



**CAPITALIA**  
**Gruppo Bancario**

**The Role of Collateral and Personal Guarantees  
in Relationship Lending: Comments**

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**The Changing Geography of Banking**  
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# Overview of the discussion

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- Background literature
- Brief summary of the main argument and results
- How the paper fits into the conference theme?
- Putting the priors on the table
- Major points
- Minor points
- Broader issue

# Background literature

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- Some literature argues that collateral and personal guarantees are incompatible with relationship lending:
  - Collateral is more likely to be pledged by riskier borrowers implying they may be useful in mitigating debtor moral hazard and adverse selection problems
  - Banks whose claims are either collateralized or personally guaranteed monitor borrowers less frequently
  - Relationship lending generates valuable information about borrower quality
- Empirical evidence: significant negative relationship b/w the probability that collateral will be pledged and the duration of the bank-firm relationship (Berger-Udell 1995; Harhoff-Körting 1998)

# Brief summary of the main argument and results

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- Ono-Uesugi (2006) use survey data of Japan's small business loan market and find:
  - A significant positive relationship with duration for collateral but not for personal guarantees
  - Banks whose claims are either collateralized or personally guaranteed monitor borrowers more frequently
- Authors' conclusion:
  - Collateral and personal guarantees play a positive role in small business lending
  - Collateral and personal guarantees are complementary to the relationship lending technology

# How the paper fits into the conference theme?

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- The changing geography of banking: operational and functional distance between banks and local communities
- The case of Japan:
  - *Collateral principle*: well-known Japanese lending practice that involves the intensive use of real estate as collateral in SME lending
  - The intensive use of collateral and personal guarantees in small business lending often interpreted as a typical example of insufficient screening and monitoring effort
- According to the Survey of Corporate Procurement (2001) by the Small and Medium Enterprise Agency of Japan:
  - 77% of borrowers pledge collateral
  - 96% of borrowers use real estate as assets pledged as collateral
  - Accounts receivables and inventories, which are typical assets pledged in the US, are rarely used

# Putting the priors on the table

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- The case of Japan is unique and we should interpret the paper's empirical evidence with this background in mind
- There is the risk that the different finding for collateral compared to what found in the literature (not based on Japanese data) could be related to the uniqueness of the *collateral principle* in Japanese lending practices
- I will be illustrating new evidence for Japan that does not support the complementarity between the real estate lending technology and the relationship lending technology, recently provided by Uchida-Udell-Yamori (2006)

# Major points: theoretical issues

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- Complementarity b/w collateral and relationship lending
- Berger-Udell (2006): credit underwriting may focus on one primary lending technology, but we may observe in practice a combination of lending technologies if some of them are complementary
- Boot (2000): as in asset-based lending, relationship lending may involve collateral that needs to be monitored (e.g. accounts receivables and inventories)
- What kind of complementarity in Japan?: real estate lending and relationship lending differ widely in terms of monitoring intensity

# Major points: empirical issues

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- The sample firms are relatively large: median firm is with 36 workers while firms with less than 21 workers are around 70% of all firms in Japan
- Analysis of the role of collateral for an individual lending technology in isolation, i.e. relationship lending technology without explicit consideration of other lending technologies
  - Kano-Uchida-Udell-Watanabe (2006) focus on two lending technologies: financial statement lending and relationship lending
- Are the firms' decision to continue with their preexisting main bank (i.e. duration) and the pledgeability of collateral jointly determined?
  - The *collateral principle* prevailing in Japan might imply an endogeneity problem for duration: it is common practice for borrowers to pledge real estate collateral as banking relationship evolves to cover credit extensions



## Minor points: empirical issues

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- Add analysis of interaction between the variables for screening and monitoring by the lender and the variables for the relationship between borrower and lender
- Robustness analysis: separate real estate collateral from other than real estate collateral
- Rationale for the instruments used for the interest rate in the IV-probit estimation is missing: (i) measures of banks market power (HHI and CITYSHARE) and (ii) the age of the borrowing firm
- Interest rate is expressed in basis points: needs to be scaled

# Broader issue: complementarity among lending technologies

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- Uchida-Udell-Yamori (2006): new evidence on Japan
- Approach followed:
  - Run a specific survey (two of the authors of the paper had significant input into the design and structure of the survey): the RIETI Survey of 2005
  - Costruction of 4 lending technology indices (financial statement; relationship; real estate; other fixed-asset) based on the questionnaire of the survey
- Findings:
  - They find evidence of complementarity among lending technologies
  - But the real estate lending technology and the relationship lending technology are not complementary to each other

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