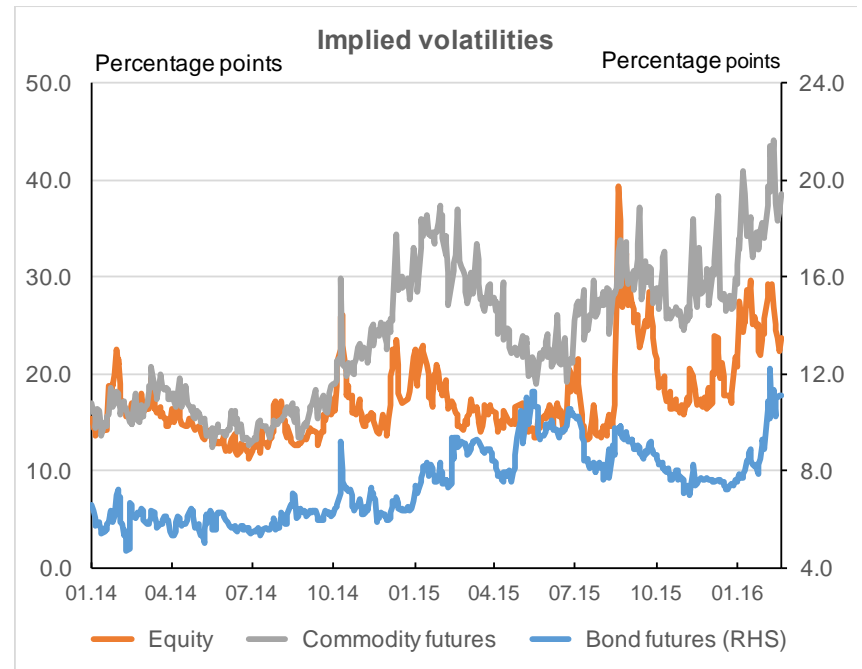
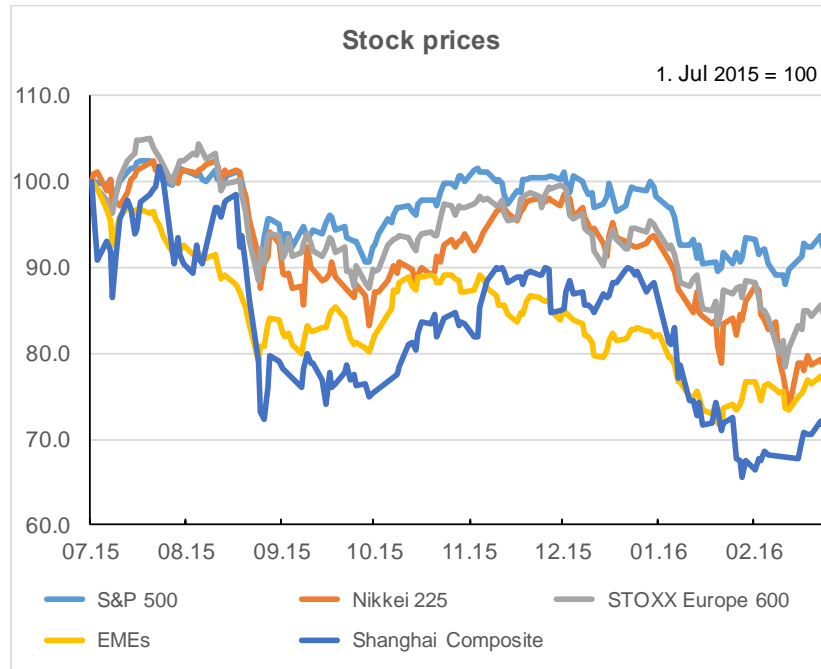


Navigating uncharted waters

Daniel M. Hofmann
Senior Advisor Financial Stability and
Insurance Economics, The Geneva Association

