



DP IB Economics: SL



Your notes

2.1 Demand

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Demand, Price & Quantity

Introduction to Demand

- Demand is the amount of a good/service that a consumer is willing and able to purchase at a given price in a given time period
 - If a consumer is willing to purchase a good, but cannot afford to, it is not **effective demand**
- A **demand curve** is a graphical representation of the **price** and **quantity demanded (QD)** by consumers
 - If data were plotted, it would be an **actual curve**. Economists, however, use straight lines so as to make analysis easier
- **The law of demand** states that there is an inverse relationship between price and quantity demanded (QD), **ceteris paribus**
 - When the price rises the QD falls
 - When the price falls the QD rises

Individual and Market Demand

- **Market demand** is the combination of all the **individual demand** for a good/service
 - It is calculated by adding up the individual demand at each price level

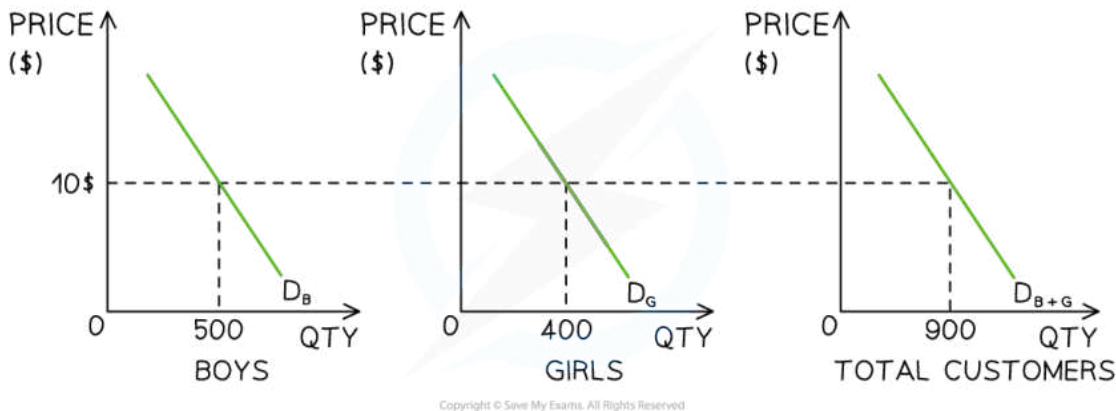
The Monthly Market Demand for Newspapers in a Small Village

Customer 1	Customer 2	Customer 3	Customer 4	Market Demand
30	15	4	4	53

- **Individual and market demand** can also be represented graphically



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Market demand for children's swimwear in July is the combination of boys and girls demand

Diagram Analysis

- A shop sells both boys and girls swimwear
- In July, at a price of \$10, the demand for boys swimwear is 500 units and girls is 400 units
- At a price of \$10, the shops **market demand** during July is 900 units

Assumptions Underlying the Law of Demand

- The law of demand is based on **three key assumptions**:
 - The income effect
 - The substitution effect
 - The law of diminishing marginal utility
- These three assumptions collectively contribute to the understanding of the law of demand and **how consumers' behaviour is influenced by changes in price**
 - The income effect and substitution effect highlight how changes in price affect consumers' purchasing power and their choices among different goods
 - The law of diminishing marginal utility explains why consumers are **less willing to pay higher prices for additional units** of a good

