
MONETARY POLICY IN THE UK

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Presentation

- 1. The UK Monetary Policy Framework**
- 2. The Economics of the UK Monetary Policy**
- 3. Assessment of the UK Monetary Policy**
- 4. Summary and Conclusions**

Presentation

1. **The UK Monetary Policy Framework**
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The UK Monetary Policy Framework

- In September 1992 UK is forced out of the ERM;
- 1992 – 1997: Inflation Targeting is introduced, with following characteristics:
 - 1-4 percent inflation target;
 - regular meetings between the Chancellor and Governor of the Bank of England to decide the level of the rate of interest;
 - inflation report (1993);
 - publication of minutes (1995);
- Disagreements between Chancellor and Governor affected credibility.

The UK Monetary Policy Framework

- In May 1997 Bank of England becomes independent with operational responsibility given to the Monetary Policy Committee (MPC);
- Inflation Target: 2.5 percent with 1 percent range [Retail Price Index excluding mortgage interest payments (RPIX); changed to HICP at 2 percent with 1 percent range in October 2003];
- Inflation Target: it is symmetrical, i.e. deviations below target are treated in the same way as deviations above the target;

The UK Monetary Policy Framework

- MPC meets at least once per month to set the rate of interest (also six times a year to set research priorities);
- Objective: price stability; not an end in itself but to help government in its objectives that include growth and employment;
- Credibility attained through pre-commitment to the inflation target without government interference;
- Constrained discretion: neither pure discretion nor rules.

The UK Monetary Policy Framework

- Membership of MPC: Governor and two Deputy Governors, two Bank of England members (appointed by Governor in consultation with Chancellor), four external members (appointed by Chancellor), and one Treasury representative who attends and speaks but has no vote;
- Treasury representative sits at the MPC meetings; does it mean coordination of monetary and fiscal policies? It might, better than without!

The UK Monetary Policy Framework

■ Letter to the Chancellor:

If target is not met, then the Governor is required to write a letter to the Chancellor to explain:

- the reasons why inflation is far away from the target;
- the policy action to deal with it;
- the period in which inflation is expected to return to target;
- how this approach meets the Government's objectives for growth and employment.

The UK Monetary Policy Framework

- Second Letter: after three months of the first letter if inflation remains 1 percent above or below target;
- An open letter does not necessarily imply sign of failure;
- MPC is accountable to Parliament: scrutiny exercised by Treasury Committee and Lords select Committee.

The UK Monetary Policy Framework

- Government retains overall responsibility for monetary policy:
 - government responsible for designing the framework;
 - government sets the inflation target;
 - once the inflation target is set, it becomes primarily a technical issue as to what level of interest rates is appropriate to meet the target;
- The MPC is responsible for setting the appropriate interest rate to meet the set inflation target.

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Economics of the UK Monetary Policy

Aggregate demand equation

$$Y_t^s = \alpha_0 + \alpha_1 \cdot Y_{t-1}^s + \alpha_2 \cdot E_t[Y_{t+1}^s] + \alpha_3 \cdot (R_t - E_t[p_{t+1}]) + \alpha_4 \cdot (rer)_t + s_1;$$

Phillips curve

$$p_t = \beta_1 \cdot Y_t^s + \beta_2 \cdot p_{t-1} + \beta_3 \cdot E_t[p_{t+1}] + \beta_4 \cdot \{E_t[p_{w,t+1}] - E_t[\Delta er_t]\} + s_2;$$

Monetary policy rule

$$R_t = (1 - \gamma_3) \cdot [RR^* + E_t[p_{t+1}]] + \gamma_1 \cdot Y_{t-1}^s + \gamma_2 \cdot (p_{t-1} - p^T) + \gamma_3 \cdot R_{t-1} + s_3;$$

Economics of the UK Monetary Policy

Real Exchange rate equation

$$rer_t = \delta_0 + \delta_1 \cdot \left\{ (R_t - E_t [p_{t+1}]) - (R_{W,t} - E_t [p_{W,t+1}]) \right\} + \delta_2 \cdot CA_t + \delta_3 \cdot E_t [rer_{t+1}] + s_4;$$

Current account equation

$$CA_t = \lambda_0 + \lambda_1 \cdot rer_t + \lambda_2 \cdot Y_t^g + \lambda_3 \cdot Y_{W,t}^g + s_5;$$

Nominal Exchange rate equation

$$er_t = rer_t + P_{W,t} - P_t ;$$

Economics of the UK Monetary Policy

- Six equations and six unknowns: output, inflation, interest rate, current account, nominal and real exchange rate;
- Inflation Targeting (IT) is embedded in equations 1-3;
- Equation 3 entails an important role for 'expected inflation';
- Transparency of inflation forecasts is a paramount element of the policy, but...
- The centrality of inflation forecasts and the margin of errors represent a major challenge to this framework.

