Monetary Policy and the Mortgage Market

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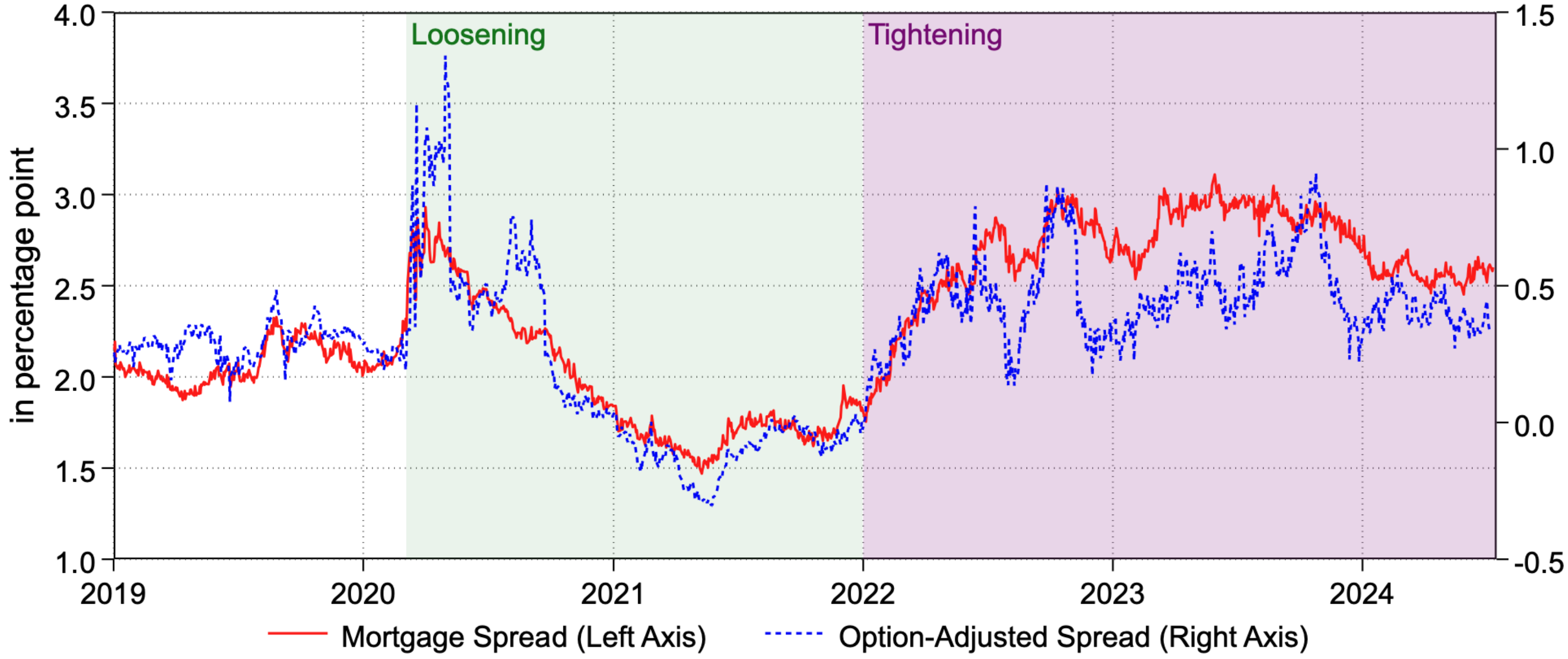
- We show that monetary policy has a large impact on the supply of mortgage credit
- It does so by shifting the supply of mortgage credit by the two largest mortgage holders: Banks and the Fed
  - For the Fed this happens because of QE and QT
- For banks we show it happens because of the deposits channel of monetary policy
- During the loosening phase of MP (2020—21), banks and the Fed bought over $2T of MBS
  - This drove down mortgage spreads and increased originations by $300B per quarter
- During the tightening phase of MP (2022—23), they sold MBS
  - This drove up mortgage spreads and mortgage originations collapsed

