

# Topic: Demand

## An Introduction to Demand

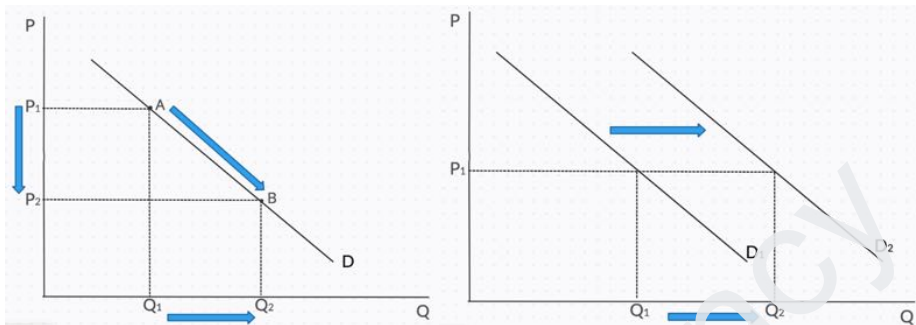
- **Demand** is the amount of a good/service that a consumer is willing and able to purchase at a given price in a given time period
  - **Effective demand** is demand supported by the necessary purchasing power (the ability to pay)
- **Individual Demand:** The quantity of a good an individual consumer demands at various price levels
- **Market Demand:** The total quantity of a good that all consumers demand at various price levels
  - **Derived demand:** Where a factor or production is demanded not for its own use but for its contribution to the production process
  - **Inferior good:** A good with a negative income effect. A rise in income causes less of it to be demanded while a fall in income causes more of it to be demanded.
  - **Complementary goods:** are in joint demand. The use of one involves the use of the other.
  - **Joint Demand:** is where two (or more) goods are used in conjunction with each other in order to achieve utility. They are complementary goods, for example, golf clubs and golf balls.
- Watch: [Demand](#)

### Exam Question: 2023 Q16

- (a) (i) Distinguish between the economic terms individual demand and market demand.

Individual demand:
Market demand:

## Movements V. Shift of Demand Curve



- **A movement along the demand curve** is caused by a change in the price of the good itself (all else being equal). (**The law of demand**)
  - When the price rises, the QD falls
  - When the price falls, the QD rises
- **A shift in the demand curve** is caused by a change in any non-price determinant of demand. Referred to as a change in demand at any given price (FUSTIC)

## Exceptions to the Law of Demand

Exceptions	Explanation
<b>Snob good / Veblen good</b>	<ul style="list-style-type: none"> <li>• A good that is attractive to some consumers because it is <b>expensive</b></li> <li>• A rise in price will cause an increase in demand and a fall in price will cause a fall in demand.</li> </ul>
<b>Giffen good</b>	<ul style="list-style-type: none"> <li>• As the price falls, <b>real incomes increase</b> and consumers buy less of these goods and purchase more of better quality goods</li> <li>• As the price rises consumers have <b>less income</b> to spend on other types of goods so they tend to devote <b>more of their income to these goods</b></li> </ul>
<b>Speculative good</b>	<ul style="list-style-type: none"> <li>• Good go up value/price <b>in future</b>. Have to buy it now. (vice versa)</li> </ul>