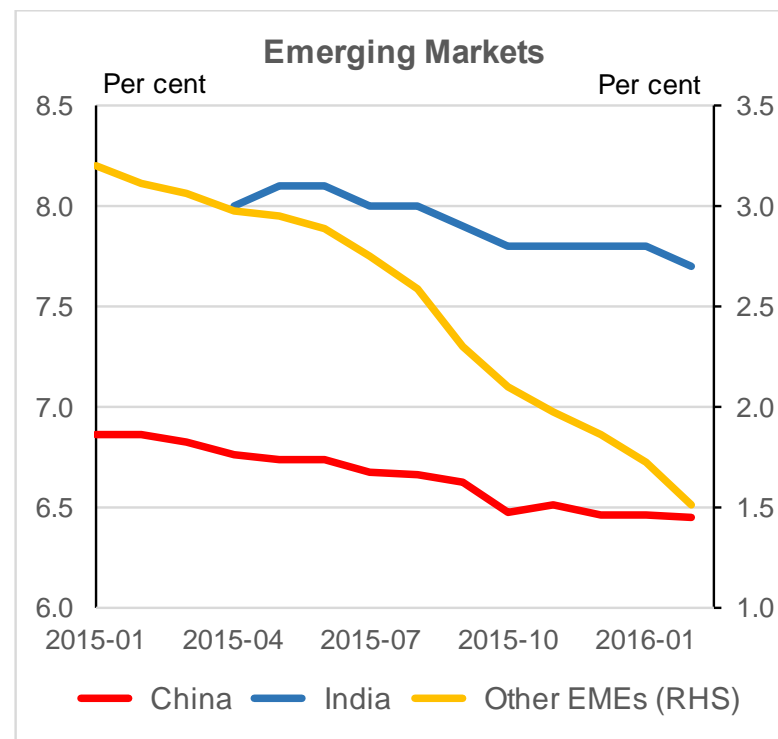
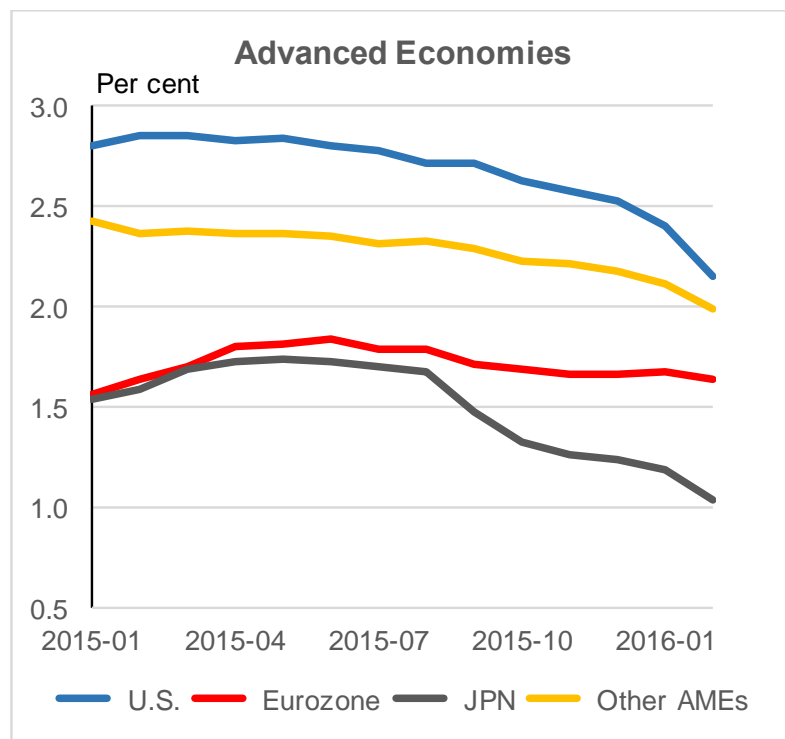
13rd Annual Roundtable of Chief Risk Officers (ART of CROs)
“Risk Management beyond Solvency II”

14-15 April 2016, Copenhagen



Source: Stock exchanges

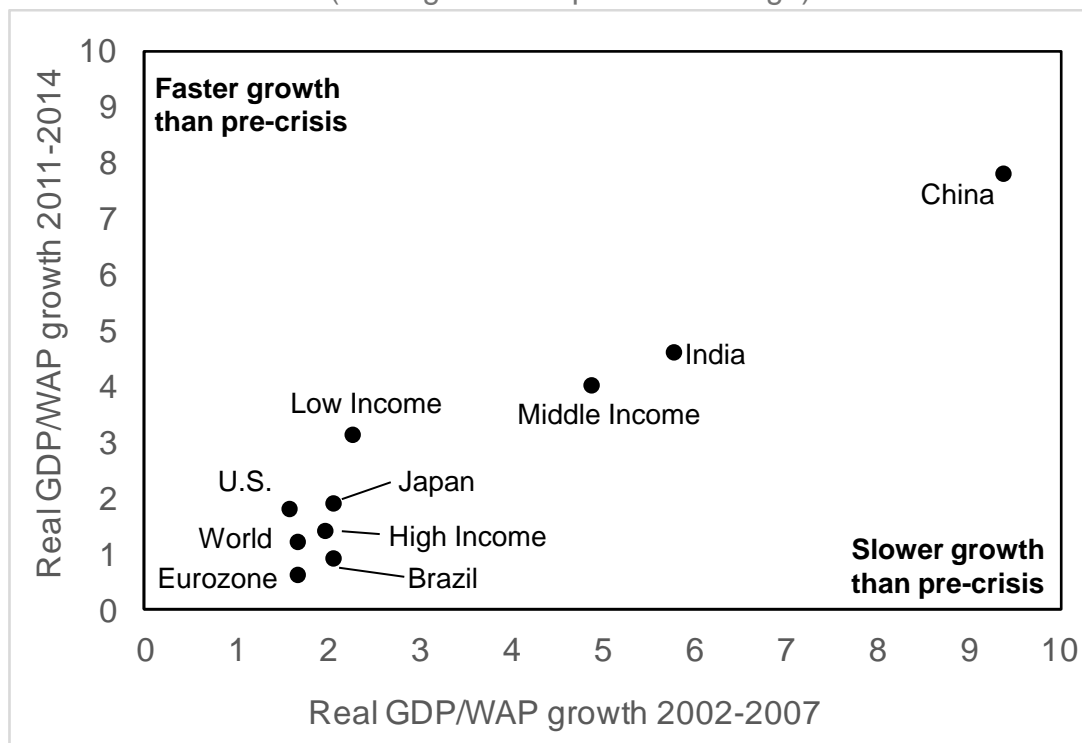
➤ The worst beginning in two decades



Source: BIS Quarterly, March 2016

➤ **Diminishing expectations across the board**

Real GDP per working age population; pre- vs. post crisis
(Average annual per cent change)



