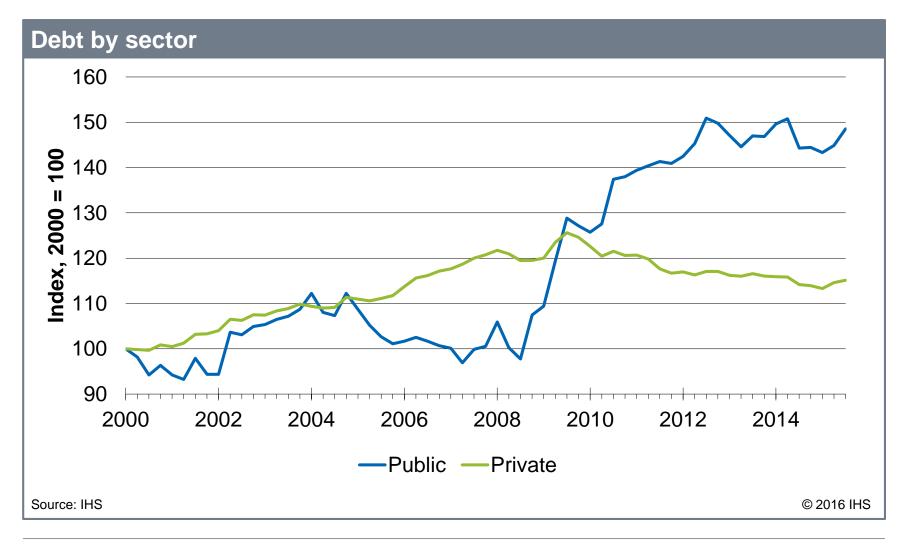
A short history of debt



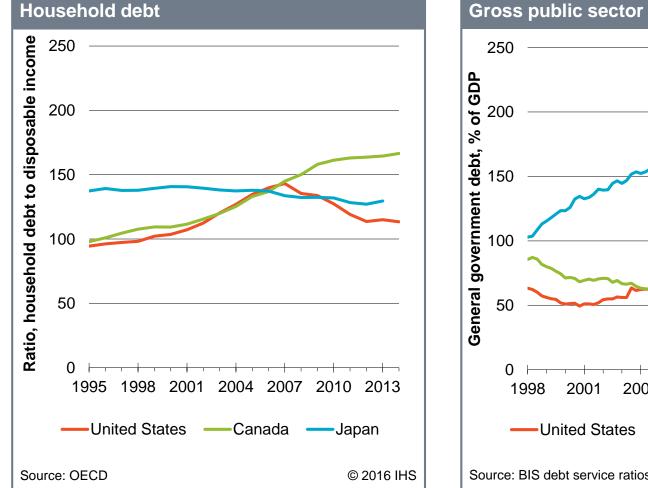
- In the words of the late Charles Kindleberger, debt/financial crises are a "hardy perennial" – we have been here many times before.
- Over the past decade and a half the ratio of global debt to GDP has more than doubled – with both the private and public sectors contributing to this increase.
- Not all the rise in private sector debt was due to low interest rates, the savings "glut" or de-regulation – some of it may have been the result of debt "democratization".
- The good news is that in some countries (notably the US, UK, Japan and Germany) private sector debt has been reduced substantially.
- Unfortunately, government debt in the developed markets has exploded

 in many of these countries public sector debt ratios are at the highest peace-time levels.

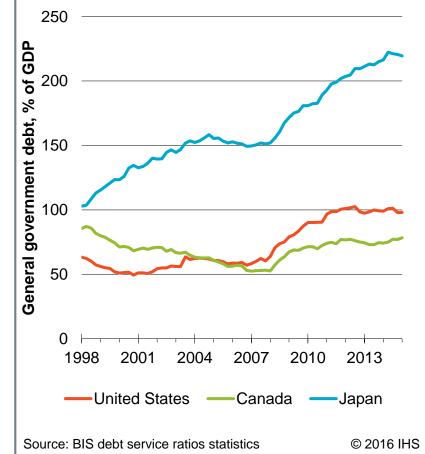
In developed markets, private sector deleveraging has been accompanied by a rapid increase in public debt



