# National Income

In computing NI, consider total GNP, ***not*** GDP. Because, GNP ***includes*** income earned by Indian residents and firms but ***excludes*** earnings of foreign residents and firms from production in India.

GNP – Depreciation = NNP and

NI = NNP – Indirect Taxes and Other

Indirect taxes include both *sales* and *excise taxes*. 'Other' includes Bad Debts to the business sector, among other things.

National product at *market prices* indicates the total amount paid by the (final) purchasers of output whereas, national income at *factor cost* measures the total amount earned by the factors of production for their contribution to the final output.

$$GDP_{FC} + NFIA = GNP_{FC}$$

$$GNP_{FC} - \text{Depreciation} = NNP_{FC}$$

$$GDP_{FC} - \text{Depreciation} = NDP_{FC}$$

$$NDP_{FC} + NFIA = NNP_{FC}$$

$$GDP_{MP} \text{ (or } GNP_{MP}) = GDP_{FC} \text{ (or } GNP_{FC}) + \text{Indirect Taxes} - \text{Subsidies}$$

# Aggregate Demand (AD)

- **Refers to the total amount that different sectors in the economy willingly spend on goods and services in a given period.**

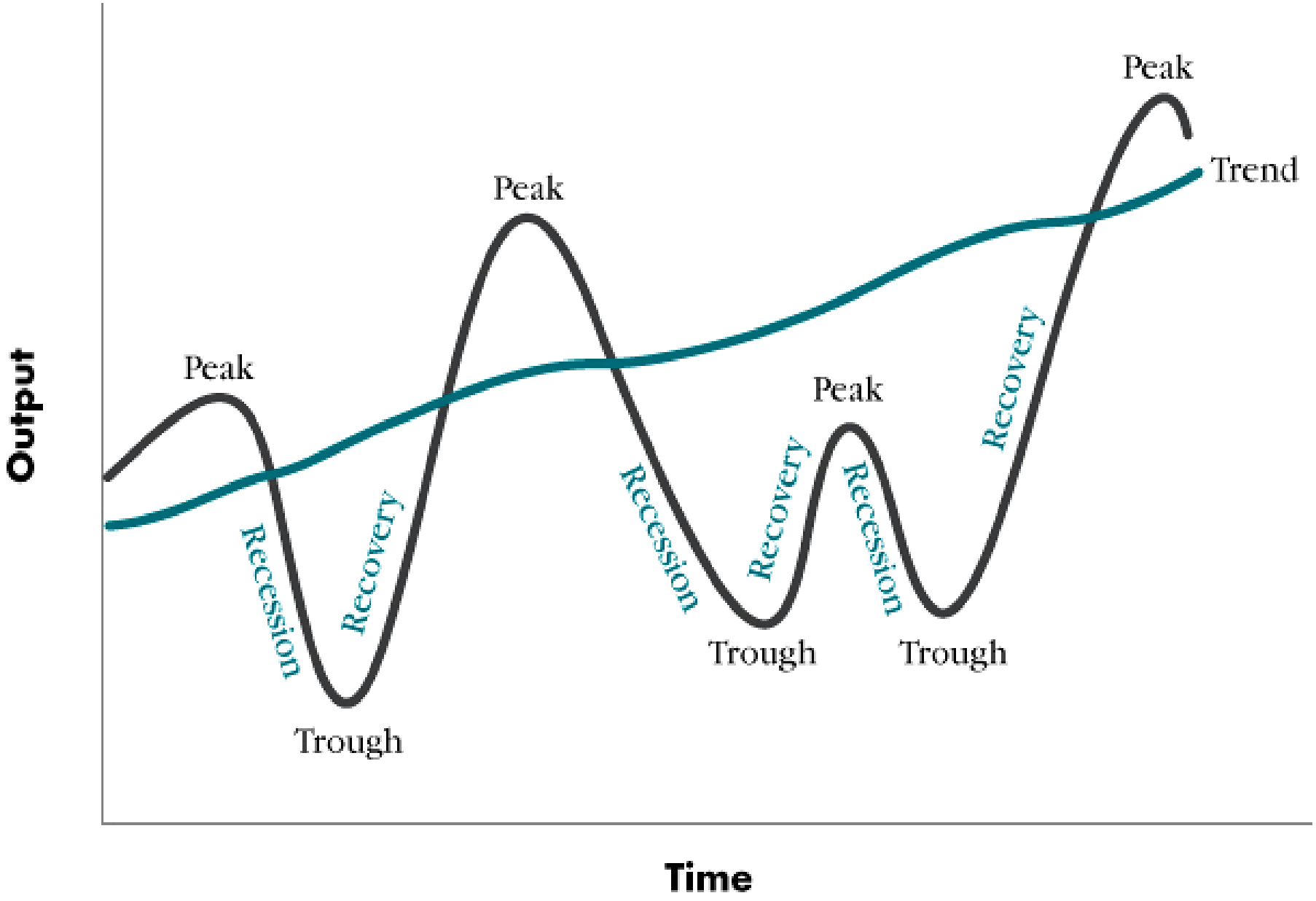
- **Aggregate demand is the sum of spending by consumers (on *cars, food items, tourism*, etc.), businesses (*investment on construction of houses and factories, machines and equipments*), government (*spending on highways, missiles*) and the rest of the world (*exports and imports*).**

