

Lecture 3: Fine Tuning Out of Control

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Outline of Arguments

- Policy had been allowed to detach from golden fetters
- How to use policy?
- Constrained by large war debts, fixed-but-adjustable exchange rate regime, capital controls and financial repression
- Policy was undertaken under extreme uncertainty: data, parameters, economic responses
- Breakdown in estimated relationships and appreciation of the subtleties of economic policy making
- Ultimately led a reduction the ambition of the scale of policy.

The New Questions

- How does one interest rate or one choice on the deficit set the level of output in an economy of so many people and institutions?
- How do we set up relationships between the Treasury and the Bank of England, as well as in the postwar period with unions, industrialists and the financial sector?
- What theory do we have to guide us other than some view about reaching full employment?
- How do we measure, sample or understand the evolution of the economy as we go along?
- Metaphors: driving, piloting...all imply lags in evaluation, action and response
- Can we achieve the Bliss Point of low inflation and stable output growth?

- Engineer-economist suggested a 'trade-off' between unemployment and inflationary pressure
- The long UK dataset allowed 1861-1913 observations to 'predict' future sub-periods 1913-48 and 1948-57
- Makes prediction about spare capacity and wages pressure that might be useful to policy makers
- Looked statistically robust at home and abroad leading to menu of choice between inflation and output
- Non-linear and worked downwards as well as upwards
- Tend to use linear version and set against preference for best outcome.

