

# **TOO MUCH DEBT, FINANCIAL SYSTEM STABILITY AND WIDER ECONOMIC IMPACTS**

16<sup>th</sup> Annual Chicago Federal Reserve Bank International Banking  
Conference: *Shadow Banking Within and Across National Borders*

7 November 2013

**Adair Turner**  
*Senior Fellow*

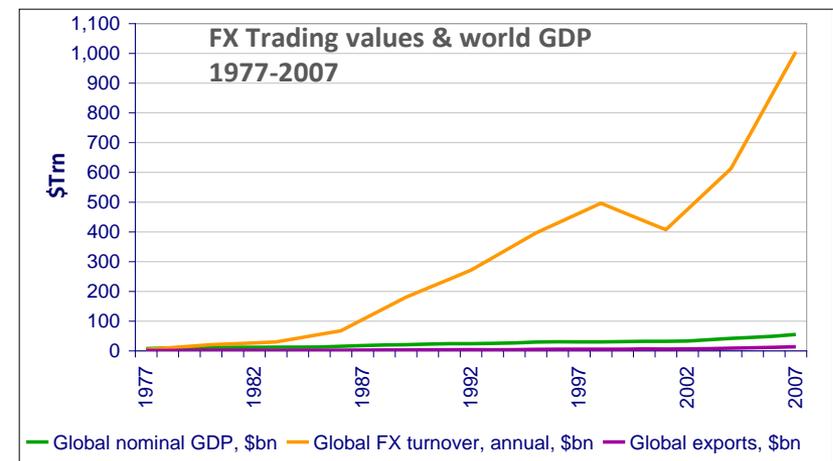
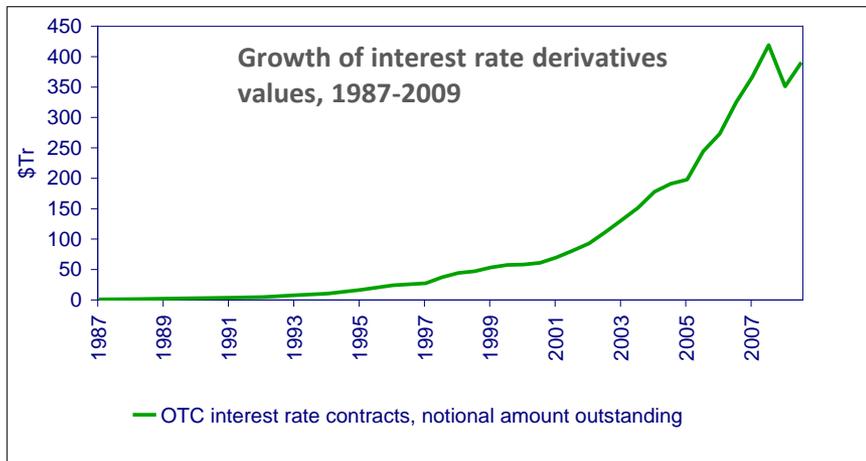
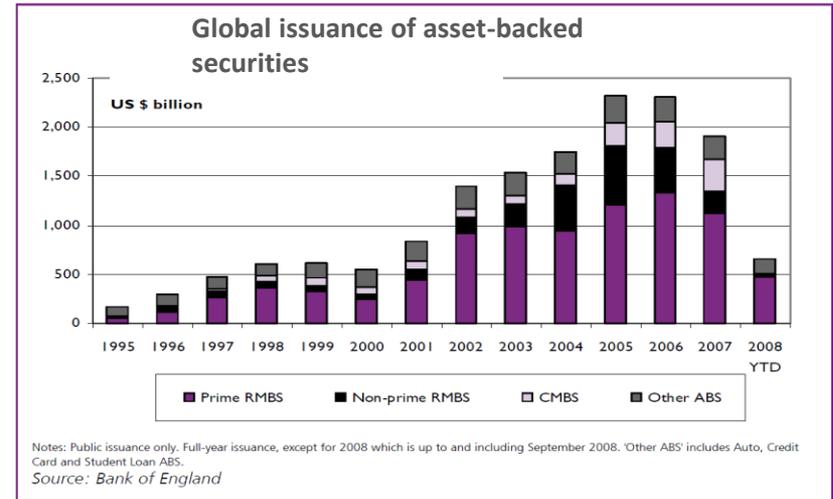
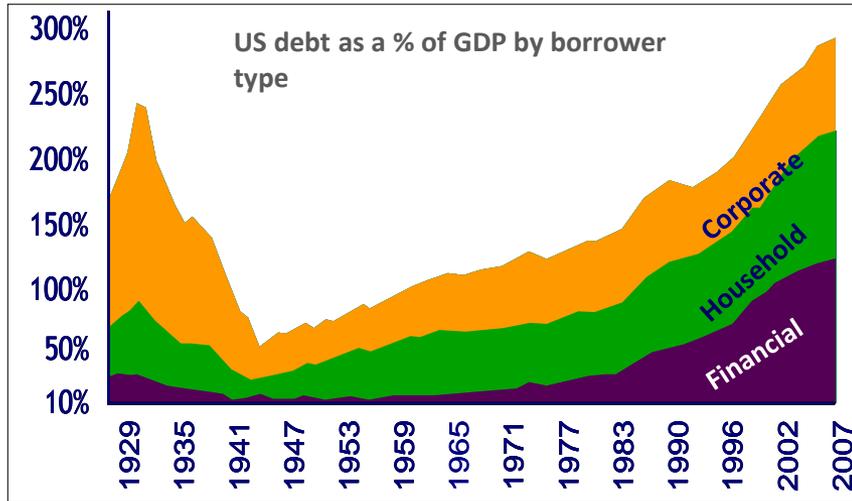
[www.ineteconomics.org](http://www.ineteconomics.org) | [www.facebook.com/ineteconomics](https://www.facebook.com/ineteconomics)

300 Park Avenue South - 5<sup>th</sup> Floor  
New York, NY 10010

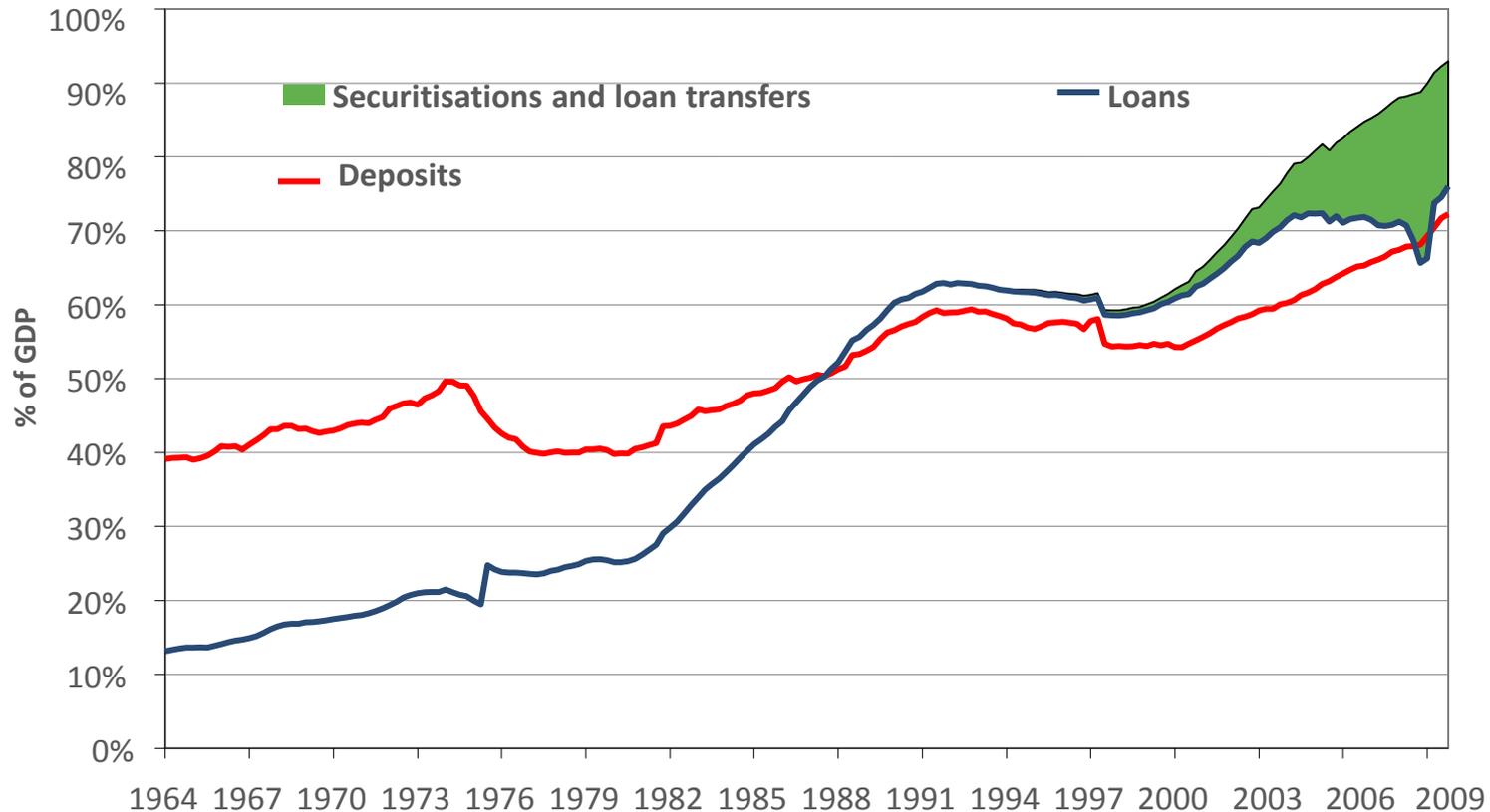
# Two Recent Lectures:

