

Why rising government debt burdens really matter

October 31, 2010 6:00pm [byFT](#) |

By Eswar Prasad and Mengjie Ding

The [global financial crisis](#) triggered a sharp increase in public debt levels, both in absolute terms and relative to GDP. The level of aggregate net government debt in the world rose from \$23,000bn in 2007 to an expected \$34,000bn in 2010. IMF forecasts indicate the level will reach \$48,000bn in 2015. The ratio of world debt to world GDP rose from 44 per cent in 2007 to 59 per cent in 2010, and is expected to climb to 65 per cent in 2015.

Rising debt levels pose risks to fiscal and macroeconomic stability and also imply transfers of wealth across generations. Our analysis shows that advanced economies (AEs) account for much of the increase in world public debt, putting their own as well as global financial stability in jeopardy.

[View the FT's interactive graphic](#)

We've analysed trends in the composition of world public debt and also calculated the burden of this debt - which we define as the ratio of debt to total and working-age populations. Our analysis is based on data from the IMF's Fiscal Monitor ([May 2010](#)), the World Economic Outlook database ([April 2010](#)) and updated information from national sources. [Download the full technical framework](#)

AEs account for the bulk of the increase in global public debt since the start of the crisis. Relative to the size of their economies, debt levels in AEs are expected to continue rising in the next few years. By contrast, debt ratios will shrink for emerging markets (EMs).

- Aggregate debt of AEs will increase from \$19,000bn in 2007 to \$29,000bn in 2010, and is expected to rise to \$42,000bn in 2015. The corresponding numbers for EMs are \$4,000bn, \$5,000bn and \$7,000bn, respectively.
- The ratio of aggregate debt to aggregate GDP for AEs will rise from 48 per cent in 2007 to 71 per cent in 2010 and further to 85 per cent in 2015. The corresponding ratios for EMs are 30 per cent, 30 per cent and 26 per cent, respectively.

There is a stark contrast between AEs and EMs in their relative contributions to growth in world debt versus the growth in world nominal GDP (measured in US dollars). EMs contribute far more to growth in global GDP than to the growth in global public debt, reflecting an improvement in their fiscal positions while AEs experience a fiscal deterioration in both absolute and relative terms.

- In 2007, EMs accounted for 24 per cent of world GDP and 17 per cent of world debt. By 2015, EMs are expected to produce 35 per cent of world output and account for just 14 per cent of world debt.
- EMs accounted for 10 per cent of the increase in global debt levels from 2007 to 2010 and are expected to account for 13 per cent of the increase from 2010 to 2015. By contrast, their contributions to global GDP over these two periods are 70 per cent and 54 per cent, respectively.
- The two biggest AEs are making a far greater contribution to the rise in global debt than to the rise in global GDP. The US contributes 35 per cent of the increase in global debt from 2007 to 2010 and 39 per cent from 2010 to 2015. Its

contributions to global GDP over those two periods are 13 per cent and 19 per cent, respectively. Japan accounts for 26 per cent of the increase in debt from 2007 to 2010 and 22 per cent from 2010 to 2015 while its contributions to global GDP increases are 17 per cent and 5 per cent, respectively.

One way to understand the burden of public debt is to examine the level of debt per capita. Richer economies can of course afford more debt but this is still an instructive calculation as it highlights the growing gulf between AEs and EMs.

- The average per capita debt in AEs was \$19,400 in 2007, rising to \$29,100 in 2010 and will go up to \$41,000 in 2015. The burden of debt for US citizens will rise from \$19,700 in 2007 to \$31,600 in 2010 and then to \$48,000 by 2015. The debt burden for Japanese citizens will hit \$75,900 in 2015, the highest level in the world.
- Average per capita debt for EMs is also rising and will go up to \$1,500 in 2015, far lower than AE levels. China's debt burden will be \$1,200 in 2015. China could in principle pay off its entire public debt by selling its stash of US government bonds.

