

# Comments on "Loan Characteristics and Credit Risk"

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# Structure of my comments

1. The summary of this study
2. Contribution
3. Discussion

# 1. The summary of this study

- "To analyze the impact that certain characteristics of loans have on default rates."
- "To compare the alternative hypotheses proposed by the various theoretical models, given that there is only scant empirical evidence relating to them, and that it tends to be limited primarily to the case of the United States"

	<b>Hypotheses</b>
Collateral and PD	Positive relation or negative relation
Maturity and PD	Longer-term loans will be higher risk or lower risk
Size of the loan and PD	Negative relation
Institution controlled by shareholders and Institution controlled by managers	The former takes more risk than the latter.
A close bank-customer relationship and PD	The closer relationship the grater PD on lending

# 1. Summary (Main results)

The loan with higher PD is associated with...

- the loan pledging collateral
  - » Former empirical studies in U.S. can be generalized other markets.
- the loan granted by saving banks, credit cooperatives, credit finance establishment
  - » In the U.S. case, the credit institutions controlled by bank management staff have a lower risk profile.
- the loan with a close bank-customer relationship
  - » To support the importance of relationship banking

# 1. Summary (Main results 2)

The loan with lower PD is associated with...

- the long-term loan (i.e. more than 5 years)
- the larger amount loan (over 3mil euros)
  - » The importance of the screening process by institutions.

>> These results lasted over a complete business cycle.

# 1. Summary (Hypotheses v.s. Results)

	<b>Hypotheses</b>	<b>Results of this study</b>
Collateral and PD	Positive relation or negative relation	Positive relation
Maturity and PD	Longer-term loans will be higher risk or lower risk	Shorter-term loans will be lower risk (except over 5 years)
Size of the loan and PD	Negative relation	Negative relation (more than 3 million Euros)
Institution controlled by shareholders and Institution controlled by managers	The former takes more risk than the latter.	Saving banks (which have no shareholders) take more risk than commercial banks
A close bank-customer relationship and PD	The closer relationship the grater PD on lending	The closer relationship the grater PD on lending

## 2. Contribution

- This study analyzes a lot of information (more than 3 million loans' data) in Bank of Spain's Credit Register over a complete business cycle from various aspects.
- Some implications of this study seems to fit the practice not only in Spain, but also in other countries.
- This study provides some important knowledge when a banking supervisor will monitor banks by checking their loan portfolios.

### 3. Discussions on this study

- Why the loans with collateral are increasing?
  - In Table 1, the ratio of the loans with collateral seems to be increasing over the observed period when the number of all loans increases. That is, a credit institution doesn't lend loans only from the data it has about the borrowers.
    - The role of collateral is to complement the existence of information asymmetries between banks and borrowers.
  - It is likely that the relationship between borrowers and credit institutions doesn't become closer than before.
  - Therefore, it seems to increase “transaction lendings” in Boot and Thakor[2000].



### 3. Discussions : Why the loans with collateral are increasing?

#### About Boot and Thakor [2000]

- There are four players in Boot and Thakor model.
  - Commercial banks, Investment banks, borrowers, depositors/investors
- The commercial bank can lend two types of loans which is classified whether there is close relationship between banks and borrowers or not.
  - **Relationship lending** (there is close relationship between banks and borrowers)
  - **Transaction lending**
- The invest bank helps the borrower to access the capital market.
- Each borrowers has a publicly observable credit attribute and finances its projects from bank or capital market.
- The depositor invests in bank deposits or purchases debt in capital market.
- Boot and Thakor model analyzes the effect of two types of competition (competition from other banks and from capital market) on these players.

### 3. Discussions : Why the loans with collateral are increasing? Implication of Boot and Thakor [2000]

Some implications from Boot and Thakor model

- There are two effects on the lendings of banks from competition.
  - The effect on the total amount of all lendings
    - The total amount of all lendings decreases with increasing competition.
  - The effect on the ratio of relationship lending to transaction lending
    - The ratio of relationship lending increases with increasing competition from banks.
    - The ratio of relationship lending decreases with increasing competition from capital market.

Is there any implication of this study from Boot and Thakor model?

### 3. Discussions on this study(Cont.)

- How much is the error of predicted PD?
  - The results of this study give us some important knowledge in monitoring banks, but there are some points to take into account when using practically.
    - From technical point, the amount of residual term of the model of this study seems to be large.
      - That is, the impact of each characteristics of loan on PD will be right, but the value of predicted PD might include a lot of error.
    - There is a risk that we might fail to recognize the change of the financial environment and the change of coefficients of the model of this study.

## Reference

Boot, A., and A.Thakor, “Can Relationship Banking Survive Competition?,” *Journal of Finance*, 55, 2000, pp.679-713.