Debt ratios

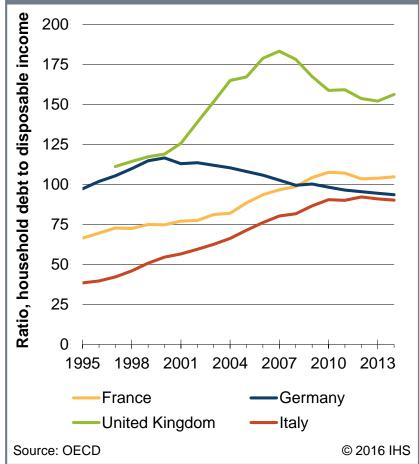


Gross public sector debt

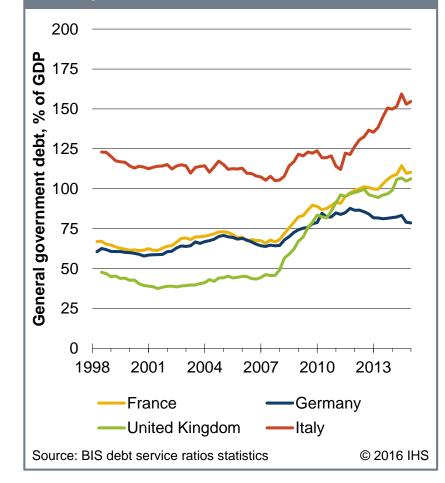


Debt ratios

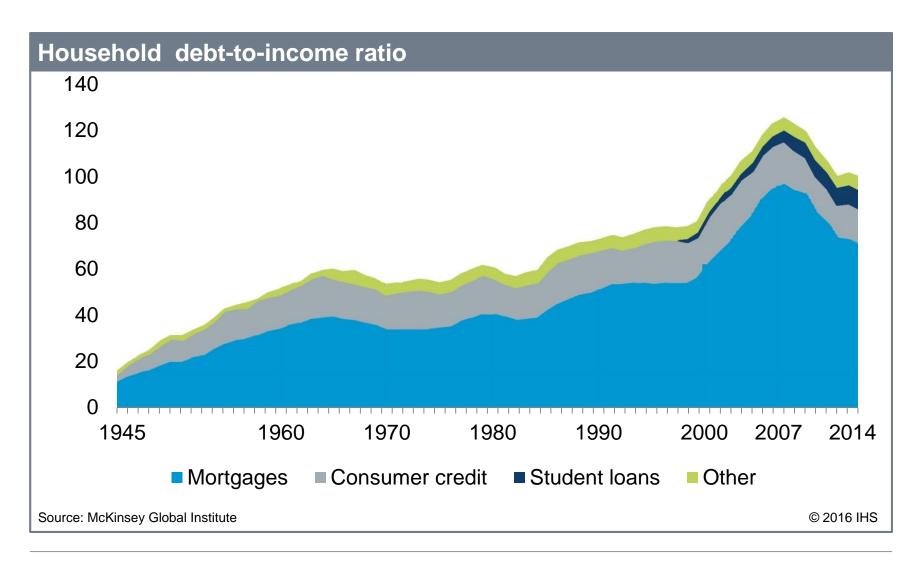




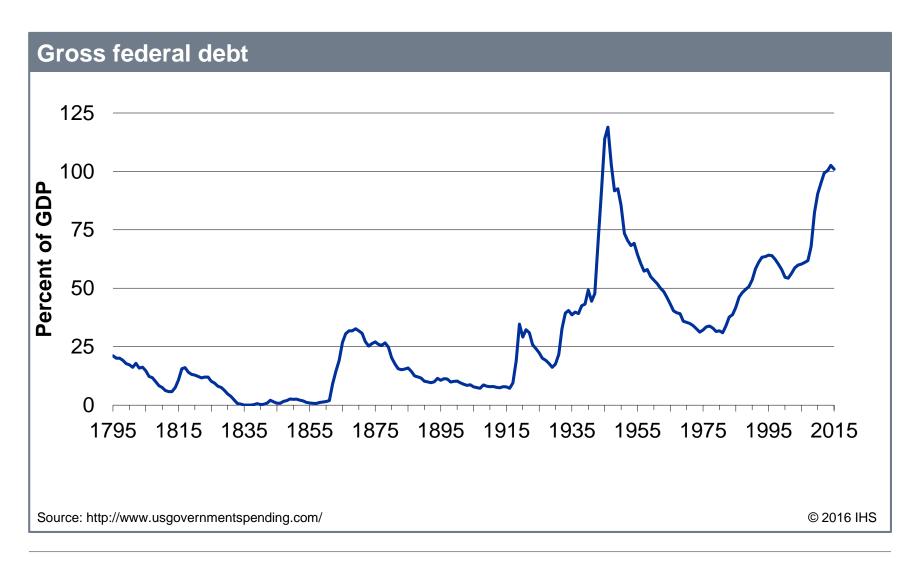
Gross public sector debt



US household debt ratio – long-term



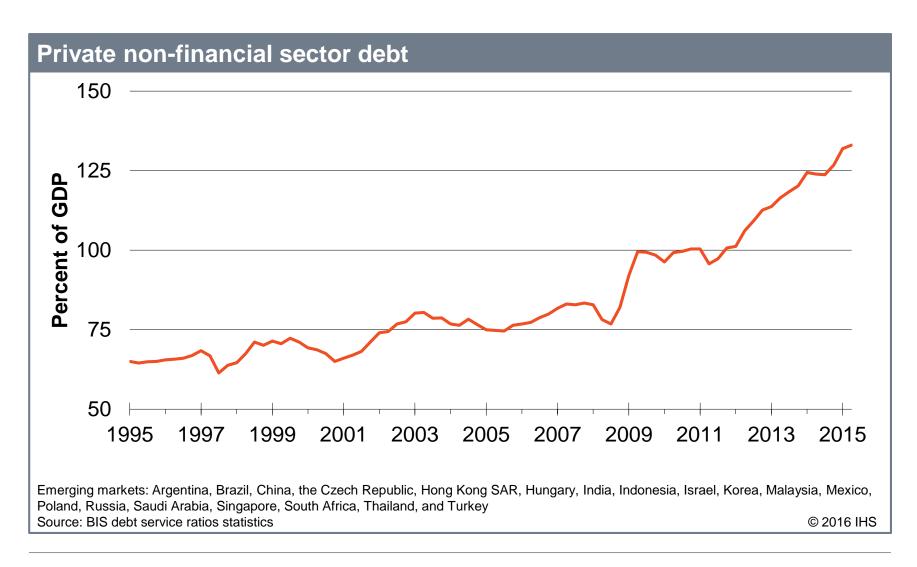
US federal government debt ratio – very long-term



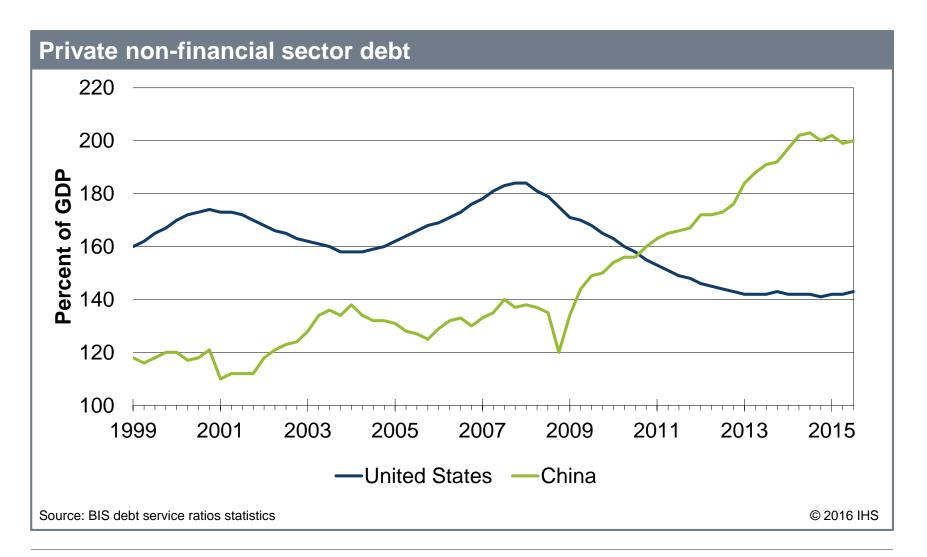
A short history of debt (continued)

- Initially, the recent surge in global debt was concentrated in the developed world; in the last few years, roughly half the increase has been in the emerging world.
- The rise in emerging market debt has been concentrated in Asia (China, Malaysia, South Korea, Thailand, and Vietnam) and Emerging Europe (Hungary and Slovakia).
- The extremely rapid increase in China's debt, from around 120% of GDP in 2000 to over 280% of GDP in 2014, is very troubling.
- Much of this debt is concentrated in financial institutions and the nonfinancial corporate sectors – most has been used to finance real estate investments and a glut in industrial capacity.
- Chinese officials have stopped ignoring this problem (and denying its seriousness) and are now openly fretting about it – but debt continues to rise at twice the rate of GDP.

