

Economic Basics

Fundamental economic problem

- The basic problem which economics addressess is that of scarcity. The desires of the human race are infinite but earths resources are limited.
- In an environment where infinite wants chase finite resources we are forced to make choices.

Scarce Resources = Factors of production

- For goods and services to be produced the **factors of production** need to be employed.

- | | |
|-------------------------|------------------------------|
| • Land | physical area, raw materials |
| • Capital
technology | factories, infrastructure, |
| • Labour | labour force |
| • Enterprise | organisation force |
| • Potential fifth | Knowledge |

Scarce resources

Q What are the implications of 'scarce resources'?

A In an environment where infinite wants chase finite resources a system of allocation is needed. A market develops, and a price is charged.

Introduction to the market

The concept of market is of central importance in economics.

- Stock market
 - Ebay
 - Housing market
 - Market for illegal labour.
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- Markets fix prices and are thus vital in helping allocate consumption.
 - All markets are made up of demand and supply.

Law of Demand

- The quantity of a good demanded in a given period of time will fall as price rises and will rise as price falls, other things being equal (*ceteris paribus*).
- If the price of a good rises the quantity demanded will fall

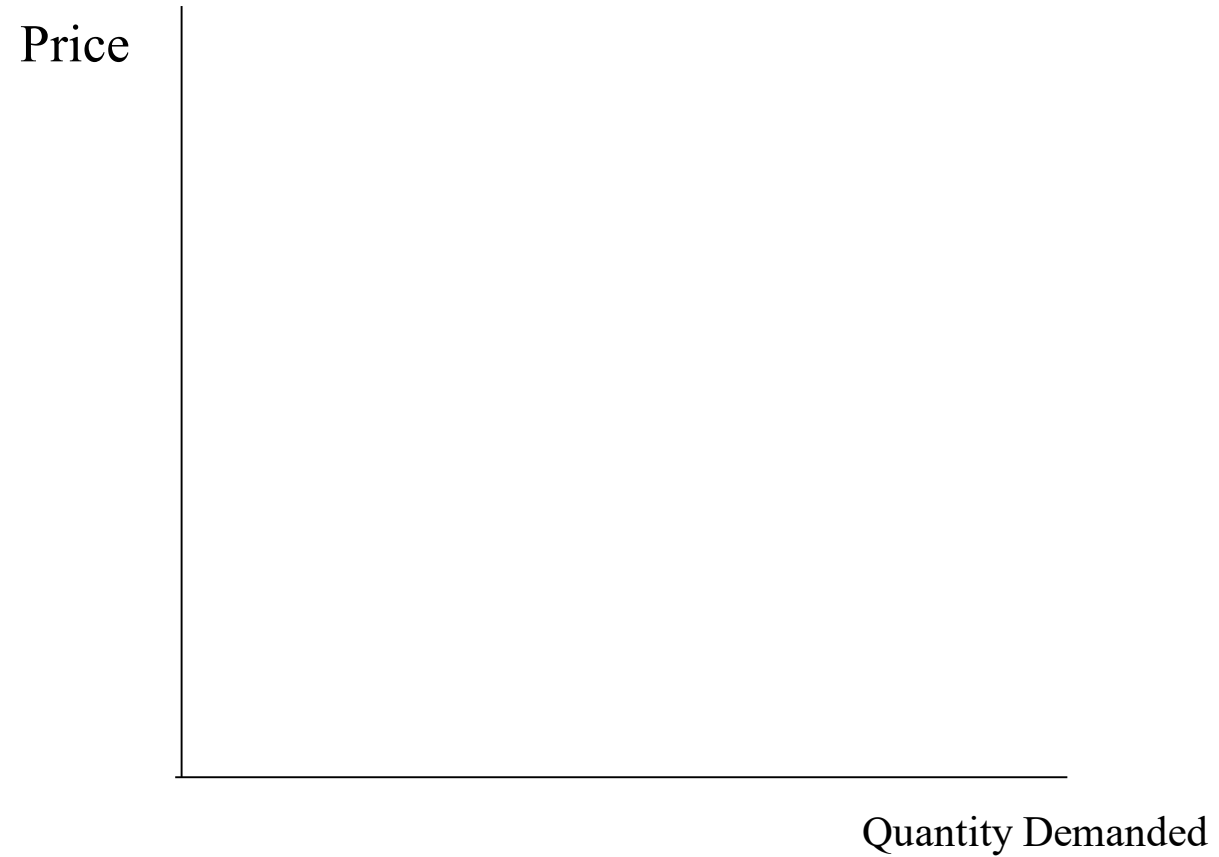
Why does demand fall with a higher price?

- As a response to the increasing opportunity cost of consuming the product.
- The actual law is supported by two key reasons
- **the income effect**
- If the price of a good rises the purchasing power of people's incomes falls and so consumers cannot afford to buy so much of the good with their money.
- **the substitution effect**
- if the price of a good rises people will purchase alternative goods instead. These goods are substitutes.
- **E.g.** If the price of bread falls the quantity demanded of bread will rise. People can afford to buy more bread through the income effect and they will also switch away from alternative goods such as pasta and rice into the bread (substitution effect).

The Demand Curve

- Definition:
- A graph showing the relationship between the price of a good and the quantity of the good demanded over a given period of time.
- The demand curve of an individual shows the different quantities of a good that a person is willing and able to buy at various prices in a given period of time.

