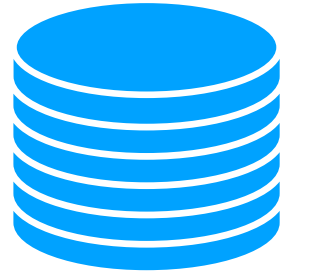


Money Creation and Central Bank

Dr Stefania Paredes Fuentes
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Department of Economics
University of Warwick

MiR@W day: The Dynamics of Money
4 Feb 2019

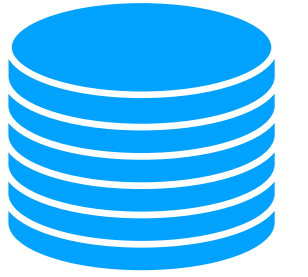
Central Bank and Money Creation



Who creates money?



Central Bank and Money Creation



What is money?

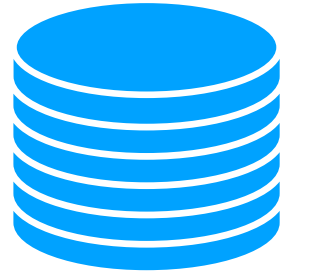
- **Central bank money**

currency in circulation and the sight deposits held by commercial banks at the central bank

- **Commercial bank money**

create by issuing loans worth many times the value of reserves they hold

Central Bank and Money Creation



Central Bank's balance sheet

Assets	Liabilities
Foreign Assets (net)	Currency
Government Balances (net)	Commercial Bank Reserves
Central Bank Operations (net)	Capital Reserves (net worth)
Other items (net)	
	BASE MONEY

Commercial banks' balance sheet

Assets	Liabilities
Reserves	Deposits
Loans	Interbank
Securities	Net Worth
	MONEY CREATION

Customer's balance sheet

Assets	Liabilities
Deposits	Loans
Currency	Non money
	BROAD MONEY

Central Bank and Money Creation

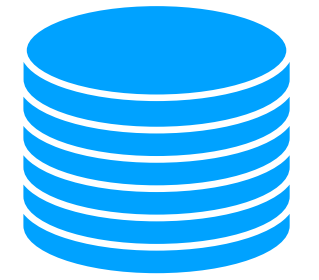
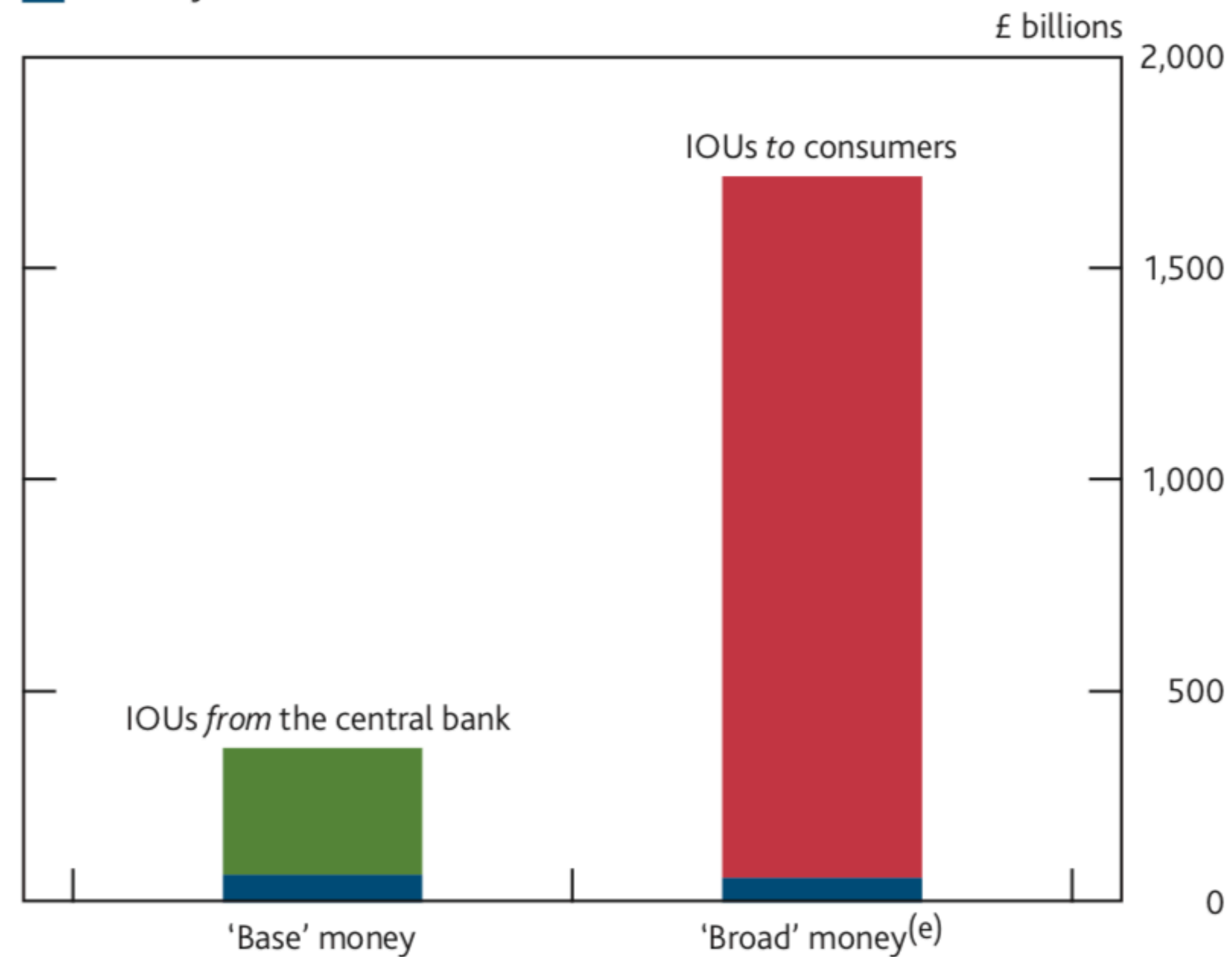
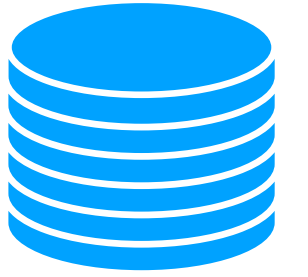


Chart 1 Amounts of money in circulation^(a)

- Bank deposits: IOUs from commercial banks to consumers
- Reserves: IOUs from the central bank to commercial banks^(b)
- Currency: IOUs from the central bank to consumers^{(c)(d)}



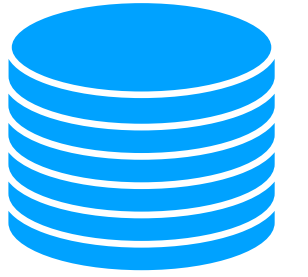
Central Bank and Money Creation



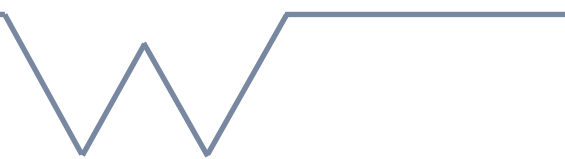
From commercial banks as financial intermediaries...



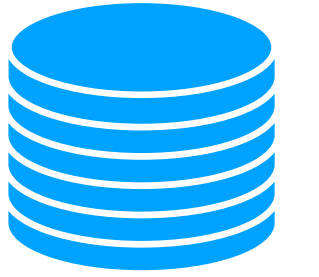
Central Bank and Money Creation



... to commercial banks as money creators.

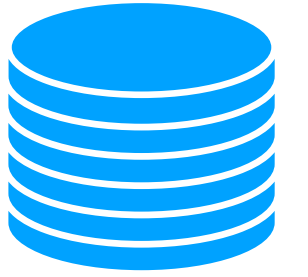


Central Bank and Money Creation



What is the role of the central bank?