## Shift of Demand Curve (FUSTIC)

### Non Price Determinants

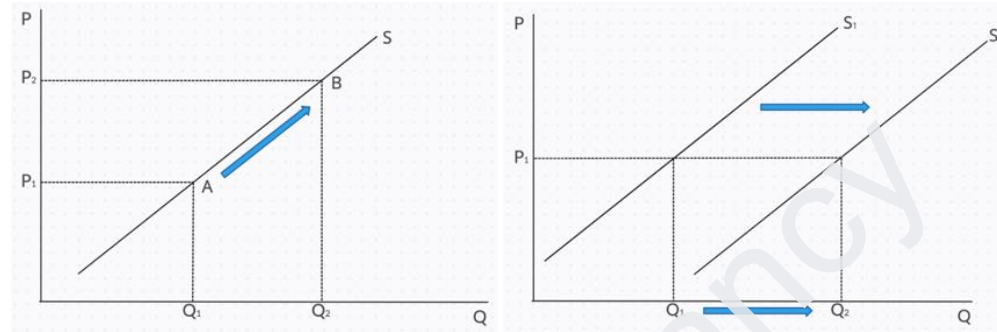
Determinant (state)	Explanation	Effect on Demand Curve
<b>Expectations About the Future</b>	<ul style="list-style-type: none"> <li>• If consumers expect the performance not to repeat they may increase their demand.</li> <li>• If they expect ticket price to rise in the future they may buy the ticket now and demand will increase.</li> </ul>	<b>Effect:</b> Demand Curve shifts Right (D1 to D2)
<b>Unplanned Events</b>	<ul style="list-style-type: none"> <li>• Factors such as the weather may influence the current demand for tickets</li> <li>• E.g. good weather may increase demand for an outdoor event.</li> </ul>	
<b>Change in price of Substitute Good</b>	<ul style="list-style-type: none"> <li>• If the price of tickets for an alternative concert increased then demand for tickets for this concert may increase.</li> </ul>	
<b>Taste / Preference</b>	<ul style="list-style-type: none"> <li>• If the consumer's preference for the artist/event becomes stronger then the demand for concert tickets will increase.</li> </ul>	
<b>Income levels</b>	<ul style="list-style-type: none"> <li>• If income rises then the demand for concert tickets will increase, assuming concert tickets is a normal good.</li> </ul>	
<b>Change in price of Complementary good</b>	<ul style="list-style-type: none"> <li>• If the price of hotel accommodation near the concert venue decreased then demand for the concert tickets may increase.</li> </ul>	

### White board activity

- Draw a demand for new cars increased in 2025
  - Show the impact of a price fall
- Draw a demand curve for crisps (state factor)
  - Consumers stage protests against animal-derived flavouring on crisps
  - 50% reduction in the price of drinks sold with crisps
  - Government introduce a 15% levy (tax) on all income earned
  - A successful advertising campaign in favour of crisps
  - Junk food tax expected to rise in the near future
- Draw a demand curve for ice cream (state factor)
  - Show the impact of a price fall
  - Sunny weather
  - increase in lactose intolerant consumers

# Topic: Supply

## Movement V. Shift in Supply Curve



- A movement along the supply curve is caused by a change in the price of the good itself (all else being equal). Referred to as a change in supply
- A shift in the supply curve is caused by a change in any non-price determinant of supply. Referred to as a change in supply at all prices

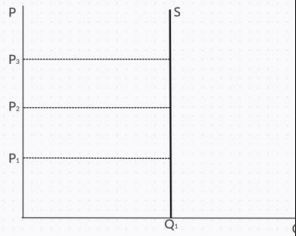
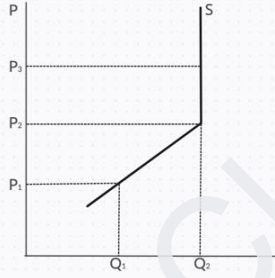
## Factors that Cause Shift of Supply Curve (CUTEST)

Determinant	Explanation
<b>Cost of production</b>	<ul style="list-style-type: none"> <li>• If there is an increase in costs of factors of production (wages, raw materials, electricity) which a firm uses, then it will be more costly to manufacture the good</li> </ul>
<b>Unplanned factors</b>	<ul style="list-style-type: none"> <li>• There may be changes in the quantity supplied, which were never intended by the producer.               <ul style="list-style-type: none"> <li>◦ E.g weather; diseases, shortages of raw materials, strikes etc.</li> </ul> </li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>• As new machinery is invented and becomes more efficient, it increases output even though the payments they receive remain the same.</li> </ul>
<b>Number of sellers in industry</b>	<ul style="list-style-type: none"> <li>• If the number of firms in the industry increases / decreases, supply increases / decreases</li> </ul>
<b>Taxation / subsidy</b>	<ul style="list-style-type: none"> <li>• If the government were to reduce the rates of tax, it would reduce in the cost of production and quantity supplied would increase</li> </ul>

- Newspaper articles - [Supply of nuts](#) and video [Watch supply](#)

- If a subsidy is granted it has the effect of reducing costs and thereby resulting in an increase in the quantity supplied.

