## Institute for **New Economic Thinking**

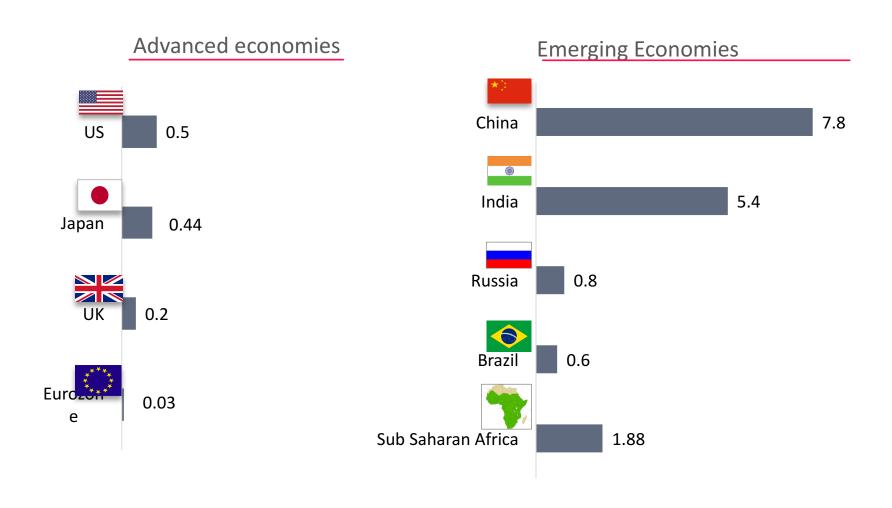
## A Decade of Stagnation: Why?

Adair Turner
Chairman
Institute for New Economic Thinking

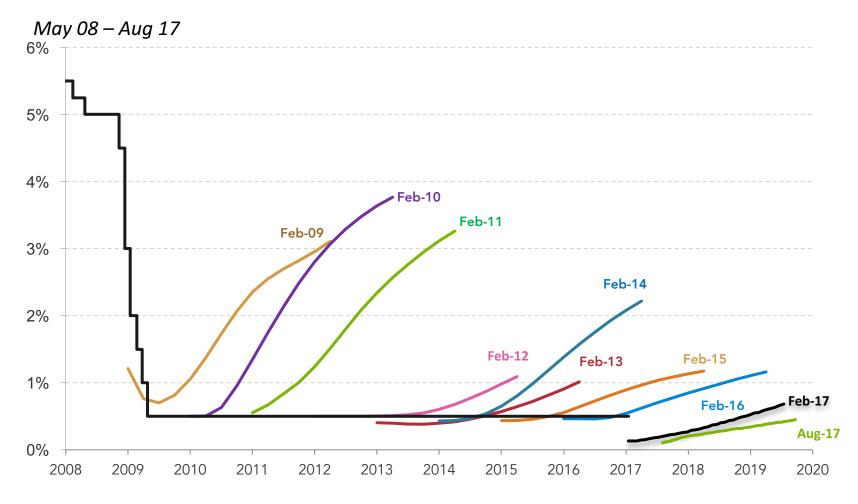
INET Plenary Conference Edinburgh 21st October 2017

### GDP per capita growth 2007-16

% per annum



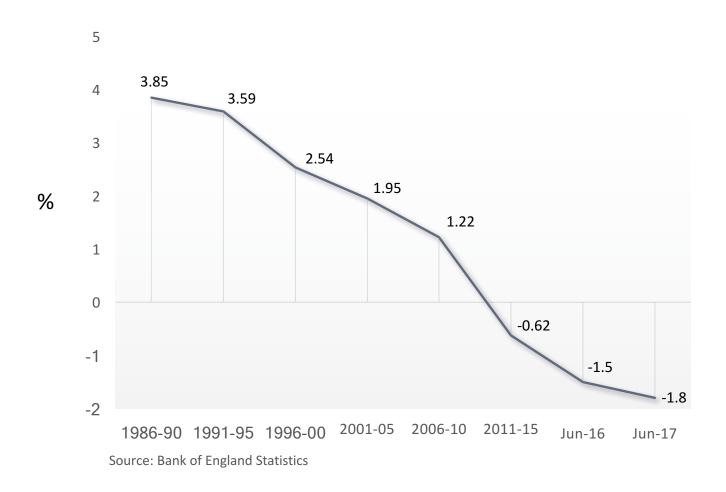
## Successive market forecasts of BofE interest rates



