Discussion to "The Collateral Channel and Bank Credit"

by Arun Gupta, Horacio Sapriza, Vladimir Yankov

Mauricio Larrain E.

University of los Andes, Chile

(1) Collateral data: good, but better exists

- Strength of paper explicitly distinguishing pledging from mere ownership of real estate
- Novelty claim should be qualified. Data only provide dummy for whether collateral is pledged and what type
- Calomiris et al. (2017, JFE) use loan-level data with **appraisal value** of collateral, by type (RE, inventory, etc.)

(2) Re-appraisal role is missing

- Collateral channel implicitly assumes:

$$\text{RE Prices} \uparrow \Rightarrow \ \text{Collateral Value} \uparrow \Rightarrow \ \text{Credit Supply} \uparrow$$

- Change in collateral value relies on **collateral re-appraisal**

- How frequent are re-appraisals in the US?

- In Chile, they are infrequent -> external validity

Endogeneity of real estate prices

- Collateral channel:

$$\text{Local RE prices} \uparrow \;\rightarrow\; \text{Collateral value} \uparrow \;\rightarrow\; \text{Firm credit} \uparrow$$

- Identification problem:

$$\text{Local Boom} \;\rightarrow\; \text{RE prices} \uparrow \;\rightarrow\; \text{Collateral} \uparrow \;\rightarrow\; \text{Credit} \uparrow$$

$$\text{Local Boom} \;\rightarrow\; \text{More credit demand} \;\rightarrow\; \text{Credit} \uparrow$$

Solution

- Instrument for real estate prices:

$$Z \rightarrow \text{RE Prices} \uparrow \rightarrow \text{Collateral} \uparrow \rightarrow \text{Credit} \uparrow$$

- Where:

$$Z = (\text{Land Supply Inelasticity}_m) \times (\text{National Mortgage Rate Shock}_t)$$

- Exclusion restriction: Z affects Y only through X

$$Z \rightarrow \text{RE Prices} \rightarrow \text{Credit}$$

(3) Fundamentals, not collateral

- Inelastic cities (SF, NYC, Boston) are superstar cities -> productive firms, skilled workers, inflows of K/innovation

- Land scarcity reflects fundamentals: desirable locations; talent networks, finance, knowledge spillovers

- More responsive to decline in national interest rates

$$\begin{array}{ccccc} & & \text{RE Prices} & & \\ Z & \rightarrow & & \rightarrow & \text{Credit} \\ & \searrow & & \nearrow & \\ & & \text{Local Fundamentals} & & \end{array}$$

Endogeneity of collateral choice

$$\text{Firm growth prospects} \rightarrow \text{Pledge RE as collateral} \rightarrow \text{Credit} \uparrow$$

$$\text{Firm growth prospects} \rightarrow \text{Credit demand} \uparrow \rightarrow \text{Credit} \uparrow$$

- Instrument for collateral choice:

$$Z = \text{Court Efficiency}_m$$

- Court efficiency isn't just about repossessing collateral: it's a broad proxy for institutional quality

(4) Institutional quality, not collateral

- Regions with more efficient courts have better enforcement overall, stronger rule of law, property rights, lower corruption, deeper financial markets, etc.

- Each of these improves credit availability independently of collateral use

- So even if no one pledges collateral, firms in efficient-court regions still get more credit because the whole financial and legal environment is stronger

(5) Aggregate effects too large

- 37% of employment growth 2013-2019 attributed to collateral channel (original version)

- Employment grew 1.7% per year (18 MM jobs)
  - Demand-driven recovery: unemployment fell from 7.9% to 3.5% → 7 MM extra jobs (40% from absorbing slack)
  - Population growth 0.5% per year → explains 20% of total
  - Sectoral reallocation: 1/3 of jobs concentrated in health care, education, leisure → 20% of total
  - Productivity growth: 1% per year (weak) → 15–20% of total

Thanks!