Appendix to Blog

We recently published a blog aimed at correcting some misinformation and clarifying the IMF's views on Greece. Some readers have had questions about the data underlying our analysis, and we thought it would be helpful, once again, to set the facts straight.

Question 1: Given that tax rates on income, including social security contributions, are above the EU average, is it fair to argue that half of Greek taxpayers are exempt from income tax?

Response: Indeed, it is in large part *because* so many taxpayers are exempt from the personal income tax that the overall tax rate in Greece is so counterproductively high. As a statement of fact, data from the Greek authorities and Eurostat indicate that more than half of wage earners are exempt from paying any *personal income tax* in Greece, compared to a euro-area average (excluding Greece) of 8 percent. As we have noted, a corollary of this narrow personal income tax base is that tax rates in Greece are unsustainably high across the board, including not only income taxes, but also social security contributions, as well as other tax rates (VAT, CIT, etc.). The very high tax rates in Greece are symptoms of a serious problem with the personal income tax, and it is wrong to try to portray them as some sort of strength.

These high tax rates, which are detrimental to both jobs and growth in the formal economy, are precisely the reason we have been arguing for a reduction in both tax and social security contribution rates, to be financed by a reduction in the personal income tax credit. Unfortunately, the experience in Greece has been exactly the opposite, as the authorities have instead, including in the context of the current ESM program, legislated new increases in tax and social security contribution rates, further exacerbating the problem. Continuing down this path simply cannot reasonably be considered to be good for growth.

Question 2: Hasn't this year's income tax reform expanded the tax base significantly, bringing Greece's tax-free allowance in line with those of other Eurozone member-states?

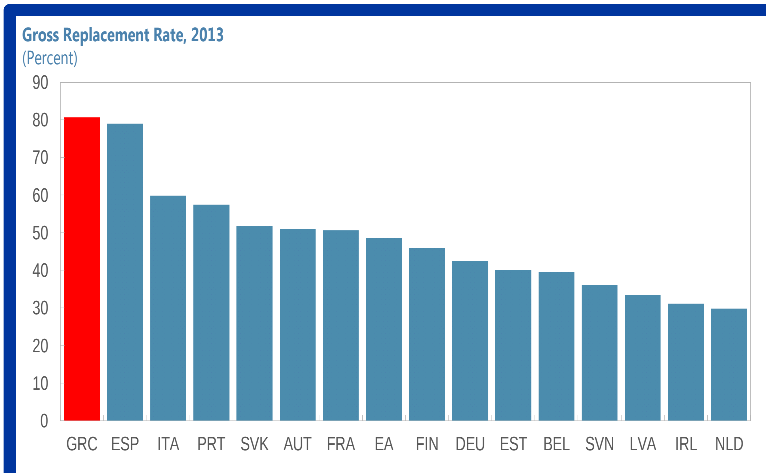
Response: The argument that Greece's income tax exemption level is appropriate because it is about the same number of euros as elsewhere in the Eurozone is in our view an entirely inappropriate comparison because it ignores the fact that income levels in Greece are relatively low. For international comparisons, tax experts instead look at *scaled indicators* such as the percentage of wage earners who are below the threshold or the ratio of the threshold level to the average wage. By any of these metrics, Greece remains an extreme outlier in Europe even after the recent reform, which has only made a marginal difference:

- the reform reduced the share of wage earners who are below the tax-free threshold by only 3 percentage points, from 55 percent to 52 percent, compared to a euro area average excluding Greece of 8 percent.

- the ratio of the tax-free threshold to average wages was reduced as a result of the reform by only 5 percentage points, from 54 percent to 49 percent, compared to an euro-area average excluding Greece of 24 percent.

Question 3: According to data from EU member states, average public pensions in 2013 were €1,233 per month in Germany compared to €846 per month in Greece. And if one also adds welfare benefits, which were many times higher in Germany, the difference is even larger. Why do you argue that pension benefits in Greece are disproportionately high?

Response: The numbers do not give an accurate picture, first because they are not based on individuals with similar characteristics, and second because they do not correct for income differences across countries. For similar workers—for example, with 45 years of contributions—pensions are nearly identical in nominal terms (€1,287 in Germany and €1,152 in Greece). But even more importantly, to take account of relative incomes when assessing pension schemes, experts will look at the ratio of the average first pension to the average wage at retirement (also known as "the gross replacement ratio"). This ratio is 81 percent in Greece, almost double the level in Germany (43 percent), pointing to a very generous pension system. The accompanying chart shows clearly that Greece is an outlier.



Sources: 2015 Aging Report; Eurostat; and IMF staff calculations.
Note: The gross replacement rate is the ratio of the average first pension to the average wage at retirement.

And while targeted welfare payments are indeed higher in many other European countries, one of the main points of our blog was that Greece desperately needs to restructure its public finances if it is to be able to boost its spending on these types of payments. Generous income tax exemptions and very high pension spending hamstring the budget, and prevent the introduction of well-targeted social benefits, especially for those groups that are most vulnerable and have been most negatively affected by the economic crisis. To suggest that high pension benefits in Greece are somehow justified because targeted social benefits are so low entirely misses the point: targeted benefits are inadequate precisely because pension benefits are maintained at very high levels.

Question 4: Hasn't tax compliance increased? In the first nine months of 2016, the collection rate for the four main taxes increased to 81 percent, from 77 percent in 2015.

Response: This claim is wrong, because it relies on a narrow definition and on data for only a handful of taxes. The collection rate figure based on a broader definition is 37 percent for the first nine months of this year (unchanged from 2015). The figure quoted in the question refers only to the four main taxes and excludes fines and penalties, which are very high in the case of Greece.