The Demand Curve



Characteristics

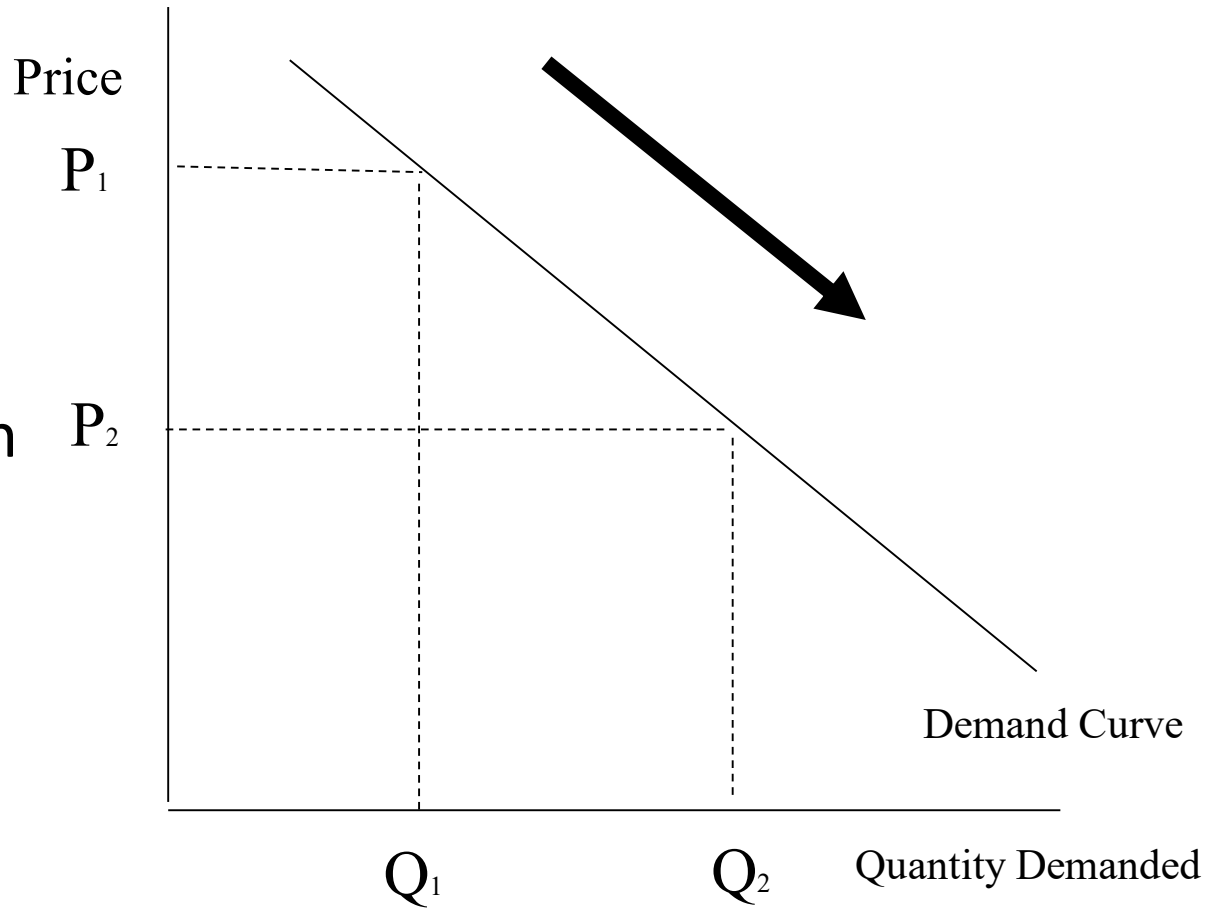
- Price is measured on the vertical axis
- Quantity is measured on the horizontal axis.
- It slopes downwards from left to right
- It depicts an inverse relationship
- Demand curve can be for an individual consumer or group of consumers or more usually for the market as a whole.

Individual, Group and the whole market

- We could create a demand curve for a good for an Individual, a Group or the whole market.
 - Eg
 - Individual a student's demand for economics textbook
 - Group this class's demand
 - Whole market. Whole world demand for Sloman
-
- To obtain a market demand curve we must find the total demand of all consumers, to do this we aggregate the quantity demanded at each price by all consumers. Thus we have a curve which shows the total quantities of a good that all consumers are willing and able to buy at various prices over a given period of time.

Movements Along

- Other things remaining equal if the price of a good changes then there will be a movement along the demand curve.

