MACROECONOMICS

(Chapter 8 —> 13)

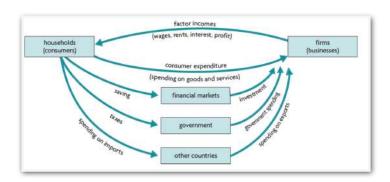
Chapter 8: The level of overall economic activity

8.1 Economic activity

The circular flow of income model:

households (consumers) Additional recome (businesses) Additional recome (businesses) Additional recome (businesses)

Adding leakages and injections:



- If leakages are greater than injections, the size of the circular flow becomes smaller —> this results in fewer services purchased, firms cutting back on their output and unemployment
- If injections are larger than leakages, the opposite happens

8.2 / 8.3 Measures of economic activity and calculations

- national income accounting —> an economy's national income or the value of output
- National output —> the output of an economy (aggregate output)
- Knowing this two values allows to —> assess an economy's performance over time
 - -> compare income and output performance with others
 - —> have a basis for making policies to meet econ. objectives
- GDP -> the market value of all final goods and services produced in a country over a period

Measuring the value of national output

Expenditure approach:

- Measures the total amount of spending to buy final goods and services in a country
- Includes only purchases of final goods + serv. and allows to see contribution of each component
- C + I + G + (X M) = GDP (Gross domestic product)
- C -> consumption spending -> all purchases by households on final goods and serv. in a year
- I -> investment spending -> spending by firms on capital goods + spending on constructions
- G -> Government spending -> spending by governments within a country
- X M -> the value of all exports minus the value of all imports of a country

Income approach:

- Adds up all income earned by the factors of production within a country over a time period
- National income —> when all factor incomes are added up
- This approach allows economists to see the relative income shares of the different factors of p. and how these might change over time and across countries

Output approach:

- Measures the value of each good and service produced in the economy over a particular time period and then sums them up to obtain the total value of output produced
- It includes only the value of all final goods and serv. to avoid double counting
- It calculates the value of output by economic sector (agriculture, ...) and then adds all up
- This approach provides economists the opportunity to study the performance of each sector

GDP and GNI:

- GNI —> the total income received by the residents of a country, equal to the value of all final goods and services produced by the factors of p. supplied by the country's residents regardless where the factors are located
- GNI —> Gross National Income —> GDP + net income from abroad

Nominal and real:

- Nominal if the measure is in terms of current prices, so not accounting the changes in prices
- Real if the measure of economic activity has eliminated the influence of changes in prices
- It is important to use real values when comparing a variable over time
- Nominal GDP measures the value of current output valued at current prices
- Real GDP measures the value of current output valued at constant (base year) prices

Total and per capita values:

- Per capita —> per person —> useful as a measure of standard of living in a country
- Needed because of —> differing population sizes across countries
 - —> population growth

Purchasing Power Parity (PPP):

- Buying power equivalence
- The amount of a country's currency that is needed to buy the same quantity of local goods and services that can be bought with US \$1 in the United States
- It makes comparisons across countries far more accurate

GDP deflator:

- Price index —> a measure of average prices in a period relative to average prices in a base year
- Real GDP = (Nominal GDP / price deflator) * 100

8.4 The business cycle

The business cycle:

- Short-term fluctuations in the growth of real output, which are alternating periods of expansion and of contraction
- Expansion -> when there is a positive growth in real GDP
- Peak —> the cycle's maximum real GDP
- Contraction —> when the economy begins to experience falling real GDP
- Trough —> the cycle's minimum level of GDP
- Potential output / GDP —> the output represented by the long-term growth trend
- Natural rate of unemployment —> only when in a point on the long-term growth trend line



Macroeconomic objectives:

- Reducing the intensity of expansions and contractions to make output gaps as small as possible
- Increasing the steepness of the line representing potential output to achieve a more rapid economic growth over long periods of time

8.5 National income statistics and alternative measures

Accuracy of national income statistics: (GDP and GNI)

- Do not include non-marketed output (which is likely to be far greater in developing countries compared to developed ones)
- Do not include output sold in underground (parallel) markets
- Do not take into account quality improvements in goods and services. Technological advances often permit improved products to be sold at a lower price giving benefits to consumers
- Do not account for the value of negative externalities such as pollution and toxic wastes
- Do not take into account the depletion of natural resources used to produce the output
- May not take into account differing domestic price levels (PPP)

Measure of economic well-being measuring issue: (GDP and GNI)

- Make no distinctions about the composition of output (not taking into account the degree to which they contribute to standards of living (military, ...))
- Cannot reflect achievements in levels of education, health and life expectancy
- Provide no information on the distribution of income and output only of the average
- Do not take into account increased leisure —> average number of hours worked per week
- Do not account for quality of life factors —> non-economic factors (crime rate, stress levels, well-functioning institutions, ...)

