Shedding DEBT

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Until households and financial institutions repair their balance sheets, recovery in many advanced economies will be halting

GOING down a mountain is usually easier than going up. But finance seems to work differently from the law of gravity. Reducing debt, that is, "deleveraging," has proven to be a much harder slog than the climb up the debt mountain. This is why balance sheet recessions, like the one many advanced economies recently suffered, are much worse than recessions in which balance sheets are not overloaded with unsustainable debts (see "Tracking the Global Recovery" in this issue of *F&D*).

Until financial institutions, households, and governments in advanced economies return their balance sheets to sustainable levels of assets and debt, recovery from the worst global economic downturn since the Great Depression of the 1930s will be retarded.

At issue is why deleveraging is so hard, what governments can do to help, how far the world has come in shedding debt, and what policies for the future are best.

Origins of the crisis

Most financial crises involve too much borrowing. Who does the excess borrowing, though, varies. In the past, it was often governments or corporations that borrowed too much. Before the recent crisis, it was financial institutions and households in advanced economies, as well as some governments, that took on too much debt.

Financial corporations in some key advanced economies registered the sharpest increase in debt. Before the crisis, their balance sheets multiplied relative to the total size of their underlying economies (see Chart 1, top panel). The debt-to-equity ratio (leverage) of financial institutions also often rose

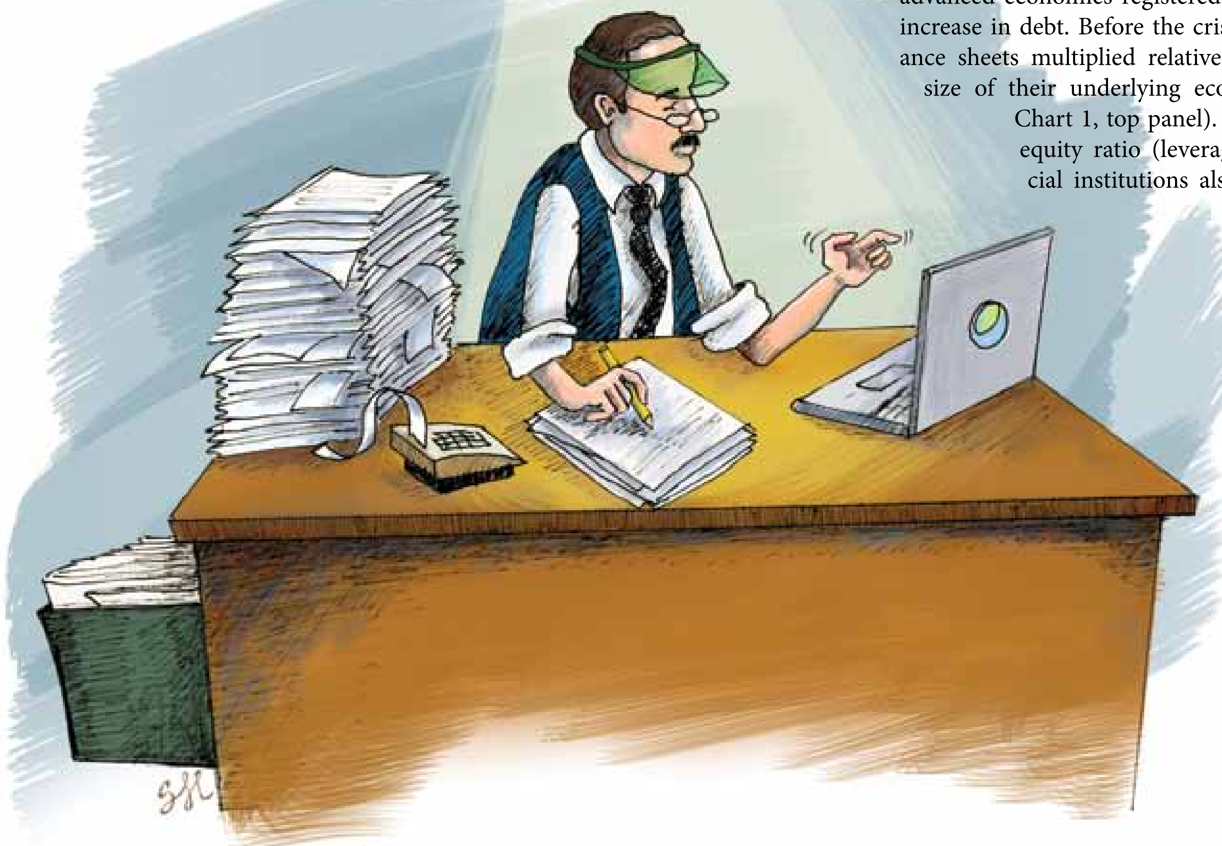
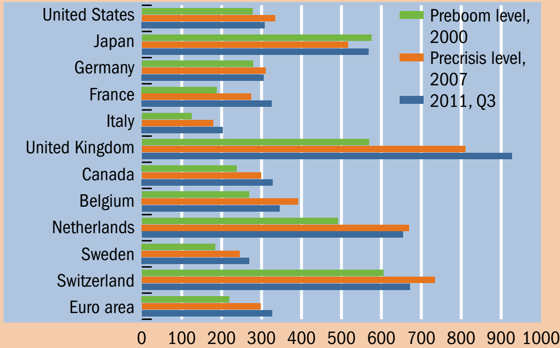


