

WHAT ARE THE VARIOUS METHODS OF MEASURING ELASTICITY OF DEMAND?

Elasticity of demand is known as price-elasticity of demand. Because elasticity of demand is the degree of change in amount demanded of a commodity in response to a change in price. Price elasticity of demand can be measured through three popular methods. These methods are:

1. Percentage method or Arithmetic method
2. Total Expenditure method
3. Graphic method or point method.

1. Percentage method:-

According to this method price elasticity is estimated by dividing the percentage change in amount demanded by the percentage change in price of the commodity. Thus given the percentage change of both amount demanded and price we can derive elasticity of demand. If the percentage change in amount demanded is greater than the percentage change in price, the coefficient thus derived will be greater than one.

If percentage change in amount demanded is less than percentage change in price, the elasticity is said to be less than one. But if percentage change of both amount demanded and price is same, elasticity of demand is said to be unit.

2. Total expenditure method

Total expenditure method was formulated by Alfred Marshall. The elasticity of demand can be measured on the basis of change in total expenditure in response to a change in price. It is worth noting that unlike percentage method a precise mathematical coefficient cannot be determined to know the elasticity of demand.

By the help of total expenditure method we can know whether the price elasticity is equal to one, greater than one, less than one. In such a method the initial expenditure before the change in price and the expenditure after the fall in price are compared. By such comparison, if it is found that the expenditure remains the same, elasticity of demand is One ($ed=1$).

If the total expenditure increases the elasticity of demand is greater than one ($ed>1$). If the total expenditure diminished with the change in price elasticity of demand is less than one ($ed<1$). The total expenditure method is illustrated by the following diagram.

3. Graphic method:

Graphic method is otherwise known as point method or Geometric method. This method was popularized by method. According to this method elasticity of demand is measured on different points on a straight line demand curve. The price elasticity of demand at a point on a straight line is equal to the lower segment of the demand curve divided by upper segment of the demand curve.

Thus at mid point on a straight-line demand curve, elasticity will be equal to unity; at higher points on the same demand curve, but to the left of the mid-point, elasticity will be greater than unity, at lower points on the demand curve, but to the right of the midpoint, elasticity will be less than unity.