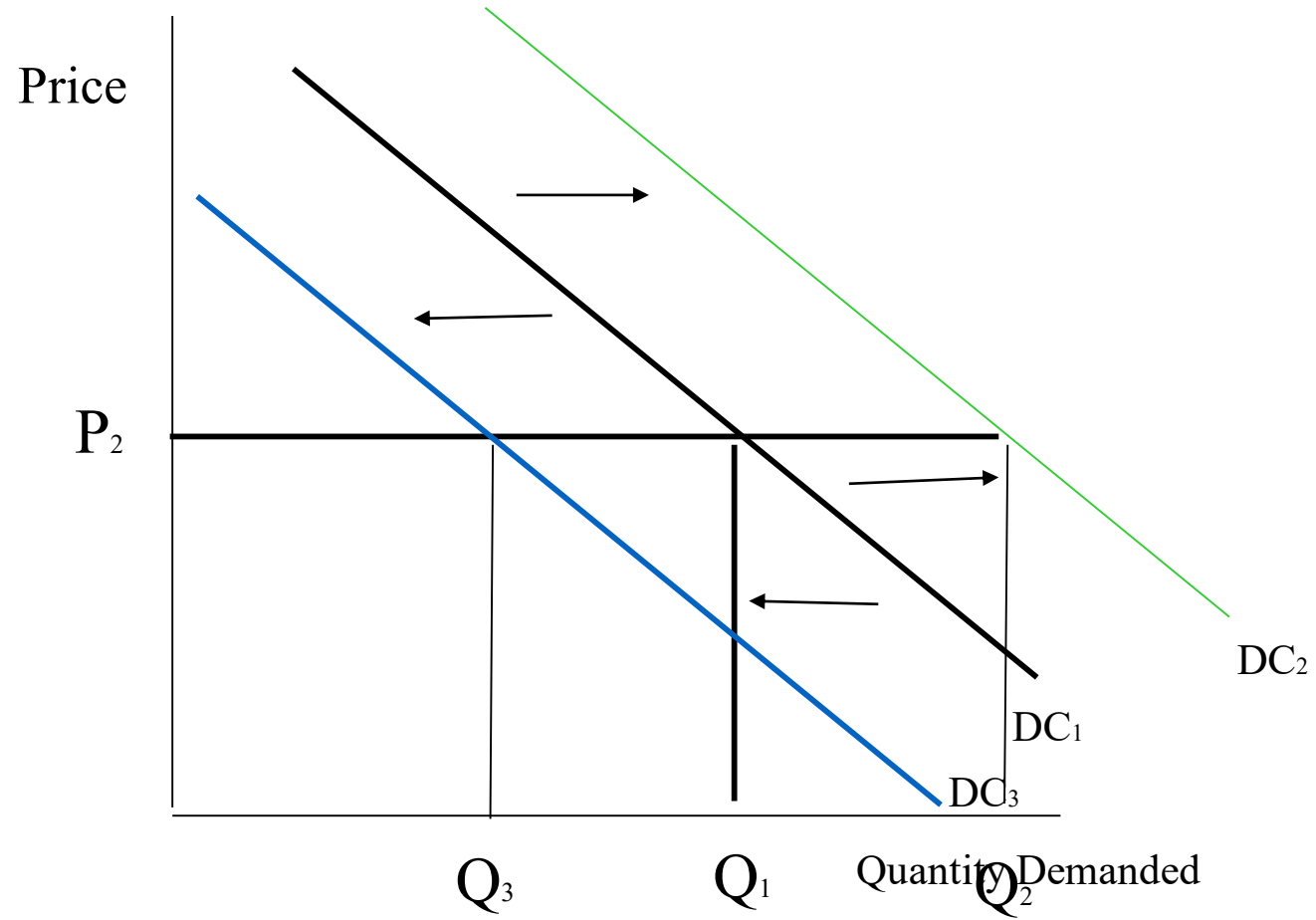


Other factors

- Price is not the only thing that affects price
- We cannot always assume that other things will remain equal. Demand is determined by a number of other factors. These other factors will cause the pattern of demand to alter.
- These changes in the demand curve are shown as a shift to either the right or left of the original demand curve
- A change in demand can cause demand to fall at each and every price, ie a shift to be left
- Or a change in demand can cause demand to increase at each and every prize, ie a shift to the right.

Shifts in demand

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Determinants of Demand

Determinants of Demand (things that causes shifts)

Tastes and fashion

- For a variety of reasons at various times people find various goods more desirable than others. advertising, obviously plays a big role in tastes and fashions.

Substitute goods

- Many goods have close substitutes, e.g. butter and margarine. If the price of butter rises people will switch to consume more margarine this will cause the demand curve for margarine to shift to the right

Complementary good

- Complimentary goods are goods which are frequently consumed together ie cars and petrol, if the price of petrol rises people will reduce the demand for cars.

Derived demand

Many items are demand for what they can do. If this increase then demand will also increase.

Composite demand

Determinants of Demand

Income

- As people's income rises their demand for most goods will rise accordingly
- Normal goods, the rise in income leads to a proportionate rise in demand
- Inferior goods; a rise in income leads to a less than proportionate rise in demand
- Luxury goods; a rise in income leads to a more than a proportionate rise in demand
- The distribution of income needs be also be considered.

