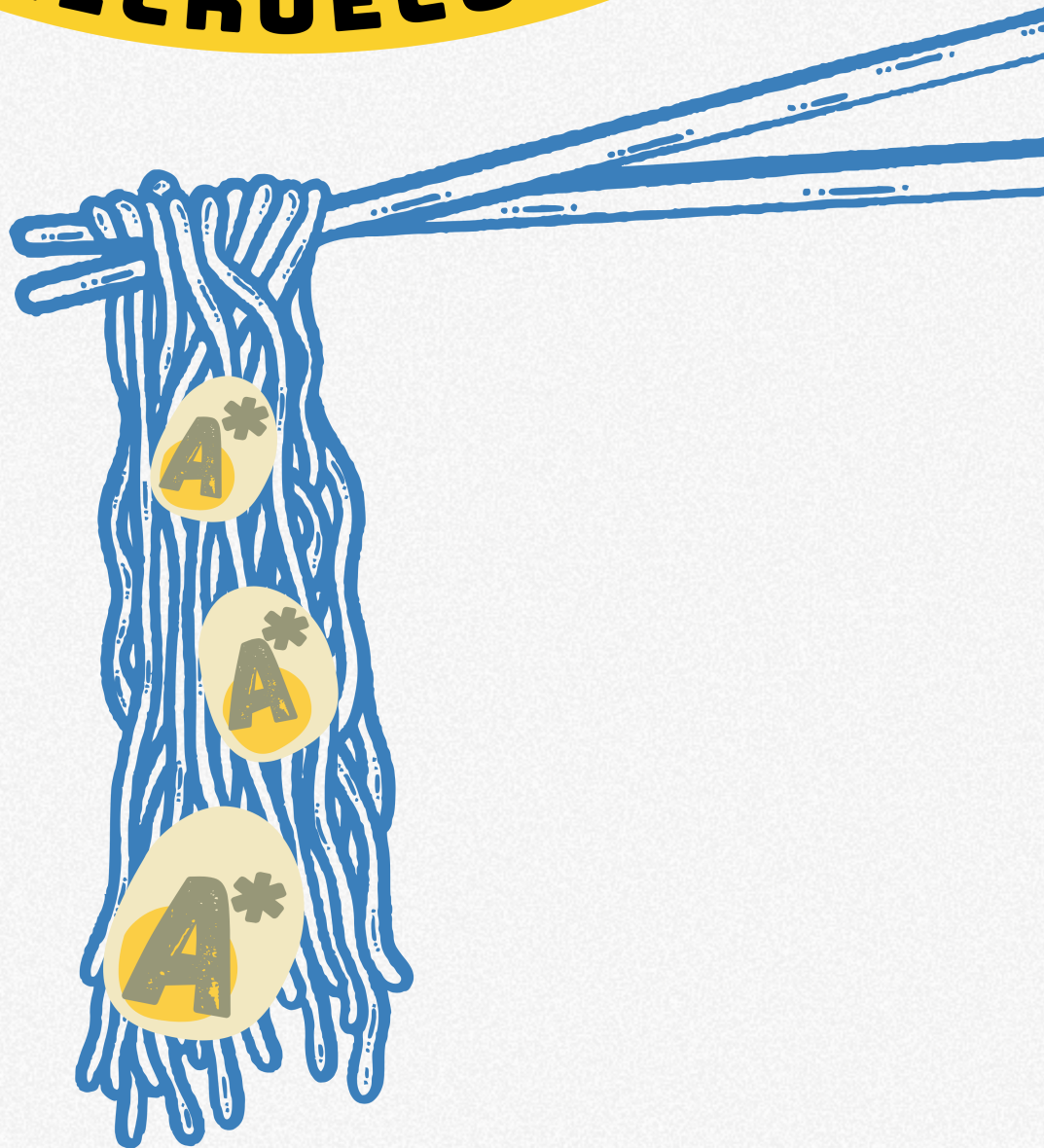


KNOCKOUT.ECONOMICS

ECONQUICK

INSTANT REVISION NOTES

IGCSE MICROECONOMICS



JUST IN ONE BITE

Table of content

Chapter	Page
Chapter 1 : Basic Economic Problem	1
Chapter 2 : Factors of production	3
Chapter 3 : Opportunity cost	7
Chapter 4 : Production possibility curve (PPC)	8
Chapter 5 : Microeconomics and Macroeconomics	12
Chapter 6 : The role of markets in allocating resources	13
Chapter 7 : Demand	16
Chapter 8 : Supply	20
Chapter 9 : Price determination	23
Chapter 10 : Price changes	26
Chapter 11 : Price elasticity of demand	29
Chapter 12 : Price elasticity of supply	35
Chapter 13 : Market economic system	40
Chapter 14 : Market failure	41
Chapter 15 : Mixed economic system	48
Chapter 16 : Money and banking	56
Chapter 17 : Household	58
Chapter 18 : Workers	61
Chapter 19 : Trade Union	69
Chapter 20 : Firms	73
Chapter 21 : Firms and production	82
Chapter 22 : Firms, Cost revenue and objectives	84
Chapter 23 : Market structure	89

CHAPTER 1

The natural of economic problem

Checklist

1. Finite resources and unlimited wants :
2. Economic and free goods

1. Economics problem

Meaning : the basic condition of having **limited resources and unlimited wants** *



2. Economic and Free goods



Key takeaways :

- Public goods ≠ Free goods as public goods are produced by limited factors of production.
- Public goods typically involve opportunity costs, whereas free goods do not entail opportunity costs.

CHAPTER 2

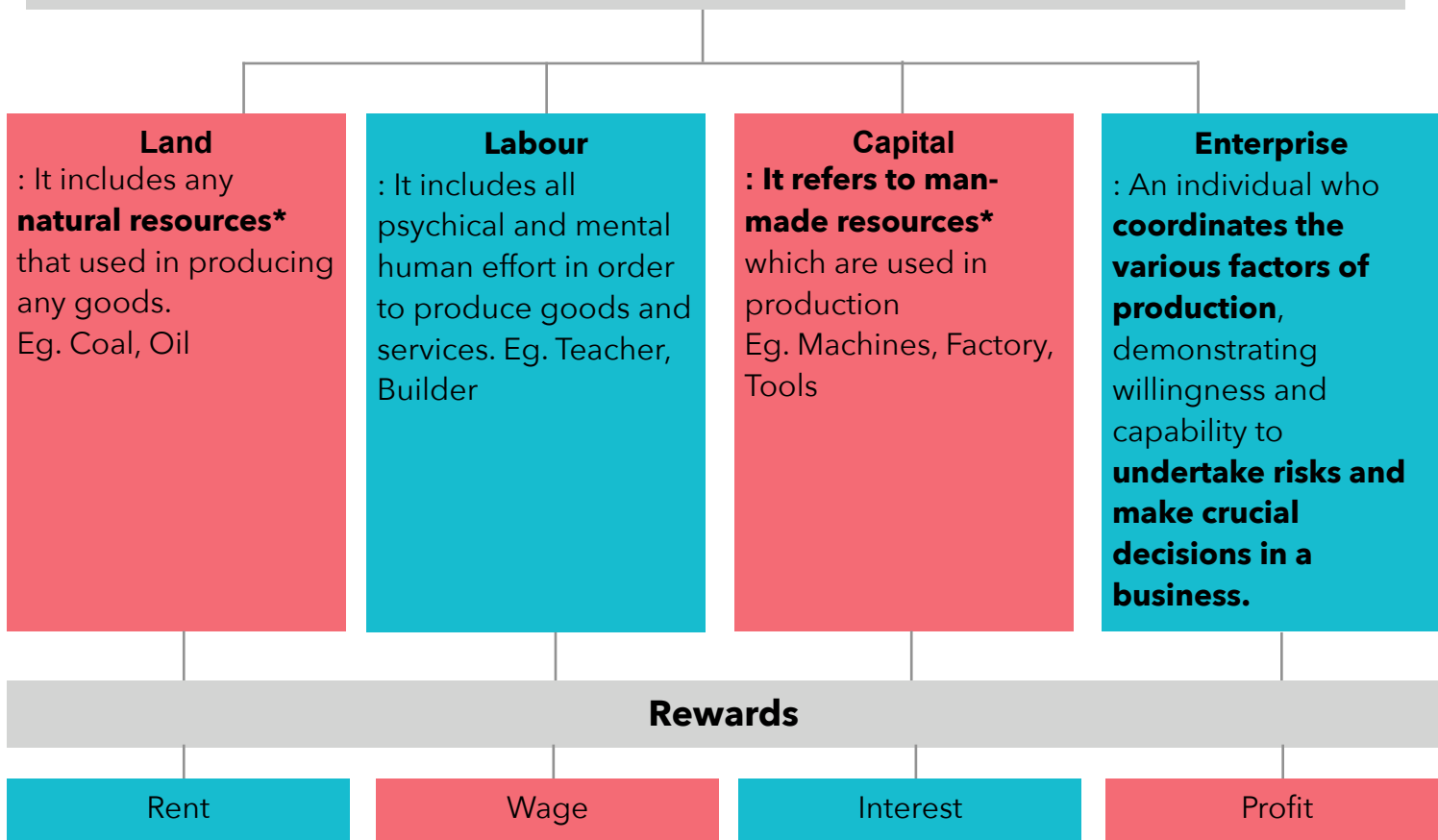
The factors of production

Checklist

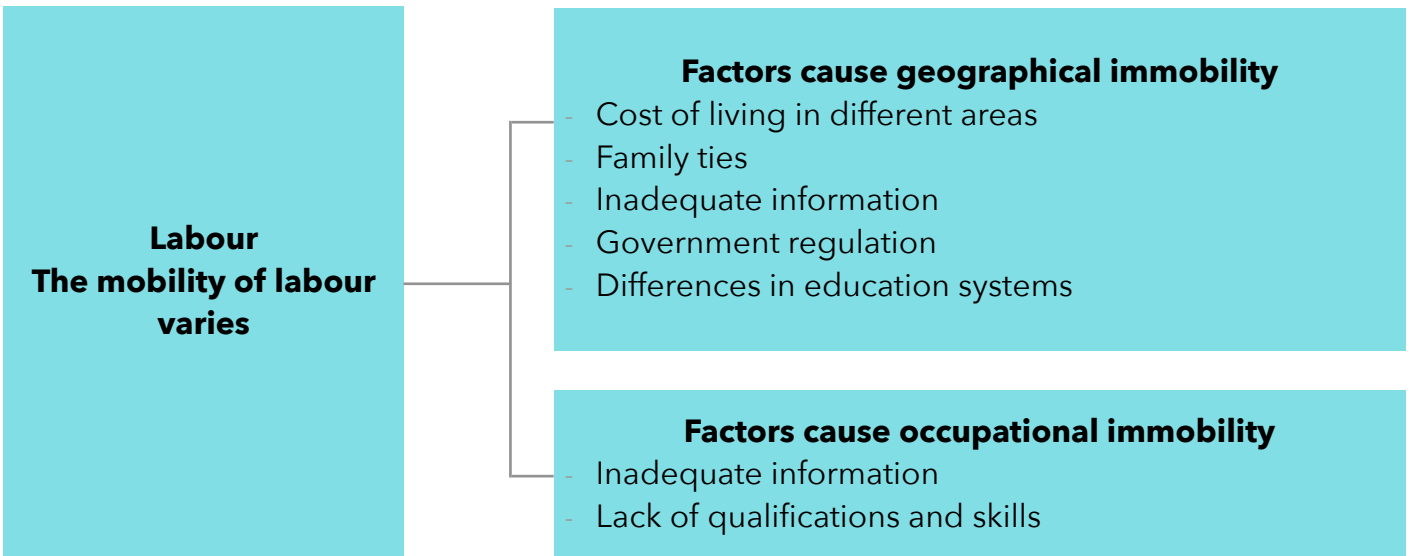
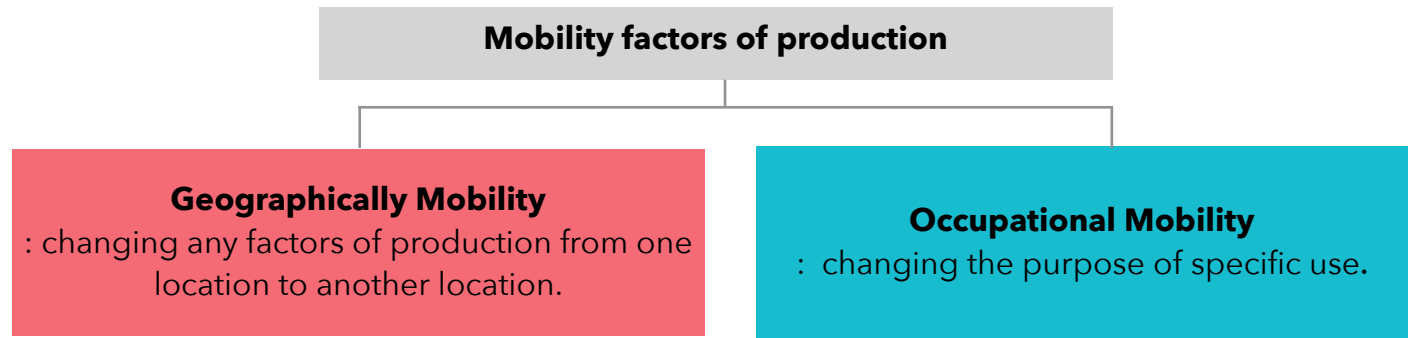
1. Definitions of the factors of production and their rewards
2. Mobility of the factors of production
3. Quantity and quality of the factors of production

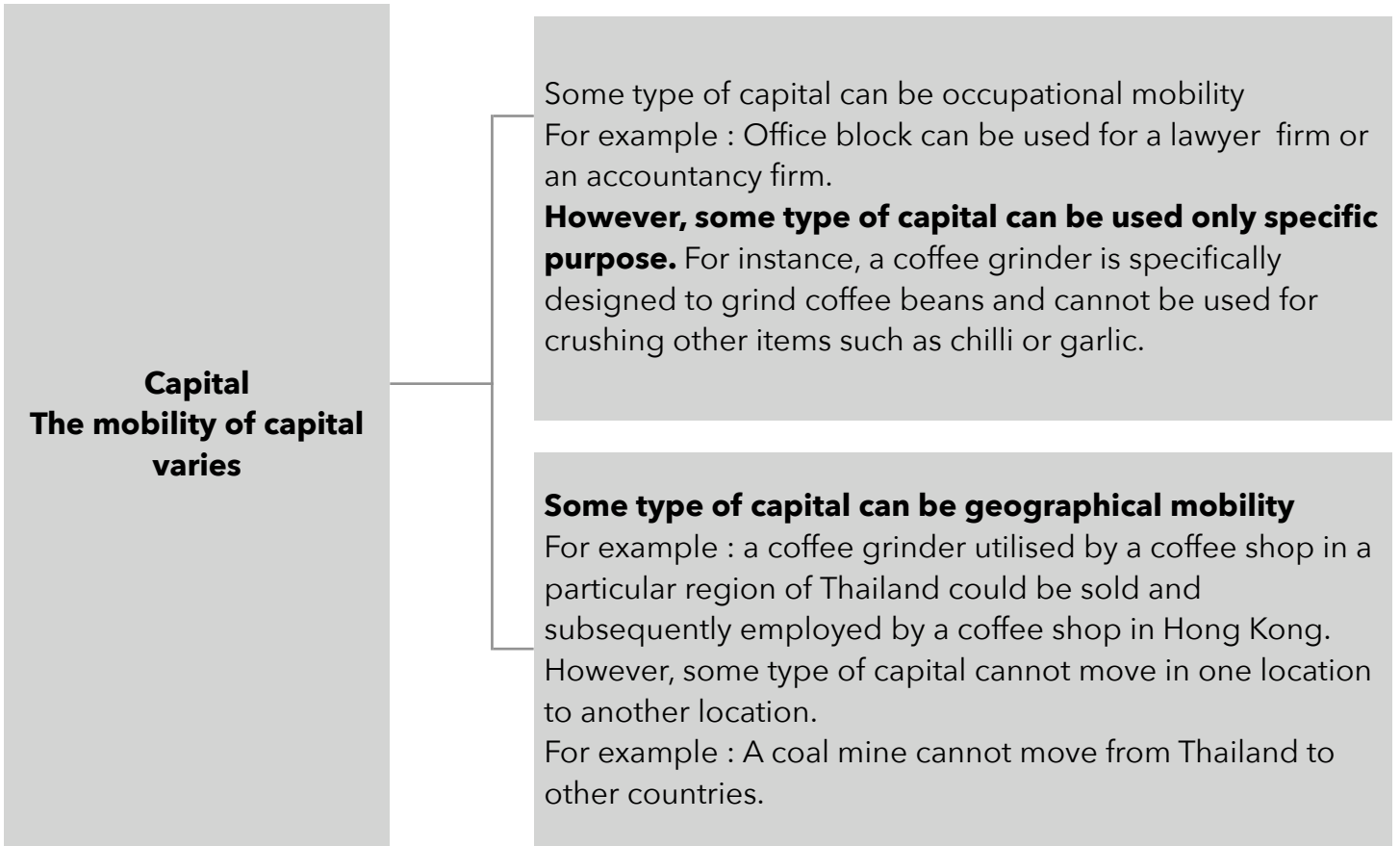
1. The factors of production

Factors of production

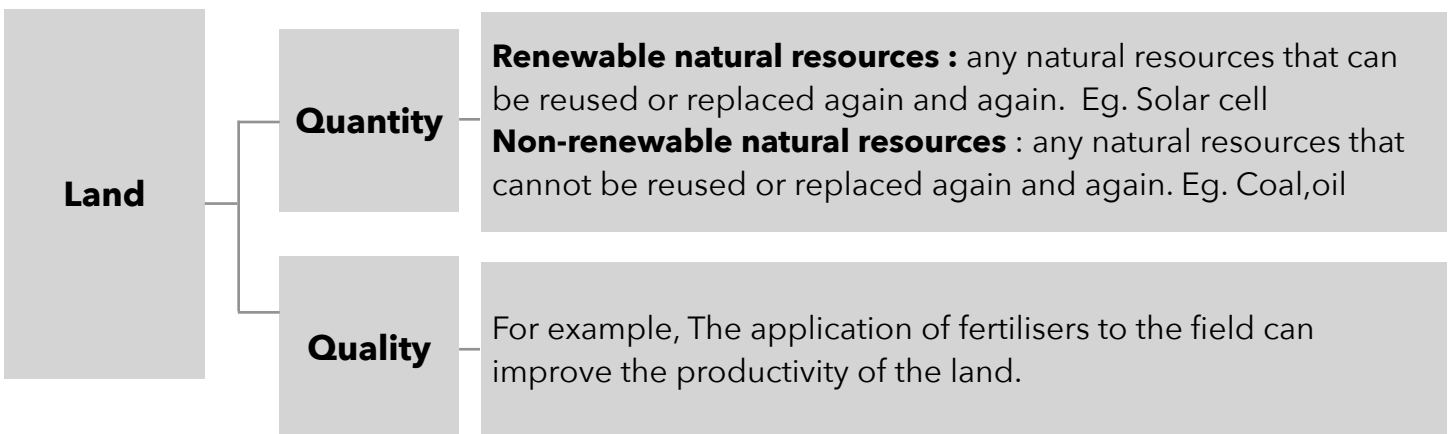


2. Mobility of the factors of production





3. Quantity and Quality of the factors of production



Labour	Quantity	To increase quantity of labour can be divided into two factors, there are <u>no. of workers</u> and <u>no. of hours that workers work</u>.	
		Factors that increase no. of workers	Factors that increase no. of hours that workers work
		<ul style="list-style-type: none"> - The number of population - The age structure of the population - The age of retirement - The school leaving age - Women’s attitudes towards work 	<ul style="list-style-type: none"> - Full time or Part time - The length of overtime - The duration of holidays - The duration of time lost due to sickness and illness. - The duration of the typical workday
	Quality	Quality of labour refers to productivity. Increase in productivity means increase no.of output with remaining input. To increase quality or workers, firms can provide <ul style="list-style-type: none"> - Better education, training - Advanced technology 	
Capital	Quantity	The quantity of capital is caused by amount of investment. Net investment = Gross investment (total spending on capital goods)-Depreciation (the value of capital goods that decrease over the period of time)	
	Quality	Advance technology has the capability to enhance the productivity and result in increase number of output.	
Enterprise	Quantity	Factors that can increase number of entrepreneurs <ul style="list-style-type: none"> - Higher education and training - Lower corporate tax - A reduction of government regulation etc. 	
	Quality	Factors that can increase quality of entrepreneurs <ul style="list-style-type: none"> - Better education and training - Better healthcare etc. 	

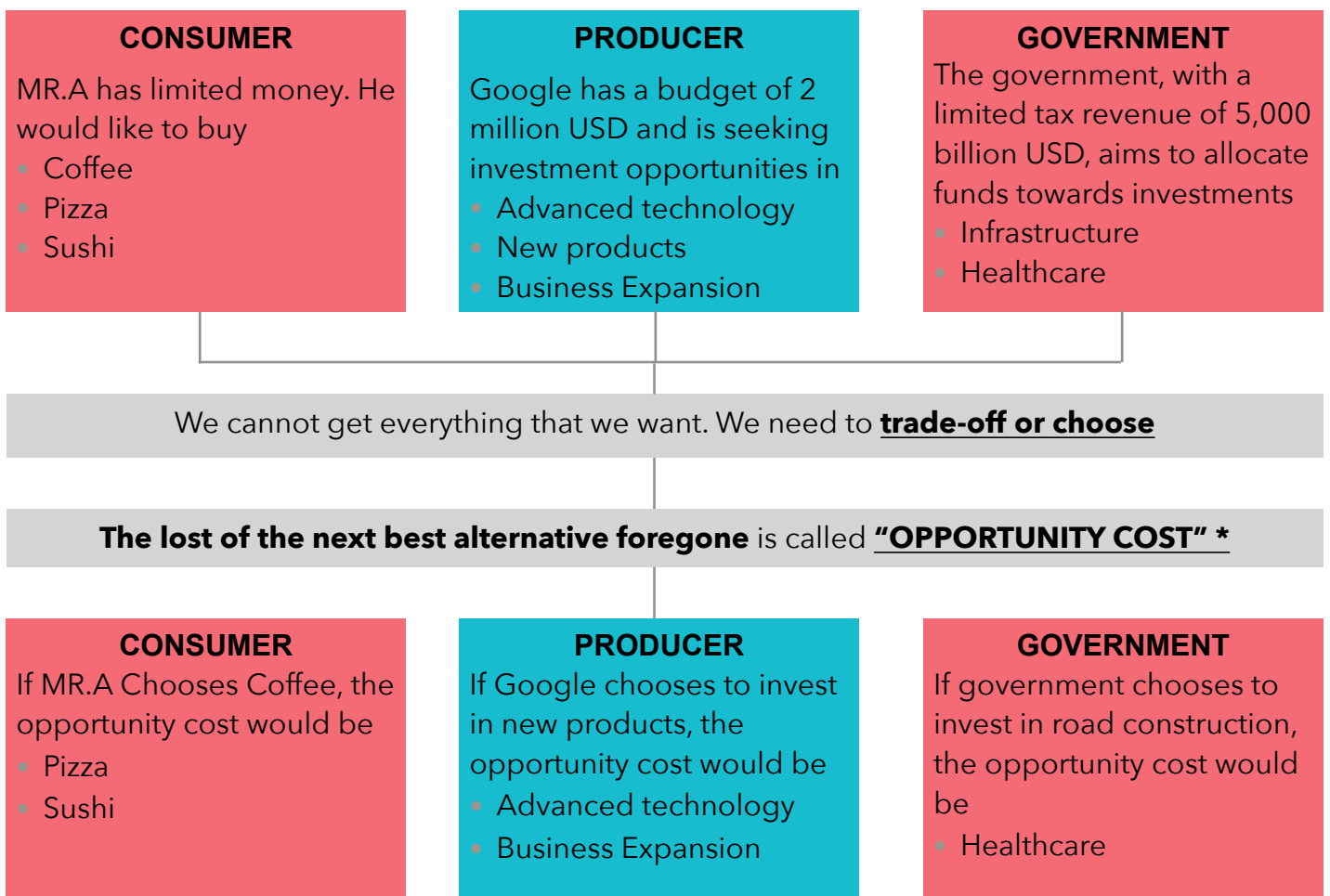
CHAPTER 3 Opportunity Cost

Checklist

1. Definition of opportunity cost
2. The influence of opportunity cost on decision making

1. Definition of opportunity cost

Meaning : the next best alternative foregone when making choice.



CHAPTER 4

Production Possibility Curve (PPC)

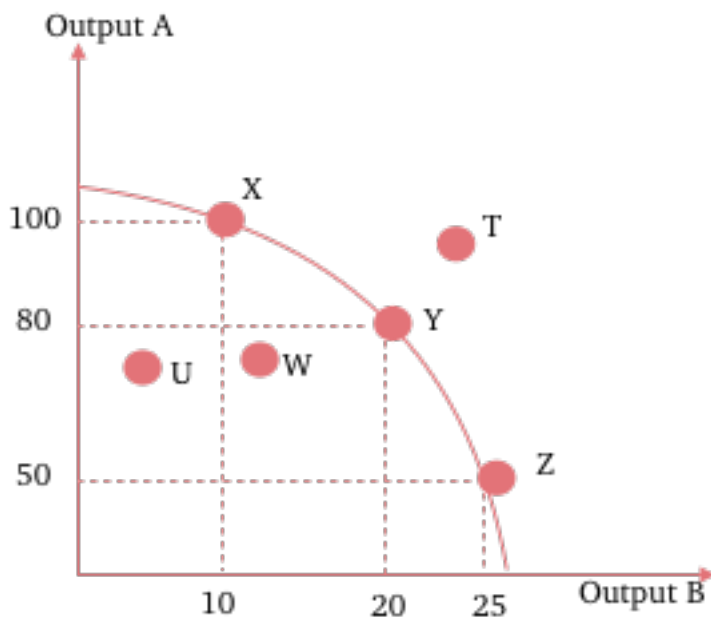
Checklist

1. Definition of PPC
2. Point under, on and beyond a PPC
3. Movements along a PPC
4. Shifts in a PPC

1. Definition of PPC

Meaning : represents the maximum output of two goods that can be produced with existing resources and technology. *

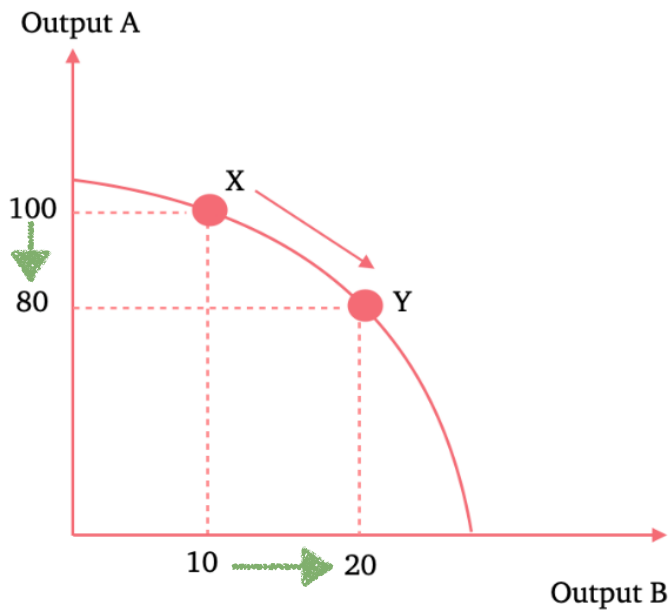
2. Point under, on and beyond a PPC



- **On PPC (Point X,Y,Z) : Points on the PPC represent efficient allocation of resources, maximising output given the available inputs.***
 - Point X : shows that a country produces 100 units of output A and 10 units of output B.
 - Point Y : shows that a country produces 80 units of output A and 20 units of output B.
 - Point Z : shows that a country produces 50 units of output A and 25 units of output B.

