# The Ring-Fencing Bonus

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*Disclaimer: The views expressed in this presentation are those of the speaker and do not necessarily represent the views of the Board of Governors of the Federal Reserve System.*

## Q: How does a change in firm boundaries affect risk-taking?

**Specifically:** How does ring-fencing affect risk-taking?

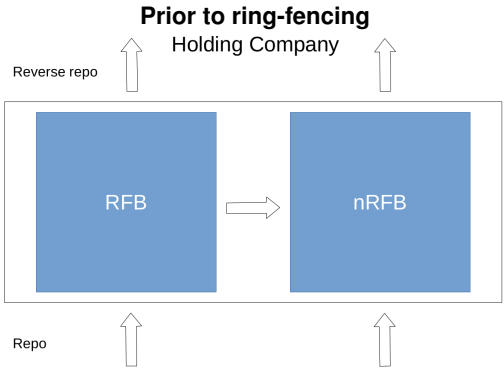
**This paper:** Use repo market to argue (*among other things*):

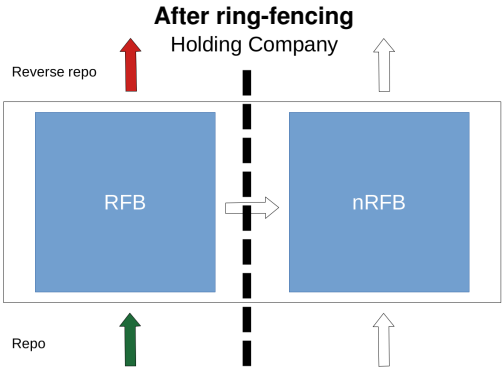
- RFBs are safer and took less risks after ring-fencing:
  - Repo rates fall for the RFB.
  - Reverse-repo rates rise for the RFB.
  - No conclusive results for non-RFB (?).
- Show an *even lower* rate for RFBs during Covid crisis.
- Present evidence this is because of different behavior, not guarantees:
  - Changes occur after implementatioon, not announcement.
  - Associated with changes in proxies for risk and accounting variables.

*What I'm going to do:*

1. Talk briefly about the setting and results.
2. Suggest places to look for more identification.

In a nutshell:



## How should we interpret results for nRFB?

**What should our null be?** A proposal:

- RFB becomes safer, nRFB becomes riskier.
- Holding company stays the same.

**Given the above null, nRFB subsidiary seems like a key part of the story.**

| **Repo rate** | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Treated × Event × RFB | -0.022*** | -0.035*** | -0.024*** | -0.021*** | -0.023*** |
| Treated × Event × nRFB | -0.023*** | -0.006*** | 0.001 | 0.002** | 0.002*** |
| Dealer and credit FEs | | Yes | Yes | Yes | Yes |
| Dealer and macro controls | | | Yes | Yes | Yes |
| Deal controls | | | | Yes | Yes |

- **Authors' interpretation:** "...cannot in general rule out the null that the borrowing costs of the nRFB are unchanged..."
- **Alternative interpretation:** riskiness of the nRFB **goes down**, but this is captured by changes in the dealer's situation.

## Basic idea of identification (unsecured lending)

Imagine that borrowers have all the bargaining power. Then:

$$\text{Repo rate}_t = \text{Risk-free rate}_t + \frac{p}{1-p} \times \text{Risk-free rate}_t$$

If I look at two different borrowers, then this will be a function of:

- Outside option of lenders (risk-free rate), likely constant at a lender/day level.
- Probability of default (object of interest)

## This comparison is more complex for repo markets than for unsecured markets

Imagine that borrowers have all the bargaining power. Then:

$$\text{Repo rate}_t = \text{Risk-free rate}_t + \frac{p}{1-p} \times \left[ \text{Risk-free rate}_t - (1+h) \frac{E[\text{Price}_{t+1} | \text{Default}]}{\text{Price}_t} \right]$$

If I look at two different borrowers, then this will be a function of:

- Outside option of lenders (risk-free rate), likely constant at a lender/day level.
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- **Haircut on the transactions.**
- **Underlying collateral loss given default.**

**Authors know this, and include appropriate controls.**

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However, this not only lead to different level of repo rates, **but also different slope to default risk.**

- *This gives some extra opportunities for identification the authors could exploit.*
  - For instance, triple difference: high vs. low price volatility collateral for RFBs vs. others before vs. after.

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  - For instance, triple difference: high vs. low price volatility collateral for RFBs vs. others before vs. after.
- Could a formula like this be used to look at economic significance?

## Note that for safe collateral in normal times, default risk is hard to detect

For most gilt collateral most of the time:

- Safe return in default $\approx$ risk-free rate.
- Trades are overnight, little time to default.

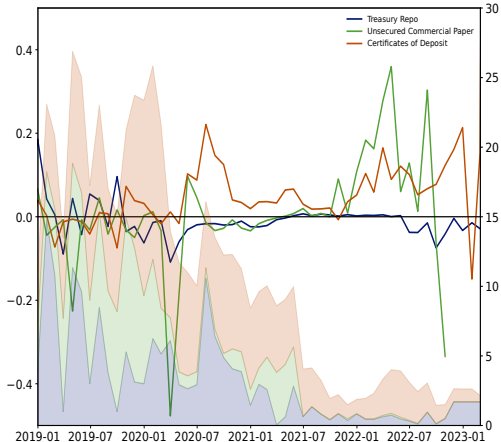
Expect U.S. repo rate even for a risky borrower *usually* pretty close to the average.

- Automatic stay?

**This makes the authors' results on the Covid crisis very important.**

- Effect on RFB rates almost doubles in March 2020 when collateral is riskier and risks more salient.

**Example: Credit Suisse N-MFP data**



## Haircuts are an important contractual detail just like interest rates

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Some people think of haircuts as responding exclusively to collateral.

- (I think this is because of the extreme example of the U.S. tri-party market?)

**More recent results suggest this isn't the case:**

- Julliard et al. (2022) find that haircuts in the U.K. are higher for lower-rated borrowers and riskier counterparties like hedge funds.
- Hempel et al. (2023) find similar tiering in the U.S. non-centrally cleared bilateral market.

A higher haircut can protect you from default *(possibly better?)* than a higher interest rate.

- ***Do haircuts respond to ring-fencing?***

## Other thoughts:

1. **What about comparison to cleared repo rates?**
   - These are tossed because they don't have default risk, but that is an **advantage.**
   - **Comparison:** same borrower, same collateral, same day, different market .
2. **What about inter-affiliate flows?**
   - How much liquidity is moving between the RFB and nRFB after the reform?
   - Interesting given research like Correa, Du and Liao (2020) and Caglio, Copeland and Martin (2021).
     - **Hard to find variation in organizational structure like this.**
     - Do interaffiliate flows respond to fill a gap?

## Conclusion

1. **This paper covers a seriously underexplored setting:**
   - In looking into this, I'm surprised how little academic work has been done.
   - Kudos for the authors for filling that gap!
2. **Uses a rich dataset to provide answers to an important question:**
   - Hopefully I've suggested useful ways to exploit it further, ***however...***
3. **There is already a lot in this paper!**
   - Both I and the authors are only covering a fraction of the results.
   - Read for more!