

## 2.6 THE COMPOSITION OF ENTRANTS TO PUBLIC WORKS, 2011–2012\*

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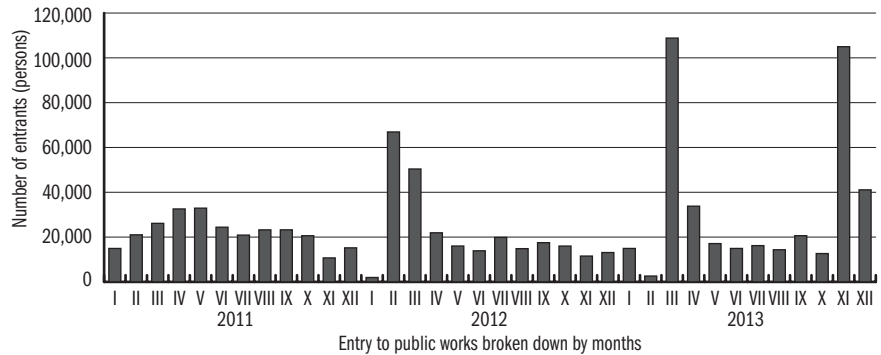
Since the most important stated aims of public works are to reach its target group and improve its employability by temporary work opportunities, a critical yardstick of its effectiveness is the fulfilment of these objectives. This subchapter examines the participants of public works and to what extent the first aim is fulfilled. The database of the Public Works portal [Közfoglalkoztatási Portál] provides information for 2013–2014 and *Mód* (2013) provides information for 2012 and 2013. A similar topic is studied by *Koltai* (2013) too but with a different methodology due to the small amount of data collected and the high number of criteria considered. The present subchapter uses the data and the concepts introduced in *Subchapter 2.3*.

The analytical framework considers the public employment system and its clients. The subchapter classifies the episodes of the public employment system into two categories: non public works (e.g. registration before a possible participation in public works, or participation in other programmes) and public works episodes. Relevant data are presented in *Subchapter 2.3*: the individual data of the National Labour Office were used to compile an episode-based micro-database. It contains a total of 2,278,036 non public works episodes in the years 2011–2012 and a further 833,769 episodes in 2013, compared to 685,935 and 245,882 public works episodes in the respective years.

As described in *Subchapter 2.1*, the Government introduced a unified system of public works at the beginning of 2011. We have seen 265,813 entrants in 2011, 263,931 in 2012 and 402,073 in 2013. There is a change in the annual distribution of entrants between 2011 and 2012: while the distribution of entries over the first year was relatively even, with a peak around April, in the following years most entries took place in February–March (see *Figure 2.6.1*) with a new peak at the end of 2013 due to training courses organised in winter public works (see *Subchapter 2.8*). Another striking change is that the length of time spent in public works significantly increased between 2011 and 2012. While the first year saw a majority of 2–4-month episodes, in episodes in all lengths emerged in similar proportions. It is worth noting that the length of episodes depends on their starting date: those starting at the beginning of a year are the longest (about 220-days long on average) and their length decreases towards the end of the year.

\* I would like to express my thanks to *Borbála Lente* for her research assistance with data preparation.

Figure 2.6.1: The number of entrants to public works in respective months



Source: Author's calculations based on the complete Employment and Public Works Database (EPWD).