Chart 1

Piling on debt

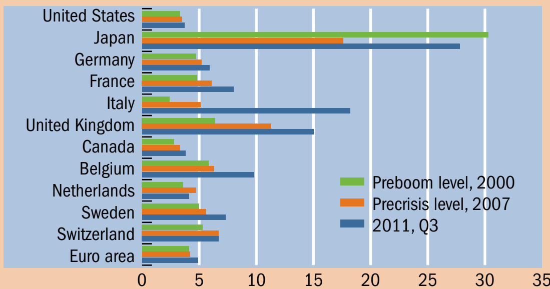
As a percent of GDP, debt on financial institutions' books in many advanced economies grew dramatically.

(debt as percent of home country GDP)



Leverage (the ratio of financial assets to equity) rose sharply as well.

(ratio of financial assets to equity)



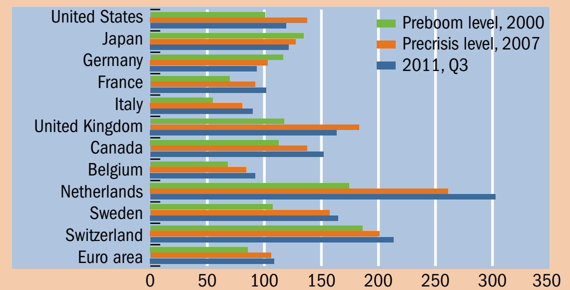
Source: IMF staff calculations.

Chart 2

Consumers gorge

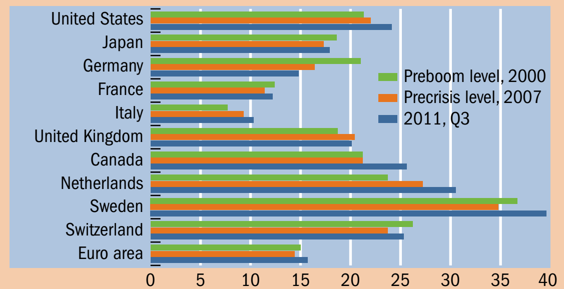
Households registered large increases in debt relative to their disposable income, driven by borrowing for houses and consumption.

(household debt as percent of disposable income)



But because of the housing and stock price booms, household net worth remained high until the crisis when prices fell, net worth tumbled, and debt grew.

(debt as percent of household net worth)



Source: IMF staff calculations.
Note: Data on ratio of debt to net worth are unavailable for Belgium.

sharply (see Chart 1, bottom panel). Notable examples were some of the large U.S. investment banks and European universal banks that saw their leverage increase to 30 times equity, many times higher than in earlier periods.

Households registered large increases in debt too, often driven by borrowing for housing and consumption. Chart 2 (top panel) shows that almost all advanced economies experienced a sharp rise in household debt-to-disposable-income ratios in the years before the crisis. But because of concurrent booms in both house and stock prices, the borrowing did not translate into measured increases in aggregate balance sheet leverage; household debt relative to assets held broadly stable (Chart 2, bottom panel). But that seemingly auspicious measure masked the growing exposure of households to a sharp fall in asset prices, especially house prices. And, importantly, it also masked the wide distribution of exposures among households. Because those with positive asset positions tend to be net savers and those with negative asset positions tend to spend relatively more, deleveraging occurs more often among those more likely to consume and has a disproportionate effect on aggregate demand.

In contrast to some previous crises, leverage (debt to equity) in the nonfinancial corporate sector did not increase much and in some countries even declined compared with earlier periods (Chart 3). Corporations generally maintained conservative balance sheets and often actually increased their cash positions, which made their net debt—liabilities minus financial assets—decline.