Alternative measures of well-being

OECD Better Life Index:

- It is based on a number of factors that the member countries themselves selected as factors that make better life
- Purpose —> provide a more accurate representation of well-being and form the basis of policies intended to improve the quality of life and well-being more generally

Happiness Index:

- Tries to address the interdependent economic, social and env. challenges faced by the world
- Based on —> Real GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity and perceptions of corruption
- Happiness is difficult to quantify and measure making this ranking less reliable for comparisons

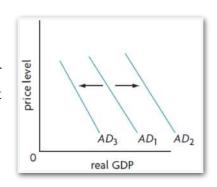
Happy Planet Index:

- A measure of sustainable well-being
- HPI = (Life expectancy * well-being * inequality of outcomes) / ecological footprint

Chapter 9: Aggregate demand and supply

9.1 AD and the AD curve

- Aggregate demand —> the total quantity of aggregate output, or real GDP, that all buyers in an economy want to buy at different possible price levels, ceteris paribus
- It consists of all components of GDP



Causes of changes in consumption spending:

- Changes in consumer confidence —> the more optimistic consumers are about their future the more they will spend
- Changes in interest rates —> because some consumer spending is financed by borrowing, and the lower the interest rate, the more consumers will spend
- Changes in wealth —> wealth is the value of assets that people own. The more people feel wealthier, the more consumer spending
- Changes in income taxes —> the lower the income taxes, the higher the disposable income
- Changes in the level of household indebtedness —> the lower the level of dept, the higher the spending by consumers
- Expectations of future price levels -> if lower prices expected in future, spending is postponed

Causes of changes in investment spending:

- Changes in business confidence —> the more optimistic firms are about their future sales and economic activity, the higher the investment
- Changes in interest rates —> decreasing in interest rates lowers costs of borrowing, making firms able to invest more money
- Changes (improvements) in technology —> they stimulate investment spending
- Changes in business taxes —> firms profits after taxes fall, therefore decreasing investment
- Level of corporate indebtedness —> high levels of dept will make the firm less willing to invest
- Legal / institutional changes —> increasing access to credit and securing property rights would result in increases in investment spending

Causes of changes in government spending:

- Changes in political priorities
- Changes in economic priorities —> gov. can use its own spending to influence AD

Causes of changes in X / M spending:

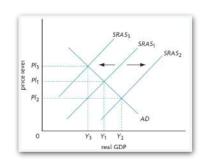
- Changes in national income abroad
- Changes in exchange rates
- Changes in trade policies, or the level of trade protection

9.2 Short-run AS and equilibrium in AD-AS

- Aggregate supply —> the total quantity of goods and services produced in an economy over a particular time period at different price levels
- Short-run AS (SRAS) —> shows the relationship between the price level and the quantity of real output produced by firms when resource prices (especially wages) do not change

Causes of shift of SRAS curve:

- Changes in wages
- Changes in non-labour resource prices
- Changes in indirect taxes
- Changes in subsidies offered to businesses
- Supply shocks such as wars and violent conflicts



- In the AD-AS model, the equilibrium level of output occurs where AD intersects with AS

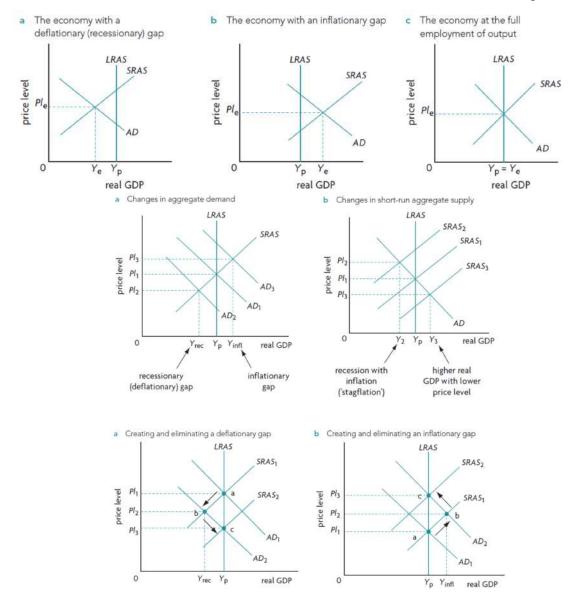
9.3 Long-run AS and equilibrium

The monetarist / new classical model:

- Importance of the price mechanism in co-ordinating economic activities
- Concept of competitive market equilibrium
- The economy as a harmonious system that automatically tends towards full employment
- The LRAS curve is vertical at the full employment level of output
- Long-run equilibrium occurs when the SRAS and AD curves intersect on the LRAS curve
- LRAS curve is vertical because with constant real costs, firms' profits are also constant, and firms no longer have any incentive to increase or decrease their output levels
- Governments should try to make markets work as freely as possible, to let it adjust alone

Short-run equilibrium:

- Deflationary gap —> unemployment is greater than the natural rate of unemployment
 - —> not enough total demand in the economy to make it worthwhile for firms to produce potential GDP, so requiring less labour
- Inflationary gap —> real GDP is > than potential GDP and unemp. is less than the natural rate
 - -> to much total demand in the economy and firm produce a greater quantity
- Full employment of output —> real GDP = potential GDP
 - —> unemp. is = to the natural rate and no deflation or inflation gap
- The economy has a built-in tendency towards full employment equilibrium

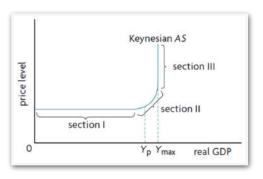


9.4 AS and equilibrium in the Keynesian model

- Inflexible wages and prices in the downward direction mean that the economy cannot move into the long run when experiencing a deflationary gap (can be seen in the Keynesian AS curve)
- If wages and prices do not fall easily, this means the economy may get stuck in the short run
- The gov. must intervene in the economy with policies to help it come out of deflationary gap

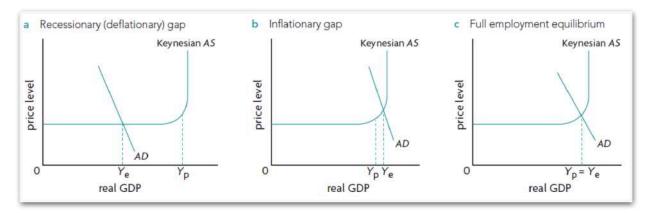
Keynesian AS curve:

- Section I —> real GDP is low —> a lot of unemployment of resources and scarce capacities
- Section II —> real GDP increases with the price levels and output increases, so increasing also employment of resources
- Section III —> real GDP reaches a level beyond which it cannot increase anymore —> firms are using the max. amount of labour and all other resources in the economy



The three equilibrium states:

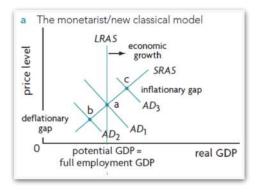
- The economy in the Keynesian model can remain indefinitely stuck in a deflationary gap
- Increases in AD does not necessarily result in increases in the price level

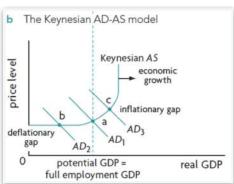


9.5 Shifting AS curve over the long term

Influences on AS over the long term:

- Increases in quantities of the factors of production
- Improvements in the quality of factors of production
- Improvements in technology
- Increases in efficiency
- Institutional changes —> how efficiently resources are used
- Reductions in the natural rate of unemployment





Chapter 10: Macroeconomic objectives I

10.1 Low unemployment

Unemployment:

- Unemployment —> people of working age actively looking for a job but who are unemployed
- Labour force —> the number of people employed + the number of people of working age who are unemployed
- Measured in two ways —> numerical —> total number of unemployed people in the economy —> unemp. rate —> (number of unemployed / labour force) x 100

Difficulties in measuring unemployment:

- Official statistics underestimate true employment because of hidden unemployment
 - -> discouraged workers who gave up looking for a job are not excluded
 - -> do not make a distinction between full-time and part-time employment
 - —> do not make a distinction on the type of work done
 - —> do not consider people on retraining programmes and early retired people
- Official statistics may overestimate true unemployment because of:
 - —> do not include people working in the underground economy
- A disadvantage of this calculation is that it is an average over the entire population —> for this reason the calculation is done on different population groups in a society (region, gender, age ...)

Costs of unemployment:

Economic costs:

- A loss of real output (real GDP)
- A loss of income for unemployed workers
- A loss of tax revenue for the government —> larger budget deficit or smaller budget surplus
- Costs to the government of unemployment benefits
- Costs to the government od dealing with social problems resulting from unemployment
- More unequal distribution of income
- Unemployed people may have difficulties finding work in the future (lose the skills)

Personal and social costs:

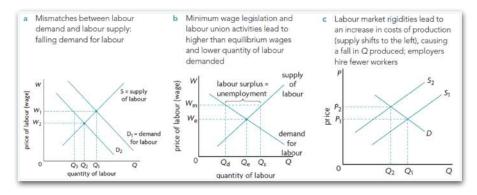
- Personal problems —> indebtedness and loss of self-esteem
- Greater social problems —> increased crime and violence, drug use and homelessness
- Arising levels of poverty

Types and causes of unemployment:

- Natural rate of unemployment —> the sum of Structural, Frictional and seasonal unemployment

Structural unemployment:

- Caused by changes in demand for particular labour skills
- Caused by changes in the geographical location of jobs —> firms may move ...
- Caused by labour market rigidities —> factors preventing the forces of supply and demand from operating in the labour market
 - —> minimum wage legislation
 - -> labour union activities and wage bargaining
 - —> employment protection laws
 - -> generous unemployment benefits



