Looking for growth...

May 2013



BCG

THE BOSTON CONSULTING GROUP

The backdrop

Great Moderation

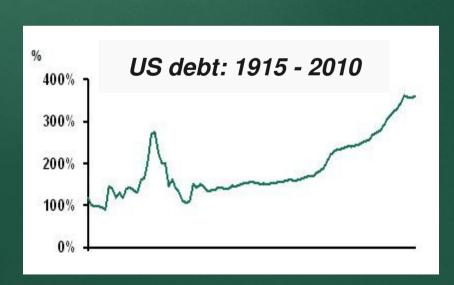
Great Disinflation

Great Roll Back of the State

Great leveraging

Great Globalisation





Dow Jones has reached a new peak

Dow Jones Industrial Average (monthly averages)

October 9, 2007: 16,000 14,164

May 6, 2013: 14,974

14,000

v Jones soars to fresh

12,000

increase bucyred by Feet's board murchuses Dr Midwell Madench and

Arach Mauzedi in New York

10,000

8,000

The Does Jones Industrial Awaraga diosat at a naxed high yaslanday with the US nurket and E2 buroaxior finally surpassing the peak art in 1907 before the ceset

meognisable US munici page, which and at 0.9 per cent higher at 1422/77, eclipsed as October threater S&P 207 chading high of 14,164.53.

The increme pushed the Ikw Harch 200 at 6,

index gains for this year to 8.3

"Il is containly a milestone ven the broad exepticism that amuser many investors se equitie," med Jack

ebouet is made up of bilas-citia companies structu. ExxonNotel, IIIV.

This that ti

Street the !

sequently rises negty 120 cont boowed for accounting IN that have successed twarps



interestmenting Tallia.

professional Wall Street's oldest beach-

Funds that are directly giren its \$10.58 price. indeposi to the DJEA testal ing to S&F Down Jones Indias. bemelement SE Com in activaly managed funds against the per- Global Gravina, Page 22

formance of the SAGP betw., and do not truck the price-indebted

DJV4 companies with high studi prices, such as IEMI, 3M inci whin the and Charton have a hierbar

an 11 per cent weighting due to managers follow the broader its \$217 sinck price, while SMP 500, many robil towestors. Ekselett-Parkurd, which is the year - up 43 per cent - carries a

before the October 1997 yeak of \$1.3to for the SMP 500 - accord- 1.5%6.15 and is conscind to break

Trading Post, Page 23.

2007

2008

2009

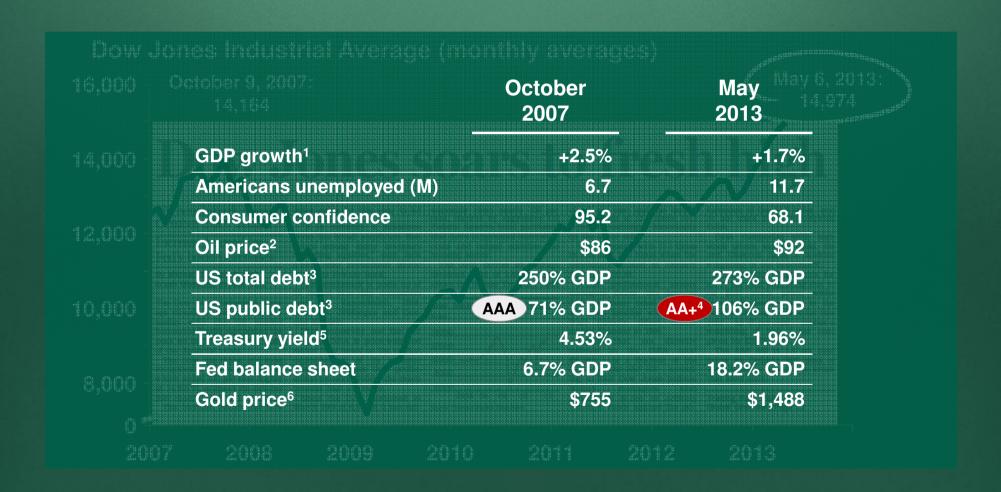
2010

2011

2012

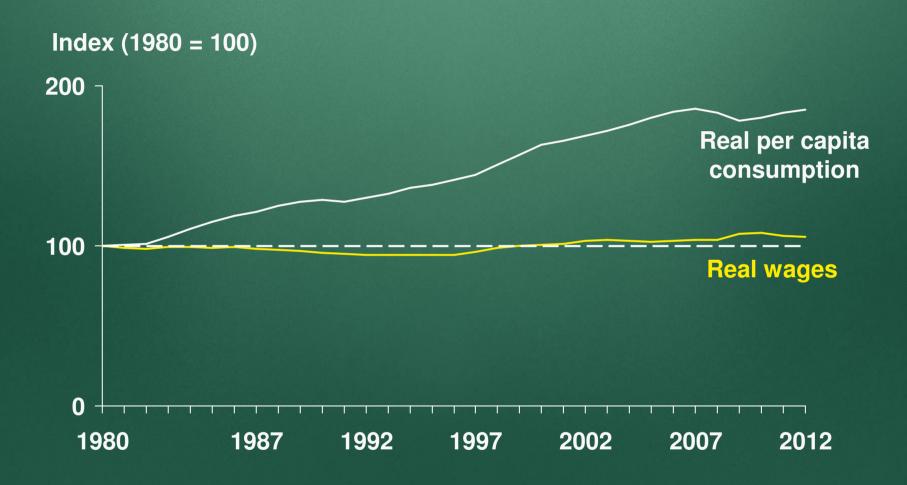
2013

Dow Jones has reached a new peak, but ...





