

Entrepreneurship, Innovation, and Finance:

New growth avenues in developed economies

新たな成長に向けたアントレプレナーシップ・
イノベーション・ファイナンスの融合

Comments/コメント

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Comments on “What Have We Learned About SME Access to Finance?” by Greg F. Udell

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Greg's presentation

- How research on SME finance has developed
- Importance of lending technology approach
- “Unsettled issues” aligned according to my heroic interpretation

7. Countercyclical macro-prudential policy tools and SME lending
8. Efficacy of government guarantees

Government commitment

Outside forces that affect SME finance

1. Competition and SME access to finance
4. Testing the SME lending channel paradigm
6. Identifying demand v. supply effects in a credit crunch

Lending technologies

2. Hardening soft information
3. Confusion over collateral: Inside collateral v. outside collateral
5. The value of audited financial statements
9. Cooperatives and SME lending
10. The role of trade credit
11. SME loan securitization

12. The potential role of fintech

On the one hand, fintech may affect some aspects of lending technologies and change the horizon of loan market competition. On the other hand, the way it behaves is heavily affected by the government regulations.

Relevance of the “unsettled issues”

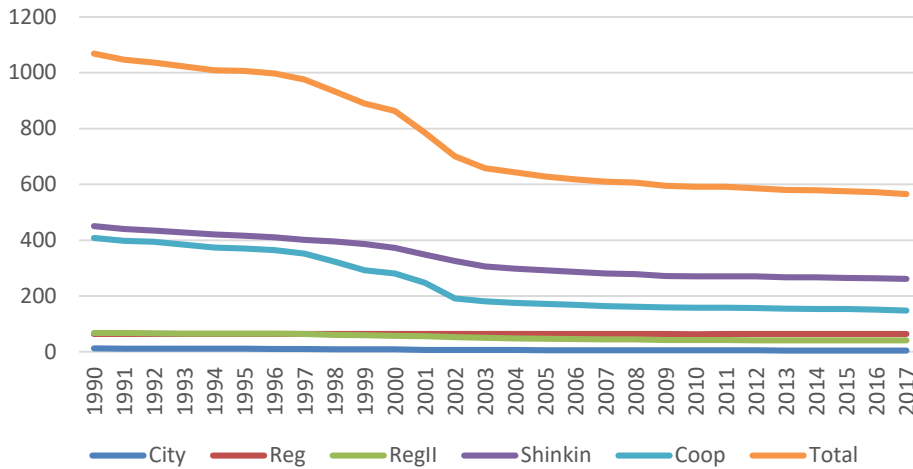
- Many of Greg’s “unsettled issues” concern practitioners and academics in the field of SME finance in Japan.
- I say this not because he kindly refers my paper, but because SMEs in developed countries have similar issues in common.
- In below are some of the issues that overlap my interest
 1. Competition and SME access to finance
 2. Efficacy of government guarantees
 3. The potential role of fintech

Relevance of the “unsettled issues”