Expectations

- Expectations of an increase in prices will increase demand at the present price

Demand Conclusion

- **A demand curve is a model, which helps to explain buyers' behaviour.**

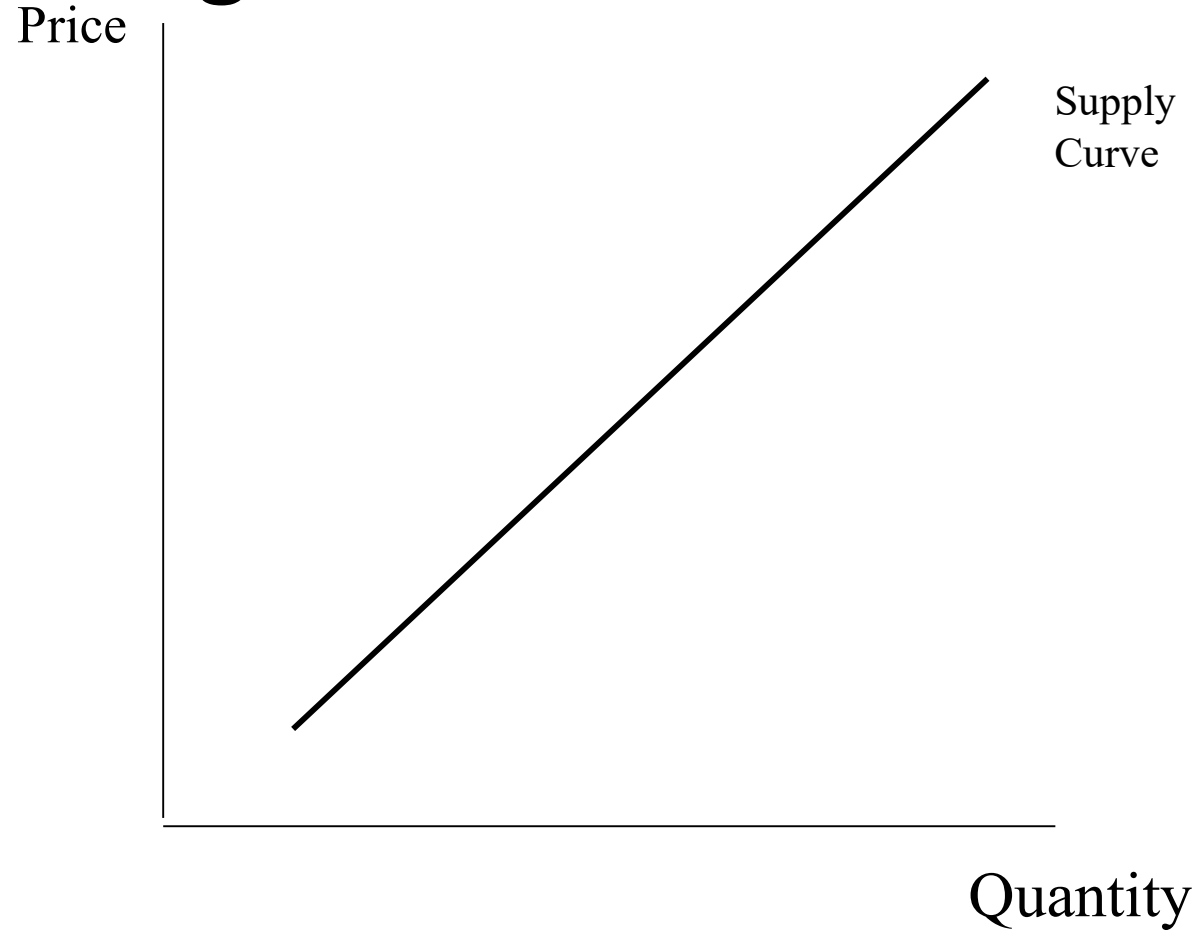
The Supply Curve

- A graph showing the relationship between the price of a good and the quantity of the good supplied over a given period of time.
- If the price of a good increases suppliers increase the quantity supplied.

Supply Curve Diagram

Slopes
upwards
from left to
right

Shows a
direct
relationship



Why does higher price encourage suppliers to produce more?

- Assume Firms aim to make profit
- They will only be persuaded to increase supply if they know the price they receive covers their cost.
- The cost of producing an extra unit is not fixed. Normally to produce an extra unit incurs increasingly high costs of production.

Why does higher price encourage supplies to produce more? THE ANSWER

- The law of diminishing marginal returns produces a situation where higher output involves higher costs of production, to overcome these higher costs of production suppliers will have to be compensated by a higher price if they are to produce an extra unit of output.
- If the price of a product is £1 a firm can afford to produce up to the point where marginal cost is £1. If the price rises the firm can increase production. Until the point where the new higher price equals the marginal cost.

Other reasons why higher price encourages supplies to produce more?

- If the price of a good rises relative to other goods it becomes more profitable to produce, firms will thus be encouraged to produce more by switching from less profitable goods
- In the long run supply of goods will increase as total market supply will increase as new producers enter the market with higher prices .
- Increasing production places higher demand on scarce resources and so resource must be obtained from more difficult and expensive factor inputs. Land at the edge is less fertile, to work longer hours labour needs high wages and machines reach full capacity. Therefore high output = higher cost of production.

Shifts in Supply: determinants

The costs of production

- If costs rise, production will become less profitable at any price and so firms will be forced to cut back on production

Substitutes in Supply

- If the profitability of alternative products increases, then producers will switch from the good they presently produce to the alternative.

