Elasticity of Demand

Elasticity means sensitiveness or responsiveness of demand to the change in price. Price elasticity of demand is a measure of the responsiveness of consumers to a change in a product's cost. The more general term demand elasticity measures the impact of a change in any of a variety of factors including the product' s price.

This change, sensitiveness or responsiveness, may be small or great.

Types of Elasticity of Demand

Based on the variable that affects the demand, the elasticity of demand is of the following types. One point to note is that unless otherwise mentioned, whenever the elasticity of demand is mentioned, it implies price elasticity.

Price Elasticity

The price elasticity of demand is the response of the quantity demanded to change in the price of a commodity. It is assumed that the consumer's income, tastes, and prices of all other goods are steady. It is measured as a percentage change in the quantity demanded divided by the percentage change in price.

Income Elasticity

The income elasticity of demand is the degree of responsiveness of the quantity demanded to a change in the consumer's income.

Cross Elasticity

The cross elasticity of demand a commodity X for another commodity Y, is the change in demand of commodity X due to a change in the price of commodity Y.

Price elasticity of Demand

The demand for a product can be elastic or inelastic, depending on the rate of change in the demand with respect to change in price of a product.

Elastic demand is the one when the response of demand is greater with a small proportionate change in the price. On the other hand, inelastic demand is the one when there is relatively a less change in the demand with a greater change in the price.

Types of Price Elasticity of Demand

- Perfectly elastic demand
- Perfectly inelastic demand
- Relatively elastic demand
- Relatively inelastic demand
- Unitary elastic demand

1.Perfectly Elastic

Perfectly elastic demand is when price constant but there is a change in the demand i.e. increase or decrease of a commodity. Thus, the demand curve is parallel to the X-axis.

Here, $\mathbf{E_P} = \infty$

2. Perfectly inelastic demand

Perfectly inelastic demand is when the demand is constant or there is no change in the demand of a commodity even if the price changes i.e. increases or decreases.

Thus, the demand curve is parallel to the Y-axis. Demand for salt is an example of perfectly inelastic demand.

Here, $\mathbf{E_P = 0}$

3.Relatively elastic demand

Relatively elastic demand is when the proportionate change in demand is more than the proportionate change in the price.

In other words, this means that a little change in the price shall cause more change in demand. Thus, the demand curve slopes downward from left to right. An example of this is luxury goods.

Here, $\mathbf{E_P > 1}$

4.Relatively inelastic demand

Relatively inelastic demand is when the proportionate change in demand is less than the proportionate change in the price.

In other words, this means that more change in price shall cause less change in demand. Thus, the demand curve slopes downward from left to right but is steeper. An example of this is the necessary goods.

Here, $\mathbf{E_P < 1}$

5. Unitary elastic demand

Unitary elastic demand is when the proportionate change in demand is equal to the proportionate change in price.

In other words, it means that the change in demand is the same as the change in price it may increase or decrease.

Thus, the demand curve slopes downward from left to right but it is a hyperbola. An example of this is comfort goods.

Here, $\mathbf{E_P = 1}$