### Other Types of Supply Curves

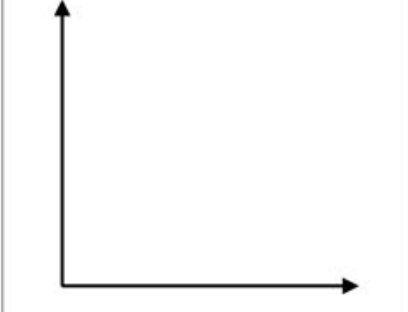
Perfectly Inelastic	Minimum Price	Limited Capacity
		
<p><b>Fixed Supply (Perfectly Inelastic Supply)</b></p> <p>Fixed supply is shown with a vertical supply curve.</p> <p>The supply of the good is fixed and cannot be changed, even if the price increases.</p> <p>E.g. seats at a concert</p>	<p><b>Supply Close to Maximum Capacity</b></p> <p>The firm can initially increase quantity supplied in response to a price increase. However, a point is eventually reached where the firm is operating at maximum capacity.</p> <p>The firm cannot increase supply any further, even if the price increases further.</p>	

### Exam Question: 2023 Q1



- (a) France will host the Rugby World Cup in 2023.

Explain, with the aid of a fully labelled diagram (including the axes) the supply curve for tickets for this event.

Diagram	Explanation
	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>


### Exam Paper: 2022 Deferred Paper

- (b) The maximum capacity of the Croke Park stadium is 82,300 spectators.

In your opinion, will the new law alter the supply curve of tickets available for the All-Ireland finals to be held in Croke Park this year?

Yes:  No:

Explain your answer with the aid of a fully labelled diagram.

Diagram	Explanation
	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

**Activity: using a whiteboard**

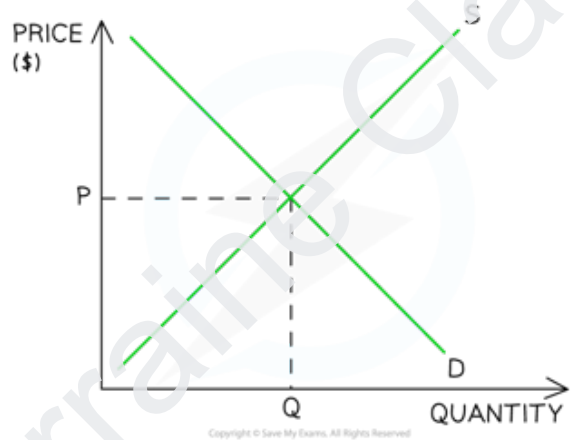
State which factor this is likely to impact and draw effect on whiteboard

- The lack of rainfall in 2018 creates a drought which reduces potato crops.
- Crisp companies receive a subsidy from the government.
- Quota placed on the quantity of crisps entering Ireland
  
- A technological advance in the production process of electric cars
- The motor tax on petrol engine cars is expected to rise in the near future
- The government increases subsidies on public transport, reducing prices for its commuter

Topic:  
Market Equilibrium

## Market Equilibrium

- A **market** is any place that brings buyers & sellers together
  - Markets can be physical (e.g. McDonald's) or virtual (e.g. eBay)
- **Equilibrium** in a market occurs when demand = supply
- At this point the price is called the **market clearing price**



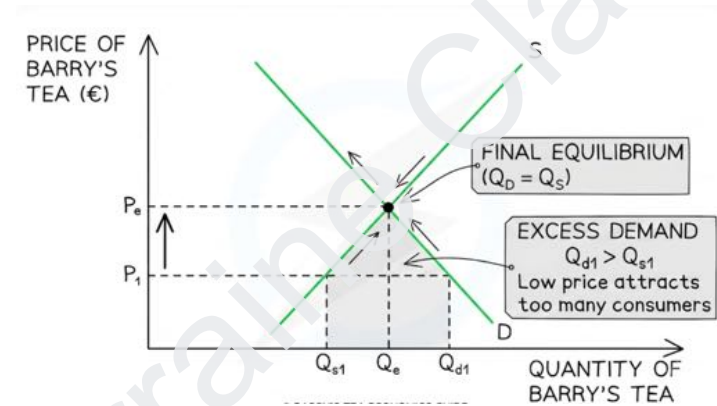
- Any price above or below  $P$  creates disequilibrium in this market
  - Market equilibrium arises where the quantity demanded equals the quantity supplied
  - equilibrium occurs when the price is such that the quantity that consumers wish to buy is exactly balanced by the quantity that firms wish to supply. There is no tendency for price to change.
- **Equilibrium price:** The price at which quantity demanded is equal to quantity supplied.
- **Equilibrium quantity:** The level of output where quantity demanded equals the quantity supplied.

