"The bright side of lending by state owned banks: Evidence from Japan" by Y. Lin, A. Srinivasan, and T.

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### Background: State Owned Banks (SOBs) in Japan

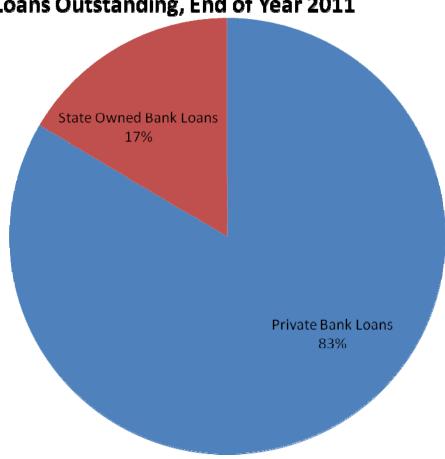
- Development Bank of Japan (DBJ) mainly provides large firms with long-term loans for investment.
- Japan Bank for International Cooperation (JBIC) mainly provides trade credit and funds for foreign direct investment.
- Japan Financial Corporation (JFC) mainly provides loans to small and medium sized enterprises (SMEs).

#### Asset size of Japanese SOBs

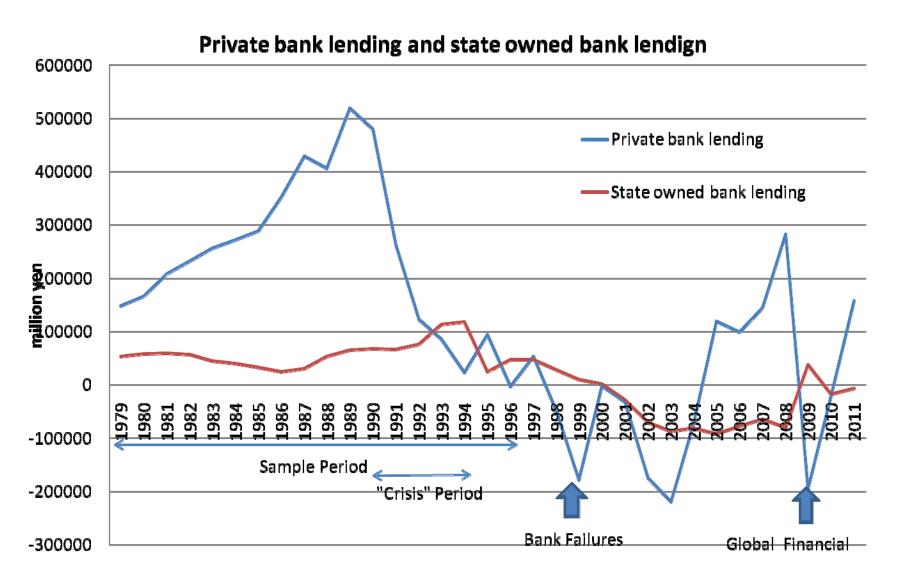
Asset size (Consolidated base, March, 2011)		(billion yen)
	Asset	Loan
SOBs		
DBJ: Development Bank of Japan	14,845	13,031
JFC: Japan Finance Corporation (excluding JBIC account)	24,008	20,632
JBIC: Japan Bank for International Cooperation	12,782	8,377
Private banks		
Mitsubishi Tokyo UFJ Bank ( a mega bank)	163,123	70,171
Yokohama Bank (a large regional Ibank)	12,520	8,601

### Background 1: State owned banks (SOBs) play a significant role in Japanese loan markets.

Loans Outstanding, End of Year 2011



## Background 2. SOB lending has been relatively stable.



#### Summary of the Paper

- Using the data of Japanese listed firms over the period from 1977 to 1996, the authors find:
- 1) One yen increase in SOB lending is associated with about one (0.97) yen increase in borrowing firm's investment.
- 2) SOB lending has a greater impact on firm investment during the "crisis" period (1990-1994) and for (supposedly) financially constrained firms.

#### Summary of the Paper, continued

- 3) An increase in SOB lending is associated with an increase in employment growth.
- 4) A significant and robust incremental effect on employment growth is NOT found during the "crisis" period or (supposedly) financially constrained firms.

