

Government Debt, the Zero Lower Bound and
Monetary Policy
by M. Trabandt and F. Smets
Discussion

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Message of the paper by Trabandt and Smets

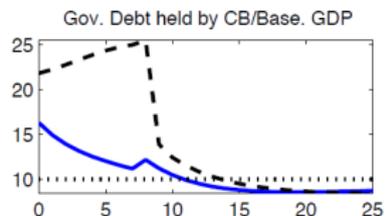
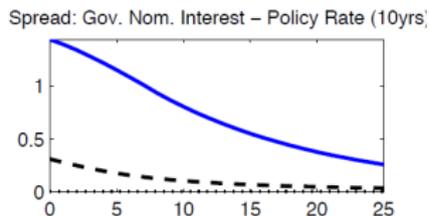
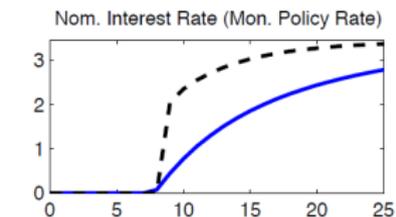
The paper is insightful, very carefully done, well documented and has a very timely message:

→ If government debt carries a risk premium, then optimal monetary policy at the zero bound relies under commitment less on forward guidance and uses instead balance sheet policies (outright purchases of gov't bonds by the CB)

This is demonstrated in a **Blanchard/Yaari framework** in which outside money and **risky government bonds** are perceived by the private sector as net wealth

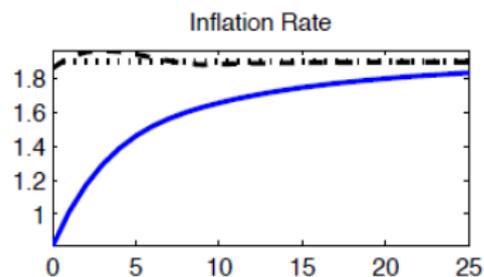
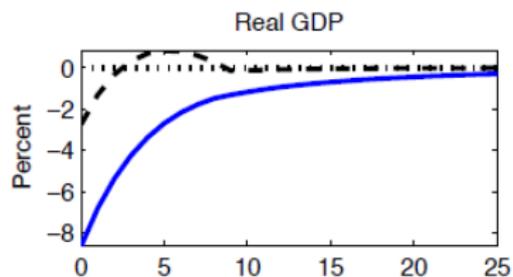
Message of the paper by Trabandt and Smets

→ This is what optimal MP should do in response to a large recessionary shock (relative to a Taylor rule):



Message of the paper by Trabandt and Smets

→ This is what you will get (relative to a Taylor rule):



Message of the paper by Trabandt and Smets

→ Mechanisms under optimal policy:

- Private sector accepts real balances in exchange for gov't bonds, since satiation at zero lower bound not yet reached (*more on this: see below*)
- Expectations channel (relatively higher inflation helps to reduce the real rate)
- CB returns earnings on gov't bonds as transfers back to the government to make sure that total government debt can decline (quantitative effect, however, calibrated to be small)

Behind all these channels:

→ Government has credible backing from CB.

Jointly, gov't and CB can mitigate private sector risk perceptions

Intuition (not quite)

Blanchard/Yaari (with risk-free gov't debt):

Gov't liabilities are private sector net wealth

For given g (and assuming lump-sum taxes), higher government debt carries a higher real interest rate and there exists a maximum level of debt to be sustained

Assume b is high and MP operates at zero lower bound:

→ Then: balance sheet policies (outright purchases of gov't bonds by the CB) are particularly effective?

→ no: this is *not* the channel...

(see: *Wallace 1981; Eggertsson and Woodford 2003; Curdia and Woodford 2011*)

Intuition (improved)

Standard model with risk-free (and one period) government debt:

CB sets nominal interest rate i

This i is the return on government debt in gov't bc

If $i > 0$: something special is needed to make sure that M is held in equilibrium (legal restrictions; utility services of M etc.)

If $i = 0$: 'something' is no longer needed and irrelevance of open market operations

If at $i = 0$ the expected real rate too high:

→ open market operations not effective, but forward guidance works

Intuition (improved)

Model with risky (one period) government debt:

CB sets nominal interest rate i , but $i^{Gov} > i$ if $b > \bar{b}$

If $i = 0$ and $b > \bar{b}$: then i^{Gov} still above its lower bound

If at $i = 0$ (and with $b > \bar{b}$) the expected real rate of i^{Gov} too high:

- Relevant interest rate channel is not yet exhausted
(notice: satiation level of m reached if $i^{Gov} = 0$)
- Because of this: balance sheet policies at the zero bound of i work...
- ...and they are more effective than forward guidance, because they directly 'restore' the interest rate channel

Q1: Risk

Blanchard/Yaari assumption magnifies the effects but is not responsible for them...

...What exactly captures **risky government debt** in the model?

→ The model mimics US or UK architecture, but is gov't debt in these countries risky (as modelled in the paper)?

→ In the EA gov't debt is risky because of unresolved strategic problems in a multi-country MU (ie countries can default), but this is not modelled

Q2: Loss function

Quantitative impact of Blanchard/Yaari set-up depends on (short) horizon of private agents

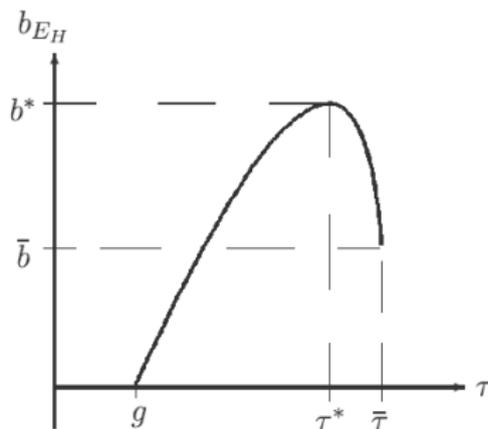
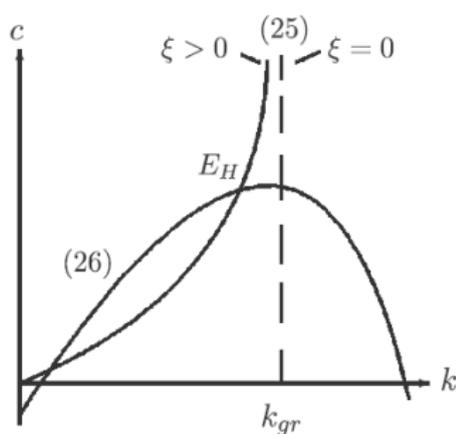
Deviations from standard Ramsey set-up may not be trivial

Loss function corresponds to standard Ramsey set-up

Questions

Q3: Uniqueness

Blanchard/Yaari set-up is vulnerable to multiple steady states
(\rightarrow Leith and v.Thadden, JET, 2008)



Q4: Policy mix

Model analysis assumes active FP, passive MP to be temporary, not permanent

Still, gov't debt is assumed to be risky. Why ?

Summary

The paper extends standard modelling into much needed new directions

At this stage: it offers a very helpful short-cut

More work of this type is needed to clarify some of the open issues
(default, strategic aspects, welfare)