# Greece, the unbearable heaviness of debt

# [Paolo Manasse](http://www.voxeu.org/index.php?q=node/5339) 24 May 2011, VOX.EU

*For a long time analysts have been arguing about whether Greece will default on part of its debt – leaving its creditors to take a “haircut”. This column argues that this prospect is becoming more and more likely.*

Many analysts long ago predicted that Greece would have to default on part of its debt or, as they say in the markets, investors would have to take a “haircut.”[1](http://www.voxeu.org/index.php?q=node/6553#fn1) It looks like they are getting closer to being right.

On 9 May 2011, Standard & Poors downgraded the Greek debt by reducing its ratings from BB- to B, for the long term, and from B to C, for the short term. The downgrade reflects

* the fact that the fiscal target (a reduction of the fiscal deficit to 9.6% of GDP) was not met (the deficit was 10.5%) and
* the opinion that the Greek debt is unsustainable.

S&P says estimates that a 50% "haircut" in the value of the debt may be required to restore solvency.

In fact, there seems to be a wide agreement among economic commentators that a restructuring of the Greek sovereign debt is inevitable, so it is no coincidence that the rumors of a new loan (€60 billion) to Greece, circulated two weeks ago by the Wall Street Journal, turned out to be void of content.

A new loan may perhaps buy some extra time for Greece, but it would hardly change the substance of things. At present, the only alternative to debt restructuring, ruling out an inflation bout that would require leaving the euro, seems to be a strong, albeit unlikely, rebound in growth. Here's why.

A national debt is sustainable when it doesn’t grow faster than GDP (so the debt-to-GDP ratio is stable or falling). The arithmetic of this is straightforward. The numerator, debt measured in euros, grows from two sources: interest payments on the outstanding debt stock and the primary deficit (covered by the issuance of new debt). The denominator, GDP measured in euros, grows due to inflation and real growth.

For Greece, the preliminary data for 2011 that must be plugged into the formula are discouraging. The primary deficit (i.e. the deficit leaving aside interest on the exisiting debt) of about 5% of GDP, an average interest rate of around 4.5% (an optimistic estimate by the Greek Economic Minister Papacostantinou), an inflation rate of 2.6%, and a negative growth rate of about 3%. Given the existing debt ratio of 150%, these numbers imply that the Greek debt-GDP ratio would grow forever and thus is unsustainable.

# What would it take to make it sustainable?

There three main policy tools for making Greece’s debt sustainable:

* lowering the interest rate on the debt,
* turning the primary deficit into a primary surplus, and
* writing down the value of the existing debt stock (i.e. defaulting, or putting it more politely, restructuring).

To think about the likely outcome, we can calculate how big the fiscal adjustment would have to be given various assumptions on the interest rate and debt stock.

First consider the situation with no lowering of the interest rate and no restructuring. The formula tells us that without restructuring or a reduced interest rate, the Greek government would have to engineer a budget surplus of about 7.5% of GDP from the current position of a 5% deficit. That sort of fiscal retrenchment has been known to cause riots if done in a single year. If it is spread out, then the eventual retrenchment has to be even bigger since the debt stock would be rising in the meantime.

Plainly, a new €60 billion loan from the EU and/or IMF would be of little help. Assuming it was on concessionary terms (say 2 percentage points below today’s average), Greece’s interest payments would fall, but not by much since the €60 billion is only a fifth of the outstanding debt. The impact on the average interest rate would be tiny – about 40 basis points. In this scenario, the debt-stabilising budget surplus would still need to be 6.9%. Again, switching from 5% in the red to 6.9% in the black seems poitically impossible.

The picture looks very different for the sceond option – restructuring plus new money at a concessionary rate. Running the numbers for a Greek partial default – say a “haircut” of 40% of the debt’s face value – we see things would be much more feasible. The formula tells us that the stabilising primary surplus would have to be a little over 4% GDP. Even this, however, would require monumetal swings of the fiscal axe.

The magic-bullet solution would be renewed GDP growth. This is the only realistic option for avoiding a default. If growth could be revamped into positive territory and stabilised there at say 1%, Greece would have to engineer a primary surplus of a meagre 1.3%.

Needless to say, the Greek government isn’t the only one to wish for faster GDP growth. The trouble is that wishing and happening have proven to be persistently divergent things when it comes to econonmic growth. More to the point, markets do not seem to believe that the wish will come true.

# References

Baldwin, Richard (2010), “[A re-cap of Vox columns on the Eurozone crisis](http://www.voxeu.org/index.php?q=node/5034)”, VoxEU.org, 13 May.

# 1 See a summary of various Vox columns in [Baldwin (2010)](http://www.voxeu.org/index.php?q=node/5034).