

Workshop on
“Money, Finance and Banking in East Asia”

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Discussion of
**“By a Silken Thread: regional banking integration and
pathways to financial development in Japan’s Great
Recession”**



By a Silken Thread: regional banking integration and pathways to financial development in Japan's Great Recession

Matthias Hoffmann and Toshihiro Okubo

Discussion: Pascal Towbin (BdF)



Thank you!

- Papers addresses an interesting and important question
- Innovative identification strategy
- Very detailed account on the historical origins of today's level of financial development
- My suggestions: strengthen theoretical argument regarding the link between banking integration and recession depth, more details on the identification strategy.

- How does (regional) banking integration affect the spread of a large financial shock?
- Paper explores differences in regional growth in Japan since 1991 recession
- Answer of the paper: Banking integration can contain the loss in output in regions where bank finance is important



Why should banking integration matter?

Sensitivity of regional output to financial shocks depends on demand and supply of credit

Demand factors: **dependence on external finance** measured by the share of manufacturing firms

Supply factors: **banking integration**, measured by the share of national banks (or 1 minus the share of regional banks)



Empirical Model 1

$$\Delta gdp_t^k = \alpha AggShock_t \times SME^k + \mu^k + \tau_t + \epsilon_t^k$$

$$AggShock_t = Post1991_t$$

α is the coefficient of the main interest: it tells how much stronger the output fall gets as the share of small manufacturing firms increases

Study compares it across two groups: high share of national banks, low share of national banks (measured in 1980-1990)

Finding: α is larger in countries low share of banks



Empirical Model II

$$\Delta gdp_t^k = AggShock_t \times \left[\alpha_0 SME^k + \alpha_1 FI^k + \alpha_2 FI^k \times SME^k + \alpha_3' X^k \right] + \mu^k + \tau_t + \epsilon_t^k \quad (2)$$

α_2 is the coefficient of the main interest:

Finding: α_2 is more negative in countries low share of national banks

Remark: Model I can be rewritten as special case of Model 2, where FI^k is a dummy variable (Additional Assumptions: homoskedasticity and some restrictions on the time fixed effects)



The Role of Banking Integration

- Argument of the paper banking integration may help to relieve credit constraints
- Intuitive for a regional funding shock. Integration facilitates transfer of funds.
- Less clear for an national shock. Everybody is concerned. Is it the international integration of big bank that matters?



The Endogeneity of Bank Lending

- Share of regional banks might be endogenous. Share of city banks could be correlated with future growth prospects
- Authors propose an instrument for regional bank lending: **mechanization of silk reeling** in the 19th century.

Is there really an Endogeneity Problem?

