# Module I

# 1

# AN ORIGIN OF CLASSICAL ECONOMICS

**Unit Structure:**



## 1.1 OBJECTIVES

After going to this module you will be able:

- To understand the origin of Classical Economics
- To understand the school of Mercantilism and Physiocracy
- To understand the thoughts of Adam Smith

## 1.2 INTRODUCTION

The subject, the History of Economic Thought, may be defined as a critical account of the development of economic ideas, searching into their origins, interrelations, and, in some cases, their results. The history of economic thought concerns thinkers and theories in the field of political economy and economics from the ancient world right up to the present day. Economics was not considered a separate discipline until the nineteenth century. For example, Aristotle, the ancient Greek philosopher, in his works on politics and ethics have thought of 'art of wealth acquisition'. He also considered the question whether property is best left in private or public hands. In medieval times, scholars like Thomas Aquinas argued that it was a moral obligation of businesses to sell goods

at a just price. Economic thought evolved through feudalism in the Middle Ages to mercantilist theory during the Renaissance (when people were concerned to orient trade policy to further the national interest). The modern political economy of Adam Smith appeared during the industrial revolution, when technological advancement, global exploration, and material opulence that had previously been unimaginable was becoming a reality. All these and further developments are subject matter of history of economic thought changes in economic thought have always accompanied changes in the economy, just as changes in economic thought can propel change in economic policy. Economic thought has at times focused on the aspects of human nature such as greed and selfishness that generally work against the good of all; at other times, economic behavior has been seen as self-regulating and working toward a common purpose. As contemporary economic thought deals with the issues of globalization and the emergence of a global economy, economists have turned to the multitude of other disciplines which, like economics, developed independently. Building on their discoveries, and united with them in pursuit of the common goal of benefiting human society, economic thought may be on the road to achieving a new level of understanding. There are several ways to present the history of economic thought. (i) to analyze the changing nature of economic theory in conjunction with the social and economic development of society (ii) to emphasize economic thinking as part of the main currents of philosophical and political ideas (iii) to emphasize the internal dynamics of the science where new insights and results emerge as a consequence of economists' awareness of the shortcomings of the present state of the subject.

Economic history is different from history of economic thought. Economic history is the study of the economic aspects of societies in the past; the history of the economic use of resources land, labor and capital; or the examination of the past performance of economies. It is concerned with how people lived most of their lives, how many were born and died, how they earned and spent, worked and played. Such variants, however, reveal little more than the definition which once said simply that it was the sort of history which required a knowledge of economics; though they are an advance on that which defined an economic historian as one who wrote as little history as possible for as much money as possible.

Economic history asks economic questions be they about the demand and supply of goods and services, about costs of production, levels of income, the distribution of wealth, the volume and direction of investment, or the structure of overseas trade it inevitably deals with large numbers, with aggregates. A study of economic history is important because the historical economic phenomena to be examined in any given period have no existence independent of the social, political, cultural, religious and physical environment in which they occurred.

**Classical School**

The Classical School, which is regarded as the first school of economic thought, is associated with the 18th Century Scottish economist Adam

Smith, and those British economists that followed, such as Robert Malthus and David Ricardo. The main idea of the Classical school was that markets work best when they are left alone, and that there is nothing but the smallest role for government. The approach is firmly one of laissez-faire and a strong belief in the efficiency of free markets to generate economic development. Markets should be left to work because the price mechanism acts as a powerful 'invisible hand' to allocate resources to where they are best employed. In terms of explaining value, the focus of classical thinking was that it was determined mainly by scarcity and costs of production. In terms of the macro-economy, the Classical economists assumed that the economy would always return to full-employment level of real output through an automatically self-adjustment mechanism. It is widely recognized that the Classical period lasted until 1870.

Classical economics refers to work done by a group of economists in the eighteenth and nineteenth centuries. They developed theories about the way markets and market economies work. The study was primarily concerned with the dynamics of economic growth. It stressed economic freedom and promoted ideas such as laissez-faire and free competition. Economic thought until the late 1800's. Adam Smith's Wealth of Nations, published in 1776 can be used as the formal beginning of Classical Economics but it actually it evolved over a period of time and was influenced by Mercantilist doctrines, Physiocracy, the enlightenment, classical liberalism and the early stages of the industrial revolution. Classical economics as the predominant school of mainstream economics ends with the 'Marginalist Revolution' and the rise of Neoclassical Economics in the late 1800's. In the 1870's William Stanley Jevons' and Carl Menger's concept of marginal utility and Leon Walras' general equilibrium theory provided the foundations. Henry Sidgwick, F.Y. Edgeworth, Vilfredo Pareto and Alfred Marshall provided the tools for neoclassical economics. Neoclassical economics is an extension of Classical economics but, the focus of the questions changed as well as the tools of analysis. In spite of the dominance of Neoclassical thought, Classical Economics has persisted and influences modern economics, particularly the 'New Classical Economics.' The belief in the efficacy of a 'free market' is central to both classical and neoclassical ideology. Famous economists of this school of thought included Adam Smith, David Ricardo, Thomas Malthus and John Stuart Mill. While Adam Smith would be regarded as the originator and leader of the school, David Ricardo should be credited with establishing the form and methods of the school. The debates between Thomas Malthus and David Ricardo about policy issues such as the 'Corn Laws' and the 'Poor Laws' contributed to the focus and form of the school. Smith was concerned about the nature of economic growth. Malthus, Ricardo and other classical economists were concerned about the question of 'distribution.' One important debate among classical economists was whether there was or wasn't a 'surplus' or 'glut.' Jean Baptiste Say and Malthus were the two major protagonists in the question about the existence of a surplus and its effects on a market economy.

