Group Economics

Is higher government debt more risky?

22 February 2013

A pillar for austerity – not as robust or fragile as people think

One of the pillars of fiscal austerity is a commitment to reduce government debt as a proportion of GDP. Reasons given for this are: 1) that higher sovereign debt leads to a higher risk of sovereign default; 2) that higher sovereign debt to GDP will lead to a higher risk of an inflation crisis; 3) that high sovereign debt means high interest rates; 4) that high sovereign debt means low economic growth; 5) that high sovereign debt means a higher volatility of growth (owing to constraints on counter-cyclical fiscal policy).

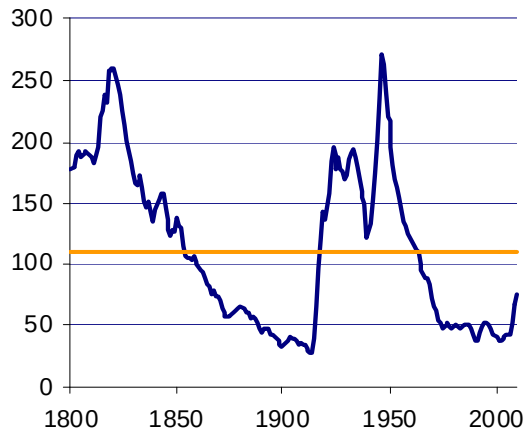
History only supports the first of these. In advanced economies, high sovereign debt has historically been associated with a higher frequency of default. However, high debt is a poor signal of high inflation and does not necessarily mean higher real interest rates. Finally, there is too little evidence to conclude whether it is higher government debt/GDP that causes persistently lower growth, or it's the other way around or a third factor is simultaneously causing both (e.g. a banking crisis). Likewise, there is too little evidence to support the claim that higher debt has led to less effective counter-cyclical fiscal policy.

How often does high debt happen in advanced economies?

Using data covering 23 (currently) advanced economies for a total of 3149 years between 1800 and 2010, we see that the answer is – more often than you might think. On average these economies spent 10% of the time with sovereign debt at more than 110% of GDP. The United Kingdom has spent 99 of the last 210 years above the 110% threshold.

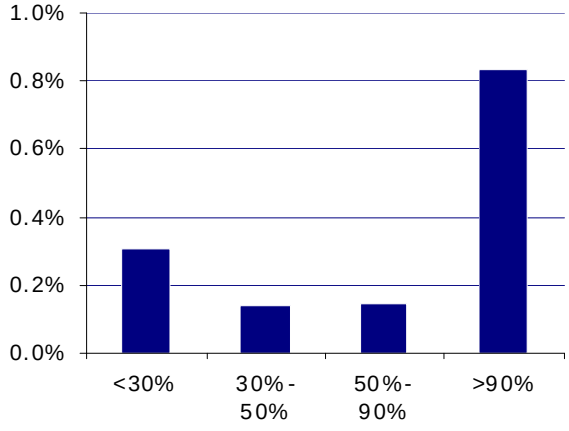
1. UK public debt/GDP 1800-2010

Source: Abbas et. al



2. Default episodes by threshold

Source: RBS Group Economics, Rogoff & Reinhart, Abbas et. al



What happens to the average frequency of default as debt/GDP increases?

The historical frequency of default episodes rises from an average of 0.1%-0.2% (1 in 333 years) at lower debt/GDP bands, to around and average of 0.8% (1 in 125 years) when government debt to GDP exceeds 90%. At these higher levels of

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debt, it is five countries that are responsible for the rise in frequency of default: Greece, Japan, Spain, Canada and New Zealand. There is serious disagreement over whether the UK's conversion of its 1917 War Loan in 1932 from 5% interest to 3.5% counts as a default event or not (we have counted it as a default). As the IMF has pointed out, default has historically not been a common tool of public debt reduction in advanced economies.

Does having your own currency make a difference?

