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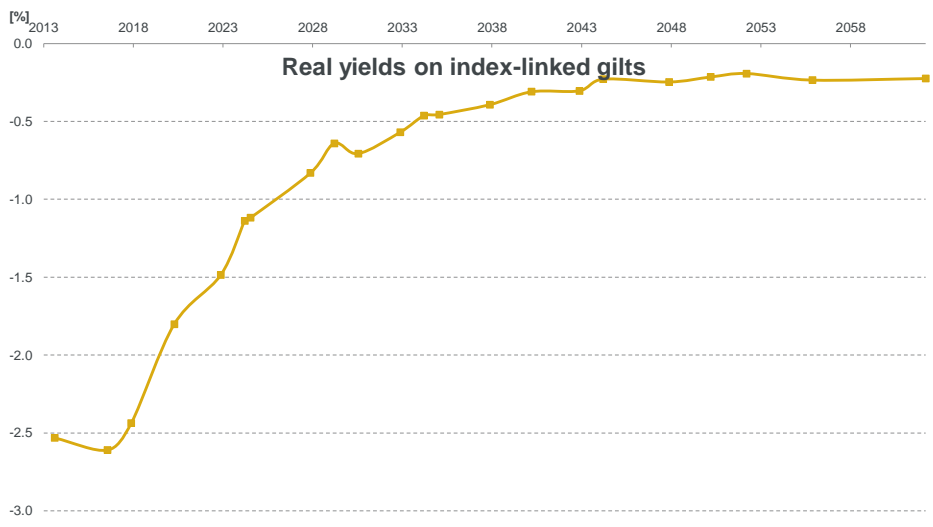
Financial repression

Financial repression working party of the
Finance & Investment PEC

Presented to the Risk and Investment Conference
Brighton June 2013



Financial repression in action...



What is Financial Repression?

Shaw and McKinnon (1973)

- Distortion by government of domestic capital markets
- Particularly to channel funds to themselves, that, in a deregulated market, would go elsewhere

Reinhart and Sbrancia (2011)

- Explicit or indirect caps or ceilings on interest rates
- Direct lending to govt. from captive domestic audience
- Regulation of cross-border capital
- Tighter connections between governments and banks



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What is Financial Repression?

- **Implemented by:** Macro-prudential regulation
 - “Goodbye financial repression, hello market crash”
- **Evidenced by:** Negative real yields
- **Impact:** A tax on savers
 - Paid to borrowers – including government

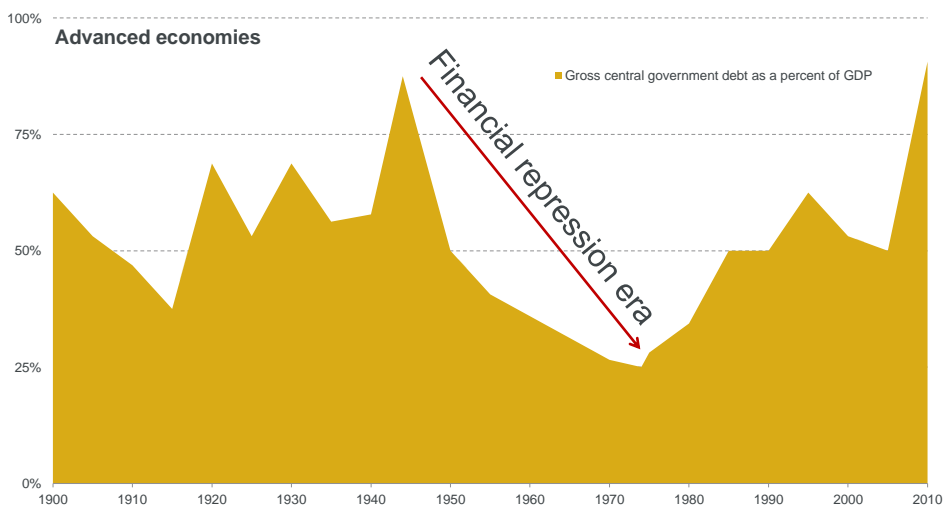


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How can debt to GDP be reduced

1. Economic growth
2. Austerity and fiscal adjustment
3. Outright defaults or restructuring
4. Surprise burst in inflation
5. Steady dose of financial repression + steady inflation

