Economic Growth involves an increase in the volume of goods and services that an economy can produce over a period of time. It is measured by the annual rate of change in real GDP.

$$\frac{\text{GDP}_2 - \text{GDP}_1}{\text{GDP}_1} \qquad \qquad X \qquad \qquad \underline{100}$$

Aggregate Demand is the sum of consumption by households, investment expenditure, government expenditure and exports less imports.

AD = C + I + G + (X - M)

C = consumption I = investment

G = government spending

X = exports M = imports

Aggregate supply = aggregate demand (National income) = (national expenditure)

The economy is equilibrium when:

S+T+M = I+G+X savings (S) investment (I)

Tax (T) government spending (G) Import (M) exports (X)

An increase in leakages
A decrease in injections
Downturn in growth

A decrease in leakages
An increase in injections

Upturn in growth

Influences on consumption

- § Consumer expectations about future inflation, real incomes and general availability of goods.
- **The level of interest rates** an increase in interest rates will discourage spending and encourage saving.
- **The distribution of income** a more even distribution of income will generally encourage a higher rate of spending.

Influences of investment

- § The cost of capital equipment
 - The level of interest rates
 - Change in government policies
 - Changes in price and productivity
- § Business expectations
 - Changes in demand for a product
 - Changes in economic outlook
 - New resources/technology
 - Level of inflation

The **multiplier** is the number of times an increase in national income exceeds the increase in aggregate demand that caused it.

Multiplier (k) =
$$\frac{1}{MPS}$$
 or $\frac{1}{1-MPC}$

The total increase = K X increase in the national income.

Effects of economic growth

Living standards – increase in growth means that there will be increase in wages, causing an increase in material living standards.

- § Employment growth creates jobs, which will cause a decrease in the level of unemployment.
- § Inflation high economic growth can cause an increase in inflation, due to larger wage claims.

 Government policies are aimed at increasing economic growth to a level that doesn't cause a significant increase in inflation.
- **External stability** higher economic growth will cause an increase in the CAD, which poses a severe problem. The CAD is the speed limit for an economy
- § Income distribution higher economic growth will cause an increase in living standards, but more for the high-income earners are able to raise their salaries higher.
- **Environmental impacts** economic growth can potentially have a negative effect on the environment. It can result in pollution, a depletion of resources and damage to the local environment.

Government micro-economic policies are designed to minimize the fluctuations so that the economy can have low inflation, low rate of unemployment and stable economic growth.

Factors that have contributed to Australia's economic growth have been:

- § Strong focus on maintaining low inflation
- § Low interest rates
- § Productivity levels due to micro-economic reform
- § Business and consumer confidence
- § Large increases in asset prices
- § The strong performance of the US
- § New technologies helped to raise productivity and efficiency levels
- § Keeping economic growth at a sustainable level.

Policies

- § Macroeconomic policies
- § Fiscal policy
- § Monetary policy

Unemployment

The **Labor force** is the section of the population 15 years and over who are working or actively seeking work. The **labor force participation rate** is the percentage of the working age population who are in the labor force.

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 Labor force
 labor force

 Participation rate
 working age population

Australia's is around 63.7%

Unemployment rate = number of persons unemployed X 100
Total labor force

Australia's is around 6%

Problems with measure used for unemployment

- § Underemployed are deemed fully employed
- § No official measure for over work

Factors that have led to higher structural unemployment

- § Increased participation rate, due to stronger growth
- § Structural change and microeconomic reform
- § New technologies and business practices
- § Rise in productivity of labor
- § Productivity growth and growth in the labor force

Types of unemployment

- § Structural unemployment occurs because of structural change within the economy
- S Cyclical unemployment occurs because of a downturn in economic activity
- **Frictional unemployment** represents people who are temporarily unemployed because they are in between jobs.
- § Seasonal unemployment occurs because of the seasonal nature of some jobs (fruit pickers)

- **Hidden Unemployment** includes those that do not fit into the ABS definition of unemployment and are not reflected in the unemployment stats.
- § Underemployed refers to people who are working less than full-time hours but would like to work longer
- **Long-term unemployed** are people who have been unemployed for longer than 12 months.
- § Hard core unemployment are people who are unemployed due to their personal, mental or physical characteristics

The **natural rate of unemployment** is the rate of unemployment that is consistent with full employment in the labor market. The natural rate of unemployment doesn't include cyclical unemployment. It is the level of unemployment that the government aims to achieve.