Source: World Development Indicators

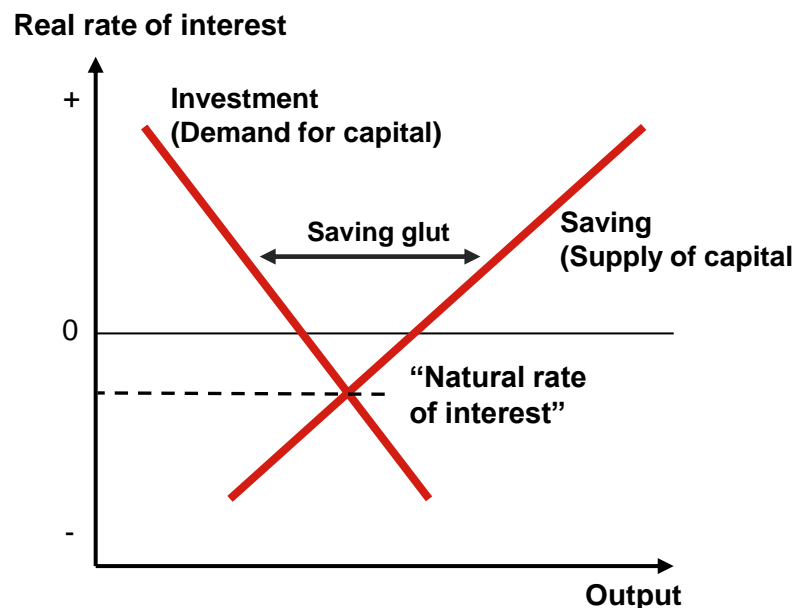
- **Central banks have lost their lustre**
(but monetary policy is no panacea)

- **What is mere trend?**
- **What is cyclical?**
- **What is structural?**

- **An eclectic framework**
- **Six leading paradigms**
- **Reach and relevance**
- **Implications for insurance**

Leading proponents: Lawrence Summers (2016), “The Age of Secular Stagnation”

Ben Bernanke (2005), “The global saving glut and the U.S. current account deficit”



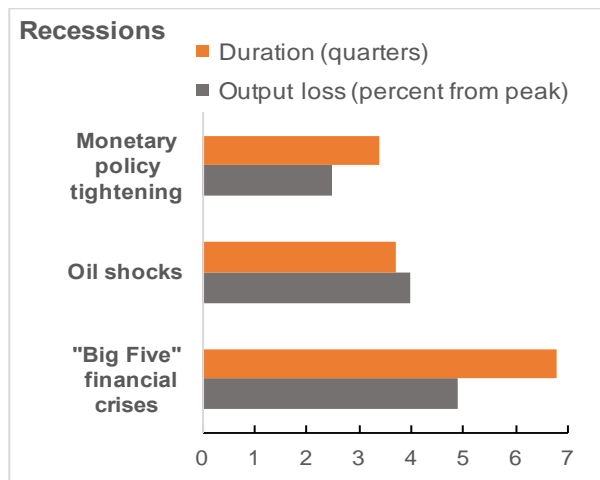
Economic and policy implications

- Protracted stagnation
- Protracted low interest rate environment
- Policy pressure on exchange rates
- Growing protectionism

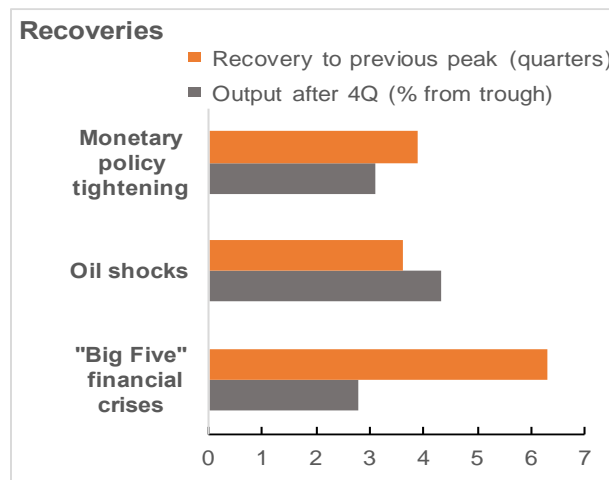
Implications for insurance

- Subdued growth in life and non-life
- Declining investment income and
- Pressure to search for yield
- Erosion of profitability (mainly life)
- And growing solvency challenges
- Hail “Mary Passes” into EMEs