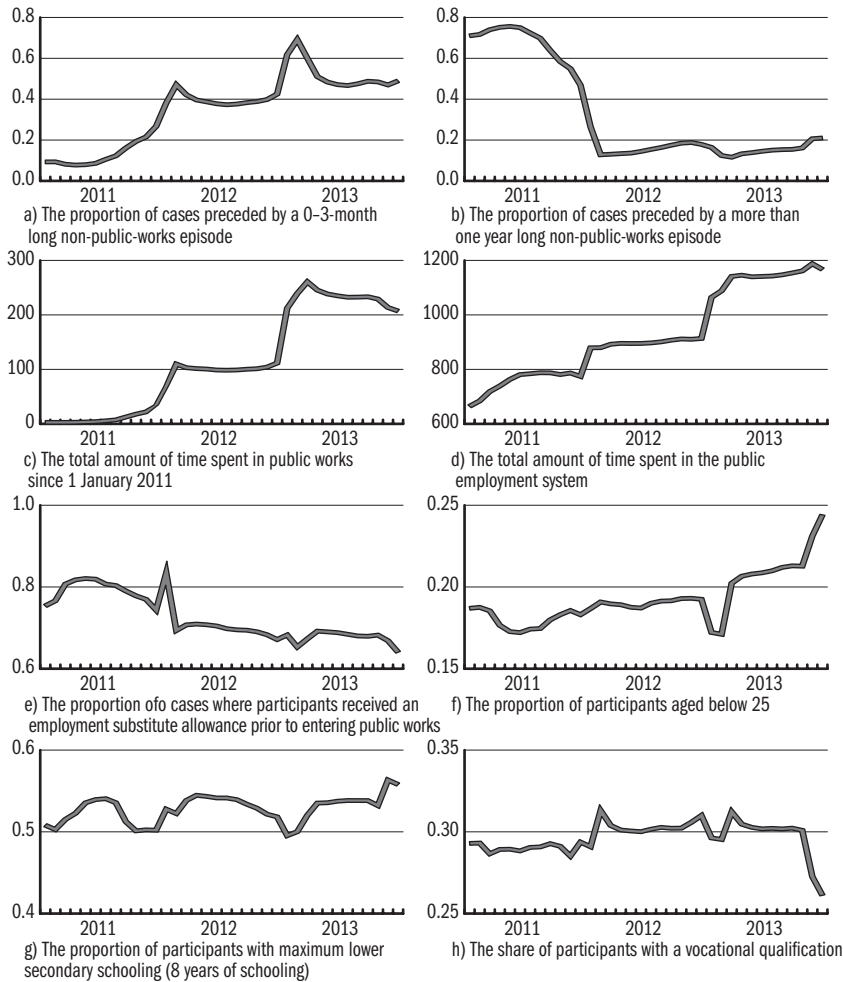
Both the length of episodes and the composition of the participants changed in the first two years of the operation of the new system. The eight panels of *Figure 2.6.2* show the change in key indicators of composition over time. Panels a) and b) indicate that the number of participants spending a short time in the public employment system before entering public works substantially increases over time, while the number of participants spending a long time there decreases. This implies that a large proportion of participants enter public works quite soon after entering the public employment.

Panel c) shows that the average cumulated time spent in public works also increases until 2013 but then decreases in 2013. It is only possible if the programme involved a considerable number of new participants who previously had not participated in public works.

According to panel d) the total time spent in the public employment system shows a similar pattern to what is seen in the case of public works in panel c) but it increases to a larger extent. It seems that *public works does not shorten time spent in the public employment system but may even, on the whole, increase it*. The slight decrease in 2013 shows that the new entrants had not previously participated in either public works or the public employment system. Meanwhile, the share of those receiving employment substitute allowance [*foglalkoztatást helyettesítő támogatás*] prior to participating in public works (see e) decreased significantly and this, similarly to panel b), indicates a decline in the share of the long-term unemployed. This tendency is underpinned by the increase in the share of clients aged under 25, as seen in panel f).

It is remarkable that the composition of the clients in terms of educational attainment was quite stable. The share of unqualified participants somewhat changed when seasonal work was available (panel g); however, it increased considerably in the winter of 2013–2014, probably because of an increase in headcounts related to public works with training.

