### Lecture



Class: M.Sc. Sem 1

**Subject**: Business Economics

Chapter: Unit 1 Chapter 3

Chapter Name: Demand & Supply



## Today's Agenda

- 1. Demand
  - 1. Demand Concept
  - 2. Demand Curve
  - 3. Analysing Demand
- 2. Determinants of Demand
- 3. Law of Demand
  - 1. Exceptions
- 4. Change and movement of demand curve
  - 1. Movement on demand curve
  - 2. Change in demand curve
- 5. Supply
  - 1. Supply Concept
  - 2. Supply Curve
  - 3. Analysing Supply



## Today's Agenda

- 11. Control of price
  - 1. Price floor
  - 2. Price ceiling
- 12. Indirect Taxes
- 13. Subsidies
- 14. Advertising
  - 1. Advertising media
  - 2. Product sectors
- 15. Ratios
- 16. Effect of Advertising
  - 1. Effect of Advertising on profit
- 17. Advantages of Advertising



## 1.1 Demand - Concept

Demand for a product is basically desire for the product. Do you agree or not?

If not, according to you, what is the definition of demand?



## 1.1 Demand - Concept

Demand

=

Desire

+

Willingness to purchase

+

Ability to pay

+

Availability of commodity





## 1.1 Demand - Concept

- Here, We need to think from the point of view of Consumer
- As the price of product increases the consumer will prefer to buy less of that commodity





## 1.2 Demand Curve

Demand curve shows the relationship between price & Quantity Demanded

Price	Quantity demanded
10	100
15	85
20	70
25	55
30	40
35	25



## 1.3 Analyzing Demand

- Individual Demand Demand made by sole Person
- Market Demand Demand made by everyone collectively





**Market Demand** 



## 1.3 Analyzing Demand

Give examples of Individual Demand and Market Demand





Apart from price, what other factors influence demand? Explain whether each of these factors are directly or inversely related to demand.

Price

Price

Demand

& Vice Versa

Inverse Relation Income

Income



Demand



& Vice Versa

DirectRelation

Population

Population



Demand



& Vice Versa

Direct Relation **Necessity Product** 

Demand will continue to be the same

Substitute Goods

Complementary Goods

Future expectation of price

Advertisement

 Price of tea





Demand for coffee



& Vice Versa

Direct Relation  Price of petrol



Demand for car



& Vice Versa

Inverse Relation Expected price of product



Demand for product

& Vice Versa



Direct

Relation

Advertisemen 🛖



Demand for product

& Vice Versa

Direct

Relation

**Taxation** 

Taste, Habit & Preference

If taxedResult in price



Demand



& Vice Versa

Inverse Relation  It influences demand depending upon choice

## Law of Demand

- Law of demand states that other things being equal, the demand for a product is inversely proportional to the price of the product.
- In other words, the demand is higher at lower prices and lower at higher prices under the assumption of ceteris paribus (i.e. other things being equal)







## 3.1

## **Exceptions of Law of Demand**

### 3.1.A Prestige goods

• Ujjwal is very rich person. He buys goods only for status symbol, which exception it shows

### 3.1.B Speculation

Atharva is good predictor of demand. According to him demand for car increases if RBI decreases repo rate. Guess the exception

#### 3.1.C Illusion

Devika thinks buying commodity from expensive showroom delivers good quality



## **Exceptions of Law of Demand**

### 3.1.D Ignorance

• One fine day Mr. Mukesh Ambani goes to vegetable market to buy Dhaniya as per the order of Neeta Ambani. Vendor knew he is Mukesh Ambani, so he charged 1000 rupees for 500gm Dhaniya. Here Mukesh Ambani didn't know the market rate for Dhaniya. Guess the exception

#### 3.1.E Habitual Goods

• Kabir Singh is addicted to Cigarettes & Alcohol. He buys Cigarettes & Alcohol at any price. Guess the exception

### 3.1.F Giffen's paradox

 Rise in price of Inferior goods the consumption of inferior goods increases & consumption normal goods decreases



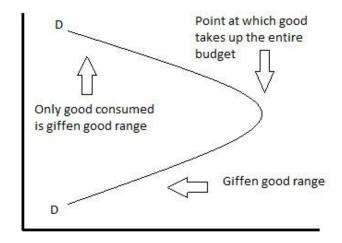
## 3.1

## **Exceptions of Law of Demand**

### Giffen's paradox - Exception of law of demand

- A Giffen good, a concept commonly used in economics, refers to a good that people consume more of as the price rises.
   Therefore, a Giffen good shows an upward-sloping demand curve and violates the fundamental law of demand.
- It is important to note that all Giffen goods are inferior goods, but not all inferior goods are Giffen goods.
- In 2007, Harvard economists Robert Jensen and Nolan Miller conducted an experiment where they studied a province in China: Hunan. In Hunan, the staple food is rice.
- The experiment indicated that lowering the price of rice through a subsidy decreased the demand for rice while removing the subsidy increased the demand for rice.

