Economist Insights

An unsustainable truth

In 2010, debt sustainability analysis of Greek debt relied on several heroic assumptions to conclude that Greek debt was sustainable. These assumptions had to be revised with Greece's second bailout in 2012, when there was a partial admission of unsustainability. Now Eurozone leaders are discussing the third bailout. What measures will need to be discussed to alleviate Greece's debt burden?

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When someone refuses to face up to a problem, they are often told not to 'stick their head in the sand' like an ostrich. Although this saying has been in use since Roman times, ostriches do not actually bury their head in the sand to hide from or ignore danger. Economists are hopefully more intelligent than ostriches, and usually don't bury their heads in the sand. However, they are quite likely to bury their head in their assumptions. Relying on rather unrealistic assumptions allows them to ignore or postpone a problem. The recent discussion about Greek debt is a classic example.

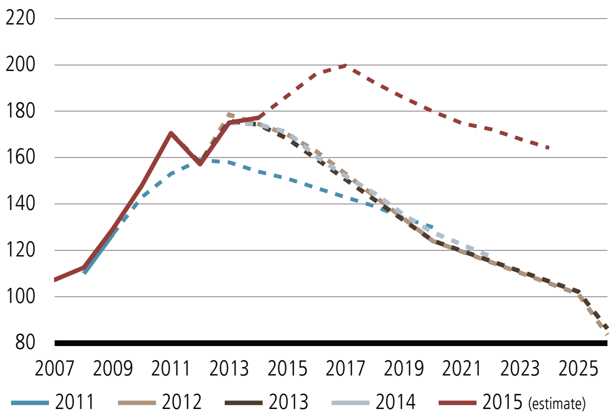
Assessing the future fiscal sustainability of a country relies on a debt sustainability analysis (DSA). This sounds very scientific, but it relies on a number of heroic assumptions about the future. These range from the future path of interest rates to the impact of structural reform to the rate of potential growth. And of course, especially in the case of Greece, the willingness of the government to stick to its promises.

Back in 2010, when Greece received its first bailout, the so-called 'Troika' (the International Monetary Fund, the European Commission and the European Central Bank) refused to acknowledge the likely unsustainability of Greek debt. Instead they relied on a set of economic and political assumptions that pointed towards sustainability. For example, assuming that severe austerity would lead to only a mild recession. Or assuming that the Greek government would successfully implement structural reforms. These assumptions had Greek debt peaking at 160% of GDP in 2012 and falling rapidly thereafter (chart 1). In reality, Greek debt continued to rise and has yet to peak even today.

To be fair, in 2010 it made political sense to choose assumptions that made Greek debt appear sustainable. Declaring Greece to be insolvent would have triggered uncontrollable contagion in other vulnerable Eurozone economies, potentially leading to a collapse of the single currency. At the time there was no European backstop such as the European Financial Stability Facility (EFSF) or European Stability Mechanism (ESM), and direct intervention by the ECB was out of the question.

Chart 1: Debt un-sustainability analysis

IMF's projection of Greek debt under each of the adjustment program reviews (% of GDP)



Source: IMF, UBS Global AM

A partial admission that Greek debt was unsustainable came in 2012, when Greece was given a second bailout. But this time private investors were forced into a 'voluntary' restructuring of their debt, taking a haircut of more than 70% in the process. This might have resolved Greece's debt problem, except that too much of the Greek debt was held by the official sector and was therefore not subject to the haircut. But at least there was an acknowledgement that the terms of the official sector loans were too harsh, and these were amended. The interest rate on the loans was significantly reduced, the maturity was extended considerably and a grace period of no payments for 10 years was introduced.

The private sector haircut and public sector terms seemed to work well enough in the short term, and at least avoided an increase in Greek debt over the near term. Nevertheless to bring debt down from the new expected peak of 180% of GDP to a sustainable level you would still need a combination of low interest rates, rapid economic growth and huge government budget surpluses. While not an impossible scenario, it was clearly improbable based on history. A further round of debt relief would have been more plausible.

The fiscally and economically disastrous government of Syriza has made things worse. If not for the deterioration in Greek public finances since they were elected at the start of the year, it might have been possible to kick the can down the road for a few more years and keep pretending that debt was sustainable. As the recent IMF DSA argued, if Greece had met all its commitments no further debt relief would have been needed, at least for now. The drop in interest rates that followed from the ECB's quantitative easing programme would have helped a lot, reducing debt by 9% of GDP by 2022.

But now the damage is done, and Eurozone leaders will almost certainly have to consider some way to alleviate the debt burden as they discuss the new, third, bailout programme. After the default there is not much private sector debt left; marketable debt amounts to about 45% of GDP, or about quarter of the total. That just leaves debt owed to the official sector.

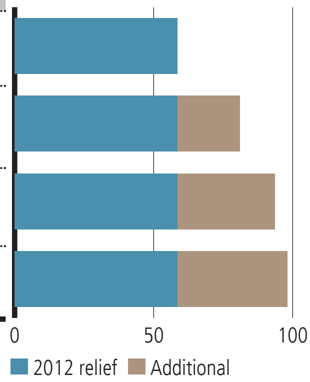
But a haircut to public sector debt is fraught with political and legal obstacles. Politically, it is hard to persuade the electorate in the core of the Eurozone that they should lose money to help out Greece. So a more veiled approach will be necessary.

As with any loan, looking at the total amount can be misleading; the repayment conditions are crucial. Official loans are cheaper in terms of interest rates than the market would provide, and more generous in terms of repayment period. So a better measure of the debt burden that will capture that difference is the net present value (NPV) of the debt stock. The NPV is the current discounted value of future principal and interest payments. The further out the payment is, the less of a burden it is. The difference between the current value of the loan and its NPV is known as the grant, and reflects the concessions that the official sector is providing.

Chart 2: Extend and pretend

NPV of Greek debt after the 2012 debt relief and under different assumptions for further debt relief (% of 2013 GDP)

	Rate reduction	Maturity extension	Grace period
2012 relief	250 bp	10y	20y
Moderate	50 bp	+10y	+10y
Large	50 bp	+50y	+25y
Extreme	50 bp	+100y	+50y



Source: IMF, Wall Street Journal, Eurostat, UBS Global AM
Note: We assume an average borrowing cost for Greece of 6%. The net present value refers to the sum of the Greek Loan Facility and EFSF loans. Following the current framework, the grace period for the Greek Loan Facility is on the principal payments only while for the EFSF loan it is on both the principal and interest payments.

So the NPV of Greece's debt could be reduced by lowering the interest rate, extending the repayment period, prolonging the grace period, or some combination of the three. Given that the IMF will not participate in any debt relief, it makes sense to just focus on the European loans.

Greece benefitted substantially from the debt relief granted in 2012. The implicit saving from the loan margin, the large maturity extension and grant period led to a NPV saving of about 55% of Greek GDP (chart 2). Given that the interest rate on the Greek loans is close to its financing cost, there is very little room for more rate reduction. However, there is still plenty of space in terms of maturity extensions and grace period. If we assume a further reduction in the loan rate of 50 bps, an extension of the debt maturity to 100 years and a grace period of 50 years (effectively the loan becomes an almost perpetual bond), the savings could rise to close to 100% of 2013 GDP.

To be fair, there is a real financial cost to the rest of the Eurozone given that the EFSF and the European countries have to borrow money on the market and cannot benefit from a grace period from their lenders. However, it is veiled because Eurozone politicians can still say that Greece owes the same total nominal value of debt. So it is not politicians and economists sticking their head in the sand, as much as an attempt to stick their electorates' head in the sand instead.

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