Japan Economic Seminar, February 20, 2020 @ CJEB

### Discussion on Balloch and Koby:

"Low Rates and Bank Loan Supply: Theory and Evidence from Japan"

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(Hitotsubashi)

#### Acknowledgement

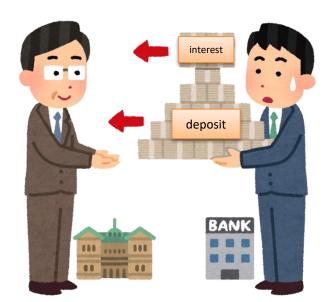
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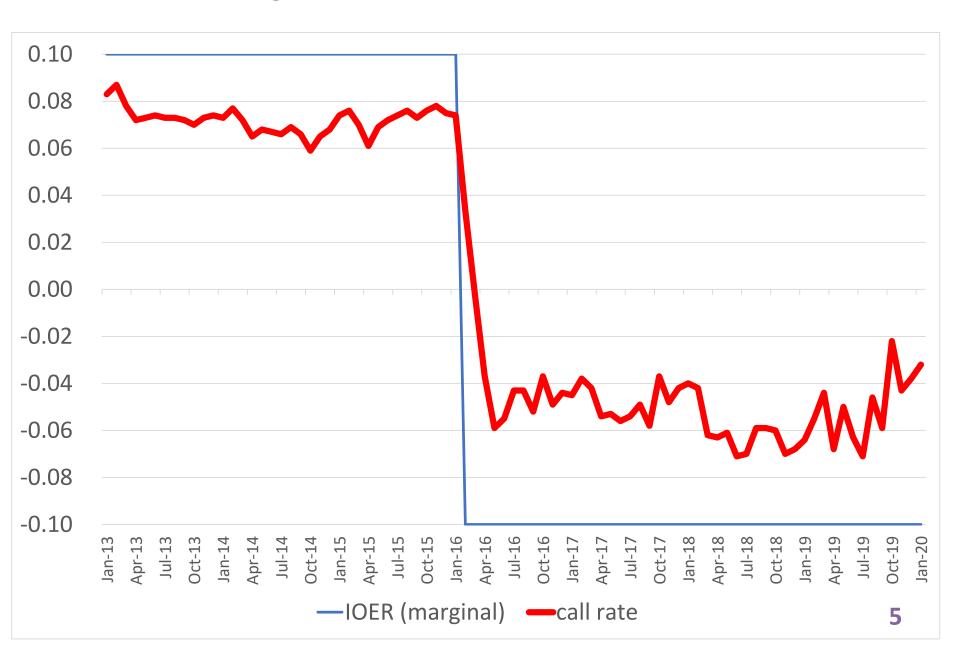
### Very timely topic! because we see in Japan...

# a growing criticism against the Negative Interest Rate Policy (NIRP)!

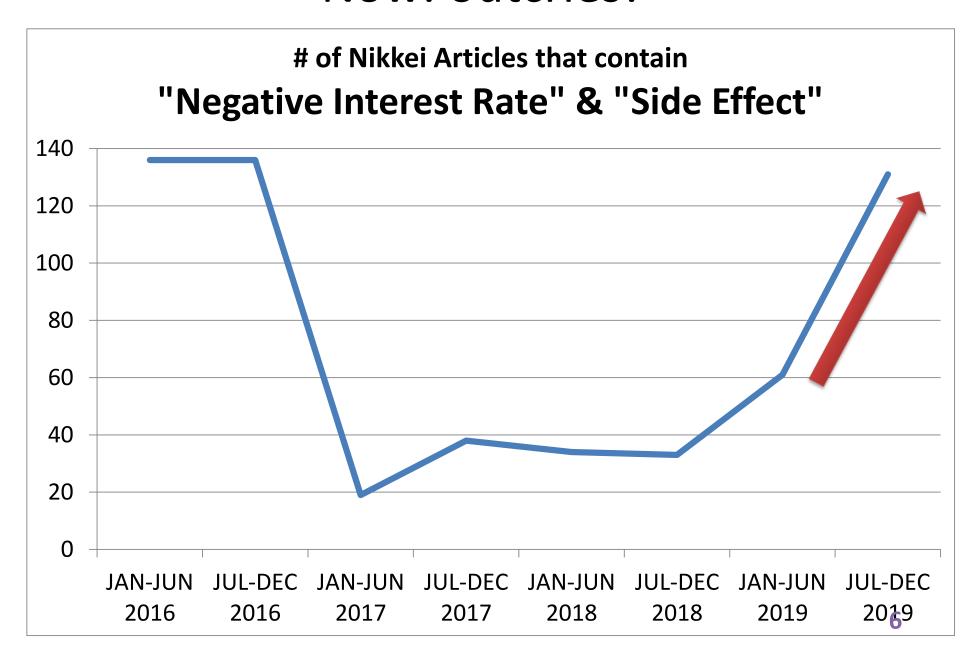
(esp. from private bankers)



