Study Notes- BBA I st year, Business Economics

Theory of Demand

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Concept

General usage------ Desire, want, demand------ same

Economic Sense-------They have different meaning

Desire, want, demand

'I want to purchase a car'----------
(but do not have enough money)

Desire (wish+ no money)

I want to purchase a car, also have money to purchase it but do not want to spend on it----

want
(wish+money+no willingness)

I want to purchase a car, have suffic ent money to purchase it and willingness to spend money at a particular price and time-----

demand
(wish+ money+ willingness+ particular time and place)

From Megha Ahuja, Assistant Professor, Graduate School of Business, Tula's Institute, Dehradun

Remember,

In economics,

Every **desire is not a want** and every **want is not a demand**

From Megha Ahuja, Assistant Professor, Graduate School of Business, Tula's Institute, Dehradun

Demand

Demand may be defined as quantity of a commodity that a consumer is ready to buy at different possible prices of the commodity during a given period of time and in a given market

Concept of Demand

- Price Demand
- Income Demand
- Cross Demand
- Autonomous Demand
- Derived Demand
- Composite Demand
- Joint Demand

Price Demand

Price Demand express the relationship between price of a commodity and its quantity demanded. It refers to the different quantities of a commodity which will be brought per unit of time in a market at different prices. Other things being equal, more of a commodity is demanded at a lower price than at a higher price.

Income Demand

Income Demand expresses the relationship between income of a household and the quantity demanded of a commodity. It refers different quantities of a commodity which will be bought at different levels of money income.

Cross Demand

Cross Demand expresses the relationship between the price of a related commmodity and the quantity demanded of a commodity. It refers to the different quantities of a commodity which will be bought as a result of change in the price of related goods. In case of complementary goods (such as car and petrol) demand for one of the two commodities is inversly related to the change in the price of its complementary goods, whereas in case of subsititutes (eg. Tea and coffee) it moves in the same direction as the price of its substitutes.

Autonomous Demand

It is also known as direct demand. When a commodity is demanded for itself, it is direct demand.

When demand of product is independent and not associated with the demand of any other product, it is called autonomous demand.

Eg. Demand for a house, clothes, food etc. is autonomous and quite independent as these goods are meant for direct consumption for consumers.

Derived Demand

When a commodity is demanded due to a demand for another commodity that the former help to produce. In other words, When a product is demanded due to the demand of any product, it is called derived demand. For eg. The demand of cement, bricks, iron etc. for house building is a derived demand because it is directly related with the construction of buildings.

Similarly, the demand of petrol, diseal, brake-oil and mobile oil etc. is a derived demand because it is associated with the demand of auto-vehicles. Demand for all the raw materials is also derived demand because it is associated with the production of some other products.

Composite Demand

When a commodity can be put to several uses, it is said to possess composite Demand. For example, the demand for steel is a composite demand which can be used for manufacturing machines, tools, motor cars etc.

Joint Demand

When several things are needed to make a commodity it is called joint demand. For eg., the demand for a hot cup of tea is also the demand for hot tea leaves, milk , sugar and boiled water.

Law of Demand

Law of Demand explains the relationship between price and demand of a commodity.

Demand of a commodity decreases if the price increases and the demand increases, if the price falls, other things being equal.

Law of Demand.....Condt.

According to **Prof. Marshall** " The greater the amount to be sold, the smaller must be the price at which it is offered in order that it may find purchases; in other words, the amount demanded increases with fall in price and diminsihes with a rise in price“

According to **Samuelson** " When the price of a goods is raised (at the same time that of all other things are held constant) less of it will be demande.....people will buy more at lower price and buy less at higher prices"

Law of Demand.....Condt.

Thus, **Law of Demand** states that **other things being equal** the amount demanded increases with a fall in price and diminshes when price increases. Thus, it may be concluded that Law of Demand explains **inverse relationship** between price and demand of a commodity. Other things being equal, demand increase on a fall in price and diminshes on a rise in price.

Assumptions of the Law of Demand

Law of Demand holds good when " other things remains the same". It means factors influencing demand other than price are assumed to be constant. However, this law is based on following assumptions-

- There should be no change in the income of consumers.
- There should be no change in taste and preference of the consumers or it remain constant.
- Price of related commodities should remain unchanged.
- Consumers do not expect any change in price of the commodity in the near future.