#### Giffen Good



Quantity



'What are Giffen goods?' - Video

### 4

## Change & Movement in Demand Curve

Movement

Changes in price other things remain constant

This is called as Expansion & Contraction in demand

Shift

Changes in other determinants of demand other than price

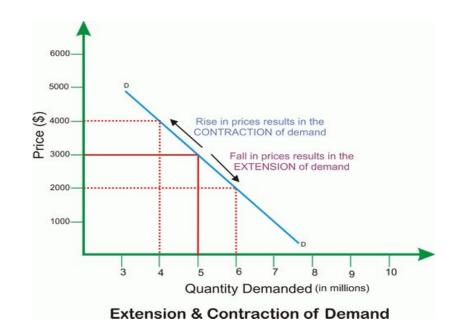
This lead to shift in demand curve to the left or right



## 4.1 Movement on Demand Curve

**Movement - Changes in price** other things remain constant

- If Price increases, Demand will decrease. It will result in Contraction in demand
- If Price decreases, Demand will increase. It will result in Extension in demand



Try this: Watch how quantity demanded changes with price



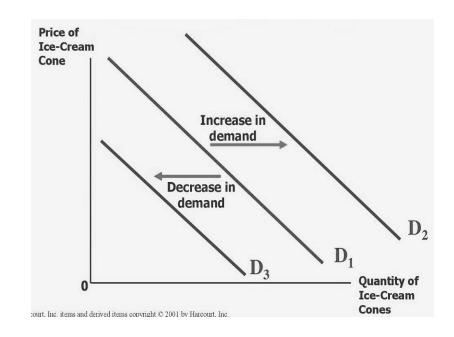
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## 4.2 Changes in Demand Curve

## Change. - Changes in other determinants of demand other than price

- If Demand increases due to other factors will shift the demand curve to the Right
- If Demand decreases due to other factors will shift the demand curve to the Left



Try this: Drag the demand curve to see what happens to quantity demanded



https://www.econlowdown.org/supply-and-demand?module\_uid=120 &section\_uid=290&page\_num=7134&p=yes

### Questions

1. What effect will a fashion to grow beards among men have on demand of razor?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect

2. What effect will increase in tax have on demand of salt?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect

3. What effect will rise in price of Jio prepaid plans have on demand of Airtel prepaid plans?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect

4. What effect will rise in price of ink have on demand of pens?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect

### Questions

5. What effect will rise in general income level have on demand of superior good Basmati rice?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect

6. What effect will increase in tax have on demand of cigarettes?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect

7. What effect will rise in price of cigarettes have on demand of e-cigarettes?

A. Expansion of Demand

B. Contraction of Demand

C. Increase in Demand

D. Decrease in Demand

E. No effect



# 5.1 Supply - Concept

Supply of a product is basically the stock held of the product by the supplier. Do you agree or not? If not, according to you, what is the definition of supply?



# 5.1 Supply - Concept

Supply

=

Willingness to Produce

+

Offer for Sale

+

At Particular Price





# 5.1 Supply - Concept

- Here, We need to think from the point of view of Supplier
- As the price of product increases the supplier will prefer to offer more commodity to sell to maximize profit





## **5.2 Supply Curve**

Supply curve shows the relationship between price & Quantity Supplied

Price	Quantity supplied
10	25
15	40
20	55
25	70
30	85
35	100





# 5.3 **Analyzing Supply**

- Individual Supply Commodity supplied by an individual supplier
- Market Supply Commodity supplied by all suppliers collectively



# 5.3 **Analyzing Supply**



Give examples of Individual Supply and Market Supply



# 5.3 **Analyzing Supply**



Explain whether the supply of oil from OPEC (Organization of petroleum exporting countries) is an individual supply or market supply



# Determinants of Supply



Apart from price, what other factors influence supply? Explain whether each of these factors are directly or inversely related to supply.