Central Bank and Money Creation



Monetary policy

Price stability

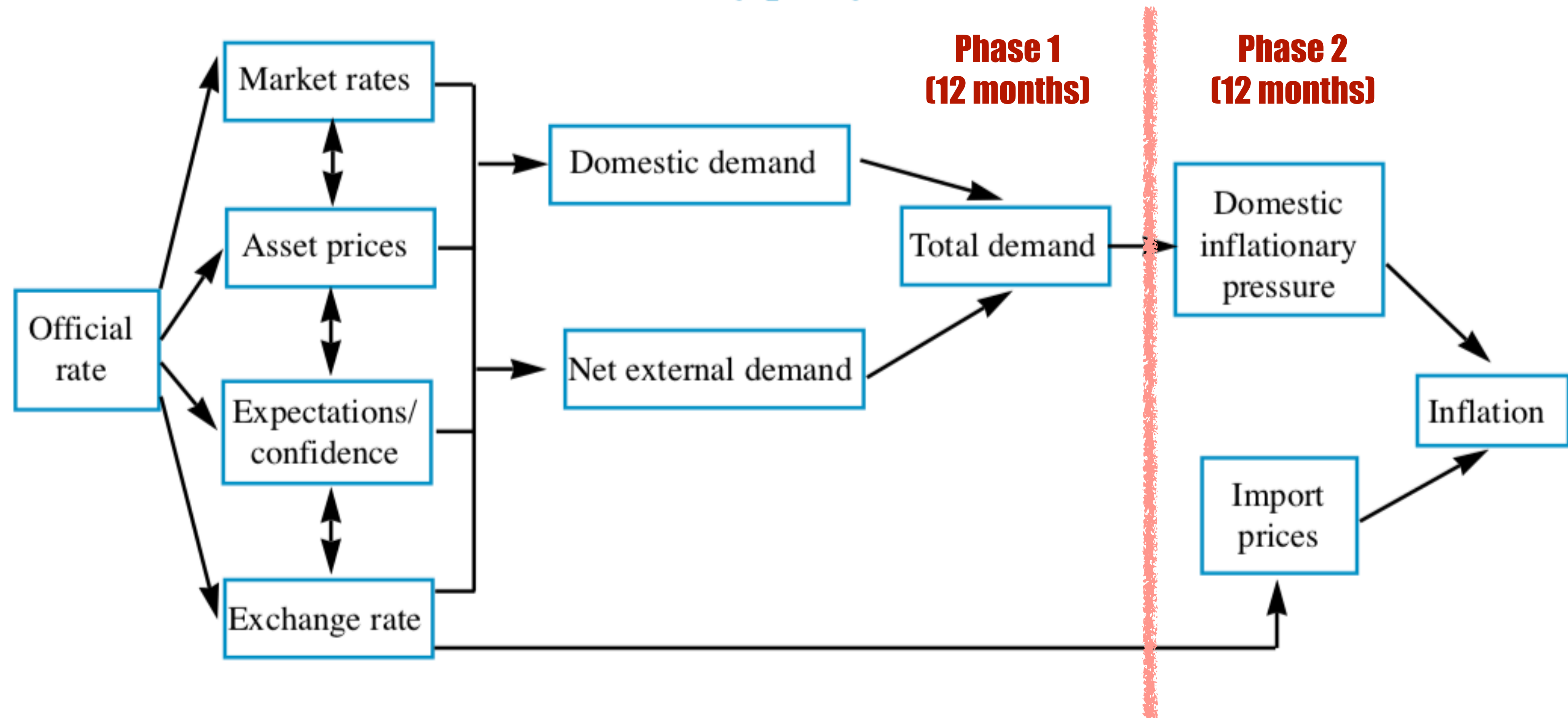
Inflation targeting - set policy rate

(new) Financial stability

Central Bank and Money Creation



The transmission mechanism of monetary policy

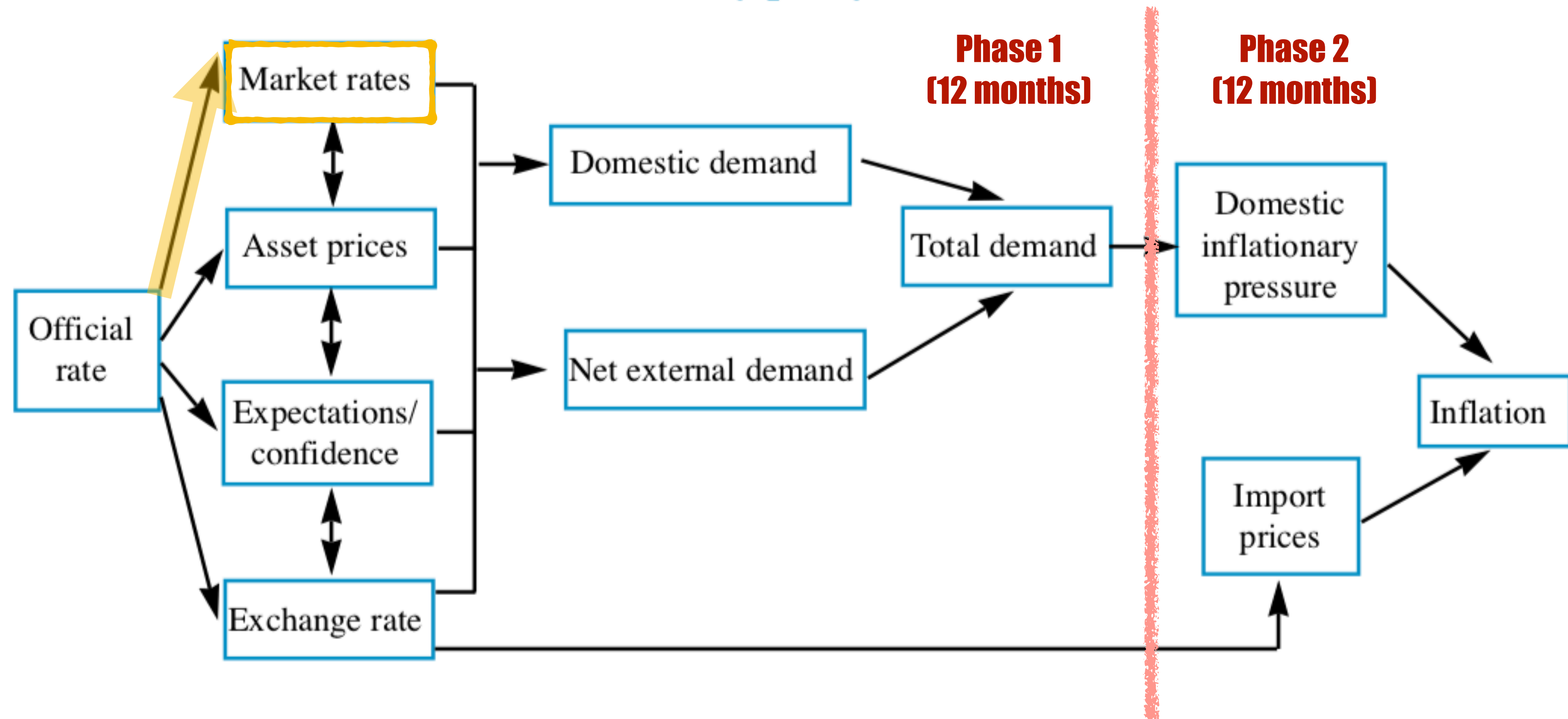


Note: For simplicity, this figure does not show all interactions between variables, but these can be important.

