

Discussion of Sabrina Howell's "Financing Constraints as Barriers to Innovation"

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What is government support about?

- ▶ Benevolent social planner.
- ▶ Correction of market failures.
- ▶ Spillovers: information, consumer surplus (domestic).
- ▶ Incomplete information (financial market imperfections):
 - ▶ improve the accuracy of information, and/or
 - ▶ reducing the asymmetry of information.

What is this paper about?

- ▶ The effect of SBIR \$150K **block** grants on various outcomes.
- ▶ Uniquely,
 - ▶ money granted through competitions and
 - ▶ grades/ranks available to researcher
- ▶ A large set of very interesting empirical findings.
- ▶ Interpretation of the findings.

Discussion - empirics

- ▶ "Causes of effects" vs. "Effects of causes", Holland 1986.
- ▶ Route taken: interpretation of the variation in the treatment effect(s): e.g. effect on young vs. old firms.
- ▶ Problem with any interpretation is to establish the counterfactual (e.g. what does it mean not to be financially constrained?).

Discussion - theory

- ▶ Certification (reveal type), valuation (increase value), prototyping (increase precision of information).
- ▶ A (very) stylized model of these 3 effects. The model would benefit from more structure:
 - ▶ how is the government signal related to the quality the VC cares about?
 - ▶ what impact each of the 3 effects has?
 - ▶ what is the decision rule of the VC(s)?
 - ▶ who observes what?

Discussion

- ▶ Very interesting paper using high-quality data.
- ▶ A large set of interesting and robust empirical results.
- ▶ Interpretation of results. What would be the RCT that allowed the identification of the mechanisms (e.g. Ludwig, Kling, Mullainathan, JEP 2011)?