**Figure 2.6.2: Time series characteristic of the composition of public works participants in respective months**



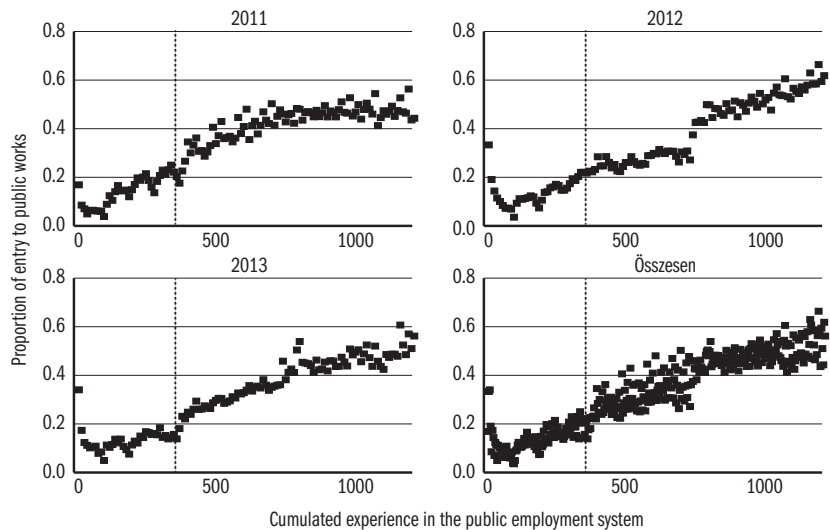
Source: Author's calculations based on the complete EPWD.

As mentioned before, public works aims at getting the long-term unemployed onto the open labour market sooner or later. Long-term unemployment cannot be measured properly by using the administrative data of the National Labour Office alone (since registration itself is already an approximation, and after leaving and re-entering the system a new registration commences). Therefore long-term unemployment herein is measured by the total time spent in the public employment system prior to participating in public works (i.e. “experience in the public employment system”).

The time spent in the public employment system is connected to the non public works episode concerned. It is calculated by increasing the value related to the previous similar episode by the subsequent public works episode (if any) and by the non public works episode concerned. Consequently, this value is *ex post* in terms of the non public works episode and *ex ante* in terms of the potential subsequent public works episode. **It is important to stress that information on the experience in the public employment system is only available if the participant was still within the system on 31 December 2010.** In these cases the length of this episode is also included. If a participant exited the system on 30 December 2010 from a registration period and then re-entered on 2 January, his/her period of experience starts from scratch.

Achieving the first aim is shown in *Figure 2.6.3* as the relation between the share of entrants to public works and experience in the public employment system. The figure shows that the share of entrants increases evenly in each of the three years, suggesting that the targeting of public works is effective. However; contradicting the assumption of effective targeting, a significant share (5–20 per cent) of participants with an experience of less than one year in the public employment system enter public works. It is odd that there is entry to public works after a registration period of about 10 days in each of the three years, after which 17, 33 and 34 per cent of participants enter public works in the respective years. Nevertheless, targeting is less than perfect in the case of participants with a long track record in the public employment system too and it is also deteriorating. The peak of the graph characterising the relationship in 2011, around 500 days, later flattens out, indicating that fewer of such participants are involved. At the same time, the proportion of participants with the longest experience increases.

**Figure 2.6.3: Proportion of entrants to public works from non public works episodes as a function of cumulated experience in the public employment system**



Source: Author's calculations based on the complete EPWD.

By definition, experience in the public employment system also cumulates during public works episodes, thus it is generally true that public works participants later have a bigger chance of participating in it again. However, it is more than that, as seen in *Table 2.6.1*. The rows of the table contain the serial number of public works episodes of the same client (cumulated for all years), and the columns contain the year the episode is commenced. The individual cells indicate how frequent an episode of a certain serial number was. In 2011, although slightly more than one-tenth of participants took part in the programme twice (and a few of them even more times), the majority participated only once. In the following year, more than half of the clients participate in the programme for the second time and nearly one-fifth of them participate for at least the third time. They had either taken part also in the previous year or had participated several times in the year concerned. The trend continues in 2013; in that year only less than one-third of the entrants had not participated in public works earlier.

