



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.

- 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**

Two main points and a proposal

1. Stylized facts:

→ Scope for further analysis

2. Methodology

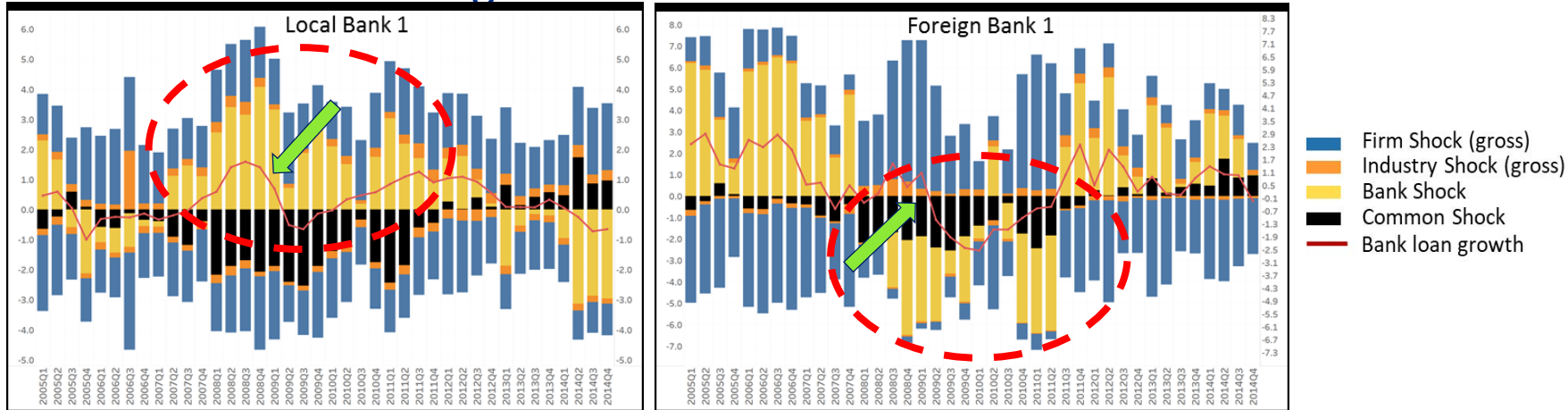
→ More robustness checks on the Amiti-Weinstein (AW) methodology

3. Way forward

→ Enlarge the set of Firm level indicators

Stylized facts I

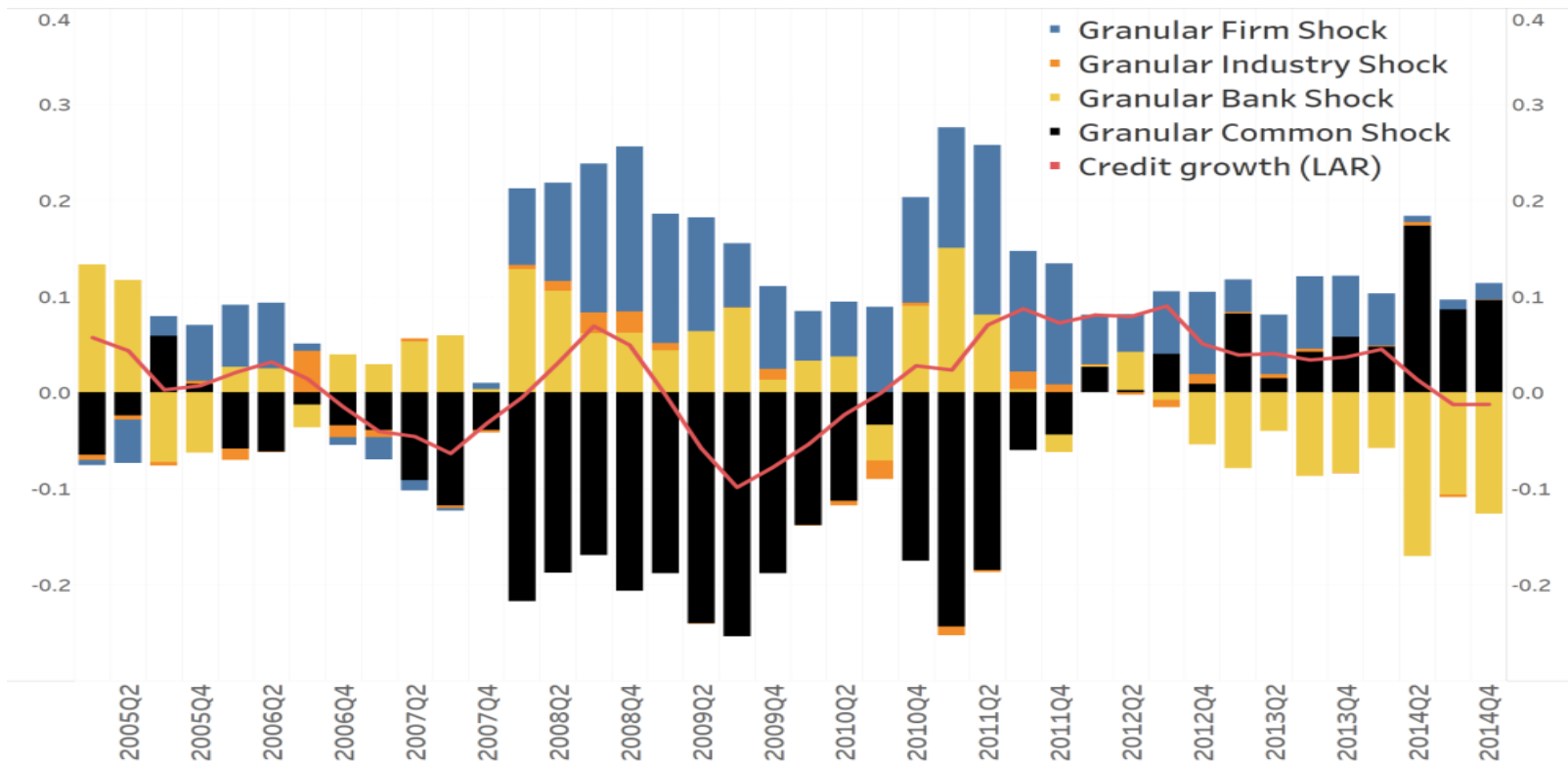
- Data analysis is extremely well performed, but it could be further expanded. For instance...
- The data seem to suggest a different pattern of credit adjustments between *local* and *foreign* banks



