What Do $40 Trillion of Portfolio Holdings Say about Monetary Policy Transmission?

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This Paper

The paper resolves two puzzles in the monetary policy transmission literature

1. Excess sensitivity of long-term yields to short-term rates
   - Theory: Monetary policy should not affect long-term term real rates as all prices adjust in the long run
   - Data: 10-year yields respond by 71 bps in response to 100 bps change in 1-year yields

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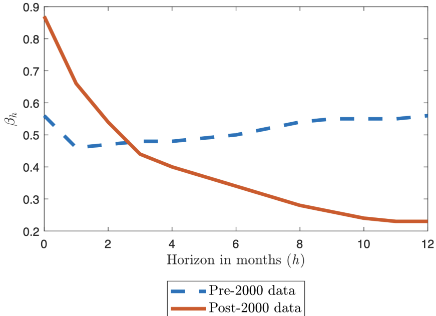
   - Theory: Monetary policy should not affect long-term term real rates as all prices adjust in the long run
   - Data: 10-year yields respond by 71 bps in response to 100 bps change in 1-year yields
2. Excess sensitivity of long-term rates is smaller at lower frequencies (Hanson, Lucca, and Wright, 2021 QJE)



Methodology and Main Findings

- Estimate a demand based asset pricing system to resolve these puzzles by quantifying the effect of shifts in investor demand and issuances on equilibrium yields
- Uses data on bond holdings across mutual funds, insurers, banks, dealers, and the Fed
- Main findings:
  - Mutual funds and banks increase their demand for long-term bonds after monetary easing
  - This creates extra demand for long-term bonds, generating excess sensitivity of long-term rates in the short run
  - Issuers (Treasury, corporations, and MBS issuers) absorb this increase in demand by issuing more long-term bonds
  - Increase in issuance eases the pressure on prices — sensitivity is reduced in the long-term

Comments

- I really like the paper! Important contribution to the literature on monetary policy and demand based asset pricing
- Existing literature mostly focused on prices, shifts attention to quantities
- Uses granular data on different types of bonds (Treasuries, MBS, corporate bonds) and largest bond investors (banks, mutual funds, insurance companies, dealers, Fed) – gives us a comprehensive picture of monetary policy transmission
- Some clarifying questions about
  - findings relative to existing studies
  - portfolio changes of some investors

Role of arbitrageurs

- Excess sensitivity of long yields higher at short frequencies in Hanson et al. (2021) due to limited risk bearing capacity of arbitrageurs, rate amplifying demand shocks, and slow moving arbitrage capital:
  - Increase in short rate leads to an increase in net supply (gross supply net of demand) of long-term bonds
  - Since arbitrageurs have to absorb the net supply of long-term bonds and have limited risk bearing capacity, term premia will increase in the short run, leading to excess sensitivity
  - Slow moving arbitrage capital $\rightarrow$ increase in term premia is temporary

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  - Assume slow moving arbitrage capital $\rightarrow$ increase in term premia is temporary
- The paper finds that most of the increase in demand absorbed by new issuance, dealers too small to absorb the entire increase in demand
- How to reconcile the findings with the existing literature?
- Portfolio changes of dealers observed over a one-year horizon
- Possible that balance sheet constraints/risk bearing capacity of dealers matters at shorter horizons?
- Different policy implications

Substitution across asset types

- Monetary easing induces banks to increase their demand for long term bonds
  - To accommodate deposit inflows
  - MBS duration is negatively affected when rates fall, increase duration by buying long-term bonds
- Banks could also increase duration by investing in long-term mortgages/long-term loans and holding the loans on balance sheet
- How would availability of other long duration assets affect the results?

Other comments

- How would regulatory capital affect financial institutions' incentives to shift to bonds of, say, lower ratings? Results might be different when capital is abundant vs when capital is scarce
- Can the results be generalized to other countries? Duration of MBS in the US tied to prepayment risk, may not be applicable across all mortgage markets
- US gov bonds part of reserve assets held by central banks in many countries. Would be interesting to see changes in demand from those investors

Conclusion

- Important paper linking monetary policy transmission to demand based asset pricing literature
- Encourage everyone to read it