The life and times of an investment bank economist

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RBS

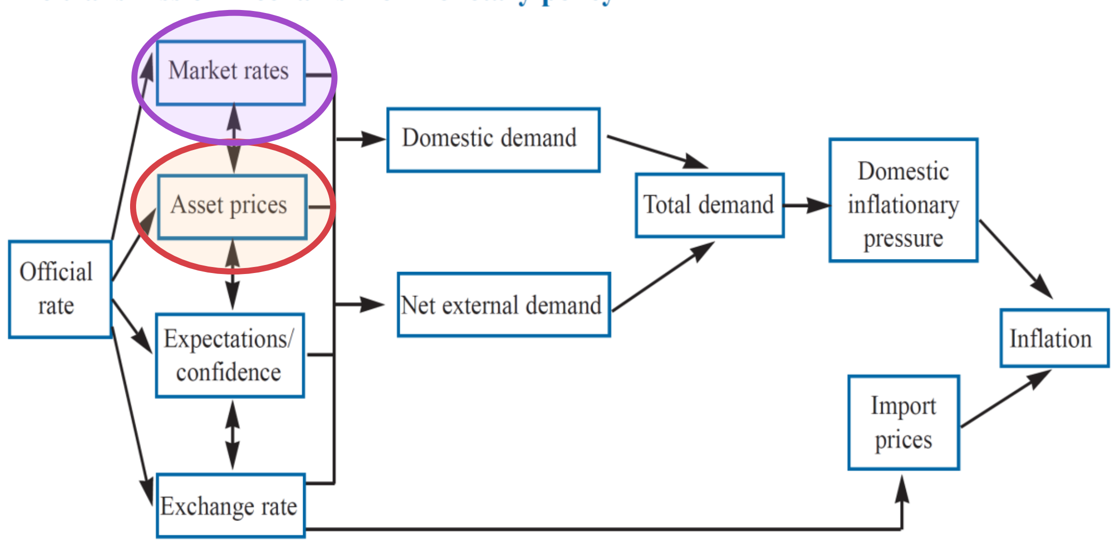
Part 1 : The art of central bank watching

Central bank watching

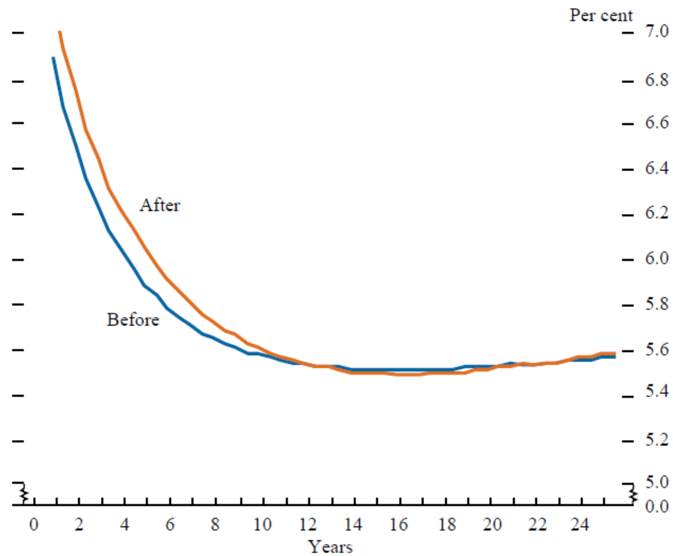
What happens when 1 or 2 people try to shadow 100-200....

- Central bank policy decisions influence a broad range of asset prices (bonds, equities, currencies, etc)
- So investors in those assets would like to be able to predict what central banks will do

The transmission mechanism of monetary policy



Yield curve: 25 basis point increase in interest rates on 4 June 1998



Central bank watching

What happens when 1 or 2 people try to shadow 100-200....

- In theory, the conduct of monetary policy is straightforward
  - Policy follows a simple rule
  - Agents are well informed about data, outlook and policy rule

- In practice, life is more complicated
  - Reaction function is complex and evolves through time
  - Information set is large
  - Central banks are not fully transparent
    - i.e., Bank of England does not update market on its assessment of economy or view of the economy in response to news

- Creates a demand for specialists who ‘watch’ central banks and forecast decisions
  - Sell side: servicing internal and many external clients
  - Buy side: servicing internal clients in that institution

The life of a central bank watcher

Observe: new data, CB communication, economic research, policy decision, etc.,

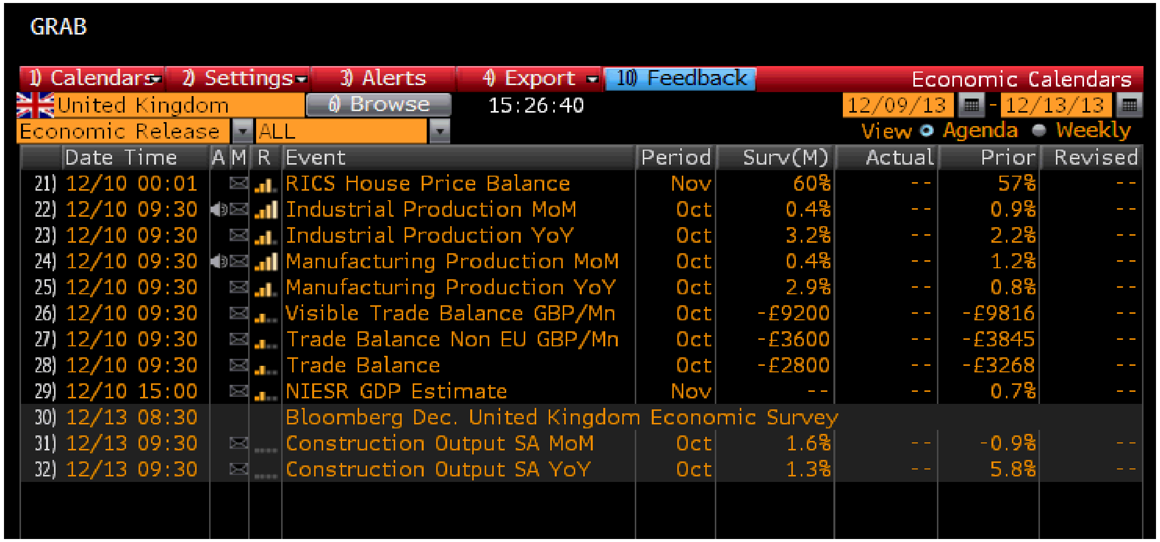
Think: Does new observation challenge ‘*view*’? Revise view as appropriate

Publish: Construct and distribute new view in written ‘research’ reports to clients;

