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## A closer look at public debt service costs and potential strategies to improve sovereign solvency

**This brief note constitutes a supplement to our November 16, 2012 Greece Macro Monitor, which presented an updated analysis on public debt dynamics and the evolution of the general government borrowing needs and sources of funding over the period 2012-2022.<sup>1</sup> The note takes a closer look at the current composition of Greece's public debt stock and its accompanying servicing cost, with the purpose of shedding some additional light on the possibilities that are arguably open to official lenders ahead of the crucial November 20 Eurogroup, as regards: i) ways to finance the government borrowing gap ensuing from the 2-year extension in the country's fiscal consolidation programme; and ii) the introduction of additional debt-reducing operations to help restore fiscal sustainability. While our November 16 report analyzed the evolution of Greece's public debt-to-GDP ratio under a broad range of macro scenarios and assumed debt-relief schemes, this report focuses, primarily, on the present composition of public debt stock, in an effort to provide a preliminary assessment of the scope currently existing in providing additional relief to Greece via official sector involvement (OSI). Although we emphasize that the OSI options presented herein do not necessarily imply a house view on their feasibility, either from a technical or a political standpoint, a number of important conclusions can still be drawn regarding the challenges lying in the way to providing a more credible response to Greece's sovereign liquidity and solvency problems.**

**Table 1** below shows the projected breakdown of Greece's central government debt stock and the estimated service costs of its components as of the end of FY-2012.<sup>2,3,4</sup>

<sup>1</sup> Eurobank Research, Greece Macro Monitor, "Now, more than ever, fiscal sustainability requires stabilization of domestic output dynamics", November 16, 2012.

<http://www.eurobank.gr/Uploads/Reports/GREECE%20MACRO%20FOCUS%20November%2016%202012.pdf>

<sup>2</sup> Table 1 figures for which there is no publically available information constitute authors' estimates.

<sup>3</sup> Our estimate of the overall debt stock at end of this year (Table 1 - line E, column 2) is not far from what is projected at the FY-2013 Budget (€343,203mn or 176.9%-of-GDP) and implicitly assumes that all three EU/IMF loan disbursements initially scheduled for June, September & December 2012 are bundled in a single tranche and released by the end of this year

<sup>4</sup> The figures presented on Table 1 correspond to central government accounts. Note that general government debt (projected in the FY-2013 Budget to reach €340,600mn at the end of this year) adjusts the corresponding central government figure for a number of items including, among others, local, social security funds and intergovernmental debts.

From Table 1, it appears that the most plausible debt components that could be subject to some form of OSI at this stage are: **i)** EU bilateral loans (disbursed under the 1<sup>st</sup> adjustment programme); and **ii)** ECB and Euro area Greek government bond holding acquired under the SMP program or for investment purposes. Note that the interest rates on loans currently provided by the EFSF are fairly close to the mechanism's funding costs. Moreover, it is not clear at this point whether the IMF Board could approve a reduction in their interest rate charges as this would, arguably, raise similar demands from other borrowers.

Table 1 - Greek Central Government Debt Composition (EURmn)

Funding Source	Amount	All-in Cost	Interest	Notes
<b>A. Troika loans (A.1+A.2)</b>	<b>193,250</b>			
A.1 IMF	26,650			[1]
Disbursed already (1 <sup>st</sup> & 2 <sup>nd</sup> programme)	21,700	2.80%	608	
Next IMF disbursements	4,950	2.80%	139	[1.1]
A.2 EU loans	166,600			
EU Bilateral loans (disbursed already, 1 <sup>st</sup> programme)	52,900	1.70%	899	3M Euribor +1.50%
EFSF (disbursed already, 2 <sup>nd</sup> programme)	74,000	2.20%	1,628	[2]
Next EFSF disbursements	39,700	2.20%	873	[2.1]
<b>B. Tbills</b>	<b>14,942</b>	<b>4.30%</b>	<b>643</b>	
<b>C. Greek government bonds - GGBs (C.1+C.2)</b>	<b>118,541</b>			
C.1 Old GGBs	57,725			
PSI hold-outs	6,000	3.95%	237	fixed rate
EA National Central Banks and ECB	45,000	4.50%	2,025	[3] & [4]
Related to preference shares	5,225	1.66%	87	6M Euribor + 1.30%
Related to ETEAN	1,500	0.99%	15	6M Euribor + 0.63%
C.2 New GGBs (post-PSI)	60,816	2.00%	1,216	fixed 2% [5]
<b>D. Special Loans</b>	<b>17,447</b>	<b>2.90%</b>	<b>506</b>	[6]
<b>E. TOTAL (A+B+C+D)</b>	<b>344,180</b>		<b>8,875</b>	