Economics of the UK Monetary Policy

- Inflation is a monetary phenomenon;
- IT is a monetary policy framework whereby public announcement of official inflation target is undertaken;
- Fiscal policy should not be used for short-term objectives; only for medium- to long-term ones;
- Important ingredients: Openness, Communication, Transparency, Accountability, Credibility, Individual Reputation of MPC Members (in view of the published minutes that reveal voting).

Presentation

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Assessment of the UK Monetary Policy

Policy may have been successful (Figure 1);

but:

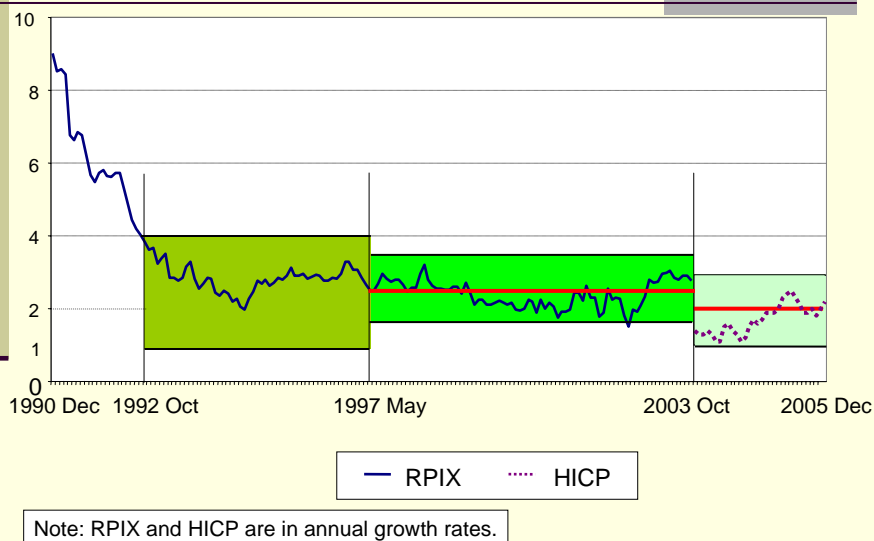
1. Actual inflation below the mid-point target, implying tight monetary policy;
2. Insufficient attention paid to the exchange rate
3. Price stability is not enough;
4. Countries that do not pursue IT type of policies have done as well as the UK;
5. MPC membership problems.

Assessment of the UK Monetary Policy

3.1. Actual inflation below the mid-point target, implying tight monetary policy

(See Figure 1)

Figure 1: Assessment of the BoE Monetary Policy



Assessment of the UK Monetary Policy

3.2. Insufficient attention paid to exchange rate:

- Exchange rate is not included in equation (3); only weighting it into decisions when setting interest rate;
- A change in the rate of interest works via exchange rate appreciation (BoE model): 80% in the first year;
- The danger is a combination of internal price stability and exchange rate instability; should include exchange rate in equation (3);
- Difficulties with exchange rate determination: difficult to model; changes in international capital movements.

Assessment of the UK Monetary Policy

3. Price stability is not enough:

- Price stability has been associated with benefits to the economies pursuing it; but:
- Price stability might not be sufficient to avoid serious macroeconomic downturns;
- Estimates for the US show that reducing price level variability by 18% results in an increase in output variability by 21%, and in the rate of unemployment by 19%;

Assessment of the UK Monetary Policy

3.3. Price stability is not enough:

- History is replete with examples of periods of relative absence of inflationary pressures followed by major economic and financial crises.
- If so, the objective of price stability might have to be applied more flexibly, with a longer-run focus than the current monolithic concentration upon it, and, also, along with other objectives, such as output stabilisation.

Assessment of the UK Monetary Policy

3.4. Countries that do not pursue IT type of policies have done as well as the UK

(See next slide)

