Price Elasticity

Elasticity is a concept which involves examining how responsive demand (or supply) is to a change in another variable such as price or income.

Price Elasticity of Demand

The most common elasticity is Price Elasticity of Demand. This measures how responsive demand is to a change in price.

* PED = % change in demand / % change in price
* If price of tomatoes increase 20%, and quantity falls by 4%, then the PED = -0.2

**Inelastic Demand**

If a change in prices causes a smaller % change in demand, then we say demand is price inelastic.

* For example, if the price of petrol increased by 10%, demand may only fall by 1%.
* Therefore the PED would be -1/10 = -0.1.
* We say that your demand is inelastic. In other words the higher price does little to reduce your demand.
* Other inelastic goods might involve:
* Oil
* Coffee
* Cigarettes.

Characteristics of Inelastic Demand

With all these goods, there are few substitutes and for many people they are necessities. E.g. if you drive a car to work, it is a necessity to buy petrol. Therefore, if the price of petrol goes up you are likely to keep buying it. If you are addicted to cigarettes, you will keep buying even if price goes up.

**Elastic demand**

Demand is said to be price elastic, if a change in price causes a bigger % change in demand.

Elastic demand means that you are sensitive to changes in price. For example, if the price of Starbucks Coffee increases, you would probably switch to other varieties of coffee like Insomnia Coffee. Therefore a change in price causes a bigger % change in demand and your demand is quite elastic.

Chocolate vs Brand of Chocolate

* If the price of chocolate in general increased, demand would be quite price inelastic – there are no close substitutes to chocolate
* However, if a particular brand like “Snickers ” or ‘Mars’ increased in price, consumers could switch to other brands of chocolate. Therefore demand is more elastic for individual brands.

**Making Use of Elasticity**



If demand is price inelastic, then increasing the price will lead to an increase in revenue.

In the above case price increases 100%, but demand only falls 20%. Therefore overall revenue increases.

Elasticity and Price Discrimination

Elasticity can be used to explain and understand decisions of firms such as price discrimination. A firm may have two groups of consumers – adults and students. Because students have low income, their demand is more price elastic. This means that if you cut prices for students, you get a bigger % increase in demand. Therefore, a firm will try to increase profits by cutting price for students and keeping them higher for adults.