Introduction to Macroeconomics: CT1 Notes

Key Economic Aims:

1. Sustained Economic Growth
   a. Refers to actual and potential growth
   b. Actual growth: measured in terms of GDP
   c. Potential growth: increase in the production capacity of the economy
   d. Important to increase levels of consumption and easier redistribution of income to the poor
2. Low Unemployment
   a. Unemployment: people who are available for work and actively seeking work can't find jobs
   b. Measured by the unemployment rate
   c. It also represents a waste of human resources (not producing on the PPC curve) and unemployment benefits are a drain on Government budget
3. Price Stability
   a. Inflation: sustained increase in the General Price Level (measured by % increase of CPI)
   b. Low rate of inflation keeps prices stable to aid process of economic decision making
   c. High inflation: purchasing power of money eroded quickly
4. Healthy Balance of Payments
   a. BOP: record of a country's economic transactions
   b. BOP chronic deficit: loss is covered by draining foreign reserves
   c. If nothing is done to correct BOP deficit, currency will depreciate (which will cause great uncertainty and affect international trade and economic growth)
5. Stable Foreign Exchange

Macroeconomic Policies

- Demand Management (regulate aggregate demand)
  - Monetary Policy (interest rate and money supply)
  - Exchange Rate Policy
  - Fiscal Policy (using government budget by taxation and expenditure)
- Supply Management (increase aggregate supply)

Circular Flow of Income

- AD = C+I+G+(X-M)
  - Compromises firms, households, the Government and the Foreign Sector
  - Withdrawals: savings (S), taxes (T) and imports (M)
  - Injections: investments (I), government expenditure (G), exports (X)

Macroeconomic Indicators

National Income

- GDP
  - Value of all final goods and services produced within a given country during a period of time
  - Methods of Calculation:
    - Product Approach: add up final value of everything produced (avoid double counting)
    - Income Approach: production of goods and services will generate incomes ofr households through wages profits, rent and interest
    - Expenditure Approach: add up all expenditure (C+I+G+(X-M))
    - National Product = National Expenditure = National Income
  - Uses of GDP:
    - Measure economic growth: compare yearly national income data

        - Gauge economic strength of different countries (GDP per capita to calculate country's contribution to IMF and World Bank + separate into developed/underdeveloped)
        - Determine contribution from various sectors of the economy (product approach to determine production figures from various industries)
        - Distribution of national income among different income groups (workers, landlords etc.)
        - Formulation of economic policies and measuring standard of living
- GNP
    - Value of all final goods and services produced by domestic factors of production in a given period
    - GNP = GDP + net factor income from abroad (NFIA)
    - NFIA = income accrued to locally owned FOP situated abroad – income earned by foreign owned productive factors located within the country
    - Shows how much national income is derived from abroad OR level of foreign investment
- NNP
    - GNP – depreciation = NNP
    - Depreciation is hard to estimate accurately so this is rarely used
- Nominal vs Real Income
    - Nominal GDP: measures GDP at current prices = does not account for inflation
    - Real GDP: measures GDP in the prices that existed in some particular year
        - Eliminates nominal GDP increase that is due to increase in prices
        - Measures actual increase in goods and services produced
- Disposable Income
    - Income that people have available for spending (after all deductions and contributions)
    - Best measure to use to see how changes in household income affect consumption

Inflation Rate

- Definition: percentage change in price level from year to year
- Consumer Price Index:
    - Measures the change in the price of a fixed basket of goods and services commonly purchased by a typical household over a period of time
    - Weighted price index: each item in the basket has a weight according to its importance
    - Types and specifications of goods and their quantities are kept constant at the base period
- Uses of the CPI:
    - Needed as a price deflator to compile economic statistics such as real GDP
    - Formulation of monetary policies and identify source of inflation
    - Used by the state to make adjustments to economic and social schemes (and wages)
    - Used by businessmen in planning and wage adjustments
- Limitations of CPI
    - Substitution bias: some prices rise more than others, so consumers buy more goods whose prices have risen less or have fallen (thus CPI might overstate the increase in cost of living)
    - Quality adjustment: changes in quality are hard to observe, and CPI understates this
    - New products: decline sharply in price in the first few years upon introduction (not added to market basket until many years later, and price declines are not recorded)