The fall and rise of mortgage spreads

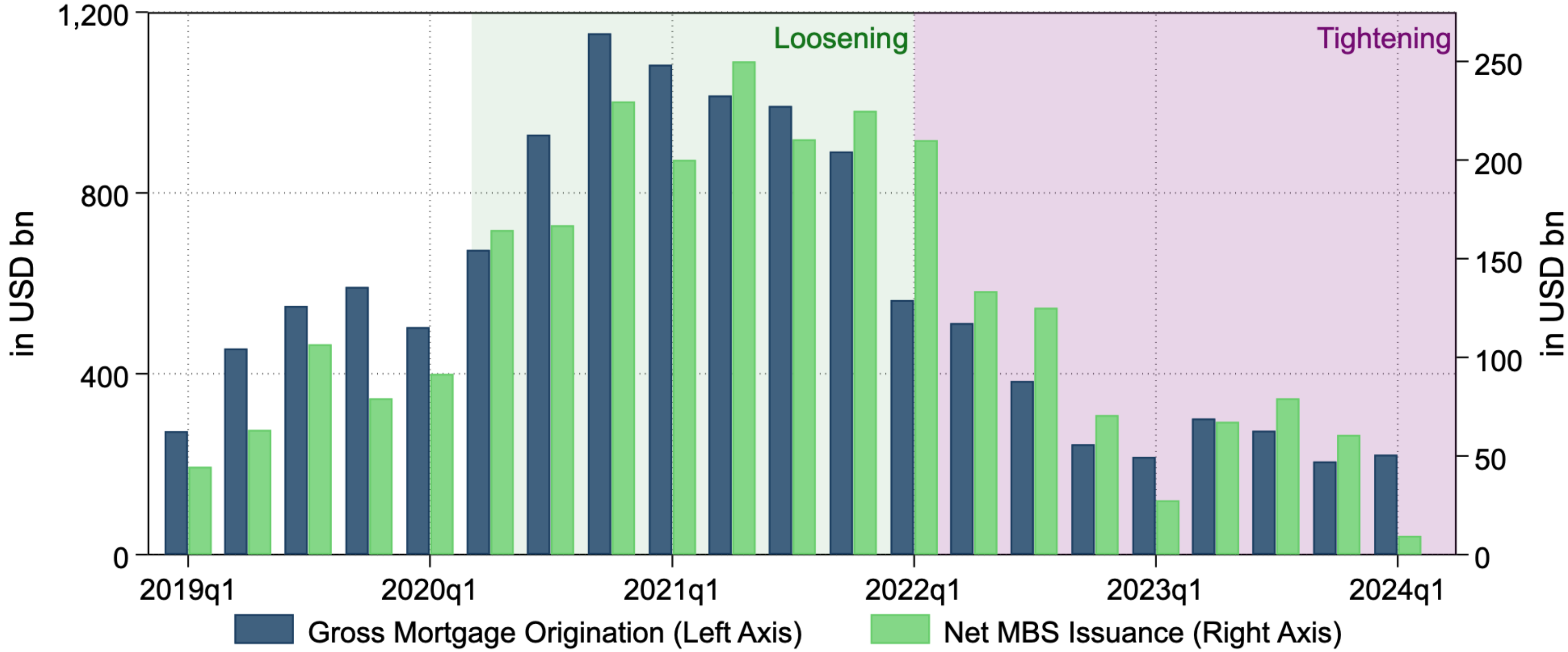


→ Mortgage spread: Mortgage rate - 10-year Treasury yield (OAS further removes cost of prepayment option)

- measures the extra cost that mortgage borrowers pay → isolates disproportionate impact of monetary policy on mortgage costs

