The efficiency of municipal public works programmes

Detailed summary

This summary includes the context and main findings of our research. The full report is available in Hungarian at http://www.budapestinstitute.eu/uploads/BI_kozcelu_kut_jelentes_2011aug30.pdf

In Hungary, unemployment rose very rapidly after the regime change in 1989, and was followed by a steady rise of long-term unemployment during the mid-1990s. In response, the Road to Work Programme (ÚMP) was launched in 2009 to provide income and an employment opportunity to long term unemployed low educated workers. The main thrust of the programme was a substantial increase of the budget available for public works programmes managed by local governments.

Our research examined the targeting and take-up of ÚMP as well as its effects on long term unemployment. Estimates based on administrative data showed that ÚMP has indeed reached the long-term unemployed with the worst chances of re-employment, although those living in remote areas were less involved in the programme. The take-up of ÚMP increased considerably by the end of 2009: nearly all villages and towns and more than a quarter of the potentially eligible long-term unemployed took part in some public works project. However, supplementary services that would facilitate re-entry to the open labour market remained weak.

According to our quantitative analysis, ÚMP did not reduce long-term unemployment. This also applies to similar programmes prior to ÚMP, which implies that public works do not have a positive impact even on a longer time span, through the effect of improving the ability to work. Based on the above, we recommend a strengthening of the involvement of social workers and job centres in providing supplmentary services to ÚMP participants, and a reallocation of resources towards other active labour market programmas that increase reemployment probabilities.

Unemployment and employment policy in Hungary

Unemployment rose very rapidly during the recession after 1989. Long-term unemployment rose steadily during the mid-1990s, peaked at 3% of the active population in 1996, stayed above 1.5% the following years, and approached 3% again by 2009.

The increase in long-term unemployment has several underlying reasons: the economic structure inherited from the socialist era, the regime change, global recession, demographic processes and the government's policies all had a role in it. The late-2000s' global recession made things worse but internal structural problems are a more likely explanation for the current low employment rates.

Active labour market programmes are underresearched, but the few empirical analyses available suggest that they have not been very successful at increasing employment in Hungary. Job subsidies are plagued by deadweight loss and training schemes tend to benefit those having secondary education while the most disadvantaged low educate job seekers are typically sent to public works

projects. The Public Employment Service is understaffed and local municipalities often lack the expertise and capacities to provide efficient services for the long term unemployed. [1]

Public works have been used as a remedy for long term unemployment since 1987. However, their role remained limited until 2000, when – as part of a workfare reform – the task of organising such projects was handed over to local councils, with around 90% of wage costs covered by a central government subsidy. Eligibility rules for unemployment assistance were tightened and recipients were obliged to participate in public works for at least 30 days a year. The new scheme introduced in 2009 did not differ much from its predecessors, but entailed a large increase in the resources available to municipalities for public works schemes. In 2009, together with two other (smaller) public works schemes it accouted for 84 percent of total spending on ALMP (excluding EU financed projects).

Take up of public works programmes

The large majority of municipalities had been involved in organising public works even before ÚMP was introduced. As table 1 shows, the impact of the programme was largest in very small villages (of below 100 inhabitants), where partic2ipation increased from 80 to 91 % (of all villages).

Table 1: Share of villages/towns that organise public works projects from 2003 to 2009

	2003	*2005*	*2007*	*2008*	*2009*
Village of <50 inhabitants	0.00	0.53	0.53	0.67	0.84
Village of 50-99	0.13	0.78	0.73	0.80	0.91
Village of 100-149	0.14	0.83	0.81	0.86	0.95
Village of 150-499	0.25	0.84	0.85	0.87	0.96
Village of 500-4999	0.44	0.88	0.87	0.88	0.97
Town/village of 5-9000	0.71	0.89	0.92	0.92	0.97
Town of 10-19000	0.70	0.85	0.85	0.84	0.99
Town of 20-49000	0.71	0.98	0.90	0.98	1.00
Town of >50000	0.90	0.95	1.00	1.00	1.00
All settlements	0.39	0.85	0.85	0.87	0.96

There is a clear upward trend in the ratio of settlements that organise public works: nearly all of them do so by 2009. To measure the factors influencing take-up, we estimated take-up for each village and town before 2008, then predicted the ratio of public works participants to eligible job seekers for 2009

[1] For an outline of current policies, see: Description of labour market institutions, http://ec.europa.eu/economy_finance/db_indicators/labref/pdf/hungary_en.pdf.

and regressed the difference between this and the actual 2009 ratio on various characteristics of towns and villages (see Table *2)*.

Table 2. Effect of settlement characteristics on the take-up of ÚMP

	coeff.	St. error	P-value
Long-term unemployment	5.3732	0.4125	0.00
Commute distance from capital (Budapest)	0.0051	0.0007	0.00
Commute distance from county centre	0.0019	0.0019	0.30
Commute distance from small region centre	-0.0140	0.0047	0.00
Number of hab. 501-1000	0.9700	0.0790	0.00
Number of hab. 1000-5000	1.2995	0.0722	0.00
Number of hab. 5000-20000	1.8045	0.1253	0.00
Number of hab. 20000-100000	0.9399	0.2501	0.00
Share of Roma community	-0.0028	0.0036	0.45
Public works used in 1999	0.2896	0.0714	0.00
Used P.O.D.*	0.0558	0.0617	0.37
Businesses	0.00003	0.0000	0.13
Constant	-0.2414	0.1450	0.10

Robust OLS regression, N=2557; F(12, 2544) = 62.00 Prob > F = 0.0000. Dependent variable is actual per predicted ratio of public workers. * The local authority would in some cases place a charge on the property of benefit recipients to be paid on death. This is used as a proxy of using public works to reduce benefit fraud.

