Government debt

The big sweat

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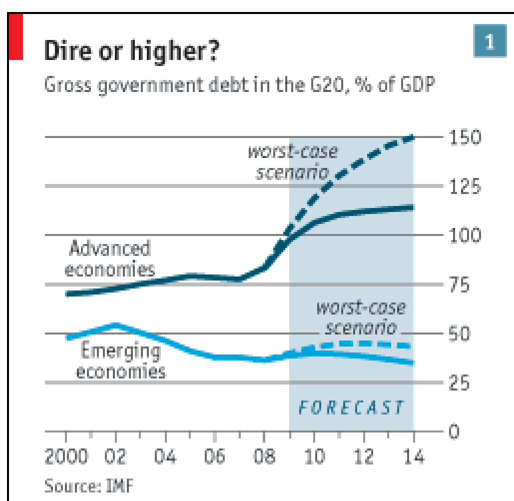
Banking catastrophes and recession have led to vast increases in rich countries' public debts. Getting their finances back into shape will be painful

OVERINDULGENCE has a price. After years of scoffing food and swilling booze, the cost is physical. After a debt-fuelled financial bender, it is fiscal. Governments have been propping up the world economy with a borrowing spree of their own. The recession has drained tax revenues and policymakers have been spending unprecedented sums to get their economies going and support their banks. Sovereign debt is piling up.

According to a study by economists at the IMF, published on June 9th, by next year the gross public debt of the ten richest countries attending the summits of the G20 club of big economies will reach 106% of GDP, up from 78% in 2007. That translates into more than $9 trillion of extra debt in three years.



There is more to come. Because economic growth is likely to be weak for several years after the recession ends, especially in countries such as America and Britain where over-indebted consumers must rebuild their savings, budget deficits will remain big. The IMF economists' baseline is that the government debt of the rich ten will hit 114% of GDP by 2014. Under a darker scenario in which economies languish for longer while fears about governments' solvency push interest rates up, the debt ratio could be 150% (see chart 1).

Governments have never borrowed so much in peacetime. Their huge debts will shape the world economy for a decade. In the short term the extra borrowing is prudent: governments must expand their balance-sheets to counter the savage pace at which

firms and households are cutting back. Were governments not stepping in, the private shift to thrift would be causing an even deeper recession. Tax revenues would fall by more, banks would be even wobblier and public borrowing might end up even higher.

So far, the flight from risk that has made government intervention necessary has also minimised its cost. Investors have flocked to the safety of government bonds, allowing sovereign borrowers to raise money cheaply. Although yields have risen this year, governments in most big economies are still paying less than they were when the crisis began in 2007 (see chart 2).

The real questions concern the medium term. How much damage will greater indebtedness do to economic growth and governments' creditworthiness? Borrowing on today's scale is plainly unsustainable, but will the rich world's governments be able to contain their debt burdens through budgetary discipline alone, or will they be tempted to turn to inflation or even forced to default? An assessment of these risks requires a look at the crises of the past, the financial markets of the present and the timeless arithmetic of debt.

History suggests that a big build-up of public debt is all but inevitable given the magnitude of the recent crash. A study of 14 severe banking crises in the 20th century by Carmen Reinhart of the University of Maryland and Ken Rogoff of Harvard University shows that public debt rises by an average of 86% in real terms in the years after big financial busts, as economies flag and governments are forced into serial attempts to revitalise them.

Default or high inflation are common. In the 1930s even America and Britain changed the terms of their government debt. America abrogated the "gold clause" (which fixed the payment of interest and principal in terms of the metal) after leaving the gold standard. Britain restructured the terms of some war bonds. The debt burdens of Germany after the first world war and Japan after the second were slashed by hyperinflation.

Since the 1940s no advanced economy has defaulted on its bonds (though numerous emerging ones have). And many rich-world governments have been able to lighten their debt burdens without resorting to high inflation. Britain's public-debt ratio soared to

250% of GDP as a result of the second world war and America's exceeded 100%. Both fell sharply in later decades, thanks largely to fast growth.

In the past 20 years several smaller rich economies, including Canada, Denmark and Ireland, slimmed their public debt by 40% of GDP or more as economic growth accelerated and budgets were kept tight. Ireland was conspicuously successful: in 1987 its gross debt was 109% of GDP; by 2007 it was down to 25%. Another smallish country, Sweden, proved that public finances can bounce back quickly from a banking bust. In the early 1990s its government-debt burden went up from 40% of GDP to more than 70%, but fell to below 50% by 2000.

Alas, there are plenty of reasons why a quick rebound will be harder today. The number of countries involved makes it less likely that any of them can count on exports to boost their economic recovery, as Sweden did. Because households will need to save much more and growth may be sluggish for several years, Japan may be a more relevant precedent. Years of stagnation after its property bubble burst have almost tripled Japan's public-debt ratio, from 65% of GDP in 1990 to more than 170% now.

Governments can no longer rely on some forces that aided a return to fiscal fitness in the past. During the second world war capital could not flee, and governments controlled prices and could appeal to patriotism. Now they must make their case in global capital markets. More recently Ireland and others were helped by steep falls in interest rates. With rates already low, that bonus will not recur.