#### Background: NIRP started in 2016.



#### Now: outcries!



### Japan: Growing interest in "Reversal Rate"

- Popularized by Governor Kuroda.
  - Speech in Switzerland on Nov 2017.

- Some call for termination of the NIRP.
  - Sweden in Dec 2019.

#### My comments

- Comments on the paper:
  - Pass-through: determinants?
  - Propensity score matching.
  - On the "POST" dummy.
  - Is the reversal rate really positive?
    - or, is there anything special about being "below zero"?

Questions about policy

# Comment on paper (1) What Determines Bank's Ability to Pass-through (PT)

(from the market rate to the deposit rate)  $\ref{eq:condition}$ 

## This paper's measure = "Ex Post" and "Historical".

- "Ex Post", or "Result-based"
  - based on the actual deposit interest expenses.
  - Might be endogenously affected by deposit demand shocks.
- "Historical"
  - as of 1990.
  - But things may have changed since then!
- Better to look at: fundamental determinants of PT.
  - Are there variations in the data that the authors might be able to exploit?

# PT determinant 1: regional market power

### Uchino (2014)

"Bank deposit interest rate pass-through and geographical segmentation in Japanese banking markets" (Japan and the World Economy):

PT affected by local market concentration!



#### Uchino (2014)

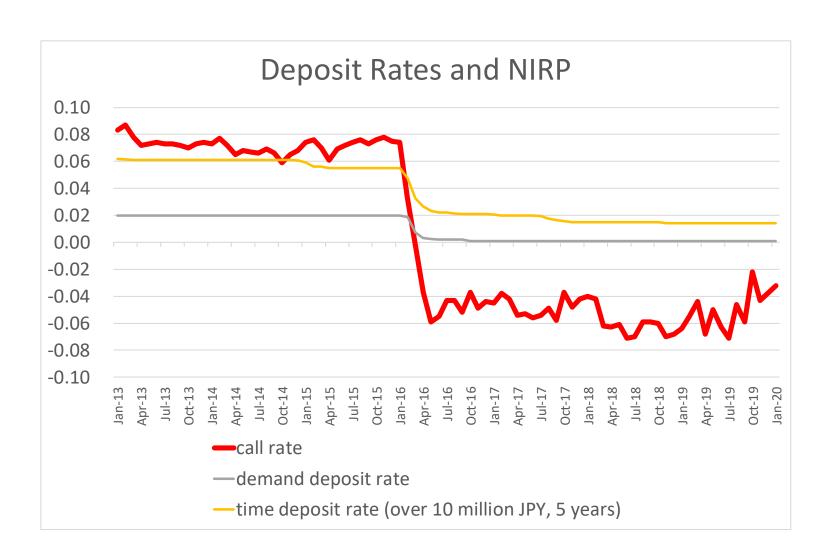
Use data on time deposit rates at the banks.

 Bank specific PT is estimated via panel cointegration method (-> long run PT).

- PT is shown to depend on:
  - Degree of local market concentration (HHI or the number of banks).
  - Number of branches of large banks.

# PT determinant 2: share of time deposits in overall deposits

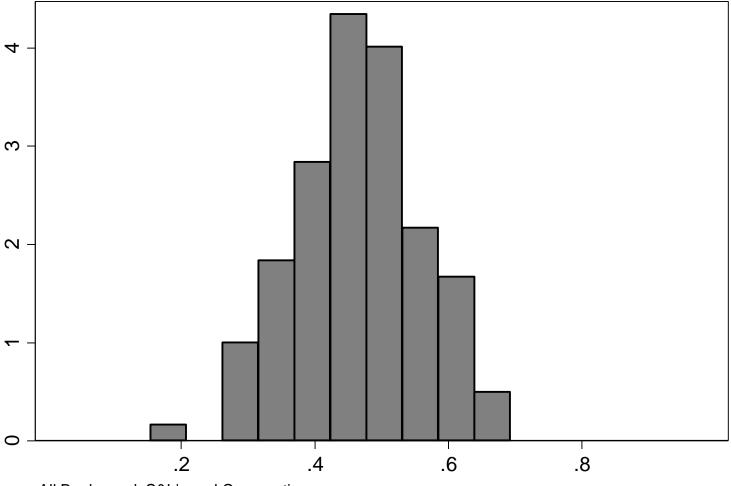
#### Time deposits: (slightly) bigger room to adjust the rate



