



Escaping the QE Infinity Trap

ECMI Annual Conference

Brussels, 9 November 2016

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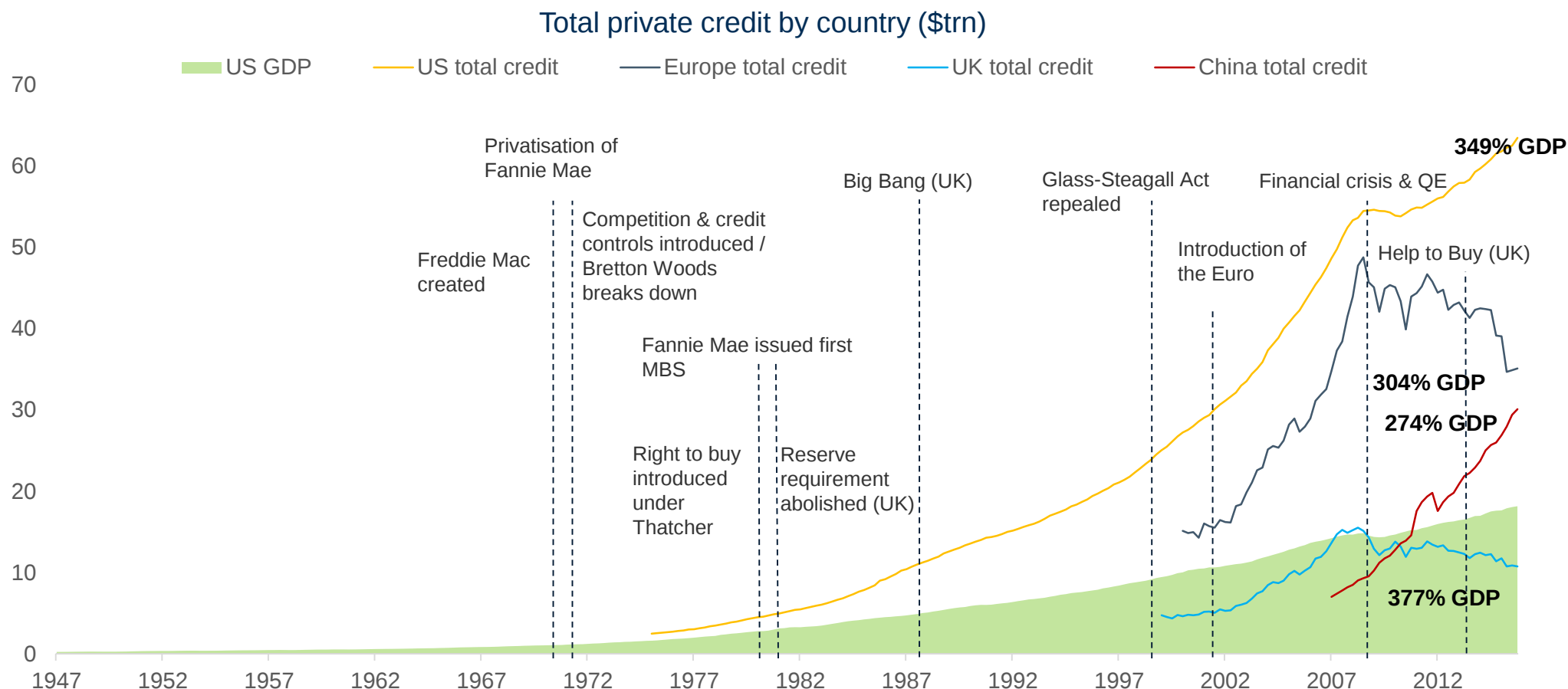
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The Debt Supercycle: Excess Credit and Financial Crises

The Debt Supercycle: Still Growing

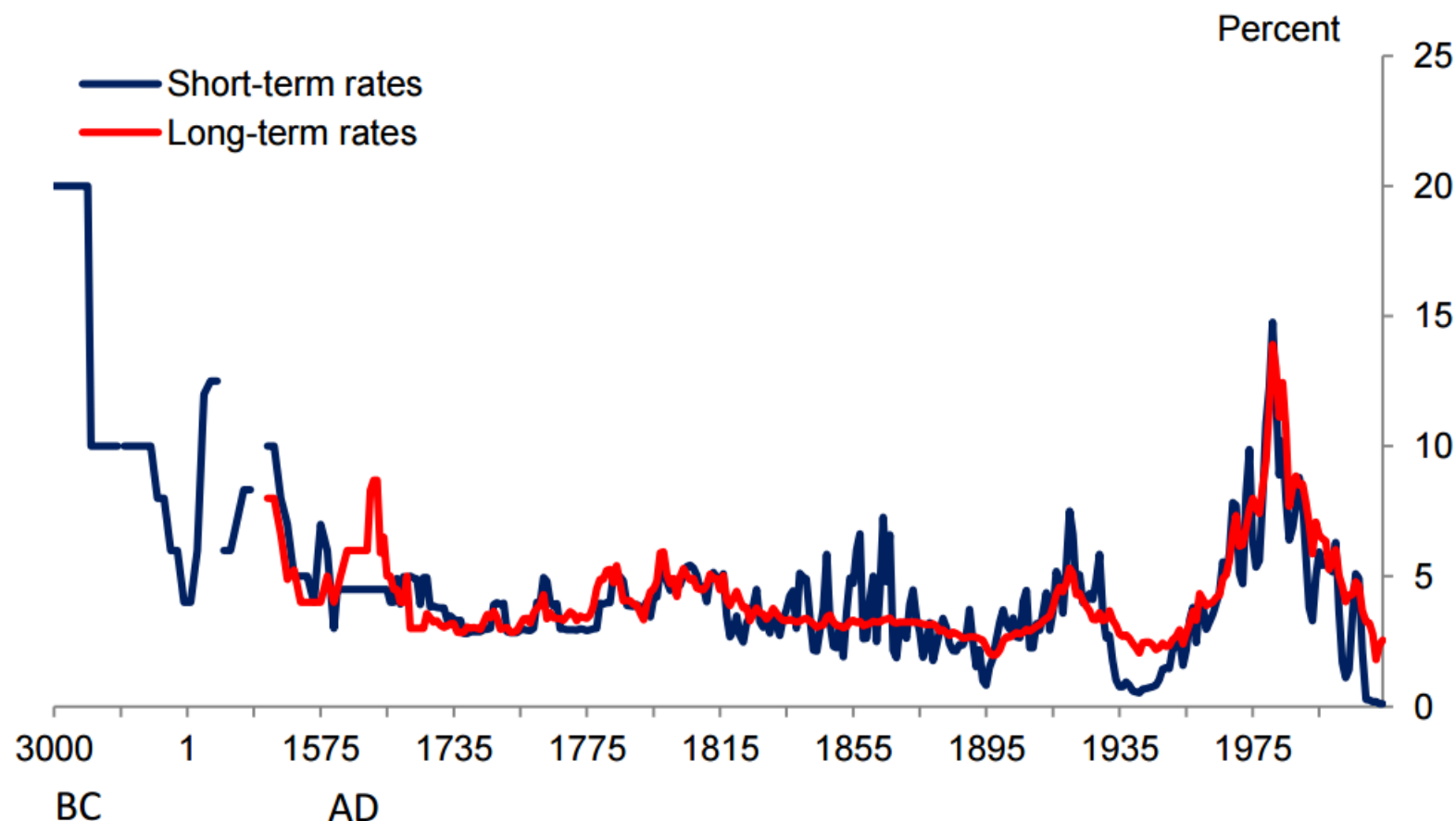
Government Subsidies and Deregulation Encouraged Credit Growth



Source: Federal Reserve, European Central Bank, Bloomberg, Federal Reserve Economic Data (FRED), People's Bank of China (PBoC). Private credit calculated as the sum of household loans, corporate loans and bonds and bank debt

The Debt Supercycle

Interest Rates: We Are at an All-time Low

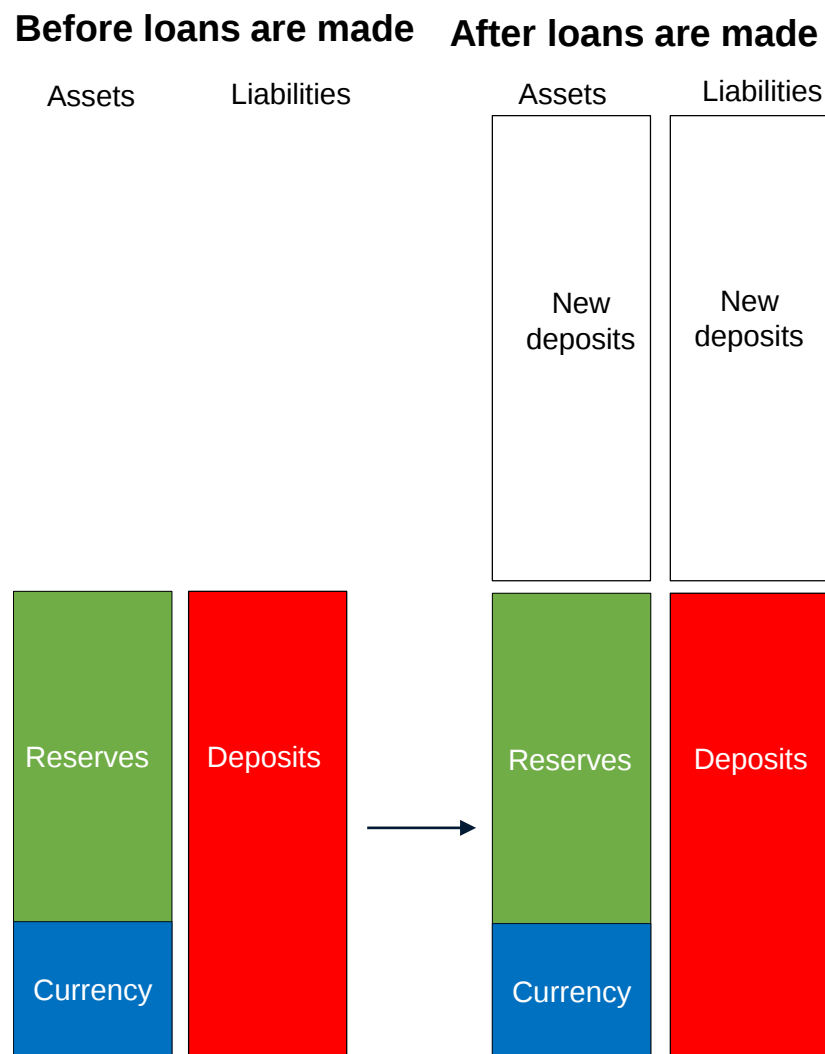


Source: Homer and Sylla (1991), Heim and Mirowski (1987), Weiller and Mirowski (1990), Hills, Thomas and Dimsdale (2015 forthcoming), Bank of England, Historical Statistics of the United States Millennial Edition, Volume 3 and Federal Reserve Economic Database. Notes: the intervals on the x-axis change through time up to 1715. From 1715 onwards the intervals are every twenty years. Prior to the C18th the rates reflect the country with the lowest rate reported for each type of credit: 3000BC to 6th century BC - Babylonian empire; 6th century BC to 2nd century BC - Greece; 2nd century BC to 5th century AD - Roman Empire; 6th century BC to 10th century AD - Byzantium (legal limit); 12th century AD to 13th century AD - Netherlands; 13th century AD to 16th century AD - Italian states. From the C18th the interest rates are of an annual frequency and reflect those of the most dominant money market: 1694 to 1918 this is assumed to be the UK; from 1919-2015 this is assumed to be the US. Rates used are as follows: Short rates: 1694-1717 - Bank of England Discount rate; 1717-1823 rate on 6 month East India bonds; 1824-1919 rate on 3 month prime or first class bills; 1919-1996 rate on 4-6 month prime US commercial paper; 1997-2014 rate on 3month AA US commercial paper to nonfinancials. Long rates: 1702-1919 - rate on long-term government UK annuities and consols; 1919-1953, yield on long-term US government bond yields; 1954-2014 yield on 10 year US treasuries.

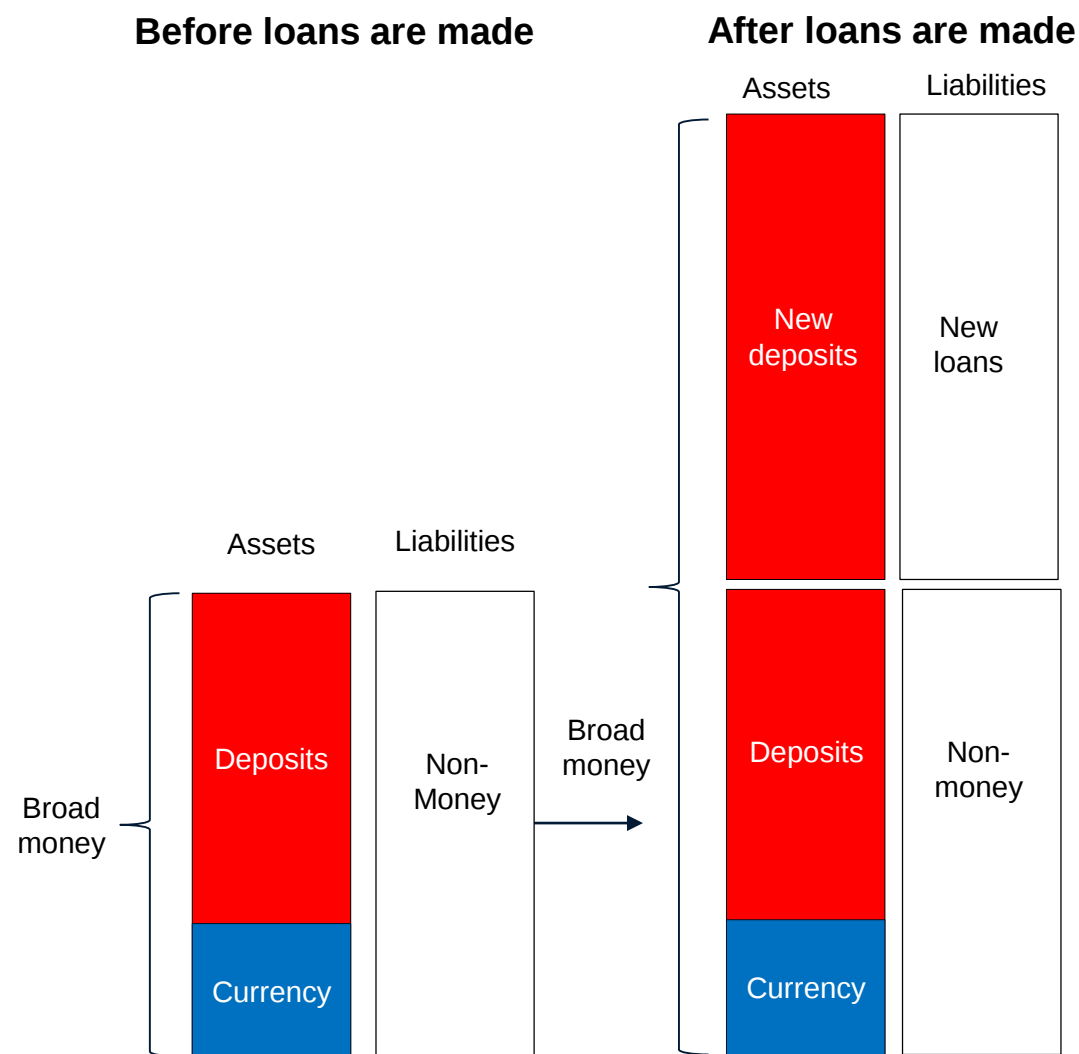
Money creation in the 21st century

Banks Issue Loans to Firms, Firms Make Deposits, and Banks Make More Money

Commercial banks



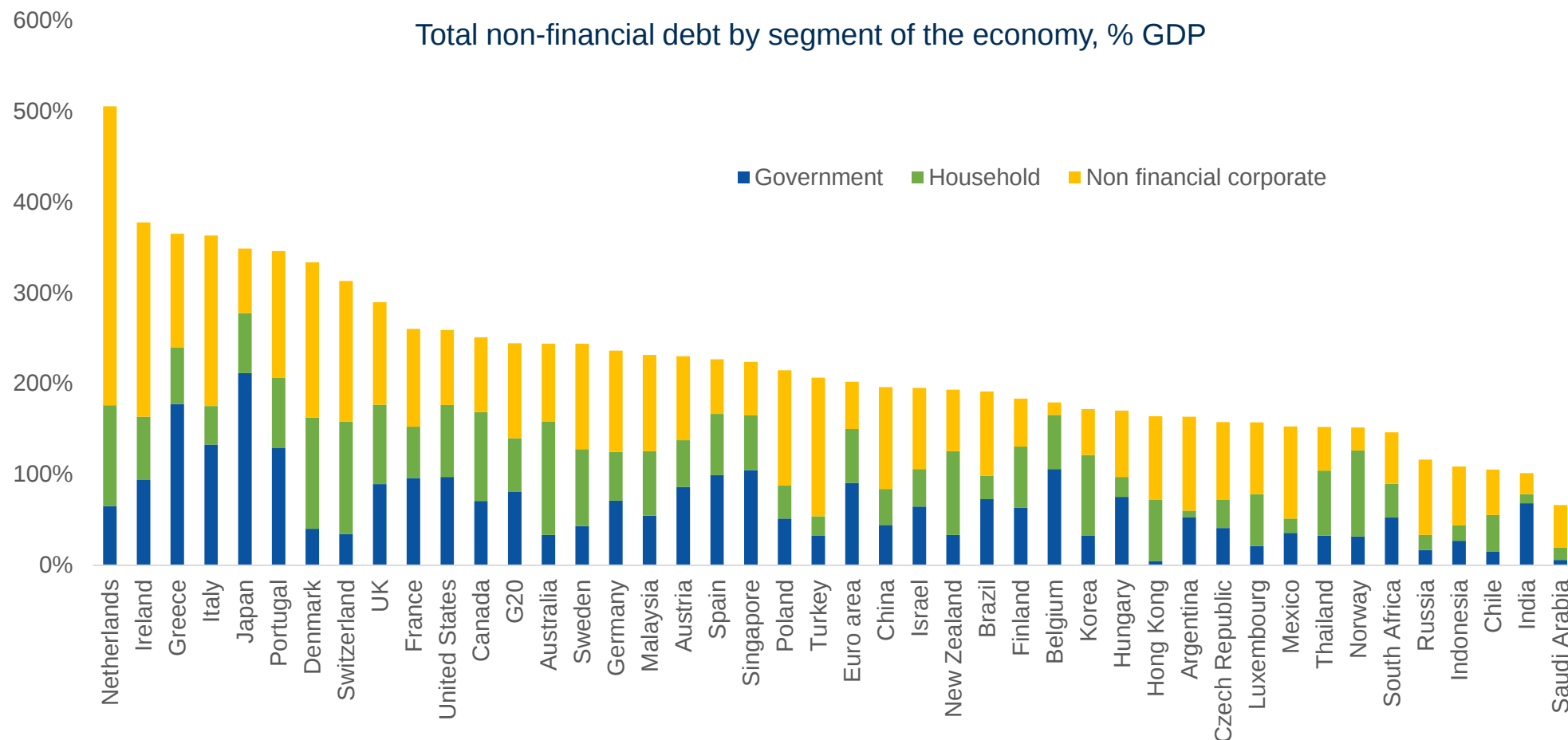
Consumers



Source: Algebris Investments (UK) LLP, Bank of England (BoE)

The Debt Supercycle

Public and Private Debt Overhangs Are Still Standing



Source: Algebris Investments (UK) LLP, Bank for International Settlements (BIS)

Policy Responses: Band-aid Solutions and Collateral Effects

Policy Responses, Limitations and Collateral Effects

Central Bank Policy Rates: Racing to the Bottom

Annual average policy rate, %

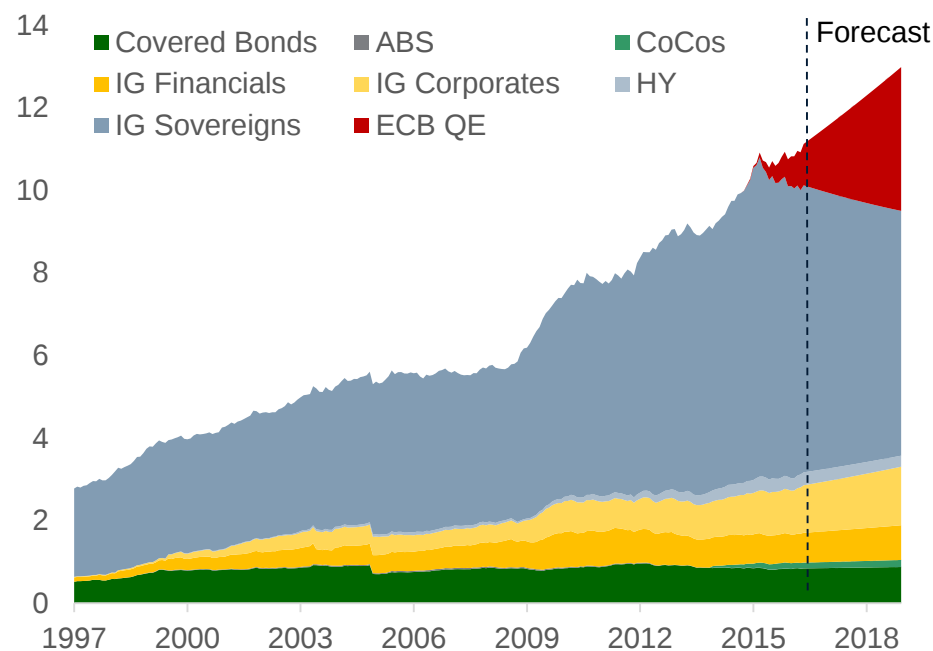
	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	Now
Australia	13.2	10.3	6.5	5.1	5.4	7.5	7.1	5.4	5.0	4.8	6.0	4.9	4.6	4.8	5.3	5.5	5.8	6.4	6.6	3.2	4.4	4.7	3.6	2.7	2.5	2.1	1.5
Canada		9.0	6.7	5.1	5.8	7.3	4.5	3.5	5.2	4.9	5.8	4.3	2.7	3.2	2.5	2.9	4.3	4.6	3.2	0.6	0.9	1.3	1.3	1.3	1.3	0.9	0.75
Denmark	8.0	9.3	9.5	8.7	5.2	5.4	3.5	3.3	3.8	2.9	4.0	4.3	3.2	2.3	2.0	2.0	2.8	3.8	4.1	1.6	0.8	1.0	0.3	0.0	0.0	0.0	0.0
Eurozone	6.0	8.0	8.3	5.8	4.5	3.0	2.5	2.5	3.0	2.7	4.0	4.3	3.2	2.3	2.0	2.0	2.8	3.8	3.9	1.3	1.0	1.3	0.9	0.5	0.2	0.1	0.0
New Zealand										4.6	6.2	5.7	5.4	5.3	5.9	6.8	7.3	7.9	7.4	2.7	2.8	2.6	2.5	2.5	3.2	3.1	2.0
Japan	6.0	4.5	4.0	3.1	2.2	1.2	0.5	0.5	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Sweden	11.5	8.0	10.0	9.0	7.2	8.5	6.3	4.1	4.1	3.0	3.7	4.0	4.1	3.1	2.1	1.7	2.2	3.5	4.1	0.6	0.3	1.8	1.3	1.0	0.3	-0.3	-0.5
Switzerland	6.0	7.0	6.0	4.0	3.5	1.5	1.0	1.0	1.0	0.5	3.1	2.9	1.2	0.3	0.5	0.8	1.5	2.4	2.4	0.3	0.3	0.1	0.0	0.0	0.0	-0.8	-0.8
UK	14.8	11.7	9.5	6.0	5.5	6.7	6.0	6.6	7.2	5.3	6.0	5.1	4.0	3.7	4.4	4.6	4.6	5.5	4.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.25
US	8.0	5.6	3.5	3.0	4.2	5.8	5.3	5.4	5.4	5.0	6.2	3.9	1.7	1.1	1.3	3.2	5.0	5.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25