Gross government debt as a % of GDP



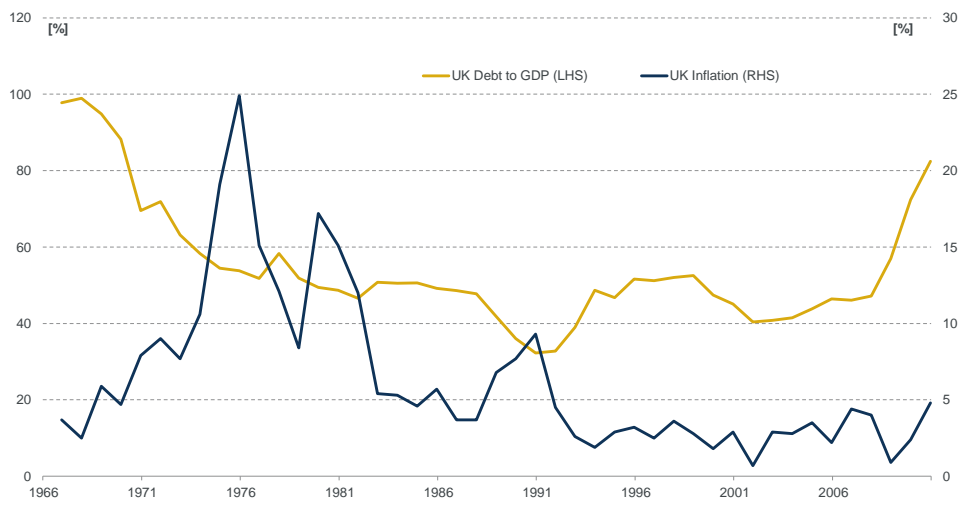
Source: The return of financial repression, Reinhart 6

Financial repression “tax” estimates

Country	Period	% GDP p.a.	% of years with -ve real yield
Argentina	1944-1974	3.2	97
Australia	1945-1968, 1971, 1978	5.1	48
Belgium	1945-1974	2.5	48
India	1949-1980	1.5	53
Ireland	1965-1990	2.0	62
Italy	1945-1970	5.3	41
South Africa	1945-1974	1.2	43
Sweden	1945-1965, 1984-1990	0.9	36
United Kingdom	1945-1980	3.6	48
United States	1945-1980	3.2	25

Source: The return of financial repression, Reinhart 7

Debt to GDP and Inflation in the UK



Source: Bloomberg 8



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Low interest rates

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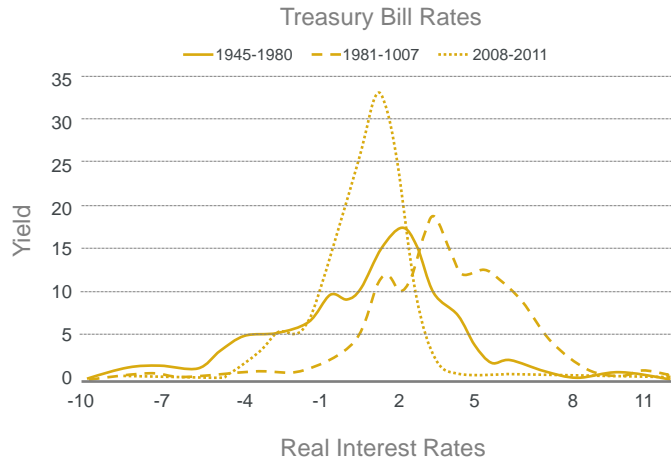
Caps on interest rates

- Explicit regulation
 - e.g. Regulation Q in the US prohibited banks from paying interest on demand deposits and capped interest on saving deposits
- Caps on bank's lending rates
 - Fixed coupon rate nonmarketable debt
 - Central bank interest rate targets
- Quantitative Easing



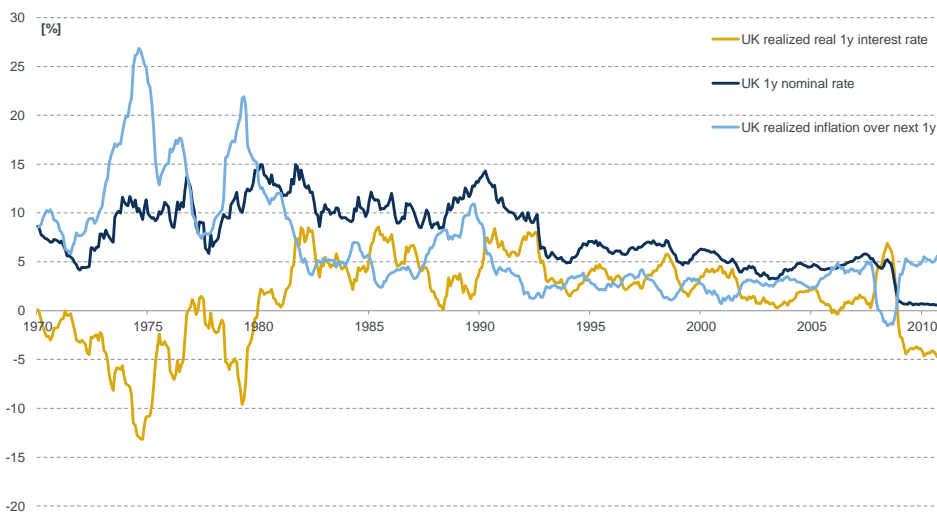
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Real interest rates US



