Discussion of *The Motives to Borrow* by Fatás, Ghosh, Panizza, Presbitero

> Paolo Mauro IMF, Fiscal Affairs Department

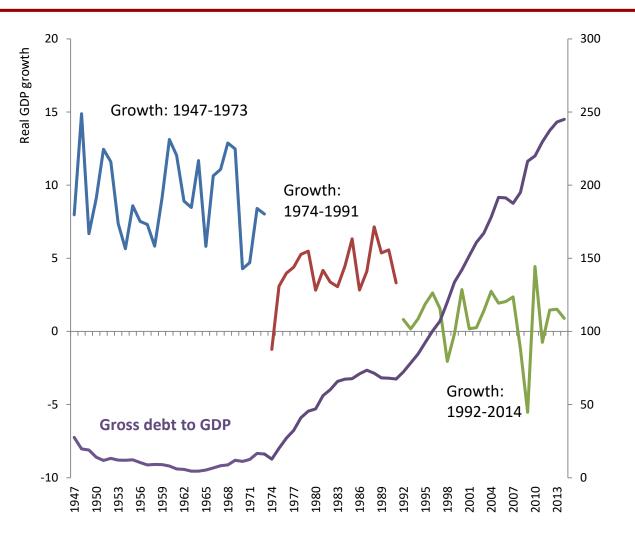


- Good: intertemporal tax smoothing, stimulus...
- Bad: short political horizons, strategic manipulation, common pool problems...
- Ugly: exchange rate crises, banking crises...



- Distributional implications (across generations, but also taxpayers versus bondholders)
- Impact of economic growth on revenues, debt ratio
- Ability to borrow, interest costs
- Mauro et al (JME 2015): Increase in primary fiscal balance in response to debt increases is weaker when borrowing costs are low, and when potential economic growth worsens unexpectedly

## **GDP Growth and Debt/GDP in Japan**



Source: P. Mauro, R. Romeu, A. Binder, and A. Zaman, 2015, "A Modern History of Fiscal Prudence and Profligacy," Journal of Monetary Economics, 76, 55-70.



## **Growth Matters More Than We Usually Say**



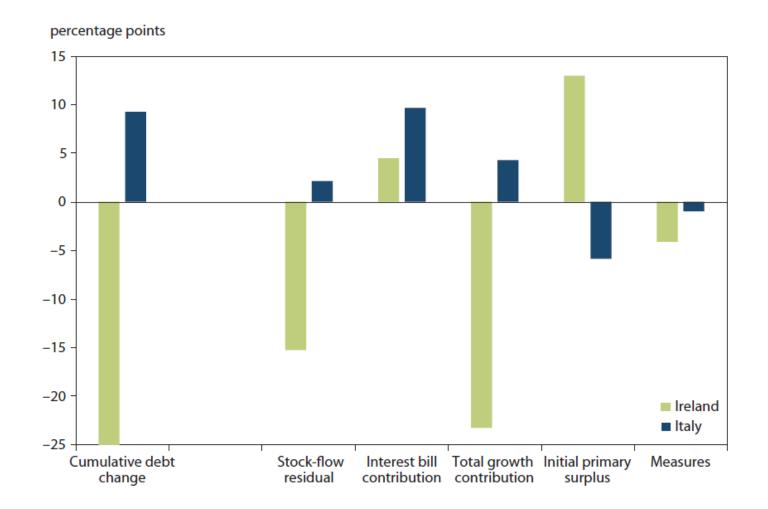
• Conventional  $d_t - d_{t-1} = \left(\frac{r_t}{1+g_t}\right)d_{t-1} - \left(\frac{g_t}{1+g_t}\right)d_{t-1} - p_t + f_t$ 

• Add 
$$p_t = p_{t-1} + e_{t-1} \left( \frac{g_t}{1+g_t} \right) + m_t$$

• **Complete** 
$$d_t - d_{t-1} = \left(\frac{r_t}{1+g_t}\right) d_{t-1} - m_t - p_{t-1} + f_t - \left(\frac{g_t}{1+g_t}\right) (d_{t-1} + e_{t-1})$$

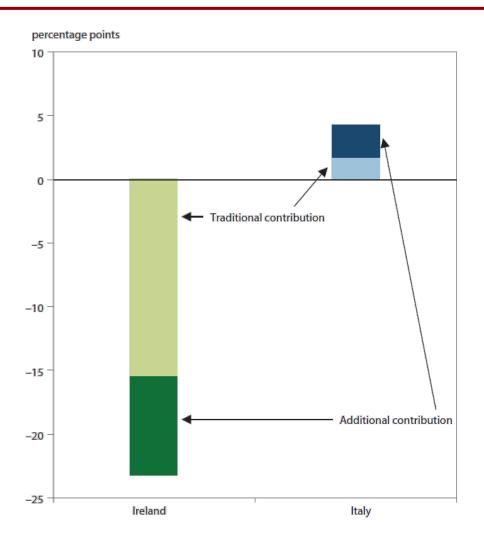
P. Mauro and J. Zilinsky, 2016, "Reducing Government Debt Ratios in an Era of Low Growth," Peterson Institute for International Economics, Policy Brief 16-10.

Cumulative contributions to changes in government debt-to-GDP ratios between end-2012 and end-2015 in Ireland and Italy (same debt ratio at end-2012)



## Traditional and additional growth contributions to changes in debt-to-GDP ratios between end-2012 and end-2015 in Ireland and Italy





Source: IMF, World Economic Outlook database, April 2016.