Central Bank and Money Creation

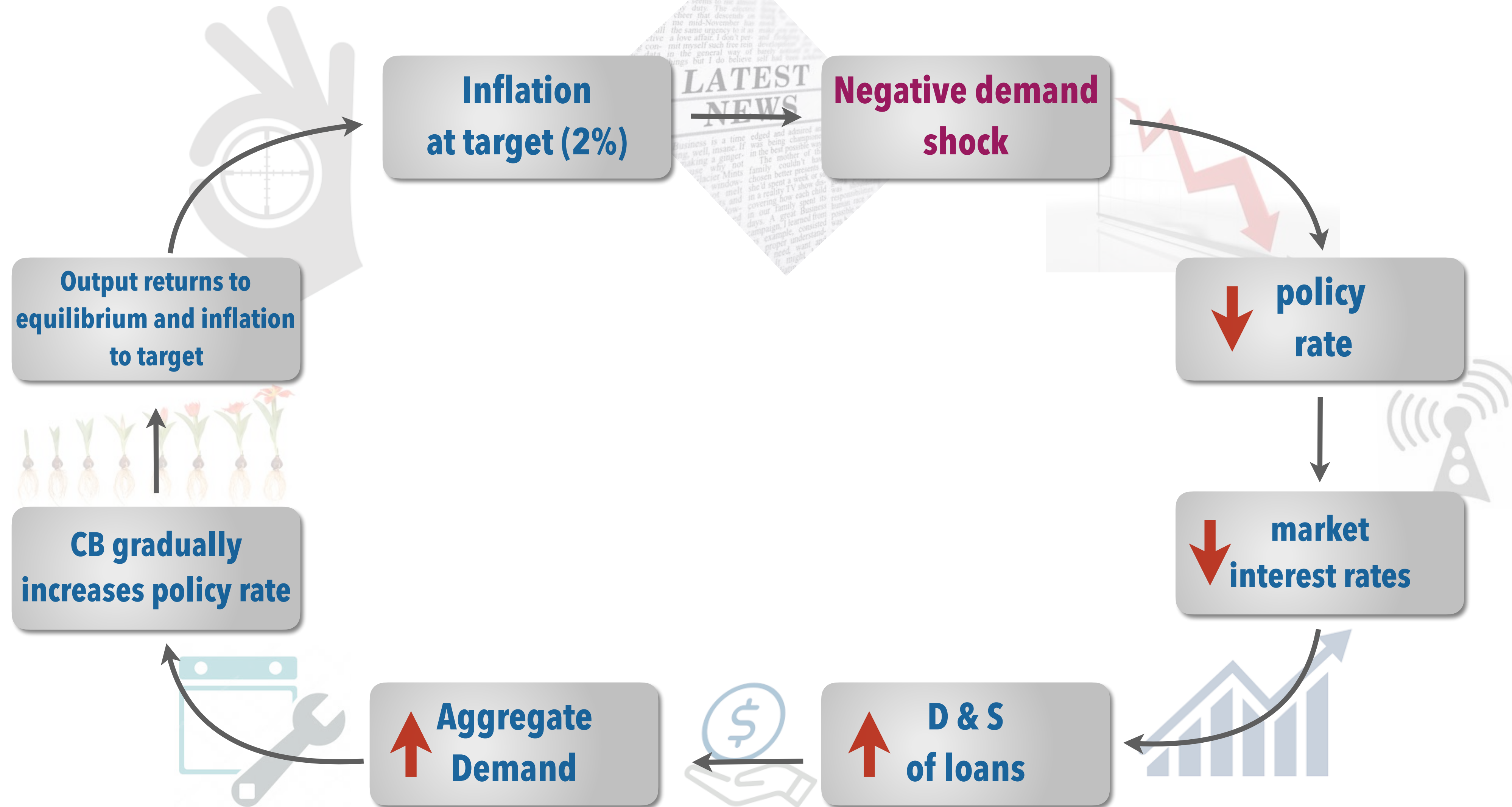
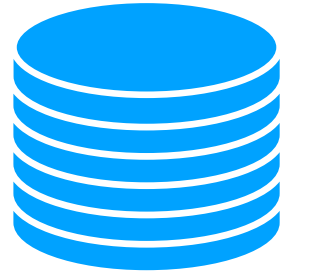


The transmission mechanism of monetary policy

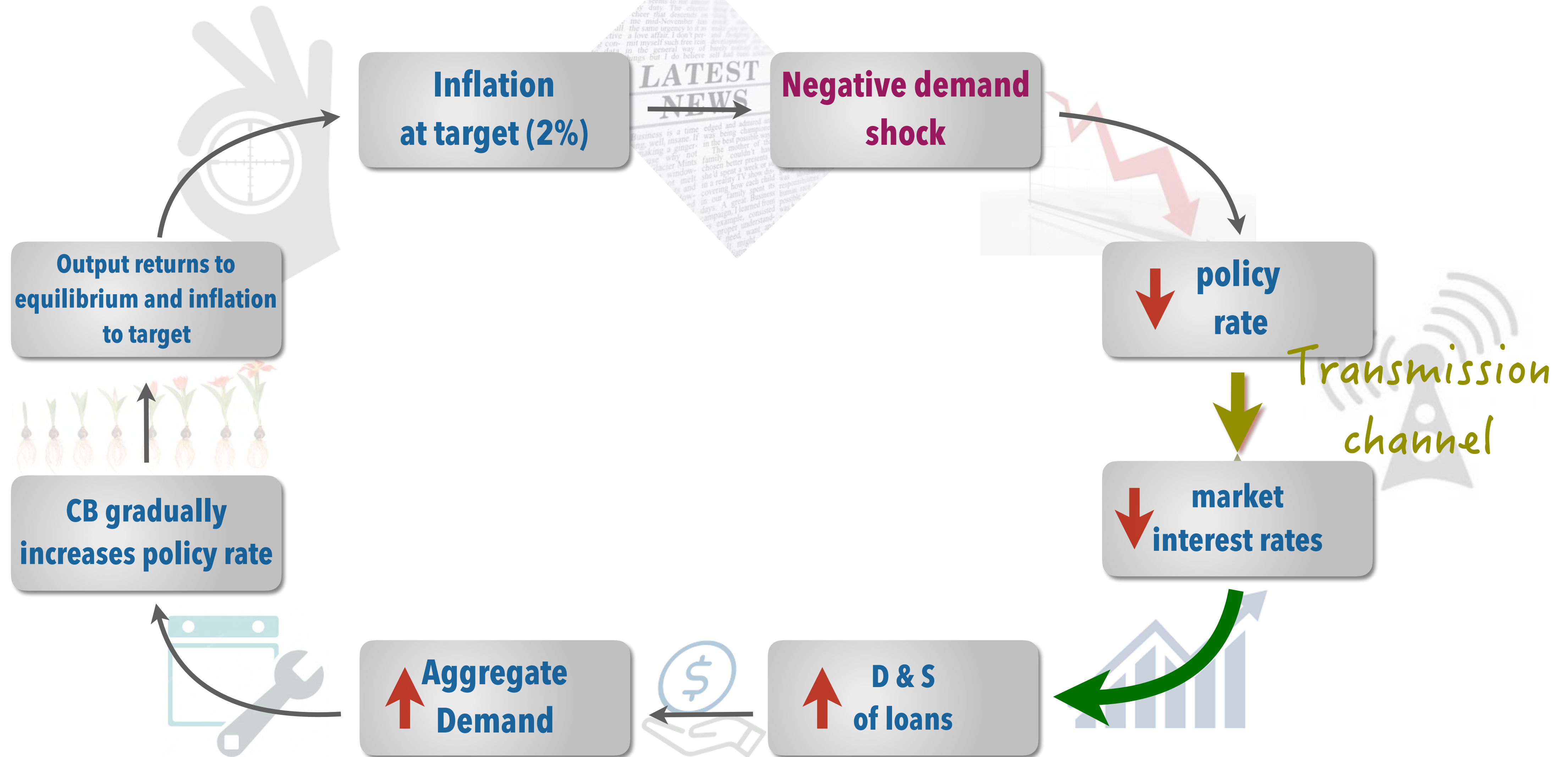
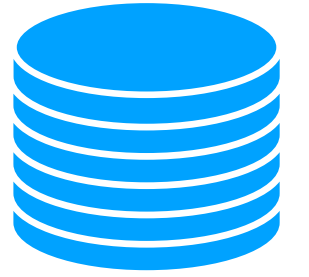


Note: For simplicity, this figure does not show all interactions between variables, but these can be important.