Phillips Curve, 1958

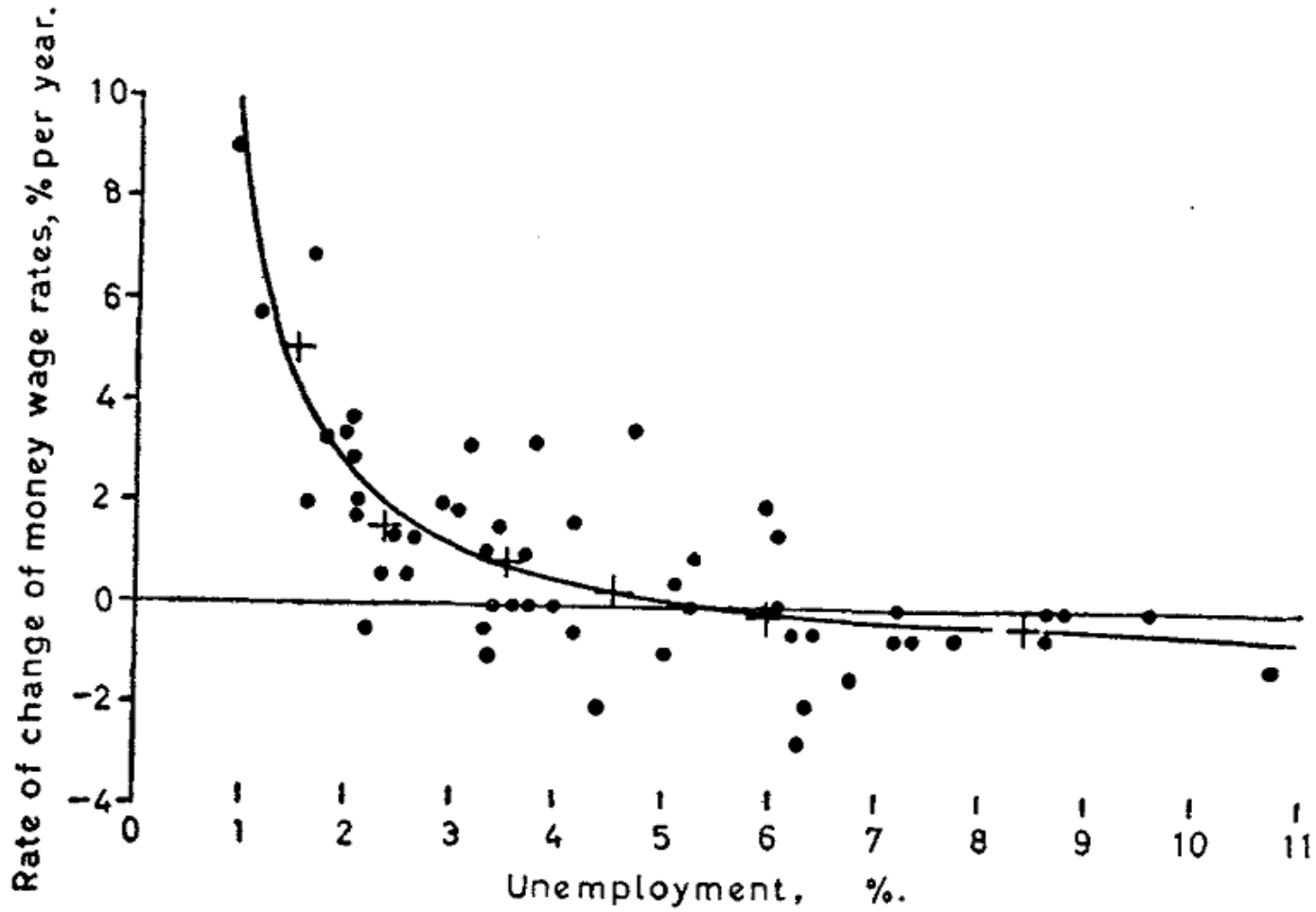
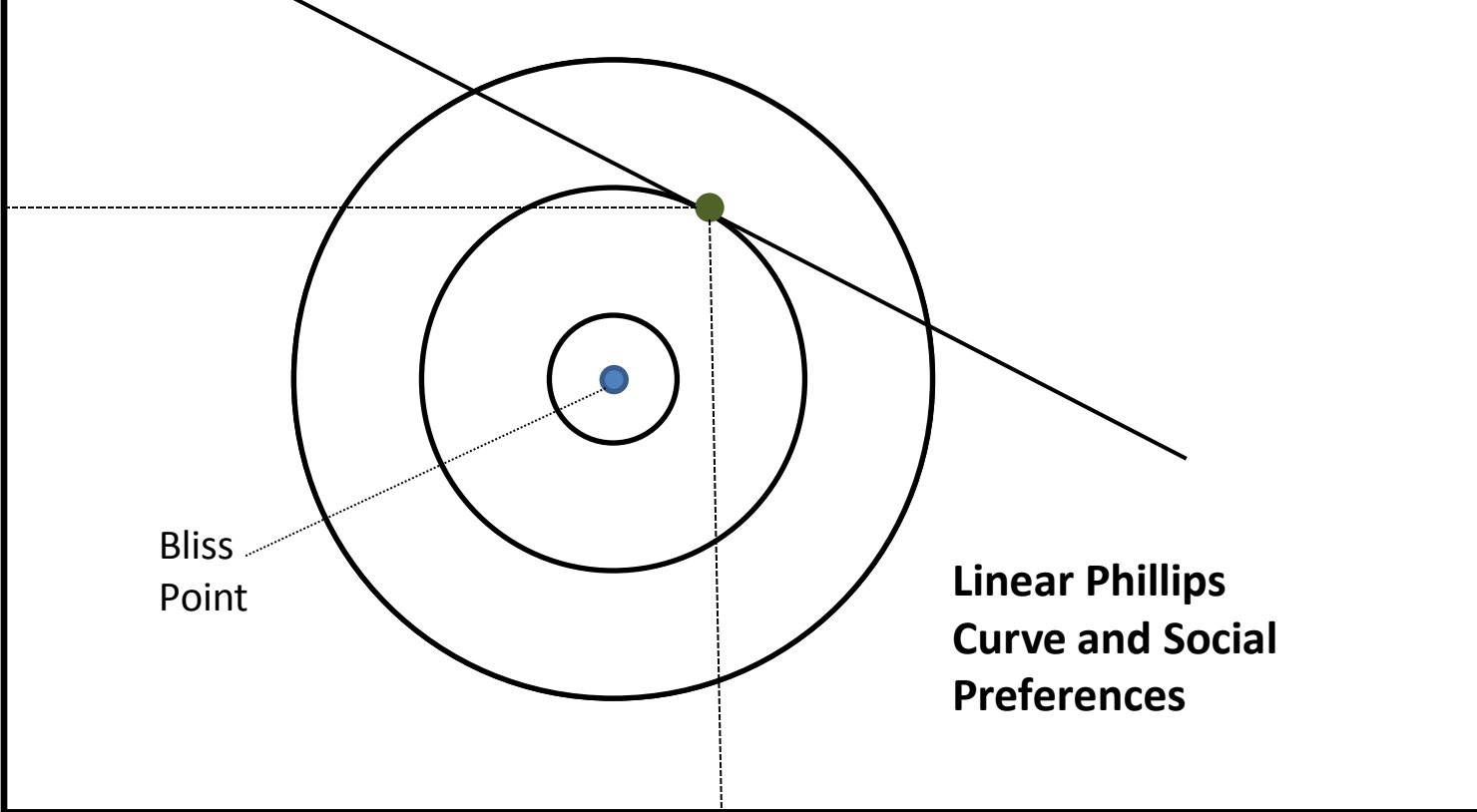