Nor is the financial crisis the only cause of budgetary strain. In America, for instance, Barack Obama's administration has ambitious plans for broader health-care coverage, though it promises to pay for it. Worse, the biggest peacetime jump in the rich world's public debt is taking place just before a slow, secular collapse in most countries' public finances as workers age and the costs of health care rise. According to the IMF's calculations, the present value of the fiscal cost of an ageing population is, on average, ten times that of the financial crisis. Left unchecked, demographic pressures will send the combined public debt of the big rich economies towards 200% of GDP by 2030.

The sheer scale of their fiscal burdens may tempt governments to lighten their loads by inflation or even outright default. Inflation seems increasingly plausible because many central banks are already printing money to buy government bonds. To fiscal pessimists this is but a small step from printing money simply to pay the government's bills. Adding to their worries, many economists argue that a bout of modest inflation would be the least painful way to ease the financial hangover.

The rich world's build-up of debt may also cause changes in countries' relative creditworthiness. Investors have long viewed emerging economies as riskier sovereign borrowers than rich ones, because of their history of macroeconomic instability and more frequent defaults. But the biggest emerging economies are now by and large in better fiscal shape than their richer fellows, and that discrepancy is set to widen. The emerging members of the G20 had a ratio of public debt to GDP of 38% in 2007. By 2014, says the IMF study, this is likely to fall to 35%, less than a third of the rich world's average. As a result the gap between the yields investors demand from rich and emerging economies' bonds is likely to narrow.

Measuring market pressure

Uncertainty about all this has been evident in bond markets (and, somewhat erratically, in the prices of sovereign credit-default swaps). Although yields are broadly low, prices have been volatile. Earlier this year the markets' fears were focused on weaker members of the euro area, notably Greece, Ireland, Portugal and Spain. In mid-March yields on long-term Greek and Irish government bonds hit 6%, almost twice that on German bonds. Without their own currencies these countries cannot unilaterally inflate away their debt, so the worry lies in the increased risk of default. All four have had their debt downgraded by the big credit-rating agencies. Ireland was marked down again by Standard & Poor's on June 8th.

Lately markets have also been paying attention to America and Britain. Standard & Poor's put a negative outlook on Britain's AAA rating last month. Yields on American Treasury bonds have risen sharply. On June 10th the yield on ten-year bonds came within a whisker of 4%; late last year it was not far above 2%. Ben Bernanke, head of the Federal Reserve, has attributed some of this increase to concerns about America's fiscal future. But much of it, he believes, is due to an ebbing of the panic that sent investors rushing to buy government debt last year. Because rising sovereign yields have been accompanied by narrower spreads on riskier debt, such as lower-grade corporate bonds, this is plausible.

Investors' uncertainty is not surprising. To gauge governments' ability and willingness to carry debt burdens, they must apply both the laws of arithmetic and less precise political and economic calculations. Arithmetically, a government's debt burden is sustainable if it can pay the interest without borrowing more. Otherwise the government will eventually fall into a debt trap, borrowing ever more just to service earlier debt. In practice merely stabilising debt ratios at a higher level may not be enough, because extra public debt crowds out private investment and drags down long-term growth. A better goal is to work off big increases in debt. How difficult that is depends on the size of the debt, the pace at which the economy grows and the interest rate the government must pay.

Suppose a country's gross public debt is 100% of its GDP. If the economy grows by 4% in nominal terms and long-term interest rates are 5%, the government will need a primary budget surplus—ie, before interest payments—of 1% of GDP to keep its debt ratio unchanged. To work off a rise of ten percentage points in the debt ratio over ten years requires an additional percentage point on the primary surplus.

The good, the bad and the ugly 3

Government debt, % of GDP

	Gross debt 2007	Net debt 2007	Gross debt 2014*	Fiscal adjustment required†
Australia	15.4	-6.0	16.6	1.2
Britain	46.9	30.2	87.8	5.7
Canada	64.1	23.4	66.2	1.0
France	70.1	34.4	89.7	4.5
Germany	65.5	44.5	91.0	1.8
Italy	113.2	87.6	129.4	4.8
Japan	170.6	85.9	234.2	14.3
South Korea	28.9	-37.7	51.8	-0.7
Spain	42.7	19.1	69.2	3.1
United States	62.9	43.0	106.7	3.5

*Forecast †Difference between forecast primary budget balance in 2014 and primary balance needed for debt sustainability as calculated by the IMF

Sources: IMF; OECD; *The Economist*

This arithmetic suggests that the projected 36-point rise in indebtedness between 2007 and 2014 should not in itself be a calamity. It also implies that countries which entered the financial crisis with modest burdens have more room for manoeuvre than those already deeply in debt. Some of the hardest-hit countries, such as Ireland and Spain, began with low debt ratios, making default extremely unlikely, at least in the short term. Italy and Japan were hemmed in from the start. America met the crash with a gross debt ratio of just above 60% of GDP. Germany's ratio was similar and Britain's a bit lower (see table 3).

