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Start-up subsidies for the unemployed: Long-term evidence and effect heterogeneity

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ABSTRACT

Turning unemployment into self-employment has become an increasingly important part of active labor market policies (ALMP) in many OECD countries. Germany is a good example where the spending on start-up subsidies for the unemployed accounted for nearly 17% of the total spending on ALMP in 2004. In contrast to other programs—like vocational training, job creation schemes, or wage subsidies—the empirical evidence on the effectiveness of such schemes is still scarce; especially regarding long-term effects and effect heterogeneity. This paper aims to close this gap. We use administrative and survey data from a large sample of participants in two distinct start-up programs and a control group of unemployed individuals. We find that over 80% of participants are integrated in the labor market and have relatively high labor income five years after start-up. Additionally, participants are much more satisfied with their current occupational situation compared to previous jobs. Based on propensity score matching methods we estimate the long-term effects of the programs against non-participation and take great care in assessing the sensitivity of our results with respect to deviations from the identifying assumption. Our results turn out to be robust and show that both programs are effective with respect to income and employment outcomes in the long-run, i.e., five years after start-up. Moreover, we consider effect heterogeneity with respect to several dimensions and show that start-up subsidies for the unemployed tend to be most effective for disadvantaged groups in the labor market.

1. Introduction

The recent OECD report on income and poverty (OECD, 2008) illustrates an increase in poverty rates over the past decade, where the risk of becoming poor shifted from the elderly in particular towards children and people of working age. The importance of employment in this context is straightforward as poverty among non-working households increased sharply during the last decade. The poverty rate[1] for households where the head is of working age but no household member actually works amounted to 36% and was three (twelve) times higher than for households with one (two or more) worker in the mid-2000s. Despite cross-country variation in terms of the scope of poverty, the negative correlation between employment rates and poverty is throughout valid. In an earlier study, Sen (1997) presents different concepts on how unemployment may cause poverty and inequality due to social exclusion. The main idea is that specific groups of individuals are generally excluded from the labor market, for example low skilled or youth. In addition, economic conditions may also foster social exclusion. He argues that along with the abolishment of social exclusion, unemployment and therefore poverty will be reduced. Governments are fully aware of this concept and therefore spend significant amounts of their budget on active labor market policies (ALMP) to equalize labor market conditions of unemployed individuals, in which a special focus is usually put on disadvantaged groups. By removing severe differences in terms of education, work experience or productivity, existing labor market barriers are to be overcome, consequently reducing unemployment. Several labor market programs have been introduced in which the most popular programs are traditionally training measures such as retraining, classroom training or on-the-job training. Furthermore, employment subsidies, job creation schemes and job-search assistance have also been adapted by almost all OECD countries. These programs are supposed to integrate unemployed individuals in the labor market and are associated with an upward shift in income level to secure one's livelihood and an increase in life and job satisfaction. Much research has been dedicated to investigating the effectiveness of ALMP programs. Although positive results with respect to income and employment prospects were found occasionally, the overall evidence indicates that the effects of those traditional measures are rather disappointing (see Martin and Grubb, 2001; Dar and Gill, 1998; Dar and Tzannatos, 1999; Fay, 1996 for evidence on OECD countries and Kluve and Schmidt, 2002 for the European experience). In particular,

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[1] The poverty rate is defined as the share of people with an equivalised disposable income below 50% of the median of the entire population.

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job creation schemes turn out to be not appropriate for improving participants' employment perspectives.

On the other hand, it is found that the promotion of self-employment among unemployed individuals is a promising tool. Public authorities usually tie start-up subsidies with the hope for a "double dividend". Besides creating a job for the self-employed themselves, the newly founded businesses may potentially create further jobs and thus reduce unemployment rates even further. Moreover, individuals who receive support also increase their employability, human capital and labor market networks during the period of self-employment, which, in the case of failure, makes them more able to find regular employment. Start-up subsidies may also be promising from a macroeconomic perspective, since the entry of new firms generally increases competition and consequently productivity of firms. This potentially can promote efficient markets and technology diffusion and might finally lead to economic stability and economic growth, i.e., an increase in wealth (see Storey, 1994; Fritsch, 2008). However, there are also some concerns related to financial promotion of start-ups by the unemployed. First of all, supported individuals may have become self-employed even without financial support. This is referred to as deadweight loss and is usually hard to determine.[2] Another concern addresses crowding out effects, whereby incumbent or non-subsidized firms may be displaced by supported start-ups. Finally, firms may also substitute employees with subsidized self-employed workers. Due to a highly regulated labor market in Germany, however, such substitution effects are likely to play only a minor role in practice.