Demand Schedule & Curve

Demand schedule- A demand schedule is a tabular statement that states the different quantities of a commodity that would be demanded at different prices. Demand schedule are of two types:-

- Individual Demand schedule
- Market Demand schedule

Demand curve- Demand curve may be defined as a graphical representation of demand schedule expressing the relationship between different quantities demanded at different possible prices of a commodity.

Individual demand schedule

Individual demand schedule- Individual demand schedule states the quantities of a commodity that a consumer or a household would buy at various prices.

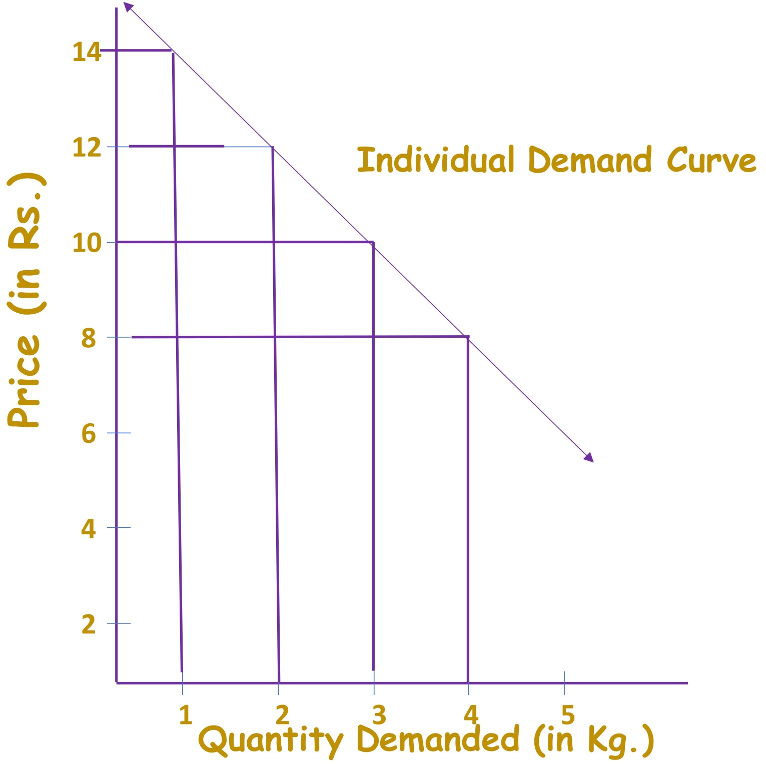
Individual Demand Schedule

Price of oranges	Quantity Demanded
(Rs.)	(Kg.)
8	4
10	3
12	2
14	1

Individual Demand Schedule & Curve

Individual Demand Schedule

Price of oranges	Quantity Demanded
(Rs.)	(Kg.)
8	4
10	3
12	2
14	1



Market Demand Schedule & Curve

Market Demand Schedule - Market demand schedule is an aggregate of individual demand schedules.
It expresses different quantities of a commodity that can be sold in a market at its different prices.

Market Demand Schedule

Price of oranges (Rs.)	Quantity Demanded (Individual Household) (Dzn.)				Total Quantity Demanded (Dzn.)
	A	B	C	D	
8	3.0	6.0	4.0	7.0	20
10	2.0	4.0	3.0	5.0	14
12	1.5	3.0	2.0	4.0	9.5
14	1.0	2.0	1.0	3.0	6

Further in topic -Law of Demand

- Determinants
- Causes
- Exceptions

Determinants of Demand

The factors that influemce decision to purchase a commodity are known as determinants of demand. There are many determinants/factors which greatly influence/affecting demand of a commodity.

Demand function

A demand function which shows the relationship between demand for a commodity and its various determinants.

There are two types of demand functions

- Individual Demand function
- Market Demand Function

Individual & Market demand function

Individual demand function:- looks at only/includes those determinants of demand that influence an individual household's demand for a commodity.