#### Great heterogeneity across banks

that one could perhaps exploit

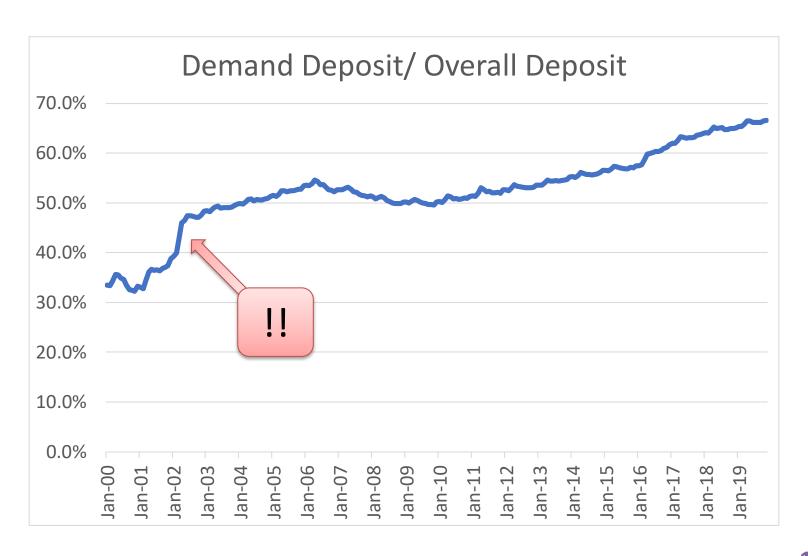




All Banks excl. S&L's and Cooperatives

#### Great variation across time

that one could perhaps exploit.



# Comment on paper (2) Propensity Score Matching?

- This paper's approach
- = Compare "High Exposure Group" vs "Low".

But the exposure is endogenous:
 might be correlated with other characteristics.

 Could utilize propensity score matching? (or synthetic control)?

# Comment on paper (3) "POST" dummy

#### DID

"POST" = dummy for all the years since 2000.

But policies changed a lot during this period!

- Might be better to use...
  - JGB rate?
    - Both the level and the slope?
  - Shadow rate?

# Comment on paper (4) Can the reversal rate be positive?

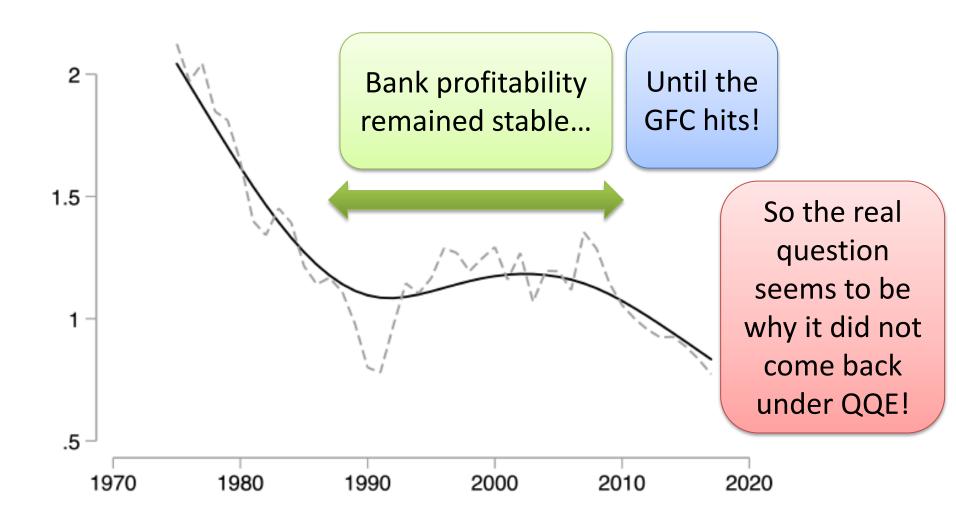
Or is there a fundamental difference between being "just very low" and going "negative"?

- Why do I ask??
- Bankers were not complaining about low r ...
- until the NIRP came!

