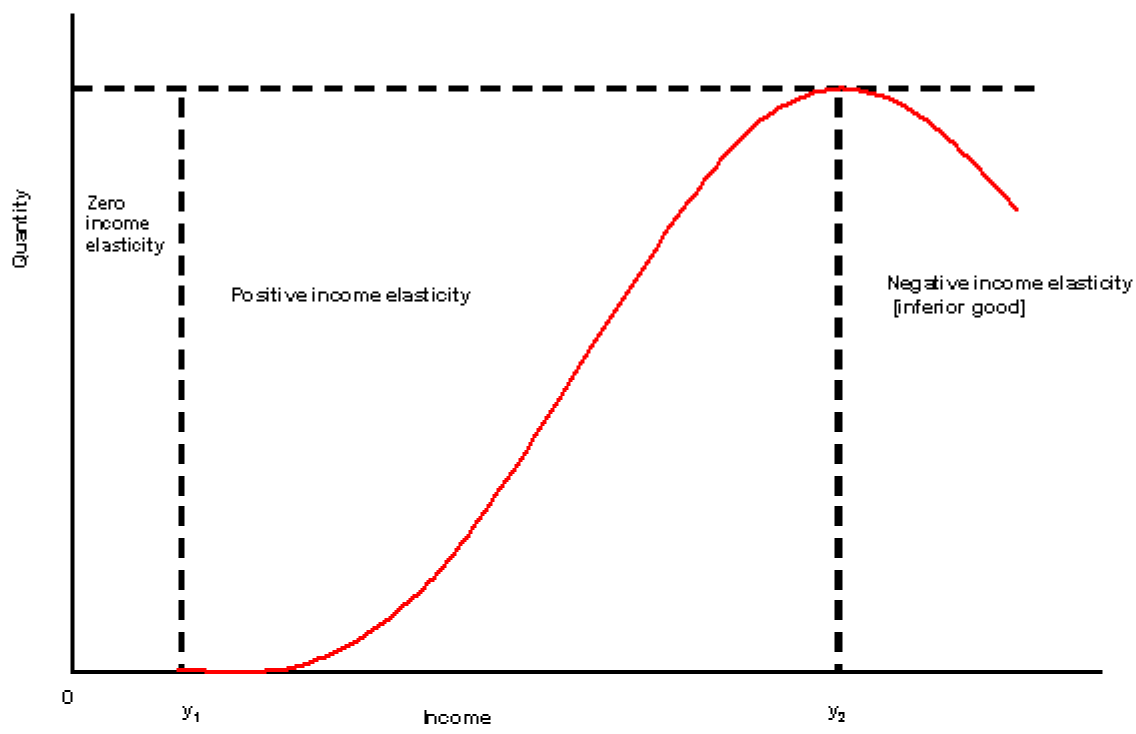
Income Elasticity Glossary

Complements: are goods that are used in conjunction with other goods.
Income elasticity of demand: the percentage change in demand divided by the percentage change in income.
Inelastic: the proportional change in quantity is less than the proportional change in price (E < 1).
Inferior goods: goods whose consumption decreases when income increases. (Income elasticity is negative).
Luxuries: normal goods that have an income elasticity greater than one.
Necessity: normal goods that have an income elasticity less than one.
Normal goods: goods whose consumption increases with an increase on income. (Income elasticity is positive).
Perfectly elastic curves: flat (horizontal) curves in which quantity changes enormously in response to a proportional change in price.
Perfectly inelastic curves: vertical curves in which quantity does not change at all in response to an enormous proportional change in price.



The income elasticity of demand for a product will also change over time – the vast majority of products have a finite life-cycle. Consumer perceptions of the value and desirability of a good or service will be influenced not just by their own experiences of consuming it (and the feedback from other purchasers) but also the appearance of new products onto the market. Consider the income elasticity of demand for flat-screen colour televisions as the market for plasma screens develops and the income elasticity of demand for TV services provided through satellite dishes set against the growing availability and falling cost (in nominal and real terms) and integrated digital televisions.

Income elasticity of demand is the responsiveness of the quantity demanded in response to the change in income.

Ei = percent change in Qd / percent change in Income

With income *I*, and vector of prices $\vec{P}$. A negative income elasticity of demand is associated with inferior goods; an increase in income will lead to a fall in the quantity demanded and may lead to changes to more luxurious substitutes. A positive income elasticity of demand is associated with normal goods; an increase in income will lead to a rise in the quantity demanded. A high positive income elasticity of demand is associated with luxury goods. A zero income elasticity of demand is an increase in income without leading to a change in the quantity demanded of a good. Many necessities have an income elasticity of demand between zero and one: expenditure on these goods may increase with income, but not as fast as income does, so the proportion of expenditure on these goods falls as income rises. This observation for food is known as *Engel's law*. **Engel's law** is an observation in economics stating that, with a given set of tastes and preferences, as income rises, the *proportion* of income spent on food falls, even if *actual*expenditure on food rises. In other words, the income elasticity of demand of food is less than 1. For normal goods, the Engel curve has a positive slope. That is, as income increases, the quantity demanded increases. For inferior goods, the Engel curve has a negative slope. That means that as the consumer has more income, they will stop buying the inferior goods because they are able to purchase better goods.

Product ranges: However the income elasticity of demand varies *within* a product range. For example the Yed for own-label foods in supermarkets is probably less for the high-value “finest” food ranges that most major upermarkets now offer. You would also expect income elasticity of demand to vary across the vast range of vehicles for sale in the car industry and also in the holiday industry.

Long-term changes: There is a general downward trend in the income elasticity of demand for many products, particularly foodstuffs. One reason for this is that as a society becomes richer, there are changes in consumer perceptions about different goods and services together with changes in consumer tastes and preferences. What might have been considered a luxury good several years ago might now be regarded as a necessity (with a lower income elasticity of demand). Consider the market for foreign travel. A few decades ago, long-distance foreign travel was regarded as a luxury out of the reach of the majority of households. Now as real price levels have come down and incomes have grown, so millions of consumers are able to fly overseas on short and longer breaks. For many an annual holiday overseas has become a necessity and not a discretionary item of spending!

How do businesses make use of estimates of income elasticity of demand?
Knowledge of income elasticity of demand for different products helps firms predict the effect of a business cycle on sales. All countries experience a business cycle where actual GDP moves up and down in a regular pattern causing booms and slowdowns or perhaps a recession. The business cycle means incomes rise and fall. Luxury Products with a high income elasticity experience greater sales volatility over the business cycle than necessities where demand from consumers is less sensitive to changes in the economic cycle