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HSC Economics

Prelim Economics Topic 1: The Nature of Economics

Lesson 1

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Syllabus Dot-points covered:

The Nature of Economics

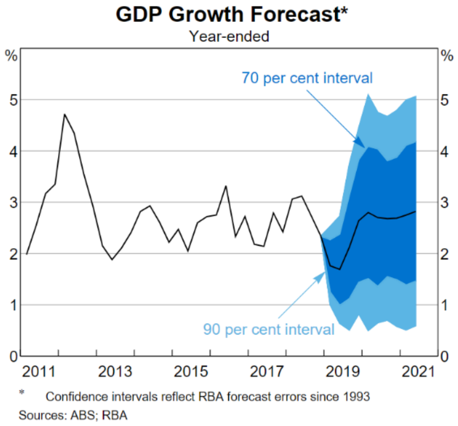
- The Economic Problem - wants, resources, scarcity
- The need for choice by individuals in society
- Opportunity cost and its application through production possibility frontiers

Economic Issues (Extension)

In Economics, there are 6 main economic issues which the government is concerned with. These 6 issues are covered extensively in the HSC syllabus, however, this section of notes will briefly cover the main concepts of these issues so that you can start off your economics course with a broader knowledge about the everyday economy and how it operates in today's society. The first 3 issues are the main economic issues the government looks at.

Economic Growth

- Economic Growth refers to an increase in the real value of goods/services that an economy produces over a period of time (generally a year)
  - o Economic growth can be measured through % increases in Real GDP.
  - o The Australian government aims for growth rates of 2 - 3%.
  - o GDP growth is expected to be 2.75% over 2019-20



- There are two ways which an economy can achieve higher growth rates:
    - **1. Increase in Aggregate Demand (AD).** AD refers to the total demand for goods/services by the economy, and it consists of 4 main components (Consumption, Investment, Government Expenditure, Net Exports).

    - **2. Increase in Aggregate Supply (AS)**. AS refers to the total level of output produced in the economy.

Aggregate Demand Diagram

Aggregate Supply Diagram

- Recent trends in Australia's Economic Growth:
  - Australia has recorded 27 years of continuous economic growth (meaning that economic growth has not fallen below 0% over the past three decades). This reflects a significantly healthy and stable economy in Australia.
  - Historically, the main source of Australia's economic growth has been the **resources sector** (natural resources eg agriculture, mining, oil). This is due to Australia's abundance of natural resources.
    - Eg in the Mining Boom (2010-2012), China's rapid growth and industrialisation led to their increased demand for building materials eg iron ore, which Australia was able to provide. During this period, Australia's economic growth reached 4.75%.
  - Recently, Australia has shifted to service-led growth due to workers having higher skill levels. Services which Australia has embraced for its growth include telecommunications, education (teaching), and finance.
  - Australia's economic growth rate in late 2018 was 3.4% (above trend levels).
  - In 2019, economic growth fell to 2.75% due to slow growth in wages, reduced foreign investment levels and reduced consumption expenditure.

<u>Inflation</u>

- Inflation refers to a sustained increased in the general level of prices in an economy over time.
  - Australia has an 'inflation target' of 2-3% (ie it strives to keep inflation rates between 2-3%).
- Recent trends in Australia's inflation rate:

- Since Australia has adopted the policy of 'inflation targeting' in 1993, inflation rates have been contained at 2-3%. Australia's average inflation rate for the past 20 years has been 2.5%
- In 2016, inflation reached a low of 1%, and today, inflation rates are still below the target range (1.8% in 2019).

Unemployment

- Unemployment refers to the situation where an individual wants to work, and is actively seeking work, but they are unable to find a job.
- Recent trends in Australia's unemployment rate:
    - During the GFC, slowed economic growth led to an increase in unemployment, with unemployment rates reaching 6%.
    - Australia currently has low levels of unemployment, with unemployment being at only 5.3% (2020).
    - However, low unemployment rates do not address the growing issue of higher underemployment rates (8%) and significantly low wages growth (2.3%. Wages growth reached historic low in 2019, with growth rates at 2.1%).
    - Wages growth has rebounded slightly in the September quarter of 2019 to 2.5% due to improved conditions in the labour market

External Stability

- External stability refers to Australia’s ability to meet its financial obligations to the rest of the world

Distribution of Income

- Distribution of income refers to how evenly income is distributed among people in the economy.
    - The government aims to provide a more equitable distribution of income in Australia through the tax-transfer system.
- The level of income inequality in Australia is determined by its Gini coefficient where 0 is perfect equality and 1 is perfect inequality
    - Australia’s Gini coefficient is currently at 0.33, which is also the OECD median