Source: S. Krogstrup (2016), Central bank websites, Bloomberg, Algebris Investments (UK) LLP. *Annual average policy rate, yellow = below or equal to 2%, pink = below or equal to 1%, red = below or equal to 0%

Policy Responses, Limitations and Collateral Effects

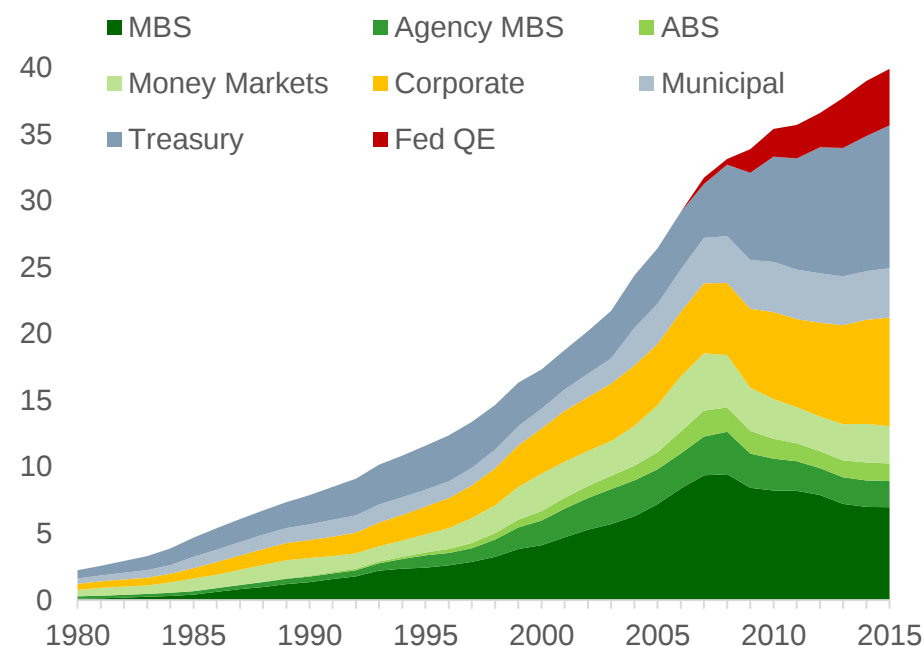
QE is Distorting Bond Markets

ECB QE and € bond markets (€trn)



Source: European Central Bank (ECB)

Fed QE and \$ bond markets (\$trn)



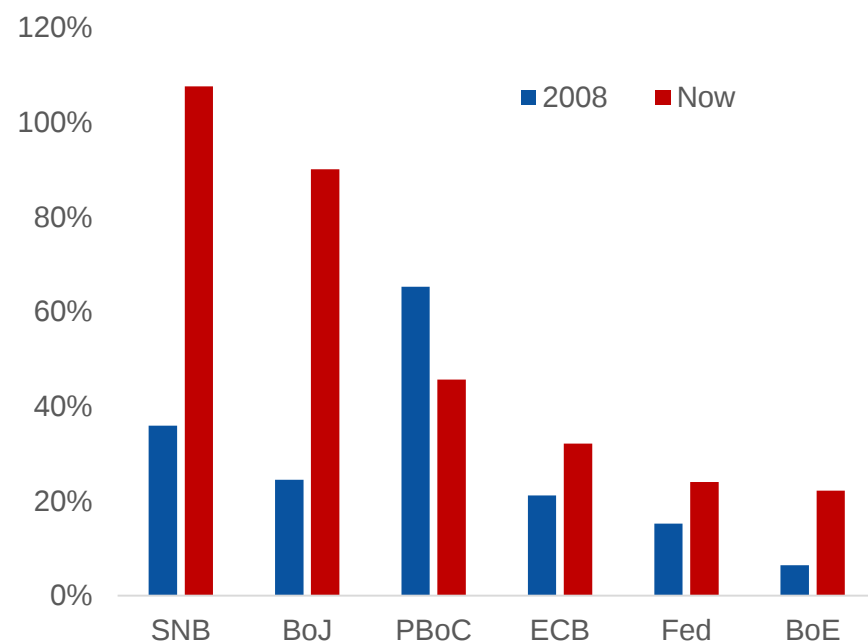
Source: National Bureau of Statistics (NBS), International Monetary Fund (IMF), Bloomberg

Policy Responses, Limitations and Collateral Effects

Global Central Bank Balance Sheets Keep Growing

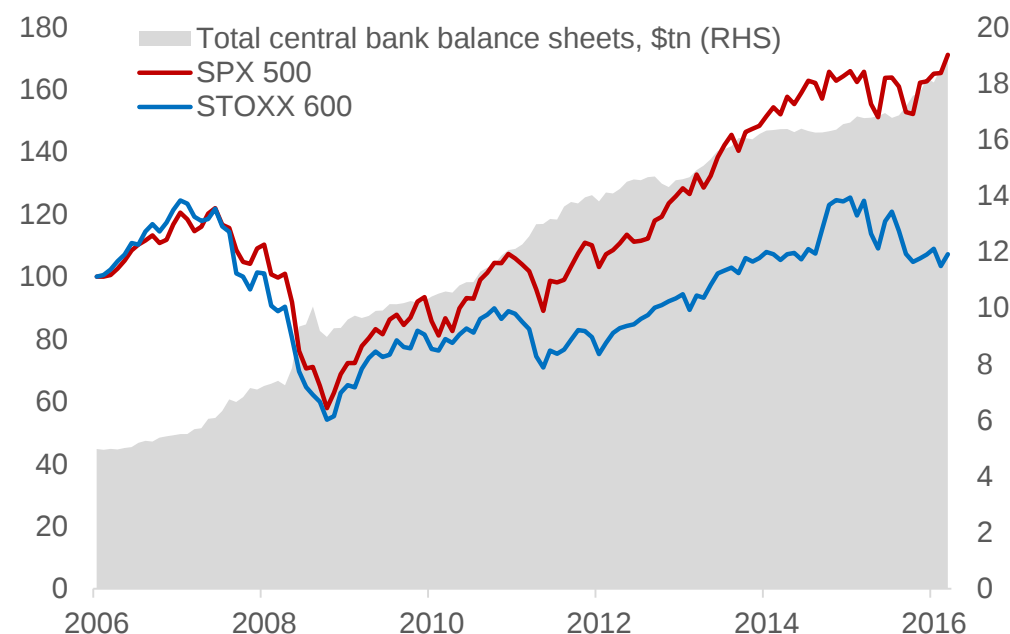
Central banks are growing faster than their economies

Central bank balance sheet size, % nominal GDP



Stock markets rise in tandem with central bank QE

Stock indices normalised vs central bank balance sheet size*



Source: Algebris Investments (UK) LLP, Central bank websites, Bloomberg, IMF

Source: Algebris Investments (UK) LLP, Central bank websites, Bloomberg. *Central banks included are the Fed, ECB, BoE, Bank of Japan (BoJ), PBoC and Swiss National Bank (SNB). Stock indices normalised: May 2006 = 100. RHS = right-hand-scale.

Policy Responses, Limitations and Collateral Effects

Forward Guidance: Easing With Words

Key milestones at the Fed

1995: All changes in monetary policy would be announced immediately

1999: Statement released after every meeting, specifying the fed funds “target”

2002: Dissenting votes published immediately

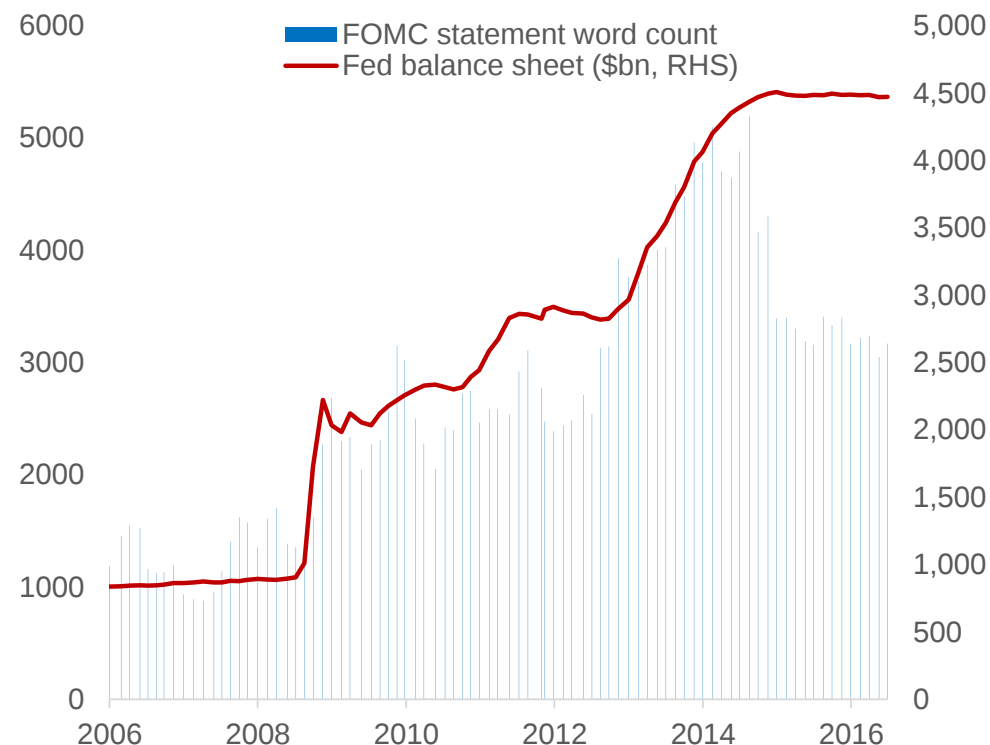
2003: Forward guidance on policy (“*policy accommodation maintained for a considerable period*”)

2008: Time-contingent forward guidance (“*for an extended period*” changed to “*at least through mid-2013*”)

2012: Data-contingent forward guidance (“*appropriate at least as long as the unemployment rate remains above 6 ½ percent...*”)

2015: Market-contingent forward guidance? (“*an abrupt tightening would risk disrupting financial markets and perhaps even inadvertently push the economy into recession*”)

FOMC: reversing the dovish talk?

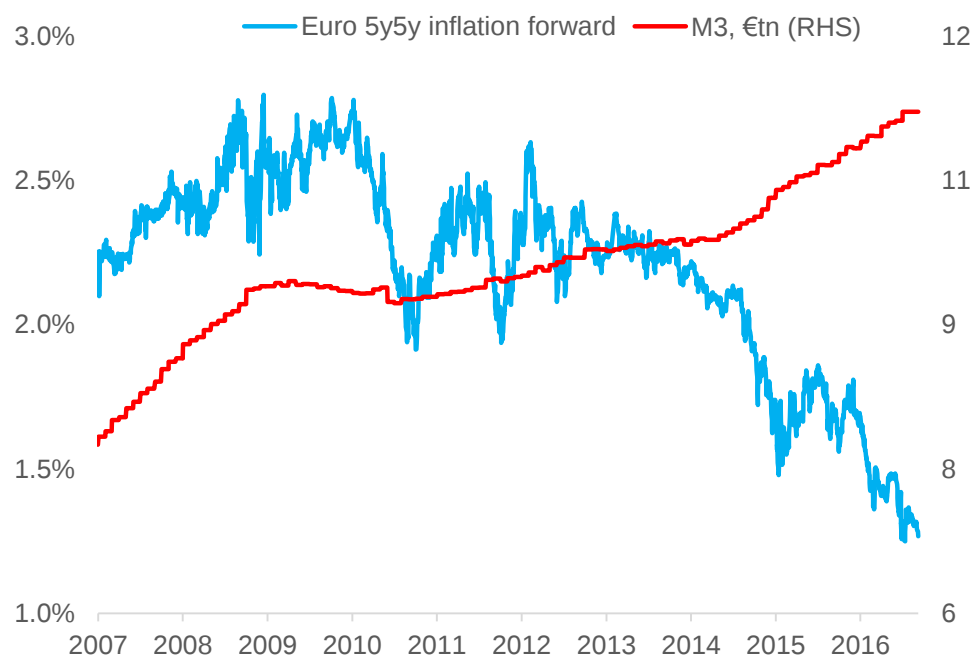


Source: Algebris Investments (UK) LLP, Federal Open Market Committee (FOMC) website, Bloomberg. RHS = Right hand scale

Policy Responses, Limitations and Collateral Effects

The Credit Transmission Channel of QE Is Impaired

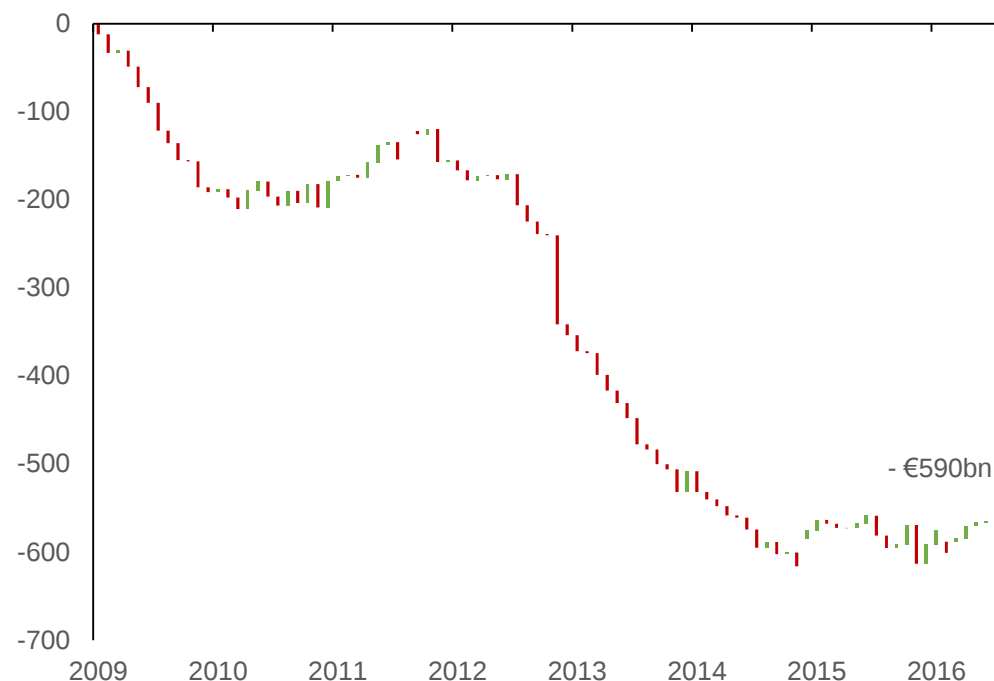
Inflation expectations continue to fall, despite rising M3



Source: Algebris Investments (UK) LLP, Bloomberg

Bank deleveraging has stabilised, but lending is weak

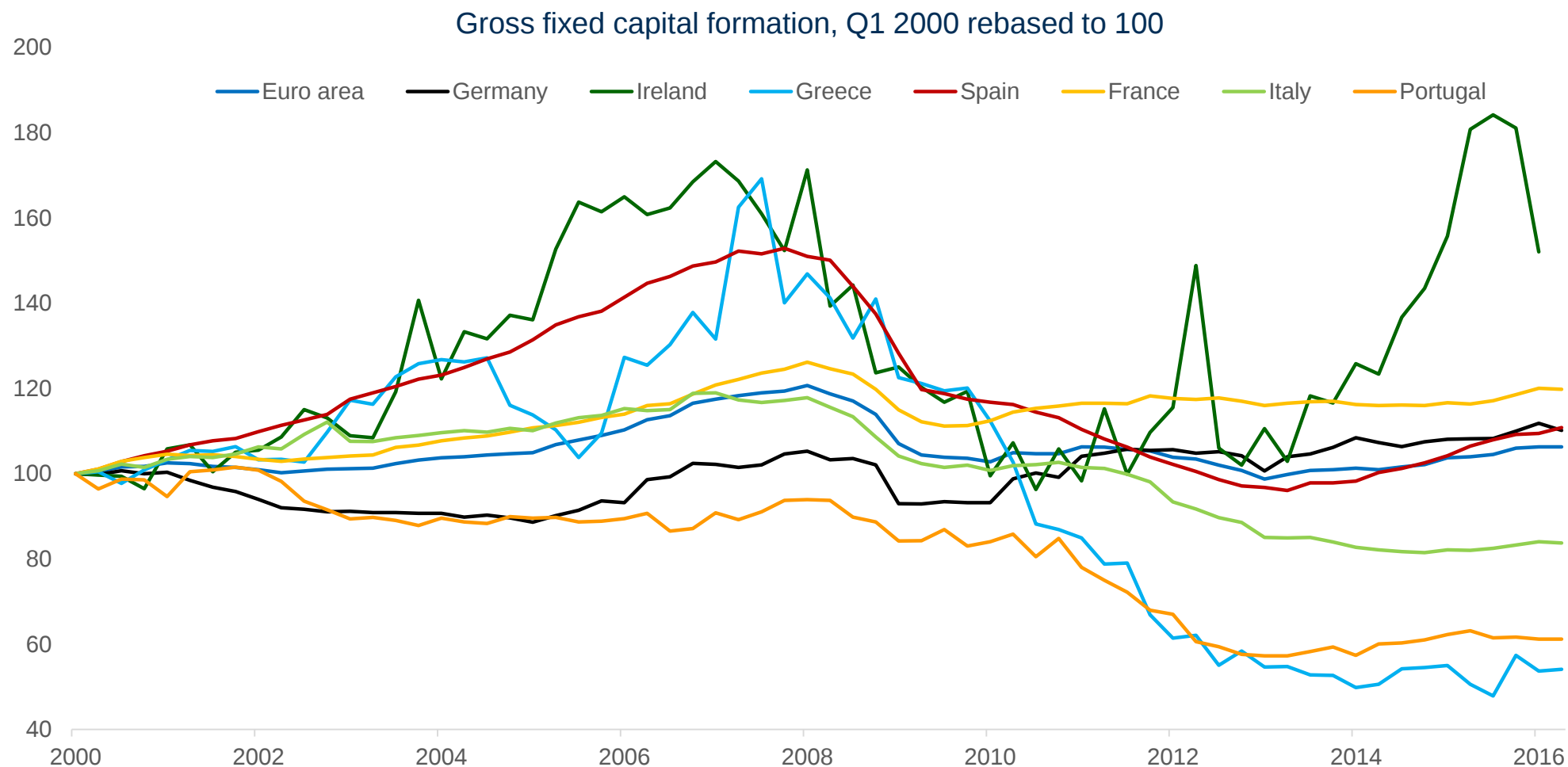
Monthly decline in total loans to Eurozone non-financial corporations
Jan 2009 – Aug 2016 (€bn)



Source: Algebris Investments (UK) LLP, European Central Bank

Policy Responses, Limitations and Collateral Effects

Investment Is Still 12% Below the Peak in the Eurozone



Source: Algebris Investments (UK) LLP, Eurostat

Policy Responses, Limitations and Collateral Effects

Fixing Structural Problems with Cyclical Tools?

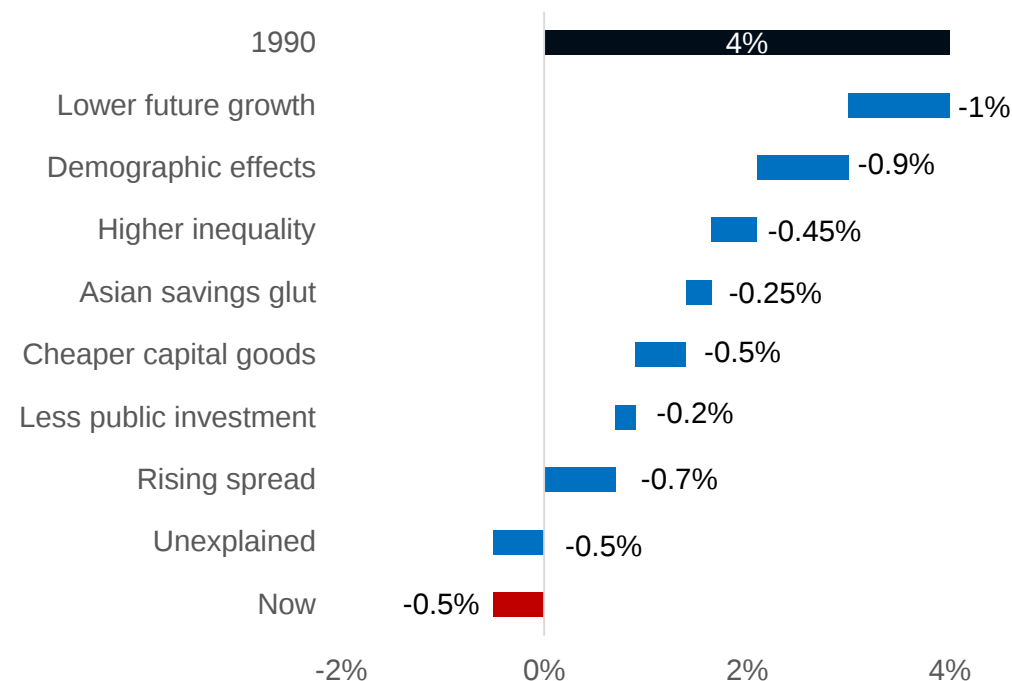
Investment is on a downward trend

Advanced economy investment as % of GDP, 5-year MA



Structural factors at play for the fall in neutral real rate

Neutral real rate in developed economies



Source: Algebris Investments (UK) LLP, IMF

Source: Algebris Investments (UK) LLP, Lukasz Rachel and Thomas Smith, *Secular Drivers of the Global Real Interest Rate*, Bank of England Working Paper No. 571, December 2016

Policy Responses, Limitations and Collateral Effects

Impact of QE on Growth, Labour Markets and Wealth Distribution

Change between 2007 and now*

	Real GDP	Bank assets	Unemployment			Youth unemployment			Gini coefficient**		
	Change	Change	2007	Now	Change	2007	Now	Change	2007	2012	Change
US	+10%	+44%	4.6%	5.0%	+0.4pp	10.5%	11.6%	+1.1pp	0.378	0.390	+0.012
UK	+7%	-10%	5.4%	5.1%	-0.3pp	14.2%	14.6%	+0.4pp	0.341	0.351	+0.010
Italy	-8%	+16%	6.1%	11.6%	+5.5pp	20.3%	40.3%	+20.0pp	0.313	0.327	+0.014
Spain	-3%	-6%	8.2%	21.0%	+12.8pp	18.1%	48.4%	+30.3pp	0.306	0.335	+0.029
Greece	-26%	-2%	8.3%	24.1%	+15.8pp	25.2%	49.8%	+24.6pp	0.335	0.340	+0.005
Iceland	+7%	-64%	1.0%	3.2%	+2.2pp	7.2%	8.8%	+1.6pp	0.283	0.257	-0.026

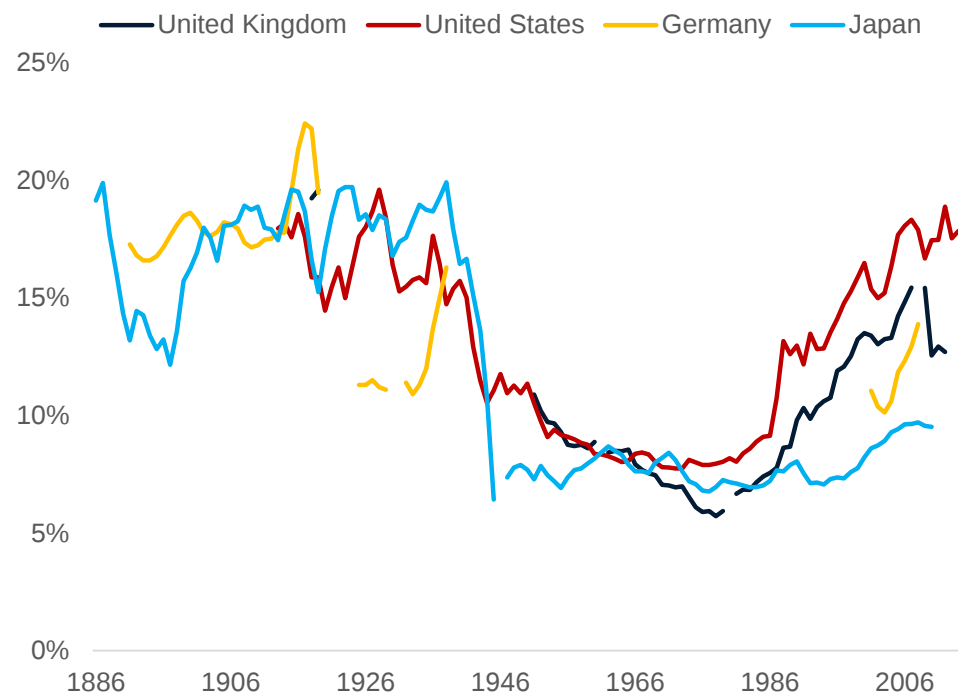
Source: IMF, OECD, Central Bank of Iceland, Bank of England, ECB, Federal Reserve, Algebris Investments (UK) LLP. Note: * Now = end 2015 for Real GDP and youth unemployment, and Q1 2016 for the rest; ** 1 = complete inequality, 0 = complete equality.

