



## Greece: Estimating the Potential Recovery of New GGBs

■ Greece's new bonds have been trading for four weeks now and their prices have stabilised at relatively low levels.

■ Here, we estimate some potential recovery scenarios for the new Greek bonds, as most market participants expect another Greek restructuring before 2015.

■ We assess what the potential pool of restructurable debt will be at that point and what the implied recovery of the new Greek bonds will be for different targets of debt/GDP in 2020.

■ Our findings imply recovery figures above the current prices of the new Greek bonds. The split of PSI and OSI in any potential future restructuring is going to be a critical variable. In any case, we see more upside than downside in the current prices of the new Greek bonds.

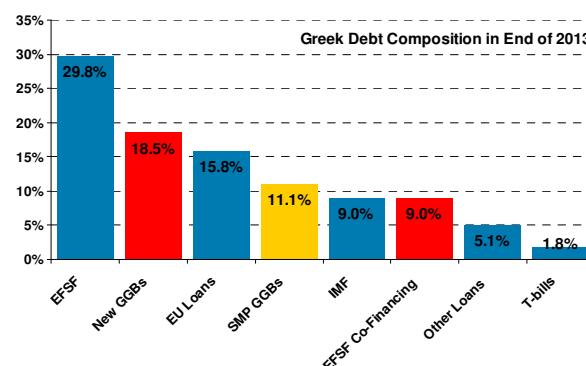
### Recovery Analysis of New GGBs

In the latest official IMF review of the Greek programme (March 2012, *Greece: Request for Extended Arrangement under the Extended Fund Facility*), two macroeconomic scenarios are presented. The first is the baseline scenario under which debt/GDP reaches 116.5% in 2020 and the second is the alternative scenario under which debt/GDP reaches 145.5% in 2020. Under the alternative scenario, a failure to ramp up structural reforms is assumed to hold up the recovery, causing higher unemployment and a deeper recession. Privatisation plans take an additional four years to complete (with proceeds through 2020 reduced by EUR 20bn).

We think Greece will only need to restructure its debt for a second time if the alternative scenario starts to unfold rather than the baseline scenario. We use the macroeconomic assumptions of this alternative scenario to come up with a form of potential recovery analysis in the case of further restructuring. The timing of such an event is also quite important, as the composition of Greek debt changes every time there is a disbursement by the official sector. We assume another restructuring is unlikely within the next one-year period, and for the purposes of this analysis, we assume Q4 2013 as the timing of any such event.

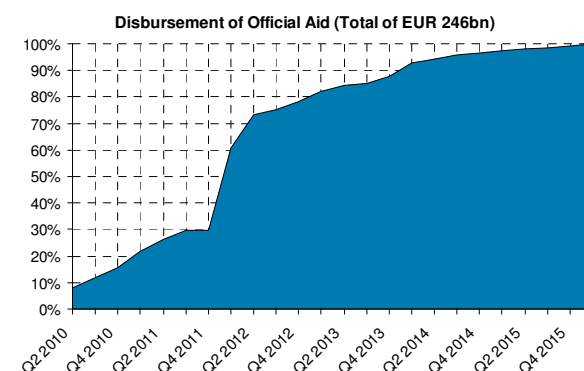
On this basis, we need to carefully examine the composition of Greek debt (Chart 1). The EFSF will have granted more than 90% of its total contribution to the Greek programme by Q4 2013; as we have

**Chart 1: Greek Debt Composition – End of 2013**



Source: BNP Paribas

**Chart 2: Disbursement of Official Aid**



Source: BNP Paribas

discussed in previous research, the disbursement profile is very frontloaded because of the PSI financing needs and the recapitalisation of Greek banks, which will take place in 2012. In terms of overall aid, 88% will have been disbursed by the end of 2013. Chart 2 shows the pace of disbursement in the Greek aid programme, as a percentage of overall aid.

Having made assumptions on the macroeconomic environment and the timing of a potential future restructuring, we need to identify what the pool of restructurable debt will be. The new Greek bonds and the EFSF loans that are part of the co-financing agreement should be the first layer and together they will account for 27.5% of Greek debt, or EUR 92bn. If we want to broaden this group, we could include the SMP's GGBs, which at that time (Q4 2013) would correspond to 11% of the debt. Adding this to the restructurable pool of debt increases it to 38.6% of overall debt, or EUR 129bn. Finally, if we want to



have full OSI (official sector involvement), we could also include the bulk of EFSF loans, broadening the restructurable pool to 68.3% of total debt, or EUR 228.7bn. Bilateral EU loans (EUR 53bn) and IMF loans are considered “senior” to the rest of the debt and are, therefore, very unlikely to be restructured at any point. To summarise, then, the three potential pools of restructurable debt, ranked by increasing degree of OSI, would be as follows:

**Pool 1:** New GGBs (EUR 62bn) + EFSF co-financing loans (EUR 30bn) = EUR 92bn, or **27.5%** of debt

**Pool 2:** Pool 1 + SMP's GGBs (EUR 37bn) = EUR 129bn, or **38.6%** of debt

**Pool 3:** Pool 2 + EFSF loans (EUR 99.7bn) = EUR 228.7bn, or **68.3%** of debt

The next question has to do with the goal of any such debt restructuring. The aim of the PSI deal was to bring debt/GDP below 120% in 2020, and the final projection under the baseline scenario is 116.5%. The alternative scenario envisages a debt/GDP ratio of 145.5% in 2020.