- 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)



→ 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”

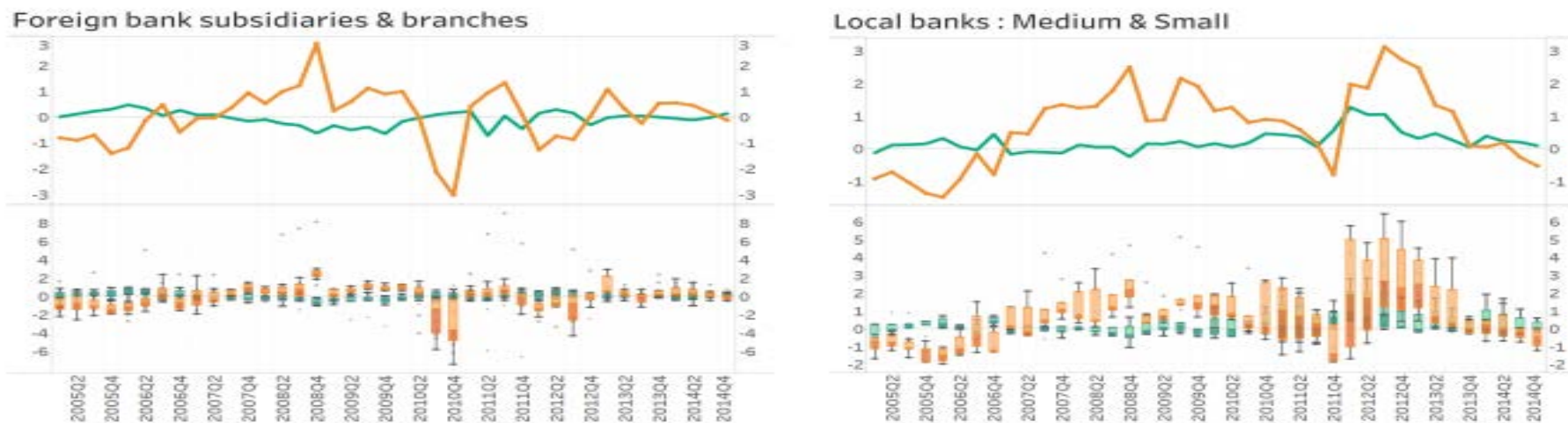
→ The authors are well aware of the issue, and expressly state on page 15 that :

