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BA LLB Paper Code: 115

Subject: Economics-I (Microeconomic Analysis)

UNIT – I

Introduction to Economics

- a. Definition, methodology and scope of economics
- b. Forms of economic analysis – Micro vs. macro, partial vs. general, static vs. dynamic, positive vs. normative, short run vs. long run
- c. Basic concepts and precepts – economic problems, economic rationality, optimality
- d. Economic organization – market, command and mixed economy
- e. Relation between economics and law- economic offences and economic legislation

Unit – II

Demand and Supply

- a. Theories of demand- demand function, law of demand
- b. Concept of utility and utility theory-utility approach, indifference curve approach
- c. Law of supply, supply function
- d. Price determination; shift of demand and supply
- e. Elasticity of demand and supply; consumer surplus
- f. Applications of demand and supply –tax floor and ceilings; applications of indifference curves- tax, labor and work

Unit – III

Production Analysis, costs and market structure

- a. Concepts of Production- production isoquants, returns, returns to factor, returns to scale
- b. Cost and revenue concepts



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- c. Classification of markets-pure and perfect competition; monopolistic and imperfect competition; monopoly, duopoly and oligopoly; cartels;
- d. Concept of Dumping- to be substantiated with the cases of International Courts of Justice, Competition law

Unit – IV

Theory of determination of factor prices, rent, interest, wages and profit

- a. Labour supply and wage determination
- b. Role of trade unions and collective bargaining in wage determination; minimum wage legislation
- c. Exploitation of labour
- d. The theory of rent, interest and profits



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UNIT-1

Microeconomics (from Greek prefix *mikro-* meaning "small" and economics) is a branch of economics that studies the behavior of individual households and firms in making decisions on the allocation of limited resources. 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. This is in contrast to macroeconomics, which involves the "sum total of economic activity, dealing with the issues of growth, inflation, and unemployment." Microeconomics also deals with the effects of national economic policies (such as changing taxation levels) on the aforementioned aspects of the economy. Particularly in the wake of the Lucas critique, much of modern macroeconomic theory has been built upon 'micro foundations'—i.e. based upon basic assumptions about micro-level behavior.

One of the goals of microeconomics is to analyze market mechanisms that establish relative prices amongst goods and services and allocation of limited resources amongst many alternative uses. Microeconomics 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.

Wealth Definition:

The early economists like J.E. Cairnes, J.B.Say, and F.A.Walker have defined economics as a science of wealth. Adam Smith, who is also regarded as father of economics, stated that economics is a science concerned with the nature and causes of wealth of nations. That is, economics deal with the question as to how to acquire more and more wealth by a nation. J.S.Mill opined that it is the practical science dealing with the production and distribution of wealth. The American economist F.A.Walker says that economics is that body of knowledge, which relates to wealth. Thus, all these definitions relate to wealth.



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However, the above definitions have been criticized on various grounds. As a result, economists like Marshall, Robbins and Samuelson have put forward more comprehensive and scientific definitions. Emphasis has been gradually shifted from wealth to man. As Marshall puts, it is “on the one side a study of wealth; and on the other, and more important side, a part of the study of man.”

Welfare Definition:

According to Marshall, economics not only analysis the aspect of how to acquire wealth but also how to utilize this wealth for obtaining material gains of human life. In fact, wealth has no meaning in itself unless it is used to purchase all those things which are required for our sustenance as well as for the comforts necessary for life. Marshall, thus, opined that wealth is a means to achieve certain ends. In other words, economics is not a science of wealth but a science of man primarily. It may be called as the science which studies human welfare. Economics is concerned with those activities, which relates to wealth not for its own sake, but for the sake of human welfare that it promotes. According to Canon, “The aim of political economy is the explanation of the general causes on which the material welfare of human beings depends.” Marshall in his book, “Principles of Economics”, published in 1890, describes economics as, “the study of mankind in the ordinary business of life; it examines that part of the individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being”.

On examining the Marshall’s definition, we find that he has put emphasis on the following four points:

- (a) Economics is not only the study of wealth but also the study of human beings. Wealth is required for promoting human welfare.
- (b) Economics deals with ordinary men who are influenced by all natural instincts such as love, affection and fellow feelings and not merely motivated by the desire of acquiring maximum wealth for its own sake. Wealth in itself is meaningless unless it is utilized for obtaining material things of life.



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(c) Economics is a social science. It does not study isolated individuals but all individuals living in a society. Its aim is to contribute solutions to many social problems.

(d) Economics only studies 'material requisites of well being'. That is, it studies the causes of material gain or welfare. It ignores non-material aspects of human life.

This definition has also been criticized on the ground that it only confines its study to the material welfare. Non-material aspects of human life are not taken into consideration. Further, as Robbins said the science of economics studies several activities, that hardly promotes welfare.

Scarcity Definition:

Lionel Robbins challenged the traditional view of the nature of economic science. His book, "Nature and Significance of Economic Science", published in 1932 gave a new idea of thinking about what economics is. He called all the earlier definitions as classificatory and unscientific. According to him, "*Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.*" This definition focused its attention on a particular aspect of human behaviour, that is, behavior associated with the utilization of scarce resources to achieve unlimited ends (wants). Robbins definition, thus, laid emphasis on the following points:

- 'Ends' are the wants, which every human being desires to satisfy. Want is an effective desire for a thing, which can be satisfied by making an effort for obtaining it. We have unlimited wants and as one want gets satisfied another arises. For instance, one may have the desire to buy a car or a flat. Once the car or the flat is purchased, the person wishes to buy a more spacious and designable car and the list of his wants does not stop here but goes on one after another. As human wants are unlimited, we have to make a choice between the most urgent want and less urgent wants. Thus the problem of choice arises. That is why economics is also called as a science of choice. If wants had been limited, they would have been satisfied and there would have been no economic problem.

(b) 'Means' or resources are limited. Means are required to be used for the satisfaction of various wants. For instance, money is an important means to satisfy many of our wants. As stated, means are scarce (short in supply in relation to demand) and as such these are to be used



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optimally. In other words, scarce or limited means/resources are to be economized. We should not make waste of the limited resources but utilize them very judiciously to get the maximum satisfaction.

(c) Robbins also said that, the scarce means have alternative uses. It means that a commodity or resource can be put to different uses. Hence, the demand in the aggregate for that commodity or resource is almost insatiable. For instance, if we have a hundred rupee note, we can use it either to purchase a book or a fashionable clothe. We may use it in other unlimited ways as we like.

Let us now turn our attention to the definitions put forward by modern economists. J.M.Keynes defined economics as the study of the management of scarce resources and of the determination of income and employment in the economy. Thus his study centered on the causes of economic fluctuations to see how economic stability could be established. According to F. Benham, economics is, “a study of the factors affecting the size, distribution and stability of a country’s national income.” Recently, economic growth and development has taken an important place in the study of economics. Prof. Samuelson has given a growth oriented definition of economics. According to him, economics is the study and use of scarce productive resources overtime and distribute these for present and future consumption. In short, economics is a social science concerned with the use of scarce resources in an optimum manner and in attainment of desired level of income, output, employment and economic growth.

Economic Rationality:

Overview

Rationality is a notion at the heart of both economics and business research. In their descriptive models, economists postulate that people behave rationally; and, in their normative models, many consultants and academics insist that business people ought to make rational decisions. But rationality is not an unambiguous concept, and it is certainly not uncontested as an economic postulate or a business goal. In this entry, a discussion of the meanings of rationality in



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economics is analysed in order to provide a framework for understanding the uses of – and limits to – the concept.

1 The rationality principle

As a point of orientation, a discussion of Karl Popper's well-known rationality principle should be raised (for an excellent discussion of Popper's principle and the debates surrounding it, see Caldwell (1994)). This will provide a framework and a language with which to discuss both rationality and the methodology of economics. According to Popper's principle, one should analyse social processes by assuming that agents act appropriately or reasonably in the situation in which they find themselves. This reflects a version of situational analysis, also known as single-exit modelling. Imagine attempting to predict which exit an agent will take from a sports stadium (Latish 1976). An agent with free will could in principle choose any exit. But the structure of the situation postulated may will a typical and reasonable agent to use the exit nearest his or her seat.

Differences between Macro and Microeconomics:

To an extent, both macro and microeconomics look at supply and demand, as well as price levels. However, each field views these factors from a different standpoint. To better grasp the meaning of macroeconomics, it might be helpful to think of it as a "top-down approach" toward understanding the economy. Macroeconomics paints a picture of the economic conditions in a particular country as a whole; however, knowledge of macroeconomic principles can be used to develop an understanding of conditions for the individual players in the economy. Likewise, microeconomics looks at the economy from the bottom up, but the information it gathers about individual households and businesses is helpful in gaining an understanding of general economic conditions. The difference of micro and macroeconomics may seem well-defined on the surface, but these two categories of study can overlap in significant ways. In fact, no student of the economy can truly comprehend the meaning of macroeconomics without comprehending the meaning of microeconomics as well.

Economic Methodology:



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Economic discussions may involve both positive and normative analysis. Positive analysis involves attempts to describe how the economy functions. Normative economics relies on value judgments to evaluate or recommend alternative policies.

As a social science, economics attempts to rely on the scientific method. The scientific method consists of the following steps:

- Observe a phenomenon,
- Make simplifying assumptions and develop a model (a set of one or more hypotheses),
- Make predictions, and
- Test the model.

If the model is rejected in step 4, formulate a new model. If the test fails to reject the model, conduct additional tests. Note that tests of a model can never prove that a model is true. A single test, however, may be used to establish that a model is incorrect. Economists rely on the *ceteris paribus* assumption in constructing models. This assumption, translated roughly as "other things constant," allows economists to simplify reality so that it may be more readily understood.

Logical fallacies:

The **fallacy of composition** occurs when one incorrectly attempts to generalize from a relationship that is true for each individual, but is not true for the whole group. As an example of this, note that any person can get a better view at a concert by standing (regardless of the actions of those in front of him or her). It is incorrect, though, to state that everyone can get a better view if everyone stands. Similarly, one would commit the fallacy of composition if one were to claim that, since anyone could increase his or her wealth by stealing from his or her neighbors (assuming no detection), that everyone can become wealthier if everyone steals from their neighbors. The association as causation fallacy, also known less technically as the *post hoc, ergo propter hoc* fallacy, occurs if one incorrectly assumes that one event is the cause of another simply because it precedes the other event. The Super Bowl example discussed in your text is a good example of this logical fallacy

Economics is as a Normative and Positive Science?



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It deals with thing as they “ought to be”. It has no objection to discussion the moral rightness or wrongness of things. Economics is not only explaining facts as they are but also justifies them.

