



Global outlook

Deleveraging: how much further to go?

Since the global financial crisis of 2007-09, private debt ratios have been under downward pressure in the advanced economies – a reversal of the pre-crisis pattern of rising indebtedness. The desire to reduce debt levels has impeded the global economic recovery, but how much longer will it continue? The length of recent deleveraging episodes in the major economies is now similar to historical averages, but progress in reducing debt ratios has been mixed. In the US and UK, debt ratios have already fallen significantly and deleveraging pressures are easing. In the Eurozone, however, deleveraging progress has been very slow and a long-drawn out and probably painful process of further debt reduction is likely.

Financial crises spark deleveraging...

Financial crises are frequently followed by lengthy and substantial periods of private sector deleveraging (defined here as a reduction in the ratio of private debt to income or GDP). This is especially the case if crises have been preceded by strong rises in debt ratios.

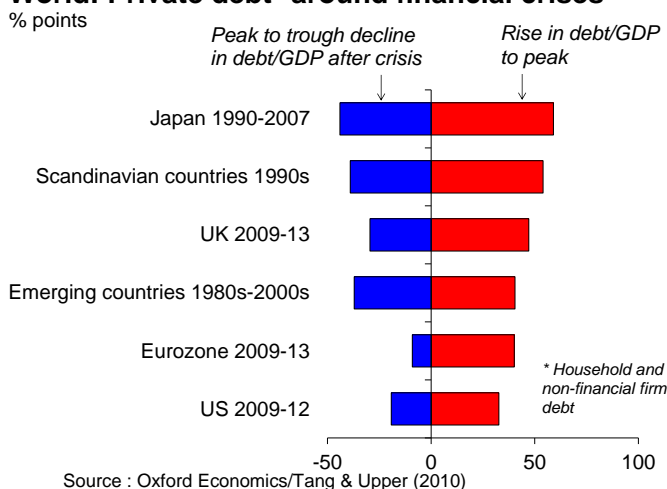
A sample of 20 systemic banking crises preceded by credit surges over the last three decades studied by Tang & Upper (2010)¹ featured 17 cases where debt ratios fell after the crisis. The average rise in the private non-financial debt ratio ahead of crises in this sample was 44% of GDP, and the average decline from peak debt levels after the crisis was 38% of GDP. So on average, the bulk of the pre-crisis debt rise was worked off in the post-crisis phase.

Post-crisis deleveraging periods can also be lengthy. In Tang & Upper's sample, the average length of deleveraging phases (i.e. from the peak debt level around the crisis to the subsequent trough) is 18 quarters or four-and-a-half years.²

But some deleveraging phases are much longer. The Philippines endured a decade-long deleveraging phase in 1997-2007, while Japan saw a deleveraging period lasting seventeen years from 1990-2007. Importantly,

deleveraging often continued long after economic growth resumed; it was not the case that deleveraging pressures were only present during economic recessions.

World: Private debt* around financial crises



...with progress in the US and UK...

Deleveraging pressures are a downside risk to economic growth. If the private sector saves harder to try to reduce its debt this implies consumer spending and investment may be lower than would otherwise be the case.

This process is likely to have been partly responsible for the unusually moderate pace of the global economic recovery in recent years. The global financial crisis of 2007-09 was preceded by strong rises in private debt ratios in many advanced economies and followed by

¹ G.Tang & C.Upper 'Debt reduction after crises' BIS Quarterly Review, September 2010



downward pressure on these ratios. But for how long will this potential drag on growth persist?

One way to answer this is to look at deleveraging progress so far compared to historical benchmarks.

