

UNIVERSITY OF MELBOURNE

DEPARTMENT OF ECONOMICS

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An Introduction to Economics

ECONOMICS “The science which studies the allocation of scarce means amongst competing ends”

Means ... the means of making things or goods and services. These means are usually referred to as factors of production, resources or inputs.

Ends ... the things or goods and services that are produced by the factors of production.

Factors of production ... land, labour capital and enterprise.

Capital

- a range of physical items used to produce goods and services
- a “produced means of production”
- produced in the capital goods industries

Economic agents ... the players or participants in the economy

- the household as a supplier of factors of production, and a consumer(demander) of goods and services
- the firm as a supplier of goods and services and a user(demander) of factor of production
- the government as a producer of goods and services and as a regulator of behaviour by firms and households

Economics as a subject starts from the fundamental proposition that the wants of a society for goods and services are unlimited, while the means of satisfying those wants, that is, the factors of production, are limited.

So there is a problem of *relative scarcity*. Not all those goods and services desired by society can be produced so choices have to be made. Economics studies the choices made necessary by relative scarcity.

- what is the nature of these choices
- how are these choices made
- how should these choices be made if certain objectives are to be achieved

These choices are sometimes referred to as the basic economic problems

- what to produce
- how to produce
- for whom to produce

The first two choices are allocative choices – choices about using factors of production. Economists refer to the concept of efficiency as the objective to achieve.

The third choice is a distributional choice – how should the goods and services that have been produced be distributed amongst members of the society. This introduces the ethical concept of equity.

If a society has to make choices as a result of relative scarcity, then it will need to have a set of institutional arrangements through which these choices can be made. Such a set of institutional arrangements is referred to as an economic system.

We will be studying the economics of market capitalism, with particular emphasis on how the market, and different types of market structure, operates.

Note the distinction between microeconomics and macroeconomics:

Microeconomics studies the behaviour of individual economic agents in individual markets.

Macroeconomics is concerned with the aggregate (total) outcome of activity in all individual markets for goods and services and factors of production. So it considers the national output of goods and services (as measured by GDP), the balance of payments, unemployment, etc.

Economic agents are:

1. Households
2. Firms
3. the government

Demand and Supply in Competitive Markets

A Market

Prof. Richard Lipsey, well known economist and textbook writer, defines a market as

“an area over which buyers and sellers negotiate the exchange of a well defined commodity”

This definition suggests that there are a range of factors that will distinguish one market from another, viz:

- ❖ Geographic location
- ❖ The nature of the product
- ❖ Government intervention – may operate to impose barriers between markets eg. A tariff by raising the price of the imported product may effectively insulate an otherwise identical product from the competition of foreign produced goods.

While we can identify individual markets by such criteria, must also recognise the interdependence between them. So if price rises in some particular market, consumers will switch their demand to the market of some substitute product, raising the price in this market and causing subsidiary effects in the markets for numerous other substitute and complementary products.

Moreover, products, which experience an increase in demand, will generate an increase in demand for the specific factors of production used to produce them, raising their prices etc.

So must recognise different categories of market: goods markets, factor markets, finance/capital markets.

A Perfectly Competitive Market

1. Large number of buyers and sellers
 - Sufficiently large that the purchase and sale of each individual buyer & seller is small in relation to the total amount.

2. The products of different sellers in the markets are identical (homogenous).
 - 1. and 2. mean that market price not affected by individual firm behaviour.
3. No barriers to entry. (barriers to entry are any factors that make it prohibitive, unreasonably difficult or expensive for new firms to enter the market).
4. All market participants (buyers & sellers) have perfect knowledge of all relevant market information.

Why do we consider perfect competition?

- historical significance in the development of economic analysis
- it provides a most efficient allocation of resources
- it provides a reference when comparing with the real world markets
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Factors affecting Demand

1. Price of good
2. Prices of related goods
3. Income
4. Tastes/Preferences
5. Expected future prices
6. Number of consumers in the market (population)

We can't consider the relationship between all of these factors and the resulting change in Demand, so we look at each in turn, holding the value of the others constant, or *ceteris paribus*.

Law of Demand

States there is a **negative** relationship between price of product (P) and quantity demand (Qd), *ceteris paribus*. It is an assumption.

The higher the price (P) of a good, the lower is the quantity demanded (Qd).

From this relationship we derive the Demand Curve

Demand Curve

A Demand curve represents the different quantities consumers will demand at different prices.

It has a negative slope because there is a negative relationship between P & Q_d (law of demand).

A change in Price (P) causes a **movement along** the Demand curve to determine Quantity Demanded (Q_d).

Therefore, we call it a change in **quantity demanded**.

