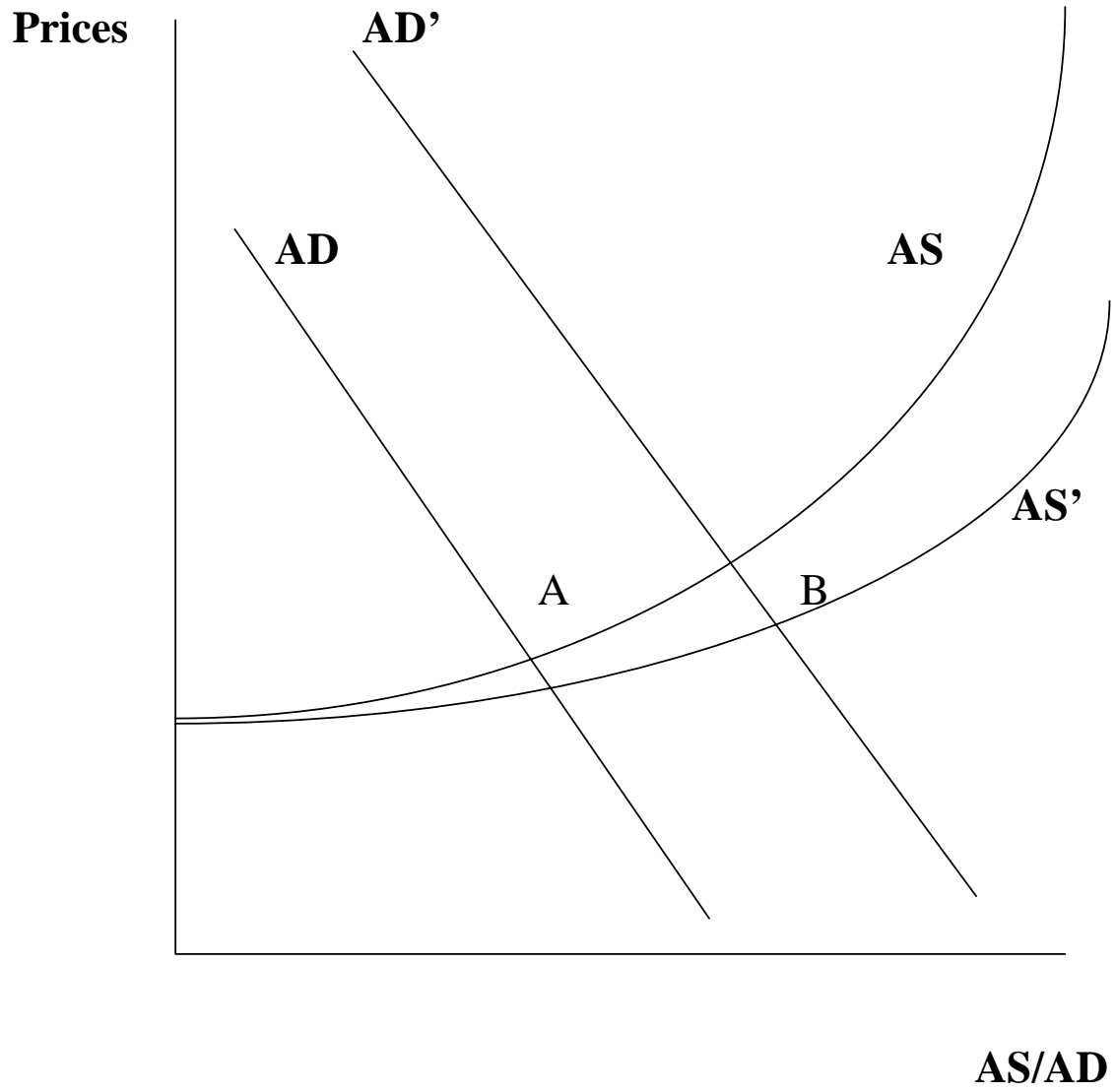


Supply Side Productivity Model



The Taylor Rule Formula

$$\dot{i}_t = 2 + \pi_t + g_\pi (\pi_t - \pi^*) + g_x X_t$$

\dot{i}_t = Federal Funds Rate

2 = Constant term as the assumed long-run average real rate of interest

π_t = prior four-quarter inflation rate

π^* = FOMC's inflation target (e. g. 2 per cent)

X_t = output gap as the percentage deviation of real GDP from a trend line of potential output

g_π = reaction function of central bank to inflation

g_x = reaction function to output gap

Example

$$i_t = 2 + \pi_t + g_\pi (\pi_t - \pi^*) + g_x X_t$$

$$2 + 3 + 1 (3 - 2) + 1 (1.5)$$

$$= 7.5$$

$$2 + 2 + 1 (2 - 2) + 1 (-3)$$

$$= 1$$

$$2 + 2 + 1 (2 - 2) + 1 (0)$$

$$= 4$$

Taylor explained inflation of the 60s and 70s by assuming

$$g_\pi < 1$$

Central Banking-Theories

Keynesian multiplier model

$$\Delta Y = 1/(1-c) \times \Delta I$$

$$1/(1-c) = 1/s$$

$$I = I(i)$$

$$I = \Delta K$$

Monetarist Model

$$M \times V = Yr \times P$$

$$M = m \times MB$$

The Greenspan Supply Side Productivity Model

$$O/h \dots Yr \times P \dots w \dots Pr$$

Inflation Targeting/Taylor Rule

$$\dot{i}_t = 2 + \pi_t + g_\pi (\pi_t - \pi^*) + g_x X_t$$

$$2^*$$

The Bernanke Helicopter/Deflation- Scare Model

$$\dot{i}_t = 2 + \pi_t + g_\pi (\pi_t - \pi^*) + g_x X_t$$

$$2 + 0 + 2 \quad (-2 \quad -2) \quad + 2 \quad (-2)$$