Positive Science deals with things as they are means “What is”. It explains their causes and effect but it remain strictly neutral as regards ends, it refuses to pass moral judgments.

Both can be distinguish as follows:

Basis: Positive Normative

- Expresses What is : What ought to be
- Based on Cause & effect of facts : Ethics
- Deal with Actual or realistic situation : Idealistic situation
- Value judgment Are not given : Are given

Deductive Methodology of Economics?

It is also known as abstract, axiomatic, a priori analytical. The economist begins from the principles which are accepted as self evident or proved proposition and then draws conclusion as consequences of these principles through the process of valid resourcing moves from “General to Particular”.

Deductive logic passes through following stages.

(A) Perception and selection of premises from which the conclusions are to be derived. Assumptions are made.

(B) Inferences are drawn from the premises originally selected.

(C) It consists of a return to the real world by means of an interpretation that yields conclusion in term of concrete sensible world of physical reality.



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Merits

- Simple
- Economical
- Accurate & reliable

Demerits

- Unrealistic assumption
- Require more competence
- It is based on false premises
- Static analysis
- Not applicable uniformly

Inductive Methodology of Economics?

It involves generalization of particular observation. It is also called experimental, statistical, historical and posterior method. In this, we move from “particular to General”. The hypotheses set in an inductive logic are also subject to future enquiry and tests. If not found empirically correct, it can be changed or modified or dropped altogether. Method is composed of two processes (A) Experimentation (B) Statistical Enquiries.



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UNIT – II

Demand:

Meaning: The demand for any commodity at a given price is the quantity of it which will be bought per unit of time at that price.

Elements of Demand: According to the definition of demand here are three elements of demand for a commodity:-

- (i) There should be a desire for a commodity.
- (ii) The consumer should have money to fulfill that desire.
- (iii) The consumer should be ready to spend money on that commodity.

Thus we can define demand as the desire to buy a commodity which is backed by sufficient purchasing power and a willingness to spend.

Determinants of Demand:

There are many economic, social and political factors which greatly influence the demand for a commodity. Some of these factors are discussed below:

(1) Price of the Commodity

(2) Price of Related Goods

- (i) Complementary Goods
- (ii) Substitute Goods

(3) Level of Income and Wealth of the Consumer

- (i) Necessaries
- (ii) Inferior goods
- (iii) Luxuries

(4) Tastes and Preference

(5) Government Policy



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(6) Other Factors:

- (i) Size and Composition of Population
- (ii) Distribution of Income and Wealth
- (iii) Economic Fluctuations

Law of Demand:

The law of demand states that, other things being equal, the demand for good increases with a decrease in price and decreases in demand with a increase in price. The term other things being equal implies the prices of related goods, income of the consumers, their tastes and preferences etc. remain constant.

Demand Schedule:

A Demand schedule is a list of the different quantities of a commodity which consumes purchase at different period of time. It expresses the relation between different quantities of the commodity demanded at different prices.

- (i) **Individual Demand Schedule:** It is defined as the different quantities of a given commodity which a consumer will buy at all possible prices.

Price (Rs.)	Quantity Demanded
1	5
2	4
3	3
4	2

- (ii) **Market Demand Schedule:** Market demand schedule is defined as the quantities of a given commodity which all consumers will buy at all possible prices at a given moment of time.

Demand Curve:



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Demand Curve is simply a graphic representation of demand schedule. It expresses the relationship between different quantities demanded at different possible prices of the given commodity.

Individual Demand Curve : The graphic representation of Individual Demand is known as Individual Demand Curve.

Market Demand Curve : The graphic representation of market demand schedule is known as Market Demand Curve .Thus market demand curve is the one that represents total quantities of a commodity demanded by all the consumers in the market at different prices. It is the horizontal summation of the individual demand curves.

Demand Curve slopes downwards:

Reasons are :-

(i) **Law of Diminishing Marginal Utility:** The law of demand is based on the law of diminishing marginal utility which states that as the consumer purchases more and more units of a commodity, the satisfaction derived by him from each successive unit goes on decreasing. Hence at a lesser price, he would purchase more. Being a rational human beings the consumer always tries to maximize his satisfaction and does so equalizing the marginal utility of a commodity with its price i.e. $Mux = px$. It means that now the consumer will buy additional units only when the price falls

(ii) **New Consumers :** When the price of a commodity falls many consumers who could not begin to purchase the commodity e.g. suppose when price of a certain good 'x' was Rs. 50 market demand was 60 units now when the price falls to Rs. 40, new consumers enter the market and the overall market demand rises to 80 units.

(iii) **Several Use of Commodity :** There are many commodities which can be put to several uses e.g. coal, electricity etc. When the prices of such commodities go up, they will be used for important purpose only and their demand will be limited. On the other hand, when their price fall they are used for varied purpose and as a result their demand extends. Such inverse relation between demand and price makes the demand curve slope downwards.



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(iv) **Income Effect** : When price of a commodity changes, the real income of a consumer also undergoes a changes. Hence real income means the consumer's purchasing power. As the price of a commodity falls the real income of a consumer goes up and he purchases more units of a commodity eg. Suppose a consumer buys units wheat at a price Rs. 40/kg now, when the price falls to Rs. 30/kg. his purchasing power or the real income increase which induces him to buy more units of wheat.

(v) **Substitution Effect** : As the price of a commodity falls the consumer wants to substitute this good for those good which now have become relatively expensive e.g. among the two substitute goods tea and coffee, price of tea falls then consumer substitutes tea for coffee. This is caused the 'Substitution effect' which makes the demand curve sloped downwards. In a nutshell, with a fall in price more units are demanded partly due to income effect and partly due to substitution effect. Both of these are jointly known as the 'price effect'. Due to this negative price effect the demand curve slopes downwards.

Exceptions to the Law of Demand:

Exceptions to the law of demand refer to such cases where the law of demand does not operate, i.e., a positive relationship is established between price and quantity demanded.

- **Giffen Goods** : Sir Giffen made an interesting observation in 1845 during famine in Ireland. When price of potatoes went up, poor people purchased more quantity of potatoes instead of less quantity as expected from the law of demand. The reason was that between two items of food consumption meat and potatoes- potatoes were still cheaper, with the result that the poor families purchased more of potatoes and less of meat. This is known as Giffen effect which is seen in cheap necessary foodstuffs. Again, the word 'Giffen' is not synonymous with 'inferior'. It simply refers to those goods which have a positive relationship with price.

- Conspicuous Goods or Goods of Ostentation
- Conspicuous Necessities
- Future Expectations About Prices
- Change in Fashion



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- Ignorance
- Emergency

Change in Demand:

(1) Movement along the Same Demand Curve : When due to change in price alone demand changes, it is expressed by different points on the same demand curve.

(i) **Expansion of Demand :** When with a fall in price, demand for a commodity rises (other things being equal) it is called expansion of demand. It is represented through the downward movement along the demand curve.

(ii) **Contraction of Demand :** When with an increase in price, demand for a commodity falls (other things being equal) It is called contraction of demand. It is represented by upward movement along the demand curve.

(2) Shifting of Whole Demand Curve:- When due to change in factors other than price of the same commodity like change in taste, income etc. the demand changes, the entire demand curve shifts either upwards or downwards.

(i) **Increase in demand:-** When due to favorable change in factors other than the price the demand of the commodity rises it is called increase in demand. It is represented by a right ward shift in the demand curve.

Increase in demand takes place in two ways :-

(a) When more purchase takes place at same price.

(b) When same purchase takes place at more price. Here DD is the original demand curve where Q1 quantity is bought at P price. Due to the change in factors the quantity purchased increases to Q2 at the same price P. this causes the demand curve to shift upward or to the right. This shift in demand curve is called increase of demand.

(ii) **Decrease in Demand :** When due to change in factors other than the price the demand of the commodity falls, it is called decrease in demand. Its is represented by a left ward shift in the demand curve.



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Decrease in demand takes place in two ways :-

- (a) When less purchase takes place at same price.
- (b) When same purchase takes place at less price.

Here DD is the original demand curve where Q_1 quantity is bought at P price. Due to the change in other factors the quantity purchased decreases to Q_2 at same price P . This causes the demand curve to shift downward or leftward. This shift in demand curve is called decrease in demand.

Elasticity of Demand:

Meaning: The elasticity of demand measures the responsiveness of the quantity demanded of a good to change in its quantitative determinant. Types Elasticity of demand are as follows :-

- Price Elasticity of Demand
- Income Elasticity of Demand
- Cross Elasticity of Demand

Price Elasticity of Demand:

The Degree of responsiveness of the quantity demanded of a good to a change in its prices of goods.

Methods to measure the elasticity of demand;

- (1) % or Proportionate Method
- (2) Total Outlay or Total Expenditure Method
- (3) Point Elasticity or Geometric Method
- (4) Arc Elasticity Method

There are five degrees of Price Elasticity of Demand :-

- (i) **Perfectly Elastic Demand** : A Perfectly elastic demand is one in which demand is infinite at the prevailing price. It is a situation where the slightest rise in price causes the quantity demanded of the commodity to fall to zero.



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(ii) **Perfectly Inelastic Demand:** Perfectly inelastic demand is one in which a change in quantity demanded. It is a situation where even substantial changes in price leave the demand unaffected.

(iii) **Unitary Elastic Demand :** unitary elastic demand is one in which the quantity demanded changes by exactly the same percentage as the price. It is a situation when change in quantity demanded in response to change in price of the commodity is such that total expenditure of the commodity, remains same.

(iv) **Greater than Unitary Elastic Demand or Elastic Demand :** A elastic demand is one in which the quantity demanded changes by a larger percentage than the price. It is a situation when change in quantity demanded in response to change in price of the commodity is such that the total expenditure on the commodity increase when prices decreases and total expenditure decreases when price increases.

(v) **Less than Unitary Elastic Demand or Inelastic Demand :** Inelastic Demand is one in which quantity demanded changes by a smaller percentage than the change in price. It is a situation when change in quantity demanded in response to change in price of the commodity is such that total expenditure on the commodity decreases when price falls and total expenditure increases when price rises.

(2) **Total Outlay Method:** Under this the elasticity of demand can be measured by considering the changes in price and the subsequent change in the total quantity of goods purchased and the total amount of money spent on it. This method gives only the nature of elasticity and not the exact numerical value.

Degree of prices elasticity of demand according to this method as follows:

(i) **Elastic Demand:** The demand for a commodity is elastic when the total expenditure on it increases with a fall in price.

(ii) **Unitary Elastic Demand :** here, with a fall in price the total outlay of the consumers on that commodity remains the same, though he purchase more in terms of units. Elasticity in this case equals to one.



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(iii) **Inelastic demand** : A commodity will have inelastic demand when with a fall in its price the total expenditure on it also falls. Here, the elasticity is less than unity.

