Evaluating Start-Up Subsidies for the Unemployed Effectiveness and Monetary Efficiency of Two Subsidy Programs

Marco Caliendo DIW Berlin, IZA Bonn, IAB Nuremberg

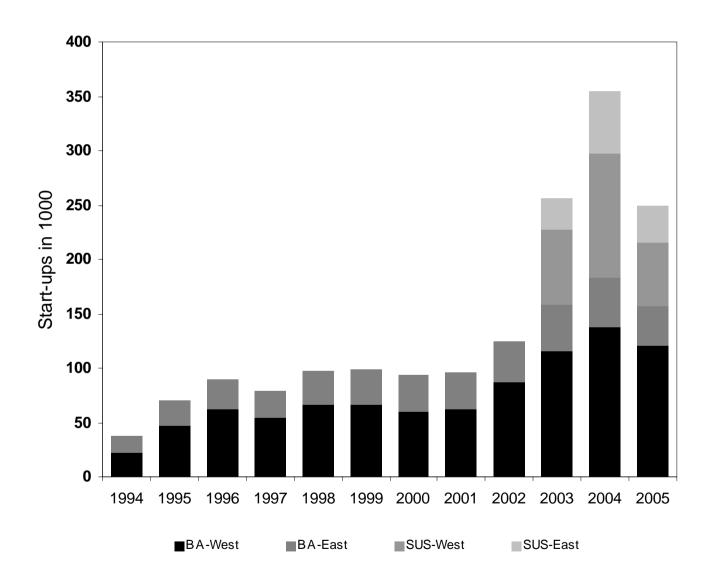
Viktor Steiner Free University Berlin, DIW Berlin, IZA Bonn

Presentation at the Workshop "Tracking and Evaluating Labour Market Reforms in Europe", European Commission, March 14, 2007

Outline

- 1. Introduction
- 2. Overview BA and SUS
- 3. Data and Evaluation Strategy
- 4. Evaluation Results
 - 4.1 Average Treatment Effects(Occup. Status, Wage Income)
 - 4.2 Monetary Efficiency
- 5. Policy Conclusions

Figure 1 Subsidized start-ups from unemployment by type and region



Key characteristics of bridging allowance (introduced in 1986):

- Secure maintenance needs and social security contributions at the beginning of the self-employment spell.
- In the first six months, the individual receives the same transfers that he/she would have received as unemployment benefit.
- Additionally, a lump-sum of about 70% is granted to cover social security liabilities (e.g. health and retirement insurance)
- Unemployed have a legal claim to BA as long as their business plan gets approved.
- Within a time frame of three years they do not loose their claim for unemployment benefits.

Key characteristics of start-up subsidy (introduced in 2003 within the Hartz-reforms):

- Secure the starting phase in self-employment. Focus: Social security of the newly self-employed.
- Support runs up to three years, with a fixed sum of 600/360/240 Euro/month in the first/second/third year.
- In contrast to the BA, participants in SUS are bound to become a member in the legal pension insurance.
- Since November 2004, business plan needs to be approved.
- Support terminates if the expected income exceeds 25,000 Euro/year.
- → Choice between SUS and BA depends on the potential benefit transfer and expectations about the business development!

Data and Evaluation Strategy

Entries in BA and SUS from III/2003

- Random sample of 6,123 participants from the third quarter of 2003 of whom 3,098 entered BA and 3,025 received SUS.
- Participants and matched non-participants have been interviewed in January/February 2005 and in January/February 2006.
- Key advantage: Additional information on self-employment
- For BA that means at least 10 (22) months after programme has ended, whereas the subsidy in SUS is still ongoing in most cases.

- **Propensity-Score Matching** to identify "statistical twins" from the pool of unemployed non-participants in the same quarter.
- Average Treatment Effects on the Treated (ATT) with three outcome measures:
 - not unemployed
 - self-employed or in wage employment
 - earnings
- Monetary Efficiency (ME) based on first outcome measure

Table 2 Occupational status and earnings of participants

	Ω	Start-Up Subsidy (SUS)	osidy (SL	ls)	Ā	Bridging Allowance (BA)	wance (F	3A)
	West G	West Germany	East G	East Germany	West G	West Germany	East G	East Germany
	Men	Women	Men	Women	Men	Women	Men	Women
1st interview, 16 months after start-up								
Self-employed	74.7	78.6	9.08	79.0	71.5	66.2	74.2	68.5
Wage employment (covered by social security)	7.3	5.4	3.1	4.1	11.6	13.7	8.2	7.9
Unemployed	14.6	8.3	13.9	11.0	13.8	14.1	15.3	15.8
Others	3.4	7.6	2.4	5.9	3.1	0.9	2.3	7.9
2nd interview, 28 months after start-up								
Self-employed	70.4	74.6	80.9	74.2	73.0	68.4	71.4	0.99
Wage employment (covered by social security)	10.3	7.9	5.1	7.8	13.6	15.7	11.5	11.9
Unemployed	13.4	7.2	11.0	8.3	9.6	6.6	14.0	10.7
Others	5.9	10.3	2.9	9.7	3.7	0.9	3.0	11.3
Monthly Earnings (in Euro)	1371	912	1151	777	2200	1629	1469	1182
Share in monthly net household income	66.4	39.6	59.8	40.6	81.2	67.9	65.4	52.4

Cost-Benefit Analysis

- 1. CE := cumulative number of months a participant is expected to spend less in unemployment than a comparable non-participant, measured by ATT, outcome variable: *not unemployed*
- 2. RBE := maximum remaining entitlement period before entry in the program, computed for each participant on the basis of the FEA register data.