 In fact, bank profitability remained stable throughout much of the 1990s and the 2000s (see next page)!

What changed in early 2016?

#### From 12 of the paper



(b) Bank net interest income per asset

#### 2016: what changed?

#### (1) <u>IOER ↓ ↓ < Call Rate ↓</u>

Not all the financial institutions can open an account at the BOJ.

If IOER>0, banks can make profits by borrowing from excluded ones.

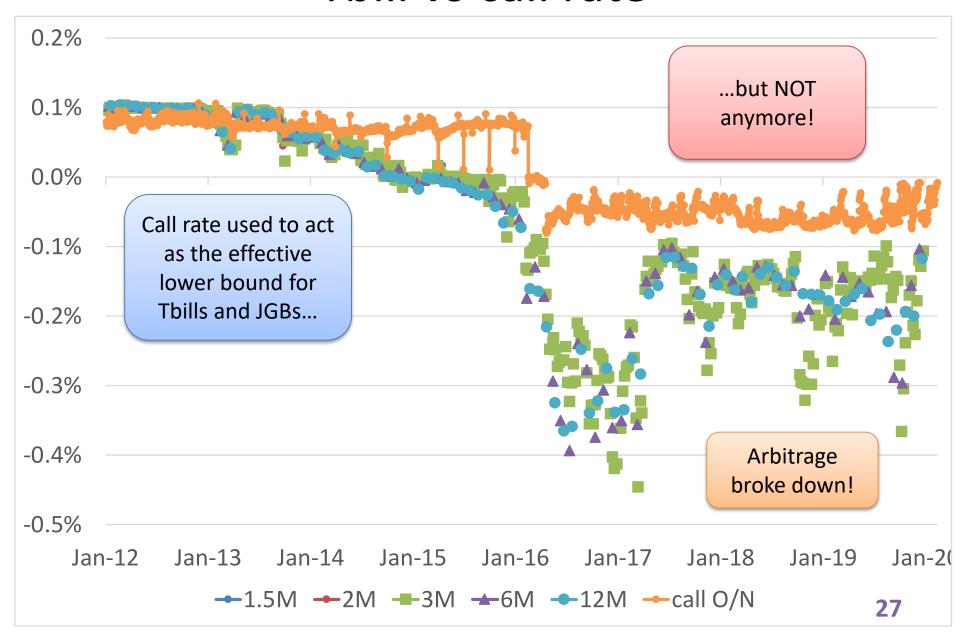
Not any more!

#### 2016: what changed?

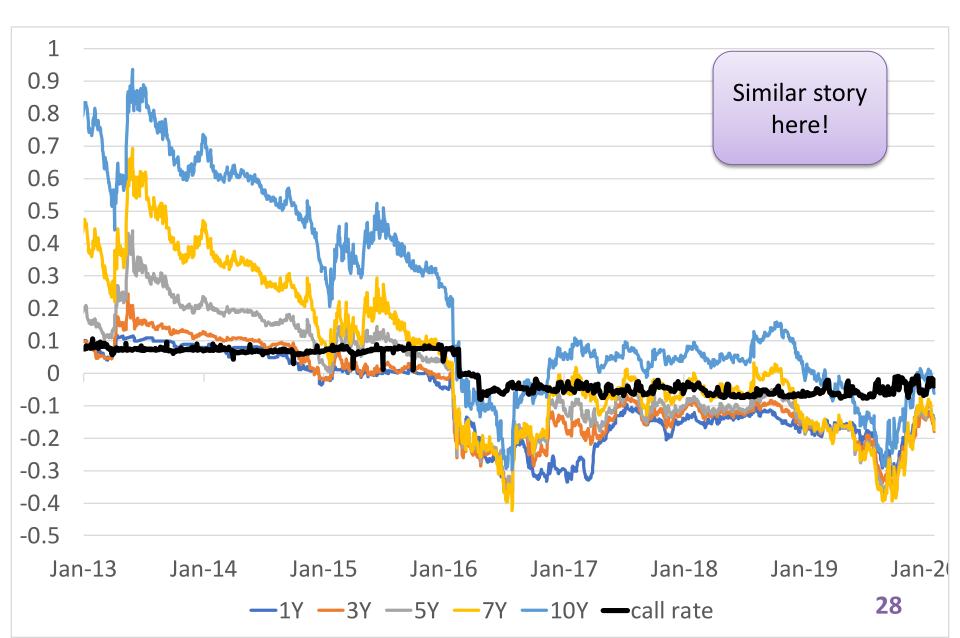
In the past: banks could make easy money by just holding on to the JGBs.

