**` CHAPTER 1: THE MICROECONOMICS**

Microeconomics is the study of individuals, households and firms behavior in decision making and allocation of resources. It generally applies to markets of goods and services and deals with individual and economic issues. Microeconomics study deals with what choices people make, what factors influence their choices and how their decisions affect the goods markets by affecting the price, the supply and demand.

**MICROECONOMICS AND MACROECONOMICS**

As a terms imply,**Microeconomics** focuses on micro or small segment of economy and it studies the decision making process and economic problems of individuals in an economy with respect to that how they use scare means or resources at their disposal for satisfying their unlimited ends. On the other hands **Microeconomics** looks at a larger picture and is study of economy as a whole.

In order to understand the concepts (**Microeconomics and Macroeconomics),** Microeconomics is the study of an individual human being, an individual household, an individual firm or an individual industry etc. with respect to how they use/divide their given scare means among the possible alternative uses/ends in order to maximize their gain or well-being. Microeconomics theory does not study the economy as a whole and instead studies the individuals and their gain maximizing behavior in any economy. Microeconomics studies and analyzes individual behavior with respect to issues like production, consumption, distribution, price determination etc.

**Macroeconomics** on the other hand, studies the aggregate or overall economic behavior of households, firms, industries etc. in any economy. It focuses on broader economic issues like business cycles, inflation, deflation, stagflation, issues related to economic growth and development, national income employment, money and monetary policy, fiscal policy etc.

**UNDERSTANDING THE DIFFERNCE BETWEEN MICRO AND MACRO ECONOMICS**

•Microeconomics studies the economic behavior of an individual firm, industry, household, consumers etc. in an economy. Microeconomics studies the economic behavior of firms, industries, household consumers etc. at an aggregate level. In other words, we can say that microeconomics is the study of economy or economic system as a whole.

•Microeconomics studies issues like demand, supply, production, production efficiency, cost, cost minimization, market structures, pricing, distribution, profit maximization etc. at individual firm, industry, households or at consumer level. On the other hand, Microeconomics studies the economic issues and problems affecting economy at a broader level. These issues can be problem of inflation, deflation, stagflation, business cycles, problem of economic growth, national income, employment etc.

•Macroeconomics theory explains and deals with the economic environment which an individual firm, industry, household etc. faced or encounter. Such issues in the economic environment impact the decision making of the individual firms, industry, households etc. However, these individual entities do not hold any power to control ot to manage the macroeconomic issues at an individual level.

**SCOPE OF MICROECONOMICS**

Microeconomic theory deals with four important issues at an individual level. These are issues are:

\*What should be produced? \*How much it should be produced? \*How can one make best use of given resources while producing goods and services in order to maximize the efficiency of production and consumption or to maximize the returns for an individual (firm, industry, household etc.) \*How the goods and services can be distributed for maximum well-being?

**The Scope and Subject Matter of Microeconomics covers following three aspects:**

*\*Theory of Firm and Production Pricing*

Under the firm and production pricing, the following are to be discussed:

\*Theory of Demand and Supply \*Theory of Production \*Theory of Cost \*Theory of Markets – Perfect market and Imperfect Markets like Monopoly, Duopoly, Oligopoly, Monopolistic competition \*Theory of Production Pricing in various market situations

*The theory of firm and product pricing discusses demand and supply environment encountered by individual firms, industries etc. It discusses how given resources can be allocated for production in order to ensure maximization of profit or maximization of cost for a firm. It also discusses various market situation possible and determination of product pricing under various market situations.*

\*Theory of Factor Pricing (As per economic theory there are four factors of production- Land, Labor, Capital and Organization)

Under the Factor pricing, the following are to be discuss:

\*Labor theory and theory of wage \*Theory of Rent \*Theory of Interest and \*Theory of Profit

The factor pricing theory discusses how the reward or return for the various factors of production (Land, Labor, Capital and Organization) can be decided when they are contributing to the production activities.

