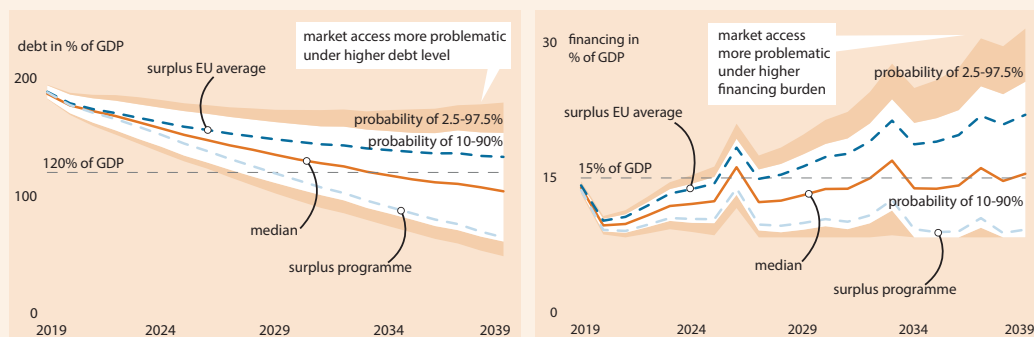


Additional package on Greek debt probably necessary

Will Greece be able to look after itself, financially, following the third financial support package? The package will see them through to 2018. If private lenders are willing to lend to Greece against an interest rate that Greece can afford to pay over longer periods of time, the country can manage its own financial needs. However, if there is substantial risk of Greece not meeting these obligations, then lenders are not willing to extend these loans. This appears to be the current situation and, therefore, a further package is likely to be necessary.

These risks are shown in a simulation of the Greek debt level and financing needs (a). Starting point of the simulation is the situation in 2018 as expected in the current package between Greece and the authorities concerned (hereafter: the programme) (b,c). From 2018, the simulation uses certain assumptions on the Greek primary budget surplus, market interest rates and economic growth. The analysis deviates from the programme on three issues. It works with more cautious assumptions for the long term; lower expected revenues from privatisation (500 million euros per year, conform IMF (e, p4), up to and including 2038, instead of 43 million in 30 years); a lower primary budget surplus (1.75% of GDP, the mean of the various averages over the past twenty years of the EU Member States of 0% of GDP and the surplus target of 3.5% of GDP in the programme); and a slightly lower long-term growth (1.5% per year, conform IMF, instead of 1.75%). In addition, the simulation presents the uncertainty around the central pathway. When the state of public finances remains critical, economic setbacks can lead to unfavourable interest rate dynamics. By showing the distribution around the central pathway, the risk to lenders that the debt level and the financing needs to keep increasing become visible.

Greek debt decreases along central pathway, but the risk of an increase is substantial



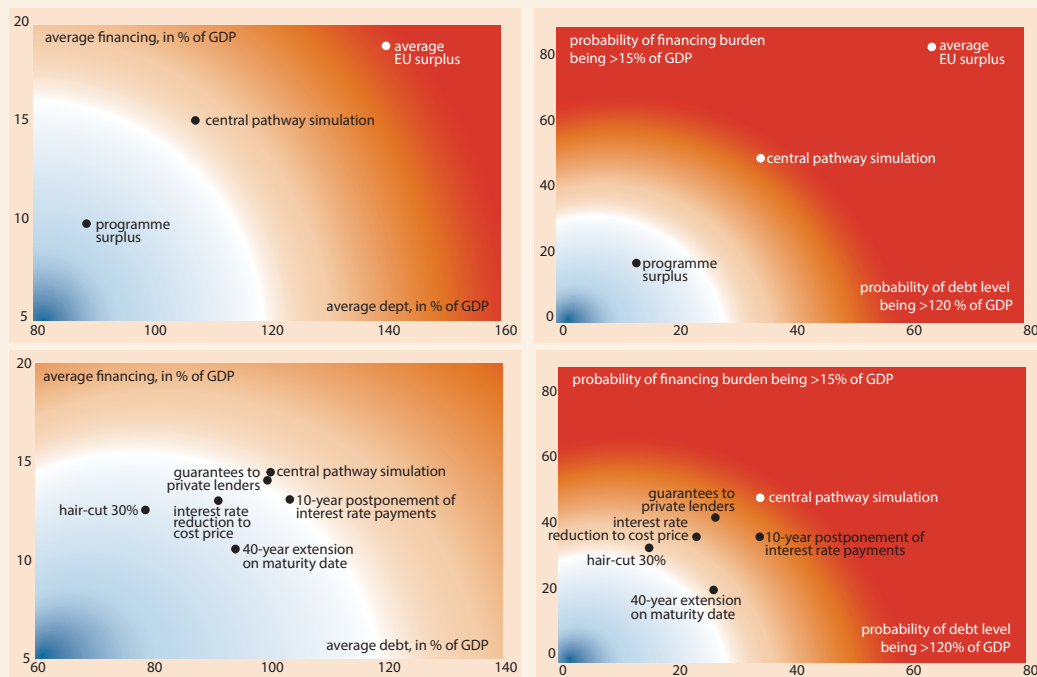
The dotted lines show the developments of debt and financing burden, under the surplus target of the programme (light blue) and the average historical surplus of the EU (dark blue).

