

The Passthrough of Treasury Supply to Bank Deposit Funding

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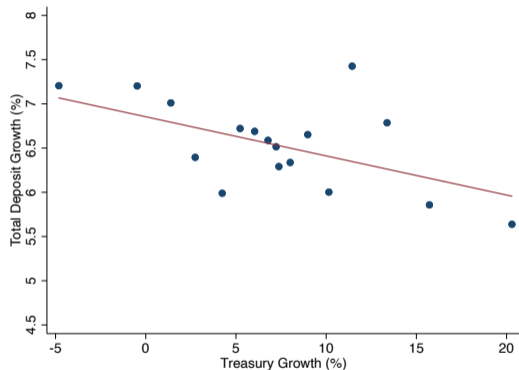
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Motivation

- ▶ Treasury supply grew rapidly after 2007 and again during the Covid period.
- ▶ Treasuries and bank deposits both provide liquidity services to investors.
- ▶ A larger Treasury supply can therefore crowd out deposits, even when banks do not directly absorb the new debt.
- ▶ Deposit-market competition determines where the crowding-out is strongest.

This Paper

- ▶ Studies how government-supplied liquidity passes through to bank deposit funding.
- ▶ Compares Treasury supply with monetary policy through a common deposit-market framework.
- ▶ Uses cross-sectional variation in local deposit competition to identify the mechanism.



Treasury growth is negatively related to deposit growth.

Main Findings

Bank funding capacity

- ▶ Treasury supply crowds out deposits more in competitive deposit markets.
- ▶ Policy-rate cuts expand deposits more in concentrated deposit markets.

Identification

- ▶ Results survive local controls and instrumented Treasury-growth specifications.

Funding structure

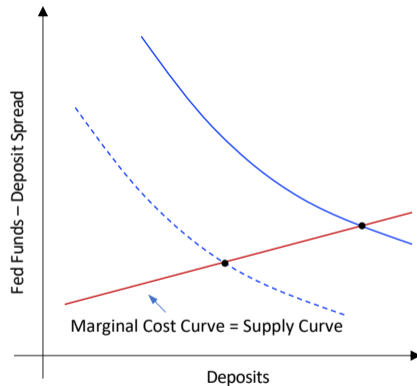
- ▶ Larger Treasury supply reduces reliance on wholesale funding.

Bank lending

- ▶ Treasury-supply shocks contract deposit-reliant lending.

Deposits and Treasuries Are Substitute Liquid Assets

- ▶ Investors value liquidity services from both deposits and Treasuries.
- ▶ An increase in Treasury supply shifts demand away from bank deposits.
- ▶ Banks supply deposits under imperfect competition.
- ▶ More competition makes aggregate deposit supply more rate-sensitive.



Treasury Supply Versus Monetary Policy

Treasury supply

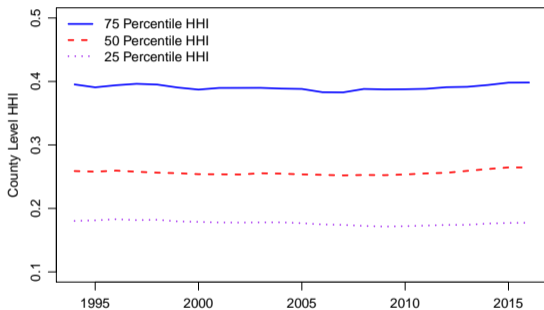
- ▶ Reduces investor demand for deposits.
- ▶ Moves the economy along banks' deposit supply curve.
- ▶ Has a larger quantity effect in competitive markets.

Policy-rate changes

- ▶ Shift banks' deposit supply curve.
- ▶ Policy-rate cuts expand deposits more where banks have more market power.
- ▶ Produces the opposite cross-sectional pattern.

Deposit Competition Shapes the Passthrough

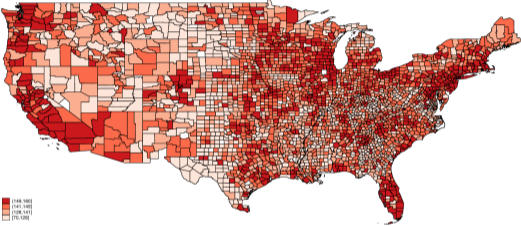
- ▶ Deposit competition varies across local markets.
- ▶ Higher competition means branches face more elastic deposit supply.
- ▶ The same national Treasury shock therefore has different local deposit effects.



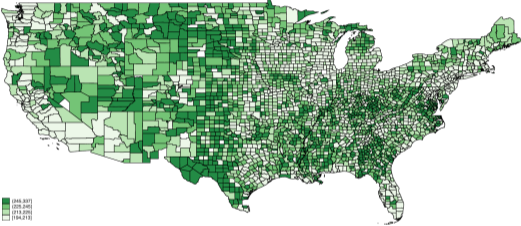
Identification

- ▶ Compare branches of the same bank located in markets with different deposit competition.
- ▶ The same bank-level balance-sheet shocks are absorbed by bank-time fixed effects.
- ▶ Local competition is measured using county-level deposit-market concentration.
- ▶ The core test asks whether national Treasury growth affects deposit outcomes differently across these local markets.

