Measuring the performance of the economy

Criteria and main indicators
- economic growth (GDP)
- full employment (unemployment rate)
- price stability (CPI)
- external stability (balance of payments)
- income distribution (Gini coefficient)
Gross domestic product (GDP)

• **Definition**

• **Elements of definition**
  – value (expressed in money terms)
  – final goods and services, value added (to avoid double counting)
  – geographic aspect (within country’s boundaries)
  – current production (during a particular period)
  – gross (no provision for depreciation, consumption of fixed capital)

• **Three approaches to calculating GDP**
  – production method (value added)
  – expenditure method (final goods and services)
  – income method (incomes of the factors of production)
GDP: valuation at factor cost (or income), basic prices and market prices

Differences due to indirect taxes and subsidies

*Indirect taxes* = taxes on products + other taxes on production

*Subsidies* = subsidies on products + other subsidies on production

• GDP at factor cost (or income)
  + other taxes on production
  − other subsidies on production
  = GDP at basic prices

• GDP at basic prices
  + taxes on products
  − subsidies on products
  = GDP at market prices
• GDP at market prices
  + subsidies on products
  − taxes on products
  = GDP at basic prices

• GDP at basic prices
  + other subsidies on production
  − other taxes on production
  = GDP at factor cost (or income)

• Factor cost (or income) based on income approach

• Basic prices based on production approach

• Market prices based on expenditure (spending) approach
GDP: valuation at current prices and constant prices

- Measurement always first at current prices (nominal GDP)
- During inflation, adjustments for price increases required
  - nominal GDP converted to real GDP
  - use prices in a base year (constant prices)
- GDP at current prices = nominal GDP (reflects price changes)

In base year:

real GDP = nominal GDP

or GDP at constant prices = GDP at current prices
Gross national income (GNI or GNP)

- **GDP**: geographical concept; reflects what happened on SA soil, irrespective of who created the product

- We also want to know what happened to the economic position of South Africans

- **GNI (= GNP) = GDP**
  - all income earned in South Africa by foreign factors of production
  - all income earned by South African factors of production in the rest of the world

- SA: GDP > GNI; USA, Lesotho: GNI > GDP
Expenditure on GDP and gross domestic expenditure

• **Expenditure on GDP**  
  \[ C + I + G + X - Z \]  
  = GDP at market prices

• **Gross domestic expenditure (GDE)**  
  = total value of all spending in South Africa  
  \[ C + I + G \]  

• Exports \((X)\) excluded from GDE because expenditure occurs in the rest of the world

• Imports \((Z)\) included in GDE (ie not subtracted) because expenditure occurs in SA
Relationship between GDE and GDP

- GDE = \( C + I + G \)
- GDP = \( C + I + G + X - Z \)

**Thus:** GDP = GDE + (X–Z)
- If GDP > GDE, then \( X > Z \) (i.e., \( X-Z \) is positive)
- If GDP < GDE, then \( Z > X \) (i.e., \( X-Z \) is negative)

**Important point**
The difference between domestic spending and domestic production is reflected in the balance of payments.

Summary of key totals

- \( C + I + G = \) GDE
- GDE + X + Z = GDP
  \[ \begin{align*}
  \text{GDP} & = C + I + G + X - Z \\
  \end{align*} \]
- GDP – net primary income payments to the rest of the world
- + net primary income receipts from the rest of the world
- = GNI (or GNP)
**Unemployment**

\[
\text{Unemployment rate} = \frac{\text{number of unemployed persons}}{\text{workforce (available workers)}} \times 100
\]

- **Strict definition:** only those who have looked for work but not found any
- **Expanded definition:** everyone who desires employment and does not have a job

**Consumer price index (CPI)**

- \( CPI = \) index of prices of representative basket of consumer goods and services
- **Elements of CPI:**
  - basket
  - weights
  - base year
  - formula
  - price collection
- CPI serves as basis for measuring inflation
Balance of payments

- Summary of all transactions with the rest of the world
- Current account and financial account
- Current account: goods, services and income
- Financial account: direct investment, portfolio investment, other investment
- Change in gold and foreign exchange reserves

Key elements

- **Current account**
  - Exports (+)
  - Imports (–)
  - Service receipts (+)
  - Service payments (–)
  - Income receipts (+)
  - Income payments (–)
  - Balance on current account
• **Financial account**
  – Direct investment
  – Portfolio investment
  – Other investment
  – Balance on financial account

• **Change in gold and foreign exchange reserves**

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Measuring inequality

• **Lorenz curve**
  – cumulative % of total income plotted against cumulative % of population (ordered from poor to rich)
  – diagonal as line of perfect equality
  – area of inequality between Lorenz curve and diagonal
- **Gini coefficient**
  - derived from Lorenz curve
  - varies from 0 (perfect equality) to 1 (perfect inequality)
  - SA varies from 0.6 to 0.7: highly unequal distribution

- **Quantile ratios**