Discussion of “Fiscal Positions and Government Bond Yields in OECD Countries” by Joseph W. Gruber and Steven B. Kamin

Christian Grisse

Federal Reserve Bank of New York

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An important question...

What is the impact of fiscal positions on sovereign bond yields?

- First-order question for policymakers. Important for determining fiscal projections
- Very topical, given the recent deterioration of fiscal positions in advanced economies
- Previous literature has found it surprisingly difficult to establish the expected positive relationship between debt/deficits and interest rates.

Fiscal positions and borrowing costs

Intuitively one expects a positive relationship:

- Higher deficits and debt levels could be associated with higher government bond yields because
  - crowding out
  - portfolio balance effects
  - fear that central bank will monetize debt
  - default risk
- Higher interest rates raise borrowing costs and thus increase fiscal deficits and debt levels

Fiscal positions and borrowing costs

There seems to be a clear relationship between fiscal developments and government bond yields in short-term movements of financial markets

> "Greek debt yields soar on deficit fear" – *FT*
> "Brazil's bond yields rise as budget deficit, net debt increase" – *Bloomberg*
> "US bond yields fly on deficit fear" – *Reuters*

Nevertheless, the existing evidence on the relationship between government's fiscal positions and their borrowing costs is mixed.

Fiscal positions and borrowing costs

Finding a clear relationship may be difficult because

- The effect may be quantitatively important only if other criteria are met: institutions, domestic investor base for government bonds etc. matter
- In advanced economies, debt levels are high and rising but may not yet be sufficient to increase borrowing costs enough to lead to quantitatively significant effects
- Endogeneity issues: interplay between fiscal positions, interest rates, and the business cycle

Summary of the paper

- Panel-data study of OECD countries, annual data 1988-2007
- Find positive and significant effect of different measures of fiscal deficits and debt on long-term (10-year) government bond yields
- use estimated coefficients and IMF-projections for fiscal positions to simulate the impact of fiscal positions on bond yields over the next years
- US long-term yields are projected to increase by 60 basis points by 2015 compared to the level consistent with the 2007 fiscal position

Econometric challenges

- Endogeneity of fiscal position and interest rates
  - use OECD's two-year ahead fiscal projections and long-term bond yields
  - control for short-term interest rates, two-year ahead inflation, GDP growth
- Potential omitted variables
  - include country fixed effects
- Downward trend in interest rates
  - period fixed effects

Contribution compared to the existing literature

Combines approaches from the previous literature:

- look at panel data of OECD countries, as in Ardagna et.al. (2004) and Chinn and Frankel (2005)
- use fiscal projections rather than current fiscal position, as in Laubach (2009), Engen and Hubbard (2005)
- for a subset of countries, use five-year five-year forward interest rates as in Laubach (2009), Engen and Hubbard (2005)
- use primary deficit to account for the direct impact of bond yields on the fiscal position

Japan

Japan has the highest level of public debt in the OECD, but long-term government bond yields have gradually declined.

- high private savings rate
- pension funds required to invest large share of their assets in domestic bonds (until late 1990s)
- Japan does not depend on foreign creditors to finance its debt

Marginal impact of fiscal position on government bond yields may depend on a range of factors

Suggestions (1)

Could include further control variables:

- reliance on foreign investors
- debt maturity
- history of defaults
- quality of institutions
- credit rating

Suggestions (2)

Could include further control variables:

- level of financial development
- measures of risk aversion ("flight to quality" effects)
- central bank independence
- capture decline in bond yields prior to the introduction of the euro in the European peripheral countries (in particular Greece, Italy, Spain)