Central Bank Communication, Financial Frictions, and Investment Decisions

Paper by

Luigi Pollio (*BC*)

Fall 2021 GLMM discussion by

Stephen J. Terry (*BU & NBER*)

How Do Macro Shocks Affect Constrained or Small Firms?

This question has been asked again and again empirically since at least the early 1990's, and the answers are a complete muddle:

Small Firms

More responsive to policy shocks (Gertler & Gilchrist, 1994)

Less responsive to cycles (Crouzet & Mehrotra, 2020)

High Leverage/Fin. Constrained Firms

Less responsive to policy shocks (Ottonello & Winberry, 2020)

More responsive to policy shocks (Jeenas, 2018)

This Paper's Very Neat Contribution

Thinking more carefully about the shocks helps to resolve the puzzle!

When Is a Rate Hike Not Just a Rate Hike?

When it's accompanied by stock market jumps!

Jarocinksi & Karadi, 2020
Decomposes high-frequency rate jumps into two categories.

1. "Pure" rate hikes: the rate jumps & stock markets fall (normal)
2. "Info"-laden rate hikes: the rate jumps & stock markets jump (presumably due to embedded good news)

This Paper's Empirics
Extracts the shocks in a VAR context using the sign restrictions above applied to policy surprises, runs time series and panel local projections of investment on these shocks.

What Does Luigi Find in His Empirical Analysis?

Macro Level

Pure rate cuts and hikes info-laden with good news about the future both appear to boost investment in the time series.

Micro Level: Pure Rate Cuts

High leverage firms respond more.

Micro Level: Rate Hikes with Good News

High leverage firms respond less.

Aha!

Muddled empirical answers in the cross section make sense if not all monetary policy shocks are the same.

Why I Really Like His Approach

There's been an odd divergence in two literatures:

Household Research

Ever since the PIH's emphasis on transitory vs persistent shocks, researchers have been laser-focused on the interaction between different types of *shocks* and financial frictions.

Firm Research

Researchers have been far more interested in heterogeneity across different types of *firms* under financial frictions, while typically muddling shocks together.

This Paper Does the Right Thing!

Makes use of the HH-side insight – that different shocks are, in fact, different – to answer firm-side questions, an attractive combination!

How Does It Work?

Luigi builds a rich, conventional GE micro-macro heterogeneous firms model with financial frictions and two macro shocks:

1. An interest rate shock
2. A TFP news shock

The exact channels are subtle (and well explained by Luigi), but to oversimplify things:

A pure interest rate cut...
...acts a bit like a transitory windfall for firms, and the most highly leveraged/constrained firms respond *more* to the change in resources.

A good TFP news shock...
...acts more like a traditional persistent change to investment opportunities, which highly leveraged/constrained firms can take *less* advantage of.

Very Cool Takeaway!
Luigi can match the heterogeneity in his empirics, rationalizing the empirical results in the model.

Comment # 1: Don't Sell Your Innovative Approach Short!

Right now...
...the empirical results are pitched a bit like they provide a final decision in a boxing match: Jeenas vs. Ottonello/Winberry, the fight of the century!

But this comes with two dangers...

1. ...linking to a highly specialized debate in two papers about liquid vs illiquid assets and liabilities, which is not at all your point, and ...
2. ...not emphasizing that your approach is entirely different from theirs and quite novel, exploiting shock heterogeneity in a natural way rather than just firm heterogeneity.

You did something very cool...
...so make sure people know it's a big deal!

Comment # 2: Make the Macro Stuff the Point

Right now...
...the paper calibrates financial frictions from elsewhere and shows that the model can qualitatively rationalize the micro empirics.

But one could reverse the emphasis and the steps...

1. ...calibrating the financial frictions by matching the micro stuff exactly (demonstrating a new identification tool!)...
2. ...and then emphasizing and explicitly demonstrating the resulting macro implications (state-dependence in policy, communications policy implications, etc, stuff currently only mentioned in writing).

Practically speaking,...
...changing the calibration as in 1) might not be quick, but demonstrating state-dependence explicitly as in 2) seems feasible and high-impact.

Comment # 3: Is Information a Tool or a Constraint?

Right now...
...it's not clear to me whether a central bank could actually generate a positive news shock or whether this is a cautionary tale.

On the one hand...
...central banks that do possess good news can choose to be more forthcoming, suggesting a policy *tool*. Happy dot plots make happy firms!

On the other hand...
...central banks don't always have good news, and might in fact reveal bad news, suggesting a policy *constraint*. Rate cuts make firms sad!

Wording
This is a relatively minor framing/wording issue, not at all a large or substantive issue with the paper's analysis.

A Very Cool Paper

Go read the paper!
It's worth your time, for three reasons.

1. This paper does the right thing, focusing on shock heterogeneity rather than just firm heterogeneity.
2. This paper links the micro empirics directly to monetary policy shocks, obviously very relevant for macro researchers.
3. This paper draws out interesting, subtle issues of information and communication policy in the context of firm heterogeneity, a novel but quite natural contribution.

Good luck with the paper!