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…
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

Short-term safe = Cheap financing