

Assessing Public Debt Sustainability

11th UNCTAD Debt Management Conference, Geneva

Martin Guzman (Columbia University-UBA)

November 14, 2017

- Any Debt Sustainability Analysis (DSA) must be able to respond the following two questions:
 - 1 Is debt sustainable with high probability?
 - 2 If it is not, what's the size of relief that would make debt sustainable with high probability?

- The ultimate goal of a sovereign restructuring is the restoration of *debt sustainability*
 - But there may be more relevant constraints than just the government's transversality condition for defining *debt sustainability*

- UN GA Resolution 69/319 (Sept 2015) adopted nine principles that should guide sovereign debt restructuring practice:
 - 1 Sovereignty
 - 2 Good faith
 - 3 Transparency
 - 4 Impartiality
 - 5 Equitable treatment of creditors
 - 6 Sovereign immunity
 - 7 Legitimacy
 - 8 Sustainability
 - 9 (Super-)Majority restructuring
- Goal of principles: to ensure *correct* functioning of sovereign lending markets

- Principles-based approach for assessing debt sustainability
 - The development of such an approach is especially relevant in the short term due to two reasons

- Evidence shows that sovereign debt restructuring processes are being ineffective at restoring sustainability

t	3	4	5	6	7
Fraction	0.497	0.525	0.553	0.575	0.6

- Fraction: denotes fraction of restructuring with private creditors (bondholders and bank loans) followed by another restructuring or default with the same group within t years

- Evidence shows that sovereign debt restructuring processes are being ineffective at restoring sustainability

t	3	4	5	6	7
High Income	0.619	0.650	0.700	0.700	0.700
Upper Middle Income	0.500	0.548	0.578	0.590	0.622
Lower Middle Income	0.467	0.477	0.500	0.523	0.548
Low Income	0.455	0.455	0.469	0.531	0.548
Total	0.497	0.525	0.553	0.575	0.6

- Fraction: denotes fraction of restructuring with private creditors (bondholders and bank loans) followed by another restructuring or default with the same group within t years

- Evidence is very suggestive of a too little syndrome

- Flawed approach: Inter-country comparison of market haircuts
 - 180 restructuring episodes with private creditors from 1970 to 2010
 - Actual haircuts vs. Predicted haircuts

$$H_t = 1 - \frac{PV \text{ new bond}(r_{t+\epsilon})}{PV \text{ old bond}(r_{t+\epsilon})}$$

- If actual haircut \gg (\ll) predicted haircut \implies too much (too little) haircut

The relief is appropriate if it restores sustainability
with high probability

A methodology for assessing the appropriate size of relief in sovereign debt restructuring

- Define the relevant constraints:
 - The Government's Intertemporal Budget Constraint
 - The principles-based constraints
- Describe the model that represents the economy under analysis, including the assumptions about the relevant parameters and shocks
 - That accounts for the endogenous feedback effects associated with macroeconomic policies

- Define the relevant constraints:
 - The Government's Intertemporal Budget Constraint
 - The principles-based constraints
- Describe the model that represents the economy under analysis, including the assumptions about the relevant parameters and shocks
 - That accounts for the endogenous feedback effects associated with macroeconomic policies

- Define the relevant constraints:
 - The Government's Intertemporal Budget Constraint
 - The principles-based constraints
- Describe the model that represents the economy under analysis, including the assumptions about the relevant parameters and shocks
 - That accounts for the endogenous feedback effects associated with macroeconomic policies