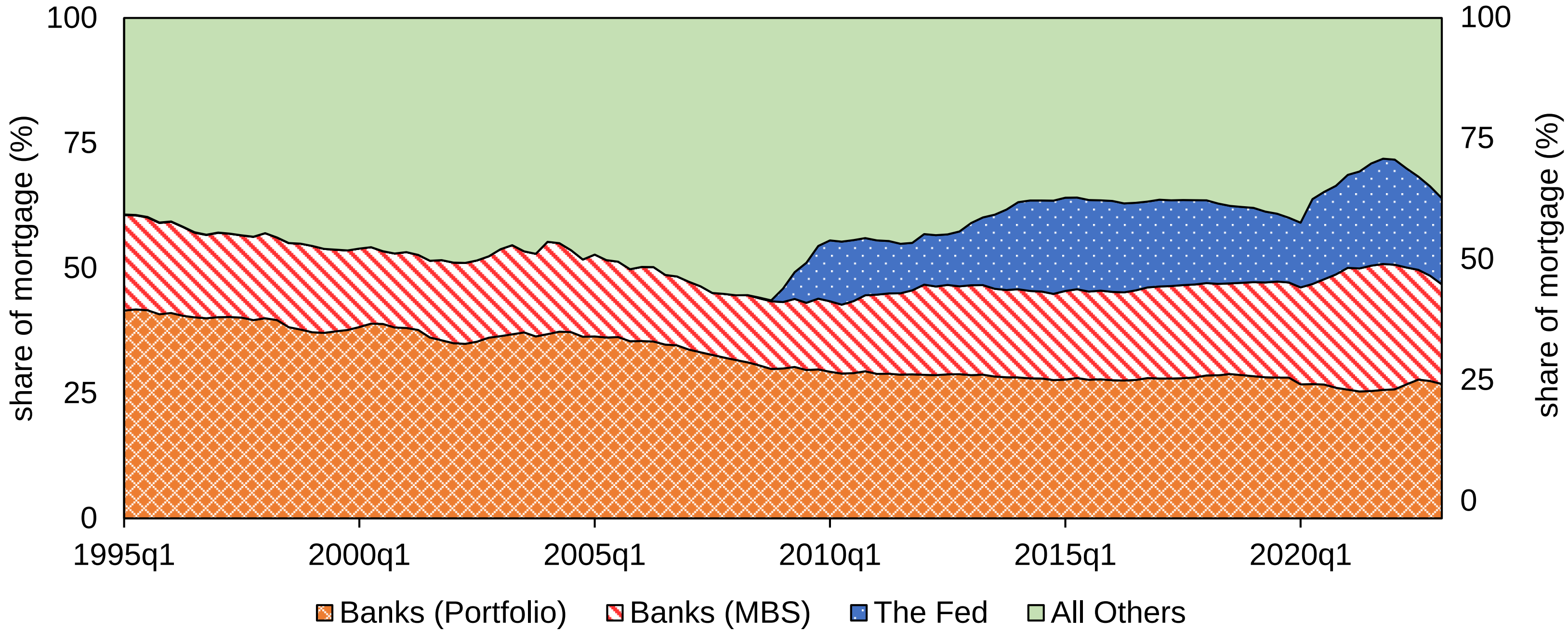
→ Mortgage credit was cheap in 2020-21, became expensive in 2022-23

