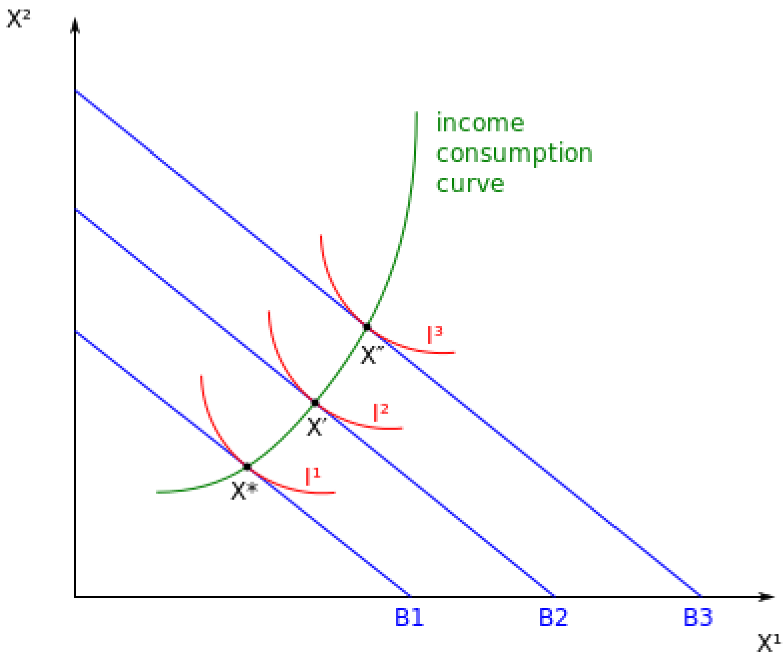
Normal good

Example of a normal good: As income increases from B1 to B3, the outward movement of utility curve I dictates that the quantity of good X1 increases in tandem. Therefore, X1 is a normal good. Put another way, the positively sloped income consumption curve demonstrates that X1 is normal. The Engel curve of X1 would also be positively sloped.

In economics, a normal good is any good for which demand increases when income increases, i.e. with a positive income elasticity of demand



Analysis

A good is normal when the income elasticity of demand is greater than or equal to zero. In mathematical terms, good g is normal if and only if:

$${\displaystyle \xi _{g}\geq 0,{\text{ where }}\xi _{x}={\frac {\Delta Q_{x}/Q_{x}}{\Delta Y/Y}}}$$

$${\displaystyle \xi _{g}\geq 0,{\text{ where }}\xi _{x}={\frac {\Delta Q_{x}/Q_{x}}{\Delta Y/Y}}}$$

In the above definition, Qx represents the quantity of good x demanded and Y represents the income of the given consumer being modeled. Intuitively, a good is normal if a change in the consumer's income causes the same direction change in the consumer's demand for good x.[3]

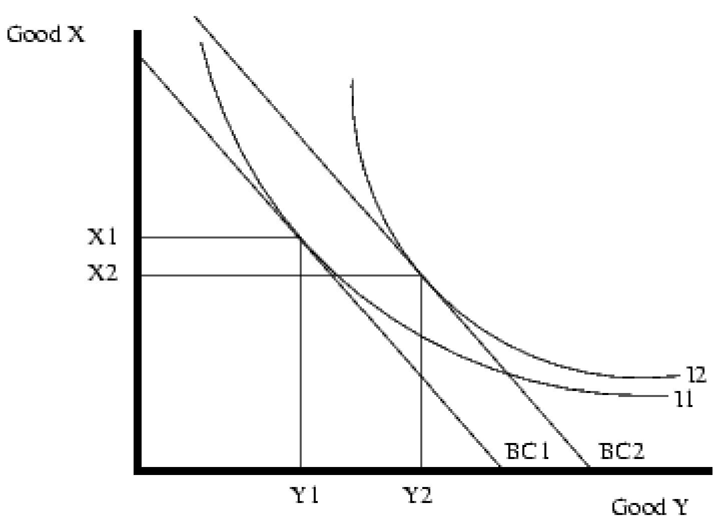
There are two types of normal goods: necessity goods and luxury goods. A normal good is classified as a necessity good when $\xi < 1$ (i.e. when an x% change in income causes a change in x less than x%), whereas a normal good is a luxury good when $\xi < 1$ (i.e. when an x% change in income causes a change in x greater than x%).[4] A good where $\xi < 0$ is an inferior good.

According to economic theory, there must be at least one normal good in any given bundle of goods (i.e. not all goods can be inferior). Economic theory assumes that a good provides always marginal utility (holding everything else equal). Therefore, if consumption of all goods decrease when income increases, the resulting consumption combination would fall short of the new budget constraint frontier.[3] This would violate the economic rationality assumption.

When the price of a normal good is zero, the demand is infinite.

Inferior good

Good Y is a normal good since the amount purchased increases from Y1 to Y2 as the budget constraint shifts from BC1 to the higher income BC2. Good X is an inferior good since the amount bought decreases from X1 to X2 as income increases.



In economics, an inferior good is a good whose demand decreases when consumer income rises (or demand rises when consumer income decreases), unlike normal goods, for which the opposite is observed. Normal goods are those for which demand rises as consumer income rises. This would be the opposite of a superior good, one that is often associated with wealth and the wealthy, whereas an inferior good is associated with lower socio-economic groups.

Inferiority, in this sense, is an observable fact relating to affordability rather than a statement about the quality of the good. As a rule, these goods are affordable and adequately fulfill their purpose, but as more costly substitutes that offer more pleasure (or at least variety) become available, the use of the inferior goods diminishes.

Depending on consumer or market indifference curves, the amount of a good bought can either increase, decrease, or stay the same when income increases.