



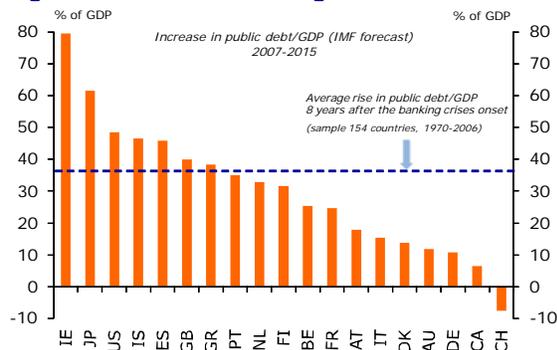
## Public debt: Nothing to fear but fear itself?

*Investors are worried that rising public debt-to-GDP ratios in the advanced economies will eventually lead to a wave of sovereign defaults. To calm market nerves, therefore, governments have announced austerity measures to lower debt ratios to more 'sustainable levels'. The question is, however, are these fears exaggerated? Evidence shows that rising debt ratios do not always go hand in hand with fiscal crisis. That said, governments cannot simply sit back and allow debt levels spiral out of control.*

### Rising debt ratios = sovereign default?

The financial crisis has taken its toll on the advanced economies' fiscal positions. Public debt-to-GDP ratios, or debt ratios, are expected to rise at a pace not seen during peace-time<sup>1</sup>. The IMF (2010) expects debt ratios in the advanced economies to rise, on average, by 35%-points until 2015, which is very much in line with the rise in debt ratios following past financial crises (see figure 1). Furceri and Zdzienicka (2010) find that in the aftermath of a severe banking crisis, there is a medium-term increase of about 37%-points in the public debt-to-GDP ratio.

**Figure 1: Debt ratios rising fast**



Source: IMF, Furceri and Zdzienicka (2010)

<sup>1</sup> Refer to our Special: "The rise of sovereign risk in the industrialised world" for a discussion on the reasons why public finances are deteriorating.

This has naturally made many market participants worried that a wave of sovereign defaults is ahead of us. To keep bond vigilantes at bay, 90% of the advanced countries have, therefore, announced austerity measures<sup>2</sup> in the hope of restoring order to their public finances (IMF, 2010).

### Mind the 'anchor effect'

As valid as these concerns are, there are good reasons to believe that investors' worries about rising sovereign default risks are slightly exaggerated. An important reason why people become very anxious when debt ratios rise can be explained by the concept known as the 'anchor effect'. To understand this, consider the following experiment: Ask investors these two questions

- A. When is **private sector** debt-to-GDP ratio sustainable?
- B. When is **public sector** debt-to-GDP ratio sustainable?

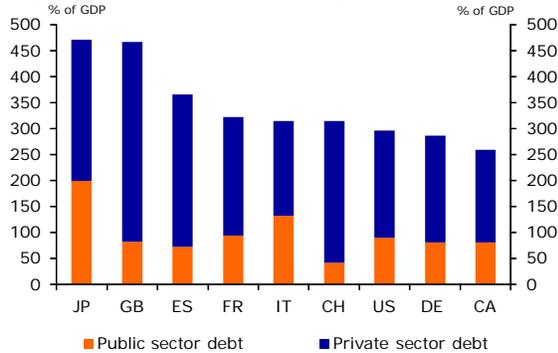
The answers given to question A are likely to be very divergent. But the answers to question B are probably going to be a figure close to 60% - in line with the Maastricht Criteria. The simple reason why we observe this is that policymakers have not set any specific target on private sector debt, even though they dwarf government debt (see figure 2).

For many years, behavioural economists have shown that when people have to make quantitative estimates in experiments, e.g. the population of an unknown town or the value of a property, they look for an anchor. In the case of public debt in the eurozone, for example, the anchor is the 60% debt ratio target that everyone is familiar with. As far as the non-eurozone countries are concerned, the average historical debt ratio usually serves as the *de facto* target. So when debt ratios rise

<sup>2</sup> The average cyclically adjusted budget balance is projected to improve by 1%-point (IMF, 2010).

above this figure, people start getting nervous. Equally, there is a sense of relief when debt ratios fall below this figure.