The rise and fall of mortgage originations



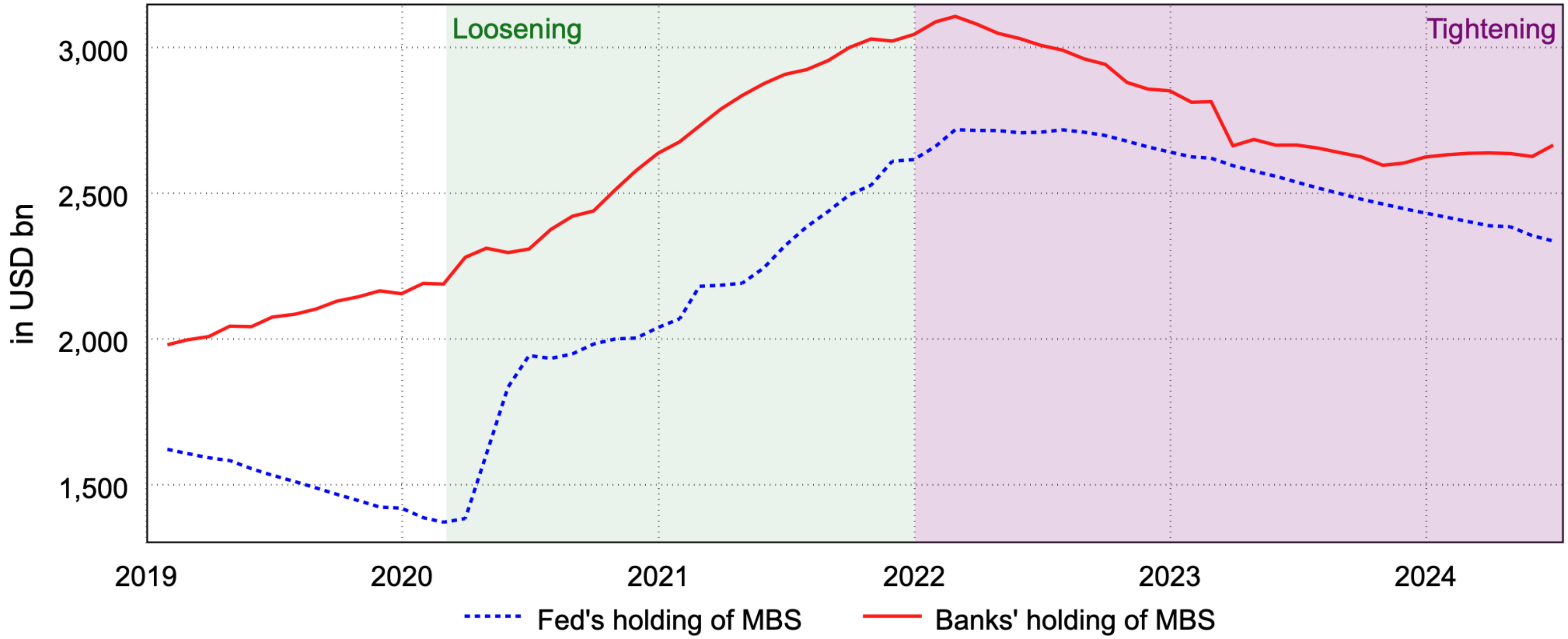
1. Mortgage originations boomed when mortgage credit was cheap during 2020—21, collapsed during 2022—23 when it became expensive
2. Prices went down, quantities went up -> the supply curve of mortgage credit shifted

Banks and the Fed own 2/3 of all mortgages



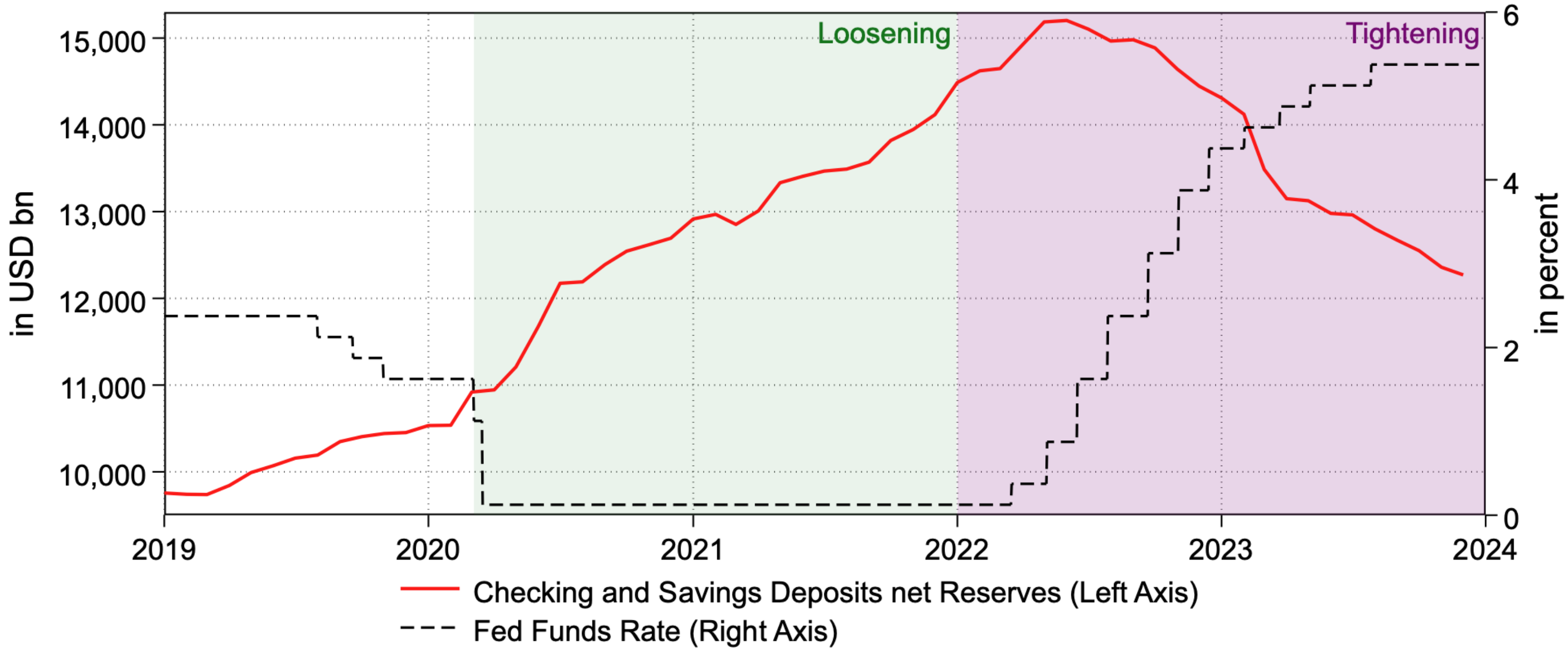
1. Banks and the Fed are by far the largest owners of mortgages, including MBS
    - Banks have held about 50% of all mortgages over the last 3 decades
    - The main recent change has been the Fed's buying of MBS under QE