- **Below PPC (Point U,W) :** Points located below the PPC indicate inefficiency in resource utilisation. *
- **Above PPC (Point T) :** Points located above the PPC are unattainable or impossible to produce due to insufficient resources.*

3. Movements along a PPC



Economics Problem : the basic condition of having limited resources and unlimited wants

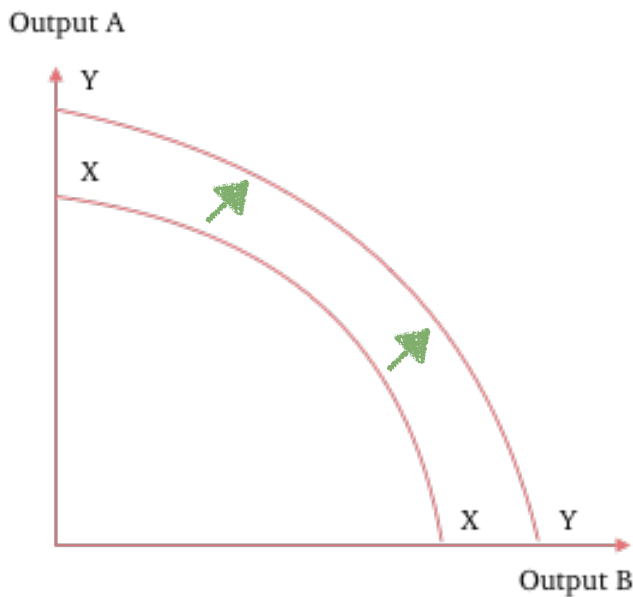
Point X shows that a country produces 100 units of output A and 10 units of output B.

Since a country has limited resources, if a country would like to move from point X to point Y

A country need to reallocate resources by reducing **output A by (100-80=20 units)** in order to increase **10 units (20-10) of output B.**

Therefore, 20 units of reducing output A is called **"Opportunity Cost" ***

4. Shifts in a PPC



A shift to the right in the PPC from XX to YY refers that a country can **increase the production of both output A and output B without incurring opportunity costs.** This shift is indicative of **"Economic growth."**

Factors shift the PPC to the right *

Increase in Quantity of resources *

- For example, A country A experiences a higher no. of immigration labour
- It results in an **increase in the labor force (resources)**, enabling the country to produce **higher quantities of both output A and output B.**

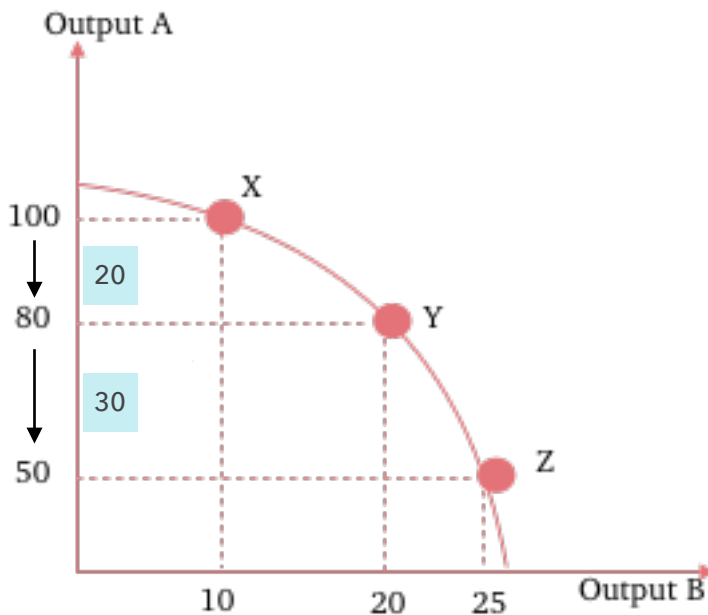
Increase in Quality of resources *

- For example, **Higher level of education can enhance the skills of labour**
- It leads to increased efficiency, faster work, and reduced errors
- Consequently, workers are able to **generate higher quantities of both output A and output B.**

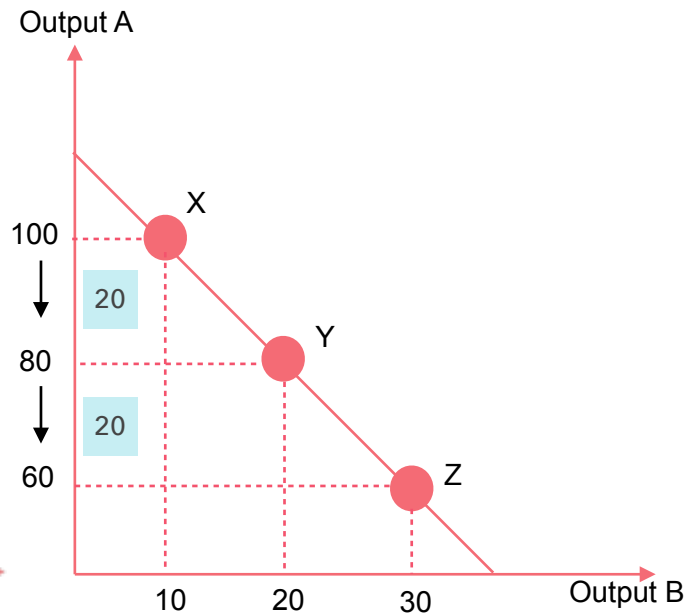
Advanced Technology *

- It enhances productivity which leads to increased production of both output A and output B.

5. The shape of the PPC



Concave PPC : Increasing opportunity cost



Straight PPC : Constant opportunity cost

Key takeaways :

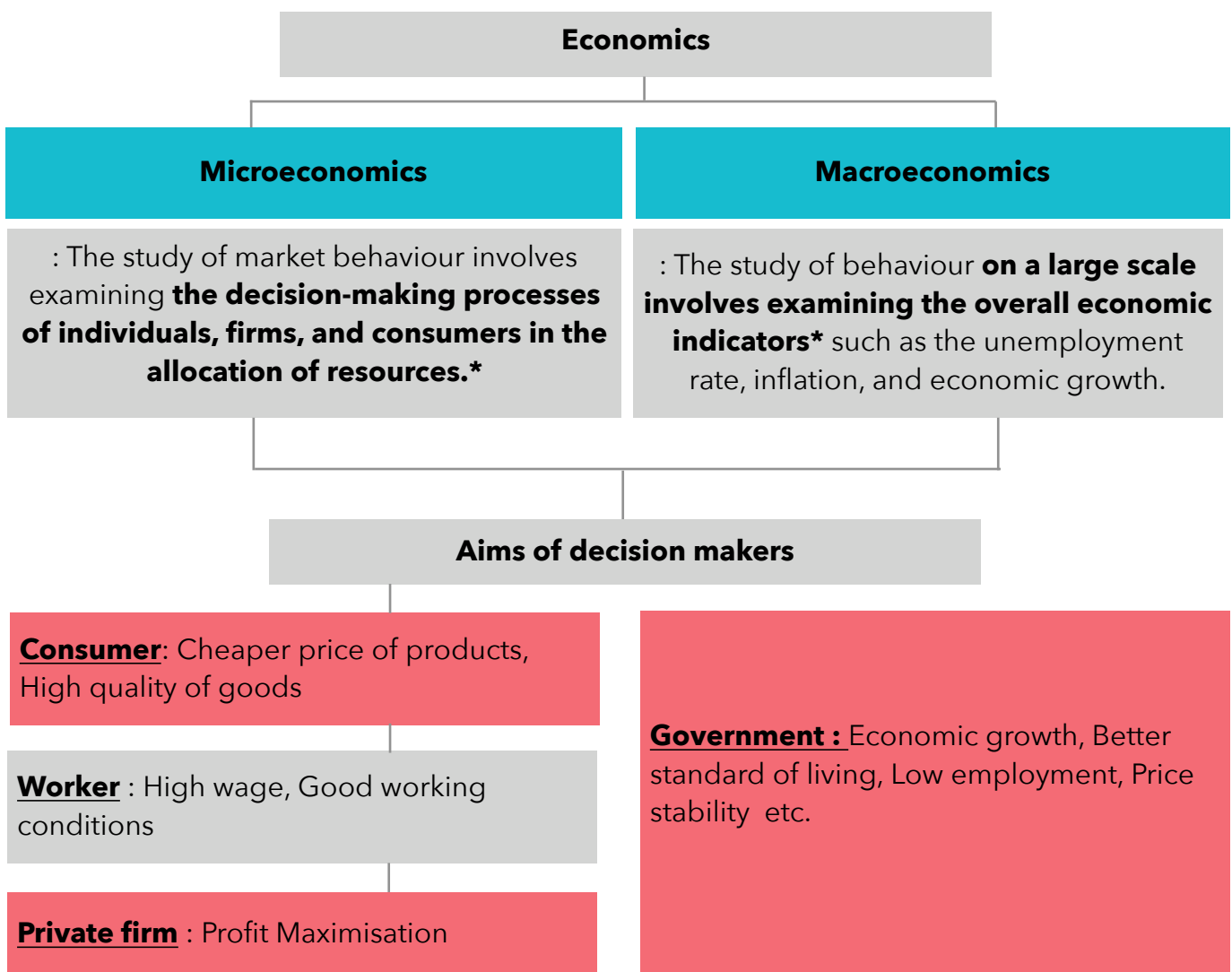
- **Every point along the Production Possibility Curve (PPC) represents maximum efficiency**
- **Movement along the PPC illustrates the concept of opportunity cost**, emphasising the limitation of resources
- Points situated **below the PPC signify inefficient resource utilisation**
- Points **above the PPC are unattainable with the current resources.**
- An outward shift of the PPC signifies economic growth, where a country can produce more goods without incurring opportunity costs. **This expansion can result from an increase in both the quantity and quality of resources, as well as advancements in technology.**

CHAPTER 5 Microeconomics and Macroeconomics

Checklist

1. Microeconomics
2. Macroeconomics

1. The difference between microeconomics and macroeconomics



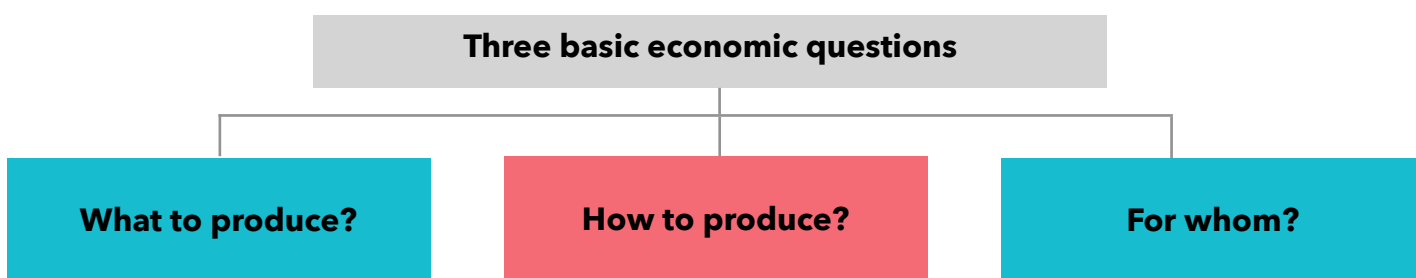
CHAPTER 6

The role of markets in allocating resources

Checklist

1. The market system
2. Keys resources allocation decisions
3. Introduction to the price mechanism

1. The three key allocation decisions



2. Different economic systems

2.1 Planned economic system eg. North Korea	: An Economic system where crucial decisions are made by government.* Resources and production of goods and services are all owned and allocated by government* .
---	---

Advantages *	Disadvantages *
<ul style="list-style-type: none"> • Government provides public goods (eg. Street light, National defence) and merit goods (eg. Healthcare, Education) for better standard of living. • Government controls demerit goods eg. Cigarettes, Alcohol etc. • Government aims to manage inflation and promote full employment through its economic policies. • Government promotes equality and social well-being. 	<ul style="list-style-type: none"> • Government may inefficiently utilise resources due to a lack of experience in producing certain goods and services. • Quality of goods and services may be lower in the absence of market competition. • Consumers may have limited choices and reduced freedom in selecting goods and services. • Government decisions may not always align with customer preferences.

No part of this resource may be reproduced, distributed, or transmitted in any form by any means for non-personal use without the prior written permission from Knockout.Economics

2.2 Market economic system
eg. USA

: An economic system in which the production decisions are determined by consumers, and the allocation of resources is facilitated through the price mechanism.

Advantages *

- **Price is determined by demand and supply.**
- Private firms provide **more choice of goods and services for consumers.**
- The abundance of private firms in the market encourages robust competition, **fostering innovation and technological advancements.** Consequently, **the quality of goods and services is enhanced.**
- It emphasizes the principle of **consumer sovereignty.**
- High competition in the market can enhance **the efficiency of resource utilisation.**

Disadvantages *

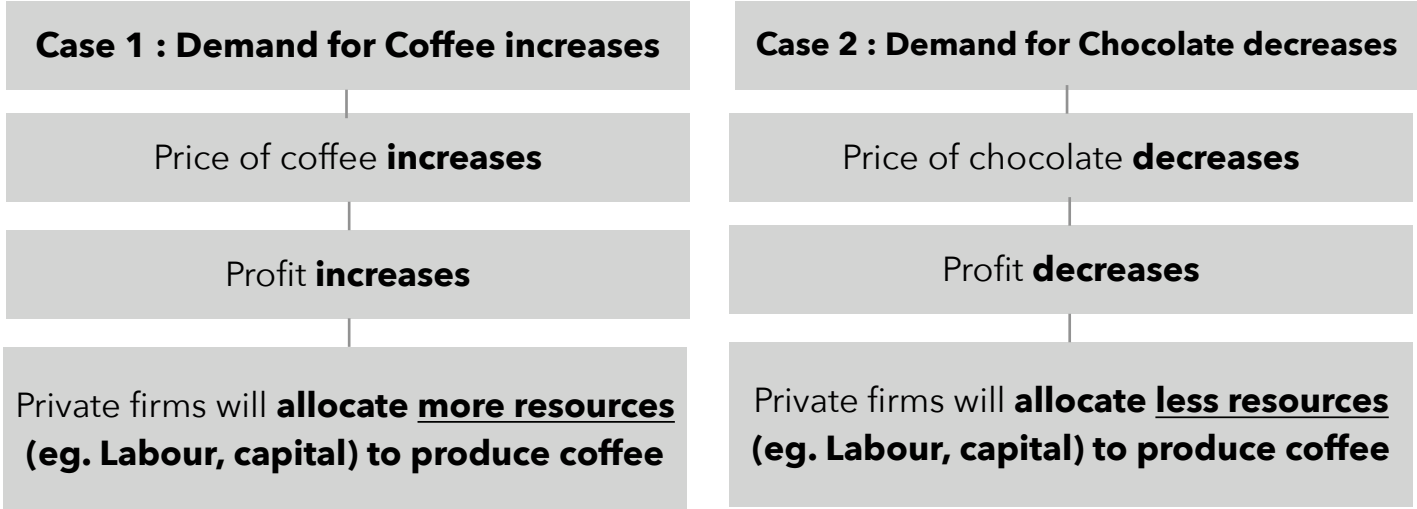
- Private firms produce **more demerit goods.**
- Private firms **ignore to produce public goods and merit goods.**
- **Monopoly can occurs in the economy. Price of goods and services would be high and low quality.**

2.3 Mixed economic system
Eg. Thailand

: An economic system in which **both private firms and government allocate resources together.**

3. The role of price mechanism

Meaning : The allocation of resources is determined by changes in price*, which in turn, are influenced by the forces of demand and supply.*



CHAPTER 7 Demand

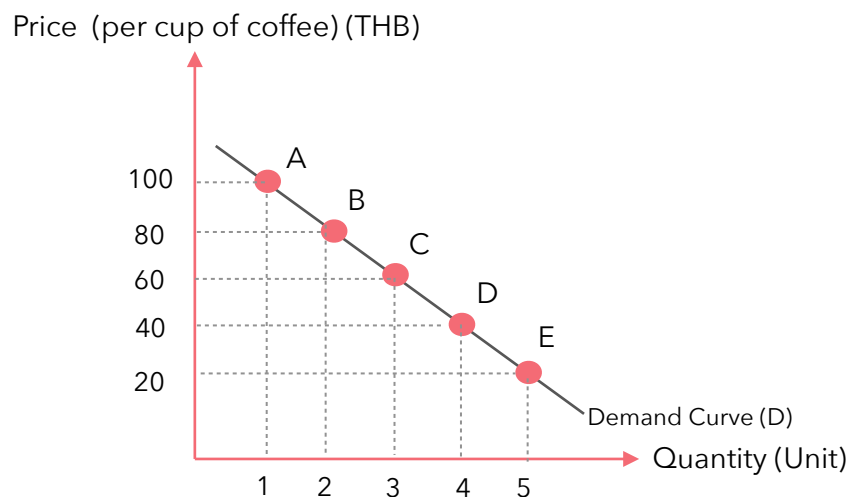
Checklist

1. Definition of demand
2. Price, Demand and Quantity
3. Individual and market demand
4. Conditions of demand

1. Definition of demand and demand curve

: The quantity of a product that consumers are willing and able to consume at a given price is known as the **quantity demanded**.

Price Cup of coffee (THB)	Quantity (Unit)
100	1
80	2
60	3
40	4
20	5

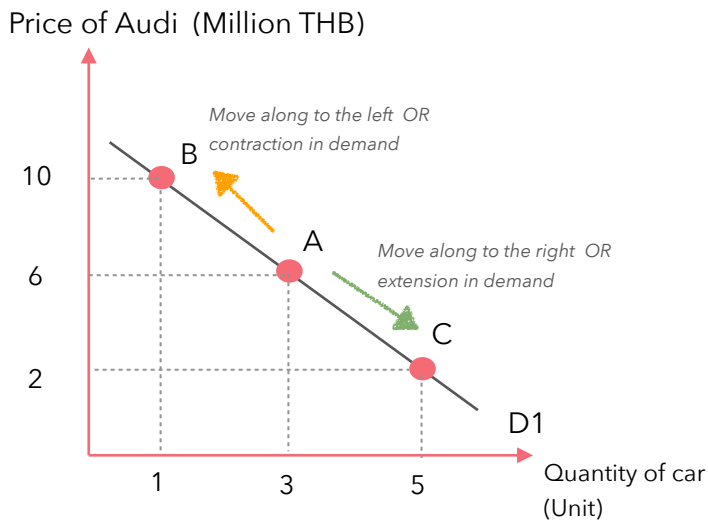


- The demand curve is **downward sloping, illustrating a negative relationship between price and quantity demanded.***
- As the **price increases**, consumers are willing to **buy a lower quantity**.
- As the **price decreases**, consumers are willing to **buy a higher quantity**.

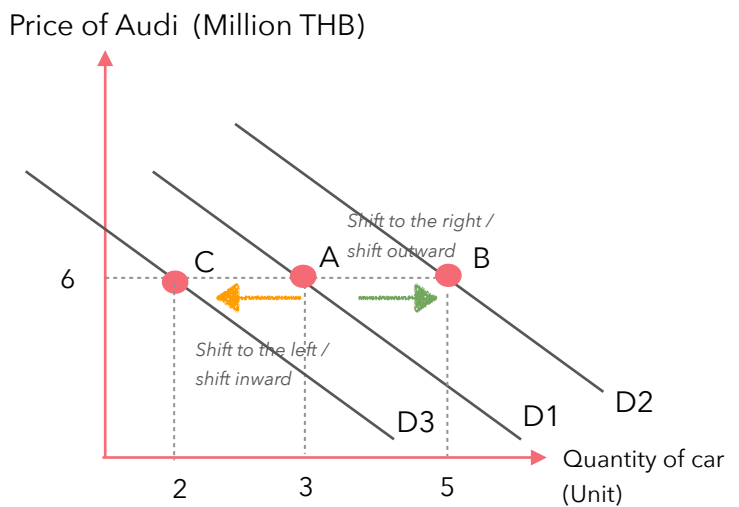
2. Move along and shift demand curve

Demand Curve

Move along*



Shift*



A movement along the demand curve causes by change in the price of a product, holding all other factors constant.

- **Original point is at A : Price of car = 6 Million THB/Unit , Quantity demanded of car = 3 Unit.**

Price increases to 10 Million THB/Unit :
Contraction in quantity demand to 1 unit. (Demand curve **move along to the left**)

Price decreases to 2 Million THB/Unit :
Extension in quantity demand to 5 unit. (Demand curve **move along to the right**)

Factors shift in demand curve
"TRIPS"*

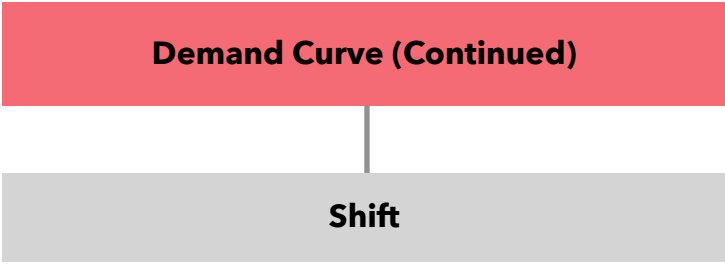
- **Original point is at A : Price of car = 6 Million THB/Unit , quantity demanded of car = 3 Unit.**

- **Taste/ Fashion**

- **Related products**

Substitute goods
 : Alternative goods, goods that can be replaced for another product.
 Eg. BMW

Complementary goods
 : Goods that need to use together.
 Eg. Petrol, Car insurance



Substitute goods

- For example: If price of BMW increases, this results in a contraction in the demand of BMW. (Move along to the left)
- Consumers switch to buy substitute good (Audi), demand for Audi shifts to the right from D1 to D2 (Point A to Point B)

Complementary goods

- For example: If price of car insurance decreases, this results in an extension in the demand of car insurance. (Move along to the right)
- Consumers will buy more Audi as the two goods are often used together
- Therefore, demand for Audi shifts to the right from D1 to D2. (Point A to Point B)

Income / Income Tax

- For normal goods, as people's incomes increase, their demand for these goods also increases. Audi, being a luxury or premium car brand, is often considered a normal good.
- So, as people have higher incomes, their ability and willingness to purchase Audi cars increase, leading to a rightward shift in the demand curve from D1 to D2. (Point A to Point B)

- When the government imposes a lower income tax rate, individuals have more disposable income.
- This increase in disposable income often leads to higher consumer spending as people have more money available for purchasing Audi.
- Therefore, demand for Audi shifts to the right from D1 to D2. (Point A to Point B)

Population

- A larger population generally means a larger pool of potential consumers
- Therefore, demand for Audi shifts to the right from D1 to D2. (Point A to Point B)

Successful advertising campaign

- Successful advertising campaign encourages consumers to buy more Audi.
- Therefore, demand for Audi shifts to the right from D1 to D2. (Point A to Point B)

Key Takeaways

- The demand curve is downward sloping, illustrating a negative relationship between price and quantity demanded.
- **Changes in the price itself**, while other factors remain constant, **cause movements along the demand curve.**
 - ▶ When the price goes up, it leads to a contraction in demand.
 - ▶ When the price goes down, it leads to an extension in demand.
- **"TRIPS"** are factors that shift the demand curve at any given price.

CHAPTER 8 Supply

Checklist

1. Definition of supply

2. Price, supply and Quantity

3. Individual and market supply

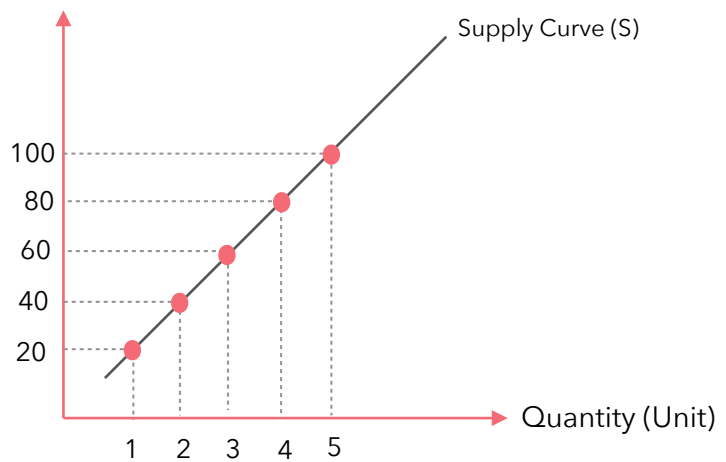
4. Conditions of supply

1. Definition of supply and supply curve

The quantity of a product that producers are willing and able to produce at a given price is known as the **quantity supplied**.

Price Cup of coffee (THB)	Quantity (Unit)
100	5
80	4
60	3
40	2
20	1

Price (per cup of coffee) (THB)

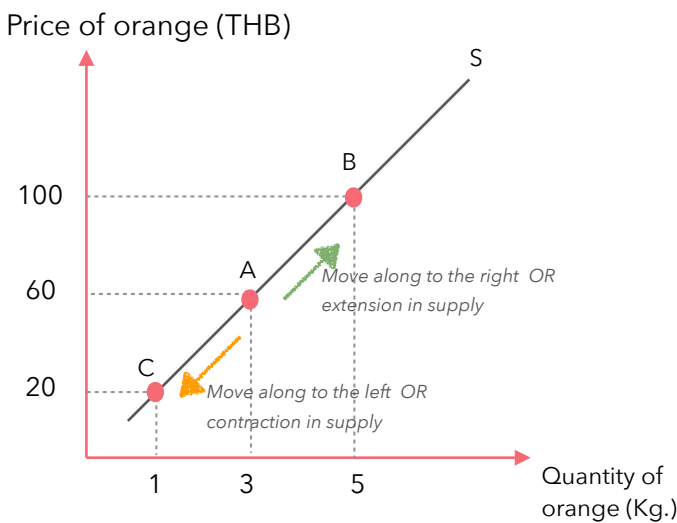


- The supply curve is **upward sloping, illustrating a positive relationship between price and quantity supplied.**
- As the **price increases**, producers are willing to **supply a higher quantity**
- As the **price decreases**, producers are willing to **supply a lower quantity**

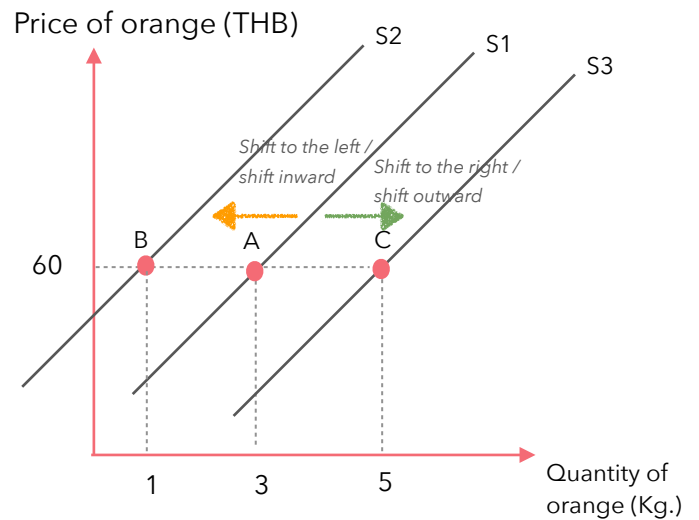
2. Move along and shift supply curve

Supply Curve

Move along*



Shift*



A movement along the supply curve causes by change in the price of a product, holding all other factors constant.

- **Original point is at A : Price of orange = 60 THB/Unit , quantity supplied of oranges = 3 Unit.**

- When the **price of oranges increases to 100 THB per unit**, there **is an extension in the quantity supplied to 5 Kg. (A to B)**
- **This movement along the supply curve to the right** indicates that producers are willing to supply **a larger quantity** of oranges at the higher price, as it becomes more profitable for them to do so.

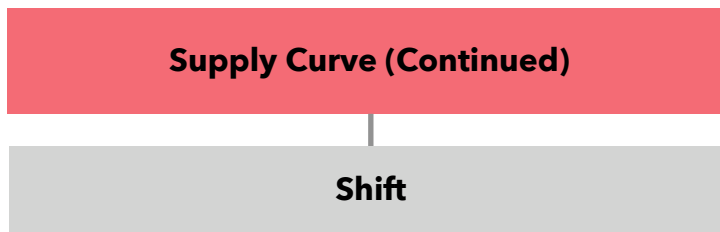
- When the **price of oranges decreases to 20 THB per unit**, there **is a contraction in the quantity supplied to 1 Kg. (A to C)**
- **This movement along the supply curve to the left** indicates that producers are willing to supply **a lower quantity** of oranges at the lower price, as it becomes less profitable for them to do so.