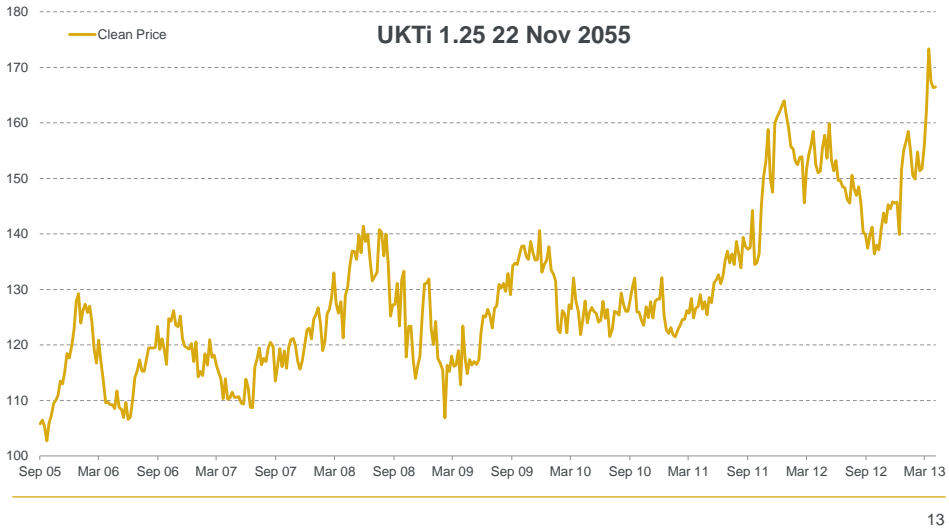
Source: *The return of financial repression*, Reinhart 11

Real interest rates in the UK (1y)



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Why would anyone buy?



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Quantitative Easing

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Impact of QE on gilt yields

• QE reduces yields

- “QE has caused the price of gilts to rise and yields to fall” and “The results... around 100bps fall” Bank of England, July 2011
- “One of the effects of QE is to push up the market price of government bonds and consequently to push down the yield they give investors.” BBC article, March 2012
- “...the very low gilt yields which are partly, though not exclusively, the result of QE.” NAPF, Exceptional times, exceptional measures, March 2012

• But then again...

- “UK gilt yields have declined only marginally more than comparable government bond yields in countries where there had been no QE.” Towers Watson, October 2012
- “There are several ways in which large-scale central bank purchases of government bonds can put upward pressure on their yields.” Capital Economics, April 2013
- “Far from being expansionary, QE is actually contractionary and deflationary.” Ken Fisher, Chief Executive of Fisher Investments, FT article, April 2013

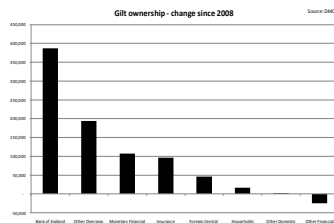


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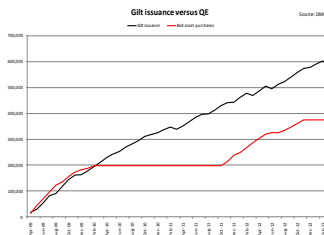
Impact of QE on gilt yields

- The BoE has been the largest buyer
- ...but other buyers are larger in aggregate



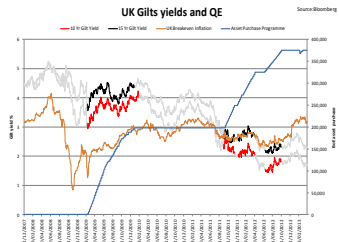
- Pension schemes and insurance companies saw GBP100bn increase
- Has risen at 3x the rate of pre-crisis
- Overseas buyers not deterred by low yields

- QE at times equivalent to new issuance
- ...but not more



- Little evidence of crowding out
- Long periods without QE

- Gilt yields have risen during periods of QE
- QE seems to raise inflation expectations



- BoE analysis based only on the few days after announcements
- Choosing the data to fit their conclusion?
- Also, yields moved on US QE2 when BoE did none