# 1.3 MERCANTILISM

## 1.3.1 Introduction:

Mercantilism is economic nationalism for the purpose of building a wealthy and powerful state. Adam Smith coined the term "mercantile system" to describe the system of political economy that sought to enrich the country by restraining imports and encouraging exports. This system dominated Western European economic thought and policies from the sixteenth to the late eighteenth centuries. The goal of these policies was, supposedly, to achieve a "favorable" balance of trade that would bring gold and silver into the country and also to maintain domestic employment. In contrast to the agricultural system of the physiocrats or the laissez-faire of the nineteenth and early twentieth centuries, the mercantile system served the interests of merchants and producers such as the British East India Company, whose activities were protected or encouraged by the state. The most important economic rationale for mercantilism in the sixteenth century was the consolidation of the regional power centers of the feudal era by large, competitive nation-states. Other contributing factors were the establishment of colonies outside Europe; the growth of European commerce and industry relative to agriculture; the increase in the volume and breadth of trade; and the increase in the use of metallic monetary systems, particularly gold and silver, relative to barter transactions. During the mercantilist period, military conflict between nation-states was both more frequent and more extensive than at any other time in history. The armies and navies of the main protagonists were no longer temporary forces raised to address a specific threat or objective, but were full-time professional forces. Each government's primary economic objective was to command a sufficient quantity of hard currency to support a military that would deter attacks by other countries and aid its own territorial expansion. Most of the mercantilist policies were the outgrowth of the relationship between the governments of the nation-states and their mercantile classes. In exchange for paying levies and taxes to support the armies of the nation-states,the mercantile classes induced governments to enact policies that would protect their business interests against foreign competition.

## 1.3.2 Meaning:

Alexander Gray observes that mercantilism is a misleading and deceitful word. Different writers have defined mercantilism differently. According to Lekachman "mercantilism was a battle against hampering medieval thought and practice". It was revolt against medievalism resolve to reconstruct economic life to a more rational scheme. To Edmund Whittaker mercantilism was the economic counterpart of political nationalism". Heiman described it as the ideological justification of Commercial Capitalism.

Thus mercantilist writers were essentially practical businessmen, merchants and administrators in various European countries like England, France, Italy, Germany, Scotland, and Spain etc. They left behind

numerous works regarding contemporary national economic problems. They do not form a school of economists. So the ideas and policies which dominated the economic scene of England 'and a part of Europe between the close of the 16th century and the middle of the 18th century can rightly be called as mercantilism. Mercantilist writers put emphasis on foreign trade as a means of accumulating treasure and building a strong nation.

### 1.3.3 Important Economic Theories of Mercantilism:

Whereas the economic literature of scholasticism was written by medieval churchmen, the economic theory of mercantilism was the work of secular people, mostly merchant businessmen, who were privately engaged in selling and buying goods. The literature they produced focused on questions of economic policy and was usually related to a particular interest the merchant and writer (in one person) was trying to promote. For this reason, there was often considerable skepticism regarding the analytical merits of particular arguments and the validity of their conclusions. Few authors could claim to be sufficiently detached from their private issues and offer objective economic analysis. However, throughout the mercantilism, both the quantity (there were over 2000 economic works published in 16th and 17th century) and quality of economic literature grew. The mercantilist literature from 1650 to 1750 was of distinctly higher quality, these writers created or touched on nearly all analytical concept on which Adam Smith based his Wealth of Nations, which was published in 1776.

The age of mercantilism has been characterized as one in which every person was his own economist. Since the various writers between 1500 and 1750 held very diverse views, it is difficult to generalize about the resulting literature. Furthermore, each writer tended to concentrate on one topic, and no single writer was able to synthesize these contributions impressively enough to influence the subsequent development of economic theory.

Secondly, mercantilism can best be understood as an intellectual reaction to the problems of the times. In this period of the decline of feudalism and the rise of the nation-states, the mercantilists tried to determine the best policies for promoting the power and wealth of the nation, the policies that would best consolidate and increase the power and prosperity of the developing economies. What is especially important here is the mercantilist assumption that the total wealth of the world was fixed and constant. These writers applied the assumption to trade between nations, concluding that any increase in the wealth and economic power of one nation occurred at the expense of other nations (the rest of the world). Thus, the mercantilists emphasized international trade as a mean of increasing the wealth and power of a nation. Using some modern game-theoretic language, we may say, that they perceived economic activity and international trade in particular as a zero-sum game that is a game, where it is impossible for both players to win. So according to mercantilists, it is impossible to increase a global wealth of the world in effect of international trade. It is a very sad assumption, and modern economists do

not share it. The goal of economic activity, according to most mercantilists, was production, not consumption, as classical economists would later have it. They advocated increasing the nation's wealth by simultaneously encouraging production, increasing exports and holding down domestic consumption. Thus, in practice, the wealth of nation rested on the poverty of the many members of society.

Third general point about mercantilism is their insistence on the notion of balance of trade. Balance of trade figures, also called net exports, are the sum of the money gained by a given economy selling exports, minus the cost of buying imports. A positive balance of trade is known as a trade surplus and consists of exporting more than one imports. A negative balance of trade is known as a trade deficit and consists of importing more than one export. As we know today, neither positive nor negative balance of trade is necessarily dangerous in modern economies, although large trade surpluses or trade deficits may sometimes be a sign of other economic problems. According to mercantilists a country should increase exports and discourage imports by means of tariffs, quotas, subsidies, taxes and the like in order to achieve a so-called favorable or positive balance of trade. Production should be stimulated by government interference in the domestic economy and by the regulations of foreign trade. Protective duties should be placed on manufactured goods from abroad; and the state should encourage the import of cheap raw materials to be used in manufacturing goods for export.

### 1.3.4 Criticisms of Mercantilism:

The following criticisms were levelled against mercantilism by the opponents:

1. The mercantilists exaggerated the importance of Commerce to the extent of depressing agriculture and other branches of human industry.

2. Undue importance was attached to gold and silver.

3. They were under erroneous belief that a favorable balance of trade alone would bring prosperity to the country.

4. Their idea about value, utility capital and interest were vague and imperfect.

5. They are narrow minded nationalists and not cosmopolitans. They could not conceive the ideas of mutually advantageous trade. However, we cannot dismiss their ideas as useless or impractical. The idea of nationalism, self-sufficiency and economic strength were the outcome of their policies. The mercantilist policy proved successful in France, England, Holland and Germany who were competing for colonial supremacy.