Frictional unemployment:

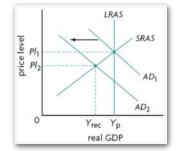
- Occurs when workers are between jobs —> have been fired, are in search of a better job or
- Tends to be short term —> does not involve a lack of skills that are in demand

Seasonal unemployment:

 Occurs when the demand for labour in certain industries changes on a seasonal basis because of variations in needs

Cyclical unemployment:

- Occurs during the downturns of the business cycle in a deflationary gap
- The downturn arises from low aggregate demand (demand-deficit unemployment)



10.2 Low and stable rate of inflation

- Inflation —> a sustained increase in the general price level
- Inflation indicates that prices of goods and services are increasing on average
- Deflation -> a sustained decrease in the general price level
- Disinflation —> a decrease in the rate of inflation
- Consumer price index —> a measure of cost of living for the typical household —> compares the value of a basket of goods and services in one year with the value of a base year
 - -> ((Final value of A- initial value of A) / initial value of A) x 100
- Real income -> (nominal income / CPI) x 100

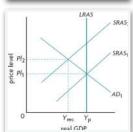
Problems with CPI:

- Different rates of inflation for different income earners
- Different rates of inflation depending on regional and cultural factors
- Changes in consumption patterns due to consumer substitutions when relative prices change
- Changes in consumption patterns due to increasing use of discount stores and sales —> prices are lower than those indicated in the CPI calculations
- International comparisons —> types of goods included, weights used and methods of calculation
- Changes in consumption patters due to introduction of new products
- Changes in product quality
- Comparability over time —> revising CPI baskets and changing the base year

Causes of inflation:

- Demand-pull inflation -> increases in aggregate demand shift right of AD)
- Cost-pull inflation -> increases in costs of production or shocks (AS to left)

LRAS SRAS Pl₂ DE Pl₁ O Y_P Yinfl real GDP



Impact of inflation:

Negative impacted by inflation:

- People who receive fixed income or wages
- People who receive income that increase less rapidly than the rate of inflation
- Holders of cash
- Savers —> interest rates must be greater than inflation
- Lenders -> (lend money to people) -> money will lose a bit of its value over time

Positive impacted by inflation:

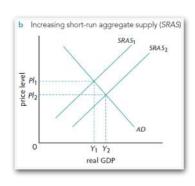
- Borrowers
- Payers of fixed incomes or wages
- Payers of incomes or wages that increase less rapidly than the rate of inflation
- Uncertainty —> cannot predict future changes in purchasing power —> fewer investments
- Savers -> lowered incentive to save money
- Export —> become more expensive to foreign buyers and imports become cheaper —> ability to compete with foreign centuries is reduced
- Economic growth —> lowered economic growth for the country
- Resource allocation —> prices rise rapidly so the signalling and incentive functions not effective
- Social and personal costs are unequally distributed —> poor people more affected by inflation

Hyperinflation:

- When there are very high rates of inflation
- Results from very significant increases in the supply of money
- Inflationary spiral -> inflation sets in motion a series of events that worsen inflation
- A low and stable rate of inflation between 2-3% if preferred overall

Causes of deflation:

- Deflation occurs very rarely because:
 - -> wages of workers do not ordinarily fall
 - -> large oligopolistic firms may fear price wars
- It is caused by decreases in AD and increases in AS



Costs of deflation:

- Falling price levels —> individuals on fixed incomes, holders of cash, savers and lenders gain
 —> borrowers and payers of individuals with fixed incomes lose
- Increases in real value of debt
- Uncertainty —> firms unable to forecast their costs and revenues due to declining price levels
- Deferred consumption --> consumers postpone spending --> deflationary spiral
- Risk of bankruptcies and a financial crisis
- Inefficient resource allocation —> signalling and incentive functions are not effective
- Policy ineffectiveness —> people won't be willing to spend
- Exports may increase as prices will be lower —> not enough to sustain all other negative effects

10.3 The relationship between unemployment and inflation

- An increase of one percentage point in unemployment lowers well-being nearly six times more than a one percentage point increase in inflation
- Misery index —> the sum of the unemployment rate and the inflation rate of a country
 - —> the higher the index, the greater the misery of a population
 - —> does not distinguish between the separate effects of unemployment and inflation on the well-being of the population

Chapter 11: Macroeconomic objectives II

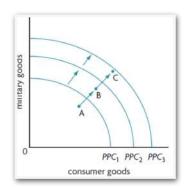
11.1 Economic growth

Economic growth:

- Refers to an increase in real GDP, or the real quantity of goods and services produced over a period of time
- Percentage change in real GDP or in real GDP per capita
- % change in real GDP = ((final value of real GDP initial value of real GDP)/initial value) x 100
- % change in real GDP per capita = % change in real GDP % change in population

Short term growth vs long term growth:

- Economic growth occurs as a result of:
 - -> increases in aggregate demand (short-term growth)
 - -> increases in short-run aggregate supply (short-term growth)
 - -> increases in long-run aggregate supply (long-term growth)
- In the Keynesian model, short-term growth does not involve an increase in potential output
- Short-term growth is affected far more by increases in aggregate demand rather than in short-run aggregate supply
- Short-term growth is shown in the expansion phase of the business cycle
- Usually long term growth needs an extended period of time to take effect



	AD-AS model	PPC model
Short-term growth	 increases in AD increases in SRAS (less important) 	reduction in unemploymentimprovement in efficiency
Long-term growth	 increased resource quantity improved resource quality technological change 	
	improvements in efficiencyinstitutional changes	=

Why economic growth occurs:

- Increase in the quantity and improvements in the quality of physical capita, due to investments
- Increased quantities of labour are unlikely to be a source of economic growth over long periods, but improvements in the quality of labour effects greatly economic growth
- Marketable commodities (minerals, metals, ecological resources, ...) can contribute to growth but are not essential
- Common pool resources are crucially important to long-term growth —> as ability of countries to maintain them

Impact of economic growth on living standards:

- Greater potential for people to increase their consumption of goods and services, and improve their standards of living —> require policies to make effective use of the resources available
- Distribution of income -> greater income going to poorer household means greater living stand.
- Household spending —> greater income spent on food, education, health is greater living stand.
- Share of income controlled by women —> the greater, the stronger the impact
- Government spending on merit goods —> budget allocated to areas such as education or health
- Contributions by non-gov. organisations —> poverty oriented that reach more poor people

Impact of economic growth on the environment:

- 1) Some environmental damage is irreversible
- 2) Growth justifies government inaction on the environment
- 3) Growth is not bad for the environment but how it is pursued
- 4) Growth based on unsustainable resources use may threaten future growth

To pursue growth ecofriendily:

- —> governments implement market-based policies that internalise the externality
- —> Governments pursue more env. regulations that encourage pollution-free tech. change
- —> Increased emphasis on human capital in production (which is pollution-free)
- -> increased emphasis on green investments
- -> changes in the structure of the economy towards more pollution-free services

Inappropriate gov. policies:

- -> introduction of capital-using technologies (labour-saving)
- -> low levels of government investment in human capital
- -> services and infrastructure to urban areas ignoring rural sector with most people
- -> concentrating investments in rich people and ignoring the urban slums

11.3 Potential conflict between macroeconomic objectives

Demand-pull inflation and economic growth:

- In the Keynesian model —> as long as AD increases along horizontal part of AS curve —> economic growth with no inflation —> no conflict between low inflation and growth
- New classical model —> when in a deflationary gap, increases in AD result in both growth and increase in price level —> possible conflict

Cost-push inflation and economic growth:

- Caused by decreases in SRAS due to factors such as high prices of factors of production
- Stagflation —> negative economic growth (not possible to have positive growth in cost-push)

Chapter 12: Economics of inequality and poverty

12.1 Inequality

Economic inequality:

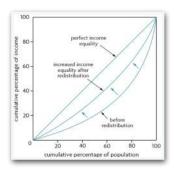
- Refers to the degree that people in a pop. differ in their ability to satisfy their economic needs
- It results mainly from differences in income and wealth
- Income inequality —> differences in how evenly income is distributed in a population
 - -> income includes interest from saving, bonds and share in stock markets
- Wealth inequality —> arises from differences in the amount of wealth people own

Measurements of economic inequality:

- Income is distributed in a quintiles of the population (20% of the whole)

Lorenz curve:

- Is used to show the degree of income inequality in an economy
- The closer a Lorenz curve is to the diagonal representing perfect income equality, the greater is the equality in income distribution



Gini coefficient:

- Is a summary measure of the information contained in the Lorenz curve of an economy
- (Area between diagonal and Lorenz curve / Entire area under diagonal)
- Has a value between 0 and 1
- The closer the value to 1 the greater the income inequality

Wealth inequality:

- The Lorenz curve and the Gini coefficient can be used in the same way to show wealth inequality
- Reasons behind greater wealth inequality:
 - —> Limited growth in wages makes it difficult for low-income people to accumulate wealth
 - —> High-income people consume a smaller fraction of their income —> can save more
 - —> Income and wealth inequalities feed on each other

12.2 Poverty

- Refers to an inability to satisfy minimum consumption needs
- Absolute poverty —> a situation where a person does not have enough income to meet basic human needs
- Poverty line —> minimum income level before absolute poverty
- World bank poverty lines —> living on less than 1.90 \\$ a day is extreme poverty
 - -> living on less than 3.20 \$ a day for lower-middle income countries
 - -> living on less than 5.50 \$ a day for upper-middle income countries

- Relative poverty —> compares the income of individuals in a society with median incomes
- Poverty rates differ widely among social groups in a society
- Measures for absolute and relative poverty are useful to governments as guides to policies providing income support as well as measures intended to combat poverty