Activity: Plot the following supply and demand curves

Price €	Quantity Demanded (*000 units)	Quantity Supplied (*000 units)
2.00	40	5
2.25	30	10
2.50	20	20
2.75	10	30
3.00	5	40

## Demand

- **Excess demand** occurs when the demand is greater than the supply ( $Q_d > Q_s$ ).
  - It can occur when prices are too low or when demand is so high that supply cannot keep up with it

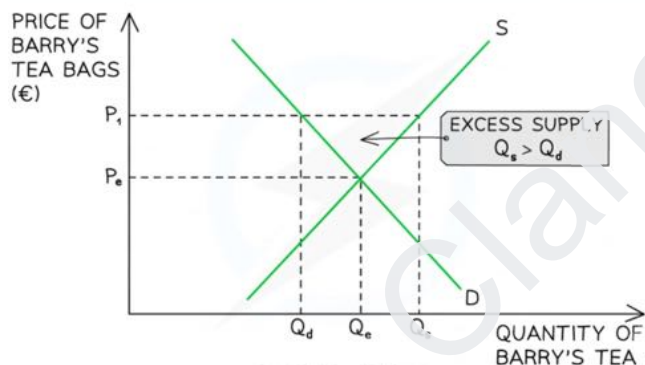


## Diagram Analysis

- If the market price is too low, there is **excess demand** ( $Q_d > Q_s$ ) as the low price attracts too many consumers.
  - This creates an upward pressure on the price of the good
  - As price rises some suppliers will increase supply and consumers will demand less (movement along the curve)
  - The price will continue to rise until equilibrium is reached at **QD = QS**
- In time, the market will have cleared the excess demand & arrive at a position of equilibrium ( $P_e Q_e$ )
- Newspaper article: [excess demand for ketchup](#)

## Excess Supply

- **Excess supply** occurs when the supply is greater than the demand ( $Q_s > Q_d$ )
  - It can occur when prices are too high or when demand falls unexpectedly
- During the later stages of the pandemic the market for face masks was in disequilibrium



### Diagram Analysis

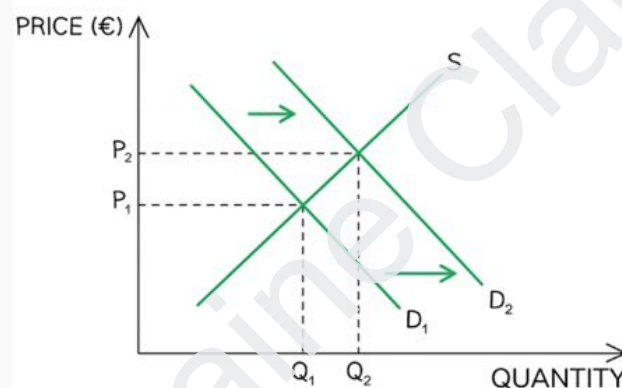
- If the market price is too high, there is excess supply ( $Q_d > Q_s$ ) and suppliers are unable to sell all they want.
  - Sellers respond by cutting their prices to clear stocks
  - As price falls some suppliers will reduce supply and consumers will demand more (movement along the curve)
  - The price will continue to fall until equilibrium is reached and  $QD = QS$
- In time, the market will have cleared the excess supply & arrive at a position of equilibrium ( $P_e Q_e$ )

## Explaining Diagrams: DERE

- D = Diagram
- E = Effect
- R = Reason
- E = Equilibrium Price and Equilibrium quantity

### Demand Curve shifts rightwards: $D_1 \rightarrow D_2$

- Demand for houses in Ireland has increased due to population growth and increased employment in urban areas.