Although, in the simulation, the Greek level of debt along the central pathway on average decreases and the financing burden stabilises, Greece will not be ready to enter the market in 2018. The risk of a debt crisis with losses for private parties remains substantial when both the debt ratio and financing burden can remain high. Along the central pathway of the simulation, the debt ratio on average decreases (the orange line in the left-hand figure) from 2018 onwards, and over time will be lower than 120% of GDP (the supporting line). The financing burden along the central pathway (orange line in the right-hand figure) is limited during the first decade, after which it averages out around 15% of GDP (the supporting line). The supporting lines have been set at a debt level of 120% of GDP and a financing burden of 15% because these levels serve as anchors in the programmes for Greece. Above these levels, market access becomes difficult. The white and light orange planes indicate probability around the central path, based on historical data on the distribution of primary surplus, risk premium and economic growth. Under these assumptions, there is a 34% probability that the debt level is higher than 120% after 20 years (in 2038) and a 48% probability that the financing burden is higher than 15% of GDP between 2028 and 2038.

This autumn, the institutions will resume their talks with Greece about debt relief, with the main objective of ensuring that Greece will become financially self-supporting. This would require that the risk of a substantial debt increase under unfavourable circumstances is limited. The long-term surplus is of crucial importance; figures below emphasise the related sensitivity of the debt level and financing burden. The figure on the left shows the average financing burden and debt level by 2038, and the figure on the right shows the chances of the financing burden being higher than 15% of GDP and the debt level being higher than 120%. Both chances look better under the programme's assumptions, and worse under the historical average EU surplus.

Possible need for additional agreements on Greek debt (continued)

Average debt level and financing burden (left) and the chance of the debt level being >120% of GDP and the financing burden being >15% by 2038 according to the simulation (right)



The background colour indicates the long-term financeability of the Greek debt and runs from blue (safe) via white to red (high risk). For the averages, a limit of 15% of GDP was used for the financing burden and 120% for the debt level. The critical probability of exceedance of these limits was set at 28%. At an average loss under restructuring over this limit, this equals a risk premium that could still be financed by Greece.

There are four obvious alternatives to lowering the current Greek debt burden to European institutions. The first alternative is a hair-cut on the financial claims on Greece. This substantially lowers the average debt level, the financing burden and the risk of both ending up higher. The second alternative is that the interest rates payable by Greece are reduced to the creditor's cost price. This has the largest impact in the first few years of such loans, when the amount lent is the highest. This also has a positive impact on financeability of the Greek debt, but less so than that of a hair-cut. The third alternative is to extend the maturity dates of the loans. The impact on the debt level materializes later than under interest rate reduction, but over time the results are comparable. The impact on the financing burden is more favourable than under interest rate reduction, and there is less risk of it ending up higher. The fourth alternative is to allow postponement of interest rate payments. This in particular reduces the financing burden. Finally, the European institutions could provide guarantees to private lenders. This reduces the risk of the debt level and financing burden becoming higher.

In order for results in the central pathway of the simulation being comparable to those of the programme, a number of measures need to be combined, or a substantially larger hair-cut must be engaged in. With respect to fiscal sustainability, debt relief is in fact an alternative for higher surpluses in the long term. In addition, for policymakers, there is a balance between keeping the incentive to reform and permanently solving this debt problem. Postponing debt relief keeps the pressure to reform high, but does not create the room for growth and investments that the financing parties would like to see, while fast debt relief creates such room, but also reduces the pressure on the need to reform – with possible negative effects for the budgetary policy in the long term.

- (a) Lukkezen, J., 2015, Analyse financierbaarheid Griekse publieke schuld; tentatieve uitkomsten [Analysis financeability. Greek public debt; tentative results (only in Dutch)], CPB Background document 15 September 2015 ([link](#)).
- (b) European Commission, 2015, Assessment of Greece's financing needs, 10 July 2015 ([link](#)).
- (c) European Commission, 2015, Debt sustainability analysis, 10 July 2015 ([link](#)).
- (d) IMF, 2015, Preliminary Draft Debt Sustainability Analysis, IMF Country Report No. 15/165, 26 June 2015 (became available on 2 July), ([link](#)) and was updated on 14 July ([link](#)).