# 1.4 PHYSIOCRACY

## 1.4.1 Introduction:

The Physiocrats were a group of economists who believed that the wealth of nations was derived solely from agriculture. Their theories originated in France and were most popular during the second half of the 18th century. Physiocracy was perhaps the first well developed theory of economics. They called themselves économistes (economists) but are generally referred to as Physiocrats in order to distinguish them from the many schools of economic thought that followed them. Physiocrat is derived from the Greek for "Government of Nature". The principles of Physiocracy were first put forward by Richard Cantillon, an Irish banker living in France, in his 1756 publication Essai sur la nature du commerce en géneral (Essay on the Nature of Commerce in General). The ideas were later developed by thinkers such as François Quesnay and Jean Claude Marie Vincent de Gournay into a more systematic body of thought held by a united group of thinkers. The Physiocrats saw the true wealth of a nation as determined by the surplus of agricultural production over and above that needed to support agriculture (by feeding farm laborers and so forth). Other forms of economic activity, such as manufacturing, were viewed as taking this surplus agricultural production and transforming it into new products, by using the surplus agricultural production to feed the workers who produced the extra goods. While these manufacturers and other non-agricultural workers may be useful, they were seen as 'sterile' in that their income derives ultimately not from their own work, but from the surplus production of the agricultural sector. The Physiocrats strongly opposed mercantilism, which emphasized trade of goods between countries, as they pictured the peasant society as the economic foundation of a nation's wealth. The Physiocrats enjoyed some support from the French monarchy and frequently met at Versailles. Adam Smith, who visited France as a tutor and mentor to the Earl of Buccleigh's son's Grand Tour, was heavily influenced by the ideas of the Physiocrats, and Karl Marx cites them as a reference in Das Kapital; they popularized the modern version of the labor theory of value.

Physiocracy is a school of thought founded by François Quesnay (1694-1774), a court physician to King Louis the 15th. At one point in time Physiocracy constituted a sort of religious movement that attracted a number of outstanding and extremely fervent believers, and exerted no small influence on real politics. The history of the Physiocratic movement is thought to have begun in 1757, when Quesnay met Mirabeau the elder (1715-89), and come to an end in 1776, with the fall of Turgot (1727-81). The actual members of the Physiocratic school referred to themselves not as Physiocrats but as économistes. The term "physiocracy" apparently came into general use after having first appeared in 1767, with the appearance of a collection of Quesnay's works published by Pierre du Pont under the title Physiocratie, ou Constitution Naturelle du Gouvernement le Plus Avantageux au Genre Humain. The term is of course a combination of "physio" (nature) and "cracy" (rule), thus

meaning the "rule of nature." This expresses the school's fundamental idea that there is a natural order, as opposed to artificial systems, and that the mission of scholarship and politics being to understand this natural order and bring it into existence, thereby bringing about this rule of nature.

### 1.4.2 The Basic Principles of Physiocracy:

The following are the fundamental principles and policies of physiocracy.

1. Agriculture is the only productive occupation.
2. Industry and trade are sterile occupations.
3. Agriculture alone produces net product.
4. There is a natural order which makes life happy and meaningful.
5. There is harmony among all classes of people.
6. The individual should get maximum liberty.
7. State action should be limited to the minimum.
8. Trade is a necessary evil, and there should be free trade.
9. Value depends on utility. Wealth has value. Value and price are the same things.
10. The wage level is at the subsistence level.
11. There is interdependence in the economic system.
12. Real wealth lies in tangible and consumable goods.
13. Private initiative must be encouraged.
14. Distribution of products is very essential.
15. Money is a medium of exchange.
16. All that is bought is sold and all that is sold is bought.
17. Rent is a perfectly legitimate income of the landlords.
18. There should be a single and direct tax on land, as it is the only productive source.
19. Private property is essential.
20. There is the possibility of overpopulation on land.

### 1.4.3 Criticisms of Physiocracy

The important criticism levelled against physiocracy are as follows:

1. Their theory was drowned in normative statement. This is quite true of natural order concept.

2. The physiocrats failed to consider the laboring Class as a productive class. Moreover, their contention that manufacturing class is sterile is also subject to severe criticism.

3. The physiocrats do not have a clear-cut concept of value. They have confused value with utility. They held the view that value depend on utility.

4. Their conception of landlord as partly productive class is more based upon political motive.

5. Physiocrats placed too much emphasis on agriculture and have neglected the non-agricultural sector.

6. Hanex says that physiocratic doctrines are full of negative attitudes.

## 1.5 ADAM SMITH

Adam Smith was born in Kirkcaldy, Fife, Scotland. The exact date of his birth is unknown; however, he was baptized on June 5, 1723. Smith was the Scottish philosopher who became famous for his book, 'The Wealth of Nations' written in 1776, which had a profound influence on modern economics and concepts of individual freedom.

In 1751, Smith was appointed professor of logic at Glasgow University, transferring in 1752 to the chair of moral philosophy. His lectures covered the field of ethics, rhetoric, jurisprudence and political economy, or 'police and revenue.' In 1759 he published his Theory of Moral Sentiments, embodying some of his Glasgow lectures. This work was about those standards of ethical conduct that hold society together, with emphasis on the general harmony of human motives and activities under a beneficent Providence.

Smith moved to London in 1776, where he published An Inquiry into the Nature and Causes of the Wealth of Nations, which examined in detail the consequences of economic freedom. It covered such concepts as the role of self-interest, the division of labor, the function of markets, and the international implications of a laissez-faire economy. 'Wealth of Nations' established economics as an autonomous subject and launched the economic doctrine of free enterprise. Smith laid the intellectual framework that explained the free market and still holds true today. He is most often recognized for the expression 'the invisible hand,' which he used to demonstrate how self-interest guides the most efficient use of resources in a nation's economy, with public welfare coming as a by-product. To underscore his laissez-faire convictions, Smith argued that state and personal efforts, to promote social good are ineffectual compared to unbridled market forces.

In 1778, he was appointed to a post of commissioner of customs in Edinburgh, Scotland. He died there on July 17, 1790, after an illness. At the end it was discovered that Smith had devoted a considerable part of his income to numerous secret acts of charity. His Important works are: 'The

Theory of Moral Sentiments' (1759). 'An Inquiry into the Nature and Causes of the Wealth of Nations' (1776).

### 1.5.1. Liberalism

**Meaning**

Classical liberalism is a political and economic ideology that advocates the protection of civil liberties and laissez-faire economic freedom by limiting the power of the central government. Developed in the early 19th century, the term is often used in contrast to the philosophy of modern social liberalism. Emphasizing individual economic freedom and the protection of civil liberties under the rule of law, classical liberalism developed in the late 18th and early 19th centuries as a response to the social, economic, and political changes brought on by the Industrial Revolution and urbanization in Europe and the United States. Based on a belief that social progress was best achieved through adherence to natural law and individualism, classical liberals drew on the economic ideas of Adam Smith in his classic 1776 book "The Wealth of Nations."