Environment

- Environmental issues is concerned with the economy’s ability to maintain ecologically sustainable development.
- It reflects the underlying tension between economic growth (which requires the use of a significant amount of resources) and long term environmental sustainability

<u>The Economic Problem - Wants, Resources, Scarcity</u>

*This dot point covers the fundamental issue of economics, known as the **'economic problem':** how society can satisfy the unlimited wants of individuals in society with the limited (or 'scarce') resources available. Due to scarcity, we cannot satisfy all our wants, and as such society needs to make choices between them and 'allocate' our scarce resources in a way that will best satisfy our competing wants.*

<u>Wants vs Needs</u>

- Needs: goods and services that are essential for human survival, eg. food, shelter, health and education
- Wants: goods and services that are not essential for survival, but rather are material desires that society would like for greater 'utility' (satisfaction and pleasure).

<u>Types of Wants</u>

- Individual Wants: desires of each person.
    - What is desired will depend on personal preferences
    - Each person's ability to satisfy their individual wants will depend on their ability to purchase goods/services (personal income). Those on low incomes are more severely affected by the economic problem, and are able to satisfy less of their wants.

- Collective Wants: desires of the whole community.
    - What is desired will depend on the community as a whole, not the individual person. Eg. parks, local sporting facilities, schools
    - In Australia, the government provides most collective wants.
        - Local governments provide the neighbourhood with parks, local sporting facilities and libraries.
        - State governments provide the police force, hospitals and schools
        - Commonwealth government provides the wants of the entire nation e.g. the defence force

Characteristics of Wants

- Wants are unlimited: satisfaction of one's wants will result in the creation of other wants. E.g. purchase of house leads to desire for curtains, carpets, white goods etc. Some wants are also recurrent, meaning that we will have to satisfy their wants over and over again in the future. E.g. clothes, petrol

- Wants change over time: factors that affect changes include levels of income, age, technology and fashion.

- Wants differ in importance: Some basic wants e.g. food, water and clothing would be ranked higher than other wants that may be considered as luxuries. Those ranked higher in importance will be satisfied first.

- Choices have to be made between wants due to scarcity.

Resources

Resources are known as 'factors of production', as they are used to create our wants.

There are four main factors of production:

- Land: Natural resources which include minerals, soil and fish
  - Australia has an abundance of natural resources eg minerals, iron ore and agriculture.

- Labour: All forms of human effort used in the production process.
  - The quality of labour is determined by the various functions eg level of edu and training, ability and willingness to work, and the size of the workforce

- Capital: All manufactured goods eg machinery, computers and office furniture that are used in the production process.

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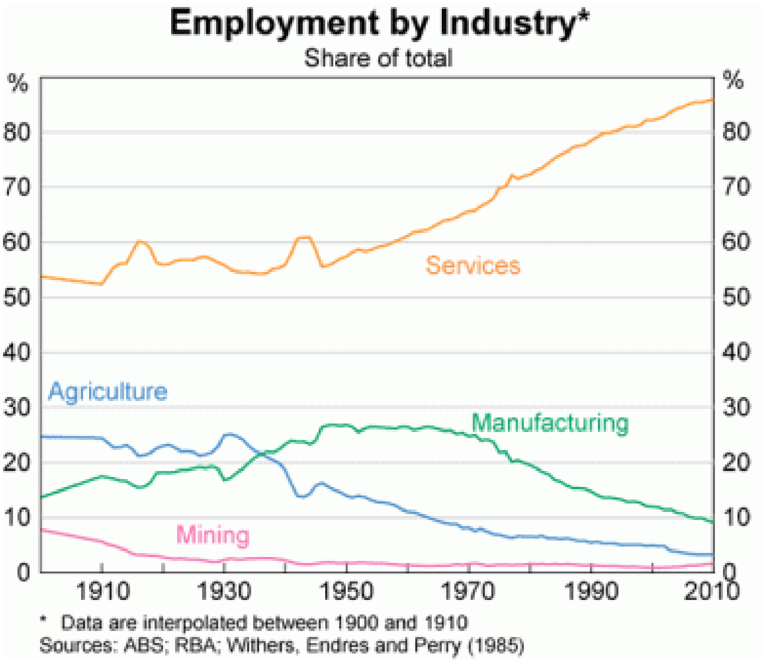


- Enterprise: Entrepreneurial resources refer to the ability to organise the other factors of production effectively.
    - There is a risk involved for those who are willing to undertake this task (these people are called 'entrepreneurs'). The risk is that entrepreneurs may make a loss organising a business, but they stand to make a profit if they are successful.