Factors shift in supply curve
"C S I T H"*

- **Original point is at A : Price of orange = 60 THB/Unit , quantity supplied of oranges = 3 Unit.**

- **Cost of production**

- For example, if the minimum wage in Thailand increases from 300 THB per day to 500 THB per day, the cost of production will increase.
- As a result, producers will decrease their supply, shifting the supply curve to the left from S1 to S2 (Point A to Point B)



• **Subsidy : grants from the government**

- If producers receive a subsidy from the government, the cost of production will be lower.
- The supply curve shifts to the right from S1 to S3 (Point A to Point C).

• **Indirect tax Eg. VAT**

- Indirect tax is a tax imposed on goods and services.
- A higher indirect tax will increase the cost of production, causing the supply curve to shift to the left from S1 to S2 (Point A to Point B)

• **Advanced Technologies**

- Advanced technologies can improve productivity, resulting in a lower cost of production.
- The supply curve shifts to the right from S1 to S3 (Point A to Point C).

• **Harvest**

- Floods, hail, and drought can cause instant plant stress, leading to a lower quantity of supply.
- The supply curve shifts to the left from S1 to S2 (Point A to Point B).

Key Takeaways

- The supply curve is upward sloping, illustrating a positive relationship between price and quantity supplied.
- **Changes in the price itself**, while other factors remain constant, **cause movements along the supply curve.**
 - ▶ When the price goes up, it leads to an extension in supply.
 - ▶ When the price goes down, it leads to a contraction in supply.
- **“CSITH”** are factors that shift the supply curve at any given price.

CHAPTER 9 Price determination

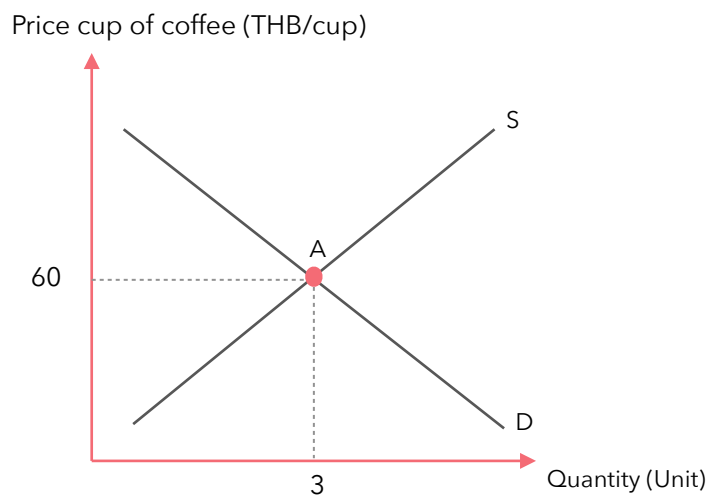
Checklist

1. Market equilibrium
2. Market Disequilibrium

1. Market equilibrium

- **Equilibrium price** : The price at which quantity demanded equals quantity supplied.

Price Cup of coffee (THB/Cup)	Quantity demanded (Unit)	Quantity supplied (Unit)
100	1	5
80	2	4
60	3	3
40	4	2
20	5	1

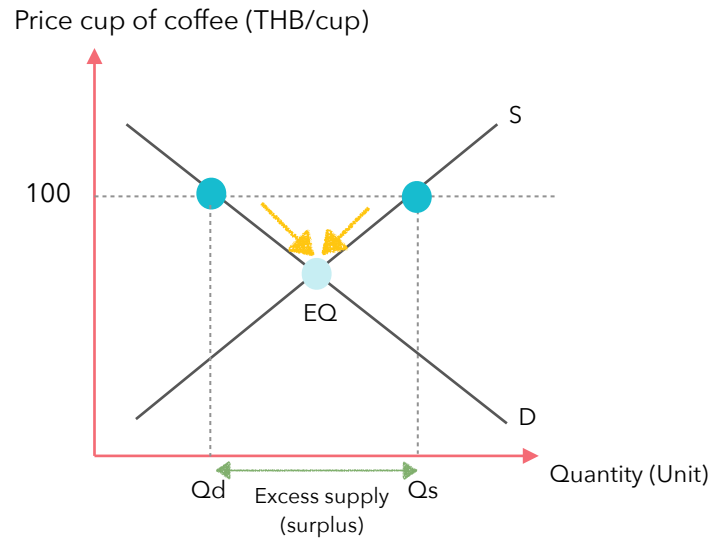


Point A represents the equilibrium price: At a coffee price of 60 THB per cup, the quantity demanded equals the quantity supplied, standing at 3 units.

2. Market disequilibrium and moving from market disequilibrium to market equilibrium

- **Disequilibrium price** : The price at which quantity demanded and quantity supplied are not equal.
- **Case 1 : Excess Supply (Surplus)**

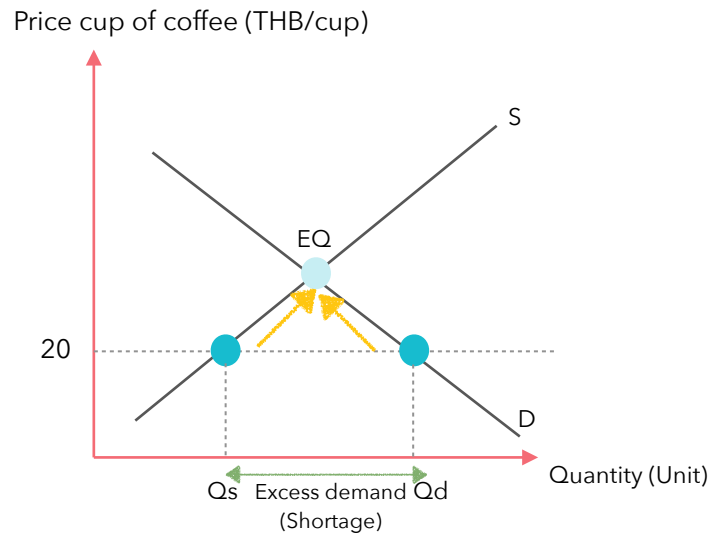
Price Cup of coffee (THB/Cup)	Quantity demanded (Unit)	Quantity supplied (Unit)
100	1	5
80	2	4
60	3	3
40	4	2
20	5	1



- At coffee price = 100 THB/cup, Quantity demanded = 1 unit and Quantity supplied = 5 units. **Quantity supplied exceeds quantity demanded, resulting in a surplus or excess supply.**
- **Surplus will lead to a downward force on the price.** This results in **an extension in demand** and **a contraction in supply**, ultimately **pushing the price down to the equilibrium level of 60 THB/Cup.**

• **Case 2 : Excess Demand (Shortage)**

Price Cup of coffee (THB/Cup)	Quantity demanded (Unit)	Quantity supplied (Unit)
100	1	5
80	2	4
60	3	3
40	4	2
20	5	1



- At coffee price = 20 THB/cup, Quantity demanded = 5 units and Quantity supplied = 1 unit. **Quantity demanded exceeds quantity supplied, resulting in a shortage or excess demand.**
- **Shortage will lead to an upward force on the price.** This results in **an extension in supply** and **a contraction in demand**, ultimately **pushing the price up to the equilibrium level of 60 THB/Cup.**

Key Takeaways

- Equilibrium price **is where the quantity demanded equals the quantity supplied.**
- Disequilibrium price **is when the price at which the quantity demanded does not equal the quantity supplied.**
- If the **price is too high**, there will be a **"surplus or excess supply"**, and **the price is pushed down to the equilibrium level.**
- If the **price is too low**, there will be a **"shortage or excess demand"**, and **the price is pushed up to the equilibrium level.**

CHAPTER 10

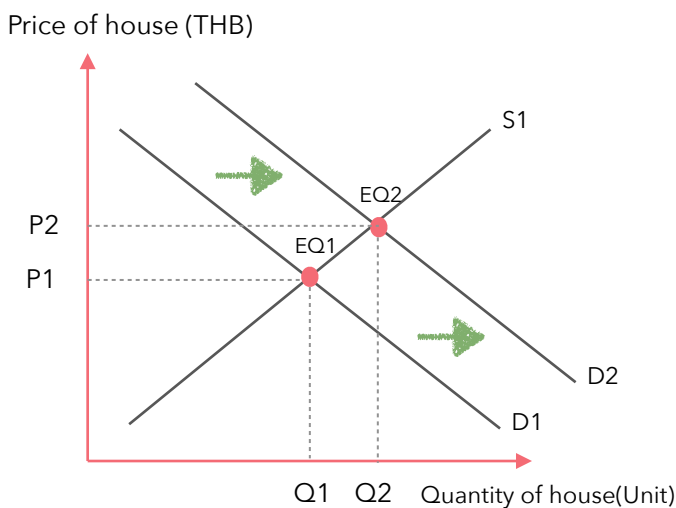
Price changes

Checklist

1. Causes of price changes
2. Consequences of price changes

1. The effect of changes in demand

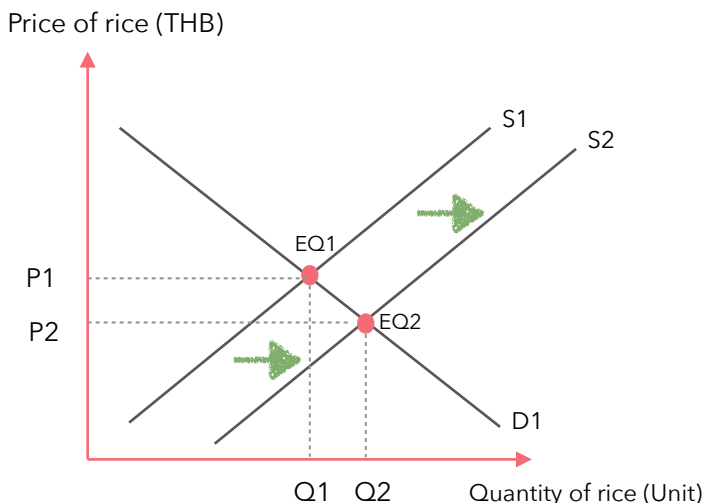
For example : If the government reduces income tax from 10% to 5% of income, how will it affect the price and quantity of houses?



- Original point is at EQ1, P1 and Q1
- When the government **imposes lower income tax, consumers receive a higher disposable income.**
- Consumers have **more ability to buy houses**
- Demand shifts to the right from D1 to D2
- New equilibrium is at point EQ2, **price is higher to P2** and **Quantity is higher to Q2.**

2. The effect of changes in supply

For example : When the government provides a subsidy to farmers, how does it impact the price and quantity of rice?



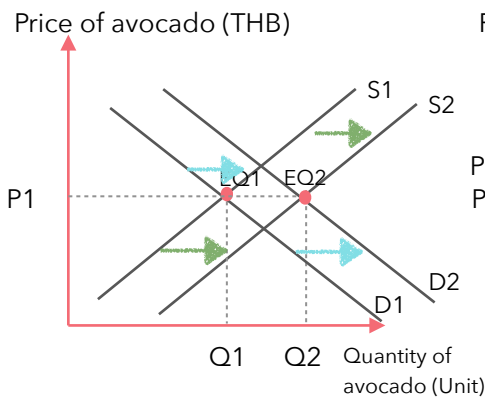
- Original point is at EQ1, P1 and Q1
- When the government provides a subsidy to farmers, the cost of production will be lower.
- Supply shifts to the right from S1 to S2
- New equilibrium is at point EQ2, **price is lower to P2** and **Quantity is higher to Q2.**

2. The effect of changes in demand and supply at the same time

For example : If consumer trends shift towards health and wellness, at the same time, a lower tax imposed by the government on avocados . How does it impact the price and quantity of avocado?

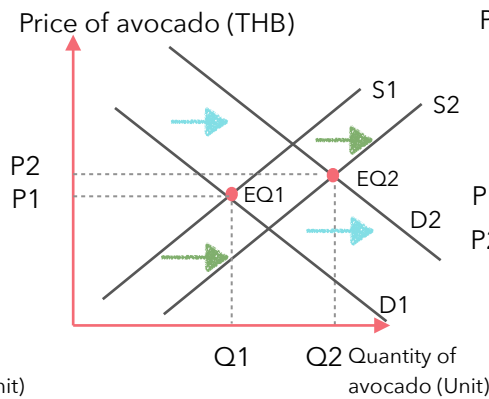
- Original point is at EQ1, P1 and Q1
- Consumer concerns more on health, **consumer will consume more on fruit like avocado.** Demand shifts to the right from D1 to D2.
- At time same time, **government imposes lower tax on avocado.** It **decreases cost of production**, supply curve shifts to the right from S1 to S2.
- Therefore, New Equilibrium will be P2 and and quantity is higher to Q2.

Case1 : Demand = Supply



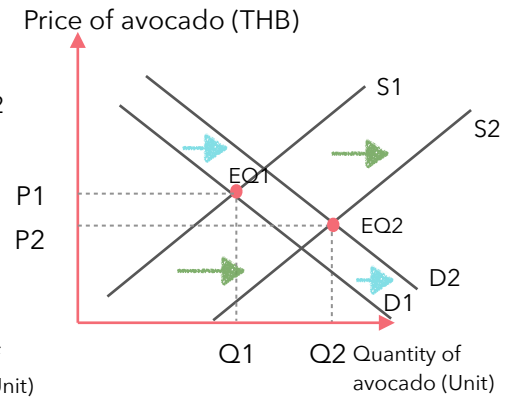
- If the **demand curve shifts equal to the supply curve**, the **price remains constant at P1**.

Case2 : Demand > Supply



- If the demand curve shifts **more than** the supply curve, the price increases to P2.

Case3 : Demand < Supply



- If the demand curve shifts **less than** the supply curve, the price decreases to P2.

To sum up : when demand and supply shift at the same time, Either price or quantity is uncertain.

Key Takeaways

- Factors that cause a shift in demand include "TRIPS".
- Factors that cause a shift in supply include "CSITH".
- If demand and supply shift at the same time, Either price or quantity is uncertain.

CHAPTER 11

Price elasticity of demand (PED)

Checklist

1. Definition of PED
2. Calculation of PED
3. Determinants of PED
4. PED and total spending on a product/revenue
5. Significance of PED

1. Definition of PED*

Meaning : The responsiveness of quantity demanded to a change in price.

2. Calculation of PED≈

Formula : % Change in quantity demanded / % Change in price

For example : If price of chocolate shows 100 THB/Bar, consumer will buy 5 units. If price of chocolate decreases to 80 THB/Bar, consumer would like to buy 8 units . Find out PED ?

Formula : % Change in quantity demanded / % Change in price

In this case, P1=100 THB/Bar P2 = 80 THB/Bar

Q1= 5 units Q2 = 8_units

$$= \frac{(Q2-Q1)/Q1 \times 100}{((P2-P1)/P1) \times 100}$$

$$= \frac{((8-5)/5) \times 100}{((80-100)/80) \times 100}$$

$$= \frac{60\%}{-25\%}$$

$$= -2.4$$

$$= -2.4$$

$$= -2.4$$

= -2.4 (Minus since Price and Quantity demand are negative relationship)

3. Interpretation of PED

Price elasticity of demand

Price elasticity of demand*

- When the quantity demanded changes by **higher percentage** than the change in price.

- PED > 1**
(For example, PED=2)
(When price decreases by 1 %, quantity demanded increases by 2%)

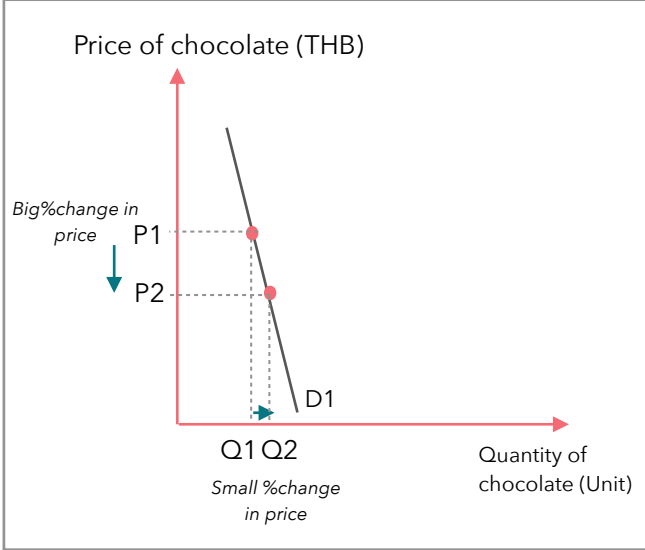
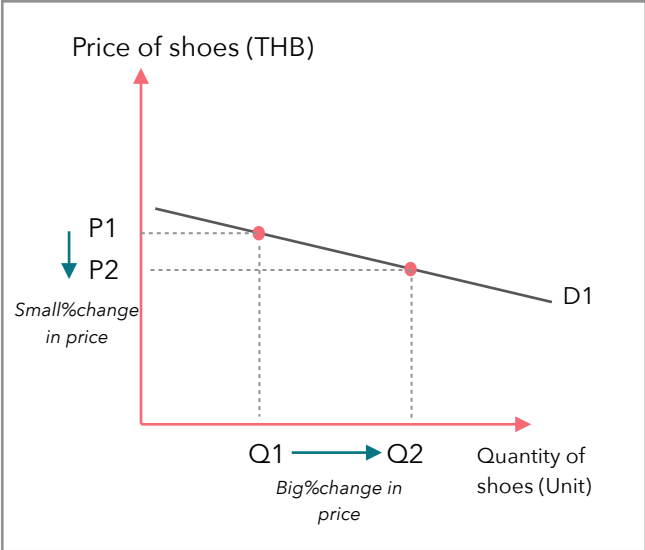
- Fashion goods, Non-essential items etc.

Price inelasticity of demand*

- When the quantity demanded changes by **lower percentage** than the change in price.

- 0 < PED < 1**
(For example, PED=0.5)
(When price decreases by 1 %, quantity demanded increases by 0.5%)

- Essential items, Addictive goods etc.



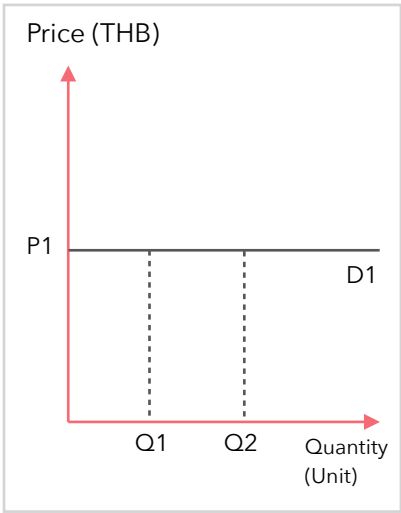
Other degrees of elasticity

Other degrees of elasticity

Perfectly elastic demand

- A change in price results **in a complete change in** quantity demanded.

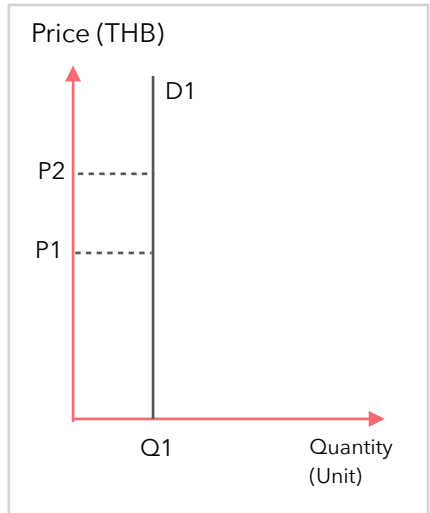
PED = ∞



Perfectly inelastic demand

- A change in price **has no change** in quantity demanded.

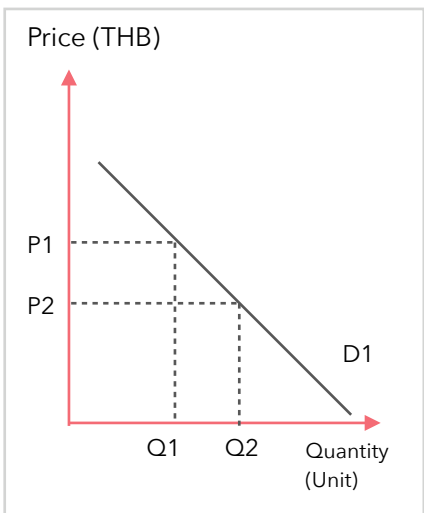
PED = 0



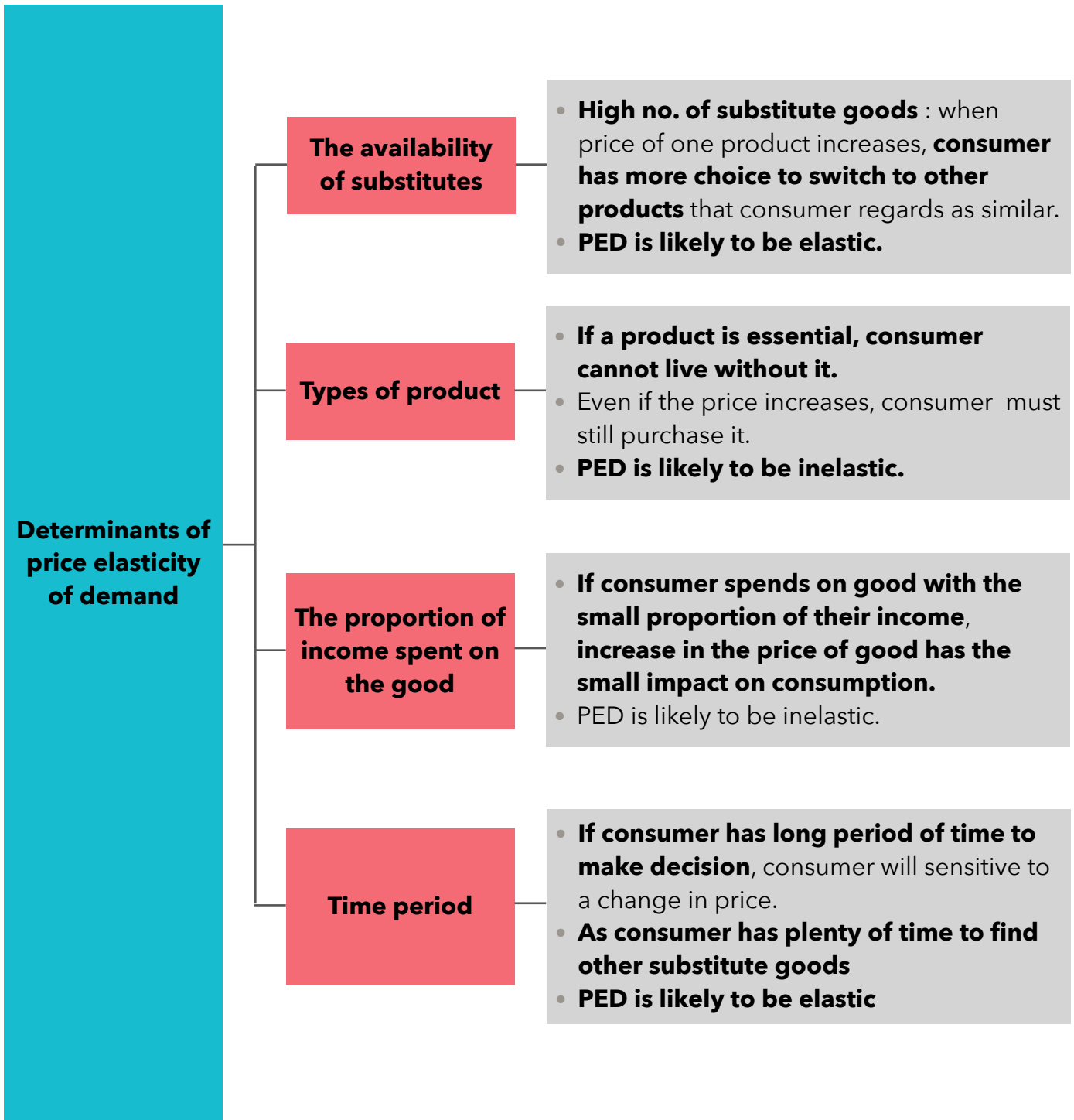
Unitary demand

- % change in price **results in equal** % change in quantity demanded.

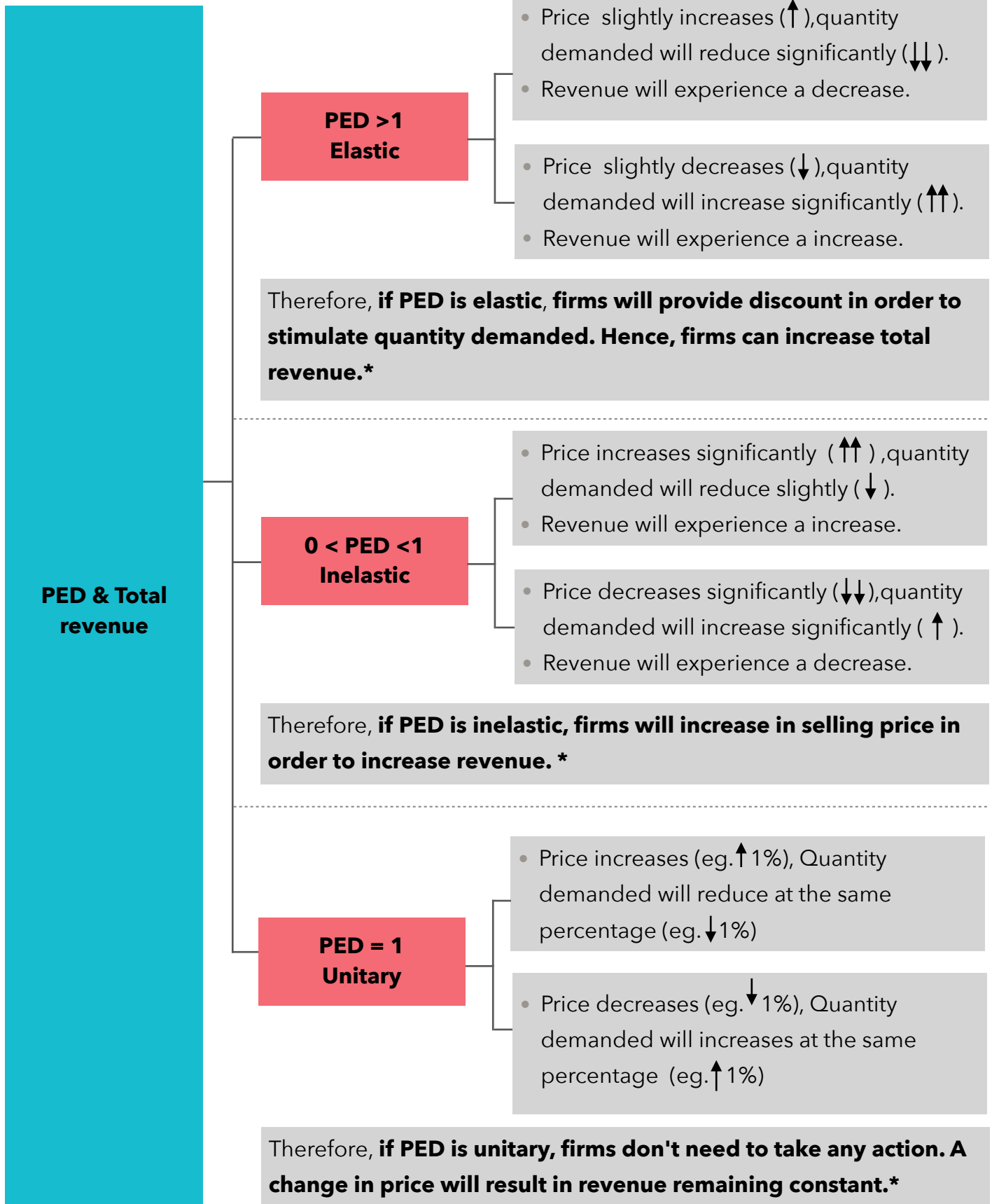
PED = 1



4. Determinants of price elasticity of demand*



5. PED and total revenue gained*



No part of this resource may be reproduced, distributed, or transmitted in any form by any means for non-personal use without the prior written permission from Knockout.Economics

Key takeaways

- PED means the responsiveness of quantity demanded to a change in price.
- $PED > 1$: elastic , $0 < PED < 1$: inelastic, $PED = 1$: unitary
- Determinants of PED include the availability of substitutes, types of product, the proportion of income spent on the good and time period.
- If PED is elastic, firms will provide discount in order to stimulate quantity demanded. Hence, firms can increase total revenue. E.g fashion, non-essential items
- If PED is inelastic, firms will increase in selling price in order to increase revenue. E.g. Essential items
- If PED is unitary, firms don't need to take any action. A change in price will result in revenue remaining constant.