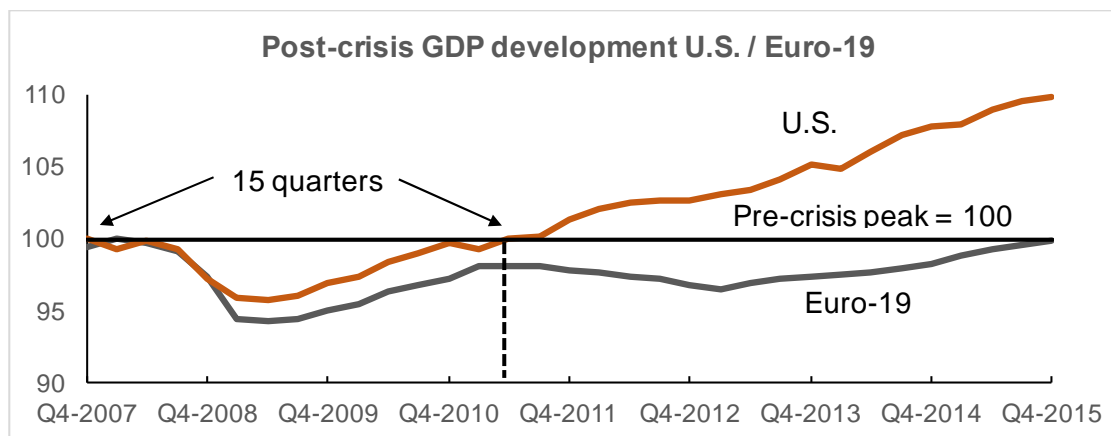
Leading proponents: Carmen Reinhart and Kenneth Rogoff (2009), “This time is different”



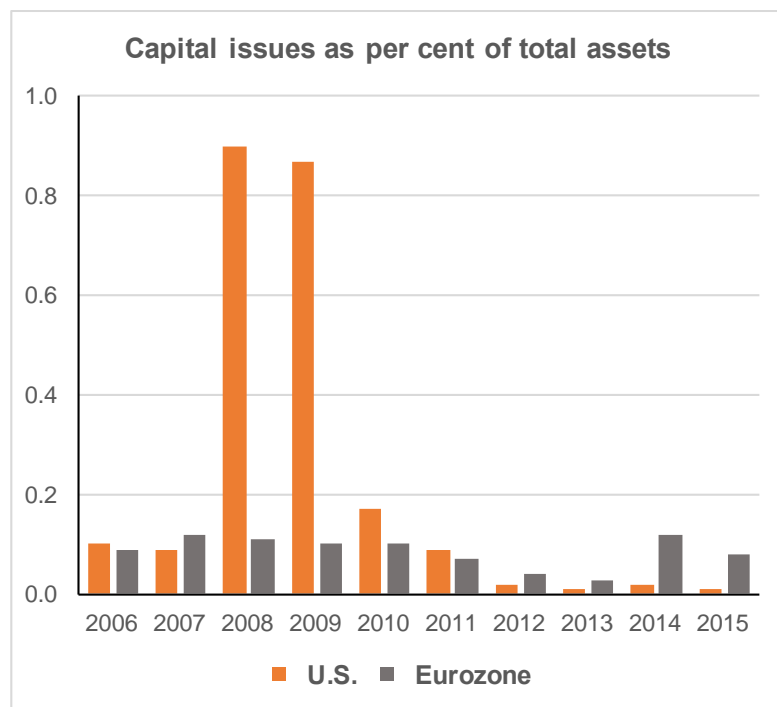
Source: IMF



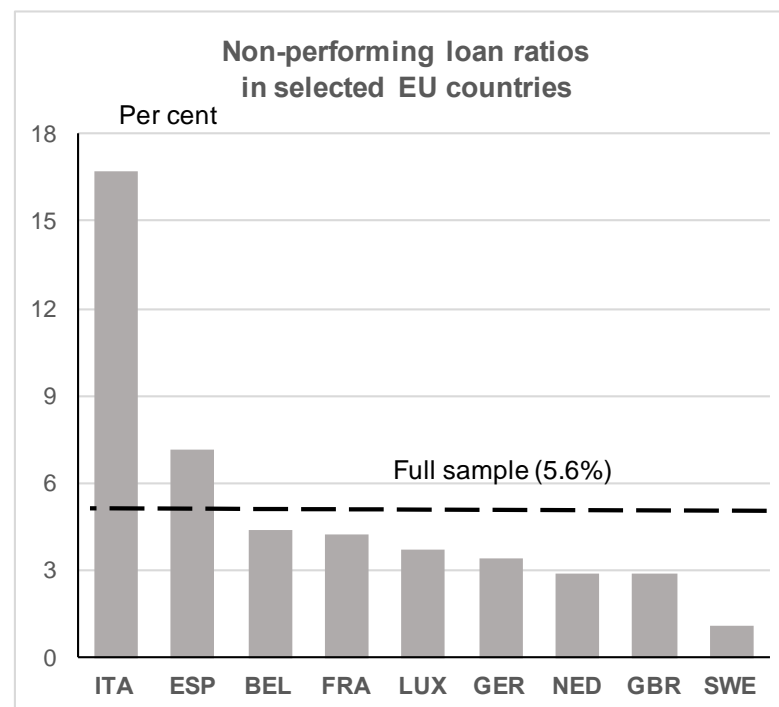
"Big Five": Finland (1990-93), Japan (1993), Norway (1988), Spain (1978-79), Sweden (1990-93)