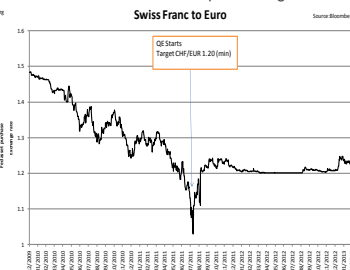
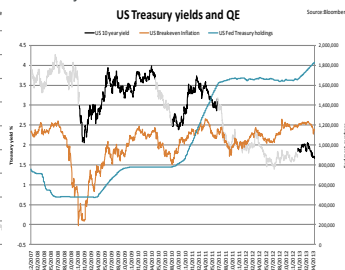
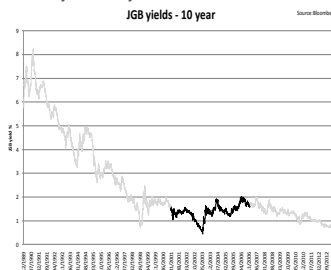


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Impact of QE on gilt yields

- Japanese experience has been the same
- ...yields only fell when there was no QE
- US experience has been the same
- ...yields rose until "QE unlimited"
- Swiss QE has been effective
- ...but then it had a specific target



- Yields now higher than when Abe announced recent plans
- Since "QE unlimited" was announced, yields have started to fall
- Earlier rises appear driven by rising inflation expectations
- Swiss said "unlimited" at outset
- Is an open ended commitment essential?



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Impact of QE on gilt yields

- Do not jump to convenient conclusions
 - There are rational explanations for QE either decreasing or increasing bond yields
 - Buying on rumour could support the former view, but is hard to prove
 - The evidence suggests the latter view has held more often
 - The form and target of QE matter
- Yields have fallen...
 - ...but it is impossible to prove what, if any, was due to QE
 - Look elsewhere for answers as to why yields have fallen

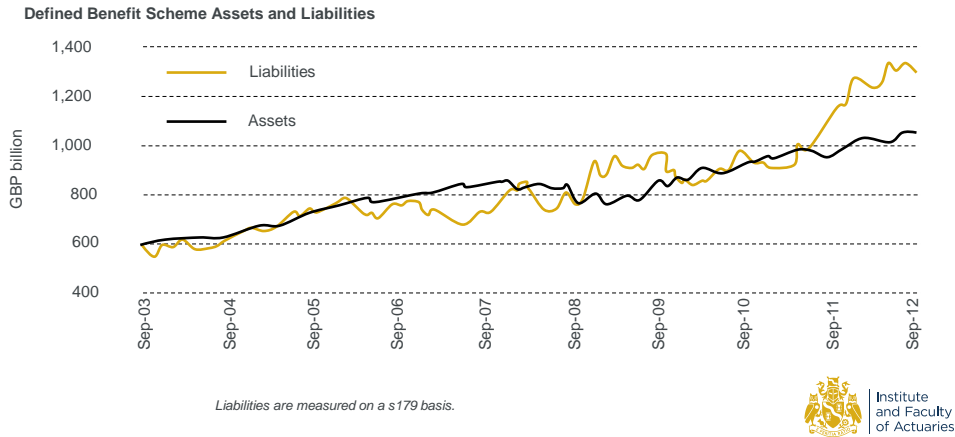


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Impact of low rates on insurers and pension funds

The insurance industry and pension providers have as their first concern the return of the economy to health; however...



Source: The Purple Book 2012 PPF/The Pensions Regulator 19

Impact of low rates on insurers and pension funds (2)

- Scheme Funding implications and impact on sponsors
- Individual annuity prices and fund values
- Investment decisions and balance sheet impacts for Life Insurers
- General Insurance underwriting profit margins

Impact of low rates on insurers and pension funds (3)

Defined Benefit Schemes (cont.)

- Higher recovery payments for sponsor just at a time when it may find hardest to afford. Possible weakening of on-going business prospects and/or jeopardise ability to continue to support the scheme.
- TPR suggested in a statement released in April 2012 "Pension scheme funding in the current environment" that it would exercise understanding in the current challenging conditions.
 - Suggests it may be acceptable to adopt a "rate reversion" margin in the recovery plan assumptions if i) Trustees acknowledge the increased reliance on the sponsor, and ii) monitor assumption of rate reversion against reality (with contingency plans in place).
- Scheme Trustees are faced with higher gilt prices, making it costly to pursue a matched strategy.
 - Adopting a riskier investment strategy may place more reliance on the sponsor and lead to a greater PPF levy
 - Targeting long term goal of buy-out more expensive.