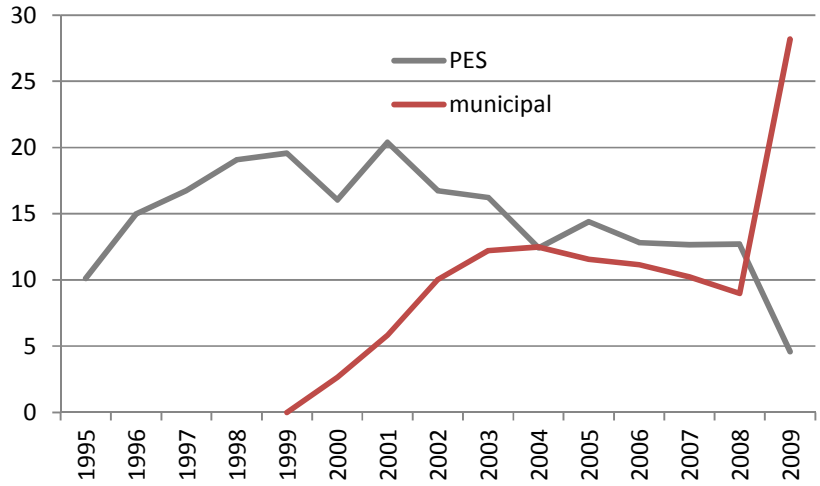
Table 2 shows that the local unemployment rate had a significant positive effect on take-up, especially in middle-sized and larger settlements and where public work was used already in 1999. Small and remote villages were less involved in ÚMP. The ratio of the Roma population had no significant effect on take-up.

Targeting ÚMP at the individual level

At the individual level, the share of participants (among all benefit recipients) increased from 20 to 30 %, considering both types of public works progammes.[2]

[2] Two main schemes were in use in 2009, organised by (1) municipalities, (2) local PES offices, and a much smaller third one organised by a central agency.

Participants of public works schemes organised by the PES and by municipalities, %



Source: own calculations based on administrative data of the PES and the Treasury.
Note: % of social assisstance recipients + participants in the two types of public works.

To examine the targeting of ÚMP, we used a quasi-panel of social assistance recipients obtained from the national PES office, which included the number of recipients and exits into public works by age group, level of education and month, for 2009. Results showed that ÚMP did reach its target groups at the individual level: low educated job seekers were more likely to participate. Age had no significant effect on take-up aside from the fact that under 25 years, involvement was more likely.

Impact on long term unemployment

The impact of public works was estimated in a panel of settlement level administrative data obtained from the Hungarian Treasury (MÁK), the Central Employment Office (FH) and the Hungarian Central Statistical Office (KSH). The data cover the years between 2003 to 2008. The basic model is:

(1) $LTU_{it} = \alpha STU_{i,t} + \gamma KC_{it} + BX_{it} + c_i + u_t + v_{it}$
(2) $V_{it} = \rho v_{i,t\,1} + \varepsilon_{it}$, where $|\rho| < 1$ and $\varepsilon \sim (0, \delta^2{}_{\varepsilon})$,

where LTU and STU denote long-term and short-term unemployment, KC is the share participating in public works, X are control variables, c denote fixed effects of settlements and u denote fixed effects of the given year. Table 3 shows regression outputs below.

Table 3: The effect of public works programmes on long-term unemployment
Dependent variable: long-term unemployment[a]

	Squares (Stata regress)	with fixed town and year effects (Stata xtreg, fe)	fixed town and year effects and autocorrelated error terms (Stata xtregar, fe)
Basic model[b]			
Short-term unemployment[c]	1.0737*** (110.25)	0.1302*** (13.22)	0.1772*** (17.29)
Public works[d]	-0.0507*** (26.18)	0.0113*** (6.36)	0.0166*** (7.96)
Autoregression (ρ)			0.3359
R2 (for panels: within)	0.4843	0.1226	0.0905
Lagged effects:[e]			
Public works (t-1)	-0.0642*** (27.29)	0.0045** (2.07)	0.0031 (1.22)
Public works (t-2)	-0.0689*** (27.31)	0.0093*** (3.78)	0.0057* (1.80)
Number of observations (villages, towns):			
Basic model	16610 (2994)	16610 (2994)	13116 (2907)
One lag	12726 (2878)	12726 (2878)	9848 (2732)
Two lags	10021 (2788)	10021 (2788)	7233 (2641)

a) Number of public workers and registered (for more than 180 days) unemployed taken together, divided by number of persons of active age
b) Number of public workers and registered (for less than 180 days) unemployed taken together, divided by number of persons of active age, for the preceding year
c) The model also contains dummy variables and settlement size (number of inhabitants).
d) Number of public workers divided by social assisstance recipients and public workers taken together.
e) Estimates show parameters similar to those in the basic model but using lagged public works indicators.

The preferred specification in column 3 (which controls for potential bias from autocorrelated error terms), shows that public works slightly increase long-term unemployment. One standard deviation in public works causes a 1/20 standard deviation increase in long-term unemployment.

This result also applies to programmes in use between 2003 and 2008, which implies that public works do not have a positive impact even on a longer time span, through the effect of improving the ability to work. Based on the above, we recommend a strengthening of the involvement of social workers and job centres in providing supplmentary services to participants, and a reallocation of resources towards other active labour market programmas that increase reemployment probabilities.