Fig.1.1861 - 1913

Inflation



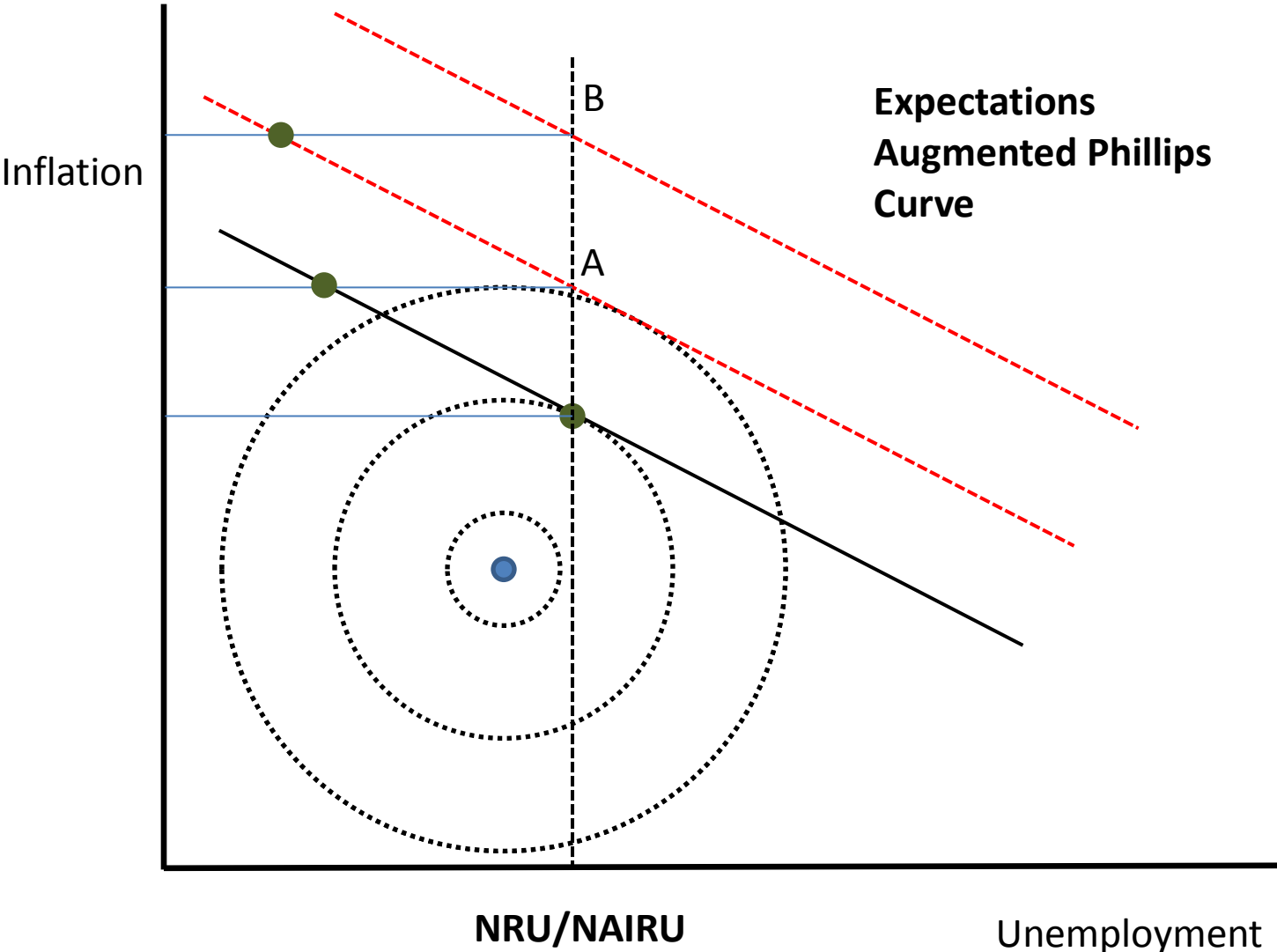
Bliss
Point

**Linear Phillips
Curve and Social
Preferences**

Unemployment

Phillips Curves and Curves

- Static Phillips Curve - within period relationship
- Accelerationist Phillips curve - output and change in inflation
- Expectations Augmented Phillips Curve - output incorporates expected inflation in an adaptive manner
- NAIRU - a level of unemployment at which inflation is stable
- Lucas Surprise Phillips curve - only unexpected inflation shocks impact on output/labour supply
- New Keynesian Phillips curve - inflation is a function of current and expected output gaps.