Classical liberals also agreed with Thomas Hobbes' belief that governments were created by the people for the purpose of minimizing conflict between individuals and that financial incentive was the best way to motivate workers. They feared a welfare state as a danger to a free market economy. In essence, classical liberalism favors economic freedom, limited government, and protection of basic human rights, such as those in the U.S. Constitution's Bill of Rights. These core tenets of classical liberalism can be seen in the areas of economics, government, politics, and sociology.

**Economics**

On an equal footing with social and political freedom, classical liberals advocate a level of economic freedom that leaves individuals free to invent and produce new products and processes, create and maintain wealth, and trade freely with others. To the classical liberal, the essential goal of government is to facilitate an economy in which any person is allowed the greatest possible chance to achieve his or her life goals. Indeed, classical liberals view economic freedom as the best, if not the only way to ensure a thriving and prosperous society.

Critics argue that classical liberalism's brand of economics is inherently evil, overemphasizing monetary profit through unchecked capitalism and simple greed. However, one of the key beliefs of classical liberalism is that the goals, activities, and behaviours of a healthy economy are ethically praiseworthy. Classical liberals believe that a healthy economy is one that allows a maximum degree of free exchange of goods and services between individuals. In such exchanges, they argue, both parties end up better off—clearly a virtuous rather than evil outcome. The last economic tenant of classical liberalism is that individuals should be allowed to decide how to dispose of the profits realized by their own effort free from government or political intervention.

**Government**

Based on the ideas of Adam Smith, classical liberals believe that individuals should be free to pursue and protect their own economic self-interest free from undue interference by the central government. To accomplish that, classical liberals advocated a minimal government, limited to only six functions:

- Protect individual rights and to provide services that cannot be provided in a free market.
- Defend the nation against foreign invasion.
- Enact laws to protect citizens from harms committed against them by other citizens, including protection of private property and enforcement of contracts.
- Create and maintain public institutions, such as government agencies.
- Provide a stable currency and a standard of weights and measures.
- Build and maintain public roads, canals, harbours, railways, communications systems, and postal services.

Classical liberalism holds that rather than granting the fundamental rights of the people, governments are formed by the people for the express purpose of protecting those rights.

**Sociology**

Classical liberalism embraces a society in which the course of events is determined by the decisions of individuals rather than by the actions of an autonomous, aristocratically-controlled government structure.

Key to the classical liberal's approach to sociology is the principle of spontaneous orderthe theory that stable social order evolves and is maintained not by human design or government power, but by random events and processes seemingly beyond the control or understanding of humans. Adam Smith, in The Wealth of Nations, referred to this concept as the power of the "invisible hand.

For example, classical liberalism argues that the long-term trends of market-based economies are the result of the "invisible hand" of spontaneous order due to the volume and complexity of the information required to accurately predict and respond to market fluctuations.Classical liberals view spontaneous order as the result of allowing entrepreneurs, rather than governments, to recognize and provide for the needs of the society.

### 1.5.2 Division of Labor

The main focus of Adam Smith's The Wealth of Nations lies in the concept of economic growth. Growth, according to Smith, is rooted in the increasing division of labor. This idea relates primarily to the

specialization of the labor force, essentially the breaking down of large jobs into many tiny components. Under this regime each worker becomes an expert in one isolated area of production, thus increasing his efficiency. The fact that laborer's do not have to switch tasks during the day further saves time and money. Of course, this is exactly what allowed Victorian factories to grow throughout the nineteenth century. Assembly line technology made it necessary for a worker to focus his or her attention on one small part of the production process. Surprisingly, Smith recognized the potential problems of this development. He pointed out that forcing individuals to perform mundane and repetitious tasks would lead to an ignorant, dissatisfied work force. For this reason, he advanced the revolutionary belief that governments had an obligation to provide education to workers. This sprung from the hope that education could combat the deleterious effects of factory life. Division of labor also implies assigning each worker to the job that suits him best. Productive labor, to Smith, fulfils two important requirements. First, it must 'lead to the production of tangible objects.' Second, labor must 'create a surplus' which can be reinvested into production.

Division of labor is the outcome of a tendency common to all men, the tendency to barter; and this tendency itself is spontaneously developed under the influence of personal interest, which acts simultaneously for the benefit of each and all. Smith in his Wealth of Nations (Book 1, Chapter 1) 'Of the Division of Labor' gives the example of a pin factory to explain the concept of division of labor. We will first see Smith's own words and then will interpret it in our own way. 'The effects of the division of labor, in the general business of society, will be more easily understood by considering in what manner it operates in some particular manufactures. It is commonly supposed to be carried furthest in some very trifling ones; not perhaps that it really is carried further in them than in others of more importance: but in those trifling manufactures which are destined to supply the small wants of but a small number of people, the whole number of workmen must necessarily be small; and those employed in every different branch of the work can often be collected into the same workhouse, and placed at once under the view of the spectator. In those great manufactures, on the contrary, which are destined to supply the great wants of the great body of the people, every different branch of the work employs so great a number of workmen that it is impossible to collect them all into the same workhouse. We can seldom see more, at one time, than those employed in one single branch. Though in such manufactures, therefore, the work may really be divided into a much greater number of parts than in those of a more trifling nature, the division is not near so obvious, and has accordingly been much less observed.

To take an example, therefore, from a very trifling manufacture; but one in which the division of labor has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business (which the division of labor has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labor has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make

twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straights it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving, the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.' Let us now interpret this.

Adam Smith, explains the optimum organization of a pin factory. Traditional pin makers could produce only a few dozen pins a day. However, when organized in a factory with each worker performing a limited operation, they could produce tens of thousands a day. This was the reason why Smith favored division of labor. He suggests that there are three causes of increase in the quantity of work:

**1. Increase in dexterity in every particular workman**: The division of labor reduces every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman.

**2. Saving the time which is commonly lost in passing from one species of work to another:** He suggests that it is impossible to pass very quickly from one kind of work to another that is carried on in a different place, and with quite different tools. A country weaver, who cultivates a small farm, must lose a good deal of time in passing from his loom to his field, and from the field to his loom. When the two trades can be carried on in the same workhouse, the loss of time is no doubt much less.