- ***Credit, Money and Leverage: What Wicksell, Hayek and Fisher Knew and Modern Macro-Economics Forgot***  
Stockholm School of Economics, September 2013  
<http://ineteconomics.org/blog/institute/adair-turner-credit-money-and-leverage>
- ***Securitisation, Shadow Banking and the Value of Financial Innovation***. The Rostov Lecture on International Affairs  
School of Advanced International Studies (SAIS), John Hopkins University, Washington DC, April 2012  
<http://www.econ2.jhu.edu/courses/336/Rostov%20Lecture%202012.pdf>

# Measures of increasing financial intensity



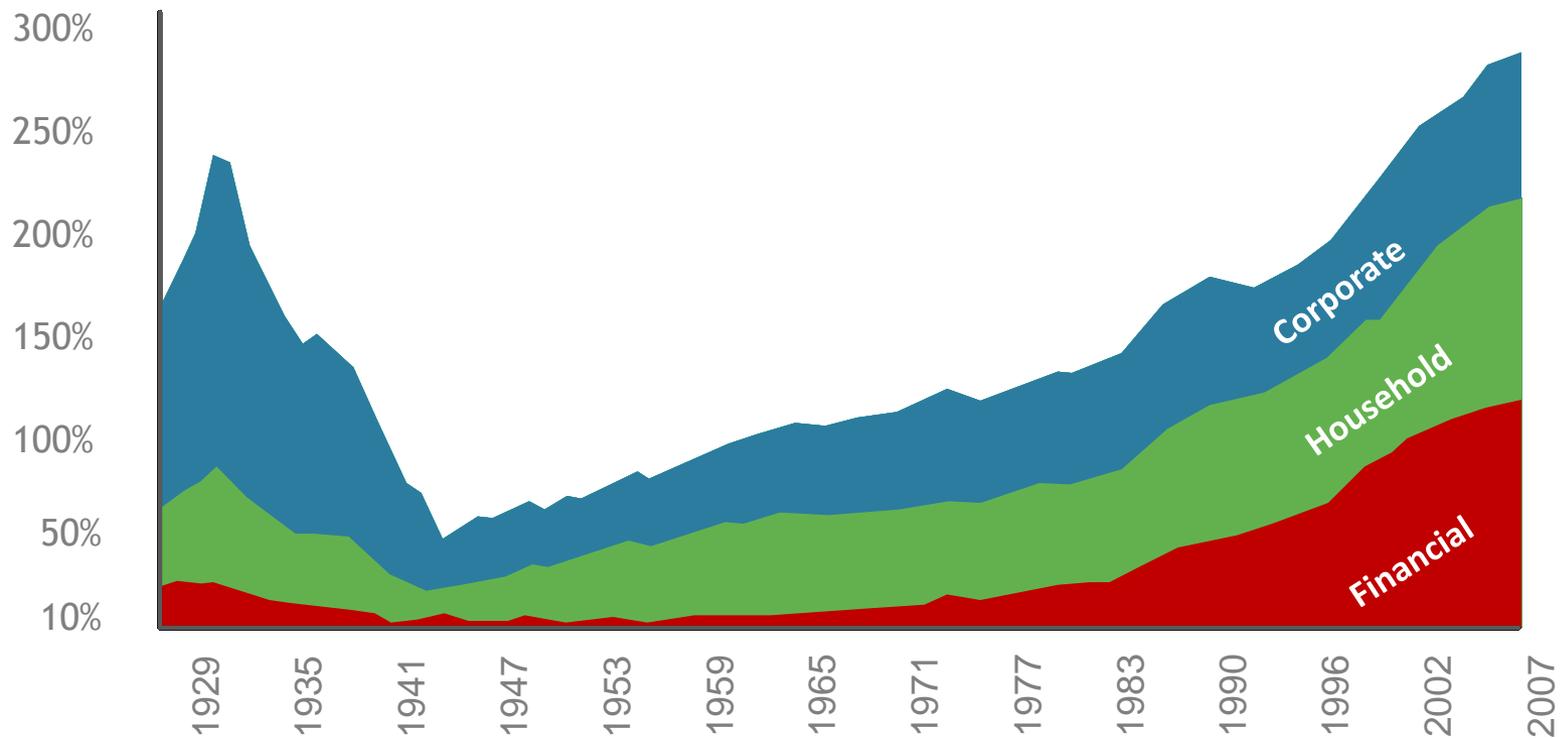
# Household deposits and loans: 1964 – 2009



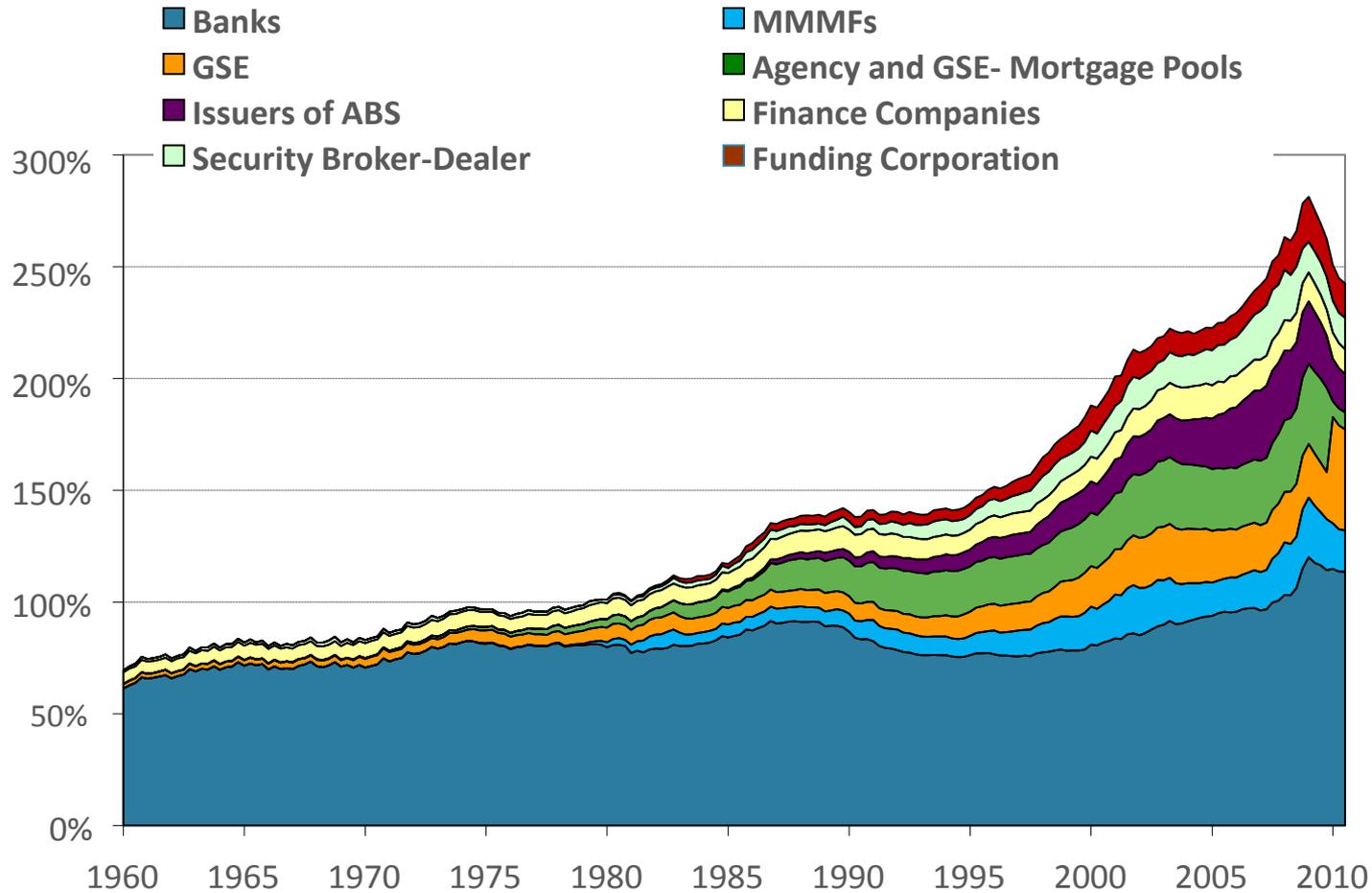
Source: Bank of England, Tables A4.3, A4.1