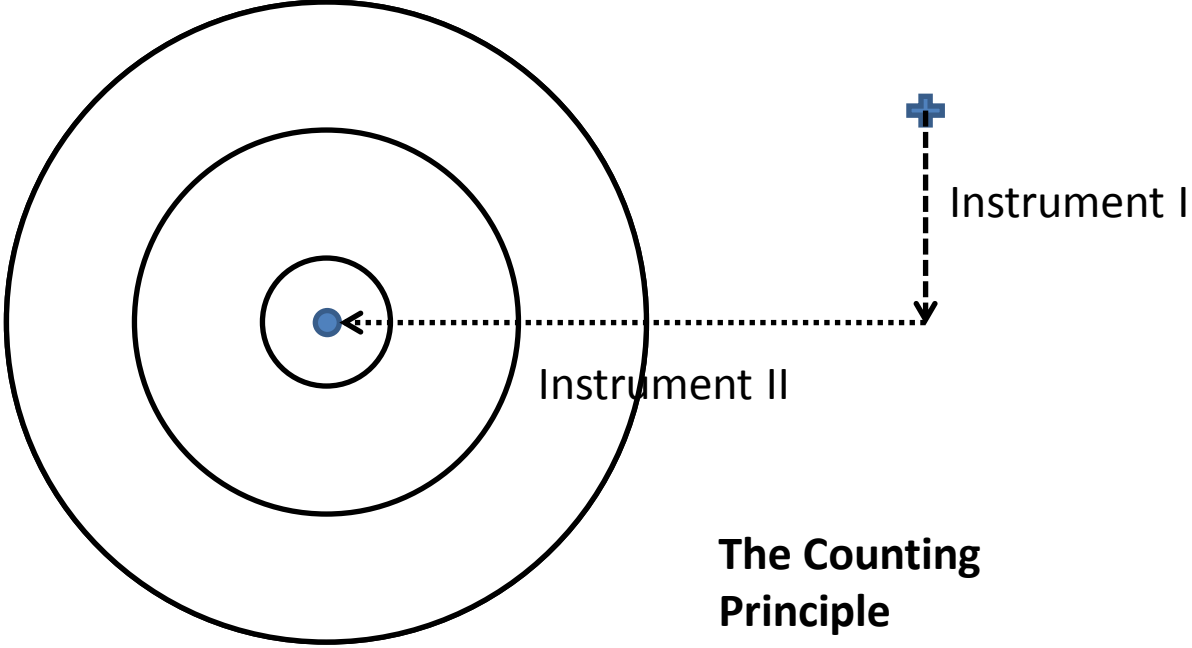
- Schulze: Inflation depends on expectations of future output
- Chatelain: Inflation depends on lagged output
- Clegg: A bit of both...

	Belief	PC	Backward	Forward	Hybrid	mean	st. dev.
			Rank	Rank	Rank		
Schulze	Forward	<i>Back</i>	1	3	2	2	1
Chatelain	Back	<i>Forward</i>	3	1	2	2	1
Clegg	Hybrid	<i>Hybrid</i>	2	2	1	1.7	0.6

Confronting Views and Outcomes

- Preferences of the policy maker qua society - typically over inflation and output
- Structure of the economy - metaphor of Phillips Curve
- Policy instrument could be determined by 'feedback parameters'
- With knowledge of model parameters in economy and view on shocks, could solve for 'optimal policy' or compare outcomes of various policies - choose least bad
- To hit the 'bliss point': require as many independent instruments as targets - the counting principle.