**3. Invention of a great number of machines which facilitate and abridge labor, and enable one man to do the work of many:** According

to Smith, a greater part of the machines made use of in manufactures in which labor is most subdivided, were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it.

### 1.5.3. Theory of Value

A main concern for Smith involved tracing the roots of value. He identified two different kinds of value, 'use value' and 'exchange value.' The concept of exchange value interested Smith considerably. The diamond-water paradox, in particular, proved puzzling to him: Why is it that diamonds, which have very little practical use, command a higher price than water which is indispensable to life? By discovering the true source of value Smith hoped to find a benchmark for measuring economic growth. Eventually Smith settled on labor as the source of value: The number of hour'slabor that a good can be exchanged for constitutes its inherent worth. (Note, this is not the same as saying that a good is worth the number of hours spent in its production.) The value of a good can also be referred to as the 'natural price.' The natural price need not function as the actual cost of a good in the marketplace. Competition, however, was expected to push the market price towards the natural price.

Smith believed that the word value has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called 'value in use'; the other, 'value in exchange.' The things which have the greatest value in use have frequently little or no value in exchange; and on the contrary, those which have the greatest value in exchange have frequently little or no value in use. Nothing is more useful than water: but it will purchase scarce anything; scarce anything can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.

According to Smith, value in exchange is the power of a commodity to purchase other goods its price. This is an objective measure expressed in the market. His concept of value in use is ambiguous; it resulted in a good part of his difficulties in explaining relative prices. On the one hand, it has ethical connotations and is therefore a return to scholasticism. Smith's own puritanical standards are particularly noticeable in his statement that diamonds have hardly any value in use. On the other hand, value in use is the want-satisfying power of a commodity, the utility received by holding or consuming a good. Several kinds of utility are received when a commodity is consumed: its total utility, its average utility, and its marginal utility. Smith's focus was on total utility -the relationship between marginal utility and value was not understood by economists until one hundred years after Smith wrote and this obscured his understanding of how demand plays its role in price determination. It is clear that the total utility of water is greater than that of diamonds; this is what Smith was referring to when he pointed to the high use value of water as

compared to the use value of diamonds. However, because a commodity's marginal utility often decreases as more of it is consumed, it is quite possible that another unit of water would give less marginal utility than another unit of diamonds. The price we are willing to pay for a commodity -the value we place on acquiring another unit - depends not on its total utility but on its marginal utility. Because Smith did not recognize this (nor did other economists until the 1870s), he could neither find a satisfactory solution to the diamond-water paradox nor see the relationship between use value and exchange value.

Smith's 'labor theory of value' stipulates that the value of a good or service is dependent upon the labor used in its production. It suggests that goods which take the same amount of time to produce should cost the same. This theory was an important concept in the philosophical ideals of Karl Marx. Opponents of the labor theory of value purport that it is not labor that determines the price of a good or service; rather, it is simply a function of supply and demand for a given good or service that determines its price. According to the theory, if the cost of purchasing something is greater than the amount that the purchaser values the time it would take to produce the good, then he will make it himself rather than buy it.

## 1.6 SUMMARY

- Economic history is different from history of economic thought. Economic history is the study of the economic aspects of societies in the past; the history of the economic use of resources land, labor and capital; or the examination of the past performance of economies.
- The Classical School, which is regarded as the first school of economic thought, is associated with the 18th Century Scottish economist Adam Smith, and those British economists that followed, such as Robert Malthus and David Ricardo.
- Adam Smith coined the term "mercantile system" to describe the system of political economy that sought to enrich the country by restraining imports and encouraging exports.
- The Physiocrats were a group of economists who believed that the wealth of nations was derived solely from agriculture. Their theories originated in France and were most popular during the second half of the 18th century.
- Classical liberalism is a political and economic ideology that advocates the protection of civil liberties and laissez-faire economic freedom by limiting the power of the central government.
- The main focus of Adam Smith's The Wealth of Nations lies in the concept of economic growth. Growth, according to Smith, is rooted in the increasing division of labor.
- A main concern for Smith involved tracing the roots of value. He identified two different kinds of value, 'use value' and 'exchange value.' The concept of exchange value interested Smith considerably.

## 1.7 QUESTIONS

Q1. Explain the Classical Economic Thoughts in detail.

**Q2.** What do you mean by Mercantilism? Explain its importance.

**Q3.** What is Physiocracy? Explain its Principles.

Q4. Define the concept of Liberalism and explain its relevance to Economics, Government and Sociology.

Q5. Explain the Division of Labor in detail.

## 1.8 REFERENCES


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# 2

# RICARDIAN, MARXISM AND SOCIALISM SCHOOL

**Unit Structure:**





## 2.1 OBJECTIVE

After going to this module you will be able:

- To understand the thoughts of David Ricardo
- To understand the school of Marxism
- To understand the school of Scientific Socialism

## 2.2 INTRODUCTION

Economics as a science is, on the one hand, a body of knowledge and on the other hand, an engine of analysis. As a result of knowledge, it contains generalizations about the working of economic system. Prof. Ricardo added little to the economic knowledge gathered by Smith. As an analytical engine, economics provides an apparatus through which actual economic problems are analysed. Ricardo's greatest contribution to economics is the provision of engine of analysis. By using the technique of deductive or abstract reasoning, he constructed a rigorous model in

which some selected economic variables were systematically placed to form a logic. Such a theoretical model helps to understand how a system works and how the change in variables affects the working of the system.

Marx was inspired by classical political economists such as Adam Smith and David Ricardo, while his own branch of economics, Marxian economics, is not favoured among modern mainstream thought. Nevertheless, Marx's ideas have had a huge impact on societies, most prominently in communist projects such as those in the USSR, China, and Cuba. Among modern thinkers, Marx is still very influential in the fields of sociology, political economy, and strands of heterodox economics.

## 2.3. DAVID RICARDO

David Ricardo was born on 19 April 1772 in London. He was the third son of a Dutch Jew who had made a fortune on the London Stock Exchange. When he was 14, Ricardo joined his father's business and showed a good grasp of economic affairs. In 1793 he married a Quaker called Priscilla Anne Wilkinson; Ricardo then converted to Christianity, becoming a Unitarian. This caused a breach with his father and meant that Ricardo had to establish his own business. He continued as a member of the stock exchange, where his ability won him the support of an eminent banking house. He did so well that in a few years he acquired a fortune. This enabled him to pursue his interests in literature and science, particularly in mathematics, chemistry, and geology.