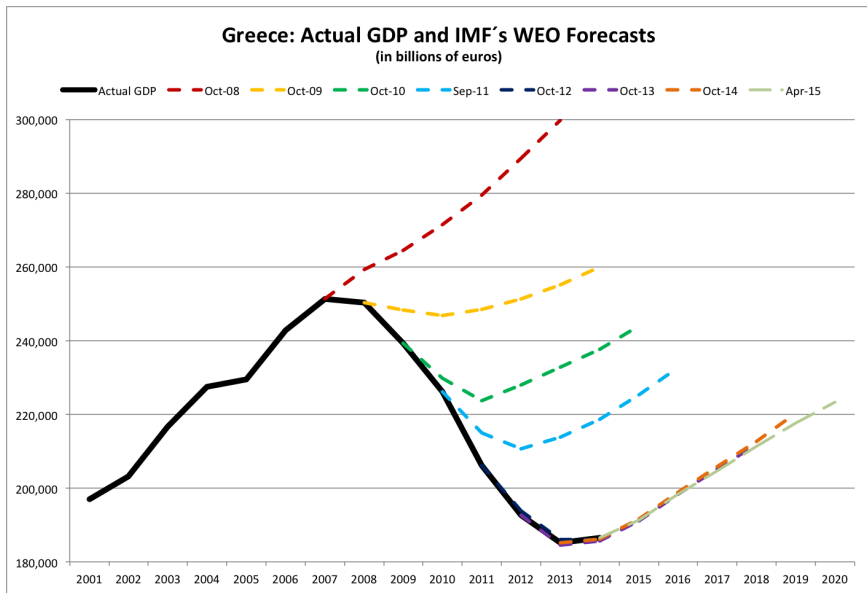
- For each possible economic scenario, find the trajectories of consistent fiscal policies that satisfy the government's Intertemporal Budget Constraint

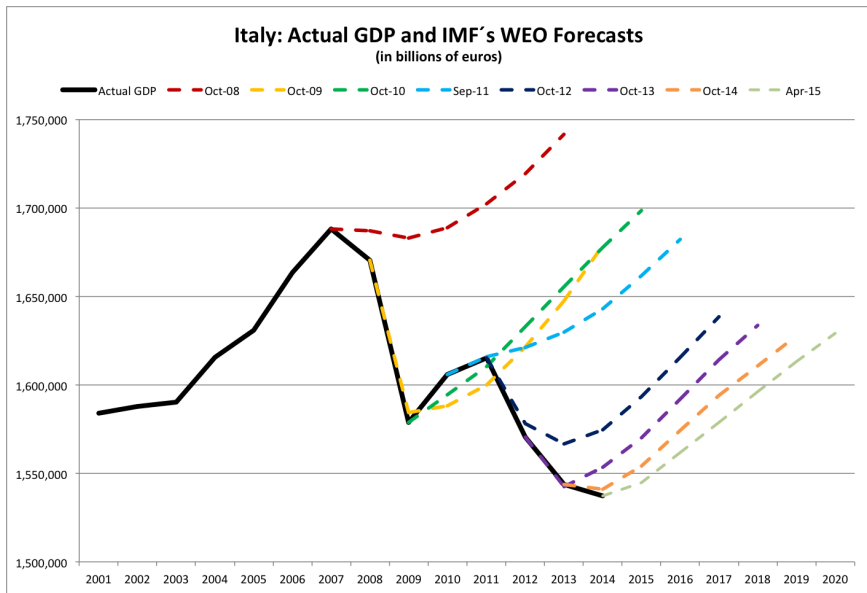
- Check if each trajectory of consistent fiscal policies respects the constraints imposed by the principles (political feasibility)
 - Trajectories of consistent fiscal policies that satisfy the government's Intertemporal Budget Constraint and the constraints imposed by the principles are *feasible*