Not any more!

#### Tbill vs call rate



#### JGB vs call rate



 Now: JGBs are so expensive that banks would not hold them for profit reasons any more.

But banks are still "forced" to hold some JGBs
 ... for regulatory reasons or duration matching?

So they bitterly complain!

#### My impression

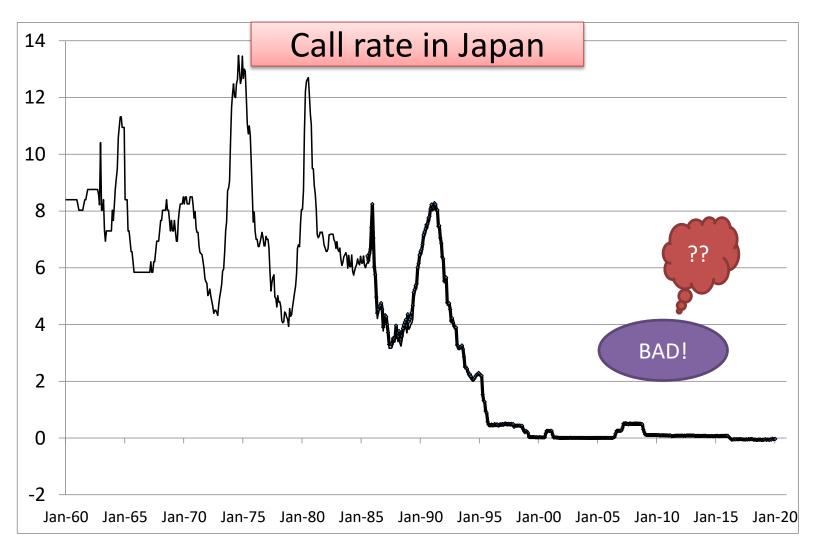
NIRP hurts bank profitability.

 But this is mainly because it produced extremely low JGB yields.

Otherwise, bankers <u>like</u> low r.

### Questions about policy

### So "low for long" is a bad policy...



#### [1] What should the BOJ have done?

For example, in 2001?

- The BOJ (before 2013) has long been criticized for being too willing to raise r.
  - But this seems to be exactly the kind of attitude needed to avoid being stuck in the "low for long trap".
    - Or am I getting a wrong message?

#### [2] How should we think about YCC?

YCC = Yield Curve Control

 Keep the long rate up while bringing down the short rate.

 Can we replicate this policy in the US and elsewhere?

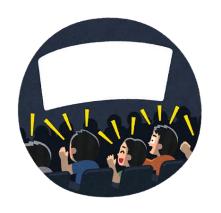
#### [3] What do we do now?

We cannot "jump" to the new steady state.

- Raise the nominal interest rate first?
  - Many have criticized the Neo-Fisherian proposal.

- Or is there a right sequencing?
- Should we worry about the cost (mainly fiscal) that could occur in transition?

# Great Paper!! I will be waiting for a sequel!



#### Comments about the model

(I won't have time to talk about them at the seminar)

#### Welfare

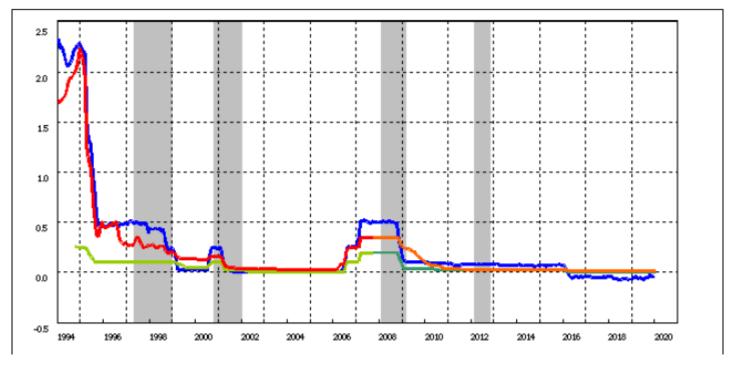
- I expect the Friedman's rule to hold even here.
- Can't we say that low r is good, despite low Y?

- Model prediction: r down -> lending rate up.
  - Realistic?
    - In general, model predictions seem too "monotonic".

Does Proposition 2 necessarily imply Figure 6?