Publicise: Discuss new view with clients (incl. face to face trips) and media

Plenty to watch

- **Plenty of CB relevant data**



GRAB

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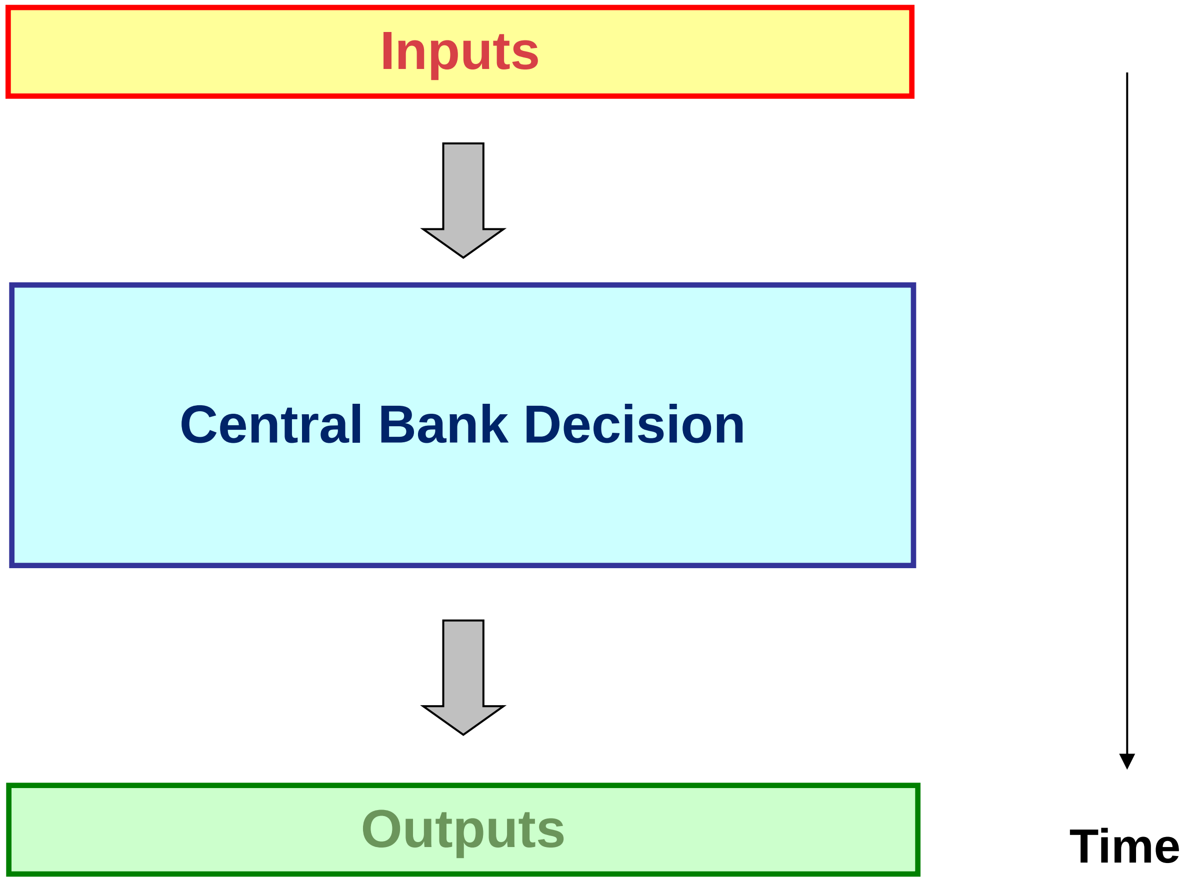
United Kingdom | 6) Browse | 15:26:40 | 12/09/13 - 12/13/13

Economic Release | ALL | View Agenda Weekly

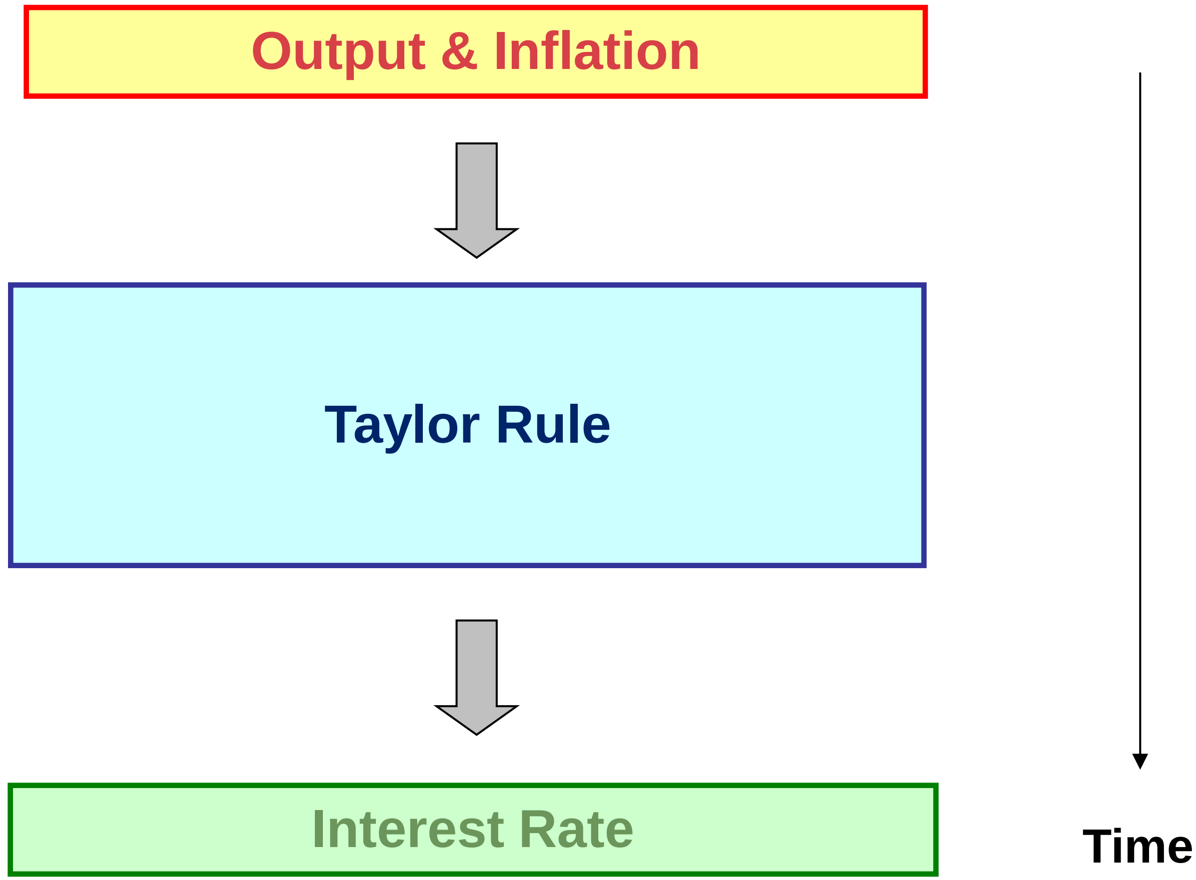
	Date Time	A	M	R	Event	Period	Surv(M)	Actual	Prior	Revised
21)	12/10 00:01				RICS House Price Balance	Nov	60%	--	57%	--
22)	12/10 09:30				Industrial Production MoM	Oct	0.4%	--	0.9%	--
23)	12/10 09:30				Industrial Production YoY	Oct	3.2%	--	2.2%	--
24)	12/10 09:30				Manufacturing Production MoM	Oct	0.4%	--	1.2%	--
25)	12/10 09:30				Manufacturing Production YoY	Oct	2.9%	--	0.8%	--
26)	12/10 09:30				Visible Trade Balance GBP/Mn	Oct	-£9200	--	-£9816	--
27)	12/10 09:30				Trade Balance Non EU GBP/Mn	Oct	-£3600	--	-£3845	--
28)	12/10 09:30				Trade Balance	Oct	-£2800	--	-£3268	--
29)	12/10 15:00				NIESR GDP Estimate	Nov	--	--	0.7%	--
30)	12/13 08:30				Bloomberg Dec. United Kingdom Economic Survey					
31)	12/13 09:30				Construction Output SA MoM	Oct	1.6%	--	-0.9%	--
32)	12/13 09:30				Construction Output SA YoY	Oct	1.3%	--	5.8%	--

- **Plenty of CB communication**

Central bank watching



e.g., Monetary Policy … in theory



No need for a central bank watcher here !

e.g., Monetary Policy … in practice

Much richer and noisier data set

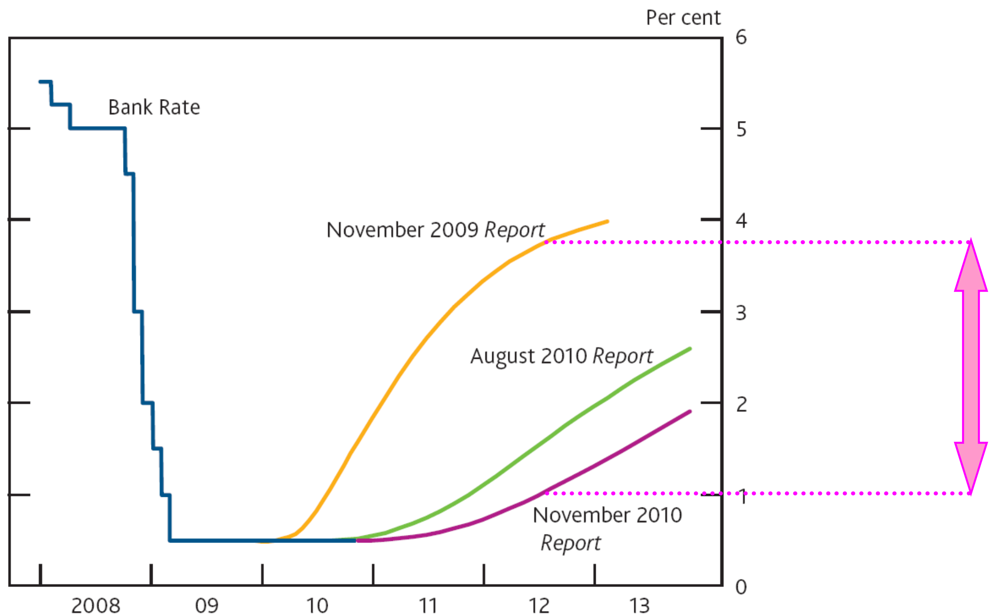
Complex decision process

Rates, Asset purchases, Signals

Time

e.g., Monetary Policy … in practice

Chart 1.1 Bank Rate and forward market interest rates(a)