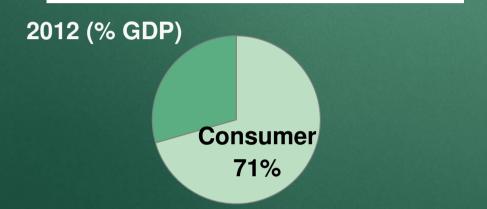
The US boom was not built on strong foundations





Households saving and deleveraging

US economy is fuelled by consumption...

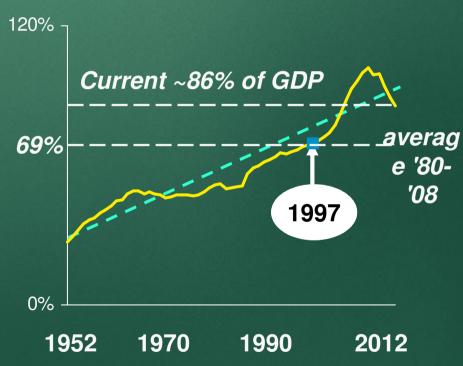


Personal savings rate: 1985 – 2012 (%)



... but now needs to deleverage

Historical household debt (% of GDP)



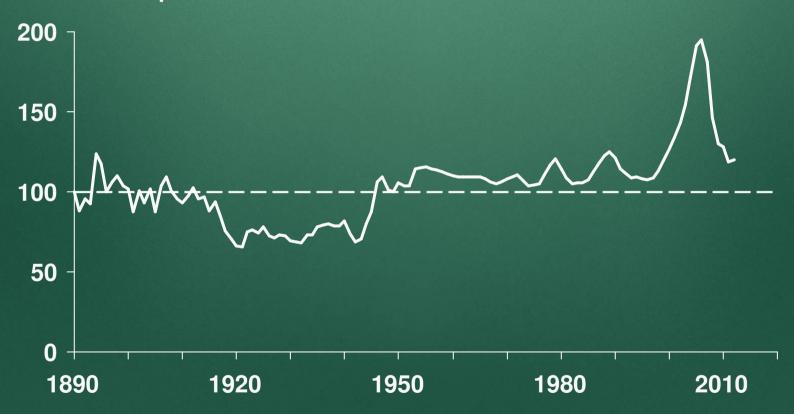
Source: EIU, Thomson Reuters Datastream (U.S. Bureau of Economic Analysis)

THE BOSTON CONSULTING GROUP



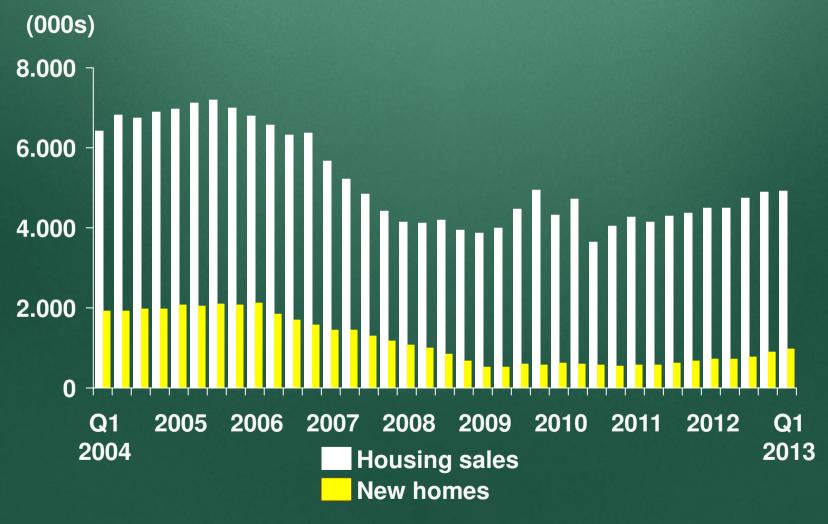
US house prices – lots of people still feel poorer

Real house price index: 1890 to 2012



US housing starts and homes sales still well below pre-crisis levels





Source: Thomson Reuters Datastream (U.S. Census Bureau, National Association of Realtors)

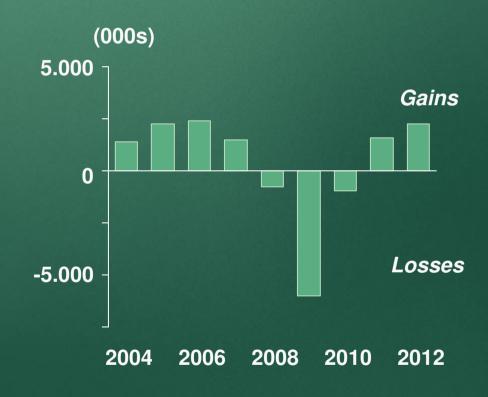


Confidence still low, but job some creation

Consumer Confidence has not recovered

Yearly changes in US employment







And recent retail data has been encouraging

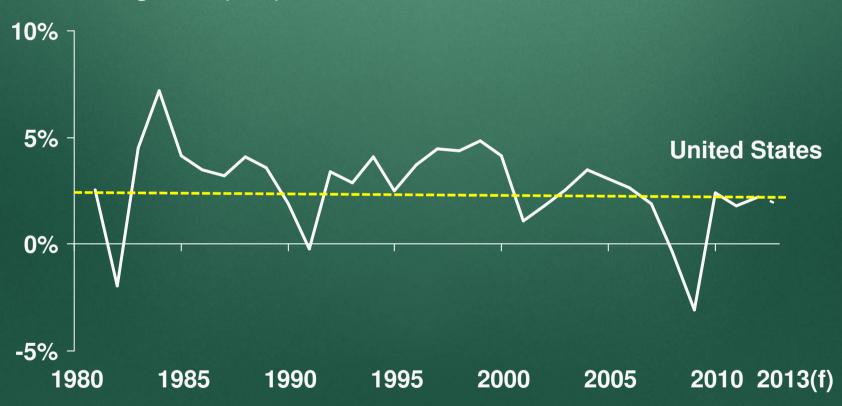
US retail sales and car sales per capita (indexed to Jan 2007 = 100)