Central Bank and Money Creation



Central Bank and Money Creation

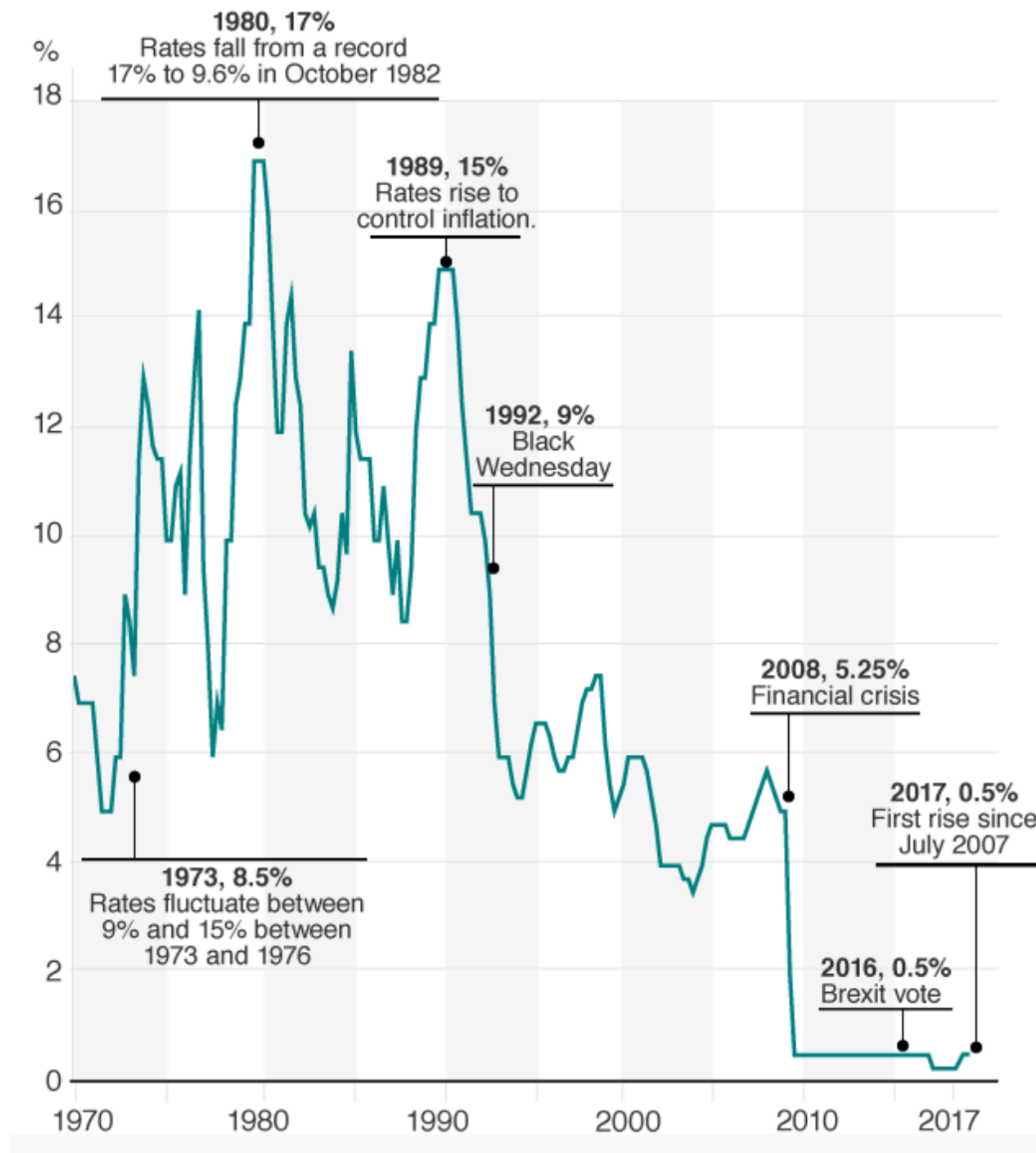




QUESTION:
WHO WAS
RESPONSIBLE
FOR THE
FINANCIAL
CR

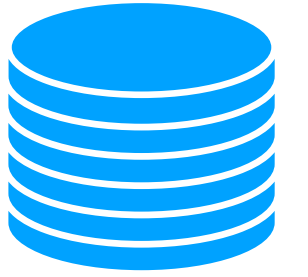


Central Bank and Money Creation

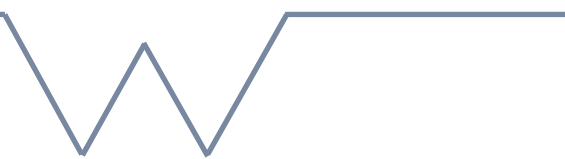


Interest Rate in the UK

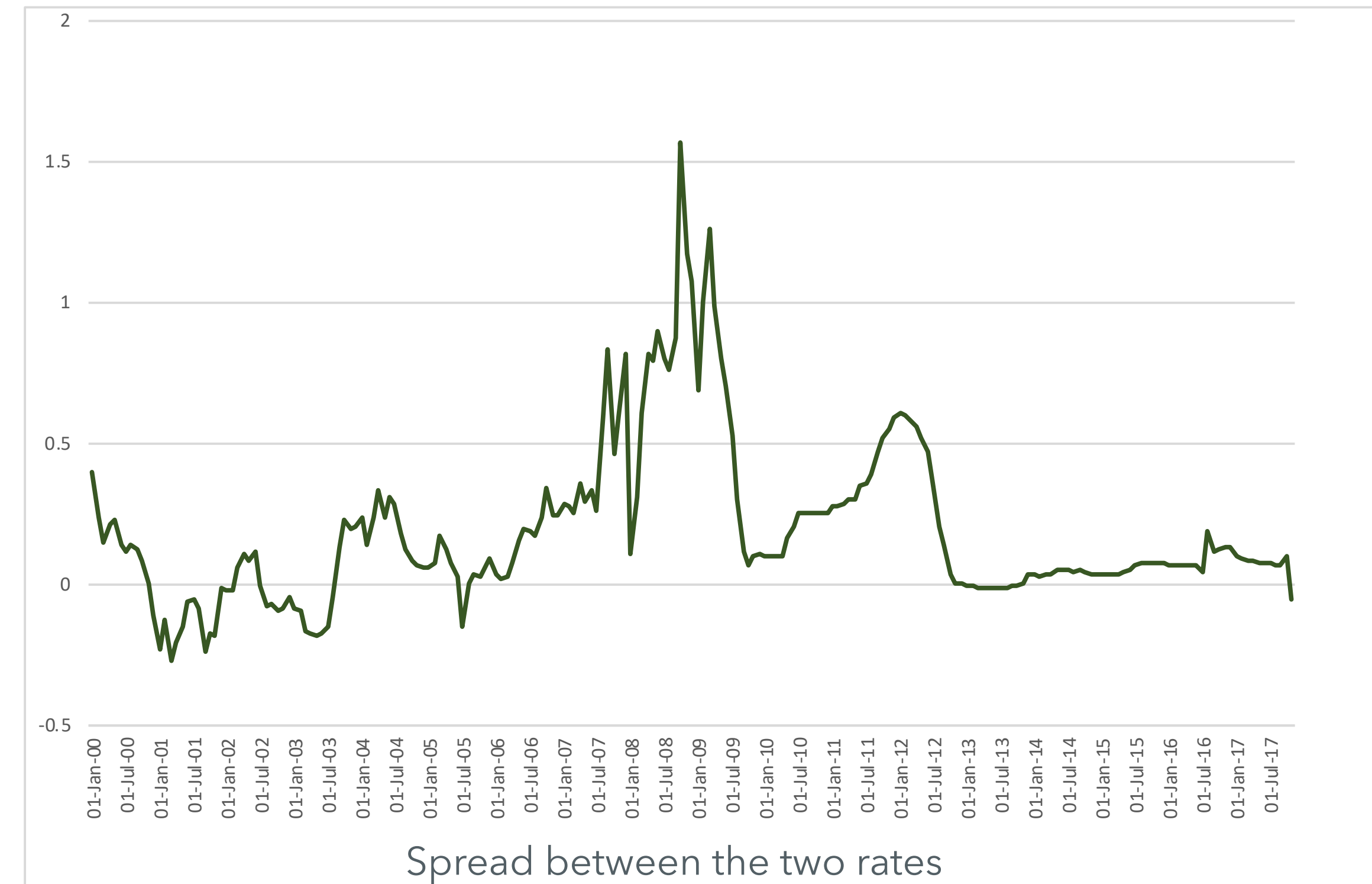
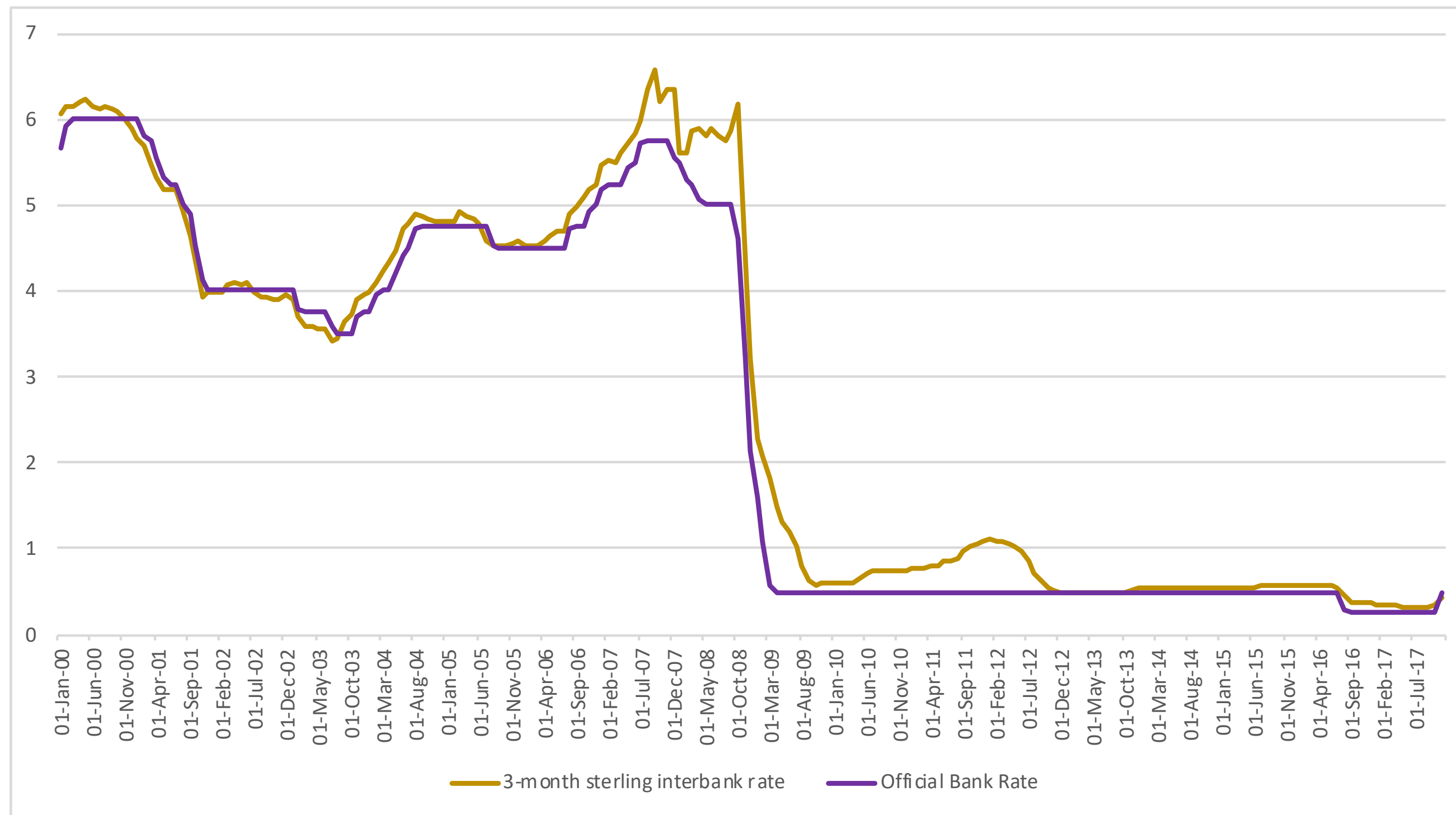
Central Bank and Money Creation



