Analysis

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#### Discussion of

"Time consistency and the duration of government debt: a signalling theory of quantitative easing" By Saroj Bhattarai, Gauti B. Eggertsson, and Bulat Gafarov

ECB workshop on Non-standard Monetary Policy Measures

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Sveriges Riksbank

Frankfurt, October 7, 2014

Overview

- The paper offers a useful theoretical framework for thinking about monetary policy and **government debt management**
- It is conceptually well-understood that, QE works by shortening the maturity of the public debt held by private investors, as a policy lever to support aggregate demand
- Yet the **key insight** of this paper is that, in a liquidity trap, the government is not indifferent between rolling over short-term debt and issuing long-term debt
- Issuing short-term debt, while resulting in low current interest payments, leads to higher interest payments in the future
- Thus, the government has the incentive to keep real interest rates low, to reduce the costs of servicing the debt

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### A New Keynesian model with long-term public debt

#### • The **household** consumes both private and public goods

- Firms face a cost of changing prices, as in Rotemberg (1983)
- The **fiscal authority** sets taxes and manages public debt, while the **monetary authority** sets the nominal policy rate subject to the zero lower bound (ZLB)
- The two government authorities **coordinate policies** and together seek to **maximize welfare**
- Finally, the benevolent government acts with **discretion** in setting policy each period

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#### In a liquidity trap, QE supports aggregate demand

- As a result of QE, economic activity contracts by less and therefore the economy suffers less deflation
- For example, as the calibrated model shows, if the **maturity** of government debt is **reduced by 7 months**, then output falls about 1.5% less and annual inflation falls about 1% less
- Shortening the maturity by **20 months**, economic activity would not contract at all during the liquidity trap
- The findings are shown to be **robust**, for example, to different levels of debt and to the maturity changing over time

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- The paper assumes **in theory** optimal **coordination** of monetary and fiscal policy, which in theory would imply full cooperation in setting policy each period
- But in practice, Federal Reserve and Treasury policies with regard to U.S. government debt have been pushing in opposite directions in recent years
- In fact, while the Fed used QE to reduce the supply of long-term government debt, the Treasury decided instead to lengthen the average maturity of the debt, see Chart

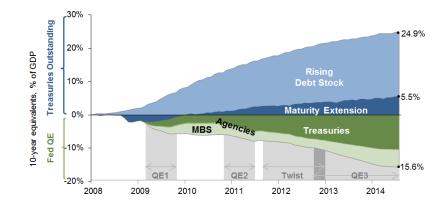
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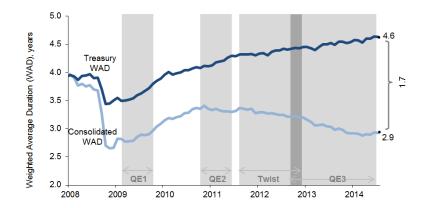
Fed and Treasury policies pushed long-term rates in opposite directions



Source: Greenwood, Hanson, Rudolph, and Summers, *Hutchins Center at Brookings*, working paper #5, Sept. 2014

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# Conclusion

- While **optimal coordination** is a useful normative benchmark, it may not be a very good description of the current practice of Federal Reserve and Treasury policies with regard to U.S. government debt
- An alternative would be to allow for separate policy objectives and thus study the interaction between monetary and fiscal policy
- Still, the paper provides a very useful theoretical framework for thinking about the **appropriate role of QE in supporting aggregate demand** in a liquidity trap

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