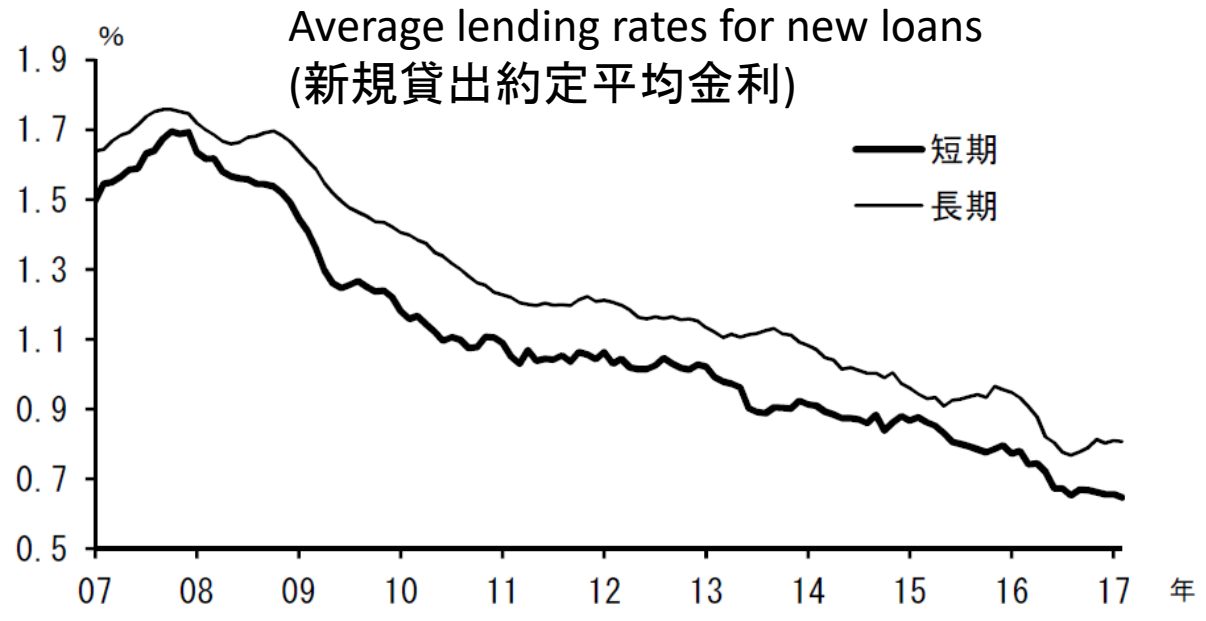
- At the same time, there are several issues that are unique to Japan.
- Issues which (I think) are important
 4. Impact of population aging on SME finance
 5. (In-) efficiency of credit allocation and existence of “zombie” firms
- I will talk about (1) background, (2) previous research, and (3) future agenda for each of the issues in the Japanese context.

Both the number of depository institutions and average lending rates decline over the years

Number of depository institutions in Japan



Source: Webpage of Deposit insurance Corporation



Source: Ojima (2017)

1. Competition and SME access to finance

Background

- Declining number of financial institutions since mid 1990s, which may have resulted in higher degree of concentration.
- If banks' market power increases, more stringent loan conditions for borrowers must apply. But on average, it does not seem to be the case.
- Disputes between FSA (Financial Services Agency) and FTC (Fair Trade Commission) over proposed regional bank mergers. Both give little consideration to relationship lending during the disputes, which they should.

Previous studies

- **Impact of bank mergers**

Megabanks (Uchino and Uesugi, 2015), regional banks (Miyazaki and Aman, 2015)

Increased borrowing costs for firms transacted with merged megabanks, but decreased costs in the case of a regional bank merger in Kyushu.

- **Extent of competition in the loan market**

From 1974 to 2000 (Uchida and Tsutsui, 2005), more recent years (Ogura, 2019; Maruyama, 2019 (in Japanese))

Increased competition until 2000 and in recent years. Became less competitive in mid-2000s.

1. Competition and SME access to finance

Further issues

- We need to obtain knowledge useful for policy-making by implementing the following:
- **Measurement of market concentration based on a more reasonable definition** of loan markets.

So far, researchers and policymakers have relied on the prefecture-level concentration indexes such as HHI.

A number of instances regional banks extend loans in Tokyo, Osaka, and neighboring prefectures.

- **Comprehensive analysis of the effect of bank mergers** in Japan to know under what circumstances bank mergers negatively affect borrower firms and decrease the extent of relationship lending.

Most of the OECD countries employ SME public loan guarantees

Policy responses of OECD countries and regions after the financial crisis. *Source:* Country responses to the WPSMEE (OECD Working Party on SMEs and Entrepreneurship) questionnaire on the impact of the global crisis on SMEs and Entrepreneurship financing and publicly available information.

