Price elasticity of demand (PED or E_d) is a measure used in economics to show the responsiveness, or elasticity, of the quantity demanded of a good or service to a change in its price. More precisely, it gives the percentage change in quantity demanded in response to a one percent change in price (ceteris paribus, i.e. holding constant all the other determinants of demand, such as income).

Price elasticities are almost always negative, although analysts tend to ignore the sign even though this can lead to ambiguity. Only goods which do not conform to the law of demand, such as Veblen and Giffen goods, have a positive PED. In general, the demand for a good is said to be *inelastic* (or *relatively inelastic*) when the PED is less than one (in absolute value): that is, changes in price have a relatively small effect on the quantity of the good demanded. The demand for a good is said to be *elastic* (or *relatively elastic*) when its PED is greater than one (in absolute value): that is, changes in price have a relatively large effect on the quantity of a good demanded.

Revenue is maximized when price is set so that the PED is exactly one. The PED of a good can also be used to predict the incidence (or "burden") of a tax on that good. Various research methods are used to determine price elasticity, including test markets, analysis of historical sales data and conjoint analyses

It is a measure of responsiveness of the quantity of a raw good or service demanded to changes in its price. The formula for the coefficient of price elasticity of demand for a good is:

$$e_{\langle R \rangle} = \frac{\mathrm{d}\,Q/Q}{\mathrm{d}\,P/P}$$