

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

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# Active Labor Market Policies to Fight Unemployment

- **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).
  - Wage subsidies: Mixed evidence (Jaenichen/Stephan, 2007; Lechner/Schuenemann/Wunsch, 2012).

# 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)

	2002	2004	2008	2011
Further vocational training	455	185	260	158
Job Creation Schemes	163	153	71	0
Wage subsidies	194	160	140	86
Promotion of Self-employment				
Bridging Allowance (BA)	126	171	-	-
Start-up Subsidy (SUS)	-	184	-	-
New Start-up Subsidy	-	-	119	134

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.
  - Data source: 'Integrated Labor Market Biographies' and three surveys (Jan/Feb 2005 and 2006, May/Jun 2008).
  - 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:  $Y^0 \perp\!\!\!\perp D \mid X$ 
  - 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 procedure: *Kernel Matching* (efficiency gain, bootstrap possible, Abadie and Imbens, *Econometrica*, 2006).
  - Matching quality: very good!
- Extensive Sensitivity Analysis
  - Alternative matching algorithms, Different PS specifications, Alternative common support condition
  - Unobserved heterogeneity

# Descriptive Evidence

Table: Bridging Allowance - Labour Market Outcomes

	West Germany		East Germany	
	Men	Women	Men	Women
<b>Employment status after 5 years</b>				
Self-employed	68%	67%	70%	56%
Dependently employed	21%	24%	20%	23%
Unemployed	7%	3%	7%	10%
<b>Income level after 5 years (in €)</b>				
Monthly net income 5 years after start-up	2,515	1,495	1,710	1,286
– If working fulltime	2,684	1,823	1,759	1,512

# Causal Effects

Table: Bridging Allowance - Treatment Effects

	West Germany		East Germany	
	Men	Women	Men	Women
Effects (differences) in comparison to a control group of non-participants				
Criterion 1: Self-employed or employed 5 years after start-up (in %-points)	17%-p	20%-p	23%-p	26%-p
Cumulative effect (in months)	16.4	22.6	21.5	23.9
Criterion 2: Net Income 5 years after start-up	777€	283€	672€	302€

# Job Creation

Table: Bridging Allowance - Job Creation

	West Germany		East Germany	
	Men	Women	Men	Women
<b>Further job creation</b>				
Share of self-employed having created a further job 5 years after start-up	42%	31%	35%	29%
Number of jobs	4.7	5.1	3.6	2.6
Full-time equivalents (FTE)	3.4	2.7	2.7	1.5
FTE for each start up	0.95	0.55	0.65	0.24

# 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).

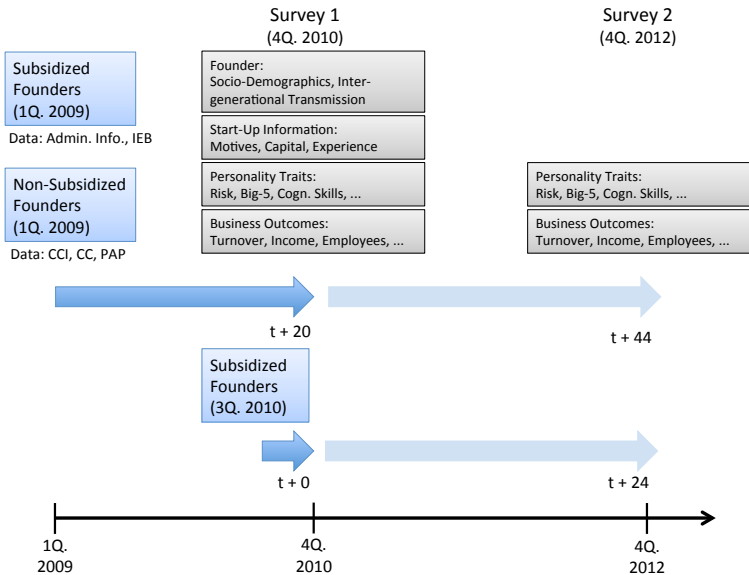
# Open Questions

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”



# Conclusion and Outlook

- 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?