Policy Responses, Limitations and Collateral Effects

Excess Credit + Easy Monetary Policy = Rising Inequality

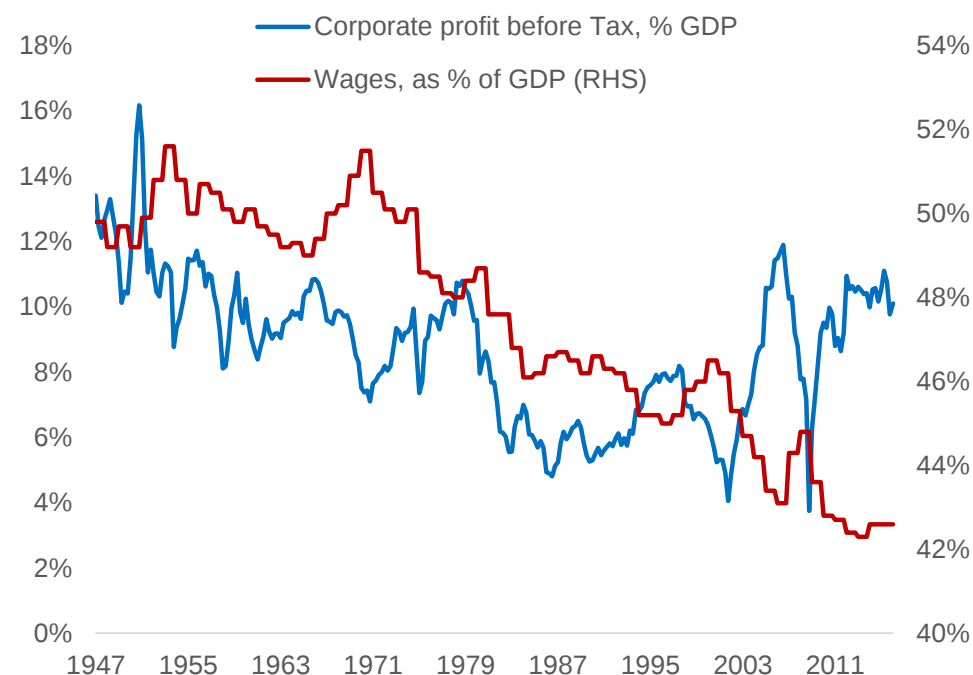
The top 1%: an ever increasing share of total income

% of total income for the top 1% of earners



Corporate profits have risen, not wages

US corporate profit and wages, as a % of GDP



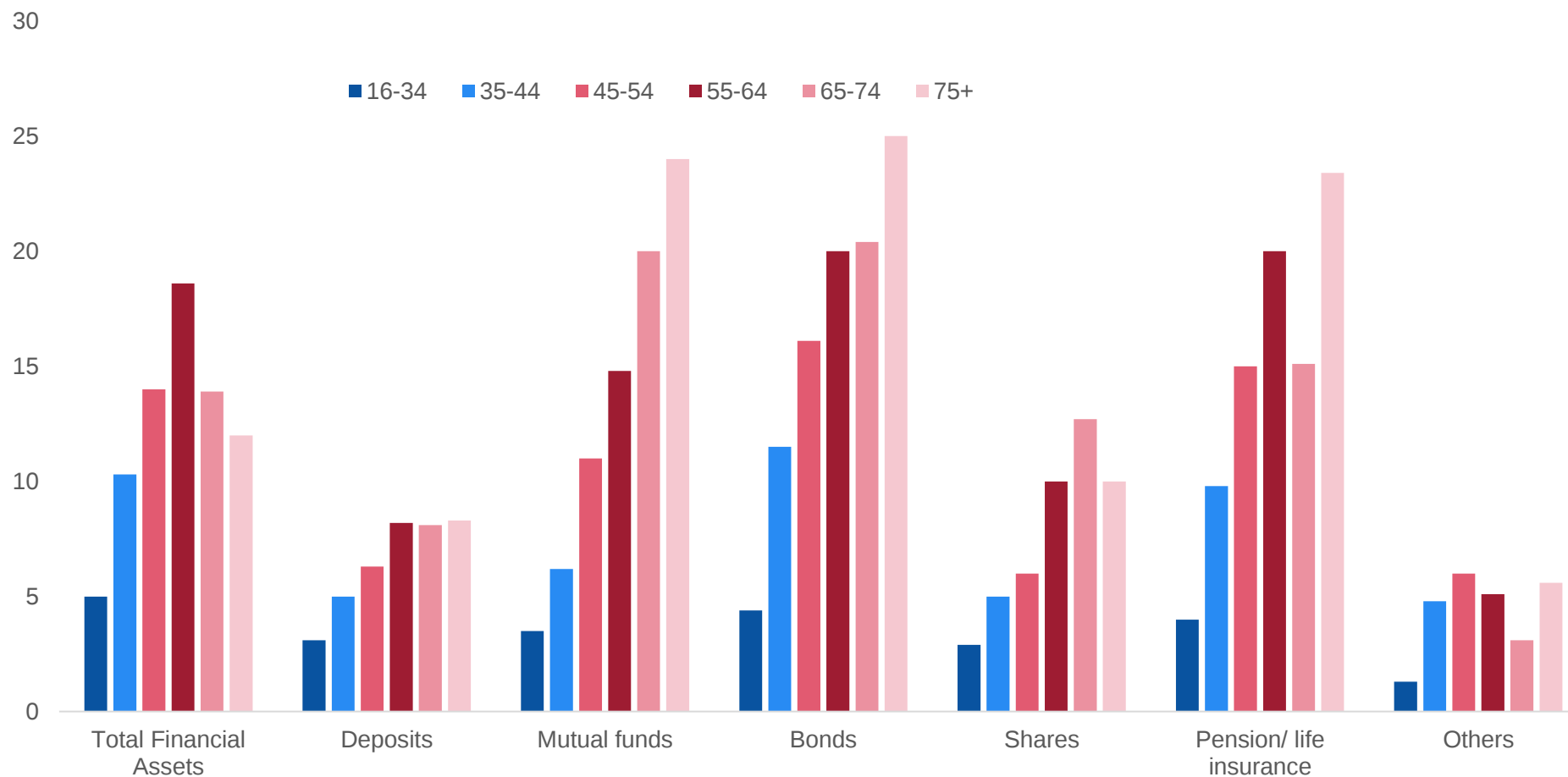
Source: Algebris Investments (UK) LLP, World Wealth and Income Debate (line breaks = data unavailable)

Source: Algebris Investments (UK) LLP, FRED

Policy Responses, Limitations and Collateral Effects

Wealth Concentration

Median value of owned financial assets by age group, €000



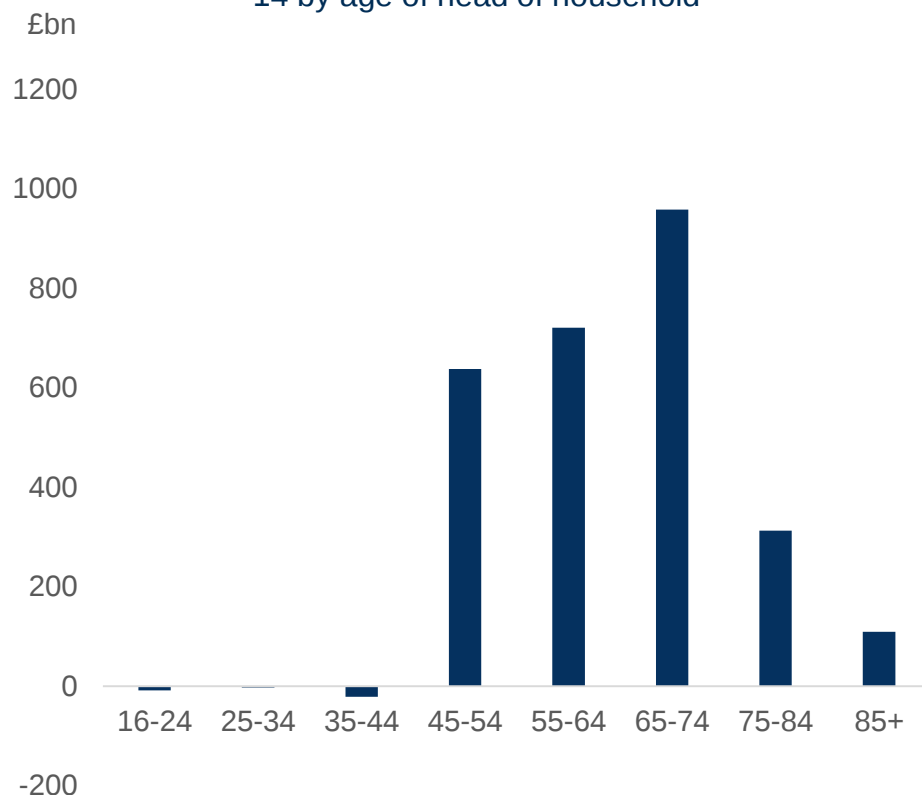
Source: Algebris Investments (UK), "The Eurosystem Household Finance and Consumption Survey Results from the first wave", ECB Working Paper, March 2013

Policy Responses, Limitations and Collateral Effects

Inequality Can Be Self-reinforcing

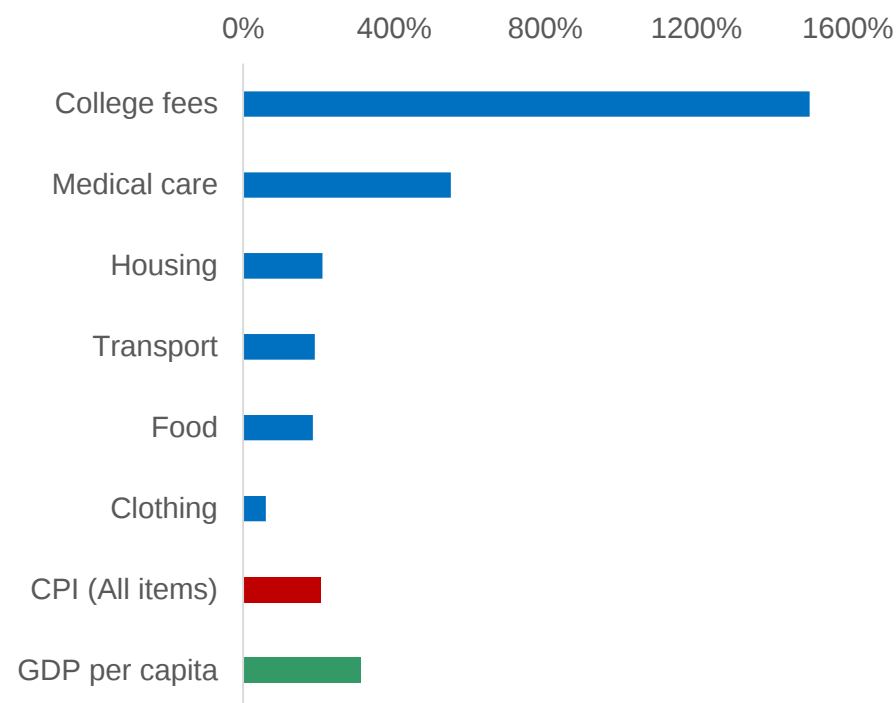
The wealth gap is getting bigger

Change in UK households' wealth between 2006-08 and 2012-14 by age of head of household



Educational divide can perpetuate inequality

US inflation by category vs income growth since 1979



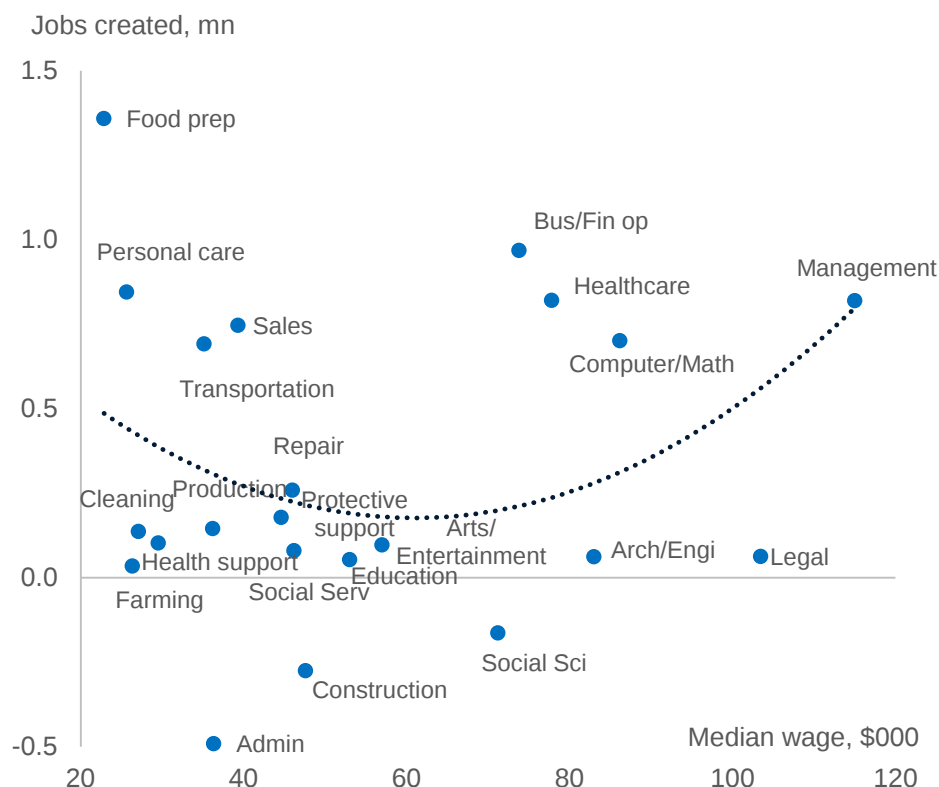
Source: Algebris Investments (UK) LLP, ONS

Source: Lukasz Rachel and Thomas Smith, *Secular Drivers of the Global Real Interest Rate*, Bank of England Working Paper No. 571, December 2016

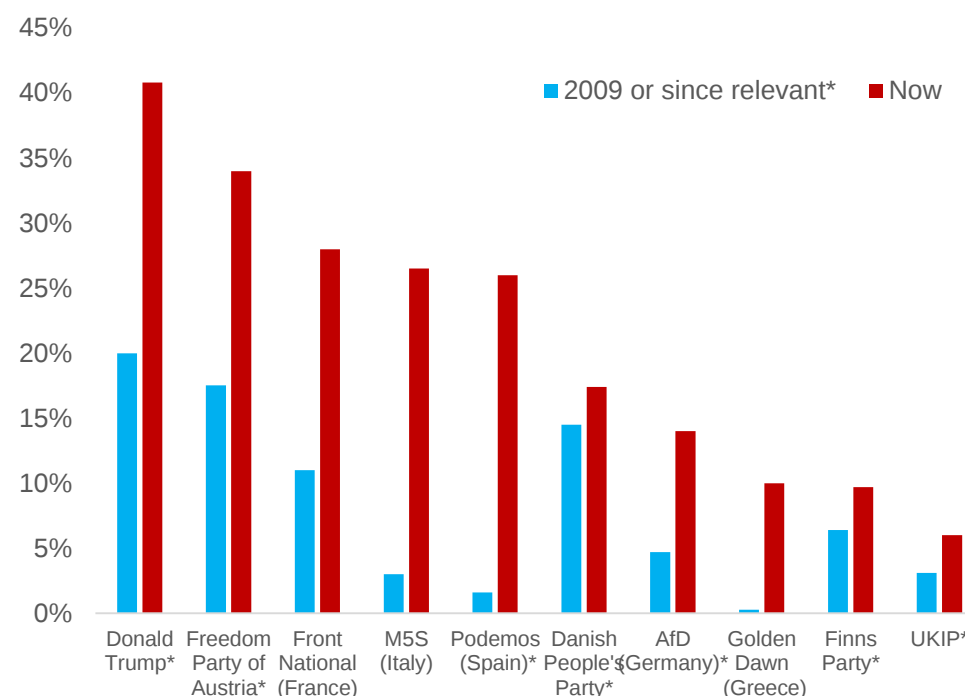
Policy Responses, Limitations and Collateral Effects

Inequality and Income Polarisation Boost Populism

More waiters and CEOs, but not enough in between
US jobs created in 2009-2015, mn vs median wage, \$000



Support for radical and populist politics is on the rise
Opinion polls for Eurosceptic parties/populists

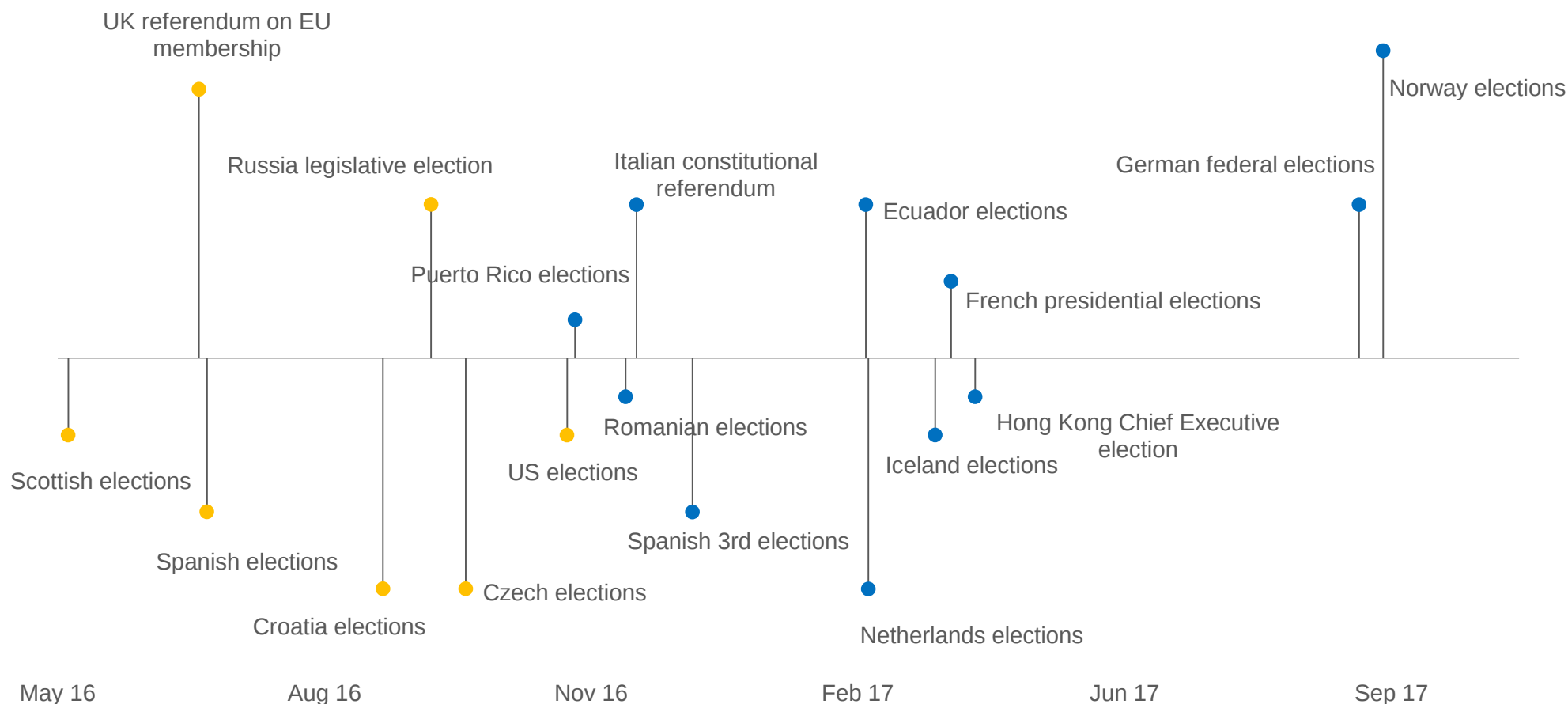


Source: Algebris Investments (UK) LLP, Bureau of Labor Statistics (BLS)

Source: Algebris Investments (UK) LLP, Wikipedia. *Freedom Party of Austria: 2008 Legislative Elections; Donald Trump: mid-2015 when he first announced candidacy; Podemos: 2013 when it came into force; Danish People's Party: 2010; UKIP: 2010 General Election; Finns Party: 2010 Parliamentary Election; AfD: 2013 Federal Election

