

The Aggregate Demand for Treasury Debt

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Discussion: Robin Greenwood

Main comment

- ▶ Deep and important paper
- ▶ Changed the way I think about...

Downward sloping demand for bonds

- In equity markets, easy to believe that demand curves for a given stock are downward sloping:
 - Idiosyncratic risk
 - Lack of realistic substitutes
- In fixed income markets, however:
 - Less idiosyncratic risk
 - More substitutability
- As a result, most modern theories of the term structure inherently treat long versus short, or corporate versus treasury, as perfect substitutes.
- Traditional measurement difficulty: Identifying exogenous shifts in supply (or demand) for bonds

Insight of Current Paper

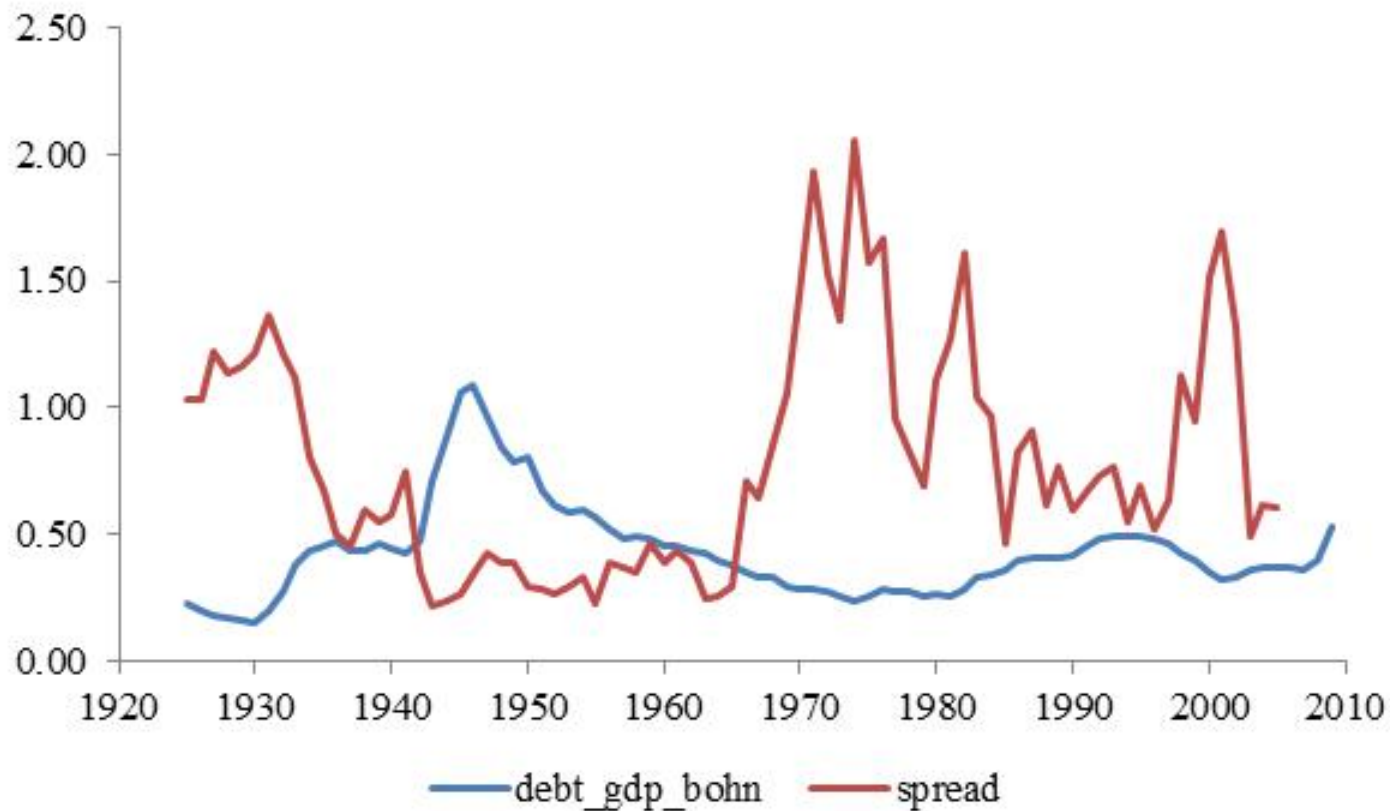
- If bonds of different *types* are imperfect substitutes...
 - Shocks to the relative supply of a particular type of bond will affect its relative price
 - Corporate versus Treasury (this paper)
 - Long versus short (Greenwood and Vayanos)
- If increase supply of Treasuries relative to supply of corporates...
 - As long as these are not treated as economic substitutes, price of Treasuries should go down relative to the price of corporates.
- Lack of substitutability is called “Convenience”
- Paper offers candidate explanations of convenience:
 - Liquidity
 - Safety

