

Start-up subsidies: Does the policy instrument matter?

Hanna Hottenrott, Technical University of Munich

Abstract

New firms in high-tech sectors contribute to innovation, competition, and employment growth, but positive externalities like knowledge spillovers can prevent entrepreneurs from appropriating the full returns from their investments. In addition, uncertainty and information asymmetry pose challenges for start-up financing. Public policy programs therefore aim to support new firms.

This study evaluates the effects of participation in such programs on the performance of new high-tech firms founded in Germany between 2005 and 2012. Distinguishing between grants and subsidized loans and after matching recipient and non-recipient firms based on a broad set of founder and company characteristics, we find that grants are better suited than loans for increasing high-risk R&D investments, but only the receipt of both grants and loans improves innovation performance and reduces the likelihood of bankruptcy.

Although grants and subsidized loans have little short-run effect on overall employment and revenue, we conclude that young firms benefit from grants without repayment obligation through financing of early stage R&D. Combined with subsidized loans, grants facilitate turning research results into marketable products via complementary investment in tangible assets. Finally, we find a crowding-in effect, rather than a crowding-out, of private venture capital.