Discussion of "Fiscal Austerity Measures: Spending Cuts vs. Tax Increases" by
by Gerhard Glomm, Juergen Jung and Chung Tran

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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

Greece: Govt 10 yr bond yields

Source: Bank of Greece
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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)

\[ r \uparrow \rightarrow S \uparrow \text{ and } K_p \downarrow, Y' \downarrow \]

- 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
  - \( TFP' \downarrow \rightarrow S \uparrow \text{ and } K_p \downarrow, Y' \downarrow \). Plus \( r_{GOVT} \uparrow \) 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? $B > 0$?
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 $G$:
  - $G \downarrow \rightarrow TFP \downarrow H_P \downarrow$ and $K_P \downarrow$, $G \downarrow \rightarrow$ wealth $\uparrow$, $H_P \downarrow$

- Unproductive $G$:
  - $G \downarrow \rightarrow$ wealth $\uparrow \uparrow$, $H_P \downarrow \downarrow$

- The effect on TFP dominates?

- The effects are reversed in the long run, due to decrease in $r$. 
How unproductive is government investment here?

\[ MP_{KP} = r + \delta = 0.14 \]

\[ MP_{KG} = \alpha_1\eta \frac{Y}{K_G} = \alpha_1\eta\delta \frac{Y}{l_G} = 0.09 \times 0.42 \times 0.1 \times \frac{1}{0.05} = 0.075 \]

About in the middle.

How about labor?

Empirical evidence on this?
Other comments

Risk Premium

- The estimated risk premium function is

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

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

\[
\begin{align*}
    r &= MP_{KP} - \delta \\
    r &= \alpha_2 \frac{Y}{K_P} - \delta \\
    0.04 &= 0.35 \frac{Y}{K_P} - 0.1
\end{align*}
\]

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