Discussion of

• “Bank Supply Shocks and Firm Investment: A Granular View from the Thai Credit Registry Data”
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Discussion outline

• Summary of the paper

• Discussion:
  - Stylized facts
  - Methodology

• Overall assessment – going forward
• Decompose loan growth dynamics into bank, firm, industry and common shocks to investigate the firm response to bank shocks.

• Firms are highly sensitive to bank lending shocks.

• Relationships matter, single bank firms are hit harder than multi bank firms.

• Firm characteristics such as healthy/unhealthy small/large matter as well.
Summary of the paper

• Three innovative contributions:
  
  – The study of **extensive margin** (new bank-firm relations due to shocks)
  
  – The study of **heterogeneity** of the effect according to the type of bank or firm.
  
  – The study of the sources of credit shocks and of the effects of bank shocks in an emerging economy such as Thailand, relying on a rich set of data

→ All in all, an excellent case on how critical is firm level analysis also for monetary policy, especially in the Asia context. Something the Productivity Research Network (PRN) project is very much involved in
1. Stylized facts:
   ➔ Scope for further analysis

2. Methodology
   ➔ More robustness checks on the Amiti-Weinstein (AW) methodology

3. Way forward
   ➔ Enlarge the set of Firm level indicators
Stylized facts I

- Data analysis is extremely well performed, but it could be further expanded. For instance...

- The data seem to suggest a different pattern of credit adjustments between local and foreign banks

> Is this because only certain firms connect with local banks while other firms connected to foreign banks?

> What are the respective characteristics of such firms? Is this affecting the solidity of the analysis?
Stylized facts II

There appears to exist a considerable **negative covariance** between the *bank* (in yellow) and the *common* (in black) shocks

➢ What are the possible methodological/theoretical explanations behind this outcome?
The decomposition proposed by Amiti and Weinstein (2017) is becoming a widely used in recent studies to identify the source of credit shocks.

The AW strategy can then be exploited in two ways:

- as micro identification of credit supply shock at firm level
- as method to aggregate at macro level the different shocks identified at micro level

A fundamental caveat applies, however:

➢ The **AW decomposition** identifies the bank supply shock **only if** there is **no sorting** between firms and banks (stronger banks do not match with bigger/better firms).
Methodological Discussion

What is the issue of sorting?

- when both credit and product markets present a high degree of polarization, stronger (/weaker) banks may be more likely to be matched with firms experiencing a greater (/smaller) demand shock.
- and this weakens the identification of the “Bank Shock”

The authors are well aware of the issue, and expressly state on page 15 that:

“all banks in the dataset have diverse client bases”

The evidence that they present themselves, however, tend to weaken that proposition, as it would appear that a sorting problem is present
Methodological Discussion

- In Figure 11 they actually show that there is a substantial difference – as opposed to the original article of AW – between healthy and unhealthy (as well as large and small) firms as concerns their exposure to bank shocks.

- They also show that this variation in bank-firm relations is linked to bank/firm characteristics (as hinted by the chart on the right related to small-medium firms).

➔ There maybe therefore a Sorting problem in the sample that needs to be corrected in order to be able to use the AW methodology.
Methodological Discussion

Manaresi & Perri (2017) propose a strategy to control for this problem:

- enriching the model with covariates at firm-bank level that are correlated with the matching process between banks and firms

Examples:
- duration of relationship between bank $b$ and firm $f$
- lagged drawn/granted credit
Way forward and a suggestion

1. Ultimately, we are interested in whether the financial sector is evolving towards one with more **efficient** bank lending

2. Productivity is a strong **determinant of investment behaviour**

Consider incorporating **productivity** as an additional firm characteristic to narrow down those firms that are affected the most by bank supply shocks.
One initiative along these lines – The Productivity Research Network

- Following the case of a EU initiative (CompNet) covering 18 EU countries.
- The Network aims at providing a robust theoretical and empirical link between productivity outcomes and their drivers (e.g. exports, finance, labor markets..)…based on firm level information across countries
- Similar analysis of this paper can be then performed…For instance

![Graph showing share of credit constrained firms by deciles of labor productivity.](image)

PRODUCTIVITY RESEARCH NETWORK

→ We are expanding the EU CompNet initiative to Asia-Pacific countries
→ …We have 11 datasets

→ Thailand is not yet in…Join us!

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<th>Dataset</th>
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<th>Data</th>
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<td><strong>Vietnam VN</strong></td>
<td>Malaysian census data, every 5 years, 2000-2010</td>
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<td>Business Longitudinal Analysis Data Environment (BLADE), 2001-2015</td>
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**Dataset**

- **What’s Included:**
  - Productivity Indicators
  - Financial Indicators
  - Labour Indicators
  - Markup Indicators
  - Trade Indicators
  - Joint Distribution

- **Firms**
  - Across 60 sectors

- **Time Covered**
  - Varies with each country
Welcome to the Productivity Research Network

Our vision is to promote empirical based research on productive drivers. Most notably, we want to create a momentum for improved data availability at the firm-level for Asia.

Thanks to the authors for their excellent contribution

Thanks to the audience for the attention

Look at the Productivity Research Network (PRN) Website