^{1.} US retail sales excluding food services Source: U.S. Census Bureau

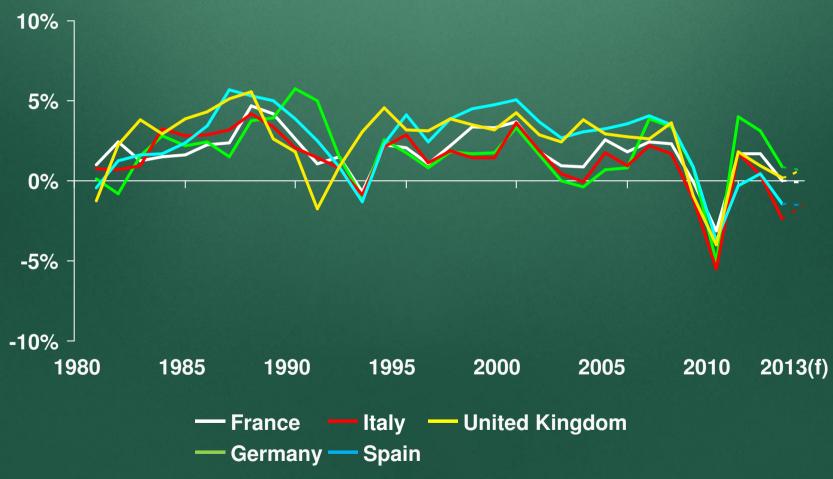
So some growth, but lower than pre-crisis

Real GDP growth (YoY)



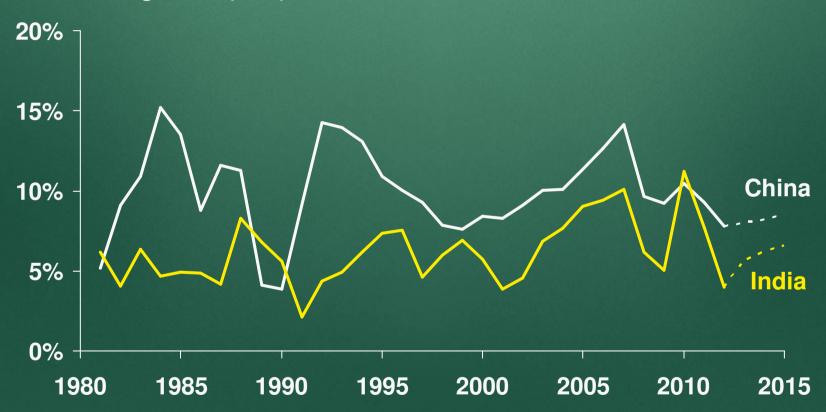
In contrast, European growth has remained stubbornly depressed

Real GDP growth (YoY)



While GDP growth in China and India well above developed economies, but slowing

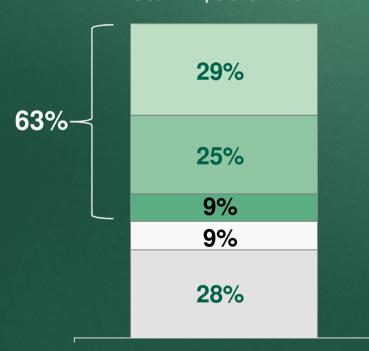
Real GDP growth (YoY)



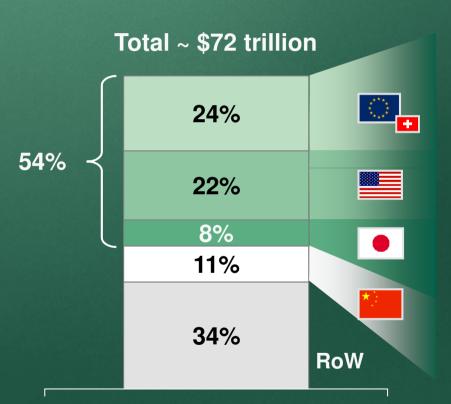
The Old World still matters...