Source: Resolution Foundation and Bank of England Inflation Report, August 2016

### Sterling 10 year index-linked gilt:

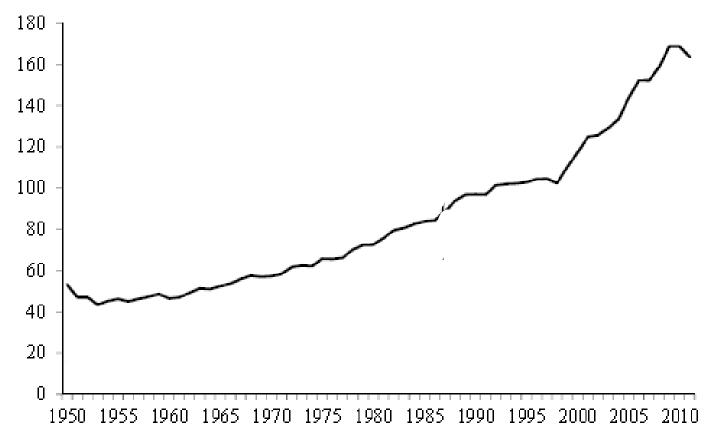
**Yield to maturity 1985 – 2017** 



- Debt overhang
- Secular stagnation

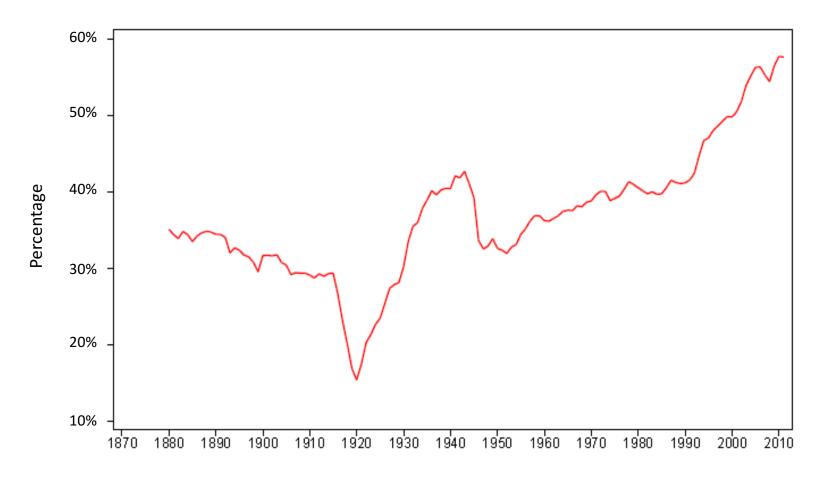
#### Private domestic credit as a % of GDP:

#### Advanced economies 1950 – 2011



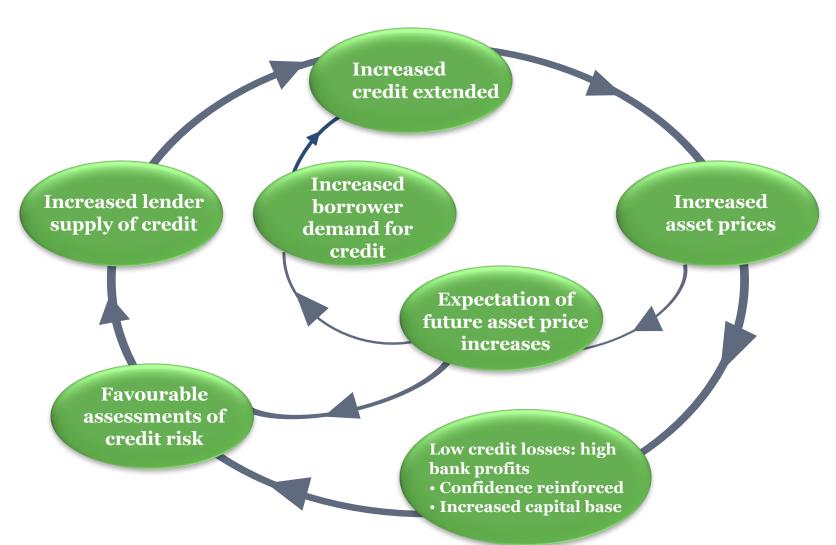
Source: Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten, C. Reinhart & K. Rogoff, 2013

