Research on Money and Finance

Occasional Policy Papers

Cypriot Public Debt: A Troubled Path under Current Policies

Ourania Dimakou
RMF and SOAS

Occasional Policy Paper 2
January 2014

Cypriot public debt:
A troubled path under current policies

Ourania Dimakou, SOAS and RMF

Public debt has been a key feature of the Cypriot crisis, rising rapidly from a low base in 2008. Rapid growth of public debt is a common feature of banking crises as rescuing the banks and preventing a deep recession are typical government concerns. Cyprus is no exception and, as a result of its banking crisis, its public debt exploded as proportion of GDP. The sustainability of Cypriot public debt under current policies, however, is a matter of considerable concern. There are reasons to expect public debt to prove unsustainable, forcing Cyprus to undertake drastic action, including severe restructuring.

To explore the sustainability of Cypriot public debt, and following closely the IMF's debt sustainability analysis (DSA) for Cyprus (Country Report No. 13/293), we first obtain projections on total public debt for the period 2013-2020. The purpose of this exercise is not to assess debt sustainability per se, but rather to explore the evolution of debt, paying particular attention to both the (already) dangerously high level of debt-to-GDP and most importantly to its medium-run projected trend. Needless to say, there are well-recognised theoretical and methodological limitations to the IMF's DSA approach, but the exercise is nonetheless helpful in identifying general and specific areas of concern regarding Cypriot public debt.

Overall, it transpires that the evolution of public debt in Cyprus under current policies is unstable and liable to high risks. The IMF's baseline projections regarding the key macroeconomic variables and the implied debt ratio projections correspond with the very poor economic outlook for Cyprus. Baseline debt is estimated to continue on an upward trend reaching 125.7% by 2015 and then slowly to decrease to 105% by 2020. In that context, even using the IMF's own methodology and performing standard bound test analysis, it is likely that Cypriot debt would remain highly vulnerable to adverse macro-finance shocks (see Table 1 and Figure 1).

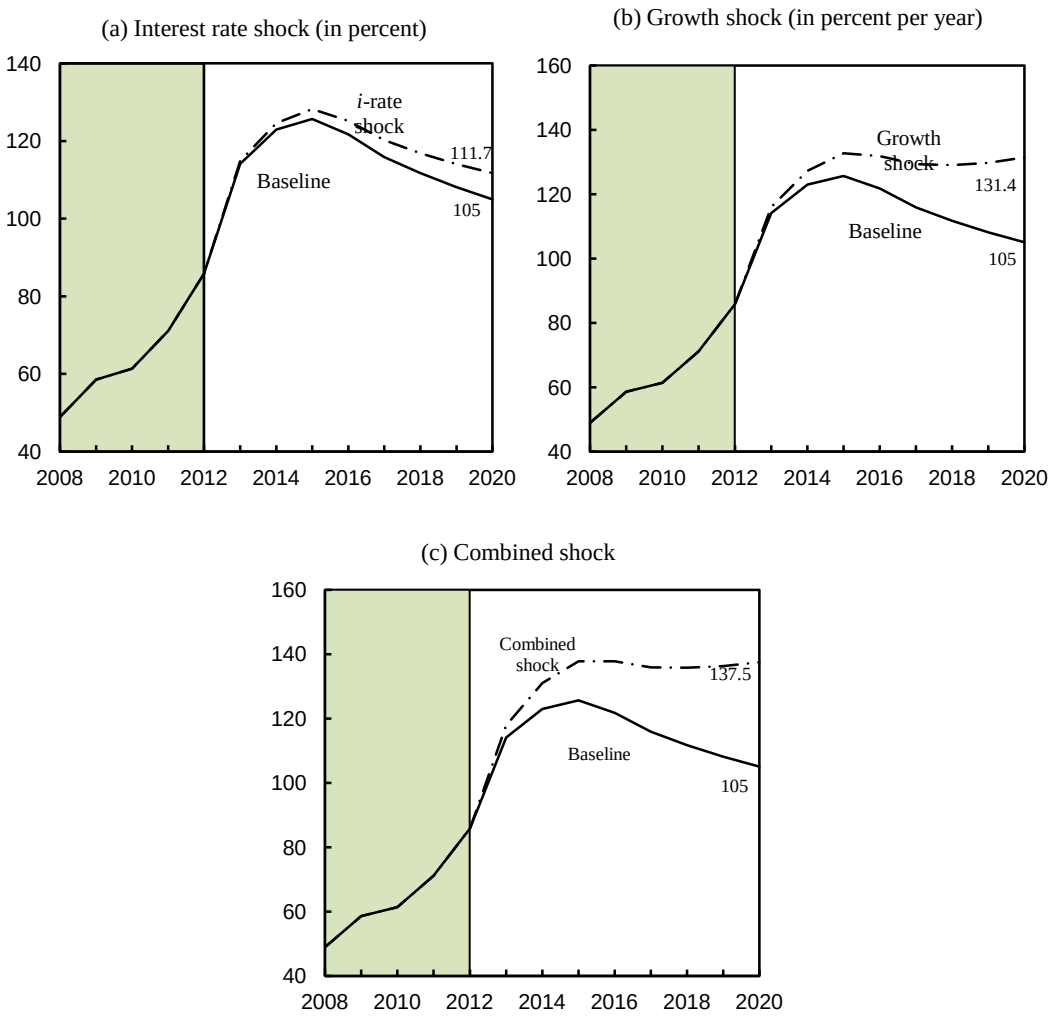
The most important factor that would generate a problematic path for public debt after 2015 would be 'an adverse shock on growth': if growth turned out even slightly weaker than the IMF has projected, the ratio of