(3) **Point Elasticity Method** : In this method we measure elasticity at a given point on the demand curve. Here we make use of derivatives rather than finite changes in price and quantity. Point elasticity can also be calculated as :-

(4) **Arc Elasticity** : It is a measure of the average responsiveness to price change exhibited by a demand curve over some finite stretch of the curve.

Determinants of Price Elasticity of Demand:

- (i) Nature of Commodity
- (ii) Substitute Goods
- (iii) Position of a Commodity in a Consumer's Budget
- (iv) Number of Uses
- (v) Time Period
- (vi) Consumer Habit
- (vii) Joint or Tied Demand
- (viii) Price Expectation

Income Elasticity of Demand:

Income elasticity of demand is the ratio of change in demand to the change in income.

$$= \frac{\% \text{ Change in Quantity Demanded}}{\% \text{ Change in Income}}$$

Degrees of Income Elasticity of Demand

- (i) **Negative Income Elasticity of Demand** : Negative Income Elasticity of Demand is one in which demand for a commodity falls as the income rises. This holds good for inferior goods.



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(ii) **Zero Income Elasticity of Demand** : Zero income elasticity of demand is one in which demand of a commodity does not change as the income changes. This holds good for essential goods.

(iii) **Greater than Zero but less than One Income Elasticity of Demand:**

Greater than zero but less than one income elasticity of demand is one in which demand for a commodity rises less than in proportion to a rise in income.

(iv) **Unitary Income Elasticity of Demand** : Unitary income elasticity of demand is one in which the demand for a commodity rises in the same proportion as the rise in income.

(v) **Greater than Unitary Income Elasticity of Demand** : Greater than unitary income elasticity of Demand is one in which the demand for commodity rises more than in proportion to rise in income.

Cross Elasticity of Demand?

The cross elasticity of demand is the responsiveness of demand for commodity X to change in price of commodity Y and is represented as follows:-

$$= \frac{\text{Proportionate Change in the Quantity Demanded of Commodity X}}{\text{Proportionate Change in the Price of Commodity Y}}$$

The relationship between X and Y commodities may be substitute as in case of tea and coffee or complementary as in the case of ball pens and refills.

(i) Cross elasticity = Infinity where Commodity X is nearly a perfect substitute for Commodity Y

(ix) Cross Elasticity = Zero where Commodities X and Y are not related

(x) Cross Elasticity = Negative where Commodities X and Y are complementary

Thus, if E_c approaches infinity, means that commodity X is nearly a perfect substitute for commodity Y. On the other hand, if E_c approaches Zero it would mean that the two commodities in question are not related at all. E_c shall be negative when commodity Y is complementary to commodity X.



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Factor affecting Elasticity of Demand?

(i) **Nature of Commodity:** Ordinarily, necessities like salt, Kerosene, oil, match boxes, textbooks, seasonal vegetables, etc. have less than unitary elastic demand. Luxuries like air conditioner, costly furniture, fashionable garments etc. have greater than unitary elastic demand. The reason being that change in their price has a great effect on their demand. Comforts like milk, transistor cooler, fans etc have neither very elastic nor very inelastic demand. **Jointly Demanded Goods** like car & petrol, pen & ink, camera & films etc. have ordinarily in elastic demand for example rise in price of petrol will not reduce its demand if the demand for cars has not decreased.

(ii) **Availability of Substitutes:** Demand for those goods which have substitute are relatively more elastic. The reason being that when the price of commodity falls in relation to its substitute, the consumer will go in for it and so its demand will increase. Commodities have no substitute like cigarettes, liquor etc. have inelastic demand.

(iii) **Different Uses of Commodity:** Commodities that can be put to a variety of uses have elastic demand, for instance, electricity has multiple uses. It is used for lighting, room-heating, air-conditioning, cooking etc. If the tariffs of electricity increase, its use will be restricted to important purpose like lighting. It will be withdrawn from important uses. On the other hand, if a commodity such as paper has only & a few uses, its demand is likely to be inelastic.

(iv) **Postponement of the Use:** Demand will be elastic for those commodities whose consumption can be postponed for instance demand for constructing a house can be postponed. As a result demand for bricks, cement, sand etc. will be elastic. Conversely goods whose demand cannot be postponed, their demand will be inelastic.

(v) **Income of Consumer:** People whose incomes are very high or very low, their demand will ordinarily be inelastic. Because rise or fall in price will have little effect on their demand. Conversely middle income groups will have elastic demand.

(vi) **Habit of Consumer:** Goods to which a person becomes accustomed or habitual will have in elastic demand like cigarette, coffee tobacco. Etc. It is so because a person cannot do without them.



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(vii) **Proportion of Income Spent on a Commodity:** Goods on which a consumer spends a very small proportion of his income, e.g. toothpaste, needles etc. will have an inelastic demand. On the other hand goods on which the consumer spends a large proportion of his income e.g. cloth etc. their demand will be elastic.

(viii) **Price Level :** Elasticity of demand also depends upon the level of price of the concerned commodity. Elasticity of demand will be high at higher level of the price of the commodity and low at the lower level of the price.

(ix) **Time Period :** Demand is inelastic in short period but elastic in long period. It is so because in the long run, a consumer can change his habits more conveniently in the short period.

Importance or significance of Elasticity of Demand?

(i) **Helpful in Price Determination :** The concept of elasticity helps a monopolist in fixing prices for his product. He will fix a higher price in those markets where there is inelastic demand for his product. Conversely, he will fix a lower price for the same product in some other segments of the market where there is elastic demand for that particular product. In this way he can discriminate the price to maximize his profit.

(ii) **Useful for Government :** Government fixes a higher tax rates in case of goods having inelastic demand and a lower tax rate for good having elastic demand.

(iii) **Useful in International Trade :** It helps to calculate the terms of trade and the consequent gain from foreign trade. If the demand for home product is inelastic, terms of trade will be profitable to the home country.

(iv) **Helpful in Forecasting Demand :** It is possible to forecast the demand for a particular commodity by analyzing its states of elasticity.

(v) **Elasticity of Demand :** Elasticity of demand also helps in taking decision regarding devaluing or revaluing a country in terms of foreign currency.

Demand Forecasting?

A forecast is tomorrow's expectation based on yesterday's achievement and today's plans.



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Phillip Kotler : “The company forecast is the expected level of sales based on chosen market plan and assumed marketing environment.”

Characteristics :

- (i) Explain potential demand for the commodities for specified future period of time.
- (ii) It is near expectation.
- (iii) It may in physical or monetary.
- (iv) At firm or industry level. At short period or long period.
- (v) Based on past achievement.
- (vi) Statistical tool are used.
- (vii) Based on today's plan for future.
- (viii) Based on experience.

Objectives:

- (1) **Short Period:** Micro level means firm or industry level for short time.
 - (i) **Production Planning:** Over production may leads price of commodity goes down & vice versa, which can be avoided.
 - (ii) **Input Planning:** Uninterrupted supply of raw material & labour & other factor of production.
 - (iii) **Pricing Policy:** Manage in way so the price are not low in a boom & vice versa.
 - (iv) **Sales Targeting :** Decide region-wise sales representative of firm. - Appraise and decide their performance.
 - (v) **Financial Planning :** Working capital require for short period or - Watch firm competitive in market. one cycle.
- (2) **Long Period :**
 - (i) **Expansion Planning :** Depends on future potential demand.
 - (ii) **Long Term Input Planning :** Gradual and regular supply of inputs.



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(iii) **Cost Consciousness** : Demand forecast make scale of operation who generate economies of diseconomies.

Utility?

Utility is the capacity of a commodity to satisfy human wants. It is defined as a "**want satisfying power of a commodity**". It is a subjective concept and has no material existence. It is not inherent in a commodity but depends upon the mental makeup of the consumer. The same commodity may have different degrees of utility for different persons. Utility cannot be equated with usefulness. A commodity may not be useful, yet it may have utility for a particular person.

Features of Utility:

- (i) **Utility is subjective in nature**
- (ii) **Utility is relative and variable**
- (iii) **Utility is not measurable**
- (iv) **Utility, usefulness and pleasure**
- (v) **Utility is Abstract**

There are two approaches for **measurement of utility**:

- (i) Measurement of utility in terms of money is called **Cardinal Utility Approach**. The amount of money which a consumer is prepared to pay for a commodity in the indirect measurement of its utility.
- (ii) Measurement of utility in term of ordinal numbers like I, II, III and so on it is **Ordinal Approach**. In ordinal approach we may say that I is preferable to II etc.

Types of Cardinal Utility: Utility is of two types :-

- (i) **Total Utility:** It is the amount of utility derived from the consumption of all the units taken together at a time.
- (ii) **Marginal Utility:** It is the additional utility derived from additional unit of a commodity.

Marginal Utility Analysis?



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This theory was propounded by Prof. Alfred Marshall, through this theory he explained how a consumer spends his income on different commodities so as to attain maximum satisfaction. The theory is based on certain assumptions which are as follows:-

- (1) The Cardinal Measurability of Utility
- (2) Constancy of the Marginal Utility of Money
- (3) The Hypothesis of Independent Utility
- (4) Rationality

Law of Diminishing Marginal Utility?

Ans.: The law is based on an important fact that although total wants are unlimited, each single want is individually satiable. It means that since each want is satiable, the intensity of want goes on diminishing as the consumer goes on increasing the units of consumption. This law is also known as '**Gossen's First law.**' To put it in Marshall's words, "The additional benefit which a person derives from a given increase of his stock of things diminishes with every increase in the stock that he already has."

Exception to the Law:

- (i) Rare Commodities (ii) Alcohol (iii) Music (iv) Miser Man (v) Complementary Goods

Limitations of the law: The law of diminishing marginal utility is applicable only if the following hold good:-

- (i) The different units consumed should be identical in all aspects.
- (ii) The law may not apply to articles like gold, cash etc.
- (iii) The presence or absence of complementary or substitutes may affect the utility.
- (iv) The commodity should be consumed in standard units e.g. if first unit of water is given to a thirsty person by spoon, the second unit should be also given in spoon.
- (v) There should be continuous consumption i.e. there should be no time gap or interval between the consumption of one unit and the other unit.



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Law of Equi-Marginal Utility with its application and limitations?

The consumer will distribute his money income between the goods in such a way that the utility derived from the last rupee spent on each good is equal. Means consumer is in equilibrium position when marginal utility of money expenditure on each good is the same. The marginal utility of money expenditure on a good or the utility of the last rupee spent on the good is equal to the marginal utility of the good divided by the price of that good.