## **Determinants of** Supply

Price

Price

Supply

& Vice Versa

Direct Relation Government policy

Favourable Govt. policy

Supply

& Vice Versa

Direct Relation Infrastructure

Supply

& Vice Versa

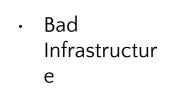
Direct Relation Cost of production

 Cost of Production

Supply

& Vice Versa

Inverse Relation











# **Determinants of Supply**

Future expectation of price

Technology

- Expected price of product
- 1



Supply of product

- & Vice Versa
- InverseRelation

Technology



Supply of product



& Vice Versa

Direct
Relation

## 7 Law of Supply

- Law of supply states that other things being equal, the supply for a product is directly proportional to the price of the product.
- In other words, the supply is higher at higher prices and lower at lower prices under the assumption of ceteris paribus (i.e. other things being equal)







## 7.1 Exceptions of Law of Supply

### 7.1.A Agriculture Goods

 Ramaswami is Farmer. He produces rice & production of rice depends on weather condition. Guess the exception

#### 7.1.B Perishable Goods

• Krunal is owner of K.C Milk House. He tries to sell milk faster to avoid losses. Guess the exception

### 7.1.C Urgent need of Cash

 Kreena's is owner of super mart. Her grandmother is suffering from deadly disease. She needs money at any cost. Guess exception

#### 7.1.D Rare Goods

 Thanos's girlfriend wants a Kohinoor Diamond but as we all know the Kohinoor Diamond is with Queen Elizabeth II & Its also not available in market. Guess exception



## 8 Change & Movement in Supply Curve

Movement

Changes in price other things remain constant

This is called as Expansion & Contraction in supply

Shift

Changes in other determinants of supply other than price

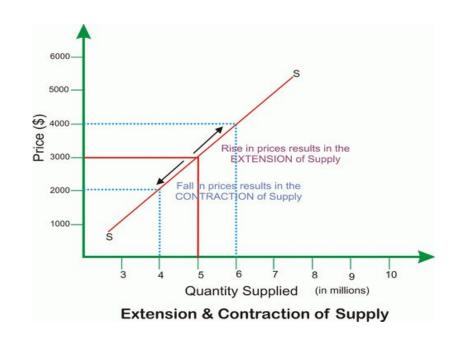
This lead to shift in supply curve to the left or right



## 8.2 Movement on Supply Curve

**Movement - Changes in price** other things remain constant

- If Price decreases, supply will decrease. It will result in Contraction in supply
- If Price increases, supply will increase. It will result in Extension in supply



Try this: Watch how quantity supplied changes with price



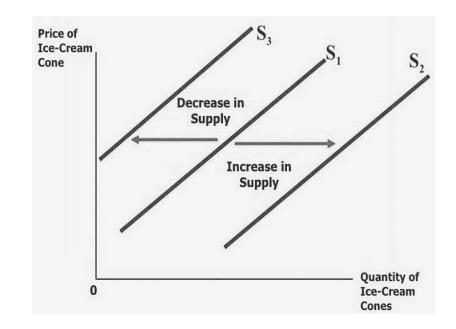
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## 8.2 Changes in Supply Curve

## Change. - Changes in other determinants of demand other than price

- If Supply increases due to other factors will shift the demand curve to the Right
- If Supply **decreases** due to other factors will shift the demand curve to the **Left**



Try this: Drag the supply curve to see what happens to quantity supplied



https://www.econlowdown.org/supply-and-demand?module\_uid=120 &section\_uid=291&page\_num=7133&p=yes

### Questions

1. What effect will a subsidy on production of a wheel have on the supply of bicycles?

A. Expansion of Supply

B. Contraction of Supply

C. Increase in Supply

D. Decrease in Supply

E. No effect

2. What effect will rise in price of cotton have on supply of clothes?

A. Expansion of Supply

B. Contraction of Supply

C. Increase in Supply

D. Decrease in Supply

E. No effect

3. What effect will new government regulation of minimum wages and additional employee benefits have on supply of people looking for jobs?

A. Expansion of Supply

B. Contraction of Supply

C. Increase in Supply

D. Decrease in Supply

E. No effect

### Questions

4. What effect will rise in potential wars have on supply of guns?

A. Expansion of Supply

B. Contraction of Supply

C. Increase in Supply

D. Decrease in Supply

E. No effect

5. What effect will rise in price of carrots have on supply of potatoes?

A. Expansion of Supply

B. Contraction of Supply

C. Increase in Supply

D. Decrease in Supply

E. No effect

6. What effect will rise in price of cigarettes have on supply of lighter?

A. Expansion of Supply

B. Contraction of Supply

C. Increase in Supply

D. Decrease in Supply

E. No effect



9 Speculation



What, according to you, is speculation for an asset?