debt to GDP would remain stubbornly high, as is shown Fig. 1(b). In contrast, an 'interest rate shock', i.e., a rise in interest rates, would not be sufficient to disturb the projected downward path of debt to GDP, as is shown in Fig. 1(a). Weaker growth would also be the main factor that would result in stubbornly high public debt to GDP in the case of a 'combined negative shock' capturing a number of different factors, as is shown in Fig. 1(c).

Table 1: IMF Bound Tests

								(a) Real Interest Rate Shock
	2013	2014	2015	2016	2017	2018	2019	2020
Av. real interest rate	3.7	2.4	1.9	1.9	2.1	2.2	2.4	2.8
*Real interest rate is shocked by a 0.5 of its historical SD, i.e. baseline RIR + 0.5*1.5*								
Debt ratio (a)	**114.8**	**124.6**	**128.2**	**125.2**	**120.2**	**116.9**	**114.1**	**111.7**
								(b) Real GDP growth Shock
	2013	2014	2015	2016	2017	2018	2019	2020
Real GDP growth	-9.8	-4.9	0.0	0.8	1.2	1.2	0.8	0.7
*Real GDP growth is shocked by a 0.5 historical SD, i.e. baseline g+0.5*2.1*								
Debt ratio (b)	**115.9**	**127.2**	**132.7**	**131.8**	**129.3**	**129.0**	**129.7**	**131.4**
								(c) Combined shock
	2013	2014	2015	2016	2017	2018	2019	2020
B1, B2 shocks plus a 0.5 historical SD shock on primary balance/GDP								
Debt ratio (c)	**117.9**	**131.0**	**137.7**	**137.8**	**135.9**	**135.7**	**136.3**	**137.5**

Figure 1: IMF's Bound Tests



Source: Author calculations based on the IMF's template and WEO data and projections

It is apparent, therefore, that the greatest concern for Cypriot public debt arises from adverse growth outcomes. To begin to explore these possibilities, Figure 2 depicts a set of customised stress tests under alternative scenarios for GDP growth shocks, while keeping the IMF's baseline projections intact. Essentially, we evaluate, first, the impact of a recession that is a little more prolonged and severe than the IMF has projected; second, the impact of the more prolonged recession above combined with a higher variability of GDP growth than the historical average; third, the impact of a more front-loaded recession together with possible spill over effects by the GDP deflator and revenues share (for more details on each shock see Table 2).