Banks and the Fed bought over $2 trillion of MBS



1. During loosening, Banks increased their MBS holdings by >$1T (+50%), the Fed by >$1T (+90%)
   - These purchases were over 20% of the MBS market
2. During tightening, banks cut their MBS holdings by $0.5T, the Fed by $0.3T

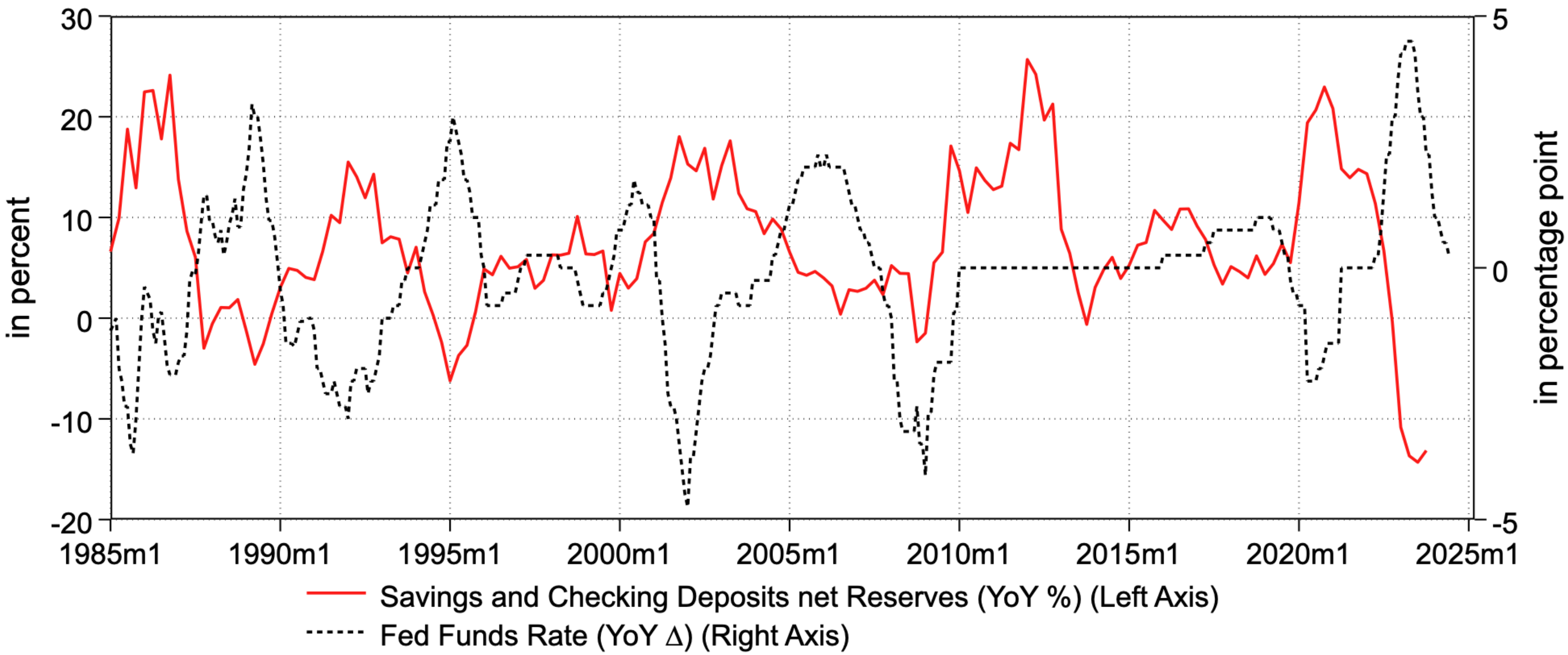
Banks buy MBS because of the Deposits Channel