# Measures of increasing financial intensity

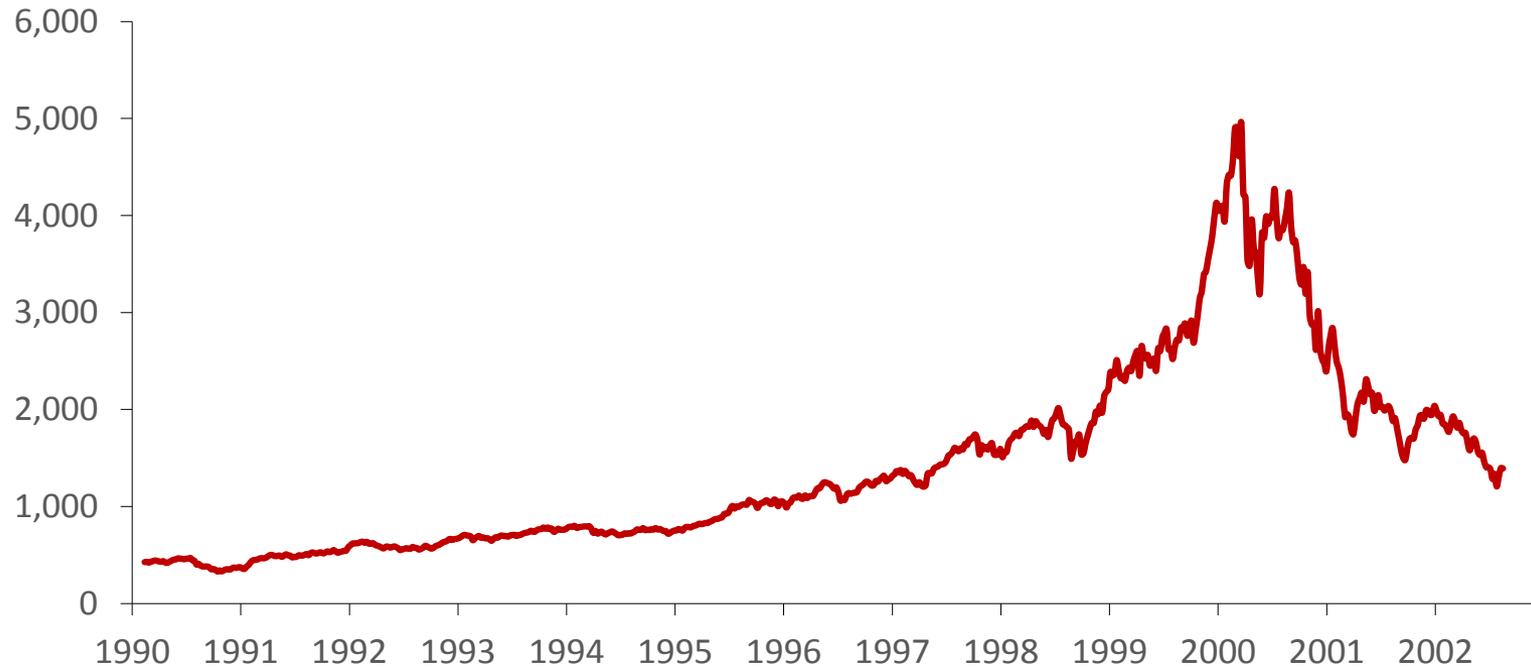
US debt as a % of GDP by borrower type



# US financial sector assets



# NASDAQ index 1990 – 2003



Source: Datastream

# Categories of credit

**Loans to businesses /  
“entrepreneurs”**

**... to finance real investment projects**

**Loans to businesses /  
speculators / investors**

**... to finance purchase of existing assets**

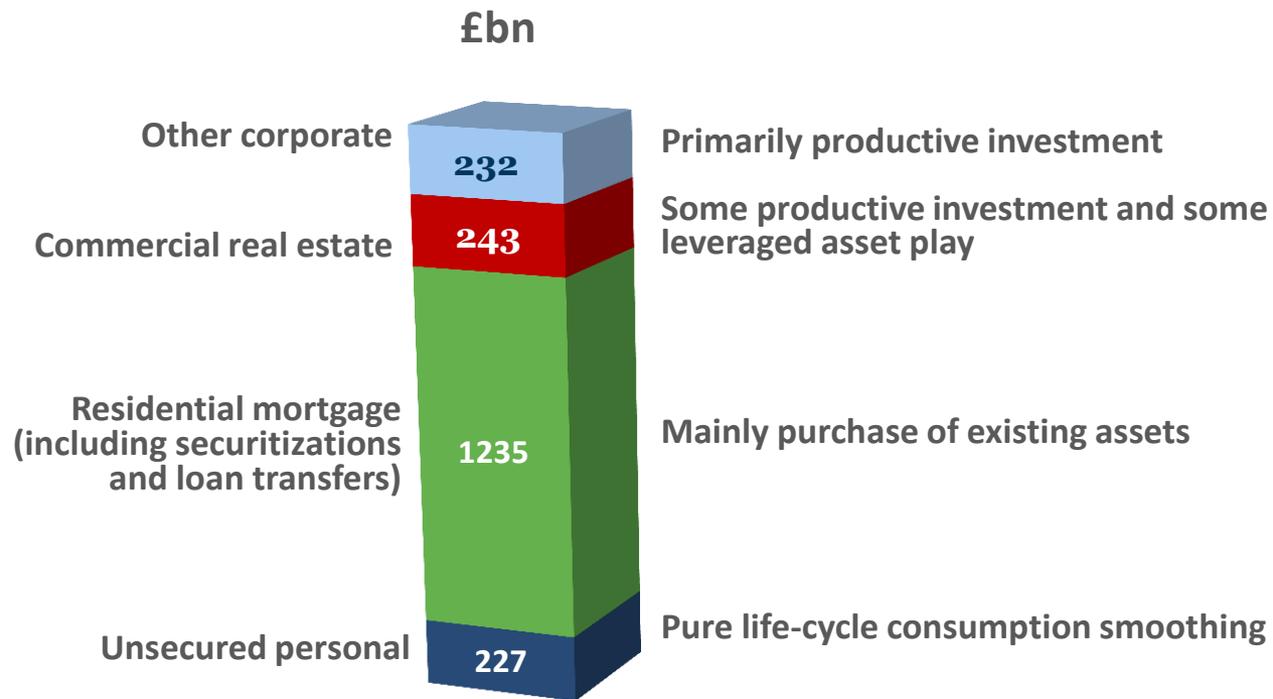
**Mortgage loans to  
households**

**... to finance residential houses**

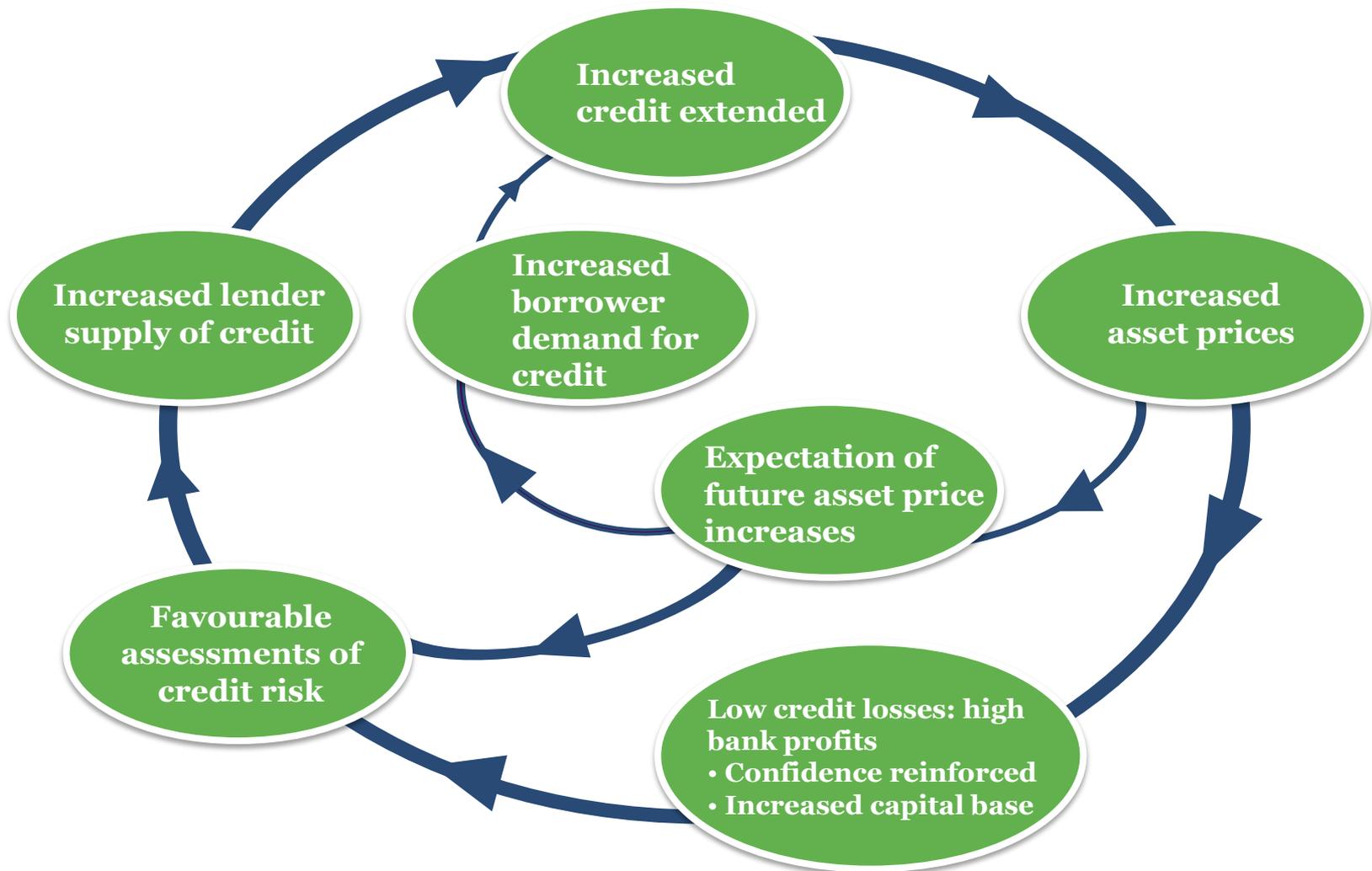
**Loans to “impatient” /  
temporarily cash limited /  
poorer households**