Scarcity

- Scarcity arises because wants are unlimited, while resources used to satisfy wants are limited
- Scarcity is considered a relative concept because while some societies and individuals are able to satisfy more of their wants than others, all societies and individuals suffer from relative scarcity.

The Need for Choice by Individuals in Society

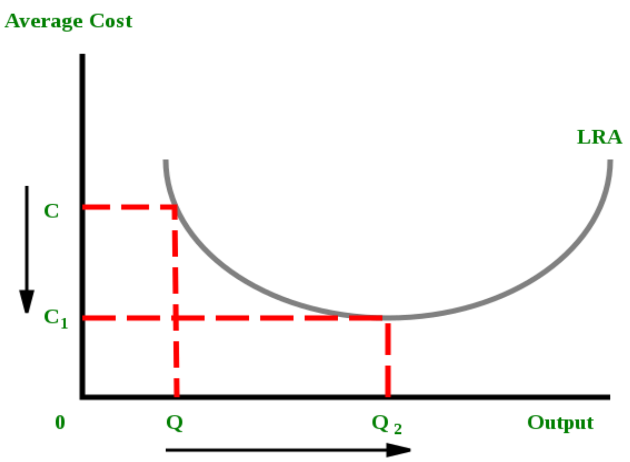
The unlimited nature of wants and limited resources means that individuals and societies have to choose how to best satisfy their needs.

All economies must attempt to answer the following questions:

1. **What to produce**
   - Economies must decide which wants it will satisfy first, and which wants they will leave unsatisfied. Therefore, they must decide which goods and services to produce.

2. **How much to produce**
   - To maximise the satisfaction of wants, economies must allocate limited resources efficiently so they can produce a quantity of good/service which matches the demands of society.
   - By producing too much of a good, resources will be wasted. By producing too little of a good, the wants of some individuals will be left unsatisfied.

3. **How to produce**
   - Economies must look for the most efficient method of production that uses the least amount of an economy's resources to produce the maximum level of output (goods/services that will satisfy individual/collective wants)



4. How to distribute production

- Economies must decide on the way which they distribute goods/services among the population.
    - If an economy decides to have a more **equitable** distribution, they could adopt a **planned economy** (where the distribution of production is determined by the government). Eg North Korea, China.
    - If an economy decides to have a more **inequitable** distribution, they could adopt a market economy (where the distribution of production is determined by an individual's ability to obtain G/S ie their income).

- This is a difficult decision because there is a conflict between equity and efficiency- more efficient systems produce less equitable outcomes

<u>Opportunity Cost and its application through production possibility frontiers</u>

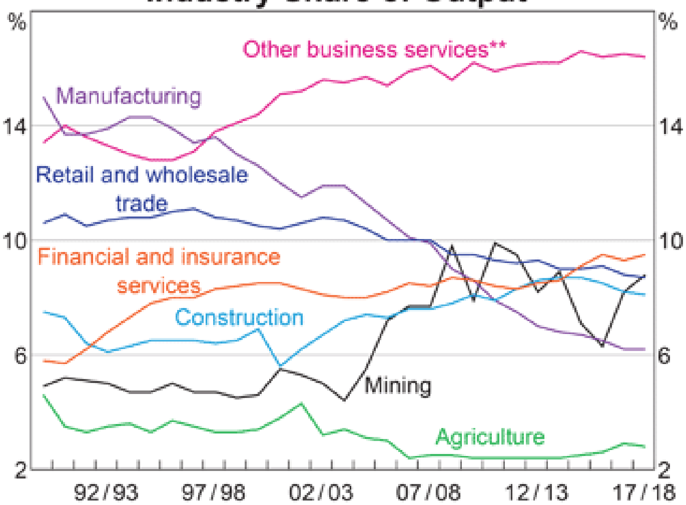
In this dot point we cover the concept of 'opportunity cost'. Due to limited resources, whenever we satisfy one want, we give up the opportunity to satisfy an alternative want. The real cost of satisfying one want is therefore <u>NOT</u> the money we pay for it, but rather the <u>alternative</u> that we have to forego.

<u>Opportunity Cost</u>

- Definition: 'Opportunity Cost' represents the cost of satisfying one want over an alternative want.