Policy Responses, Limitations and Collateral Effects

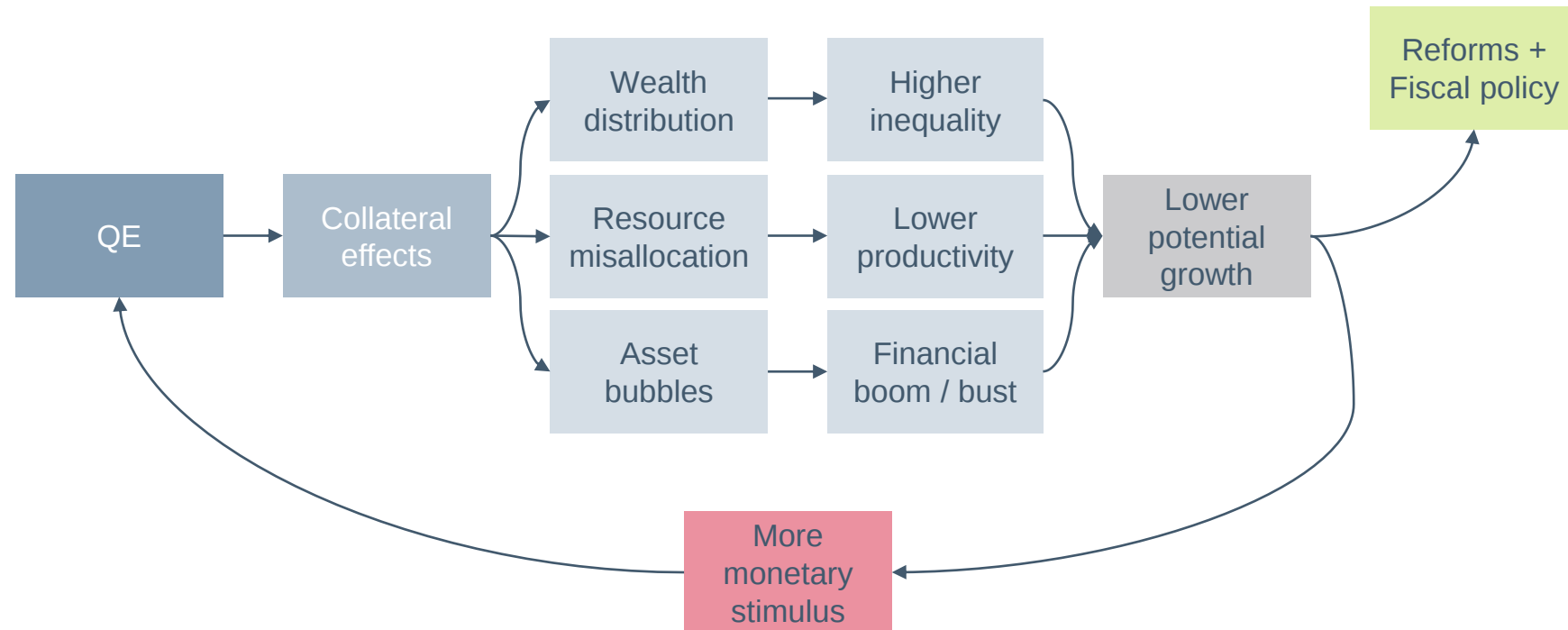
Unstable Political Environment



Source: Algebris Investments (UK) LLP.* Yellow = already took place

Policy Responses, Limitations and Collateral Effects

The QE Infinity Trap



Source: Algebris Investments (UK) LLP

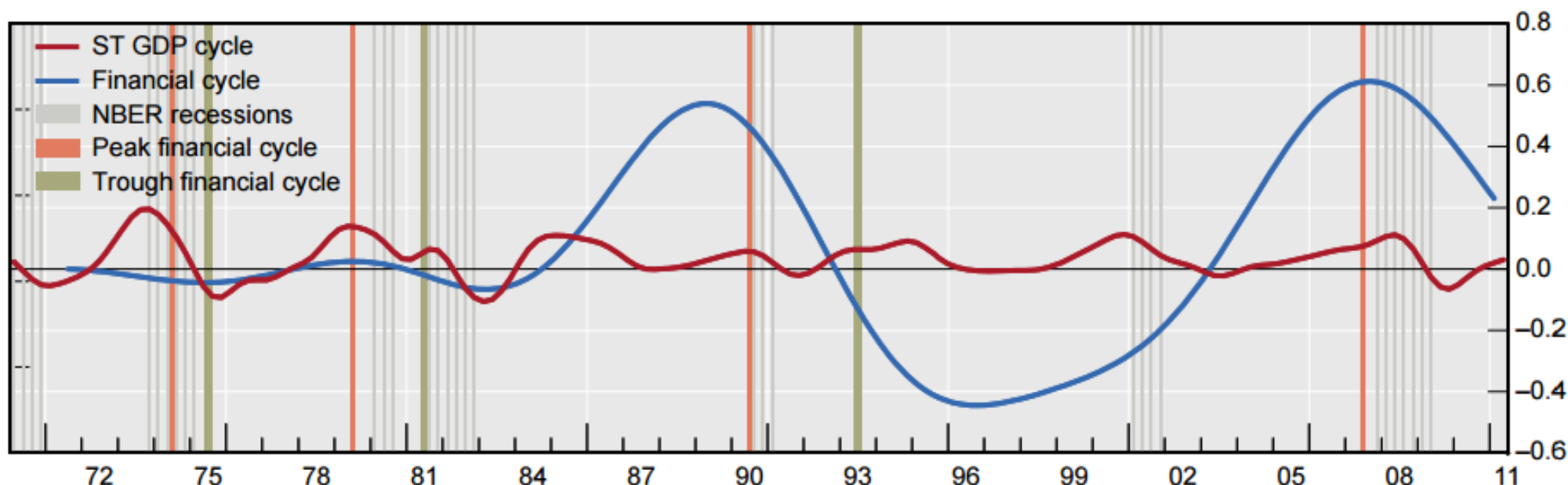
“If every time a central bank starts moving towards normalcy, it says, ‘no, no, exchange rate appreciating, turmoil etc., we got to go back,’ we’re in it for a long time [...] Then this is not QE2, 3, 4, it’s QE infinity, we keep doing it.”

Raghuram Rajan, Former Governor of the Reserve Bank of India, April 2016

Policy Responses, Limitations and Collateral Effects

The Financial Cycle: No Machine of Perpetual Motion

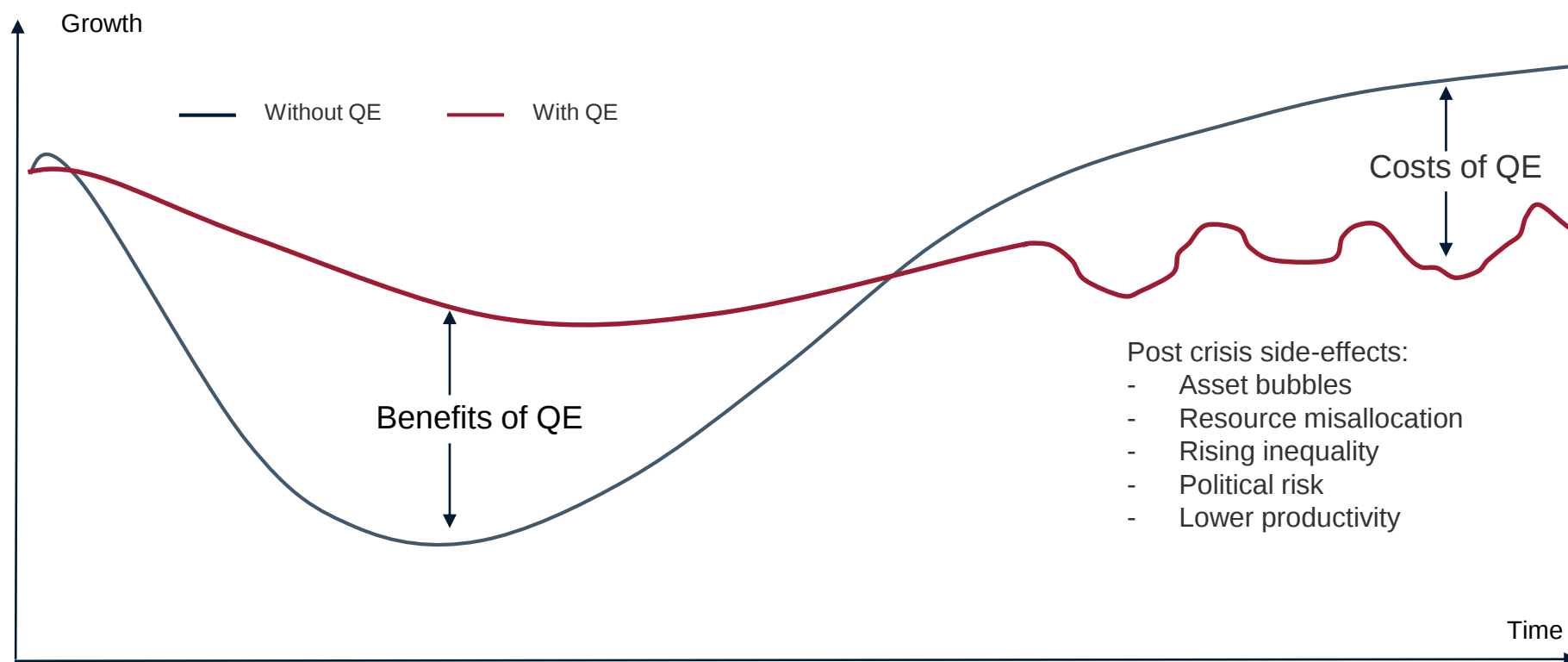
Financial cycles and crises are becoming longer and deeper



Note: Orange and green bars indicate peaks and troughs of the combined cycle using the turning-point (TP) method. The frequency based cycle (blue line) is the average of the medium-term cycle in credit, the credit to GDP ratio and house prices (frequency based filters). The short terms GDP cycle (red line) is the cycle identified by the short-term frequency filter.

Policy Responses, Limitations and Collateral Effects

Payback Time – Prepare to Pay for QE



“Sometimes the criticism directed at our policies implicitly attributes responsibility for the low interest-rate environment to central bank policies. But the truth is precisely the opposite: central banks are simply reacting to and trying to correct a situation that they did not create.”

Vítor Constâncio, ECB Vice-President, 25 August 2015

Source: Algebris Investments (UK) LLP

Why Current Policies Do Not Work

Why Current Policies Do Not Work

Keynes vs Friedman vs Bernanke

John Maynard Keynes:

"In so far as the inducement to the individual to save depends on the future return which he expects, it clearly depends not only on the rate of interest but on the fiscal policy of the government. [...] If fiscal policy is used as a deliberate instrument for the more equal distribution of incomes, its effect in increasing the propensity to consume is, of course, all the greater."

The General Theory of Employment, Interest, and Money, 1936

Milton Friedman:

"Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output. [...] A steady rate of monetary growth at a moderate level can provide a framework under which a country can have little inflation and much growth."

The Counter-Revolution in Monetary Theory, 1970

"... it shows how unreliable interest rates can be seen as an indicator of appropriate monetary policy. [...] Now, the Bank of Japan's argument is, 'Oh well, we've got the interest rate down to zero; what more can we do?' It's very simple. They can buy long-term government securities, and they can keep buying them and providing high-powered money until the high powered money starts getting the economy in an expansion. What Japan needs is a more expansive domestic monetary policy."

Speech at the Bank of Canada, 2000

Ben Bernanke:

"The U.S. government has a technology, called a printing press (or today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at no cost."

November 2002

"We didn't allow the fact that interest rates were very low to fool us into thinking that monetary policy was accommodative enough."

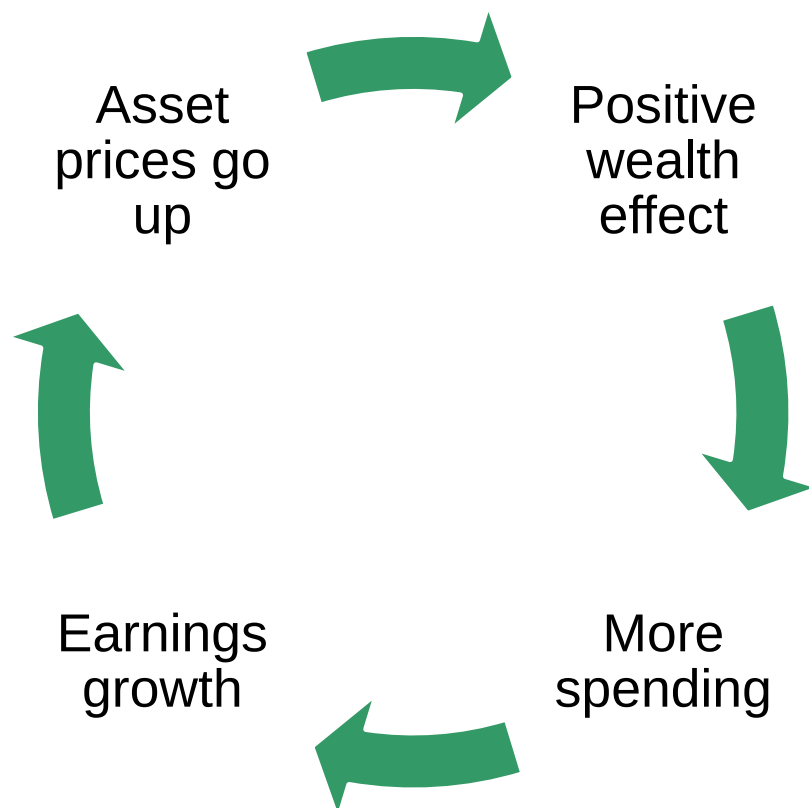
Speech at the Economic Club of Indiana, Indianapolis, 2012

Source: Algebris Investments (UK) LLP

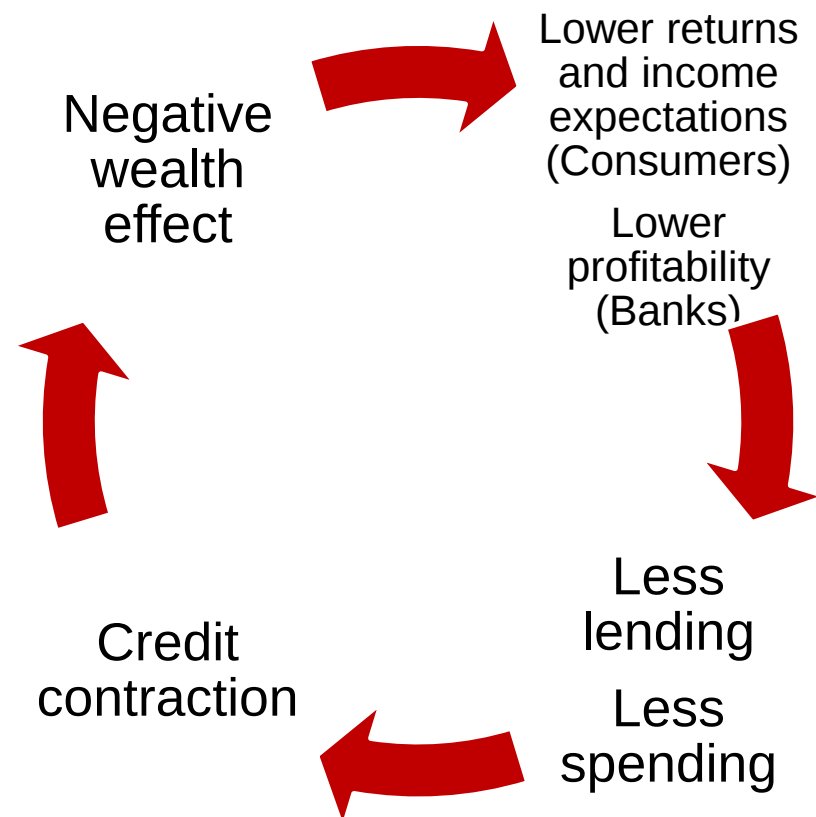
Why Current Policies Do Not Work

NIRP: Theory vs Practice

Theory



Practice

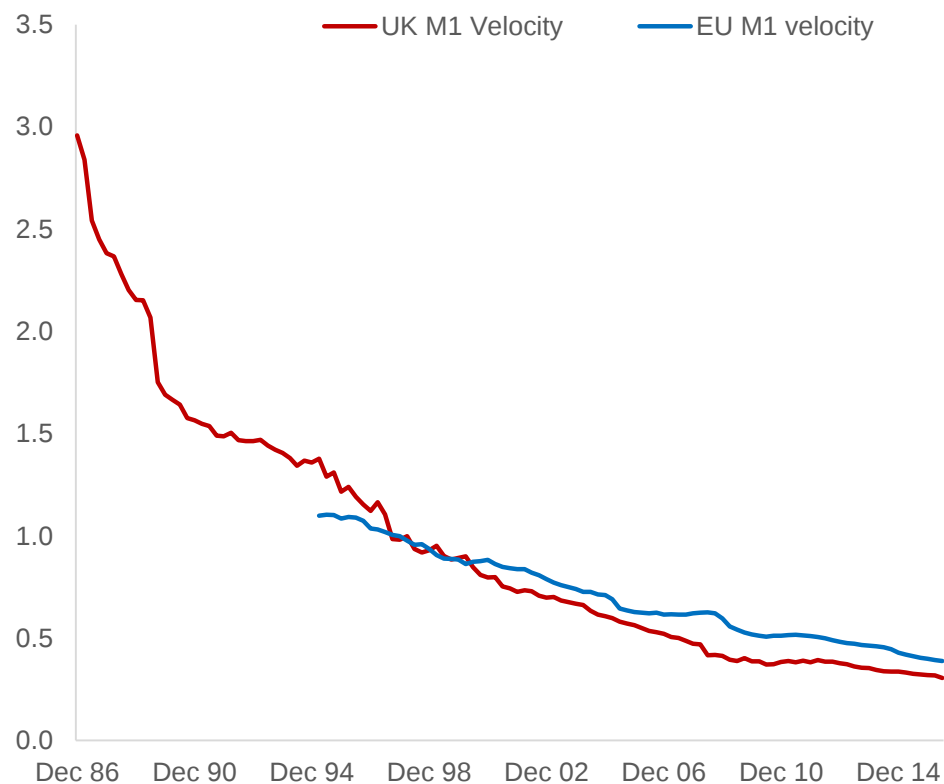


Why Current Policies Do Not Work

Keynesianism and Friedmanism Broke Down in an Over-levered World

Monetary stimulus no longer means more growth

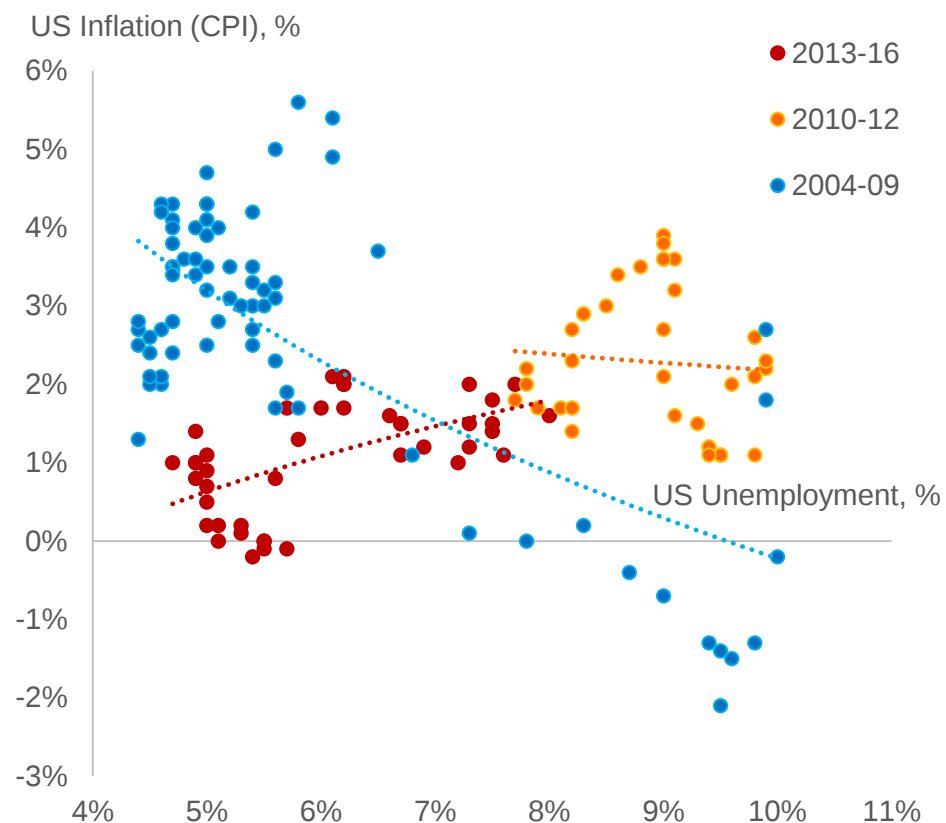
UK and EU M1 Velocity



Source: Algebris Investments (UK) LLP, BoE, ONS, ECB

Inflation and unemployment don't follow the Phillips Curve

US Inflation vs unemployment, 2004 - 2016



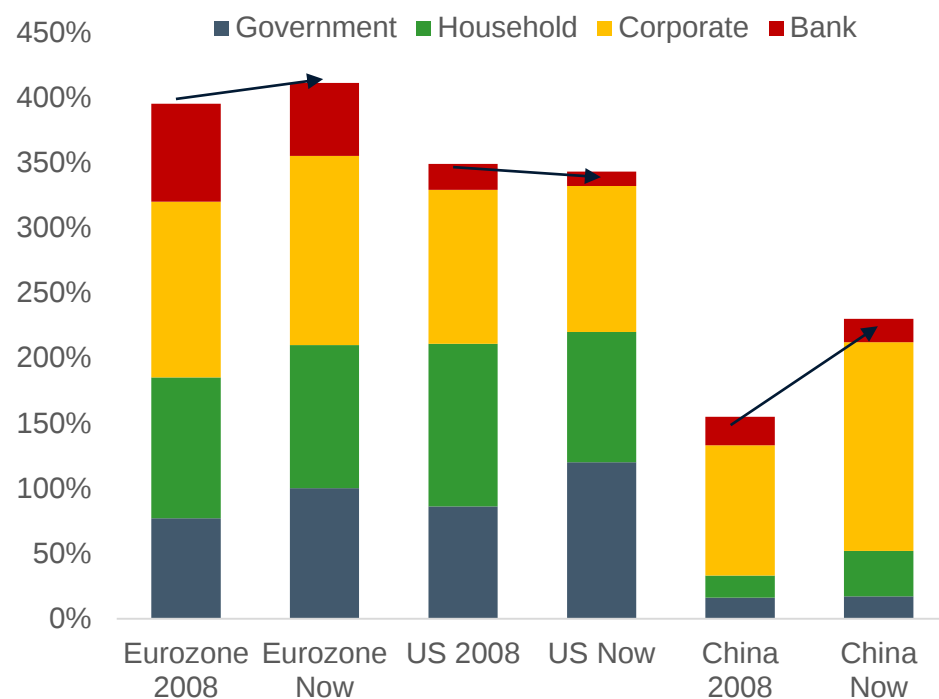
Source: Algebris Investments (UK) LLP, Bloomberg

Why Current Policies Do Not Work

Debt Overhangs Have Only Declined Where Capital Markets Allowed Defaults

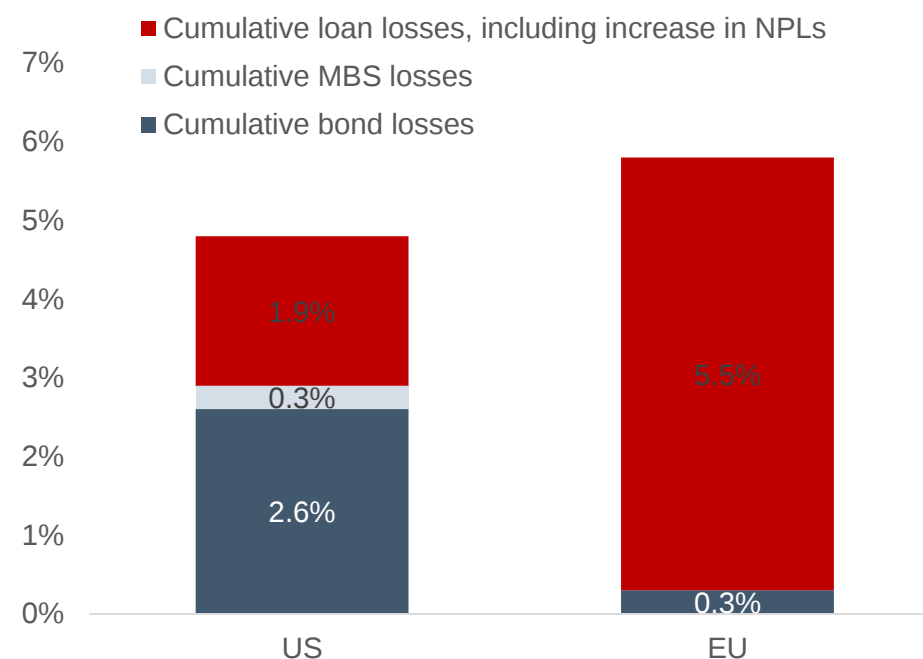
US private sector delevered, unlike Europe and China