# Share of real estate lending in total bank lending

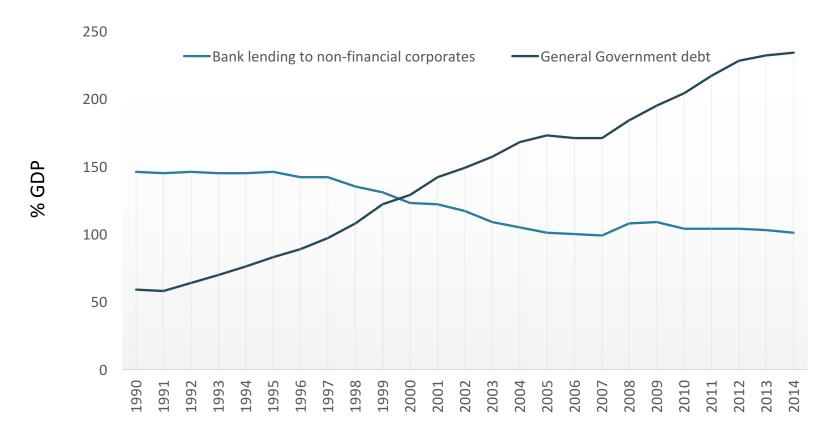


Source: "The Great Mortgaging", Oscar Jordá, Moritz Schularick and Alan Taylor, 2014)

### Credit and asset price cycles: upswing



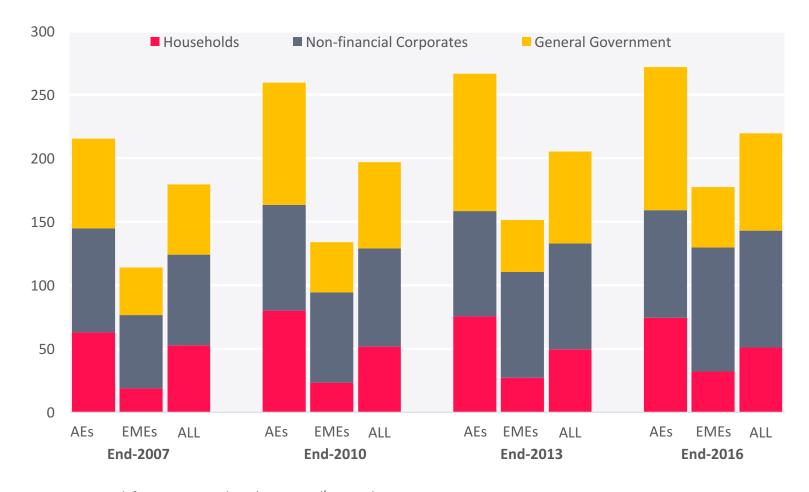
# Japanese government and corporate debt: 1990 – 2010



Source: BoJ Flow of Funds Accounts, IMF WEO database (April 2011), FSA calculations

