Currency Crises

- In practice, most fixed exchange rate regimes eventually collapse.
- This happens when market participants lose confidence in the govt.'s. ability to sustain the peg.
- Loss of confidence can be self-fulfilling.

Support for the overvalued ex. rate, e, requires the govt. to buy its own currency using fx reserves.

If investors suspect the ex. rate will be devalued, they will sell the domestic currency. This shifts the S curve further to the right, to S₂.

This accelerates the loss of reserves, and makes a devaluation more likely!
Recent Currency Crises

1.) Europe 1992-93
2.) Mexico 1994
3.) Asia 1997
   - Thailand, Indonesia, Malaysia, Korea, Philippines
4.) Brazil 1999
5.) Turkey 2000
6.) Argentina 2001
Open-Economy "Trilemma"

or, the "Impossible Trinity"

Stable Exchange Rates

Gold Standard

Currency Board

Floating Rates

Breton Woods

Open Capital Markets

Independent Monetary Policy
Examples

Independent Monetary Policy > USA
Open Capital Markets

Independent Monetary Policy > China
Stable Exchange Rate

Stable Exchange Rate > Hong Kong
Open Capital Markets

Stable Exchange Rate > Argentina
The Keynesian Aggregate Supply Curve

What are the implications of sticky nominal wages for Aggregate Supply?

1.) When the nominal wage is fixed, an increase in the price level lowers the real wage.

2.) The lower real wage induces firms to hire more labor.

3.) The additional labor produces more output.
Labor Demand

\[ \frac{W}{P} \]

[Graph showing labor demand with \( L^0 \) and \( P_2 > P_1 \)]

Production Function

\[ Y = F(K, L) \]

Aggregate Supply Curve

[Graph showing aggregate supply with \( Y \), \( Y_1 \), \( Y_2 \), and \( P \), \( P_2 \), \( P_1 \).]
Keynesian Business Cycles

According to Keynes, business cycles are caused by fluctuations in Aggregate Demand.

Prediction: There should be a positive correlation between output and the price level.
The Phillips Curve

\[ P = \alpha Y \] \quad \text{AS Curve}

\[ \Delta P = \alpha \Delta Y \]

\[ \Delta P = \pi = \text{inflation} \]

\[ \Delta Y = -2\Delta U \] \quad \text{Okun's Law}

\[ \pi = \text{constant} - 2\alpha \Delta U \] \quad \text{Phillips Curve}
2 Problems with the Keynesian Model

1.) Stagflation (combination of high unemployment and high inflation) 
   Lucas

2.) It predicts real wages and productivity should be counter-cyclical (Contrary to empirical observations). 
   \[ \text{RBC Model} \]
Real Business Cycles

\[ P \]

\[ \frac{Y}{P} \]

As shown in the graph, there are different levels of AS ( Aggregate Supply) at various points (Y1, Y2, Y3) corresponding to different price levels (P). The AD (Aggregate Demand) curve intersects with AS at these points, indicating equilibrium levels of output and price. The graph also illustrates the relationship between the money supply and expenditure, depicting different levels of expenditures (L1, L2, L3) at various price levels.
Solow Residuals as Technology Shocks

\[ Y_t = A_t K_t^{\alpha} L_t^{1-\alpha} \]

\[ \frac{\Delta Y}{Y} = \frac{\Delta A}{A} + \alpha \frac{\Delta K}{K} + (1 - \alpha) \frac{\Delta L}{L} \]

\[ \frac{\Delta A}{A} = \frac{\Delta Y}{Y} - \alpha \frac{\Delta K}{K} - (1 - \alpha) \frac{\Delta L}{L} \]

\[ V \]

Measured Solow Residual
\[ y_t = 0.01 + y_{t-1} + \varepsilon_t \]