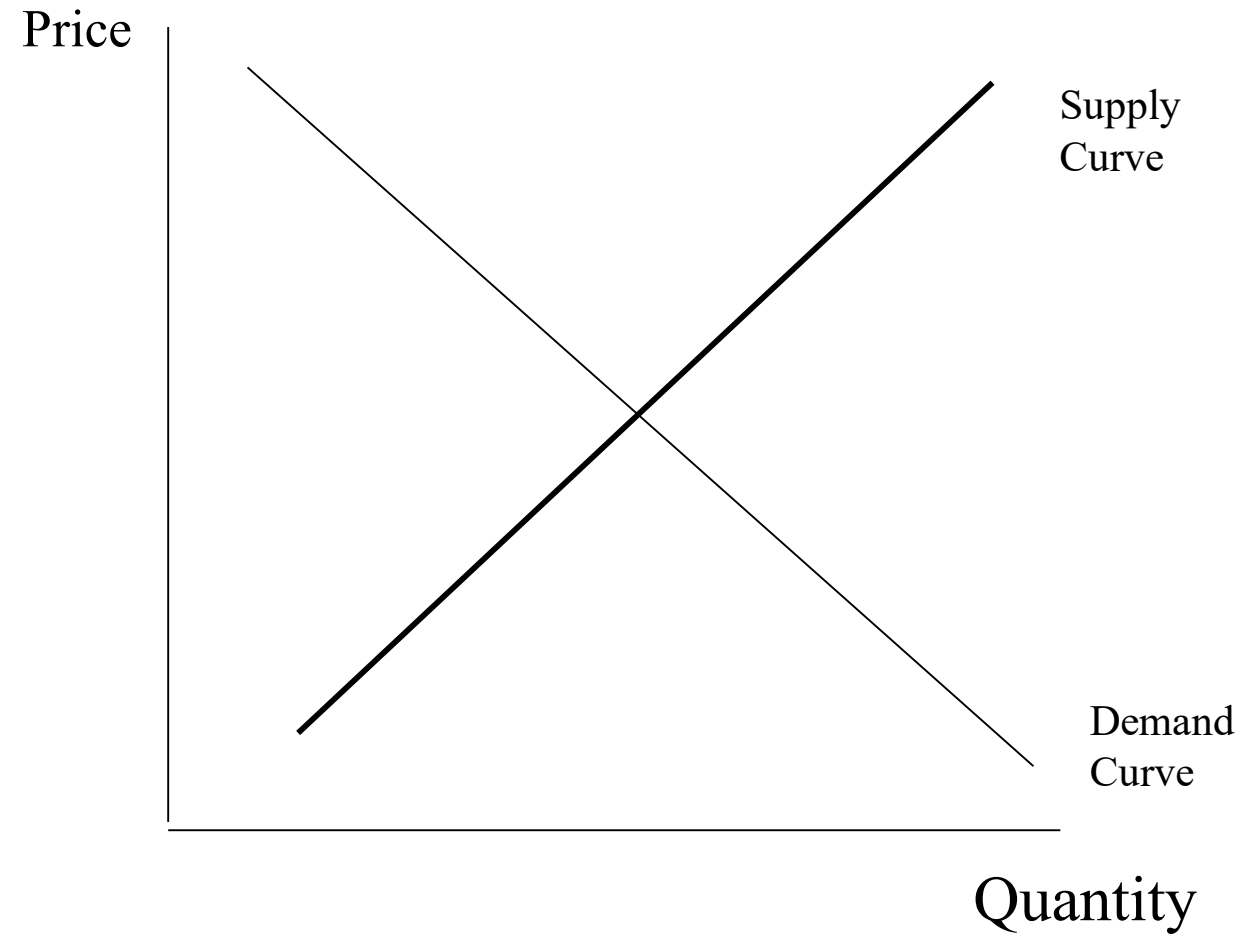
Shifts in Supply: determinants

- **Goods in joint supply**
- Goods in joint supply are goods where the production of one leads to the production of more of the other. e.g. Beer and Marmite.
- **Unpredictable events**
- Earthquakes, war and weather all effect supply
- **Expectations of future price changes**
- If the price is expected to rise producers may hold on to stocks in the short run and plan to release them in the long run.

The Market

- Definition: A market is a shorthand expression for the process by which households' decisions about consumption of alternative goods, firms' decisions about what and how to produce, and workers' decision about how much and for whom to work are all reconciled by adjustment of prices.