Inflation



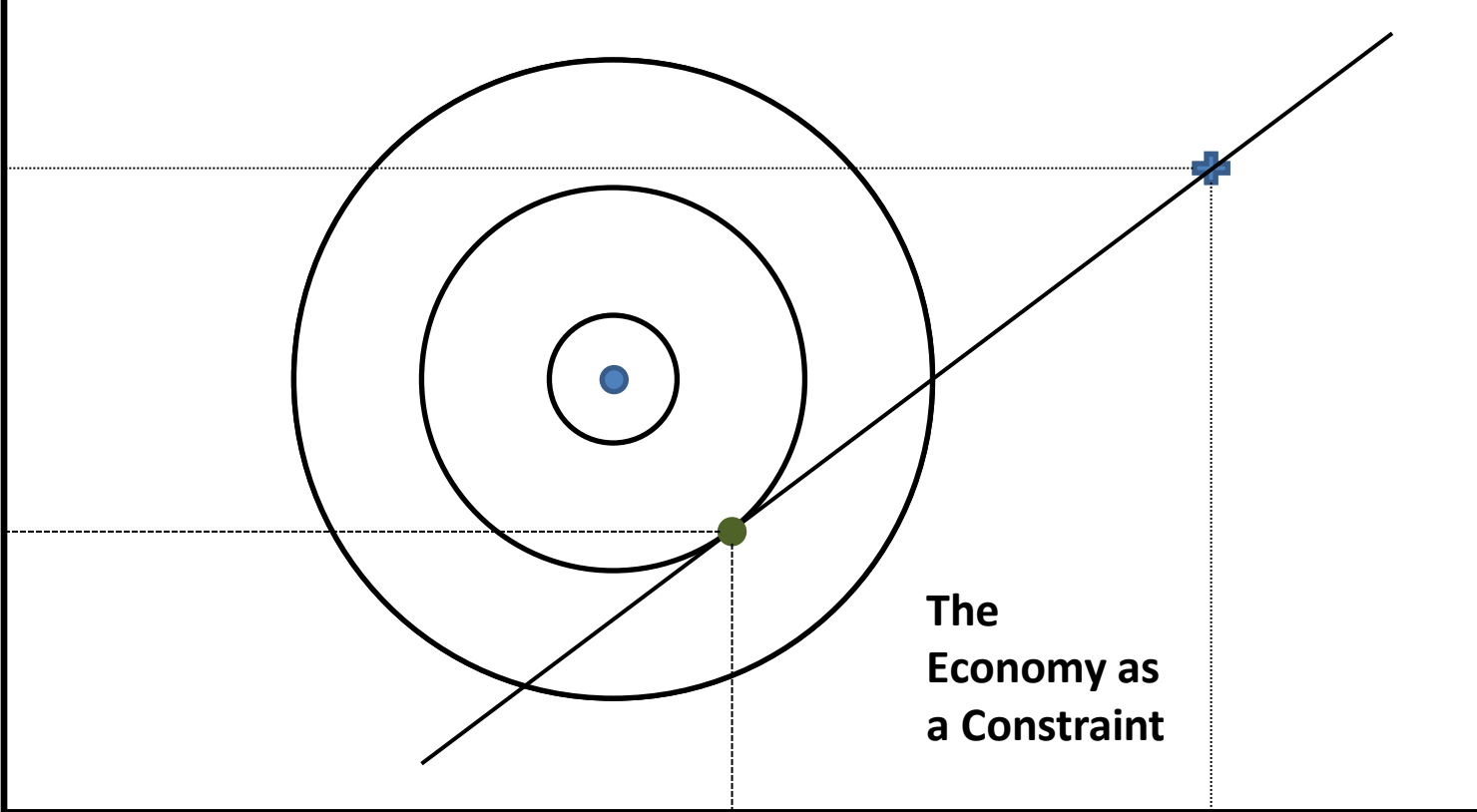
Instrument II

Instrument I

The Counting Principle

Output

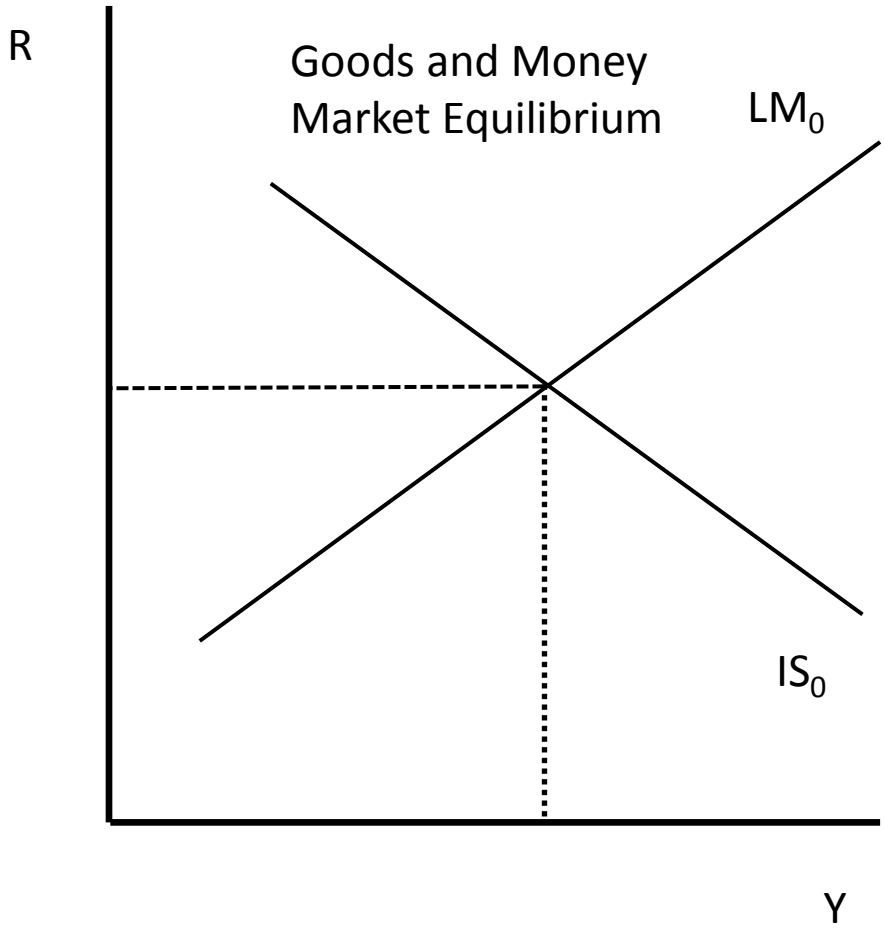
Inflation

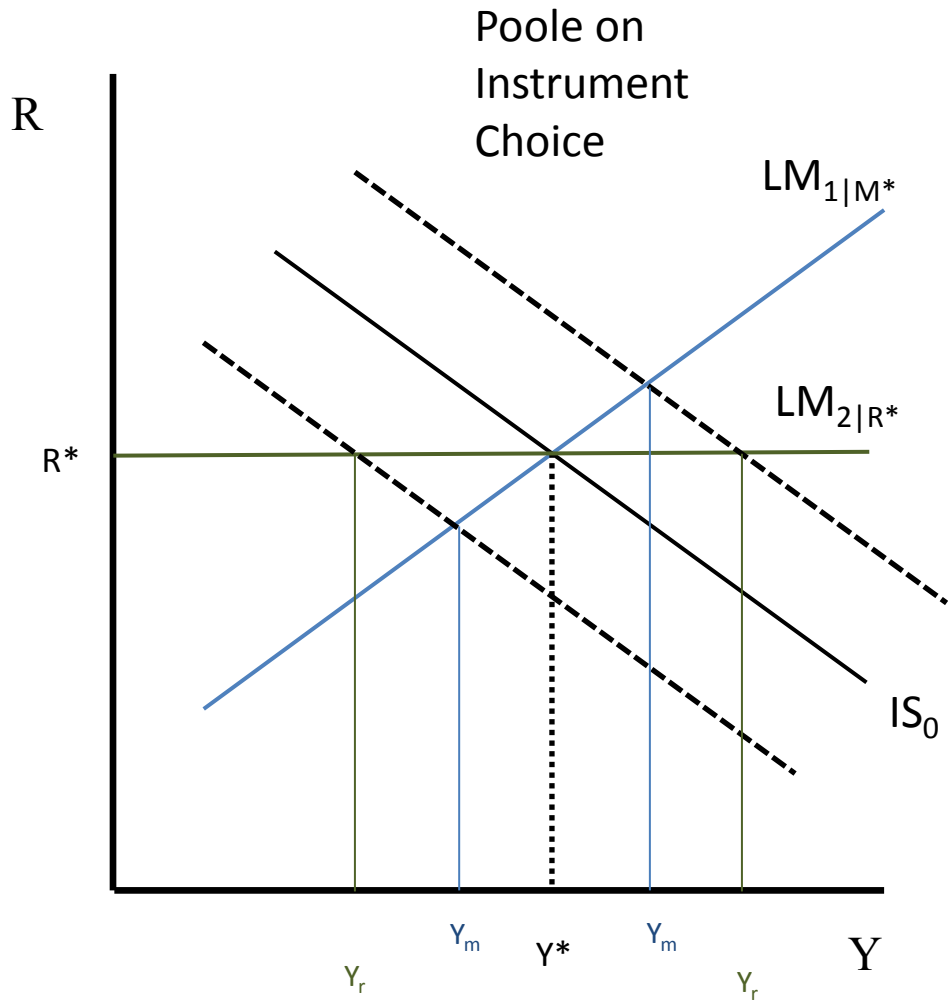


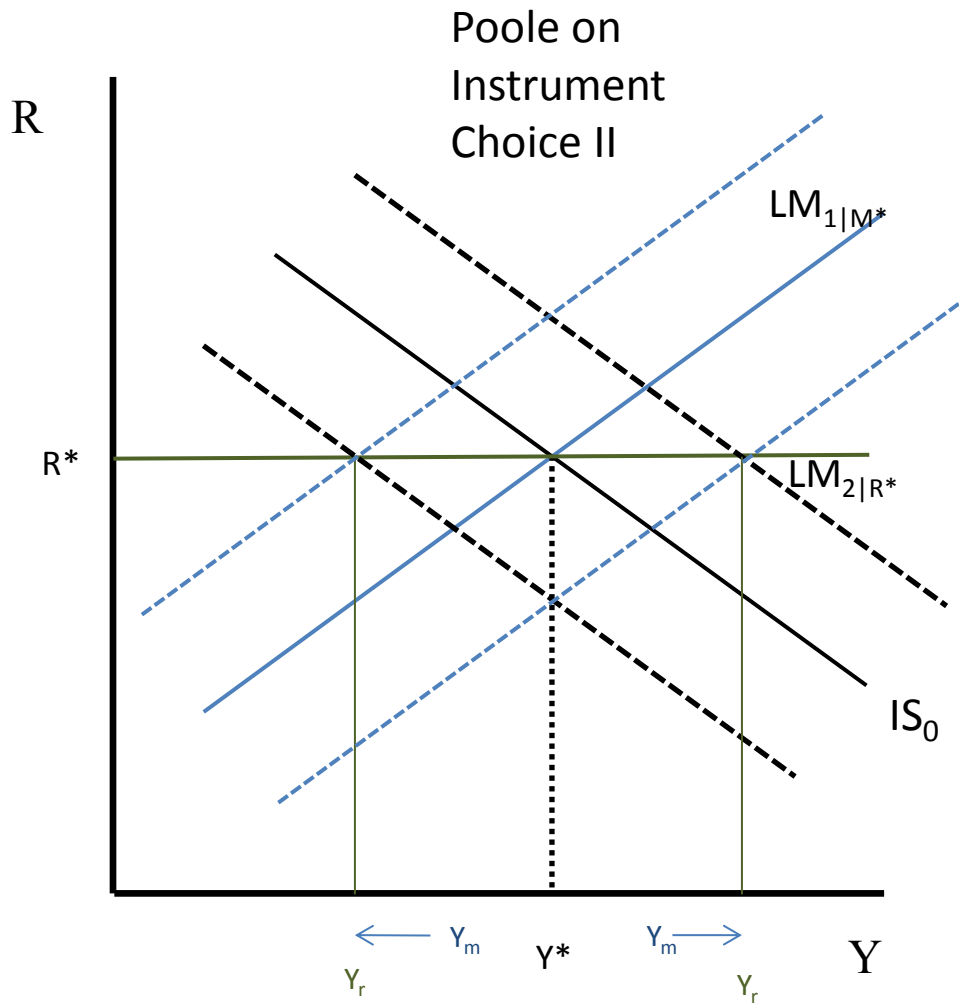
**The
Economy as
a Constraint**

Output

- How do we choose an instrument, when key economic relationships are not stable i.e. subject to stochastic shocks?
- Used IS-LM model but can be generalised to a question of instrument choice in any field:
 - (i) set the money stock and let expenditure shocks determine interest rates and output
 - (ii) set interest rates and let expenditure shocks
 - 'choose the method that induces least variance in our target variables'
 - But that variance depends on the parameters and relative size of shocks...







'the conditions for a common currency in Western Europe do not exist, and that, especially because of the lack of labour mobility, a system of flexible exchange rates would be more effective in promoting balance of payments equilibrium and internal stability'

James Meade 1961

- Mundell argues that if objectives are not independent - they are sufficiently highly correlated - then only one instrument may be required
- Highly synchronised economies can form a single monetary union.

