Special Report 2012/08b

Coping with life after debt *(part 2)*

If there is a single word that appears most frequently in discussions of the economic problems now afflicting the Western world, that word is undoubtedly "debt." In the first part of this series, we showed that debt, which rose sharply in most advanced countries prior to the crisis, is still at elevated levels. In this part, we look at the post-crisis balance sheet adjustment process and conclude that (i) it will take many years to complete and (ii) the transitional phase will be economically painful.

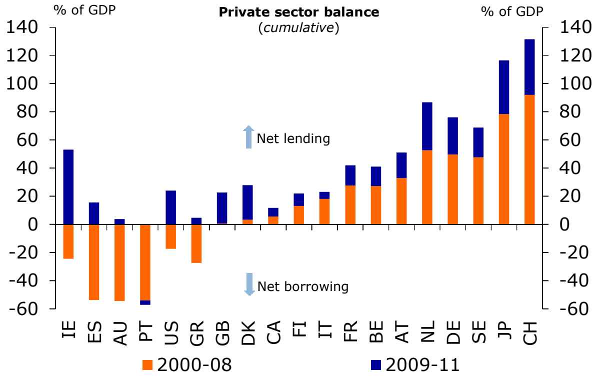
After the party comes the hangover

Before the financial crisis in 2008/09, consumers in the advanced economies used debt to enhance their consumption or invest in housing, companies used it to expand their businesses and boost their returns, and governments used it to avoid fiscal adjustments. The crisis brought an end to those go-go years. Falling asset prices, incomes and credit availability combined with a surge in jobless rates and economic uncertainty led to extreme private sector frugality in the industrialised world. *All* countries in our sample, with the exception of Portugal, started running private sector surpluses during 2009 and 2011 (figure 1).

Household deleveraging

For households, deleveraging can be viewed in two ways. Since interest and principal payments have to be paid from current and future income, the first thing that households may be interested in is how high their debt is relative to current or expected future income. The relevant income measure in this context is household disposable income. Apart from wages and profits, developments in the tax rate or in government transfers are important determinants for disposable income. Given the current harsh fiscal austerity measures, disposable income is under downward pressure in a number of countries. Furthermore, the high and rising unemployment rate has reduced job-certainty.

Figure 1: Private sector frugality



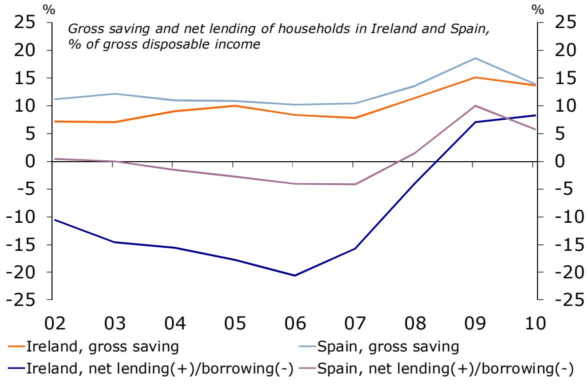
Source: Reuters EcoWin, Rabobank

This reduces the expected future income of a given household since a spell of unemployment can be part of their future. In all then, the current economic situation has resulted in both lower disposable income in a number of countries while income expectations have also been reduced. As such, the level of debt will be less bearable for many households.

Apart from developments in income and income expectations, households are also interested in their balance sheet. The most important assets that households hold are saving deposits, portfolio investments in securities and houses. Having assets may mitigate a certain debt load. But likewise, a sharp fall in the value of their assets will push down their net wealth. If that happens, households may well want to reduce their debt or build up new assets.

The main way for households to reduce leverage is by lowering consumption to increase savings. These savings may be used to build up assets or pay down debt. If paying down the latter is the objective, households can lower their investment in housing to make maximum use of savings for debt reduction. This is exactly what has happened in most countries and most dramatically in Ireland and Spain (figure 2).

Figure 2: From net borrower to net lender

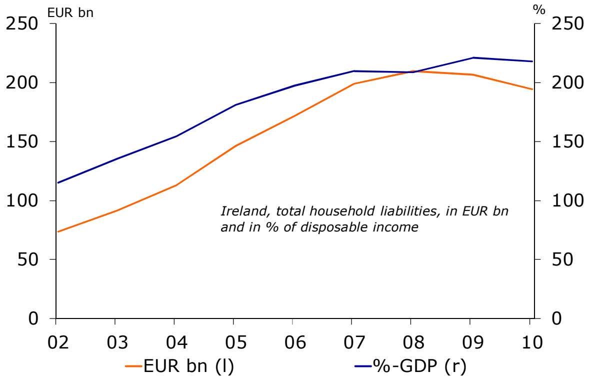


Source: Reuters EcoWin, Rabobank

Despite this dramatic turnaround from being net borrowers to being net lenders, household deleveraging is quite a slow process. Irish net lending of between 5% and 10% of disposable income compares to a gross debt load of more than 200%. As such, the dent that this net lending can make annually is rather modest. A further complicating factor is the fact that although the amount of household debt has fallen from 2008 to 2010, household disposable income fell quite sharply in that period too. As a result the debt to disposable income ratio was still more than 2%-points higher in 2010 than in 2008 (figure 3).

