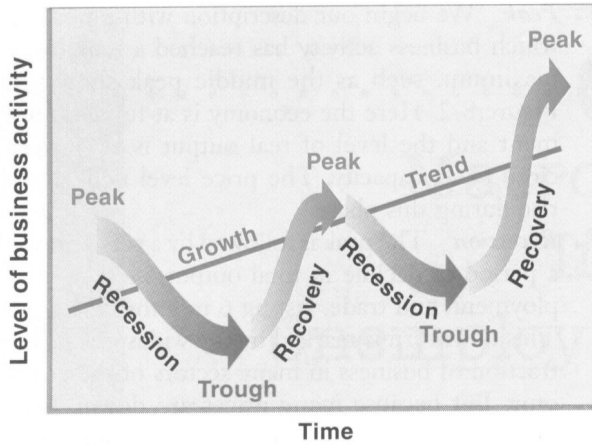
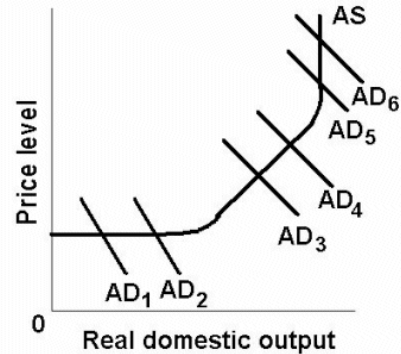


AP Macroeconomics Key Graphs

The Business Cycle

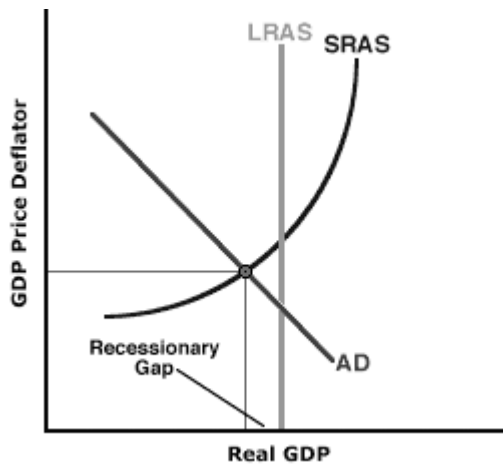


Short-Run Aggregate Supply

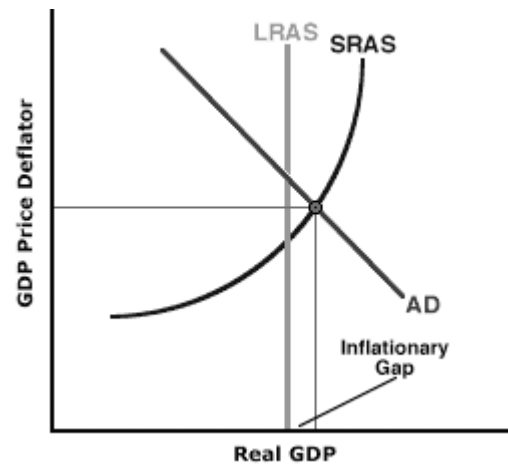


Keynesian Range: Sticky wages make AD perfectly elastic
 Intermediate Range: Upward sloping portion
 Classical Range: At or near full employment and increase in AD results in high inflation. The car can't go faster

Recessionary Gap



Inflationary Gap



Fiscal Policy

Expansionary Tools-

1. Increase Government Spending
2. Decrease Taxes

Contractionary Tools-

1. Decrease Government Spending
2. Increase Taxes

Monetary Policy

Expansionary Tools-

1. Buy bonds, securities, treasuries
2. Decrease reserve requirement
3. Decrease Discount rate

Contractionary Tools-

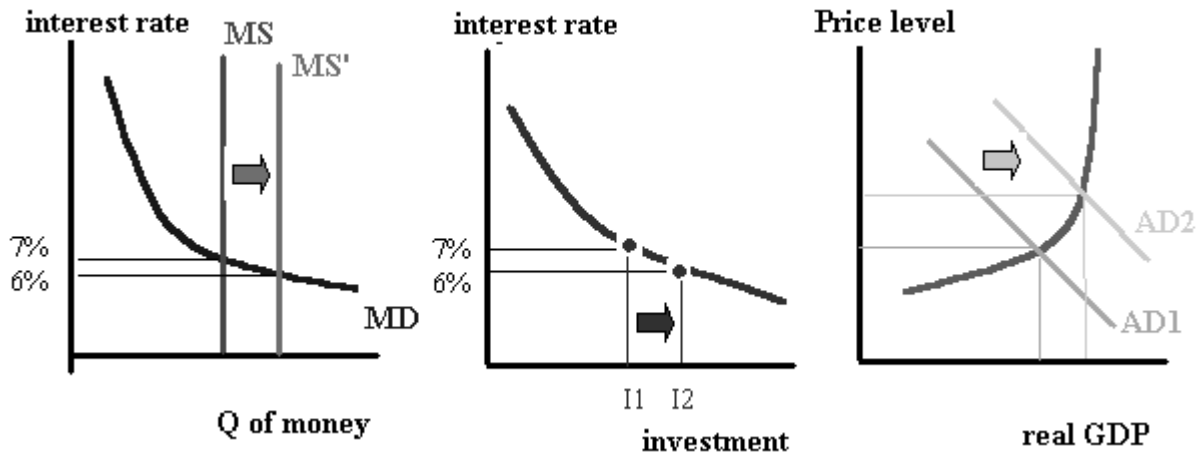
1. Sell bonds, securities, treasuries
2. Increase reserve requirement
3. Increase Discount rate