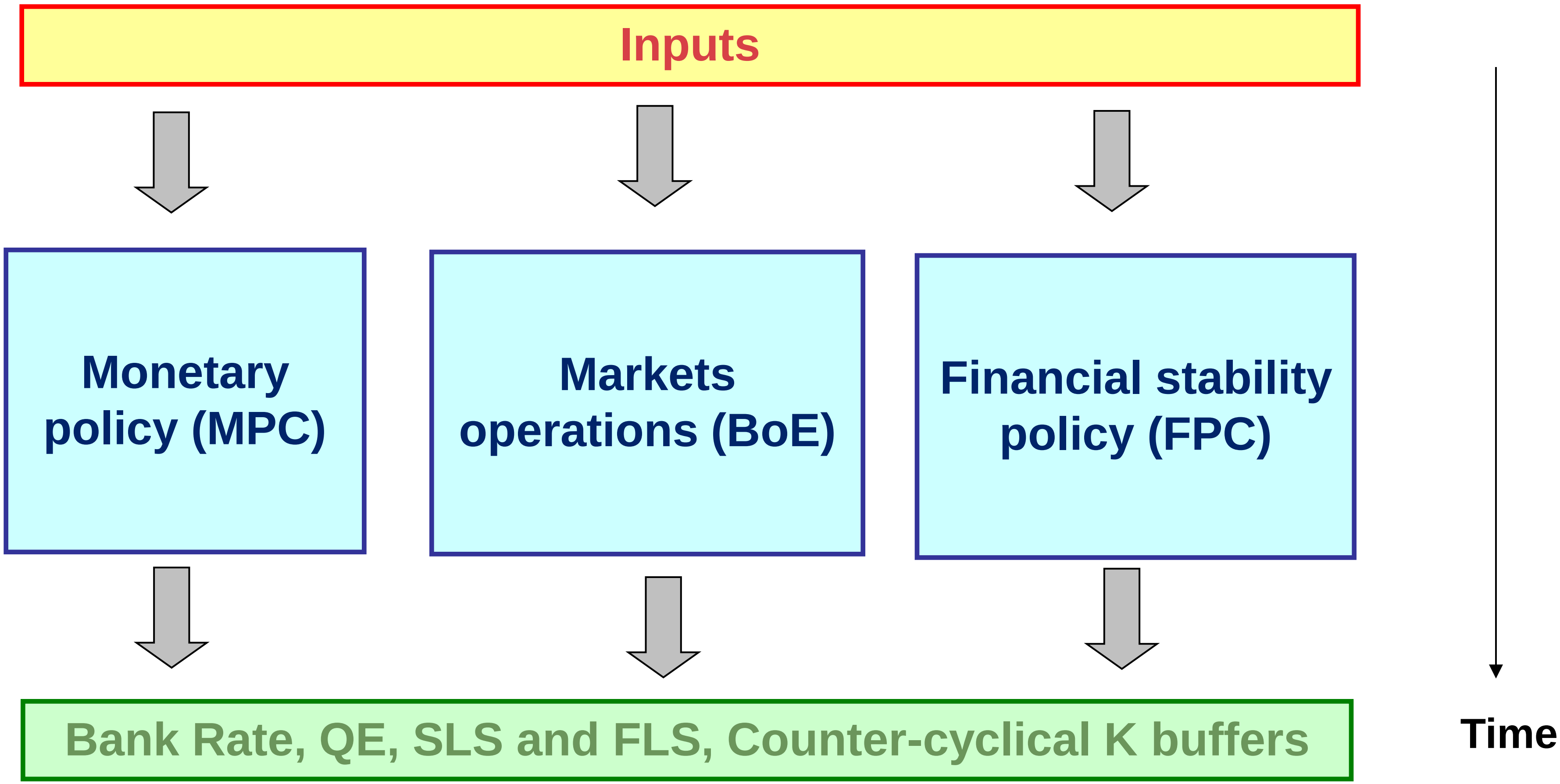


Sources: Bank of England and Bloomberg.

(a) The November 2009, August 2010 and November 2010 curves are estimated using overnight index swap (OIS) rates in the fifteen working days to 4 November 2009, 4 August 2010 and 3 November 2010 respectively.

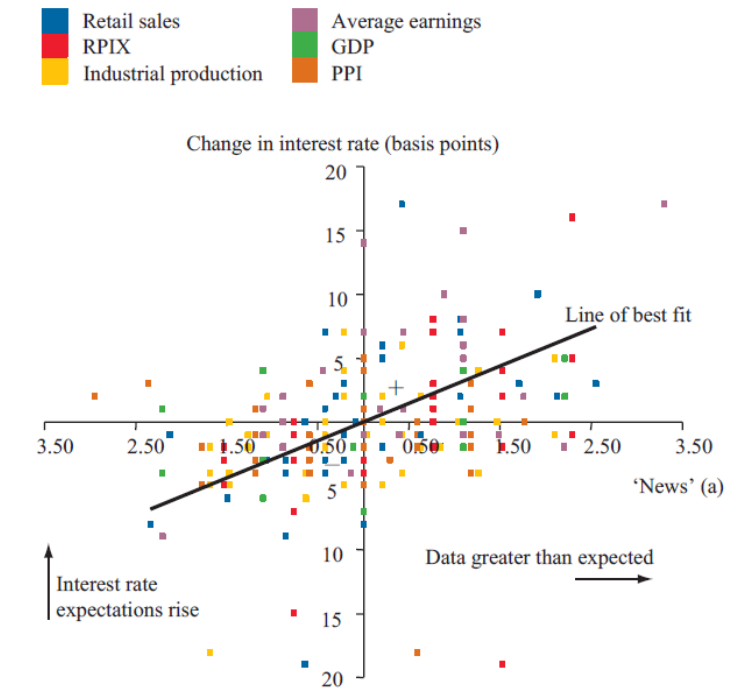
- **Not just about calling the decision at the next policy meeting**
- **It is about calling the future path of policy**
- **And that path can shift a lot**

Central bank watching – Multiple actors, Multiple instruments



Markets are trying to central bank watch in real time…

Effect of data surprises on interest rate expectations: nearest short sterling contract



(a) Actual minus expectation, divided by standard deviation of past forecast errors.

