Aggregate Supply/Demand

Macroeconomic Equilibrium

- Macroeconomic equilibrium occurs when aggregate demand (AD) = aggregate supply (AS)
- Changes in the Macroeconomic equilibrium can be caused by changes in AD or AS

Aggregate Demand/Supply Definitions

- **Aggregate Demand (Supply)**– the inverse relationship between total real demand (supply) for goods and services and the aggregate price level
- There are two aggregate supply situations
  - Long-run AS (LAS) – assumes that all factor markets are in equilibrium (full employment). LAS thus occurs at the “potential” level of real output (Potential real GDP)
  - Short run AS (SAS) – assumes that all factor prices are constant

AD determinants

- AD is a function of several variables
  - – Policy Variables (M, g, t)
  - – International Variables (E, y*, P*)
  - – Expectational Variables (Π)
- Thus, we can write that

$$AD = f(\overset{-}{P} \mid \overset{+}{M}\ \overset{+}{g}\ \overset{-}{t}\ \overset{-}{E}\ \overset{+}{y^*}\ \overset{+}{P^*}\ \overset{+}{\Pi})$$

AS Determinants

- AS is a function of several variables
  - – Factor availability (L,K)
  - – Technology and incentives (tech)
  - – Short run: factor prices (W)
- Thus, we can write that

$$LAS = f(\overset{0}{P} \mid \overset{+}{L}\ \overset{+}{k}\ \overset{+}{tech})$$

$$SAS = f(\overset{+}{P} \mid \overset{+}{L}\ \overset{+}{k}\ \overset{+}{tech}\ \overset{-}{W})$$

Secular Trends

- Output grows because of:
  - – Labor force growth
  - – More skilled labor force
  - – Investment
  - – Improved technology
- These factors increase potential output and shift LAS
- Note that prices rise if aggregate demand increases more than the secular rise in potential output

Cyclical Fluctuation Example

- Suppose that a rise in AD causes output to rise above potential.

1) Ouput increase raises factor demand. This causes factor prices to rise.
2) Factor prices affect SAS.
3) This wage/price adjustment continues until output falls back to potential.
4) This causes no change in potential GDP but leads to inflation.

Recessionary/Inflationary Gaps

- **Recessionary (Inflationary) Gap –** the difference between the equilibrium level of GDP and the potential level of GDP when the economy is at less than (greater than) full potential
- Inflation
  - Demand-Pull – inflation caused by increases in AD
  - Cost-push – inflation caused by continuous AS decreases