

The Evaluation of Start-Up Subsidies for the Unemployed and the Role of “Unobserved” Characteristics for Matching Estimators



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1 Motivation

- **Start-up subsidies** for the unemployed are an important part of Active Labor Market Policy (ALMP).
 - **Previous evaluation studies:**
 - Positive and significant long-term effects on employability and income (compared to other unemployed individuals).
 - Typically based on administrative records, usually no information on personality characteristics.
 - Matching estimators prone to **bias**.
 - Therefore: Sensitivity analysis.
 - **Our approach:**
 - We know that **entrepreneurs are different** with respect to personality traits, non-cognitive skills and risk preferences.
 - Probability of being self-employed and success as an entrepreneur positively correlated with...
 - high openness to new experiences.
 - high internal/low external locus of control.
 - higher willingness to take risks.
 - Explicit inclusion of personality characteristics in evaluation analysis.
- **Key question:** What are the consequences of including usually “unobserved” personality characteristics for the estimated propensity scores and treatment effects?

2 Start-Up Subsidy

- Start-up subsidy (SUS, *Gründungszuschuss*) in Germany (08/2006 – 11/2011).
- **Entrance requirements:**
 - Unemployed and eligible for unemployment benefit I (*ALG I*) for at least another 90 days at time of business foundation.
 - Proof of sustainability (*Tragfähigkeitsbescheinigung*) of business intention issued by external institution.
- **Payment:**
 - 9 months (legal entitlement): SUS equal to UB I plus lump sum of 300€ to cover social security costs.
 - 6 months (discretionary benefit): lump sum of 300€ to cover social security costs.

3 Strategy

- Replicating previous evaluation studies and sensitivity analyses.
 - Adding personality variables in estimation procedure.
- **Base specification:** → **Full specification:**
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- Comparing results with respect to propensity scores and treatment effects.

4 Data

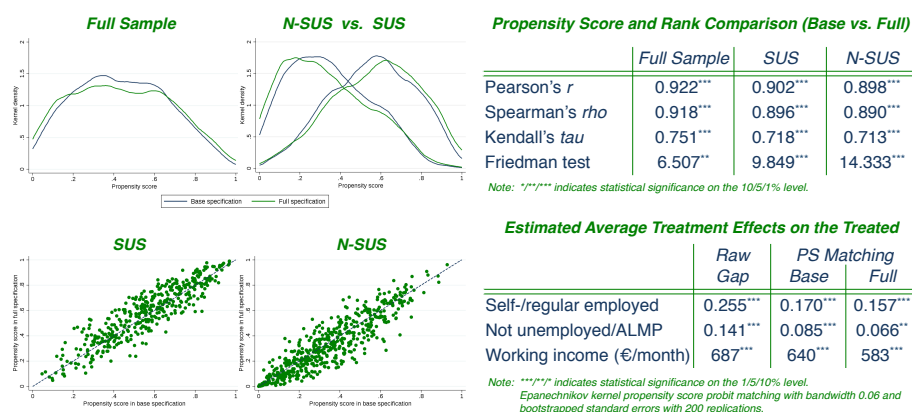
- **Treatment group (SUS, n=403):** Random sample of unemployed entering SUS in 1st quarter of 2009.
- **Control group (N-SUS, n=516):** Random sample of unemployed eligible but not entering SUS in 1st quarter of 2009.
- **Data sources:**
 - Administrative records from Federal Employment Agency.
 - Survey data from CATI interviews conducted in 4th quarter of 2010.
- 67 control variables in base specification.
- 10 personality variables:
 - Risk: High willingness if score higher than 6 on a scale from 0 to 10.
 - All others: Likert scale from 1 to 7.

Summary Descriptives

	SUS	N-SUS	
<i>Big five</i>			
Conscientiousness	6.14	6.06	
Extraversion	5.89	5.65	***
Agreeableness	6.16	6.09	
Neuroticism	3.88	4.12	***
Openness	5.02	4.76	***
<i>Locus of control</i>			
Internal	6.11	5.86	***
External	2.72	3.16	***
High readiness to take risks	0.50	0.42	**
Impulsiveness	4.33	4.45	
Patience	5.11	5.00	

Note: ***/**/* indicates a significant difference on the 1/5/10% level.

5 Empirical Results



6 Preliminary Findings

- Openness to new experiences and internal/external locus of control significant in propensity score estimation.
- Substantial changes in individual estimated propensity scores/ranks, no clear overall pattern.
- Personality traits are relevant in the process of selection into the start-up subsidy.
- Estimated treatment effects decrease after inclusion of personality traits.
- Neglecting personality traits leads to over-estimation of treatment effects (due to positive selection bias).
- **Outlook:**
 - Different matching algorithms.
 - Relate to standard sensitivity analysis.

Key References:

- Caliendo, M., F. Fossen, and A. Kritikos (2011): *Personality Characteristics and the Decision to Become and Stay Self-Employed*, IZA Discussion Papers 5566, Institute for the Study of Labor (IZA), Bonn.
- Caliendo, M., S. Künn (2011): *Start-Up Subsidies for the Unemployed: Long-Term Evidence and Effect Heterogeneity*, Journal of Public Economics, 95(3-4), 311– 331.