Market demand function- includes all those factors that influence the demand for commodity in a market

Individual Demand Function

Individual Demand Function is expressed as under

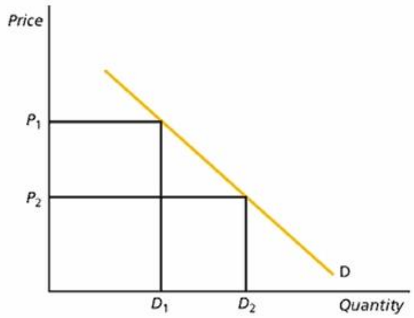
Dx= f(P, Po, Y, T)

Dx- Demand for commodity X is a function
P- Price of thr commodity
Po- Price of related commodity
Y- Consumer's Income
T- Taste and Preference

Individual Demand Function

1) Price of a commodity

The first important factor that influence our decision to purchase a particular commodity is its price. The demand of a commodity rises, with fall in price and demand of a commodity falls, with rise in price, other things remain unchanged. This inverse relationship between price of a commodity and its demand, is called Law of Demand.



Individual Demand Function

2) Price of related commodity

Demand of a commodity is also influenced by the change in the price of related goods. Related goods are of two types:-

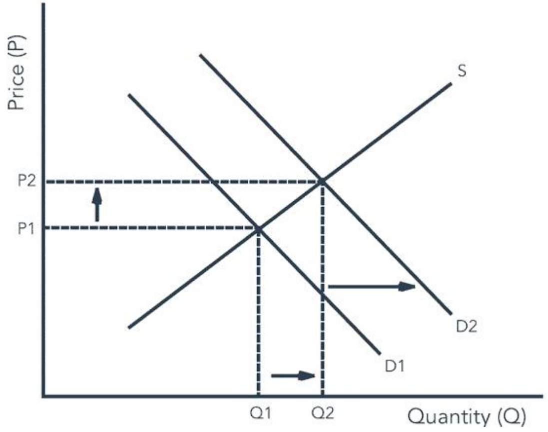
- Substitute goods
- Complementary goods

Individual Demand Function

2) Price of related commodity

a) Substitute goods

Competitive goods or substitute goods are those goods which one can be used / consumed (substitute with equal ease and satisfaction in place of another). For eg. tea or coffee, ball pen and ink pen , car and scooter, coca cola and pepsi.



In case of such goods, increase in the price of one causes increase in demand for the other and decrease in the price

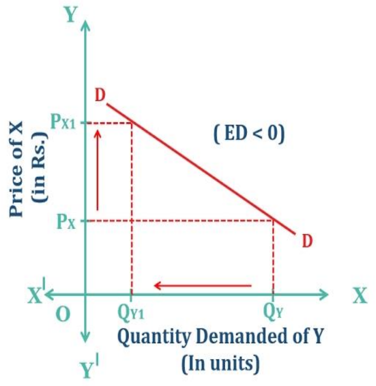
of one causes decrease in demand for the other. This type of relationship is known as direct relationship and is represented by the upward sloping demand curve.

Individual Demand Function

2) Price of related commodity

b) Complementary goods

Complementary goods are those goods wherein one commodity possesses utility and is demanded only when the second related commodity is also available. In other words, complementary goods are those goods which jointly satisfy a particular want. For example- ball pen and refill, ink pen and ink, bread and butter, scooter and petrol etc.



These goods are complementary to each other and are jointly demanded.

In case of complementary goods, a fall in the price of one causes increases in the demand of other, and a rise in the price of one causes decrease in the demand for the other.

For example when the price of petrol falls, the demand for scooter rises and vice versa. This sort of relationship is also known as inverse relationship represented by a downward sloping curve.

Individual Demand Function

3) Income of consumers

Ordinarily, with an increase in the income of an individual or a household, demand for goods increases. However this may not be true. We may distinguish between three types of commodities

a) Necessaries

b) Comforts and luxuries

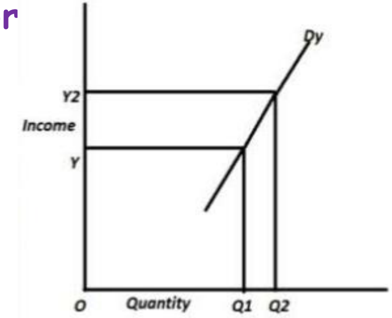
c) Inferior goods

Individual Demand Function

3) Income of consumers

a) Necessaries

Necessaries are those goods which are essential for human existence like food, clothing, shelter etc. These goods, therefore, occupy a place of priority in the consumer's order of preference. Ttherefore, even at low level of income, a large share of income is spent on such goods. With the rise in income it is possible that the consumer may demand more of these goods. But, there is a limit to which even a very rich man can eat foods. In other words, with an increase with an increase in income, demand for necessary goods may increase up to a point, but beyond that point, increases in income does not affect demand for this type of goods.