### Diagram Analysis

<b>E: Effect</b>	Demand curve shifts rightwards $D_1 \rightarrow D_2$
<b>R: Reason</b>	Rapid population growth combined with the permanent rise of remote working has fundamentally changed consumer tastes, driving buyers to seek larger homes with space for home offices.
<b>E: Equilibrium Price</b>	Price increases $P_1 \rightarrow P_2$
<b>Equilibrium quantity</b>	Quantity demanded increases $Q_1 \rightarrow Q_2$

### Supply Curve shifts leftwards

- Due to a very wet winter and severe waterlogging in spring 2026, Irish farmers have faced massive delays and crop failures.

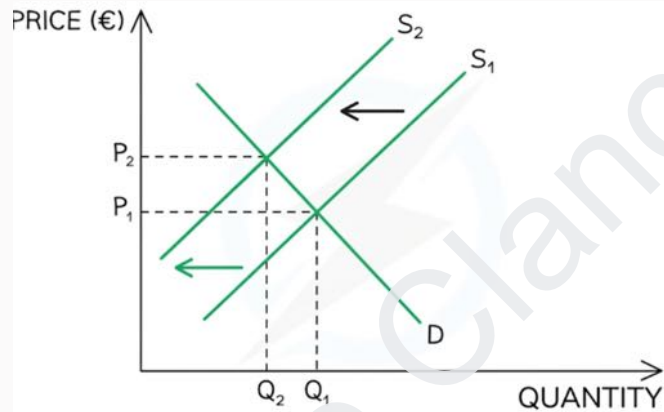


Diagram Analysis

<b>Effect</b>	Supply curve shifts leftwards $S_1 \rightarrow S_2$
<b>Reason</b>	Due to extreme weather (an <b>unforeseen event</b> ), there was a fall in supply of domestic Irish potatoes and field vegetables.
<b>Equilibrium Price</b>	Price equilibrium increases $P_1 \rightarrow P_2$ and equilibrium quantity decreases $Q_1 \rightarrow Q_2$
<b>Equilibrium quantity</b>	

### Demand Curve Shifts Leftwards

- As inflation and elevated living costs squeeze household budgets, and as cheaper electric vehicle (EV) and hybrid models enter the market, Irish consumers have turned away from traditional fossil-fuel cars.
  - Central Statistics Office (CSO) data reveals a steep double-digit drop in the licensing of new petrol and diesel cars compared to previous years.

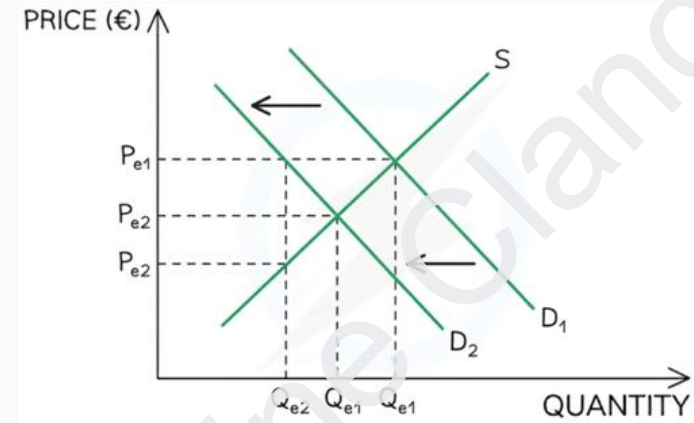


Diagram Analysis

<b>Effect</b>	Demand curve shifts leftwards $D_1 \rightarrow D_2$
<b>Reason</b>	High fuel prices and a shift in <b>consumer tastes</b> toward more economical hybrid and electric vehicles have reduced the desire for traditional cars.
<b>Equilibrium Price</b>	Price equilibrium increases $P_1 \rightarrow P_2$ and equilibrium quantity decreases $Q_1 \rightarrow Q_2$
<b>Equilibrium quantity</b>	