CHAPTER 12

Price elasticity of supply (PES)

Checklist

1. Definition of PES
2. Calculation of PES
3. Determinants of PES
4. Significance of PES

1. Definition of PES

Meaning : The responsiveness of quantity supplied to a change in price.

2. Calculation of PES

Formula : % Change in quantity supplied / % Change in price

For example : If price of car shows **5 Million THB/unit**, Audi will produce **10 units per month**. If price of car increases to **5.5 Million THB/unit**, Audi will increase production to **12 units per month** . Find out PES ?

Formula : % Change in quantity supplied / % Change in price

In this case, P1=5 Million THB / Unit

P2 = 5.5 THB / Unit

Q1= 10 units per month

Q2 =12 units per month

$$= \frac{(Q2-Q1)/Q1 \times 100}{((P2-P1)/P1) \times 100}$$

$$= \frac{(12-10)/10 \times 100}{((5.5-5)/5) \times 100}$$

$$= \frac{20\%}{10\%}$$

$$= 2$$

$$= 20\%$$

$$10\%$$

$$= 2 \text{ (Positive since Price and Quantity supplied are positive relationship)}$$

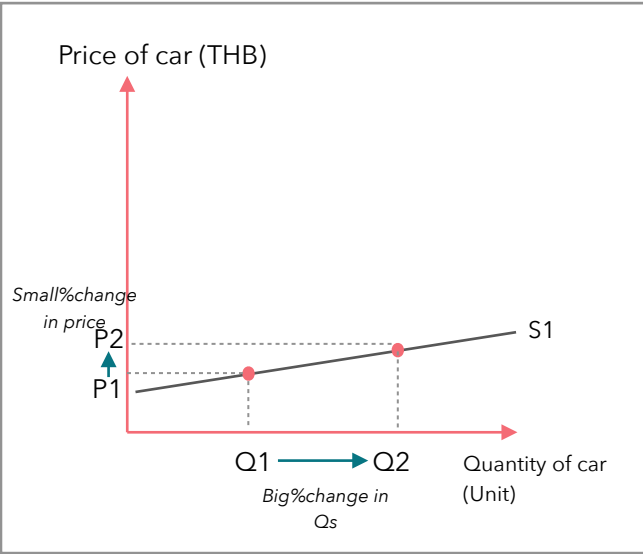
3. Interpretation of PES

Price elasticity of supply (PES)

Price elasticity of supply*

- When the quantity supplied changes by **higher percentage** than the change in price.

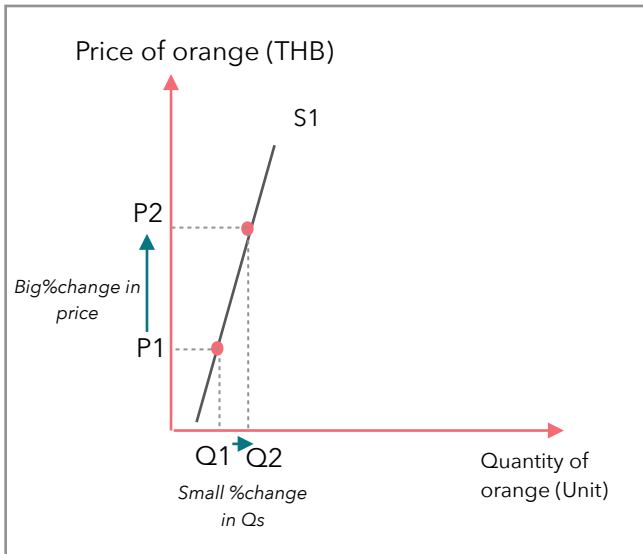
- PES > 1**
(For example, PES=2)
(When price increases by 1 %, quantity supplied increases by 2%)



Price inelasticity of supply*

- When the quantity supplied changes by **lower percentage** than the change in price.

- 0 < PES < 1**
(For example, PES=0.5)
(When price increases by 1 %, quantity supplied increases by 0.5%)



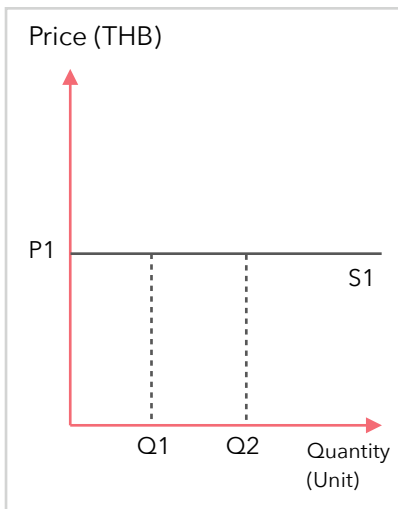
Other degrees of elasticity

Other degrees of elasticity

Perfectly elastic supply

- A change in price results **in a complete change in** quantity supplied

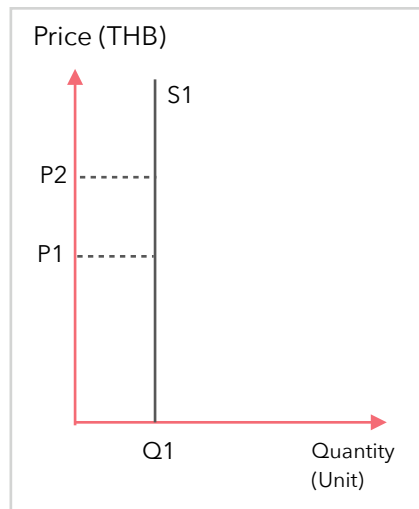
PES = ∞



Perfectly inelastic supply

- A change in price **has no change** in quantity supplied.

PES = 0



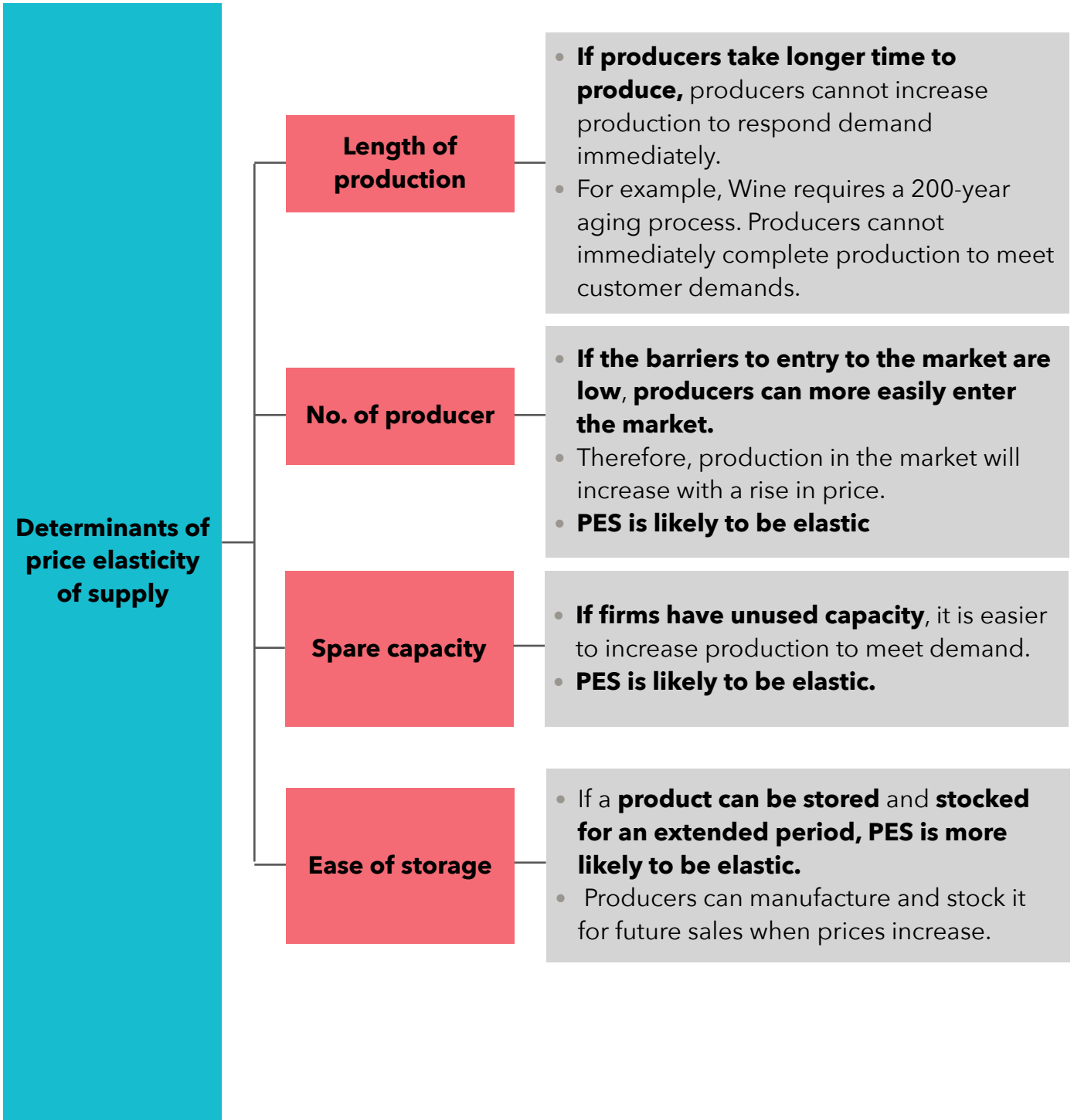
Unitary supply

- % change in price **results in equal** % change in quantity supplied.

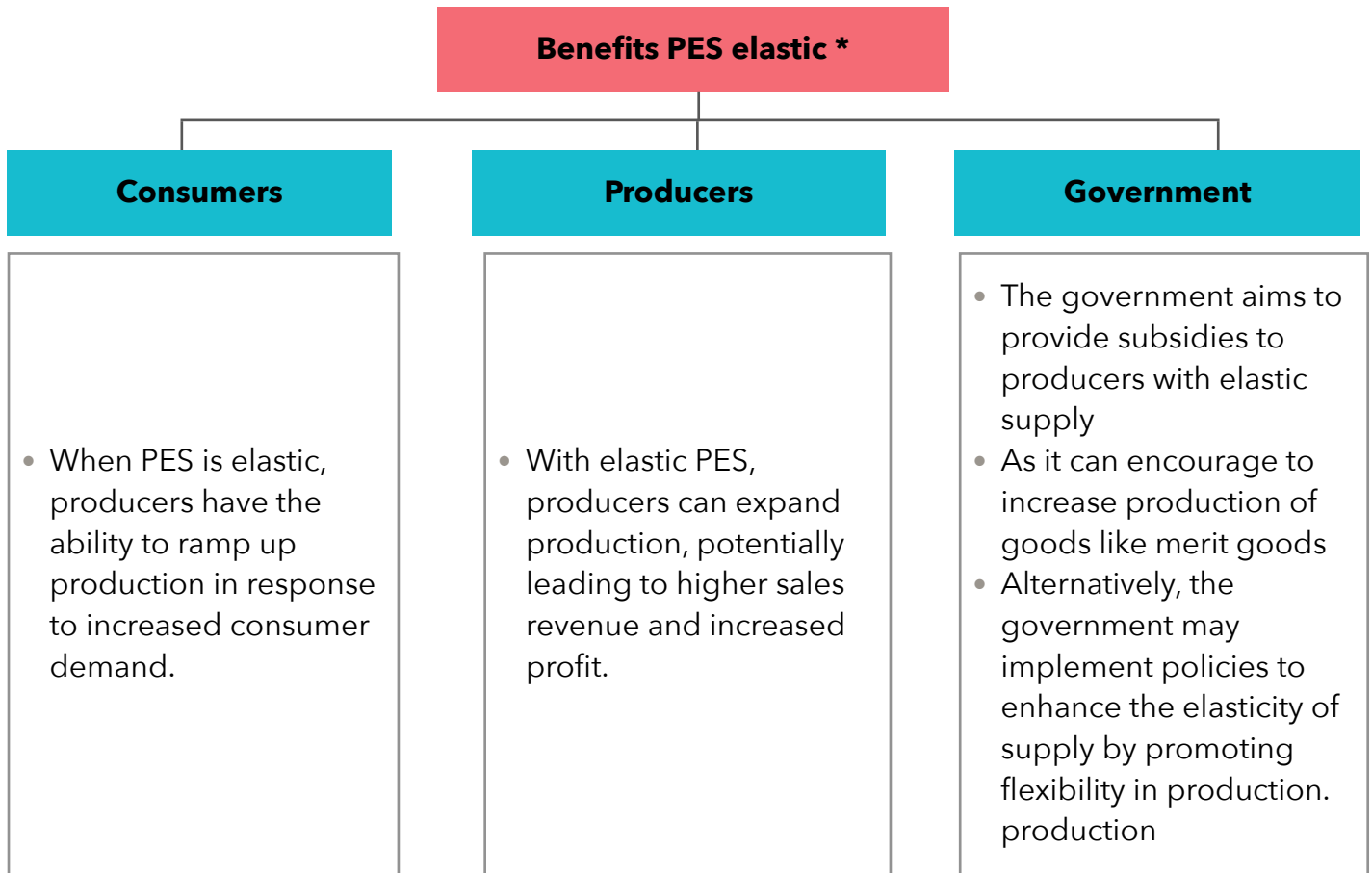
PES = 1



4. Determinants of price elasticity of supply*



5. Implications of PES for decision making



Key takeaways

- PES means the responsiveness of quantity supply to a change in price
- $PES > 1$: elastic , $0 < PES < 1$: inelastic, $PES = 1$: unitary
- Any supply curve that starts at the origin has PES value equal to one. (Unitary PES)
- Determinants of PES include length of production period, no. of producer, spare capacity, ease of storage

CHAPTER 13

Market economic system

Checklist

1. Definition of market economic system
2. Advantages and disadvantages of the market economic system

1. Definition of market economic system

Meaning : : An economic system where consumers dictate production decisions and resource allocation is achieved through the price mechanism.

Advantages *

- Price **is determined by demand and supply** with **limited government intervention**.
- Private firms offer **a greater variety of goods and services for consumers**.
- **High competition in the market promotes innovation and technology.**
Quality of goods and services will be higher.
- It focuses on **consumer sovereignty**.
- Private firms aim to **maximise profits**, leading them to strive for **cost minimisation** by **improving efficiency and reducing waste**.

Disadvantages *

- Market failure, which means inefficient allocation of resources. It can be attributed to various factors
 - ▶ **Private firms take consideration only private cost and benefits.** They may not take into account the costs or benefits to third parties
 - ▶ **Monopoly** can occur in the economy. Price of goods and services would be high and low quality.
 - ▶ Private firms **ignore to produce public goods and merit goods.**
 - ▶ Private firms produce **more demerit goods as they possible to charge high price and gain more profit.**

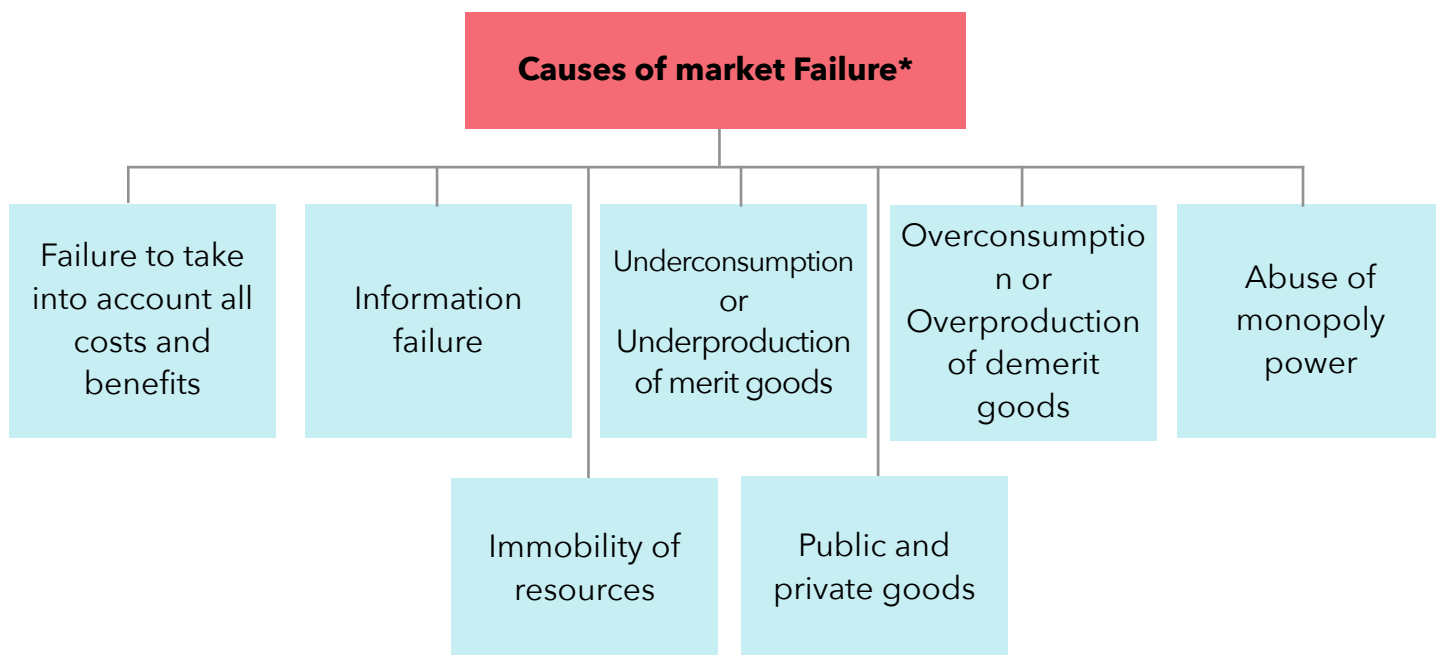
CHAPTER 14 Market failure

Checklist

1. Definition of market failure
2. Causes of market failure
3. Consequences of market failure

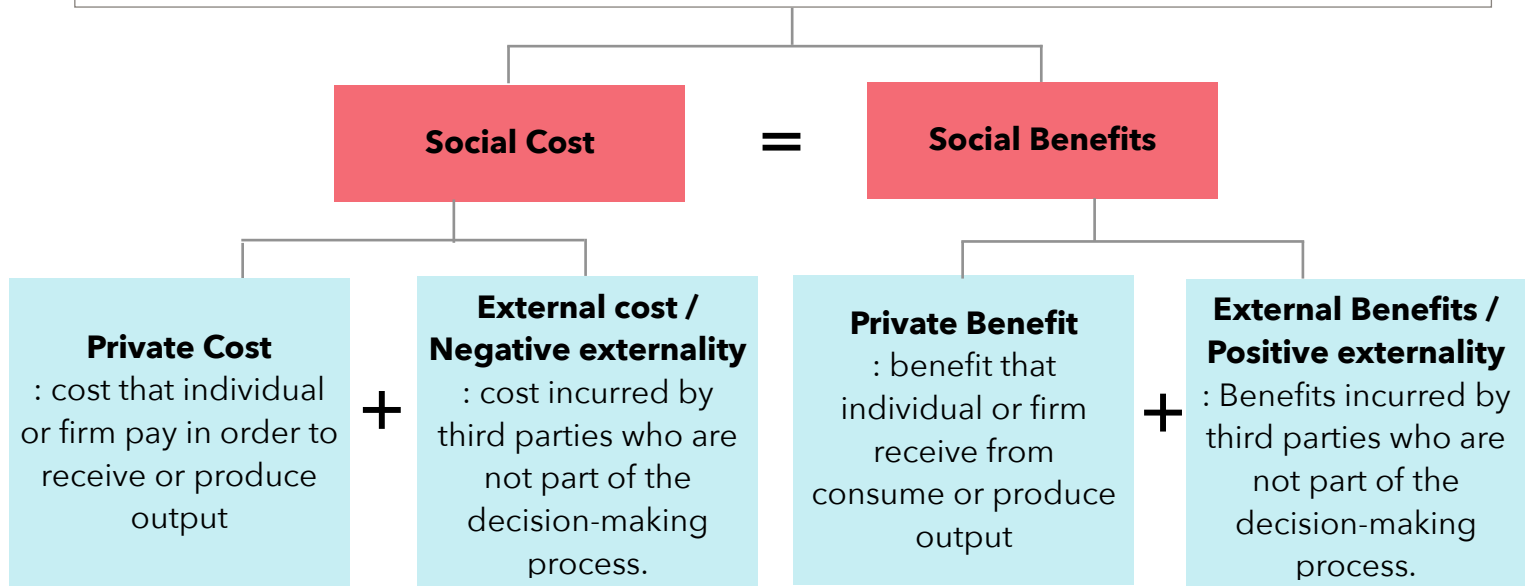
1. Definition of market failure

Meaning : occurs when free market allocate resources inefficient. A free market cannot produce the right quantities and at the lowest possible average cost.



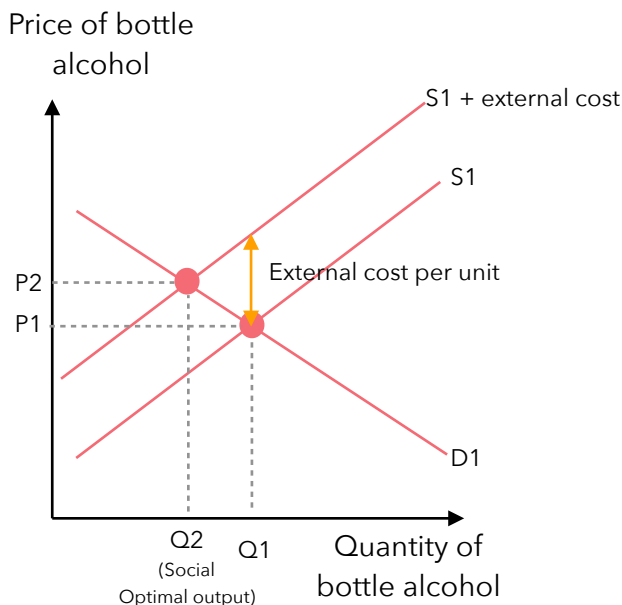
2. Failure to take into account all costs and benefits

Social optimum output* : the level of output that makes social cost equals to social benefits and the society receives maximised welfare.



Case 1 : Overproduction of demerit goods

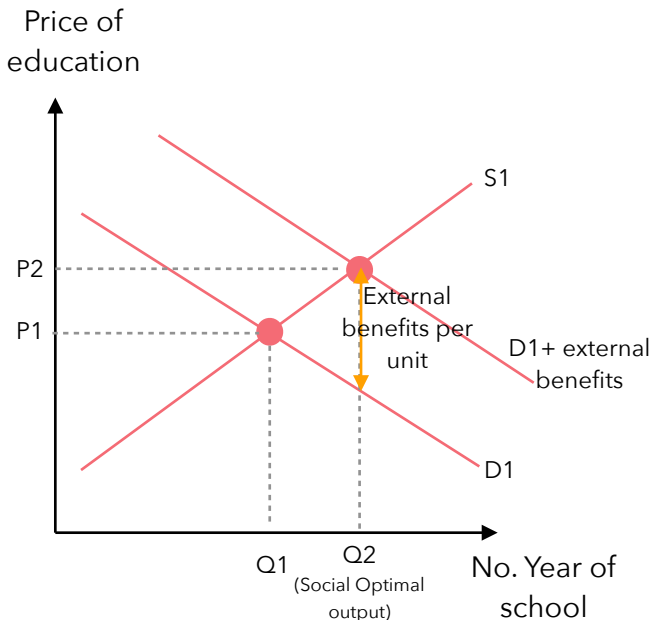
- When a liquor company determines the quantity of bottles it will produce, the firm typically considers private costs such as labor and raw materials, along with private benefits like revenue and profit.
- However, external costs, such as noise and pollution, are often overlooked.** This oversight can lead to the **overproduction of alcohol bottles.**



- Original point is at EQ1, P1 and Q1.
- When a firm takes **external costs into account, the cost of production increases**, causing the supply curve to shift left from S1 to S1 + external cost.
- New EQ2, price is higher to P2 and quantity is lower to Q2 (Social optimal output)**
- The distance between S1 and S1 + external cost represents the external cost per unit.**
- The **Distance between Q1 and Q2 = Over-production of demerit goods**

Case 2 : Underconsumption of merit goods

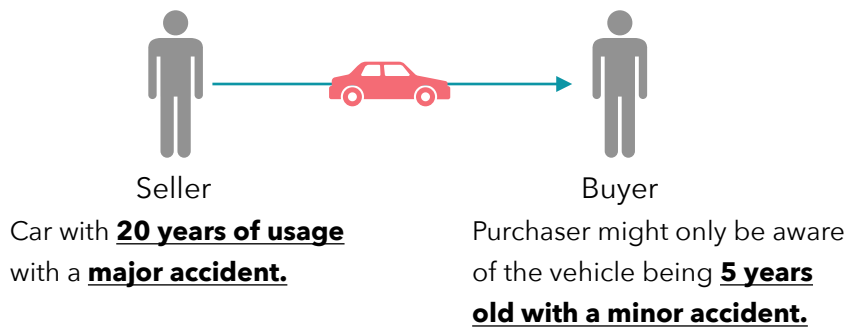
- When students consider university degree courses, they take into account private costs (such as tuition fees) and private benefits (such as future earnings and connections).
- However, they often overlook **external benefits (such as contributions to the country's GDP)**, leading to **underconsumption of education**.



- Original point is at EQ1, P1 and Q1
- When students take into account **external benefits**, the demand curve shifts to the right from D1 to D1+external benefits.
- New EQ2, **price is higher to P2 and quantity is higher to Q2 (Social optimal output)**
- The distance between **D1 and D1+external benefits** represents the **external benefits per unit**.
- The **distance between Q1 and Q2 = Underconsumption of output**

3. Information failure

Meaning : When consumers lack accurate or sufficient information, it can lead to incorrect decision-making.