Source: OECD

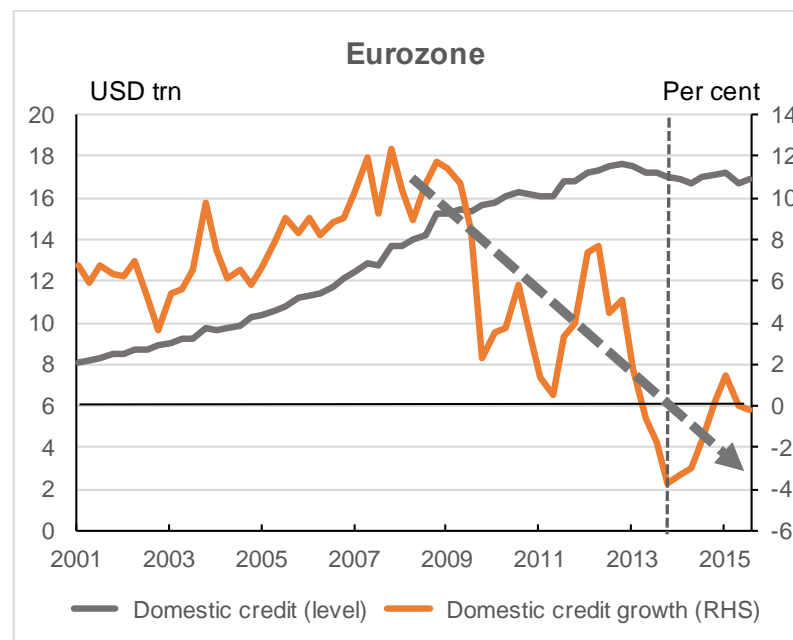
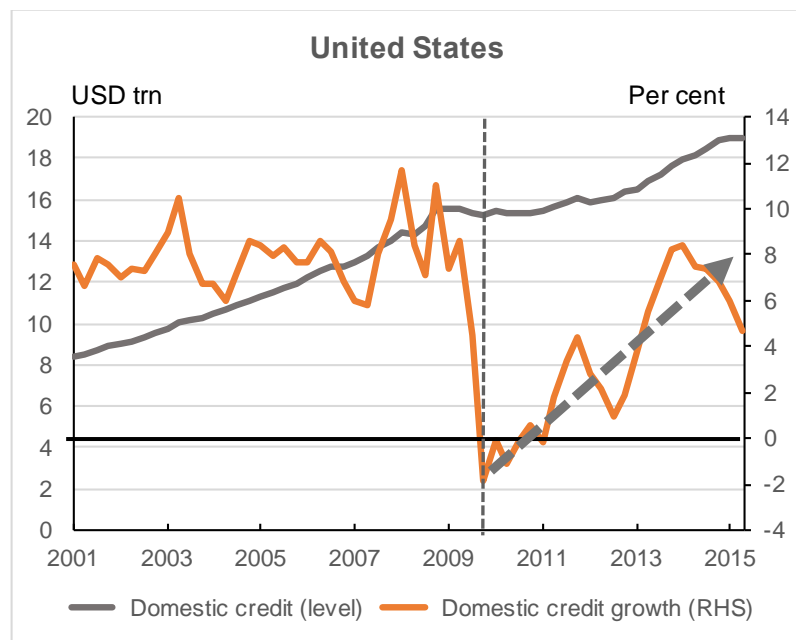


Source: ECB, Thomson Reuters



Source: BIS Quarterly March 2016

➤ **European banks are ill prepared to cope with financial headwinds**



Source: BIS Quarterly March 2016

- Eurozone banks penalised with six-year handicap
- Adverse consequences for the economic recovery