9

### Speculatio n

- Buyers' and sellers' actions are sometimes influenced by their expectations regarding future price movements.
- Speculation is where people make trading decisions based on expectations of future price movements.

### For example

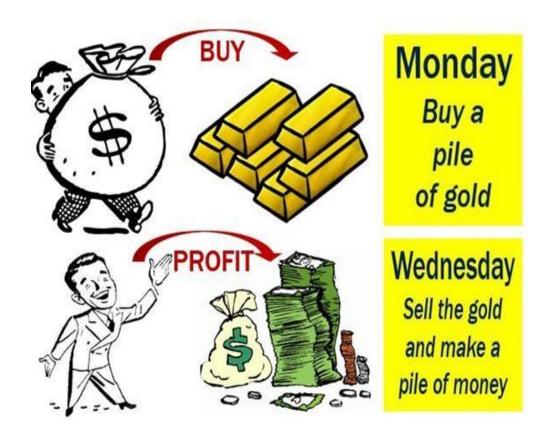
If traders expect a share price to rise, they will buy the share in anticipation that it will do so. This extra demand will itself lead to a rise in the share price.



9

## Speculatio n

Example - Speculation

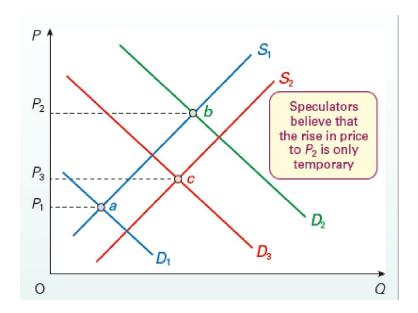


### 9.1 Stabilising speculation

This occurs when speculators believe that the price change that has occurred is temporary.

### For example

In times of plenty and low prices, farmers may hold back supplies of produce to the market in anticipation of higher prices in the future. Such action reduces the fall in the current price. Similarly, in times of shortage and high prices, farmers may release supplies so that the market price rises by less than would otherwise be the case.



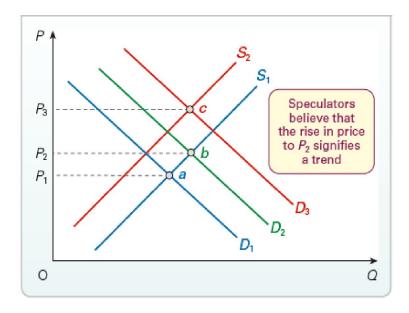
## 9.2

# **Destabilising speculation**

• It occurs when speculators believe that there will be further price changes in the same direction.

#### For example

If the price of oil increases and traders buy oil in anticipation of a further price rise, the increased demand will lead to a larger overall price rise than would otherwise have arisen.





### 10 Uncertainty



Is there any difference between risk and uncertainty?

What are the uncertainties in relation to the price of the product, that a firm, selling a good or service, would expect? What can be the potential solutions of these uncertainties?

### 10 Uncertainty

- Uncertainty refers to a situation in which the probabilities of the different possible outcomes are not known.
- Risk refers a situation in which the probabilities of the different possible outcomes are known, but it is not known which outcome will occur.
- Most economic decisions are made in a situation of uncertainty and peoples' decisions will reflect their attitudes to uncertainty and risk.

## 10.1 Dealing with Uncertainty

- 1. Holding stocks of goods and services which can be supplied to the market when prices are favourable
- 2. Purchasing information, eg market research and trade publications
- 3. Using futures and forwards
- 4. Using insurance.



## 11 Control of price



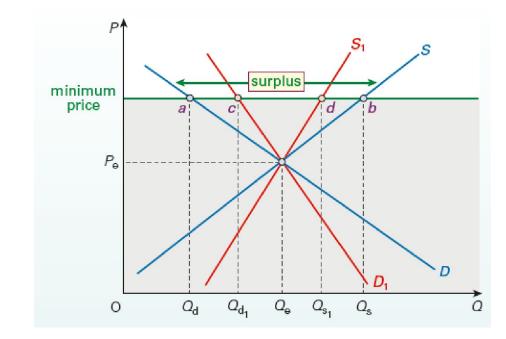
Is the equilibrium price, i.e. the price at which demand and supply is equal, desirable for the economy?

### 11 Control of price

- At the equilibrium price, there will be no shortage or surplus.
- The equilibrium price, however, may not be the most desirable price.
- The government, therefore, may prefer to keep prices above or below the market clearing level i.e. control the price.