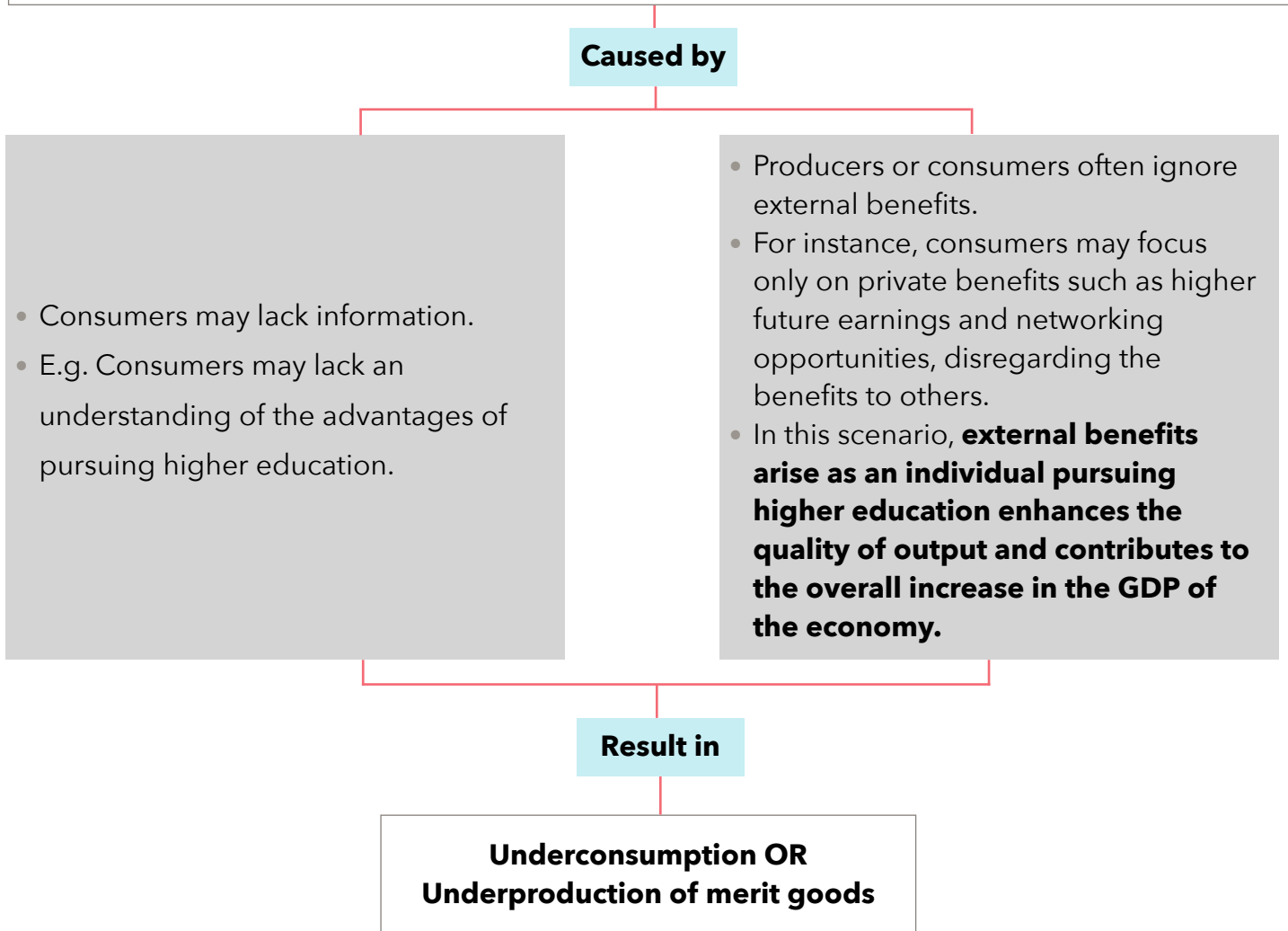


For example :

- The seller possesses more information than the buyer, and the buyer may lack the technical knowledge.
- As a result, it can lead to incorrect decision-making.

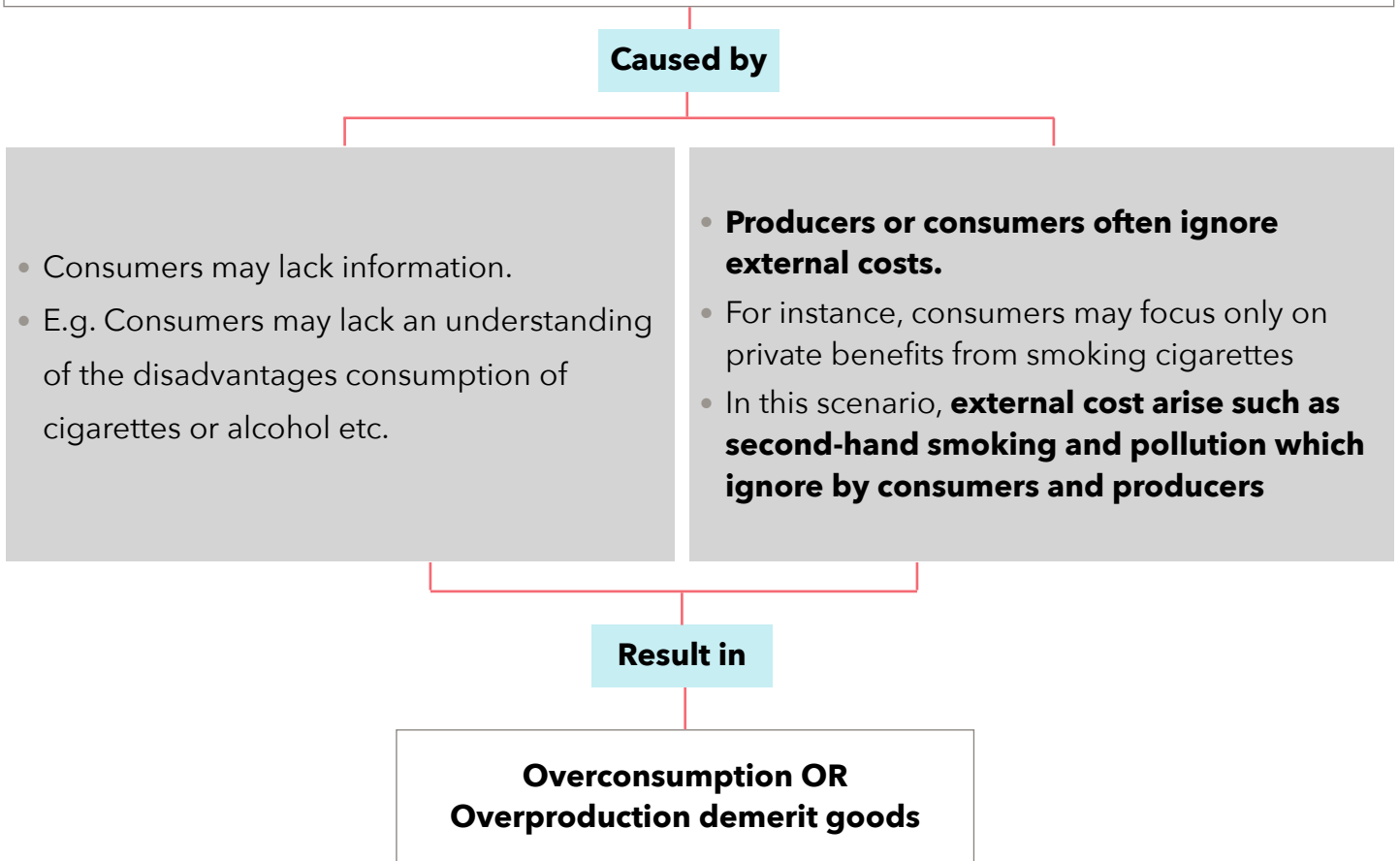
4. Merit goods

Meaning : Goods that provide positive externalities to society, such as healthcare and education, can **lead to underproduction or underconsumption of merit goods.**



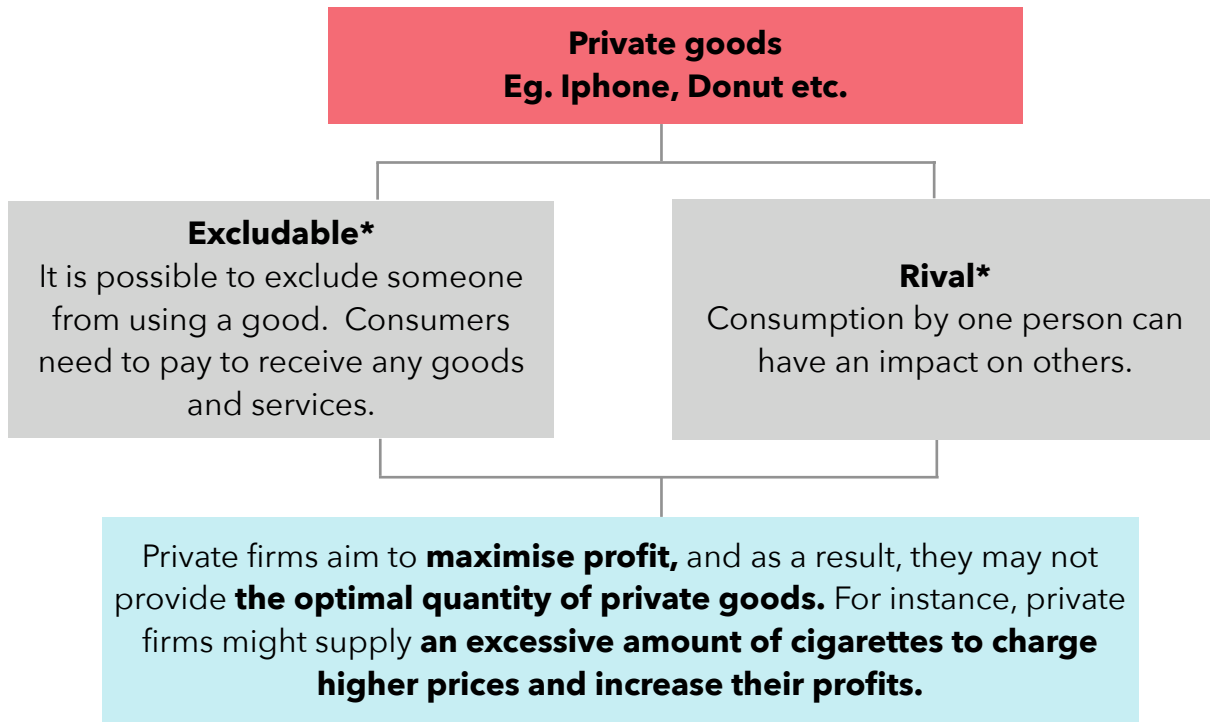
5. Demerit goods

Meaning : Goods that impose negative externalities on society, such as cigarettes and alcohol, can lead to overproduction or overconsumption of demerit goods.



6. Public and private goods



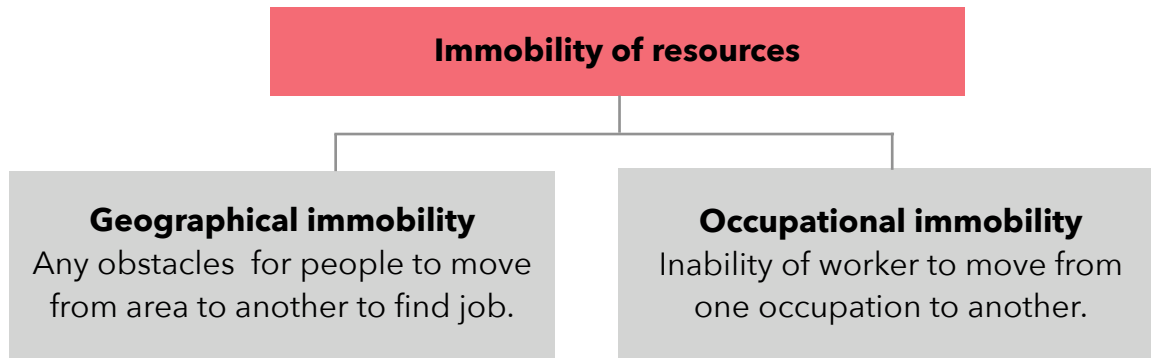


7. Abuse of monopoly power

Monopoly : a only one seller supply good in the economy.

- In the absence of competition, a firm has the authority to establish **high prices through limited quantity supply to achieve increased profits**.
- This **lack of competition discourages efforts to enhance productivity, resulting in higher average costs and inefficient resource utilisation**.
- Additionally, firms may **neglect improving the quality of products, producing lower-quality items since consumers have limited alternatives**.

8. Immobility of resources



- For instance, there is a rise in demand for labor in the financial sector in the US, and simultaneously, the demand for labor in manufacturing is decreasing in Thailand.
- Workers in Thailand may face challenges in transitioning from manufacturing to the service sector due to a lack of skills or knowledge (**occupational immobility**).
- Moreover, **geographical immobility** comes into play as it might be challenging for them to move to the US due to the high cost of living. Consequently, these workers may experience unemployment, **leading to the under-utilisation of resources**

CHAPTER 15

Mixed economic system

Checklist

1. Definition of the mixed economic system
2. Government intervention to address market failure

1. Definition of the mixed economy system

Meaning : Both the private and public sectors play crucial roles in resource allocation within the economy. Private firms cater to the demand for goods and services, responding to customer needs. Meanwhile, the government supplies essential goods and services, and also regulates private firms to enhance the overall standard of living.

Advantages of market economy*

- **Price is determined by demand and supply.**
- **Private firms provide more choice of goods and services for consumers.**
- The abundance of private firms in the market encourages robust competition, fostering innovation and technological advancements. Consequently, **the quality of goods and services is enhanced.**
- It emphasizes the principle of **consumer sovereignty.**
- **High competition** in the market can **enhance the efficiency of resource utilisation.**

Advantages of planned economy*

- **Government provides public goods** (eg. Street light, national defence) and **merit goods** (eg. Healthcare, Education) for better standard of living.
- Government **regulates demerit goods** such as cigarettes and alcohol.
- **Government controls inflation and promotes economic growth**
- **Government promotes equality and social well-being.**
- The government safeguards consumers by **preventing private firms from exploiting them through price hikes or providing misleading information.**

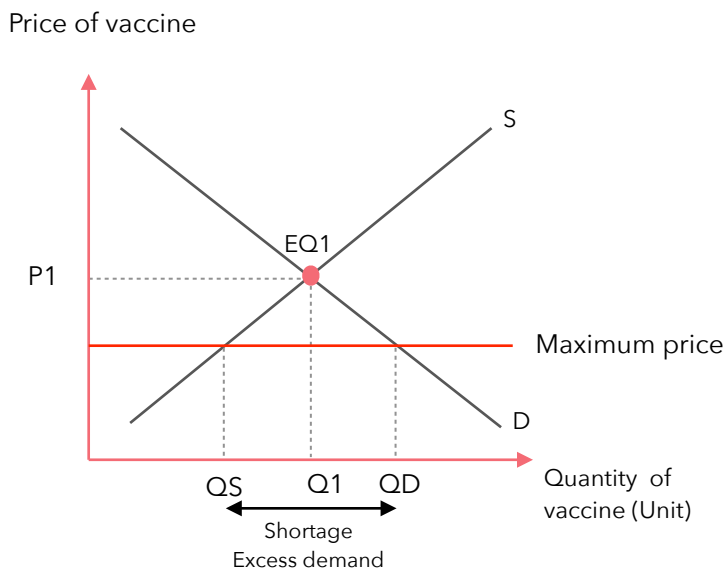
+

Mixed Economy

2. Maximum and minimum prices

2.1 Maximum price

Meaning : when the government limit firm's ability to set their selling price in particular product. **A maximum price is established below the equilibrium price. (Ceiling price).**



Advantages*

- People **have more ability to afford necessities** Eg. Education, Healthcare, Food, Accommodation etc.
- ▶ Therefore, people have better standard of living.

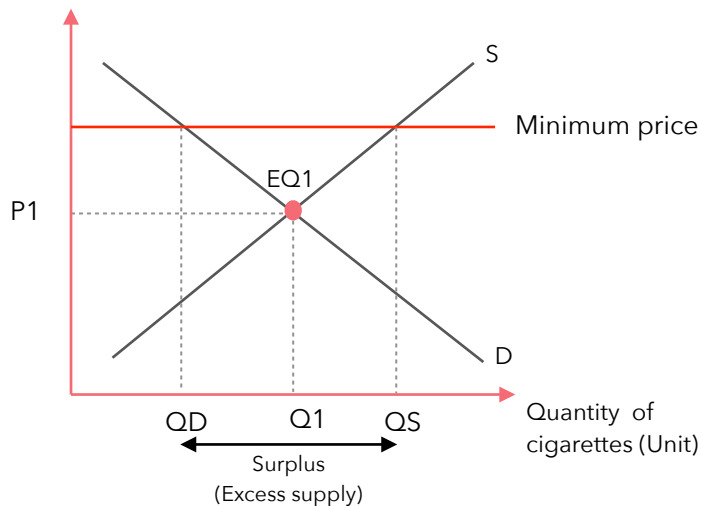
Disadvantages*

- **The lower price of a good can discourage producer to produce product** (resulting in a contraction in supply) while encourage consumers to buy more product (leading to an extension in demand). **Consequently, a shortage (excess demand) may occur.**
- Individuals might purchase **a good at a lower price and then resell it at a higher price in the black market.**

2.2 Minimum price

Meaning : When the government intervenes to mandate that **firms set the price of a good above the equilibrium. (Floor price)**

Price of cigarettes



Advantages*

- If the government **sets a minimum price on demerit goods, individuals may have reduced affordability.** Consequently, this can lead to **decreased consumption of demerit goods, thereby reducing negative externalities in society.**
- Setting **a minimum price on agricultural products by the government can enhance farmers' revenue** and contribute to an improved standard of living.

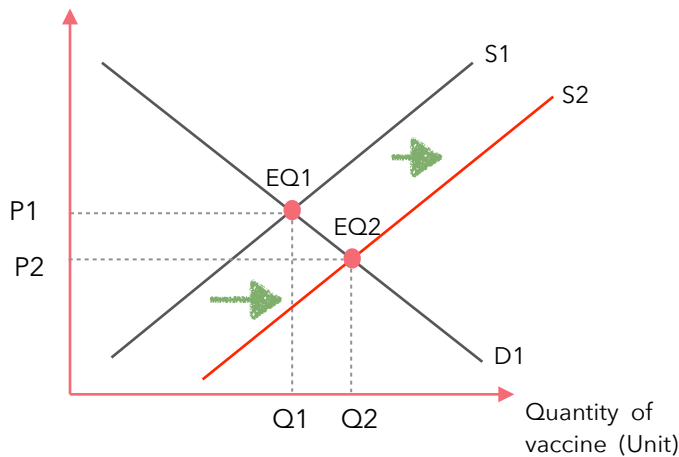
Disadvantages*

- **It causes disequilibrium.** There will be contraction in quantity demand and extension in quantity supply, **resulting in surplus or excess supply.**

3. Subsidies

Meaning : It is a grant from the government which **reduces cost of production, encouraging producers to increase their output in the economy.**

Price of vaccine



- Original equilibrium is at EQ1, P1 and Q1
- When government provides grant to producers, **cost of production will be lower.**
- Supply shifts right from S1 to S2.
- **New EQ is at EQ2, Price is lower to P2 and Quantity is higher to Q2**

Advantages*

- **It encourages producers to produce more merit goods** Eg. Healthcare, education. Therefore, **It can reduce underproduction of merit goods.**
- **Consumers having a greater ability to afford goods** contributes to an improved standard of living.

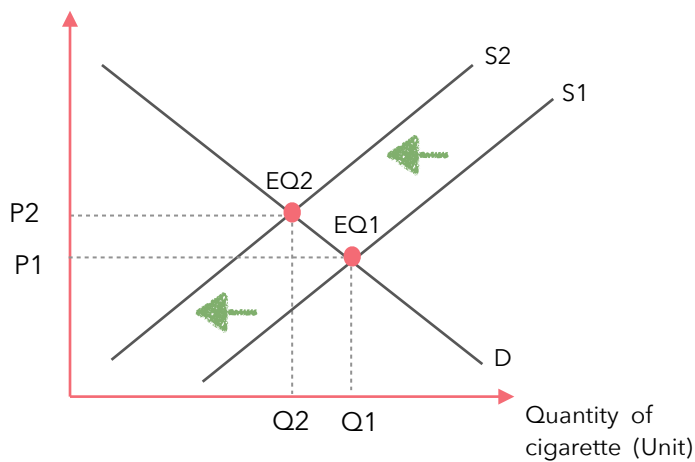
Disadvantages*

- **The opportunity cost will rise**, leading to **a reduction in the government's budget for other projects.**
- It results in **an inefficient allocation of resources**, as firms may rely on government subsidies, **discouraging self-driven improvements in production.**
- Government may need to borrow money to support subsidy which leads to **national debt.**

4. Indirect tax

Excise tax : Government imposes taxes on goods and services per unit, increasing the **cost of production**. For instance, taxes are imposed on items like cigarettes and alcohol.

Price of cigarette



- **Original equilibrium is at EQ1, P1 and Q1**
- When government imposes excise tax on cigarette , **Cost of production will be higher.**
- **Supply shifts left from S1 to S2. New is at EQ2, Price is higher to P2 and Quantity is lower to Q2.**

Advantages*

- **It discourages producers from manufacturing certain products**, such as demerit goods, **thereby reducing overproduction of those goods.**
- **Reduced consumer ability to afford demerit goods** may contribute to a **decrease in the overconsumption of these goods.**

Disadvantages*

- **If demand is inelastic , some people may be addictive. Higher price of demerit goods cannot reduce consumption.**
- **Tax evasion may occur.** People might purchase demerit goods from the black market.
- **If the government imposes a small indirect tax, consumers may not feel a significant difference and continue to purchase demerit goods.**

5.Environment policies

Environment policies

Restriction on the amount of pollution

- The government **establishes a limit on the amount of pollutants** that firms are allowed to emit.
- **If firms exceed this limit, they are required to pay fines.**

Pollution permit

- **The government issues permits to firms, allowing them to emit pollutants up to a specified quota.**
- **If a firm emits pollutants below its allocated quota, it can sell the unused portion to other firms exceeding their assigned limits.**

Advantages*

- Firms **attempt to decrease their pollution emissions to avoid fines.**
- **The government collects revenue from fines.** The government has a larger budget for investments in areas such as infrastructure and healthcare.
- **It incentivises firms to decrease pollution, as they have the opportunity to generate revenue by selling their pollution quota.**

Disadvantages*

- **It is difficult to calculate pollutants in monetary value.**

6. Regulation

Meaning : Government establishes rules to limit certain activities of individuals or firms.

For instance, it prohibits department stores from selling alcohol between 8:00 am. and 5:00 pm.

Advantages

- **It is easy to understand and supported by legal statutes.**

Disadvantages

- It maybe difficult to ensure that everyone applies the regulation.
- **It lacks flexibility and may be unfair to certain groups,** such as responsible drinkers, who are unable to purchase alcohol during the daytime.
- The government might face a decline in popularity.

7. Nationalisation and privatisation

- **Nationalisation :** When the ownership is transferred from the private sector to the public sector
- **Privatisation :** When the ownership is transferred from the public sector to the private sector

Advantages and Disadvantages from privatisation

Advantages*

- Many **private firms contribute to the production of goods and services in society, providing consumers with a broader range of choices.**
- Due to **intense competition, private firms are incentivised to produce high-quality products and foster innovation.**
- With profit maximisation as their goal, **private firms strive to minimise costs, leading to reduced waste and increased efficiency.**

Disadvantages*

- **Private firms may not base their decisions on the full range of costs and benefits, including social costs and social benefits.**
- If a single private firm monopolises the market, **it is likely to set high prices and lack motivation to enhance the quality of its products.**
- Driven by the goal of profit maximisation, **private firms might reduce quality or exploit labor to cut production costs.**

8. Direct provision

Meaning : When a government provides essential goods to society, such as housing, education, healthcare, etc.

Advantages*

- Government **has direct control and regulation over the quality and standards of essential goods and services provided to the public.**
- Essential goods and services **are accessible to everyone in the society. It also promotes equity in the society.**

Disadvantages*

- **It can limit choice as the government is the sole provider of goods and services.**
- **Quality may be lower** as there is no incentive to improve innovation and technology.
- **Allocation of resources is inefficient, as the government does not always aim for profit maximisation.**

9. Government failure*

- **Governments may experience delays in decision-making**, hindering their ability to promptly respond to demand for goods and services.
- **Corruption may arise**, impeding the effective utilisation of government budgets to achieve maximum benefits.
- **Political considerations might impact certain decisions**; for instance, the government may refrain from imposing taxes on alcohol during election periods.
- **Government intervention has the potential to reduce economic efficiency**; for instance, taxes may act as disincentives for individuals to engage in productive work.

Key takeaways

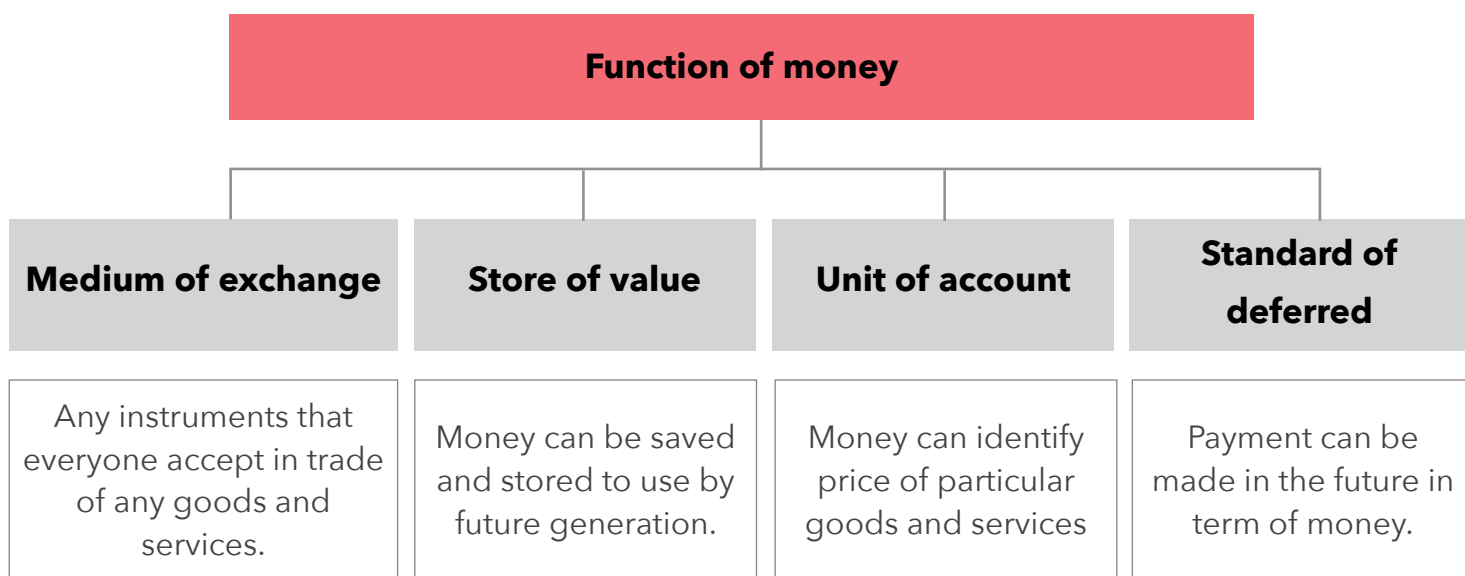
- The **maximum price is known as the ceiling price. It applies** whereas the **minimum price is referred to as the floor price.**
- Minimum price can also be applied to minimum wage.
- **An indirect tax** is imposed on goods and services, **increasing the cost of production.** Consequently, prices rise and potentially **decreasing consumption.** However, **if demand is inelastic, imposing taxes may not be as effective.**
- **A subsidy is a government grant that lowers the cost of production**, leading to reduced prices and potentially increased consumption. However, **it entails an opportunity cost.**

CHAPTER 16 Money and Banking

Checklist

1. Money
2. Banking

1. Function of money

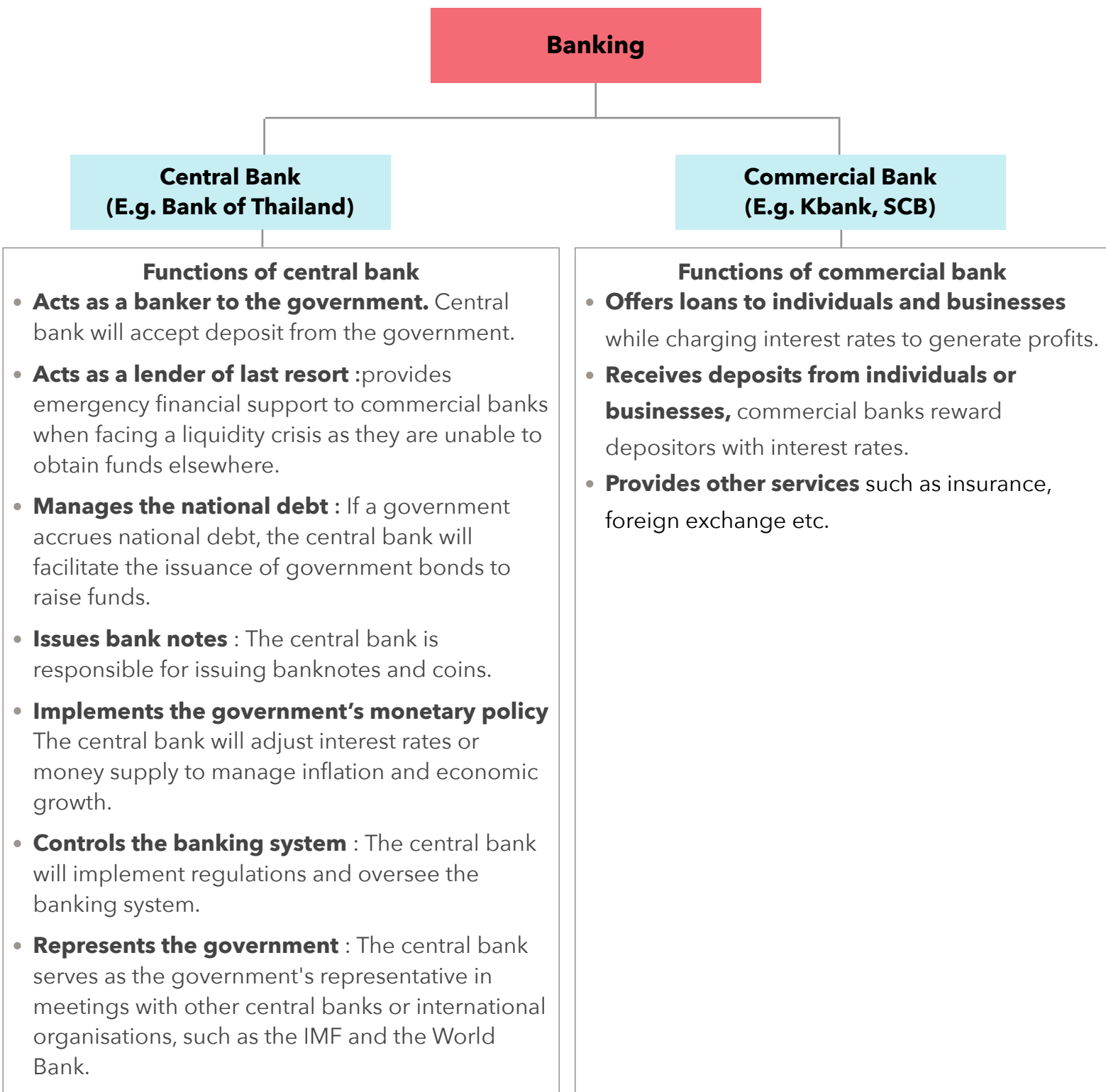


2. The characteristics of money

Durability	<ul style="list-style-type: none"> Money that maintains its strength and usability over multiple uses.
Portability	<ul style="list-style-type: none"> Money should be lightweight for easy carrying and transportation between different locations.
Divisibility	<ul style="list-style-type: none"> Money must be divisible into smaller units. Eg. ₦ 1,000, ₦ 500, ₦100, ₦ 50, ₦10 etc.
Limited supply	<ul style="list-style-type: none"> Money is inherently scarce to maintain its value

Uniformity	<ul style="list-style-type: none"> • Each unit of money should be the same in terms of value.
Acceptable	<ul style="list-style-type: none"> • Money must be widely acknowledged and accepted as a medium of exchange for goods and services.

