

MACROECONOMICS

1. Gross Domestic Product (GDP)

GDP is the total monetary value of all FINAL goods and services produced within a country's borders during a specific time period (usually a year). It measures a nation's economic performance.

Key features:

- Counts only FINAL goods (no double-counting).
- Measures production inside the country, regardless of producer nationality.
- Expressed in monetary terms.

Example:

If Bangladesh produces garments worth 500 billion taka, rice worth 200 billion taka, and digital services worth 100 billion taka, then $GDP = 800$ billion taka.

GDP Components

Consumption (C)

Investment (I)

Government Spending (G)

Net Exports ($NX = \text{Exports} - \text{Imports}$)

2. Ways to Measure GDP

- 1. Production Method:** Sum of value added at each stage of production.
 - 2. Income Method:** Sum of wages, rent, interest, and profits.
 - 3. Expenditure Method:** $GDP = C + I + G + NX$
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3. GDP Growth Rate

GDP growth rate measures how fast an economy is expanding. It compares GDP from one period to another.

Formula:

$GDP \text{ Growth Rate} = ((GDP \text{ this year} - GDP \text{ last year}) / GDP \text{ last year}) \times 100$

Example:

GDP last year: \$100 billion

GDP this year: \$110 billion Growth = 10%

4. Unemployment & Inflation (Types)

Unemployment occurs when individuals are willing to work but cannot find jobs.

Types of Unemployment:

- **Frictional:** Temporary unemployment (e.g., switching jobs).
- **Structural:** Skills mismatch (e.g., automation replacing workers).
- **Cyclical:** Due to economic recession.
- **Seasonal:** Varies with seasons (e.g., agriculture, tourism).

Inflation is a sustained rise in the average price level.

Types of Inflation:

- **Demand-Pull:** Too much demand chasing too few goods.
- **Cost-Push:** Higher production costs increase prices.
- **Built-In:** Wage-price spiral.
- **Hyperinflation:** Extremely rapid inflation (e.g., Zimbabwe).
- **Deflation:** General drop in prices.

5. Unemployment Rate & Economic Growth

Unemployment Rate Formula:

$$\text{Unemployment Rate} = (\text{Unemployed} \div \text{Labor Force}) \times 100$$

Economic Growth refers to an increase in real GDP. It indicates higher production, income, and standard of living.

Relationship:

- Higher growth → more jobs → lower unemployment.
- Recession → business closures → higher unemployment.

6. GNP and GDP Deflator

GNP (Gross National Product): Measures total output produced by a country's citizens, regardless of location.

Example: A Bangladeshi engineer working in Dubai contributes to Bangladesh's GNP, not GDP.

GDP Deflator:

$$\text{GDP Deflator} = (\text{Nominal GDP} / \text{Real GDP}) \times 100$$

It measures price changes across the entire economy.

7. GDP vs CPI

GDP Deflator: Includes ALL goods produced domestically.

CPI: Includes only a fixed basket of consumer goods.

Key Differences:

- CPI includes imports; GDP deflator does not.
 - GDP deflator includes capital goods; CPI does not.
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8. Disposable Income

Disposable Income = Personal Income – Taxes.

Example:

If salary = 50,000 taka and taxes = 5,000 taka → Disposable Income = 45,000 taka.

9. Fiscal Policy & Monetary Policy

Fiscal Policy: Government taxes and spending to influence the economy.

- Expansionary: Lower taxes, higher spending.
- Contractionary: Higher taxes, lower spending.

Monetary Policy: Central bank controls money supply and interest rates.

- Expansionary: Lower interest rates → more spending.
 - Contractionary: Higher interest rates → reduce inflation.
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10. Cash Reserve Ratio (CRR)

CRR is the percentage of bank deposits that must be kept with the central bank.

Effects:

Higher CRR → less lending → reduced money supply.

Lower CRR → more lending → increased money supply.

Example:

If CRR = 5%, then for every 100 taka deposit, the bank must keep 5 taka as reserve.