

How The Taylor Rule Works

The Taylor Rule has been suggested by John Taylor of Stanford University as a means of setting 'optimal' monetary policy for the US. We have applied the same rule to other major economies as shown below. The rule is the following:

$$sr = rsr^* + ep + 0.5(\hat{p} - \hat{p}^*) - 0.5(gdp^* - gdp)$$

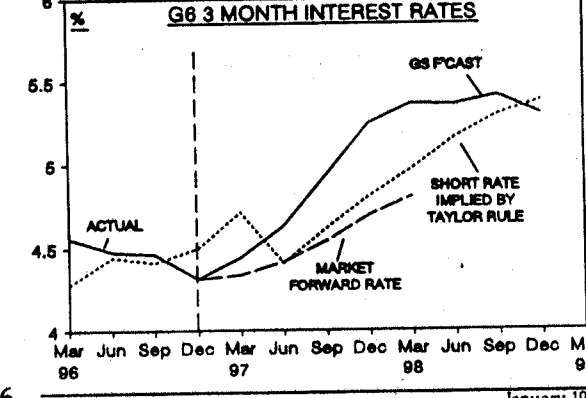
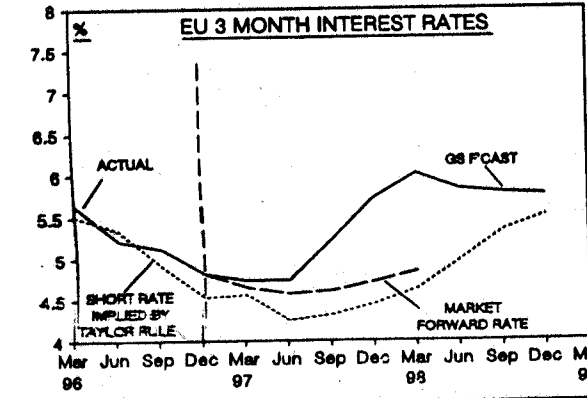
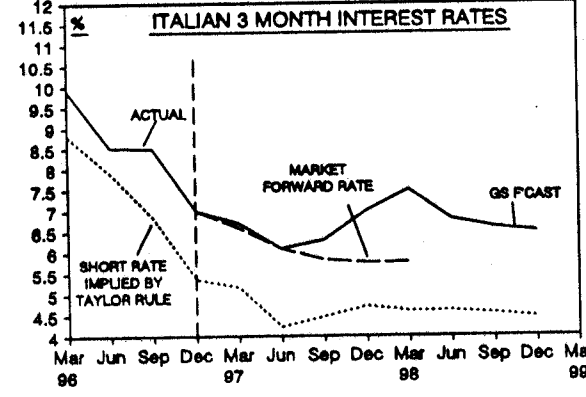
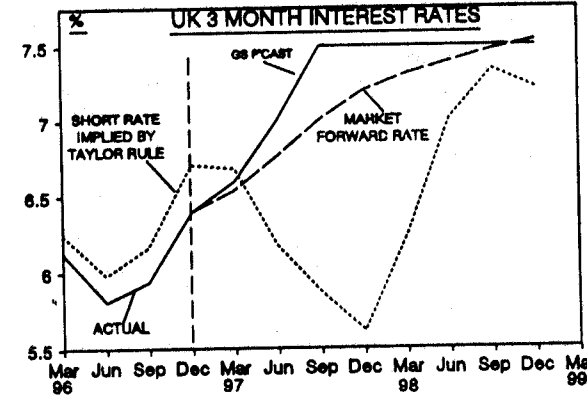
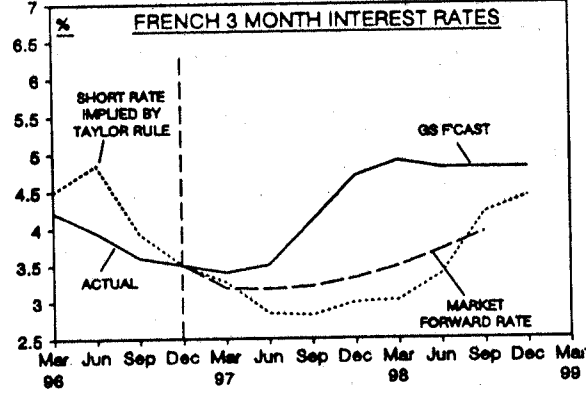
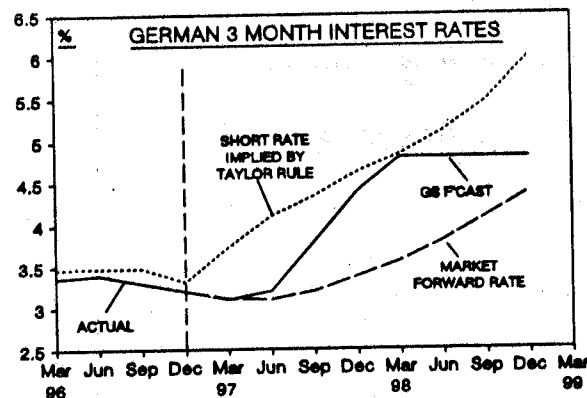
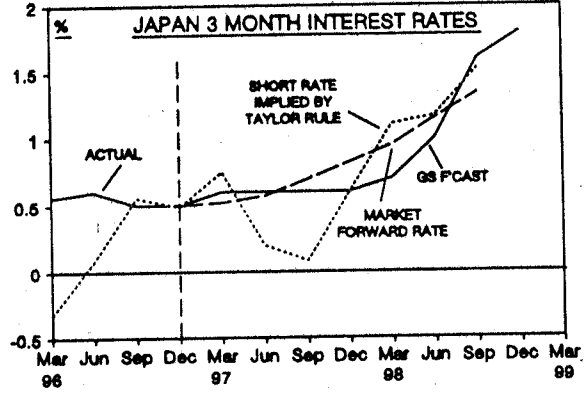
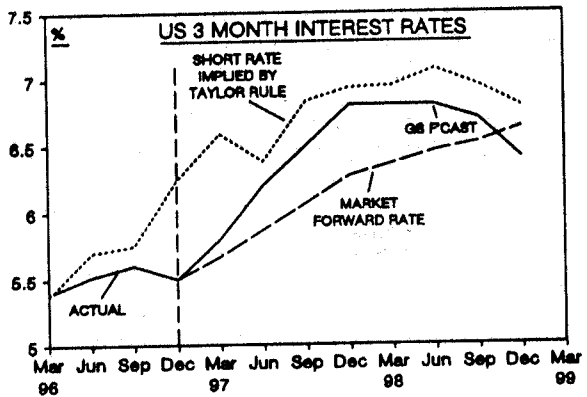
where sr = short rate implied by the Taylor Rule; rsr^* = real short rate implied by neutral monetary conditions; ep = expected price inflation; \hat{p} = actual price inflation; \hat{p}^* = central bank objective for price inflation; gdp^* = trend or equilibrium output; gdp = actual output. The values which we are using at the present time for the key variables are shown in the table below. Expected price inflation (ep) is proxied by historic price inflation in Taylor Rule (1) in the table, and by consensus inflation forecasts in Taylor Rule (2). Further rationale for the rule can be found in "Macroeconomic Policy in a World Economy", John B. Taylor, W.W. Norton and Co. (1993).