# Aggregate Supply (AS)

- **Refers to the total quantity of goods and services that the nations' business is willing to produce and sell during a given period.**

**Potential Output:** Maximum sustainable output that an economy can produce. It is determined by the availability of productive inputs and the managerial and technical efficiency with which those inputs are combined.

# Business Cycle



# Total Spending and Level of Economic Activity

## Recovery or Expansion

Increased Spending

↓

Causes

↓

Larger Output

↓

Causes

↓

Increased Employment

↓

Causes

↓

More Income

## Recession or Contraction

Decreased Spending

↓

Causes

↓

Smaller Output

↓

Causes

↓

Decreased Employment

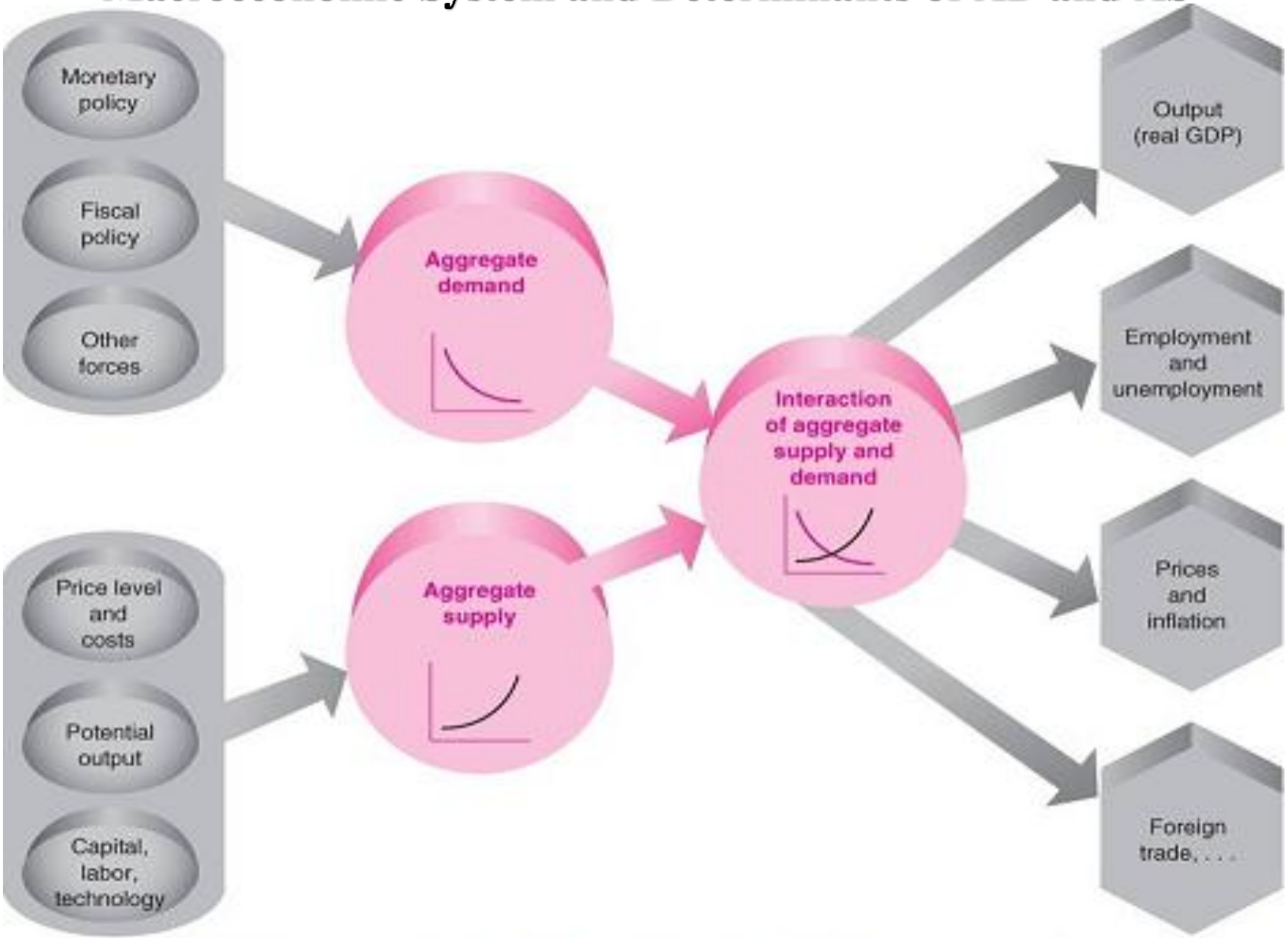
↓

Causes

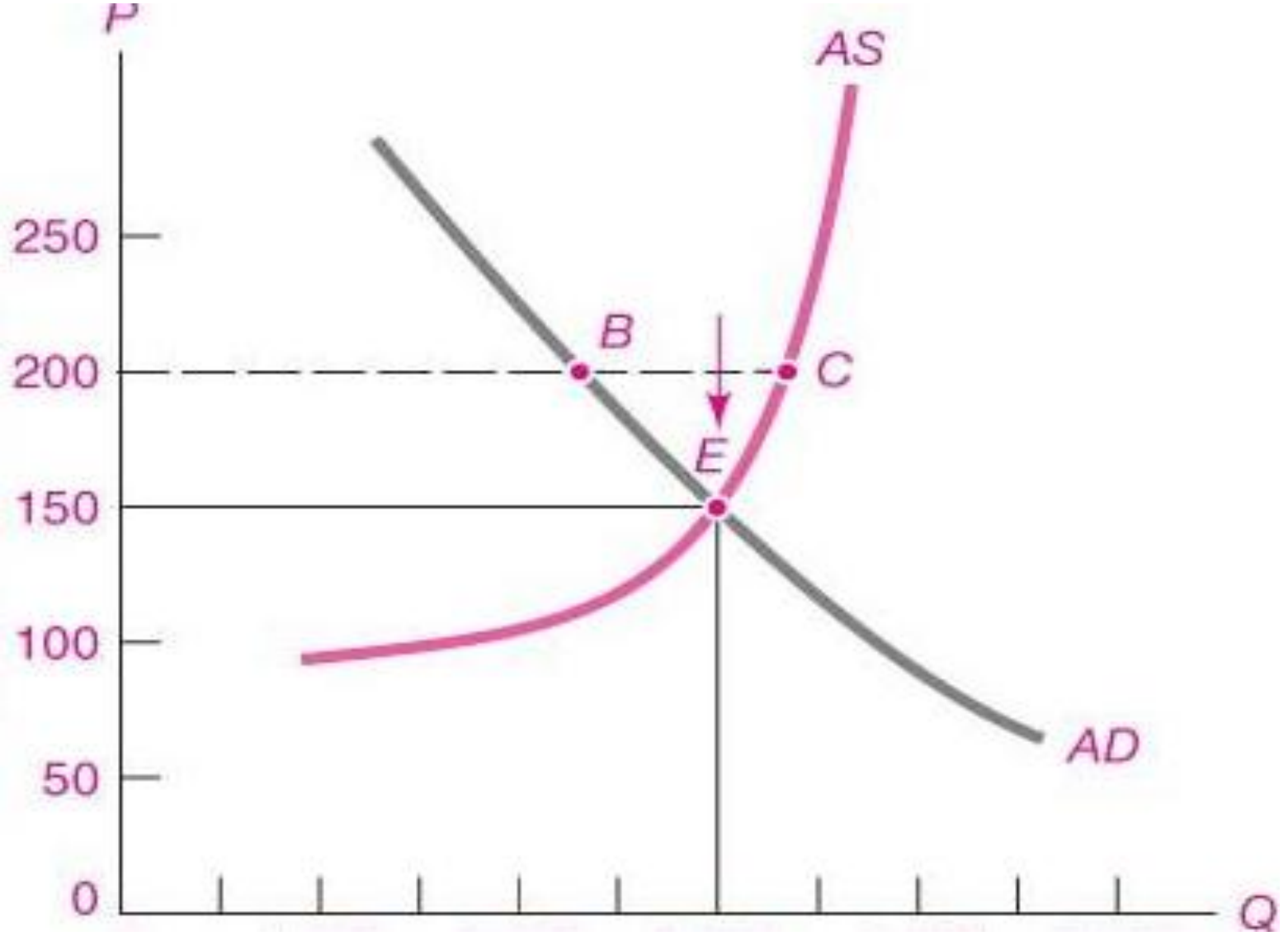
↓

Less Income

# Macroeconomic System and Determinants of AD and AS

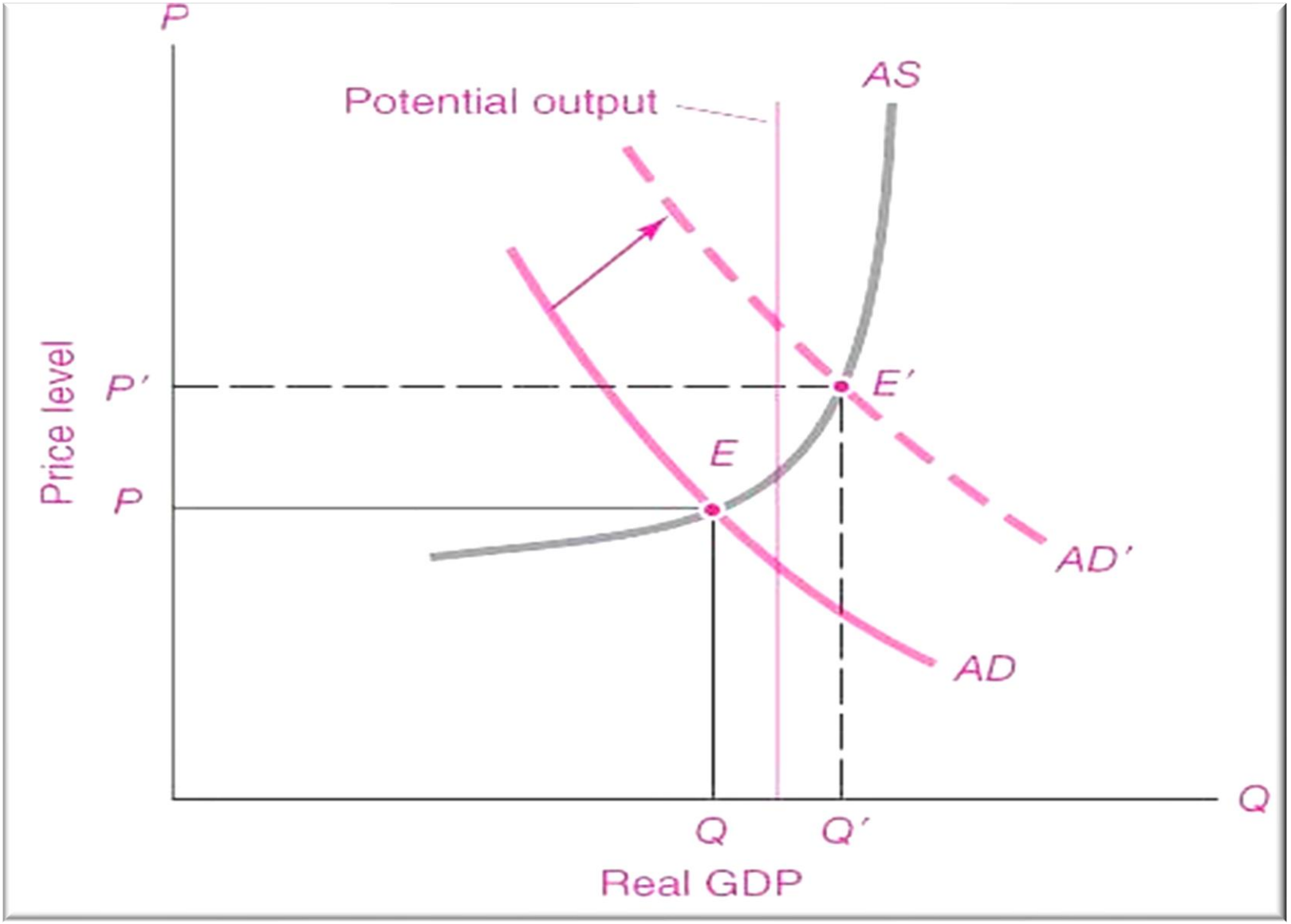


# MACROECONOMIC EQUILIBRIUM

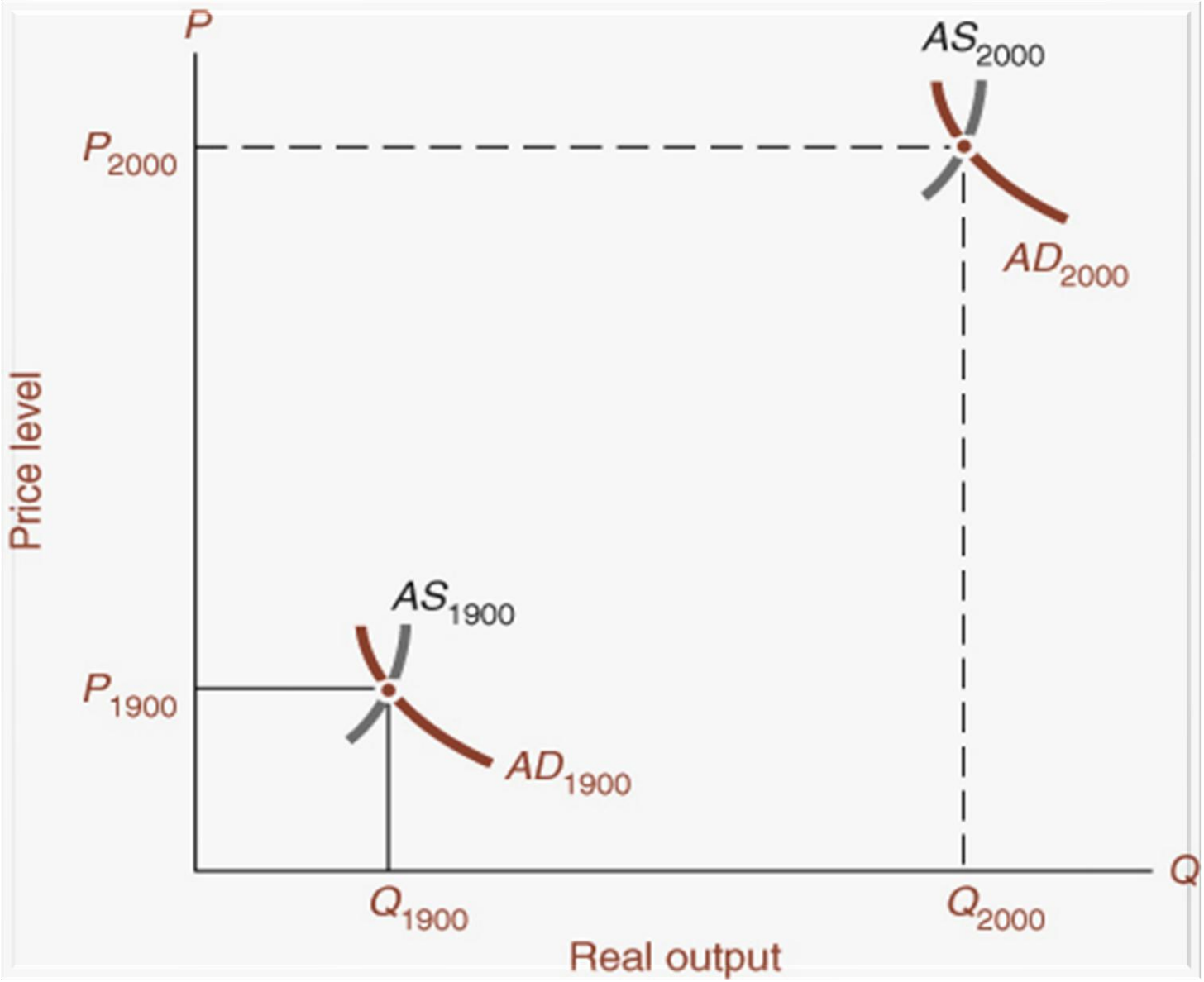



Equilibrium determination of National Income and general price level