### Supplementary slides

#### Call rate vs Deposit rate, long view

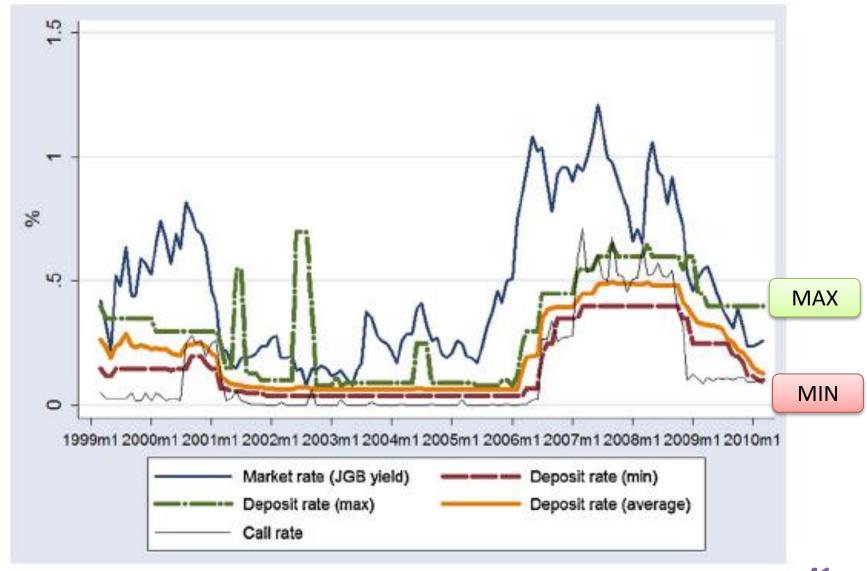


Blue: call rate

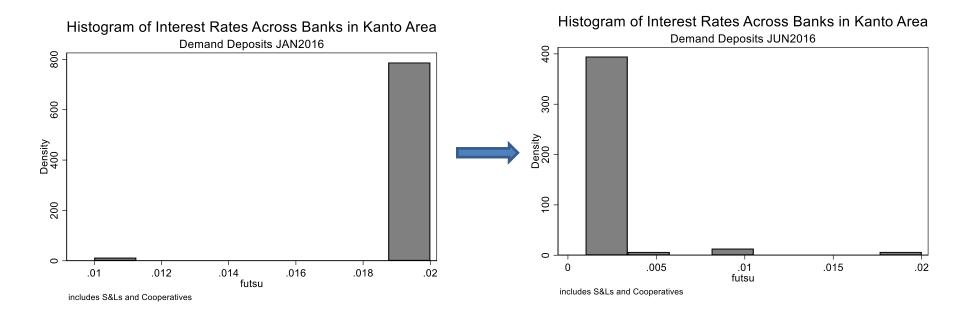
Red and orange: time deposit rate (less than 3 million yen, 1 year)

Light green and dark green: demand deposit rate

### Evolution of interest rates in the 2000s: Distribution of Deposit Rate is more compressed near ZLB!

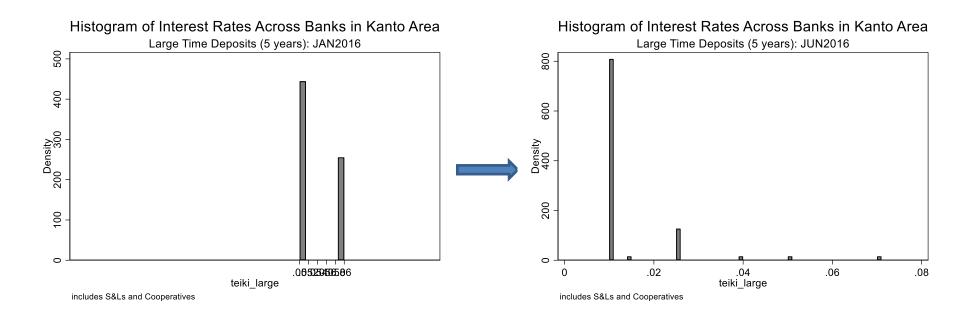


### Changes in cross sectional distribution of deposit rates in response to the introduction of the NIRP in 2016.



Demand deposit rates are not only almost identical across banks at a given point in time, but they also tend to move very closely with each other (and quickly) over time!

### Changes in cross sectional distribution of deposit rates in response to the introduction of the NIRP in 2016.



Time deposit rates:

More variation across banks, across time!

#### Demand Deposit/Overall Deposit: 1995