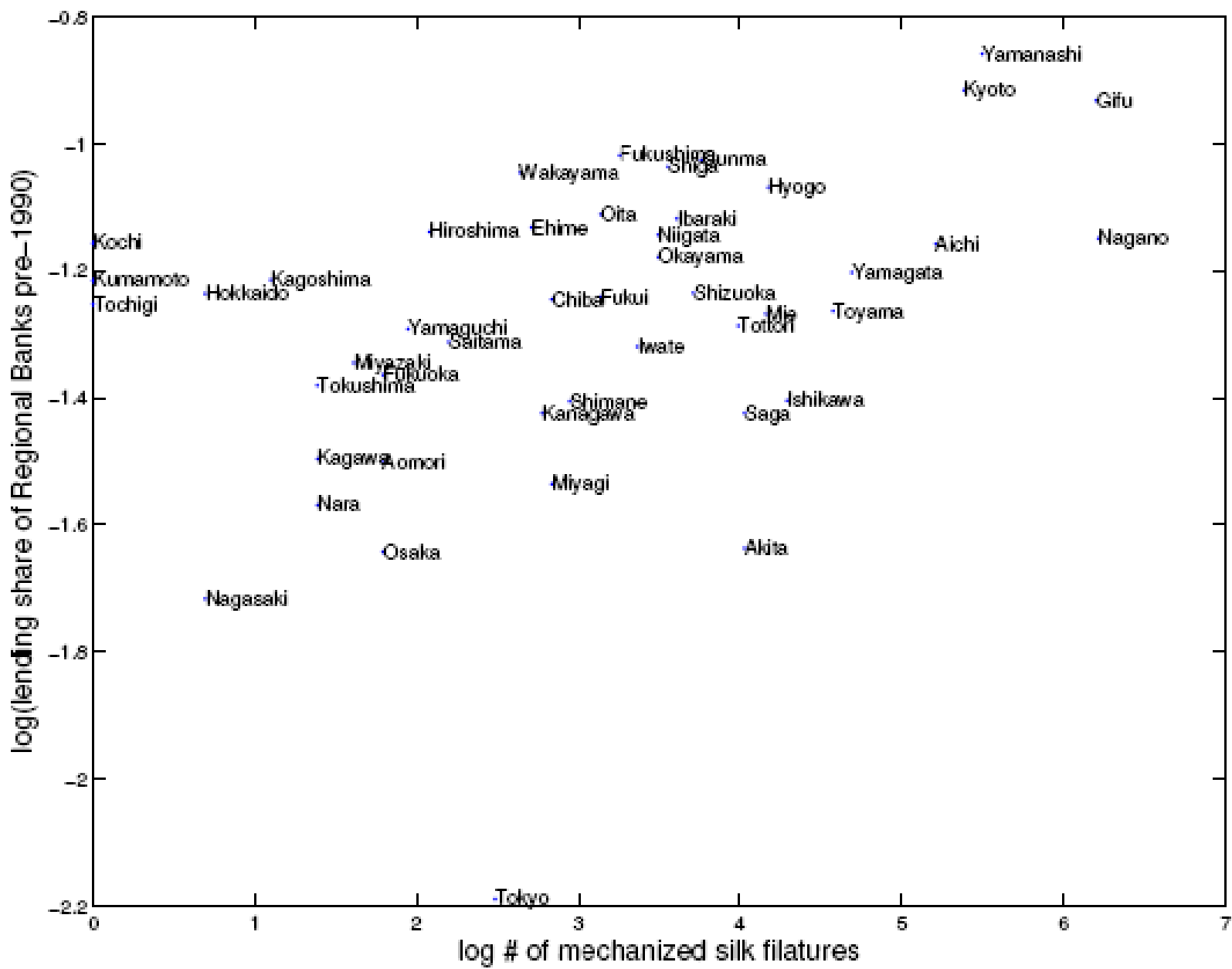
$$\Delta gdp_t^k = AggShock_t \times [\alpha_0 SME^k + \alpha_1 FI^k + \alpha_2 FI^k \times SME^k + \alpha_3' X^k] + \mu^k + \tau_t + \epsilon_t^k \quad (2)$$

- Exogeneity condition: $E(Xe) = E(AggShock * X'e) = 0$
- If AggShock is a true shock, we should not be worried: It should be independent from all other information available.
- $\Rightarrow E(Xe) = E(Aggshock)E(X'e) = 0$
- Problem: Aggshock might not be a true shock, correlated with unobserved changes in “regional growth prospects”
- \Rightarrow need for instruments OR identify a true shock
- Authors take the instrument route



Silk reeling and regional banks

- Mechanization of silk reeling leads to a separation of silk worm farming and silk reeling
- Need for trade finance/ but information asymmetries regarding the quality of silk.
- Lending is done mainly through regional financial institutions with specialized knowledge.
- Degree of silk reeling mechanization in the 19th is correlated with share of regional banks today.





Do We Have a Valid Instrument?

- First condition: Instrument needs to explain lending shares of regional banks
- Second condition: Instrument needs to be uncorrelated with unobserved “regional growth prospects”
- Does the second condition hold as well? Does silk mechanization also predict sectoral structure today, e.g. importance of textile industry?



Some remarks on the IV regression

$$\Delta gdp_t^k = \alpha AggShock_t \times SME^k + \mu^k + \tau_t + \epsilon_t^k$$

- Authors apply two stage approach on Model I
- Instrument regional bank lending share. Use the instrumented bank lending share as splitting criterion
- This is not a standard IV regression. Alternative: use the dummy version of Model I or Model II and apply IV
- Do we need to instrument
[AggShock*Bank Lending] , [Bank Lending],
[AggShock*Bank Lending *SME] ?

The logo of the Banque de France is visible in the top-left corner, featuring a classical figure and the text 'BANQUE DE FRANCE'.

First Stage Finding is in itself Interesting

- Sectoral structure of the 19th century predicts banking structure today
- What's the channel?
- Endogenous “protectionism“?
- Persistent information advantages?



Thank you!