$$\Delta i^e = \alpha + \beta S$$

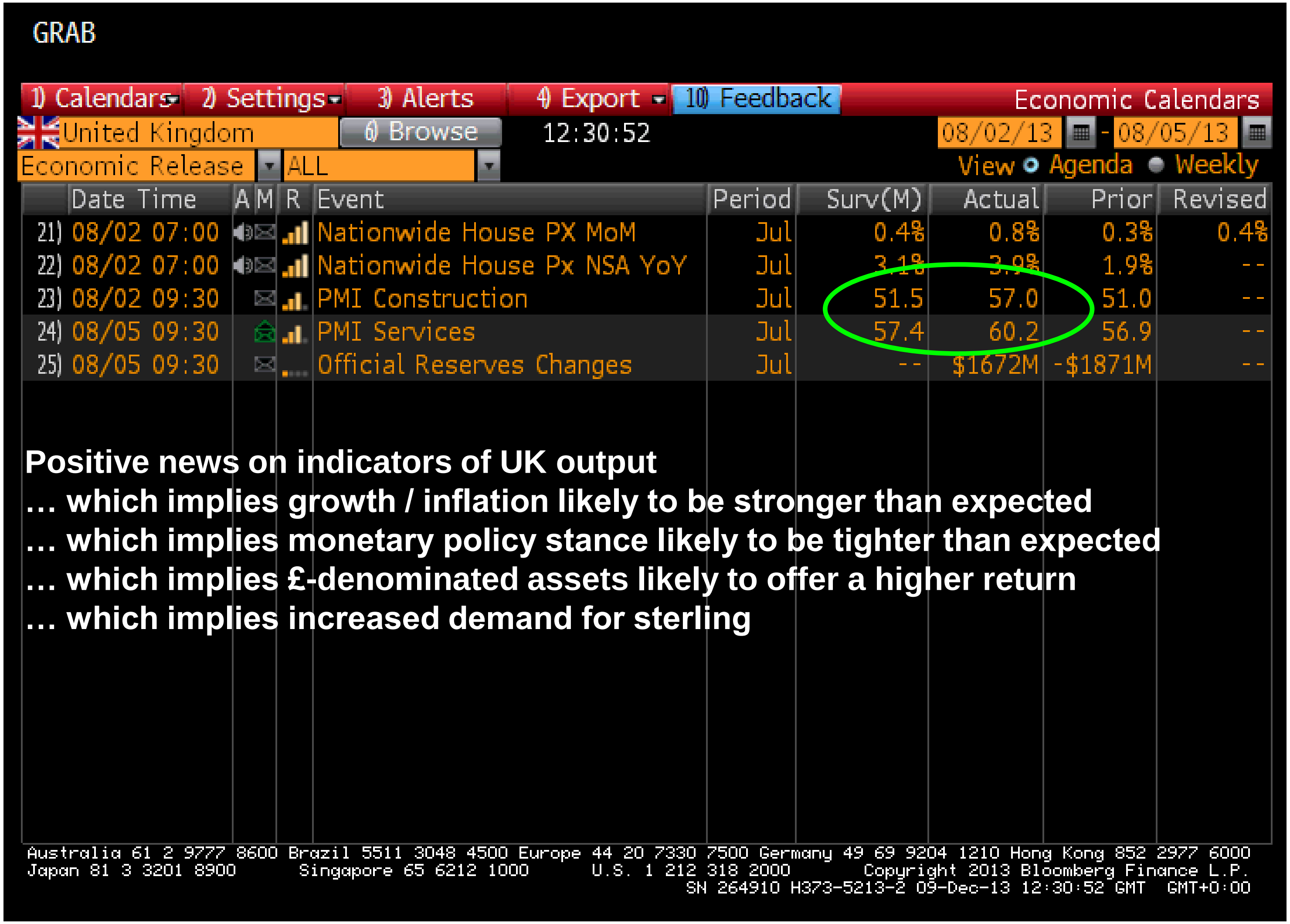
Regression results—nearest short sterling futures contract

	Slope coefficient, β	Significance level of: β	Constant, α
Average earnings	0.030	1%	5%
Retail sales	0.027	1%	n.s.
RPIX	0.020	1%	n.s.
US CPI	0.019	1%	n.s.
Industrial production	0.017	1%	n.s.
US NFP	0.015	5%	n.s.
GDP	0.009	5%	n.s.
Unemployment	0.004	n.s.	n.s.
PPI	-0.002	n.s.	n.s.

Note: n.s. = not significant.

- **Monetary policy responds to evolving state of the economy**
- **Asset prices should respond instantaneously to 'news' in the data (surprise)**
- **Immediate payoff from accurately forecasting 'data surprises'**
- **Smaller payoff from accurately forecasting eventual decision**

Data surprises



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United Kingdom 6) Browse 12:30:52 08/02/13 - 08/05/13

Economic Release ALL View Agenda Weekly

	Date Time	A M	R	Event	Period	Surv(M)	Actual	Prior	Revised
21)	08/02 07:00			Nationwide House PX MoM	Jul	0.4%	0.8%	0.3%	0.4%
22)	08/02 07:00			Nationwide House Px NSA YoY	Jul	3.1%	3.9%	1.9%	--
23)	08/02 09:30			PMI Construction	Jul	51.5	57.0	51.0	--
24)	08/05 09:30			PMI Services	Jul	57.4	60.2	56.9	--
25)	08/05 09:30			Official Reserves Changes	Jul	--	$1672M	-$1871M	--

Positive news on indicators of UK output
… which implies growth / inflation likely to be stronger than expected
… which implies monetary policy stance likely to be tighter than expected
… which implies £-denominated assets likely to offer a higher return
… which implies increased demand for sterling

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2013 Bloomberg Finance L.P.
SN 264910 H373-5213-2 09-Dec-13 12:30:52 GMT GMT+0:00

Cable - £/$ bilateral exchange rate

Cable - £/$ bilateral exchange rate

Data surprises

GRAB

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United States 6) Browse 12:31:30 08/02/13 - 12/16/13