**•WELFARE ECONOMICS**

Under the Welfare theory, the following are to be discusses:

\*Criteria of social welfare \*Maximization of social welfare \*Determination of welfare optimizing output mix, commodity distribution and resource allocation

The welfare theory discusses and understands the criteria of social welfare for any economy and how the same can be achieved in the economy. It also discusses the determination of welfare maximizing output mix, commodity distribution and resource allocation.

**CETERIS PARIBUS**

It is a Latin phrase which means ‘Other things remain constant’. The assumption of ‘Ceteris Paribus’ is integral part of microeconomics theory. By using the assumption of ‘Ceteris Paribus’, it becomes easy to understand the relationship between two variables or in other words the impact of changes in one variable on the other variable while other variable remains constant.

**IMPORTANCE OF MICROECONOMICS**

**•Understanding operation of economy at a micro level-** Microeconomics analyses various market solution and the economic reasons in making decisions like- What to produce? For whom to produce? How much to produce? Among others.

•**Optimizing of resource allocation-**how a firm or an industry can maximize its production efficiency and the profit by appropriate allocation and utilization of resources at its disposal.

**•Minimization of Cost-**the determination of optimum production point for a firm/industry and the point of cost minimization for a firm.

•**Understanding Consumer behavior-**the study of Marginal Utility Theory, Revealed Preference Hypothesis, Consumer Indifference curves etc. give useful insight into consumer behavior and thus help in understanding and predicting the consumer behavior in varied market situations

•**Demand Forecasting**-the demand and demand analysis elasticity of demand and predicting the demand of a product.

•**Impact of change in price/income/prices of related goods etc. on the demand of a product-**the impact of change in price, income, prices of related goods etc. on the demand the good or service which the firm is offering to the market

• **Government Policy Making-**deciding appropriate tax policy, pricing policy of the public goods and services, impact of tax policy in reducing inequality of income and wealth.

• **Foreign trade and exchange rate determination-**the impact of change in tariff on the terms of trade.

• **Maximization of Social Welfare-**appropriate allocation of resources, commodities and output mix for the maximization of the social welfare.

**CHAPTER 2: THEORY OF THE FIRM**

The theory of firm is the microeconomic concept founded in neoclassical economics that states the firms exist and make decisions to maximize profits. Firms interact with the market to determine pricing and demand and the allocate resources according to models the look to maximize net profits.

Neoclassical economists believe that a consumer’s number one concern is to maximize personal satisfaction, and that everyone makes decisions based on fully informed evaluation utility. This theory coincides with the idea of rational behavior theory, which states that people act rationally when making economic decisions.

Neoclassical economics stipulates that a good or service often has value that goes above and beyond its input cost. This economic theory states that competition leads to an efficient allocation of resources within an economy. This resource allocation establishes market equilibrium between supply and demand

**ARGUMENTS AGAINSTS NEOCLASSICAL ECONOMICS**

Neoclassical economics has grown to become the primary take on modern-day economics. Most criticism points out that neoclassical economics makes many unfounded and unrealistic assumption that do not represent real situations. Neoclassical economics is also sometimes blamed for inequalities in global debt and trade relations because the theory holds that such matters as labor rights will improve naturally, as a result of economic conditions.

**AN EXAMPLE OF NEOCLASSICAL ECONOMICS**

For examples, neoclassical economics believe that’s since the value of a product is driven by consumer perception, there is no upper bound to income or profits that can be made by smart capitalist. This difference between the actual costs of the product and the price it is actually sold for is cold the “economic surplus”.

**THEORY OF FIRM**

The theory of the firm, the behavior of a particular business entry said to be driven by profit maximization. This theory governs decision making in a variety of areas including resource u

The theory of the firm goes along with the theory of the consumer, which states that consumers seek to maximize their overall utility. In this case, utility refers to the perceived value a consumer places on a good or services, sometimes referred to as the lever of happiness the consumer experiences from the good or services.

**EXPANSION ON THE THEORY OF THE FIRM**

Modern takes on the theory of the firm sometimes distinguish between long-run motivation, such as sustainability, and short-run motivation, such as profit maximization. The theory is always being analyzed and adapted to suit changing economies and markets. More economists began to look at the firm level to answer basic questions about why companies produce what they do, and what motivates their choices when allocating capital and labor.

