

Income Elasticity of Demand Formula

Income elasticity of demand or YED is referred to as the corresponding change in the demand of a product in response to change in consumer's income. It can also be defined as the ratio of change in quantity demanded by the change in customer income.

A higher YED indicates that when consumer income rises, there is a tendency to purchase more goods and services.

Similarly, when there is a drop in income, the customer shows a tendency towards frugal purchasing, which involves cutting down on buying more quantity of goods and services.

When the YED is lower the change in consumer income has little effect on the demand for the product.

Income elasticity of demand is a useful measure used by governments and businesses to determine the type of goods to be produced and the impact of changes in income on the demand of products of those businesses.

It can be used for predicting the economic growth of a country and the income of individuals in a country.

The mathematical representation of the income elasticity demand formula is

Income Elasticity of Demand (YED) = % change in quantity demanded / % change in income

Or $YED = \% \Delta \text{ in } Q_d / \% \text{ in } \Delta Y$

Types of Income Elasticity of Demand

There are five types of income elasticity of demand which are as follows

1. **High:** Increase in the consumer income leads to increase in quantity demanded for the product.
2. **Unitary:** The rise in income is very much in alignment with the quantity demanded.
3. **Low:** The rise in income is not that much aligned with the demand for quantity of the product.
4. **Zero:** The rise in income does not change the demand for products or in other words consumers demand the same quantity of products.

5. **Negative:** The rise in consumer income results in decline in the quantity demanded for the product.