Income elasticity of demand

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What is income elasticity of demand?

Income elasticity: measures the responsiveness of demand to a change in income

- Demand for a product is *income elastic*: means that the change in demand is *proportionately greater* than the change in income (e.g., cars, fashion accessories, entertainment, holidays, luxury goods).
- Demand for a product is *income inelastic*: means that the change in demand is *proportionately less* than the percentage change in income (e.g., milk, food, heating fuel).

Calculation of income elasticity of demand

$$\text{income elasticity of demand} = \frac{\text{\% change in quantity demanded}}{\text{\% change in income}} \quad (1)$$

- income elasticity > 1 (*demand is income elastic*): change in demand is proportionately greater than change in income
- income elasticity < 1 (*demand is income inelastic*): change in demand is proportionately less than the change in income
- income elasticity can also tell us whether a good is a *normal good* or an *inferior good*
  - *normal good* (positive value): increase in income results in *increase* in demand
  - *inferior good* (negative): increase in income results in *decrease* in demand

Good	Income elasticity	Elastic or inelastic	Type of good	The effect of a 10% increase in income
Product W	0.6	Inelastic	Normal	Demand would increase by 6%
Product X	–2.4	Elastic	Inferior	Demand would fall by 24%
Product Y	1.9	Elastic	Normal	Demand would rise by 19%
Product Z	–0.8	Inelastic	Inferior	Demand would fall by 8%

THE FACTORS INFLUENCING INCOME ELASTICITY OF DEMAND

- *Factors* that influence income elasticity of demand
  - If goods are *necessities*: goods that consumers *need* to buy.
  - If goods are *luxuries*: goods that consumers like to buy if they can afford it.
- *Price* of a product:
  - Relatively *cheap* products will be *income inelastic*
  - Relatively *expensive* products will be *income elastic*

THE SIGNIFICANCE OF INCOME ELASTICITY OF DEMAND TO BUSINESS

Businesses may use income elasticity of demand in order to *predict* how changes in income (in the economy) will affect the demand for their products:

- Businesses selling goods with *high* income elasticity
  - these goods are often *cyclical* (very sensitive to changes in income)
  - Example: air travel, restaurants, luxury goods
  - Difficult to *forecast* demand for goods that depend on *business cycles*
- Businesses selling goods with *low* income elasticity
  - these goods are more *stable* through the business cycle
  - Example: basic goods (farmed products)
  - in countries with *steady economic growth*, the demand for *inferior goods* and *normal necessities* tends to decline

The significance of income elasticity of demand to business

- Production planning
  - if businesses *know* the income elasticity of demand for their products they can respond to predicted changes in incomes
  - Cases:
    1. Products have *income elastic demand*: changes in income will affect goods. Expansion $\rightarrow$ ensure that there is enough capacity; Recession $\rightarrow$ cut output (e.g., car industry in 2008 crisis)
    2. Products that are *inferior goods* prepare production when recession is coming (demand for inferior goods *increase* when income goes down)

Key terms

- **Discretionary expenditure**: non-essential spending or spending that is not automatic
- **Income elastic demand**: the percentage change in demand for a product is proportionately greater than the percentage change in income
- **Income elasticity of demand**: the responsiveness of demand to a change in income