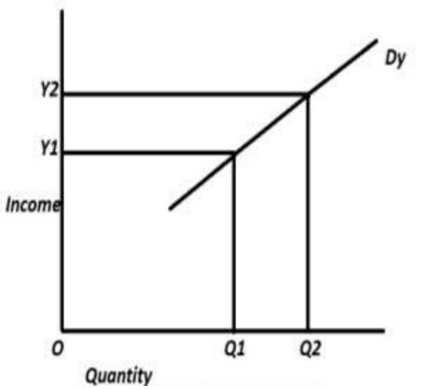


Individual Demand Function

3) Income of consumers

b) Comfort & Luxuries

Comforts and luxuries- are those goods which make our life more enjoyable; for example a simple meal is a necessity for existence, a four course meal is more enjoyable and a ten course dinner is a good luxury.



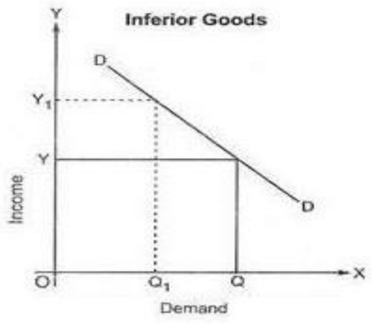
As income increases, demand for comfort and luxuries will also go up

Individual Demand Function

3) Income of consumers

c) Inferior Goods

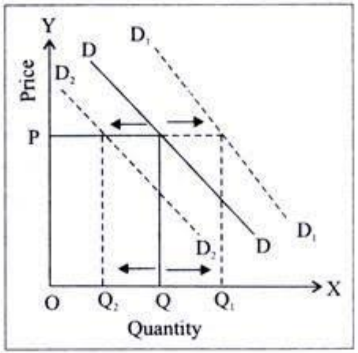
Inferior goods are those goods which are rated very low in the consumer's Estimation and for which better substitute may be available.
For example- coarse cloth and coarse grain. A consumer may not like to consume these goods because he may not afford to purchase better substitutions.
Therefore, when his income increases, a consumer will substitute inferior goods by better substitute i.e. with an increase in income, demand for inferior goods will fall and vice versa.



Individual Demand Function

4) Taste and preference of consumers

The demand for a commodity also depends upon taste and preference of consumers and change in them over a period of time. These include fashion, habit, custom. Taste and preference change according to the nature of business, age, family composition of an individual etc. Taste and preference of the consumer are influenced by advertisement, change in fashion, climate, new inventories etc. Other things being equal, demand for those goods increases for which consumers develop taste and preference. Contrary to it, if a consumer has no taste and preference for a product, its demand will decrease.



Market Demand Function

Market demand function = f (P,Po, Y, T, E, N, U, Yd)

Market demand function (Mkt. dx)= market demand for commodity (Dx) is a function(f) of

P- price of commodity

Po- price of related goods

Y-Consumer's income

T- Taste and preference

N- Population

Yd- Distribution of income

U-other factors

Population

Population:- Population bears a direct relationship with demand. Demand increases with increase in population and decreases with decrease in population.

Composition of population also affect demand. If the composition of population changes for eg. female population increases, demand for goods meant for women will go up. If there are more children, demand for such goods as baby- food, toys, books, stationery, biscuits, sweets etc. will be large. Similarly, if there are more older people in the region, such goods as spectacles, walking sticks, artificial teeth, tonic, fruits will be more in demand.

Distribution of Income

Distribution of income:- Market demand is also influenced by change in the distribution of income in the society.

If income is equally distributed, there will be more demand. Demand of the goods of necessities and comforts will be more.

If income is not equally distributed, there will be less demand. In the latter case, income will concentrate with the rich. Large sector of the society will be poor and because of its low income, market demand will also be low. Demand of goods of comforts and luxuries will be more.

Other factors

Advertising:- If firms are spending more on advertising their products, more awareness and favourable perception about the product will be created which will tend to increase demand.