Defined Contribution Schemes

- Increased annuity prices from low rates
 - Impact may be dampened for those very close to retirement if in a lifestyle investment fund.
- Low or negative investment returns, especially if purchasing index linked UK gilts
- Members may have benefited from the rise in equity prices over 2009-2012



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Impact of low rates on insurers and pension funds (4)

Life Insurance

- Inflated gilt prices have pushed investment strategy towards alternate investments in search of yield. Investment in corporate bonds and structured credit is more attractive to maintain rates of return.
- Possible balance sheet impacts
 - Higher market risk capital requirements if alternative investment strategy pursued.
 - Lower gilt yield has led to lower assumed reinvestment return and so a deterioration in balance sheet position (greatest impact for deferred products).
 - Cost of annuity rate and investment guarantees increased.
 - Higher longevity capital requirement.
- Fall in perceived value of saving may lead to less pension saving by individuals and consequently less business (Aviva February 2013 survey "Working Lives" suggests that nearly 40% of people will opt out of auto-enrolment)
- Bulk purchase annuity firms impacted by increased DB scheme deficits
 - Possible fall in buyout business as schemes less able to afford. The Aon Hewitt 2013 survey "Global pension risk survey" showed that pension schemes' long term risk reduction goals are now further away.
 - Schemes/sponsors likely to have less funds available so greater need to be competitive to win business: margins squeezed.

General Insurance

- Less investment return on short term liquid investments – need to make underwriting profit



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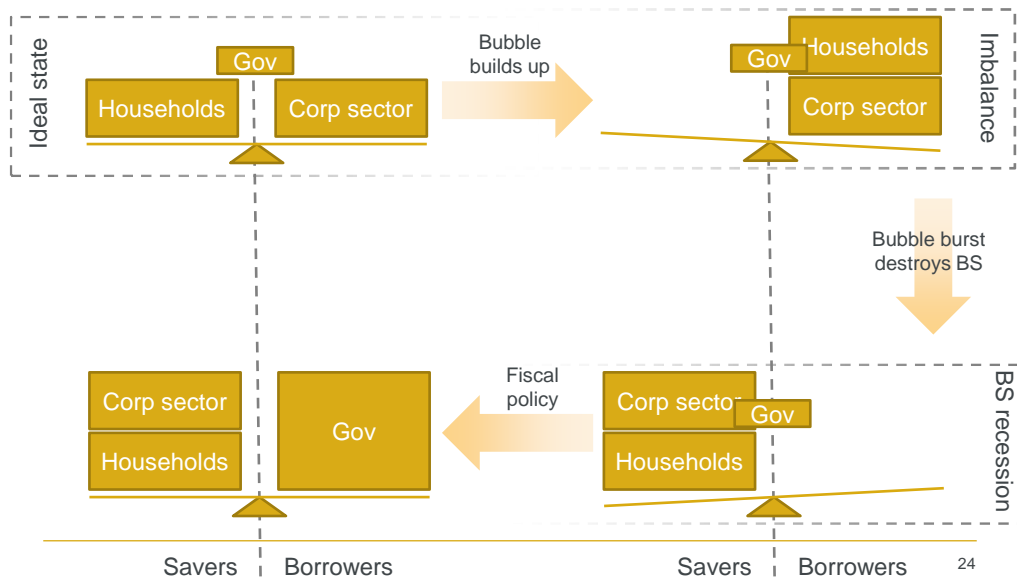
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Balance sheet recessions

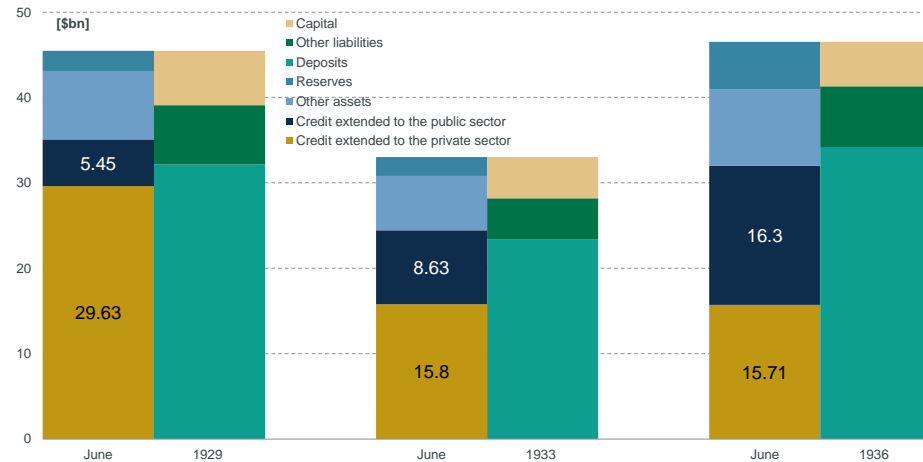
Lessons from Japan

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Balance sheet recession – what is that?