### Price floor - Setting minimum (high) price

- If the government sets a minimum price above the equilibrium (a price floor), there will be a surplus.
- The government sets minimum prices to prevent them from falling below a certain level.





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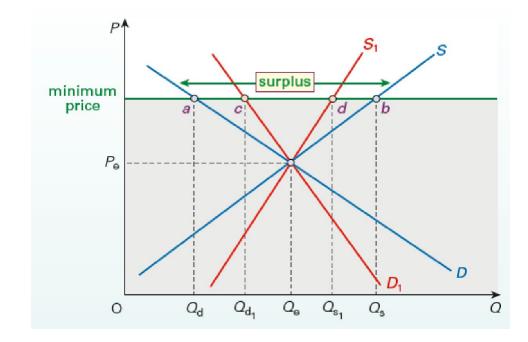
What are the reasons that a price floor on a particular good/service is set? Give examples of products on which government can/should set price floor.

It may do this for various reasons:

- To create a surplus
- To determine the consumption
- To protect consumer income

Problem associate with Price flooring

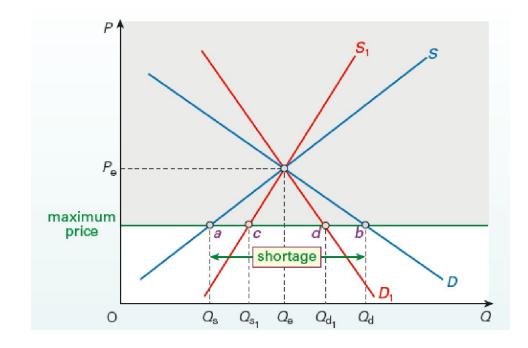
- Firms with surpluses may try to evade the price control and cut their prices.
- High prices may cushion inefficiency.
- High price may discourage firms from producing alternative goods which they could produce more efficiently or which are in higher demand, but which nevertheless have a lower (free-market) price.



# Price Ceiling

### Price ceiling - Setting maximum (low) price

- If the government sets a maximum price below the equilibrium (a price ceiling), there will be a shortage.
- The government may set maximum prices to prevent them from rising above a certain level.





# Price Ceiling

What are the reasons that a price ceiling on a particular good/service is set? Give examples of products on which government can/should set price ceiling.

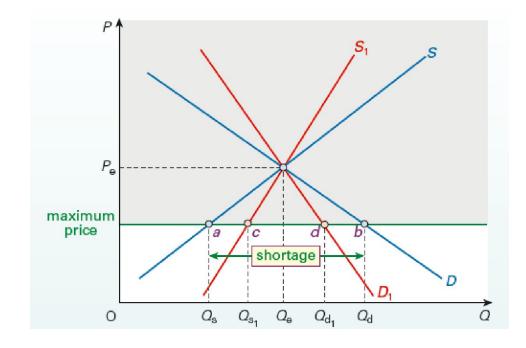
# 11.2 Price Ceiling

- The rationale for this type of policy is usually one of fairness,
- Government setting maximum prices for basic goods so that people on lower incomes can afford.
   This may be a particular issue in times of famine or war.
- The resulting shortages, however, create further problems.
- If the government merely sets prices and does not intervene further, the shortages will lead to sellers having to allocate the good amongst its potential customers in one or more of the following ways:
  - 1. 'First-come, first-served' basis.
  - 2. Random ballot.
  - Favored customers.
  - 4. A measure of merit.
  - 5. A rule or regulation.

# Price Ceiling

### To minimise the problem of shortage of supply

- By direct government production, or by giving subsidies or tax relief to firms.
- Alternatively, it may attempt to reduce demand: by the production of more alternative goods or by controlling people's incomes.







What is the difference between direct tax and indirect tax? Give examples of types of currently applicable Indirect tax

This taxes are compulsory to pay

Example

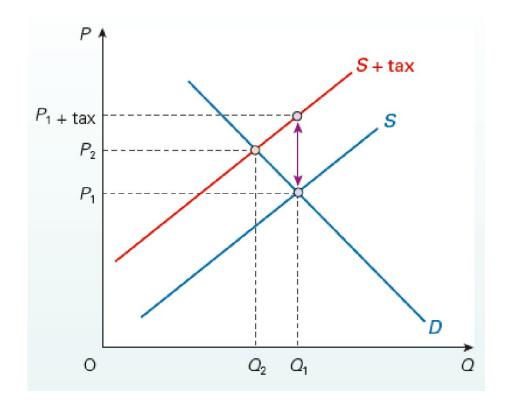
Value added tax (VAT) and excise duties on cigarettes, petrol and alcoholic drinks.