Source: Greece's FY-2013 Budget, IMF, EC (Nov 2012) & Eurobank Research

(For explanatory notes on Table 1 please see Annex at the end of this document)

In view of the aforementioned points, we proceed next with a preliminary calculation of total savings that could be generated by a combination of new operations (OSI) to reduce public debt. For indicative purposes, **Table 2** below assumes a 150bps reduction in the interest rate on EU bilateral loans released under the 1<sup>st</sup> programme as well as the passing on to Greece (via euro area governments) of both the coupon payments and capital gains earned on ECB holdings of Greek government bonds. As per our baseline scenario presented in our *November 16, 2012 Greece Macro Monitor* the overall cumulative general government borrowing requirement in the period 2012-2020 is estimated at ca €59.8bn. This sum is reduced to €40.3bn after the OSI measures depicted in Table 2, with the ensuing cumulative decline in debt ratio being ca 9.5ppts of projected GDP over the corresponding period.

Table 2 - Estimated effect of debt reducing operations

	end-2020
<b>A. Cumulative borrowing gap (2012-2020)</b>	<b>59.8</b>
<b>B. Projected savings realised over 2012-2020 (b1+b2+b3)</b>	<b>19.5 or (ca 9.5ppts-of-projected GDP)</b>
b1. 150bps interest rate reduction in EU bilateral loans (€52.9bn in total) 1/	7.1
b2. coupon payments on ECB-held Greek government bonds (GGBs) passed on to Greece	5.3
b3. implicit capital gains on ECB-held GGBs passed on to Greece	6.8
<b>C. Cumulative borrowing gap (2012-2020) after debt-reducing operations (A-B)</b>	<b>40.3</b>

Source: EC, IMF, Eurobank Research

1/ Measure assumed to be applied retrospectively from 1.1.2012.

***In conclusion,***

Lower interest rates on EA/EFSF loans disbursed under the 1<sup>st</sup> & the 2<sup>nd</sup> bailout programmes may provide a considerable fiscal relief to Greece but may not be adequate enough to facilitate a significant improvement in the country's public debt dynamics from a medium-term perspective. Note that the average effective interest rate on outstanding EU/IMF loans is estimated to be ca 2.15% at the end of 2012, *i.e.*, already at fairly concessional levels.

Any reduction in EU bilateral loans to be decided at the November 20 Eurogroup should probably need to be accompanied by additional debt reducing operations including *e.g.* the passing on to Greece (via euro area governments) of coupon payments and capital gains earned on ECB-held GGBs, debt buybacks and/or other measures, if Greek public debt dynamics are to improve on a more sustainable basis.

**Annex - Explanatory note to Table 1**

1. The IMF loan cost is roughly the weighted average cost of underlying currency Tbills plus a spread of 1%. For amounts which are over a country's quota there is an additional charge of 2%. Finally, for loan amounts outstanding more than 3 years, the all-in-cost increases further by 1%.
  - 1.1 Assumes release of Jun., Sept. & Dec. 2012 IMF loan disbursements take place by the end of FY-2012.
2. EFSF lends to EU countries at a cost which is calculated as the average cost of all funds raised by the EFSF, including Tbills, plus a margin of 15bps.
  - 2.1 Assumes release of Jun., Sept. & Dec. 2012 EFSF loan disbursements take place by the end of FY-2012.
3. Euro area (EA) governments where central banks currently hold GGBs have already agreed to pass on to Greece any coupons accruing on their GGB investment portfolios until 2020.
4. ECB holdings of Greek government bonds (GGBs) are estimated to be €30-35bn. The return of any coupon payments and the difference between the purchase price and par (roughly 20%) could, arguably, be returned back to Greece, through EA governments.
5. New GGB coupon increases to 3% after 2015, 3.65% after 2020 and 4.30% after 2021.
6. Special loans include old BoG loans (5.214 bio), Titlos, old EIB loans, etc

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