The causes of unemployment

§ Economic growth

The labor market is a derived demand market – that is the demand for labor will be determined by the level of goods and services sold in an economy. A decline in AD will cause an increase in unemployment

§ The stance of macro-economic policies

- o Expansionary would cause an increase in economic activity, causing unemployment to drop.
- o Tightening policies will cause a slowdown in growth and increase in unemployment.

§ Constraints on economic growth

High economic growth will cause a decrease in unemployment, but will also put a lot of pressure on inflation, which is a bigger concern for governments.

- § Rising participation rate
- § Structural change
- § Technological change
- § Productivity

The impacts of unemployment

§ Economic costs

- Unemployment means that resources are not been used efficiently which will cause higher prices and lower living standards
- o Unemployment leads to a decline in the skills of the labor force
- The government must pay for unemployment benefits and retraining, which makes further growth harder.
- Lower wage growth

§ Social costs

- Increased inequality
- o Crime
- o Poverty
- Loss of work skills
- Poor health

§ Policies

- Expansionary macroeconomic policy
- o Microeconomic and labor market reform

Inflation is the sustained rise in general price levels within an economy.

Consumer Price Index (CPI) – measures the percentage change in prices of consumer goods and services and therefore it reflects the cost of living.

Inflation rate =
$$\frac{CPl_2 - CPl_1}{CPl_4}$$
 X $\frac{100}{1}$

The CPI uses a basket of goods and services, which are weighted according to their significance for the average Australian household

Recent inflation trends

Australia's most significant macroeconomic achievement was that Australia sustained reduction in inflation rates after having high inflation during the mid 1970's. After the recession in the early 1990's, Australia has emerged from the recession with low inflation levels. The RBA kept inflation within the target range of 2-3% even though the economy was growing strongly during the late 1990's.

Causes of inflation

- § Demand-pull inflation due to an increase in demand which is greater than supply, prices rise to match the demand.
- **Cost-**push inflation due to increase in production costs, mainly due to increased wages, prices are increased in order maintain profits.
- § Inflationary expectations in inflation is expected to increase, then firms will increase their prices to protect themselves from changes.
- § Imported inflation a rise in import prices, a depreciation of the \$A will both lead to inflation.
- § Government policies by increasing indirect taxes, deregulation of an industry, the GST.

Effects of inflation

§ Economic growth and uncertainty

Inflation is a major constraint on economic growth. Increased growth will generally lead to inflationary pressures through increased wages and strong consumer demand. Sustained low inflation rates allow for high economic growth. Low inflation is beneficial to economic growth.

§ Wages

High levels of inflation will generally mean that employees will demand higher wages to maintain their real wages. To compensate for this, businesses will increase their prices, which further increases inflation and so on.

§ Income distribution

Negative effect of income distribution, because low-income earners can fin it hard to increase their wages as fast as prices.

§ Unemployment

Generally high inflation will mean high growth, which causes a decrease in unemployment. **Stagflation** is when both inflation and unemployment are increasing at the same time.

§ International competitiveness

Low inflation should mean that Australia would be more internationally competitive. This should help to decrease its imports and increase exports, thus improving the CAD.

§ Exchange rates

High inflation can cause a depreciation of the \$A over time. Low inflation can stabilize a volatile \$A.

§ Interest rates

Causes an increase as the RBA tries to stabilize the rate of inflation.

External Stability involves maintaining the size of Australia's CAD and the sustainability of the level of foreign debt and equity. It also involves ensuring that Australia is able to service its foreign liabilities and stabilizing dramatic movements of the Australian dollar.

Australia's foreign liabilities

Net foreign debt – reflects the total liabilities of Australians to foreigners **minus** the liabilities of foreigners to Australians.

Net foreign equity – reflects the total value of Australian assets in foreign ownership **minus** total value of overseas assets owned Australians.

Equity doesn't add directly to Australia's foreign debt, but Australia does have to repay the price of purchasing the assets unless the assets are sold back to Australia. Borrowing does add directly to Australia's foreign debt, the initial borrowed amount must be repaid back with interest. In the long-term, the growth of Australia's foreign debt can lead to a debt sustainability problem. This reduces Australia's standard of living and the economic growth potential.