**RISK ASSOCIATED WITH THE THEORY OF THE FIRMS PROFIT MAXIMIZATION GOAL**

Modern takes on the theory of the firm take such facts as low equity ownership by many decision makers into account; some feel that chief executive officers (CEOs) of publicly held companies are interested in profit maximization as well as in goals based on sales maximization, public relations and market shares.

Further risk exists when a firm focus on a single strategy within the marketplace. If a business relies on the sale of a particular good for its overall success, and the associated product fails within the marketplace, this can lead to a financial collapse of that particular company or department within a company.

**SUPPLY AND DEMAND**

Supply and Demand is perhaps one of the most fundamental concepts of economics and it is the backbone of a market economy. Demand refers to how much(quantity) of a product or service is desired by buyers. The quantity demanded is the amount of a product people are willing to buy at certain price; the relationship between price and quantity demanded is known as the demand relationship. Supply represent how much the market can offer.

1. **THE LAW OF DEMAND**

The law of demand states that, if all other factors remain equal, the higher price of a good, the less people will demand that good. In other words, the higher price, the lower the quantity demand. The amount of a good that buyers purchase at a higher price is less because as the price of a good goes up, so does the opportunity cost of buying that good. As a result, people will naturally avoid buying a product that will force them to forgo the consumption of something else they value more. The demand shows a downward slope.

1. **THE LAW OF SUPPLY**

Like the law of demand, the law of supply demonstrates the quantities that will be sold at a certain price. But unlike the law of demand, the supply relationship shows an upward slope. This means that the higher the price, the higher quantity supplied. Producers supply more at a higher price because selling a higher quantity at higher price increases revenue.

**TIME AND SUPPLY**

Unlike the demand relationship, however, the supply relationship is a factor of time. Time is important to supply because suppliers must, but cannot always, react quickly to a change in demand or price. So it is important to try and determine whether a price change that is cause by demand will be temporary or permanent.

1. **SUPPPLY AND DEMAND RELATIONSHIP**

Now that we know the laws of supply and demand, let’s turn to an example to show how supply and demand affect price.

Imagine that a special edition CD of your favorite band is released for ₱20. Because the record company’s previous analysis showed that consumers will not demand CDs at a price higher than ₱20, only ten CDs were released because the opportunity cost is too high for suppliers to produce more. If, however, the ten CDs are demanded by 20 people, the price will subsequently rise because, according to the demand relationship, as demand increase, so does the price. Consequently, the rise in price should prompt more CDs to be supplied as the supply relationship shows that the higher the price, the higher the quantity supplied.

1. **EQUILIBRIUM**

When supply and demand are equal (i.e. when the supply function and demand function intersect) the economy is said to be at equilibrium. At this point, the allocation of goods is at its most efficient because the amount of goods being supplied is exactly the same as the amount of goods being demanded, Thus, everyone (individuals, firms, or countries) is satisfied with the current economic condition. At the given price, suppliers are selling all the goods that they have produce and consumers are getting all the goods that they are demanding.

In the real market place equilibrium can only ever be reached in theory, so the price of goods and services are constantly changing in relation to fluctuations in demand and supply.

1. **DISEQIULIBRIUM**

Disequilibrium occurs whenever the price or quantity is not equal to P\* or Q\*.

1.***EXCESS SUPPLY***

If the price is set too high, excess supply will be created within the economy and there will be allocative inefficiency.

2.***EXCESS DEMAND***

Excess Demand is created when price is set below the equilibrium price. Because the price is so low, too many consumers want the good while producers are not making enough of it.

1. **SHIFT VS. MOVEMENT**

For economics, the ‘movement’ and ‘shift’ in relation to the supply and demand curves represent very different market phenomena:

1.***MOVEMENT***

A movement refers to a change along a curve. On the demand curve, a movement denotes a change in both price and quantity demanded from one point to another on the curve. The movement implies that the demand relationship remains consistent. Therefore, a movement along the demand curve will occur when the price of the good changes and the quantity demanded changes in accordance to the original demand relationship. In other words, a movement occurs when a change in the quantity demanded caused only by a change in price, the vice versa.