3. Banking



CHAPTER 17 Households

Checklist

1. the influences on spending, saving and borrowing

1. The influences on spending, saving and borrowing

1.1 Spending

People **purchase various goods and services to satisfy their needs and desires**, including items like food, clothing, housing, water, and entertainment. etc.

Factors influence on spending *

<p>Disposable income (Income after deduction on tax and state benefits received)</p>	<ul style="list-style-type: none"> • When people have more disposable income, people have more ability to pay on goods and services. • People will spend more in total.
<p>Wealth (All of the asset including house, stock, car etc)</p>	<ul style="list-style-type: none"> • Wealth can generate income; for instance, individuals may receive dividends when holding stocks. • Moreover, Wealth can influence confidence. When the price of a house rises, individuals tend to feel wealthier and increase their spending.
<p>Rate of interest (Cost of borrowing or benefit from saving)</p>	<ul style="list-style-type: none"> • Lower interest rate means lower cost of borrowing. People are likely to borrow and spend more. • In other words, lower interest means lower benefits from saving. People tend to save less and switch to spend more.
<p>Advance technology</p>	<ul style="list-style-type: none"> • Advanced technology is likely to boost spending, as individuals are inclined to purchase new products to replace existing ones.
<p>Confidence</p>	<ul style="list-style-type: none"> • High levels of confidence in individuals contribute to a sense of security, prompting increased spending on goods and services.

Income and consumption

Average propensity to consume (APC) : the proportion of income that spend on goods and services.

For example : If MR.A has salary ₦20,000 per month, total spending will be ₦5,000 per month. Therefore, APC will be $5,000 / 20,000 = 0.25$

When **people have higher income, APC tends to be lower.***

When **people have lower income, APC tends to be higher.***

Pattern of expenditure

1. **Poor individuals exhibit a higher Average Propensity to Consume (APC) compared to wealthier individuals.** Poor individuals allocate a greater proportion of their income towards essentials like food and clothing to sustain life. In contrast, wealthier individuals spend more in absolute terms.
2. **Richer individuals tend to spend more both in total and as a proportion on luxury goods and services** For example, Wealthy individuals are more likely to enjoy extended holidays abroad.
3. **Expenditure patterns differ among various groups of people, including teenagers, adults, and based on individual tastes. etc.** For example, teenagers are more likely to allocate a higher proportion of their spending on games, while retired individuals tend to dedicate a larger proportion to healthcare.

1.2 Saving

: refer to **the money that individuals retain rather than expend.**

Income and saving

- **Average propensity to save (APS) : the proportion of income that is saved rather than spent on any goods and services.**

For example : If MR.A has salary ₦20,000 per month, total spending will be ₦5,000 per month. Total saving will be $20,000 - 5,000 = ₦15,000$ per month. Therefore, APS will be $15,000 / 20,000 = 0.75$ OR $(1 - APC)$

- **Saving ratio** means is the percentage of income that individuals or households save instead of spending.

$$\text{Saving ratio} = \text{Saving} / \text{Disposable income}$$

Factors influence on saving*

Disposable income

- An increase in disposable income generally leads to a higher saving ratio among people.

Wealth

- An increase in wealth results in a higher income, providing individuals with more opportunities to save.

Rate of interest

(Cost of borrowing or benefit from saving)

- An increase in **interest rates results in higher return on saving, leading people to save more.**

Age structure

- During the **working age, individuals have the potential to generate higher income, enabling them to save more.**

1.3 Borrowing

: is the amount of money that people take from banks or financial institutions and intend to repay it with interest over the period of time.

Factors influence on borrowing*

The availability of loans and overdraft

- When **individuals have easier access to funding, they are more likely to borrow a greater amount.**

Confidence

- Individuals are likely to borrow more if they have high confidence in their ability to earn money to repay debts in the future.

Rate of interest

(Cost of borrowing or benefit from saving)

- An **increase in interest rates results in higher borrowing costs, leading people to borrow less.**

Social attitudes

- **Certain countries and groups of people may be more concerned about the risks** associated with being in debt, **leading individuals to borrow less.**

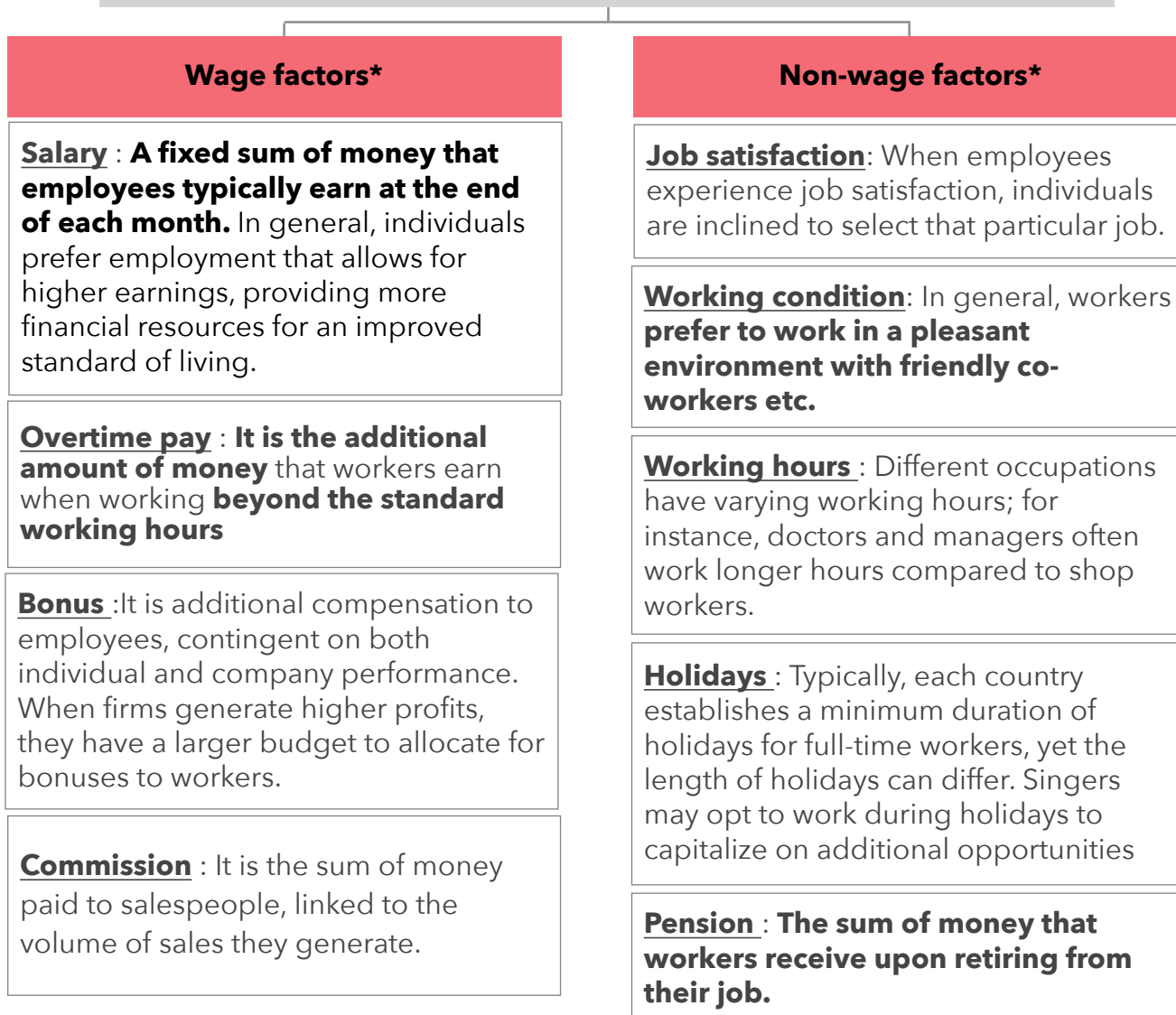
CHAPTER 17 Workers

Checklist

1. factors affecting an individual’s choice of occupation
2. wage determination
3. reasons for differences in earnings
4. division of labour/specialisation

1. Factors that influence an individual’s choice of occupation

Factors that influence on an individual’s choice of occupation



Factors that influence on an individual's choice of occupation

Non-wage factors (Continue.)

Fringe benefits : are extra benefits by employers such as free meal, leisure facilities , car etc.

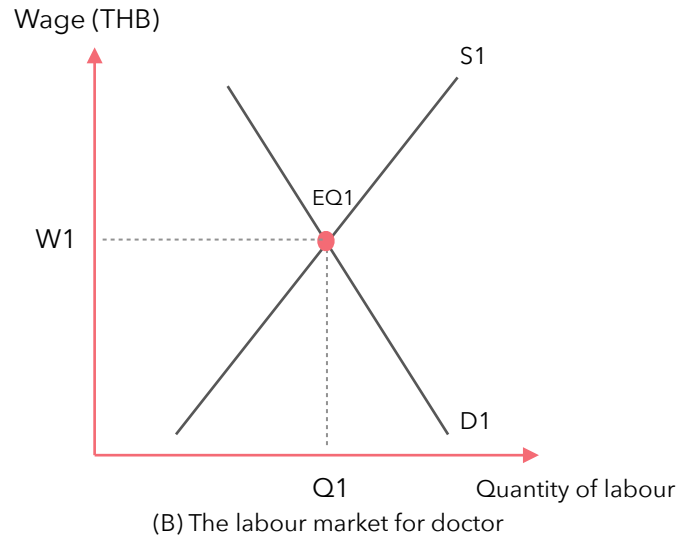
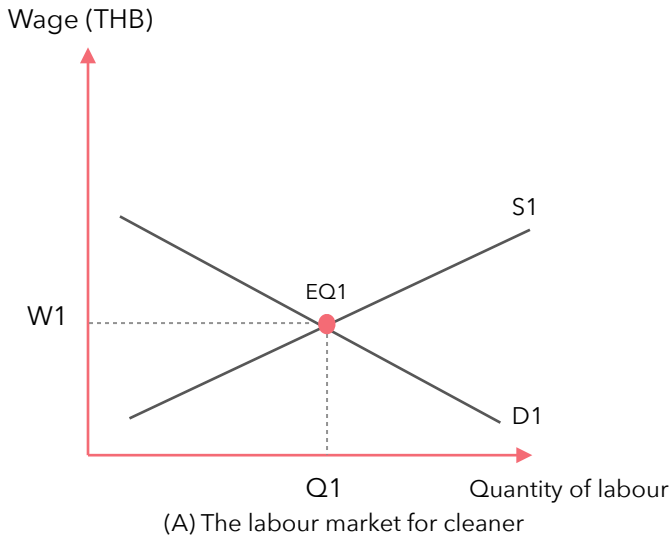
Job security : A high level of job security implies that workers are less likely to face redundancy. Individuals often choose for jobs with greater job security as they feel more assured.

Career prospects : People are likely to choose occupation that provides increased chances for career progression.

Size of firms : Individuals often choose for occupations in **larger firms as they typically offer higher wages, greater job security, and improved career prospects.**

Location : Individuals often prefer occupations that are in **close proximity to their homes**, allowing them to save on transportation costs and reduce commuting time.

2. Wage determination and the reasons for differences in earnings

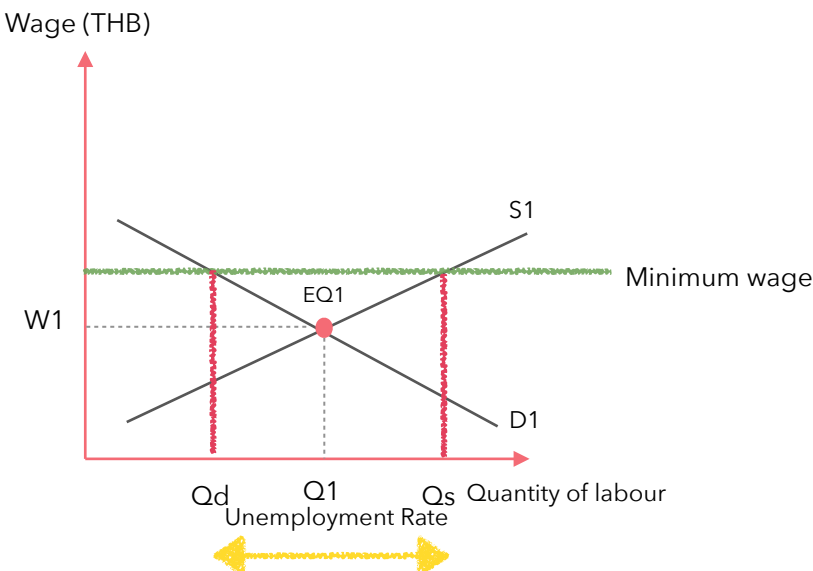


- A. The wage for cleaners tends to be lower** because the **supply of cleaners is typically high** relative to the demand. Since **cleaning jobs do not require special skills or high qualifications**, the wage remains low.
- B. The wage for doctors tends to be higher** due to **the limited and often low supply of doctors relative to the demand**. Doctors require special skills, high qualifications, and undergo a more extended period of training.

2.1 Government policies

Minimum wage* : set by the government, **representing the lowest amount that workers may be paid.**

- **The purpose of establishing a minimum wage** is to ensure that workers **have sufficient income to cover the cost of living and alleviate poverty**. However, **it also elevates production costs for firms, potentially leading to a reduction in the number of workers and contributing to a higher unemployment rate.**



- The minimum wage will result in **an contraction in demand of labour** and **a contraction in supply of labour**
- **Qs > Qd = Excess supply (Unemployment Rate)**

2.2 Public opinion

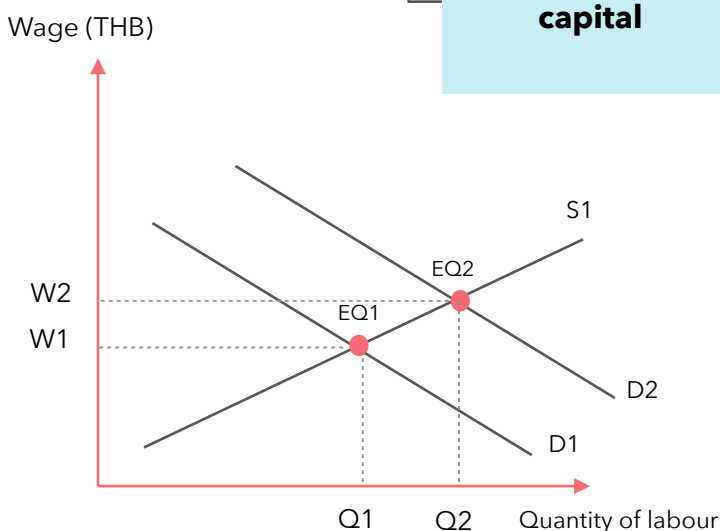
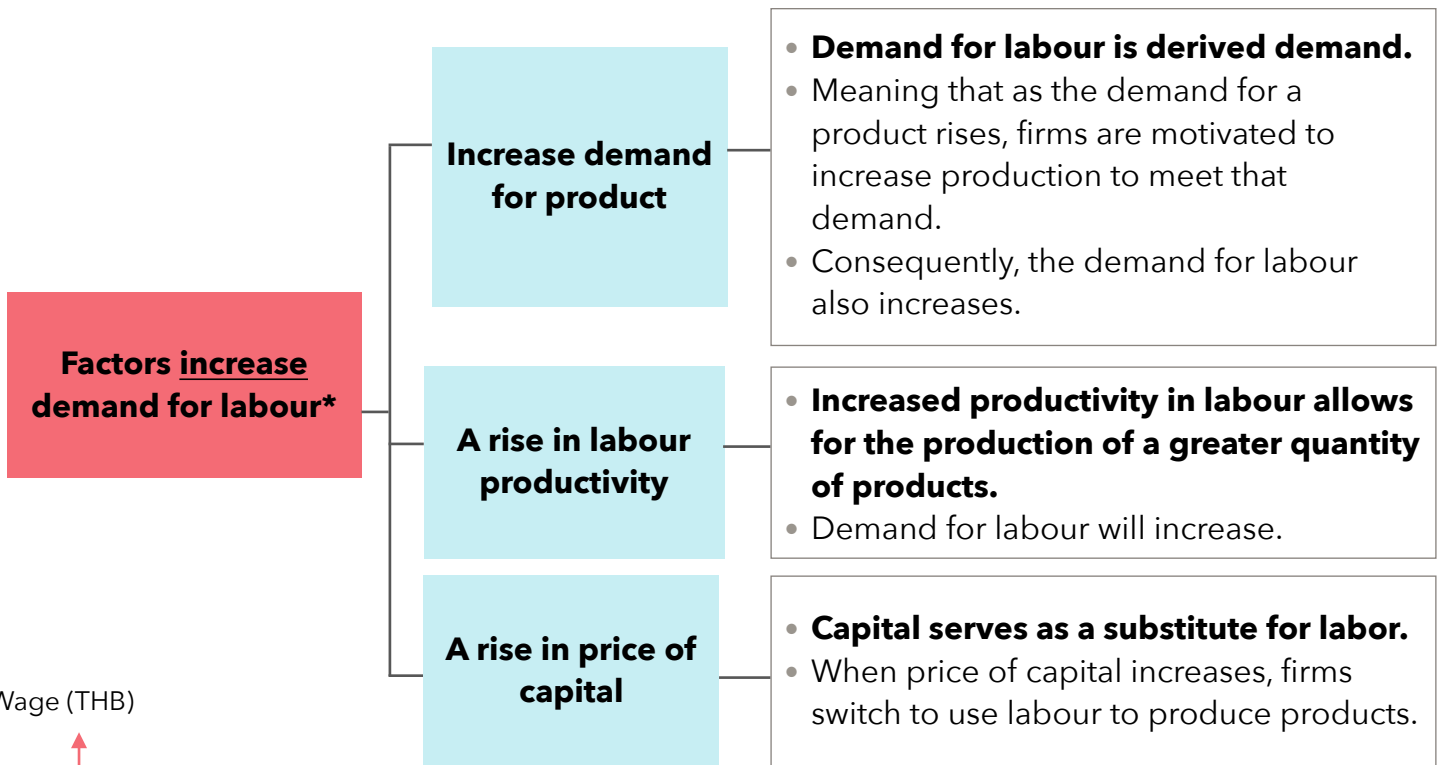
: is a group of people that can put pressure on government or employers to revise the wage.

2.3 Discrimination

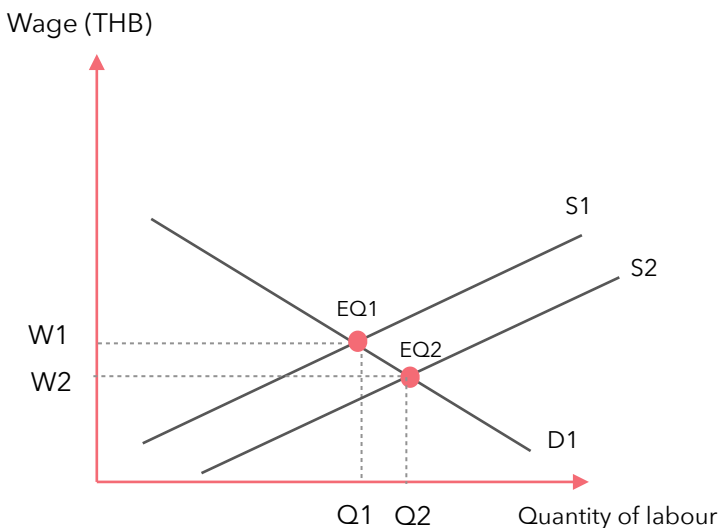
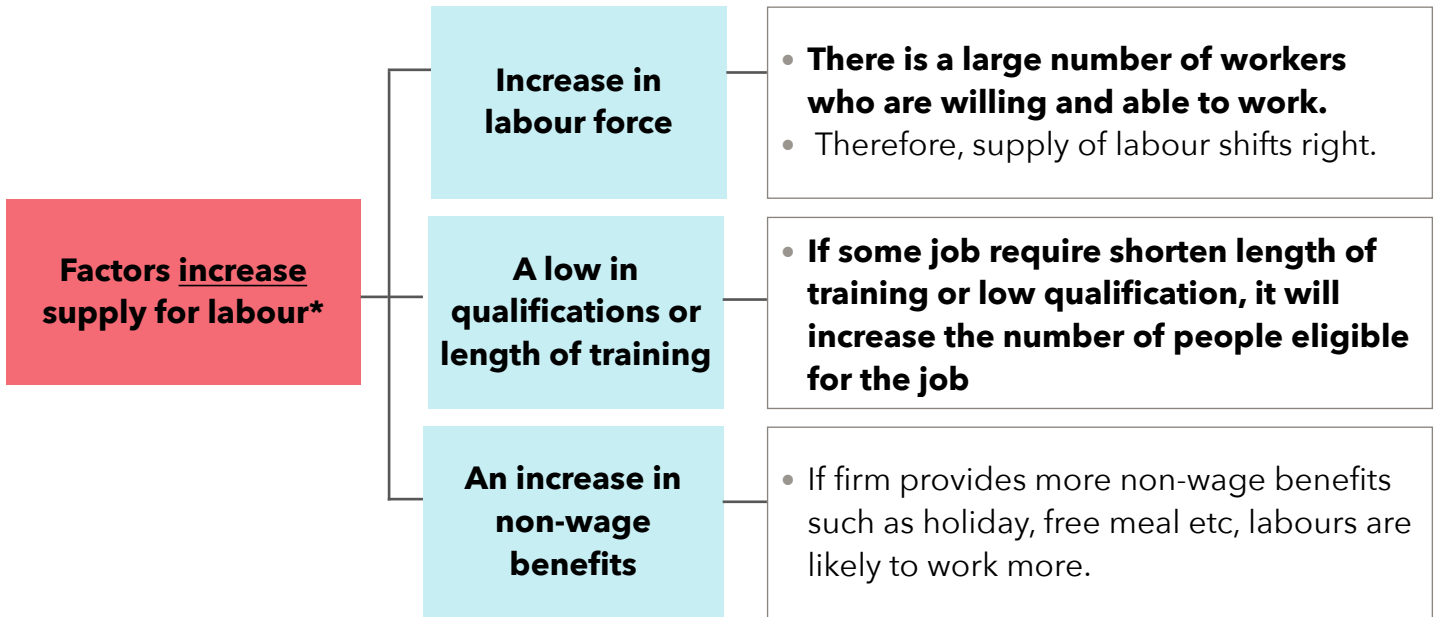
: When a group of workers is subjected to unfavourable treatment regarding wages, welfare, promotional opportunities, and training. It may involve gender discrimination or racial discrimination etc.

3. Why earning of occupations change over time

3.1 Change in demand and supply of labour



No part of this resource may be reproduced, distributed, or transmitted in any form by any means for non-personal use without the prior written permission from Knockout.Economics



3.2 Changes in the stages of production

Individuals employed in the **primary sector generally receive lower wages** as it demands **fewer skills and qualifications**. Conversely, those working in the **service sector tend to earn higher wages** due to the need for **specific skills and higher qualifications**.