Debt as % of GDP



US took losses in capital markets, Europe in banks

Default losses since the crisis as % of GDP



Source: Organisation for Economic Co-operation and Development (OECD), Eurostat, European Central Bank, Federal Reserve, Markit

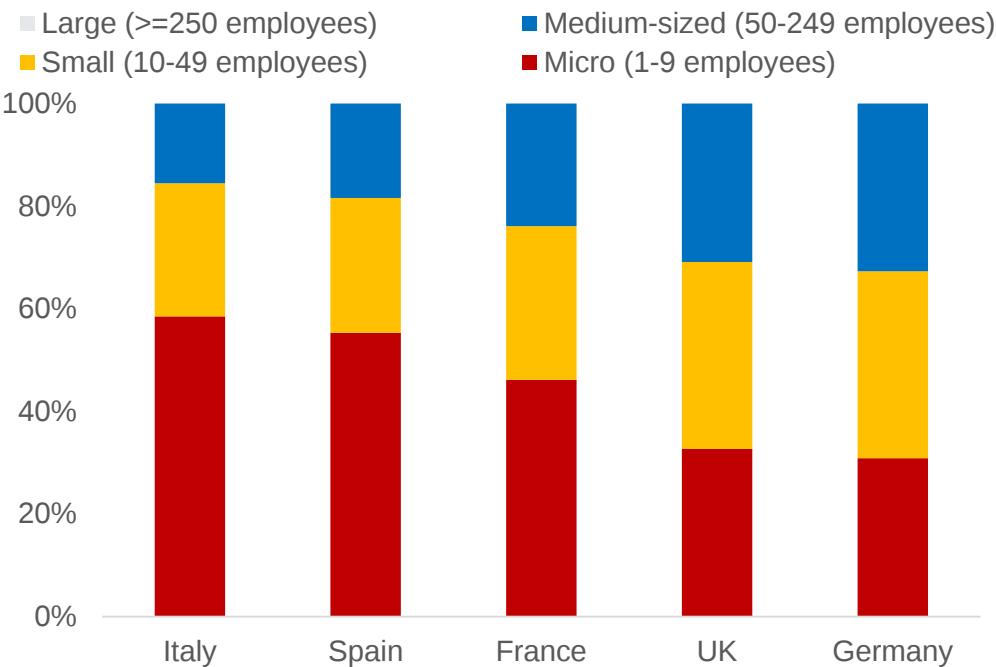
Source: Moody's, European Central Bank, Federal Reserve, Fannie Mae, Freddie Mac

Why Current Policies Do Not Work

Europe Relies on Banks for Credit Intermediation

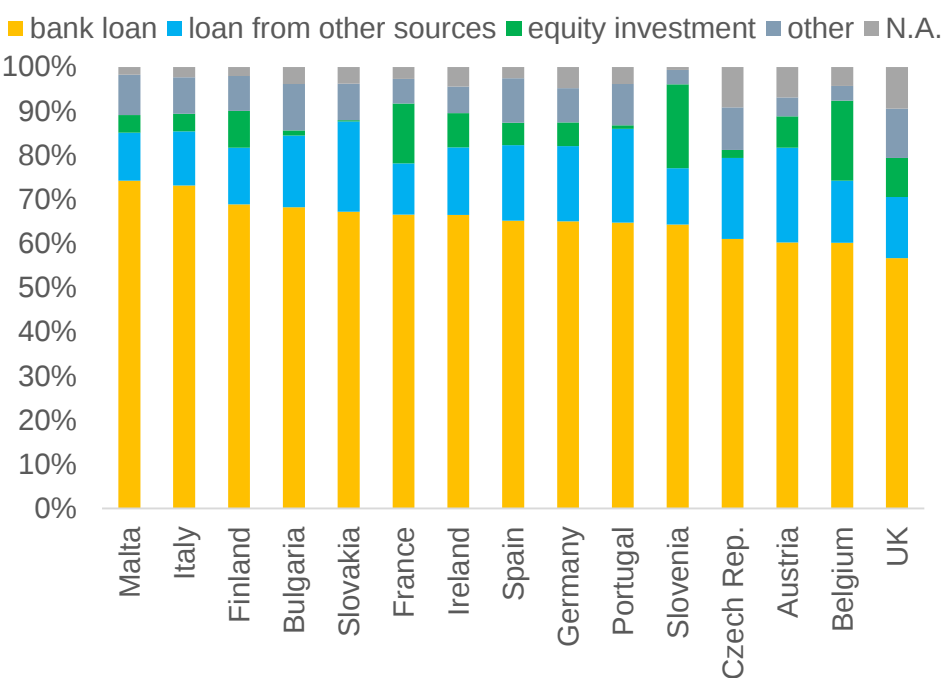
SMEs are a large part of Europe’s economy

Breakdown of companies by size, % of total companies



Firms Depend on banks for credit

Firms’ most preferred types of external financing if needed

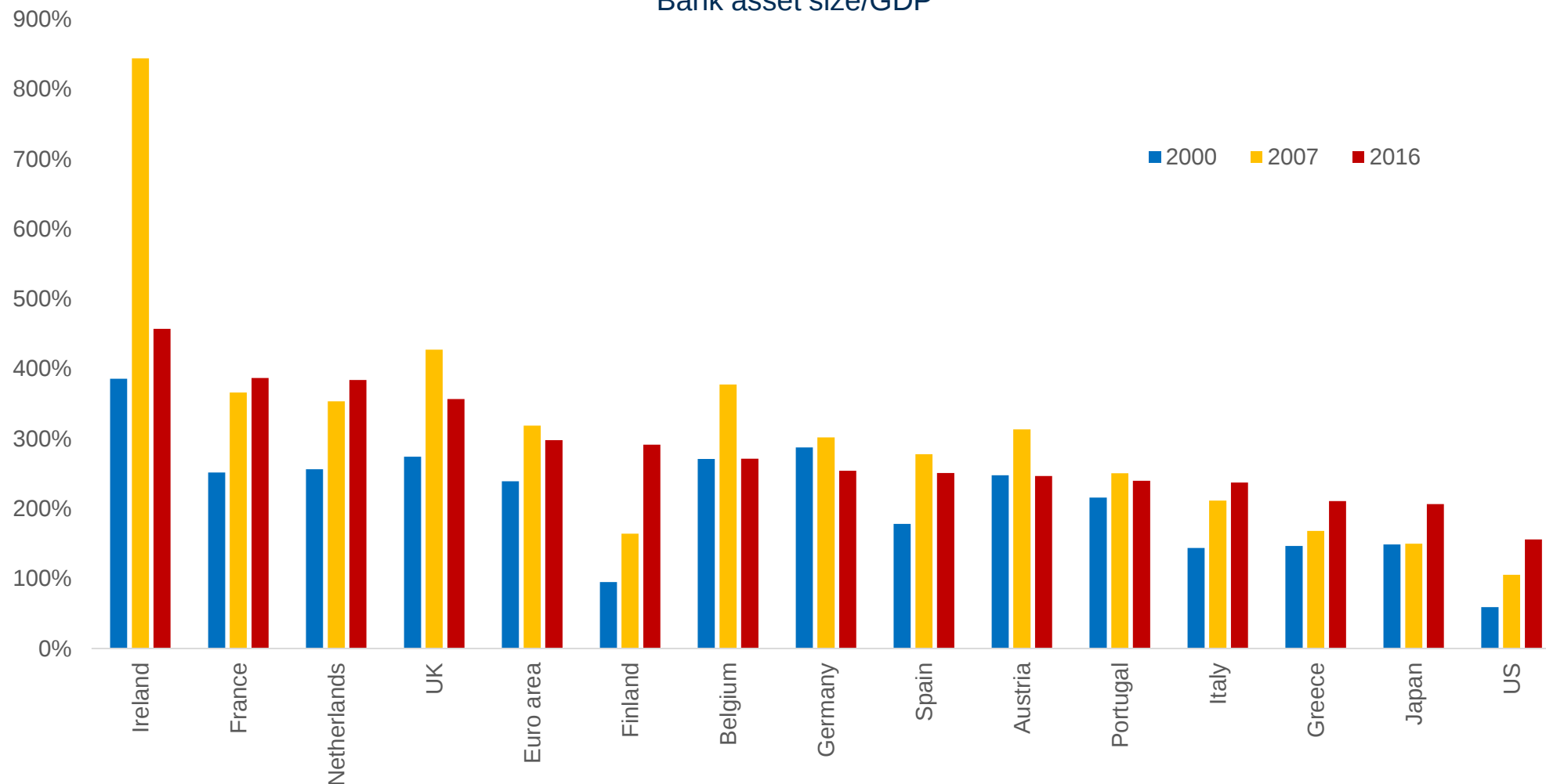


Source: Algebris Investments (UK) LLP, EC Observatory on SMEs (2015 Survey)

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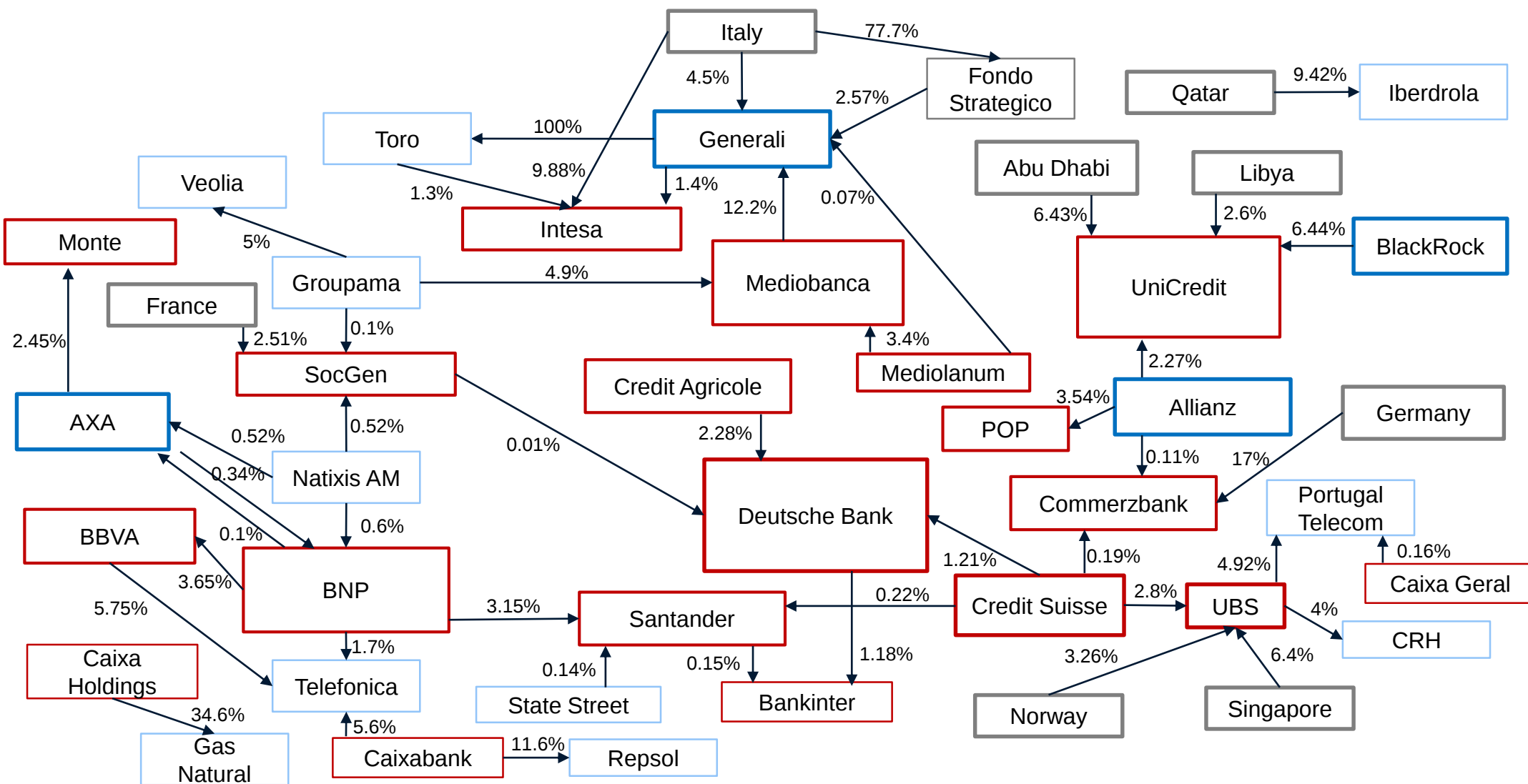
Why Current Policies Do Not Work But Banks Are Still Too Large...

Bank asset size/GDP



Source: Algebris Investments (UK) LLP, ECB, FRED, BoE, BoJ

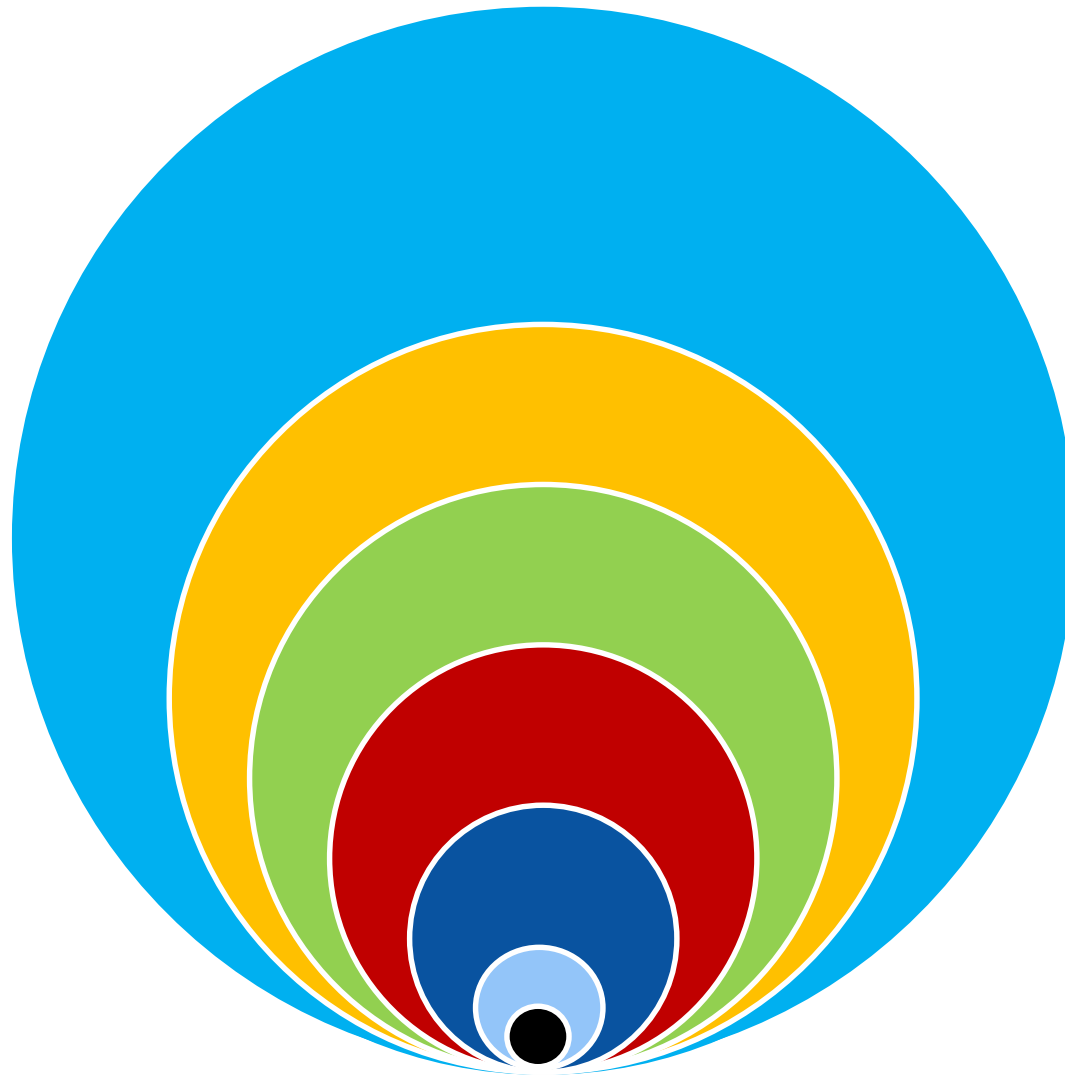
... and Overcomplex



Source: Algebris Investments (UK) LLP, Bloomberg

Why Current Policies Do Not Work

Eurozone Banks vs Rest of the World



Eurozone bank assets: €32.5tn

Eurozone GDP: €10tn

Value of world's gold stock : €7tn

US-Iraq war cost (2003-10): €2.7tn

Global hedge fund industry: €1.6tn

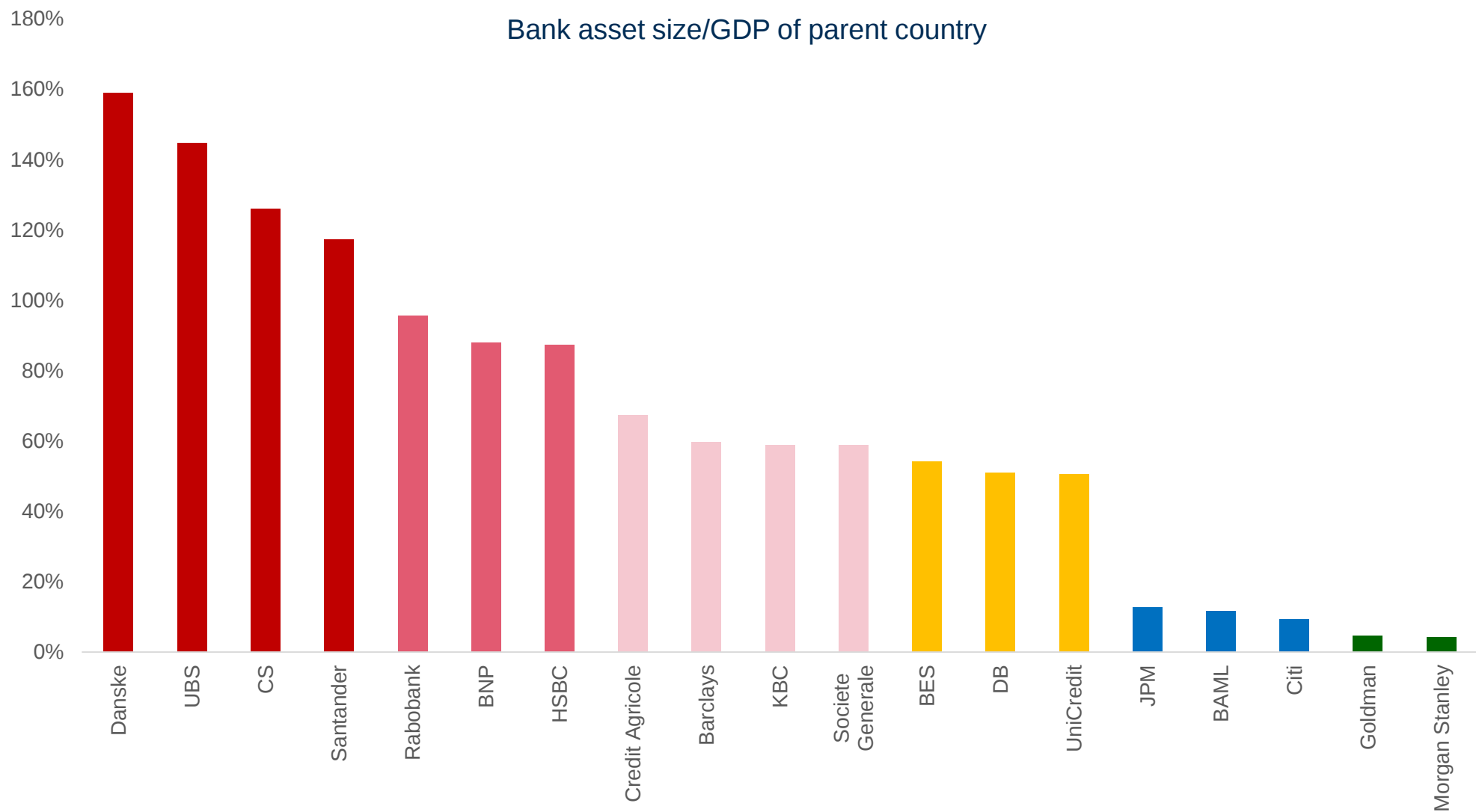
European Stability Mechanism: €0.5tn

Kung Fu Panda 3: €0.0001tn

Source: Algebris Investments (UK), Bloomberg, Wikipedia

Why Current Policies Do Not Work

Too Big to Fail Has Not Gone Away

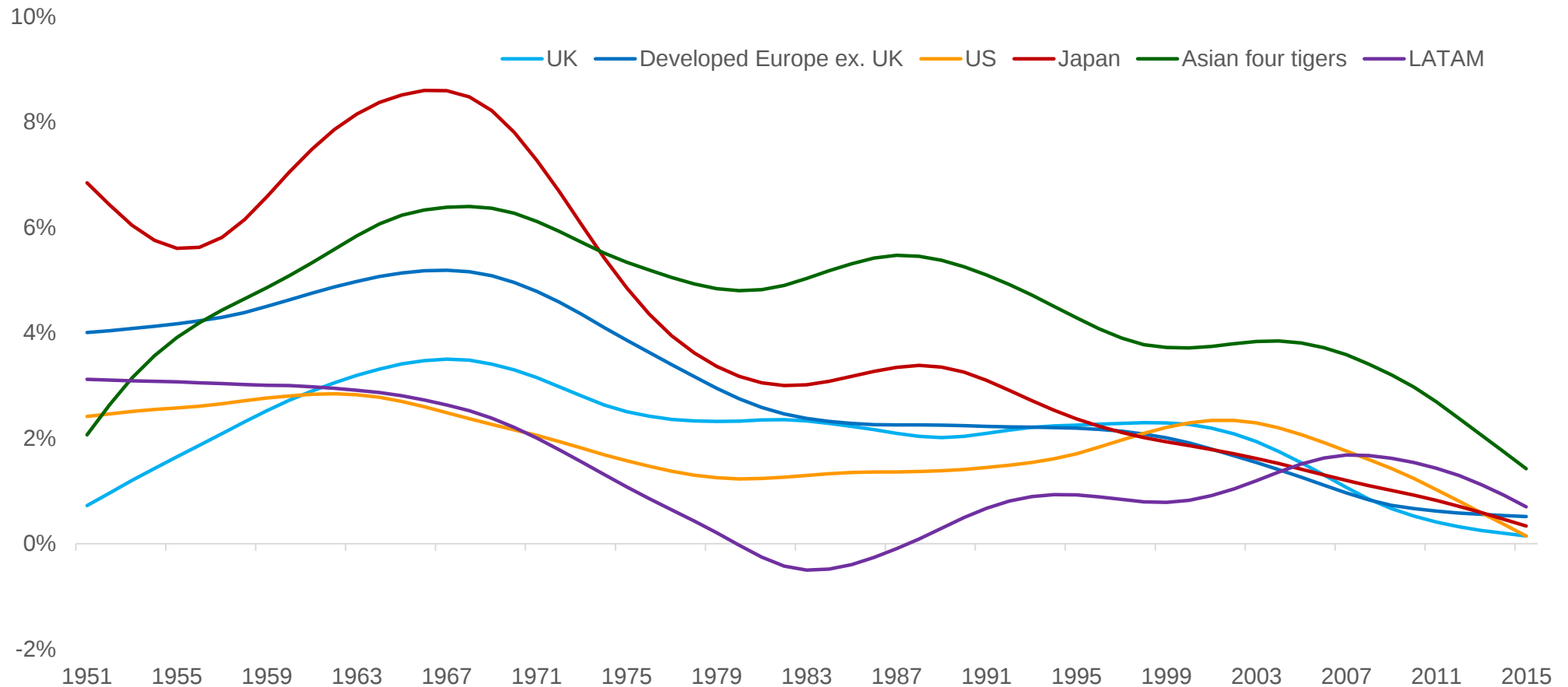


Source: Algebris Investments (UK), Bloomberg, IMF

Why Current Policies Do Not Work

Productivity Growth Has Hit a Wall

Trend growth of labour productivity (output per hour) using HP filter, 1951 - 2015



Source: Algebris Investments (UK) LLP, The Conference Board Total Economy Database. Note: Trend growth rates are obtained using HP filter, assuming a lambda of 100.

