Technology Policy Evaluation



Improving access to finance for young innovative firms with growth potential: evidence of impact of equity instruments on firms' output

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1. Motivation / Objectives

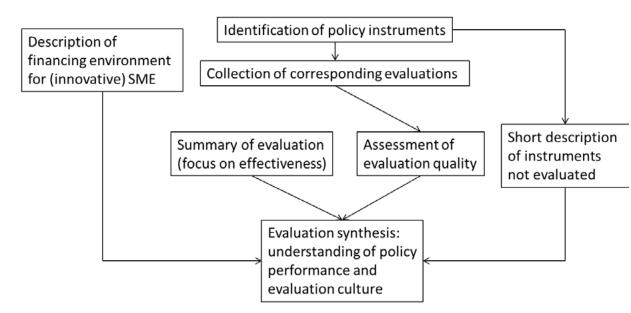
High-growth enterprises are increasingly a target for government interventions, especially in Europe which lags behind the US in the number of fast growing innovative firms (so-called scale-ups). In response to this large "scale-up gap", the current policy debate has focused on new sources and forms of funding to enhance national and EU level support for scale-

Objective: This paper examines the impact of public equity instruments on young innovative companies with growth potential. It focuses on the output additionality, i.e. the effects of equity instruments on the output of firms (measured by growth in terms of employment, turnover and innovative activities).

2. Main Research Questions

- > What are the effects of public equity instruments on firms' output as measured by employment growth, turnover growth and innovation activities?
- > What are major lessons learnt (in terms of design and implementation) from the evaluations of this type of policy measure?

3. Methodology



Adapted from Edler, J., Ebserberger, B. and Lo, V. (2008). Improving Policy Understanding by means of Secondary Evaluation. R&D Evaluation 17(3)

Evidence sources

All sources	Evaluation Reports	Academic articles
31	19	12

Types of equity instruments:

- Public venture capital funds directly investing in companies (direct VC)
- Public funds invested in private VC funds (indirect or hybrid VC)
- Equity guarantees or government-backed loans to finance VC

Countries covered: Austria, Belgium, Denmark, Ireland, the Netherlands, Finland, Germany, the United Kingdom

4. Results

The main results arising from our review of the evaluation studies on the effectiveness of public equity instruments are:

- High-growth potential firms, which receive public funding in the form of equity, experience stronger increases in employment and turnover compared to the control groups.
- The employment growth rate oscillates from 50% to 145% and turnover from 125 to 800% (post-treatment), both are significantly higher compared to the untreated groups.

- The firm **profitability** declines in the beginning, with progressive growth after 3-4 years.
- The effects are **highly concentrated**, with the top 5-15% of supported firms absorbing the vast majority of generated returns.
- The majority of the national and regional equity measures achieve medium to high private investment leverage levels (2 to 3), with minimal or zero crowding out effects.
- Equity does not necessarily impact companies' innovation performance measured in terms of R&D spending. However, venture capital acts as a facilitator for the commercialisation of already developed innovations mainly through provision of finance, but also through partner networks and opening up of different channels of commercialisation.
- Most of the available evidence exists for **early stage investment** where public support is concentrated.

Output Additionality Summary Table

Effects on:	Equity instruments	
Employment	•••	
Turnover	•••	
Innovation	•00	

●●● = major relevance ●●○ = moderate relevance ●○○ = minor relevance

5. Relevance for Policy

The gathered evidence provides also more general lessons on the design and implementation of financial support for innovative ventures with growth potential.

- In favour of syndication of funds with a leading role of the private sector (as opposed to government funds only).
- Provision of long-term investments encompassing longer time spans and/or longer perspectives with less pressure on exits to achieve better outcomes in terms of employment and turnover growth.
- Intervening both at the early and growth stages while making the intervention more flexible at the margins (i.e. allowing for some investments just under/over the equity gap).
- Delivering added value services (e.g. networking and coaching) to the companies and ensuring that the fund is assisted by skilled professionals.
- Flexible geographical boundaries together with larger size funds to enable a diverse portfolio of investments and sufficient funding for follow up rounds of financing.
- Extending the indicators of success, beyond leverage effect, exits and fund profitability towards a closer examination of the effects on employment and turnover as well as the assessment of larger socio-economic benefits.
- The outcomes are heavily dependent on the number and quality of companies available to invest in and therefore on the general innovativeness of the regional or national economy (i.e. the innovation ecosystem).

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