New Evidence on the Effects of Start-Up Subsidies for the Unemployed

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References


Download: www.empwifo.de — www.caliendo.de
Active labor market policies (ALMP) are common tools to reintegrate unemployed into the labor market (OECD: 0.6% GDP, 2008).

ALMP usually consist of traditional measures such as job creation schemes, training programs, job search assistance, or wage subsidies.

- **Goal:** Remove severe disadvantages in education, work experience or productivity.
- **Focus:** Dependent Employment

**Empirical Evidence:** Rather mixed (Card et al., 2010):

- Job creation schemes: Overall ineffective to improve participants’ labor market perspective (Caliendo et al., 2008).
- Training programs: Evidence is mixed in medium-run. Modest effects in the (very) long-run (Kluve/Schmidt, 2002; Martin/Grubb, 2001).
What are the Potential Gains of Start-Up Subsidies?

- **Start-up subsidies** for the unemployed are a different strategy to integrate unemployed individuals into employment.
  - **Goal**: Help unemployed individuals to start a business (overcome capital constraints, secure livelihood in the starting phase).
  - **Focus**: Self-employment.

- **Getting back to work...**
  - Re-integration of individuals whose work is either undervalued in paid employment (low formal skills) or who face discrimination (migrants).
  - Alternative to limited job offers in dependent employment due to group-specific labor market constraints (e.g. limited availability of part-time jobs) or structural changes in regions/industries.

- **Potential macroeconomic effects:**
  - “Double dividend” if there is additional job creation.
  - Increased competition due to new firm entries leads to efficient markets and technology diffusion, potentially economic growth.
  - “Entrepreneurial spirit”
Can these Programs Deliver?

- Can these programs confirm the (high) expectations?
  - Are unemployed individuals qualified to start their own business?
  - Old dogma: Necessity start-ups are doomed to fail! If they survive they only generate minimal income.
  - What are the long-term effects? Is there any job-creation?
  - Higher effects for different sub-groups?
  - What about deadweight losses?

- Previous empirical evidence:
  - Evidence on the long-term effects of these programs is scarce/non-existent.
  - Main problem: No appropriate data available!
  - Reasons: Limited usage of programs and data issues (administrative data/HH surveys).
## Start-Up Subsidies: Germany as a Case Study

### Entries into ALMP/SC III in Germany (in thousand)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Further vocational training</td>
<td>455</td>
<td>185</td>
<td>260</td>
<td>158</td>
</tr>
<tr>
<td>Job Creation Schemes</td>
<td>163</td>
<td>153</td>
<td>71</td>
<td>0</td>
</tr>
<tr>
<td>Wage subsidies</td>
<td>194</td>
<td>160</td>
<td>140</td>
<td>86</td>
</tr>
<tr>
<td>Promotion of Self-employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridging Allowance (BA)</td>
<td>126</td>
<td>171</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Start-up Subsidy (SUS)</td>
<td>-</td>
<td>184</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>New Start-up Subsidy</td>
<td>-</td>
<td>-</td>
<td>119</td>
<td>134</td>
</tr>
</tbody>
</table>

*Source: Statistic of the German Federal Employment Agency.*
Start-Up Subsidies: Germany as a Case Study

- For a certain period individuals could choose between two programs. Main difference: Amount and length of the transfer payments!
  - Bridging Allowance (BA), introduced in 1986, unemployment benefits plus 70% (for SSL), maximum duration: six months.
  - Start-up Subsidy (SUS), introduced in 2003, fixed sum of €600 per month in the first year, €360/€240 in the second/third year.

- Due to institutional setting, both programs attract a different clientele (PWP, 2009)!
  - BA participants are higher educated with higher earnings in the past,
  - Less restrictive eligibility criteria in case of SUS provides individuals without or elapsed benefit entitlement (e.g. women due to less labor market experience) access to start-up subsidies.

- Both programs were combined to one single subsidy in August 2006 (reformed again in Nov 2011).
  - New Start-up Subsidy (New SUS), unemployment benefits plus €300 (for SSL) for nine months; €300 might be extended for further six months.
Giving Answers with New Data

In the last couple of years we established research projects, which will help to answer the raised questions:

1. Long-run effects of start-up subsidies (presented today)
   - **Data:** Entries from unemployment into SUS and BA in III/2003.
   - **Control group:** Unemployed individuals in III/2003 who did not enter SUS or BA.
   - **Observation period:** Up to 56 months after start-up
   - **Focus today:** Participants in Bridging Allowance

2. Evaluation of the new start-up subsidy (available in **March 2013**)

3. Evaluation of business coaching for start-ups (available in **June 2013**)

Research Questions

Two topics are of main interest:

1. Are these programs effective in...
   - ...avoiding unemployment?
   - ...integrating individuals in regular employment or self-employment?
   - ...increasing the personal income of individuals?
   - ...and if so, for whom do they work best (effect heterogeneity)?

2. Do these programs also generate additional employment effects?
   - ...first descriptive evidence on the extent of these potential effects
Identification and Implementation of PSM

- **Average Treatment Effect on the Treated:**
  \[ \tau_{ATT} = E(\tau \mid D = 1) = E(Y^1 \mid D = 1) - E(Y^0 \mid D = 1) \]

- **Selection Bias if:**
  \[ E(Y^0 \mid D = 1) \neq E(Y^0 \mid D = 0) \]

- **Conditional Independence Assumption:**
  \[ Y^0 \perp D \mid X \]
  - Informative data (in total 55 variables): Socio-demographics, (un)employment history, regional characteristics, risk attitudes, parental self-employment, etc.

