Discussion:

QE, Bank Liquidity Risk Management and Non-bank Funding: Evidence from Administrative Data Darst, Kokas, Kontonikas, Peyrdo & Vardoulakis

Monetary Policy and the Mortgage Market
Deschler, Savov, Schnabl & Supera

The Market for Sharing Interest Rate Risk: Quantities and Asset Prices
Khetak, Li, Neamtu & Sen

FEDERAL RESERVE BANK OF RICHMOND
Richmond ▪ Baltimore ▪ Charlotte

FDIC Bank Research Conference
Anna Kovner
September 26, 2005

Disclaimer

The views in this presentation are those of the speaker and do not necessarily reflect the views of the Federal Reserve Bank of Richmond or the Federal Reserve System.

Contributions of the papers

- Understanding how financial institutions' funding and segmentation influence how interest rate changes affect the real economy
  - Careful empirical studies that account for how differences among financial institutions inform models of the financial sector
- Institutions and their funding matter
  - Deposit flows in (and out) of banks affect lending → QE and QT impact matter depending on assets and depositors
  - Investor maturity habitat affects demand and thus pricing for interest rate swaps → changing regulation changes availability and pricing of financial instruments
- Cannot assume away financial sector in models – heightened importance of understanding mechanism to estimate impact
  - Financial frictions meaningfully influence the real world impact of policies

Implication of the papers

- When the specifics of the financial sector matter a lot…

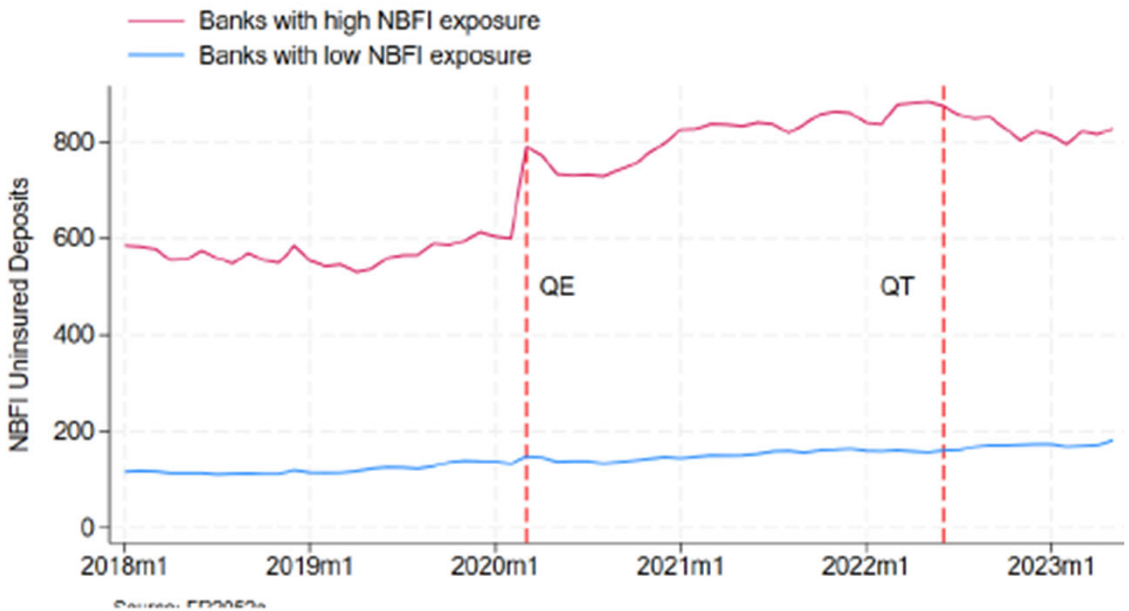
…value of detailed data is high (2 papers take advantage of new, confidential datasets)

…generalizability of policy interventions may be limited

- Specifically highlighted in context of interest rate swaps (UK) which shows how regulatory changes that affect one sector can spill over
- Not discussed in papers on QE/QT (US) which implicitly take the institutional setting as a given
  - Both show the impact of inflow of deposits to banks

QE, Bank Liquidity Risk Management and Non-bank Funding: Evidence from Administrative Data (DKKPV)