Assessment of the UK Monetary Policy

Basic Structural Model

$$(7) \pi_t = \mu_t + \gamma_t + \varepsilon_t$$

$$(8) \mu_t = \mu_{t-1} + \beta_{t-1} + \delta \cdot \omega_t + \eta_t$$

$$(9) \beta_t = \beta_{t-1} + \zeta_t$$

μ_t stochastic trend

ω_t intervention; δ impact of intervention

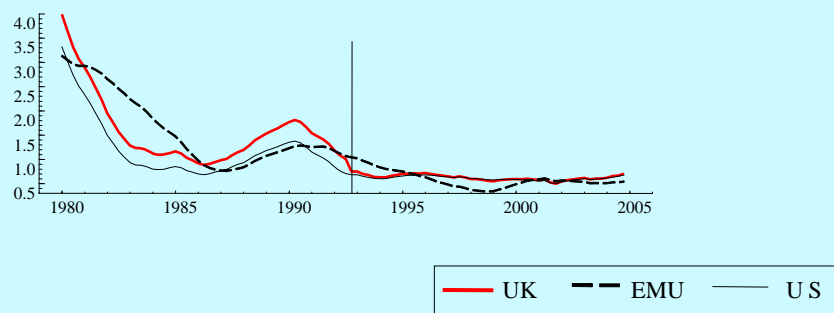
Assessment of the UK Monetary Policy

3.4. Countries that do not pursue IT type of policies have done as well as the UK

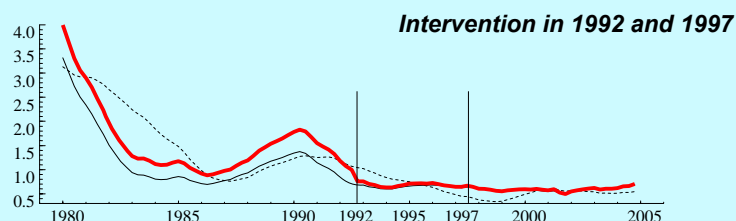
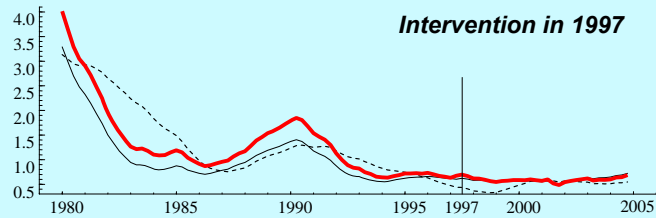
- Was there a shift in the underlying level of inflation due to Inflation Targeting?
- Visual inspection on how μ_t evolved; see next two figures

Assessment of the UK Monetary Policy

Intervention in 1992



Assessment of the UK Monetary Policy



— UK - - - EMU — U S

Assessment of the UK Monetary Policy

Multivariate STM

$$(7) \pi_t = \mu_t + \gamma_t + \varepsilon_t$$

$$(8) \mu_t = \mu_{t-1} + \beta_{t-1} + \delta \cdot \omega_t + \eta_t$$

$$(9) \beta_t = \beta_{t-1} + \zeta_t$$

ω_t intervention; δ impact of intervention

Is δ significant?

Table 1a. Model Estimates

| Model | Date of Intervention | Coefficient | t-value | p-value |
|---------|----------------------|-------------|---------|---------|
| Model 1 | 1992Q4 | -0.235 | -1.176 | [0.242] |
| Model 2 | 1997Q2 | -0.758 | -0.356 | [0.728] |
| Model 3 | 1992Q4 | -0.219 | -1.054 | [0.294] |
| | 1997Q2 | 0.027 | 0.137 | [0.891] |

Note: Period of estimation is 1980(Q1)-2004(Q4).

Assessment of the UK Monetary Policy

3.4. Countries that do not pursue IT type of policies have done as well as the UK

- It has been suggested that:
- IT was more successful in 'locking-in' low levels of inflation rather than in achieving low levels;
- Given CB determination to tame inflation, expectations changed such that inflation is contained within IT limits

Assessment of BoE's Monetary Policy

Evidence in 'lock-in' effects

Application:

- Estimations run for period previous to intervention
- Actual inflation is compared to predictions following IT
- Standardized errors (\tilde{v}_t) are used to compute CUSUMs: $\tilde{v}_t = v_t / f_t^{1/2}$
 (v_t) is the one-step ahead prediction error
 f_t is the estimate of its variance