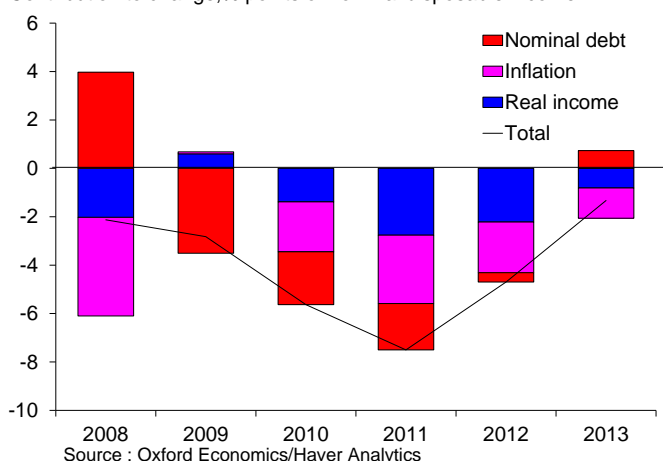
Overall, the picture is mixed. For most of the advanced economies, deleveraging has now been under way for between five and seven years. Concentrating on household and non-financial corporate (NFC) debt, we find that generally household debt ratios began to decline first, with NFC debt ratios starting to decline later (partly this reflects NFCs drawing down pre-arranged credit facilities early in the crisis).

So the length of the deleveraging process so far is broadly similar to that found in historical episodes. This might suggest deleveraging pressures should now be easing, but for this to be the case the private sector also needs to have used this period to get debt levels down to desired levels.

So how far has deleveraging proceeded? The picture is mixed in this regard. Substantial progress has been made in the US and the UK. US private sector debt rose by 33% of GDP from 2003 to 2008 and has dropped back by 19% of GDP since. In the UK, debt rose by 47% of GDP to its peak, falling back by 29% of GDP since. So in both cases around 60% of the pre-crisis debt run-up has been worked off.

US: Household debt ratio decomposition

Contribution to change, % points of nominal disposable income

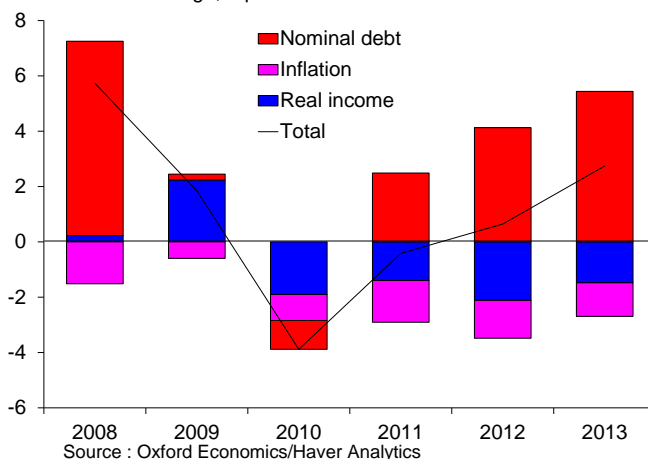


Decomposing the change in private debt ratios in the US into its component parts – changes in nominal debt, real income growth, and inflation – also provides some positive signals. From 2009-12, the nominal value of household debt fell – a consequence of the painful

housing bust. But 2013 saw nominal debt rise for the first time in four years. The household debt ratio still fell in 2013 but this was due to 'passive' deleveraging, the impact of rising real incomes and inflation, rather than 'active' cuts in debt outstanding.