- Confidential data on the largest ($50B+) US banks' response to QE 3/20-3/22 (2/23). QE led to increase in:
  - Noninterest bearing deposits, noninsured deposits, total loan commitments, undrawn loan commitments (p. 28 text)
- Nonbank deposits do not offer same natural hedge as bank deposits
  - LCR assigns 100% run-off factor
  - NBFI deposits are endogenous



QE, Bank Liquidity Risk Management and Non-bank Funding: Evidence from Administrative Data (DKKPV)

- Differences-in-differences between banks with more and less NBFI deposits (as of Feb 2020 share of total deposits) *relatively*:
- Deposits: more NBFI deposits when fed funds rates fall and QE starts, not much difference when QT starts
  - Higher deposit rates on insured deposits
- Assets: more securities, less undrawn loan commitments
  - Y-14 data identifies differences either with industry-location-size-time fixed effects (all loans) or firm-time fixed effects (syndicated loans)

Suggestions for the paper - DKKPV

- Not all runnable deposits are the same – why would banks act as if these nonbank deposits would stay?
- Diffs-in-diffs is hard in the post-pandemic context. Banks with more nonbank deposits do different types of lending
  - Even in the presence of parallel trends and similar levels, the pandemic shock to loan demand is presumably variable across banks' business lines
- Average deposit costs vs. rates on new deposits (Ratewatch)
  - What is deposit beta overall of these different banks? Large increase in noninterest bearing deposits at this time would also be missed in Ratewatch
  - Impact of SVB may affect results in QT time period
- What about other types of credit?
  - Contingent credit: credit cards, home equity
  - Noncontingent: MBS (covered in DSSS), mortgages etc.