	Measures supporting sales, cashflows and working capital			Enhancing SME access to liquidity especially to bank	Mediation and monitoring	Strengthening proinvestment measures	Strengthening capital base and private equity and venture
	Alleviating working capital shortage in the economy	Reducing and easing tax payments	Export facilitation	Creation and extension of loan and guarantee schemes			
Australia		○					○
Austria			○	○		○	○
Belgium		○		○	○		
Canada	○	○	○	○			
Czech Republic			○	○		○	
Denmark		○	○				○
Finland				○			○
France	○	○		○	○	○	
Germany			○	○		○	
Greece				○			
Hungary				○		○	○
Italy	○	○	○	○	○	○	
Japan				○		○	
Korea				○			
Luxembourg			○	○			
Mexico		○	○	○			○
Netherlands		○	○	○			
New Zealand		○	○				
Spain			○	○		○	
Switzerland			○			○	
UK				○			○
USA				○	○	○	
EC				○		○	

OECD (2009).

2. Efficacy of government guarantees and other commitments to SME finance

Background

- Government loan guarantees have been one of the tools employed by many developed countries since the Global Financial Crisis.
- The guarantee scheme has been changed in Japan since fiscal 2018.
- Also, government-affiliated financial institutions extend direct loans to SMEs.

Previous studies

- **Impact of loan guarantees** during and after the crisis period (Ono, Uesugi, and Yasuda, 2013; Ono and Yasuda, 2018)
Effectively alleviated firms' financial constraint. But banks that exploited firms' private information extended guaranteed loans to ex-post risky firms. Firms that deferred repayment performed worse, especially when they received credit guaranteed loans.
- **Impact of direct loans by government banks** (Ogura, 2018; Imai 2009, 2018; Uesugi, Uchida, and Mizusugi, 2016 (in Japanese))
Alleviate firms' financial constraint to increase investment, employment. But usually fail to improve profitability and productivity.

2. Efficacy of government guarantees and other commitments to SME finance

Further issues

- **Comparison among a variety of government commitments to SME finance**

Loan guarantees; direct loans by government banks; capital injections to banks

We may focus on the various policy measures introduced after the Tohoku Earthquake in 2011 (Uesugi et al., 2019).

- **Study on the commitment by the local government**

A number of municipalities have their own policy measures that aim to assist SME finance.

But no serious quantitative analysis or evaluation so far.

Fintech credit volumes

Annex Table 1

Amount of fintech credit volumes by country

	Level (USD, in millions)		Annualised growth 2013–16 (%)	<i>Memo: Volume per capita in 2016 (USD)</i>
	2013	2016		
Australia	12	549	258	22.5
Brazil	1	61	294	0.3
Canada	8	169	176	4.7
Chile	12	93	98	5.1
China	5,547	240,905	252	174.2
Colombia	...	131	...	2.7
Estonia	...	83	...	63.0
Finland	...	119	...	21.7
France	59	338	79	5.2
Georgia	...	111	...	30.1
Germany	48	233	69	2.8
India	4	90	182	0.1
Ireland	...	81	...	17.3
Israel	...	33	...	3.9
Italy	0	114	...	1.9
Japan	79	380	69	3.0
Korea	1	368	617	7.2
Mexico	1	106	373	0.9
Netherlands	48	165	51	9.7
New Zealand	<1	190	668	40.1
Nigeria	...	36	...	0.2
Poland	...	35	...	0.9
Singapore	0	101	...	18.0
Spain	4	85	177	1.8
Sweden	...	7	...	0.7
United Kingdom	906	6,068	88	92.4
United States	3,757	32,414	105	100.2
World	10,555	283,529	199	50.5

Claessens, Frost, Turner, and
Zhu (2018, BIS Quarterly
Review)

3. The potential role of fintech

Some casual thoughts

- I agree with Greg's view that fintech can be a disruptive technology.
- I also agree with his view that current fintech firms are able to extend loans of limited size (USD 100k). Is this because the current fintech technology is good at screening applications only by individual human being's traits?
- Such technological progress **may change the way how firms use some of their lending technologies.**

Example: After the introduction of “electronic claims (電子債権)” in Japan, one fintech company, Tranzax Inc., started providing PO (purchase order) finance. A supplier firm uses factoring when it issues a bill to a customer. But it can use the PO finance when it receives an order from the customer firm.

