

# Discussion of "Fiscal Austerity Measures: Spending Cuts vs. Tax Increases" by

by Gerhard Glomm, Juergen Jung and Chung Tran

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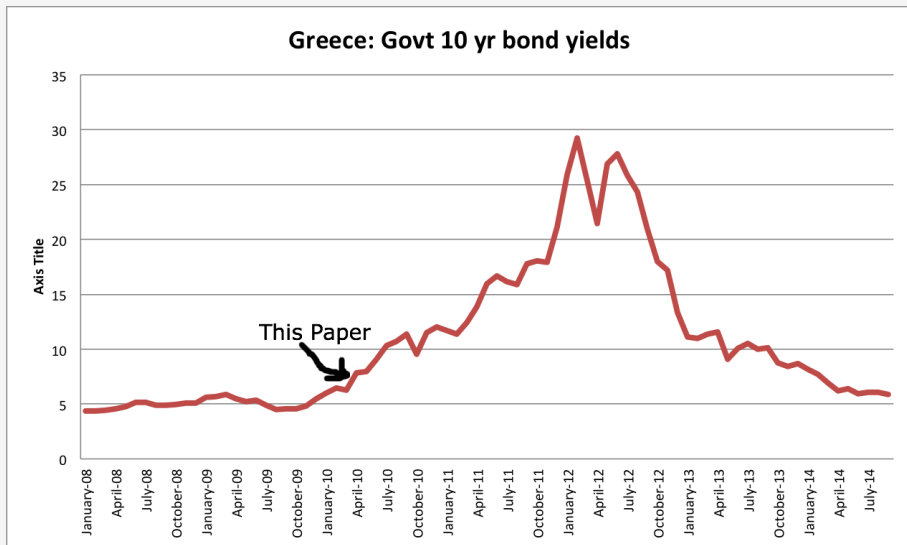
UCSB and CERGE-EI

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## Overview

- Three main results:
  - A country with high level of external indebtedness (Greece) is very sensitive to external shocks
  - It is welfare improving to reduce the debt to GDP ratio over time
  - Cuts in gov't spending are more damaging to GDP than tax increases in the short run (vs. Alesina et al. 2012)
- Nice and easy to read paper. Some of the results are a little of a black box, however.

# Sensitivity to External Interest Rate Shocks



Source: Bank of Greece

# Sensitivity to External Interest Rate Shocks

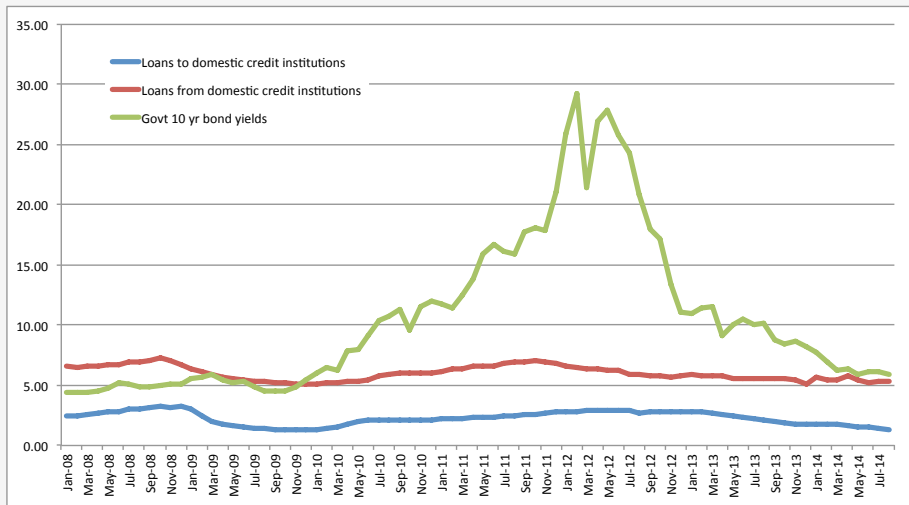
## ■ Increase in interest rates:

- Portfolio adjustment: MPK has to increase: decrease in capital stock and GDP
- Substitution effect: Increase in savings (decrease in current account)
- $r \nearrow \rightarrow S \nearrow$  and  $K_P \searrow, Y' \searrow$ ,
- Overall, negative wealth effect (b/c CA deficit initially?)