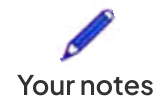
An Explanation of the Three Assumptions

The Assumption	Explanation
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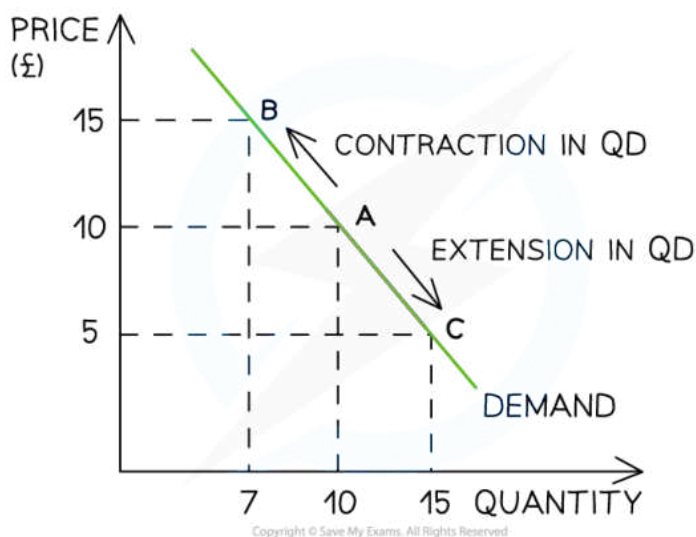
<p>The Income Effect</p>	<ul style="list-style-type: none"> ▪ The income effect refers to the change in a consumer's purchasing power resulting from a change in the price of a good/service <ul style="list-style-type: none"> ▪ When the price of a good decreases, consumers' purchasing power increases as with the same income they can buy more of the good ▪ When the price of a good increases, consumers' purchasing power decreases as with the same income they can afford to purchase less of the good ▪ The income effect assumes that consumers will adjust their consumption patterns based on changes in their purchasing power caused by price fluctuations
<p>The Substitution Effect</p>	<ul style="list-style-type: none"> ▪ The substitution effect suggests that consumers will substitute goods/services that have become relatively more expensive with those that have become relatively less expensive <ul style="list-style-type: none"> ▪ When the price of a particular good rises, consumers may seek alternatives that provide similar utility or satisfaction at a lower cost ▪ E.g. if the price of brand A coffee increases, consumers may switch to brand B coffee, assuming it provides a similar level of satisfaction but at a lower price ▪ The substitution effect assumes that consumers are rational decision-makers who have perfect information and respond to changes in relative prices by adjusting their consumption
<p>The Law of Diminishing Marginal Utility</p>	<ul style="list-style-type: none"> ▪ The Law of Diminishing Marginal Utility states that as additional products are consumed, the utility gained from the next unit is lower than the utility gained from the previous unit ▪ Marginal utility is the additional utility (satisfaction) gained from the consumption of an additional product ▪ The utility gained from consuming the first unit is usually higher than the utility gained from consuming the next unit <ul style="list-style-type: none"> ▪ For example, a hungry consumer gains high utility from eating their first hamburger. They are still hungry and purchase a second hamburger but gain less satisfaction from eating it than they did from the first hamburger



- **Lowering the price** makes it a more attractive proposition for the consumer to **keep consuming** additional units - and there is a **movement down the demand curve**

Movements Along a Demand Curve

- If **price** is the only factor that changes (**ceteris paribus**), there will be a change in the quantity demanded (**QD**)
 - This change is shown by a **movement along the demand curve**



A demand curve showing a contraction in quantity demanded (QD) as prices increase and an extension in quantity demanded (QD) as prices decrease

Diagram Analysis

- An **increase** in price from £10 to £15 leads to a movement **up** the demand curve from point A to B
 - Due to the **increase** in price, the QD has **fallen** from 10 to 7 units
 - This movement is called a **contraction** in QD
- A **decrease** in price from £10 to £5 leads to a movement **down** the demand curve from point A to point C
 - Due to the **decrease** in price, the QD has **increased** from 10 to 15 units

- This movement is called an **extension** in QD



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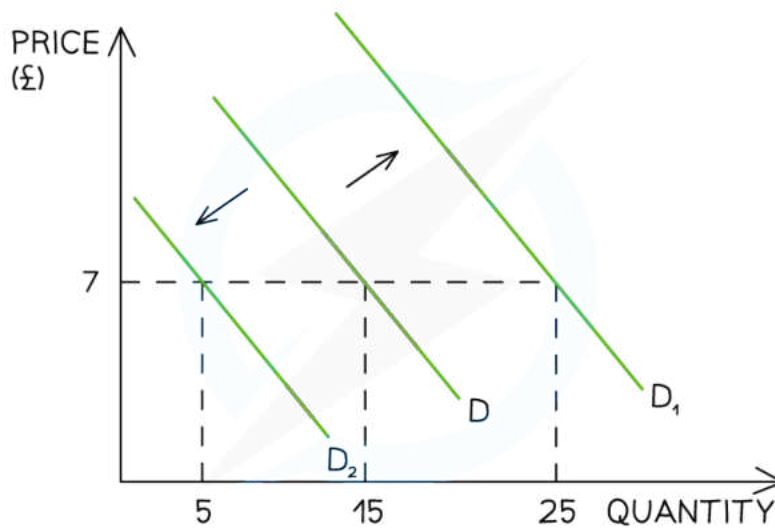