### Supply Curve Shifts Rightwards

- In order to help meet their climate targets & to lower energy costs for households, the EU is providing subsidies for solar panels

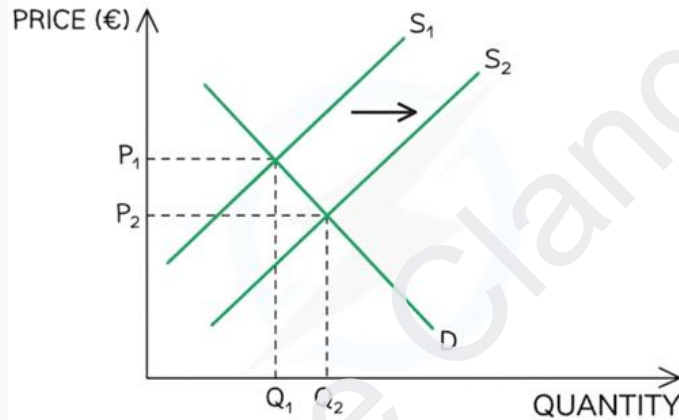


Diagram showing

### Diagram Analysis

<b>Effect</b>	Supply curve shifts rightwards $S_1 \rightarrow S_2$
<b>Reason</b>	There is an increase in supply of solar panels in the EU due to a per unit subsidy
<b>Equilibrium Price</b>	Price equilibrium decreases $P_1 \rightarrow P_2$ and equilibrium quantity increases $Q_1 \rightarrow Q_2$
<b>Equilibrium quantity</b>	

### Activity: using a whiteboard

The effects which each of the following is most likely to have on the above equilibrium position:

- The lack of rainfall in 2018 creates a drought which reduces potato crops.
  - Vegan consumers stage protests against animal-derived flavouring on crisps.
  - Crisp companies receive a subsidy from the government.
  - 50% reduction in the price of drinks sold with crisps
  - Quota placed on the quantity of crisps entering Ireland
  - Government introduce a 15% levy (tax) on all income earned
  - Advertising campaign in favour of the product
- 
- Assume the market for electric cars is in equilibrium. Describe with the aid of a separate diagram in each case the effects of the following market equilibrium position for electric cars
    - A technological advance in the production process of electric cars
    - The motor tax on petrol engine cars is expected to rise in the near future
    - The government increases subsidies on public transport, reducing prices for its commuter

Activity: Practice shifting demand or supply curves

- [set 1](#)
- [set 2](#)
- [set 3](#)

**Exam Question: 2024 Q11**

- (c) Assume the market for a brand of Irish organic ice cream is in equilibrium.

Explain, with the aid of a separate diagram in each case, the effects which each of the following is most likely to have on the initial equilibrium position of this market.

- (i) A prolonged heatwave during the summer in Ireland.

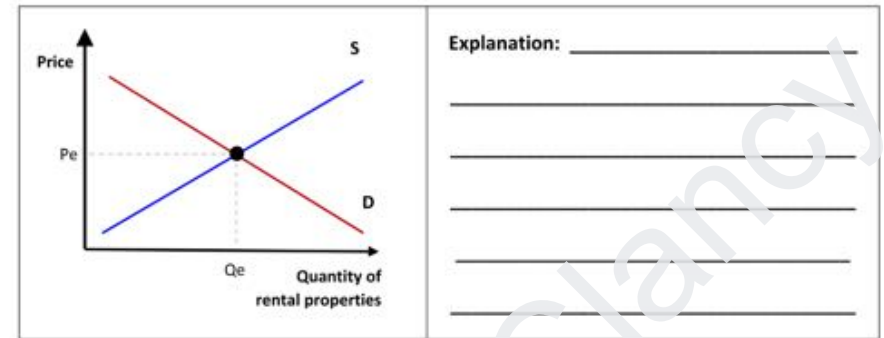
Diagram	Explanation
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

**Exam Question 2023 Q7**

- (a) Landlords are leaving the Irish housing market in their thousands, blaming excessive taxation, rent control and constantly changing laws.

Adapted from Sunday Business Post

Show on the diagram below how this development will alter the rental market equilibrium position. Explain your answer.