These taxes can be a fixed amount per unit sold – a specific tax.



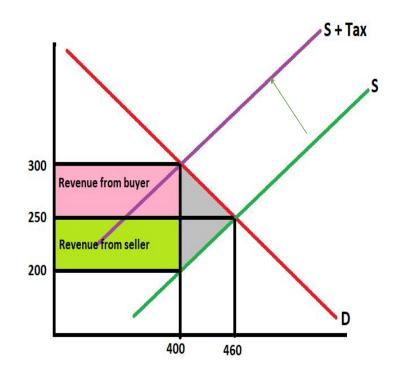
#### Effect of the tax

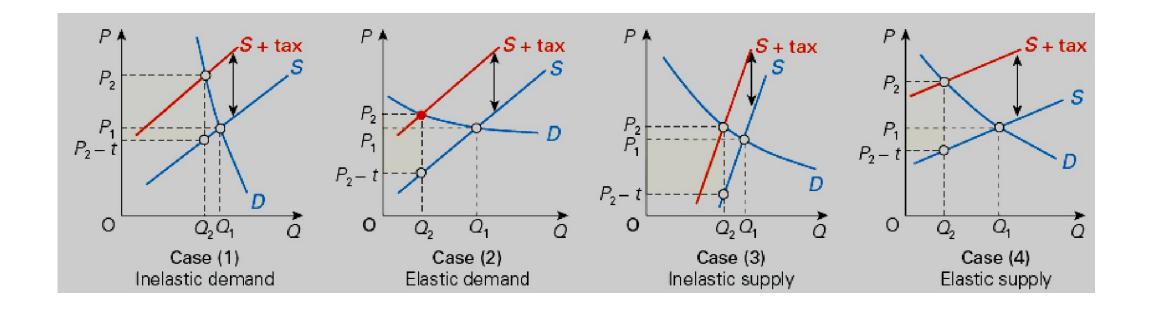
- Raise price and reduce quantity.
- Price will not rise by the full amount of the tax, however, because the demand curve is downward sloping.
- The burden or incidence of such taxes is distributed between consumers and producers.
- Consumers pay to the extent that price rises. Producers pay to the extent that this rise in price is not sufficient to cover the tax.



#### Conclusion

- 1. Quantity will fall less, and hence tax revenue for the government will be greater, the less elastic are demand and supply.
- 2. Price will rise more, and hence the consumers' share of the tax will be larger, the less elastic is demand and the more elastic is supply.
- 3. Price will rise less, and hence the producers' share will be larger, the more elastic is demand and the less elastic is supply







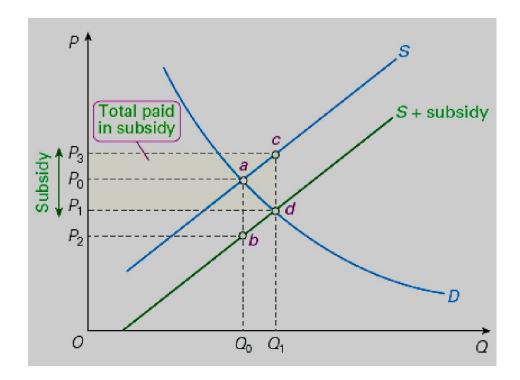
### 13 Subsidies

• Subsidy is a payment by the government to a producer or consumer and so is the opposite of a tax.



### 13 Subsidies

- When a government pays a subsidy to the producer it has the effect of shifting the supply curve downwards by the amount of the subsidy
- Subsidy is passed on to the consumer depends on the price elasticity of demand and supply.
- The consumer's share of the subsidy will be greater (i.e. the price fall will be greater), the less elastic the demand and the more elastic the supply.







Give examples of advertisement which persuaded you to purchased their product



?

What does this advertisement depict? Is this advertisement ethical?



Audi trolling its 4 rivals through 1 commercial. Notice how these keychains make up the Audi logo at the top depicting that Audi has qualities of all four combined



Burger King trolling McDonalds



Watch McDonald's reply in the following video



**Advertising** is the paid communication of firms and other organizations directed towards consumers and the broad society.