As a result of cumulating experience, the connection shown in *Figure 2.6.3* and repeated entries to the public employment system, an extremely large number of participants re-enter public works several times. This results in an increase in experience in public works and in the public employment system, as seen in *Figure 2.6.1*.

**Table 2.6.1: Distribution of the serial number of public works episodes in the respective year of commencement**

| No.   | 2011  | 2012  | 2013  | Total |
|-------|-------|-------|-------|-------|
| 1     | 87.6  | 37.0  | 28.4  | 47.7  |
| 2     | 11.3  | 44.6  | 25.0  | 26.6  |
| 3     | 1.0   | 14.0  | 25.9  | 15.4  |
| 4     | 0.1   | 3.5   | 13.7  | 6.9   |
| 5     | 0.0   | 0.9   | 7.0   | 3.3   |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Author's calculations based on the complete EPWD.

In addition to experience, other factors also have an impact on the likelihood of someone entering public works. The details are shown in *Table 2.6.2*, which indicates that men, older participants, the unqualified and participants who are not fresh graduates are more likely to enter public works. The proportion of entrants increases between 2011 and 2012 in the case of each group and then drops below the 2011 value in each group. The registered population is fairly stable in terms of gender and school attainment; however the increase in the share of older participants, young participants and fresh graduates is remarkable and exceeds the increase in the likelihood of entry to public works.

**Table 2.6.2: Share of entrants to public works in the year of entry, broken down according to their characteristics and the distribution of the registered unemployed in the year of entry to public works**

|                                                                              | 2011 | 2012 | 2013 | Average |
|------------------------------------------------------------------------------|------|------|------|---------|
| <b>Share of entry according to characteristics of entrants</b>               |      |      |      |         |
| Total population                                                             | 31.9 | 33.1 | 27.4 | 30.1    |
| <b>Demographic characteristics</b>                                           |      |      |      |         |
| Female                                                                       | 31.4 | 29.1 | 25.6 | 28.0    |
| Male                                                                         | 32.3 | 36.2 | 29.0 | 31.8    |
| <b>Age</b>                                                                   |      |      |      |         |
| Below 25                                                                     | 26.9 | 27.1 | 25.0 | 26.0    |
| Aged 25–44                                                                   | 32.1 | 31.6 | 26.7 | 29.5    |
| Over 44                                                                      | 34.8 | 40.5 | 30.3 | 34.0    |
| <b>Educational attainment</b>                                                |      |      |      |         |
| Max. eight years of schooling (lower-secondary level)                        | 48.4 | 50.1 | 39.8 | 44.7    |
| Vocational school                                                            | 27.9 | 31.2 | 25.4 | 27.6    |
| Min. secondary school leaving examination (Matura)                           | 15.5 | 16.0 | 13.9 | 14.9    |
| Fresh graduate                                                               | 24.6 | 24.9 | 23.7 | 24.2    |
| <b>The history of participants in the preceding non public works episode</b> |      |      |      |         |
| Max. 3 months                                                                | 17.0 | 37.3 | 36.9 | 32.8    |
| 4–9 months                                                                   | 17.2 | 29.9 | 23.8 | 24.0    |
| 10–12 months                                                                 | 19.6 | 35.1 | 27.4 | 27.9    |
| More than 12 months                                                          | 52.8 | 30.9 | 19.6 | 34.0    |
| Did not receive unemployment benefits                                        | 39.2 | 42.8 | 31.6 | 36.3    |
| Received unemployment benefits                                               | 21.9 | 19.4 | 19.9 | 20.4    |
| Did not receive employment substitute allowance                              | 6.5  | 15.1 | 15.5 | 12.9    |
| Received employment substitute allowance                                     | 67.6 | 61.7 | 44.4 | 55.1    |
| Did not participate in training                                              | 31.6 | 33.2 | 27.0 | 29.9    |
| Participated in training                                                     | 20.4 | 26.5 | 33.6 | 30.8    |
| Did not participate in other programmes                                      | 32.1 | 34.5 | 28.3 | 30.9    |
| Participated in other programmes                                             | 10.8 | 4.9  | 4.2  | 5.9     |
| <b>Proportions within the registered population</b>                          |      |      |      |         |
| <b>Demographic characteristics (distribution)</b>                            |      |      |      |         |
| Female                                                                       | 44.4 | 43.1 | 46.0 | 44.8    |
| Male                                                                         | 55.7 | 56.9 | 54.0 | 55.2    |
| <b>Age</b>                                                                   |      |      |      |         |
| Below 25                                                                     | 18.8 | 20.5 | 21.2 | 20.4    |
| Aged 25–44                                                                   | 54.3 | 52.3 | 49.0 | 51.3    |
| Over 44                                                                      | 26.9 | 27.3 | 29.8 | 28.4    |
| <b>Educational attainment</b>                                                |      |      |      |         |
| Max. eight years of schooling (lower-secondary level)                        | 40.6 | 39.1 | 42.3 | 41.0    |
| Vocational school                                                            | 34.8 | 34.9 | 33.0 | 34.0    |
| Min. secondary school leaving examination (Matura)                           | 24.6 | 26.0 | 24.7 | 25.0    |
| Fresh graduate                                                               | 10.5 | 12.9 | 15.3 | 13.4    |