Global GDP: 2009

Total ~ \$58 trillion

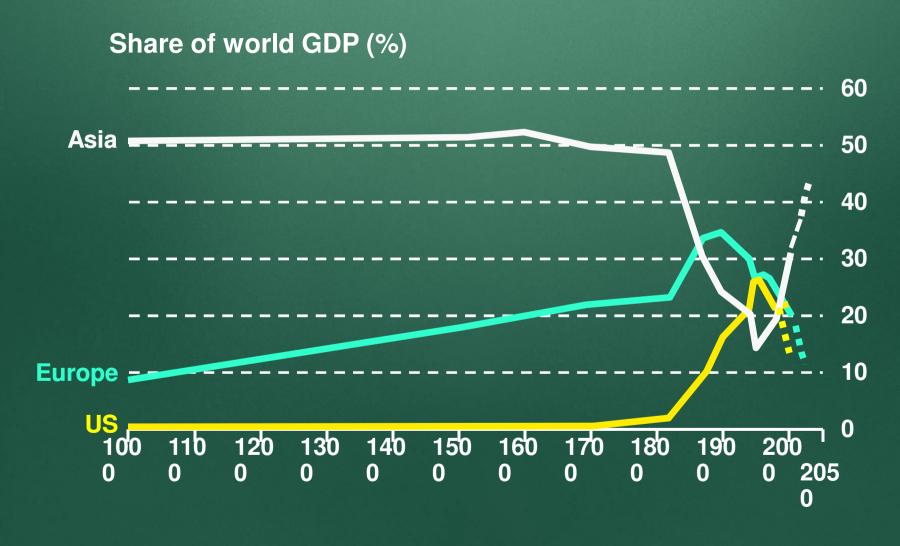


Global GDP: 2012



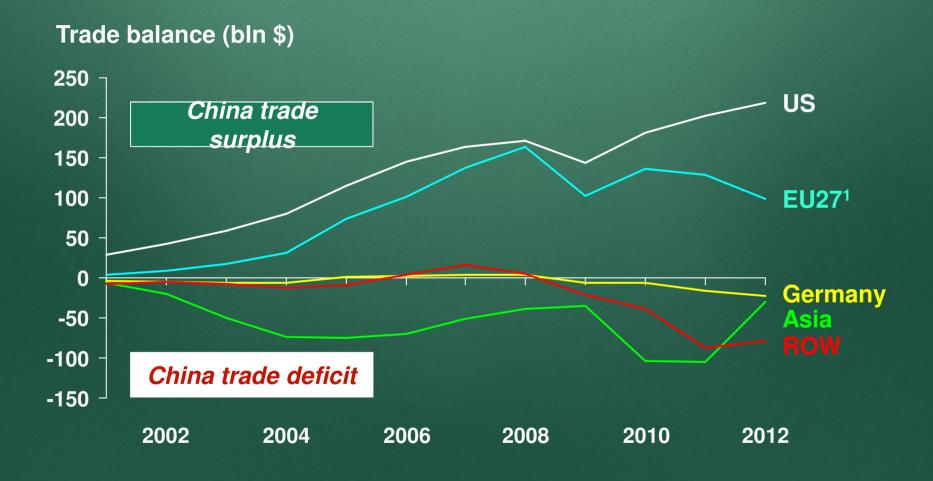
83% of Global Trade touches EU, US, and Japan

...But the Old World is losing ground





Behind the figures: China does not run a surplus with everyone

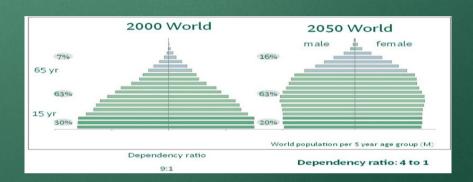


Four major drags on growth in the developed world – particularly Europe

Too much debt



Demographics



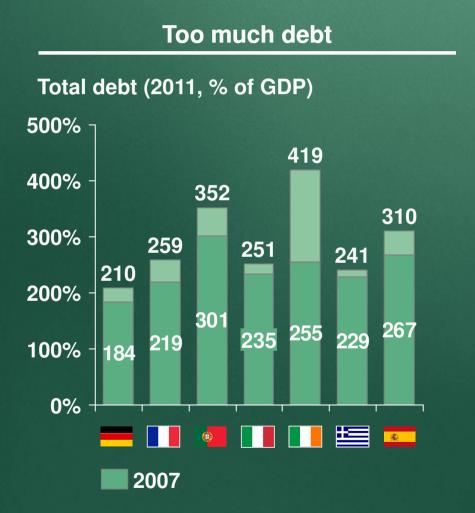
Eurozone in crisis



Imbalances/Uncompetitiveness



Global imbalances reflect underlying lack of competitiveness



Countries lack competitiveness ...



Source: Thomson Reuters Datastream (OECD)

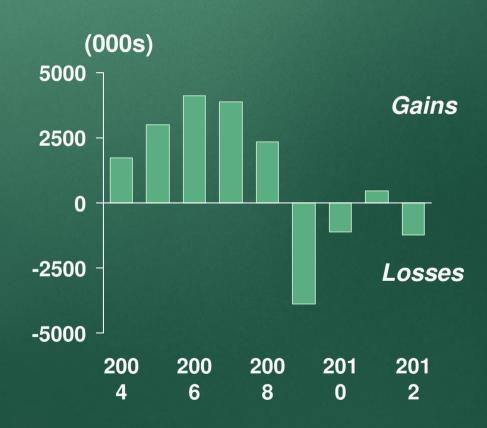


In Europe, uncertainty and layoffs since 2009

Double dip in Economic Sentiment

Index 120 100 80 Jan Jan Jan Mar '04 '06 '08 '10 '13

Yearly changes in EU employment



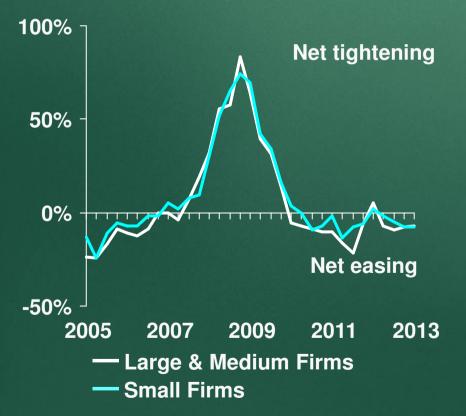
Note: Employment statistics for EU27

Source: Thomson Reuters Datastream (DG ECFIN, Eurostat)

Unlike US, in EU restricted financing persists

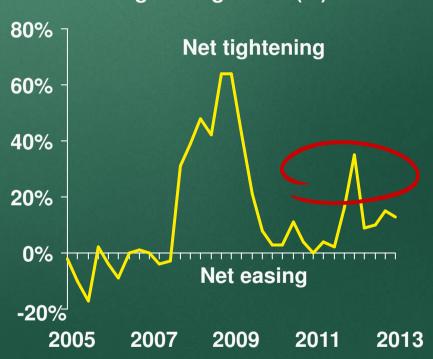


US banks tightening credit (%)