- The relationship between changes in policy rate and market rates broke down
- Banks were holding onto funds
- transmission channels broke down!



Central Bank and Money Creation



Central Bank and Money Creation

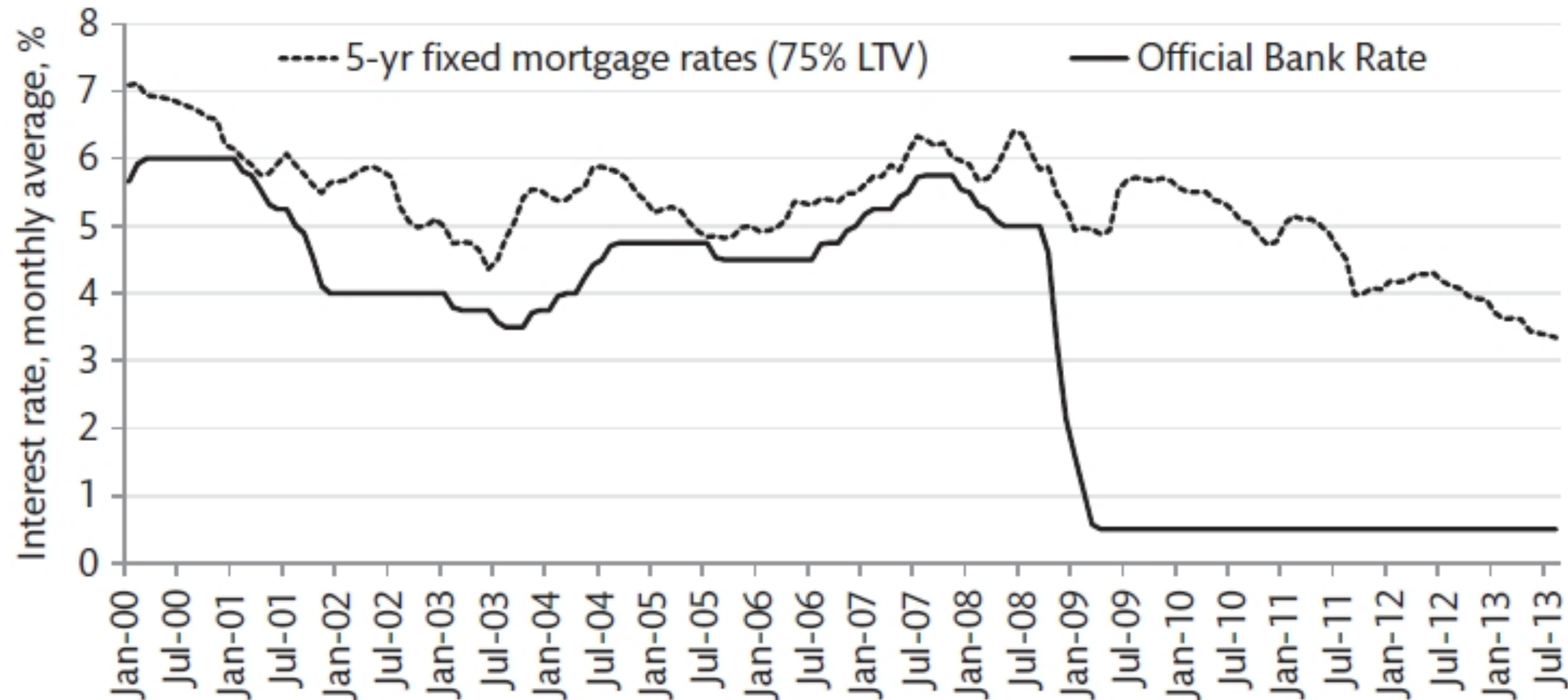
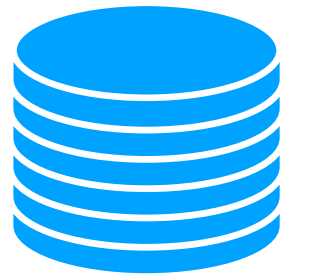
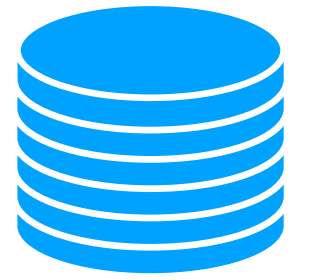


Figure 5.4 UK Official Bank Rates and 5-yr fixed mortgages rates (75% LTV): Jan 2000–Aug 2013.

Source: Bank of England (data accessed October 2013).



