

Economics

1-The Origin of the word: economics is a word derived from the Latin language (ikous) which means the household ,and (nomus) which means the house affairs or management.

2-What is economics?

Definitions : Economics can bpe defined as follows:-

a/ - Economics is the science which concerns in producing, exchanging and accumulating wealth(Adam Smith).

b/- Economics is the science that studies the human behavior in the ordinary business of life .(A. Marshall)

c/ -Economics is the science that studies the general principles of managing the economic resources by individuals and the states.(Wickstead).

d/- Economics is the study of the production and distribution of the wealth.(J.Mill).

e/- Economics is the sciences that studies the economic welfare of nations.(Pigout)

f/- Economics is the arranged efforts for satisfying the human needs.(Wicksell).

g/-Economics is the study which focuses on the way in which man attempts to overcome the problem of scarcity.(E.Nevin).

h/- The most widely accepted definition is that of professor Lionel Robins who believes that “economics is the science that studies the human behaviors as a relationship between ends and scarce means which have alternative uses.(Lionel Robins)

- Economics is the study of the use of limited productive resources in a society, to satisfy the unlimited human wants of its members.
- What is meant by human want's?
Human wants are things, services goods and circumstances that people desire.

The Economic problem

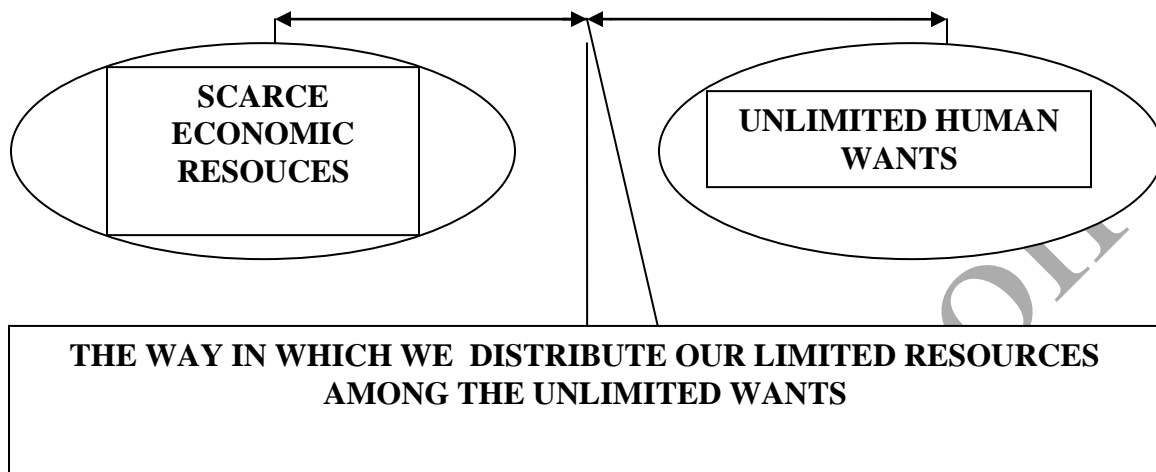
What is the fundamental economic problem ?

The fundamental economic problem is scarcity ,the imbalances between our desires and means of satisfying those desires, it is a problem faced by rich as well as by poor societies.

Then, Scarcity and choice are the center problem in the economic theory and analysis this problem is the result of the imbalance between the unlimited human wants and the limited economic resources of people and nation .for instance :

Cars are common but they are relatively scarce in the economic science, because everyone of us would like to have one. People make their choices according to their needs .They demand the necessary goods and services. The problem of choice is essentially solved by the price mechanism, or the market forces demand and supply .

The economic problem can be illustrated by the following graph :-



To understand what is economic, you must know what resources are, why they are scarce and how choices are made as to their use and allocations .

The four economic resources :

- What is meant by resources ?

Resource are the things or services used to produce goods and services which can be used to satisfy human wants .

We have two kind of resources :

1- Free resources ,such as sand in the desert ,sea water at the beach and air ,the free resources are :

- Unlimited
- We do not need to pay for it .
- We can use it to satisfy our needs .

