Discussion

"Misappropriation of R&D Subsidies: Estimating Treatment Effects with One-sided Noncompliance" by Philipp Boeing and Bettina Peters

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Subsidy Misappropriation

This is a great paper! Makes my job difficult, in some sense

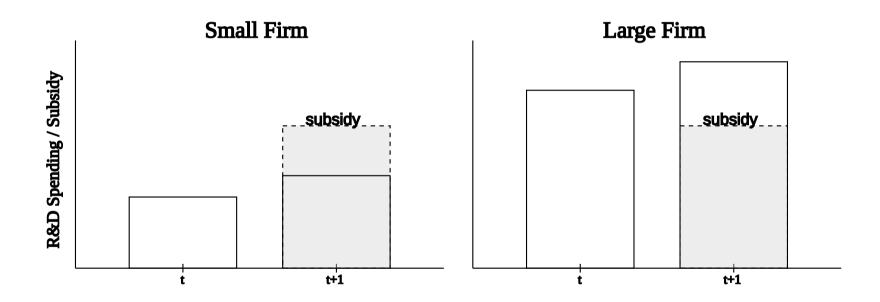
I particularly liked the funding graphs, which are intimidating at first, but upon careful study make the notion of a "pecking order" crystal clear

$$\underbrace{\text{Entropy Balancing}}_{\text{pseudo-randomization}} \longrightarrow \underbrace{\text{R\&D Subsidy}}_{\text{intent-to-treat}} \longrightarrow \underbrace{\text{Misappropriation}}_{\text{NON-compliance}}$$

Very useful results as an "end user": how much can we rely in research subsidies to achieve our goals? Question of how much we can generalize/specialize this

Hidden Misappropriation

Thinking about firm size and the measurement of misappropriation: large firms hould be able to "hide" misappropriation in existing R&D spending



But is this really misappropriation? Is it different from crowding out?

Mismeasurement of Subsidies

Somewhat worried about the switch in data sources happening around 2006/2007 and the fact that we see big changes starting around then (around MLP policy change), especially since we're looking for "missing" R&D

$$\log \mathbb{E}[p] = eta_0 + eta_1 \log(R_0) + eta_2 \log(R_1) + arepsilon$$

But presumably true production function is additive, such as in

$$\log \mathbb{E}[p] = lpha_0 + lpha_1 \log (R_0 + R_1) + arepsilon$$

Lead to underestimate of effect size in proportion to share of subsidies in R&D

$$eta_2 = rac{\partial \log \mathbb{E}[p]}{\partial \log(R_1)} = lpha_1 \left(rac{R_1}{R_0 + R_1}
ight) < lpha_1$$