Why Current Policies Do Not Work

The Monetary Tide Is Turning

"I am throwing the possibility out there that even "helicopter money" may not work for the same reason that so much fiscal spending has not elevated growth... So the nuclear option may not be as much of a panacea as some people think."

Raghuram Rajan, Former RBI Governor, 10 May 2016

"I have serious reservations about the extent of reliance on monetary policy around the world. It isn't that the central banks were wrong to do what they could, it is that what they could do was not enough, and never could be enough, fully to restore demand after a period of recession associated with a very substantial debt build-up. [...] The problem now is that there is a limit to how much we can expect to achieve by relying on already indebted entities taking on more debt."

Glenn Stevens, Former RBA Governor, 10 August 2016

"In assessing the effectiveness of the negative interest rate policy, the potential impact on the financial intermediation due to its influence on the profits of financial institutions needs to be taken into account. Considering that the profits affect the soundness of financial institutions in a cumulative manner, the impact can vary depending on the duration of the policy."

Haruhiko Kuroda, BoJ Governor, 5 September 2016

"So they do reflect also the expectation that this extraordinary policy support will remain in place. But does it mean that it can stay in place forever? The answer is of course no. We want a convergence which is self-sustained, in other words, without the extraordinary policy support that is in place now."

Mario Draghi, ECB President, 20 October 2016

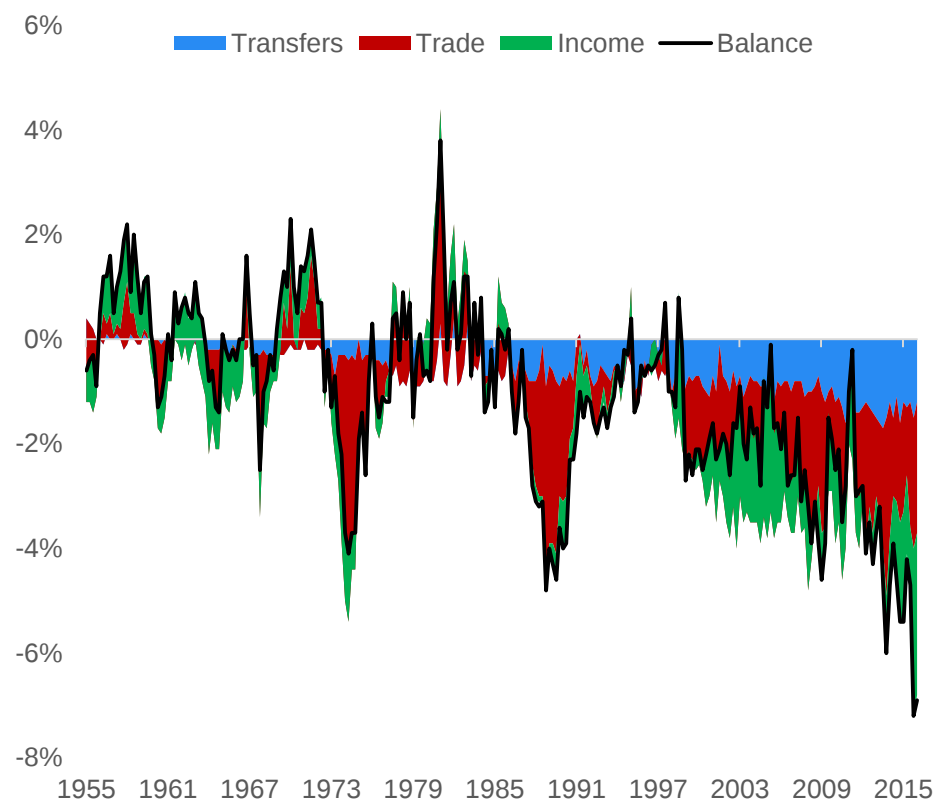
The Divided Kingdom: Policy and Populism in the UK after Brexit

The UK's Challenges Beyond Brexit

Twin Deficits

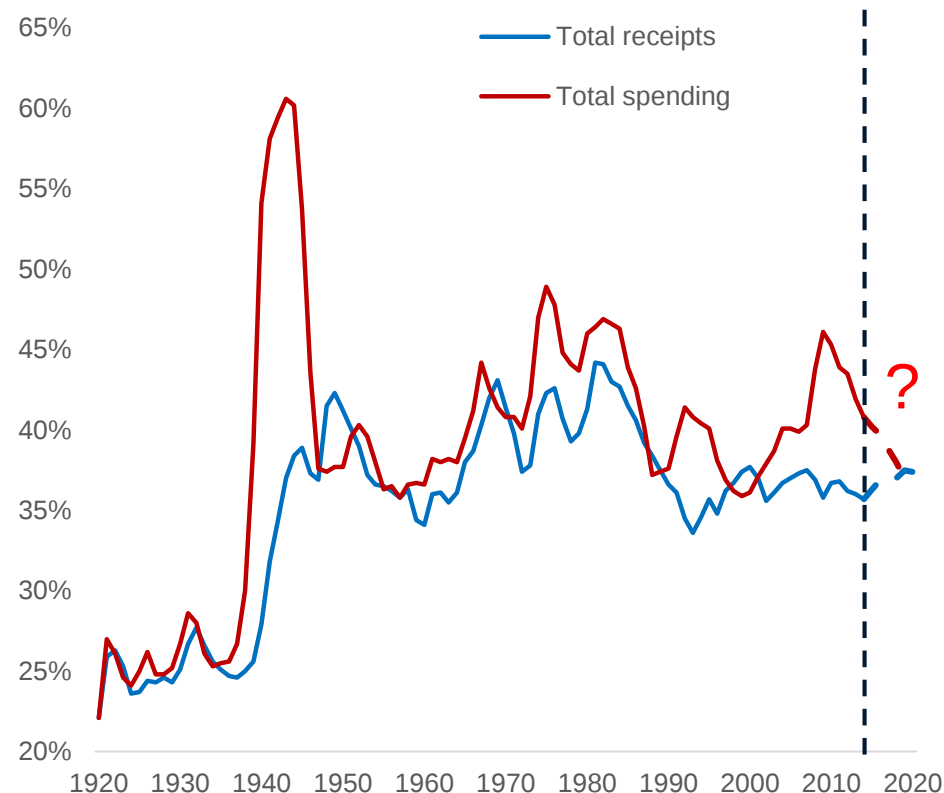
Current account deficit is rising

UK current account deficit, % GDP



Fiscal gap is still large at 5% GDP, and could widen again

As % of GDP



Source: Algebris Investments (UK) LLP, Office of National Statistics (ONS)

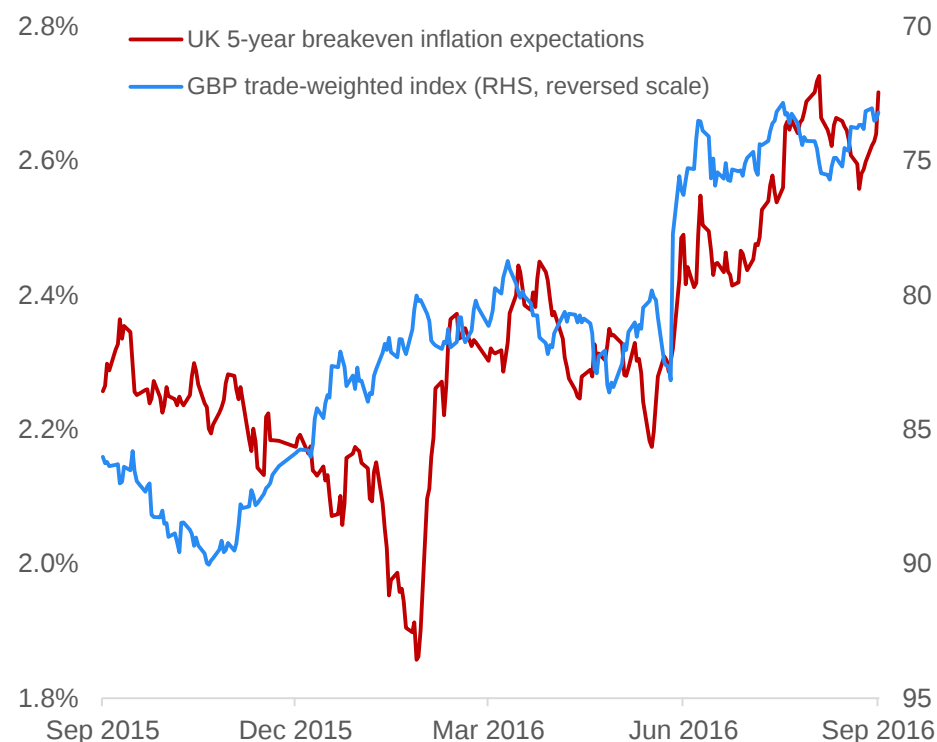
Source: Algebris Investments (UK) LLP, Office of Budgetary Responsibility (OBR)

The UK's Challenges Beyond Brexit

Currency Depreciation, Higher Inflation

Pound depreciation will bring in import-led inflation

% share of UK GVA, 2014



Source: Algebris Investments (UK) LLP, Bloomberg. Breakeven inflation expectations = yield on nominal government bonds – yield on inflation-linked bonds. GBP index used is Deutsche Bank GBP Trade Weighted Index Spot.

Importing goods and labour, exporting services

46% of the total food consumed is imported:

Over 90% of bananas and coffee

81% of tomatoes

70% of cucumbers

60% of mushrooms

50% of cauliflower

58% of imported food is from the EU

10% of the workforce is foreign nationals:

31% of food manufacturers

23% of domestic help

16% of crop production / animal rearing

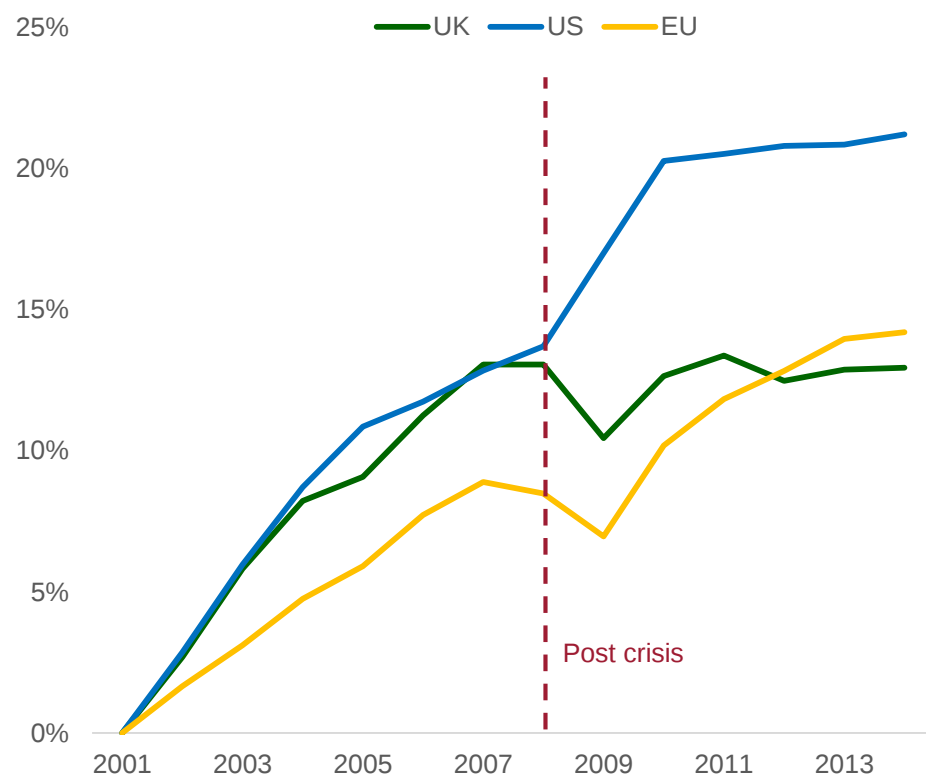
14% of NHS nurses

Source: Algebris Investments (UK) LLP, Food Security UK, The Guardian, Daily Mail, Telegraph

The UK's Challenges Beyond Brexit

Lost Productivity

UK productivity has stalled post-crisis
Cumulative productivity growth since 2001, %



UK productivity has lagged Europe

1.5% productivity growth from 2008 to 2015 vs 13% from 2000 to 2006

7% financial industry productivity growth led UK economy pre-crisis

6x higher productivity growth in the EU than in the UK, post-crisis

20% higher productivity levels in G7 countries than in the UK:

31% higher in the US

31% higher in Belgium

27% higher in France

24% higher in Germany

30% higher productivity in London than the rest of the UK

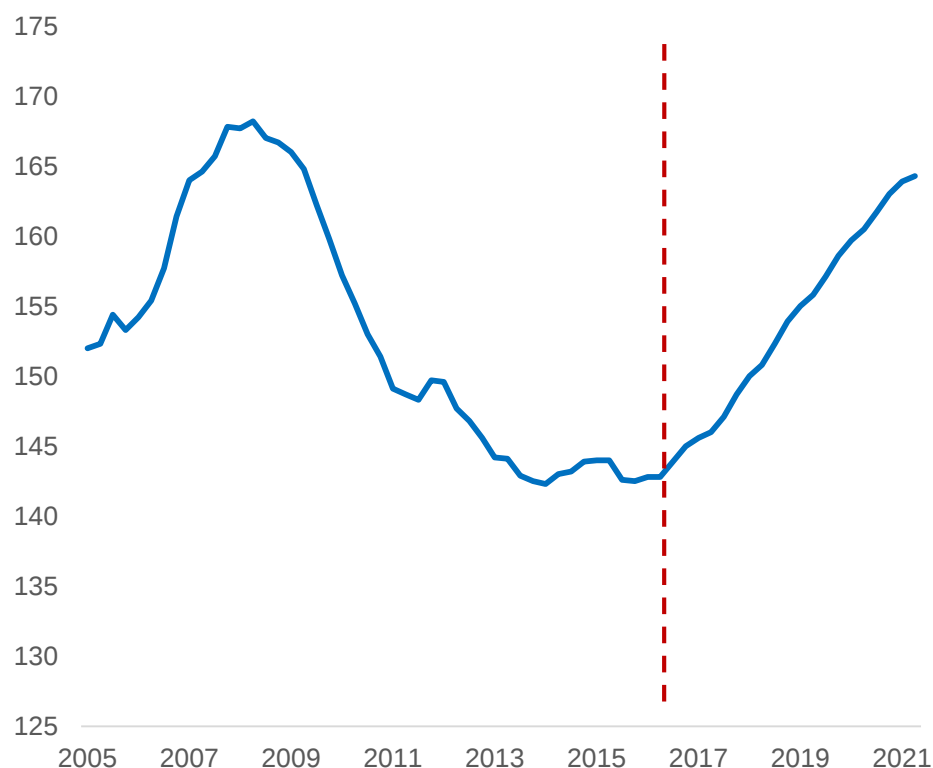
7 of 12 UK regions have lower productivity in 2014 than in 2007

The UK's Challenges Beyond Brexit

Too Much Leverage, Again

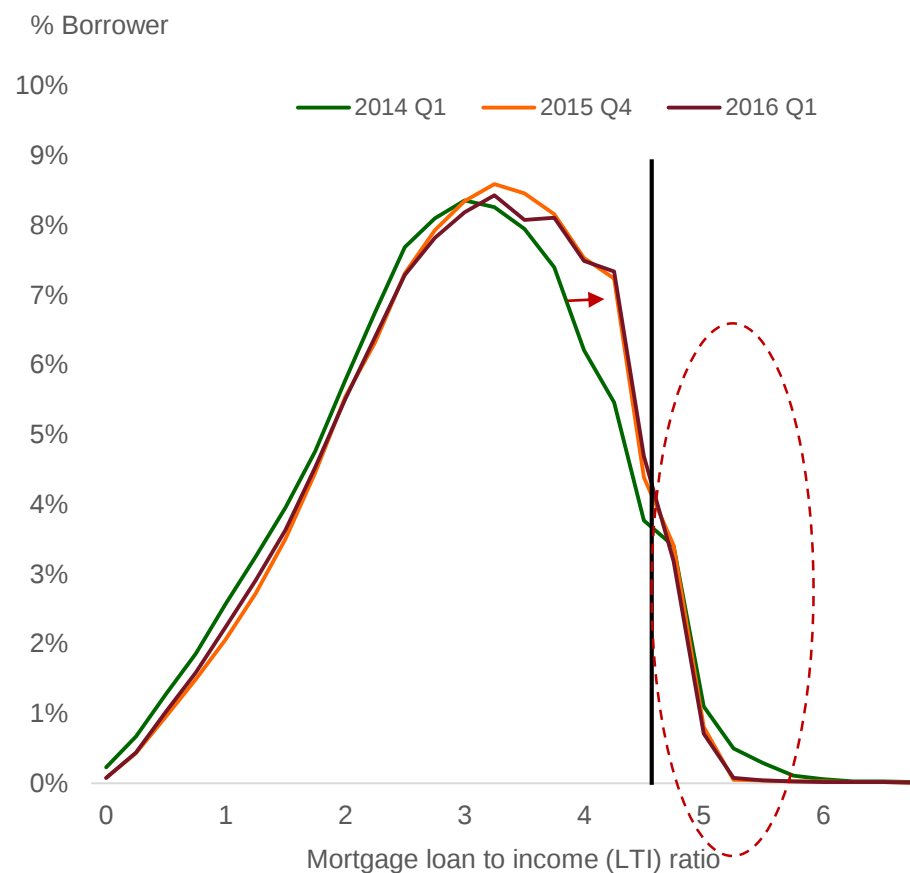
UK household leverage is expected to continue rising

Household Debt to Income, %



“Bunching” of mortgage flows at LTI just below 4.5x

Distribution of mortgage flows by LTI



Source: Algebris Investments (UK) LLP, OBR

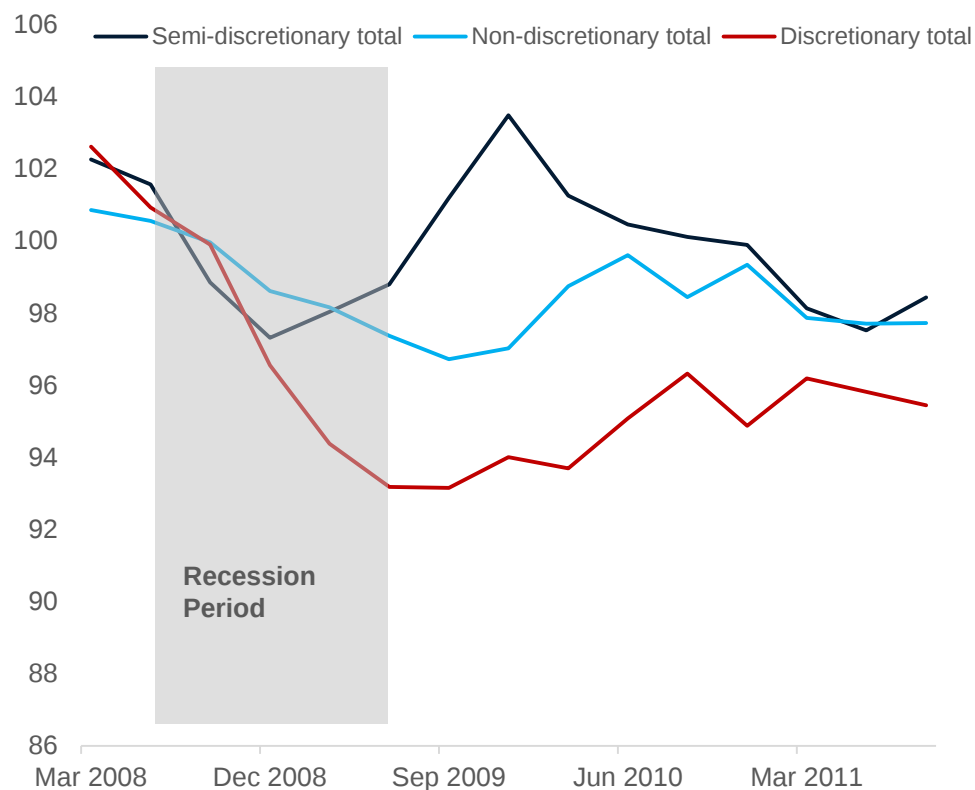
Source: Algebris Investments (UK) LLP, BoE

The UK's Challenges Beyond Brexit

Consumers: Winter is Coming

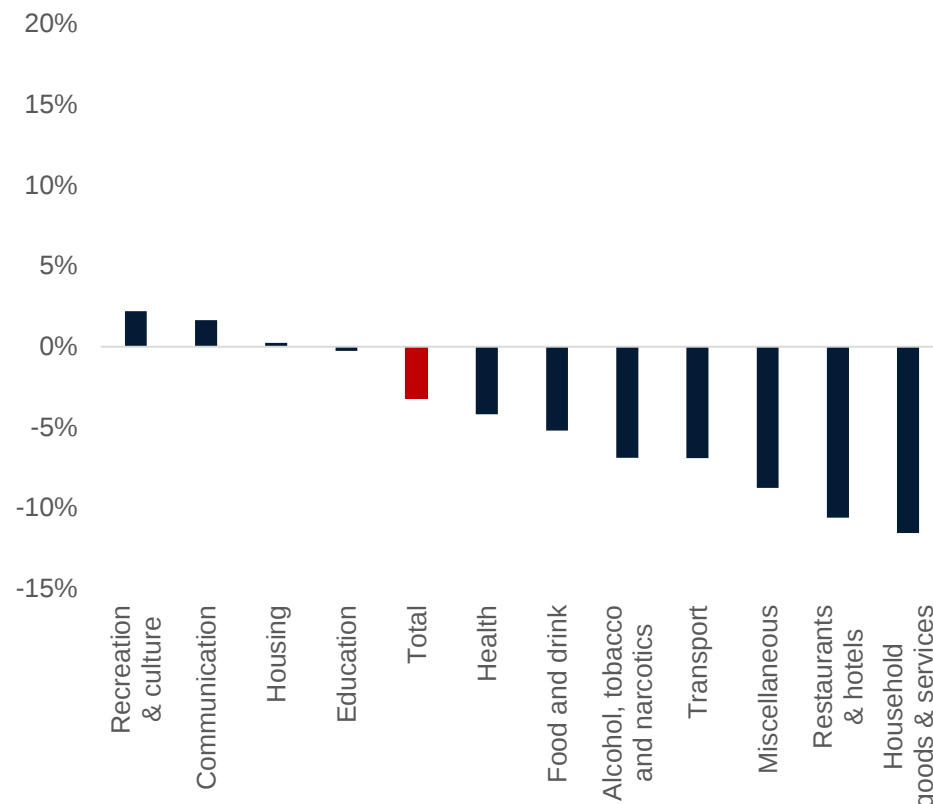
Consumers spend less on discretionary items

Volume of Goods and Services Purchased, 2008 = 100



Where will consumers cut spending this time?