2-Economic resources are :

- Scarce(Limited).
- We have to pay for it .
- We can used to satisfy our need .

Economic resources can be classified into four categories ,each of which is described below :

Land : includes:

1- Natural resources :

Timber, oil ,coal ,iron ore, soil and other minerals.

2- Environmental resources: air ,water, and climate.

3- Land is important and valuable resources in both agriculture and industry.it used for farming and we build factories, office buildings ,shopping centers, parts and homes on it . the rent is the basic payment made to the owners of land .

Labor:

Human efforts ,both physical and mental are included in the category of Labour.

Labor is the work and time for which employees are paid .about two-thirds of the total resources costs are paid to Labour in the form of wages and salaries.

Capital:

Is 'man'- made goods used to produce other goods and services.it consist mainly of plant, buildings ,equipment ,inventories and other nonhuman producible resources that contribute to the production .Marketing and distribution of goods and services all fall within the economist's definition of capital. Firms often raise funds to acquire new capital by borrowing money or issuing new corporate stock. without capital the nation's output level would be less than it is .

Entrepreneurship:

Is the talent to develop products and processes and to organize production to make goods and services available. The entrepreneurs are innovators ,risk taker and use new advances technology, which help us to cope with the problems of scarcity by making workers ,capital and land more productive

2- The three fundamental questions of economics:

In any society ,scarcity requires choices to deal with the following basic questions:

1- What to produce?

Decision must be made about what to produce and how much of each item to produce with the limited resources available. choices must be made about which goods and services to make available and which to forgo.

2- How are goods produced?

Alternative means are available to producing goods and services in utilizing available scarce resources, the methods of production chosen can affect the overall well-Bing of a nations citizens.

Production methods that allow more output to be squired firm available resources enable those resources to satisfy human wants.

3- For whom are goods produced?

How is the national product divided among different households.

The income a person has available for spending depends on earnings from work , income from investments or rent and any gifts received. It also depends on the taxes the person must pay and the payments the person receives from governments.

People with higher income will enjoy more and better products and services than people with lower income .

3-The scope of economics:

Economics is main part of the human knowledge. It is a social science concerns in studying the human behavior and how people get their means of living. It studies the decisions which determining the production , exchange and distribution and consumption ,and the relationship between these processes.

4- The Nature of economics ;

Economics is a positive rather than normative science . It doesn't ask what should be done but what can be done.

5- The Relationship between Economics and other sciences;

As a main branch of knowledge , Economics has strong relationships with most of sciences like statistics, accounting ,management, Law , history, geography, politics, mathematics and sociology. Never the less , economics has weak relationships with sciences like physics , chemistry and geology .

6- Parts of economics ; Economics or the economic theory can broadly be divided into two main parts;

a/ **Micro-economics** : Microeconomics (from Greek prefix mikro-meaning "small") is a branch of economics that studies the behavior of individuals and firms in making decisions regarding the allocation of limited resources.[1] Typically, it applies to markets where goods or services are bought and sold. Microeconomics examines how these decisions and behaviors affect the supply and demand for goods and services, which determines prices, and how prices, in turn, determine the quantity supplied and quantity demanded of goods and services.[2][3]

This is in contrast to macroeconomics, which involves the "sum total of economic activity, dealing with the issues of growth, inflation, and unemployment." [2] Microeconomics also deals with the effects of national economic policies (such as changing

taxation levels) on the aforementioned aspects of the economy.[4] Particularly in the wake of the Lucas critique, much of modern macroeconomic theory has been built upon 'microfoundations'— i.e. based upon basic assumptions about micro-level behavior.

One goal of microeconomics is to analyze the market mechanisms that establish relative prices among goods and services and allocate limited resources among alternative uses. Microeconomics also analyzes market failure, where markets fail to produce efficient results, and describes the theoretical conditions needed for perfect competition. Significant fields of study in microeconomics include general equilibrium, markets under asymmetric information, choice under uncertainty and economic applications of game theory. Also considered is the elasticity of products within the market system.

b/ Macro-economic ; which focuses on the aggregate relation between the parts of the economy, the balance of payments , the level of employment , the rate of inflation ,the foreign trade, the public financeetc.

