Épreuve de section européenne

Elasticity in economics

The price elasticity of demand of a product is a measure of the relationship between a change in the quantity demanded of this particular product and a change in its price. Price elasticity of demand is a term in economics often used when discussing price sensitivity. The formula for calculating the price elasticity of demand of a product is:

$$\text{price elasticity of demand} = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in price}}$$

If a small change in price is accompanied by a large change in quantity demanded, the product is said to be elastic (or responsive to price changes). Conversely, a product is inelastic if a large change in price is accompanied by a small amount of change in quantity demanded.

Price elasticity of demand measures the responsiveness of demand to changes in price for a particular product. If the price elasticity of demand is equal to 0, demand is perfectly inelastic (i.e., demand does not change when price changes). Values belonging to $]-1;0[\ \cup\ ]0;1[$ indicate that demand is inelastic (this occurs when the percent change in demand is less than the percent change in price). When price elasticity of demand equals one, demand is unit elastic (the percent change in demand is equal to the percent change in price). Finally, if the value is greater than 1 or less than -1, demand is perfectly elastic (demand is affected to a greater degree by changes in price). For example, if the quantity demanded for a product increases by 15% in response to a 10% increase in price, the price elasticity of demand would be $15\% \ / \ 10\% = 1.5$.

Businesses evaluate price elasticity of demand for various products to help predict the impact of a pricing on product sales. Typically, businesses charge higher prices if demand for the product is price inelastic.

Adapted from various sources

Questions

1. The price of a product has increased by 5 percent and in response, the quantity demand has decreased by 10 percent. Find out the price elasticity of demand of this product. Decide whether it's elastic or not.

2. The price elasticity of demand of a product is -3. It has been decided that its price should increase by one percent. Find out how the quantity demanded changes in response to this change in prices.

3. It is said that necessities tend to have inelastic demand while luxuries are more elastic. Explain that sentence and, if possible, give examples.

4. The price elasticity of a product is equal to 0. What does it mean?

5. Explain the last sentence of the text.