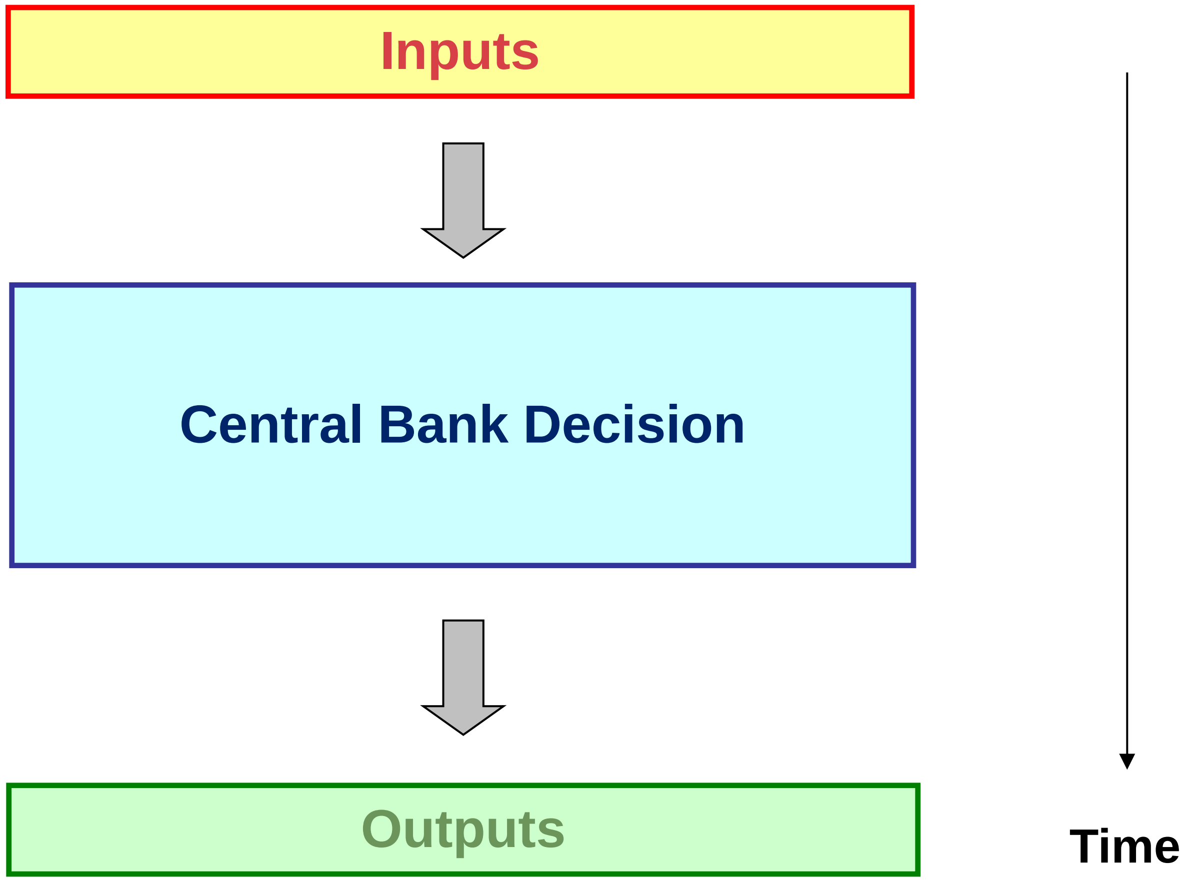
Economic Release ALL View Agenda Weekly

	Date Time	A	M	R	Event	Period	Surv(M)	Actual	Prior	Revised
21)	08/02 13:30				Personal Income and Spending Annual Revisions					
22)	08/02 13:30				Change in Nonfarm Payrolls	Jul	185K	162K	195K	172K
23)	08/02 13:30				Two-Month Payroll Net Revisi	Jul	--	-26K	--	--
24)	08/02 13:30				Change in Private Payrolls	Jul	195K	161K	202K	194K
25)	08/02 13:30				Change in Manufact. Payrolls	Jul	2K	6K	-6K	-7K
26)	08/02 13:30				Unemployment Rate	Jul	7.5%	7.4%	7.6%	--
27)	08/02 13:30				Average Hourly Earnings MoM	Jul	0.2%	-0.1%	0.4%	--
28)	08/02 13:30				Average Hourly Earnings YoY	Jul	2.2%	1.9%	2.2%	2.1%
29)	08/02 13:30				Average Weekly Hours All Empl	Jul	34.5	34.4	34.5	--
30)	08/02 13:30				Change in Household Employm	Jul	--	227	160	--
31)	08/02 13:30				Underemployment Rate	Jul	--	14.0%	14.3%	--
32)	08/02 13:30				Personal Income	Jun	0.4%	0.3%	0.5%	0.4%
33)	08/02 13:30				Personal Spending	Jun	0.5%	0.5%	0.3%	0.2%
34)	08/02 13:30				PCE Deflator MoM	Jun	0.4%	0.4%	0.1%	--

Negative news on key US indicators (of employment)
… which implies US monetary policy stance likely to be looser than expected
… which implies \$-denominated assets likely to offer a lower return
… which implies increased demand for sterling relative to dollar

Central bank watching

A number of roles ... scope for specialism



Central bank watching

A number of roles ... scope for specialism

Inputs

High frequency data watcher
hunts down unusual leading indicators

Macro forecaster/commentator
good model building skills / economic intuition

Short-term

Medium-term

Code breaker
deciphers central bank communication

Policy forecaster/commentator
understands reaction function and policy levers

Outputs

Part 2 : Issues

Does austerity hurt and does QE work?

Austerity

Does fiscal consolidation hurt?

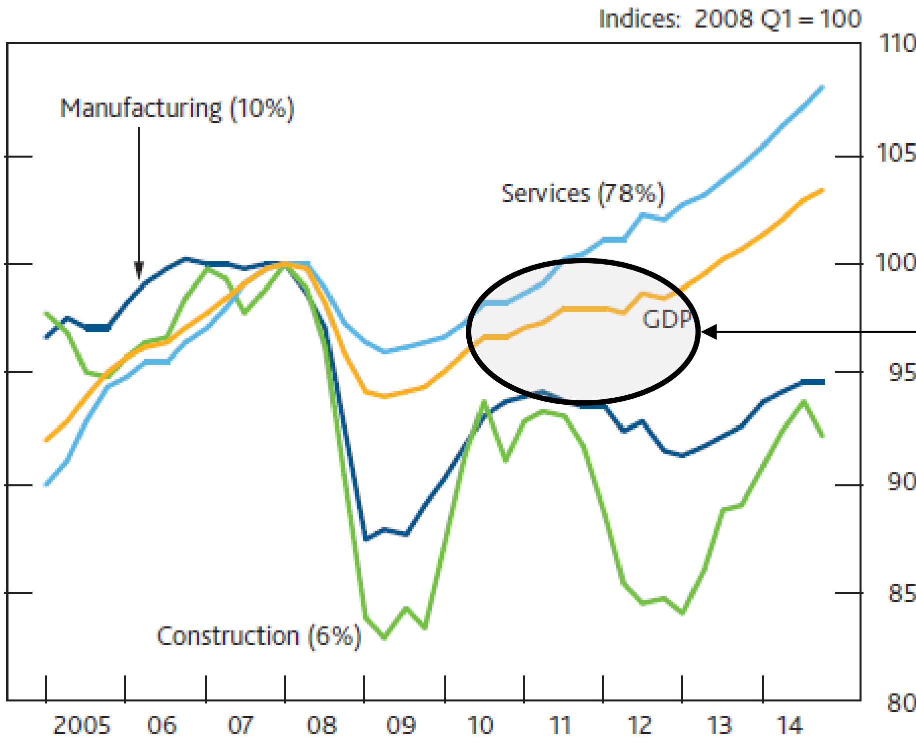
- **After an initial bounce-back in 2010 the recovery grinds to a near-halt in 2011 and 2012**
- **Around this time the government steps up the pace of fiscal consolidation**
- **Seems self evident that lower government spending and/or higher taxes will depress demand …..**

Austerity

Anaemic second phase of recovery from the crash coincides with consolidation

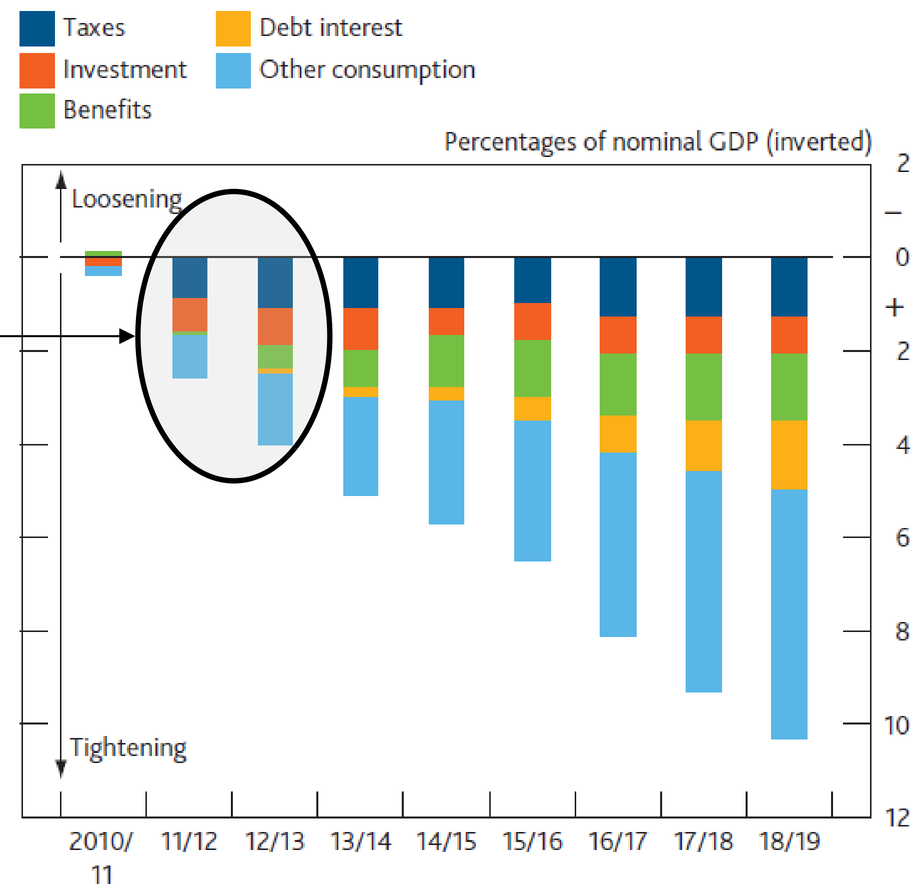
The UK's recovery

The level of GDP



Fiscal consolidation

By source



Austerity

Semantics

- **Economists usually describe fiscal policy during this period as being *tight***
  - **i.e., the net effect of fiscal policy on aggregate demand is negative**
- **However, the government is running a substantial deficit on the current budget and is expected to continue to do so for years to come**
  - **i.e., the government is injecting more money into the economy via transfers, procurement and compensation that it is draining out via taxes**
- **Even when we strip out the estimated effect of the economic cycle (higher welfare spending and lower tax receipts) the current budget is still in deficit and is expected to remain so for years to come**
- **It is perhaps more accurate to say that with large headline and cyclically adjusted deficits that are set to close gradually over time:**
  - **fiscal policy is *less loose than it once was*; or perhaps**
  - **fiscal policy is *not loose enough***

