

Unit 2: Economic Indicators & the Business Cycle Cheatsheet

Gross Domestic Product (GDP)

- Definition: Market value of all final goods & services produced in a country in a year.
- Formula:

$$\text{GDP} = C + I + G + (X - M)$$

- C: Consumption
- I: Investment
- G: Government Spending
- X - M: Net Exports (Exports - Imports)

- Not Included in GDP:
- Intermediate goods
 - Used goods
 - Non-market transactions (e.g., household work)
 - Illegal activity

Types of GDP

Nominal GDP: Measured in current prices (not adjusted for inflation).

- Real GDP: Adjusted for inflation (better measure of growth).

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

Unemployment

Definition: People actively seeking work but without jobs.

- Types of Unemployment:
 - Frictional: Temporary, between jobs.
 - Structural: Skills mismatch or technological change.
 - Cyclical: Due to economic downturns.
- Seasonal: Jobs tied to specific times of the year.

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

Natural Rate of Unemployment (NRU): Frictional + Structural Unemployment.

Labor Force Participation Rate:

$$\text{LFPR} = \frac{\text{Labor Force}}{\text{Working - Age Population}} \times 100$$

Inflation

Definition: General rise in price levels.

Measured by:

- CPI (Consumer Price Index): Tracks price changes for a basket of goods/services.
 - GDP Deflator: Measures price level changes in all goods/services.

Types of Inflation:

- Demand-Pull: Too much spending.
- Cost-Push: Rising production costs.

$$\text{Inflation Rate} = \frac{\text{CPI in Year 2} - \text{CPI in Year 1}}{\text{CPI in Year 1}} \times 100$$

The Business Cycle

Phases:

- Expansion: Economic growth, falling unemployment, rising GDP.
 - Peak: Maximum output; possible inflation concerns.
- Contraction (Recession): Falling GDP, rising unemployment.
 - Trough: Lowest point; signals recovery phase.

