

ENDING THE GREEK CRISIS

Debt Management and Investment-led Growth

SUMMARY

The Greek government has recently presented the institutions with its comprehensive reform proposals for completing the final review of the current loan agreement.¹

Moving forward, Greece requests a follow up arrangement that will ensure its speedy return to the money markets and its economy's return to significant growth. The Greek authorities propose two sets of policies for achieving this twin goal: a proposal concerning re-financing part of Greece's sovereign debt (without haircuts and without new monies for the Greek state) and a second proposal on how investment funding for the private sector can be crowded in.

TABLE OF CONTENTS

1. Debt Management
2. Investment-led Growth

APPENDIX 1 – Requirements for stabilising Greece's Debt

APPENDIX 2 – Re-profiling of longer term debt repayments

APPENDIX 3 – Effect of the Greek authorities' proposal on sovereign debt sustainability (DSA)

Debt Management and Investment-led Growth

1. Re-financing

Greece's public debt is mostly owed to the official sector. In order of magnitude, Greece's official debt is owed to: (i) ESM-EFSF, (ii) ECB, (iii) the IMF, and (iv) other EU governments (the Greek Loan Facility program, GLF, dating back to the first program signed in May 2010).

- i. Maturities of the ESM-EFSF and GLF loans are long-dated and the effective interest rate is not high.
- ii. Greece's debt to the ECB (stemming from the SMP bonds purchased by the ECB in 2010/1) is short term and thus creates a funding gap in the short and medium term. Moreover, it prevents Greece's participation in the ECB's quantitative easing program (as it pushes the ECB's holding of Greek bonds below the one-third maximum threshold).
- iii. The IMF repayment schedule spikes during 2015, the year when recovery must set in.

In view of the above, the Greek authorities propose that (ii) and (iii) are re-financed through the ESM by means of a simple operation that is fully consistent with the ESM's rules (see

¹ See separate document entitled 'Agreement on the Economic Policy & the Reforms of the Period 7/2015-3/2016 and the Completion of the Current Program'

below). Since not one extra euro will be received by the Greek state, *Greece and its partners must agree that the conditionalities for this new ESM loan must be the same as the conditionalities for completing the final review of the on-going program* (as per the Greek government's reform proposal – see footnote 1)

POLICY 1 – SMP BUY-BACK: Greece acquires a new liability to the ESM that allows SMP bonds to be bought back from the ECB. Once they are bought back from the ECB, Greece retires these bonds.

Cost of Policy 1: Greece will acquire a new liability to the ESM equal to the full face value of the remaining SMP bonds – that is, 27 billion euros. Thus the ECB is repaid in full for the remaining SMP (in a lump sum). Greece will have extinguished a short-term debt to the ECB of a face value equal to 27 billion and will acquire, in return, a new liability of the same face value to the ESM.

Benefits of Policy 1: As ESM debt is long-dated and bears a low interest rate, while no new monies are lent to Greece for use by the Greek state, Greece reduces significantly its effective interest rate, eliminates a large part of its funding gap and, crucially, becomes eligible to participate in the ECB's quantitative easing program (which brings forward its return to the money markets).

POLICY 2 – IMF PARTIAL BUY-BACK: Once the ECB SMP bonds have been repaid (see Policy 1 above), the ECB will return to Greece the 'profits' (approximately 9 billion euros) it made due to having purchased them below par initially (as per the existing arrangements for returning to Greece the ECB's SMP program 'profits'). Greece uses up this sum to repay, in part, its remaining debt to the IMF (19.96 billion). The remaining debt to the IMF (approximately 11 billion) is refinanced through a combination of regained market access and IMF disbursements. (Nb. Under the current IMF Greek program, Greece has 16 billion outstanding disbursements.) The IMF continues to provide its technical expertise but its funding commitments are reduced.

Cost of Policy 2: No cost to Greece's creditors.

Benefits of Policy 2: Greece repays part of IMF debt early (through the return of SMP profits) thus improving Greek debt's sustainability and reducing the IMF's exposure to default.

POLICY 3 – RE-PROFILING GLF-EFSF LOAN FACILITIES: Elongating and GDP growth-indexing the GLF and EFSF components of Greek public debt to: (a) eliminate the funding gap in 2022 and 2023, and (b) provide insurance to Greece in case of deviations of its growth rate around its trend levels (See Appendix 2)

Cost of Policy 2: No cost to creditors if Greece stays on average on its trend growth rate. If growth exceeds (falls short of) expectations consistently, creditors stand to gain (lose).

