

Price Elasticity of Demand

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Understanding Price Elasticity of Demand

Elasticity, when considering pricing and demand for goods and services, refers to how much demand for a good or service can change. You can think of elasticity as a rubber band—when demand for a good is elastic, it is like a stretchy rubber band and can stretch far beyond its original shape. If demand is inelastic, the rubber band was made very thick and tough, and you can't stretch it very far, if at all. Price elasticity of demand measures how a change in price affects a product's demand. If a price change creates a large change in demand, it is considered elastic. If a price change creates a small or no change in demand, it is inelastic.

If demand for some goods is very inelastic, consumption won't change regardless of price. That is, a reduction in price does not increase demand much, and an increase in price does not hurt demand. This usually happens when there is no good substitute for a product, so consumers must continue purchasing it even if the price changes.

If the quantity demanded of a product changes greatly in response to changes in its price, it is elastic. That is, the demand point for the product is stretched far from its prior point. If the quantity purchased shows a small change after a change in its price, it is inelastic. The quantity demanded didn't stretch much from its prior point.

Price elasticity of demand can be expressed mathematically as:

Price Elasticity of Demand = Percentage Change in Quantity Demanded ÷ Percentage Change in Price

Types of Price Elasticity of Demand

1) If the quantity of a product demanded or purchased changes more than the price changes, then the product is considered to be elastic.

2) If the change in quantity purchased is the same as the price change, then the product is said to have unit (or unitary) price elasticity. 3) If the quantity purchased changes less than the price, then the product is deemed inelastic.

For example, if the price goes up by 5%, but the demand falls by 10%, the product is elastic. If a price change of 10% creates a 10% change in demand, the product shows unitary elasticity. And if a price increase of 10% doesn't change demand, the product is inelastic.

What Makes a Product Elastic?

If a price change for a product causes a substantial change in either its supply or its demand, it is considered elastic. Generally, it means that there are acceptable substitutes for the product. Examples would be cookies, SUVs, and coffee.

What Makes a Product Inelastic?

If a price change for a product doesn't lead to much, if any, change in its supply or demand, it is considered inelastic. Generally, it means that the product is considered a necessity. Examples include gasoline, milk, and natural gas.

Factors That Affect Price Elasticity of Demand

A product's demand elasticity depends on various factors that can change over time. Some of these factors are within a business's control, while others are determined by market conditions.

1) Availability of Substitutes

The more easily a shopper can substitute one product for another, the more elastic the demand for those products will be. For example, if shoppers like coffee and tea equally, they will be happy to switch to tea if the price of coffee goes up. When this happens, the demand for coffee will fall. This is because coffee and tea are considered good [substitutes](#) for each other.

2)Urgency

The more discretionary a purchase is, the more its quantity demanded will fall in response to price increases. That is, the product demand has greater elasticity.

For example, imagine you're considering buying a new washing machine, but the current one still works; it's just old and outdated. If the price of a new washing machine goes up, you're likely to forgo that immediate purchase and wait until prices go down or the current machine breaks down.

The less discretionary a product is, the less its quantity demanded will fall in response to price changes.

3)Duration of Price Change

The length of time that the price change lasts also matters. Demand response to price fluctuations is different for a one-day sale than for a price change that lasts for a season or a year.

Clarity of time sensitivity is vital to understanding the price elasticity of demand and for comparing it with different products. Consumers may accept a seasonal price fluctuation rather than change their habits. For example, it will cost more to purchase a swimsuit in the summer than in the winter. But most consumers still buy their swimsuits in the summer because that's when they need them.