2.***SHIFT***

A shift in a demand or supply curve occurs when a good’s quantity demanded or supplied change even though price remains the same. For instance, if the price for a bottle of beer was ₱2 and the quantity demanded increased from Q1 to Q2, then there would be a shift in the demand for beer. Shift in the demand curve imply that the original demand relationship has changed, meaning that quantity demand is affected by a factor other than price. A shift in the demand relationship would occur if, for instance, beer suddenly became the only type of alcohol available consumption.

**CHAPTER 3: PRODUCTION THEORY**

The Production Function Production refers to the transformation of inputs into output or products An input is a resources that a firm uses in its production process for the purpose of creating a s

A production function indicates the highest output(Q) that a firm can produce for every specified combinations of output (physical relationship between inputs and outputs), while holding technology constant at some predetermined state.

Mathematically, we represent a firm’s production function as:

Q=f (L, K)

Q=highest output f=function of L=labor K=capital

The quantity of output is a function of, or depend on, the quantity of labor and capital used in production.

Output refers to the number of units of the commodity produced. Labor refers to the number of workers employed. Capital refers to the amount of the equipment used in production. We assume all the units of L and K are homogenous or identical. Technology is assumed to remain constant during the period for the analysis.

**THE SHORT RUN**

The short run is a time period in which the quantity of some inputs, called fixed factors, cannot be increased. So, it does not correspond to a specific number of months or years.

A fixed factor is usually an element or capital (such as plant and equipment). Therefore, in our production function capital is taken to be fixed factor and labor the variable one.

**TOTAL, AVERAGE, AND MARGINAL PRODUCTS**

Total product (TP) is the total amount that is produced during a given period of time. Total product will change as more or less of the variable factor is used in conjunction with the given amount of the fixed factor. Average product (AP) is the total product divided by the number of units of the variable factors used to produce it. Marginal product (MP) is the change in total product resulting from the use of one additional unit of the variable factor.

**Variable-**it is change and can assume any value.

**RELATIONSHIPS AMONG TOTAL, MARGINAL, AND AVERAGE PRODUCTS OF LAW**

**•**With labor time continuously divisible, we can smooth TP, MP and AP curves. •The TP curve increase at an increasing rate up to point A; past this point, the TP curves rises at a decreasing rate up to point C and declines thereafter. •The MP rise up to point A, becomes zero at C, and is negative thereafter. •The AP raises up to point B and declines thereafter (but remains positive as long TP is positive).

**LAW OF DIMINISHING RETURNS**

•This law states that as additional units of an output are used in a production process, while holding all other inputs constant, the resulting increments to output (or total products) begin to diminish beyond some point.

•As the firm uses more and more units of the variable input with the same amount of the fixed input, each additional unit of the variable input has less and less of the fixed input to work and, after this point, the marginal product of the variable input declines.

**STAGE OF PRODUCTION**

The relationship between the MP and AP curves can be used to define three stages of production of labor

Stage I of labor -Is the range of production for which increase in the use of variable unit cause increase in its average product.

Stage II of labor -Is the range for which increase in the use of a variable input causes decrease in its average product, while values of its associated marginal product remain non-negative.

Stage III of labor -Is the range for which the use of a variable input corresponds to negative values for its marginal product.

**THE LONG RUN**

The long run is a time period in which all inputs may be varied but in which the basic technology of production cannot be changed.

The long run corresponds to a situation that the firm faces when is planning to go into business (to expand the scale of its operation).

Like the short run, the long run does not correspond to a specific length of time.

**PRODUCTION OF ISOQUANT**

An isoquant is a set of input combinations that can be used to produce a given level of output.

This curve indicates that a firm can produce the specified level of output from input combinations (L, K), (L, K), (L, K), ….

As we move down from one point on an isoquant to another, we are substituting one factor for another while holding output constant.

ISO means equal

**MARGINAL RATE OF TECHNICAL SUBSTITUTION**

The Marginal Rate of Technical Substitution (MRTS) measures the rate at which one factor is substituted for another with output being held constant.

