



MANAGERIAL ECONOMICS

Prof. Trupti Mishra

Shailesh J. Mehta School of Management,
IIT Bombay

Lecture No - 8 : Theory of Demand

Recap from last module

- Introduction to Managerial economics
- Basic concepts used in business decision making
- Important tool and techniques of economic analysis
- Optimization techniques

- Market works on certain market principles – law that governs the working of market system- **market mechanism**.
- The working of market system – **fundamental Laws of market**
- **Law of Demand and Supply**

Session Outline

- Defining Demand
- Law of Demand
- Demand Schedule/Demand Curve/Demand Function
- Factors affecting Demand
- Change/Shift in the Demand

Session Outline

- Supply/ Law of Supply
- Supply Schedule/Supply Curve/Supply Function
- Factors affecting Supply
- Change/Shift in the Supply
- Market Equilibrium

What is Demand?

A relation showing the quantities of a good that consumers are willing and able to buy at various prices per period, other things constant.

What is Demand?

Demand for commodity implies

Desire to acquire it

Willingness to pay for it

Ability to pay for it

Types of Demand : Individual and Market demand

The quantity of a commodity an individual is willing and able to purchase at a particular price, during a specific time period, given his/her money income, his/her taste, and prices of other commodities, such as substitutes and complements, is referred to as the **individual demand for the commodity**.

Types of Demand :Individual and Market demand

The total quantity which all the consumers of the commodity are willing and able to purchase at a given price per time unit, given their money incomes, their tastes, and prices of other commodities, is referred to as the **market demand for the commodity.**

Types of Demand : Demand for firm's and industry product

The quantity of a firm's product that can be sold at a given price over time is known as the **demand for the firm's product**.

The sum of demand for the products of all firms in the industry is referred to as the **market demand or industry demand for the product**.

Types of Demand : autonomous and derived demand

An autonomous demand or direct demand for a commodity is one that arises on its own out of a natural desire to consume or possess a commodity. This type of demand is independent of the demand for other commodities

Types of Demand : autonomous and derived demand

The demand for a commodity which arises from the demand for other commodities, called **'parent products'** is called **derived demand**. *Demand for land, fertilizers and agricultural tools*, is a derived demand because these commodities are demanded due to demand for food.

Types of Demand: Demand for durable and non-durable goods

Durable goods are those goods for which the total utility or usefulness is not exhaustible in the short-run use. Such goods can be used repeatedly over a period of time.

The demand for non-durable goods depends largely on their current prices, consumers' income, and fashion. It is also subject to frequent changes.

Types of Demand : short-term and long-term demand.

Short-term demand refers to the demand for goods over a short period.

The long-term demand refers to the demand which exists over a long period of time.

Law of Demand

Relationship between Price and quantity demanded is an economic law.

The quantity of a good demanded per period relates inversely to its price, other things constant.

Exception to Law of Demand :Giffen Goods

A **Giffen good** is one which people paradoxically consume more of as the price rises, violating the law of demand.

Exception to Law of Demand :Giffen Goods

During the Irish Potato Famine of the 19th century, potatoes were considered a Giffen good. Potatoes were the largest staple in the Irish diet, so as the price rose it had a large impact on income.

People responded by cutting out on luxury goods such as meat and vegetables, and instead bought more potatoes. Therefore, as the price of potatoes increased, so did the demand

-Exception to Law of Demand :Veblen Effect

concepts of conspicuous consumption and status-seeking

-Exception to Law of Demand :Veblen Effect

The more expensive these commodities become, the higher their value as a status symbol and hence, the greater the demand for them. The amount demanded of these commodities increase with an increase in their price and decrease with a decrease in their price.

- Exception to Law of Demand :Prediction
- Expectation of change in the price of commodity

-Exception to Law of Demand :Share Market

Demand Schedule and Demand Curve

- The **demand schedule** is a table that shows the relationship between the price of the good and the quantity demanded.
- The **demand curve** is a graph of the relationship between the price of a good and the quantity demanded.

Demand Schedule and Demand Curve

	Price(in RS)	Quantity Demanded (per week)
A	15	8
B	12	14
C	9	20
D	6	26
E	3	32

Individual point on demand curve / schedule shows quantity demanded and entire demand curve/schedule shows demand.

Factors Influencing Demand

- Price of good or service (P)
- Incomes of consumers (M)
- Prices of related goods & services (P_R)
- Taste patterns of the consumer (T)
- Expected future price of product (P_e)
- Number of consumers in market (N)

Demand function shows relation between P & Qd when all other variables are held constant

- $Q_d = f(P)$
- $\Delta Q_d / \Delta P$ must be negative

$$Q_d = 500 - 5P$$

- At zero price, demand is equal to 500 units.
- (-) shows inverse relationship between price and demand .
- (5) Implies that for each one rupees change is price demand changes by 5 units

Generalized Demand Function

$$\cdot Q_d = f(P, M, P_R, \mathfrak{I}, P_e, N)$$

$$Q_d = a + bP + cM + dP_R + e\mathfrak{I} + fP_e + gN$$

***b, c, d, e, f, & g* are slope parameters**

Measure effect on Q_d of changing one of the variables while holding the others constant

Sign of parameter shows how variable is related to Q_d

Positive sign indicates direct relationship

Negative sign indicates inverse relationship

Factors Influencing Demand

Variable	Relation to Q_d	Sign of Slope Parameter
P	Inverse	$b = \Delta Q_d / \Delta P$ is negative
M	Direct for normal goods Inverse for inferior goods	
PR	Direct for substitutes Inverse for complements	$d = \Delta Q_d / \Delta PR$ is positive $d = \Delta Q_d / \Delta PR$ is negative
T	Direct	$e = \Delta Q_d / \Delta T$ is positive
Pe	Direct	$f = \Delta Q_d / \Delta Pe$ is positive
N	Direct	$g = \Delta Q_d / \Delta N$ is positive

Market Demand

Market demand is the sum of all individual demands at each possible price

Graphically, individual demand curves are summed horizontally to obtain the market demand curve.

Session References

Managerial Economics; D N Dwivedi, 7th Edition