We assume three different debt/GDP targets for 2020 for our debt restructuring analysis: (i) **a mild target**, bringing debt back in line with the baseline scenario of **116.5%**, (ii) **a medium target**, bringing debt down to **100%** and (iii) **an aggressive target**, bringing debt down to **80%**. All these targets are based on the projected debt/GDP ratio in 2020 under the macroeconomic assumptions of the alternative IMF scenario.

The equation we are trying to solve here is what the required debt reduction would be in terms of pool of restructurable debt under the various scenarios, so as to hit each of the three debt/GDP targets above. A narrower pool of restructurable debt would imply a much lower recovery rate, as the required debt reduction would apply to less debt.

Table 1 and Chart 3 summarise our findings. In order to reach a debt-to-GDP ratio of:

- i) 116.5% in 2020, there would have to be **EUR 58.5bn** of debt reduction at the end of 2013
- ii) 100% in 2020, there would have to be **EUR 91.6bn** of debt reduction at the end of 2013
- iii) 80% in 2020, there would have to be **EUR 131.6bn** of debt reduction at end of 2013

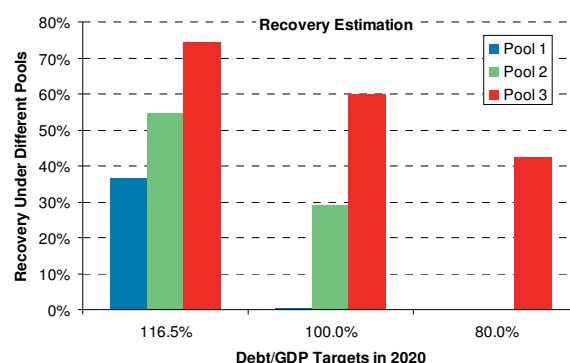
These debt-reduction figures imply different recovery rates depending on the pool of restructurable debt we use. For the smaller pool 1, the recovery is 36.4% for a debt/GDP ratio of 116.5% in 2020, almost 0%

**Table 1: Recovery Estimates and Assumptions**

2020 Debt/GDP Target:	Required Debt Reduction in 2013 (EUR bn)	Pool 1: New GGBs + Co-Financing: EUR 92bn		Pool 2: Pool 1 + SMP's GGBs: EUR 129bn		Pool 3: Pool 2 + Bulk of EFSF Loans: EUR 228.7bn	
		Haircut	Recovery	Haircut	Recovery	Haircut	Recovery
116.5%	58.5	63.6%	<b>36.4%</b>	45.3%	<b>54.7%</b>	25.6%	<b>74.4%</b>
100.0%	91.6	99.6%	<b>0.4%</b>	71.0%	<b>29.0%</b>	40.1%	<b>59.9%</b>
80.0%	131.6	143.0%	-	102.0%	-	57.5%	<b>42.5%</b>

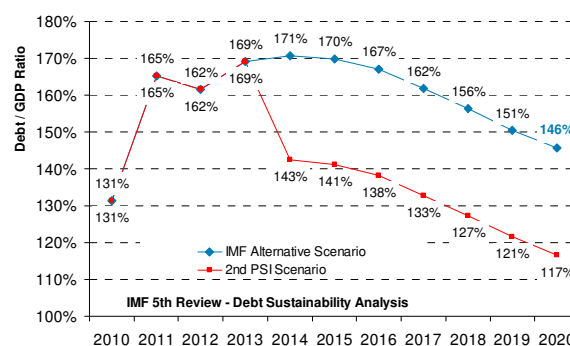
Source: BNP Paribas

**Chart 3: Recovery Estimates per Pool**



Source: BNP Paribas

**Chart 4: Alternative Greek Debt Trajectories**



Source: BNP Paribas

for a debt/GDP ratio of 100% and zero for a debt/GDP ratio of 80%. In the latter case, there is actually a need for additional OSI, as the required debt reduction is higher than the outstanding debt amount in pool 1. For pool 2, the recovery is 54.7% for a debt/GDP ratio of 116.5% in 2020, 29% for a debt/GDP ratio of 100% and zero for a debt/GDP ratio of 80%. Finally, for the extended pool 3, recovery is as high as 74.4% for a debt/GDP ratio of 116.5%, almost 60% for a debt/GDP ratio of 100% and 42.5% for a debt/GDP ratio of 80%.