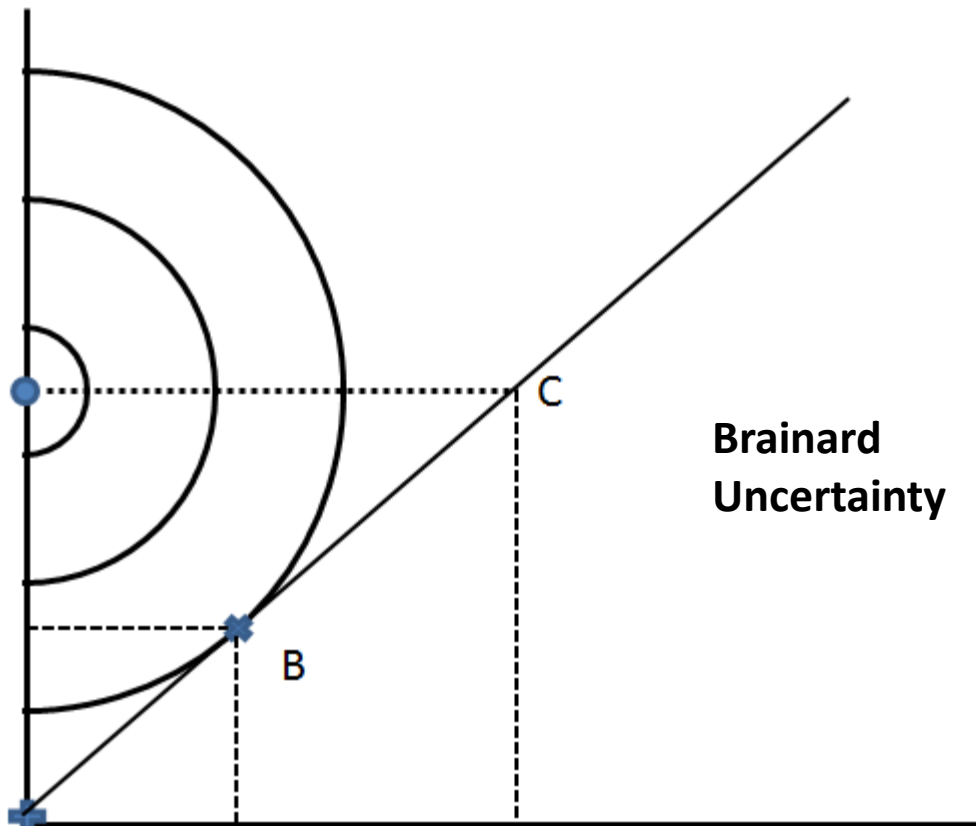
- Empirical analysis prior to formation of EMU was not terribly conclusive
- Are the 'estimated' synchronised shocks ones that monetary policy can offset?
- What role did fiscal policy play in masking idiosyncratic shocks?
- How synchronised do shocks have to be to make a monetary union viable?
- Will individual states respond in the same manner to a common interest rate shock?
- Shocks do not imply chronic payments problems, they imply temporary adjustment issues.

Friedman's Programme for Monetary Stability

- Economy has exogenous mean and variance - perhaps driven by productivity
- This is primitive and independent of monetary (and fiscal) policy
- If we add policy, which is a function of growth, to the mix, output will have the properties of both the exogenous part and the policy part
- Output will thus tend to be more volatile and if money cannot affect output permanently then we loose out
- Unless policy is sufficiently negatively correlated with output.

- Imagine we care about a target and the uncertainty - variance - around it
- We would be willing to accept some miss in inflation if that also involved a lower variance
- If the impact of policy response was uncertain and it induced volatility such a trade-off may exist
- We will choose to miss a target rather than risk volatility
- Note this is a point solely about the extra variance induced in a system by making policy responsive
- So even if we decide to act to do so cautiously and gradually.

Inflation



**Brainard
Uncertainty**

A

Inflation variance

Concluding Remarks

- Output-Inflation trade-offs lie at the heart of economic discourse
- But we cannot agree on the form - one answer is that they keep changing every time we change policy
- Being flexible about economic structures and instrument choice, when we do not fully understand their properties might make a lot of sense
- But economic instruments cannot be precisely calibrated
- Are as likely to induce volatility as reduce it
- So use them sparingly - perhaps the gold standard 'rule' was not so bad?