- **Implementation of Propensity Score Matching (**JPubEcon, 2011**):**
  - Estimation of propensity scores: \( P(D = 1 \mid X_0) \rightarrow \) (Probit).
  - Matching quality: very good!

- **Extensive Sensitivity Analysis**
  - Alternative matching algorithms, Different PS specifications, Alternative common support condition
  - Unobserved heterogeneity
## Table: Bridging Allowance - Labour Market Outcomes

<table>
<thead>
<tr>
<th>Employment status after 5 years</th>
<th>West Germany</th>
<th>East Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Self-employed</td>
<td>68%</td>
<td>67%</td>
</tr>
<tr>
<td>Dependently employed</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>7%</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income level after 5 years (in €)</th>
<th>West Germany</th>
<th>East Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly net income 5 years after start-up</td>
<td>2,515</td>
<td>1,495</td>
</tr>
<tr>
<td>– If working fulltime</td>
<td>2,684</td>
<td>1,823</td>
</tr>
</tbody>
</table>
## Causal Effects

**Table: Bridging Allowance - Treatment Effects**

<table>
<thead>
<tr>
<th></th>
<th>West Germany Men</th>
<th>West Germany Women</th>
<th>East Germany Men</th>
<th>East Germany Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effects (differences) in comparison to a control group of non-participants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criterion 1: Self-employed or employed 5 years after start-up (in %-points)</td>
<td>17%-p</td>
<td>20%-p</td>
<td>23%-p</td>
<td>26%-p</td>
</tr>
<tr>
<td>Cumulative effect (in months)</td>
<td>16.4</td>
<td>22.6</td>
<td>21.5</td>
<td>23.9</td>
</tr>
<tr>
<td>Criterion 2: Net Income 5 years after start-up</td>
<td>777€</td>
<td>283€</td>
<td>672€</td>
<td>302€</td>
</tr>
</tbody>
</table>
### Table: Bridging Allowance - Job Creation

<table>
<thead>
<tr>
<th>Further job creation</th>
<th>West Germany</th>
<th>East Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of self-employed having created a further job 5 years after start-up</td>
<td>42%</td>
<td>31%</td>
</tr>
<tr>
<td>Number of jobs</td>
<td>4.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Full-time equivalents (FTE)</td>
<td>3.4</td>
<td>2.7</td>
</tr>
<tr>
<td>FTE for each start up</td>
<td>0.95</td>
<td>0.55</td>
</tr>
</tbody>
</table>
What About Effects for Different Sub-Groups?

We split the estimation sample with respect to several characteristics:

1. Disadvantaged groups in the labor market
   - BA is effective for low educated and young individuals!

2. Disadvantaged areas
   - BA is more effective in disadvantaged areas!

3. The case of unemployed women
   - BA is more effective for unemployed women!
   - In contrast to traditional ALMP programs, less detrimental effects on fertility!
Key Findings in a Nutshell

- Can these programs confirm the (high) expectations?
  - Are unemployed individuals qualified to start their own business?
  - Old dogma: Necessity start-ups are doomed to fail! If they survive they only generate minimal income.
  - What are the long-term effects? Is there any job-creation?
  - Higher effects for different sub-groups?
  - What about deadweight losses?

- Preliminary conclusions:
  - High survival rates - even after five years! Not every business closure is a failure!
  - 30-40% of the supported business founders create further jobs (FTE quota per subsidy: 0.8 for men, 0.4 for women).
  - Positive income and employment effects (compared to non-participants); modest effect for women.
  - (Partly) higher effects for disadvantaged groups. They depict an alternative to limited job offers in dependent employment and are most effective when non-participants face low employment rates.
  - 15% potential windfall gains/deadweight losses (ZAF, 2012).
Even though the preliminary results suggest that these programs are effective, there are open questions!

- Are we looking at the proper comparison group?
  - Other unemployed or other start-ups?
- What about personality traits?
  - Entrepreneurs are different! Personality traits and risk attitudes play a role to become self-employed and to be successful (*SBE, 2009; JEBO, 2010*).
  - Do these traits and perceptions change over time?
- Additional support needed?
  - Can we enhance program effectiveness by additional coaching programs?

⇒ Ongoing research project “SUS: A New Evaluation Approach” (joint with IAB, Nuremberg)
Survey Design “SUS: A New Evaluation Approach”

1Q. 2009
4Q. 2010
4Q. 2012

Subsidized Founders (1Q. 2009)
Data: Admin. Info., IEB

Non-Subsidized Founders (1Q. 2009)
Data: CCI, CC, PAP

Survey 1
(4Q. 2010)

Founder:
Socio-Demographics, Intergenerational Transmission

Start-Up Information:
Motives, Capital, Experience

Personality Traits:
Risk, Big-5, Cogn. Skills, ...

Business Outcomes:
Turnover, Income, Employees, ...

Survey 2
(4Q. 2012)

Personality Traits:
Risk, Big-5, Cogn. Skills, ...

Business Outcomes:
Turnover, Income, Employees, ...

1Q. 2009
4Q. 2010
4Q. 2012
– Policy Conclusions:
  – Start-up subsidies for the unemployed: An interesting alternative, but not for everyone!
  – More commitment and quality controls can increase efficiency.
  – Non-monetary support is probably needed...

– New research projects will allow additional answers:
  – Comparison with non-subsidized start-ups...substitution effects?
  – Baseline measurement at start-up
  – Additional information on psychological characteristics, cognitive skills etc.
  – Effects of business coaching

– Macroeconomic effects?