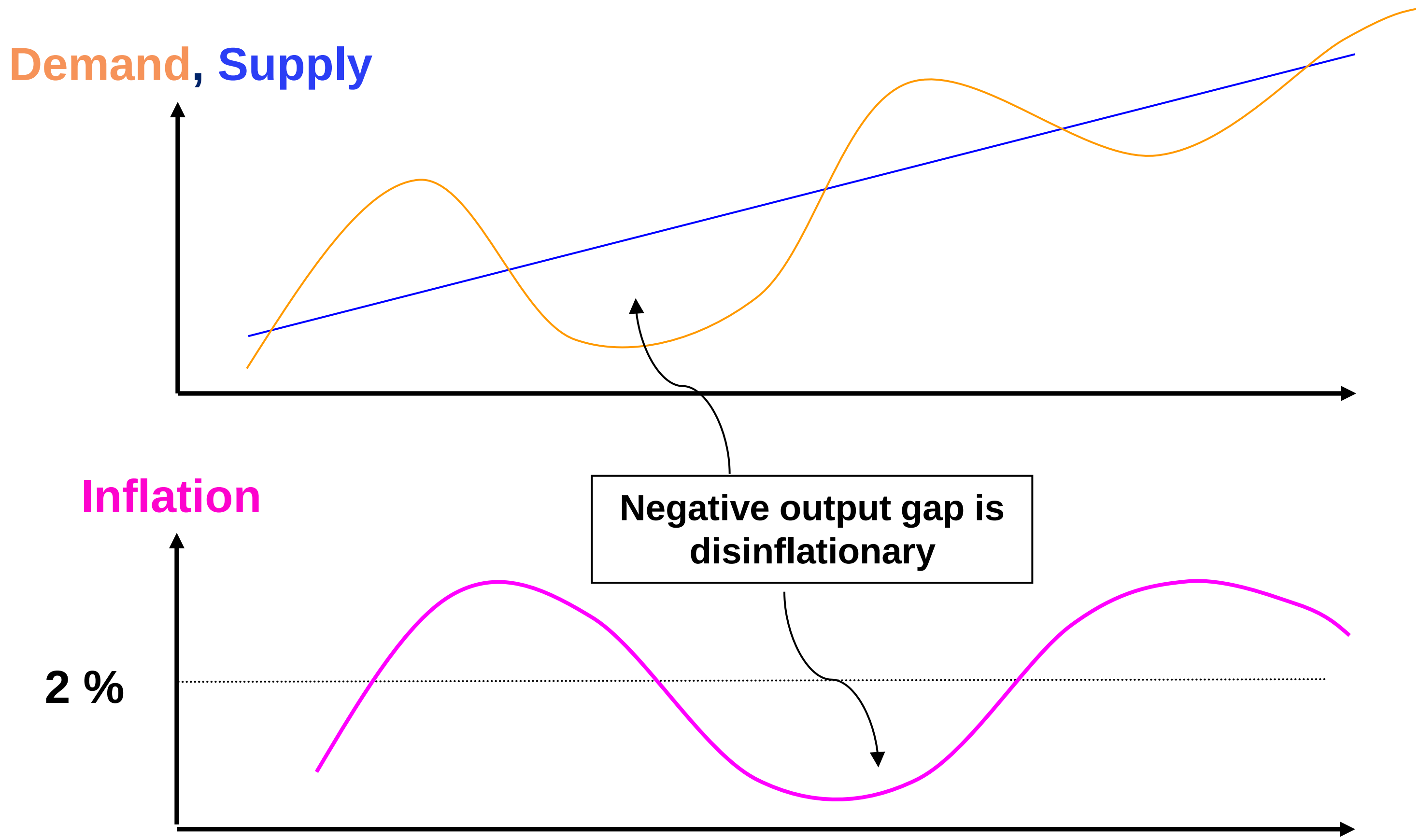
Austerity

Substance

- We do NOT typically think of fiscal policy having a persistent impact on output or employment
  - e.g., nobody claimed that the expansion in government spending in the early years of the last decade raised the level of output and employment…
- The reason why?
  - Monetary Policy
- If the central bank wants to anchor inflation it must lean against shifts in demand – including those that are driven by fiscal policy – to stabilise the output gap

Monetary policy in control

Leans against the gap between demand and supply



Austerity

Substance

- Tighter (less loose) fiscal policy implies looser (less tight) monetary policy and vice versa
- Lower interest rates will encourage some households or companies to spend
- Therefore fiscal policy does not impact the overall level of spending but
  - Fiscal policy does impact the level of interest rates; and
  - Fiscal policy does influence the mix of demand
- In normal times fiscal consolidation would simply lead to looser monetary policy

Was monetary policy still in control after 2009?

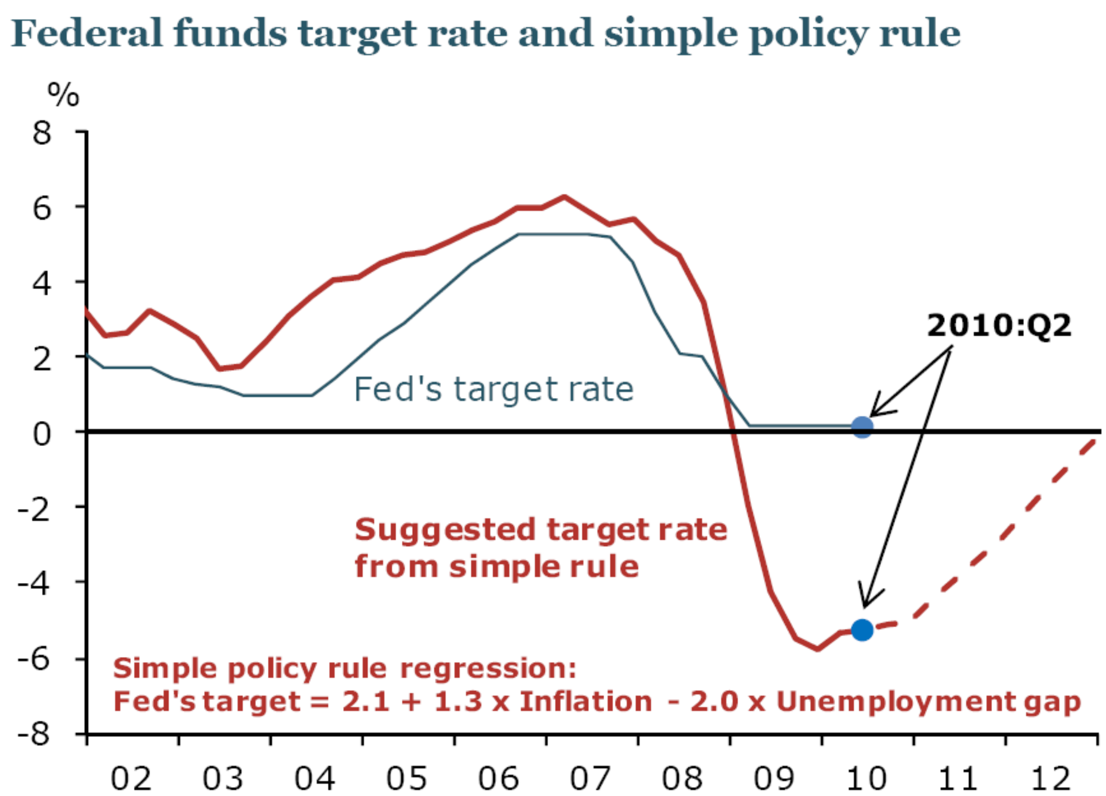
What happens when interest rates hit the floor?

Interest rates hit the lower bound in many economies including the UK at the start of the crisis

In an ideal world, central banks would have liked to loosen rates further

In this situation, tighter fiscal policy could have had an impact on aggregate demand

… because tighter fiscal policy was not offset by looser monetary policy



Was monetary policy still in control after 2009?

What happens when interest rates hit the floor?