In 1799 he read Adam Smith's Wealth of Nations and for the next ten years he studied economics. His first pamphlet was published in 1810: entitled The High Price of Bullion, a Proof of the Depreciation of Bank Notes, it was an extension of the letters that Ricardo had published in the Morning Chronicle in 1809. In it, he argued in favour of a metallic currency, giving a fresh stimulus to the controversy about the policy of the Bank of England. The French Wars (1792-1815) caused Pitt's government to suspend cash payments by the Bank of England in 1797. Consequently, there had been an increase in the amount of their paper currency and the volume of lending. This created a climate of inflation. Ricardo said that inflation affected foreign exchange rates and the flow of gold. The Bullion Committee was appointed by the House of Commons in 1819: it confirmed Ricardo's views and recommended the repeal of the Bank Restriction Act. In 1814, at the age of 42, Ricardo retired from business and took up residence at Gatcombe Park in Gloucestershire, where he had extensive landholdings.

In 1819 he became MP for Portarlington. He did not speak often but his free-trade views were received with respect, although they opposed the economic thinking of the day. Parliament was made up of landowners who wished to maintain the Corn Laws to protect their profits. Ricardo made friends with a number of eminent men, among whom were the philosopher and economist James Mill, the Utilitarian philosopher Jeremy Bentham and Thomas Malthus, best known for his pamphlet, Principles of

Population published in 1798. Ricardo accepted Malthus' ideas on population growth.

In 1815 another controversy arose over the Corn Laws, when the government passed new legislation that was intended to raise the duties on imported wheat. In 1815 Ricardo responded to the Corn Laws by publishing his Essay on the Influence of a Low Price of Corn on the Profits of Stock, in which he argued that raising the duties on imported grain had the effect of increasing the price of corn and hence increasing the incomes of landowners and the aristocracy at the expense of the working classes and the rising industrial class. He said that the abolition of the Corn Laws would help to distribute the national income towards the more productive groups in society.

### 2.3.1. Theory of Rent

David Ricardo, an English classical economist, first developed a theory in 1817 to explain the origin and nature of economic rent. Ricardo used the economic and rent to analyse a particular question. In the Napoleonic wars (1805-1815) there were large rise in corn and land prices. Did the rise in land prices force up the price of corn, or did the high price of corn increase the demand for land and so push up land prices. Ricardo defined rent as, "that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." In his theory, rent is nothing but the producer's surplus or differential gain, and it is found in land only.

**Assumptions**

1. Rent of land arises due to the differences in the fertility or situation of the different plots of land. It arises owing to the original and indestructible powers of the soil.

2. Ricardo assumes the operation of the law of diminishing marginal returns in the case of cultivation of land.

3. Ricardo looks at the supply of land from the standpoint of the society as a whole.

4. In the Ricardian theory it is assumed that land, being a gift of nature, has no supply price and no cost of production.

According to Ricardo rent arises for two main reasons: 1. Scarcity of land as a factor and,2. Differences in the fertility of the soil.

**1. Scarcity of land**

Ricardo assumed that land had only one use to grow corn. This meant that its supply was fixed, as shown in given figure below. Hence the price of land was totally determined by the demand for land. In other words, all the price of a factor of production in perfectly inelastic supply is economic rent it has no transfer earnings.

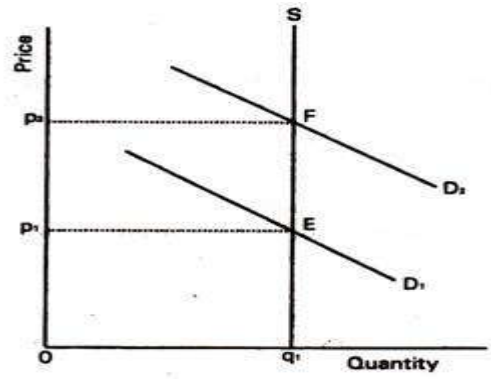


**Fig. 2.3.1. Earning of a Factor in Fixed Supply**

**2. Differences in the fertility of the soil**

Ricardo assumes that the different grades of lands are cultivated gradually in descending order the first-grade land being cultivated at first, then the second grade, after that the third grade and so on. With the increase in population and with the consequent increase in the demand for agricultural produce, inferior grades of lands are cultivated, creating a surplus or rent for the superior grades.

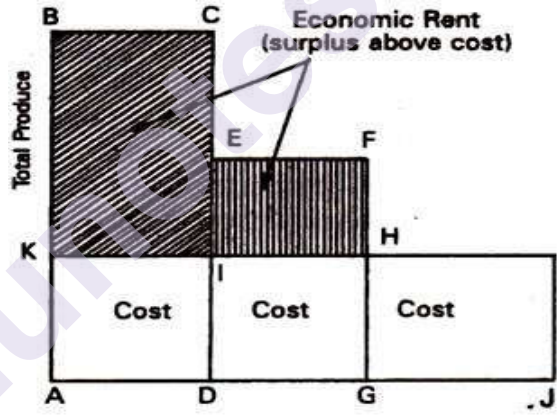


**Fig. 2.3.2. Differential Rent**

Here, AD, DG and GJ are three separate plots of land of the same size, but of difference in fertility. The total produce of AD is ABCD, that of DG is DEFG and that of GJ is GHIJ. The first and second plots of land generate a surplus show by the shaded area, which represents the rent of the first two plots of land. Since the third plot GJ has no surplus, it is marginal land or no-rent land. Grade 4 (below-marginal) land will not be cultivated, because rent is negative.

**2.3.2. Theory of Wage**

This theory was propounded by David Ricardo (1772-1823). According to this theory, "The labourers are paid to enable them to subsist and perpetuate the race without increase or diminution". This payment is also called as 'subsistence wages'. The basic assumption of this theory is that if workers are paid wages more than subsistence level, workers' number will

increase and, as a result wages will come down to the subsistence level. On the contrary, if workers are paid less than subsistence wages, the number of workers will decrease as a result of starvation death; malnutrition, disease etc. and many would not marry. Then, wage rates would again go up to subsistence level. Since wage rate tends to be at, subsistence level at all cases, that is why this theory is also known as 'Iron Law of Wages'. The subsistence wages refers to minimum wages. This theory can be discussed with the help of diagram.