The market

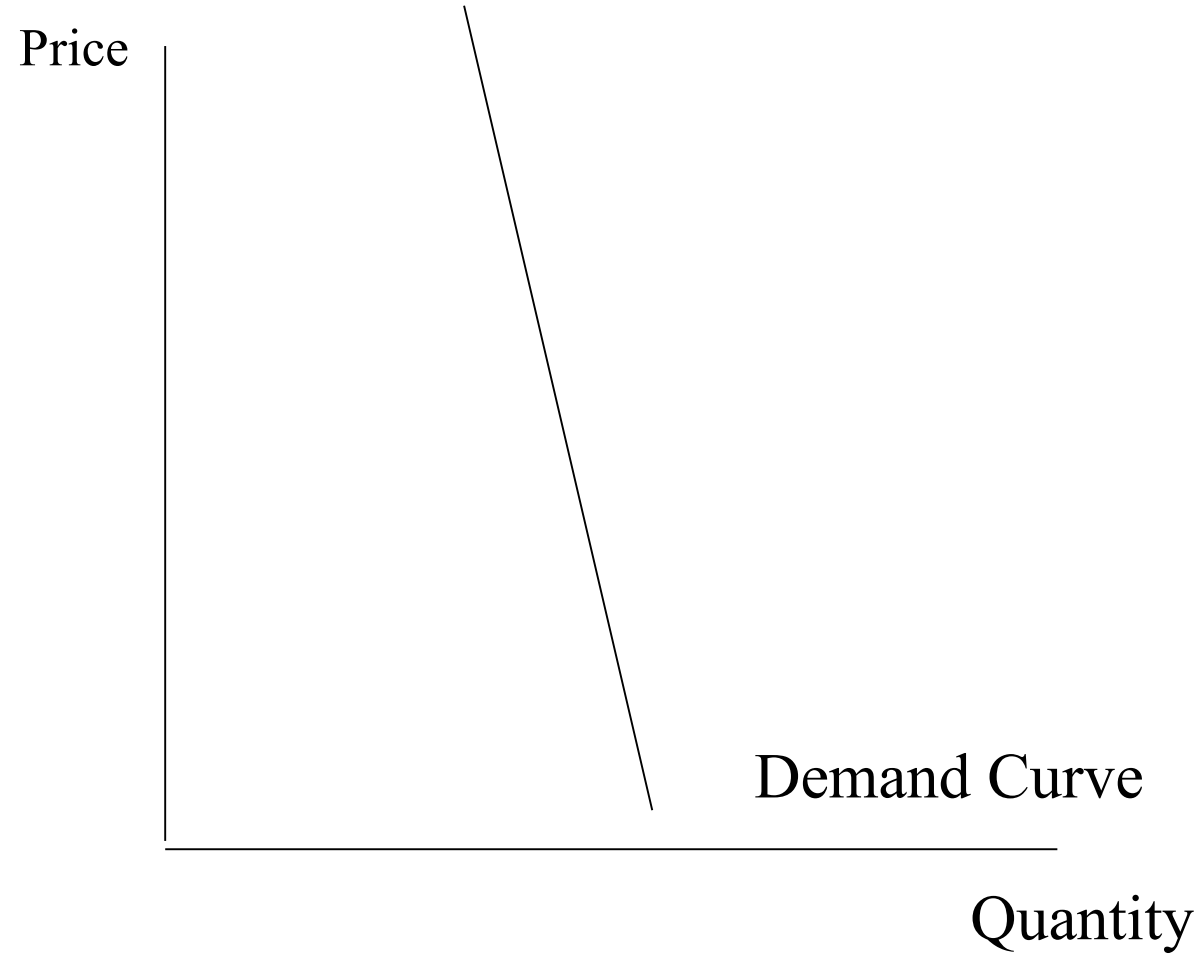


Elasticity in the market

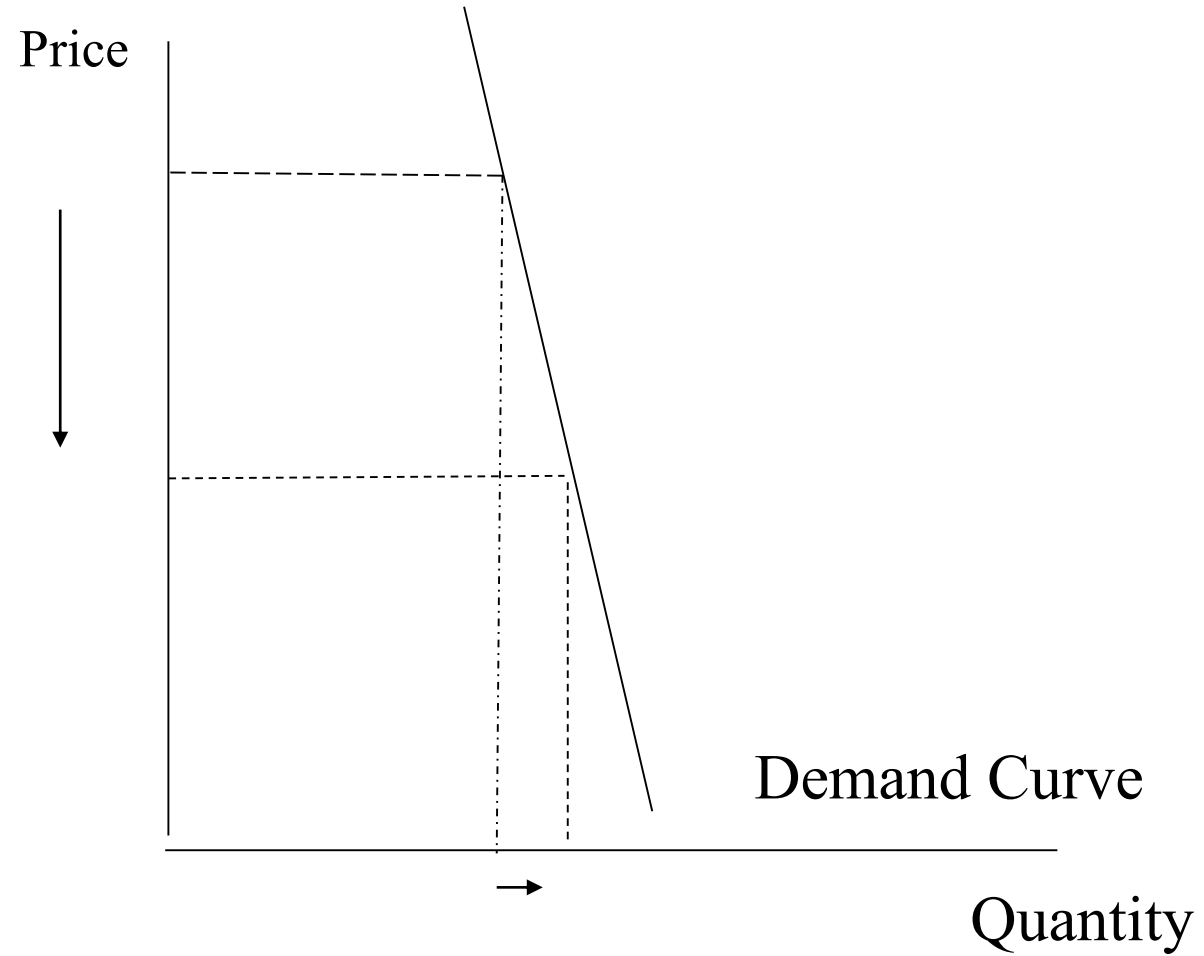
- Elasticity tells use how responsive demand and supply is to a change in price.
- Elasticity is related to the slope of the curve
- **Elastic** a change in determinant causes a proportionately greater change in variable ie demand or supply
- **Inelastic** a change in determinant causes a proportionately smaller change in variable. ie demand or supply.
- **Unit Elasticity** this is where the change in determinant is matched equally by the change variable