Economic and policy implications

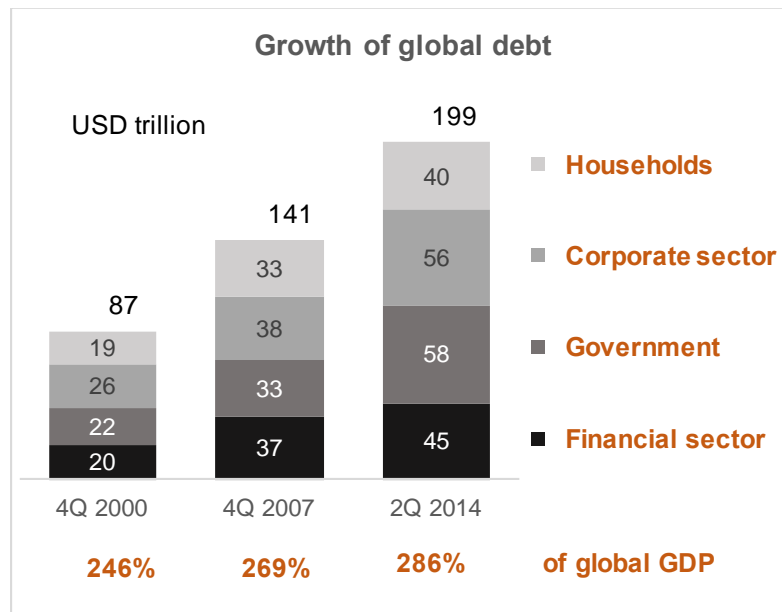
- Distressed financial intermediation
- Fragile zombie banks
- Costly rights issues
- Protracted low interest rate environment
- Subdued economic growth (mainly Eurozone)

Implications for insurance

- Subdued growth prospects for life and non-life and
- Pressure on European insurers to expand geography
- Declining investment income
- Erosion of profitability and solvency pressure
- Zombie insurers?

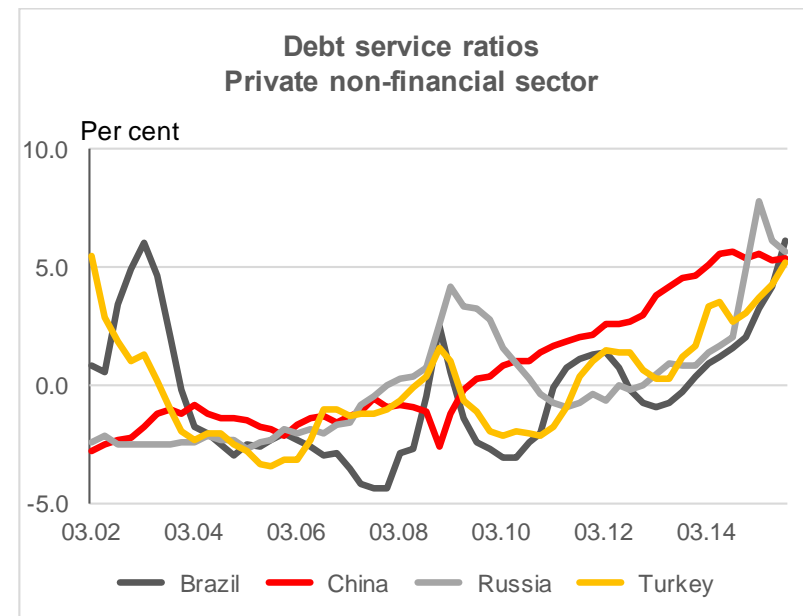
Leading proponents: BIS research department

If debt was the problem...



Source: McKinsey

...will more debt be the solution?



Source: BIS Quarterly March 2016

- Will debt be monetised?
- Will sovereigns default?

Economic and policy implications

- Continued financial market volatility in AMEs and EMEs
- New bubbles (mainly in EMEs)
- Growing financial crisis potential in EMEs and Eurozone
- Risk of run-away inflation
- Regulatory over-stretch