Gross debt is a good measure of the public sector's demands from financial markets, since it includes all outstanding government paper. It is the measure used in the IMF study. But it does not give a full picture. Some countries include internal government IOUs in their figures: America, for instance, counts the bonds held in its government pension plan. Because other countries do not, that overstates America's relative gross debt burden. Washington policymakers prefer to look at "debt held by the public", which excludes those internal IOUs. At 37% of GDP in 2007, it puts America in a better light.

Although gross debt is the best guide to governments' financial obligations, net debt, which subtracts the value of their assets, is a better indicator of their creditworthiness. The difference can be huge. Norway's gross debt was close to 60% of GDP in 2007, but thanks to its oil-based sovereign-wealth fund it had a net surplus of almost 150% of GDP. Since Japan's government controls vast assets, notably the Japan Post bank, its net debt, at 86% of GDP, is far lower than its gross debt. After financial crises, the gap can widen a lot. When governments take over failed banks their gross debt soars, but because the accompanying assets have value net debt goes up by much less. Comparing net debt across countries is harder than comparing gross debt, because estimating the value of government assets is hard. Even so, the ranking of big rich economies' burdens, and of the likely increases in them, is much the same on both measures.

Furthermore, calculations about the sustainability of debt must take into account more than just its size relative to GDP. As a rule, countries that issue debt in their own currency to their own citizens are less vulnerable than those that must sell bonds in foreign currencies or that depend heavily on foreign lenders. Emerging economies, which have usually borrowed from abroad, have often faced crises with debt burdens of less than 60% of GDP. Japan, with a large pool of private domestic savings, funds a debt burden almost three times as big as that easily—and cheaply. Persistent economic weakness has pressed yields on Japanese government bonds down from 7% in 1990 to below 2%.

This gives some comfort to rich countries with rising debt burdens—especially America, because the dollar is the world's reserve currency. The rise in private saving after the financial crisis should also hold down the cost of borrowing. That said, America, like Britain and many other countries but unlike Japan, relies on foreign investors, who may prove less willing to fund a much larger debt burden. In the past a bigger burden in America has led to slightly higher long-term interest rates. One often-cited study suggests that a rise of ten percentage points in the ratio of debt to GDP increases long-term bond yields by a third of a percentage point. If America's debt burden gets a lot bigger, however, this could change. Studies from continental Europe suggest that the extra interest-rate cost rises with indebtedness.

The budget balance, which indicates the prudence of fiscal policy from year to year, also helps in determining a government's vulnerability. On that measure the economies of the euro zone fare relatively well. Germany, for instance, entered the crisis with a primary surplus. Both Britain and America had deficits.

From prudence to profligacy

Unfortunately, some countries that seemed to be in decent shape, such as Ireland and Spain, turn out to have relied too much on revenues from soaring property prices and have seen their tax bases collapse. The IMF's economists reckon that by 2014 Ireland's gross public debt is likely to exceed 120% of GDP, undoing all the gains from the past two decades, while its primary deficit will still be 6.7% of GDP. In Britain, which counted on taxes from financial assets and property, the primary deficit is still likely to be above 3% of GDP in 2014, one of the highest among the world's big rich economies.

All this is daunting enough. But for a full sense of the task facing governments, demographic pressures have to be added to the crisis-related damage. On this score all the world's big rich economies are in trouble, but some are worse placed than others—which implies that they will have to run bigger primary budget surpluses. The present value of the increase in America's future age-related budget obligations is about five times its GDP. For Britain, the figure is about three times.

To estimate just how much pain lies ahead, the IMF's economists put all these elements together, assume that long-term interest rates exceed economic growth rates by a percentage point (the long-term pre-crisis average) and then calculate by how much primary budget balances would have to improve in order to bring gross debt ratios to a sustainable level. The economists define this level as 60% or, for Japan, half of today's figure (ie, 85%). Their results suggest that Ireland and Japan have most to do. Both would need to boost their primary balances by more than 12% of GDP, compared with

what is forecast for 2014. Britain would need an improvement of close to 6%. The gap in America is 3.5% and in Germany just under 2%.

All told the outlook is bleak. In a few countries, the financial crisis has badly damaged the public finances. Elsewhere it has accelerated a chronic age-related deterioration. Everywhere the short-term fiscal pain is much smaller than the long-term mess that lies ahead. Unless belts are tightened by several notches, real interest rates are sure to rise, as will the risk premiums on many governments' debt. Economic growth will suffer and sovereign-debt crises will become more likely.

Somehow, governments have to avoid such a catastrophe without killing the recovery by tightening policy too soon. Japan made that mistake when concerns about its growing public debt led its government to increase the consumption tax in 1997, which helped to send the economy back into recession. Yet doing nothing could have much the same effect, because investors' fears about fiscal sustainability will push up bond yields, which also could stifle the recovery.

The best way out is to tackle the costs of ageing head-on by, for instance, raising retirement ages further. That would brighten the medium-term fiscal outlook without damaging demand now. Broadly, spending cuts should be preferred to tax increases. And rather than raise tax rates, governments would do better to improve their tax codes, broadening the base and eliminating distortive loopholes (such as preferential treatment of housing). Other priorities will vary from one country to the next. But after today's borrowing binge, doing nothing is no longer an option.