**... to bring forward consumption**

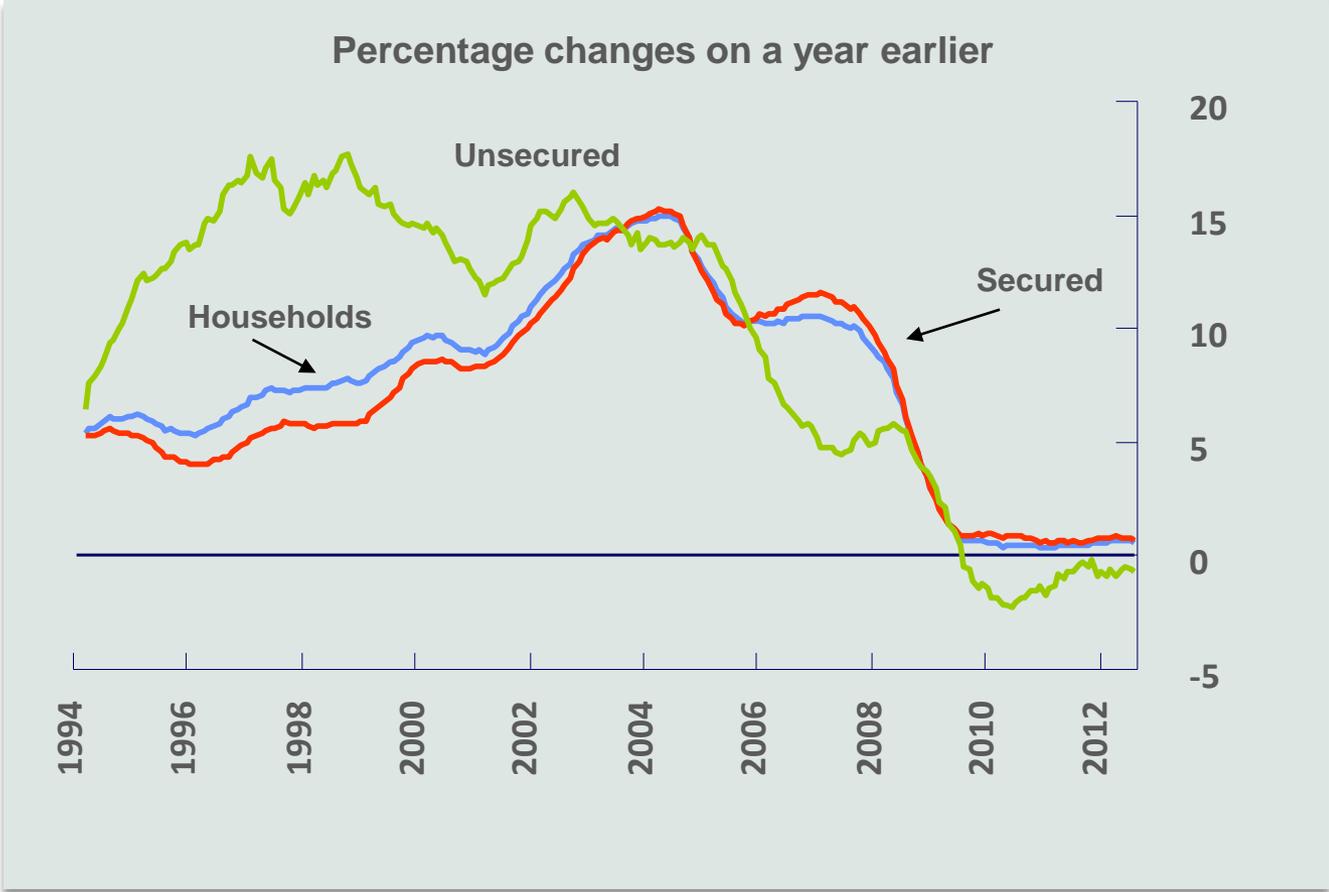
# Categories of debt: UK, 2009



# Credit and asset price cycles

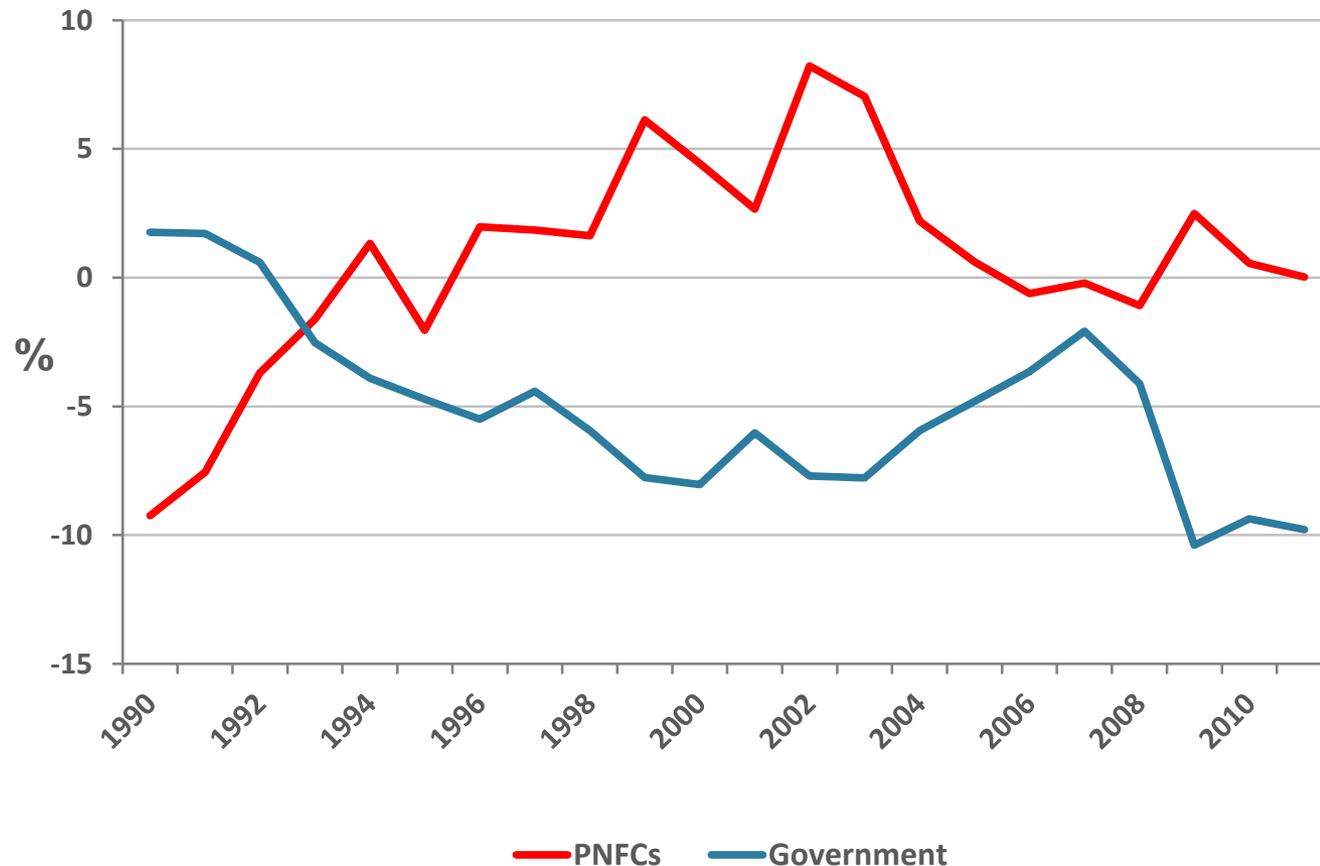


# Lending to UK households



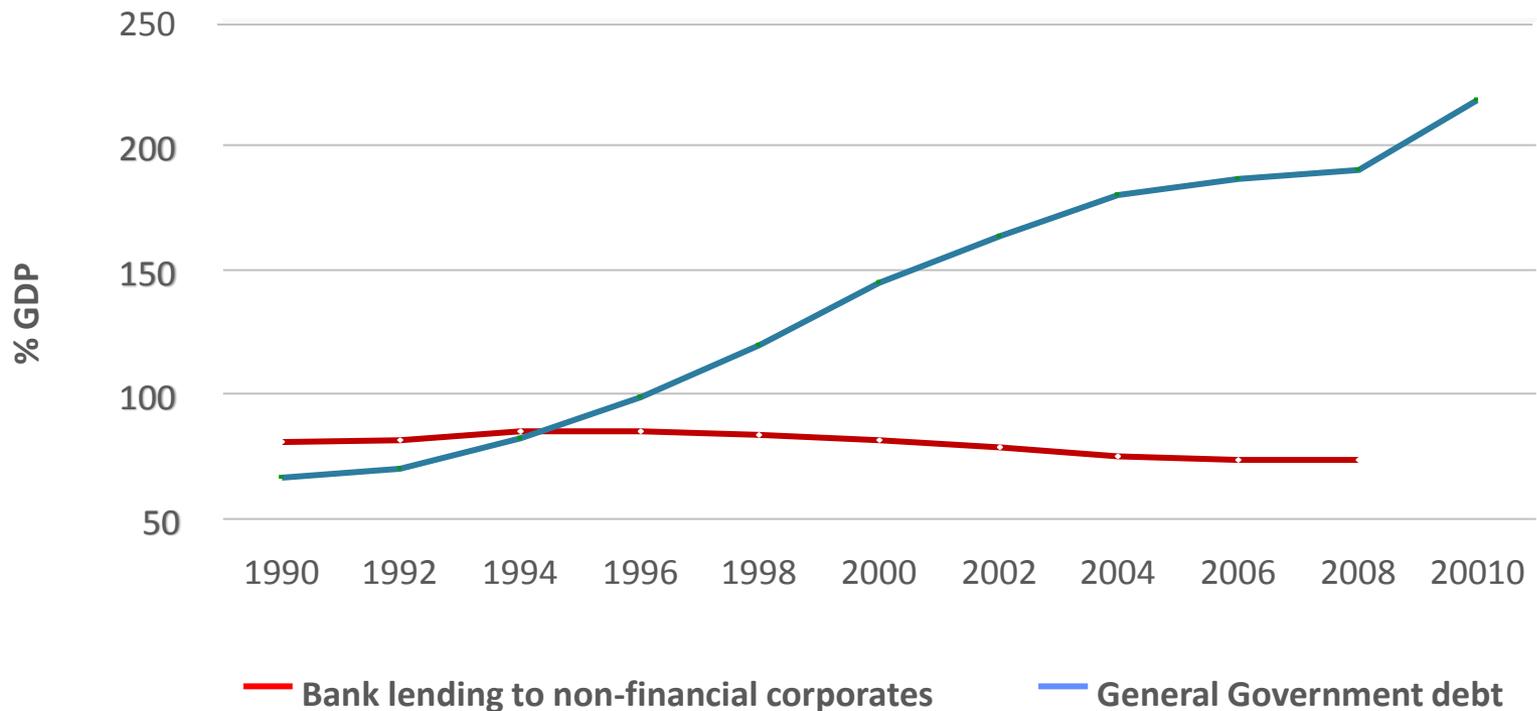
Source: Bank of England "Trends in Lending"

# Sectoral financial surpluses/deficits as % of GDP: Japan 1990 – 2012



Source: IMF, Bank of Japan Flow of Funds Accounts

# Japanese government and corporate debt: 1990 – 2010



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

# Shifting leverage: private and public debt-to-GDP

## UK



Source: ONS Note: PNFC = private, non-financial corporates; Public = central and local government