Assumption of the Law:

- (i) Measurability
- (ii) Rationality
- (iii) Constancy of marginal utility of money
- (iv) Law of Diminishing Marginal Utility goods
- (v) No change in taste, preference, income & fashion
- (vi) No change in price of substitute & complementarily goods
- (vii) Divisibility of goods

Consumer's Surplus:

Concept: Very often the price which a consumer pays for a commodity is less than what he is willing to pay for it, so that the satisfaction which he derives is more than the price paid for it. This extra satisfaction is termed as Consumer Surplus.

Definition: According **Alfred Marshall**, "The excess price which a person would be willing to pay rather than go without the thing, over that which he actually does pay is the economic measure of this surplus of satisfaction. It may be called Consumer's Surplus". Thus, Consumer's surplus is the excess of utility obtained by the consumer over foregone or disutility suffered. It is measured by the difference between the maximum price which the consumer is willing to pay for a commodity and that which he actually does pay.

Symbolically:



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Consumer Surplus = (What a consumer is ready to pay) – (What is actually pays)

- Value in use – Value in exchange
- $\sum MU_x - (\text{Price} \times \text{No. of units})$
- $\sum MU_x(TU) - \sum P_x Q_x$

Assumption:

- (i) Utility is measurable
- (ii) The marginal utility of money is assumed to be same.
- (iii) The utility of a commodity is dependent on its supply.
- (iv) The commodity in question has no close substitute.
- (v) $MU_m = \text{Constant}$
- (vi) Price of commodity given

Usefulness/Advantage:

- (i) It helps to make economic comparisons about the people's welfare between two places or countries.
- (ii) The concept is useful in understanding the pricing policies of a discriminating monopolist.
- (iii) It helps in evaluating the economic effect of a tax or bounty on a commodity.
- (iv) It helps to measure the benefits from international trade.

Limitations:

- (i) The assumption that utility and satisfaction bear definite relationship is not correct.
- (ii) The assumption that marginal utility of money is constant is most unrealistic.
- (iii) It is quite impossible to say that a commodity will have no close substitute.
- (iv) Consumer surplus cannot be measured in case of luxuries and bare necessities of life.
- (v) The assumption that in measuring the consumer's surplus all determinants of demand except the price remain constants does not hold true.



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Indifference Curve Analysis?

Every consumer has a scale of preference between two or more goods. A scale of preference consists of a number of alternative combinations of two or more things which gives the consumer the same amount of satisfaction. He also assumes the consumer to be rational and aware of his preference for any two or more goods. Since all the alternative combinations of the two goods give the consumer the same satisfaction. If he chooses one combination he is indifferent about the other combinations.

Assumption:

(i) **Rational Being**

(ii) **Utility is Ordinal**

(iii) **Diminishing Marginal Rate of Substitution:** Marginal rate of substitution (MRS) is the rate at which one commodity is substituted by the other, provided the utility derived is constant. In other words, it is the rate at which the consumer is prepared to exchange goods x and goods y.

Indifference Curve?

The curve on which locus of various combination of two goods giving the same level of satisfaction are depicted, at which consumer is indifferent means he can either choose one point and other as all points given him same satisfaction because of this indifference or neutral state of consumer these curve are called Indifference Curve (by J. R. Hicks and R. G. D. Allen).

Properties of Indifference Curve:

(i) **An Indifference Curve has Negative Slope:** It means that it slopes downwards from left to right which denotes that if the quantity of one commodity (y) decrease, the quantity of the other (x) must increase, if the consumer is to stay on the same level of satisfaction. The level of equal satisfaction is possible only on the negatively sloped curve. If it is assumed that indifference curve is horizontal to x-axis, it would mean that either of the two (y in the above case) shall



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remain constant in terms of quantity and more units of x shall be consumed. But this is not possible as utility is quantitative. Similarly, Indifference curve cannot be parallel to y -axis for the same reason. Again, if it is assumed that the indifference curve is positively sloped, it would mean that more units of both the commodities are consumed at all combinations. As the number of unit increase the level of satisfaction also rises. Hence this case is also not possible as utility is a cardinal concept.

ii) **Indifference Curves do not intersect:** If they did at the point of intersection it would imply two different level of satisfaction, which is impossible. This can be made clear from the given figure. In the figure, there are two indifference curves IC_1 and IC_2 which intersect at point A . Since, A and B lie on the same IC , the level of satisfaction is same. Same is the case with A and C . But it should be noticed that point A shows two different levels of satisfaction as it lies both on the higher and lower indifference curves. Such a situation is not possible. Hence, indifference curves can never intersect.

(iii) **Indifference Curves are always Convex to the Origin:** This implies that the slope of an indifference curve decreases (in absolute terms). As we move along the curve from the left downwards to the right the marginal rate of substitution of the commodities is diminishing. It has been observed that as more units of commodity (say x) is substituted for another commodity (Say y) the consumer is unwilling to part with less and less of the commodity (x) which is substitutes with Y . This is called diminishing marginal rate of substitution (MRS). Hence, indifference curve are convex to the origin

Budget Line:

A budget line which is also known as Consumption Possibility Curve represents the different possibilities of the two goods which the consumer can afford with his given income. On the one hand it shows the **money income** of the consumer and on the other hand it shows the relative **price ratio**.



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Consumers Equilibrium:

Consumers Equilibrium: A consumer is said to be in equilibrium when he is deriving maximum possible satisfaction from the given commodities and is not in a position to rearrange his purchases of goods, say x and y.

Assumptions in Consumers Equilibrium:

- (i) The consumer has an indifference map, which depicts his scale or order of preference for various combinations of two goods, say x and y.
- (ii) He has fixed income to spend on x and y completely.
- (iii) Prices of goods x and y are given and do not change.

Consumers equilibrium is illustrated in the figure given below :-

In order to determine consumer's point of equilibrium we make use of indifference map and budget line together. In the given figure :-

- (a) AB is the budget line of the consumer.
- (b) IC₁, IC₂ and IC₃ are different indifference curves, showing different levels of satisfaction.

In case he spends all his income on commodity x, he can buy OB quantity and similarly, if he spends his entire income on Y he can purchase OA quantity of it. However, if he wants to consume both the goods together he will try to reach a situation of equilibrium where sacrifice made by him equals the satisfaction derived. Again, a rational consumer will try to reach the highest possible indifference curve while staying in his budget line or affording capacity. As shown is the figure, the consumer has at his options combinations D, C and E, but he would option for combination at C because it will provide higher satisfaction in comparison to point. D and E since both these points are lying on the lower indifference curve i.e. IC₁, further, points D and E are part of IC, the lower indifference curve and as known higher the IC, higher is the level of satisfaction. It can also be seen the point M is another level on the further higher. But it is beyond the buying capacity of the consumer as can be seen. Hence, the consumers points of



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equilibrium is determined at point C where he will consume OQ units of goods x and of units of goods Y.

Change in Consumer Equilibrium.

There is change in consumer equilibrium points due to change in Income of the consume & relative price ratio of commodity than it is called change in equilibrium.

(i) **Price Consumption curve (PCC)** : PCC is locus of various combination points of consumer at various level of relative price ratio keeping money income constant.

(ii) **Income consumption curve (ICC)** : ICC is the locus of various equilibrium points of the consumer at various level of money income, keeping relative price ratio constant.

(iii) **Substitution effect** : When income, taste preference remain constant & price of both-commodity are changed & consumer rearrange purchase in manner that the consumer is neither better off nor worse off.

Application, uses, scope, Importance of IC Analysis:

Important uses of IC Analysis as follows:

- Use in production analysis
- Use in exchange
- Use in International Trade
- Use in Taxation
- Use in Consumer Equilibrium
- Use in consumer surplus
- Use in public finance
- Use in deciding Rationing & subsidies
- Use in portfolio Investment



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Supply and Its Determinants:

Meaning: “The supply of good is the quantity offered for sale in a given market at a given time at various prices”. Thus, the important features of supply may be concluded as:-

- (i) It is the quantity of commodity offered for sale in the market at various prices.
- (ii) It is flow and is always measured in terms of time.

Determinants of Supply are follows:

- (i) Price of the Good
- (ii) Price of Related
- (iii) Price of Factors of Production
- (iv) State of Technology
- (v) Government Policy
- (vi) **Other Factor:** Includes various individual policies, exchange policies, trade policy etc. Time is another important factor influencing supply e.g. it is quite difficult to adjust the supply to the changing conditions in the short period. But such adjustments in supply become easy if the time period is long. Again, transparent and infrastructural facilities positively effect the supply of a good.

Law of Supply:

In the Words of Dooley, “The law of supply states that other things remaining the same, higher the prices the greater the quantity supplied and lower the prices the smaller the quantity supplied”.

Assumption of the Law:

- (i) It is assumed that incomes of buyers and sellers remain constant.
- (ii) It is assumed that the tastes and preferences of buyers and sellers remain constant.
- (iii) Cost of all the factors of production is also assumed to be constant.
- (iv) It is also assumed that the level of technology remains constant.



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(v) It is also assumed that the commodity is divisible.

(vi) Law of supply states only a static situation.

Criticisms of Law of Supply:

(i) It Explains Only the Static Situation

(ii) Expectation of Change in the Prices in

(iii) It does not apply on Agricultural Products

(iv) It does not apply on Artistic

(v) It does not apply on the Goods of Auction

Why Supply Curve upward sloping:

The following reason are responsible through which supply increase with increase in price & vice-versa:-

(i) Seller becomes ready to offer more goods from their old stocks.

(ii) Producer increase their production in view of high profit possibilities.

(iii) New firms enter the market visualizing higher profit which in turn, increase supply & vice-versa.

Exception of the law of supply :

(1) Social distinction goods

(2) Antique goods

(3) Labour supply curve

(4) Agriculture commodity

(5) Perishable commodity

Change in Supply:

(1) **Movement along the Same Supply Curve :** When due to change in price alone, the supply changes it is expressed by different points on the same supply curve.



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(i) **Expansion of Supply** : When supply of a commodity increases on an increase in its price, it is called expansion. It is shown by upward movement of supply curve.

(ii) **Contraction of Supply** : when supply of a commodity decrease on a falls in its price, it is called contraction of supply, It is shown by downward movement of supply curve.

Both expansion and contraction of supply is shown as under :-

Original supply of commodity is OQ, at price OP. When the price increases to OP₁, the supply increase to OQ₁ i.e. T₁ on Supply curve. This is expansion of supply. When the price falls to OP₂ Supply decreases to OQ₂ i.e. T₂ on supply curve. This is contraction of Supply:

(2) **Shifting of the Whole Supply Curve**: When due to change in factors other than price of the same commodity like change in income, change in taste etc, the supply changes it makes the supply curve shift either leftward or rightward of the original supply curve. This is called shifting of the supply curve.

(i) **Increase in Supply** : When supply of a commodity increases due to change in any factor other than price it is called increase in supply. It is shown by rightward shift of supply curve.