Benefits of Policy 2: Investors will recognise a new reality in which Greece's creditors have become partners in Greece's growth (See previous paragraph – 'Cost of Policy 2')

2. Investment

Greece's economy needs to be kick-started. While long-term recovery will need to be financed privately, getting the flow of investment funding going will require an initial boost. It will also require a vehicle for dealing efficiently with the voluminous non-performing loans that currently block the credit system.

POLICY 4: SPECIAL EIB PROGRAM FOR GREECE: The European Council gives the ‘green light’ to the European Investment Bank to embark upon a *Special Investment Program for Greece* that is fully funded by a special issue of EIB bonds (waiving the requirement of national co-funding), with the ECB providing secondary market coverage for the latter (in the context of its QE program) – to be administered by the EIB and the EIF in cooperation with a new public DevBank, in collaboration with EFSI, the Hellenic Investment Fund, the EBRD, KfW and other European investment vehicles, and in conjunction with new privatisations (e.g. ports, railways)

Cost of Policy 4: No cost to taxpayers or for Greece’s creditors. EIB operates on purely banking criteria and, on this occasion, stands to benefit from Greece’s rapid economic growth and rise in asset prices.

Benefits of Policy 4: The ‘announcement effect’ of Policy 3 (even before any investment funding is provided), especially when combined with the other policies, will be to crowd in substantial investments and, inevitably, to investment-led growth.

POLICY 5: BANKING ASSET MANAGEMENT VEHICLE: Set up a vehicle to manage efficiently the banking sector’s voluminous non-performing loans.

Cost of Policy 5: It will depend on which tranches of the banks’ non-performing loans are swapped with the new vehicle’s assets. The Greek government envisages that the seed capital will be provided from the HFSF’s remaining funds.

Benefits of Policy 5: First, the state’s equity in the banks stands to appreciate sharply. Secondly, credit will begin to flow again, adding to the recovery brought about by Policies 1,2&3.

APPENDIX 1 – REQUIREMENTS FOR STABILISING GREECE’S DEBT

Debt sustainability is about keeping the Debt-to-GDP ratio under control. This typically requires that the deficit is low enough to guarantee that, given the growth rate, the debt ratio is constant or falling. An economy with zero (nominal) growth needs a balanced budget. Negative nominal growth, which has been Greece’s case since 2009, requires an increasing primary surplus just to keep the Debt-to-GDP rate constant. However, with positive nominal growth, some deficit is consistent with solvency; all that it takes is for the debt to grow less rapidly than nominal GDP.

In the case of Greece where the debt-to-GDP ratio stands at 175%, while nominal GDP is shrinking, the most pressing need for a return to nominal GDP growth. Allowing for a medium term, conservative, growth rate of 3% in nominal terms the benchmark deficit (beyond which debt is unsustainable) is 5.25% of GDP (=3%*1.75).² This deficit target has already been achieved – which means that Greece’s debt needs only a positive nominal GDP growth rate to be stabilised.³

In other words, a 3% deficit is well within the boundaries of debt sustainability as conventionally defined. Given the interest bill, of about 4.5% of GDP, a primary surplus of 1.5% is fully consistent with the stabilisation of the Debt-to-GDP ratio at the current levels.

Debt sustainability analysis (DSA) exercises (such as shown in Appendix 1) reveal that maintaining the current cyclically adjusted primary surplus at around 1% to 1.5% until the effective primary surplus

² Deficit = (Debt-to-GDP ratio) times (Nominal Growth Rate)

³ In 2014, the deficit fell under the Maastricht benchmark of 3%. In structural terms, correcting the measure of the deficit for the output gap, Greece is actually engineering a fiscal surplus (up to 1.6% of GDP according to the IMF).

reaches 2.5%, and maintaining this level constant forever after, is clearly sufficient to restore Greece's solvency over the long run.

Of course, significantly to reduce Greece's Debt-to-GDP ratio (and thus propel Greece back to the money markets within months), the effective interest rate must come down significantly; from 4.5% to something closer to 1%-1.5%. A series of smart debt swaps that achieve this at negligible cost to the creditors is presented below.

APPENDIX 2 – RE-PROFILING OF LONGER-TERM DEBT REPAYMENTS

A2.1 Greek Loan Facility (GLF) Loan Segment

The GLF dates back to the first loan agreement (May 2010). It is a complex multiple bilateral loan agreement between Greece and each of the Eurozone member-states and it is unique to Greece (unlike the EFSF loans that were also extended to Portugal, Ireland, Spain and Cyprus).

