$$\frac{\Delta Y}{Y} = \frac{\Delta M}{M} - \pi$$

If the growth rate of money supply is constant so it will be inflation and so it should the growth rate of output.

b) Target growth rate of nominal GDP

Automatically increase money growth whenever nominal GDP grows slower than targeted; decrease money growth when nominal GDP growth exceeds target.

This is what monetary policy can do in the IS-LM model. If output decreases, an increase in money supply will decrease interest rate and so it will increase investments and so it will increase output. Vice versa if output increases.

c) Target the inflation rate

Automatically reduce money growth whenever inflation rises above the target rate.

Many countries' central banks now practice inflation targeting, but allow themselves a little discretion.

d) The **Taylor rule**:

From Lecture 9 we know that the Taylor is given by the following:

le.co.uk $i = \pi + 2 + 0.5 (\pi - 2) - 0.5$ (GDP gap) where GDP gap = 100 x $\frac{\overline{Y} - Y}{\overline{Y}}$ = percent by where BEDP is below its natural rate te ioargeted at 4 percent

If $\pi = 2$ and output is at its in the late, then interest Crest rate at 4%). (meaning that the contral bank sets th

For each one-point increase in π , monetary policy is automatically tightened to raise the interest rate by 1.5. For each one percentage point that GDP falls below its natural rate, monetary policy automatically eases to reduce the interest rate by 0.5.