#### Global debt continues to rise

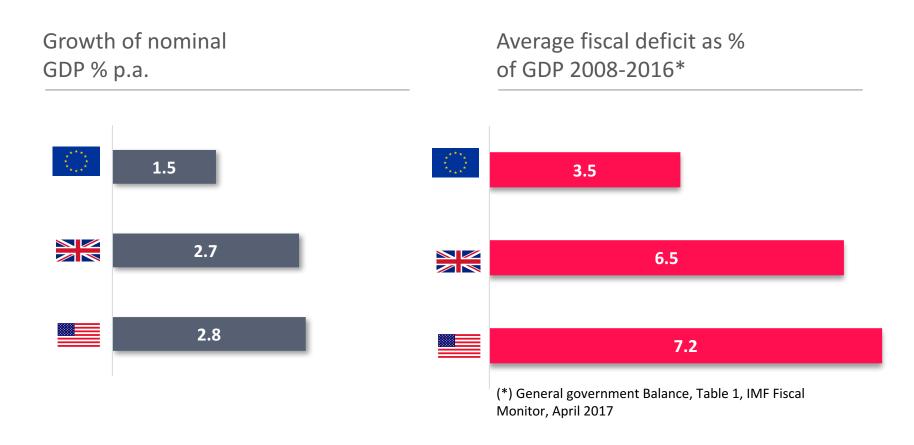
#### Debt as % of GDP



Source: Bank for International Settlements 87th Annual Report, 2017

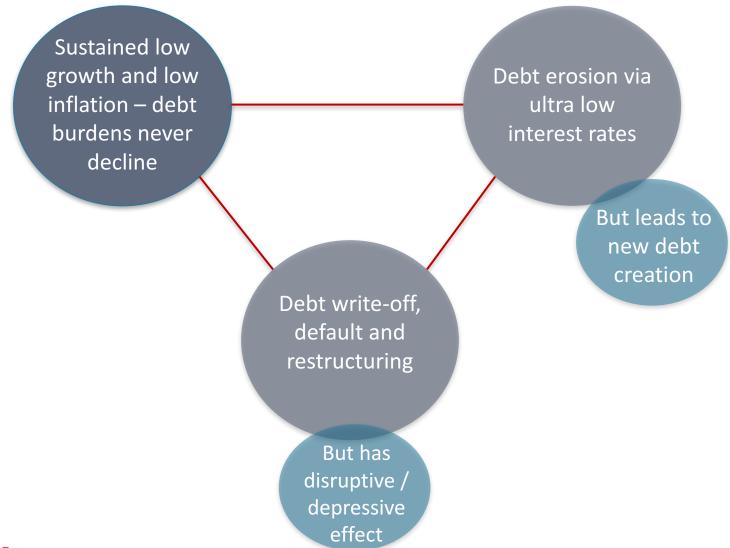
## Nominal GDP growth and fiscal balance

2007 - 2016



Source: IMF World Economic Database, April 2017; IMF Fiscal Monitor, 2017

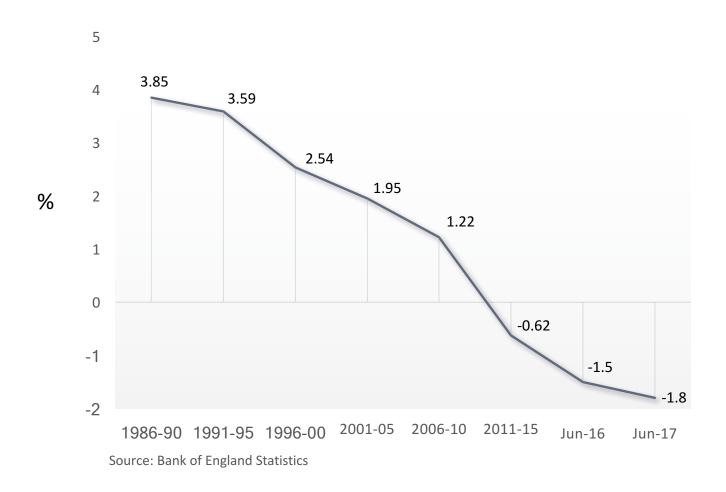
### Debt overhang: the unavoidable choice?



- Debt overhang
- Secular stagnation

### Sterling 10 year index-linked gilt:

**Yield to maturity 1985 – 2017** 



## Why did real rates fall so much even before the crisis?

#### **Ex-ante savings**

Global imbalances?

Inequality?

Demographic effects?

#### **Ex-ante investment**

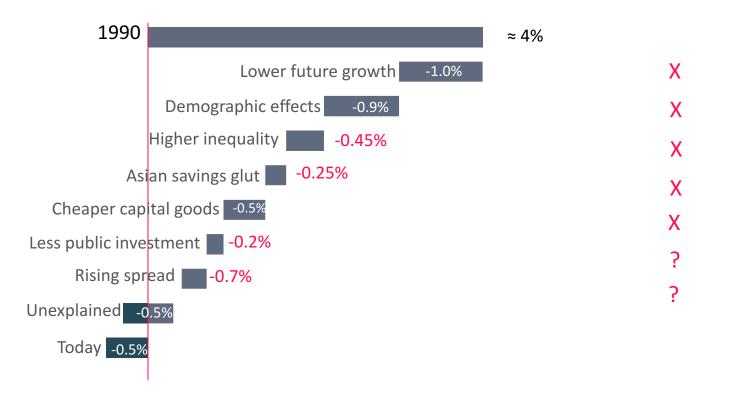
Reduced investment needs?

- In plant and machinery?
- In advanced economy property and infrastructure?