An opportunity cost will usually arise whenever an economic agent chooses between alternative ways of allocating scarce resources. The opportunity cost of such a decision is the value of the next best alternative use of scarce resources. Opportunity cost can be illustrated by using production possibility frontiers (PPFs) which provide a simple, yet powerful tool to illustrate the effects of making an economic choice.

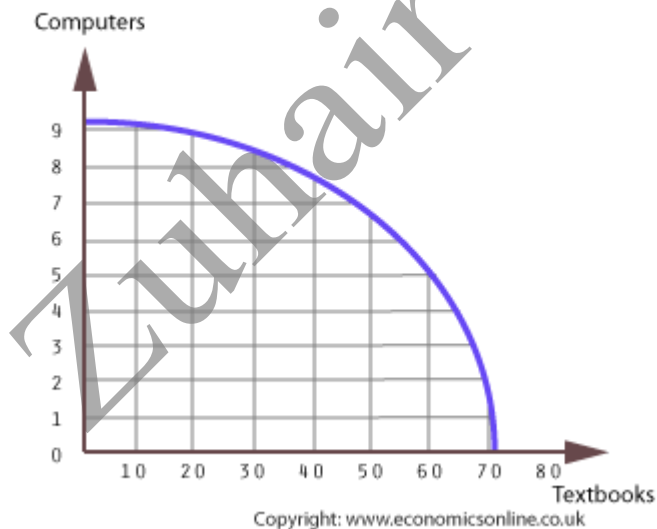
A *PPF* shows all the possible combinations of two goods, or two options available at one point in time.

Production possibilities

Mythica, which is a hypothetical economy, produces only two goods - textbooks and computers. When it uses all of its resources, it can produce five million computers and fifty five million

textbooks. In fact, it can produce all the following combinations of computers and books.

COMPUTERS (m)	TEXTBOOKS (m)
0	70
1	69
2	68
3	65
4	60
5	55
6	48
7	39
8	24
9	0

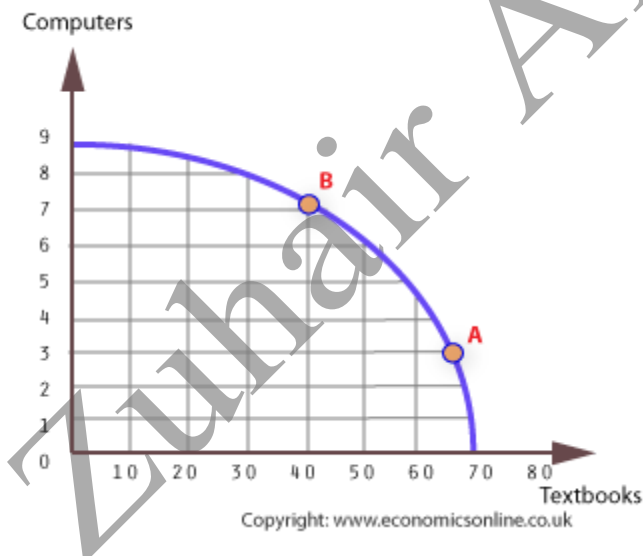


These combinations can also be shown graphically, the result being a production possibility frontier. The production possibility frontier (PPF) for computers and textbooks is shown here.

Interpreting PPFs

Firstly, we can describe the opportunity cost to *Mythica* of producing a given output of computers or textbooks. For example, If *Mythica* produces 3m computers; the opportunity cost is 5m textbooks. This is the difference between the maximum output of textbooks that can be produced if no computers are produced (which is 70m) and the number of textbooks that can be produced if 3m computers are produced (which is 65m). Similarly, the opportunity cost of producing 7m computers is 31m textbooks - which is $70 - 39$.

PPFs can also illustrate the opportunity cost of a change in the quantity produced of one good. For example, suppose *Mythica* currently produces 3 million computers and 65m textbooks. We can calculate the opportunity cost to *Mythica* if it decides to increase production from 3 million computers to 7 million, shown on the PPF as a movement from point A to point B. and textbooks is shown here.