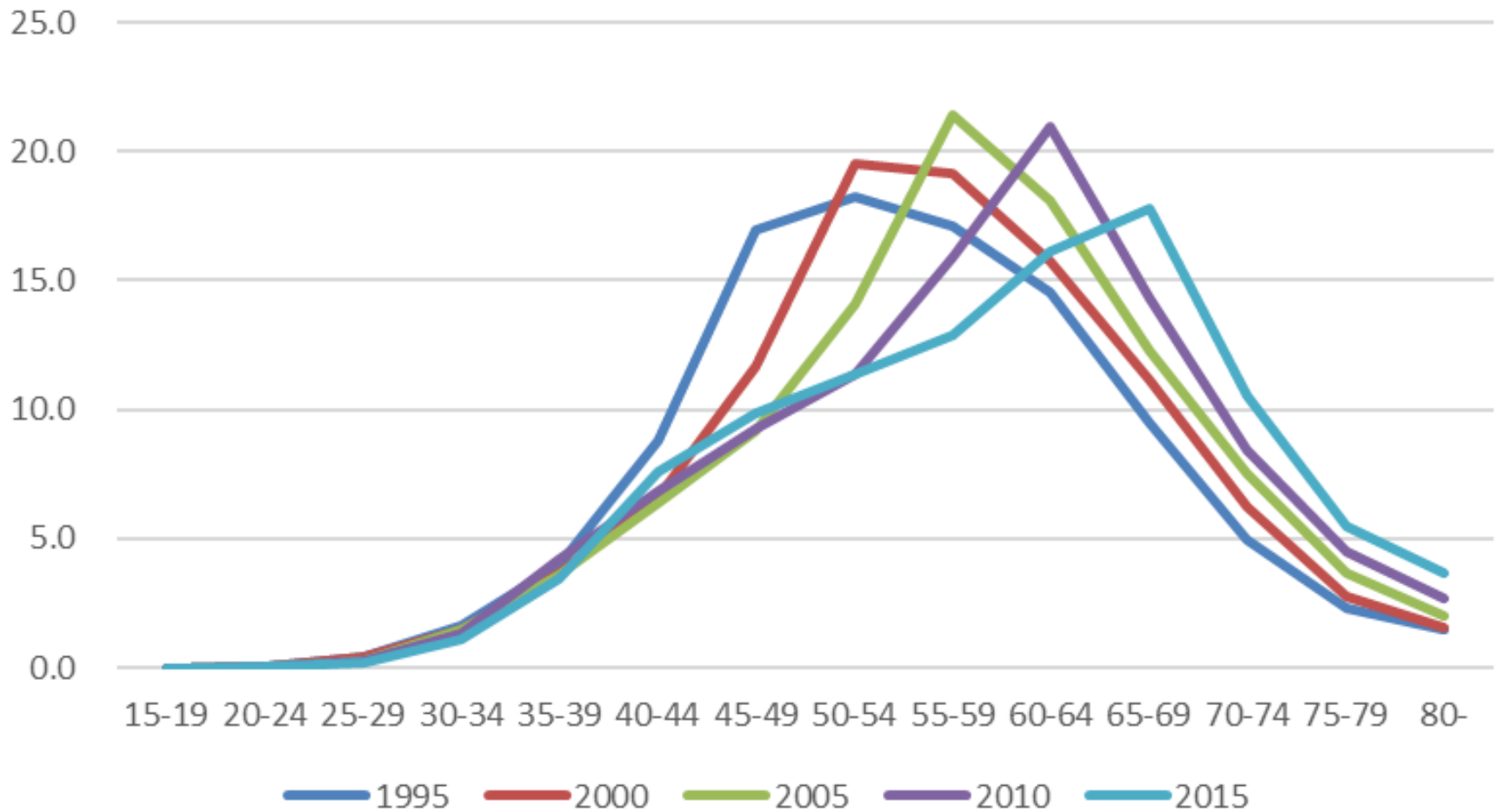
3. The potential role of fintech

- It may also change the structure of the market and its extent of competition.

