

### **1.1 What is economics?**



1.1 What is economics?	Depth	Diagrams & calculations
Economics as a social science	AO2	
The social nature of economics		
<ul> <li>The basis of the study of economics: microeconomics and macroeconomics</li> <li>Introduction to the nine central concepts: scarcity, choice, efficiency, equity, economic well-being, sustainability, change, interdependence, intervention</li> </ul>		
The problem of choice	AO2	
<ul> <li>Factors of production—land, labour, capital and entrepreneurship</li> </ul>		
Scarcity		
<ul> <li>Unlimited human needs and wants to be met by limited resources</li> <li>Scarcity and sustainability</li> </ul>		



1.1 What is economics?	Depth	Diagrams & calculations
Opportunity cost	AO2	
The cost of choice		
Free goods		
The basic economic questions		
<ul> <li>What/how much to produce, how to produce and for whom to produce?</li> </ul>		
<ul> <li>Means of answering the economic questions</li> </ul>		
<ul> <li>Market versus government intervention</li> </ul>		
<ul> <li>Economic systems: free market economy, planned economy and mixed economy</li> </ul>		



1.1 What is economics?	Depth	Diagrams & calculations
<ul> <li>The production possibilities curve model (PPC)</li> <li>Assumptions of the model</li> <li>Increasing versus constant opportunity cost</li> <li>Features of the model: opportunity cost, scarcity, choice, unemployment of resources, efficiency, actual growth and growth in production possibilities</li> </ul>	AO2 AO4	<ul><li>Diagram: PPC illustrating choice and opportunity cost, unemployment of resources, actual growth and growth in production possibilities</li><li>Diagram: PPC showing increasing versus constant opportunity cost</li></ul>

1.1 What is economics?	Depth	Diagrams & calculations
Modelling the economy	AO2	Diagram: circular flow of income
The circular flow of income model	AO4	model, with leakages and injections
<ul> <li>Interdependence between economic decision-makers interacting and making choices in an economy: households, firms, the government, the banks and financial sector, and the foreign sector (foreign firms and households)</li> </ul>		
<ul> <li>Leakages and injections</li> </ul>		



### Starter



What do you think is the study of economics?

Brainstorm some key words and ideas.



Economics is a **social science** which studies the behaviour of individuals and societies when allocating scarce resources to meet unlimited needs and wants.

Economics uses **scientific methods** to model the behaviour and interactions between economic agents such as consumers, producers, and the government.





#### **Microeconomics**

**Microeconomics** is a branch of economics which studies the behaviour of individuals and firms in particular markets.





#### **Macroeconomics**

**Macroeconomics** is a branch of economics which studies the behaviour of the government and the economy as a whole.



#### **Introduction to concepts**

"The reason experts remember more is that what novices see as separate piece of information, experts see as organized sets of ideas." - John Bransford, et al, *How Students Learn*, 2005

Part of IB Economics revolves around **concept-based learning**. You will come across a variety of concepts over the course.





A **concept** is an organizing idea with distinct attributes that are shared across multiple examples.

They are words we can use to categorize our world, like hashtags on social media.



















There are **nine central concepts** that underpin the economics course:

Well-being	<b>Cho</b> ices
Interdependence	Intervention
Scarcity	<b>C</b> hange
Efficiency	Equity
	Sustainability

Task: Collate relevant images which illustrate each key concept in relation to economics.





Factors of production refer to the resources that are required to produce goods and services.

The four factors of production can be remembered using the acronym **CELL**.





Capital refers to man-made resources e.g., vehicles, machinery, and infrastructure.





**Enterprise** refers to the skill of organizing the three other factors of production. Famous entrepreneurs include Elon Musk, Jeff Bezos, Oprah Winfrey, and Vera Wang.





Land refers to natural resources e.g., agricultural land, wood, gold, water, and oil.





Labour refers to human resources e.g., factory workers, teachers, artists, and engineers.



# **Factors of production – activity**

#### **Producing Faber-Castell pencils**



Categorize the resources below to the correct factor of production.

Assembly machine

Clay Lumberjack

Wood

Workers at the pencil factory

Graphite

Graphite miner

Varnishing machine Kaspar Faber (founder of Faber-Castell)





## **Factors of production – factor income**

Households own the factors of production which are sold to firms in exchange for income.

Factor of production	Factor income
Capital	Interest
Entrepreneurship	Profit
Land	Rent
Labour	Wages



### **Circular flow of income**

The **circular flow of income** model shows the interaction between households and firms.

- Households provide resources to businesses.
- Firms provide income to households.
- Firms use the resources to produce goods and services for households.
- Households provide expenditure to businesses.
- The cycle repeats.





### **Circular flow of income**

#### Discussion

- What assumptions are made and why might this model not be realistic?
- How can we improve the model to better reflect the economy?





## The circular flow of income model

An **injection** refers to the additional money added into the circular flow of income.

A **leakage** refers to a withdrawal of money from the circular flow of income.

If **injections** > **leakages**, circular flow increases. If **leakages** > **injections**, circular flow decreases.