Since we measure K on the vertical axis, the MRST represent the amount of capital that must be sacrificed in order to use more labor in the production process, while producing the same level of output. K/ L (the slope of the isoquant which is negative).

We multiply the ratio by -1 in order to express the MRTS as a positive number.

**CHAPTER 4: COST THEORY**

In the cost theory, there are two types of costs associated with production – Fixed Costs and Variable Costs.

In the short run, at least one factor of production is fixed, so firms face both fixed and variable costs.

**FIXED COSTS**

Fixed costs are costs that do not vary with different levels of production and fixed costs exists even if output is zero. Example: rent and salaries.

**AVERAGE COSTS**

Average fixed costs = Fixed costs/ Quantity

The quantity produced is low, the average fixed cost is very high and this cost lowers as the quantity produced increase.

**VARIABLE COSTS**

Variable costs are costs that vary with level of output. Ex. Electricity.

The variable costs curve starts from zero. It means when output is zero, the variable costs is zero, but as output increase the variable costs increase. It keeps increasing to a point that economics of scale cannot lower the per unit costs anymore hence the steep incline

**IMPORTANCE OF DISTINCTION BETWEEN FIXED AND VARIABLE COSTS**

This distinction is important in cost theory. Every firm has the object to maximize profits or minimize losses, if losses are unavoidable. At times the price of the product may not cover average total cost. Then the firm will have to decide whether to shut down or produce some output.

1. **DECISION TO SHUT DOWN THE FIRM:**

The producers may not cover the total costs, if the price of the product is less than the short- run average cost. Then the distinction between fixed cost and variable cost is important.

If the price does not cover average variable costs, the firm prefers to shut down. In order words if the total revenue (total sale proceeds) does not cover total variable costs, the firm must shut down. Otherwise, its total loss will be greater than the fixed costs. It will produce something only when the price covers average variable cost and part of the average fixed costs. The output which marginal cost is equal to marginal revenue keeps losses minimum.

1. **BREAKS- EVEN POINT:**

At times the firm may not make any profit. It just pays to produce a given output. Total revenue is just equal to total cost. The firm has crossed the losses zone and is about to enter the zero profit zone. The output which total revenue becomes equal to total cost represent break- even point.

**MARGINAL COST**

Marginal cost is the increase in cost caused by producing one more unit of the good.

The marginal cost curve is U shaped because initially when a firm increase its output, total costs as well as variable costs start to increase at a diminishing rate. At this stage, due to economies of scale and the Law of Diminishing Returns, Marginal Cost falls till it becomes minimum. Then as output rises, the marginal cost increases.

**TOTAL COST**

Total Cost = Fixed Cost + Variable Cost

When the output is zero, variable costs are also zero. But we have fixed costs which is where the Total Cost start. The Total Cost remains parallel to the Variable Cost and the distance between the two curves is the Fixed Cost.

**AVERAGE TOTAL COST**

Average Total Cost = Total Cost/ Quantity. (Total Cost = Fixed Cost = Variable Cost)

Average Variable Cost = Variable Cost/ Quantity

**MARGINAL COST, AVERAGE COST, VARIABLE COST**

**NOTE:** If average costs are falling then marginal cost must be less than average while if average cost are rising then marginal must be more than average. Marginal cost on its way up must cut the cost curve at its minimum point.

If Marginal Cost less than Average Variable Cost, Then Average Cost goes down.

If Marginal Cost is greater than Average Variable Cost, then Average Cost goes up.

If Marginal Cost is equal to Average Variable Cost, then Average Cost will be at minimum.

**MARKET MODELS: PURE COMPETITION, MONOPOLISTIC COMPITITION, OLIGOPOLY, AND PURE MONOPOLY**

A modern economy has many different types of industries. However, an economic analysis of the different firms or industries within an economy is simplified by first segregating then into different models based on the amount of competition within the industry. There are 4 basic market models: PURE COMPETITION, MONOPOLISTIC COMPETITION, OLIGOPOLY, and PURE MONOPOLY. Because the competition among the last 3 categories is limited, these market models are often referred to as IMPERFECT COMPETITION.