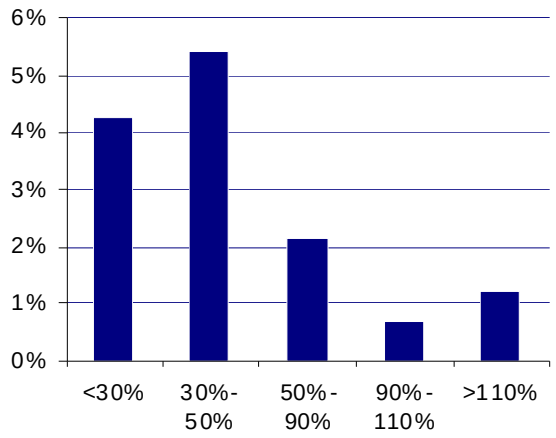
A recent investigation by the IMF finds that in 26 historical instances of debt reduction starting from very high debt/GDP, there were three defaults, all involving foreign currency denominated debt. So at face value, being able to issue debt in your own currency may reduce the risk of default.

What about the risk of high or hyper-inflation?

The other commonly cited risk is that high public debt to GDP will invariably lead to inflation running amok. But history shows that the likelihood of a (currently) advanced economy running 20%-plus inflation is greatest when the public debt to GDP ratio is at its lowest. So other factors must be more important (e.g. government deficits). Further, as we move beyond the 50% threshold, the likelihood of very high inflation does not change. Note that this is not saying that inflation won't rise at higher levels of debt, just that hyperinflation risk doesn't. For a discussion of the possible role of inflation in managing down current UK government debt please see the note: "Can the UK Inflate Away its Debt Problems?"

3. Share of years in 20%-plus inflation by threshold

Source: RBS Group Economics, Rogoff & Reinhart, Abbas et. al



Interest rates don't necessarily go up under high debt

Rogoff, Reinhart and Reinhart (2012) find that in 11 of 26 historical cases where public debt was above the 90 percent debt/ GDP threshold, real interest rates were either lower, or about the same, as during the lower debt/ GDP years (see annex). Further, they find that high debt periods that coincide with low growth have no more association with higher real interest rates than high debt high growth periods. This may in part be due to conscious policy choices taken at the time.

High public debt and low growth – what causes what?

There is insufficient evidence to conclude whether it is high public debt causes low growth or vice versa. Establishing causality is a serious problem both for this claim and the claim that high public debt constrains the ability of a government to pursue counter-cyclical fiscal policy. For instance in the recent case of Greece, it is clear that unsustainably high public debt has contributed to the economic contraction that has engulfed the country. By contrast in the case of Ireland, it is clear that the banking crisis and subsequent depression were what led to the jump in government debt.

Causality cuts right to the heart of the policy debate. For if high debt does cause low growth, then governments should be pursuing extremely aggressive debt reduction. If low growth causes high debt, then the clear policy choice is to stimulate growth even at the expense of higher debt. But to reiterate, we simply do not have enough evidence.

How robust is the debt/GDP pillar of austerity?

On balance, the historical basis for austerity is not as robust or as fragile as proponents or detractors claim. While the frequency of default at higher debt levels is raised, history suggests that on average we go from a once in 333 year frequency to a once in 125 year frequency. This latter still represents a rare event. There is no evidence that high debt/GDP means a higher risk of high or hyperinflation. Further there is little evidence of a systematic relationship between high debt and high real interest rates. As we are currently seeing, countries like the UK and US are enjoying lower rates than ever, even as debt goes up.

Perhaps the most important part of the debate seems a long way from a convincing resolution. The case for or against the impact of high debt on growth is yet to be convincingly made. In committing to one view over the other, both sides of the debate will be operating under considerable uncertainty.

References

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C. Reinhart, V. Reinhart & K. Rogoff, “Public debt overhangs: advanced-economy episodes since 1800”, Journal of Economic Perspectives, 2012

S.A. Abbas, N. Belhocine, A. ElGanainey & M.Horton, “A historical public debt database”, IMF WP/10/245, 2010

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Annex: Growth and real interest rate outcomes for 26 high debt episodes in advanced economies 1800-2011 (Source: Reinhart, Reinhart & Rogoff (2012))