## ■ Questions:

- Alternative explanation to an increase in savings / decrease in CA: income effect: future looks worse than today
- $TFP' \searrow \rightarrow S \nearrow$  and  $K_P \searrow, Y' \searrow$ . Plus  $r_{GOVT} \nearrow$  implies negative wealth effect.
- The explanation in the paper relies on the fact that *all* borrowers and savers face an increase in the interest rate: is that consistent with data?
- How to interpret higher  $r_{GOVT}$  without introducing risk explicitly?

# Sensitivity to External Shocks



Source: Bank of Greece

# Policy Reforms

- Two aspects:
  - intertemporal dimension (decrease debt over time?)
  - spending cuts vs tax increases
- Intertemporal dimension
  - A standard Ramsey optimal tax problem: Smooth labor taxes over time. In the absence of spending or TFP shocks, constant debt to GDP ratio over time.
  - Here the answer is very different. It is better for taxes to go up and then down. Why?
  - My guess is, that it is all driven by the decrease in  $r$  in response to lower  $B/Y$ . It would be nice to see what happens if the interest rate channel is shut down.
  - General argument for driving debt to 0?  $\underline{B} > 0$ ?

# Spending Cuts vs Tax Increases

- Cuts in public spending are worse than tax increases in the short run. Results reversed in the long run.
- Driving forces: partially productive government investment, plus a decline in  $r$  in the long run.
- Partially productive  $G$ :
  - $G \searrow \rightarrow TFP \searrow, H_P \searrow$  and  $K_P \searrow$ ,
  - $G \searrow \rightarrow$  wealth  $\nearrow, H_P \searrow$
- Unproductive  $G$ :
  - $G \searrow \rightarrow$  wealth  $\nearrow \nearrow, H_P \searrow \searrow$
- The effect on TFP dominates?
- The effects are reversed in the long run, due to decrease in  $r$ .

## Spending Cuts vs Tax Increases

- How unproductive is government investment here?

$$MP_{KP} = r + \delta = 0.14$$

$$MP_{KG} = \alpha_1 \eta \frac{Y}{K_G} = \alpha_1 \eta \delta \frac{Y}{I_G} = 0.09 * 0.42 * 0.1 * \frac{1}{0.05} = 0.075$$

About in the middle.

- How about labor?
- Empirical evidence on this?



## Other comments

### Risk Premium

- The estimated risk premium function is

$$r^{risk} = \beta_0 + \beta_1 \left( \frac{B}{Y} \right) + \beta_2 \left( \frac{B}{Y} \right)^2$$

where  $\beta_0 = 0.2437$ ,  $\beta_1 = -0.00538$ ,  $\beta_2 = 3E - 05$ .

- Decreasing in  $\frac{B}{Y}$  (for reasonable values). Typo?

## Other comments

### Capital-Output Ratio

- The model is calibrated to capital-output ratio of 1.5. Seems very low. Does that include public capital too?
- Moreover: from the calibration

$$r = MP_{KP} - \delta$$

$$r = \alpha_2 \frac{Y}{K_P} - \delta$$

$$0.04 = 0.35 \frac{Y}{K_P} - 0.1$$

yields  $\frac{K_P}{Y} = 2.5!$

- If public capital is included, then  $\frac{K_P + K_G}{Y} = 3$ , even higher. ??

## Conclusions

- Enjoyed reading the paper! Raises some questions of first order importance.
  
  
  
  
  
  
  
  
  
  
- Focusing on the main mechanisms (and ignoring other ones) would help to sharpen the message