We focus in our analysis on the effects of start-up subsidies on the participating individuals only, that is we do not address any macroeconomic or general-equilibrium effects. Most of the existing evaluation studies on start-up schemes report positive effects with respect to different labor market outcomes. The evidence varies with respect to countries and institutional design of support. A main shortcoming of previous studies is that they provide short- to medium-run evidence only and—especially in the case of industrialized countries—do not consider effect heterogeneity. If the analysis is conducted at a point at which individuals still receive the support, the results are likely to be upward biased due to locking-in effects. To properly judge the effects of the programs, the observation window needs to be (substantially) longer than the period of support. Furthermore, it can be assumed that there will be heterogeneity in the effects of these programs, which implies that some groups might benefit more and others less from participation. This is of special interest for particular disadvantaged groups, for example low educated or young individuals who are over-represented among the long-term unemployed and socially excluded. Knowing how start-up schemes work for these groups will help to design programs more appropriate and thereby tackle long-term unemployment, social exclusion, and the associated risk of poverty.

The aim of this paper is to close the existing research gap by providing long-term evidence and an extensive analysis with respect to effect heterogeneity for two distinct start-up subsidies for unemployed individuals in Germany. The first program—*bridging allowance* (BA, "Überbrückungsgeld")—provided relatively high financial support (depending on individuals' previous earnings) to unemployed workers for six months; whereas the second program—*start-up subsidy* (SUS, "Existenzgründungszuschuss")—consisted of (lower) monthly lump-sum payments for up to three years.[3] Since both schemes differ sharply in terms of financial support and duration, they also attracted different types of individuals. Using a combination of administrative and survey data, we are able to follow individuals for nearly five years after entering the programs. In addition, we also have access to a suitable control group of other unemployed individuals allowing us to use propensity score matching methods for the impact analysis. We take great care in assessing the sensitivity of our results with respect to deviations from the identifying assumption. Our results turn out to be robust and we find strong positive long-run effects nearly five years after start-up for both programs with respect to several labor market outcomes. In addition, we show that they are most effective for individuals at high risk of being excluded from the labor market, i.e., low educated and low qualified individuals.

The paper is organized as follows: Section 2 provides a brief literature review on ALMP in OECD countries, institutional details on start-up programs for the unemployed in Germany and a discussion of previous results on such measures. Afterwards we describe the data, present descriptive results and illustrate the identification and estimation strategy in Section 3. The main results are discussed in Section 4, which also contains an extensive analysis of effect heterogeneity. Finally, we present the sensitivity analysis in Section 5 before we conclude and give an outlook in Section 6.

2. ALMP to reintegrate unemployed individuals

2.1. Previous literature

The OECD reports an average spending of 0.6% of a country's GDP on ALMP among all OECD member states in 2007, and therefore, much research has been conducted investigating the effectiveness of such measures (see OECD, 2009). The main question is whether ALMP programs are appropriate for improving participants' labor market perspectives and in addition whether they also generate income gains for participants. For instance, Martin and Grubb (2001), Dar and Tzannatos (1999) and Fay (1996) review evaluation studies on ALMP across OECD countries and present mixed results for several programs. In fact, they do find some positive results for certain subgroups, for example training for the long-term unemployed, or women. Dar and Gill (1998) consider retraining programs in OECD countries and are not able to identify significant effects. Focusing on Europe, Kluve and Schmidt (2002) find strong heterogenous effects for different programs and subgroups and argue that job search assistance and training might be effective. Card et al. (2010) provide an international meta-analysis of recent evaluation studies on the effectiveness of ALMP programs and confirm the overall ineffectiveness of job creation schemes. Moreover, they find promising effects for classroom or on-the-job training in the medium-run. In an earlier review on the US and European experience, Heckman et al. (1999) point out that benefits from ALMP programs do not significantly reduce poverty or unemployment, however, employment gains are more likely to occur as an increase in income levels. Betcherman et al. (2004) provide an overview on the effectiveness of ALMP in developing and transition countries and find some positive results for employment services while training measures, public works and wage subsidies are rather unsuccessful. For Germany, Fitzenberger et al. (2008) and Lechner et al. (2004) find positive effects for training measures in the long-run. Moreover, Stephan (2008) and Stephan and Pahnke (2008) provide evidence for vocational training, short-term training, wage subsidies and job creation schemes and show consistently negative effects for job creation schemes (in line with Caliendo et al., 2008) and mostly positive but not always significant effects for the other programs under consideration. Lechner and Wunsch (2008) conclude that programs such as vocational training, wage subsidies, short-term training and assessment schemes are overall ineffective for the West German labor market. To sum up, despite occasionally positive results, the overall evidence indicates that traditional measures are rather disappointing. In particular job

[2] Meager (1993) provides an estimate of the deadweight effect related to the bridging allowance in Germany and concludes that the effect is rather small (about 10%).

[3] Both programs were replaced in August 2006 by a single new program—the new start-up subsidy program (*Gründungszuschuss*)—which will not be analyzed here.