- Opportunity Cost can be applied at an individual level, business level and government level:
    - **Individual Consumers-** with limited resources (due to limited income), individuals may have to choose between their wants. Eg. Satisfying their desire for a car and an overseas holiday. The opportunity cost for buying the car will therefore be the overseas holiday.
    - **Businesses/Firms-** firms have to choose which G/S they would like to produce. Eg. If a firm decides to produce travel bags, it gives up the opportunity to produce something else with their resources eg electrical appliances.
    - **Governments-** the government has limited resources that it can use to satisfy community wants. Eg if the government decides to build a new library, this may be at the opportunity cost of a new sports stadium.

Industry Share of Output*



* Nominal gross value added

** Includes: information media and telecommunications; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services

Source: ABS

Production Possibility Frontier

- The production possibility frontier (PPF) can be used to illustrate the opportunity cost involved in making choices.
- The PPF also shows the various combinations of two alternative products that can be produced, given technology and a fixed quantity of resources, when all resources are used to its fullest capacity.

A simple PPF curve is based on the following assumptions:

1. The economy only produces two goods
2. The state of technology is constant
3. The quantity of resources available remains unchanged
4. All resources are fully employed

Example:

- An economy can decide to operate at:
    - Point A: economy produces 160 units of oil, and 0 units of leather
    - Point B: economy produces 80 units of leather, and 0 units of oil
    - Point C: the economy produces 120 units of oil, and 20 units of leather

Calculating Opportunity Cost:

- If an economy decides to move from point A to point C: it is able to produce 20 additional units of leather at the **opportunity cost** of producing 40 units of oil (ie to produce 20 units of leather, it gives up 40 units of oil)

Oil	160	120	80	40	0
Leather	0	20	40	60	80

Figure 1.1 – Production possibility schedule for oil and leather

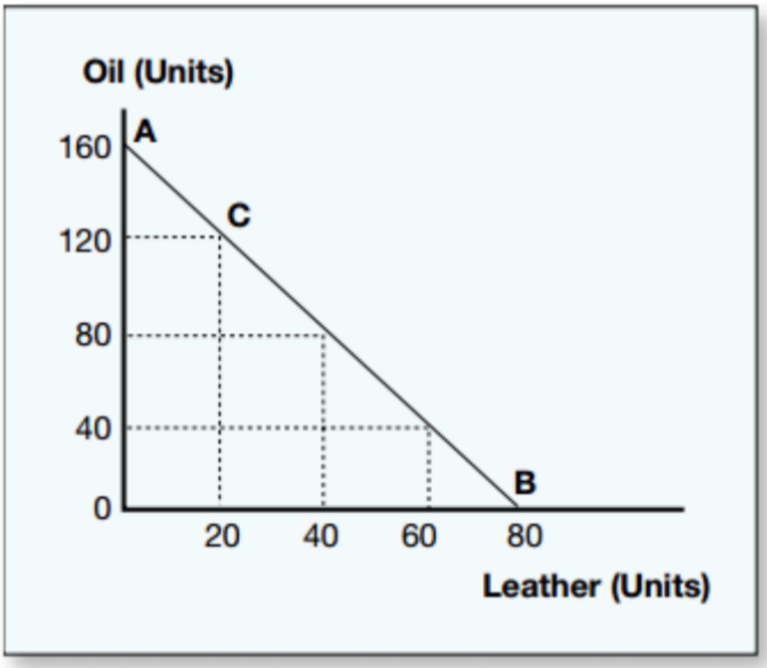


Figure 1.2 – Production possibility frontier for oil and leather

- Therefore, the opportunity cost to produce each unit of leather will be 40 units of oil DIVDED by 20 units of leather (40/20 = 2 units). We must give up 2 units of oil to produce 1 unit of leather.

Increasing the PPF:

- An economy can increase their PPF through two main methods:
    - **1. Employment of new resources.** This can be achieved through the discovery of new resources, increase in population from migration, or the increase in the number of people available for work.
    - **2. Improvements in efficiency.** This can be achieved through greater levels of productivity by adopting new technology.
    - Through both these methods, an economy will be able to produce a greater quantity of both goods.

Unemployment and the PPF:

- If the economy operates at a point INSIDE the curve, it means that some of its resources are **unemployed** and the economy is producing less than its maximum potential level.

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Practice Exam Questions:

1. *The following table shows a production possibility frontier for food and clothes in a hypothetical economy using a fixed quantity of resources.*

Food	500	400	300	200	100	0
Clothes	0	200	300	400	500	1000

a) *Construct a production possibility curve from the information in the table. (2)*

b) *State the opportunity cost of producing the first 200 units of clothes. (1)*

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2. *Define 'technical efficiency'. (2)*

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3. *Illustrate what would occur to the PPF if the economy experiences an increase in technical efficiency (1)*

4. *Explain TWO ways in which an economy can increase its PPF.*

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