Cross-Sectional Exposure



Treasury-supply passthrough exposure.

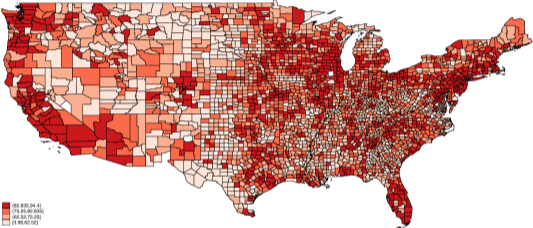


Monetary-policy passthrough exposure.

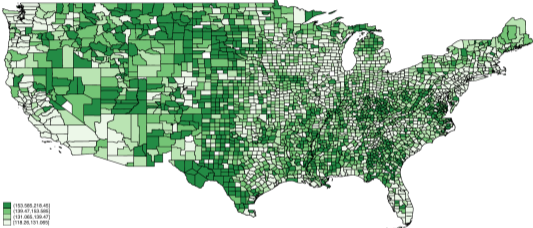
Interpreting the Cross-Section

- ▶ Treasury growth and monetary policy are aggregate shocks.
- ▶ Local deposit competition determines the sensitivity of local branches to those shocks.
- ▶ This design separates the Treasury-supply channel from broad changes in bank investment opportunities.
- ▶ Instrumented specifications use military-expenditure shocks and seasonal tax-deadline variation in Treasury supply.

Opposite Deposit-Market Effects

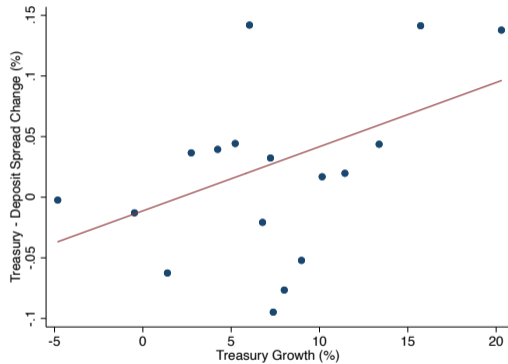
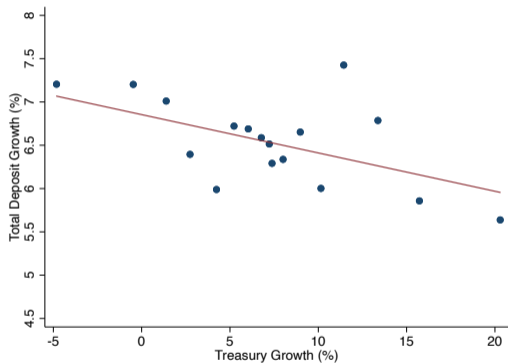


Treasury growth: stronger crowd-out in competitive markets.



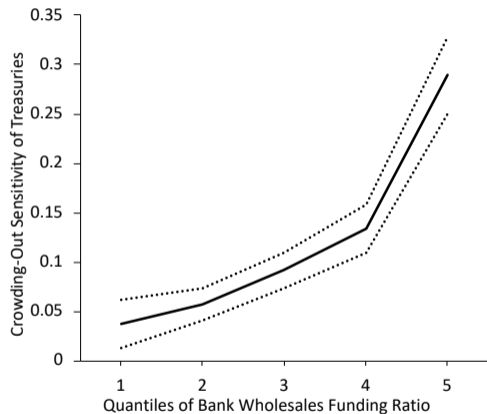
Policy-rate changes generate the opposite distributional pattern.

Deposit Spreads and Quantities Move Together



Funding Structure

- ▶ Wholesale deposits are more rate-sensitive than retail deposits.
- ▶ Treasury supply disproportionately crowds out wholesale funding.
- ▶ Monetary-policy cuts also reduce reliance on wholesale funding.
- ▶ The funding-structure response matters for bank fragility because wholesale funding is more runnable.



Bank Lending

- ▶ Deposits are an important and difficult-to-replace source of bank funding.
- ▶ Treasury-supply shocks spill over from deposits to credit supply.
- ▶ A one-standard-deviation increase in Treasury growth reduces new small-business lending and on-balance-sheet mortgage lending more for banks exposed to competitive deposit markets.

Takeaways

- ▶ Treasury supply is not only a government-finance variable; it is also a shock to bank deposit funding.
- ▶ Deposit-market competition governs how strongly Treasuries crowd out deposits.
- ▶ Treasury supply and monetary policy move through different sides of the deposit market.
- ▶ The banking-system effects of fiscal financing depend on the structure of deposit markets.