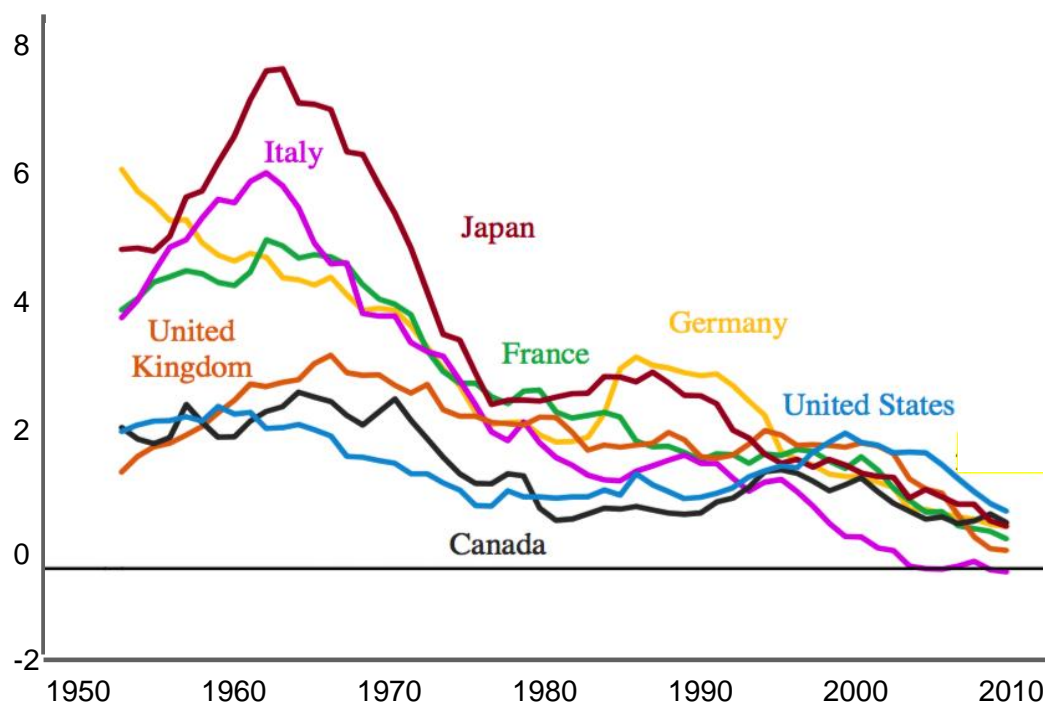
Implications for insurance

- Challenge for investment management
- Risk of double hit (mainly life)
- Risk of financial market induced regulation

Leading proponent: Robert J. Gordon (2016), “The Rise and Fall of American Growth”

Labour productivity growth 1955-2010

10-year centred moving average of annual per cent growth in output/hour



Source: Council of Economic Advisers, Annual Report 2016

Economic and policy implications

- Low income growth; mainly in AMEs
- Protracted low interest rates
- Fear of globalisation
- Growing protectionism

Implications for insurance

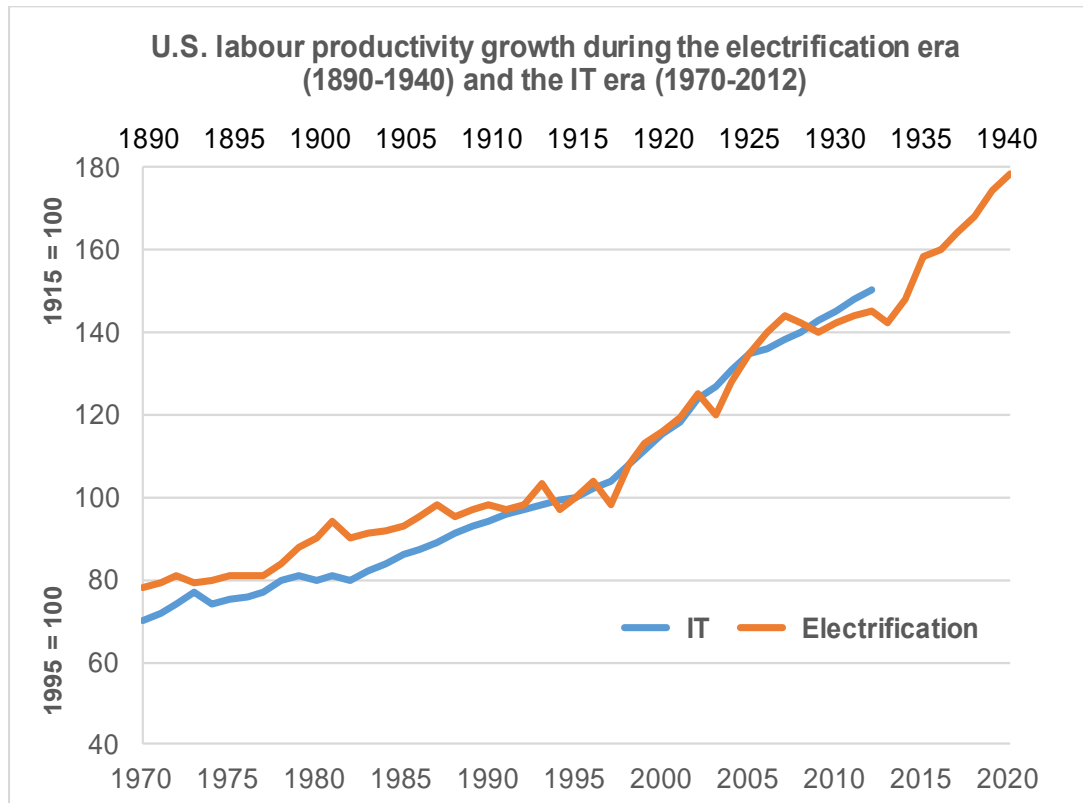
- Subdued demand in AMEs
- Declining investment income and
- Erosion of profitability (mainly life)
- Global business models at risk

“THE FUTURE OF FARMING IS DIGITAL” (PARADIGM 5)

THE SECOND MACHINE AGE OR THE FOURTH INDUSTRIAL REVOLUTION



Leading proponents: Erik Brynjolfsson and Andrew McAfee (2014), “The Second Machine Age”
Klaus Schwab (2016), “The Fourth Industrial Revolution”



Source: Syverson (2013), “Will history repeat itself?”