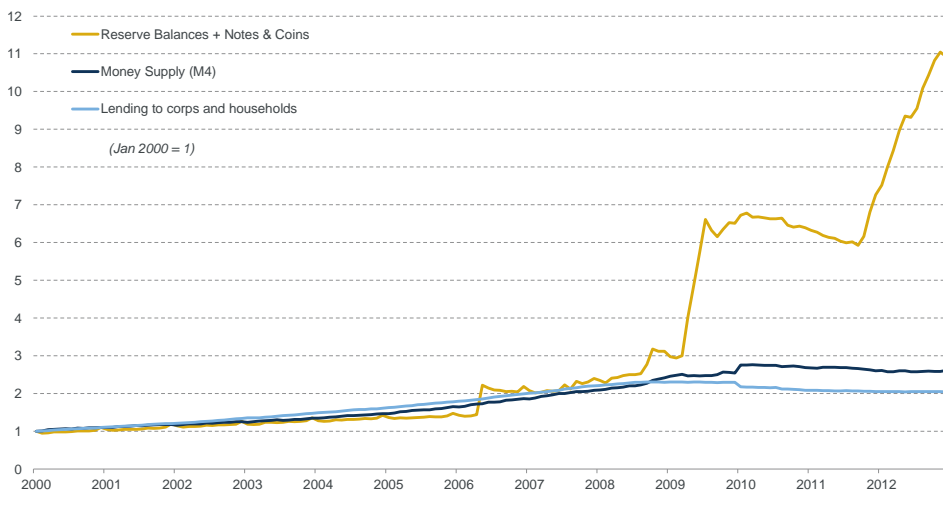


Government acts as “borrower of last resort”



Source: *The world in balance sheet recession: causes, cure and politics*, Richard Koo 25

Breakdown of money aggregate relationships in the UK



Source: BOE 26



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Unconventional²

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Unconventional²

Financially “repressive” schemes

There are other schemes which reduce private sector investment options and effectively encourages investors towards repressive negative “real yield” investment:

- Funding for Lending Scheme
- Help to Buy Scheme
- Business Finance Partnership
- Government underwriting of Housing Association bonds

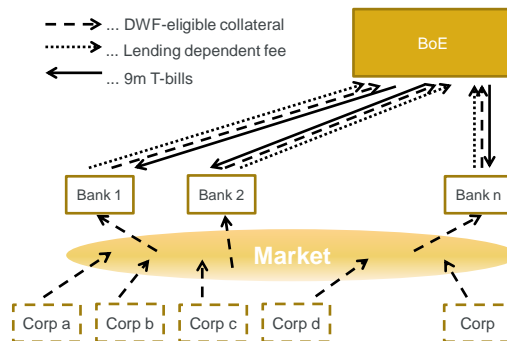
Each of these schemes reduces options for savers and investors as government is providing cheap finance.



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FLS

The BoE provides 9m T-Bills to banks and building societies in exchange for eligible collateral. On maturity, the bills must be returned and can be exchanged for fresh 9m T-bills, allowing funding to occur for up to four years. The paid fee and the amount that a bank can borrow depends on its change in lending.



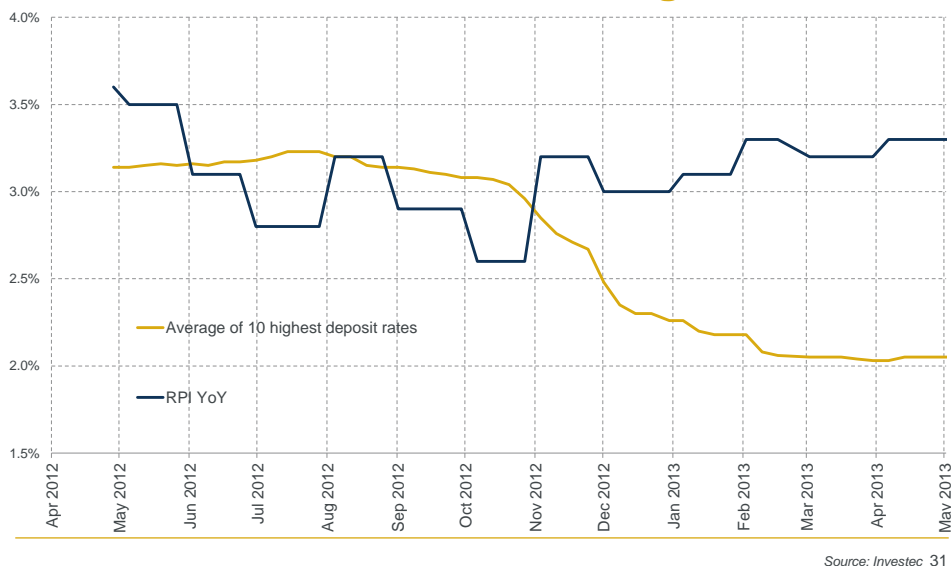
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Funding for lending scheme?