The GLF slice of Greece's debt would be well suited to restructuring: The interest rate is floating, based on the Euribor 6M and the creditors could lock in the current low rates into much longer maturities.

Re-structuring GLF through longer maturities

Ideally, from the perspective of both Greece and the member-states that have lent it GLF monies, the GLF loans should be transformed into a perpetual bond bearing a 2%-2.5% interest rate. It would be ideal for Greece because it would avoid any refinancing risk. And it would be ideal for creditor states because of the relatively large interest rate it would bear.

In case a perpetual bond proves difficult politically/legally, an alternative would be to lengthen the GLF debt to 100 years, with minimal principal payable upon maturity. Even a full principal repayment would lighten the load of this GLF debt upon Greece without imposing significant losses on the creditor member-states.

dYfdYh U"VcbXg 1

Re-structuring GLF through GDP Indexed Bonds

GDP indexed bonds have already been introduced in the PSI debt exchange in 2012. The merit of nominal GDP indexed bonds is to lower the risk of volatility and ensure that debt sustainability becomes slowdown-proof, as debt repayments are reduced pro-cyclically during downturns and sped up during an upturn.

Two options are available. One is to link the interest payment of the debt to nominal GDP growth rates (Nb. This was the approach embedded in the PSI bonds) (See Appendix 2)

Another method could be to index the principal debt redemption to nominal GDP. Debt repayments could be automatically suspended during years following nominal growth rate below a certain (low) threshold. Cumulatively that would reduce debt repayments if nominal GDP (in absolute terms) failed to reach a certain level by a certain point in time – e.g. 2022).

GDP-indexing was already included in the 2012 PSI

In March 2012, the PSI bonds were issued together with separately tradable warrants providing for certain payments indexed to Greece's real GDP growth as follows. The warrants have an aggregate notional amount ("Notional Amount") equal to the aggregate principal amount of the PSI bonds with which it is issued. The GDP securities were issued as a single instrument.

Subject to the conditions below, Greece will make a payment to all holders of outstanding warrants in each year beginning in the year 2015. Starting in 2015 and each year thereafter to and including 2042, Eurostat will publish the nominal GDP in euros and the real rate of growth of GDP (Actual Real Growth Rate) for the preceding calendar year ("Reference Year"). Greece will be obligated to make payments to all holders of warrants (as described below) if and only if each of the two conditions set forth below is satisfied:

- (1) Nominal GDP for the Reference Year exceeds the "Reference GDP" projected by the EuroWorking Group for that year,
- and**
- (2) The Actual Real Growth Rate for the Reference Year is positive and exceeds the real growth rate projected by the EuroWorking Group (the "Reference GDP Growth Rate"), provided that for purposes hereof, beginning with the Reference Year 2021, if the Actual Real Growth Rate for the calendar year preceding the Reference Year is negative, the Actual Real Growth Rate for the Reference Year shall be deemed to be the cumulative (i.e. the sum of) Actual Real Growth Rate for both years.

In the event that conditions (1) and (2) are satisfied, Greece will pay to each holder of outstanding warrants an amount equal to the GDP Index Percentage of the Notional Amount. The GDP Index percentage shall be an amount (expressed as a percentage) not to exceed 1.00%, equal to 1.5 times the amount by which the Actual Real Growth rate exceeds the Reference GDP Growth Rate.

By way of example, if the Actual Real Growth Rate for calendar year 2020 is -0.3% and the real growth rate for the Reference Year 2021 is +2.6%, the Actual Real Growth Rate for the Reference Year 2021 shall be deemed to be 2.3% (-0.3% +2.6%), and the payment due in 2022 in respect of the Reference Year 2021 shall be equal to 0.45% ($1.5 \times (2.3\% - 2\%)$) of the Notional Amount.

A2.2 European Financial Stability Facility (EFSF) Loan Segment: Splitting the EFSF debt in two

The EFSF loans are less flexible than the GLF. To the extent that the EFSF had to borrow on the market the corresponding amounts that it granted to Greece, at an average rate of about 2.5%, its funding cost is already locked in.

One way to proceed, however, would be to split Greece's debt obligations (except for the part which is under a co-financing agreement) into two instruments: half of it would be a 5% interest bearing instrument, and the other half would be a series of non-interest bearing instruments (zero coupon bonds), repaying the other 50% principal at maturity.

The merit of making explicit the concessionality of the debt is to allow for a wider range of options. The liability management exercise would then focus on the long-term non-interest bearing assets.