3.3 Changes in government policy

<p>A rise in minimum wage</p>	<p>A rise in minimum wage can increase the payment for low-paid workers.</p>
<p>Reduce barriers for foreign workers</p>	<p>It may incentivize workers to immigrate to the country, leading to an increase in the supply of workers. Consequently, wages could decrease.</p>

<p>The introduction of government anti-discrimination</p>	<p>: It has the potential to enhance career prospects and wages within certain groups.</p>
<p>Advances in technology</p>	<p>: If technology can replace workers, it may result in lower wages as the demand for labor would decrease.</p>

3.4 Changes in the earning of individual over time

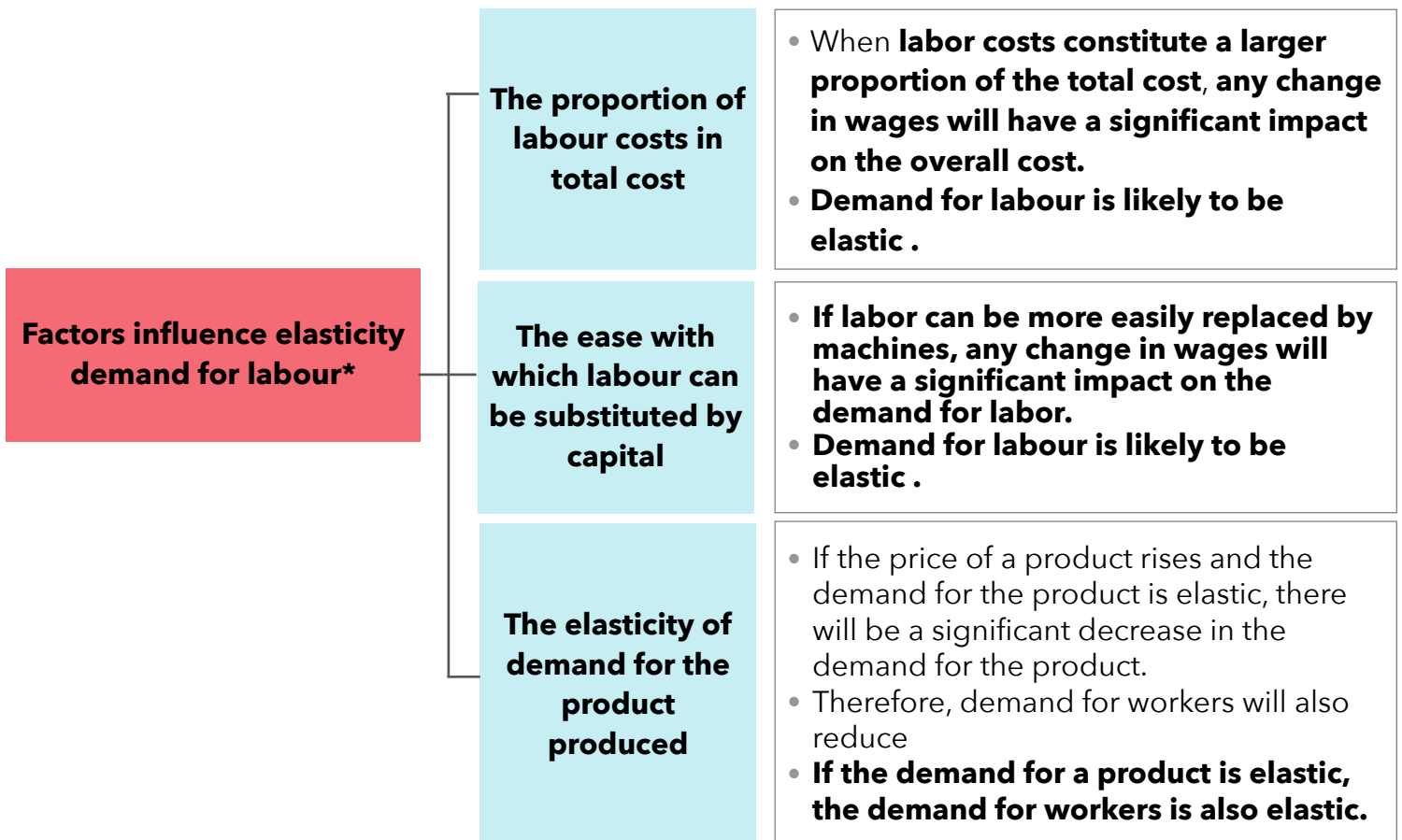
: With an extended duration of employment, workers tend to acquire higher skills and greater productivity. As a result, wages have the potential to increase over time.

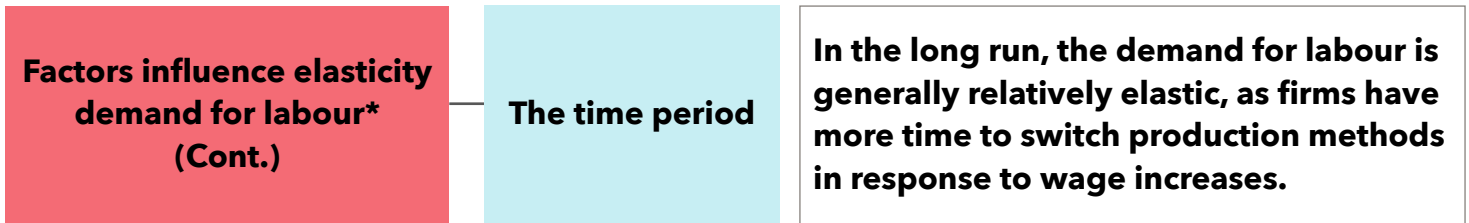
Or as **workers accumulate more experience over time, they often take on additional responsibilities and have greater opportunities for promotion, leading to an increase in payment**

4. The extent to which earnings change

4.1 Elasticity of demand for labour

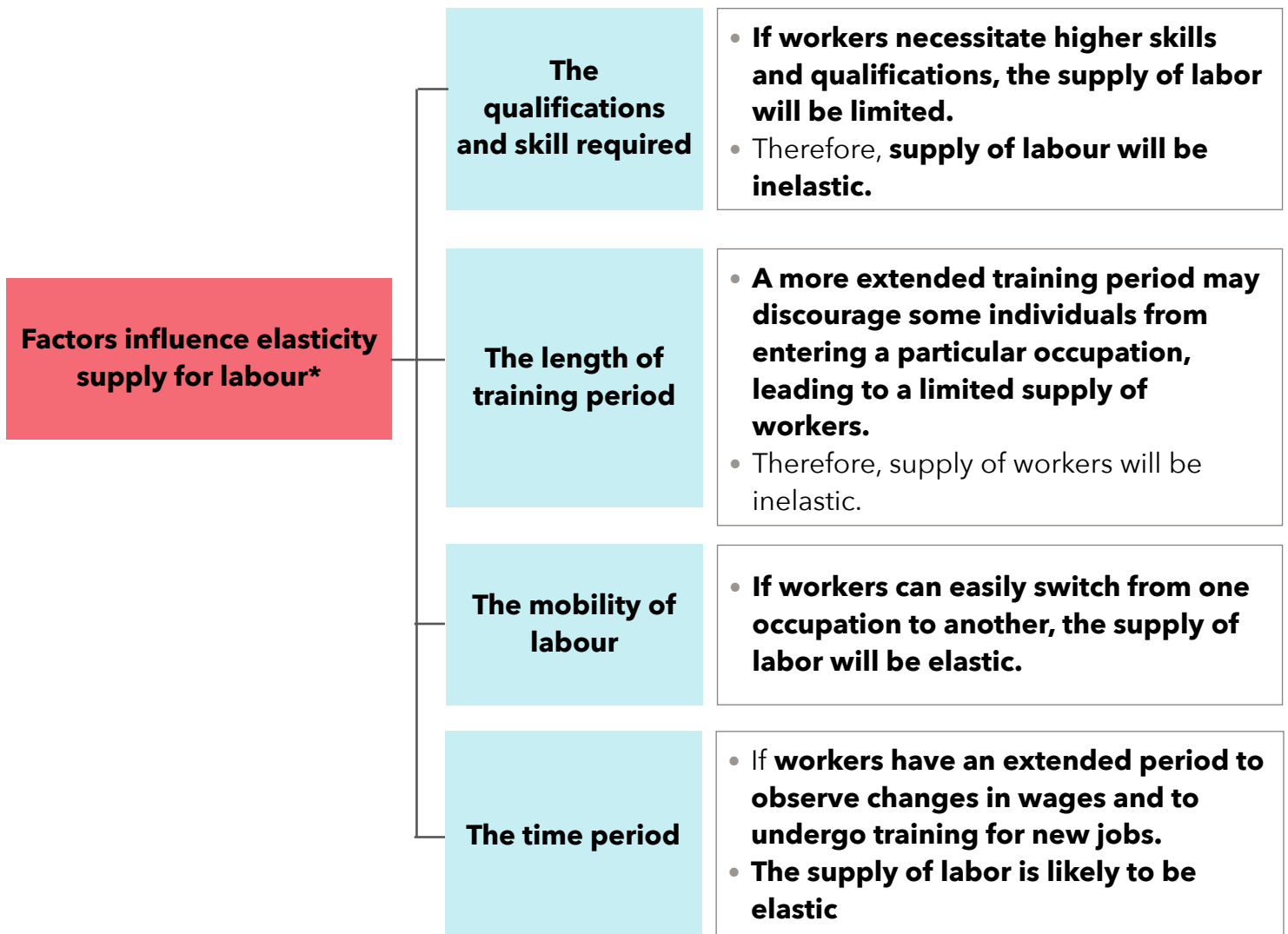
: the responsiveness of quantity demand for labour to a change in wage





4.2 Elasticity of supply for labour

: the responsiveness of quantity supply for labour to a change in wage



5. Specialisation and division of labour

- **Specialisation*** : When workers focus on a particular task or product.
- **Division of labour *** : Workers are responsible for a specific task rather than the entire production process.

Advantages	Disadvantages
<ul style="list-style-type: none"> • It increases labour productivity, they can work faster and less error. Therefore, total output will increase • The average cost is reduced due to a decrease in waste and errors. • Firms can reduce training cost. 	<ul style="list-style-type: none"> • It can also lead to decreased productivity due to feelings of boredom. • In the event of a machine breakdown, workers are unable to produce products and receive wages, which is considered unfair to them.

Key takeaways

- Wage and non-wage factors are influential in an individual's choice of occupation.
- The demand for labor is influenced by factors such as the **demand for the product, labor productivity, and the price of capital.**
- The supply for labor is influenced by factors such as **labour force, qualifications or length of training, non-wage factors.**
- Factors affecting the elasticity of demand for labor include **the share of labor costs in total expenses, the substitutability of labor with capital, the demand elasticity for the produced product, and the time period.**
- Factors influencing the elasticity of labor supply include **the necessary qualifications and skills, the duration of the training period, the mobility of labor, and the time period.**

CHAPTER 19

Trade union

Checklist

1. Definition of a trade union
2. The role of trade union in the economy
3. The advantages and disadvantages of trade union activity

1. Definition of a trade union

Meaning : The organisation that **seeks to protect the interests of workers.**

2. The role of the trade union



Collective bargaining : The negotiation process between a group of workers and employers aimed at improving wages or working conditions.

3. Factors affecting the strength of a trade union

3.1 A high level of economic activity

- Economic growth results in **increased income**, enabling **firms to generate higher revenue and profit**.
- Companies **possess a larger budget to enhance both pay and working conditions**.

3.2 A high number of members

- With an **increased number of members, funding for the trade union will also rise**.
- Consequently, **the trade union can utilise this budget to offer additional training for enhanced skills and improved productivity**.

3.3 A high level of skills

- When **workers possess strong skills, it can pose a challenge for the firm to substitute skilled labor with alternatives such as capital or non-union labor**.
- Workers will have more power to secure higher payment.

3.4 A consistent demand for the product produced by the workers

- **If only workers can produce products in response to customer demand, unions would possess significant bargaining power**.

3.5 Favourable government legislation

- A trade union's bargaining power will be stronger if the government permits the union to take action with employers.

Industrial action : It is an event where **workers undertake actions with the intention of compelling an employer to agree to certain terms**.

Strike : when a group of workers stop working to put pressure on employers to agree with specific demand in term of working condition, pay levels etc.

4. Advantages and disadvantages of trade union

4.1 Advantages and Disadvantages of trade union (workers) *

Advantages	Disadvantages
<ul style="list-style-type: none"> • Employees have more bargaining power to ask for higher wage and better working condition Eg. Sick payment, Holiday and healthcare benefits. 	<ul style="list-style-type: none"> • Member fees are expensive. Members have a reduced budget available for consuming other products.
<ul style="list-style-type: none"> • A trade union can safeguard the rights and employment of its members, promoting fairness among all members. For instance, it can advocate for equal wages for women compared to men. 	<ul style="list-style-type: none"> • Being members of a trade union and engaging in industrial action increases the risk of unemployment.
<ul style="list-style-type: none"> • Trade unions offer crucial education and training programs that can enhance the skills of the labor force. Employees enjoy increased job opportunities for advancement and the potential to secure higher wages. 	<ul style="list-style-type: none"> • Workers cannot get any incomes during strike duration. Workers face a shortage of funds to cover the cost of living.

4.2 Advantages and Disadvantages of trade union (Firms)

Advantages	Disadvantages
<ul style="list-style-type: none"> • Trade unions offer education and training opportunities for their members Education and training can improve members' productivity. As a result, firms can reduce cost and generate more profit. 	<ul style="list-style-type: none"> • Trade unions advocate for increased wages and improved working conditions. It increases cost of firms
<ul style="list-style-type: none"> • Trade union establishes a useful channel of communication between employers and employee. Negotiating with workers as a group can save time and be less stressful compared to negotiating with each worker individually. 	<ul style="list-style-type: none"> • A strike initiated by a trade union may lead to a negative reputation for the business. Furthermore, a strike halts the production processes of firms. Consequently, firms may incur losses in revenue and face the risk of bankruptcy.

4.3 Advantages and Disadvantages of trade union (Economy)*

Advantages	Disadvantages
<ul style="list-style-type: none"> • Trade union protects the benefits of workers. People in working age would like to participate in the labour market. An increase in the supply of labor contributes to a higher national output. 	<ul style="list-style-type: none"> • Trade union increases wage and cost to firms To maintain profit, firms need to lay-off some workers and there will be higher unemployment rate.
<ul style="list-style-type: none"> • With higher income, workers can afford goods and services more easily. It results in higher actual economic growth. 	<ul style="list-style-type: none"> • Minimum wage may discourage foreign direct investment (FDI)
<ul style="list-style-type: none"> • It improves worker's productivity. Therefore, country's productive potential will rise. 	<ul style="list-style-type: none"> • Minimum wage increases cost of production Exported products lose competitiveness in the global market. Consequently, there will be a decline in export revenue and a reduction in economic growth.

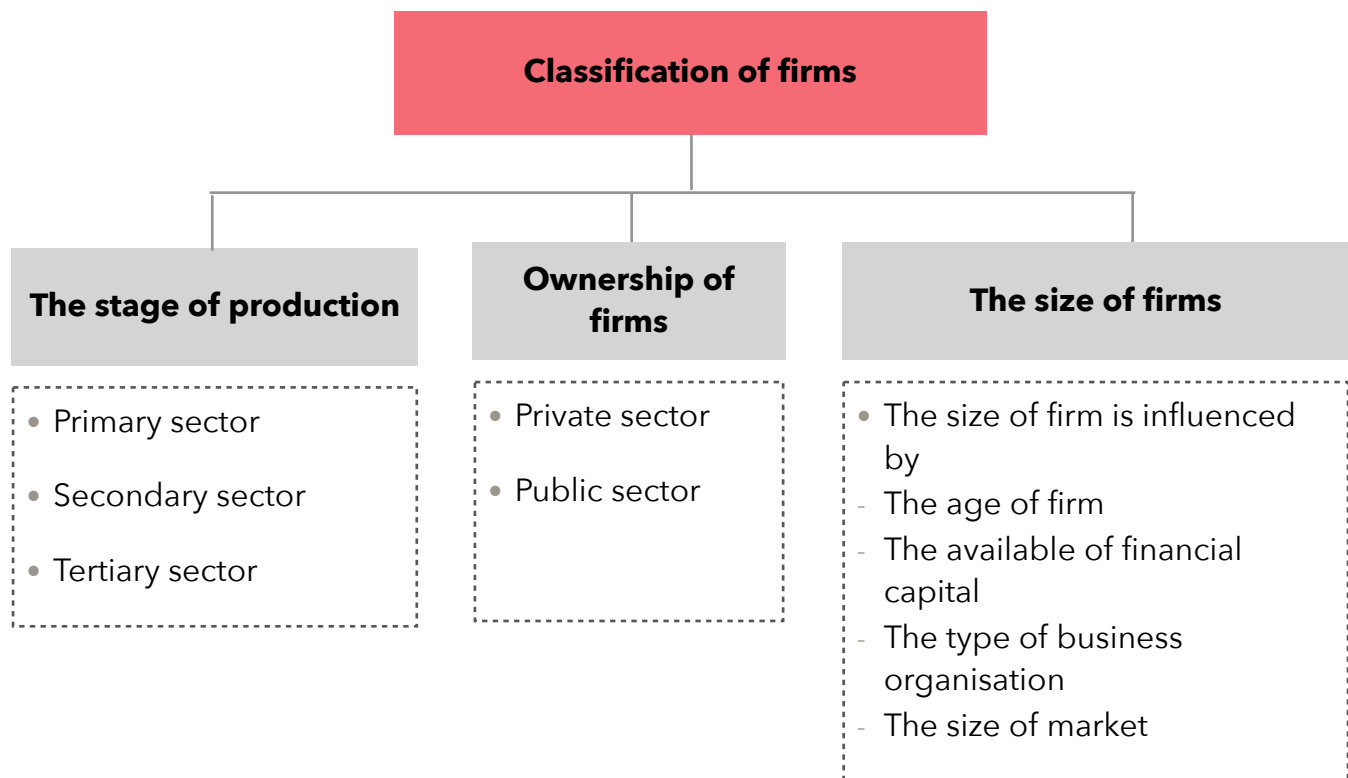
CHAPTER 20

Firms

Checklist

1. Classification of firms
2. Small firms
3. Causes and forms of the growth of firms
4. Mergers
5. Economies and diseconomies of scale

1. Classification of firms



2. Why some firms remain small*

2.1 The small size of market

- When the demand for a product is limited, there is no necessity for the firm to be large.
- Such as bridal gown, luxury yachts etc.

2.2 Preference of consumers

- Consumers favour certain personal services from smaller firms, as they can offer friendly and specialised services, such as hairdressing.

2.3 Owner's preference

- The owner of a firm may not desire to exert extensive effort and may seek more leisure time.

2.4 Flexibility

- Small firms find it easier to adapt when market conditions undergo changes.

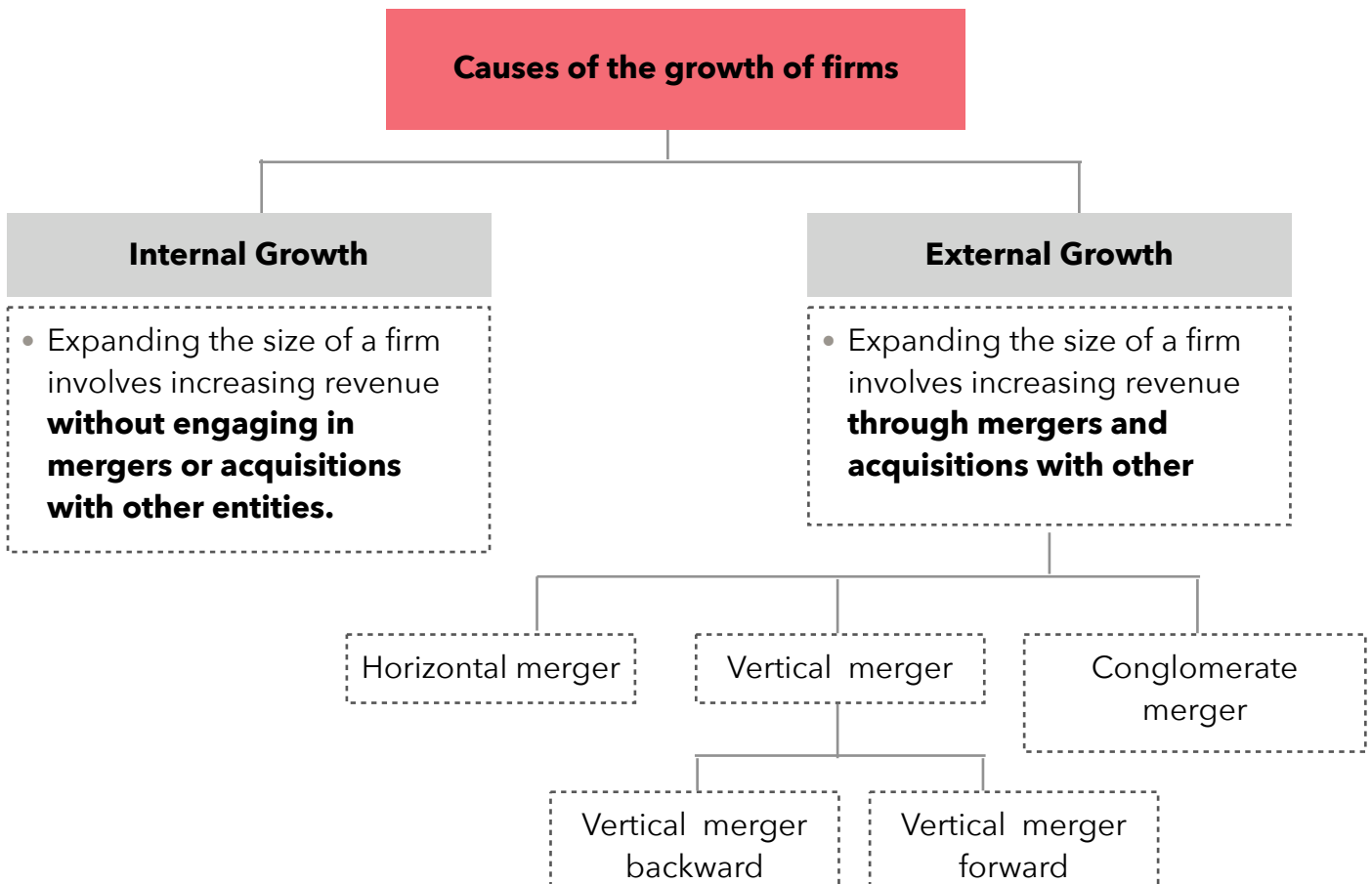
2.5 Lack of funding

- It is difficult for small firms to raise fund for business expansion. Therefore, firms remain small.

2.6 Government support

- Government in some countries may provides subsidy to small firms which can reduce cost of production

3. Causes of the growth of firms



No part of this resource may be reproduced, distributed, or transmitted in any form by any means for non-personal use without the prior written permission from Knockout.Economics

3.1 Method of Internal growth

- Firms may launch new design, new colour of the products to generate more revenue.
- Firms can boost sales revenue through advertising their products.
- Firms can increase revenue in different geographical regions.

3.2 Method of External growth

3.2.1 Horizontal merger *

: The merger of two firms **at the same stage production and same industries.** *

For example :

- ▶ Manufacturing of steel A + Manufacturing of steel B (Secondary sector + Secondary sector)
- ▶ Big C + Top supermarket (Tertiary sector + Tertiary sector)

Advantages *

- **Firms can achieve economies of scale,** leading to a reduction in average costs.
- **Rationalisation**
: Merging could enable them to divest redundant resources.
- **Firms have more market share.**
: They have more power to dominant in the market, allowing for easier access to funding at lower interest rates.

Disadvantages *

- **It is difficult to control** since two firms have different management structures.
- **Firms may experience diseconomies of scale.**
: Average cost will be higher.

3.2.2 Vertical merger backwards

: The merger of two firms at the **earlier stage production** and **same industries**.*

For example :

➤ Producer of canned fish + Fish farming (Secondary sector + Primary sector)

Advantages *	Disadvantages *
<ul style="list-style-type: none"> • Companies can guarantee a sufficient supply of high-quality products at reasonable prices.. • Companies can procure raw materials to prevent selling them to competing firms. 	<ul style="list-style-type: none"> • This results in a lack of competition among suppliers, leading to higher average costs. • Firms may experience diseconomies of scale. Average cost will be higher.

3.2.3 Vertical merger forward

: The merger of two firms at the **later stage production** and **same industries**.*

For example :

➤ Producer of canned fish + Supermarket (Secondary sector + Tertiary sector)

Advantages*	Disadvantages*
<ul style="list-style-type: none"> • Companies can guarantee that they have an sufficient number of outlets. : Consumers can more easily access a wide range of products. • Products are stored and displayed effectively to maintain quality standards. • It helps to develop marketing strategies of the new products which brings to stimulate demand of consumers. 	<ul style="list-style-type: none"> • Firms may experience diseconomies of scale. : Average cost will be higher. • Firms need to pay more fixed cost eg. Labour cost, rent fee etc. • Companies may lack experience in managing various aspects of the business, such as running distribution systems.

3.2.4 Conglomerate merger

: The merger of two firms with **different industries** *

For example :

► Supermarket + Hotel or Coffee shop + School

Advantages*

- **Firms can diversify risk.** If sales revenue of one product fail, firms can generate revenue from others. It mitigates the risk of default.
- **Companies can extend into alternative markets** when the current market becomes saturated.
- Diversifying risks enables companies to **access funding more easily at lower interest rates.**

Disadvantages*

- **Firms may experience diseconomies of scale.** Average cost will be higher.
- **Companies may lack expertise in a new business,** increasing the possibility of failure.

4. The effect of a merger on consumers

Advantages*

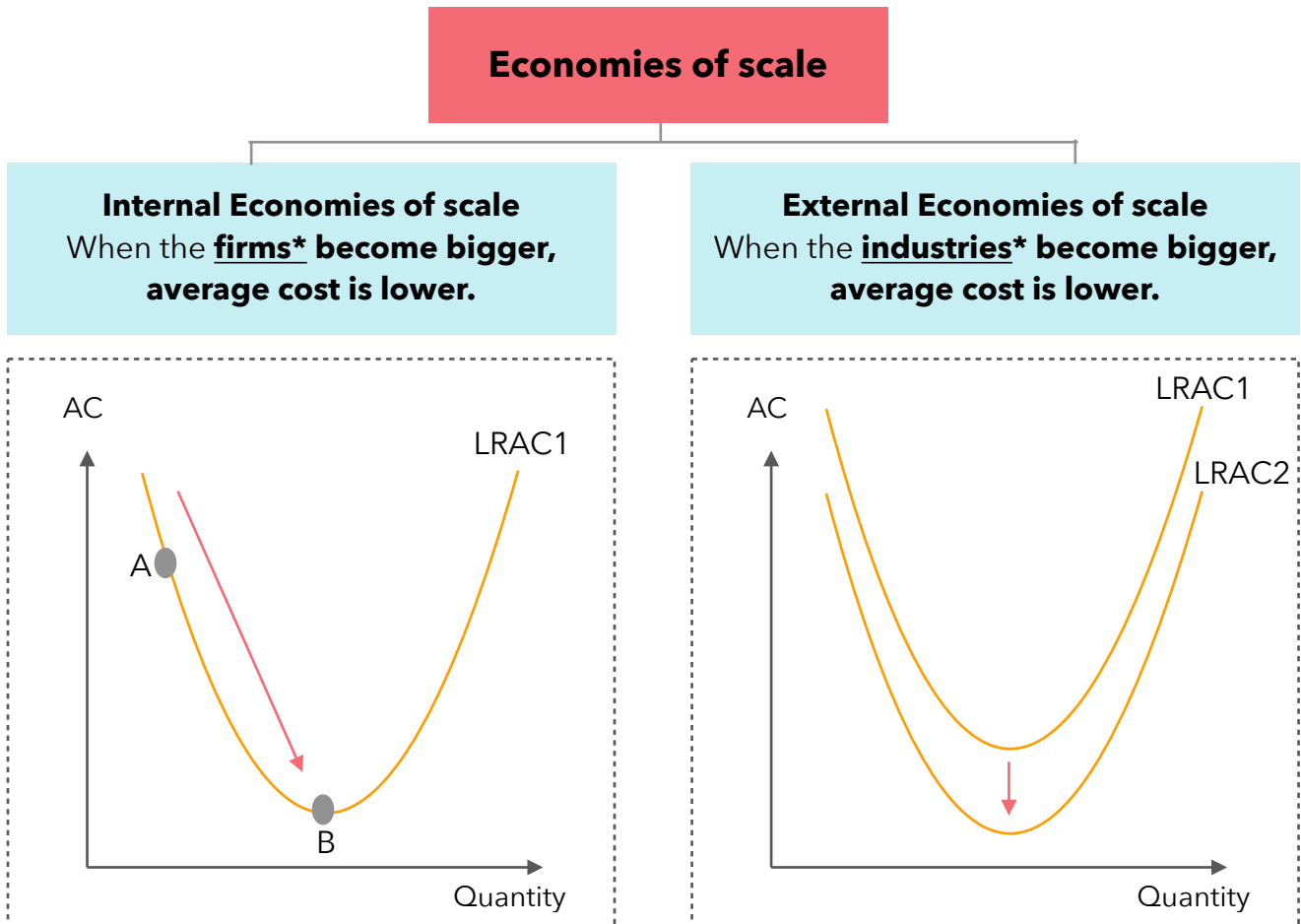
- **As firms achieve economies of scale,** firms experience lower average costs. This allows them to **offer lower prices, contributing to an increase in consumer surplus.**
- **Firms generate higher profit. Firms have higher budget to invest in innovation and technology .** Quality of products would be higher

Disadvantages*

- **Firms may experience diseconomies of scale. Average cost will be higher.** Therefore, firms possible to charge higher price to consumers.
- **Merger can reduce competition in the market.** The creation of monopoly power may restrict choices and result in higher prices for consumers.