- Is it right for the government to pressure or incentivise banks to increase lending when banks argue that there is low demand for lending from credit worthy applications. This particularly after the over aggressive lending which caused the financial crisis of 2007/8?
- Is it right for government to facilitate lending for residential mortgages and making them artificially cheap, blocking private sector investment?
- Is the weakening of the savings market another form of “repression”?

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Interest rates on UK retail savings



Other currently “repressive” schemes

Support for Housing Associations

- Housing Associations able to borrow money cheaply from Government for social housing.
- This restricts private sector investment into this field as investors cannot compete with the source of cheap money

Business Finance Partnership

- Provides lending to SMEs alongside private sector investment.
- Reduces the returns to investors as it alters the balance of supply and demand for loans

Help to Buy Scheme

- Could this create a housing bubble?
- Shifts emphasis from rental market to home ownership
- What happens when government support is withdrawn?
- Reduces possibility of private sector investment in residential property



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A captive audience

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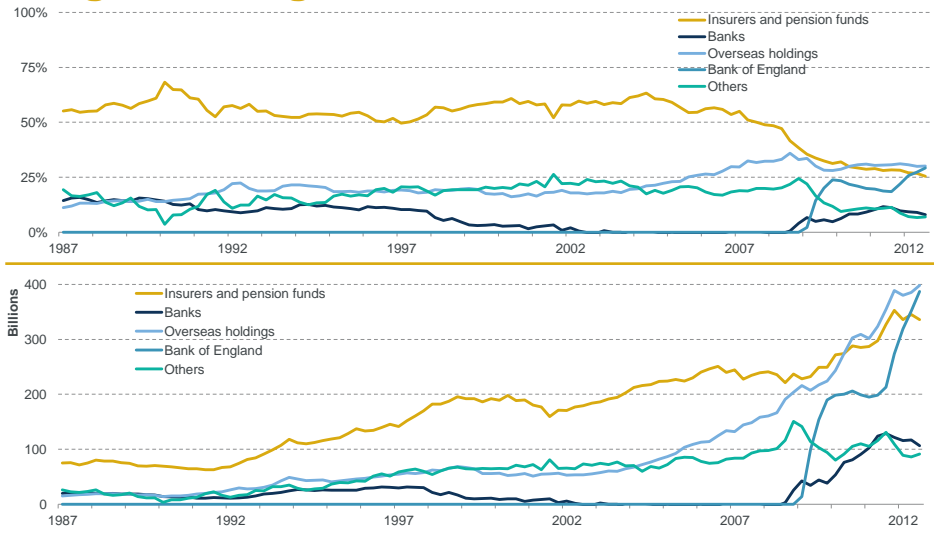
Creating and maintaining a captive domestic audience

- Prudential regulatory measures
- Exchange controls
- High reserve or liquidity requirements (tax levy on banks)
- Transaction taxes
- Prohibition of gold transactions



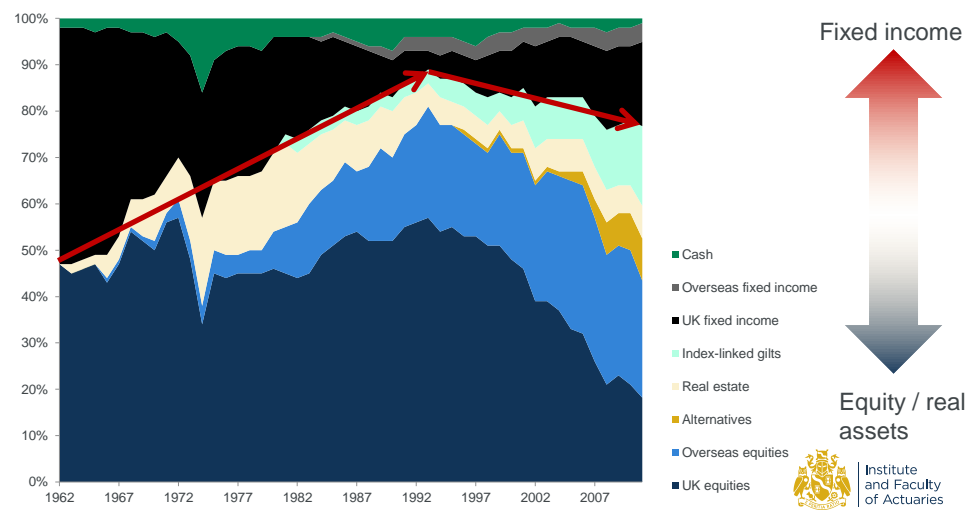
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UK gilt holdings