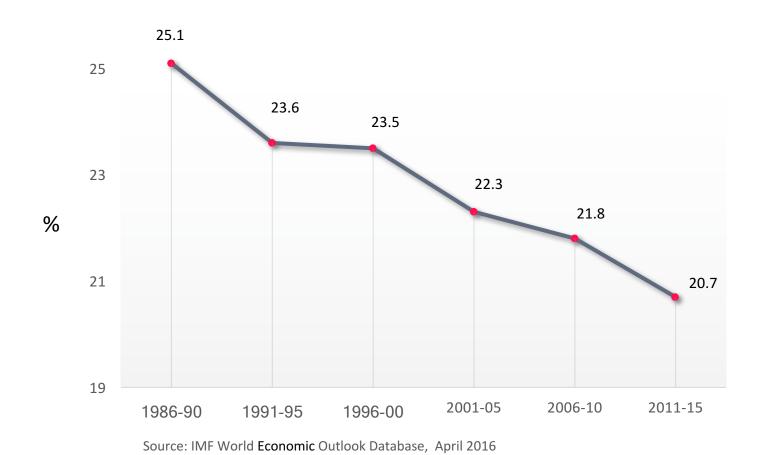
### Drivers of a falling neutral real rate?





Source: Lukasz Rachel and Thomas Smith, *Secular Drivers of the Global Real Interest Rate,* Bank of England Working Paper No. 571, December 2015

## Advanced economy investment as % of GDP: 1986 – 2015 five-year averages



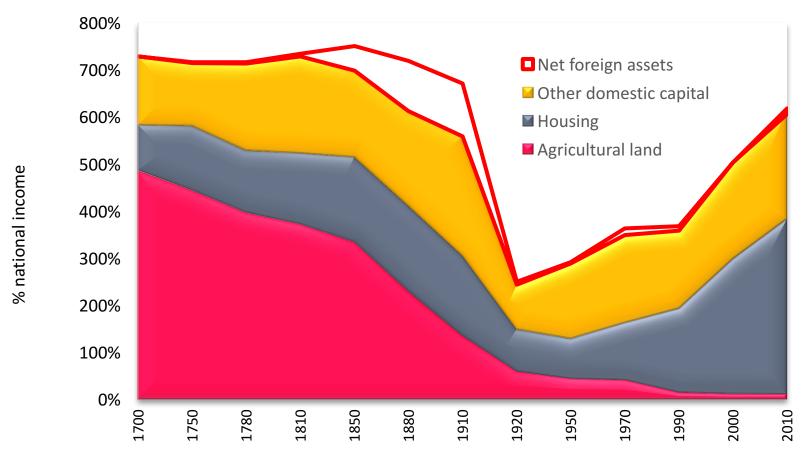
### Wealth and employment in ICT businesses

Market Value (\$bn)		Employees (000s)
Microsoft	<b>447</b> (Sep 2016)	~ 114,000 (Sep 2010)
Google	555	~ 67,000
f	374	~ 14,500
Instagram	1*	~ 12
<b>◯</b> WhatsApp	19*  * Paid by Facebook	55

We have over 1 million users per engineer and this number has been steadily increasing

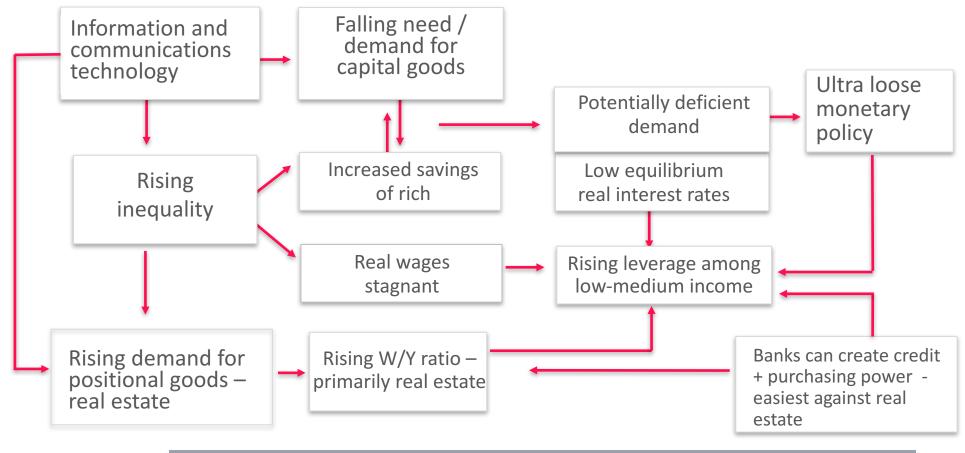
With only 32
engineers, one
WhatsApp developer
supports 14 million
active users

#### **Capital in France 1700 – 2010**



Source: Capital in the Twenty First Century, T. Piketty (2013)

### **Dynamics in the modern economy**



Fundamental drivers of secular stagnation only offset by rising leverage

- Crisis and debt overhang
- Exacerbates secular stagnation problem