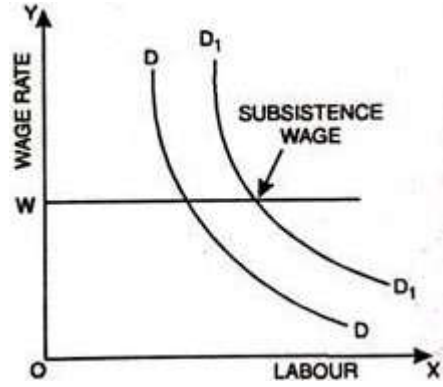


**Fig. 2.3.3.**

In given Figure demand and supply of labor has been measured on OX-axis and wage rate on OY-axis. OW is the subsistence level of wages. At OW wage rate supply of labor is perfectly elastic. Since, supply of labor is perfectly elastic, wage rate neither can fall below OW nor can increase above the level of OW. Although demand increases from DD to $D_1D_1$ yet the wage rate remains the same at OW. Though this theory is criticized by many economists on various ground still it is one of the successful theory of wage.

### 2.3.3. Theory of Value

Modern discussion of the validity of the economic system of David Ricardo has centered about the theory of value. The labor theory of value states that the relative price of two goods is determined by the ratio of the quantities of labor required in their production. His labor theory of value has the following assumptions: 1. Both sectors have the same wage rate and the same profit rate; 2. The capital employed in production is made up of wages only; 3. The period of production has the same length for both goods.

In the theory 'On Value and Riches,' Ricardo makes effort to illustrate that exchange value is not the same as 'value in use'. In this way one can factor two often contradictory results. the capital employed in production must be made up of wages only for his value theory to hold, is answered by this: that production may be made up of capital and machinery, but it doesn't change the principle (which he attributes to Adam Smith) that he tries to lay out in this chapter. Machinery may add to one measure of value beyond almost all measure without adding one penny to the other measure of value. In this way, one is able, Ricardo seems to show, to factor out

somewhat contradictory assumptions which if confounded lead to equally contradictory results.

The key point that Ricardo seems to make is: Accumulation of capital adds riches without decreasing the value of things to be traded, which may bring the various economic factors to a win-win. Ricardo first attempts to show that new riches are not adding as much value as one would think because they are always decreasing somewhat from the exchangeable value of what was produced. The decreasing value in exchange as value-in-use increases he extrapolates to infer that the sum world total of value in exchange is a fixed constant. Therefore, in the growth of the global economy, the first-world countries, he states, will begin to lose value per trade, even to the purely theoretical extent of taking from the capital base.

## 2.4 KARL MARX

Karl Heinrich Marx (1818-1883) was born on May 5, 1818 in the city of Trier, Germany. His father was a lawyer who came from a long line of Rabbis, but had changed his faith to Protestantism in order to keep his job. Karl Marx went to the University of Bonn to study law when he was 17 years old. Here he became engaged to Jenny von Westphalen, whose father, Baron von Westphalen, influenced Marx to read Romantic literature and Saint-Simonian politics. Only a year later, Marx was moved by his father to the University of Berlin where he studied Hegelianism, influenced by Ludwig Feurbach and other Hegelians. He admired G.W.F. Hegel's dialectics and belief in historical inevitability, but Marx questioned the idealism and abstract thought of philosophy and maintained his belief that reality lies in the material base of economics. In distinct contrast to G.W.F. Hegel's concentration on the state in his philosophy of law, Marx saw civil society as the sphere to be studied in order to understand the historical development of humankind. In 1841 Marx earned his doctorate at Jena with his work on the materialism and atheism of Greek atomists.

### 2.4.1. Theory Surplus Value

The Marxian concept of surplus value**,** professed to explain the instability of the capitalist system. In Marxian economics, surplus value is the difference between the amount raised through a sale of a product and the amount it cost to the owner of that product to manufacture it: i.e. the amount raised through sale of the product minus the cost of the materials, plant and labour power. The concept originated in Ricardian socialism, with the term "surplus value" itself being coined by William Thompson in 1824; however, it was not consistently distinguished from the related concepts of surplus labour and surplus product. The concept was subsequently developed and popularized by Karl Marx. Marx's formulation is the standard sense and the primary basis for further developments, though how much of Marx's concept is original and distinct from the Ricardian concept is disputed. Marx's term is the German word "Mehrwert", which simply means value added (sales revenue less the cost of materials used up), and is cognate to English "more worth".

It is a major concept in Karl Marx's critique of political economy. Conventionally, value-added is equal to the sum of gross wage income and gross profit income. However, Marx uses the term Mehrwert to describe the yield, profit or return on production capital invested, i.e. the amount of the increase in the value of capital. Hence, Marx's use of Mehrwert has always been translated as "surplus value", distinguishing it from "value-added". According to Marx's theory, surplus value is equal to the new value created by workers in excess of their own labour-cost, which is appropriated by the capitalist as profit when products are sold. Marx thought that the gigantic increase in wealth and population from the 19th century onwards was mainly due to the competitive striving to obtain maximum surplus-value from the employment of labour, resulting in an equally gigantic increase of productivity and capital resources. To the extent that increasingly the economic surplus is convertible into money and expressed in money, the amassment of wealth is possible on a larger and larger scale. The concept is closely connected to producer surplus.

Marx used the terms surplus and exploitation in a pejorative sense. He strongly believed that the income distribution at the time was unfair and that the institutions that led to this unfairness deserved to be called exploitative. Most modern economists see such judgments as going beyond the role of economists as economists. They try to separate normative judgments from positive analysis. But even in terms of normative judgments, they question the value of the exploitation concept. They see human nature as generally exploitative and see the market as based on the concept of mutual exploitation. Abba Lerner summarized this view nicely: in capitalism man exploits man; in socialism it is the other way around.

### 2.4.2. The Materialistic Interpretation of History

**Introduction**

Marx's general ideas about society are known as his theory of historical materialism. Materialism is the basis of his sociological thought because for Marx material conditions or economic factors affect the structure and development of society. His theory is that material conditions essentially comprise technological means of production and human society is formed by the forces and relations of production.