“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

Figure 11: Differential Bank Shocks: Healthy Vs. Unhealthy Firms



- 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

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**

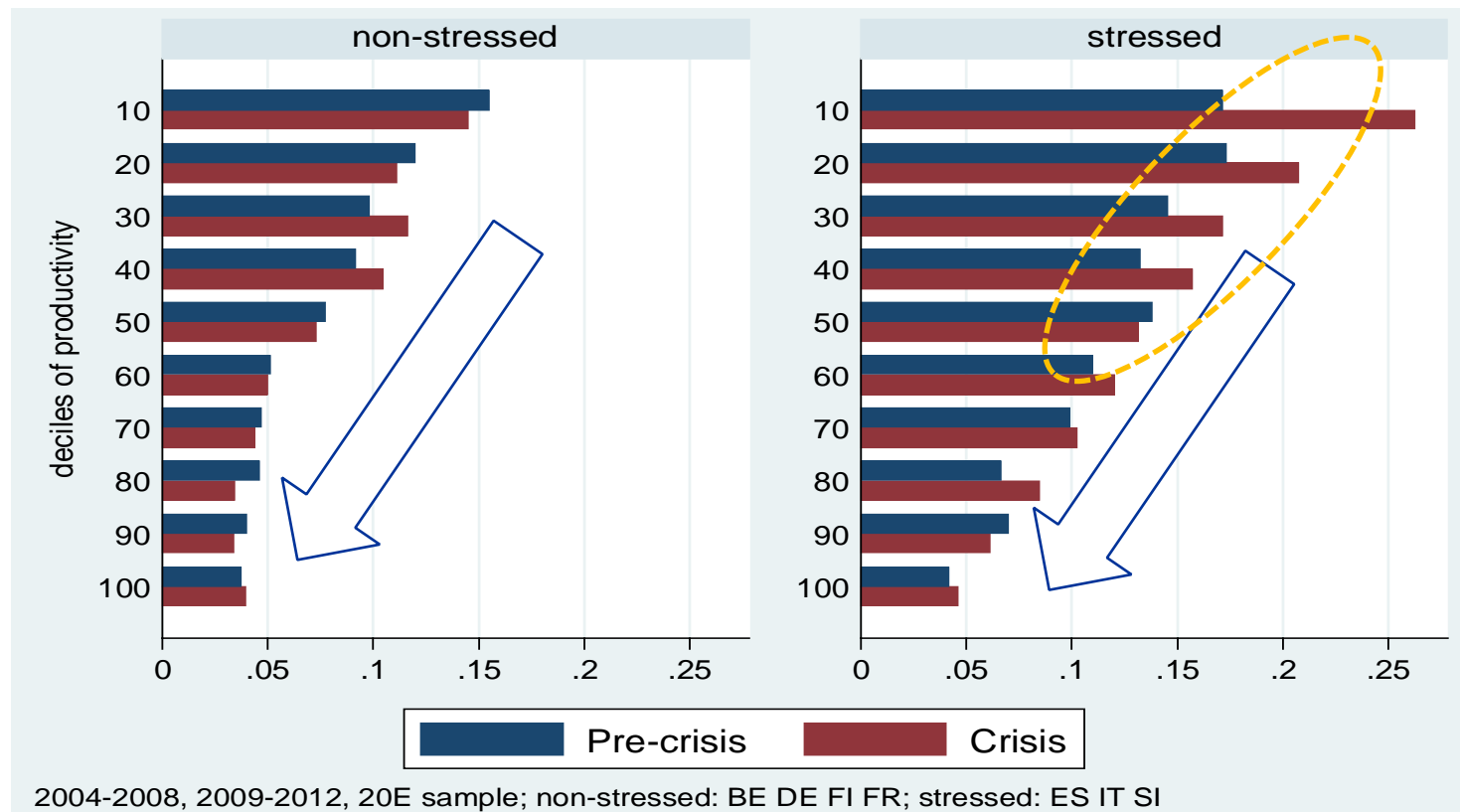
2. Productivity is a strong **determinant of investment behaviour**



Consider incorporating productivity as an additional firm characteristic to narrow down those firms that are affected the most by bank supply shocks.

- 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**

Share of credit constrained firms by deciles of labor productivity



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!

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*

Coverage: Asia-Pacific	Data
Japan JP	Basic Survey of Japanese Business Structure and Activities (BSJBSA), 1994-2015E2
Indonesia ID	
Vietnam VN	Vietnam Enterprise Surveys, 2000-2015
Malaysia MY	Malaysian census data, every 5 years, 2000-2010
Korea KR	
Australia AU	Business Longitudinal Analysis Data Environment (BLADE), 2001-2015
New Zealand NZ	Longitudinal Business Database, from 1999
India IN	Prowess database, 1988-2016
Turkey TR	
China CN	
Singapore SG *	Annual Census of Manufacturing Activities, 2002-2015



Thanks to the authors for their excellent contribution

Thanks to the audience for the attention

Look at the [Productivity Research Network \(PRN\) Website](#)