But in EU, credit access still limited





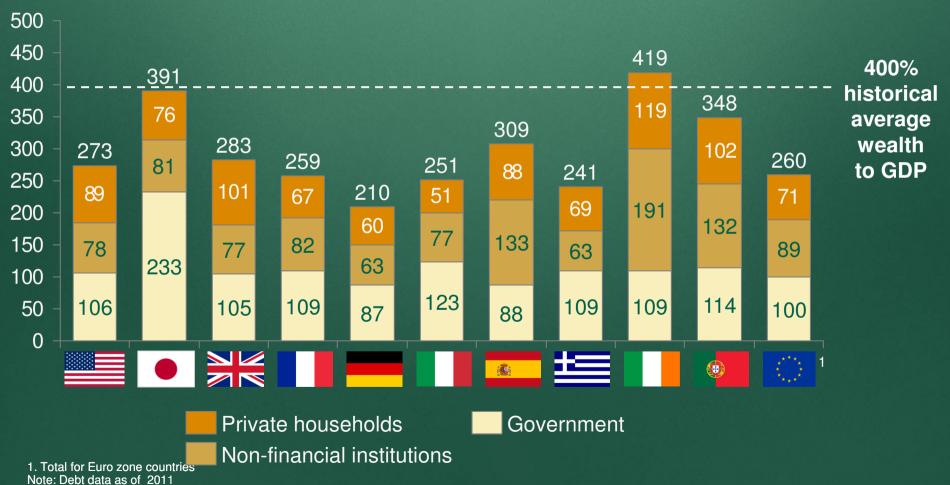
Note: Bank lending survey: The question asked reads: Over the past three months, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed?

Source: Thomson Reuters Datastream (Federal Reserve, ECB)

EU debt levels clearly not sustainable

Long-term asset values around 4 times GDP





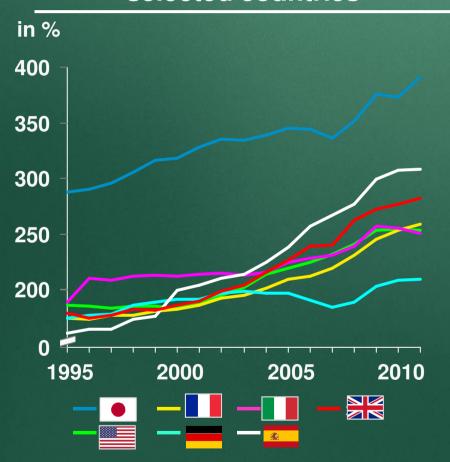
Non-consolidated total liabilities of governments, households, and non-financial corporations (loans only) at market prices Source: Eurostat; Federal Reserve; Thomson Reuters Datastream; BCG analysis

THE BOSTON CONSULTING GROUP

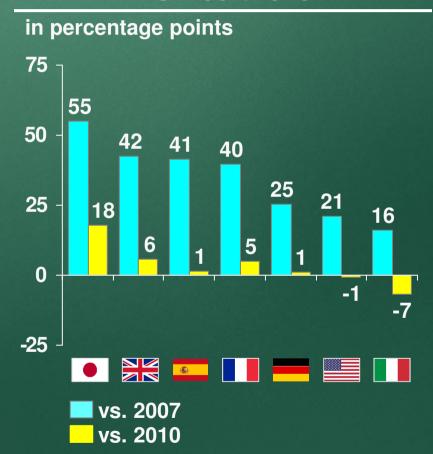
But unlike the US, there is little deleveraging

Only Italy and the US have started deleveraging recently

Total debt¹ to GDP for selected countries



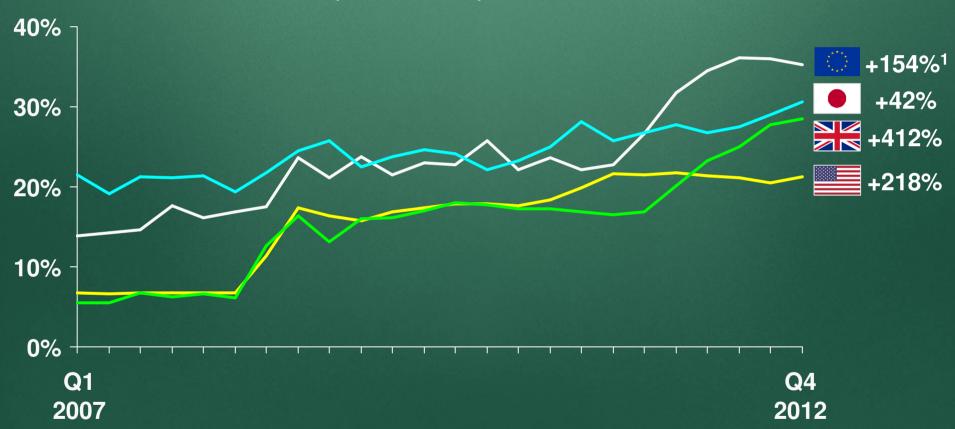
Total debt to GDP 2011 vs. 2007/2010



1. Total debt includes government, nonfinancial-corporation and household debt Source: Thomson Reuters Datastream, BCG analysis

Printing money has not worked

Central banks' total assets (in % of GDP)