Why is deleveraging so hard?

When the crisis hit and asset prices declined, net worth fell sharply. Households and financial institutions were forced to lower their indebtedness. This downward path was harder than the way up because it takes time to shed debt and not everyone can, or should, do it at the same time.

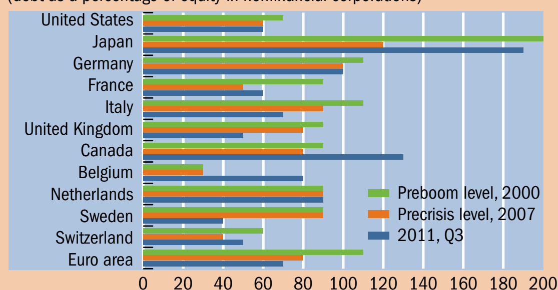
That deleveraging takes time is best seen from the perspective of a household. It can take several years to save enough money to make the down payment for a first house. But once they own a house, households can borrow multiples of their income. In good times, households can benefit from rising house prices and experience an even sharper increase in net worth. But a house price decline can make the loan exceed

Chart 3

Corporate restraint

In contrast to earlier crises, nonfinancial corporations did not increase their debt-to-equity ratios, generally keeping conservative balance sheets.

(debt as a percentage of equity in nonfinancial corporations)



Source: IMF staff calculations.

the value of the house, wiping out net worth. Add in unemployment and a decline in income—which many households in advanced economies face today—and the problems are magnified. Indeed, when house prices declined from 2007 onward, ushering in the global financial crisis, many households saw their wealth shrink relative to their debt. And, with less income and more unemployment, many find it hard to meet their mortgage payments and other financial obligations despite record-low policy interest rates.

Faced with these circumstances, households must increase their savings to restore their net worth. Their ability to do this quickly is limited. Building their down payment took some time, and so will rebuilding their net worth. And for those that find themselves in default, restructuring loans with their lender can easily take a year or more. Add the time it takes to regain their credit rating—so that they refinance at more attractive terms—and the overall deleveraging process can easily take years to run its course.

That's the microeconomic story. At the aggregate, or macroeconomic, level it is more complicated. When everybody retrenches at the same time, the overall result is worse. If many households suddenly begin to save a lot more, there will be a large drop in aggregate demand, which reduces output and leads to more unemployment and less income—and forces even more people to deleverage. If many people try to sell their homes to regain cash, house prices can decline further, triggering more defaults and foreclosures, and further tightening credit conditions for other borrowers. These adverse feedback loops, as economists call them, trigger fire sales that cause house prices to decline below their equilibrium values.

History confirms this slow process of deleveraging. In advanced economies over the past three decades, housing busts and recessions preceded by larger run-ups in household debt tended to be more severe and protracted (IMF, 2012). Specifically, the combination of house price declines and prebust increases in leverage seems to explain the severity of the contraction. In particular, household consumption fell in high-debt economies by more than four times the amount that can be explained simply by the wealth effects of a fall in house prices. Nor was the larger contraction simply driven by financial crises. The relationship between household debt and the contraction in consumption also holds for economies that did not experience a banking crisis around the time of the housing bust.

It is also difficult for financial institutions to deleverage, and when they reduce debt the process can have equal or even worse macroeconomic effects than when households do it. A rise in nonperforming loans, a drop in the value of securities in bank portfolios (which worsens a bank's debt-to-equity position), or regulatory tightening following a financial crisis can force banks to restore their balance sheets. Like households, though, banks can save little, except for cutting dividends and adjusting salaries. They could repair their balance sheets by raising new equity, but are often reluctant to do so, and raising equity quickly can be costly.

Instead, banks tend to repair balance sheets by shedding risky assets—that is, cutting back on new loans. But this response hurts the real economy because it reduces the availability of external financing. If the financial sector is unwilling to provide new financing, a credit crunch can result, in which households and corporations are forced to deleverage, which in turn dampens investment and consumption. This can create a vicious cycle of declines in aggregate output and activity, less income, worse loans, and lower asset prices followed by more forced deleveraging.

Can governments pick up the slack?