(ii) **Decrease in Supply** : When the supply of a commodity decreases due to a change in any factor other than price, it is called decrease in supply. It is shown by leftward shift of the supply curve. Both increase and decrease in supply is shown as under :-

Elasticity of Supply?

Ans.: According to Samuelson, 'Elasticity of Supply is the degree of responsiveness of supply of a commodity to a change in its price.' It is measured by dividing the percentage change in the quantity supplied of a commodity by the percentage change in its price. It can be expressed as follows :-

% Change in Quantity Supplied

% Change in Price

degrees of Supply Elasticity?



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Ans.: (i) Perfectly Elastic Supply : Under this, supply tends to be infinitely elastic. It happens when nothing is supplied at a lower price but a small increase in price causes the quantity supplied to increase to an infinite extent indicating that the producers are ready to supply any quantity at that price. Here, the supply curve becomes parallel to x axis

(iii) Perfectly Inelastic Supply: At times, the supply of a commodity may not change at all to any change in price. Such a commodity is said to have zero elasticity of supply or perfectly inelastic supply. Graphically, the supply curve drawn is parallel to Y axis.

(iii) Unit Elastic : When the proportionate change in the quantity supplied is equal to the proportionate change in price, the supply of the commodity is said to be of unit elasticity. Here, the coefficient of elasticity of supply is equal to one, i.e. $E_s = 1$. As given in the figure, relative change in the quantity supplied (Δq) is equal to the relative change in the price (Δp).

(iv) More than Unit Elastic Supply or Relatively greater Elastic Supply :

Elasticity of supply is said to be more than unity when a small change in price leads to a substantial change in commodity supplied. It means that relative change in commodity supplied is more than the relative change in price.

(v) Less than Unit Elastic Supply or Relatively less Elastic Supply : In this case a substantial change in price leads to a very small change in quantity supplied. It means that the quantity supplied is lesser in proportion than the change in price of the commodity. Thus, $E_s < 1$.

Elasticity of Supply measured?

(i) Percentage Method:

It is depicted of follows:

$$= \frac{\text{Proportionate Change in Quantity Supplied}}{\text{Proportionate Change in Price}}$$

(ii) Geometric Method (Point Method):



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Measuring the elasticity at a particular point of the supply curve is known as point elasticity of supply

(iii) **Arc Method:** It is a measure of the average responsiveness to price change exhibited by a supply curve over some finite stretch of the curve.

Factors affecting the Elasticity of Supply:

(i) Nature of the Commodity

(i) For perishable goods, its supply will not respond in an effective manner to the change in price. So it have an inelastic supply.

(ii) For durable goods, its supply will respond effectively and it will have an elasticity of supply.

(ii) Production Time

(iii) Techniques of Production

- **Estimates of Future Price**



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Unit-III

Perfect competition – a pure market

Perfect competition describes a market structure whose assumptions are strong and therefore unlikely to exist in most real-world markets. Economists have become more interested in pure competition partly because of the growth of e-commerce as a means of buying and selling goods and services. And also because of the popularity of auctions as a device for allocating scarce resources among competing ends.

Assumptions for a perfectly competitive market

- Many sellers each of whom produce a low percentage of market output and cannot influence the prevailing market price.
- Many individual buyers, none has any control over the market price
- Perfect freedom of entry and exit from the industry. Firms face no sunk costs and entry and exit from the market is feasible in the long run. This assumption means that all firms in a perfectly competitive market make normal profits in the long run.
- Homogeneous products are supplied to the markets that are perfect substitutes. This leads to each firms being “price takers” with a perfectly elastic demand curve for their product.
- Perfect knowledge – consumers have all readily available information about prices and products from competing suppliers and can access this at zero cost – in other words, there are few transactions costs involved in searching for the required information about prices. Likewise sellers have perfect knowledge about their competitors.
- Perfectly mobile factors of production – land, labour and capital can be switched in response to changing market conditions, prices and incentives.
- No externalities arising from production and/or consumption.

Evaluation – Understanding the real world of imperfect competition!



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It is often said that perfect competition is a market structure that belongs to out-dated textbooks and is not worthy of study! Clearly the assumptions of pure competition do not hold in the vast majority of real-world markets, for example, some suppliers may exert control over the amount of goods and services supplied and exploit their monopoly power. On the demand-side, some consumers may have monopsony power against their suppliers because they purchase a high percentage of total demand. Think for example about the buying power wielded by the major supermarkets when it comes to sourcing food and drink from food processing businesses and farmers. The Competition Commission has recently been involved in lengthy and detailed investigations into the market power of the major supermarkets. In addition, there are nearly always some barriers to the contestability of a market and far from being homogeneous; most markets are full of heterogeneous products due to product differentiation – in other words, products are made different to attract separate groups of consumers.

Consumers have imperfect information and their preferences and choices can be influenced by the effects of persuasive marketing and advertising. In every industry we can find examples of asymmetric information where the seller knows more about quality of good than buyer – a frequently quoted example is the market for second-hand cars! The real world is one in which negative and positive externalities from both production and consumption are numerous – both of which can lead to a divergence between private and social costs and benefits. Finally there may be imperfect competition in related markets such as the market for key raw materials, labour and capital goods. Adding all of these points together, it seems that we can come close to a world of perfect competition but in practice there are nearly always barriers to pure competition. That said there are examples of markets which are highly competitive and which display many, if not all, of the requirements needed for perfect competition. In the example below we look at the global market for currencies.

Currency markets - taking us closer to perfect competition

- The global foreign exchange market is where all buying and selling of world currencies takes place. There is 24-hour trading, 5 days a week.



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- Trading volume in the Forex market is around \$3 trillion per day – equivalent to the annual GDP of France! 31% of global trading takes place in London alone.
- Most trading in currencies is 'speculative.'

The main players in the currency markets are as follows:

- Banks both as "market makers" dealing in currencies and also as end-users demanding currency for their own operations.
- Hedge funds and other institutions (e.g. funds invested by asset managers, pension funds).
- Central Banks (including occasional currency intervention in the market when they buy and sell to manipulate an exchange rate in a particular direction).
- Corporations (for example airlines and energy companies who may use the currency market for defensive 'hedging' of exposures to risk such as volatile oil and gas prices.)
- Private investors and people remitting money earned overseas to their country of origin / market speculators trading in currencies for their own gain / tourists going on holiday and people traveling around the world on business.

Why does a currency market come close to perfect competition?

- Homogenous output: The "goods" traded in the foreign exchange markets are homogenous - a US dollar is a dollar and a euro is a euro whether someone is trading it in London, New York or Tokyo.
- Many buyers and sellers meet openly to determine prices: There are large numbers of buyers and sellers - each of the major banks has a foreign exchange trading floor which helps to "make the market". Indeed there are so many sellers operating around the world that the currency exchanges are open for business twenty-four hours a day. No one agent in the currency market can, on their own influence price on a persistent basis - all are 'price takers'. According to Forex_Broker.net "The intensity and quantity of buyers and sellers ready for deals doesn't allow separate big participants to move the market in joint effort in their own interests on a long-term basis."



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- Currency values are determined solely by market demand and supply factors.
- High quality real-time information and low transactions costs: Most buyers or sellers are well informed with access to real-time market information and background research analysis on the factors driving the prices of each individual currency. Technological progress has made more information immediately available at a fraction of the cost of just a few years ago. This is not to say that information is cheap - an annual subscription to a Bloomberg or a Reuter's news terminal will cost several thousand dollars. But the market is rich with information and transactions costs for each batch of currency bought and sold has come down.
- Seeking the best price: The buyers and sellers in foreign exchange only deal with those who offer the best prices. Technology allows them to find the best price quickly.

What are the limitations of currency trading as an example of a competitive market?

- Firstly the market can be influenced by official intervention via buying and selling of currencies by governments or central banks operating on their behalf.

DUMPING LEGAL DEFINITION

- The act of selling goods at less than fair market value, typically for the purpose of injuring a competitor and gaining market share.
- The selling of large amounts of a stock, or stocks in general, at whatever market prices are in effect. For example, investors might dump stocks on hearing of an outbreak of fighting in some part of the world.
- The selling of a product in one market at an unusually low price while selling the same product at a significantly higher price in another market. For example, a firm may sell a product in its home market at a price covering all costs, and then sell the product in a foreign market at a significantly lower price, covering only variable costs. See also antidumping.



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- The sale of goods of one nation in the markets of a second nation at less than the price charged within the first nation. Dumping can eliminate competitors by undercutting their prices
- Selling goods or commodities in another country at prices that are substantially below the going market price. International trade regulations attempt to prevent dumping. Violations may be reported to the World Trade Organization.
- Selling a large amount of securities in a market with no concern for what effect that is likely to have on the price or the product
- The selling of large amounts of a stock or stocks in general at whatever market prices are in effect. For example, investors might dump stocks upon hearing of an outbreak of fighting in some part of the world.
- The selling of a product in one market at an unusually low price while selling the same product at a significantly higher price in another market. For example, a firm may sell a product in its home market at a price covering all costs and then sell the product in a foreign market at a significantly lower price covering only variable costs.

Dumping- Evolution of the term:

It has long been customary to speak of one market as a dumping ground for the surplus products of another market when the producers of the latter for any reason sell their commodities in the former at unusually low prices.

From this usage it was a natural outcome to speak of selling in a distant market at reduced prices as dumping, but the word used in this sense appeared not to have entered into the literature of economics until the first years of the twentieth century. In 1903 and 1904, the tariff question was the dominant political issue in Great Britain, and in a huge output of polemical literature which marked the tariff controversy. The term became well established and appeared with or without apologetic quotation marks in book after book.



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The term —dumping¹ has since found its way into the economic terminology of the French, German, Italian and probably other languages. Initially, it had a vague and uncertain meaning, and is still used indiscriminately for such diverse price-practices such as severe competition, customs undervaluation, —bargain, —sacrifice or —slaughter sales², local price-cutting and selling in one national market at a lower price than in another.

In recent years, however, the increased use of the term by academic economists with their creditable tendency towards the exact establishment of terminology and of the development of legislation dealing with dumping and allied price-practices, which made necessary some measure of precision in the differentiation between various price practices, have both contributed to the consistency of the usage. Extensive variations in the use of the term both as to gist and implication are nevertheless still present.

According to Dale, the origin of the word —dump is uncertain. Its usage by the early nineteenth century had come to mean the act of throwing down in a lump or mass, as with a load from a cart, and it was then a natural extension to apply the word to the disposal of refuse and to describe as a dumping ground, a market for the disposal of surplus stock. During this time, dumping was used in English language trade literature to illustrate loosely a situation in which goods were sold cheaply in foreign markets. Today, however, the term is used intentionally to signify the practice of price discrimination in international trade.



