

Monetary policy disconnect
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Discussion

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- Background

- Summary

- Comments and Questions

Rate dispersion and monetary policy inefficiency

- ▶ Duffie and Krishnamurthy (2016) argue that cross-sectional dispersion in overnight money market rates may impede **monetary policy passthrough efficiency**.

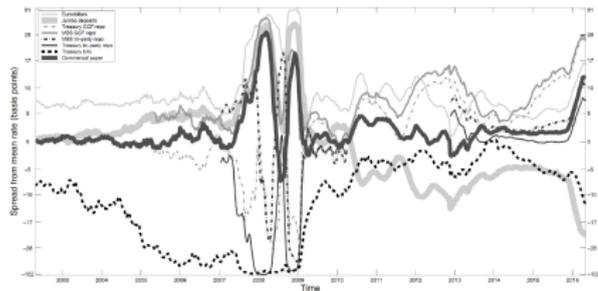


Fig. 4.1: The cross-sectional distribution of a selection of overnight-equivalent money-market rates, shown as rolling 120-day lagging averages. The underlying rates included in this analysis are as described in the text and legend, and are shown net of simple adjustments for credit and term premia. The line weight of a given rate is proportional to the average outstanding quantity of the instrument over the period in which it is present in the sample. The vertical scale is “stretched” near median levels, relative to tail levels, with a non-linear rescaling given by the student- t distribution with 3 degrees of freedom. Thus, the equally spaced tick marks on the vertical axis are separated by an unequal number of basis points, as shown. Note: This plot is extremely preliminary.

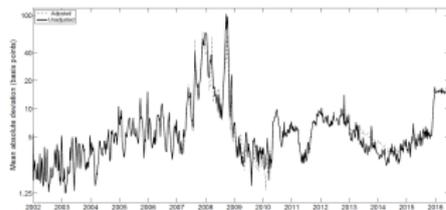


Fig. 4.2: The dispersion index D_t , the weighted mean absolute deviation of the cross-sectional distribution of selected money-market rates at time t . The underlying overnight-equivalent rates included in this analysis are as described in the text, and are net of simple adjustments for credit and term premia described in the text. The vertical axis is on a logarithmic scale. The adjusted dispersion index, shown with a dotted line and available only during a sub-period due to data gaps, further adjusts each unsecured overnight-equivalent rate by subtracting the spread $s_1 - s_2$ between an unsecured overnight “benchmark” rate s_1 and a secured overnight “benchmark” rate s_2 . For s_1 , we use the average of the Eurodollar rate and FFEB. For the secured rate s_2 , we use the average of the rates on treasury GCF repo and treasury tri-party repo.

- ▶ DK’s dispersion index (volume-weighted average of mean absolute deviation) jumps significantly on December 17, 2015, a **historical “passthrough event”** in monetary policy setting, when IOER was raised from 25 to 50 bps
- ▶ They argue that main drivers of dispersion are:
 - ▶ Imperfect competition by financial intermediaries.
 - ▶ Search, relationship, monitoring, and attention costs on the part of some cash investors.
 - ▶ Capital and liquidity regulation (SLR and LCR) for banks and bank-affiliated dealers.

Methodology

- ▶ This paper investigates **dispersion in European interbank repo rates** using high-frequency data from three largest trading platforms from 2010 to 2018, for which they know all the terms including lender, borrower, aggressor type, underlying basket. . .
- ▶ Focus on repo rate dispersion across:
 - ▶ Counterparties: banks with **access to the ECB deposit facility** (or not).
 - ▶ Collateral: bonds **eligible for ECB purchases** (or not).
- ▶ Use panel regressions to investigate how daily changes in repo rates are explained by changes in the policy target rate (e.g., EONIA) comparing:
 - ▶ Access versus non-access banks' rates, and controlling for whether GC-Repo rate is **above or below the Deposit Facility Rate**.
 - ▶ Eligible versus non-eligible collateral, controlling for **pre and post QE**.
- ▶ When GC rates fall below the DFR, expect lending by the banks with access to drop and their rates to be less sensitive to changes in EONIA.