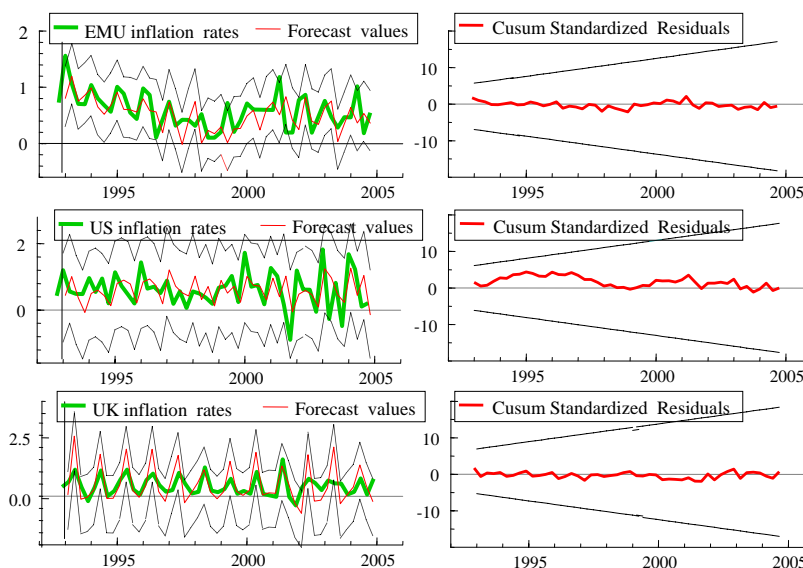
$$CUSUM(t, \tau) = \sum_{j=\tau+1}^t \tilde{v}_j$$

- Cusum-t tests are used to contrast if inflation series have broken away

$$CUSUM = (T - \tau)^{-1/2} \cdot \sum_{j=\tau+1}^t \tilde{v}_j$$

Evidence in 'lock-in' effects

Model 1. Intervention in 1992



Evidence in 'lock-in' effects

Model 2. Intervention in 1997

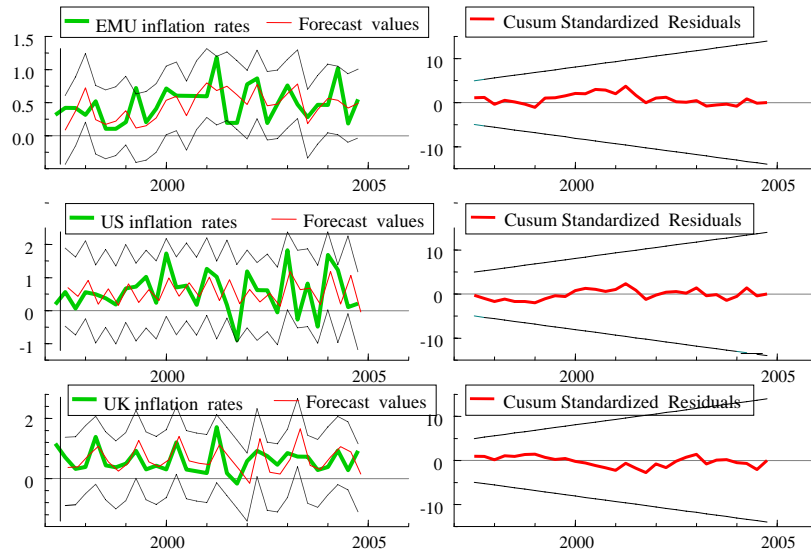


Table 2a. Predictive testing methods: CUSUM-t test

| Model | UK | US | EMU | Degrees of freedom |
|---------|--------|--------|-------|--------------------|
| Model 1 | 0.008 | 1.353 | 1.219 | 48 |
| Model 2 | -0.483 | -0.021 | 0.586 | 30 |

Note: No failures detected at a 5% significant level.

Has globalisation helped to contain inflation?

- Opening global markets in goods, services and factors create more competition and reduce costs;
- CBs more focused in maintaining low inflation; higher penalties on countries judged to have unsound policies as capital movements are higher;
- Credibility of monetary policies has been enhanced;
- Incentives to innovate through competition produces higher economies of scale and increased productivity;
- Competition weakens the power of monopolies and unions, therefore flattening the Philips curve;
- However, more research is needed.

Assessment of the UK Monetary Policy

3.5. MPC membership problems

- The process of appointing the external members of the MPC is highly secretive and in the hands of the Chancellor of the Exchequer;
- It would appear that the need for greater transparency in the process of MPC appointments could potentially become a serious issue;
- Recent remarks by the Governor of the BoE may be a sign of rising tensions between the Governor and the Chancellor of the Exchequer;
- If this were to be validated, it could potentially affect adversely the credibility of the policy framework.

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Assessment of the UK Monetary Policy

- We have sketched the institutional dimension of the BoE monetary policy, and the role assigned to the UK HM Treasury in this framework;
- The strategy has been successful in terms of keeping UK inflation rates within the targets set by HM Treasury; the policy has managed to 'lock-in' UK inflation rate at low levels;
- Non-IT countries have been as successful in this regard.

Assessment of the UK Monetary Policy

- We then highlighted the theoretical framework upon which the IT policy framework is based;
- Recent low inflation rates are the result of other forces, perhaps that of globalisation.
- More thought should be channelled into the current framework of the UK monetary policy.