1. Deposits channel: when the Fed cuts rates, banks receive inflows of low-beta deposits (checking and savings)
   - During loosening phase, low-beta deposits grew by \$4.3T (net of increase in reserves)
   - During tightening phase, they shrank by \$1.2T
2. Deposits have low beta → function like long-term debt → banks invest them in long-term fixed-rate assets

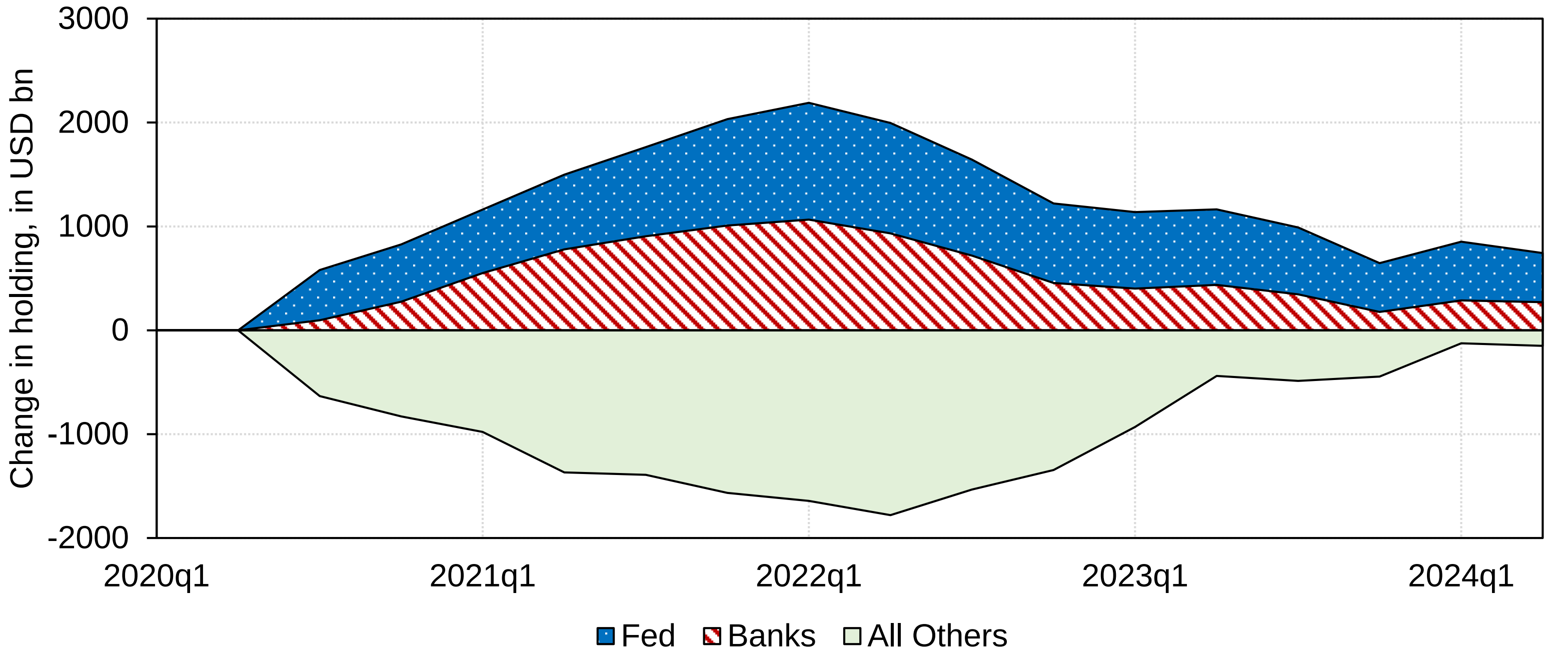
REASSESSING THE EFFECTIVENESS AND TRANSMISSION OF MONETARY POLICY