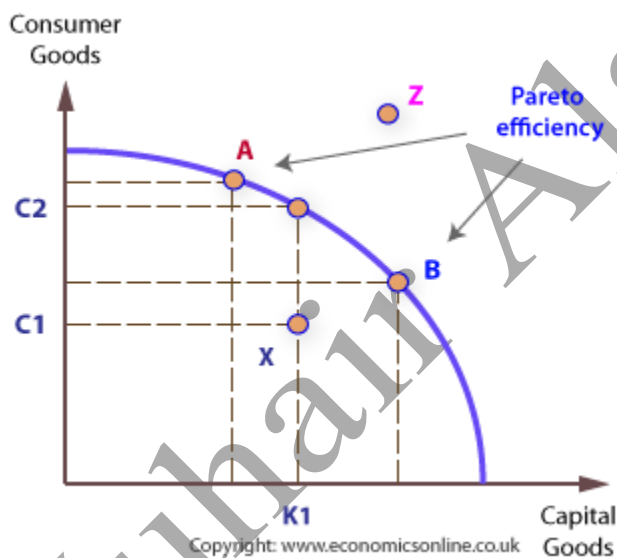


The result is a loss of output of 26 million textbooks (from 65 to 39m). Hence, the opportunity cost to *Mythica* of this decision can be expressed as 26m textbooks. In fact, this is the same as comparing the *static* opportunity cost of producing 3m computers (5m textbooks) and 7m computers (31m textbooks).

Pareto efficiency

Any point on a PPF, such as points 'A' and 'B', is said to be efficient and indicates that an economy's scarce resources are being fully employed. This is also called *Pareto efficiency*, after Italian economist Vilfredo Pareto. Any point inside the PPF, such as point 'X' is said to be inefficient because output could be greater from the economy's existing resources.

Any point outside the PPF, such as point 'Z', is impossible with the economy's current scarce resources, but it may be an objective for the future. Pareto efficiency can be looked at in another way - when the only way to make someone better off is to make someone else worse off. In other words, Pareto efficiency means an economy is operating at its full potential, and no more output can be produced from its existing resources.



Pareto efficiency is unlikely to be achieved in the real world because of various *rigidities* and *imperfections*. For example, it is unlikely that all resources can be fully employed at any given point in time because some workers may be in the process of training, or in the process of searching for a new job. While searching for work, or being trained, they are unproductive. Similarly, an entrepreneur may have wound-up one business venture, and be in the process of setting-up a new one, but during this period, they are

unproductive. Despite this, Pareto efficiency is still an extremely useful concept.

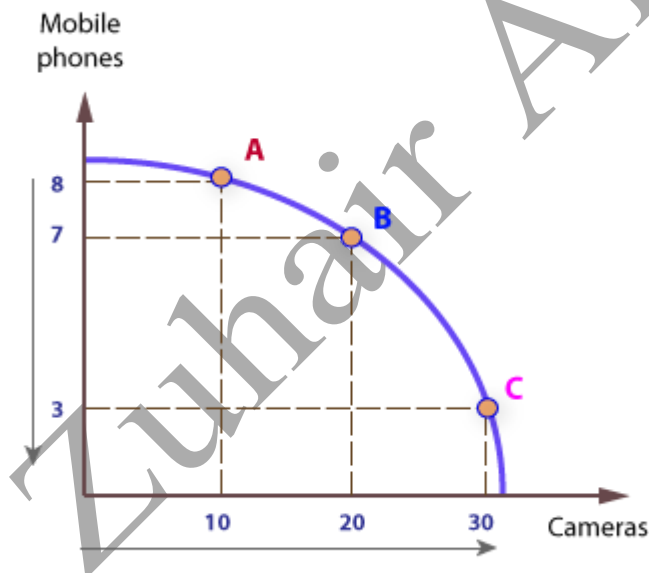
It is a useful concept for two reasons:

1. It can be an objective for an economy because it can set a direction towards which an economy can move.
2. It can help highlight the imperfections and rigidities that exist in an economy and prevent Pareto efficiency being achieved.

