

# Bank Lending During the Crises

## **DISCUSSION**

by

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# 1. INTRODUCTION

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What are the determinants of bank lending?

The recent financial crises gives a unique opportunity to answer this question.

By looking the behavior of the financial system under “extreme” conditions allows us to make “observations” that usually are not possible.

*More generally:* Loans are “investment projects” for the banking firm.

Loan selection behavior may shed light on the investment behavior of firms.

These papers help us better understand banks investment behavior.

## 2. OVERVIEW OF THE RESULTS

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*Paper 1: De Young, Gron, Torna, Winton: “Risk Overhang and loan Portfolio decision.”*

*Question:*

how does the “legacy” of existing loan portfolio affect a bank’s lending policy?

Legacy: liquidity, past performance, correlation structure.

Paper develops and estimates a dynamic portfolio model of banks’ loan selection.

A bank’s new loans during a certain period depend on:

- Stock of existing loans,
- Their performance,
- Their liquidity,
- Correlation structure of old and new loans
- bank’s risk aversion (determined by loan illiquidity).

## OVERVIEW OF THE RESULTS (2)

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### *Main results:*

There is an important “*loan overhang*” effect:

*Banks make fewer new loans*

1. when their return is positively correlated with the return on existing loans.
2. when they have a larger stock of business loan in their portfolio;
3. when their expected return is lower.

# OVERVIEW OF THE RESULTS (3)

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## *Comments:*

1. Intriguing evidence suggesting that banks act as-if they are risk averse.
  - Not clear where the risk aversion is coming from.
  - Is the Froot-Sharfetsin-Stein model the right one?
  - Risk aversion may come from many sources: standard bankruptcy costs, risk of loss of rents (charter value), managerial entrenchment, ....
2. The authors should be commended for their effort of deriving a stylized dynamic portfolio model of bank loan selection.

Many questions are still open: in a dynamic setting subtle issues on dynamic portfolio optimization become important.

For example: if there is no serial correlation of returns (big if!) a loss in a given loan class should be followed by more loan activity to rebalance the portfolio!

Time varying asymmetric information and thus illiquidity is important.

3. The role of illiquidity is not fully explicit in the analysis.

## OVERVIEW OF THE RESULTS (4)

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*Paper 2: Berrospide, Black, Keeton: The cross-market spillover of economic shocks through multi-market banks.*

This paper asks an important question: do local shocks to a bank spillover to other markets?

This is important at least for two reasons:

- to learn how shocks propagate, and possibly generate a systemic crises;
- to learn about “internal capital markets” effect in the setting of the banking form.

# OVERVIEW OF THE RESULTS (5)

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## *Main results:*

Look at the mortgage lending market of multi-market banks.

1. Mortgage lending in one market responds negatively to shocks in other markets;
2. This effect is more pronounced in peripheral markets;
3. Securitized loans respond positively.

These are interesting results, consistent with the internal capital markets hypothesis;

They also show that the internal capital market effect may be a plausible mechanism for the propagation of shocks.

# OVERVIEW OF THE RESULTS (6)

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## *Some issues:*

1. Different effect for portfolio loans vs securitized loans: is this a liquidity effect?

2. Different effect on peripheral markets:

- Does this difference depends on the different competitive position?
- Or the different profitability of these markets?

=> This result may speak to the different effect of internal capital markets on core business activities and non core business activities.

# OVERVIEW OF THE RESULTS (7)

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*Paper 3: Carlson, Shan, Warusawitharana: Capital ratios and bank lending.*

Question: does bank capital promote lending?

The issue of whether more bank capital is good for lending is very important.

This is linked to the question of the value of bank capital.

Two theoretical approaches:

Diamond-Rajan (JPE 2001): bank equity capital is detrimental, because it exacerbates the hold-up problem and reduces a bank's incentives to collect on loans.

Financial fragility is good!

Mehran-Thakor (RFS 2011): bank capital improves banks' incentives to monitor and decreases the probability of regulatory intervention.

Allen, Carletti, and Marquez (RFS, 2011): bank capital gives banks a competitive advantage.

## OVERVIEW OF THE RESULTS (8)

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***This paper:*** by using a “matching strategy “ approach to control for bank heterogeneity, studies the impact of bank capital ratios on loan growth.

***Main results:*** the relationship between bank capital and growth *is small* and typically *insignificant* until the recent financial crisis.

The strongest effect of capital on loan growth seems to be

- on commercial real estate loans;
- for low capital ratios, suggesting a non-linear relationship.

# OVERVIEW OF THE RESULTS (9)

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These results are a bit disappointing (or surprising):

1. It seems that capital ratios do not really matter, unless we are in a financial crises.

This important to know, of course, because we worry about crises...

But perhaps, on a day to day basis capital ratios are less important.

2. Also, it is surprising that the results are stronger for real estate loans, rather than commercial and industrial loans.

3. I wonder if the matching technique is really the appropriate tool here: we are exploiting cross sectional heterogeneity in bank capital ratios among matched firms.

The question is what is behind this heterogeneity: equity capital is lower because of

- Previous losses?
- Heterogeneous loan characteristics not picked up by the matching process?
- Other endogenous variables?

# CONCLUSIONS

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## *In summary:*

These are very interesting papers that shed new light on the behavior of the banking firm.

## My take away:

- banks do act in a risk averse way, at least as long as they are not too close to default.
- internal capital markets for banks are an important component for the banking activity, and it may provide a channel for the propagation of shocks in the economy;
- the role of capital ratios in banks may be more subtle than we realize.

These are important topics that call for additional research.