As the private sector has already incurred a 21.5% recovery in NPV terms in the current PSI (53.5% in face value terms), we would expect either a target of 116.5% debt/GDP if the pool of restructurable debt were restricted to pool 1, or a broadening of the restructurable pool to the predefined pools 2 or 3 if the debt/GDP target were set lower at 100% or 80%. We could, in fact, go as far as to say that pool 2 would be more likely to be used if the target were 100% and pool 3 if the target were 80%. This would put the likely recovery range at **29% - 42.5%**.

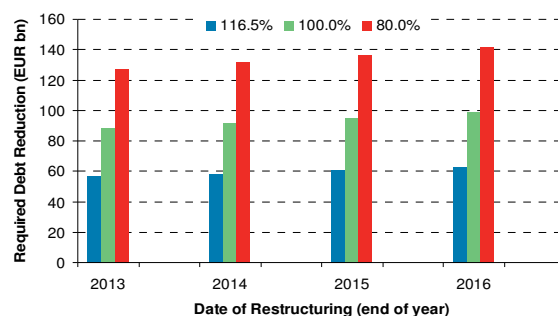
These levels are much higher than the current prices of the new GGBs, explaining why we see more upside than downside for the new Greek bonds at these market levels. Of course, our analysis is based on several assumptions, the most fundamental of which is that Greece stays in the eurozone. It also assumes flat recovery between the private sector and the official sector for pools 2 and 3. For pool 1 this is not an assumption, but a fact, because of the main rules governing the co-financing agreement between the new Greek bonds and the EUR 30bn of EFSF loans.

Finally, Chart 5 shows that the earlier any potential second restructuring takes place, the lower the required debt reduction will be. This is a simple function of debt-servicing costs, as if you haircut your debt further in 2013, debt-servicing costs in 2013-20 will be lower than in a scenario in which you haircut your debt in 2016. There would be additional implications for pools 2 and 3; as time goes by, the SMP's GGB holdings are replaced with EFSF/IMF loans. Pool 1 would not be affected by this, as both the new Greek bonds and the EFSF loans tied to the co-financing deal have long-term maturity profiles.

Chart 6 shows the trading range of the new GGBs since their launch on 12 March 2012. The current price range is 18.5-22.5, implying an inverted yield curve with yields in a range of 17-21%. In the early days of trading, the long end was close to 24 and the front end (actually the 2023-24 maturities) at more than 27 (Chart 6). At these levels, Greek bonds are trading at a yield pickup of 900bp over PGB 2023 and 740bp over PGB 2037. The PSI package as a whole is trading at around 21.2 cents, with 15 cents coming from the EFSF notes, 6 cents from the New Greek bond strip and 0.2 cents from the GDP warrants (Chart 7).

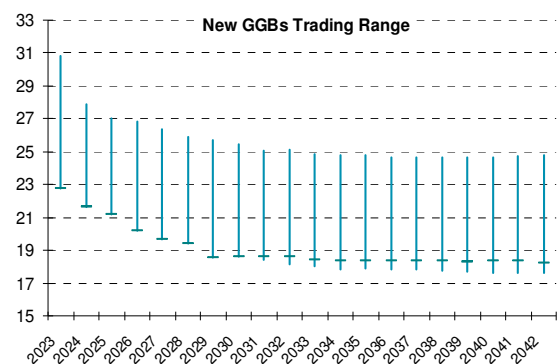
Clearly, current prices are being affected by the upcoming Greek elections and the tricky issue of the treatment of Greek foreign-law bond holdouts. We think the political risks are being overstated by the recent polls, and we see a coalition between the New Democracy and PASOK parties as the most likely scenario. This would be the most euro-friendly

**Chart 5: Sensitivity to the Timing of Any Potential Second Restructuring**



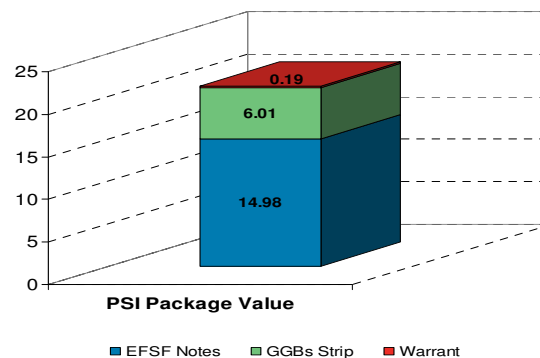
Source: BNP Paribas

**Chart 6: New GGBs Trading Range**



Source: BNP Paribas

**Chart 7: PSI Package Value Breakdown**



Source: BNP Paribas

outcome. The treatment of the holdouts is a potential bad-headline risk for Greece, but it should not affect the new Greek bonds or the implementation of the new EU/IMF programme, in our view.

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