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This presentation

 Introduces the current status of bank-borrower relationships in Japan

• Main question:

Is bank-borrower relationship beneficial? (銀行・借手が親密なリレーションシップを結ぶことにメリットはあるのか?)

Based on our <u>latest empirical study</u> : KUUW

 Information Verifiability, Bank Organization, Bank Competition and Bank-Borrower Relationships

●(情報の立証可能性・銀行組織・銀行競争と銀行・借手間のリレーションシップ)

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- Hirofumi Uchida: Wakayama University
- Gregory F. Udell: Indiana University
- Wako Watanabe: Tohoku University

A study of the Regional Finance Workshop (地域金融研究会) in the RIETI
RIETI discussion paper 06-E-003

This presentation

Composition of this presentation

OFirst part: Uchida

- Brief summary of the paper's results and their implications
- OSecond part: Udell

Further implications in an international context

Part I Brief summary of our research

Hirofumi Uchida

Background for KUUW (1)

- Increased attention to beneficial bankborrower relationship in Japan
 - 1. historical emphasis on bank-borrower ties
 - a report by the Financial Service Council in 2003 (金融審議会答申)
 - "Toward Functional Enhancement of Relationship Banking"
 - 3. a line of "relationship banking policies" (リレバン行政)
 - by the Financial Services Agency (FSA: 金融庁)
 - 1st and 2nd action program (2003, 2005)

Background for KUUW (2)

- .. but WHY is close bank-borrower relationship beneficial?
 - Because, through closer relationships...
 - Iending bank can accumulate borrower' information
 - which could mitigate problems stemming from asymmetric information (情報の非対称性)
- For example
 - Greater knowledge -> can safely lend -> credit rationing prevented
 - Greater knowledge -> appropriate loan pricing -> cheaper credit
- Especially for Small- and Medium-sized Enterprises (SME: 中小企業)

What **KUUW** have done (1)

- Investigates these questions
 - Are there *actually* benefits of bank-borrower relationships?
 - (実際に,銀行・借手間のリレーションシップにメリットはあるのか?)
 - O For whom are the benefits observed?
 - (そのメリットはどのような銀行・借手間に見られるのか?)

What KUUW have done (2)

Analysis

 Econometric analysis using data from a Japanese SME survey

Regression analysis

Sample

○1960 sample SMEs

from

○Survey of the Financial Environment (金融環境実態調査)

 by the Small and Medium Enterprise Agency(中 小企業庁)

conducted on November 2002

What **KUUW** have done (3)

Methodology

- Investigate statistical association between two types of variables
 - [a] Variables that represent relationship closeness
 - [a1] relationship length, [a2] relationship scope
 - [b] Credit term or credit availability variables that represent relationship benefits
 - [b1] interest rate, [b2] collateral, [b3] loan turndown

○ with which we examine whether:

- closer relationships [a] -> more beneficial credit [b] ?
 - (e.g.)
 - Ionger relationship [a1] -> lower interest rate [b1]?
 - wider scope [a2] -> less frequent loan turndown [b3]?

 If yes, there is a benefit to establishing close bankborrower relationships

What KUUW have done (4)

Our punch line

OThe association ([a] closeness -> [b] benefit) is examined in conjunction with 3 factors

1. Information Verifiability:情報の立証可能性

- ・ <u>with audit</u> (監査(お墨付)あり) vs. <u>without audit</u> (監査なし)
- 2. Bank Organization:銀行組織
 - by bank size and organizational complexity
 - <u>large banks</u>(都長信銀) vs. <u>regional banks</u> (地・2地銀) vs. <u>Shinkin</u> <u>banks</u> (信金)

10

- 3. Bank Competition:銀行競争
 - <u>intensive</u> (競争度大) vs. <u>low</u> competition (競争度小)

 \bigcirc (e.g.) Does the benefit exist between

SME w/o audit statements and competitive Shinkin bank? (And other combinations of SMEs-banks)

Main findings of **KUUW** (1)