**Output can rise above the trend (or potential output) because people work overtime and machinery is used for several shifts.**



# Growth in Potential Output Determines Long-Run Economic Performance



# The Unemployment Rate

- to be *unemployed,* a person must want to work and be actively looking for a job (but have not yet found one).

- the *labor force* consists of those who are employed and those who are unemployed.

- the *unemployment rate* is equal to the number of unemployed people divided by the labor force.

# Measuring Joblessness: The Unemployment Rate

**Labor Force = Number of Employed + Number of Unemployed**

$$\text{Unemployment Rate} = \frac{\text{Number of Unemployed}}{\text{Labor Force}} \times 100$$

$$\text{Labor-Force Participation Rate} = \frac{\text{Labor Force}}{\text{Adult Population}} \times 100$$

# INVESTMENT

**The second largest component of aggregate demand in an economy after consumption, is investment.**

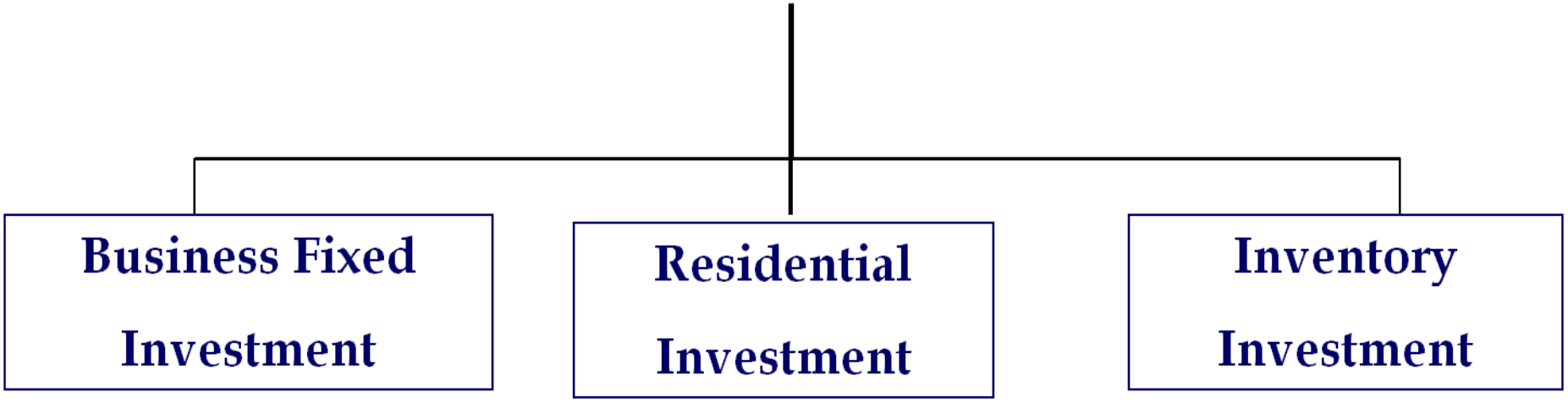
**Two important roles:**

***Large and highly volatile component of aggregate demand affecting the business cycle.***

***Investment leads to capital accumulation and promotes economic growth in the long run.***

***The most volatile component of GDP over the business cycle.***

# INVESTMENT




**Business fixed investment** comprises mainly of business spending on machinery, equipment, and structures such as factories.

**Residential investment** consists largely of investment in housing and real estate.

**Inventory investment** considers only additions to the stock of inventories of firms: both final goods' inventories and inventories of raw materials.

# Components of Investment as a Percentage of GDP in the US, 1959-2002