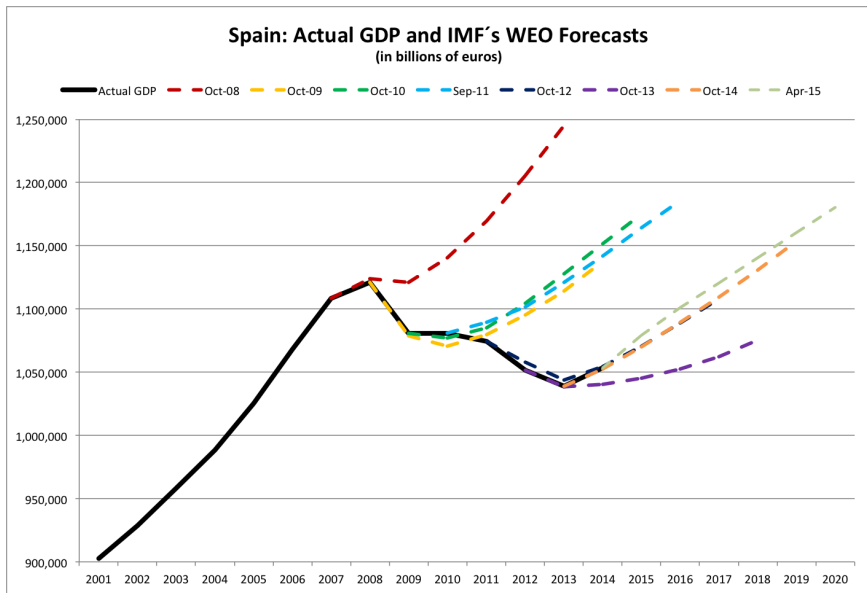
- Check if each trajectory of consistent fiscal policies respects the constraints imposed by the principles (political feasibility)
 - Trajectories of consistent fiscal policies that satisfy the government's Intertemporal Budget Constraint and the constraints imposed by the principles are *feasible*

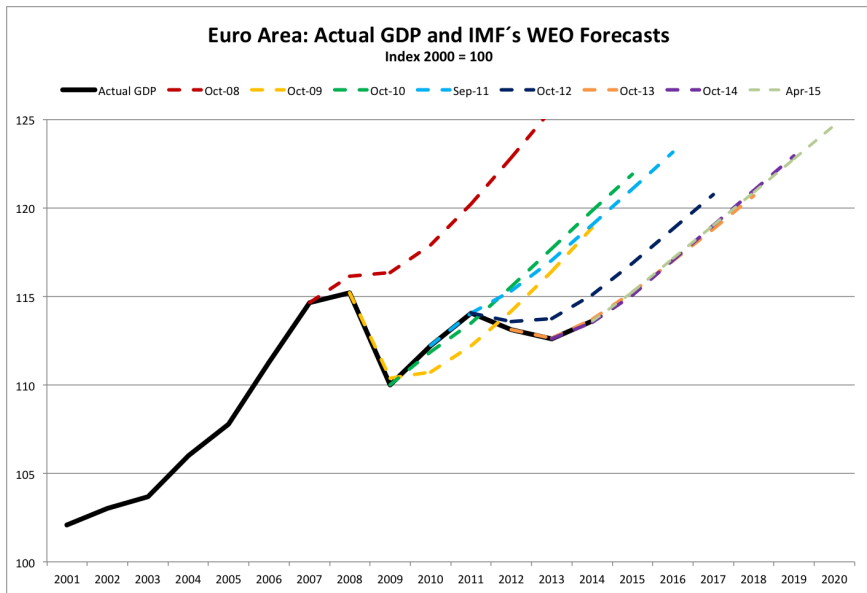
- If there is a “sufficiently large” mass of *feasible* trajectories of consistent fiscal policies, then the debt position satisfies sustainability with high probability
- Otherwise, there is need for a debt write off large enough as to achieve a “sufficiently large” mass of *feasible* trajectories of consistent fiscal policies

- Computing the appropriate non-contingent relief requires knowledge on the distribution of fiscal multipliers
- Framework is complementary of IMF Fan Charts Approach (Abiad-Ostry 2005; Celasun-Debrun-Ostry 2006)
 - But Fan Charts approach that projects variables that matter for sustainability assessments matching past moments of those variables is likely to fail in times of deep debt distress









- Makes debt restructuring come “Too Late”
- Makes debt restructuring come “Too Little”
- It creates inter-creditor inequities

- Need for clarifying what's a sensible framework for assessing the appropriateness of a debt write-down
- Evidence that suggests presence of *too little* syndrome in sovereign debt restructuring
- We advocate for principles-based sustainability approach
- Framework could be the basis for the codification the UN *sustainability principle*