## **Real world example – Research task**

- **Step 1:** Visit <u>World's most expensive cities</u>
- Step 2: Complete tasks on the next slide



#### Source: <u>World's most expensive cities</u>

- 1. Sort the table by Buying Price (US\$ per sqm)
- 2. Using examples, consider why property prices in some cities are much higher than others.
- 3. Which of the 9 key concepts does this exercise relate to the most? Justify your answer.





**Sustainability** refers to the ability to meet the needs of the present without compromising the ability of future generations to meet their needs.

Threats to sustainability arise due to scarce resources. It is important we consider the allocation of our scarce resources such that we can meet our present needs without compromising the ability to meet future needs.



Using real world examples, consider potential threats towards sustainability. How might your chosen example be related to the concept of scarcity?



## **Scarcity & the basic economic questions**

There are **limited** resources in the economy, but individuals and societies have **unlimited** wants. Therefore, **choices** must be made about how to allocate scarce resources. Economic systems aim to answer the three basic economic questions:

- 1. What to produce?
- 2. How to produce?
- 3. For whom to produce for?



Consider the similarities and differences between how different economies address these three basic economic

questions.



#### **Real world example**

#### Source: Peak Population: What it Means for Global Resources

- 1. What are finite resources?
- 2. List three examples of finite resources.
- 3. List some of the factors which may affect the carrying capacity of a population.
- 4. List some of the issues which may arise due to overpopulation and the scarcity of resources.





## **Economic systems**



Level7 Education

### **Real world example - economic systems**

Rank the following 12 countries from the **freest economy** to the **least free economy**.

Germany	China	Mexico
Venezuala	Singapore	North Korea
<b>United States</b>	India	United Kingdom
South Africa	Canada	Australia





#### **Real world example – research task**

Visit Index of Economic Freedom to check your answers.





## **Homework / Inquiry**

- 1. What are the main characteristics of a communal/planned economy?
- 2. Explain the argument that the private sector is more efficient than the public sector in providing goods and services in an economy.



## **Opportunity cost – the cost of choice**

Every choice made is associated with a cost, which is known as an opportunity cost.

**Opportunity cost** refers to the value of the next best alternative forgone when a choice is made.

Examples:

- A worker decided to go on vacation for a week instead of going to work. The opportunity cost is the lost wages.
- The US government spent over \$1 trillion on social security in 2020.
   The opportunity cost is \$1 trillion that could have been used to improve education, healthcare, or other areas of the economy.







## **Real world example – case study**

Article: <u>Would costly border wall outweigh other projects?</u>

1. Define opportunity cost.

2. How much money did President Trump want Congress to budget for his proposed wall on the US–Mexico border?

3. What is the potential opportunity cost of this project?









## **Opportunity cost – free goods**

**Free goods** are naturally abundant with unlimited supply and therefore do not incur any opportunity costs. Examples include air, sunlight, sea water, and desert sand.



## Over to you...

Hoang, Wray, & Chakraborty (2020)

Economics for the IB Diploma Programme

- Pages 14 15
- Paper 2 and 3 Exam Practice Questions 1.1 and 1.2





The **production possibilities curve** is a model which illustrates the different combinations of two goods or services that an economy or firm can produce.



#### Assumptions of the model:

- There is a fixed amount of resources
- Only two goods are being produced
- Technology and production techniques are fixed
- All resources are used efficiently





A point **on** the PPC (**A**, **D**, **E**) means all resources are employed and are used efficiently.

A point **within** the PPC (**B**) means some resources are unemployed or used inefficiently.

A point outside the PPC (C) is not possible with the current level of resources.



#### **PPC and opportunity costs**

Suppose a farmer decides to change from point A to point B. What is the opportunity cost?



The opportunity cost of producing R2-R1 additional kilograms of raspberries is S1-S2 kilograms of strawberries. This is the opportunity cost of the choice made due to scarce resources such as land and labour.



#### Increasing opportunity cost

A concave PPC occurs due to specialization of resources, as resources are not equally suitable to produce different products.

#### **Constant opportunity cost**

A linear PPC occurs due to the marginal rate of transformation being constant throughout the curve.





#### **Constant opportunity cost**



Cheryl finishes school at 4pm and goes to bed at 10pm. She is free to study and play during the hours in between. Assume Cheryl is only interested in studying and/or playing.

Draw a PPC diagram to illustrate the different combinations of hours Cheryl can spend studying and/or playing.



Actual growth (e.g., Point A to Point B)

An economy moves closer to the PPC when unemployment decreases, and efficiency increases.





Growth in production possibilities (e.g., PPC1 to PPC2)

An economy's PPC can shift outwards if there is:

- an increase in the **quantity** of resources
- an improvement in the **quality** of resources
- an improvement in technology

An outward shift of the PPC indicates that the productive capacity of the economy has increased.



## Over to you...

Hoang, Wray, & Chakraborty (2020)

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## Test your knowledge on this unit: <u>Kahoot!</u>