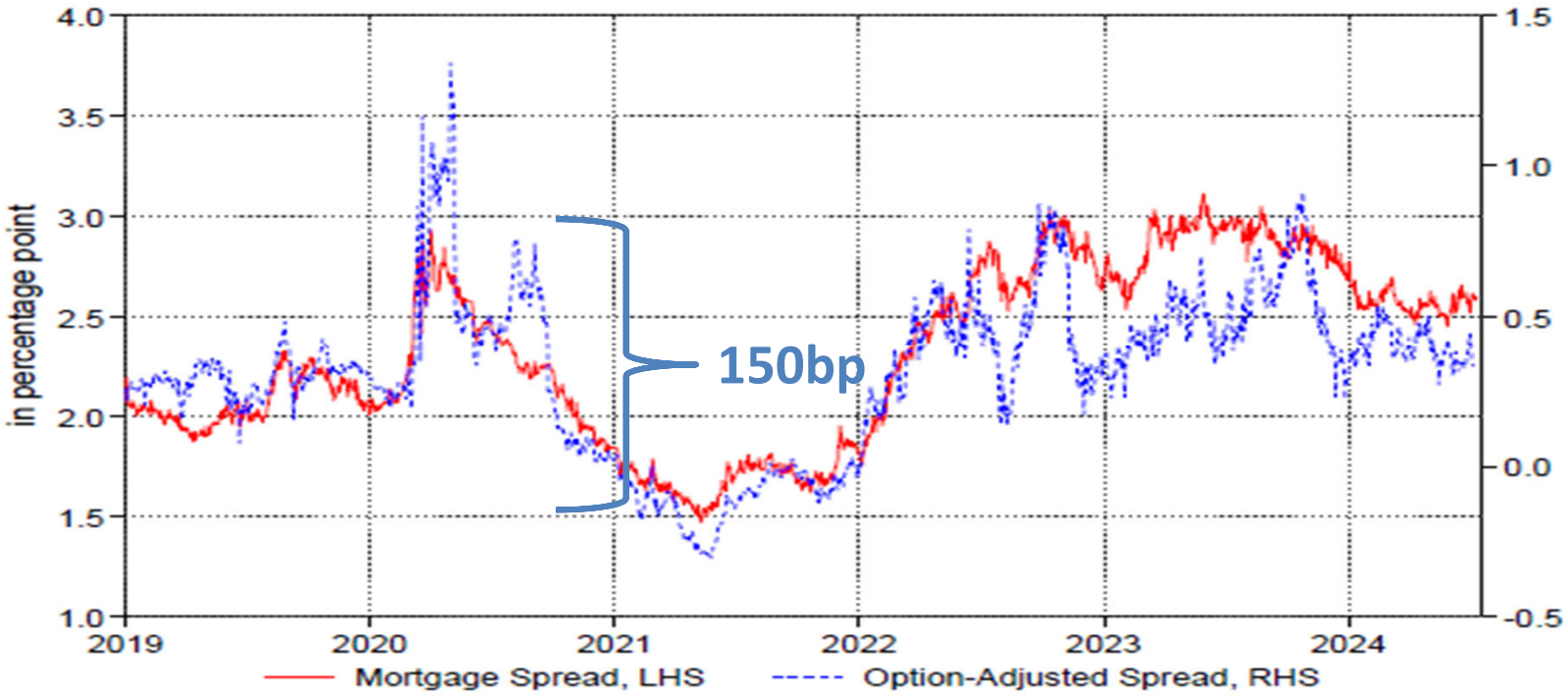
Theoretical context

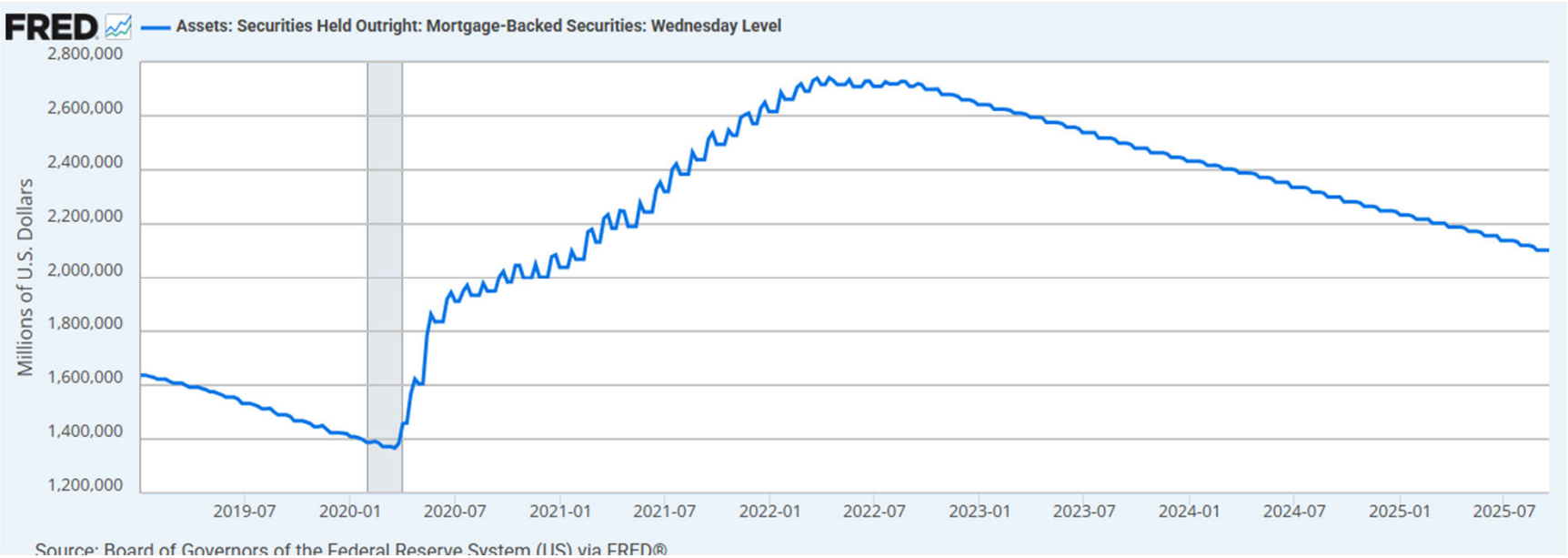
- Impact of QE is primarily a macro concern — relative changes in lending are interesting to think about in terms of the implications of impact on banks
  - Banks with high levels of NBFI deposits: Broker dealers, trust banks
- Distinction between funding fragility and cost – is there one?
- Figure 4: Undrawn commitments should fall at exceptionally high level of uninsured deposit

Monetary Policy and the Mortgage Market (DSSS)