Change in total household expenditure, 2007-2009



Source: Algebris Investments (UK) LLP, ONS

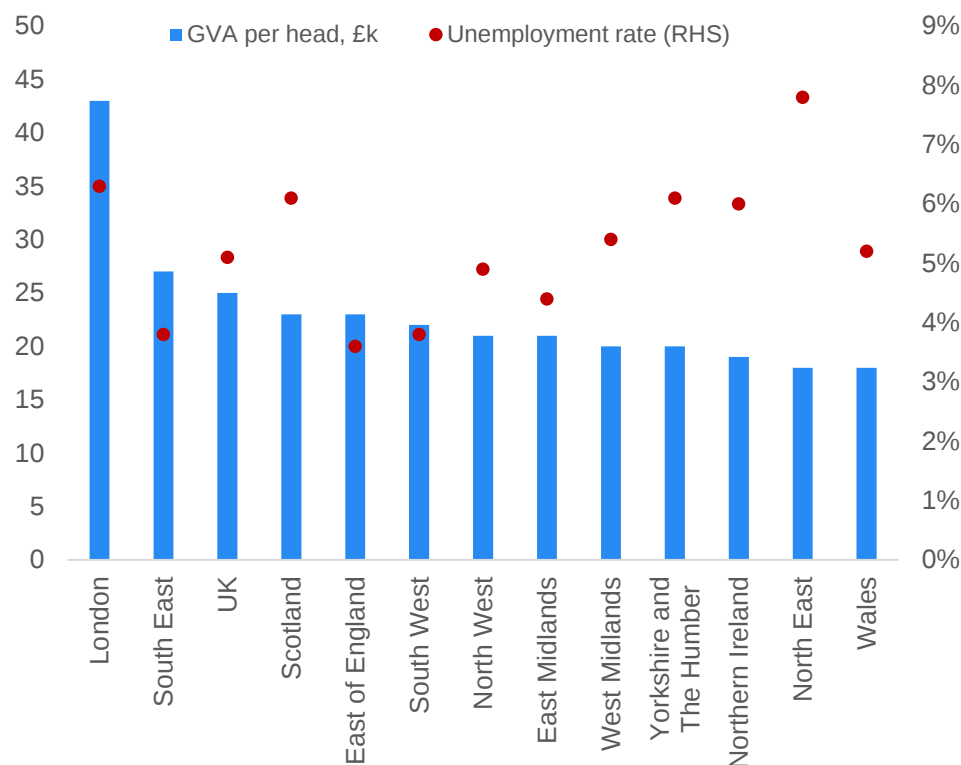
Source: Algebris Investments (UK) LLP, ONS

The UK's Challenges Beyond Brexit

Social and Geographical Imbalances Grow

There are great disparities between regions ...

GVA per head 2014, £k vs unemployment % 2016



... and along socio-economic lines

6th highest income inequality amongst OECD members

7% privately educated Britons are:

71% of senior judges

55% of Permanent Secretaries

53% of Senior Diplomats

50% of Lords

44% of the Sunday Time's 'Rich List'

43% of Columnists

35% of the National Rugby Team

Top 1% of earners pay 27% of tax

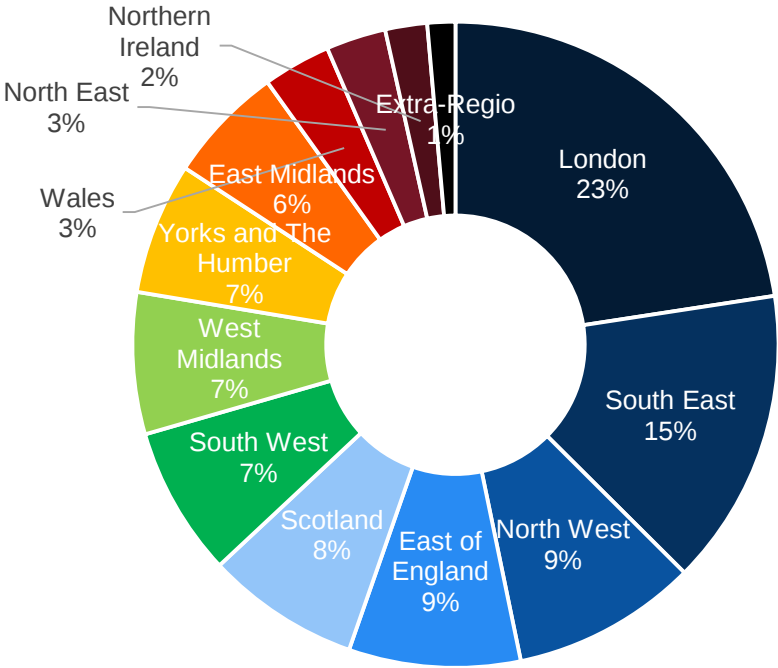
45% of Britons from the top income quartile remain in this bracket

12% only of those in the lowest income quartile ever migrate to the highest quartile

The UK's Challenges Beyond Brexit

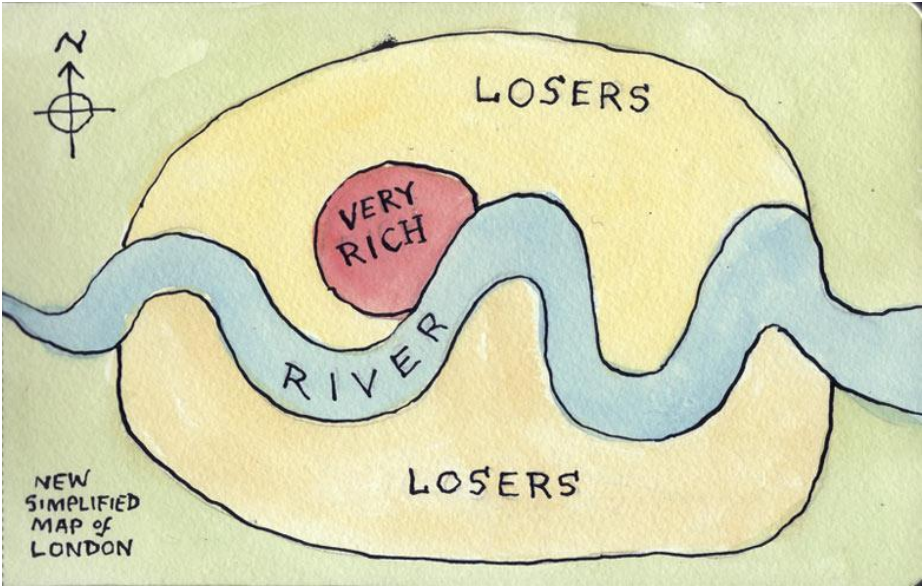
The UK is Over-dependent on London

The economy is over-dependent on London
% share of UK GVA, 2014



Source: Algebris Investments (UK) LLP, ONS

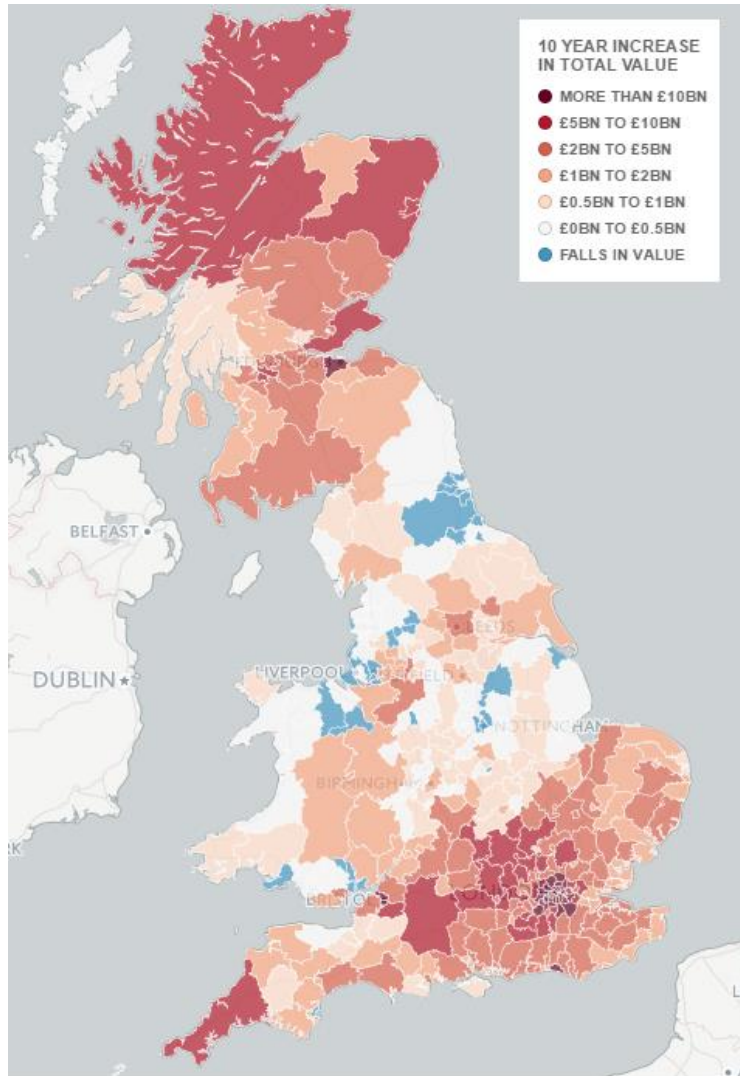
... which itself is very unequal



Source: Algebris Investments (UK) LLP, Google Images

The UK's Challenges Beyond Brexit

The Housing Crisis



Source: Savills Jul 2016

Over £100bn offshore-held property in London

Average home price in London: £600k

What £500k buys you in

London



Scotland



More leverage: loan-to-income ratio in London & the UK increased from around 2.3x in 1995 to 3.7x and 3.2x in 2015, respectively

Unaffordable: between 1994 and 2014, the average house price increased from around 6x earnings to over 16x

Source: Algebris Investments (UK) LLP, Land Registry (The Guardian newspaper), Zoopla (Buzzfeed), "House prices in London – an economic analysis of London's housing market"

Brexit means Brexit

Expectations vs Reality

Monetary Policy:

“Because while monetary policy – with super-low interest rates and quantitative easing – provided the necessary emergency medicine after the financial crash, we have to acknowledge there have been some bad side effects.”

Fiscal Stimulus:

“[...] we need to do: take big, sometimes even controversial, decisions about our country’s infrastructure”

Humanitarian Aid:

“Providing humanitarian support for refugees in need.”

Inequality:

“Advancement in today’s Britain is still too often determined by wealth or circumstance. By an accident of birth rather than talent. By privilege not merit.”

Monetary Policy:

4% probability of 25bp rate hike by September 2018

164% Household Debt to Income by 2025

Fiscal Stimulus:

2nd highest fiscal deficit in Europe at 4.9% in 2015

4.9% of GDP net spending cuts by 2019

Humanitarian Aid:

Accepted refugees: Germany 1m in 2015
UK 8000 since 2011

Inequality:

£32.5m cut in free school meals

0.8% Oxbridge graduates are: 75% of Senior judges
38% of Lords

Source: Algebris Investments (UK) LLP, PM Theresa May October 5th Speech at Conservative Conference, Elitist Britain? UK Gov, OBR, BOE, Amnesty UK, Sky News, The Independent

Brexit: The Road Ahead

Potential Outcomes

To exit the EU, the UK parliament needs to trigger Article 50 under the Lisbon Treaty

Under Article 50, the UK has two years to renegotiate the terms of its relation with the EU. If negotiations have not been completed by this time, the UK will automatically be removed from the EU.

We see three scenarios ahead:

Scenario	Chance	Impact on the UK economy	BoE response	Political spill over to Europe
Hard Brexit	60%	Recession. Loss of EU passporting rights. Job losses in finance-related sectors.	Rates cut to negative	EU breakup fears resurface
Soft Brexit	30%	Medium term weaker growth, until EEA or EFTA status is approved	One more cut to zero	Anti-EU protest parties gain ground
Bremain	10%	Article 50 not triggered. Parliamentary vote or new elections. Short term weaker growth	Lower for longer	Contained

Source: Algebris Investments (UK) LLP

Bringing The United Kingdom Back

Proposed Long-term Solutions

Prevent another rise in household leverage

- Bank of England could tighten lending standards

- Reduce housing subsidies, such as the Help to Buy scheme

Reduce inequality through property / wealth taxes

- Current policies penalise income earners and benefit asset holders:

 - 0% tax on primary residences vs 45% highest income tax

- A wealth or property tax could:

 - reduce inequality

 - reduce deficits

Encourage investment in the real economy

- Infrastructure spending

- Housing investment

Monetary policy reforms: increase macro-prudential regulation and credit controls

Economic rebalancing: diversify the financial system away from banks, and towards other funding source

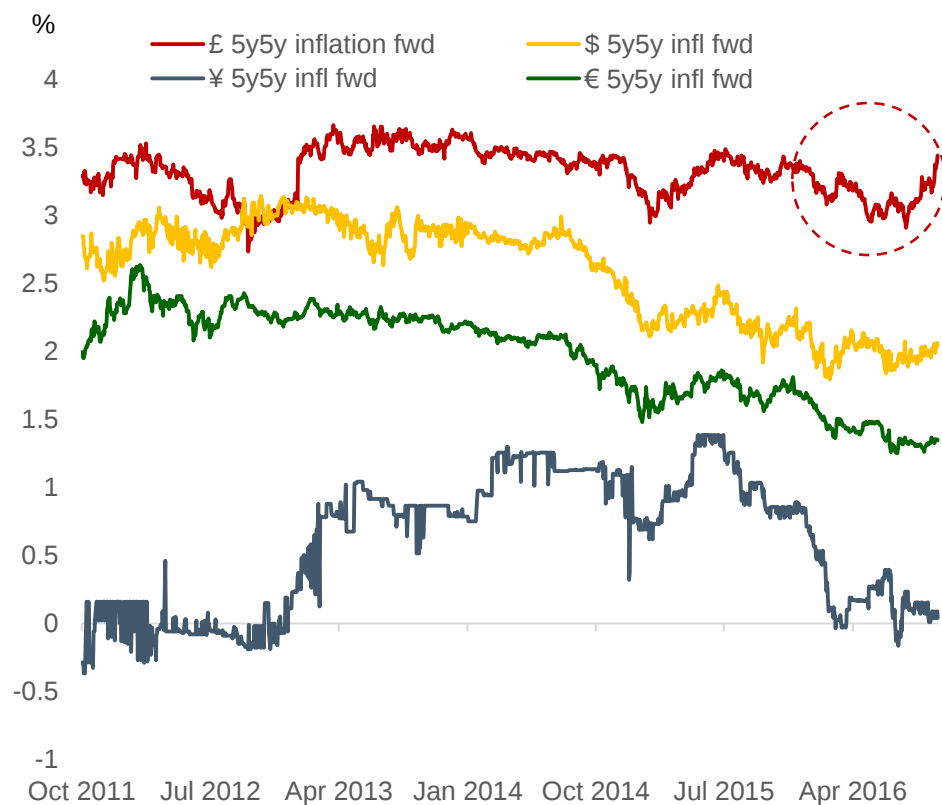
Source: Algebris Investments (UK) LLP

Brexit: Market Implications

Lower FX, Higher Inflation, Higher Rates

Inflation expectations are rising ...

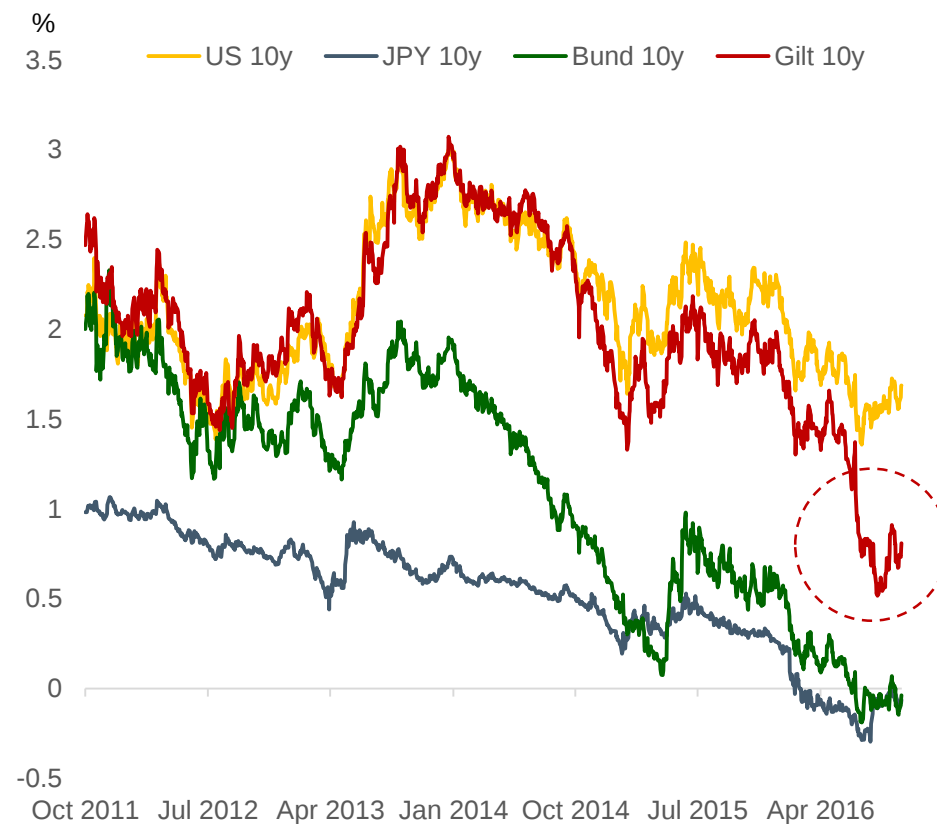
5y5y forward inflation, %



Source: Algebris Investments (UK) LLP, Bloomberg

... yet Gilt yields are near record lows

Yield to maturity, %



Source: Algebris Investments (UK) LLP, Bloomberg

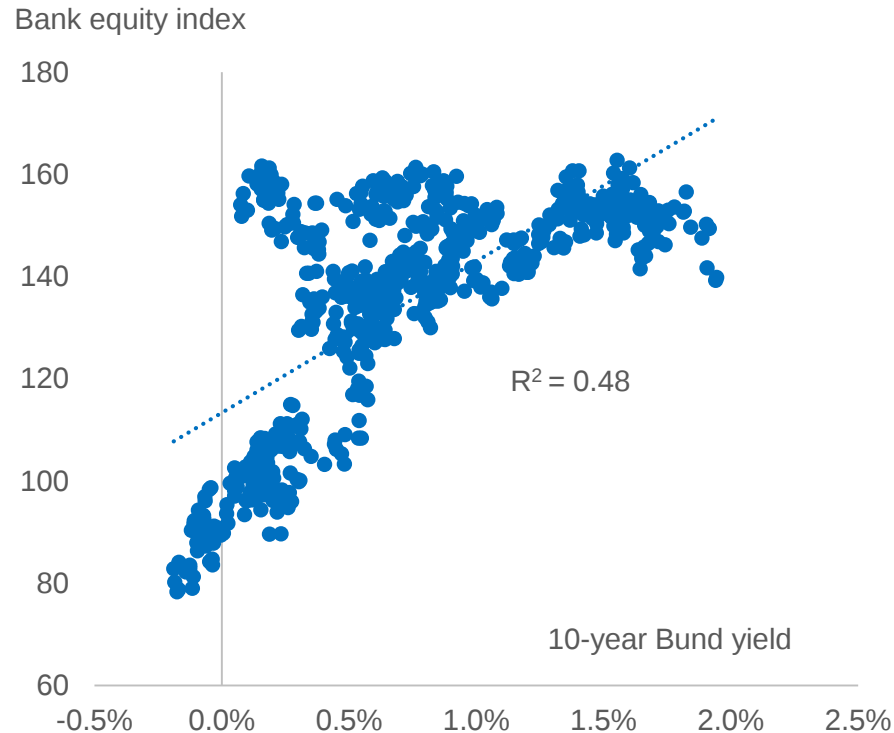
Solutions:

QE with Limits, Fiscal Policy and Debt Restructuring

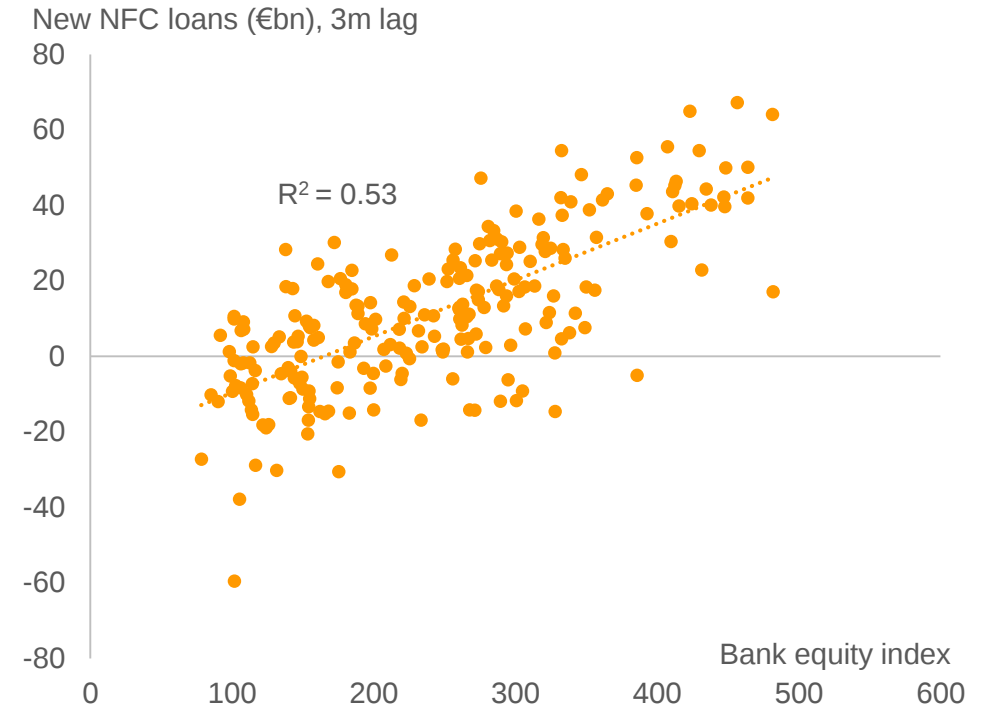
Solutions

From QE Infinity to QE with Limits: A Push-back To Further Rate Cuts

Low interest rates hurt bank valuations...



... which in turn hinders lending activity



“Bank equity prices are of some significance for policymakers, because if they drop in the way they did, one would assume, if this is to stay, cost of capital would increase, and therefore the net return on lending would decrease and would suggest on the banking side a more conservative lending behaviour. That's why we do care about bank equity prices for the transmission of our monetary policy.”

