More Cash Flows, More Options? The Effect of Cash Windfalls on Small Firms

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Stores that sell winning lottery tickets can get kickbacks

- Who knew?
- The kickbacks themselves are not random.
- Stores that sell more tickets get more kickbacks.
- But **conditional** on a selling a winning ticket, the kickback amount is certainly random.

There are three main results.

The size of the kickback is

- **negatively** related to the likelihood of a business closing
- **negatively** related to the likelihood of taking out a loan or getting a tax lien.
- **positively** related to the likelihood that the owner starts a new business.

I want to talk about two things.

- What can we learn from cash flow shocks?
- Empirical issues.

Economists love cash flow shocks

- This goes back to Friedman's permanent income hypothesis.
- Flavin (1981): excess sensitivity of consumption to transient income shocks
- Fazzari, Hubbard, and Petersen (1988)
- Then we decided that the shocks needed to be exogenous.
- Finding exogenous shocks has turned out to be hard.
  - tradeoff between exogeneity and sample size

Figuring out what they mean has turned out to be harder

- The most common interpretation of cash flow sensitivity is financial constraints.
- This intuition comes from thinking about a **binding** financial constraint.
- But frictions can exist and have effects without constraints binding.
- So you can have
  - cash flow sensitivity without financial frictions
  - financial frictions without cash flow sensitivity

Cash flow sensitivity without financial constraints

- Endogenous cash flows (e.g. Abel and Eberly 2011)
  - decreasing returns to scale
- Exogenous cash flows (Terry 2015; Terry, Whited, and Zakolyukina 2019)
  - myopia or contracts that incentivize short-termism

Financial frictions without cash flow sensitivity

- Endogenous cash flows (e.g. Moyen 2004; Hennessy and Whited 2007)
  - when you dial up frictions, cash flow sensitivity goes to zero
- Exogenous cash flows
  - I do not know of any cites, maybe Midrigan and Xu (2014), so I did it myself.

Simple dynamic model with debt and investment

- Endogenous cash flows
- Exogenous cash flows
- Debt is constrained by collateral
- No equity issuance

NO INVESTMENT CASH FLOW SENSITIVITY!
With a lot of uncertainty, the firm keeps a lot of financial slack.

What are the takeaways from all of this?

- Rational agents facing a dynamic convex optimization framework never react to transitory unexpected shocks.
- It's all in the non convexities.
- Myopia — often
- Financial frictions — sometimes

What does all of this mean for the current paper?

- It's a nice theoretical background for framing the results.
- Right now the paper has a collection of interesting facts without much tying them together.

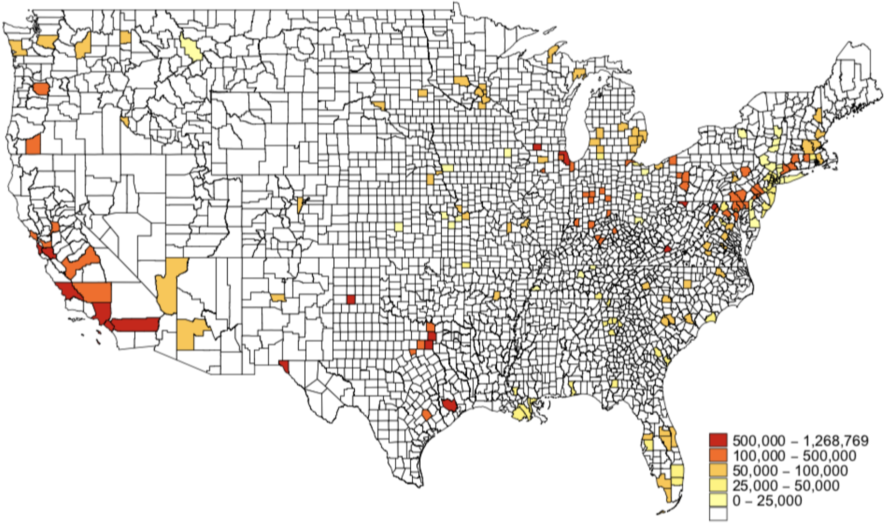
The results on older owners that might speak to the myopia question

- There is experimental evidence that older people are less likely to be hyperbolic discounters (Halfmann, Hedgcock, and Denburg 2013).
- It looks like older store owners are less likely to close their stores.
- This by itself is not that surprising.
- I would like to know what they do with the cash and whether they look constrained prior to the windfall

These cash flow shocks are conditionally random.

- They certainly identify the causal direction of an elasticity.
- Conditionally
- But not unconditionally

The stores that sell winning tickets must be different



These stores tend to be in urban areas

- More retail volume
- Higher costs
- **More external opportunities**

Sample selection compromises magnitudes and interpretation

- Magnitude:
  - Are the urban store owners just more likely to start new businesses anyway?
- Interpretation:
  - We really do not know how non urban store owners would react.
- This issue is important from a policy perspective.

Sample selection remedies are also really hard

- There is likely no exogenous shock to identify winning-ticket stores
- But I think the paper would be more informative if we knew more about the stores in and out of the sample.
- Don't just use characteristics as controls.
- Show us the differences.

The paper has a second sample selection issue

- The business start-up results are done with a sample that is 36% smaller.
- Is this sample similar to the whole sample of 280 stores?

What about stores that get sold

- The 7-Eleven in Bethesda, MD went through three owners in seven years in the 1990s.
- I do not understand why a store owner would let the old store fail and then start a new business.
- Why not just sell the sold store.
- Some clarity on what happens when winners start new stores.

An ingenious setting that is potentially quite informative

- Think a bit harder about why you are getting the results that you do.
- Explore your sample composition some more.

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