- Impact of monetary policy on mortgage credit:
  - QE purchases of MBS and subsequent QT
  - Deposits channel of banks —> When rates fall, banks attract long duration deposits which they invest in MBS
- QE/QT channel through mortgage spreads in addition to rates
  - Variation in mortgage spread (30YFRM- 10YTsy or OAS) can be as much as -125bp (2020-2021) although usually ~50-75bp (2022-4)
  - Important role of banks' demand for MBS through impact on mortgage spreads

Spreads reduction with 2020QE but not QT





Opportunities for the paper DSSS - Implications

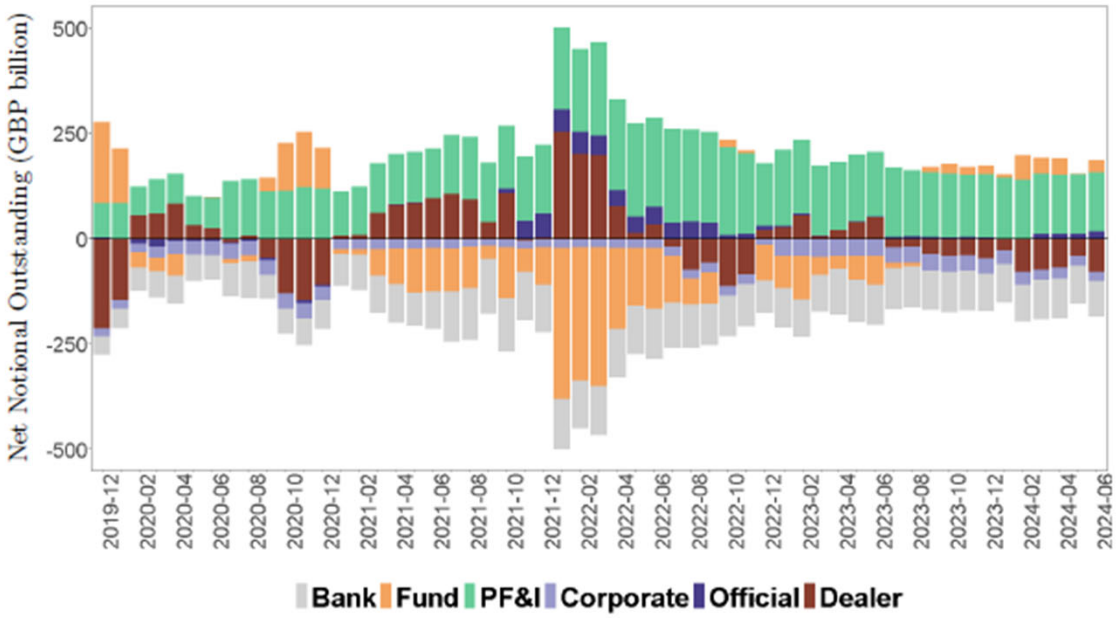
- Explore relationship between deposits and MBS through impact on MBS ETF
  - How should we think about banks' endogenous choice between MBS and holding mortgages directly?
  - Bank demand for MBS (B_t) modelled as $\alpha^B D_t$ (bank' portfolio share x deposits), but likely also depends on regulation, duration and other factors maybe even prospects of Fed intervention
    - Banks' mortgage portfolio holdings has fallen relative to MBS since 1995 by at least 10 ppt