Increasing opportunity cost

Opportunity cost can be thought of in terms of how decisions to increase the production of an extra, marginal, unit of one good leads to a decrease in the production of another good.

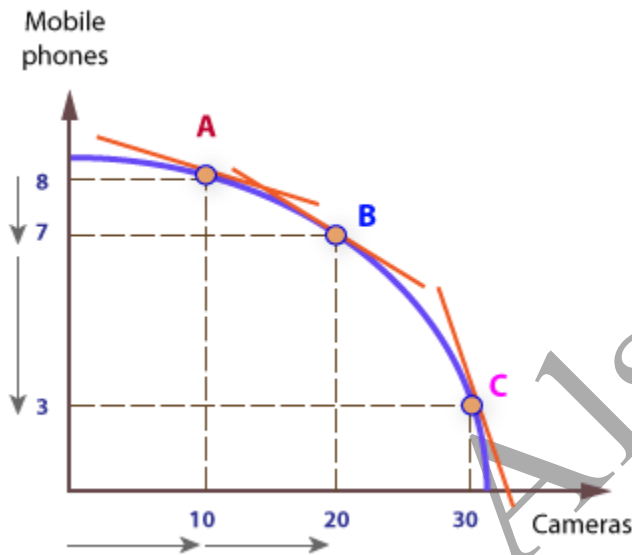
According to economic theory, successive increases in the production of one good will lead to an increasing sacrifice in terms of a reduction in the other good. For example, as an economy tries to increase the production of good X, such as cameras, it must sacrifice more of the other good, Y, such as mobile phones.



This explains why the PPF is concave to the origin, meaning it is *bowed outwards*. For example, if an economy initially produces at A, with 8m phones and 10m cameras (to 20m), and then increases output of cameras by 10m, it must sacrifice 1m phones, and it moves to point B.

If it now wishes to increase output of cameras by a further 10m (to 30m) it must sacrifice 2m phones, rather than 1m, and it moves to point C; hence, opportunity cost increases the more a good is produced.

The gradient of the PPF gets steeper as more cameras are produced, indicating a greater sacrifice in terms of mobile phones foregone.



Full employment:

State of economy in which all eligible people who want to work can find employment at prevailing wage rates. However, it does not imply 100 percent employment because allowances must be made for frictional unemployment and seasonal factors.:

The first definition of full employment would be the situation where everyone willing to work at the going wage rate is able to get a job.

This would imply that unemployment is zero because if you are not willing to work then you should not be counted as unemployed. To be classified as unemployed you would need to be actively

seeking work. This does not mean everyone of working age is in employment. Some adults may leave the labour force, for example, women looking after children.

But, in practise, we never see 0% unemployment, and this can make full employment hard to define. Generally, unemployment rate of 3% or less would be considered to be full employment. But, this is a figure the UK hasn't experienced for many decades.

Optimal Unemployment Level

Another definition of full employment would be the 'optimal' level of unemployment. In practise, an economy will never have zero unemployment because there is inevitably some [frictional unemployment](#). This is the unemployment where people take time to find the best job for them. Frictional unemployment is not necessarily a bad thing. It is better people take time to find a job suitable for their skill level, rather than get the first job that comes along. Generally, you may expect frictional unemployment to cause an unemployment rate of 2-3%. Therefore, some economists may claim that unemployment of less than 3% indicates 'full employment' – or at least very close.

Cyclical Unemployment

Over time, the economy experiences many ups and downs. That's what we call **cyclical unemployment** because it goes in cycles. Cyclical unemployment occurs because of these cycles. When the economy enters a recession, many of the jobs lost are considered cyclical unemployment.

For example, during the Great Depression, the unemployment rate surged as high as 25%. That means one out of four people were willing and able to work, but could not find work! Most of this unemployment was considered cyclical unemployment. Eventually, unemployment came down again. As you can see, at least part of unemployment can be explained by looking at the cycles, or the ups and downs of the economy.