Deposits Channel of MP has been robust over time



1. When the Fed raises rates, banks keep deposit rates low → makes deposits expensive to hold → deposits flow out
    - When the Fed lowers rates → deposits flow in

How bank and Fed purchases drove the MBS market



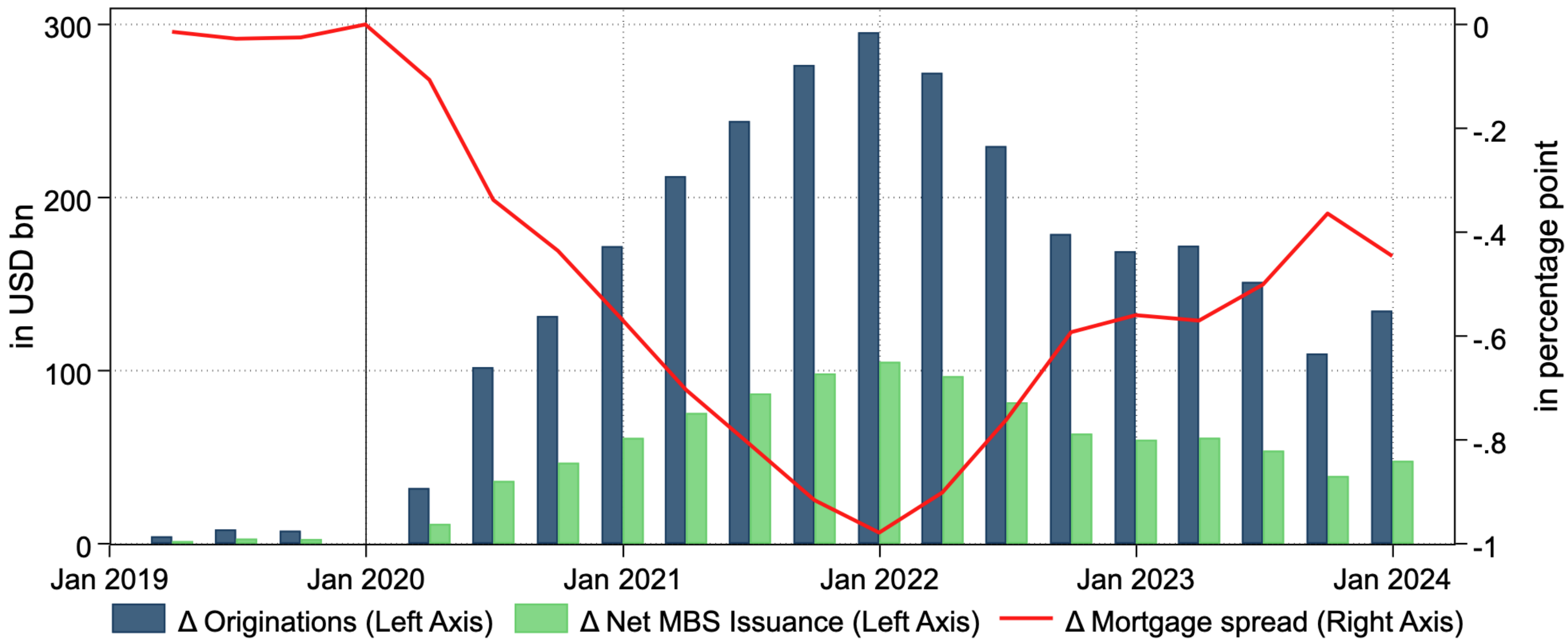
1. Other MBS investors (mutual funds, Rest of World) are not directly affected by monetary policy