US: Corporate debt ratio decomposition

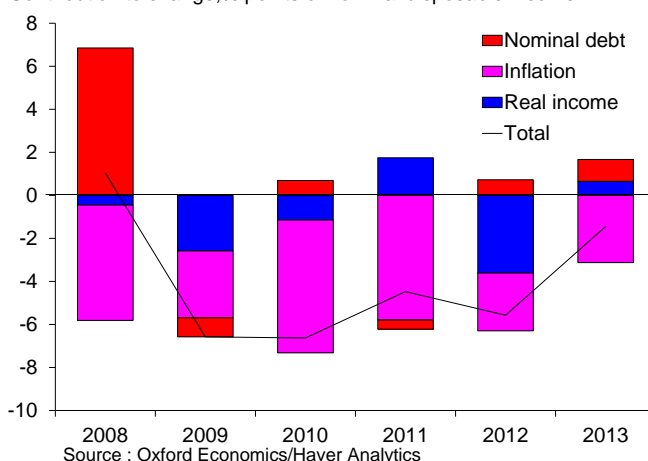
Contribution to change, % points of GDP



On the corporate side things look even better. Nominal debt started to rise again as early as 2011 and the debt ratio actually crept up in 2012, with a further modest rise last year. Deleveraging pressures in the US in the corporate debt area appear modest at present. This may reflect the fact that the more severe debt build-up before the crisis was in the household sector.

UK: Household debt ratio decomposition

Contribution to change, % points of nominal disposable income



The UK also shows some signs of easing deleveraging pressure: nominal debt rose in the household and corporate sectors in 2012 and 2013. In the household sector, these rises were modest however, and more than offset by inflation and income growth – so the debt ratio continued to fall. In the corporate sector the picture is



again more positive with bigger rises in nominal debt. The NFC debt/GDP ratio did fall back in 2013 but this was in large part due to strong GDP growth.

...but still some risks...

The recent indications from the US and UK are positive, and the fact that both countries are currently enjoying economic growth and improving labour markets should also help ease deleveraging pressures.

There are still some risks, however. Looking back at the historical evidence, it is probably not correct to compare either the US or UK with emerging market deleveraging episodes. But the experience of advanced economies such as the Scandinavian countries in the 1990s and also Japan suggest further deleveraging is a possibility. These countries saw around 70% of the rise in debt to its peak being reversed, a little higher than the 60% seen in the US and UK so far.

That said, in the US at least, further corporate deleveraging looks unlikely in the absence of shocks as debt levels do not appear excessive.

Further US household deleveraging may still be a risk, given weak wage and income growth. The pressure for deleveraging has been reduced by the sharp fall in the household debt service ratio over recent years, but this fall has of course been partly due to very low interest rates – so Fed policy tightening from next year might start to build the pressure up a little once again. The same issue also exists for the UK.

...especially in the Eurozone

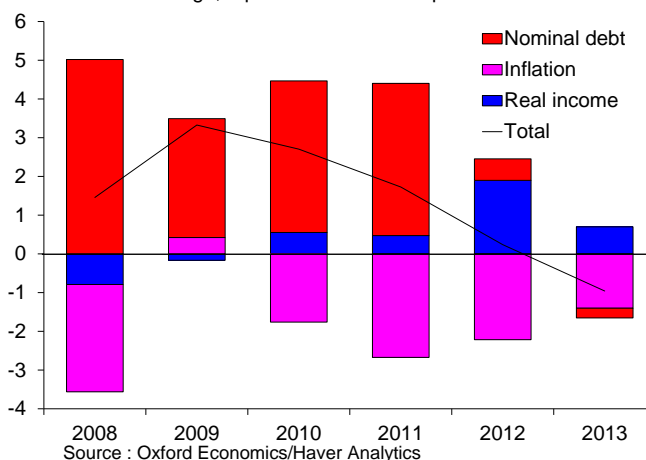
But in terms of concerns about further deleveraging in the advanced economies, it is the Eurozone that really stands out.

The build-up in private debt in the Eurozone to its peak was similar to the average seen in historical crisis episodes, at around 40% of GDP. But even after five years, this ratio has only fallen by around 9% of GDP – less than a quarter of the debt build-up has been worked off. This is very limited progress by historical standards.

Indeed, the household debt/GDP and debt/disposable income ratios are actually above their 2007-8 levels, with nominal debt outstanding having risen in every year from 2008 to 2012 – only starting to decline last year, which was also the first year that saw a decline in the debt ratio. Household deleveraging, at a Eurozone-wide level, has barely begun.