Falling disposable income can be attributed to the enacted austerity measures. But it is also the result of the sharp contraction in consumption and investment needed to reduce the amount of debt. This is reducing economic activity. As a result, household deleveraging is partly self-defeating, at least in the short run.

Figure 3: Debt down, leverage up



Source: Reuters EcoWin, Rabobank

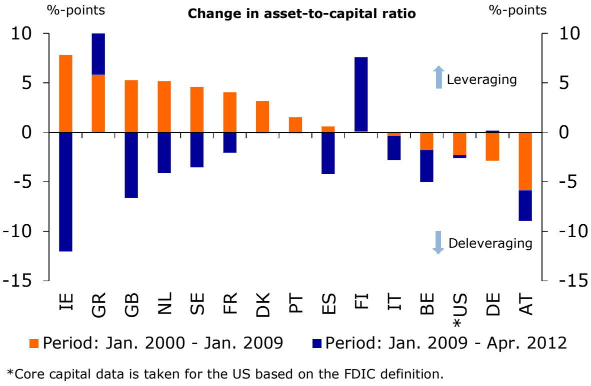
Corporate deleveraging

For non-financial corporations, leverage can be assessed either by looking at debt relative to earnings or by debt relative to equity. The crucial point about debt is that it requires a fixed payment of interest and that, generally, the principal will have to be paid back in time. This stands in contrast to equity, that only requires dividend payments which can vary with profitability and does not have to be paid back. As long as current and future expected profitability is sufficient to service the interest and principal payments and loans can be re-financed, debt is not a problem. Adverse economic developments can change profitability quickly and hence make debt more problematic. Most corporations have attempted to regain profitability by reducing headcount, wage costs and financing needs (through lower investment expenditure). This has enabled them to become net lenders in many countries and sharply reduce their net borrowing in others. But, as with households, the process of deleveraging through net lending is a rather slow process. And similar to household deleveraging, the rise in unemployment that results from cost cutting and lower investment demand results in adverse economic circumstances that partly work against the deleveraging itself.

Financial sector deleveraging

So far our focus has been on the non-financial sector. Turning our attention towards the financial sector, we can also state that banks have been under pressure to deleverage since the outbreak of the global banking crisis in 2008 and eurozone debt crisis in 2010. The introduction of additional, tighter regulation on the banking industry has further increased the deleveraging pressure. In general, the new regulatory framework will force banks to hold more capital or lower their risk appetite. We have already observed that banks have started to reduce their asset-to-capital ratio in many countries (figure 4). What is not entirely clear is whether they have lowered their leverage ratio by 1) shedding assets, which for banks

Figure 4: Change in banks leverage ratios



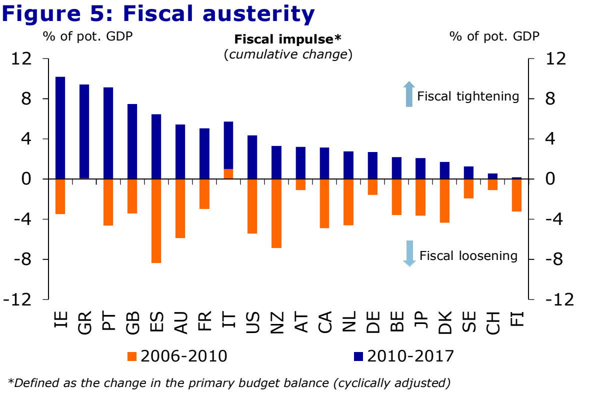
Source: ECB, US FDIC, Rabobank

generally means reducing lending, 2) raising capital buffers through equity issuance or higher retained earnings, or 3) doing a combination of both. Since in times of financial stress banks have difficulty raising or generating extra capital, we can assume that falling assets have done most of the heavy lifting.

Public sector deleveraging

Governments also came under pressure to deleverage following the eurozone debt crisis. This was because bond investors realised that not all governments had the fiscal space to rescue their economies without bringing their own solvency into question. To maintain market confidence, governments began binding themselves to the mast of fiscal prudence. Figure 5 shows that fiscal policy, which was generally loose prior to the euro crisis, will remain contractionary in the period 2010-17 in most countries. But with most governments still running high budget deficits, currently they are mostly still increasing their debt loads.

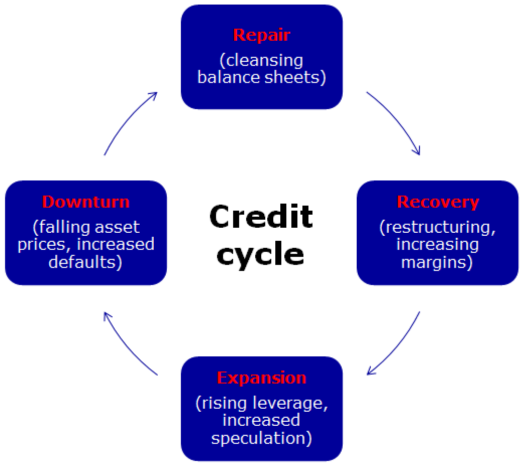
Figure 5: Fiscal austerity



Source: IMF

How much deleveraging is still needed?