**Figure 2: Private debt is larger but who cares?**



Source: McKinsey, OECD

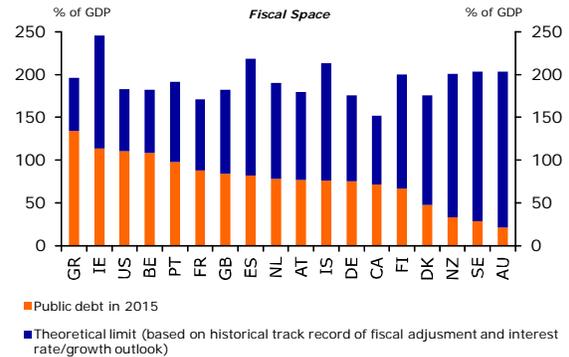
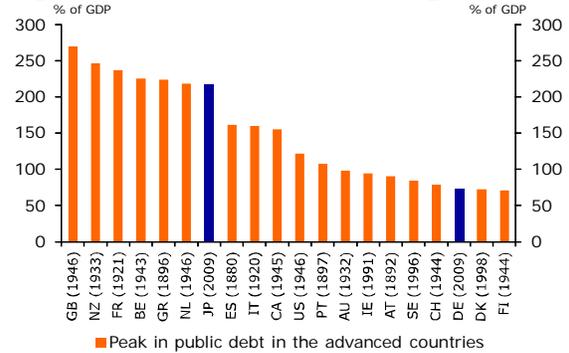
It is important to realise, however, that this magical number (i.e. 60%) has no economic relevance. Caner et al. (2010) use a dataset of 99 countries (1980-2008) and find that when debt ratios rise above 77%, annual GDP growth falls. Reinhart and Rogoff (2010) find in their extensive database of 44 countries and about 200 years of observations, that growth rates fall when the debt ratio rises above 90%<sup>3</sup>. So the European leaders could have even set the target at 55% or 65% and we would still not be worse off. The fact that they settled on 60% was perhaps because the average debt ratio one year before signing the Maastricht Treaty (MT) was roughly 50%.

In other words, the debt ratio target could have been different if the MT would be signed in a different period. The top panel of figure 3 shows that the 60% target or even the current debt ratios are very low judging by historical peak levels. Countries such as the UK, France, Belgium, New Zealand and the Netherlands have had public debt ratios that surpassed 200% at one point in time without leading to default. Indeed, all countries, except for Germany and Japan, have had higher debt ratios in the past. Against this backdrop, it is not difficult to imagine that the target debt

<sup>3</sup> Reinhart and Rogoff do not control for causality.

ratio (i.e. the anchor) would have been much higher if the MT was signed right after WWII or the Great Depression years. Perhaps then the current debt ratios would be more comforting.

**Figure 3: Are current debt ratios high?**



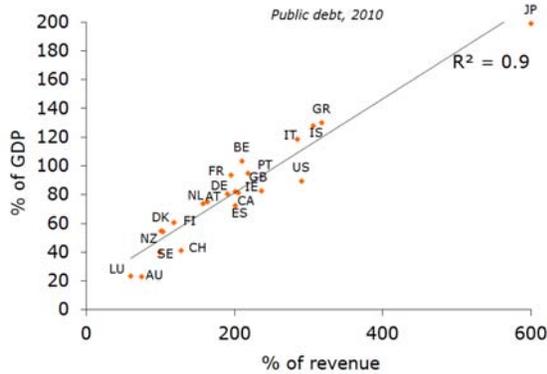
Source: IMF, Ostry et al. (2010)

Indeed, Ostry et al. (2010) tried to identify a single debt-to-GDP threshold, above which things are considered to be no longer sustainable. Each country's theoretical 'debt limit' is a function of its own history of fiscal consolidation and the interest rate/growth outlook. The bottom panel of figure 3 shows that all countries in the sample (which excludes Japan and Italy) have some fiscal space left. Of course, this does not mean that governments can allow their debt to build up until it reaches their country's calculated limit. For example, we cannot expect investors to roll-over Ireland's debt at the going interest rate when its debt ratio approaches the theoretical limit (245%). This exercise simply shows that given the history of fiscal consolidation in these countries, we should not immediately fear the worse when debt ratios rise.

**How we measure public debt matters**

Also of particular relevance is the way we interpret public debt. Given that the value of debt in nominal terms is not easily interpretable it has become common practice in the financial markets and within policy circles to relate the debt to the size of the economy (GDP). But if a country is structurally unable to raise revenues out of GDP to finance its spending and service its debt (i.e. government revenues are a small share of GDP), GDP is not an appropriate scale variable and government revenues are a better one (Roubini, 2003).

**Figure 4: Different yardsticks matter**



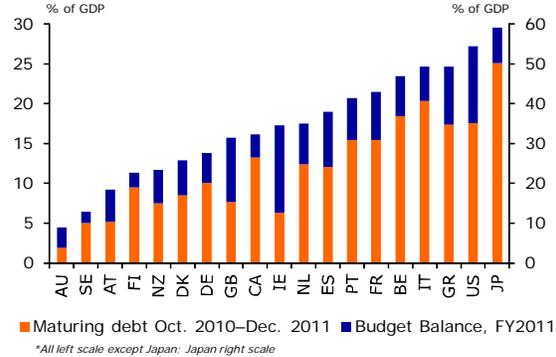
Source: OECD, Rabobank

Figure 4 depicts public debt in the advanced countries when measured as a share of GDP and total government revenue. The good news is that the correlation between the two measurement techniques is quite high. Japan and Greece’s governments are highly indebted no matter what denominator you take. However, there are some disturbing differences too. For example, markets are more concerned about Italy’s high debt-to-GDP ratio, but looking at the public debt-to-revenue ratio, the country scores as good/bad as the US. The gap between France and Germany narrows as well if we only look at debt-to-revenue ratios. Nevertheless, market participants continue to anchor their sovereign default expectations on debt-to-GDP ratio movements even though other reliable measures are available.