Eurozone: Household debt ratio decomposition

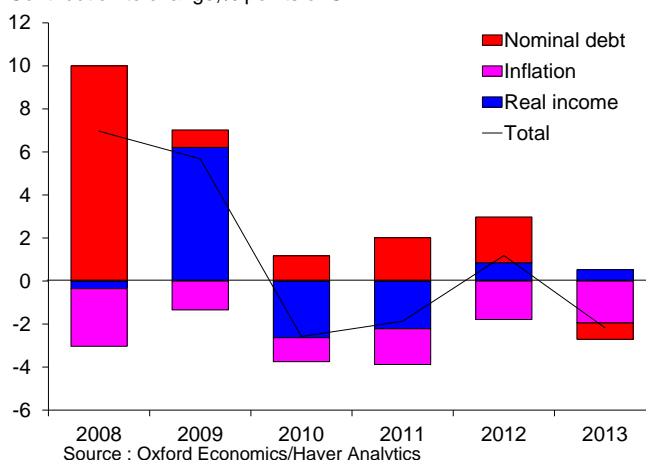
Contribution to change, % points of nominal disposable income



The picture is only marginally better in the corporate sector. Nominal debt again actually rose in all years from 2008-12, before declining modestly in 2013. The debt ratio has dropped since 2010 thanks mostly to inflation, but only slightly – and remains elevated at close to 140% of GDP.

Eurozone: Corporate debt ratio decomposition

Contribution to change, % points of GDP



So private sector deleveraging in the Eurozone appears to be lagging that in the US and UK by several years. This lack of progress is all the more remarkable given it has had arguably the worst macroeconomic backdrop among the major economies. The Eurozone has suffered two recessions since 2008 and two bouts of severe financial and banking sector strains as well (with the Eurozone financial crisis following hard on the heels of the global financial crisis).

This suggests that private sector deleveraging in the Eurozone could have some way to go. The data from 2013, showing the first cuts in nominal debt outstanding in the household and corporate sectors, suggest the



process may now be starting in earnest. But even if this is so, it may take a lengthy period even to match the progress seen in the US and UK – let alone the average reversal in debt ratios seen in historical episodes.

Why does deleveraging matter?

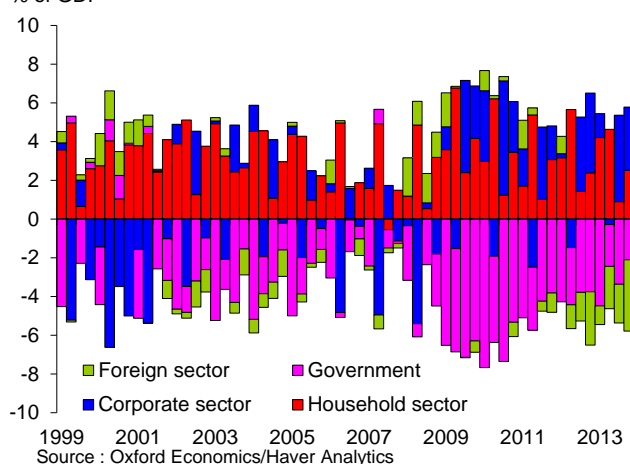
Why does private sector deleveraging matter? In principle, it need not necessarily be a drag on economic growth. The private sector saving more implies lower consumer spending and investment. But this effect could be offset either by increased public sector dissaving (e.g. a bigger budget deficit, as seen in Japan in the 1990s or the US in 2008-09) or by a bigger foreign sector deficit (i.e. boosting the current account position) which would boost activity.

There may be limits to how far these offsets can operate, however. Achieving a better current account position in a virtuous way (i.e. by raising exports) may be hard in an environment of low world trade growth and will certainly be very hard for all indebted countries to achieve simultaneously.

And there are limits to the plausible public sector offset as well. If the budget deficit and/or public debt are already high, the authorities may not wish to risk worsening them further. Indeed, the authorities may try to reduce them instead, adding to downward pressures on output.