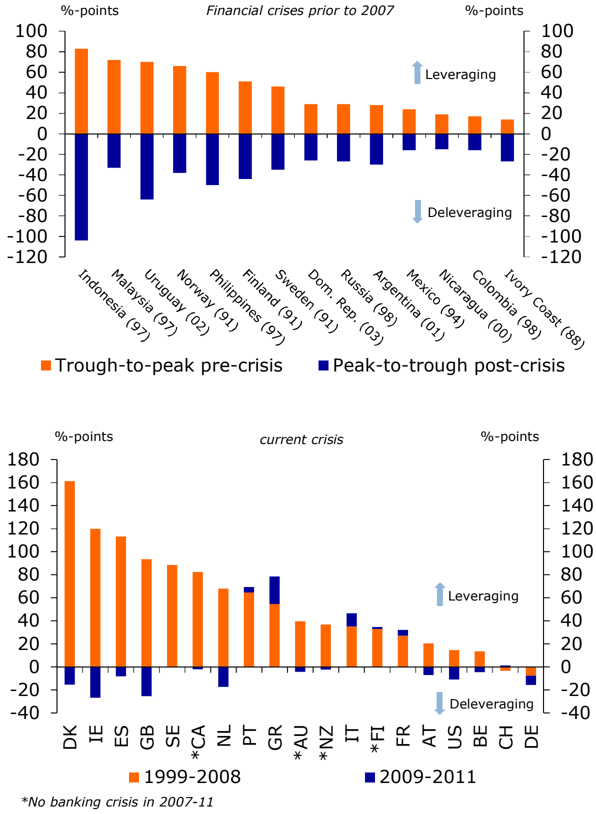
Looking at the traditional credit cycle (see diagram below), we can argue, based on the evidence above, that most of the advanced countries find themselves somewhere between the *downturn* and the *repair* stage. The question is how long will it take until we get to the recovery phase (i.e. 'optimal' debt level is reached)?



To get a rough idea about the depth and length of the current deleveraging process, we could look at how private sector credit/GDP behaved before and after financial crises prior to 2007. Tang and Upper (2010) show that credit/GDP rises, on average, by 44%-points before a crisis and then drops by an almost equal amount (38%-points) after the crisis (figure 6, top panel). Looking at the current crisis, one can see that the average growth of credit/GDP in the period 1999-2008 for the advanced economies (55%-points) exceeded that of the past crises (figure 6, bottom panel). So if history is any guide, we should expect a similar degree of credit reduction in the crisis-hit countries. Yet a glance at the data reveals that credit/GDP has only dropped by 4%-points post-crisis, on average, till end-2011. We have already discussed the reasons for the slow deleveraging process of households and firms. This development is not shocking from a historical perspective. Reinhart and Reinhart (2011) find that credit/GDP continues to increase immediately after the crisis, despite the fact that deleveraging is underway. This is because sharp declines in the denominator

(GDP) are not matched by comparable write-downs in outstanding credits. Thus, balance sheet adjustment is a protracted process.

Figure 6: Change in private sector credit/GDP



Source: Tang & Upper (2010), IMF, Rabobank

In their sample of 15 financial crises, Reinhart and Reinhart (2011) find that private sector deleveraging *starts* 2-3 years after the crisis and lasts about 7 years. The results for public sector deleveraging are even more sobering. Reinhart et al. (2012) look at 22 advanced economies since 1800 and conclude that the average duration of 26 public debt overhang episodes – defined as public debt/GDP exceeding 90% for 5 years or more – was 23 years! The reason for this is that deleveraging often progresses through two distinct phases (Mckinsey Global Institute, 2012). During the first phase, households and firms reduce their debt over several years, which results in weak growth and a corresponding rise in government debt. In the second phase, growth rebounds and public debt is reduced gradually over many years. This is also what is happening in many advanced countries.

Implications of deleveraging

The industrialised world has entered an era characterised by an overhang of public and private debt. The much-needed balance sheet repair process has only just started in many countries and it will probably take some more years until it is complete. In the meantime, we cannot expect robust growth to make a quick comeback. Indeed, past experience of other crisis-hit countries shows recessions that follow financial crises are not only deeper and more protracted, but that the recoveries are indeed much more anaemic. Abiad et al. (2011) find that creditless recoveries following financial crises are inferior, with average growth about a third lower than during 'normal' recoveries. The authors find that industries that are dependent on external finance appear to suffer more during creditless recoveries. Dell'Ariccia et al. (2012) find that three out of five credit booms were characterised by below-trend growth during the six-year period following their end. So it should come as no surprise that the speeds of recovery observed today are either similar or slower than the ones experienced by crisis-hit countries in the past.

August 2012
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