duration shorter than half a year, and 90% were shorter than one year.⁴ The overall labour market employment of public workers is thus made up of many short episodes, and the duration of their market jobs is not longer than their public works episodes: according to *Cseres-Gergely–Molnár* (2014) the average completed duration of public works episodes was 3.4 months in 2011, 5.1 in 2012 and 5.9 in 2013.

³ From this point onwards a wage limit of 110% will be applied to differentiate between market jobs and public works.

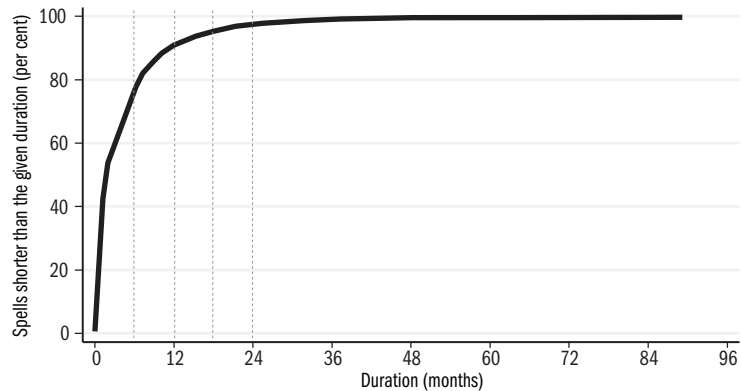
⁴ Note that in these calculations we make no difference between individual employers. It is possible that during a continuous employment spell the person observed had several employers. In the database the employment spells can be broken down by employers, a task left for future research.

Table 2.5.3: Employment episodes in market jobs of persons involved in public works programmes in the fourth quarter of 2011, 2003–2010

| | Average/Percentage |
|-----------------------------------------------------------------------------------------|--------------------|
| Average number of employment spells | 3.0 |
| The distribution of workers by the number of employment spells in market jobs (percent) | |
| 1 | 30.3 |
| 2 | 23.0 |
| 3 | 16.1 |
| 4 | 10.8 |
| 5 | 7.1 |
| 6 | 4.7 |
| 7 or more | 8.0 |
| The average duration of episodes (month) | 5.6 |
| The average duration of uncensored episodes (month) | 4.1 |

The number of observations: 54,833 employment spells, which belong to 18,228 persons. The number of completed spells is 41,516, which belong to 14,599 persons. Source: administrative panel data of persons involved in public works programmes in the fourth quarter of 2011.

Figure 2.5.1: The cumulated distribution of the duration of finished employment episodes, market jobs, 2003–2010



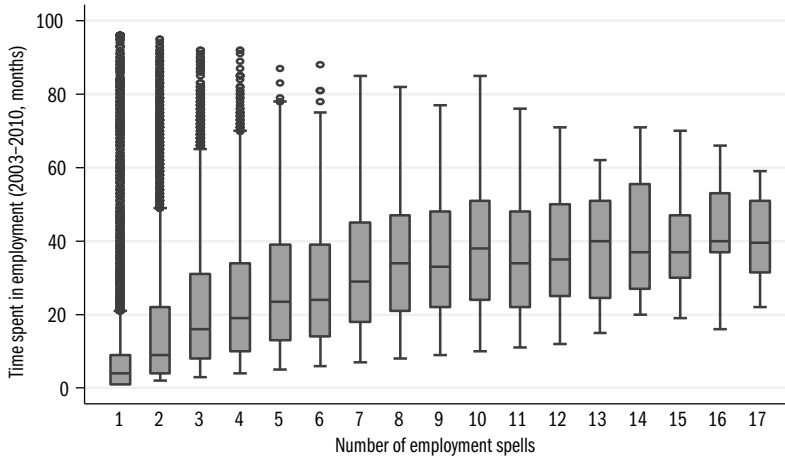
The figure refers to episodes which started beyond 1 January 2003 and terminated before 1 January 2011. The number of observations: 41,516 episodes, which belong to 14,599 persons.

Source: Administrative panel data of persons involved in public works programmes in the fourth quarter of 2011

Finally, we present a “box-and-whiskers” chart to illustrate how much the *number* of employment spells contributed to the total rate of employment in the entire period, and thus to the total income generated. On the horizontal axis of *Figure 2.5.2* we can see the number of market jobs, while on the vertical axis we have the total amount of time worked in market jobs in

2003–2010. The lower and upper edges of the boxes show the 25th percentiles, respectively. The line in the middle of the boxes is the median. The bottom and top “whiskers” show the lowest and the highest connected values, while the circles denote the heavy outliers.

Figure 2.5.2: The correlation between the number of employment episodes and the total amount of time worked, market jobs, 2003–2010



Source: Administrative panel data of persons involved in public works programmes in the fourth quarter of 2011

Persons working 30–40 months are those having more than eight employment spells in a period of eight years. The total amount of time worked in one single job is very low, even if there is a tiny minority of outliers who spent 80–90 months in one permanent job. In this respect, there is a striking contrast between the average Hungarian *employee* and the average *public worker*. According to the Labor Force Survey (wave 2005 Q2), the uncompleted duration of employment in respondents’ current jobs amounted to 106 months on average, with a duration of 100 months for those who completed primary school and 63 months for those who completed less than that. Since the episodes observed at a given point in time are most likely to approach their half-time, average completed duration is about twice as long as the observed uncompleted duration. This compares to only four month’s completed duration in the population examined in this chapter.

Conclusions

Persons pondering over the issues of public works, including the author of the present text, are most probably mistaken when they contrast public works to stable market employment as a desired alternative and consider the permanent labour market inclusion of public workers as a policy goal. Data shows that this is more of a dream, than a real objective.

A policy based on the actual characteristics of the labour market of public workers would do better to promote more frequent *entry* into market jobs. On the one hand such an approach demands far more patience: a clear understanding that public works used as a tool of discipline – except for labour markets in a very good condition – is dysfunctional. The unexpectedly delivered “notices” that call for public works of an incalculable duration hampers both informal work that is necessary for daily breadwinning and job seeking. On the other hand, the more people who have more frequently the opportunity to be employed in a real work organization, the greater is the chance that a number of them are selected for permanent employment. As shown in Chapter 2.10, the current practice of public works offers limited help as to the transition to real jobs. Until this situation remains unchanged, it would be advisable to terminate all elements of regulation that impede entry into market jobs – unstable, short-term and temporary as they typically are.