Ideally, the creditors should simply cancel, in a phased fashion, the part that carries no coupon. In real economic terms, they would lose little, only the market value of the non-interest bearing bonds and would still cash the amount of interest originally due.

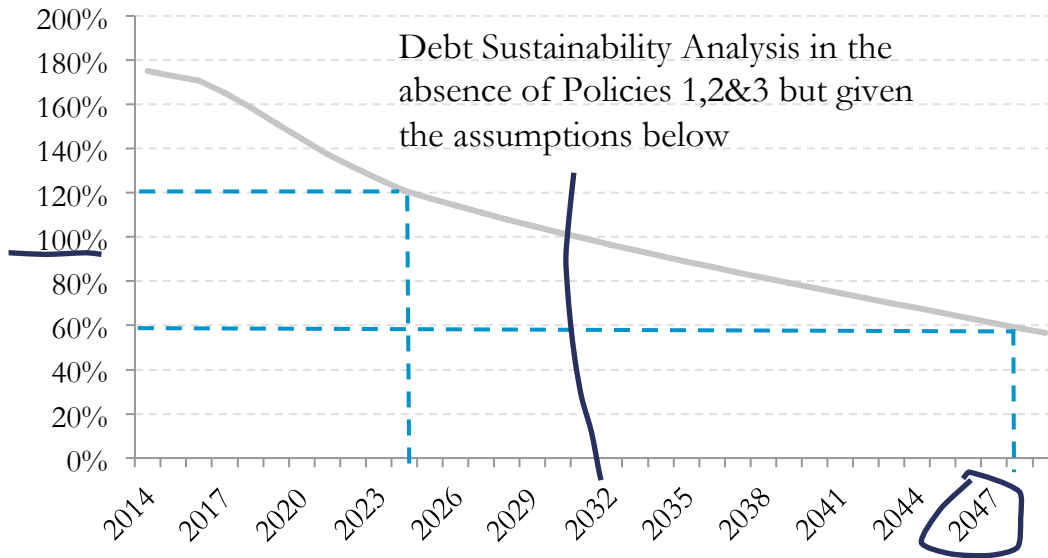
From the creditors' view point this approach would have two merits:

- It would give them time to provision for the EFSF losses, especially if the debt has been initially lengthened to say 50 years (in NPV terms, the market loss could amount to 50% of face value, or about 25 billion). Here the creditors will be willing to lengthen the maturity as it reduces their losses!
- It keeps Greece under the pressure of honouring a significant primary surplus, as the debt service remains high

From Greece's perspective, such a move would reduce significantly (up to 50%) the face value of the EFSF debt, speeding up even further Greece's return to the money markets.

APPENDIX 3 – EFFECT OF THE GREEK AUTHORITIES’ PROPOSAL ON GREEK SOVEREIGN DEBT SUSTAINABILITY (DSA)

The following analysis illustrates the trajectory of Greece’s sovereign debt if the proposed debt operations (see Policies 1,2&3; and Appendix 2) are adopted, even under circumstances where the primary surplus fails to rise above 2.5%: Greece could lower its debt-to-GDP ratio to 93% in 2020 and further down to 60% by 2030. This result, especially if combined with Policies 3&4 and reform agenda agreed between the Greek government and the institutions, should return Greece to the money markets well before the end of 2015.



Year (end of period)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Nominal GDP (€bn)	181,9	178,8	182,4	189,2	197,5	207,1	217,2	228,6	241,1	254,3	267,4
Output Gap (% of potential GDP)	-10,30%	-11,5%	-11,1%	-9,6%	-8,2%	-6,8%	-5,4%	-4,0%	-2,6%	-1,1%	0,0%
Potential GDP	202,8	202,1	205,2	209,3	215,2	222,1	229,5	238,1	247,4	257,2	267,3
Real Potential GDP Growth (%)	-	1,5%	1,5%	1,6%	1,7%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
Real GDP growth (%)	-	0,1%	2,0%	3,3%	3,3%	3,5%	3,4%	3,4%	3,4%	3,4%	3,1%
GDP deflator (%)	-	-1,8%	0,0%	0,4%	1,1%	1,3%	1,4%	1,8%	2,0%	2,0%	2,0%
Primary balance (%GDP)	-	0,8%	1,0%	1,7%	2,4%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%
Cyclically adjusted Primary Balance (%Pot GDP)	-	5,7%	5,7%	5,7%	5,7%	5,2%	4,7%	4,1%	3,5%	3,0%	2,5%