5. Economies and diseconomies of scale

5.1 Economies of scale



5.1.1 Internal Economies of scale

Purchasing Economies of scale	<ul style="list-style-type: none"> When firms produce large quantity, per-unit costs tend to decrease due to factors such as bulk discounts
Marketing Economies of scale	<ul style="list-style-type: none"> By producing a wide range of products, companies can reduce the average marketing cost per unit.
Managerial Economies of scale	<ul style="list-style-type: none"> Larger firms can hire specialised staff with higher productivity, resulting in lower average costs.
Labour Economies of scale	<ul style="list-style-type: none"> Larger firms implement the division of labor, where workers focus on specific tasks, leading to increased productivity. Average cost would be lower.
Financial Economies of scale	<ul style="list-style-type: none"> Larger firms find it easier to secure funding at a lower cost of borrowing.

No part of this resource may be reproduced, distributed, or transmitted in any form by any means for non-personal use without the prior written permission from Knockout.Economics

<p>Technical Economies of scale</p>	<ul style="list-style-type: none"> • Large firms have enough funding to invest in advance technology. It can increase productivity and lead to lower average cost.
<p>Risk bearing Economies of scale</p>	<ul style="list-style-type: none"> • Larger firms usually produce wide range of products. • If firms cannot sell one product, firms still gain revenue from other products.

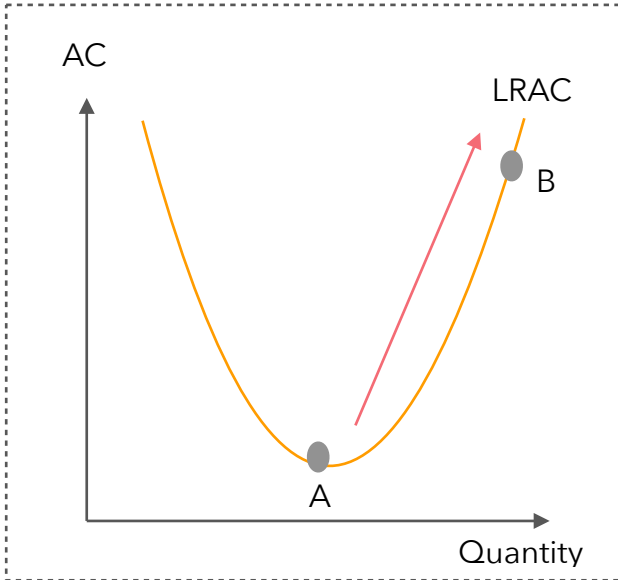
5.1.2 External Economies of scale

<p>A skilled labour</p>	<ul style="list-style-type: none"> • A firm can recruit workers who have been trained by other firms • Firms can reduce training cost and improve productivity • Average cost is likely to decrease.
<p>A good reputation</p>	<ul style="list-style-type: none"> • An area can gain a good reputation for a high quality of goods and services • For example, Phuket has a reputation of being a popular holiday resort
<p>Improved infrastructure</p>	<ul style="list-style-type: none"> • Government may support the growth of an industry by improving infrastructure , railway, electricity supplies • It can lead to lower transport cost for businesses • Average cost is likely to decrease.

5.2 Diseconomies of scale

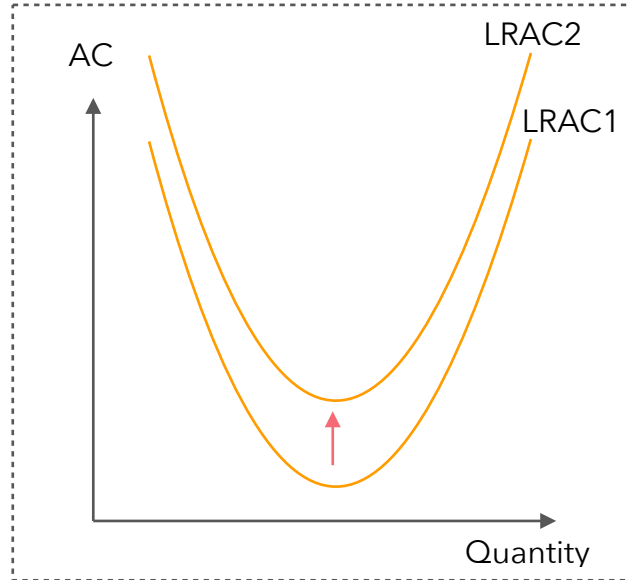
Internal diseconomies of scale

When the **firms*** become bigger, average cost is higher.



External Diseconomies of scale

When the **industries*** become bigger, average cost is higher.



5.2.1 Internal Diseconomies of scale *

Difficulties controlling the firm

- **Larger firms typically have more extended layers of management.**
- This has the **potential to raise administrative costs.**
- **Slower decision-making in firms can hinder their ability to respond to changes in market conditions and trends.**

Communication Problem

- It can be difficult to ensure that everyone in the big firm has full knowledge about their functions.

Poor industrial relations

- Employees in large firms typically handle only specific aspects of the business.
- Employees **feel unimportant or less moral**
- **This could potentially result in a decreased motivation to work efficiently.**

5.2.2 External Diseconomies of scale

Congestion

- With the presence of more firms in the area, the number of vehicles is likely to increase.
- This could result in congestion, leading to extended journey times.
- Transportation expenses will be elevated.

Increase in competition for raw materials

- A high number of firms, particularly in larger industries, can lead to heightened competition for resources such as capital and labor.
- It may result in an increase in the price of resources.

Key takeaways

- **Internal growth** involves expanding the size of a business through an increase in sales revenue **without engaging in mergers and acquisitions**. **External growth**, on the other hand, entails expanding the size of a business by increasing sales revenue **through mergers and acquisitions with other entities**.
- **A horizontal merger** involves the integration of firms within the **same industry and at the same stage of production**
- **A vertical merger** involves the integration of firms within the **same industry and different stage of production**. (Backward vertical merger : merge with earlier stage while Forward vertical merger : merger with the next stage)
- A Conglomerate merger involves the integration of two firms with **different industries**
- **Internal economies of scale refer to the reduction in average costs as firms grow larger**, whereas **external economies of scale** refer to the **decrease in average costs when industries as a whole expand**.

CHAPTER 21

Firms and production

Checklist

1. Demand for factors of production
2. Labour-intensive and capital-intensive production
3. Production and productivity

1. Demand for factors of production

1.1 Factors influencing demand for capital goods

Price of capital goods	<ul style="list-style-type: none"> According to the law of demand, A rise in price of capital goods will cause a contraction in demand for capital goods
Price of substitute goods	<ul style="list-style-type: none"> If capital and labor are substitutes, an increase in labor costs leads to higher production expenses. Consequently, companies may use capital instead.
Profit level	<ul style="list-style-type: none"> If firms generate higher profit, firms have more budget to buy more capital goods.
A cut in corporate tax	<ul style="list-style-type: none"> A reduction in corporate tax results in increased available profits that can be allocated for investment.
Rising real disposable income	<ul style="list-style-type: none"> With an increase in disposable income, there is a heightened demand for products. Companies aim to meet this demand by investing in capital to expand production.
A cut in interest	<ul style="list-style-type: none"> Lower interest means lower cost of borrowing. Firms will tend to invest more on capital goods.
Advances in technology	<ul style="list-style-type: none"> In the presence of advanced technology that enhances productivity, companies are inclined to increase their investments.

1.2 Factors influencing demand for land

: Productivity is the main factor influencing demand for land.

- For example, concerning agricultural land, heightened fertility leading to increased output results in elevated demand and higher rental fees.
- Housing in the city center tends to command a higher price compared to rural areas due to the added convenience of easy access to various department stores.

2. Labour-intensive and capital-intensive

- **Labour-intensive** : A process of production that requires the large amount of labour.
- **Capital-intensive** : A process of production that requires the large amount of machines.

3. Production and productivity

- **Production** : The processes and methods used to transform inputs (eg. Raw materials) into outputs.
- **Productivity** : is the efficiency of production of goods and services. It is calculated by total output /total input

	Firm A	Firm B
Number of workers	10	40
Total Output (Units)	100	200
Productivity	10 units/worker	5 units/worker

In this case, Firm A has higher productivity than Firm B.

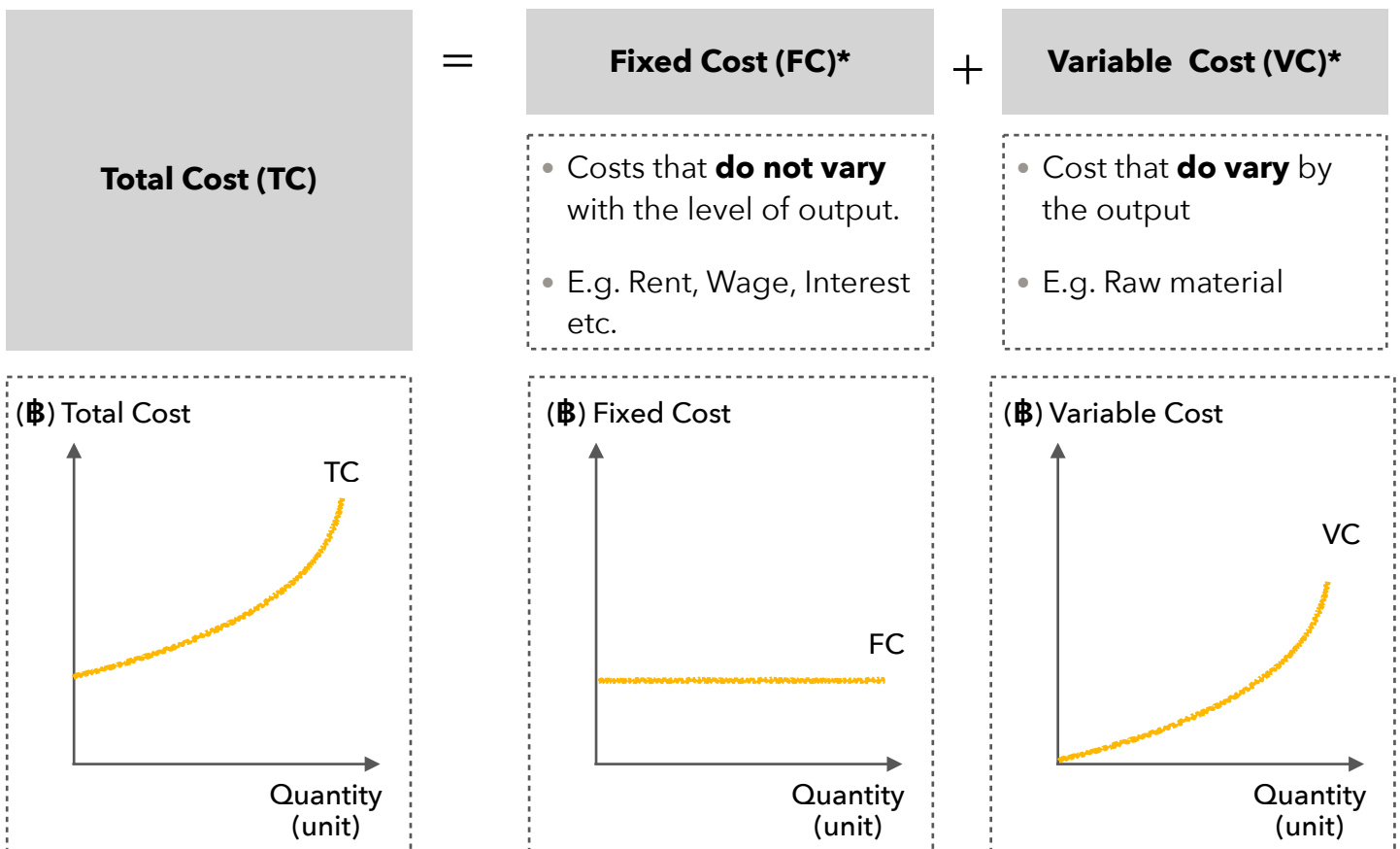
CHAPTER 22

Firms and production

Checklist

1. Definition of costs of production
2. Calculation of costs of production
3. Definition of revenue
4. Calculation of revenue
5. Objectives of firms

1. Definition of costs of production



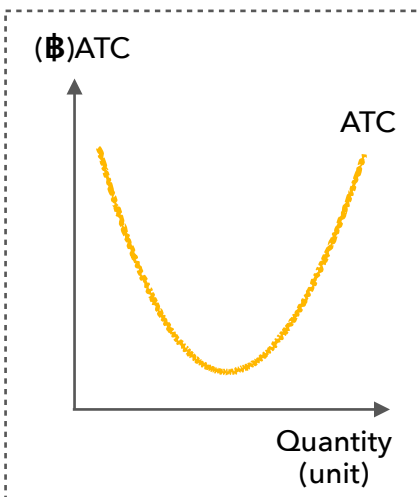
• **At the beginning, total variable costs typically exhibit a gradual increase as productivity rises in the short run. However, beyond a certain output level, variable costs may escalate rapidly as productivity tends to decrease.**

For example :

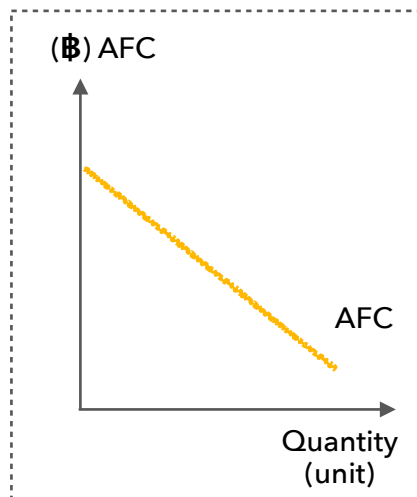
Number of output	FC (฿)	VC (฿)	TC (฿)
0	2,000	0	2,000
1	2,000	40	2,040
2	2,000	70	2,070
3	2,000	90	2,090
4	2,000	120	2,120
5	2,000	175	2,175

2. Average total cost, Average fixed cost and Average variable cost

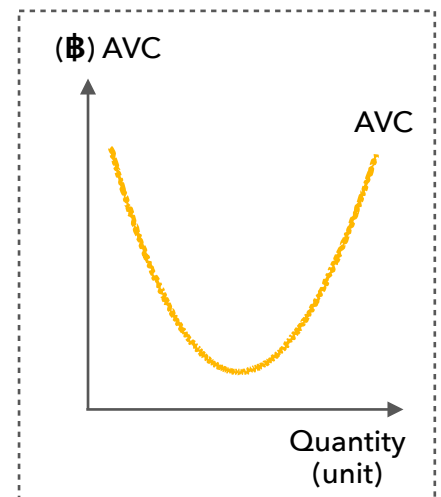
- **Average total cost (ATC)** = Total cost / total output
- **Average fixed cost (AFC)** = Total fixed cost / total output
- **Average variable cost (AVC)** = Total variable cost / total output



Average total cost



Average fixed cost



Average variable cost

For example :

Number of output	Fixed cost (₺)	Average Fixed cost (₺)	Variable cost (₺)	Average variable cost (₺)	Total cost (₺)	Average total cost (₺)
1	2,000	2,000	40	40	2,040	2,040
2	2,000	1,000	70	35	2,070	1,035
3	2,000	666.67	90	30	2,090	696.6
4	2,000	500	120	30	2,120	530
5	2,000	400	175	35	2,175	435

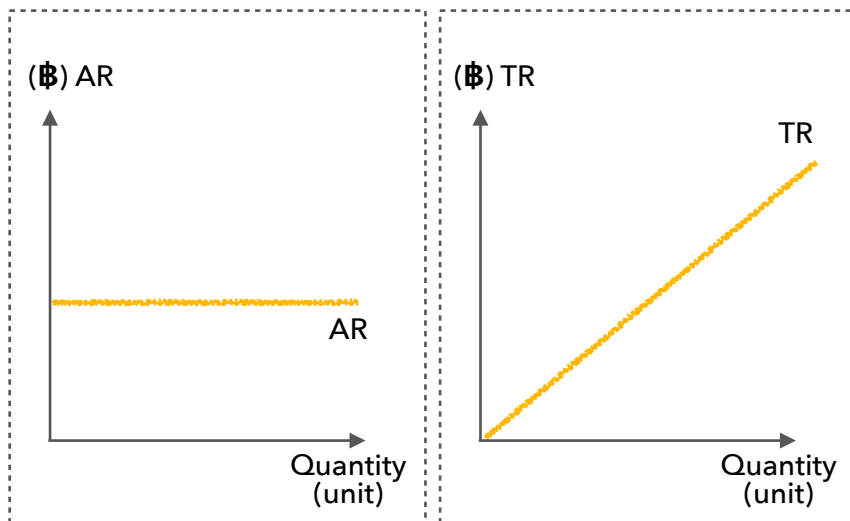
3. Calculating revenue

- **Total revenue (TR)** = Price / unit x Quantity
- **Average revenue (AR)** = Total revenue / Quantity

3.1 Perfectly competitive firm

Meaning : In a market where firms sell identical products and there are numerous buyers and sellers. Each firm is considered a price taker.*

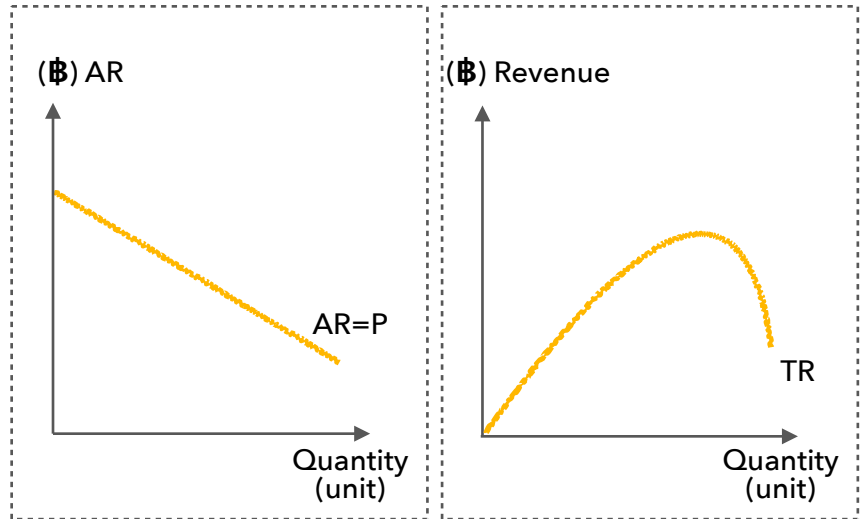
Number of output	AR (Price₺/Unit)	TR (₺)
1	20	20
2	20	40
3	20	60
4	20	80
5	20	100



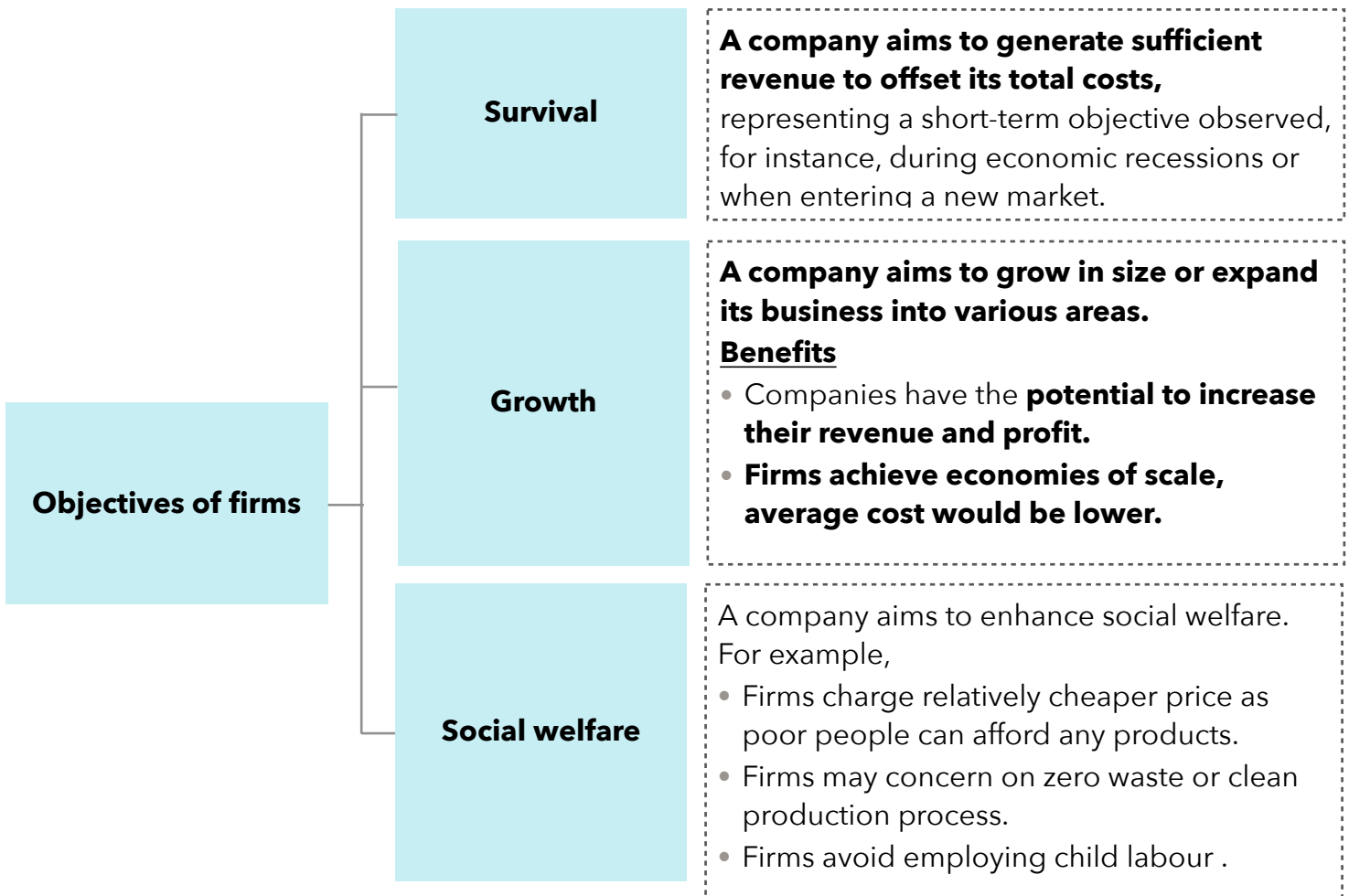
3.2 Imperfect competitive market

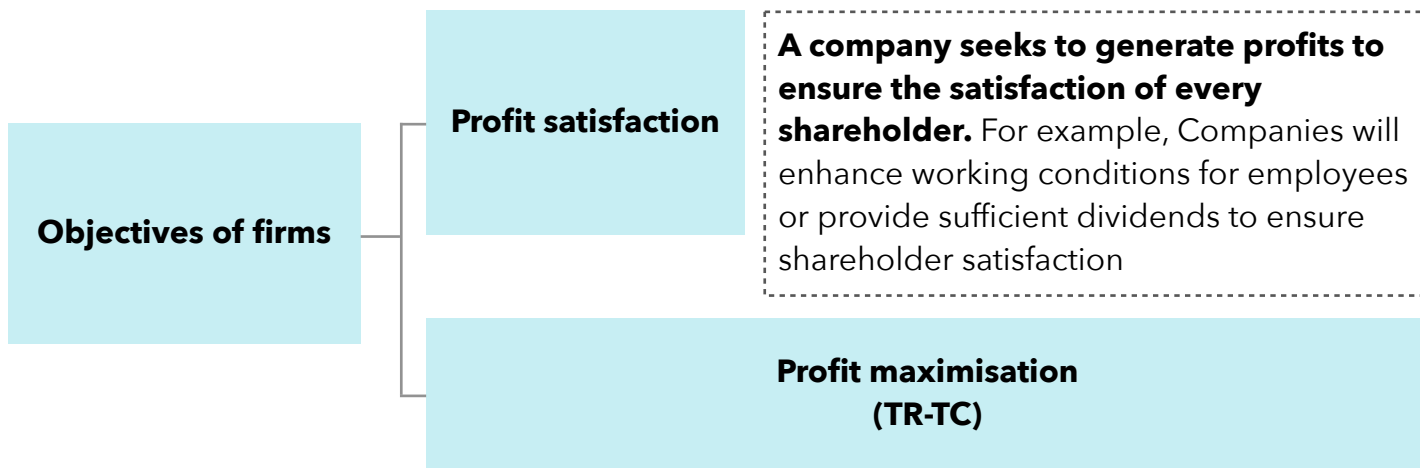
Meaning : Firms are price marker. Firms sell at cheaper price when selling more quantity of output.

Number of output	AR (Price₹/Unit)	TR (₹)
1	10	10
2	9	18
3	8	24
4	7	28
5	6	30
6	5	30
7	4	28



4. Objectives of firms*





To achieve profit maximisation

1. Raise in revenue *

1.1 Increase in selling price

- Firms sell premium quality of products by using high quality of ingredient. (However, firms need to ensure that additional selling price > additional cost)
- Firms may launch new products by using advanced technology.

1.2 Increase volume of output

- Firms might offer a range of products in response to customer demand.
- Firms may use advertising campaign to stimulate demand.

2. Reduction in total cost

- Firms may increase productivity (by training labour to upgrade skills or using advanced technology) in order to reduce average cost.
- Firms may merge with others to achieve economies of scale. Therefore, average cost will be lower.

Benefits of profit maximisation

- Greater profits indicate the success and elevated reputation of a business.
- Companies have the ability to distribute higher dividends to shareholders, potentially serving as an incentive for increased investment in the business.
- Obtaining a source of finance becomes easier with lower interest rates.
- Recruiting top managers and highly skilled workers will be more accessible.

Key takeaways

- At zero output, total cost equates to fixed cost.
- Profit = Total revenue - Total cost (Fixed cost + Variable cost)
- The average fixed cost will exhibit a downward trend.

CHAPTER 23

Market structure

Checklist

1. Competitive markets
2. Monopoly markets

1. Competitive markets

Meaning : Many producers and consumers are engaged in competition within the market.

1.1 Key characteristics*

- **Many buyers and sellers participate in the market.**
- **It is price takers.** Firms do not have power to set up price. The price is determined by demand and supply.
- There are **low barriers to entry and exit.**
- Firms can only **achieve normal profit** (zero economic profit occurs when firms earn enough revenue to cover all their costs) in long run .
 - ▶ In short run, firms are able to achieve supernormal profit. (The extra profit that is higher than normal profit)
 - ▶ It encourages new firms into the market, supply shifts right.
 - ▶ Therefore, price level will be cheaper and profit will return back to normal level.

1.2 Advantages and Disadvantages of competitive markets

Advantages*	Disadvantages*
<ul style="list-style-type: none"> • High competition in the market forces firms to respond to consumers' demand. • Efficiency has the potential to improve. Increased competition often incentives firms to enhance their productivity, innovate their operations to remain competitive. • Products are variety and high quality for consumers. • Price will be lower as many firms compete in the market. 	<ul style="list-style-type: none"> • Firms can only achieve normal profit in long run. Therefore, firms have lower budget to invest in innovation and technology • Firms own small market share. Firms cannot take advantage of economies of scale. Therefore, average cost will be higher.

2. Monopoly markets

Meaning : Only firm dominants in the market.

2.1 Key characteristics*

- Only one seller in the market.
- It is price maker. Firm has power to set up price.
- There are high barriers to entry and exit.
- Firms can achieve supernormal profit in both short run and long run .

2.2 Advantages and Disadvantages of monopoly markets

Advantages*	Disadvantages*
<ul style="list-style-type: none"> • A monopolist can take advantage of economies of scale. The average cost will be lower. ➤ Firm possible to transfer benefits to consumers by charging lower price. • A monopolist, creating supernormal profit, may allocate funds towards research and development endeavors to foster innovation. • It reduces duplicate cost eg. Marketing cost 	<ul style="list-style-type: none"> • The absence of competition could diminish the motivation to enhance operational processes, potentially leading to inefficiencies within a monopoly. • A monopolist may set a high price to customers as it is a price maker. • Consumers may experience a lack of diversity in goods and services available. • A monopolist may have no incentive to respond to customers' wants due to the lack of competition.

Key takeaways

- Competitive markets are many buyers and sellers in the market. Therefore, Firms are price taker.
- Monopoly markets are only seller that produce products in the market. Therefore, firm is price marker.