IMPERFECT COMPETITION

PURE COMPETITION/ MONOPOLISTIC COMPETITION/ OLIGOPOLY/ PURE MONOPOLY

In **a purely competitive market,** there are large numbers of firms producing a standardized product. Market prices are determined by consumer demand; no supplier has any influenced over the market price, and thus, the suppliers are often referred to as **price takers.** The primary reason why there are many firms is because there is a low barrier of entry into the business. The best examples of a purely competitive market are agricultural products, such as corn, wheat and soybeans.

**Monopolistic Competition** is much like pure competition in that there are many suppliers and the barriers to entry are rather law. However, the suppliers try to achieve some price advantages by differentiating their products from other similar products, most consumer goods, such as health and beauty aids, fall into this category. Suppliers try to differentiate their product as being better so that they can justify higher prices or to have a larger market share than the competition.

**MONOPOLISTIC COMPETITION: SHORT- RUN PROFITS AND LOSSES, AND LONG- RUN EQUILIBRIUM**

Monopolistic competition is the economic market model with many sellers selling similar, but not identical products. The demand curve of monopolistic competition is elastic because although the firms are selling differentiated products, many are still close substitutes, so if one firm raises its price too high, many of its consumers will switch to product made by other firms.

Monopolistic competition has a downward sloping demand curve. Thus, just as a pure monopoly, its marginal revenue will always be less than the market price, because it can only increase demand by lowering prices, but by doing so, it must lower the prices of all units of its product. Hence, monopolistically competitive firms maximize profits or maximize losses by producing that quantity where marginal revenue equals marginal cost, both over the short run and the long run.

**SHORT- RUN PROFIT OR LOSS**

In the short run, a monopolistically competitive firm maximizes profit or maximizes losses by producing that quantity that corresponds to when marginal revenue equals marginal cost. If average total cost is below the market price, then the firm will earn an economic profit.

• D = MARKET DEMAND

• ATC = AVERAGE TOTAL COST

• MR = MARGINAL REVENUE

• MC = MARGINAL COST

**SHORT – RUN PROFIT = (Price – ATC) ×QUANTITY**

However, if the average total cost is above the market price, then the firm will incur losses, which will be equal to the average total cost minus the market price multiplied by the quantity produced. It will still minimize losses by producing the quantity where marginal revenue equals marginal cost, but eventually the firm will either have to reverse the losses, or it will have to exit the industry.

**LONG – RUN EQUILIBRIUM: NORMAL PROFITS**

If the competitive firms in an industry earn an economic profit, then other firms will enter the same industry, which will reduce the profits of the other firms. More firms will continue to enter the industry until the firms are earning only a normal profit.

However, if there are too many firms, then firms will start to incur losses, especially the inefficient ones, which will cause them to leave the industry. Consequently, the remaining firms will return to normal probability. Hence, the long- run equilibrium for monopolistic competition will equate the market price to the average total cost, where marginal revenue equals marginal cost.

**MARKET PRICE= MARGINAL COST= ALLOCATIVE EFFICIENCY**

**PRODUCTION EFFICIENCY= MINIMUM ATC**

**EXCESS CAPACITY=** Quantity produced at minimum **ATC –** Quantity that yields the greatest profit (**MR = MC)**

Because monopolistic competitive firms do not operate at their minimum average total cost, they, therefore, operate will **excess capacity**. Note in the above diagram that firms would lose money if they produced more to achieve either allocative or productive efficiency. That most firms operate with excess capacity is evident when looking at most monopolistically competitive firms, such as restaurant and other retailers, where salespeople are often idle.

**PRODUCTIVE AND ALLOCATIVE EFFICIENCY OF MONOPOLISTIC COMPETITION**

**Productive efficiency requires that:**

**Price = Minimum Average Total Cost**

Pure competition can achieve productive efficiency, but most monopolistic competitive firms do not, since they sell at a price higher than the minimum average total cost, and would actually lose money selling their minimum ATC.