The burden of the public debt may ultimately fall on the working-age population rather than the entire population, though inflation that erodes the real value of debt would of course hurt everyone. There is an even sharper contrast between AEs and EMs when we calculate the debt burden of the working-age population (ages 20-64; we do not make an exception for the French in our calculations!).

- Among AEs, the average debt per working-age person will more than double from \$31,700 in 2007 to \$68,500 in 2015. Japan tops all countries on this measure and the US will move into second position by 2015. US debt per working-age person goes from \$32,300 in 2007 to \$79,200 in 2015. For Japan, it nearly triples from \$46,200 in 2007 to \$134,500 in 2015.
- For EMs, average debt-per working-age person rises to \$2,600 in 2015, a level far lower than that of the AEs. In the case of China, this measure of the debt burden will be \$1,800 in 2015.

Our analysis paints a sobering picture of worsening public debt dynamics and a sharply rising debt burden in AEs. But perhaps the worst is yet to come. First, AEs as a group are experiencing little population growth. Second, they are facing rapidly aging populations. Third, their economies are likely to register slow growth, especially relative to the EMs. Fourth, entitlement spending on health care and pensions is likely to explode due to unfavorable demographics.

AEs had better get their fiscal act together once the recovery is better entrenched. It will take strong political will to tackle near-term deficits and then to control the growth in entitlement spending. In the absence of decisive action, ballooning public debt in the AEs could become a major threat to domestic and global financial stability.

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Tags: [economic recovery](#), [Fiscal policy](#), [Sovereign debt](#)

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venky_nalluri | November 2 5:12pm | [Permalink](#)

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I am wondering if India's debt figures include the debt of its state governments.
Nalluri, bullshouse.com

Andrew Watt, ETUI Brussels | November 2 1:23pm | [Permalink](#)

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This is a remarkably silly article. It extrapolates some trends and calculates some debt quotients without, it seems, any reflection on what they mean in economic terms. The silliness is perhaps best revealed by the sentence: 'China could in principle pay off its entire public debt by selling its stash of US government bonds.' In a capitalist economy there will always be net debtors and net creditors: the latter are not mentioned once in the article. Yet in the aggregate net debts and claims cancel out. The two real issues are: who holds the debt and who the claims, and whether the debt-holders are able to service the loans or not. The rise in government debt is the direct result of the economic crisis. When the crisis broke creditors refused to extend further credit to private borrowers (firms and households). The latter also 'voluntarily' sought to reduce their borrowing as a share of income, i.e. pay down debt or 'deleveraging'. If government debt had not expanded, taking the place of private debt, and satisfying savers' demand for safe financial investments, there would have been a catastrophic decline in incomes and output.

Going forward, government debts should fall only to the extent that the private sector stops deleveraging. The key need is to stimulate growth and get unemployment back down. This article clouds the real issues by frightening people with essentially meaningless large numbers.

John Vernon | November 1 10:58pm | [Permalink](#)

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Surely surely the FT graphic has switched the labels for Singapore and Sweden!

Christian Vanschayk | November 1 4:59pm | [Permalink](#)

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Extrapolations of current trends are useful short term predictors and in raising red flags. However they should be used with caution. Societies and economies do adapt and change. For example, take Japan's ratio of debt to working age population. Any one who has been to Japan notices, its labor intensive service industries such as banks and retail are over staffed. Working women are marginalized. Productivity improvement opportunities abound. Also, more young ambitious Japanese are going abroad. They will have an influence upon their return. Even staid Japan might be expected to change.

Gugu | November 1 4:20pm | [Permalink](#)

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What is the implication for the Swedish export oriented economy. The graphics point to a decrease in debt burden, but if the country will not be able to increase exports, what then?

David Blake | November 1 1:34pm | [Permalink](#)

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The authors say their "analysis paints a sobering picture." I can't see any analysis at all. Just some numbers and an assertion that there is a disaster looming. How can one take seriously any study which looks at public debt and ignore the enormous amount of private debt which really is the problem?

Moribund | November 1 11:40am | [Permalink](#)

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The unwelcome solution is widespread adoption and social acceptance of euthanasia

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