#### Aim

- To inform consumer about product
- To create desire to buy product



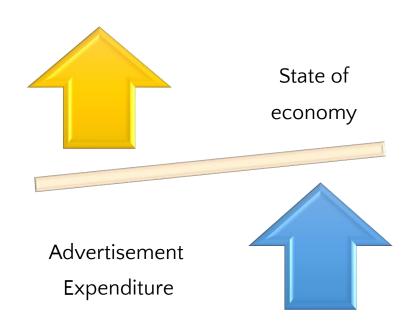


Factors to be considered while advertising

### State of economy

Advertising expenditure is very sensitive to the state of the economy, tending to increase substantially when demand is high and profits are growing and to be cut during periods of recession or slow growth.

Advertisement & state of economy has direct Relation





## 14.1 Advertising Media

You want to advertise a bicycle, suitable to ride in uneven terrains, in rural village. Which advertising medias will you use and why?



## 14.1 Advertising Media

You want to advertise a particular brand of shoes casually worn by people in their twenties. Which advertising medias will you use and why?



# 14.1 Advertising Media

- Newspaper & Magazine
- Email
- Radio
- Television
- Film
- Outdoor
- Window Display
- Exhibition
- Social Media



#### 14.2 Product Sectors

- Consumables
   For example :- Food, Cosmetics etc
- Consumer Durable
   For example :- Household Appliances
- Service For example :- Banking, Insurance etc

#### 15 Ratios

#### Example

Advertising/sales ratio = 
$$\frac{100}{200}$$
 = 0.5 = 50%

Advertising/sales ratio = 
$$\frac{300}{200}$$
 = 1.5 = 150%

A low ratio indicates that the advertising campaign generated high sales relative to the advertising expense

A limitation on the use of the advertising/sales ratio is that the ratio does not indicate the absolute amount spent advertising a product.

### 15 Ratios

- Market structure with the ratio tending to be high in oligopolistic markets
- Product characteristics with the ratio tending to be high for products that:
  - represent a large expenditure for consumers, eg consumer durables
  - are new
  - have a constantly changing customer base, eg educational services.



16 Effect of Advertising

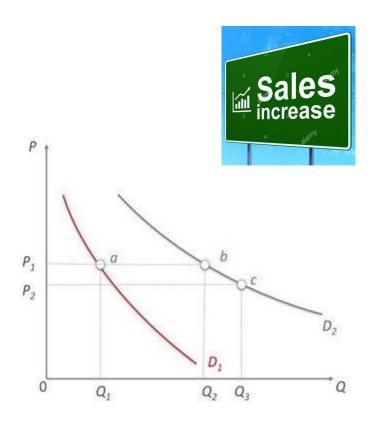


Explain how advertising and elasticity of demand of a product are interconnected

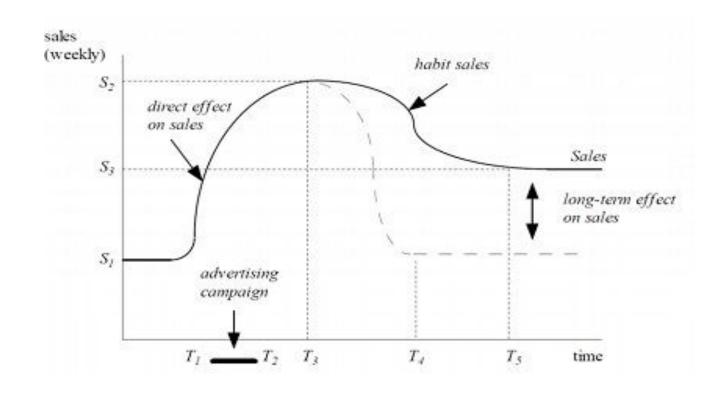
### Effect of Advertising

Advertising of a product is intended to:

- Shift the product's demand curve to the right (by bringing the product more to consumers' attention and increasing the attractiveness and marginal utility of the product)
- Make the product's demand less price-elastic (by creating brand loyalty and so reducing the number of perceived substitute goods, enabling the firm to increase prices without a substantial decrease in demand).