The monopolistic film also does not achieve allocative efficiency. **Allocative efficiency** requires that;

**Price = Marginal cost**

The monopolistic firm exhibits a down sloping demand curve. That means that in order to sell more units, it must lower its price, but if it lowers its price, then it must lower its price on all units. Thus, like a monopoly, marginal revenue continually declines as quantity is increased.

An **Oligopoly** is a market dominated by a few suppliers. A high barrier to entry limits the number of suppliers that can complete in the market, so the oligopolistic firms have4 considerable influence over the market price of their product.

**Oligopoly Pricing Models**

A pure monopoly maximizes profits by producing that quantity where marginal revenue equals marginal cost. However, it is much more difficult for an oligopoly to determine at what output it can maximize its profit. There are 2 major reasons for this; the independence of the firms and their diversity, especially in terms of concentration ratios.

There have been 2 prominent characteristics of oligopolies observes over the years

1. In a stable economy, oligopolies prices change much less frequently than under any other market model, such as pure competition, monopolistic, competition, and even monopoly.
2. When prices do change, the firms generally move in the same direction and by the same magnitude in their price changes, which may be the result of collusion.

**Kinked Demand Theory**

Consider a firm in an oligopoly that wants to change its price. How will the other firms react? There are 2 possibilities: they can either match the price changes or ignore them. This makes the demand curve more elastic, since as the firm raises its price, then many of its customers will buy from the other firms, lowering the revenue of the higher price firm.

**Cartel Model**

A **cartel** by agreeing to fix prices or to divide the market among themselves, or to restrict competition some other way. The primary characteristics of the Cartel Model is **collusion** among the oligopolistic firms to fix prices or restrict competition so that they can earn monopoly profits.

**Problem Creating and Maintaining Collusion**

Collusion is often difficult to detect, because it is often based on tactic or covert agreements that are made during social interactions between the executives of the oligopolistic firms. Nonetheless, there are several obstacles to collusion. One common obstacles is differences in demand and cost.

The other major barrier to collusion is antitrust law. Most modern economies prohibit collusion, since it is against the public interest, although there are some exceptions. A very common exception is the pricing of insurance products, since many insurance companies depend on rating companies that gather information on insurance risks and how to price them.

**Price Leadership Model**

In many industries, there is a **dominant firm** in an oligopoly, and the other firms often follow the dominant firm in price changes, which can be viewed as a type of implicit price collusion. Hence, the dominant firm also becomes the **price leader**.

**Productive and Allocative Efficiency of Oligopolies**

Pure competition achieves productive efficiency by producing products at the minimum average total cost. They also achieve allocative efficiency because they produce until their marginal cost equals price. However, because oligopolies produce only until their marginal cost equals marginal revenue, they lack both the productive and allocative efficiency of pure competition.

A pure monopoly has pricing power within the market. There is only one supplier who has significant market power and determines the price of its product. A pure monopoly faces little competition because of high barriers to entry, such as high initial cost, or because the company has required significant market influence through network effects for instance.

**The Disadvantage of a Monopoly to Society**

Because consumers of a monopoly product pay a higher price than they would have under a competitive market, there is a transfer of income from the consumers to the owners of the monopoly. In general, owners of businesses, including stockholders, tend to be wealthier than the buyers of the monopoly product, so this causes a transfer of income from poorer people to wealthier people, creating a greater inequality than would otherwise be the cases.

**Cost Inefficiency of a Monopoly**

Competitive firms must generally produce their products for the lowest average total cost; otherwise, they are driven out of business. However, a monopoly has no such concerns, because it has high barriers to entry to protect its position. Therefore, monopolists often do not operate anywhere on the minimum average total cost curve, but usually operate at some point above, which generally referred to as X- efficiency. Although X- efficiency reduced the monopolist profits, its persists, nonetheless, because managers become comfortable in their job, they are unwilling to take risks, and they have no incentive to develop new products. Often, jobs are given to fawning employees rather than to competent people.

**Regulating Monopolies**

When a monopoly arises, how should the government handle it? It depends on the specific facts. If it is a natural monopoly where a single supplier can provide the service at a reduce cost then the government can regulate the prices that it can charge, which is the case for natural gas and electricity.