- "Closeness [a] -> Benefit [b]" association detected!
 - In the following form:
 - 1) longer relationship [a1] -> lower interest rate [b1]
 - 2) longer relationship [a1] and wider scope [a2] -> less frequent loan turndown [b1]
- But, detected only between
 - SME without audited financial statements
 - (監査を受けていない中小企業)
 - Less competitive Shinkin bank
 - (競争に晒されていない信用金庫)

Main findings of **KUUW** (2)

Interpretation of the findings

- OCloser bank-borrower relationship is beneficial
 - only between:
 - Opaque SME (without audited financial statements)
 - (情報が分かりにくい中小企業)
 - Less competitive small bank
 - (競争に晒されていない中小の地域金融機関)
- ○and, a closer relationship is irrelevant

for other combinations of SMEs and banks

Our findings and FSA's policy

Implication for FSA's "relationship banking policy"

- Oisclaimer:
 - FSA's policy is not limited to measures to promote *relationship lending* (: based on accumulation of borrowers' information)
 - We cannot derive implications for these other measures
- Natural implication
 - For opaque SMEs and less-competitive small banks: RELEVANT
 - For transparent SMEs, and large banks and regional banks: IRRELEVANT
- Much more important implication

Do not treat equally different SMEs and different banks!

Part II

Further Implications in an International Context

Gregory F. Udell

KUUW in an International Context

 Recent theoretical work suggests a framework for understanding SME credit availability in global context (Berger and Udell 2006)

This framework based on:

 the existence of multiple *lending technologies*

the importance of the *financial institutions* structure

Othe importance of the *lending infrastructure*

THE LENDING TECHNOLOGIES

- Not just one lending technology (relationship lending)
- Not just two lending technologies (relationship lending vs. transactions lending)
- In addition to relationship lending, there are at least 8 SME lending technologies that exist in the world
 - Financial statement lending (based on audited financial statements)
 - Small business credit scoring
 - O Asset-based lending
 - Factoring
 - Equipment lending
 - Real estate lending
 - Trade credit

Feasibility of Lending Technologies

- Feasibility and effectiveness of each lending technology depends on a country's
 - Financial institution structure market presence of and competition among different types of institutions
 - <u>Lending infrastructure</u> rules and conditions that affect financial institutions and their abilities to lend

The Dimensions of Structure

The financial institutions structure Clarge vs. small institutions OForeign vs. domestic institutions OState-owned vs. private institutions OFinancial market concentration The lending infrastructure OThe information environment OThe legal, judicial and bankruptcy environment OThe tax and regulatory environment

Why Does Structure Matter? – Three Examples

- If relationship lending based on "soft information" is best done in small banks, then banking industry consolidation may be a problem.
- If relationship lending requires some local monopoly power, then banking concentration matters.
- If financial statement lending requires informative audited statements, then the information environment matters.

The Research Challenge

- Much of this paradigm has not been tested empirically.
- Data have not allowed researchers to test many theories of SME lending because
 - the data cannot distinguish among the technologies.

• An example:

- <u>Theory of relationship lending</u>: Stronger relationships at small banks lead to more credit on better terms.
- This theory does not apply to financial statement lending.
- Therefore, prior tests of this theory have been problematic because data cannot distinguish between relationship lending and financial statement lending (nor other technologies).

KUUW's Contribution

- KUUW can go further in testing some key aspects of this new paradigm for SME lending
 - because our data can distinguish between two of the most important lending technologies – relationship lending and financial statement lending.
 - No other data set on SMEs in developed economies today is capable of doing this.

KUUW's Contribution (cont.)

- Thus, KUUW empirically supports this new paradigm by finding:
 - Financial statement lending (i.e., lending against audited statements) is different than relationship lending
 - OBank size and concentration matters
 - for, and only for, relationship borrowers
 - Specifically, the strength of relationships matter only for opaque SMEs without audits, at small banks in concentrated banking markets.

International Policy Implication

- More studies needed like KUUW that examine the impact of financial institutions structure and lending infrastructure on lending technologies.
- This will help policymakers make policy decisions about these key structures
 - to maximize the effectiveness of lending technologies,
 - which in turn maximizes credit availability for SMEs with different characteristics,
 - and best insulates SMEs from financial system shocks by maximizing substitutability among lending technologies.