Central Bank and Money Creation



M4 net lending from financial institutions to the private sector (Bank of England)





UK, September 2007



The day the credit crunch began, 10 years on: 'the world changed'

Key players in the drama recall the day that sparked the first UK bank run in 140 years and heralded a global financial crisis

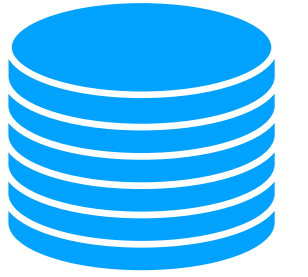


US, September 2008

Too big to fail



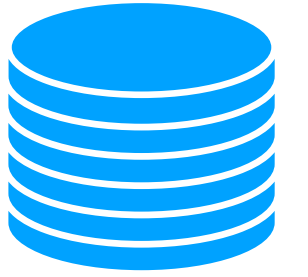
Central Bank and Money Creation



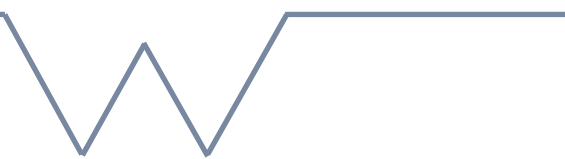
What was wrong with the banks?

1. **Correct monetary policy is all that is needed to secure financial stability**
 - supported the misconception that CBs could control the money supply and credit
2. **Financial markets price risks correctly on average**
 - Efficient Market Hypothesis (Fama): security prices fully reflect all available information (weak/semi-strong versions)
3. **Mark-to-Market (M2M) and value at risk (VaR) frameworks** offer accurate measures of value and thus are appropriate ways of managing risk

Central Bank and Money Creation



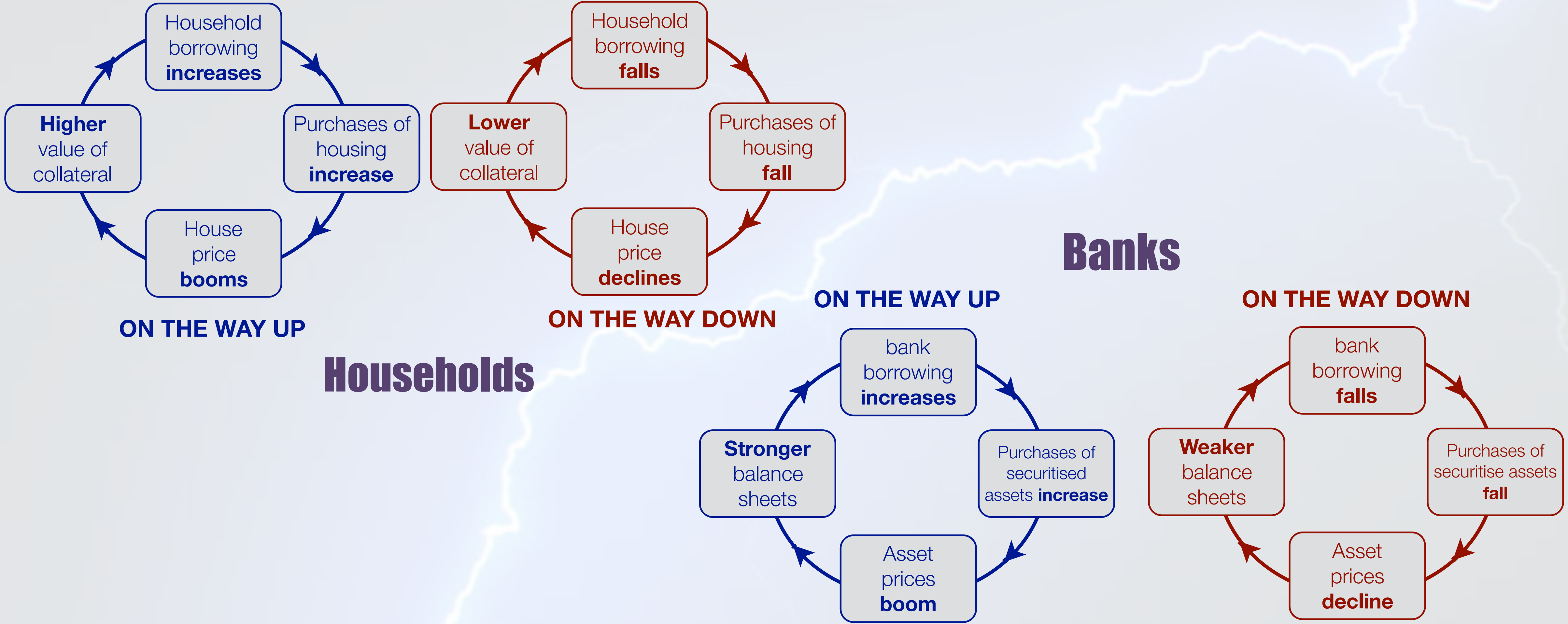
- Central banks have limited control over the money created in the economy
- Changes in the commercial banks balance sheets have strong effects on the real economy
- Bank lending is pro-cyclical
 - Boom in credit creation during good times
 - Banks will cut back lending during recessions
- Credit expansion may create **instability**



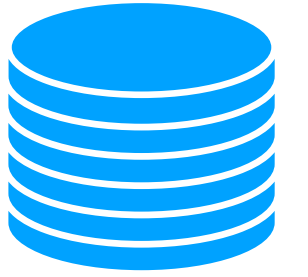
Central Bank and Money Creation



2008's financial crisis



Central Bank and Money Creation



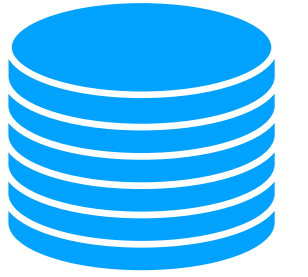
What was wrong with the banks?

1. Correct monetary policy is all that is needed to secure financial stability

- supported the misconception that CBs could control the money supply and credit

- Pre-2008: Banks were efficient in allocating capital, by correct judgment of risks
Post-crisis: Strengthen banks' ability to *manage risk*
(no much on how capital is allocated)
- Pre-2008: Price stability as only goal for central banks
Post-crisis: + Financial stability and Macro-prudential regulation