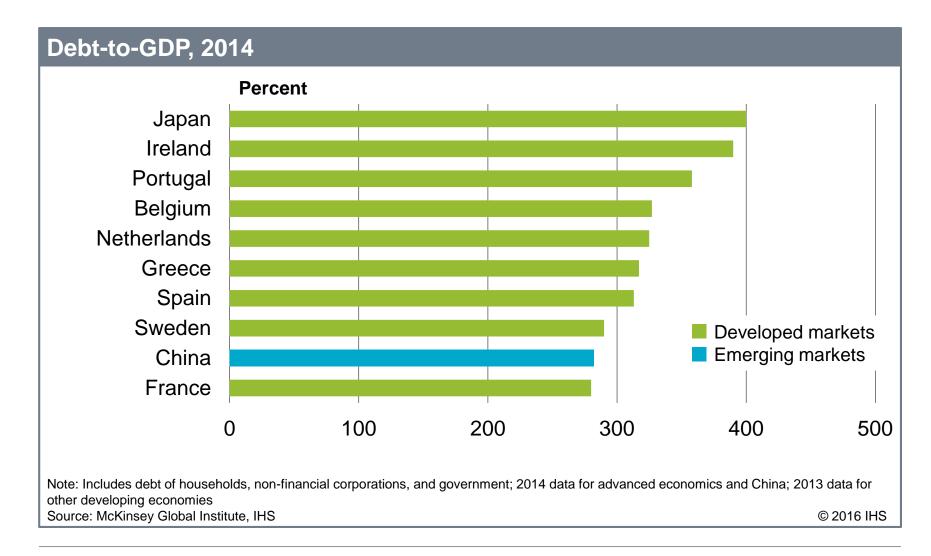
Emerging market private non-financial sector debt



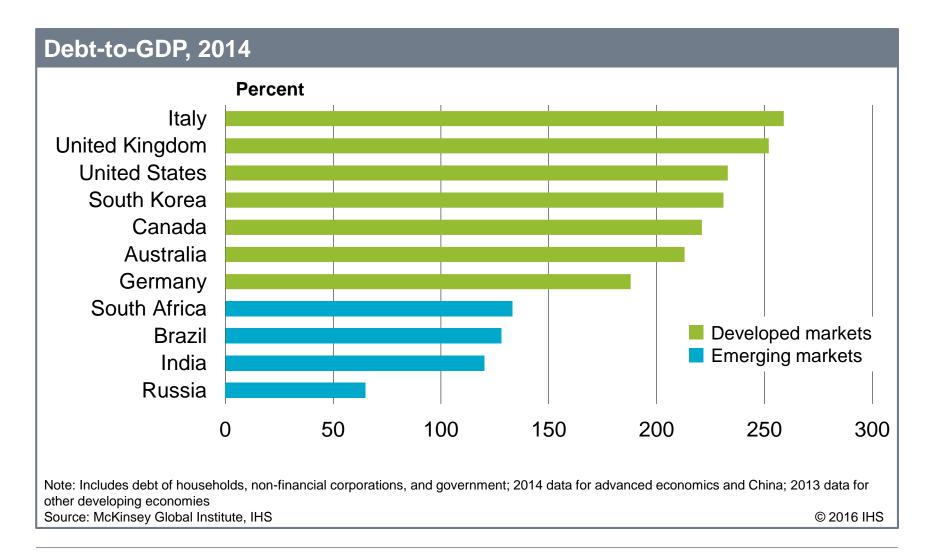
Private non-financial sector debt in China and the US



Total debt-to-GDP ratio



Total debt-to-GDP ratio



Where do we go from here?

- The tolerance for debt seems to have increased in the past couple of decades – what is the limit?
- How will the developed economies lower debt burdens without damaging the medium- to long-term growth potential?
- Is the rise in emerging market debt more dangerous than that of the developed markets?
- Is China, somehow exceptional? Or is it a big accident waiting to happen?
- Is part of the answer the increased use of capital markets (versus banks) – as has happened in the US?

The rise of capital markets and the decline of banks in the United States