Mario Draghi, ECB President, 21 July 2016

Source: Algebris Investments (UK) LLP, Bloomberg. Note: Bank equity index = Euro Stoxx Banks (price index), 2008 - 2016

Source: Algebris Investments (UK) LLP, Bloomberg. Note: Bank equity index = Euro Stoxx Banks (price index), New NFC loans = Flow of Eurozone bank loans to non-financial corporates, 1997 - 2016

US fiscal stimulus: comparing proposals

	Clinton	Trump
Infrastructure	Would boost federal investment by \$275bn over five years with an additional \$25bn to fund an infrastructure bank	<i>“At least double”</i> Clinton’s infrastructure spending
Taxes	• Would largely maintain the current tax code, with some increases for wealthier taxpayers (a 4% surcharge on taxpayers earning >\$5mn per year) • Favours tax incentives for investment in hard-hit manufacturing locales • Tax credits for businesses of \$1,500 per apprentice • 15% tax credit for companies that share profits with workers on top of wages and pay rises	• Lower taxes for everyone • Reduce dramatically the income tax, with a top rate of 33% vs 39.6% now • Lowering the top federal corporate tax rate to 15% from 35% now • Repatriation of corporate profits held overseas at a one-time 10% rate
Minimum wage	Would increase national to \$12, with \$15 in some locations	Wants states to set their own minimum wages
Others	Would increase funding for scientific research and college education	

Source: Algebris Investments (UK) LLP, www.hillaryclinton.com, www.donaldjtrump.com, Politifact, Observatory Group

Solutions

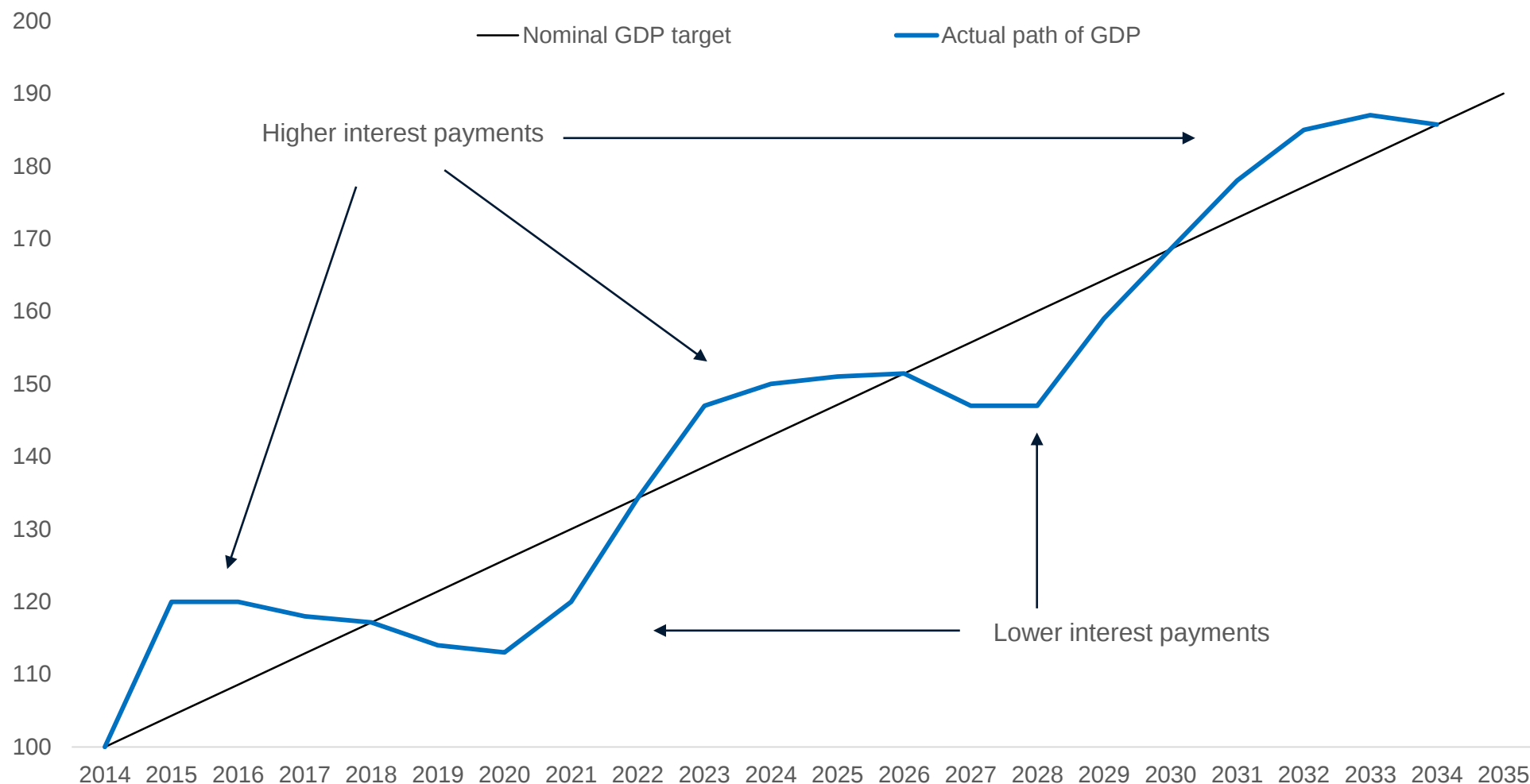
Potential Policy Measures to Achieve Sustainability

	Solution	Action
Public sector debt	Flexible debt linked to growth	Restructuring with growth-linked bonds Bail-inable sovereign bonds Blue-Red bonds
Private sector debt	Realise losses through defaults/restructuring Diversified funding	Speed up and standardise insolvency procedures Deepen capital markets to spread losses more evenly Bail-inable debt Develop securitisation markets to share risk of loan lending
Kick-start growth	Combine monetary policy with fiscal stimulus to increase investment and boost productivity. Reduce inequality. Rebalance growth model.	Bank consolidation and restructuring of business models Infrastructure spending Skill re-training for workers Improve access to education and funding for R&D Rebalance weight on income vs wealth tax
Long term	Monetary policy reform	Include financial stability in central banks' mandate Central banks control quantity of credit created

Source: Algebris Investments (UK) LLP

Solutions

Growth-linked Bonds Pay Out More/Less If the Economy Does Better/Worse

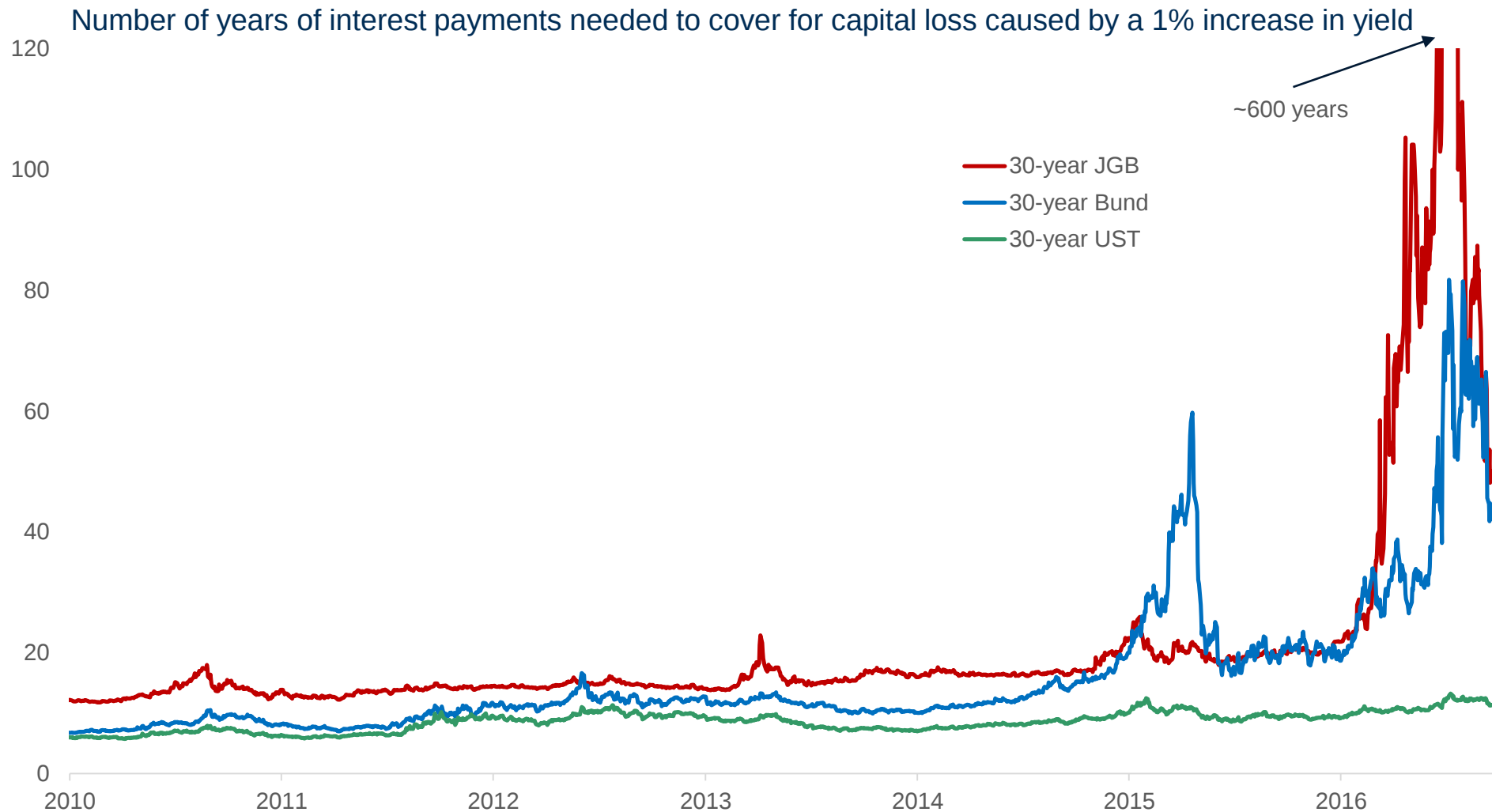


Source: Algebris Investments (UK) LLP

Investing When the Monetary Tide Is Turning

Conclusions

Yields Do Not Protect Bondholders from Duration Risk



Source: Algebris Investments (UK) LLP, Bloomberg

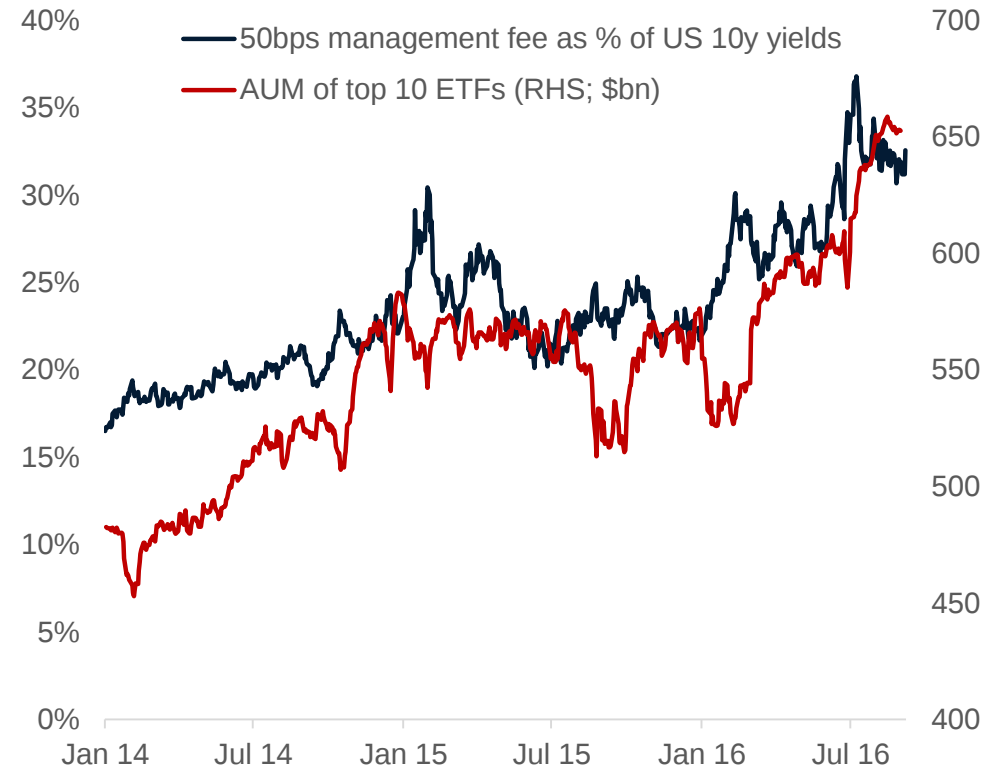
Conclusions

Lack of Yield Pushes Investors into the Same Passive Trade

Earning enough to cover management fees is getting harder



Management fee as % yield vs Top 10 ETF AUM



Source: Algebris Investments (UK) LLP, Bloomberg

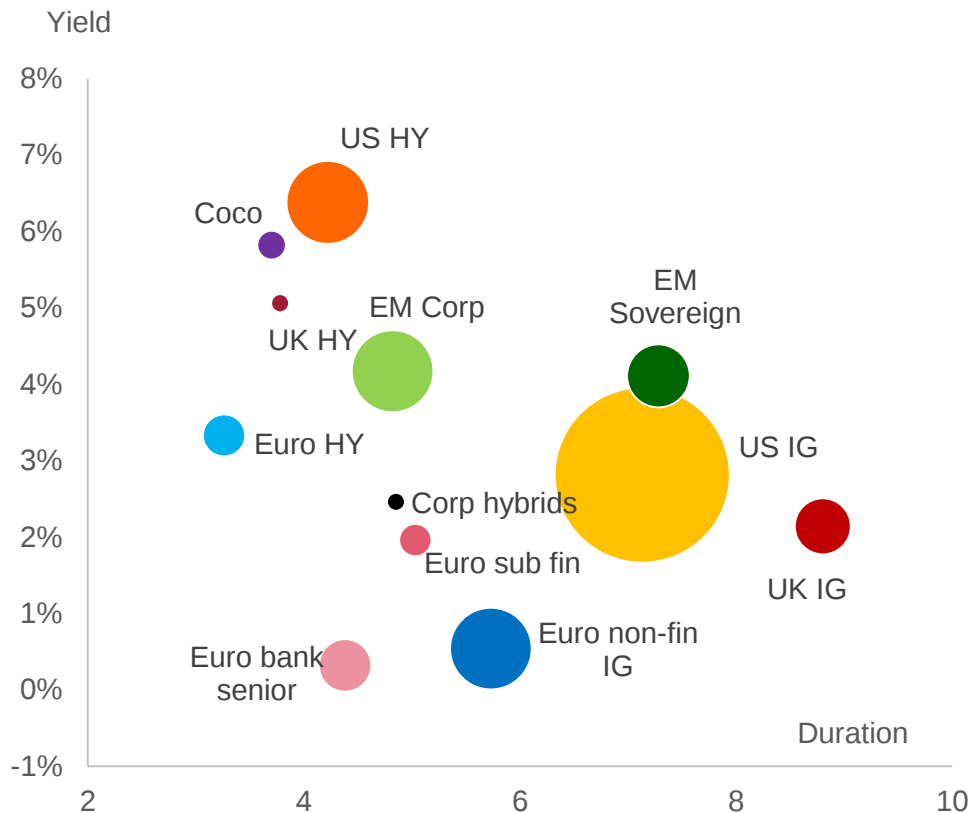
Source: Algebris Investments (UK) LLP, Bloomberg. Codes of ETFs included are SPY, IVY, VTI, EFA, VOO, VWO, AGG, GLD, QQQ, VEA

Conclusions

Investing When the Monetary Tide Is Turning

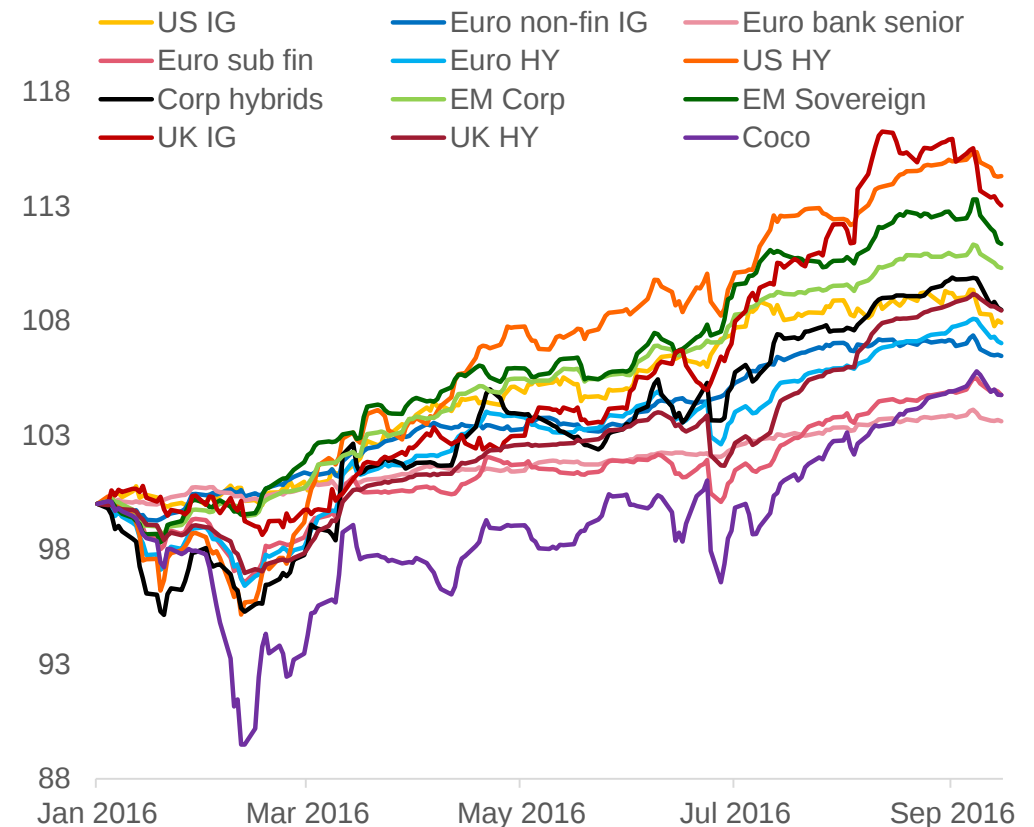
QE has turned bond markets into a yield desert

Yield vs duration, bubble size indicates outstanding amount



Financial bonds have underperformed year to date

YTD total return



Source: Algebris Investments (UK) LLP, BoAML Indices

Source: Algebris Investments (UK) LLP, BoAML Indices

Conclusions

From QE Infinity to Sustainable Long-term Solutions

1. Keynes' and Friedman's theory worked well in a world with growing demographics and productivity
2. Fiscal policy needs to be sustainable and aimed at improving productivity. Lump-sum spending by governments overburdened by debt has proven to be ineffective, like in Japan
3. A monetary expansion strategy à la Friedman only works in financial systems able to outsource losses after a crisis, like in US bond markets. In bank-centric economies like Europe and Japan, the transmission channel of monetary policy remains impaired
4. Central bankers have realised that prolonged QE and negative interest rates policy (NIRP) are ineffective and are shifting their focus to the transmission channel of monetary policy
5. This means caring about bank profitability and lending, and putting a floor on negative rates
6. Fiscal stimulus is likely to happen in the US after elections and in the UK, in response to Brexit. Europe could implement a plan after German and French elections in 2017
7. The long term solutions are about growing productivity and reducing debt burdens
8. The shift from QE Infinity to QE with limits is good for savers and firms which were hurt the most by NIRP - banks and insurers, and bad for the assets which performed best thanks to low rates, like utility stocks, long-dated investment grade bonds, and core government debt

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Algebris Investments (UK) LLP (“Algebris”) is a global investment manager with a historical focus on the **financial sector** across the capital structure

Founded in 2006, Algebris has gradually expanded its expertise and entered the **global credit** space to capture a broader set of value opportunities



18 Investment Professionals

150+ Years of Combined Experience



Diverse Strategies

Long Only and Hedged



10 Years

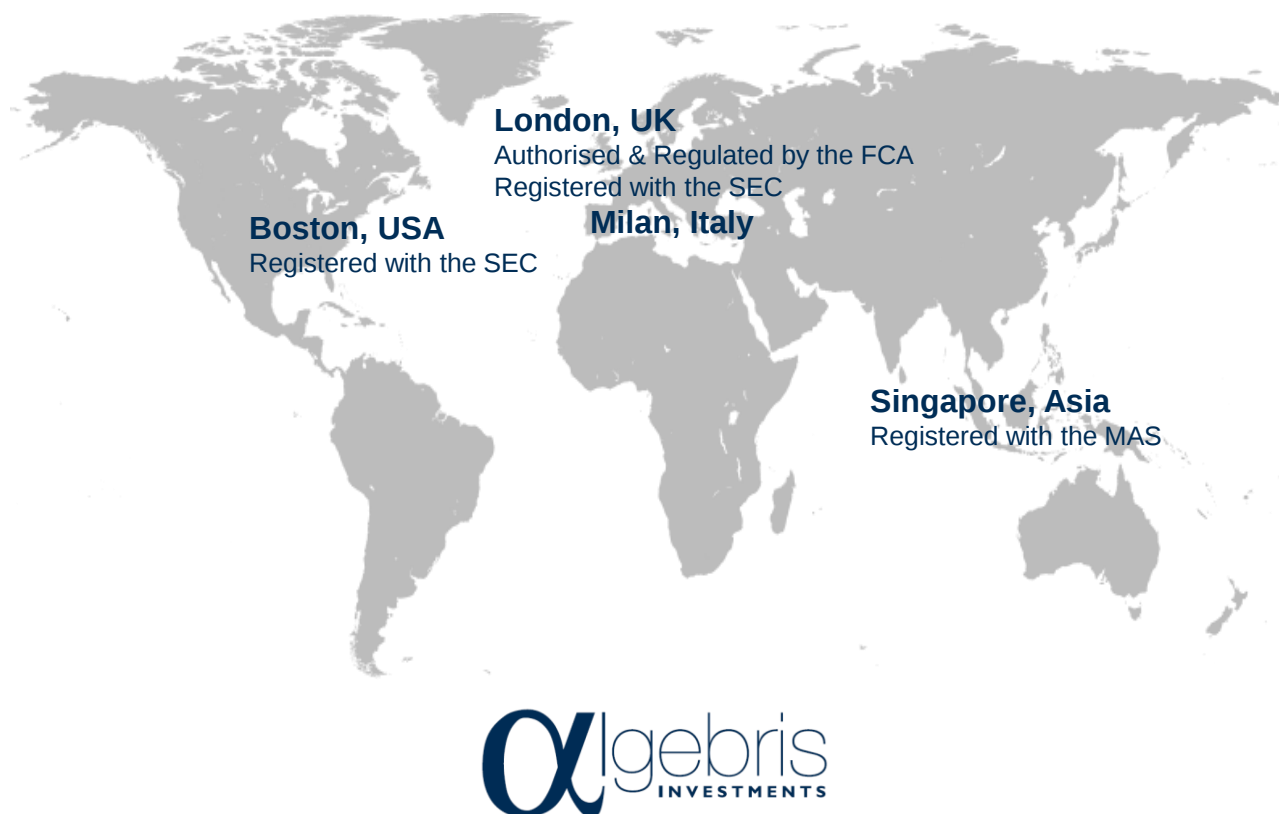
Successful Track Record in Financials



AUM

USD 5.6bn*

Active in UCITS since 2011



*Across nine funds and a number of managed accounts. Data as of 07.11.2016
Source: Algebris Investments (UK) LLP

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