#### Comment 1. Causality

- Given that DBJ finances investment, nearly oneto-one relationship between SOB lending and firm investment is reasonable.
- The issue is what would happen if DBJ did not finance. Maybe firms would
- 1) borrow from other banks,
- 2) issue bonds,
- 3) withdraw deposits, and/or
- 4) reduce investment.

#### Comment 1. Causality, continued

- The authors try to distinguish "cutting off investment" from "financing from other sources" by
- 1) instrumental variables using "Amakudari" (a retired government official who is now a board member) as an IV.
- 2) sequential or propensity score matching
- 3) panel GMM using 3- and more lagged variables and "Amakudari" as IVs.

#### Comment 1. Causality, continued.

 However, I doubt that "amakudrari" is an exogenous variable; Government sends officials to a firm that needs to be restructured and at the same time DBJ provides funds for restructuring.

#### Comment 1. Causality, continued

- The authors regress I(t)/K(t-1) on
- SOB lending (t), Q(t-1), and other controls.
- I suggest using the share of SOB lending to total borrowing or to total debt issued to control for firm's demand for total borrowing.
- I also suggest using Q(t) instead of Q(t-1).

## Comment 2. Sample period and Identification of the "Crisis" period

- The authors choose the sample period to 1977-1996, and identifies the crisis period with 1990-1994.
- The sample period (and the crisis period) does not include the period of the most severe banking crisis in Japan, 1997-1998, when large financial institutions failed.
- Woo (2003, JMCB) and Watanabe (2007, JMCB) find evidences that Japanese banks cut back on their lending in response to a large loss of capital in 1997.

### Comment 2. Sample period and identification of the "crisis" period.

- The authors say that their results are robust to the inclusion of all data till 2006 and the identification of the second crisis with 1997.
- I suggest extending the sample period till 2010 and identifying the crises with 1997-98 and 2008.

# Comment 3. Effects of Financial Liberalization in Japan

- Restrictions on issuing corporate bonds were gradually relaxed until complete liberalization was realized in 1996.
- The role of SOBs have presumably changed after the liberalization of corporate bonds, since firms now have alternative sources for long-term funds.
- I suggest dividing the (extended) sample period into the period of restricted bond issuance and that of free bond issuance.
- The latter period would give implications for developed economies.

## Comment 3. Effects of Financial Liberalization in Japan.

- The authors say that SOB lending might reflect an implicit government guarantee of the firm, and hence induce additional lending to the firm by private banks. They obtain results supporting this hypothesis.
- However, the authors' assertion seems to be valid, if any, only during their sample peirod.
- There are some large firms that borrowed from and/or were capitalized by DBJ but fell in financial distress especially in the 2000s. (e.g., Japan Airline, Daiei, Elpida Memory)

Examples of the companies that DBJ lent or invested but fell in financial distress.

- Japan Airline filed a bankruptcy-reorganization plan (like Chapter 11 in US) in 2010.
- Daiei, the major supermarket chain, asked for help from the Industrial Revitalization Corporation of Japan in 2004.
- Elpida Memory, a DRAM (Dynamic Random Access Memory) manufacturer, filed a banktuptcy-reorganization plan in 2012.

### Comment 4. Interpretations on borrowers' market values

- Observing positive effects of SOB lending on borrowers' stock market performance, the authors say that SOBs can enhance efficiency of the firm's investment by mitigating credit constraints.
- Another possibility is that SOBs provide loans at a lower interest rate than private banks do.
- Such a subsidized credit may hamper restructuring and lower macroeconomic efficiency (Caballero, Hoshi and Kashyap, 2008, AER).

### Comment 5. How to capture the role of SOB lending

- The variable, State owned bank, is the change in loans outstanding from the previous year (divided by total capital in the previous year).
- The authors treat an increase and a decrease in SOB lending symmetrically.
- It may be more informative to focus on the effect of increases in SOB lending on firm investment.
- I suggest measuring increases in SOB lending or a dummy for increase as an alternative measure. (e.g., Peek and Rosengren, 2005, AER)

#### Technical Comment.

• In Table 3, readers might be interested in the coefficients of *State owned bank* itself (as well as its intersection with Q or cash flow).