Central Bank and Money Creation



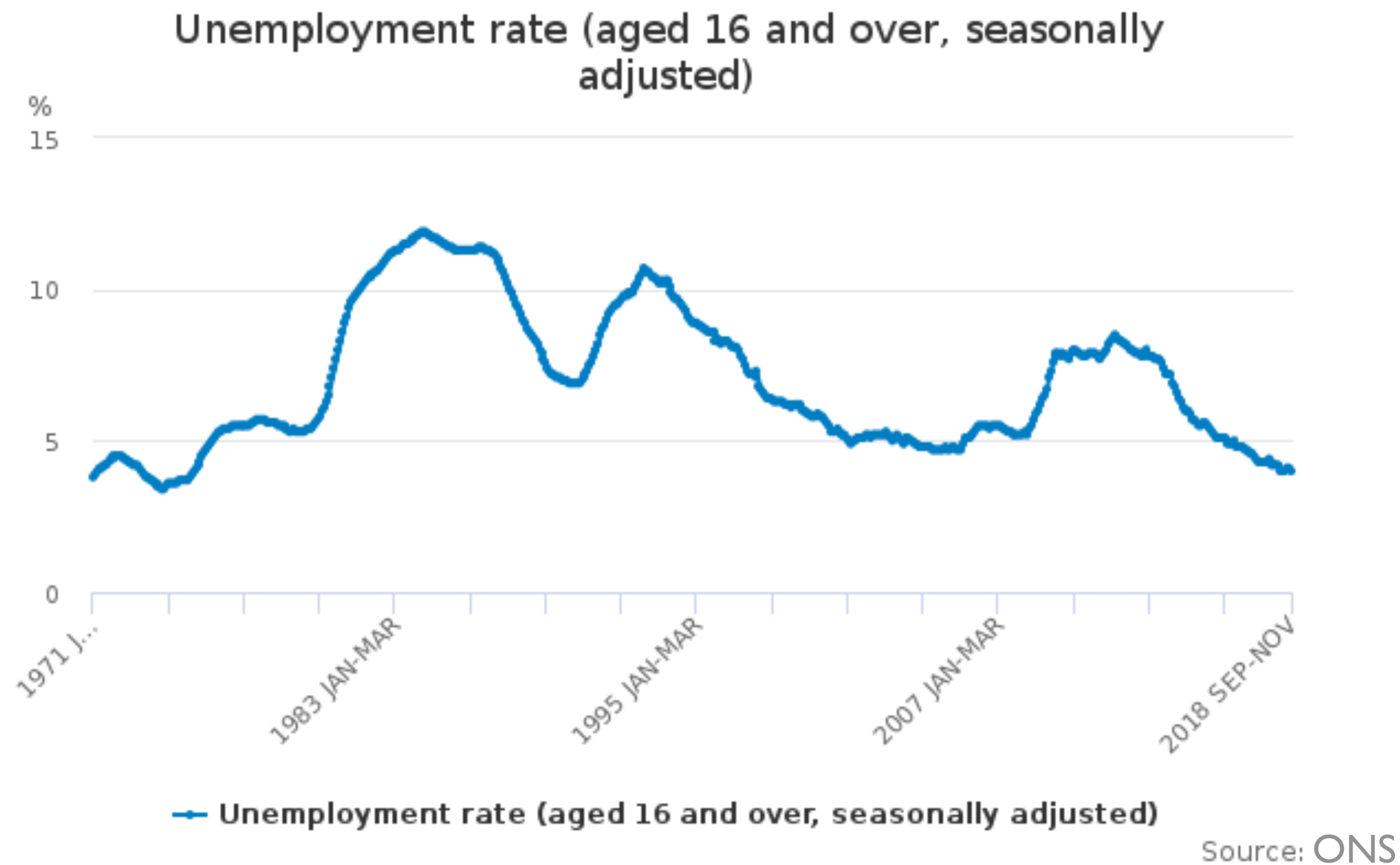
The current scenario

- Interest rates still low
(zero lower bound)
- Unemployment rates historical low levels
- Consumer credit is high
- BoE has announced an increase in interest rates