## US



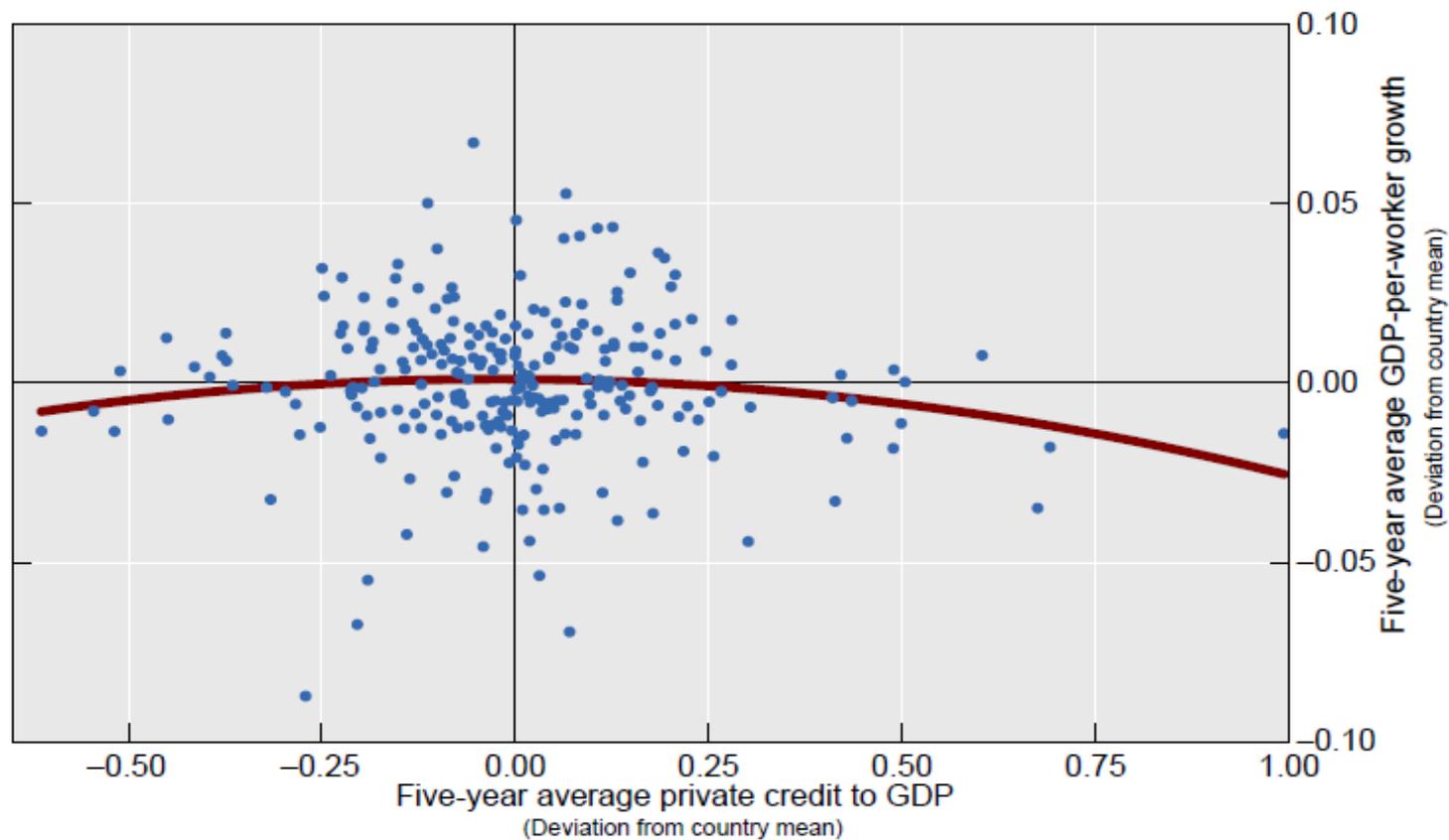
Source: BEA Note: PNFC = private, non-financial businesses; Public = federal, state and local government

## Spain



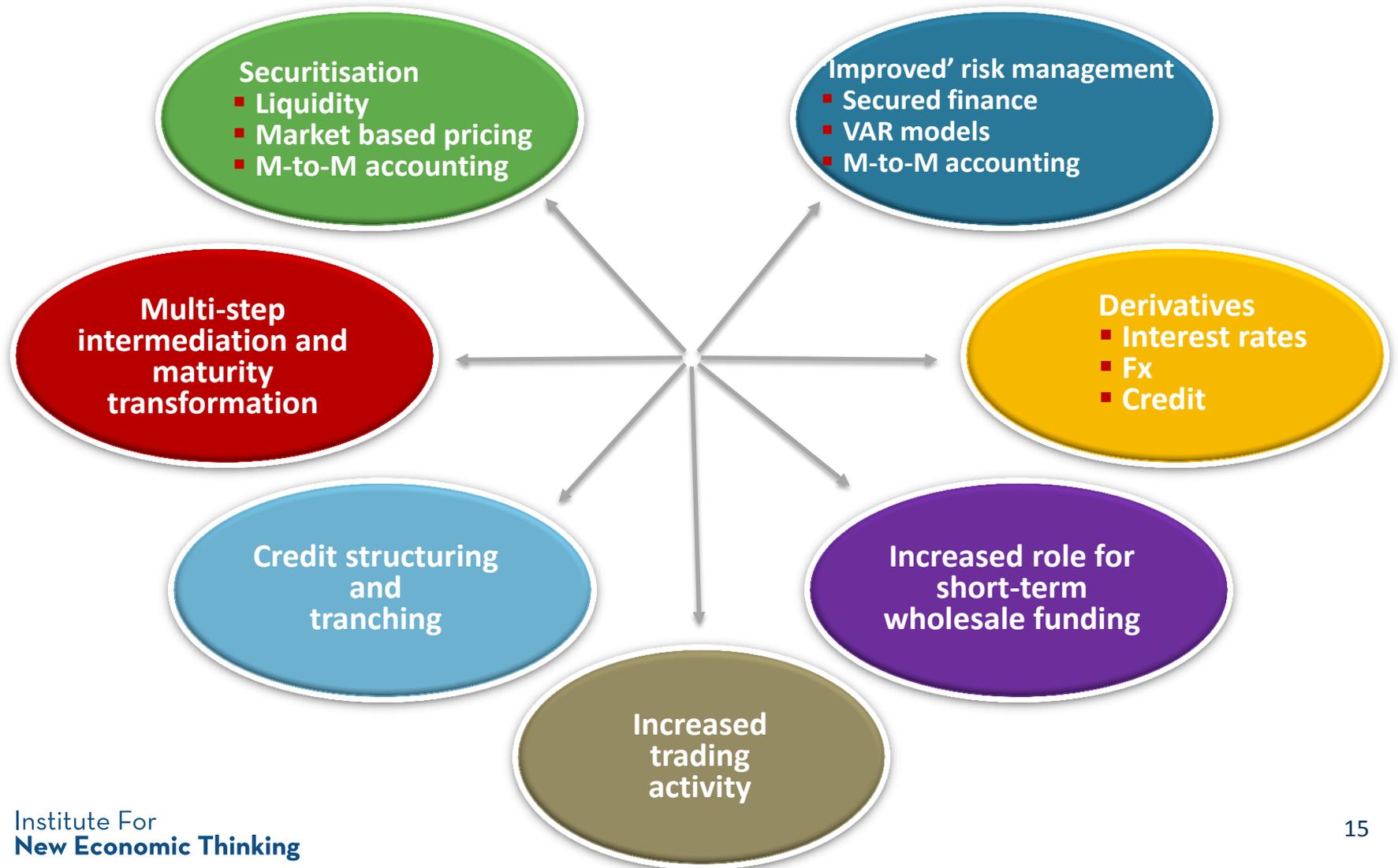
Source: ECB Note: PNFC = private, non-financial corporates; Public = central and local government

# Private credit to GDP and growth

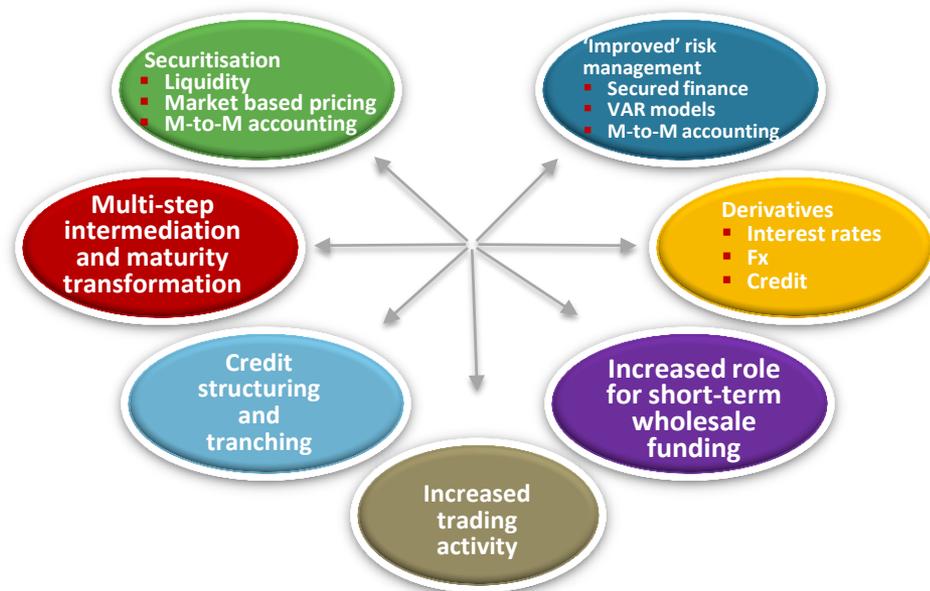


*Source: S. Cecchetti and E. Kharroubi, BIS Working Paper No. 381  
"Reassessing the impact of finance and growth"*

# Dimensions of increasing complexity



# Increasing complexity – not just a parallel shadow system



- Increasing integration of commercial and investment banking
- Multiple bank to shadow bank links (SIVs, repo markets)
- Large expansion of banking trading books
- Increase in wholesale funding – secured and unsecured
- Treasuries become profit centres
- Intra-financial system assets grow rapidly

Credit derivatives “*enhance the transparency of the markets collective view of credit risks... [and thus]... provide valuable information about broad credit constraints and increasingly set the marginal price of credit*”.