However, the Bank of England was not idle at the lower bound .. it purchased hundreds of billions of government bonds through QE

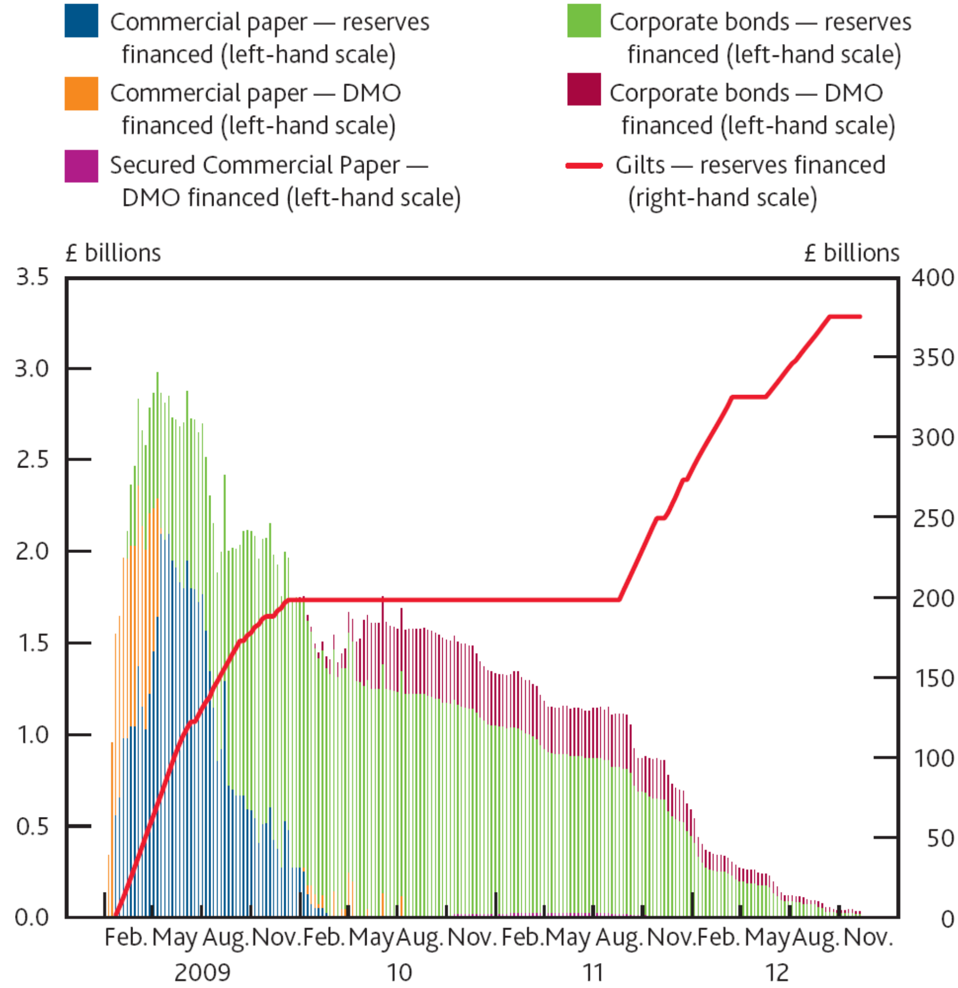
The question is: was QE an effective substitute for further rate cuts?

If yes, then the standard logic applies and fiscal policy did not depress demand

If no, then perhaps austerity did hurt

BoE asset purchases

Gilt purchases on right hand scale

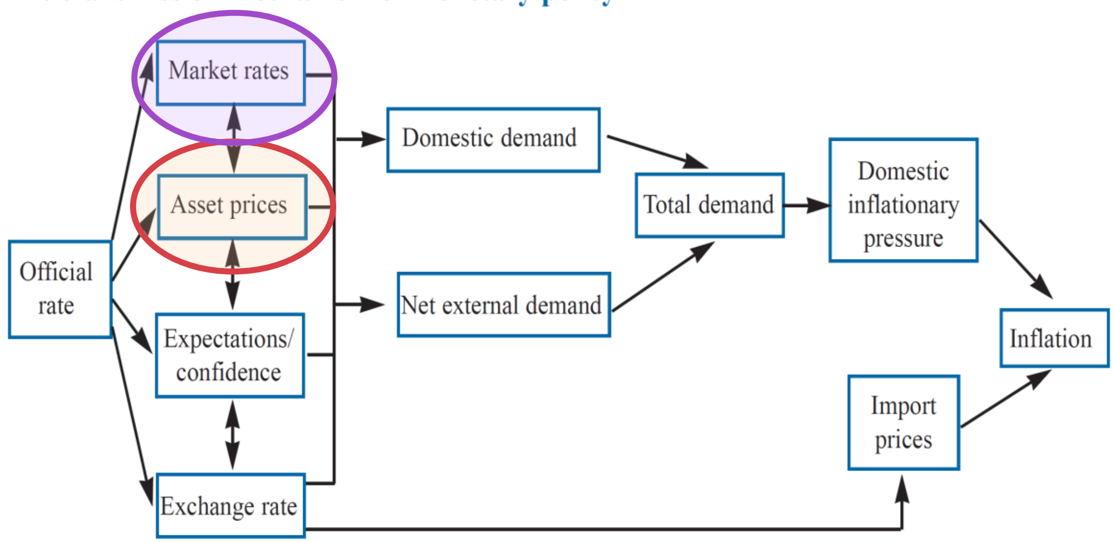


Does QE work

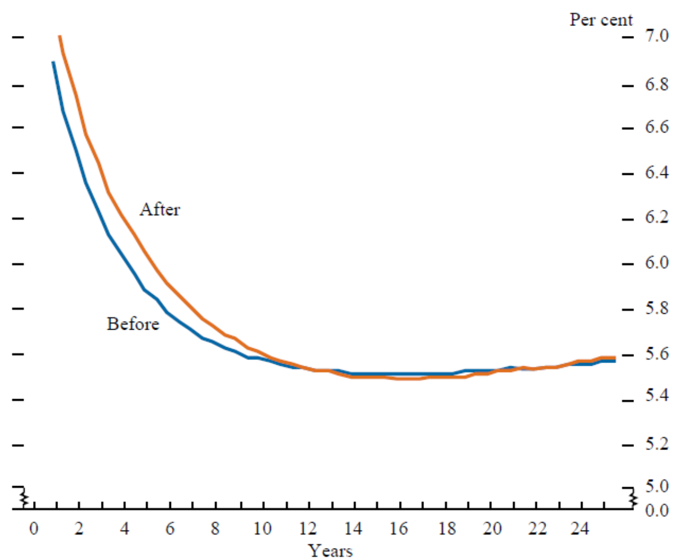
Impact in financial markets

- **From before:** a conventional rate cut can influence the price of a broad range of assets – including long-term government bonds
- I am going to argue that if QE can do likewise then it can serve as a crude substitute for rate cuts