Frictional Unemployment

Frictional unemployment occurs because of the normal turnover in the labor market and the time it takes for workers to find new jobs. Throughout the course of the year in the labor market, some workers change jobs. When they do, it takes time to match up potential employees with new employers. Even if there are enough workers to satisfy every job opening, it takes time for workers to learn about these new job opportunities, and for them to be considered, interviewed and hired.

When Cindy graduates from college, she begins looking for work. Let's say it takes her four months to land a new job. During this time, she is frictionally unemployed.

Structural Unemployment

Let's talk about **structural unemployment** occurs because of an absence of demand for a certain type of worker. This typically happens when there are mismatches between the skills employers want and the skills workers have. Major advances in technology, as well as finding lower costs of labor overseas, lead to this type of unemployment.

Lesson 4

8- economic wants and resources :

The want is the personal feeling and desire to obtaining economic commodities .

Economic wants have four qualities:-

- a/ The ability of satisfaction.
- b/ The ability of renew ability.
- c/ Multiplicity .
- d/ The ability of replacement.

Resources are all materials and goods obtained or produced by people and available in the economy:-(food, clothes, machines, buildings , lands, waters, money....etc.

9- the commodity and utility:-

The commodity is a concept refers to everything that satisfies the human need.

Utility is the ability of the commodity on satisfying the human wants.

10- The price and value :-

The price is the quantity of money paid to get a good or service.

The value is the quantity of money spend in producing or manufacturing the economic commodity .

Value = All costs paid in producing the commodity.

Chapter tow : The Theory of the price

1- Demand theory : The branch of the price theory that deals with the way in which the consumer makes his choices for consumption with a given income and set of prices.

a/ Demand concept : The amount of the commodity that the person is willing and able to purchase in a given period of time and different prices.

b- Demand curve :- A graphic representation showing the quantities of a commodity the consumers are willing and able to buy at a given period of time and alternative prices with the assumption that everything affecting demand (except the price) remains constant.

Price (\$/slice)	Quantity Demanded (number of slices)
\$2.50	3
\$2.00	4
\$1.50	5
\$1.00	6
\$0.50	7

A change in the price of a good causes a movement along the demand curve. If the price of pizza falls from \$2.00 to \$0.50, the market moves from point A down the demand curve to point B. The quantity demanded rises from 6 to 12 slices of pizza. The change in the price of pizza has no effect on the demand for pizza. Demand is represented by the entire demand curve. A change in the price of pizza does not cause any change in the demand curve.

the demand curve embodies a negative price to quantity relationship. The curve typically slopes downward from left to right; though there are some goods and services that exhibit an

upward sloping demand, these goods and services are characterized as abnormal.

A change in price, with no change in any of the other variables that affect demand, results in a movement along the demand curve. For example, if the price of coffee falls from \$6 to \$5 per pound, consumption rises from 25 million pounds to 30 million pounds per month. That is a movement from point A to point B along the demand curve in Figure 3.1 "A Demand Schedule and a Demand Curve". A movement along a demand curve that results from a change in price is called a change in quantity demanded. Note that a change in quantity demanded is not a change or shift in the demand curve; it is a movement along the demand curve.

Source: Boundless. "Demand Schedules and Demand Curves." Boundless Economics. Boundless, 21 Jul. 2015. Retrieved 14 Mar. 2016 from <https://www.boundless.com/economics/textbooks/boundless-economics-textbook/introducing-supply-and-demand-3/demand-46/demand-schedules-and-demand-curves-170-12268/>

Lesson 7

3/1/2011

Law of Demand: The law that reflects the relationship between the price of a commodity and quantity demanded of it (The lower is the price, the greater the quantity that will be demanded) other things constant.