There have been many cases historically where a big increase in private sector leverage ended in a financial crisis—in the Scandinavian and east Asian countries in the 1990s, for example. Research has shown that financial crises of this type are followed by long, deep recessions in which crucial indicators such as unemployment and housing prices take far longer to hit bottom than after a normal recession. In some cases, though, recovery was fast because governments were able to substitute public purchasing for private buying. For example, when faced with a big crisis in the early 1990s, excessively indebted private borrowers in Sweden reduced their obligations by slashing spending. The Swedish government, which had a better credit standing than the private sector, increased its spending, running large fiscal deficits. At the same time, the government promptly restructured the financial system, and the central bank cut interest rates. Aided by an exchange rate adjustment, the collapse in activity was halted, the economy recovered, and the government could then start to reduce its debt.

Unfortunately, for many advanced economies, this path is not as easily available today as in the 1990s. Public debt levels were already high before the financial crisis, and many other liabilities—among them pensions and medical and other social services—loom large. The recessions caused large fiscal deficits, mainly due to the slow economic activity and further increases in expenditures, in part due to bank

recapitalization as governments poured funds into banks and other financial institutions to keep them afloat. As a result, many countries' creditworthiness is being questioned and many governments cannot easily increase spending to protect the economy from the forced private retrenchment. This has been especially true for countries on the periphery of the euro area, where governments have had to retrench.

Still, governments can play important roles. Household debt restructuring programs such as those in the United States in the 1930s and in Iceland today can help. The U.S. government took over about one in five mortgages, extended maturities and lowered interest rates, and in a number of cases wrote off principal, thereby significantly reducing debt repayment burdens and the number of household defaults and foreclosures. Such policies can help avert self-reinforcing cycles of household defaults, additional house price declines, and increased contractions in output.

Only the United States and Germany have been successful in lowering the debt-to-GDP ratio in the financial sector.

Where are we today?

Progress in deleveraging now varies by specific sectors of the economy and by country. Charts 1, 2, and 3 also provide a snapshot of the household and financial and corporate sector debt situation as of the third quarter of 2011. A simple comparison of current debt and leverage ratios with their preboom (year 2000) levels suggests that households have a long way to go to repair their balance sheets. The financial sector also needs to reduce its debt-to-GDP ratio and liabilities-to-equity ratio by quite a bit. Corporate sectors are generally in better shape.

Some countries are a little further ahead in this process. In Germany, household debt to income has already declined. In the United States, the ratio has also fallen from its peak, although largely due to defaults that wiped out debts. In the United Kingdom, there has been some reduction in household debt to income since the crisis, although the level remains high. In most other countries, though, household debt has yet to return to its precrisis level or even to stop increasing. For example, household leverage continues to rise in France and the Netherlands, in part because house prices have declined.

In general, there has been less progress in deleveraging in the financial sectors. While the United States and Germany have been successful in lowering the debt-to-GDP ratio in the financial sector, it still has not returned to precrisis levels. In countries such as Canada, France, Italy, and the United Kingdom, the financial sector has not yet deleveraged, and either the debt-to-GDP or debt-to-equity ratio—or both—is still quite high.

While in most countries, nonfinancial corporations did not increase their leverage, in some—notably Japan and Canada—the nonfinancial sector remains heavily indebted.

Policies can make a difference

It will take a long time to repair balance sheets. Although private sector repair is progressing, it is far from over. And many governments have fiscal problems so large that they cannot fill the demand gap caused by the deleveraging.

In some respects, though, this slow progress is good news. As discussed above, deleveraging too quickly, especially by financial institutions, can worsen overall economic performance by reducing aggregate demand and activity. In some countries, there are encouraging signs of repair being made without adverse macroeconomic consequences. The challenge for all countries is to repair balance sheets at the right speed: not too fast, not too slow.

Policies can make a difference. Standard recommendations for an orderly global deleveraging include the following elements:

- Policymakers must carefully coordinate financial, macroeconomic, and structural policies to ensure that the financial system is in a good position to support the economy.
- As a complement to bank capital and provisioning increases under way (see "Fixing the System," in this issue of *F&D*), it is essential to make further progress on bank restructuring and resolution, backed by official support if necessary. The authorities should ensure that banks exercise appropriate restraint on dividend payments and remuneration to preserve capital buffers that can absorb losses.
- Household mortgage debt burdens in some countries must be made sustainable through programs to facilitate principal write-downs.
- The road toward fiscal consolidation in many countries, must be mapped out to ensure or restore solvency in the eyes of financial markets, but the debt reduction path should not hamper the short-run recovery.
- To prevent adverse spillovers, policymakers must coordinate their activities and must avoid excessively favoring their own economic and financial systems. ■

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Reference:

International Monetary Fund (IMF), 2012, "Dealing with Household Debt," World Economic Outlook, *Chapter 3 (Washington, April).*