The response of public debt is unsettling. Debt ratios increase substantially until about 2015 and then stabilise for a short while. However, the most concerning element is that the rising trend resumes after 2019. A 'combined severe shock', in particular, would cause estimated debt ratio to exceed 150%. Note finally that, if the slightly prolonged and deeper recession gave rise to additional bad loans and recapitalisation needs for banks (i.e., a combined growth and contingent liabilities shock) the debt trajectory may well turn out to be much worse.

Figure 2: Alternative Negative Growth Shocks

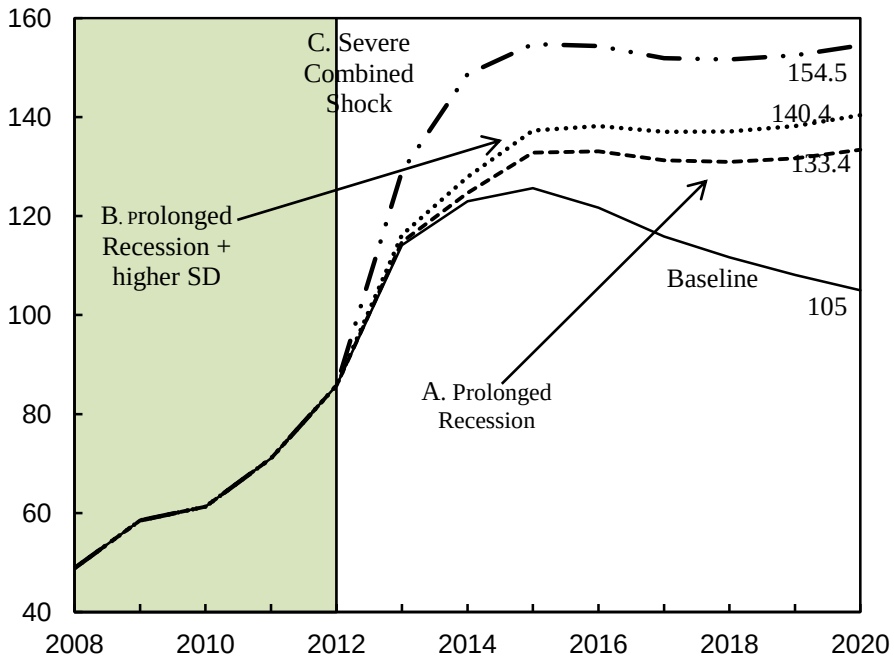


Table 2: Alternative Bound Tests

	2013	2014	2015	2016	2017	2018	2019	2020
A. Prolonged Recession								
Real GDP growth	-8.7	-3.9	-2.1	0.0	0.7	1.2	0.8	0.7
Debt-to-GDP	**114.8**	**124.7**	**132.8**	**133.1**	**131.3**	**130.9**	**131.7**	**133.4**
B. Prolonged Recession and higher growth SD								
Real GDP growth	-10.0	-5.2	-2.9	-0.5	0.3	0.9	0.6	0.5
Debt-to-GDP	**116.2**	**127.9**	**137.3**	**138.2**	**137.0**	**137.1**	**138.2**	**140.4**
C. Combined shock								
Real GDP growth	-14.6	-7.2	0.0	0.8	1.2	1.2	0.8	0.7
Inflation (GDP deflator)	-1.0	0.2	1.2	1.5	1.8	1.9	1.9	2.0
Revenues-to-GDP	34.7	36.5	40.2	41.6	42.1	42.5	42.6	42.7
Debt-to-GDP	**129.0**	**148.6**	**154.8**	**154.4**	**151.9**	**151.6**	**152.5**	**154.5**

A: The recession is prolonged for two extra years so that real GDP growth turns positive in 2017

B: Recession prolonged as in A, and the historical Standard Deviation (SD) of real GDP growth is increased to 2.6

C: Negative GDP shock is much more front-loaded; both the GDP deflator and revenues-to-GDP ratio are also impacted (employing information from IMF (2013a)).

Cypriot public debt is on a highly risky path under current policies. The Troika has imposed a severe recession on the economy, dramatically lowering growth rates. Troika policies have also weakened Cypriot banks. If the recession turns out to be even slightly longer and deeper than forecast by the IM, Cypriot public debt is likely to prove unsustainable. Policy makers would do well to start preparing for such an outcome now.