Minimum income standards (MIS):

- Method to measure poverty
- Consists of ongoing research on what people in a population believe are the essentials for a minimum acceptable standard of living that allows people to participate in society
- It calculates the minimum income that is required for different family types to be able to buy the essentials in the basket
- This measure reveals info on -> number of people living under minimum income
 - —> the relative contribution of each item in the basket
 - -> how these factors change over time

Composite indicators:

- Measures of complex phenomena that cannot easily be described by a single indicator
- Multidimensional poverty index (MPI) —> measures poverty in three dimensions —> health, education and living standards —> each dimension is intended to reflect deprivations
- MPI of the world bank —> as noted by the bank, the standard monetary measure of poverty does not capture important aspects of well-being, such as access to health care or a secure community

Difficulties in measuring poverty:

- Poverty has different meaning and different approaches to measurement
- Measurement problems —> do not take wealth or savings into consideration
 - —> in some cases poverty is measured based on household surveys
 - —> is subjective
 - -> do not include homeless people
 - -> freelance work or income from investments not included
- Overestimation or underestimation of the national poverty line

12.3 Causes of economic inequality and poverty

Causes of inequality:

- Circumstances that affect life opportunities and are beyond one's control include:
 - -> parents' level of education, occupation and income
 - -> place of birth
 - -> gender
 - -> race and ethnicity

- Different levels of human capital -> differences in skills, education and good health possessed
- Different levels of resource owned —> some people inherit, or accumulate through savings from high incomes, financial capital or other forms of property which gives both income and wealth
- Discrimination —> some social groups often face discrimination in the job market, with the result that they may receive lower wages or may find greater difficulty finding work
- Unequal status and power —> people in positions of power may sometimes use this to influence government policies favouring their own interests, rather than policies favouring redistribution
- Government tax and benefits policies —> people on low income must often rely heavily on transfer payments and social services and merit goods provided by the government
 - -> tax policies that favour the rich and do not favour redistribution of income
- Technological change —> it has eliminated some jobs by replacing human labour with machines
- Globalisation —> economic integration on a global scale —> foreign direct investment involves greater demand for skilled rather than unskilled workers + economies may offshore certain jobs
- Market-based supply-side policies —> such as discouraging trade unions and reducing bargaining power of labour, or reducing the minimum wage
- Increases in pay of certain occupations —> certain occupations increased much more than others
- Unemployment —> if long-term then an individual is more likely to become poor
- Geography —> people may live in remote regions with limited possibilities for employment
- Age -> older people may receive pensions that are barely enough to cover minimum needs
- Poverty —> low incomes leads to low human capital, and so further low income

12.4 Impacts of income and wealth inequality

Economic growth:

- Greater inequality lowers growth by reducing the ability of lower income people to invest
- Children of low-income families are likely to also have low incomes in future
- Savings of wealthy people often leave the country (reduces resources available domestically)
- Income and wealth in a few hands results in significant political control —> influence policies
- Significant political control by the rich may result in less government provision of merit goods
- Improved income distribution increases the demand for locally produced goods and services —>
 encourages local production and promotes local employment and investment
- High income inequality means that the poor are unable to obtain credit so can't make investments
- High income inequality leads to social dissatisfaction, unrest and political instability

Low living standards:

- Lack of access to health care and education
- Higher infant, child and maternal mortality
- Higher levels of preventable diseases
- Social problems (crime rates, drug use, ...)
- Inability to realise one's full potential —> waste of human capital

Social and political instability:

- High income and wealth inequalities create societies that are polarised and divided —> different interests created so interactions between groups are difficult
- The groups at the top begin to have a stronger political influence
- Rise in sense of dissatisfaction

12.5 Policies to reduce income and wealth inequalities and poverty

Taxation:

- It can lower inequalities by taking more taxes from the rich than from the poor
- Are the most important source of government revenues
- Divided in two types —> direct taxes and indirect taxes

Direct taxes:

- Taxes paid directly to the government tax authorities by the taxpayer
- Personal income taxes -> taxes paid by individuals on all forms of income
- Corporate income taxes —> taxes on the profits of corporations
- Wealth taxes —> taxes on ownership of assets (property taxes or inheritance taxes)

Indirect taxes:

- Taxes on spending on goods and services
- General expenditure taxes —> VAT for Europe and sales taxes for USA
- Excise taxes —> taxes paid on specific goods and services such as cigarettes and petrol
- Customs duties (tariffs) -> tax applied on imports of foreign goods into a country
 - —> it keeps imports out of the country and it raises tax revenue
- Indirect taxes are inconsistent with the objective of a more equal distribution of income

Taxation types:

- Proportional —> as income increases, the tax rate remains constant
- Progressive —> as income increases, the tax rate increases
- Regressive —> as income increases, the tax rate decreases