Unemployment Rate

- Number of employed persons / Labour Force x 100%
- Labour force = economically active population, either employed or unemployed
    - Economically inactive: those who were not working, did not have a job to return to and were not looking for a job in the reference period (students, homemakers, retirees)

Balance of Payments

- Principles

    - Countries which are open economies will have global flows of money recorded in BOP
    - Receipts of money from abroad = credits (+ve), outflows are debits (-ve)
    - When all credit and debit items are taken together (from every country), they add up to 0
    - BOP must balance due to double-entry bookkeeping system (each transaction recorded twice, once as a debit and once as a credit)
    - BOP is in equilibrium when current + capital + financial account = 0
        - Positive balance = BOP surplus, negative balance = BOP deficit
- Current Account
    - Goods balance: import and export of physical goods (exports are inflows = credit)
    - Services balance: import and export of service (transportation, travel, insurance)
    - Income balance: wages, interest and profits flowing in and out
    - Current transfers: government contributions to and receipts from international organizations, or international transfer of money by individuals and firms
- Capital Account: flow of funds associated with acquisition of disposal of fixed assets (land)
- Financial Account:
    - Direct Investment (Long Term Capital): acquisition or sale of assets
    - Portfolio Investment (Hot Money): holding of paper assets such as company shares
- Overall Balance:
    - BOP surplus = increase in foreign currency available for foreign reserves/pay off foreign debt
    - ABOP deficit = run down foreign reserves or borrow from IMF

<u>Standard of Living</u>

- Overview
    - Refers to both material (amount of goods and services consumed) and non-material aspects (health, stress, security)

Measurement of SOL (Material)

- Real GDP per capita: adjusted for inflation and population growth
    - Inflation Rate: Changes in nominal GDP reflect both price and output produced changes
        - Real GDP only reflect changes in the volume of output (real GDP more relevant)
    - Population growth: if population increases by more than GDP, amount of goods and services available to each person is actually less, so SOL decreases

Measurement of SOL (non-material)

- Life expectancy rate (access to healthcare)
- Literacy rate (access to education)

Limitations of using GDP

- Measuring national output
    - Exclusion of non market activities: non paid housework and other unpaid activities (volunteering) that are ignored in the computation of GDP since no transaction was recorded
    - Exclusion of underground economy: illegal activities or private home tuition
- Measuring material welfare
    - Composition of GDP: production does not mean consumption (capital investments increase GDP but current living standards remain the same, this helps to increase future SOL)
    - Income distribution: GDP does not convey who gets to enjoy goods and services
- Measuring non-material welfare
    - Leisure time: if GDP increases due to longer working hours, it means less leisure time to pursue other worthwhile activities not reflected in GDP
    - Environmental degradation: external costs of polluting air and rivers not taken into account

Comparing SOL between countries

- **Material SOL:** PPP adjusted GDP per capita (US$)
  - Exchange rates: GDP figures converted to common currency at a purchasing power parity rate (allow a given amount of money in one country to buy same amount of goods in another) adjusting for costs of living
  - Population: account of differences in population sizes between countries
- **Non-material SOL:** life expectancy, literacy, pollution, crime rates

Difficulties in comparison

- Difference in accounting procedures
  - No internationally agreed method of measuring national income, accuracy in data varies
  - Less developed countries have more non-marketed good (self-sustenance in farming)
- Difference in size of underground economy
- Difference in composition of GDP (goods consumed are not identical)

Alternative measurements of SOL

- HDI: combined measure of life expectancy, education and GDP per capita PPP adjusted
- Measure of Economic Welfare: adjust GDP and adds leisure, unpaid housework
- Index of Sustainable Economic Welfare: accounts for inequality, household production, environmental costs, resource depletion