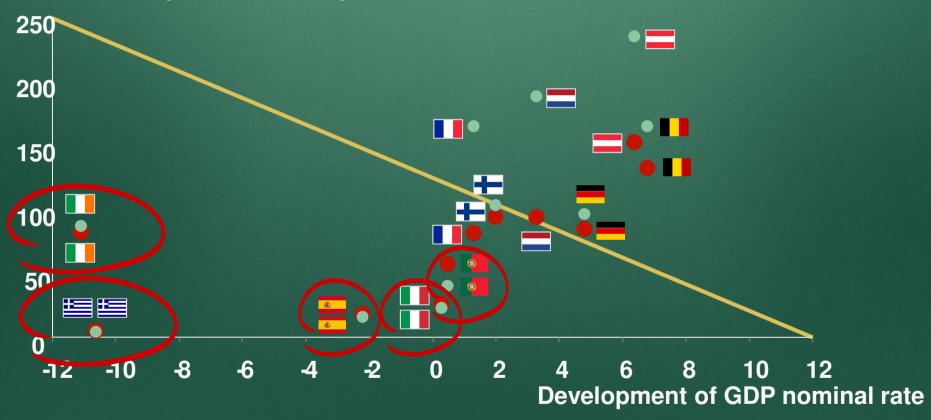


^{1.} Consolidated balance sheet for the Eurosystem Source: National central banks, Thomson Reuters Datastream, BCG analysis

Economic crisis leads to bankruptcies

... or not

Insolvencies per 10,000 companies



20092011

Source: Creditreform; BCG analysis

Companies: The rise of the zombie!



They are alive – but barely – thanks to government help, ultra-loose monetary policy and, often, the reluctance of lenders to write down bad loans since the crisis.

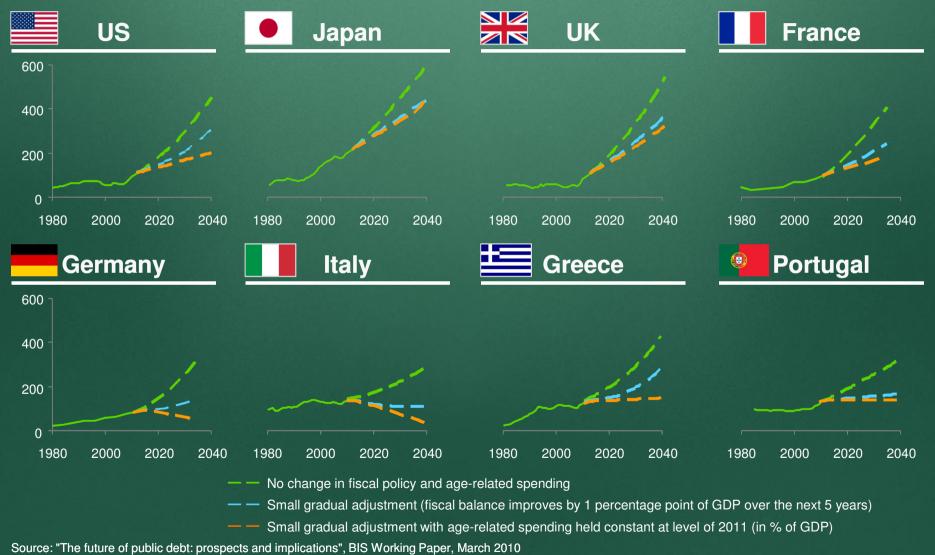
The concern is that these companies – which spend so much of their cash servicing interest payments that they are unable to invest in new equipment or future growth areas – could be at least partly to blame for the weak recovery in Europe, hogging resources that could go to more productive areas.

The growing fear is that **the continent could be following the path of Japan**, where low interest rates, looser government policy and the failure of the big banks to foreclose on unprofitable and highly indebted companies is thought to have contributed to two decades of weak growth.

Source: Financial Times (January 9, 2013); BCG analysis

Drastic measures are necessary to check the rapid growth of current and future liabilities

Public gross debt/GDP prediction



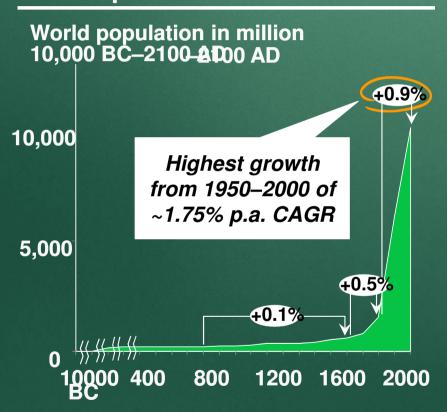
Developed world is aging relentlessly



The growth formula is broken

Economic Growth = Workforce

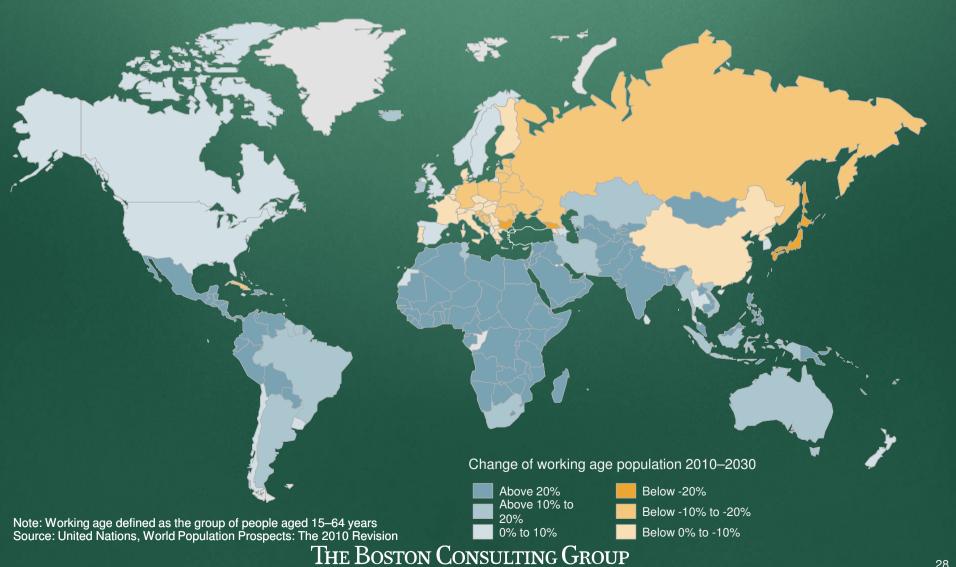
Population evolution ...



