The Maturity Structure of Debt, Monetary Policy and Expectations Stabilization
by Stefano Eusepi and Bruce Preston
Discussion

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General remarks

- This is a comprehensive and exciting paper

- It is very carefully done:
  but read it slowly, because...
  -..."*The analysis proceeds numerically...*"
  -..."*No attempt is made to fit the model to data*"

- The main message is clear. And it invites for some comments and
  follow-up questions

Structure of the Discussion

- **1)** Some more empirical motivation why the topic is relevant

- **2)** Summary of the paper

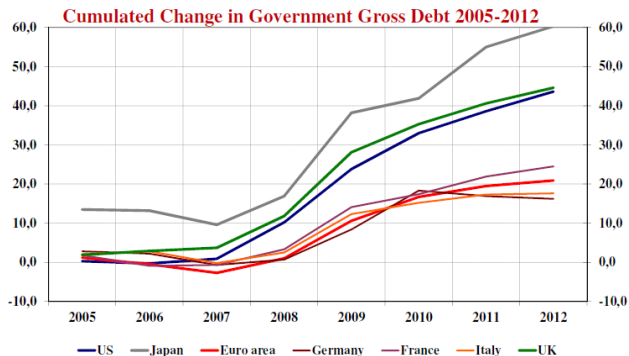- **3)** Comments and questions

Motivation

→ *Why to worry about* **changes** *in the* **size** *of* **government debt** *?*
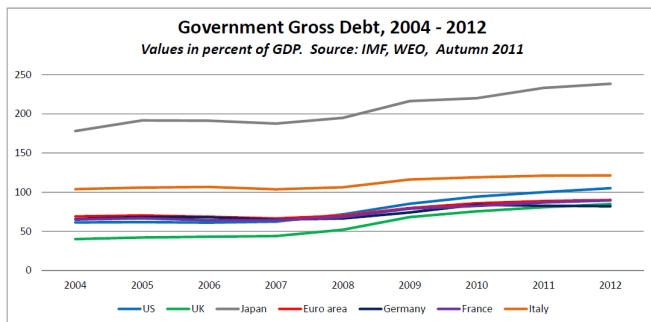
Motivation

*Why to worry about* **changes** in the **size** of **government debt?**

Values in percent of GDP. Source: IMF, WEO, Autumn 2011

Motivation

→ *Why to worry about* **changes** in the **composition** of **gov't debt**?

→ Evolution of maturity structure before and during the crisis...?
Euro area: Consider outstanding amount of government debt securities
(in % of GDP) vs. residual maturity (January 2008–December 2010)
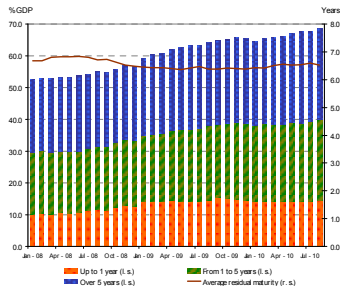
→ **EA: residual maturity has hardly moved since January 2008**,
while debt has substantially increased
→ **Cross-country** variation: **residual maturity** of **DE** ⩽ **EA** < **IT** etc.

Summary of the paper

- **Practical concern:** Changes in the size and the composition (i.e. maturity structure) of outstanding government debt should matter when assessing recent Fed policies of QE

- **Theoretical challenge:** in the "standard" New Keynesian model, these things don't matter (Eggertsson and Woodford, 2003)

- **Contribution of the paper:**
  $\rightarrow$ addresses this unpleasant gap
  $\rightarrow$ identifies a single well-defined channel by which changes in the size and composition of debt generate macroeconomic instability in the standard NK model

- $\rightarrow$ (Recursive least squares) **Learning** to replace **RE**

Summary of the paper

- **Benchmark:** Standard New Keynesian model assumes
  - agents are infinitely lived
  - private sector and gov't have identical effective decision horizons
  - taxes are lump-sum

- **Rational expectations:**

  Assume MP satisfies the Taylor-Principle.

  Then fiscal policy is irrelevant for the dynamics, as long as FP respects intertemporal solvency (FP is passive)

Summary of the paper

- **Learning:**

  Incomplete knowledge about the economy

  Intertemporal solvency of gov't not to be taken for granted

  $\rightarrow$ Gov't debt may be perceived as net wealth

  $\rightarrow$ Changes in the maturity structure may be perceived as a non-trivial source of changes in taxation

- **Key insight:**

  For RE equilibrium to be E-stable, Taylor principle no longer sufficient: MP to be more aggressive to counteract destabilizing expenditure effects, reflecting size and composition of gov't debt

- **Policy implication**:

  $\rightarrow$ FP to be transparent about its intertemporal solvency

  $\rightarrow$ If so: short-term interest rate restored as single relevant (MP) policy instrument

Summary of the paper

Rich and impressive details:

- **Results are non-monotonic w.r.t. the maturity of gov't debt**

  Short and long maturities are conducive to stability, while medium maturities are not

  Why? The effects of changes in (expected) inflation on the evolution of gov't debt and the associated wealth effects play out differently at different horizons

- **Agents make forecasts not only one-period ahead but far into the future under i) anchored expectations or ii) unanchored expectations**

  Such long horizon is needed to make sure that changes in the future timing of taxes and debt holdings matter

- **Dynamics are well explored**

  Links between E-stability of MP rules and implied volatilities of output and inflation

Comments

Comment 1:

- Learning addresses a relevant margin...

  ...but why within a RE benchmark which stresses so strongly **separations** rather than **interactions between MP and FP**?

- Suggestion of an alternative benchmark:

  consider NK model with old-fashioned deviations from Ricardian equivalence via

  - short-sighted consumers (relative to gov't) or

  - distortionary taxes

- Then, under RE:

  $\rightarrow$ Gov't debt, by construction, a meaningful state variable

  $\rightarrow$ Taylor principle, by construction, not a sufficient statistic to summarise (well-behaved) MP and FP

Comments

Comment 1:

- In this spirit, Leith/von Thadden (JET, 2008) have a NK model with short-sighted consumers and clear-cut results under RE:

  $\rightarrow$ multiple steady states possible

  $\rightarrow$ local stability conditions differ between economies characterised by high vs. low gov't debt

  $\rightarrow$ more aggressive MP reactions needed under high gov't debt

- In such extended NK model: Addition of learning would not generate such non-standard results, but likely reinforce them

Comments

Comment 2:

- Let's go back to the **practical concern:** Changes in the size and the composition (i.e. maturity structure) of outstanding government debt should matter when assessing Fed policies of QE

- What is the relevant benchmark configuration for MP and FP?

  MP: short-term interest rate pegged at zero bound since late 2008 and commitment is out to keep it there

  FP: outlook is challenging

- $\rightarrow$ Is this a good environment to learn about standard mix of active MP and passive FP ?