.But why higher prices reduces the quantity demanded. The theory give two reasons:-

- 1- Substitution Effect :The change in consumption resulting from a change in the price of one good relative to the price of other goods.
- 2- Income Effect: The change in consumption resulting from an increase in the consumers real income.
- 3- rices of Related Goods and Services
- 4- Suppose the price of doughnuts were to fall. Many people who drink coffee enjoy dunking doughnuts in their coffee; the lower price of doughnuts might therefore increase the demand for coffee, shifting the demand curve for coffee to the right. A lower price for tea, however, would be likely to reduce coffee demand, shifting the demand curve for coffee to the left.
- 5-
In general, if a reduction in the price of one good increases the demand for another, the two goods are called complements. If a reduction in the price of one good reduces the demand for another, the two goods are called substitutes. These definitions hold in reverse as well: two goods are complements if an increase in the price of one reduces the demand for the other, and they are substitutes if an increase in the price of one increases the demand for the other. Doughnuts and coffee are complements; tea and coffee are substitutes.
- 6- Complementary goods are goods used in conjunction with one another. Tennis rackets and tennis balls, eggs and bacon, and stationery and postage stamps are complementary goods. Substitute goods are goods used instead of one another. iPods, for example, are likely to be substitutes for CD players. Breakfast cereal is a substitute for eggs. A file attachment to an e-mail is a substitute for both a fax machine and postage stamps.
- 7-
- 8- Figure 3.4
- 9- The Factors affecting demand:-

- 1-Number of the consumers.
- 2- The price of the commodity.
- 3- The prices of other alternative or complement commodities.
- 4- The size of the consumer incomes.
- 5- Tastes of the consumers.

d/Demand function :- A mathematical relationship between the quantity of a good the consumer wishes to buy and the variables that affect this choice.

It is written as follows;-

$$D= f(P,P_1,Y,T)$$

Where:

P; The price of the good.

P₁: The prices of other alternative good.

Y:The size of the consumers income.

T:The tastes of the consumers.

21/2/2011

C/ The concept of Elasticity :-

Elasticity is the degree of response of demand to the change in the price .It is the percentage change in the quantity demanded of a commodity to the percentage change in the price of the commodity ,or :

Percentage change in quantity demanded

Percentage change in the price

Or;

% change in Qd

% change in P

Or:

$$E = \frac{\Delta q/q}{\Delta p/p} \quad \text{or} \quad \frac{\Delta q}{\Delta p} \cdot \frac{p}{q}$$

e/ Degrees of demand elasticity : They are five degrees:-

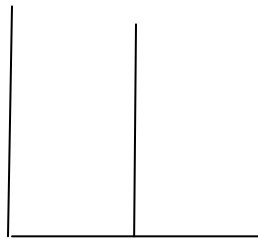
a/ Perfectly or completely inelastic demand : where the quantity demanded does not change as the price change. The degree is zero and demand curve will be vertical on the horizontal axis .(see graph 1).

b/ Relatively inelastic demand ; where the quantity demanded change by a smaller percentage than the price does . The degree is greater than zero but less than one .(see graph 2)

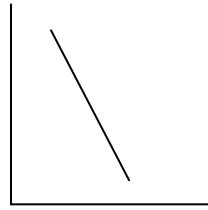
c/ Unitary elasticity: where the quantity demanded change by exactly the same percentage as dose the price .The degree is one only .(see graph 3).

d/ Relatively or fairly elastic demand ; where quantity demanded change by greater percentage than does the price. The degree is greater than one but less than infinitely.(see graph 4).

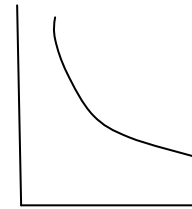
e/ Perfectly or infinitely elastic demand : where demand curve becomes straight line on , and parallel to the horizontal axis . Here consumers are prepared to buy all they can obtain at same price but non at all when even slightly the price changes .The degree is infinity.(see graph 5)



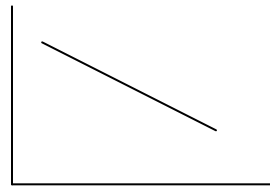
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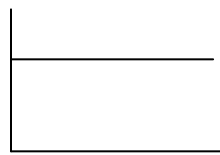
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5

Kinds of demand:-

1- Joint or complementary demand:

If a commodity is a complementary to another commodity .the demand for the first one cause a demand for the second commodity.

e.g: tea and sugar, petrol and cars.....etc.