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The term was applied persuasively to describe almost any situation in which goods were sold abroad at cheap prices, irrespective of the cause of the cheapness, the insinuation being that the goods were unwanted in their country of derivation and were exported only to get rid of them.

Economists have always defined dumping as transnational price discrimination where prices vary between national markets. Although economists still object in principle, they now accept that dumping may also be defined as transnational sale below costs. Deard off admits this new. The definition has broadened over the years; some now consider dumping including 'sales below costs', at least presumptively....this alternative criteria for dumping have gradually acquired elevated status of an alternative definition.

However, there is no correlation between price discrimination and sales below cost. Sales below cost may occur with or without discrimination and yet, on the other hand discrimination may take place without selling below costs. The term dumping is employed most often, even in careless business language to signify selling the same commodities at different prices in different markets. Commercially, the term is often uncritically extended to cover various types of sales at prices lower than those generally current, even if the prices are uniform to all purchasers.

Types of Dumping

- 1. Sporadic Dumping:** Occasional sale of a commodity at below cost in order to unload an unforeseen and temporary surplus of the commodity such as cheese, milk, wheat etc. in the international market without reducing domestic prices.
- 2. Predatory Dumping:** Temporary sale of a commodity at below its average cost or a lower price abroad in order to drive foreign producers out of business, after which prices are raised to take advantage of the monopoly power abroad.
- 3. Persistent Dumping:** Continuous tendency of a domestic monopolist to maximize total profits by selling the commodity at a higher price in the domestic market than internationally (to meet the competition of foreign rivals).



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Causes of Dumping :

Dumping usually occurs because of the following reasons:

- (1) Producers in one country are trying to stay competitive with producers in another country,
- (2) Producers in one country are trying to eliminate the producers in another country and gain a larger share of the world market,
- (3) Producers are trying to get rid of excess stuff that they can't sell in their own country,
- (4) Producers can make more profit by dividing sales into domestic and foreign markets, then charging each market whatever price the buyers are willing to pay.

Competition Act, 2002:

Introduction:

Competition is now universally acknowledged as the best means of ensuring that consumers, even more so the — aam aadmi or common man, have access to the broadest range of services at the most competitive prices. Producers will have maximum incentive to innovate, reduce their costs and meet the consumers demand. Competition thus promotes locative and productive efficiency. But all this requires healthy market conditions and governments across the globe are increasingly trying to remove market imperfections through appropriate regulations to promote competition.

The Preamble of the Competition Act, 2002:

An Act to provide, keeping in view of the economic development of the country, for the establishment of a Commission to prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto.



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The Act provides a very wide mandate for the Competition Commission of India to enforce. Apart from its rather broad objective, the Act contains provisions which have rather become standard in the competition jurisdictions all across the globe. These are the provisions relating to anti-competitive agreements, abuse of dominant position and regulation of combinations. In the respect of anti-dumping law the provisions relating to abuse of dominant position and anti-competitive agreements assume importance. In respect of dominant position it is pertinent to note that whereas dominance is not frowned upon by the Competition Act, 2002 abuse of dominance is certainly frowned upon by the legislation. Another significant feature in the context of these provisions of the Act is that anti-competitive agreements and abuse of dominance are to be prohibited by the orders of the Commission whereas the mergers are to be regulated by the orders of the Commission. This difference in law is of immense significance. Whereas the former two prevent enhancement of consumer welfare the latter drives economic growth. Hence, the distinction has been maintained.



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Section 4 of Competition Act:

In respect of abuse of dominant position, Section 4(2) enlists the circumstances when an enterprise shall be considered to be abusing its dominant position. It states:

(1) There shall be an abuse of dominant position under sub-section (1), if an enterprise,- directly or indirectly, imposes unfair or discriminatory-

(i) Condition in purchase or sale of goods or service; or

(ii) Price in purchase or sale (including predatory price) of goods or service; or

(b) Limits or restricts-

(i) Production of goods or provision of services or market therefore; or

(ii) Technical or scientific development relating to goods or services to the prejudice of consumers; or indulges in practice or practices resulting in denial of market access; or makes conclusion of contracts subject to acceptance by other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts; or uses its dominant position in one relevant market to enter into, or protect, other relevant market

Abuse of Dominant Position:

One of the most vigorous users of the predominant international trade defense measure, i.e. antidumping duty, India has an unenviable and unfortunate reputation for extreme protectionism being afforded to its domestic industries through the use of anti-dumping investigations and duties. Anti-dumping as an international trade defense measure is by definition protectionist of the Indian market and is based on the following three touchstones:

(i) That there is a significant difference between the normal value of a commodity or product and the price at which it is exported to India;

(ii) That the difference between the normal value and the export price to India greater than certain tolerances is per se evidence of dumping;



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(iii) If this dumping causes or is likely to cause injury to the domestic industry, antidumping duties would be levied.

The effect of anti-dumping duty usually renders the export of the product to India economically unviable. Now, the touchstone of competition law is to avoid an appreciable adverse effect on a relevant market.

Section 18: Duties of the Commission

As stated in Section 18 of the Competition Act, 2002:

It shall be the duty of the Commission to eliminate practices having adverse effect on competition, promote and sustain competition, protect the interests of consumers and ensure freedom of trade carried on by other participants, in markets in India: Provided that the Commission may, for the purpose of discharging its duties or performing its functions under this Act, enter into any memorandum or arrangement with the prior approval of the Central Government, with any agency of any foreign country.



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UNIT-4

Exploitation of labor:

Labor exploitation is work obtained from a person under threat (real or perceived) and which the person has not offered themselves voluntarily (ILO, 1930).

Labor exploitation is also often an element of human trafficking. According to the Palermo Protocol to Prevent, Suppress and Punish Trafficking in Persons, human trafficking is the combination of movement or harboring of a person; use of deception or coercion; and placement into situations of exploitation (UNODC, 2004). Trafficking in persons, for all forms of exploitation including labor exploitation, is an international criminal offence. Commonly, this is often referred to as slavery.

Contributing Factors:

The following factors contribute to the prevalence of labor exploitation and an individual's vulnerability:

- High unemployment
- Non-payment of minimum wages
- Poverty
- Crime rates
- Discrimination
- Corruption

Different forms of exploitative labor:

Forced labor often occurs when employers take advantage of gaps in legislation to exploit vulnerable workers. Forced labor is not always included in state anti-trafficking legislation and so is under-represented in trafficking statistics. Forced labor does not always occur under the umbrella of transnational criminal networks, but instead may involve an individual who forces



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one or even hundreds of people into servitude. Bonded labor, also referred to as debt bondage, occurs when a person has to work to pay back an inherited debt, or when a debt is incurred as part of the terms of employment. Often debts are due to economic shocks where an individual or families have to borrow from moneylenders and employers to pay for culturally important events such as a funeral, wedding or dowry. Economic shocks can also be caused by crop failure or the sudden death of the main breadwinner. The worker's labor becomes repayment for an initial loan. The circumstances of the bonded labor may become additionally exploitative when the value of the work is greater than the loan. Bonded labor is illegal in most countries, however sometimes these laws are inadequate and/or not enforced.

Involuntary domestic servitude occurs when a domestic worker becomes ensnared in an exploitative situation from which they are unable to escape. The exploitation can include inadequate wages and working conditions; however, it is also the real or perceived restriction of freedom, trapping the individual in servitude through violence, coercion, physical, sexual and emotional abuse, physical barriers etc. (Director General, 2005). Domestic servitude is largely hidden and hard to uncover because it generally occurs in private homes. This kind of work is largely unregulated by public authorities.

Minimum wage law:

Minimum wage law is the body of law which prohibits employers from hiring employees or workers for less than a given hourly, daily or monthly minimum wage. More than 90% of all countries have some kind of minimum wage legislation. Until recently, minimum wage laws were usually very tightly focused. In the U.S. and Great Britain, for example, they applied only to women and children. Only after the Great Depression did many industrialized economies extend them to the general work force. Even then, the laws were often specific to certain industries. In France, for example, they were extensions of existing trade union legislation. In the U.S., industry specific wage restrictions were held to be unconstitutional. The country's Fair Labor Standards Act of 1938 established a uniform national minimum wage for nonfarm,



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nonsupervisory workers. Coverage was later extended to most of the labor force. A minimum wage is the lowest hourly, daily or monthly remuneration that employers may legally pay to workers. Equivalently, it is the lowest wage at which workers may sell their labor. Although minimum wage laws are in effect in many jurisdictions, differences of opinion exist about the benefits and drawbacks of a minimum wage.

Supporters of the minimum wage say that it increases the standard of living of workers, reduces poverty, and forces businesses to be more efficient. Opponents say that if it is high enough to be effective, it increases unemployment, particularly among workers with very low productivity due to inexperience or handicap, thereby harming less skilled workers and possibly excluding some groups from the labor market; additionally it is less effective and more damaging to businesses than other methods of reducing poverty. The first moves to legislate wages did not set minimum wages, rather the laws created arbitration boards and councils to resolve labor conflicts before the recourse to strikes.

- In 1896, New Zealand established such arbitration boards with the Industrial Conciliation and Arbitration Act
- In 1899, the colony of Victoria, Australia established similar boards
- In 1907, the Harvester decision was handed down in Australia. It established a 'living wage' for a man, his wife and two children to "live in frugal comfort"
- In 1909, the Trade Boards Act was enacted in the United Kingdom, establishing four such boards
- In 1912, the state of Massachusetts, United States, set minimum wages for women and children
- In the United States, statutory minimum wages were first introduced nationally in 1938
- In the 1960s, minimum wage laws were introduced into Latin America as part of the Alliance for Progress; however these minimum wages were, and are, low



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Arguments in favor of Minimum Wage Laws

Supporters of the minimum wage claim it has these effects:

- Increases the standard of living for the poorest and most vulnerable class in society and raises average.
- Motivates and encourages employees to work harder
- Stimulates consumption, by putting more money in the hands of low-income people who spend their entire paychecks.
- Increases the work ethic of those who earn very little, as employers demand more return from the higher cost of hiring these employees.
- Decreases the cost of government social welfare programs by increasing incomes for the lowest-paid.
- Encourages people to join the workforce rather than pursuing money through illegal means, e.g., selling illegal drugs
- Encourages efficiency and automation of industry.
- Removes low paying jobs, forcing workers to train for, and move to, higher paying jobs
- Increases technological development. Costly technology that increases business efficiency is more appealing as the price of labor increases.