Government policy:- Government policy is also responsible to influence the demand for a commodity. If the government imposes additional tax on various commodities, it would lead to an increase in the price of commodities. This would bring down the demand for such commodities.

Other factors…Condt….

Sociological factors:- Household's purchase are influenced by such sociological factors as classgroups, background, education, marital status, age and place of residence particularly urban and rural.

Weather conditions:- Change in weather conditions also influence consumer's demand. /Climate and weather conditions are also important factors influencing the demand of a commodity. For eg. the demand of fans, coolers, refrigerators etc. increases in summers. The demand of wool and woollen garments increases in winter. The demand for umbrellas and rain coats increases in rainy season.

Other factors….

Credit facilities:- If credit for purchasing good is easy available, it will lead to a rise in demand. Availability of credit to the consumer from the sellers, banks, relations and friends or from any other source encourages the consumer to buy more than what they would buy in the absence of credit facility. That is why the consumer who can borrow more can consumer than those who can borrow less.Credit facility affects mostly the demand for durable goods, particularly those which required for payment at the time of purchase.

Why does a demand curve slope downwards to the right?

Or

Why does the law of demand operate?

Or

Why more of the goods is purchased when its price falls?

Or

Reasons for the application of law of demand

The demand curve of a commodity slopes downward to the right because of the following reasons:-

1) **Law of diminishing marginal utility**:- The law of diminishing marginal utility states that with successive increase in the units of a commodity, every additional unit of that commodity gives lesser satisfaction to the consumer. A consumer always tries to maximize his satisfaction. He can do so by equalising the marginal utility of the commodity with its price.

In brief, consumer will get maximum satisfaction when

Marginal utility of commodity = Price of commodity

This equality between the marginal utility and price will be attained soon at a higher price at than at a lower price.

In table given below, when the price of oranges is 70 rupees each, in order to equate it with the Marginal utility the household will purchase 8 oranges. Now suppose that the price increases to 90 rupees. In order to equate with the new price with the marginal utility the household will now purchase 7 oranges. It means lesser units of orange will be demanded at a higher price. Similarly, if the price of orange becomes 40 rupees per unit, the household in order to equate the marginal utility of orange with its price will now purchase 9 oranges. In other words, more oranges will be demanded at a lower price.

Quantity of oranges (Units)	Marginal Utility (Rs.)
6	100
7	90
8	70
9	40

Thus, according to this law, as a consumer, in a given time, increases the consumption of a thing/ commodity, the utility from each successive unit goes on diminishing. A consumer gets maximum satisfaction when the price of the commodity is equal to its marginal utility. As more units are bought then marginal utility diminishes. Consequently, a consumer will buy more and more units of a commodity only when he has to pay less and less price for each successive unit.

It is therefore, clear that **with fall in price more units of a commodity will be demanded and with rise in price less units of commodity will be demanded**

2) **Change in number of consumers**:- When price of a commodity falls, two effects are quite possible. Firstly, new (additional) buyers enter the market, i.e. consumer, who could not afford to buy that commodity previously, start demanding it at reduced price. Secondly, old consumers or buyers purchase more of the same commodity by spending the same amount of money. As a result, old and new buyers push up the demand for a commodity when price falls.

For e.g. Suppose the price of the butter falls from Rs. 150 per kg to Rs. 125 per kg. Many households who could not afford to buy at a higher price will find it now within their means to buy butter when its price comes to Rs. 25 per kg.

Moreover, the old purchases by spending the same amount of money i.e. Rs. 150 can now purchase more butter and vice versa in the case of rise in price.

3) **Diverse use of commodity**:- A commodity having different uses is generally used at a large scale. For example, milk is used for drinking, for preparing tea, curd, sweets, cheese etc.. **If there is an increase in the price of such products, they will be used only for important uses and their demand will fall. On the contrary, with the fall in price, they will put to various uses and their demand will rise. Hence, the demand curve slope downwards to the right.**

4) **Income effect:-** A change in quantity demanded as a result of change in real income caused by change in price of a commodity is called **Income effect**.

Any change in the price of a commodity affects the purchasing power or real income of the consumer (although his money income remains the same). When a price of a commodity falls, an individual household can purchase more of the commodity. Likewise, at a higher price, he can purchase only smaller quantities.