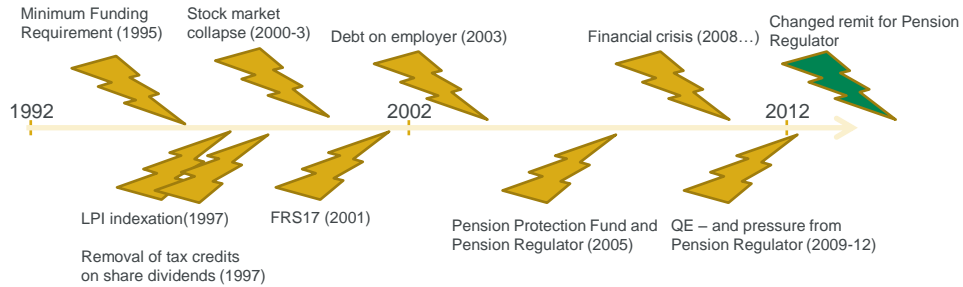
Source: DMO 35

The rise and fall of the cult of the equity

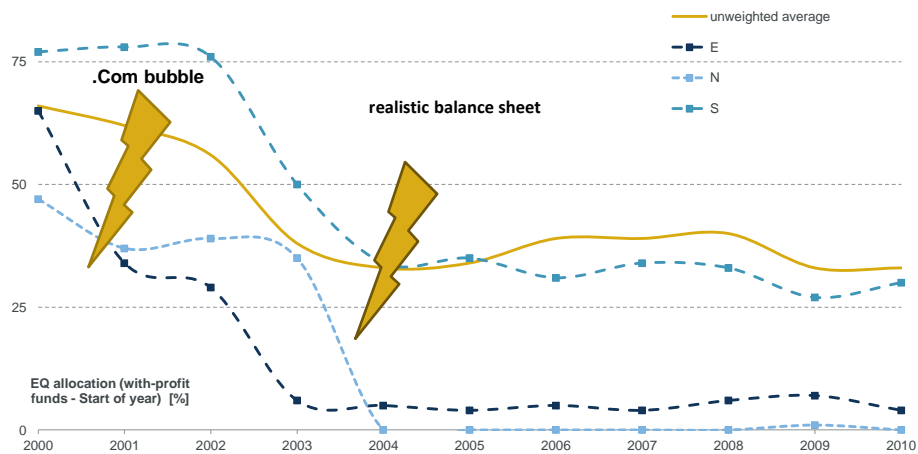


Source: UBS Pension Fund Indicators 2012 36

Drivers of the reversal



And life insurers?



Irish precedent

- National Pension Fund used to bail out banks
- Private pension fund tax
- Sovereign annuities

Drivers of Economic Growth and International Wealth Transfers

- Demographics
- Productivity

How will indebtedness of west unwind?
What happens when rapidly ageing Chinese population starts
trying to run down savings?

Discussion points ...

- Cock-up or conspiracy?
- What's the lesser evil: financial repression or market crashes?
- Are -ve real yields an inevitable consequence of ageing populations?
- Are creditors paying for the excesses of debtors?
- Why do actuaries invest in assets with guaranteed -ve real returns?
Because of normal investment criteria or because of regulation?
- Is regulation too repressive?
- Has the Funding for Lending Scheme destroyed retail savings?
- Are unconventional² policies inappropriately distorting markets?

Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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Appendix

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Working party members

- ***Paul Fulcher (chairman)***
- ***Richard Boardman***
- ***Ian Collier***
- ***Hans-Christof Gasser***
- ***Rod Price***
- ***Paul Shelley***
- ***Sarah Softley***



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Recommended further reading

- **The Liquidation of Government Debt**
Reinhart and Sbrancia; 2011; National Bureau of Economic Research
<http://www.nber.org/papers/w16893>
- **The Return of Financial Repression**
Reinhart; 2012; Centre for Economic Policy Research
<http://www.cepr.org/pubs/dps/DP8947.asp>
- **The world in balance sheet recession: causes, cure and politics**
Richard Koo; 2011; Nomura Research Institute
<http://rwer.wordpress.com/2011/12/12/rwer-issue-58-richard-koo/>
- **Investment Practice – Full Circle?**
Alastair Ross Goobey; 2005; The Pension Institute
<http://www.pensions-institute.org/workingpapers/wp0510.pdf>