Arguments against Minimum Wage Laws:

Opponents of the minimum wage claim it has these effects:

- As a labor market analogue of political-economic protectionism, it excludes low cost competitors from labor markets and hampers firms in reducing wage costs during trade downturns. This generates various industrial-economic inefficiencies.
- Hurts small business more than large business.
- Reduces quantity demanded of workers, either through a reduction in the number of hours worked by individuals, or through a reduction in the number of jobs.



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- May cause price inflation as businesses try to compensate by raising the prices of the goods being sold.
- Benefits some workers at the expense of the poorest and least productive.
- Can result in the exclusion of certain groups from the labor force.
- Small firms with limited payroll budgets cannot offer their most valuable employees fair and attractive wages above unskilled workers paid the artificially high minimum, and see a rising hurdle-cost of adding workers.
- Is less effective than other methods (e.g. the Earned Income Tax Credit) at reducing poverty, and is more damaging to businesses than those other methods.
- Discourages further education among the poor by enticing people to enter the job market.
- Discriminates against, through pricing out, less qualified workers (including newcomers to the labor market, e.g. young workers) by keeping them from accumulating work experience and qualifications, hence potentially graduating to higher wages later. (This may be a reason why trade unions press for minimum wages, i.e. to protect older workers on the job from the competition of younger, cheaper workers on the job market, for a given level of productivity.)

Rent, Interest, and Profits:

Introduction:

A. labor markets, because wages and salaries account for about 70 percent of our national income. (If proprietors' income, which is largely labor income, is added to wages and salaries, the return to labor increases to 80 percent.)

B. The three sources of income—rent, interest, and profits—which compose the remaining 20 percent of our national income.

C. This chapter will answer each of the following questions:

1. Why do different parcels of land in different locations receive different rent payments?
2. What factors determine interest rates and causes interest rates to change?



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3. What are the sources of profits and losses and why do profits and losses change over time?

II. Economic rent is the price paid for use of land and other natural resources that are fixed in supply. (Note that this definition differs from the everyday use of the term.)

A the demand for land is downward sloping because of diminishing returns and the fact that producers must lower the price of the product to sell additional units of output.

B. Perfectly inelastic supply of the resource is one unique feature of the supply side of the market that determines rent. Land has no production cost; it is a “free and non reproducible gift of nature.” Its quantity does not change with price (with a few exceptions).

C. Changes in demand therefore determine the amount of rent. This will be determined by several factors.

1. The price of the product grown on the land,
2. The productivity of the land, and
3. The prices of other resources combined with the land for production.

D. Land rent is viewed as a surplus payment because it performs no incentive function to provide more supply; it is not necessary to ensure the availability of land.

E. Some argue that rent should be taxed away, since it is unearned, or that land should be nationalized and owned by the state.

1. Henry George’s proposal for a single tax of up to 99 percent of land rent asserted that this tax could eliminate other taxes. Unlike the effect of a tax on other resources, the tax on land would not have a negative incentive effect.

2. Critics of the single-tax idea make several points.

- a. Current levels of government spending are too great to be supported by rent taxes.
- b. It is difficult to separate the rent component from other income resulting from the combined use of land with other resources.
- c. Unearned income goes beyond land and land ownership; capital gains and interest income might also be considered unearned.



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d. It is unfair to tax current owners, who may have paid a steep market price for the land and therefore find that the rent return is not high relative to that price.

E. Each parcel of land is not equally productive. More productive land will be in great demand and therefore will receive different rents. These different rent payments allocate land to its most productive use.

F. In reality, land has alternative uses and costs. From society's perspective, rent is a surplus; but an individual firm must pay rent to attract the land away from alternative uses. Without rent to allocate land among its various uses, there would be no market mechanism to make sure each piece of land was being utilized in its most valuable fashion. Therefore, rent does provide an important function to our economic system.

III. Interest is the price paid for the use of money. It is usually viewed as the money that must be paid for the use of one dollar for one year.

A. Two aspects of interest are important.

1. It is stated as a percentage, and the Truth in Lending Act of 1968 requires lenders to state the costs and terms of consumer credit in terms of an annualized interest rate.

2. Money itself is not an economic resource, but it is used to acquire capital goods, so in hiring money capital, businesses are ultimately buying the use of real capital goods.

B. The loan able funds theory of interest.

1. The supply of loan able funds is an upward-sloping curve—a larger quantity of funds will be made available at high interest rates than at low interest rates. Most individuals prefer present consumption and must be paid to defer consumption by saving.

2. The demand for loan able funds is inversely related to the rate of interest. At higher interest rates fewer investment projects will be profitable since fewer projects yield the high rate of return needed to compensate for the high interest cost.

3. Economists disagree about the responsiveness of the quantity of investment funds supplied to changes in interest rates. Most economists believe that saving is relatively insensitive to interest rate changes and believe the supply of funds is inelastic.



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4. Whether the curves are elastic or inelastic, the equilibrium interest rate equates the quantities of loan able funds supplied and demanded.
 5. Households rarely lend savings directly to businesses. Households place their savings in financial institutions and receive an interest payment. Businesses borrow funds from financial institutions and pay an interest payment.
 6. Changes in the supply of funds may occur as a result of changes in tax policy or social insurance benefits.
 7. Anything that changes the rates of return on potential investments, such as improvements in technology or a decrease in the demand of the final product, will change the demand for funds.
 8. Both households and businesses operate on both the supply and demand sides of the market for loan able funds. While households supply loan able funds, they may also borrow to finance large purchases and education. Similarly, businesses may save in the market for loan able funds, and governments may borrow to finance deficits.
- C. Banks and other financial institutions not only gather and make available the savings of households, but also create funds through the lending process.
- D. There are many different interest rates with different names and they vary for many reasons.
1. Varying degrees of risk (riskier loans carry higher rates),
 2. Differing maturities on the loan (higher rates usually on longer term loans),
 3. The size of the loan (larger loans have lower rates),
 4. Taxability (interest on some local and state bonds is tax free; the interest would be lower, since lenders don't have to pay federal taxes on that interest income),
 5. Market imperfections play a role, because some banks in smaller towns have more market power than banks that have a lot of competition.
- E. Economists usually refer to what is called the “pure rate of interest,” which is best approximated by the interest paid on long term, riskless bonds such as the long term bonds of the



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U.S. government. In spring 2001 this rate was 5.5 percent. The current rate can be found in the third section of the daily Wall Street Journal and other publications.

F. The role of the interest rate is important because it affects both the level and composition of investment and R&D spending.

1. The level of investment varies inversely with the interest rate. The Federal Reserve System will increase and decrease the money supply and thus influence interest rates. Changes in investment will affect the level of GDP.

2. Interest rates will also have an effect on borrowing for R&D. Again, R&D depends upon the cost of borrowing money as compared to the expected rate of return on the R&D project.

3. Nominal interest rates are those stated in terms of current dollars; the “real” interest rate is the rate of interest expressed in terms of dollars of constant or inflation-adjusted value. The real interest rate is the nominal rate minus the rate of inflation.

5. It is the real interest rate, not the nominal rate, that businesses should consider in making their investment and R&D decisions.

G. Application: Usury laws specify maximum interest rate that can be charged on loans. The purpose is to make borrowing more accessible to low-income borrowers. However, Figure 29-2 demonstrates several problems with usury laws.

1. There will be a shortage of credit if the usury rate is below the market rate. Riskier borrowers may be excluded from borrowing from established financial institutions.

2. Credit-worthy borrowers will be able to borrow at below-market “prices.”

3. Lenders will receive less than market rates of return on the funds loaned.

4. Funds will not be allocated to their most efficient use.

IV. Economic profits are what remains of a firm’s total revenue after it has paid individuals and other firms for materials, capital and labor supplied to the firm (the explicit costs) and allowed for payment to self employed resources (the implicit costs).



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A. The role of the entrepreneur is most important in a capitalist economy. Profits are the reward paid for entrepreneurial ability, which includes taking initiative in combining resources for production, making non routine policy decisions, introducing innovations in products and production processes, and taking risks associated with the uncertainty of all of the above functions.

1. A normal profit is the minimum required to retain the entrepreneur in some specific line of production.

2. An economic profit is any profit above the normal profit. This residual profit also goes to the entrepreneur. This residual profit does not exist under pure competition in a static economy. It occurs because of the dynamic nature of real-world capitalism and the presence of monopoly power.

B. There are several sources of economic profits, but they would not occur in a static, unchanging economy. Thus, the first prerequisite is that the economy be dynamic.

1. In a dynamic economy, the future is uncertain and some risks cannot be insured against.

2. Uninsurable risks stem from three general sources:

- a. Changes in the general economic environment
- b. Changes in the structure of the economy; and
- c. Changes in government policy.

3. Some or all of the economic profit in a real, dynamic economy may be compensation for risk taking.

4. Some of the economic profit may be compensation for dealing with the uncertainty of innovation.

5. Monopoly power is a less desirable source of economic profits because such profits stem from a misallocation of resources.

C. The functions of profits include the following:



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1. The expectation of profits encourages firms to innovate, which stimulates new investment. This will expand output and employment.

2. Profits allocate resources among alternative lines of production. Resources leave unprofitable ventures and flow to profitable ones, which is where society is signaling it wants these resources to be allocated.

V. Labor income is the dominant type of income, with wages and salaries constituting about 70 percent of national income. If one adds in a part of proprietors' income, which is probably largely labor income, the share rises to about 80 percent. Therefore, the "capitalists'" share of income is only about 20 percent. These percentages have remained remarkably stable in the U.S. since 1900.

Collective Bargaining:

A. The goal of collective bargaining is to establish a "work agreement" between the firm and the union.

B. Union status and managerial prerogatives.

1. In a closed shop, a worker must be (or become) a member of the union before being hired. This is illegal except in transportation and construction.

2. In a union shop, an employer may hire nonunion workers, but they must join in a specified period of time.

3. An agency shop requires nonunion workers to pay dues or donate a similar amount to charity.

4. Twenty states have right-to-work laws that prohibit union shops and agency shops.

5. In an open shop, the employer may hire union or nonunion workers. Workers are not required to join the union or contribute; but the "work agreement" applies all worker – union and nonunion.

6. Most work agreements contain clauses outlining the decisions reserved solely for management; these are called managerial prerogatives.

C. The focal point of any bargaining agreement is wages and hours.



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1. The arguments most frequently used include for wage increases are:
 - a. “What others are getting”;
 - b. Employer’s ability to pay based on profitability;
 - c. Increases in the cost of living; and
 - d. Increases in labor productivity.
2. In some cases, unions win automatic cost-of-living adjustments (COLAs).
3. Hours of work, voluntary and mandatory overtime, holiday and vacation provisions, profit sharing, health plans, and pension benefits are other contract issues.
- D. Unions stress seniority as the basis for worker promotion and for layoff and recall and sometimes seek means to limit a firm’s ability to subcontract work or to relocate production facilities overseas.
- E. Union contracts contain grievance procedures to resolve disputes.
- F. The bargaining process.
 1. Collective bargaining on a new contract usually begins about 60 days before the existing contract expires.
 2. Hanging over negotiations is the “deadline” which occurs at the expiration of the old contract, at which time a strike (union work stoppage) or a lockout (management forbids workers to return) can occur.
 3. Bargaining, strikes and lockouts occur within a framework of Federal labor law, specifically the National Labor Relations Act (NLRA).