Note: Historical estimates of World Population estimates reflect "lower estimates" of US Census Bureau. Data by 2009 from US Census Bureau, starting 2010 from UN World Population Prospects

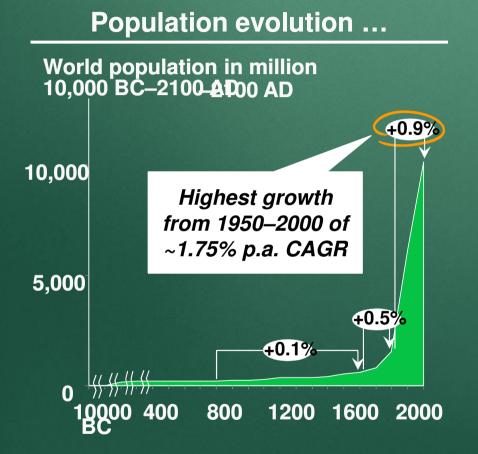
Source: US. Census Bureau, Historical Estimates of World Population, 2012; United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision; Robert Gordon, "Is U.S. economic growth over? Faltering innovation confronts the six headwinds", NBER Working Paper 18315, http://www.nber.org/papers/w18315

Russia and China will shrink at the content of the

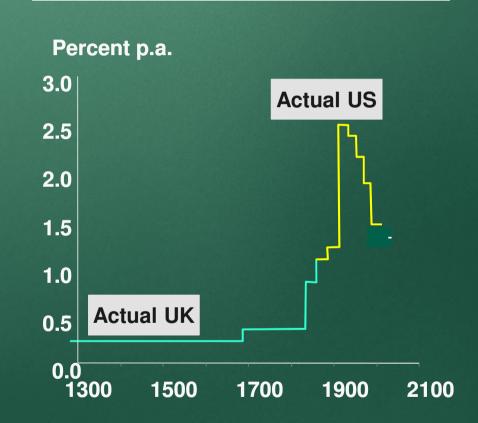


The growth formula is broken

Economic Growth = Workforce



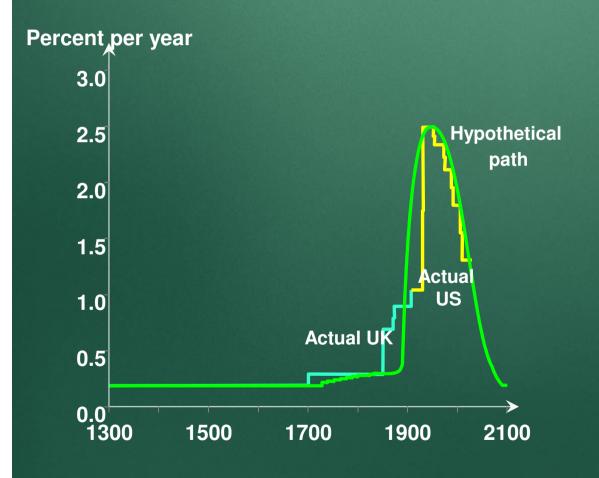




Note: Historical estimates of World Population estimates reflect "lower estimates" of US Census Bureau. Data by 2009 from US Census Bureau, starting 2010 from UN World Population Prospects

Source: US. Census Bureau, Historical Estimates of World Population, 2012; United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision; Robert Gordon, "Is U.S. economic growth over? Faltering innovation confronts the six headwinds", NBER Working Paper 18315, http://www.nber.org/papers/w18315

Headwinds for further productivity gains

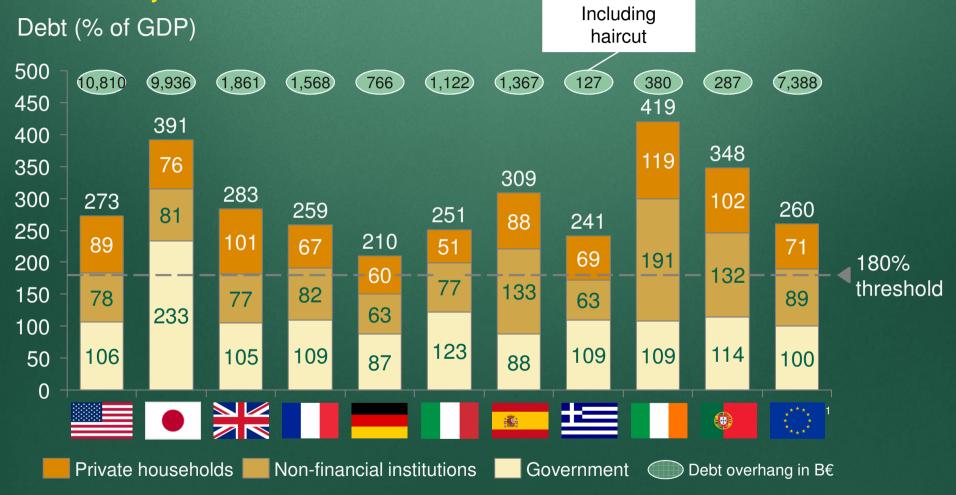


- Innovation with less impact on productivity than in the past
- The West is falling behind on education
- Intensified international competition increases labor cost pressure
- Efforts to reduce CO2/the end of cheap resources
- Underinvestment in assets by public and private sector
- Increased income inequality

30

Back to Mesopotamia?