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Non-Price Determinants of Demand

Shifts of the Demand Curve

- There are numerous factors that will **change the demand** for a good/service, **irrespective of the price level**. Collectively these factors are called the **non-price determinants of demand** and include
 - Changes in real income
 - Changes in tastes/preferences
 - Changes in the price of related goods (substitutes and complements)
 - Changes in the number of consumers
 - Future price expectations
- Changes to each of the non-price determinants, **shifts the entire demand curve** (as opposed to a movement along the demand curve)



A graph that shows how changes to any of the non-price determinants shifts the entire demand curve left or right, irrespective of the price level

- For example, if a firm **increases** their **Instagram advertising**, there will be an **increase in demand** as more consumers become aware of the product
 - This is a **shift in demand** from D to D_1 . The price remains unchanged at £7 but the **demand has increased** from 15 to 25 units



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An Explanation of how each of the Non-Price Determinants of Demand Shifts the Entire Demand Curve at Every Price Level

Non-Price Determinant	Explanation	Condition	Shift	Condition	Shift
Changes in real income	<ul style="list-style-type: none"> Real Income determines how many goods/services can be enjoyed by consumers There is a direct relationship between income and demand for goods/services 	Income Increases	D Increases Shifts Right ($D \rightarrow D_1$)	Income Decreases	D Decreases Shifts Left ($D \rightarrow D_2$)
Changes in taste/preferences	<ul style="list-style-type: none"> If goods/services become more preferable then demand for them increases There is a direct relationship between changes in taste/preferences and demand Advertising or branding can change tastes/preferences 	Good becomes more preferable	D Increases Shifts Right ($D \rightarrow D_1$)	Good becomes less preferable	D Decreases Shifts Left ($D \rightarrow D_2$)



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<p>Changes in the prices of substitute goods (Related goods)</p>	<ul style="list-style-type: none"> Changes in the price of substitute goods will influence the demand for a product/service There is a direct relationship between the price of good A and demand for good B E.g. The price of a Sony 60" TV (good A) increases so the demand for LG 60" TV (good B) increases 	<p>Price of Good A Increases</p>	<p>D for Good B Increases Shifts Right (D→D₁)</p>	<p>Price of Good A Decreases</p>	<p>D for Good B Decreases Shifts Left (D→D₂)</p>
<p>Changes in the prices of complementary goods (Related goods)</p>	<ul style="list-style-type: none"> Changes in the price of complementary goods will influence the demand for a product/service There is an inverse relationship between the price of good A and demand for good B For example, the price of printer ink (good A) increases so the demand for ink printers (good B) decreases 	<p>Price of Good A Increases</p>	<p>D for Good B Decreases Shifts Left (D→D₂)</p>	<p>Price of Good A Decreases</p>	<p>D for Good B Increases Shifts Right (D→D₁)</p>
<p>Changes in the number of consumers</p>	<ul style="list-style-type: none"> If the population size of a country changes over time, then the demand for goods/services will also change There is a direct relationship between the changes in 	<p>Population Increases</p>	<p>D Increases Shifts Right (D→D₁)</p>	<p>Population Decreases</p>	<p>D Decreases Shifts Left (D→D₂)</p>



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	<p>population size and demand</p> <ul style="list-style-type: none"> ▪ Demand will also change if there is a change to the age distribution in a country as different ages demand different goods/services e.g an ageing population will buy more hearing aids 				
Future price expectations	<ul style="list-style-type: none"> ▪ If consumers expects the price of a good/service to increase in the future, they will purchase it now and demand will increase ▪ If consumers expects the price of a good/service to decrease in the future, they will wait to purchase it later and demand will decrease 	Expectations price will rise	D Increases Shifts Right (D→D₁)	Expectations price will fall	D Decreases Shifts Left (D→D₂)



Examiner Tips and Tricks

The difference between a **movement along the demand curve** and a **shift in demand** is essential to understand. You will be repeatedly examined on this and it is important that you use the **correct language** to show that you understand the difference between a **change in quantity demanded** and a **change in demand**.

When **price changes** (ceteris paribus), there is a movement along the demand curve resulting in a change to **quantity demanded**. When a **non-price determinant of demand changes**, there is a shift of the entire demand curve resulting in a **change to demand**.