 Average savings (AS) := min(CE, RBE), averaged over all participants, measured in unemployment months.
- 3. Monetary average savings (MAS): AS for each participant multiplied by the average amount of savings per month (amount of unemployment benefits received in the month before program entry plus a surcharge of 70% covering SSC).
- 4. Fiscal costs (FC) for the BA: individual amount of unemployment benefit
 + 70% surcharge for social security contributions
 for a maximum of six months.

 Effective BA take-up is determined by the survival rate in self-employment.
 FC for the SUS: similar, taking into account the longer subsidy period and the successive reduction of its amount (€600 / 360 / 240).
- 5. Monetary Efficiency: ME = MAS FC; a positive (negative) value implies that from the perspective of the FEA savings of a program exceed (fall short) of the fiscal costs induced by the program.

Evaluation Results I: ATT occupational status

Table 3 Average treatment effects of participating in BA and SUS on occupational status (percentage points)

	Start-Up Subsidy (SUS)				Bridging Allowance (BA)			
	West G	Sermany	East G	ermany	West Germany		East G	ermany
	Men	Women	Men	Women	Men	Women	Men	Women
Outcome variable: Not unemployed								
Measured after start-up								
6 months	54.2	52.8	56.1	59.9	44.2	44.3	51.2	45.4
16 months	35.1	30.7	38.8	44.4	24.3	21.9	30.8	26.5
28 months	27.6	19.9	30.3	34.9	19.8	17.9	23.9	21.3
Outcome variable: Self-employed or in wage employment								
Measured after start-up								
6 months	64.5	72.2	68.2	73.6	55.8	59.4	65.2	62.2
16 months	46.1	53.5	48.6	56.7	33.8	39.7	41.5	45.9
28 months	35.8	43.1	42.9	49.4	27.8	33.7	36.6	39.4

Evaluation Results II: ATT earnings

Table 4 Average treatment effects of participating in BA and SUS on earnings (in Euro)

	West G	East Germany		
	Men	Women	Men	Women
Start-Up Subsidy (SUS)		 		
Earnings difference	509.5	242.5	639.8	321.3
Standard deviation	74.5	70.6	120.4	87.3
Bridging Allowance (BA)				
Earnings difference	923.9	648.4	651.2	777.4
Standard deviation	90.3	131.6	116.7	161.1

Evaluation Results III: Monetary efficiency

Table 5 Monetary efficiency of BA and SUS

	Start-Up Subsidy (SUS)				Bridging Allowance (BA)				
	West G	ermany	East G	ermany	West G	Sermany	East G	ermany	
	Men	Women	Men	Women	Men	Women	Men	Women	
Cumulative treatment effect, CE (in months)	11.4	10.3	11.8	13.9	8.8	8.3	10.5	9.8	
Remaining entitlement period, RBE (in months)	5.0	5.2	5.7	4.4	7.4	6.7	7.0	6.2	
Unemployment benefit (in Euro)	699.4	527.6	662.8	482.8	1179.1	891.6	858.9	729.2	
Program costs (in Euro)	11317	11580	11735	11700	11979	9030	8698	7413	
Monetary Efficiency, ME (in Euro)	-5436	-6898	-5357	-8101	2882	1095	1497	244	

Summary and Policy Conclusions

Estimated average treatment effects indicate that both programs can be considered successful along various dimensions:

- As measured by our first outcome variable registered unemployment ATT after 28 months amounts to roughly 20 percentage points, for the SUS program it ranges between 20 percent for women in west Germany and 35 percentage points for women in east Germany.
- Participants in the two programs are also much more likely to be selfemployed or in wage employment than the control group of comparable nonparticipants at the end of our observation period.
- Participants earn considerably more than comparable non-participants 28 months after they became self-employed, and this effect is especially strong for those having received the BA.
- Monetary efficiency from the perspective of the Federal Employment Agency is positive for the BA and negative for the SUS. However, relative to the length of the subsidy period the net costs of the SUS seem rather modest.

For the SUS, the interpretation of estimated ATT has to take into account that the program is still on-going for the majority of the cohort analyzed in this study. For the BA, the subsidy already expired at least 22 months ago, estimated treatment effects can therefore be interpreted without this caveat.

Overall, both the BA and the SUS belong to the more promising programs in the portfolio of ALMP in Germany, where self-employment is still an underdeveloped activity.

Given the evaluation results of this study, we are skeptical about the recent reform of start-up subsidies in Germany whereby the BA and the SUS were superseded by a new subsidy.

- BA and SUS attracted quite different groups of participants..
- Evaluation results do not suggest that the SUS was ineffective in reducing future unemployment or are excessively expensive.
- Nor do they suggest that the subsidy period needed to be increased for the BA in order to increase its effectiveness or monetary efficiency.

Thus, the new start-up subsidy may well reduce program effectiveness and increase deadweight loss.