III. Economic Effects of Unions

- A. The union wage advantage is verified by studies that suggest that unions do raise the wages of their members relative to comparable nonunion workers; on average, this pay differential over the years is estimated to have been about 15 percent.
 1. The overall average level of wages of all workers has probably not been affected by unions.



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2. Union workers seem to gain at the expense of nonunion workers.
 3. Real wages overall still depend on productivity.
- B. Efficiency and productivity are affected both positively and negatively by unions.
1. The negative view has three major points.
 - a. Featherbedding and work rules make it difficult for management to be flexible and to use their workers in the most efficient ways.
 - b. Strikes, while rare, do constitute a loss of production time and affect certain industries more than others.
 - c. Labor misallocation might occur as a result of the union wage advantage, but studies suggest that the efficiency loss is minimal—perhaps only a fraction of one percent of U.S. GDP.
 2. The positive view has three major points as well.
 - a. Managerial performance may be improved when wages are high because managers are forced to use their workers in more efficient ways. This is called the shock effect.
 - b. Worker turnover may be reduced where workers feel they can voice dissatisfaction and have some bargaining power.
 - c. Seniority promotes productivity because workers do not fear loss of jobs, and informal training may occur on the job because workers do not compete with one another in a seniority based system.
 3. Research findings have been mixed. Some have found a positive effect of unions on productivity, while an almost equal number have found a negative effect of unions on productivity.

IV. Labor Market Discrimination

- A. Hispanics, and women bear a disproportionately large burden of poverty. Their low incomes are a result of the operation of the labor market, and this includes the impact of discrimination.



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B. Economic discrimination occurs when female or minority workers, who have the same abilities, education, training, and experience as white male workers, are accorded inferior treatment with respect to hiring, occupational access, promotion, or wage rate.

C. Types of discrimination:

1. Wage discrimination occurs when minority workers or women are paid less than white males for doing the same work. This practice violates Federal law, but it can be subtle and difficult to detect.

2. Employment discrimination takes place when women or minority workers receive inferior treatment in hiring, promotions, layoffs, or permanent discharges. This type of discrimination also includes sexual and racial harassment.

3. Occupational discrimination occurs when women or minority workers are arbitrarily restricted or prohibited from entering the more desirable, high-paying occupations. Historically, craft unions have effectively barred blacks from membership and, thus, from employment.

4. Human-capital discrimination occurs when investments in education and training are less and inferior to that of whites.

D. Cost of discrimination.

1. Discrimination does more than simply transfer benefits from women, blacks, and Hispanics to men and whites; where it exists, discrimination actually diminishes the economy's output and income.

2. The effects of discrimination can be depicted as a point inside the economy's production possibilities curve.

3. Rough estimates suggest the U.S. economy would gain \$325 billion per year by eliminating racial and ethnic discrimination and \$180 billion per year by ending gender discrimination.

V. Economic Analysis of Discrimination:

A. Taste-for-discrimination model.



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1. The model assumes that, for whatever reason, prejudiced employers experience a subjective and psychic cost—a disutility—whenever they must interact with those they are biased against.
2. The amount of this cost is reflected in a discrimination coefficient d , measured in monetary units.
3. The cost of employing the preferred worker is the workers wage rate, W_w (in the example the preferred worker is white).
4. The employer's perceived "cost" of employing the worker, against whom he/she is prejudiced (in the example the worker is black) is the black worker's wage rate, W_b plus the cost of d , or $W_b + d$.
5. The prejudiced employer will not refuse to hire blacks under all conditions. They will, in fact, prefer blacks if the actual white-black wage difference in the market exceeds the value of d .

B. Prejudice and the market black-white wage ratio.

1. For a particular supply of black workers, the actual black-white wage ratio will depend on the collective prejudice of white employers.
2. An increase in white employer prejudice, i.e., a decrease in the demand for black workers, reduces the black wage rate and thus the black-white wage ratio.
3. A decrease in white employer prejudice, i.e., an increase in the demand for black workers, increases the black wage rate and thus the black-white wage ratio.

C. The taste-for-discrimination model suggests that competition will reduce discrimination in the very long run.

1. The actual black-white wage difference for equally productive workers allows non discriminating employers to hire blacks for less than whites and, therefore, gain a cost advantage over discriminating competitors.
2. The lower costs will allow non discriminators to under price prejudiced employers, eventually driving them out of the market.



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3. Critics of the implication of the model note that progress in eliminating prejudice has been modest.

D. Statistical discrimination

1. People are judged on the basis of the average characteristics of the group to which they belong, rather than on their own personal characteristics or productivity.

2. The firm practicing statistical discrimination is not being malicious in its hiring behavior (although it may be violating antidiscrimination laws). The decision it makes will be rational and profitable.

a. In hiring, an employer wants to find the best person for the job, but collecting all of the information on each possible candidate can be expensive.

b. Employers may reduce the cost of hiring by using the average characteristics of women and minorities in determining whom to hire; the employer is using crude indicators of gender, race, or ethnic background as a measure of production-related attributes.

c. By reducing hiring costs, the use of statistical discrimination may increase the employer's profits.

E. Occupational discrimination can cause crowding or an oversupply of workers in the few occupations that are left to the class of workers experiencing discrimination. This theory helps to explain the relatively low wages of women relative to men. (Figure 35.5 explains this in supply and demand diagrams.)

1. The crowding model includes the following assumptions: the number of male and female (or black and white) workers is equal; the economy has three occupations; the two groups of workers have identical labor force characteristics—anyone could fill a position equally well.

2. There are several effects of crowding.

a. Wages will be lower in the few occupations where women are not discriminated against because most women are “crowded” into these occupations. The supply is unnaturally large relative to demand.



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b. Eliminating discrimination will shift women from the low wage occupations into higher wage occupations, bringing about an equilibrium wage that should be the same in all occupations requiring similar types of workers without respect to gender.

3. The conclusion is that society will gain from a more efficient allocation of resources when discrimination is abandoned

VI. Antidiscrimination Policies and Issue

A. Government might attack the problems of discrimination in several ways.

1. Promote a strong economy: higher wages increase the cost of discrimination, tight labor markets help overcome stereotyping.

2. Improve the education and training opportunities of women and minorities.

3. Direct government intervention: The U.S. government has outlawed certain practices in hiring, promotion and compensation and required government contractors to take affirmative action to ensure that women and minorities are hired at least up to the proportions of the labor force.

B. The affirmative action controversy.

1. Affirmative action consists of special efforts by employers to increase employment and promotion opportunities for groups that have suffered past discrimination and continue to experience discrimination.

2. Supporters of affirmative action contend that merely removing the discrimination burden does nothing to close the present socioeconomic gap.

a. Because of historical discrimination, women and minorities find themselves in an inferior position economically to white men.

b. The results of past discrimination continue due to seniority layoff plans and inferior education and training of women and minorities.

c. Something more than equal opportunity, i.e., preferential treatment, is necessary to counter the inherent bias in favor of white men.



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3. Those against affirmative action claim that affirmative action goes beyond aggressive recruitment.

a. Preferential treatment has forced employers to hire less-qualified women and minority workers.

b. Preferential treatment, if it causes the hiring of less-qualified women and minority employees, may result in resentment by majority workers who have been passed over for jobs and promotions and reinforce stereotypical views of women and minorities that will negatively affect highly-qualified women and minorities.

C. Recent developments.

1. A series of important Supreme Court decisions in 1986 and 1987 upheld the constitutionality of affirmative action programs, but more recent decisions have undermined some specific programs.

2. In 1996 Congress debated legislation restricting affirmative action, and the Clinton administration halted several Federal programs designed to give preference in Federal contracting to minorities.

Risk Theory of Profit:

Prof. Hawley, an American economist in 1907, propounded the risk-bearing theory of profit. Prof. Hawley remarks, "The profit of an undertaking, or residue of the product after the claims of land, labor and capital are satisfied, is not the reward of management or coordination but of the risk and responsibilities that the undertaker subjects himself to". So, according to this theory, profit is the reward for risk-taking in business. Every business involves some risk or other. Since the entrepreneur undertakes the risk, he is entitled to receive profit. If he does the reward, he will not be prepared to undertake the risks. Hence, higher the risk, the greater is the possibility of profit. This profit of the entrepreneur exceeds the ordinary return on capital. If it were less than the ordinary return on capital, the entrepreneur would not be prepared to undertake the risk.

The main objections to this theory are as follows:

1. No Direct Relation between Risk and Profit



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Unlike the theory, there is no direct relation between risk and profit. It is not necessary that if the risk were high, the profit would correspondingly be high. In reality, profit is influenced by several factors addition to risk bearing. Profit may arise due to superior ability or monopoly position.

2. Reward for Risk-avoidance

According to Prof. Carver profits arise not because risks are borne, but because the superior entrepreneurs are able to reduce them. So profit is the reward for risk-avoidance rather than risk-taking. Still it cannot be denied that a great deal of pure profit is the reward for risk taking.

3. Unforeseeable Risks

A strong criticism has been made by Prof. Knight. According to him profit does not arise due to all kinds of risk. It arises only due to unforeseeable risks. The foreseeable risks such as fire, accident can be insured. So an insurable risk is, in reality, no risk at all. Profit arises only due to unforeseeable risks such as fall in price, changes in fashion new discovery. These risks are non-insurable. So these risks give rise to profit. Prof. Knight referred to unforeseeable risk as uncertainty-bearing. So profit is the reward for uncertainty bearing, which is the special function of the entrepreneur. Peter Duckers also regards profit as the reward for undertaking unforeseeable risk, which cannot be provided against.

Interest:

Interest is money paid by a bank or other financial institution to an investor or depositor in exchange for the use of the depositor's money.

Amount of interest is (usually) a fraction (called the interest rate) of the initial amount deposited called the principal amount.

$$A = P (1 + r) t .$$

Notation:

r : interest rate per unit time

P : principal amount

A : amount due (account balance)

t : time



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These quantities are related through the equation:

$$A = P(1 + rt).$$

If a portion of the interest is credited after a fraction of a year, then the interest is said to be compounded. If there are n compounding periods per year, then in t years the amount due is

$$A = P(1 + \frac{r}{n})^{nt}$$

The annual interest rate equivalent to a given compound interest rate is called the effective interest rate.

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