IT developments may exploit potential scope economies with multiple product offerings using new direct distribution channels with easy access to (formerly) distant customers (Boot, 2018, p87).

- But at the same time, **fintech is affected by the way government regulates it**. The government may help fintech firms to exploit their advantage over incumbents or deter them from operating at their will.
- Example in Buchak et al. (2018): In the US residential mortgage market, online fintech shadow banks increased their shares from 2007 to 2015 due to lighter regulatory burden and government guarantees.

Age distribution of firm CEOs 1995-2015



Source: 2016 White Paper on SMEs

4. Impact of population aging on SME finance

Background

- Business succession has become a serious policy issue for SMEs in Japan.
- A number of SMEs, whose elderly CEOs tried to find their successors but failed, have exited the market.
- The business practice of a bank requiring CEOs to pledge personal guarantees (a form of outside collateral) may have become an obstacle for the succession process.

A prospective successor does not want to pledge his/her assets for the firm's debt

- The government has promoted “loans which do not require CEO's personal guarantees.” But only modest progress thus far since banks have been reluctant.

Previous studies

- **Determinants and effects of bank loans that exempt CEO's personal guarantees** (Uesugi, Uchida, and Iwaki, 2018, in Japanese).
- Interestingly, high quality firms that are less likely to default tend to choose non-personal guaranteed loans.

4. Impact of population aging on SME finance

Further issues

- **Contract terms that facilitate the use of non-personal guaranteed loans**
Loan covenants may work as substitutes for personal guarantees

- **Examination of ex-post performance of firms that have secured their successors** (Tsuruta, forthcoming)

5. Efficiency of credit allocation & existence of zombie firms

Background

- Zombie firms are those that perform poorly but receive financial assistance to survive.
- First strand of research focused on the Japanese listed firms in the 1990s (Caballero, Hoshi, and Kashyap, 2008, Fukuda and Nakamura, 2011).
- In recent years, many subsequent studies focus on other countries (e.g. Banerjee and Hofmann, 2018).
- “5,300 zombie firms in the world, doubled in 10 years due to lower interest rates caused by the lax monetary policy” (Nikkei Newspaper, August 11, 2019)

Examined 26 thousand listed firms in the US, Europe, China, Japan and other Asian countries to identify firms whose interest coverage has been less than unity for the three consecutive years. The number of firms has doubled from 2008 to 2018.

Previous studies

- **Detecting zombie SMEs** in Japan (Imai, 2016; Goto and Wilbur, 2018)
Zombie ratio is higher for SMEs than for large firms, but the ratio declined before and after the GFC.

5. Efficiency of credit allocation & existence of zombie firms

Further issues

- We expect a **high zombie SME ratio after the GFC**, especially due to lax lending policies enabled by the SME Finance Facilitation Act. But is it true?
- Do these firms survive or exit the market?
- How are they assisted by financial institutions?

- In contrast, there is **an increasing number of SMEs that hold no loan amount outstanding**. In most cases, they do not have demand for loans (Tsuruta, 2016). So, **how do zombie firms and zero leverage firms coexist?**

- Another issue is the size of credit reallocation across firms in Japan, which has substantially declined since the 1990s (Sakai and Uesugi, 2019).
- Smaller amount of funds flowing from low-quality firms to high-quality counterparts in recent years

Conclusion

- I talked about some of the issues listed in Greg's top 12. The potential role of fintech is a promising but under-researched area in Japan. This will be the topic in the next session.
- I also talked about some out-of-the-list issues. It remains to be seen whether Japan is an anomaly or other developed countries will follow suit.
- Thanks much for the chance discussing a thought-provoking set of research issues!