All other factors affecting demand cause the Demand curve to shift to the left or right. This is usually referred to as **'Changes in Demand'**.

2. Prices of Related Goods

- a. Substitute good – is a good that can be used in place of another good to satisfy the particular want or need.
Eg/ coke/pepsi and margarine/butter.

There is a **positive** relationship between the price of a substitute and quantity.

If $\uparrow P$ of substitute $\rightarrow \uparrow Q_d$ (Dc shifts to right)
If $\downarrow P$ of substitute $\rightarrow \downarrow Q_d$ (Dc shifts to left)

- b. Complementary good – is a good that is used in conjunction with another good to get maximum satisfaction.
Eg/ camera/ film and CD's/ CD players

There is a **negative** relationship between the price of a complement and quantity.

If \uparrow price of a complement $\rightarrow \downarrow Q$ (Dc shifts to left)
If \downarrow price of a complement $\rightarrow \uparrow Q$ (Dc shifts to right)

3. Income

When income (Y) changes, the change in quantity (Q) depends on whether we are looking at a **normal good** or **inferior good**.

Normal good:

- Positive relationship between Y and Q
 $\uparrow Y \rightarrow \uparrow Q$ (Dc shifts to right)
 $\downarrow Y \rightarrow \downarrow Q$ (Dc shifts to left)

Inferior good:

- Negative relationship between Y and Q
 $\uparrow Y \rightarrow \downarrow Q$ (Dc shifts to left)

4. Tastes/Preferences

Positive change in tastes/preferences $\uparrow T \rightarrow \uparrow Q$ (Dc shifts to right)

5. Expected future prices

\uparrow expected future prices $\rightarrow \uparrow Q$ (Dc shifts to right)

6. Population(an influence on the market demand curve only)

\uparrow population $\rightarrow \uparrow Q$ (Dc shifts to right)

Factors affecting Supply

1. Price of good
 2. Prices of substitutes in production
 3. Prices of factors of production
 4. Technology
 5. Number of suppliers
 6. Expected future prices
- Costs of production*

1. Price of good – other things being equal, we usually assume a positive relationship between price and the qty, that firms are willing to supply. This gives the positive or upward sloping supply curve.
This slope must assume that marginal cost (the addition to total cost of producing one more unit of output), is increasing.

2. Prices of substitutes in production. Here we are referring to other products that the firm could easily and cheaply switch its FOP to producing. If the price of a substitute in production for product X increases, then other things being equal, it is relatively more profitable to produce these goods and firms will supply less X. So the supply curve of X will shift to the left.
3. Costs of production. If these decrease, due to a fall in the price of factors that make the product or an improvement in technology, then the firm would be willing to supply any given quantity at a lower price. So the supply curve would shift down or to the right.

Equilibrium in the Competitive Market

The demand curve is a locus of different combinations of price and quantity that households/consumers intend or would like to buy.

Similarly, the supply curve is a locus of different combinations of price and quantity that firms intend or would like to sell.

With curves shown, there will be only one combination of price and quantity that will be consistent with the intentions of both sides of the market. This is the equilibrium price and associated quantity – the price at which supply and demand are equal.

Equilibrium- a state of rest - a situation in which neither side of the market has any incentive to change their behaviour.

At any price, the quantity bought will equal the quantity sold. But only in equilibrium will demand and supply be equal – that is, the quantity that consumers **intend** to buy will equal the quantity that firms **intend** to sell.

If the market is not in equilibrium, then there will be either excess demand (a shortage), or excess supply (a surplus), and the competitive market will adjust to equilibrium.

When demand greater than supply

- At P_1 : demand is greater than supply- *excess demand*.
- The amount bought and sold will be Q_1 . At this point, the product produced by the firm is not enough to satisfy the demand.

- If the price of the product rises, it will cause movement towards the equilibrium point, where supply = demand. (When price increase, consumers tend to buy less of the product, hence the demand will decrease, and supply will increase because firms tend to produce more.)
- When price increases, the people who give up the product are those who value the product less highly. Those who continue to buy are the ones who value the product more.

When supply greater than demand

- In this situation, the firm will produce less and decrease the price so as to get rid of the stock. In this situation, the consumers will tend to buy more due to the lower price.
- This process will lead the situation back to the equilibrium point.

The role of price as a rationing device

- *Rationing*: process of eliminating excess demand or supply
- Price rations based on the strength of the preference of the people.
- Black market = underground economy. ← Happen when price rationing cannot operate..
- If price is not able to operate as the rationing device, other factors will do the job of rationing- Non-price rationing will occur .

Other rationing devices

- Queuing-“first come first served”, ballot
- Race, religion, gender