Eurozone: Sectoral balances

% of GDP



This is exactly what has been happening in the Eurozone over the last few years, where fiscal austerity has been widespread even in the presence of a pressing need for the private sector to reduce its debt ratios. Indeed, it is quite likely that fiscal cutbacks have been one of the

reasons that the private sector has made such limited progress in deleveraging.

Going forward, there is some scope for optimism in that the pressure for fiscal austerity in the Eurozone is starting to ease. But we are very unlikely to get the kind of major fiscal accommodation that would ideally be needed to offset the extensive private deleveraging that has to happen. In this respect, the Eurozone today looks very different from Japan in the last two decades, where large-scale fiscal stimulus played a key role in preventing an even worse growth outlook than actually occurred.

There is a particular risk in a number of individual Eurozone states where high public and private debt coincide. In Cyprus, Ireland, Portugal, Spain – and, perhaps surprisingly, France – the ratios of government, household and NFC debt are all higher than their respective Eurozone averages (which are themselves relatively high). And Greece and Belgium have two of these three ratios above average.

	Debt to GDP ratios		
	Government	NFCs	Households
Austria	86.1	89.2	29.0
Belgium	105.9	195.6	98.6
Cyprus	112.0	158.4	161.2
Estonia	10.1	82.8	43.0
Finland	56.0	92.8	124.6
France	116.9	148.9	109.0
Germany	66.5	88.9	89.5
Greece	171.4	78.7	108.1
Ireland	123.7	304.4	213.4
Italy	144.6	115.4	84.4
Latvia	46.1	120.2	31.9
Luxembourg	23.9	376.7	55.6
Malta	72.6	139.1	75.2
Netherlands	85.3	93.3	273.2
Portugal	135.3	153.0	115.7
Slovakia	54.8	39.3	53.3
Slovenia	54.7	84.2	33.2
Spain	98.5	171.8	120.2

Note red-shaded values higher than Eurozone averages

One good piece of news for the Eurozone is that deleveraging pressures should be fairly modest in its 'motor economy', Germany. There, both private and public debt ratios are below average (partly thanks to a previous round of corporate deleveraging after the dot-com bust). But surprisingly, Germany to date has been one of the countries achieving most private deleveraging – NFC debt/GDP has dropped 11% points since 2009 and household debt/GDP by around 9% points.

Another problem caused by private sector deleveraging pressures is that they can impede the normal functioning



of the monetary transmission mechanism. If households and firms want to cut their debt levels, attempts to stimulate the economy by reducing borrowing costs may prove ineffective – though monetary loosening may allow deleveraging to be completed sooner insofar as it frees up cash flow for use in debt reduction (by reducing debt interest payments).

The use of quantitative easing (QE) as a monetary tool partly gets round this problem as it can in theory raise asset prices and stimulate the economy without requiring increased credit – it creates money directly rather relying on the banking system to do so. But even QE will face significant headwinds if private deleveraging pressures are strong as such pressures imply destruction rather than creation of money (i.e. net repayments of debt).

Conclusion

Looking at the recent experiences of the advanced economies, the US looks in the best position. A combination of fiscal expansion in 2008-9 plus mortgage debt write-offs and an early effort at cleaning up bank balance sheets appears to have encouraged relatively rapid private deleveraging. And aggressive QE helped further soften the economic impact. The UK has benefitted from some of the same factors, albeit perhaps to a lesser extent. Much of the necessary deleveraging has probably occurred in both countries. And to the extent that further deleveraging occurs it may do so in a relatively healthy way, with the private sector 'growing out' of its debt rather than actively paying it down.

By contrast, the Eurozone looks in a difficult position. Fiscal austerity has held back private deleveraging, which only really got underway in 2013. Moreover, monetary policy has been far less supportive – concentrating on traditional channels that may be relatively ineffective in the face of private deleveraging pressures. A lengthy and probably painful process of private sector deleveraging still lies ahead of the Eurozone.