} Price of these characteristics determined by quantity

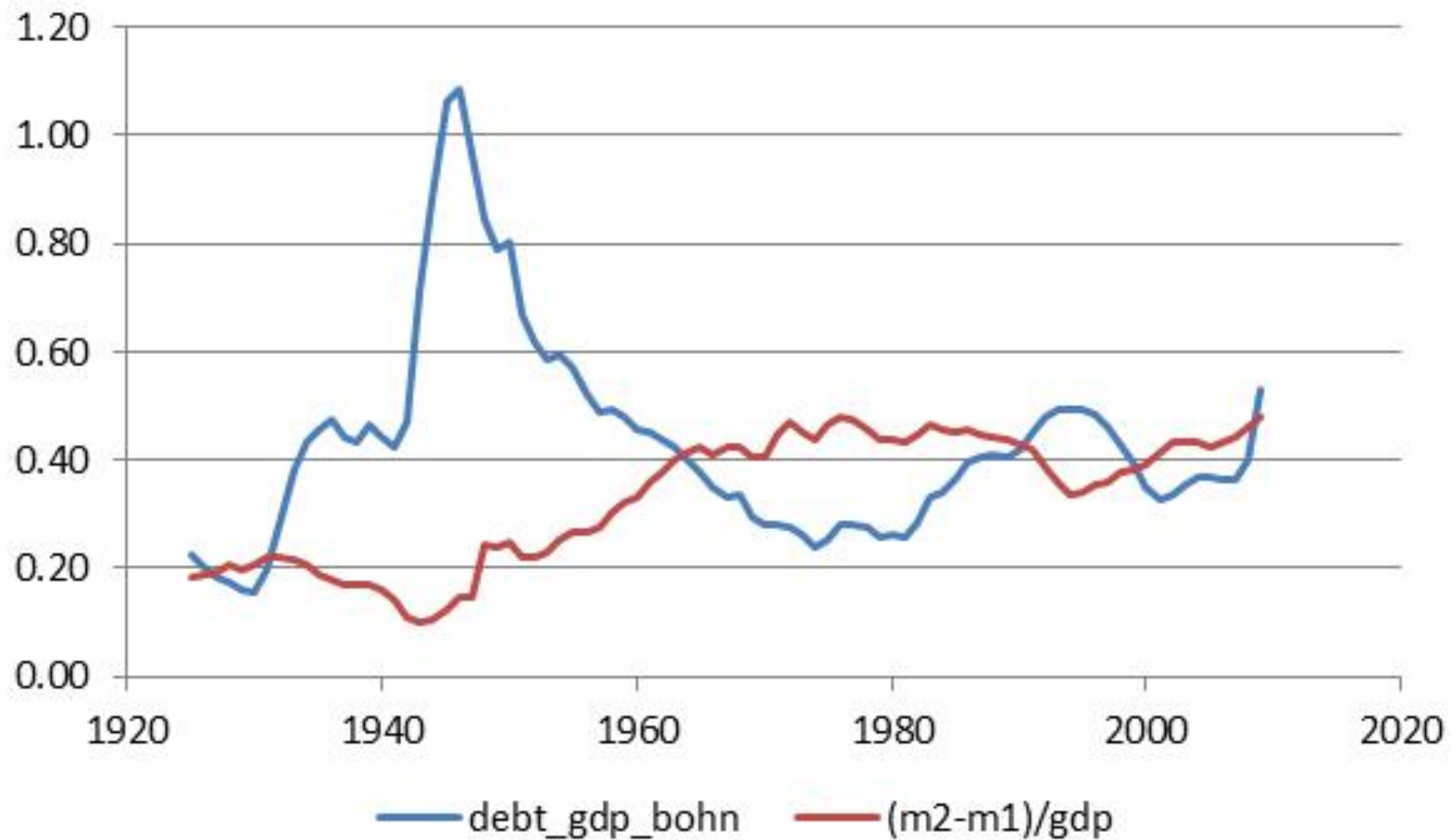
Main Result

▶ Debt/GDP \uparrow $(y^{AAA}-y^G)\downarrow$

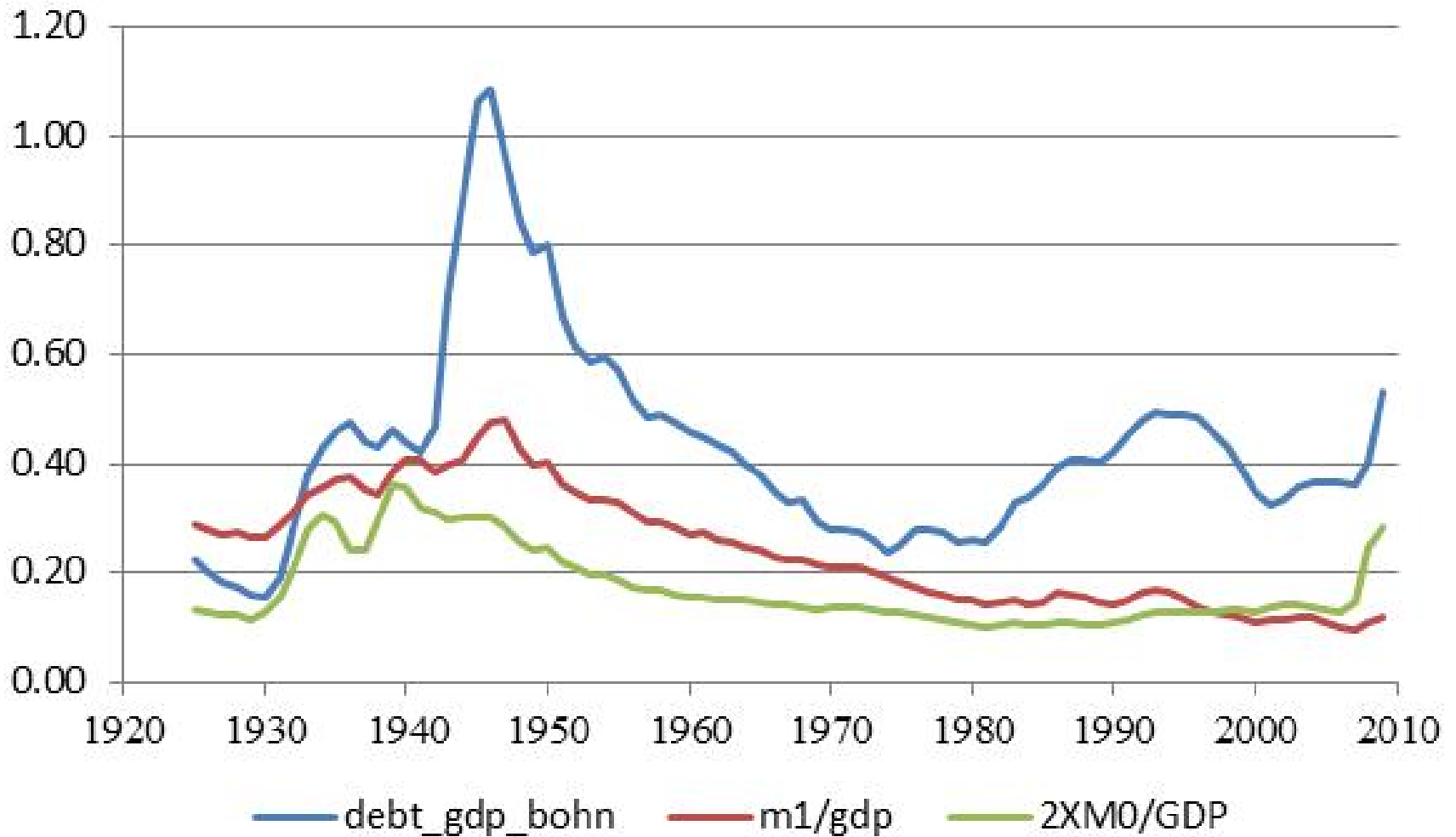
$P^G \downarrow$ $y^G \uparrow$ $y^{AAA} \sim$ $(y^{AAA}-y^G)\downarrow$



Result 2: Supply Response



Result 2: Caveat....



Implication 1: What do we learn about bond supply and overall interest rates ?

- ▶ If we believe that corporates and Treasuries are pretty good substitutes...
- ▶ Then magnitudes in paper understate the true effect of government supply on bond prices.
- ▶ Thought experiment in paper of increasing debt/gdp implicitly holds general level of interest rates fixed

Implication 2: QE

- ▶ QE: Fed buys LT bonds
- ▶ If we believe QE is only changing price of Treasury specific attributes, then not much help for lower grade credits
- ▶ Alternative story: changing price of duration
 - But lots of duration in other instruments (MBS, etc) so harder to change the price?
- ▶ But, can still be helpful if it allows banks to issue more CP, which it uses to finance loans

Comments 1: Distinguishing Channels

- ▶ Paper tries to distinguish between “liquidity” and “safety” channel.
- ▶ Particularly challenging because they distinguish between “long-term safety” and “short-term safety”
- ▶ I admire the effort, but this seems difficult
- ▶ We don’t know how effects interact
 - Maybe investors care more about liquidity when it’s short than when it’s long
- ▶ Follow on work might try to measure these attributes in a continuous way and estimate a no arbitrage model

Comments 2: Moneyness along the curve

If moneyness varies along the curve, creates a role for debt management