Inelastic

A very steep curve

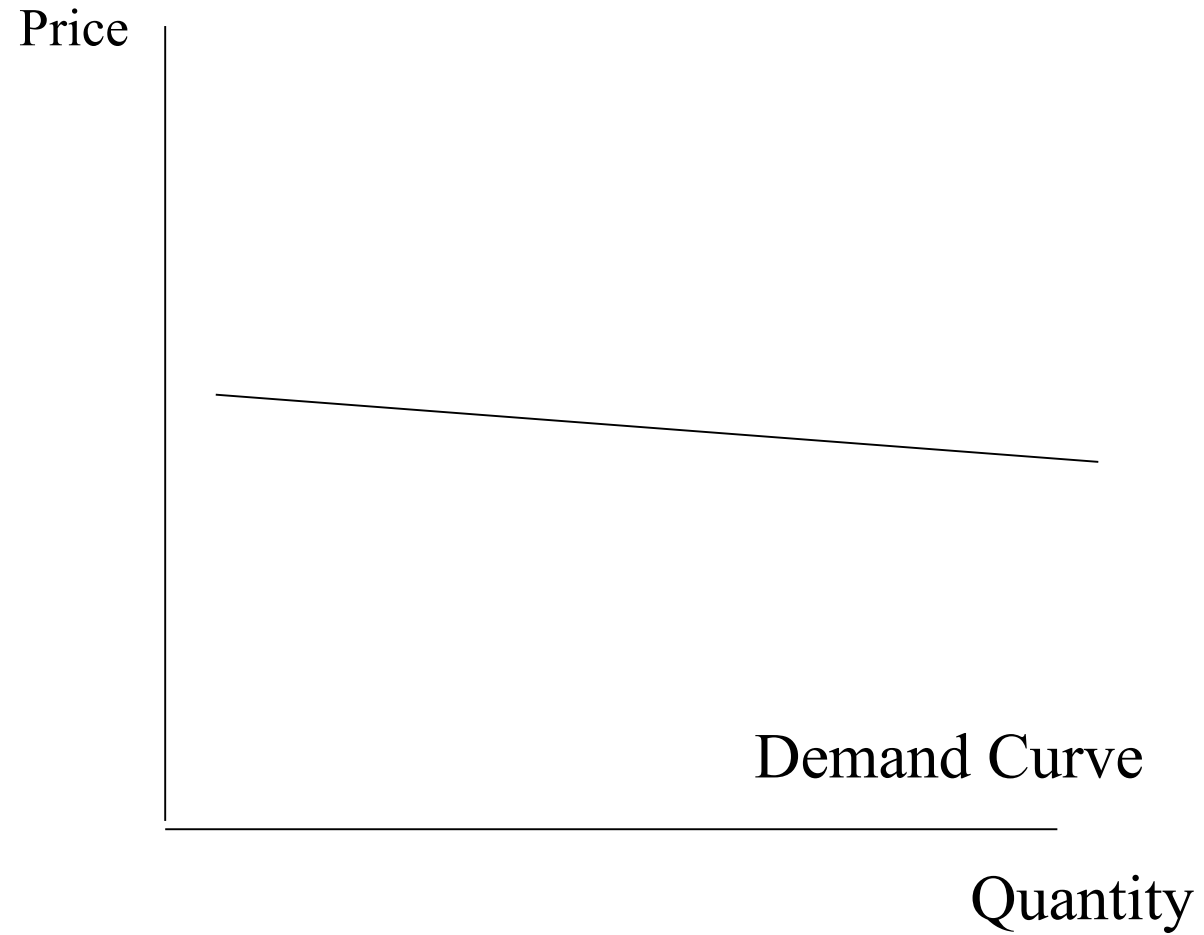


Inelastic

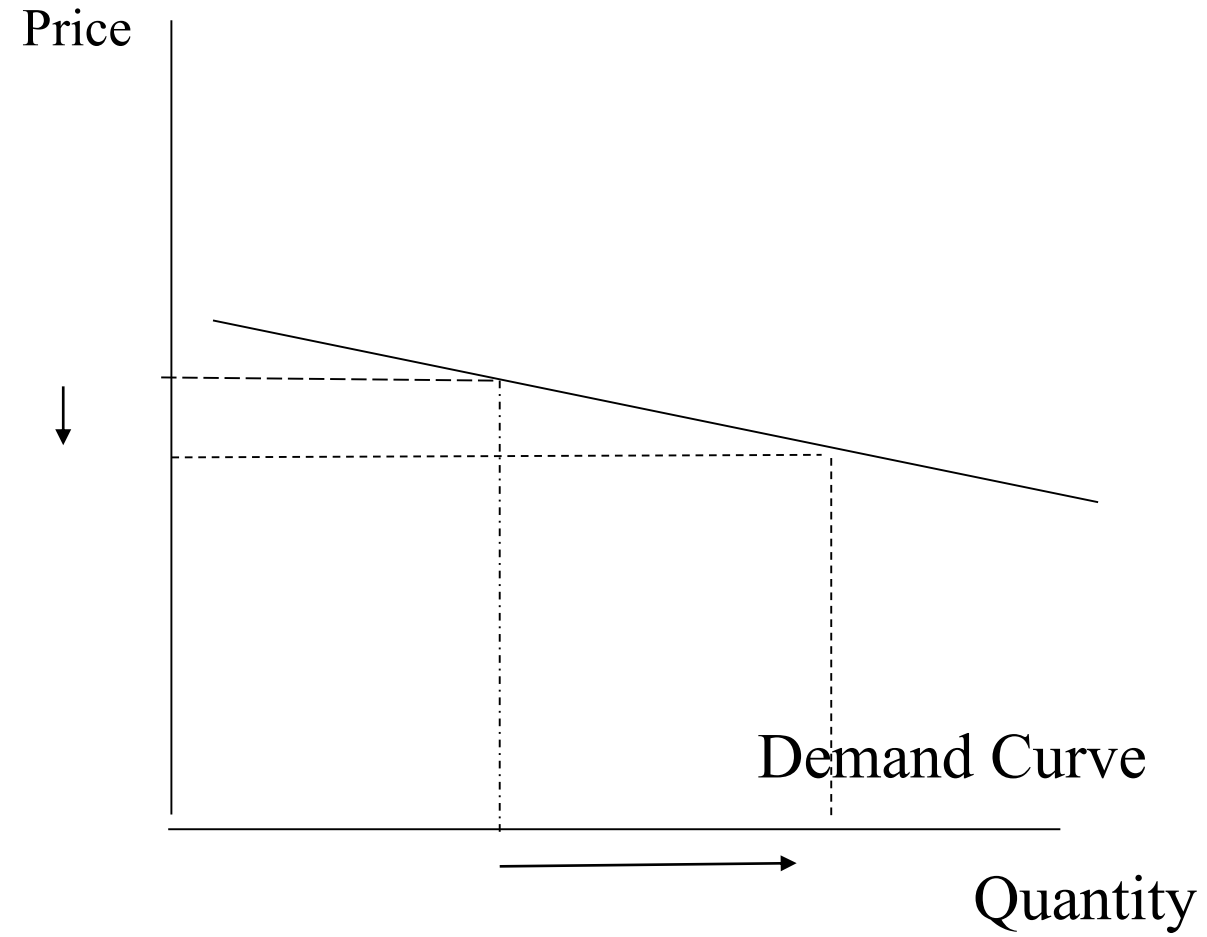


Elastic

A very
shallow curve



Elastic



Elasticity

- Elasticity allows us to relate the size of the change in quantity demanded or supplied with the size of the change in price (or any other determinant of demand and supply)
- It applies to both supply and demand

$$\text{Elasticity} = \frac{\text{Proportionate (or percentage) change in quantity}}{\text{Proportionate (or percentage) change in price}}$$

EG

- price of RGU parking ticket rises 20%
- demand for parking places falls by -10%
- $10\% / 20\% = -0.5$

Price Elasticity of Demand

- **Price Elasticity of Demand**

- **Formulae**

$$\frac{\text{\%change in quantity demanded}}{\text{\% change in price}}$$

- **Sign (+/-)** negative

- **Magnitude**

- > 1 elastic eg gold, crisps
- < 1 inelastic eg drugs,
- unit elasticity = 1

Price Elasticity of Supply

- **Price Elasticity of Supply**

- **Formulae**

$$\frac{\text{\%change in quantity Supply}}{\text{\% change in price}}$$

- **Sign (+/-)** Positive

- **Magnitude**

- > 1 elastic eg bar workers
- < 1 inelastic eg housing
- 1 equals perfectly proportionate

Income Elasticity of Demand

- **Income Elasticity of Demand**
- The responsiveness of demand to a change income
- **Formulae**
$$\frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}}$$

Sign (+/-) & Magnitude

negative (< 0) = inferior

eg house coal

positive but < 1 = Normal

eg bread

positive but > 1 = Luxury

eg sports cars

Cross-Price Elasticity of Demand

- **Cross-Price Elasticity of Demand**
- Examines the strength of substitutes
- The responsiveness of demand for one good to a change in the price of another
- **Formulae**
$$\frac{\% \text{ change in quantity demanded of good A}}{\% \text{ change in price of good b}}$$

Sign (+/-)

positive substitute > 0

negative substitute < 0