

Measuring and Interpreting elasticity

Econ 201/Haworth

The table below provides a summary of how to calculate each measure of elasticity, along with how to interpret your result.

E.g., if you calculate a measure of own-price elasticity and find that $\epsilon_D = -2.1$, then you can use the table below to interpret this measure as being elastic. Similarly, if you calculate income elasticity and find that $\epsilon_I = 3.4$, then you know that this good is a normal good and a luxury.

Elasticity measure	Calculation	Direction of Relationship (Positive vs Negative)	Magnitude of Relationship (Big effect vs Small effect)
Own-Price Elasticity	$\epsilon_D = \frac{\% \Delta Q_A}{\% \Delta P_A}$	$\epsilon_D < 0$ (always true)	$ \epsilon_D < 1$ (inelastic) $ \epsilon_D = 1$ (unit elastic) $ \epsilon_D > 1$ (elastic)
Income Elasticity	$\epsilon_I = \frac{\% \Delta Q_A}{\% \Delta I}$	$\epsilon_I < 0$ (inferior good) $\epsilon_I > 0$ (normal good)	$\epsilon_I < 1$ (necessity) $\epsilon_I > 1$ (luxury good)
Cross-Price Elasticity	$\epsilon_{CP} = \frac{\% \Delta Q_A}{\% \Delta P_B}$	$\epsilon_{CP} < 0$ (Goods A & B are complements) $\epsilon_{CP} > 0$ (Goods A & B are substitutes)	—