   → When banks and the Fed bought MBS, these investors sold

2. To get them to sell, the mortgage spread had to fall (MBS price had to rise)

3. During tightening, to get them to buy, the mortgage spread had to rise

Estimated impact of Fed and bank MBS purchases



- We estimate a model of the MBS/mortgage market to isolate and quantify impact of Fed and MBS purchases
  - Fed and bank MBS purchases led to 100 bps decline in the mortgage spread
  - Increased gross originations by $300B per quarter at the peak; net by $100B

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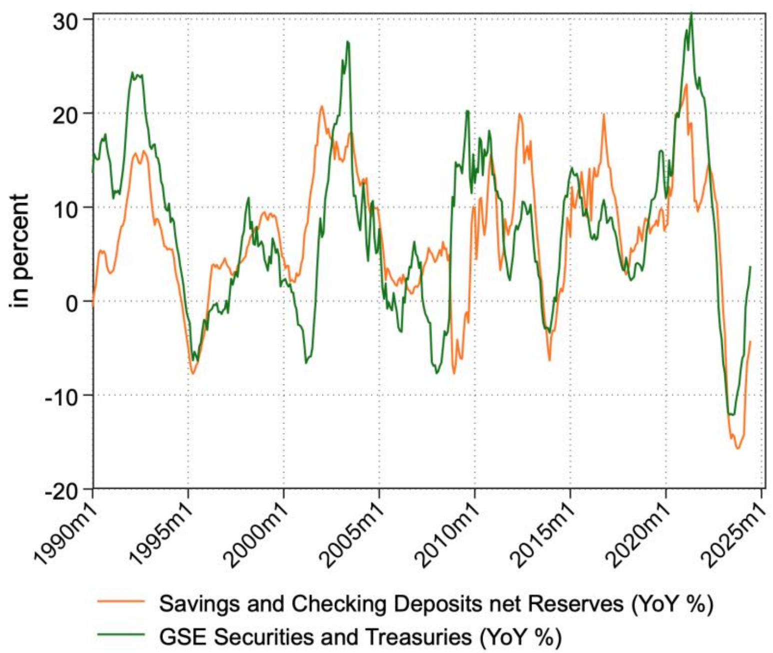
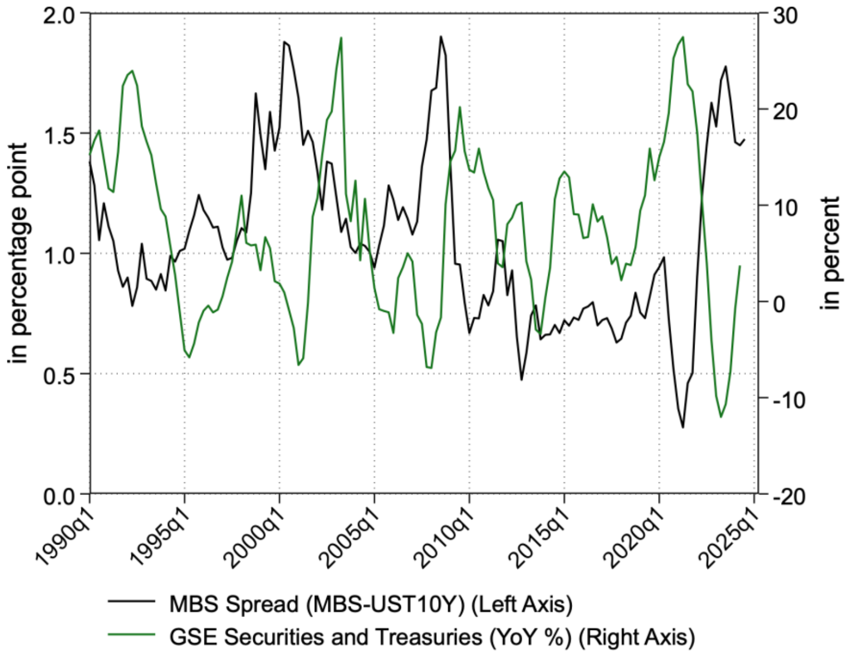
Does Monetary Policy Always Work This Way?





1. While QE/QT is recent, monetary policy has always driven banks' supply of mortgage credit
2. Deposits channel: Monetary policy → deposits inflows/outflows → banks buy/sell MBS
3. Implies the mortgage market will continue to be a central transmission channel for monetary policy