Key Formulas:

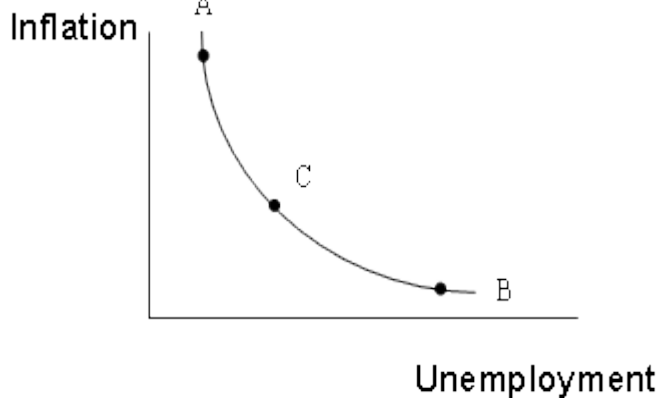
- $GDP = C + I + G + (\text{Exports} - \text{Imports})$
- $\text{Nominal GDP} = \text{Real GDP} \times \text{Price Index} / 100$
- $\text{Unemployment rate} = \text{Unemployed} / \text{Labor force}$
- $\text{Consumer Price Index} = \text{Price of Market Basket} / \text{Price of Base Year Market Basket} \times 100$
- $\text{Spending Multiplier} = 1 / \text{MPS}$
- $\text{Money/Monetary Multiplier} = 1 / \text{Reserve Requirement}$
- $\text{Nominal Interest Rate} = \text{Real Interest rate} + \text{Expected Inflation}$

The Keynesian Three Step Transmission

Shows the result of Monetary policy. An increase of the money supply causes interest rates to fall causing investment and consumption to increase. More investment and consumption increases AD and increases price level and output.

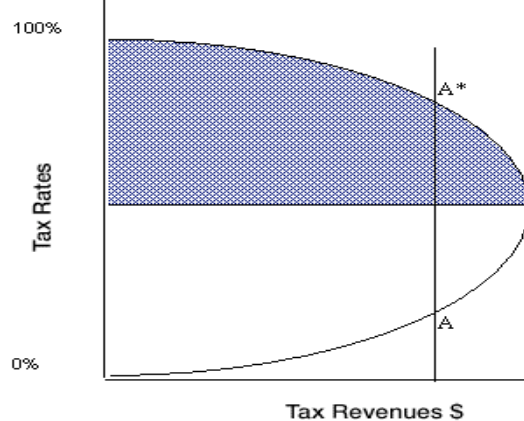


The Phillips Curve



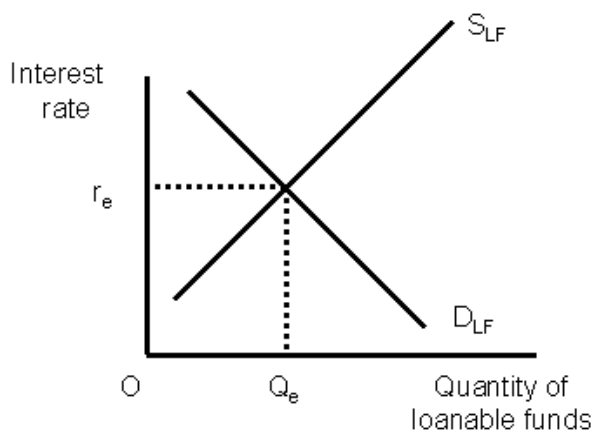
Shows tradeoffs between inflation and unemployment. To decrease inflation you will get some unemployment and vice versa.

The Laffer Curve



Shows that a significant increase in the tax rate can decrease the incentive to work causing a fall in tax revenue.

Loanable Funds Market



- Shows the supply and demand for loans and equilibrium sets the real interest rate.
- When the government borrows money to increase spending, D_{LF} increases causing interest rate to increase and investment to fall. This is **CROWDING OUT**.

Foreign Exchange



- If demand for Canadian goods increases, the demand for Canadian dollars increases causing it to appreciate.
- If Canadians want a different currency the supply of Canadian dollars available to exchange increases.
- If the interest rate in Canada is significantly higher than the U.S., then Americans will demand more Canadian dollars to earn higher returns in Canadian banks. The Canadian dollar appreciates. The U.S. dollar depreciates.