Implications of the Taylor Rule for Current Short Term Interest Rates

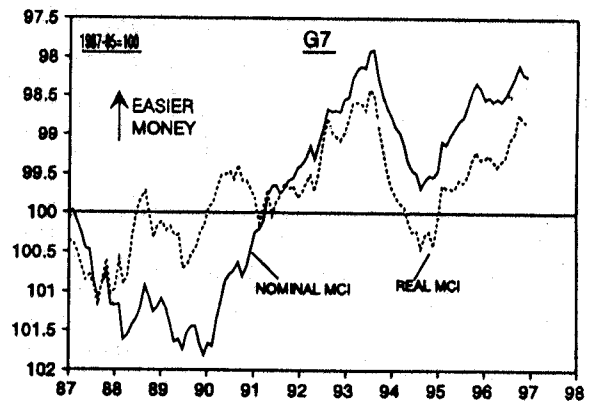
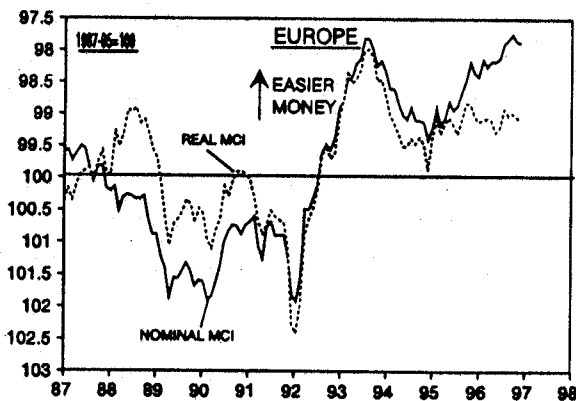
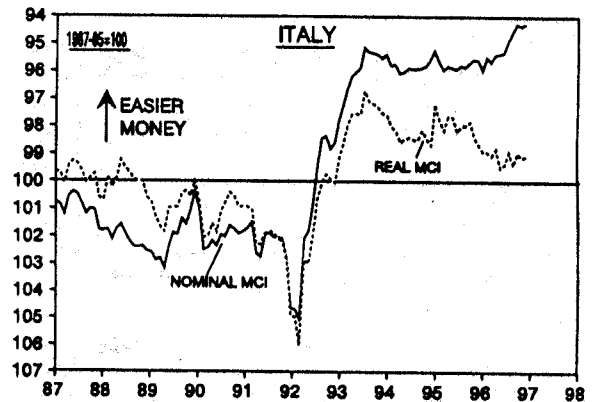
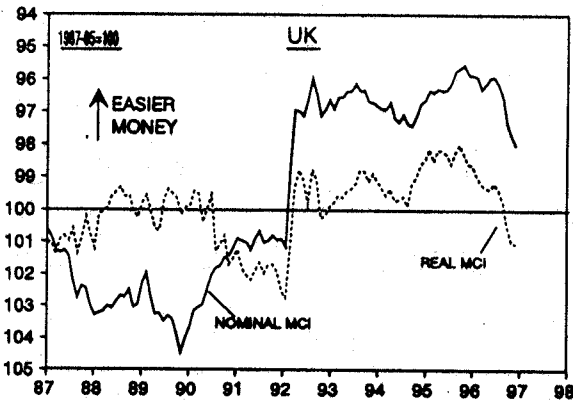
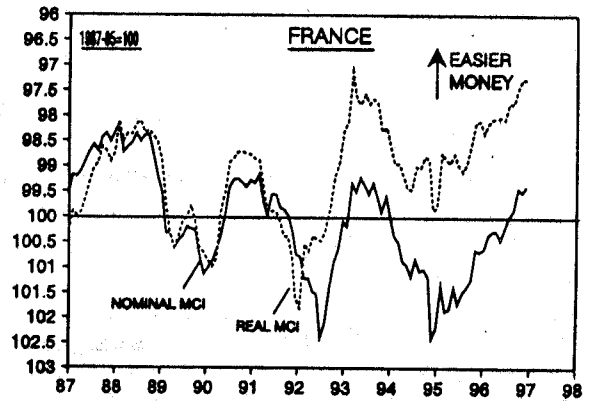
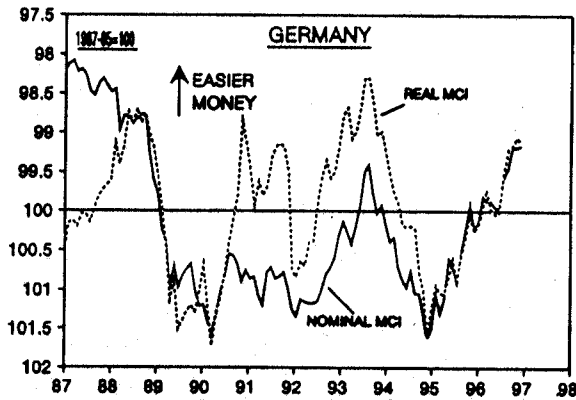
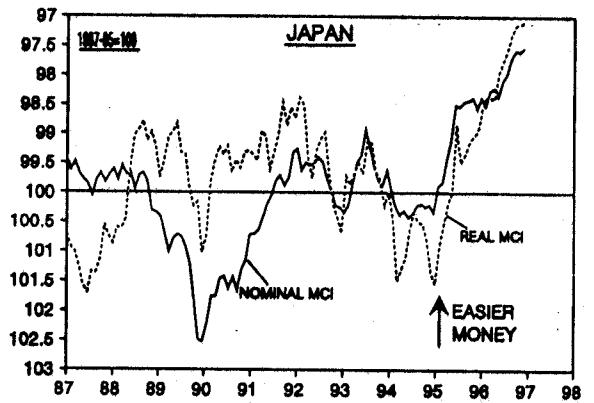
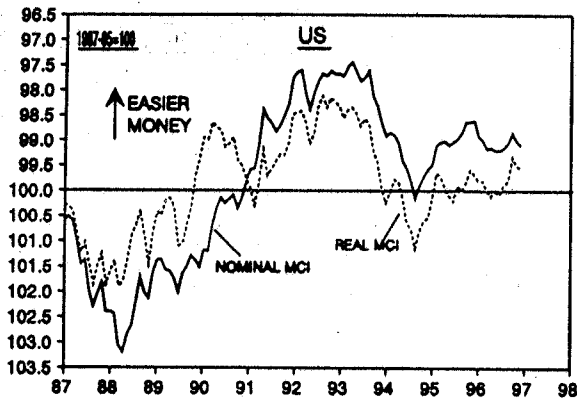
	Neutral Real Short Rate ¹	Output Gap ²	Inflation Target ³	Actual Inflation ⁴	Expected Inflation ⁵	Short Term Interest Rates		
						Taylor Rule (1) ⁶	Taylor Rule (2) ⁷	Actual 3 Mth Rate
US	2.0	-1.3	2.0	3.3	3.2	6.6	6.5	5.5
Japan	2.6	+1.6	2.0	0.5	1.5	1.6	2.6	0.6
Major EU	3.6	+2.4	2.3	2.1	2.4	4.4	4.7	4.7
- Germany	3.5	+2.7	2.0	1.4	2.0	3.3	3.9	3.1
- France	3.5	+3.2	2.0	1.7	2.0	3.5	3.8	3.3
- Italy	4.0	+2.8	3.0	2.6	2.4	5.0	4.8	7.1
- UK	3.5	+0.4	2.5	3.1	3.5	6.7	7.1	6.3
Canada	3.0	+2.6	2.0	2.0	1.8	3.7	3.5	2.8
G7 Total	2.7	+0.6	2.1	2.3	2.6	4.8	5.1	4.2

¹Real short rate judged to be consistent with neutral monetary conditions. ²GS estimates of the difference between trend and actual GDP (negative number implies that GDP is above trend). ³Ultimate inflation objective of the central bank. ⁴Inflation over past 12 months. ⁵Expected inflation over next 12 months, taken from Consensus Economics. ⁶Taylor Rule calculated from actual inflation as proxy for expected inflation. ⁷Taylor Rule using consensus price forecasts as proxy for expected inflation.

Short Rates Implied by the Taylor Rule



GS Monetary Condition Indices (1)



GS Monetary Condition Indices (2)