^{1.} Total for Euro zone

Note: Debt data as of 2011

Non-consolidated total liabilities of governments, households, and non-financial corporations (loans only) at market prices Source: Eurostat; Federal Reserve; Thomson Reuters Datastream; BCG analysis

Required one-time wealth tax

Necessary debt reduction to reach sustainable debt-to-GDP ratio

Necessary debt reduction and remaining HH financial assets (%)



- Household financial assets needed for debt reduction
- Remaining household financial assets

Cyprus = Mesopotamia





of paying for bank tailouts from tanguayes to private investor of survoice for the control of survoice from the control of survoice from the from t



Bail-Out

Euro group and IMF will pay €10B to rescue Cyprus

Bail-In

Equity shareholders, bond holders and uninsured depositors will face "haircuts"

Laiki Bank closure

- €4.2B in uninsured deposits will be transferred to a "bad bank" which will be wound up over time
- All deposits of less than €100,000 are safe and will go to Bank of Cyprus

Bank of Cyprus recapitalization

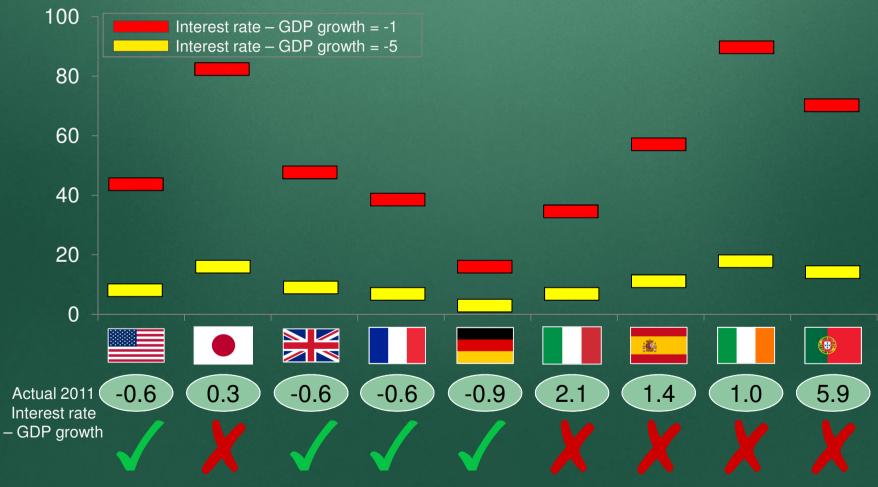
- Contribution of private investors and uninsured depositors
- Uninsured deposits are estimated to amount to €10B—of which 37.5% to 60% will be converted

Source: Financial Times,, 26 March 2013, Economist "The Cypriot deal: Seconditing Out 10 2013

THE BOSTON CONSULTING GROUP

Financial repression?

Number of years to reach 180% threshold



Note: 2011 data, Portugal interest paid as of 2010

Non-consolidated total liabilities of governments, households, and non-financial corporations (loans only) at market prices

Source: OECD; BCG analysis

Europe: a bit of a mess

Banks in countries with credit bubbles or fiscal deficits are damaged

Banks hold high

levels of public

debt; finance

same governments which support them Fragile banking systems need rescuing

Private sector retrenches; demand weakens in face of austerity

Unemploymen t rises, Government revenues reduce

Weak banks need to deleverage. Put liquidity into Government bonds

Austerity weakens the economy and the banks

Fiscal austerity ineffective

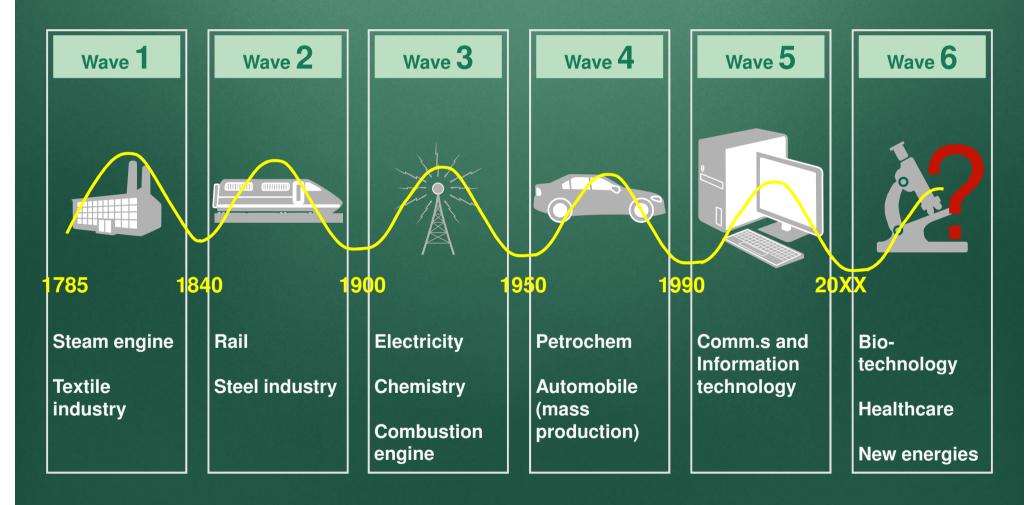
Is this the biggest Ponzi Scheme in world history



How to solve the euro crisis?

Six possible options	debt overhang	Restore competitiveness
Internal devaluation	X	X
Permanent transfers from north to south	X	
 Grow out of the problem Debt and demography render this option impossible 		
Organized debt restructuring and growth agenda		
The inflation solution	✓	
6 Debt restructuring and Euro zone exits The Boston Consul	TING GROUP	37

Will there be a next "Kondratiev" cycle?



This says it all



Jean-Claude Juncker
Prime Minister of Luxembourg
Former President of the Eurogroup

We all know what to do, we just don't know how to get re-elected after we've done it.



THE BOSTON CONSULTING GROUP

Thank you

bcg.com | bcgperspectives.com