**Pure Competition is the Best for the Consumer**

From the consumer point of view, pure competition is the best type of market, because it gives consumers the greatest consumer surplus. From an economic standpoint, pure competition is also the easiest model to analyze, so this is the first market model that will be covered in depth.

**CHAPTER 5: THEORY OF PRICE**

The theory of price is an economic theory that contends that the price for any specific good/service is based on the relationship between the forces of supply and demand. The theory of price says that the point at which the benefits gained from those who demand the entity meets the seller’s marginal costs is the most optimal market price for the good/service.

**Understanding Supply and Demand and the Relation to Price Theory**

Supply denotes the amount of products or services the market is able to provide. This can include tangible goods, such as automobiles, or intangibles, such as the ability to have an appointment with a skilled service provider. In each instance, the available supply is finite in nature. There are only a certain of automobiles available, and only a certain number of appointments available, to any given time.

**Factor Pricing: Concept and Theories**

Factors of production can be defined as inputs used for producing goods or services with the aim to make economic profit.

In economics, there are four main factors of production, namely land, labor, capital, and enterprise. The price that an entrepreneur pays for availing the services of these factors is called factor pricing.

**Concept of Factor Pricing**

Factor Pricing is associated with the prices that an entrepreneur pays to avail the services rendered by the factors of production. For example, an entrepreneur needs to pay wages to labor, rents for availing land, and interests for capital so that he/she can earn maximum profit. These factors of production directly affect the production process of an organization.

**Theories of Factor Pricing:**

The theory of factor pricing is concerned with the principles according to which the price of each factor of production is determined and distributed. The distribution of factors of production can be of two types, namely personal and functional. Personal distribution is concerned with the distribution of income among different individuals.

PRICE ASPECTS:

Refers to the aspect in which an organization pays a certain amount to avail the services of factors of production. For example, wages, received by labor constitute the price of factors of production.

INCOME ASPECTS:

Refers to another aspect in which a certain amount is received by a factor of production. For instance, rents received by a landlord and wages received by labor constitute the income generated from the factors of production.

**Labor Theory of Value**

The labor theory of value was an early attempt by economists to explain why goods were exchanged for certain prices on the market. It suggested the value of a commodity could be measured objectively by the average number of labor hours necessary to produce it. The best-known advocates of the labor theory were Adam Smith, David Ricardo and Karl Marx.

**Labor Theory of Value**

Advocates of the labor theory believed that if two goods are exchanged for the same price, they must therefore have the same value. Value was determined by inputs, chiefly labor. The theory could not explain, among other things, profits, losses and land values.

**Labor Theory and Marxism**

The labor theory of value interlaced nearly every aspect of the Marxian analysis. Marx’s pinnacle economic work, “Das Kapital**,”** was almost entirely predicated on the tension between capitalist owners of the means of production and the labor power of the working class.

**The Subjectivist Theory Takes Over**

The labor theory’s problems were finally resolved by the subjective theory of value. This theory stipulates exchange value is not absolute but relative and based on individual subject evaluations. Value emerges from human perceptions of usefulness. Voluntary economic exchanges take place only when each trading partner subjectively values the others good more than his own.

**Labor Productivity**

Labor productivity is defined as real economic output per labor hour. Growth in labor productivity is measured by the change in economic output per labor hour over a defined period of time.

**Karl Marx’s Labor Theory of Value**

In developing a theory of relative prices, or the quantitative relationship between things or commodities, Marx essentially used Ricardo’s theory of value. Commodities manifest in their prices certain quantitative relationships, and this means, according to Marx, that all commodities must contain one element in common that must exist in certain measurable quantities.

**Marx’s Labor Theory of Value: A Summary judgement**

Much has been written on Marx’s labor theory of value, but in our view much of that writing is not essential to Marx’s central argument for two major reason. First, Marx was not primarily interested in questions concerning the allocation of resources and the formation of prices; he wanted to develop a theory that would explain the dynamic changes taking place in the economy of his time.