The transmission mechanism of monetary policy



Yield curve: 25 basis point increase in interest rates on 4 June 1998



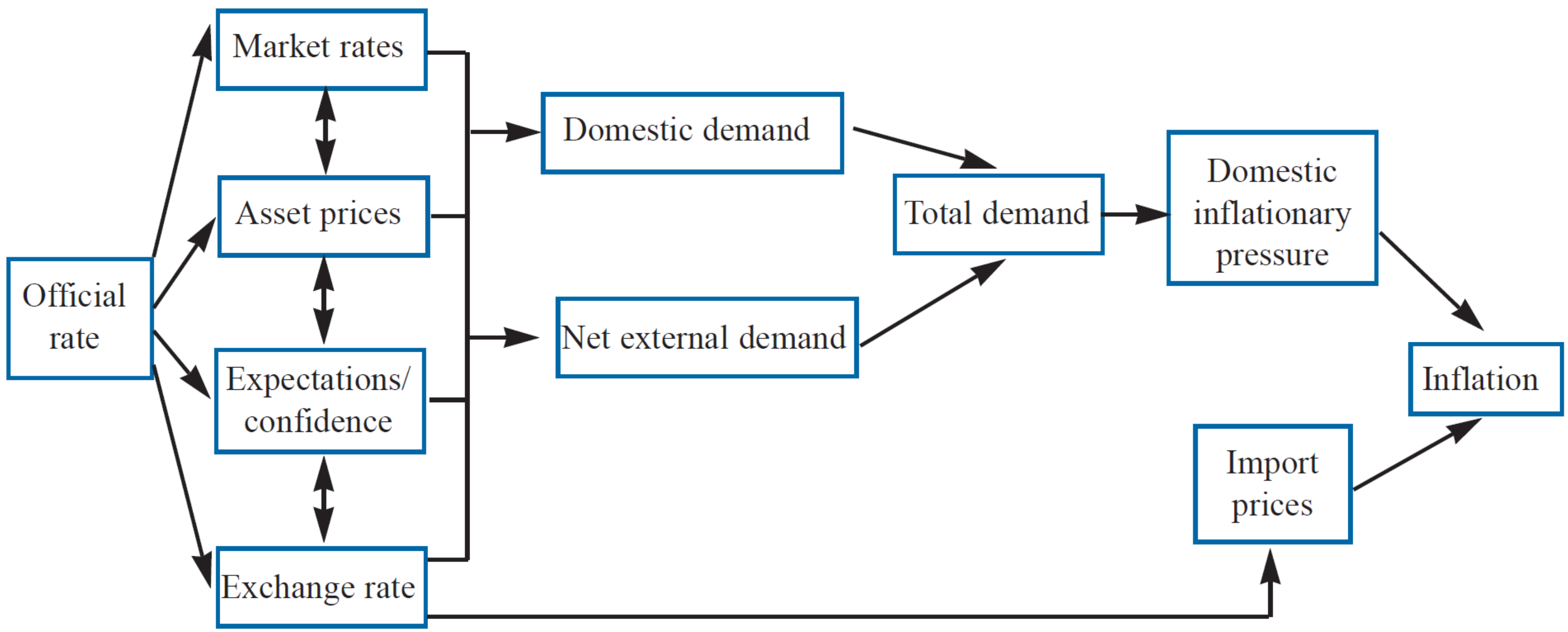
Does QE work

Impact in financial markets

- A cut in official interest rates lowers the cost of short-term secured funding for banks which will lower the cost of borrowing unsecured in the interbank market
  - QE has no effect here
- A cut in official interest rates that is expected to persist – because the central bank has signalled that it is more downbeat about the outlook – should lower interest rates at much longer horizons too
  - QE could also have a signalling effect by pushing back expectations of timing of first rate hike
  - QE could further approximate that signalling effect by raising the price of financial assets
- How? Investors hold cash and financial assets in their portfolios and the demand for each asset depends on relative returns.
  - Central bank buys assets and the private sector is left holding too much cash (and too few assets) at current asset prices
  - Hot potato effect: investors purchase assets driving up prices until portfolio is back in equilibrium (return on other assets is low enough)

Does QE work?

Approximating the transmission mechanism of a rate cut



- **Once QE moves market rates when we should expect to see a response of a broader set of assets and in particular the currency**
- **If interest rates fall and the currency depreciates we should expect to see the usual demand response and import price channel**
- **The standard critique of QE is that it cannot work because the economy did not recover … but that probably tells us that the BoE did not do enough; not that QE doesn't work**

Final thought

Inflation is the constraint

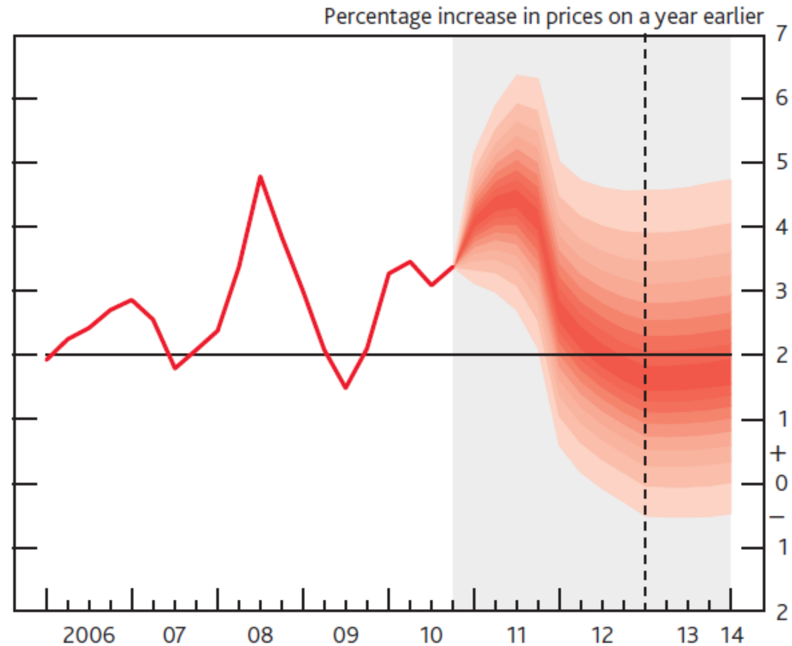
Even if QE does not work then it is still possible that austerity might not have depressed demand

The MPC might have raised Bank Rate if the government had not increased the pace of consolidation

Why? Although demand was weak, inflation was not, so there was a constraint on how much stimulus the MPC could provide via QE

Looser fiscal policy might have pushed the MPC over the edge…..

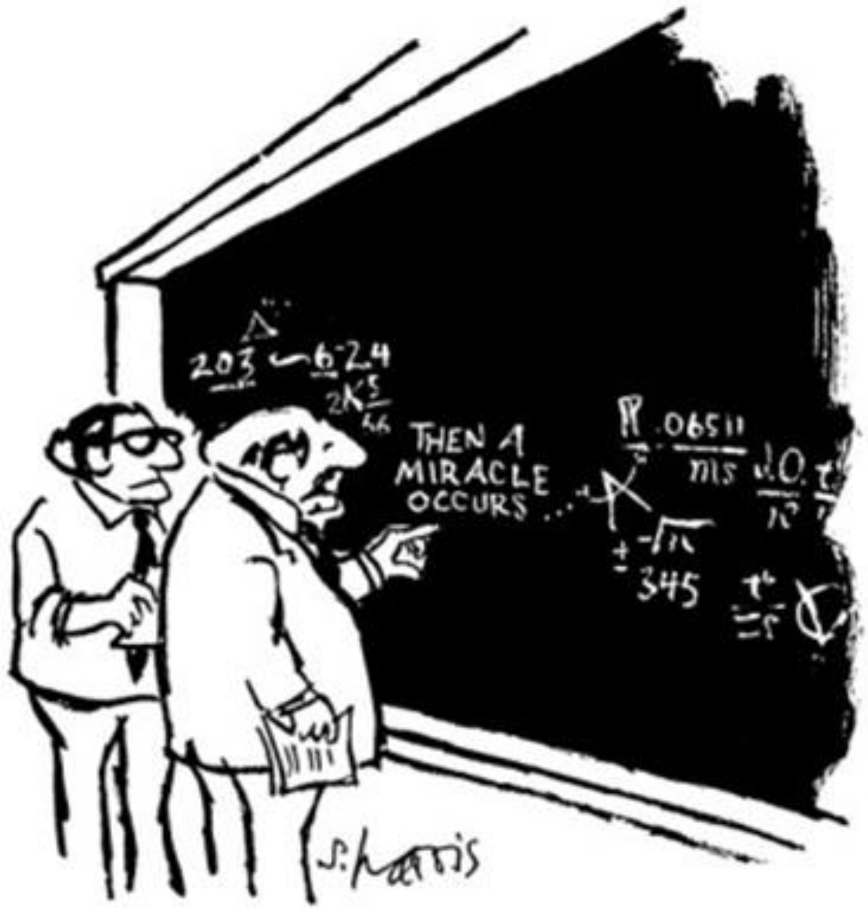
Chart 5.1 CPI inflation projection based on market interest rate expectations and £200 billion asset purchases



"For most members, recent developments implied that the risks to inflation in the medium term had probably shifted upwards. For some of those members, the decision this month was finely balanced. …. The publication of the Report [following month] would also give the Committee the opportunity to explain fully its assessment of the outlook and its policy decisions ….. For two members, the evidence suggested that the balance of risks was already sufficiently clear to warrant an immediate increase in Bank Rate."

JAN-2011 Minutes

Any questions?



"I think you should be more explicit here in step two."