For e.g. If the price of sugar is Rs. 30 per kg and 5 kg sugar is used in a family in a month. Suppose the price of sugar decreases Rs. 25 per kg, the consumer will be saving Rs. 25 in purchasing the same quantity of sugar (i.e. he can purchase 1kg extra). He can consume more sugar because of such savings and thus, the demand for sugar will increase on a fall in price. It is called Income effect. Similarly, increase in the price of a commodity is equal to the decrease in the income of a consumer and will result in decrease in the demand of a commodity.

Real income (purchasing power) is that income which is measured in terms of goods and services.

5) **Substitution effect**:- Substitution effect refers to substitution of one commodity for the other when it becomes relatively cheaper.

It is an important cause of the application of Law of demand. When the price of a commodity increases, consumers prefer to purchase its substitute goods because they find these goods relatively cheaper. Similarly, when the price of a commodity falls, consumers prefer to consume this commodity in place of its substitute goods.

For e.g.- Suppose the prices of tea and coffee are Rs. 10 and Rs. 20 respectively. Now if the price of tea increases to Rs. 15 per Cup, the relative price of coffee which is a substitute of tea diminishes. As a result, the household will increase the demand for coffee, consequently the demand for tea will decline.

The combined effect of income effect and substitution effect are called as a price effect.

Exceptions to the Law of demand

From Megha Ahuja, Assistant Professor, Graduate School of Business, Tula's Institute, Dehradun

Exceptions to the law of demand

Generally, less of a good is demanded at Higher price, and more of it is demanded at a lower price.

However, there are situations when this relationship between Price and Demand may not hold good. These are known as **exceptions to the Law of Demand.**

In these situations, more may be demanded at a higher price and less may be demanded at a lower price. In such a situation, demand curve will be have a positive slope i.e. it will move upwards.

Some of the important exceptions are as follow:-

1) Giffen goods

Giffen goods are a special type of inferior goods (named after the economist Sir Robert Giffen who made this proposition popular) such that a rise in price leads to an increase in demand for these goods, and vice versa.

According to Giffen " when the price of bread increased, low paid workers purchased more bread and with the fall in price, the demand for bread declined"

Giffen goods are the inferior goods such as Jowar and Bajra in comparison to wheat etc.

Giffen goods....condt

When the price of giffen goods such as Jowar and Bajra fall, their demand also goes down. This is because of the fact that with the fall in the price of giffen goods, the real income of household increases (purchasing power) and they tend to substitute giffen goods by superior goods (say wheat). This is because the consumers divert their purchasing power caused by fall in price of giffen goods to purchase superior goods. As a result, demand for such inferior goods whose price has fallen, also falls and vice versa.

2) Conspicuous necessities

Another important exception occur in case of such commodities as through their constant use, because of fashion or prestige value attached to them have become necessities of life.

A commodity may be a necessity for one household and may be luxury for another. Fridge, TV, CD player etc. are examples in this regard. For middle class families, these products have become necessities as they convey a certain level of standard of living. Their demand increases, even though their price increases.

3) Future change in price

Law of demand does not apply when prices are expected to change further. When the prices are rising, households tend to purchase larger quantities of the commodity, out of apprehension that prices may go up further likewise, when prices are expected to fall further, a reduced price may not be sufficient incentive to induce households to purchase more.

4) Change in fashion

A change in fashion and taste affects the market for a commodity. When a new fashion product replaces old fashion product, no amount of reduction in price of the latter is sufficient to clear the stocks. New fashion products, on the other hand, will have more customers even though its price may be going up.

5) Conspicuous consumption

A few goods like diamond etc. are purchased by rich and wealthy sections of the society because the prices of these goods are so high that they are beyond the reach of the common man. More of these commodities is demanded when their prices go up very high. Velben has termed it as conspicuous consumption .Law of demand does not apply here.

6) Ignorance

Consumer's Ignorance is another factor at that time Law of demand does not apply.
Sometimes, out of ignorance, the consumer feels that a good is worthless if its price is low and so purchases very little quantity of the same. But, if the same good is priced high, it will attract more demand.

7) Emergency situations:

The law of demand does not apply during emergencies like famine, flood, war and internal disturbance. At such time, households behave in an abnormal way. People buy their necessities in larger quantities even at higher prices to make provision for uncertain/unexpected future.