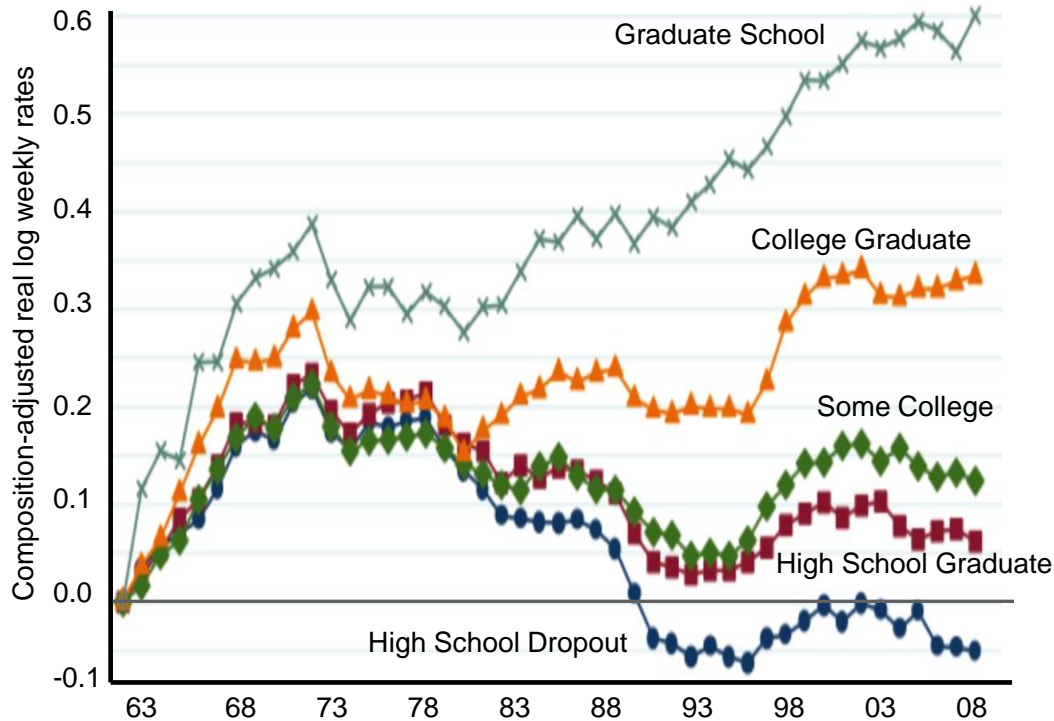
Economic and policy implications

- Golden Age of growth ahead
- Faster income growth for some
- Divisive IT gaps across the world

Implications for insurance

- New bundling of financial services
- Traditional business models at risk
- New competitors at the horizon
- Margin pressure, mainly non-life
- Growing demand for new solutions
- Costly and risky IT investments

Wages for full-time, full-year male U.S. workers, 1963-2008



Economic and policy implications

- War for talent
- Skewed income distribution leads to politics of redistribution
- Fear of globalisation
- Political backlash for centre parties

Implications for insurance

- Challenge for global business models

Source: Acemoglu and Autor (2010), "Skills, tasks, and technologies"



Putin, Vladimir

“Politics must take precedence over economics”

V.I. Lenin



Erdoğan, Recep Tayyip

Economic and policy implications

- Confrontation over political cooperation
- Political fundamentalism and nationalism
- Protectionism; anti-migration
- Sceptical view of multilateralism (Brexit)
- Fear of, and backlash to, globalisation



Le Pen, Marine



Orban, Viktor

Implications for insurance

- Growth retarding if implemented
- Global business models at risk



Trump, Donald

Leading paradigm	Key driver(s)	Economic impact	Relevance	Impact on insurance
Secular stagnation	Excess savings	Stagnation	Many AMEs	<ul style="list-style-type: none"> • Subdued demand for L and NL • Declining investment income and erosion of profitability
Wake of global financial crisis	Weak banks; Deleveraging cont.	Stagnation; Banking crisis	Mainly Europe	<ul style="list-style-type: none"> • Subdued demand for L and NL • Declining investment income and erosion of profitability
Financial market fragility	Excessive monetary stimulus; lack of debt consolidation	Market turbulence; Eurozone crisis; EME crisis	Eurozone; Many EMEs	<ul style="list-style-type: none"> • Challenge for investment management • Risk of FM-induced regulation
Growth pessimism	Low productivity	Anaemic growth	Most AMEs	<ul style="list-style-type: none"> • Subdued demand for L and NL • Declining investment income and erosion of profitability
Digital economy	Digital transformation	Growth acceleration	Global	<ul style="list-style-type: none"> • Pressure on traditional business • New competitors • Challenge for global business • Costly IT investments • New growth opportunities
Rise of PELOTs	Populism and protectionism	Growth retarding	Global	<ul style="list-style-type: none"> • Growth retarding if implemented • Global business models at risk

Outcome	Nature	Occurrence	
Financial market turbulence and new financial crisis	Long cycle Paradigms 2 + 3	Likely	20%
Prolonged growth stagnation and low interest rates	Structural and long cycle Paradigms 1 + 4	Highly likely	80%
Globalisation setback	Very long cycle Paradigms 5 + 6	Possible	10%
Onset of Golden Age fuelled by IT	Structural (medium term) Paradigm 5	Possible	5%



Thank you

daniel_hofmann@genevaassociation.org