The change in the demand for the first commodity will bring the same percentage change in the demand for the second one .

2-Derived demand :demand can be derived one when it is a direct result for the demand on the other commodities .

e.g : the demand for the factors of production (Land ,labor, and capital).wools and cottons and the textile industries.

3-Composite demand :

The demand or use the same commodity for more than one purpose.

Steel is used in the car manufacturing ,Ship building, bridges construction..etc

16/3/2011

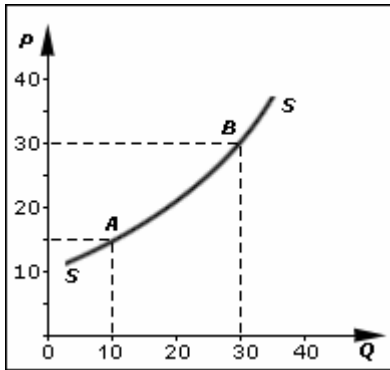
-Supply theory :

Supply a term refers to the amount of a commodity the producers (or sellers) are ready and willing to supply in a given period of time and a set of different prices.

a/ Supply curve;- A graphic representation showing the quantities of a commodity the producers (or sellers) are willing to produce (or sell) in a given period of time and various prices with the assumption that everything affecting supply (except the price of that commodity) remains constant.

b/Factors affecting supply: supply of any good is affected by five factors : The Supply Curve

The **supply curve** shows the quantity supplied of a given product at varying price points, holding all else constant. Here's a graph of the supply curve.



You'll notice that the x -axis is labeled 'Q', and the y -axis is labeled 'P.' Those stand for quantity and price. Just like we saw earlier, when the price of a good goes up, the supply does as well. Each producer has his or her own supply curve for a given product, which can vary from one producer to another. The exact curve depends on production costs and other variables.

Let's look at an example. Imagine two wineries in the Paso Robles region: Paso Winery and Robles Winery. Paso Winery may be willing to supply 20 bottles of their wine if the market price were \$10 per bottle but willing to supply 100 bottles if the price were \$50 per bottle. Robles Winery may only be willing to supply 5 bottles if the price were \$20 each and 50 bottles at a price of \$50 each.

The summation of the two individual supply curves creates a market supply curve, with red wine ranging from \$10 a bottle up to \$50 a bottle. The two individual supply curves differ because the wineries are willing and able to supply red wine at different prices. This may be due to varying input costs. Those are the costs associated with producing the wine, such as the variety of grape being used, labor costs, or technique of fermenting the grapes.

- 1-The price of supplied good(p).
- 2-The price of other substitutes (p_1)
- 3-The prices of the factors of production(F).
- 4-The goals of the producers or sellers(G).
- 5 –The technology used(T).

Hence, Supply function is written as follows

$$S = f(P, P_1, F, G, T).$$

-. What determines the market prices:-

In the free-enterprise economy, the prices of the goods and services and the prices of the factors of production are determined by the demanded for and the supply of these goods and the factors of production.

. Equilibrium:- Is the market condition where the quantity of the commodity that the consumers are willing and able to purchase equals the quantity the producers or sellers are willing to supply. Geometrically the equilibrium price occurs at the point where the demand curve intersects at the supply curve.

13/4/2011

CH3/ The theory of consumer Equilibrium:

As we said before ,utility means the proper of a commodity that enable it to satisfy a human want.

We should know that;

a/ Utility is a subjective matter .Cigarettes are useful and give utility to the smokers, but they are not to the others.

b/Utility increases according to the degree of necessary ,and the quantity we consume of the good in a given time.

c/Total Utility : The sum of utilities the person gets from consuming the units of the consumed commodity.

$$T.U = U_1 + U_2 + U_3 + \dots + U_n .$$

d/Marginal Utility :It refers to the change in total utility as an individual consumer has additional unit of the commodity M.U is the difference between the utility of the previous unit and the following unit of commodity

Zuhair Alsadoon