Main Results

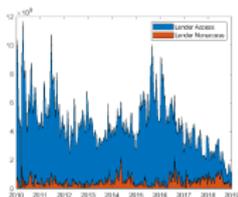
- ▶ 1 percent EONIA change leads GC repo rates to change by
 - ▶ 50 bps for access banks versus 68 bps for nonaccess banks, on average, but
 - ▶ **only 4 bps** for access banks versus 94 bps for nonaccess banks, when GC rates are below the DFR.
- Lenders with access to the deposit facility do not react to changes in the target rate once GC rates are below the DFR, in contrast to lenders without access.
- ▶ 1 percent EONIA change leads special repo rate for eligible collateral to change by
 - ▶ 11 bps prior to the PSPP, but
 - ▶ **~ 0** after PSPP.
- Repo rates whose collateral is eligible for ECB purchases are less correlated with EONIA rates, post QE implementation.
- ▶ Interpretation in terms of **monetary policy disconnect**:
 - First, banks with access to ECB deposit facility lend at rates that are more misaligned from target rate. Second, secured loans whose collateral assets are the target of QE are more disconnected from the monetary policy rate.*

Identification of monetary policy disconnect?

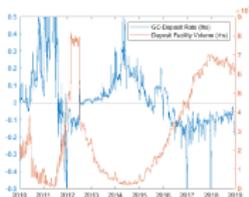
- ▶ EONIA is an **unsecured** interbank rate, that also reflects bank credit and liquidity risk.
- ▶ GC-repo is a **secured** rate.
- Regression results from daily changes of REPO on EONIA may reflect time-variation of factor exposures and volatilities and not necessarily inefficiency in monetary policy pass-through (e.g., if bank credit risk volatility increases when rates fall then GC-repo sensitivity to EONIA might be smaller when rates fall).
- ▶ Eligible bonds tend to go on special (Corradin and Maddaloni (2020)). The **'specialness' liquidity premium** depends on the level of rates (Nagel (2016)).
- ▶ ECB purchases have (temporary and perhaps long-term) price-impact. Indeed, this is the objective of QE.
- Expect a lower sensitivity of (daily changes) in special repo rates on eligible collateral to (daily changes) in EONIA. Is it monetary policy disconnect?
- ⇒ For identification of pass-through inefficiency, might be better to focus on actual shocks to policy (e.g., changes in deposit facility rate, open market operations, ECB announcements) around narrow windows (e.g., DK2016 look at impact of 25 bps IOER change on cross-sectional money market rate dispersion).

What is the monetary policy goal of the deposit facility rate?

- ▶ If **all** banks had access to the deposit facility, then, in theory, repo rates could not fall below the DFR, as no bank should want to lend at the lower REPO.
- ▶ If **some** banks do not have access to the DFR and have excess liquidity, then they could push the repo rate below the DFR.
- ▶ However, in theory, banks with access could then borrow at REPO to lend at the higher DFR and thus push the market clearing REPO rate above the DFR. Why is this not happening?



(a) General collateral trading volume

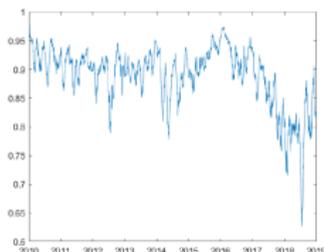


(b) Spread between GC and deposit facility rate

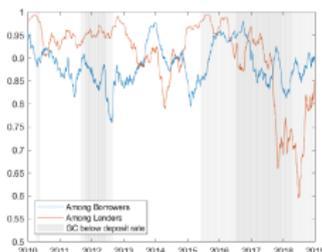
- ▶ Perhaps, banks with access to DFR view increasing REPO borrowing as entailing additional balance sheet costs (Funding Value Adjustments - Andersen, Duffie, and Song (2019)).
 - ▶ Can we interpret the fact that banks with access to the DFR are not willing to lend at rates below the DFR as evidence for *monetary policy disconnect*.
- Isn't it precisely one of the monetary policy goals of the DFR?

What drives the cross-sectional dispersion in GC-repo rates?

- ▶ Regression results suggest that, when GC repo falls below DFR, banks with access continue to lend at REPO rates close to DFR while bank without lend at lower rates.
- ▶ How come we still observe a majority of lending done by banks with access when GC-REPO is below DFR?



(a) Total share by access banks



(b) Share by access borrowers/lenders

Fig. 2.2. Trading volume shares

- ▶ Would be interesting to give more evidence on the cross-sectional dispersion in level of repo-rates at given time.
 - ▶ Why would any bank with access to DFR lend at a lower REPO rate?
 - ▶ Why would any bank borrow REPO at higher rate than that offered by a non-access bank (in the anonymous centrally cleared secured repo market)?
- ▶ Most euro-zone interbank repo is anonymous (Mancini, Ranaldo, Wrampelmeyer (2016)).
- ▶ What explains dispersion (lack of competition, price discrimination, search costs...)?