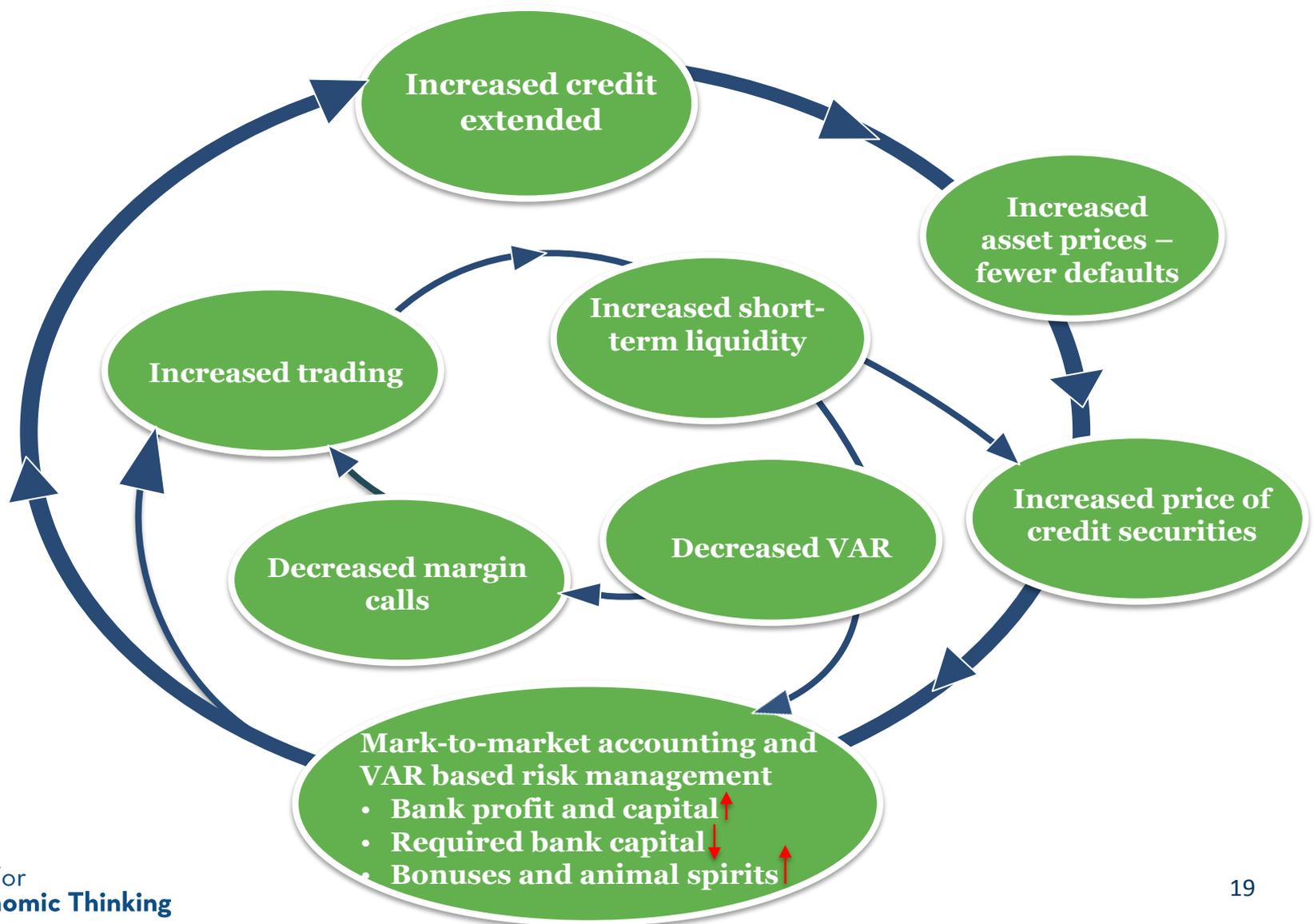
IMF Global Financial Stability Report, April 2006

# Additional credit creation

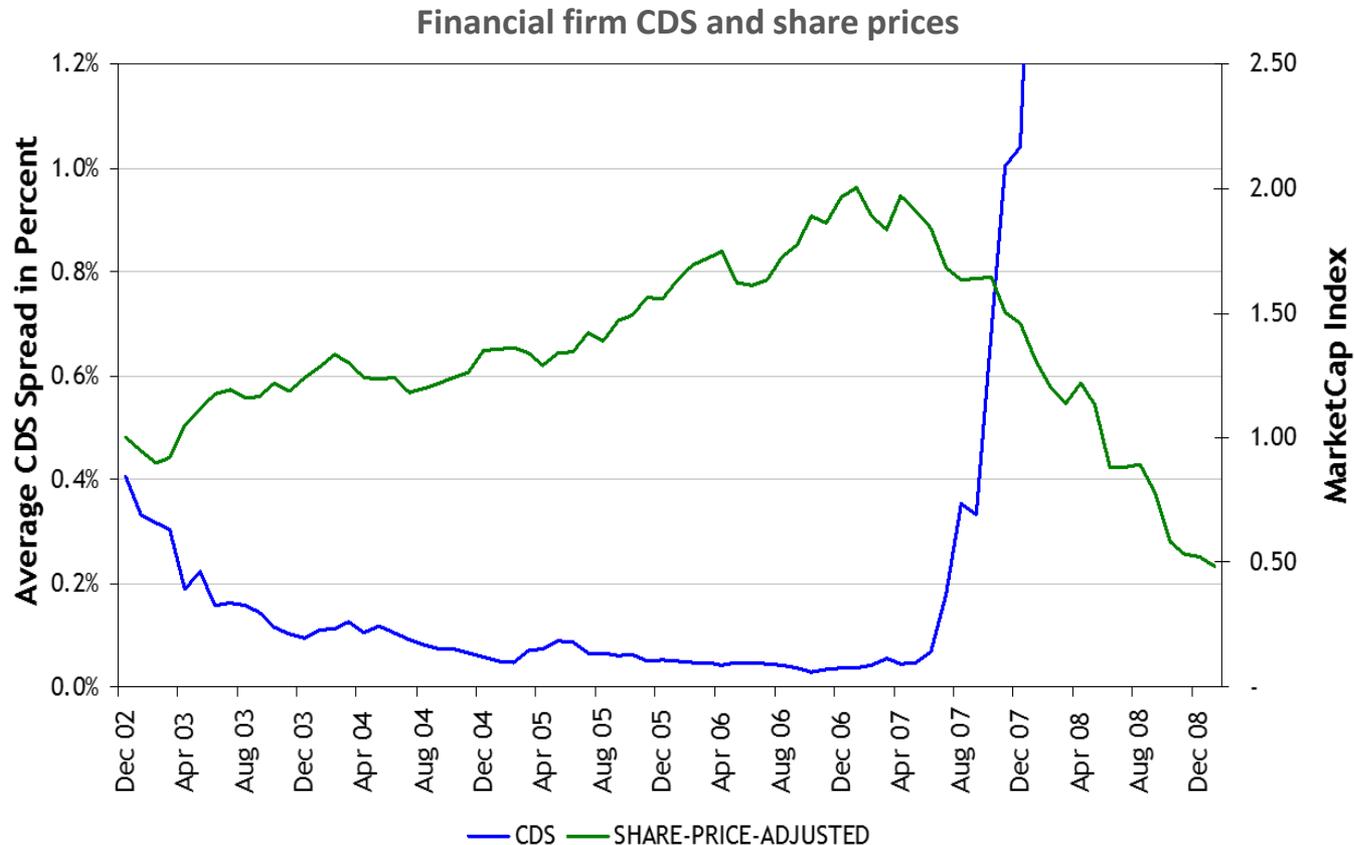
*“Securitisation is a good thing. If everything was on bank balance sheets, there would not be enough credit.”*