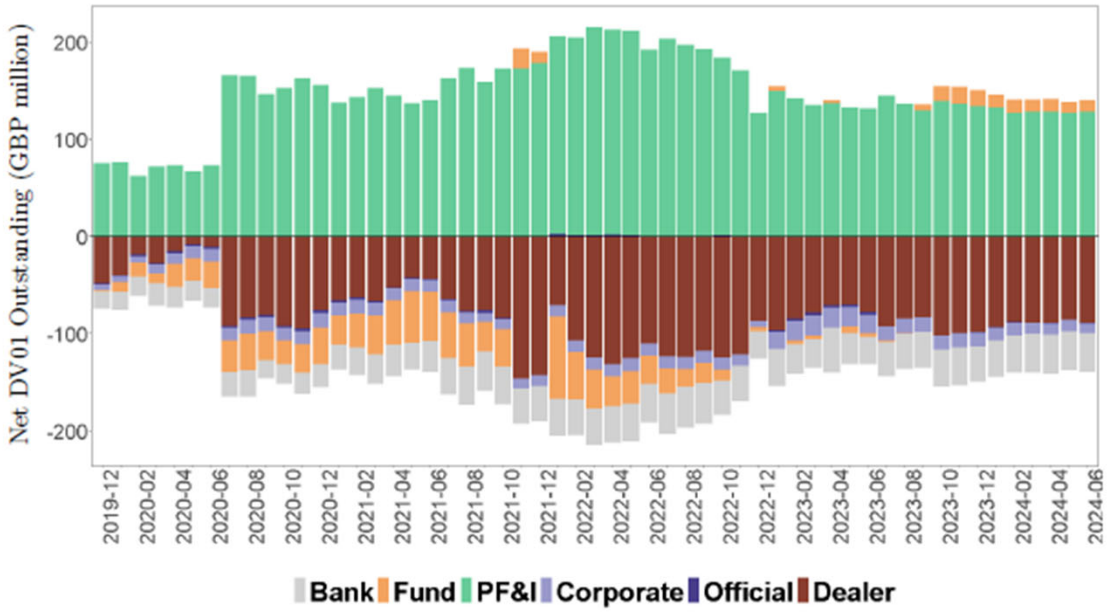
Opportunities for the paper DSS - Implications

- Estimation of impact of mortgage originations: back of the envelope calculation based on difference between current mortgage rate and prevailing mortgage rate but paper calculation: $\Delta \widehat{\text{Total Mortgage Originations}} = -\hat{\alpha}^{S}_{Gross} \times \Delta \widehat{\text{Spread}}$
  - What does this look like in current context? Should this instead take into account getting the change in spread to be lower than average outstanding mortgage rate?
- Impact of other participants and possible market changes
  - Scharfstein and Sundarem (2016) relate market concentration to MBS yields
  - Fuster, Lo and Willen (2024) relate capacity constraints to 2008-2014 QE

The Market for Sharing Interest Rate Risk (KLNS)

- Novel data from UK interest rate swaps
- PF&I receive fixed, banks and corporates pay fixed
- Dealers manage the maturity differences
- Funds move back forth





Who trades matters

- Demand elasticities matter for pricing of term structure of swap spreads
  - Estimated through central clearing portfolio compression (reduced balance sheet costs for dealers)
- Understanding end user demand informs interpretation of demand shocks – changing demand for one type of investor affects pricing for other investors
  - Requiring pension funds to increase (reduce) hedging would lower (increase) the hedging costs for banks
  - Presumably also informs information extracted from prices
- Sub sample analysis: Supply-side constraints are more binding in a MP tightening environment

Suggestions for the paper - KLNS I

- How do interest rate swaps compare to other markets for managing risk? Literature discussion in the paper emphasizes interest rate risk and swaps
  - Perennial questions about “value” of financial markets and derivatives – speculation vs hedging
- Are differences in regulation and bank business models between the US and UK big enough to explain hedging differences?
  - How integrated are global markets (hedging of non-GBP rate risk)?
- Should there be more/different trading?
  - Given fundamentals of habitat preferences, is the amount of hedging optimal and in what interest rate realizations?
  - What are the implications for financial stability in this context?

Suggestions for the paper - KLNS II

- Getting user categories right is key:
  - End user banks vs dealers – separating commercial bank and dealers may introduce some error
  - Arbitrageurs: Dealers but not hedge funds?
  - Combining hedge funds with asset managers makes sense from the regulator perspective but may miss differences in activities
- Look at trading patterns within types and then ask about the identities of firms?
  - Outliers in their “type” may be informative about patterns

Financial institutions matter

- Papers illustrate the importance of demand from different types of financial institutions and within banks with different funding structures
  - Affects how institutions respond to policy changes and the impact on prices
- Stablecoin or other innovations could alter the impact
  - Key forces include behavior of savers (depositors or pension funds)
  - How much of the behavior of financial institutions reflects regulations and how much reflects optimal matching of assets and liabilities (or cash flows)
- Is aggregate market efficient? On average and in times of market disruption?

Thanks for the opportunity to read these paper – you should read all of them!

FEDERAL RESERVE BANK OF RICHMOND®
Richmond ▪ Baltimore ▪ Charlotte