|                                                                              | 2011 | 2012 | 2013 | Average |
|------------------------------------------------------------------------------|------|------|------|---------|
| <b>The history of participants in the preceding non public works episode</b> |      |      |      |         |
| Max. 3 months                                                                | 24.3 | 33.0 | 33.9 | 31.0    |
| 4-9 months                                                                   | 28.9 | 37.5 | 31.1 | 32.2    |
| 10-12 months                                                                 | 7.2  | 9.4  | 7.3  | 7.8     |
| More than 12 months                                                          | 39.6 | 20.1 | 27.7 | 29.0    |
| Did not receive unemployment benefits                                        | 55.1 | 58.3 | 63.5 | 60.0    |
| Received unemployment benefits                                               | 44.9 | 41.7 | 36.5 | 40.0    |
| Did not receive employment substitute allowance                              | 59.2 | 61.6 | 58.9 | 60.0    |
| Received employment substitute allowance                                     | 40.8 | 38.5 | 41.1 | 40.0    |
| Did not participate in training                                              | 98.5 | 98.1 | 95.1 | 97.0    |
| Participated in training                                                     | 1.6  | 1.9  | 4.9  | 3.0     |
| Did not participate in other programmes                                      | 96.8 | 95.0 | 96.1 | 96.0    |
| Participated in other programmes                                             | 3.2  | 5.0  | 3.9  | 4.0     |

Source: Author's calculations based on the complete EPWD.

As for the length of the non public works episode preceding public works, the composition of entrants changes considerably over time. While in 2011 more than half of the entrants had spent in excess of 12 months in a non public works episode, in 2013 only 20 per cent of them had done so. In parallel, the share of entrants from all shorter categories increased, especially of entrants with a length of less than three months. At the same time (probably partly due to the restart of the registration period following a public works episode) the proportion of participants registered for a long time decreases, while the proportion of those registered for a shorter time increases.

The proportion of entry among participants who had not received unemployment benefits dropped more sharply than the proportion of those who had. During the three years the earlier small share of those who had not received employment substitute allowance increased three-fold, and the share of those who had received decreased. This is not in line with the changes in the related population, since the proportion of those who did not receive unemployment benefits increased in this period, and the proportion of those receiving and not receiving employment substitute allowance was nearly stable. A very small proportion of the registered unemployed participated in training or other active labour market programmes. While public works participation of the former increased one and a half times, public works participation of the latter decreased by half.