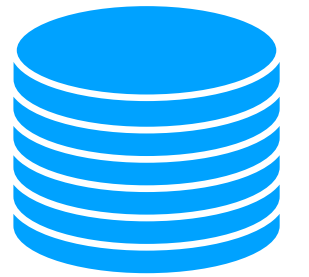
Central Bank and Money Creation



The current scenario



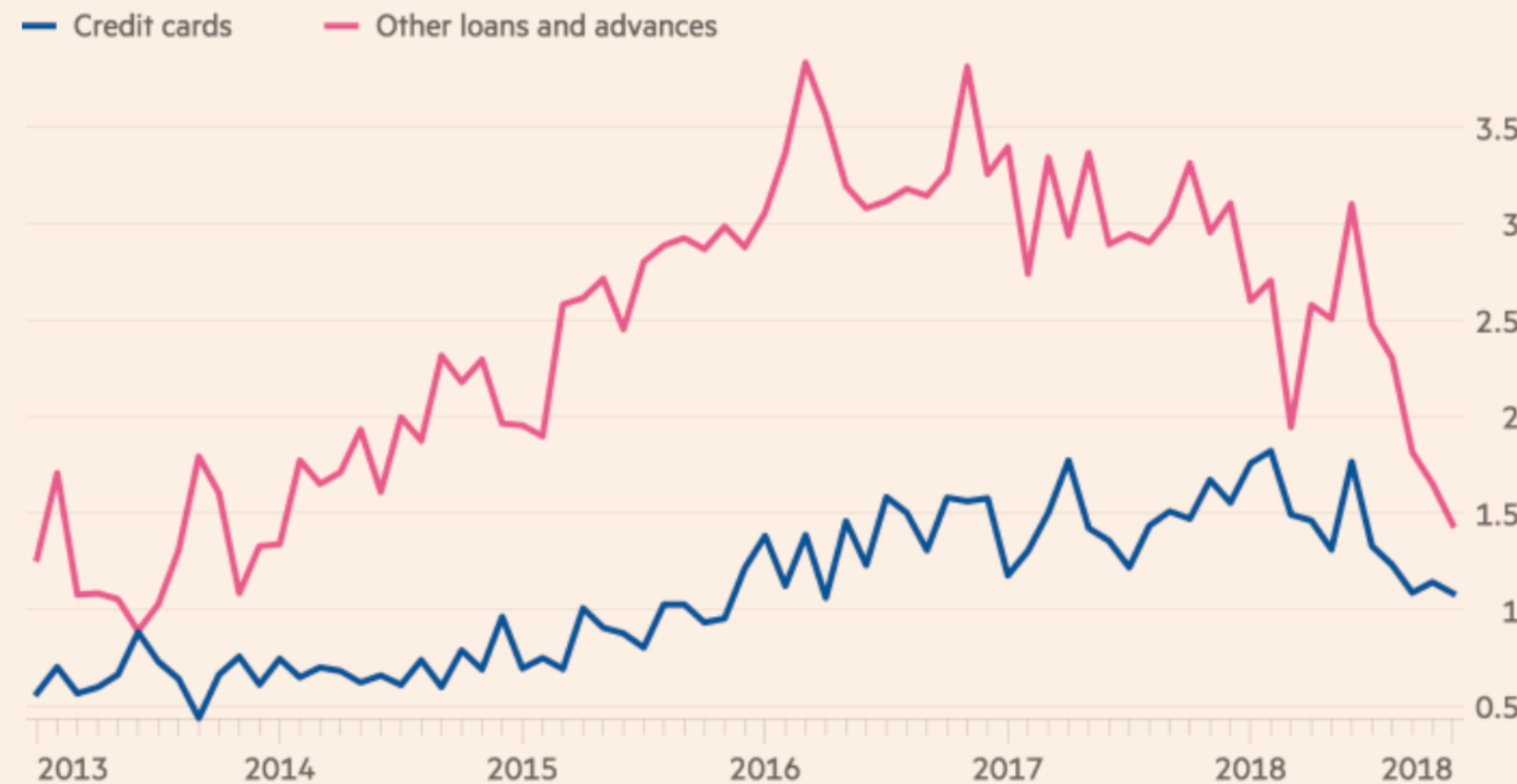
Central Bank and Money Creation



The current scenario

UK consumer borrowing has been slowing since the summer

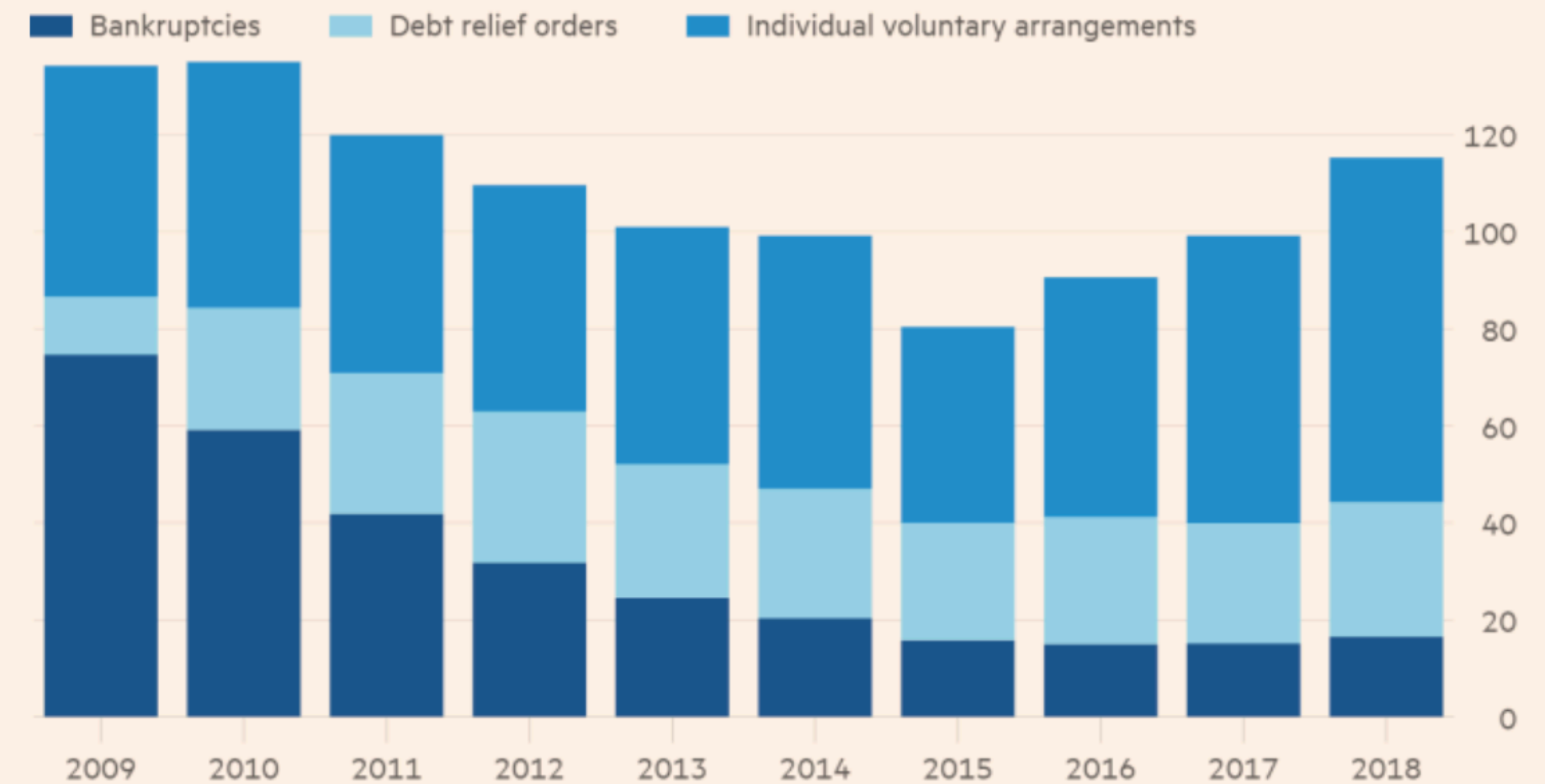
Change in amount outstanding, rolling 3m sum (£bn)



Source: Bank of England
© FT

Insolvencies in 2018 were the highest for seven years

Individual insolvencies in England and Wales (000s)



Source: Insolvency Service
© FT

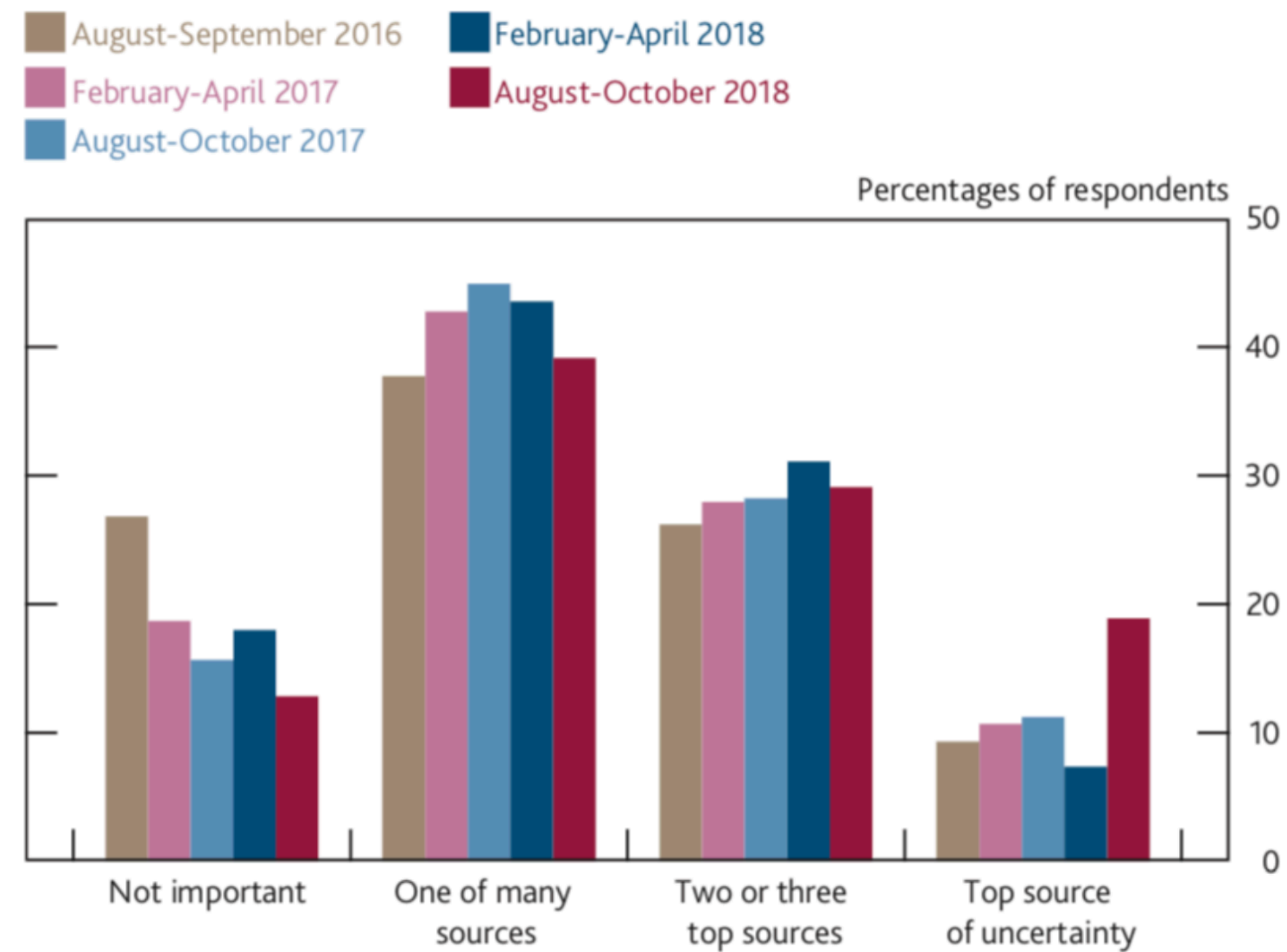
Central Bank and Money Creation



The current scenario

Chart 2.11 Brexit-related uncertainty among companies has risen

Decision Maker Panel: Brexit as a source of uncertainty^(a)



(a) Responses to the question 'How much has the result of the EU referendum affected the level of uncertainty affecting your business?'



Central Bank and Money Creation

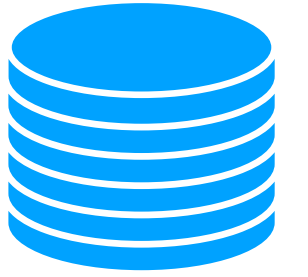


Epoch	Prior conventional wisdom	Economic outcomes	What did we learn	Protagonist
1920 - 1941 (Great Depression)	Markets are self-correcting, efficient, and ensure the full use of resources	Collapse of aggregate demand, high and persistent unemployment.	Instability is an intrinsic feature of the aggregate economy and aggregate demand can be stabilized by government policy.	Keynes
1940s - 1970	Government policy can implement an employment target by picking a point on the Phillips curve.	Late-60s decline in profits, investment, and productivity growth. Stable Phillips curve trade-off disappears.	With given institutions, the need to maintain profits, investment, and productivity growth can limit the ability of a government to implement sustainable low unemployment using aggregate demand policies.	Friedman
1970s - 2008 (Great Recession)	Instability has been purged from capitalist dynamics; minimally regulated financial markets work well.	Financial and housing market crash of 2008.	Debt-fuelled financial and housing bubbles can co-exist with low and stable inflation, and will destabilize an economy in the absence of appropriate regulations.	Minsky
2008 - 2019 (Austerity and Brexit)	Austerity to keep government debt under control; Macro Prudential regulation as policy for financial stability	?	?	?

Source: adapted from The Economy (Unit 17)



Central Bank and Money Creation



What next?

- Brexit shock: real test for the current monetary policy framework and banking system
- Monetary policy committee has announced an increase in interest rates (7 Feb 2019)
- Problems in the banking system amplified the negative effects of the 2008 financial crisis, is the current system ready for a new crisis?