# Effect of Advertising



#### 16

## **Effect of Advertising**

#### Advertising - Vivo

- Vivo had entered India's smartphone market in 2012 with the launch the Vivo X1. Since then, Vivo has seen good growth in the country. It has the capacity to produce over 3 crore smartphones annually.
- Vivo came out with its Diwali campaign recently which was all about spreading the message of joy and hope. The brand also launched a new product and promoted it aggressively. It also bought ad spots during the IPL by sponsoring the IPL.
- Vivo became one of the largest selling smartphone brands after Xiaomi and Samsung. On account of heavy advertising spends, it increased its market share from 6% in the 1<sup>st</sup> quarter of 2018 to 18% in the 1<sup>st</sup> quarter of 2021

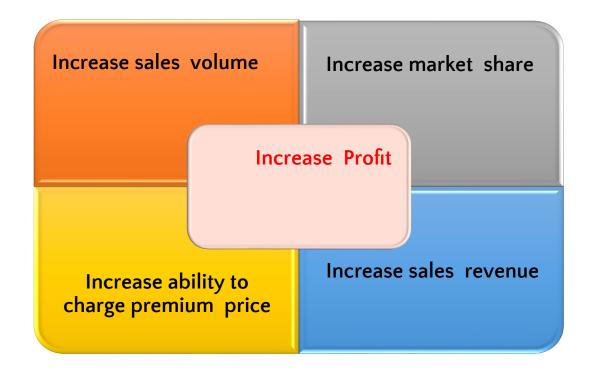








# 16.1 Effect of Advertising on profit





### 17 Advantages of Advertising



Advertising is beneficial not just for the company but also for the society. What advantages of advertising, other than those for companies, can you think of?

### 17 Advantages of Advertising

- Provide information to consumers
- Breaking down barrier to entry
- Emphasizing on product development
- More competition on price
- Increase sales leading to economies of scale



Disadvantages of Advertising



Advertising can be harmful for society. What disadvantages/limitations of advertising can you think of?

### 18

## Disadvantages of Advertising

- Distorting Consumer's decision
- Creating wants & Increase Scarcity
- The opportunity cost
- Increase materialism
- Increase cost & price
- Creating a barrier to entry by promoting loyalty to existing brands
- Unwanted side-effects for society, for example unsightly or tasteless adverts.



Recap Demand = Desire + Willingness to purchase + Ability to pay + Availability of commodity

- Individual Demand Demand made by sole Person
- Market Demand Demand made by everyone collectively
- Quantity demanded & Price have Inverse Relationship

- Determinants of Demand
  - 1. Price
  - 2. Income
  - 3. Population
  - 4. Necessity product
  - 5. Substitute Goods
  - 6. Complementary Goods
  - 7. Future Expectations of Price
  - 3. Advertisement
  - 9. Taxation
  - 10. Tastes, Habits and Preferences

Recap demand states that other things being equal, the demand for a product is inversely proportional to the price of the product.

- Exceptions of law of demand
  - 1. Prestige goods
  - 2. Speculation
  - 3. Illusion
  - 4. Ignorance
  - 5. Habitual Goods
  - 6. Giffen's paradox
- Movement Changes in price other things remain constant
- Change Changes in other determinants of demand other than price



Recap = Willingness to produce + Offer for sale + A Particular price

- Individual Supply Supply made by sole Supplier
- Market Supply Supply made by all suppliers collectively
- Quantity supplied & Price have Direct Relationship

- · Determinants of Demand
  - 1. Price
  - 2. Government policy
  - 3. Infrastructure
  - 4. Cost of production
  - 5. Future Expectations of Price
  - 6. Technology

Recap supply states that other things being equal, the supply for a product is directly proportional to the price of the product.

- Exceptions of law of supply
  - Agriculture Goods
  - Perishable Goods
  - Urgent need of Cash
  - Rare Goods
- Movement Changes in price other things remain constant
- Change Changes in other determinants of supply other than price

Recapitation is where people make trading decisions based on expectations of future price movements.

- Stabilizing Speculation This occurs when speculators believe that the price change that has occurred is temporary.
- Destabilizing Speculation This occurs when speculators believe that the price change that has occurred is permanent / over a long duration.
- **Uncertainty** refers to a situation in which the probabilities of the different possible outcomes are not known.
- The government, may prefer to keep prices above or below the market clearing level i.e. control the price.
- If the government sets a minimum price above the equilibrium (a price floor), there will be a surplus.
- If the government sets a maximum price below the equilibrium (a price ceiling), there will be a shortage.



Recap Taxes are taxes levied on purchase of goods and services.

- **Subsidies** are the payments by government to producers or consumers.
- **Advertising** is the paid communication of firms and other organizations directed towards consumers and the broad society.
- Advertising expenditure is very sensitive to the state of the economy. Advertisement & state of economy has direct Relation
- Advertising/sales ratio =  $\frac{Total\ expenditure\ on\ advertising\ product}{Total\ value\ of\ sales\ of\ product}$
- Advertising of a product is intended to:
  - 1. Shift the product's demand curve to the right
  - 2. Make the product's demand less price-elastic