The independent effects of individual characteristics are not always compliant with what is seen in *Table 2.6.2* because of the correlation between them. In order to exclude these effects, a simple logit model was used for estimating the likelihood of entry to public works for each of the three years, at the end of a non public works episode: this is the time when entry to public works is realistic. The average marginal effects of the individual variables are shown

in *Table 2.6.3*, which is comparable to the differences between likelihoods in categories of a given variable indicated by *Table 2.6.2*. The findings are in line with earlier findings and mainly differ in their absolute value.

**Table 2.6.3: Average marginal effects after logit estimation.**  
Outcome variable: entry to public works from a non public works episode

|                                                        | 2011        | 2012        | 2013        |
|--------------------------------------------------------|-------------|-------------|-------------|
| <b>Demographic characteristics</b>                     |             |             |             |
| Male                                                   | 0.00484***  | 0.0347***   | -0.000722   |
| Aged 25-44                                             | 0.0165***   | 0.0166***   | 0.0138***   |
| Over 44                                                | 0.0459***   | 0.0768***   | 0.0452***   |
| Schooling: vocational school                           | -0.0552***  | -0.0648***  | -0.0500***  |
| Schooling: min. secondary school leaving exam (Matura) | -0.0786***  | -0.108***   | -0.0878***  |
| Fresh graduate                                         | 0.0223***   | 0.0457***   | 0.0516***   |
| <b>History of participant in registration</b>          |             |             |             |
| Number of days spent in the public employment system   | 0.000125*** | 0.000151*** | 0.000108*** |
| Number of unsuccessful placements                      | -0.0724***  | -0.0414***  | -0.0392***  |
| Received unemployment benefits                         | 0.0231***   | -0.0603***  | -0.0426***  |
| Received employment substitute allowance               | 0.484***    | 0.245***    | 0.118***    |
| Participated in training                               | -0.0377***  | -0.0378***  | 0.0713***   |
| Participated in another active labour market programme | -0.106***   | -0.270***   | -0.218***   |

Heteroskedasticity-robust and clustered standard errors.

Reference categories: female, aged below 25, with educational attainment of a maximum of eight years of schooling (lower secondary), not a fresh graduate, did not spend time in the public employment system, had no unsuccessful job placement, did not receive unemployment benefits or employment substitute and did not participate in any other active labour market programmes.

Logit coefficients were calculated using the total sample, while the average effects were calculated using a 5-per-cent sample due to being highly resource-intensive.

Significant at a level of \*\*\*1 per cent, \*\*5 per cent, \*10 per cent.

Source: Author's calculations based on the complete EPWD.

It appears that *the composition of public works participants changed* as a result of a shift in the programme structure of the public employment system. At first, predominantly clients with a long period of registration entered public works, which changed over time. This has happened partly because of the restart of the registration period, which in the case of repeated participation, decreases the time of the preceding registration but does not decrease the average time spent in the public employment system. The majority of participants continue to be unqualified and older. It is important to note, however, that among new entrants it is young people and fresh graduates who have an increasing share.

Thus there are significant changes behind the relative stability of headcounts, presented in *Subchapter 2.3*, which are partly beneficial, partly adverse.



It is beneficial that public works apparently reaches a number of clients registered for a long time but not yet previously involved in other programmes. This may provide more financial security than the small amount of employment substitute allowance or social benefit or in many cases the local labour market that is accessible without support and mobility. It is less favourable that over time the targeting of the programme deteriorates. As seen in *Subchapter 2.5*, a significant part of public works participants have considerable work experience, therefore the expedience of the programme in general should be examined. It is especially a serious cause for concern that the likelihood of young participants, usually with a short time spent in the public employment system, entering public works increases. The labour market prospects of young people may be improved by other support instead of public works (as indicated in the *Youth Guarantee* plan of the Government) (*Ministry for National Economy*, 2013). Still, their share within public works participants is growing. Since participants obviously become increasingly attached to public works in the public employment system, it is of special importance that the targeting of the programme be as effective as possible.