- (ii) An increase in lactose intolerant consumers.  
 \*(Lactose intolerance is a digestive problem where the body is unable to digest lactose, a type of sugar, mainly found in milk and dairy products.)

Diagram	Explanation
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

- (iii) Producers are receiving a subsidy for organic ice cream production.

Diagram	Explanation
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

**Exam Question: 2023 Q16**

- (ii) The Irish Government has provided free school transport for the 2022/2023 school year. Demonstrate, with the use of a fully labelled diagram the impact this new scheme will possibly have on the market equilibrium for petrol/diesel cars.

Diagram	Explanation
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

- (iii) The rapid introduction of this scheme created an additional demand of 6,000 bus tickets in late September 2022 after schools had opened. Does this represent a government failure? Explain your answer.

Yes:  No:

Explanation:
_____
_____
_____

Exam Paper: 2022 Deferred paper

- (a) (i) Describe by means of a clearly labelled diagram, the market demand and supply curves for electric vehicles (i.e. electric cars and vans) in Ireland.

Explanation:


- (ii) Outline two reasons for the current increase in the cost of producing electric vehicles.

1.	
2.	

- (b) Demonstrate, with the aid of a fully labelled **diagram**, in each case, the effects which each of the following is most likely to have on the market equilibrium position for electric vehicles in Ireland. Explain your answer in each case.

- (i) The Government's decision to invest heavily in the construction of a network of high-power chargers (HPCs) across the country's main roads.

Diagram	Explanation

- (ii) Improvements and advances in the technology used in the production of electric vehicles.

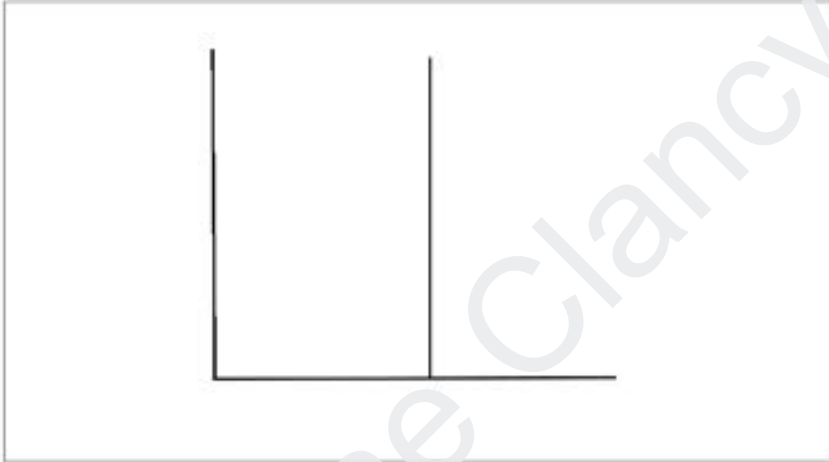
Diagram	Explanation

**Exam Question: 2021**

Shortages of the PlayStation 5 Gaming Consoles (PS5) was a nightmare for many consumers in the lead up to Christmas 2020.

Adapted from Forbes

- (a) (i) Complete the diagram below to indicate how excess demand is occurring in this market. (\*Note: The retail price for a PlayStation 5 Gaming Console was €500)



- (ii) From your diagram above, explain how excess demand occurs.


**Exam Question: 2024 Q5**

Harry Styles performed a concert at Slane Castle on 10<sup>th</sup> June 2023 with a maximum capacity of 80,000 people. The ticket prices for the show were €97.10 each and the concert sold out in hours.

- (a) Using the information above, illustrate with the aid of a fully labelled diagram (including the axes) how a shortage of tickets for this concert may arise.



- (b) Explain your diagram above.

Explanation:

## Consumer and Producer Surplus

- **Consumer Surplus:** is the difference between what a consumer actually pays for a good and the maximum s/he was willing to pay for the good rather than do without it.
  - The utility gained from a good or service in excess of the amount paid for it.
- **Producer Surplus:** is the difference between what a producer receives for a good and the minimum s/he was willing to accept for the good.
  - The extra earnings obtained by the producer above the minimum required for them to supply the good or service.