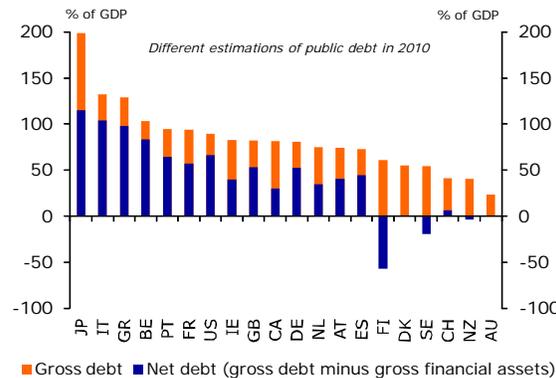
**What happened to government assets?**

One of the biggest concerns of investors is that bond markets shut their doors when governments are most in need of refinancing. This is very troubling given the stiff competition countries will face for rolling over their debt amid large funding needs of other advanced economies (see figure 5, top panel).

**Figure 5: Are refinancing risks very large?**



■ Maturing debt Oct. 2010–Dec. 2011 ■ Budget Balance, FY2011  
 \*All left scale except Japan: Japan right scale



■ Gross debt ■ Net debt (gross debt minus gross financial assets)

Source: IMF, OECD

In case the bond market shows less appetite in digesting the new issuances of one or more countries at the going interest rates, authorities will be forced to either (i) raise the yields to uncomfortably higher levels to make the bonds more attractive to investors (i.e. long run solvency comes under question), (ii) go cap-in-hand to the IMF or other governments with deep pockets (e.g. Germany or China) for financial support or (iii) sell their financial assets to service their debt. The latter is, sadly, very often ignored by market participants and the media alike. If we take governments’ gross financial assets into account government finances look far less precarious (see figure 5,

bottom panel). For that matter, rollover risks fall considerably because governments can liquidate their assets to meet outstanding liabilities. For example, next year Japan will need to issue a gross volume of government bills and bonds with a value that exceeds 40% of GDP. In the extreme scenario that investors shun its debt, it can sell its assets, which account for 115% of GDP, to refinance itself until confidence is restored.

To sum up, the arguments provided show that investors should not immediately fear the worse when gross public debt ratios rise. This, in turn, can make governments in countries that have a relatively large fiscal space confident enough to stimulate their economies in case the recovery falters. Once the recovery takes foot, governments can run enough primary surpluses in the future to bring down debt ratios to more sustainable levels. This constitutes efficient use of available fiscal space.

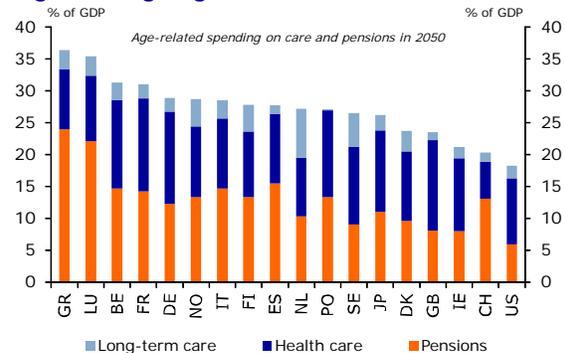
### So the sky is the limit?

Having said that, governments must not test market nerves by allowing debt ratios to rise far above the anchor (60% in the case of the eurozone countries) without having a credible medium-term strategy to restore order to the public finances. The result may be a self-fulfilling vicious spiral, whereby higher interest rates amid market nervousness lead to rising debts, which will further undermine investor confidence and (perceived) government willingness/ability to service its debt.

Fiscal policymakers must realise that the headwinds they will face going forward are far greater than in the past. Countries did not need to default when debt ratios exceeded 200% because they were growing robustly (mostly during or after war). But growth in the industrialised world will remain sluggish going forward amid a protracted deleveraging process. The austerity measures will further weaken global demand. Moreover, rapidly ageing populations will put an enormous

amount of pressure on public finances of the OECD countries in the coming years. The direct costs of ageing involve increases in age-related expenditure such as pension and health-care entitlements (see figure 6). The indirect cost of ageing is a shrinking labour market, which reduces the potential growth rate of the economies in the long run.

Figure 6: Ageing, here we come



Source: S&P

Finally, higher debt levels hinder fiscal policymakers to effectively respond to economic shocks. Maintaining some fiscal space is important especially because of the ongoing banking sector fragility in the West. In the event of another banking crisis, governments must be able to carry bail-out operations to avoid a systemic collapse.

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