Evaluating taxes as a policy for redistribution:

Transfer payments:

- Payments made by the government to individuals specifically for the purpose of redistributing income away from certain groups and towards other groups (vulnerable groups)
- Conditional cash transfers if they are granted with conditions to meet certain requirements
- They use a big part of the government budget and create incentives for people not to work

Targeted gov. spending:

- Governments spend to provide merit goods that are under provided by the market
- Uses tax revenue to provide the good in larger quantities and at very low or zero prices

Universal basic income:

- A method intended to provide residents in a country with a sum of money that they would receive regardless of any other income they may have

Polivies to reduce discrimination:

- Countries around the world usually have legislation that forbids discrimination in the workplace
- It is essential to ensure that discrimination does not occur

Government intervention in markets:

- Minimum wage legislation —> sets a legal minimum wage
- Price controls such as food price ceilings or price floors for farmers
- 25% of redistribution occurs through the tax system while 75% occurs through benefits

Chapter 13: Demand-side and supply-side policies

13.1 Macroeconomic policies

Demand-side policies:

- Also called demand management —> focus on changing AD to achieve macroeconomic goals
- Try to counteract the effects of short-term fluctuations in real GDP and bring full employment level of real GDP, or potential GDP
- Two types of stabilisation policies —> either monetary policies or fiscal policies —> try to minimise the short-run fluctuations of the business cycle

Supply-side policies:

- Focus on the production and supply side of the economy (specifically the LRAS curve)
- Aim to increase potential output and achieve long-term economic growth
- Focus on increasing the quantity and quality of factors of production (LRAS curve factors)
- Two major categories of supply-side policies:
 - —> market-based (rely on the working of the market)
 - —> interventionist (rely on government intervention)

13.2 Demand management and monetary policy

The role of central banks:

- Monetary policy is carried out by the central bank of each country
- Commercial banks are financial institutions whose main functions are to hold deposits for their costumers, loans, transfer funds and to buy government funds —> cannot be central banks
- Are responsible for: -> Banker to the government (as commercial banks for costumers)
 - —> Banker to commercial banks —> holds deposits for them and for loans
 - -> Regulator of commercial banks -> regulates and supervises them
 - —> Monetary policy —> controls the supply of money and interest rates
- It has a degree of independence from government interference in the pursuit of monetary policy

The goals of monetary policy:

- Low and stable inflation
- Low unemployment (specifically cyclical unemployment)
- Reduce business cycle fluctuations
- Promote a stable economic environment for long-term growth —> needed to be able to plan and carry out economic activities
- External balance —> country's revenues from exports are balanced by spending on imports over an extended period of time

Inflation targeting:

- The public announcement of medium-term numerical targets for inflation with an institutional commitment by the monetary authority to achieve these targets
- Between 1.5% and 2.5% usually
- Advantages —> achievement of a low and stable rate of inflation
 - -> improved ability of economic decision-maker to anticipate future inflation
 - -> greater co-ordination between monetary and fiscal policy
- Disadvantages —> reduced ability of the central bank to pursue macroeconomic objectives
 - -> conflict between a low rate of inflation and low unemployment
 - —> reduced ability of CB to respond to supply-side policies —> leads to costpush inflation and stagflation
 - -> a too low inflation target may lead to higher unemployment
 - —> a too high inflation target may lead to problems resulting from high inflation

Real vs Nominal interest rates:

- Real interest rate = nominal interest rate - rate of inflation

The role of monetary policy:

- The point of changing the money supply and changing interest rates is ultimately to influence AD
- Changes in interest rates affect —> Investments and consumption in the GDP
- Higher interest rates —> lower spending so AD to the left
- Lower interest rates —> higher spending so AD to the right
- Expansionary monetary policy —> An increase in the money supply by the central bank
 - -> aim to expand AD and the level of economic activity
 - —> easy money policy
- Contractionary monetary policy —> A decrease in the money supply by the central bank
 - -> aim to contract AD and the economy
 - —> tight money policy
- Ratchet effect —> the price level moves up when there is an increase in AD and then remains at the same level until there is a further increase in AD

Evaluating monetary policies:

Strengths:

- Interest rate changes can be incremental
- Interest rates changes are reversible
- Monetary policy is flexible
- Relatively short time lags (time delays)
- Central bank independence
- Limited political constraints (no changes in government budget)
- No crowding out

Constraints:

- Possible ineffectiveness in recession —> rates cannot fall when approaching zero
 - -> low consumer and producer confidence
 - -> banks may be fearful of lending
- Conflict between government objectives
- May be inflationary
- Problematic when dealing with stagflation or cost-push inflation as they are supply-side issues

13.3 Demand management and fiscal policy

The government budget:

- Type of plan of a country's revenues and expenditures over a period of time (usually one year) that the government makes to plan its activities
- Sources of gov. revenue —> taxes of all types
 - —> from the sale of goods and services
 - —> from the sale of government-owned assets or properties
- Types of gov. Expenditures:
 - —> Current expenditures —> spending on day-to-day items that are recurring (wages, ...)
 - —> Capital expenditures —> include public investments or spending to produce physical capital (roads, airports, ...)
 - —> Transfer payments —> payments to vulnerable groups (for income redistribution)

Goals of fiscal policy:

- Refer to manipulations by the gov. of its own expenditures and taxes to influence AD
- Can affect G, C and I components of the GDP
- Equitable distribution of income
- Low and stable rate of inflation
- Low unemployment
- Reduce business cycle fluctuations
- Promote a stable economic environment for long-term growth
- External balance (Imports Exports)

Expansionary fiscal policy:

- Increasing government spending
- Decreasing personal income taxes
- Decreasing business taxes (taxes on profits)
- Combination of the above

Contractionary fiscal policy:

- Decreasing government spending
- Increasing personal income taxes
- Increasing business taxes
- Combination of the above

Evaluating fiscal policy:

Strengths:

- Pulling an economy out of a deep recession
- Ability to target sectors of the economy
- Direct impact of government spending on AD
- Dealing with rapid and escalating inflation
- Ability to affect potential output

Constraints:

- Problems of time lags —> problem must be recognised, appropriate policy must be decided, policy takes effect in the economy
- Political constraints —> as numerous political pressures
- Sustainable dept
- In a recession, tax cuts may not be effective in increasing AD
- Inability to "fine tune" the economy —> cannot be used to reach a precise target as general
- May be inflationary —> if it lasts to long
- Unable to deal with cost push inflation or stagflation as it is a demand-side policy

13.6 Supply-side policies

Goals of supply-side policies:

- Promote long-term growth by increasing the productive capacity of the economy
- Improve competition and efficiency
- Reduce costs of labour and reduce unemployment through greater labour market flexibility
- Increase incentives of firms to invest in innovation by lowering costs of production
- Reduce inflation to improve international competitiveness

Market-based supply-side policies:

Encouraging competition:

- Privatisation -> increases efficiency due to improved management and operation of private
- Deregulation —> elimination or reduction of government regulation of private sector activities
- Contracting out to the private sector
- Anti-monopoly regulation —> assures fair competition
- Trade liberalisation

Labour market reforms:

- Abolishing minimum wage legislation
- Weakening the power of labour unions
- Reducing unemployment benefits
- Reducing job security (against being fired)

Incentive-related policies:

- Lowering personal income taxes
- Lowering taxes on capital gains and interest income
- Lowering business taxes

Strengths:

- Improved resource allocation
- May not burden the government budget
- Ability to create employment
- Ability to reduce inflationary pressure (LRAS to right)

Constraints:

- Time lags as effects over the long term
- Possible unfavourable impact on unemployment (competition may increase unemployment)
- Possible negative effects on equity
- Negative impact on the government budget (policies in the form of tax cuts)
- Possible interference of vested interests (strong personal interests) —> oppose and may prevent the policies from being implemented
- Possible negative effects on the environment

Interventionist supply-side policies:

- Presuppose that the free market economy alone cannot achieve the desired results in terms of increasing potential output —> so gov. intervention is required
- Investment in human capital —> training and education
 - —> improved health care services and access to these
- Investment in new technology —> research and development
 - —> results in new or improved capital goods
 - —> gov. usually provides incentives to firms for this
- Investment in infrastructure -> can lead to more efficient transport of goods ...
- Industrial policies —> gov. policies designed to support the growth of the industrial sector
 - -> Support for small and medium-sized enterprises of firms (SMEs)
 - -> tax exemptions, grants, low-interest loans and business guidance
 - -> support for infant industries (as SMEs but also protection against exports)

Strengths:

- Direct support of sectors important for growth
- Ability to create employment
 - -> enabling workers to acquire the skills...
 - -> providing assistance to workers to relocate
 - -> providing info that reduces unemployment when workers are between jobs/season
- Potential ability to reduce inflationary pressure —> by increasing potential output
- Possible positive effects on equity —> skilled workers are more likely to be employed and be an active and productive part of the society

Constraints:

- Time lags -> time needed is long
- Negative impact on the government budget as heavily based on gov. spending

Overlaps between demand-side and supply-side policies:

- Interventionist supply-side policies involve an increase in government spending —> more AD
- Market-based supply-side policies encourage firms to invest more in R&D —> it is an investment so leads to an increase in AD
- Demand-side policies can contribute to long-term growth of potential GDP by providing a stable macroeconomic environment
- Fiscal policies —> gov. spending for provision of physical capital improves also quality of goods
 - —> gov. spending for instruction also improves the quality of the labour force
 - —> lower business taxes also promote technological innovations
- Monetary policies —> a fall in interest rates encourages more spending by firms on capital goods, so increasing their quantity —> this affects potential output