The **debt serving ratio** measures the percentage of export revenue needed to spend on interest payments. When CAD the first became a problem, many economists saw this as a problem of Australia's trade performance and lack of export competitiveness. The problem with running consistent CAD's is that the servicing costs also increase, which causes further worsening of the CAD.

Australia's CAD is mainly generated by the private sector rather than the government, which means that Australia's CAD isn't as bad as it seems.

Policies

- § Tightening of fiscal and monetary policy to cut spending on consumption and investment to reduce the CAD
- § Micro-economic reform to lift the efficiency and international competitiveness of Australian businesses.
- § Maintaining a fiscal balance over the medium to long term.

Income/wealth distribution

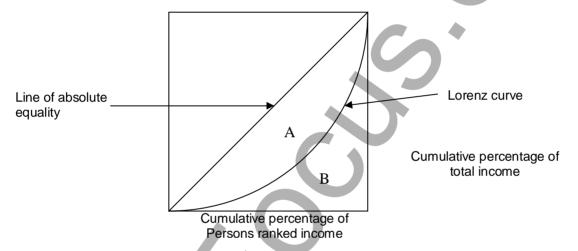
Personal Income is the amount of funds received measured in money terms from the sale of factors of production.

Income inequality refers to the degree to which income is unevenly distributed.

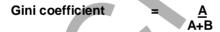
- § Mean income average level of income
- § Median income middle income point
- § Quintile 20% grouping of population

Measuring income inequality

§ Lorenz curve – is a graphical method of representing income inequality



§ Gini co-efficient – is a mathematical indication of income inequality. A value zero would indicate absolute equality. A value of 1 indicated absolute inequality



Wealth is a number value of assets that a person owns. Wealth is harder to measure because accurate figures are hard to obtain. The households with the highest concentration of wealth generally have higher income.

Sources of income

- § Income from the production of goods and services
- Wealth dwelling capital and business capital

Trends

The top 20% of income earners accounted for 48% of total income.

- § According to age
 - Oldest age group have lowest average and median incomes
 - 45-54 have highest mean and median levels of income.
- § According to occupation and gender
 - o Managers and administration are highest paid group
 - Laborers are lowest paid group
 - o Females earn on average 65% of males for same job

§ According to ethnic background

- o Persons born overseas have higher average wages that those born in Australia.
- o Non-English speaking have lowest incomes

Economic Benefits

- § Increased level of education and skills. Higher income rewards for higher qualifications
- § the labor force will be encouraged to work longer and harder hours
- § A more mobile labor force, as people will move to where the money is.
- § Entrepreneurs will be more encouraged to take risks.
- Potential for higher savings and capital formation.

Economic Costs

- § utility is reduced
- § less money is available for consumption and investment
- § expenditure of conspicuous items
- § less work efficiency
- § welfare support

Social benefits

- § higher income earners have greater access to education
- § inheritance gives an opportunity for wealth through production and investments

Social costs

- § social class division
- § poverty
- § crime

Government policies

- § welfare safety net
- § progressive tax systems
- § rebates for childcare

Managing the environment

The natural environment is the whole interaction of the climate, soil and play and animal life.

Ecologically sustainable development (ESD) – involves the pursuing of a level of economic growth which is compatible with the long-term preservation of the environment, rather than pursuing the maximum rate of growth possible.

Intergenerational equity is the concept of ESD between the current generations and future generations.

Key principals

- § integrating economic and environmental goals
- § environmental assets
- § intergenerational development
- § managing environmental risks
- § global effects of environmental issues

Market failure occurs because the price mechanism and markets fail to take into account the social costs of their production. They don't take into account the environment.

Public and private goods

Public goods are non-excludable; the producer cannot exclude certain consumers. They are non-rival; the consumption by one person doesn't reduce the quality of other consumers.

Free riding occurs when a good is used by a consumer without having to pay for it.

Environmental Issues

- § preserving the natural environment
- § controlling pollution
- **Externalities** represent a cost or benefit that affects society that is not taken into account by the price mechanism.

§ Depletion of natural resources

- o **Renewable** they can naturally regenerate by themselves
- o Non-renewable natural resources cannot regenerate in the short-term
- The impact of depletion of resources is greatest on future generations