“Senior American Regulator”, quoted in the  
*Economist Special Report on Financial  
Innovation*, February 2012

# Credit and asset prices: with securitised credit and mark-to-market accounting

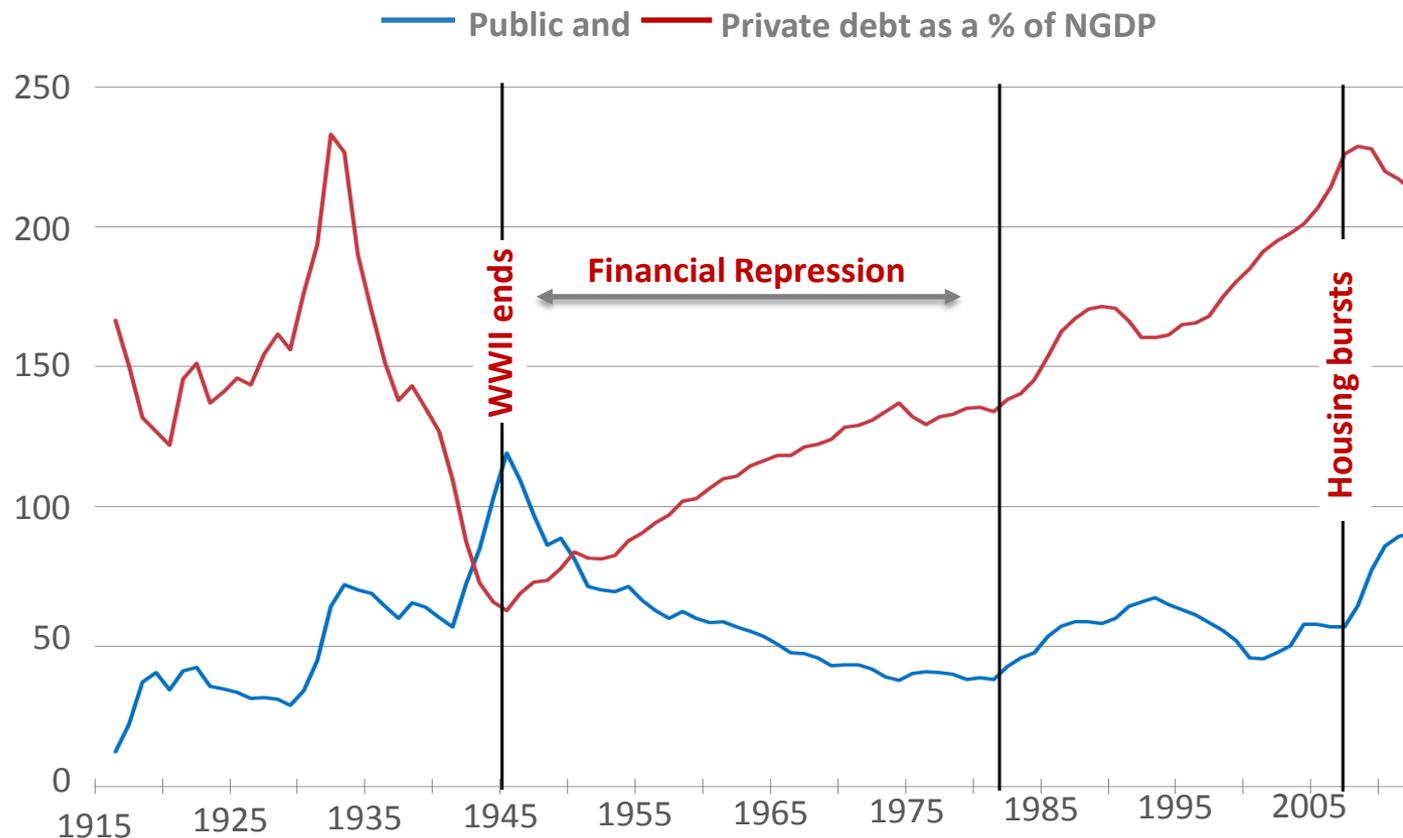


# Irrational exuberance in equity and debt markets



Source: Moody's KMV, FSA Calculations

# Private and public leverage cycles: US

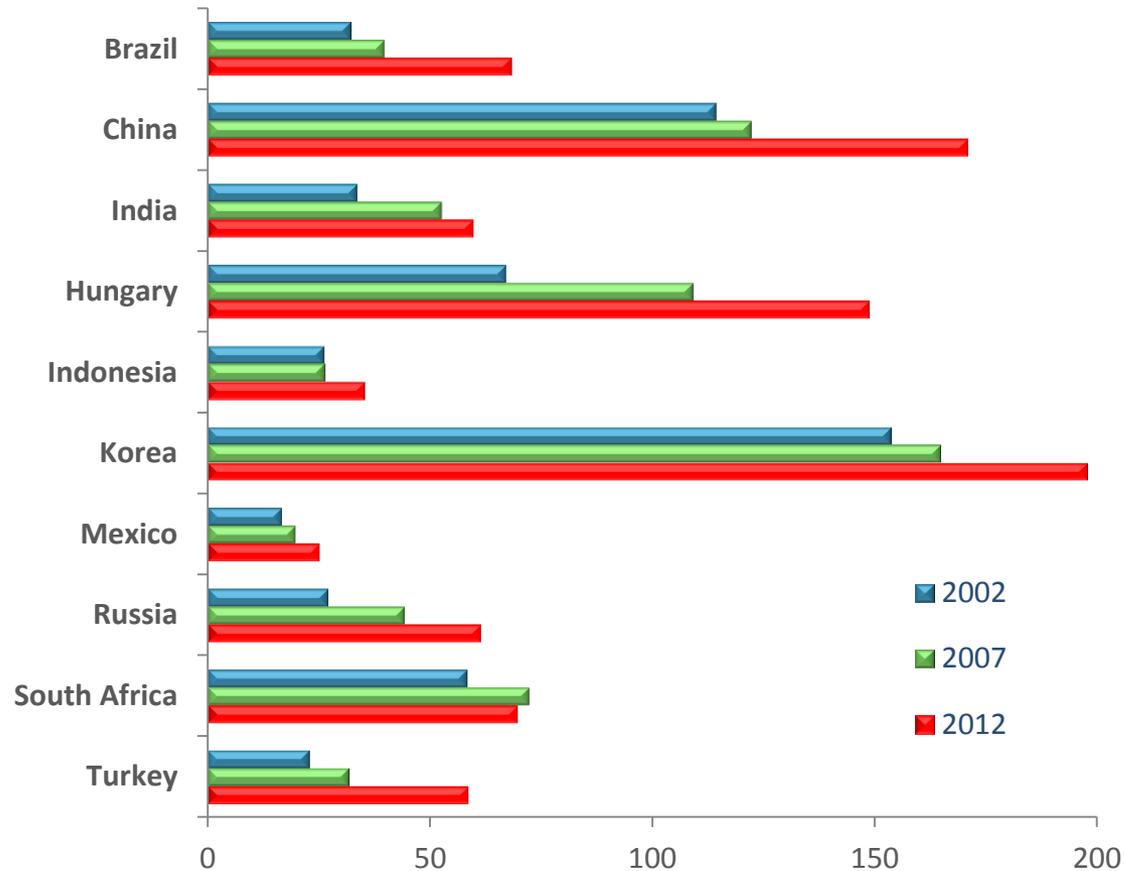


Source: McCulley and Pozsar

# China: total social finance to GDP



# Non-financial private sector\* credit outstanding, % GDP



Source: BIS, Citi Research  
\*Households + corporates

# Leaning against credit cycles: monetary or macro-prudential levers?



**Pros**

## Monetary policy – interest raises

- Gets into all the cracks

**Cons**

- Elasticity of response variable by category of credit

## Macro-Prudential levers

- Can address specific credit categories

- Will stimulate innovation to avoid