Marx's theory of historical materialism is historical. It is historical because Marx has traced the evolution of human societies from one stage to another. It is called Materialistic because Marx has interpreted the evolution of societies in terms of their material or economic bases. Materialism simply means that it is matter or material reality, which is the basis for any change.

According to Friedrich Engels, the theory of historical materialism was discovered by Karl Marx, but Marx thought it was Engels who has conceived the materialist formulation of history independently. We shall say that both of them used this theory, to quote Marx, as the "guiding thread" of all their works.

Materialism means the materialist structure of society. It is how the super structure of society is based on economic infrastructure. Marx's theory of historical materialism is the materialistic interpretation of the history of societies. All the societies have experienced similar pattern of history and every history is built upon its materialist foundations.

Marx has tried to suggest that all society passes through unilinear evolution, every society progresses stage by stage and every society has marched ahead. He has suggested about the history of society, i.e.

Primitive Communism → Slavery → Feudalism→ Capitalism →Socialism →Communism

Historians recorded history in the manner it is found. But Marx had a vision for future, how is history taking man through time. Each stage sows the seeds of its own destruction. One will go and other will come. Such precision and succession will continue till the ultimate i.e. communism is reached.

Marx's theory sought to explain all social phenomena in terms of their place and function in the complex systems of society and nature. This was without recourse to what may be considered as metaphysical explanations clearly outlined in those early writings of Hegal and his followers. This eventually became a mature sociological conception of the making and development of human societies.

**Assumptions**

Historical materialism is based upon a philosophy of human history. But it is not strictly speaking, a philosophy of history. It is best understood as sociological theory of human progress. As a theory it provides a scientific and systematic research programme for empirical investigations. At the same time, it also claims to contain within it a revolutionary programme of intervention into society. It is this unique combination of scientific and revolutionary characters which is the hall mark of Marx's original formulation.

**The Theory**

The clearest exposition of the theory of historical materialism is contained in Marx's 'preface' to A Contribution to the Critique of Political Economy (1859). Here he says that the actual basis of society is its economic structure. For Marx, economic structure of society is made of its relations of production. The legal and political super structure of society is based on relations of production. Marx says that relations of production reflect the stage of society's forces of production.

Marx's theory of Historical Materialism states that all objects, whether living or inanimate are subject to continuous change. The rate of this change is determined by the laws of dialectics. Marx says that new developments of productive forces of society came in conflict with existing relations of production.

When people become conscious of the state of conflict, they wish to bring an end to it. This period of history is called by Marx the Period of Social Revolution. The revolution brings about resolution of conflict. It means that new forces of production take roots and give rise to new relations of production.

Thus, we can see that for Marx it is the growth of new productive forces which outlines the course of human history. The productive forces are the powers society uses to produce material conditions of life. So for Marx, human history is an account of development and consequences of new forces of material production. This is the reason why his view of history is given the name of Historical Materialism.

**The terms mentioned in Marx's theory of Historical Materialism:**

**1. Social relations, over and above individuals: -**Marx says that as a general principle, the production of material requirements of life, which is a very basic necessity of all societies; compel individuals to enter into definite social relations that are independent of their will. This is the basic idea of Marx's theory of society. He stresses that there are social relations which impinge upon individuals irrespective of their preferences. He further elaborates that an understanding of the historical process depends on our awareness of these objective social relations.

**2. Infrastructure and Super-structure: -** According to Marx, every society has its infrastructure and superstructure. Social relations are defined in terms of material conditions which he called infrastructure. The economic base of a society forms its infrastructure. Any changes in material conditions also imply corresponding changes in social relations. Forces and relations of production came in the category of infrastructure. Within the superstructure figure the legal, educational and political institutions as well as values, cultural ways of thinking, religion, ideologies and philosophies.

**3. Forces and relations of production: -**The forces of production appear to be the capacity of a society to produce. This capacity to produce is essentially a function of scientific and technical knowledge, technological equipment and the organisation of labour force. The relations of production arise out of the production process but essentially overlap with the relations in ownership of means of production.

**4. Social change in terms of social classes: -**Marx elaborates the significance of the infrastructure of society by tracing the formation of the principal social classes. He develops the idea of social change resulting from internal conflicts in a theory of class struggles. For Marx, social change displays a regular pattern. Marx constructs in broad terms, a historical sequence of the main types of society, proceeding from the simple, undifferentiated society of "primitive communism" to the complex class society of modern capitalism.

He provides an explanation of the great historical transformation which demolished old forms of society and created new ones in terms of

infrastructural changes which he regards as general and constant in their operation. Each period of contradiction between the forces and relations of production is seen by Marx as a period of revolution.

## 2.5 SCIENTIFIC SOCIALISM

The ceaseless clash of contradictions which formed the foundation of economic life in the middle of the nineteenth century was bound to find theoretical expression, especially from members of those classes victimized by those contradictory forces and which had an interest in changing the direction of society. In the works of Karl Marx and of Frederick Engels the interests of the working class found their best expression. In their life activities they symbolize the best of German philosophy, French politics, and British economics, synthesizing all three elements to bring forth "Scientific Socialism."

Scientific Socialism has three principal divisions, namely, philosophy, economics, and politics. In philosophy, Marx took the theory of dialectics which he found in Hegel, and, casting out its idealism, placed it on its feet as a theory of dialectical materialism which, when applied to human society, became a theory of historical materialism. In the field of economics Marx based himself upon the theory of value as labour which had already been suggested by the Classical School of British economists before him, and thereby worked out a theory of surplus value and the laws of accumulation of capital, analysing adequately for the first time both the structure and evolutionary functioning of the capitalist system. In politics, both Marx and Engels grasped the principles of the class struggle which already had been stated by working class elements, and developed them into a thesis leading to a new system of society, Socialism or Communism, through the institution of a Dictatorship of the Proletariat.

As Marx put it: "And now as to myself, no credit is due to me for discovering the existence of classes in modern society nor yet the struggle between them. Long before me bourgeois historians had described the historical development of this class struggle and bourgeois economists the economic anatomy of the classes. What I did that was new was to prove: (1) that the existence of classes is only bound up with particular, historic phases in the development of production; (2) that the class struggle necessarily leads to the dictatorship of the Proletariat; (3) that this dictatorship itself only constitutes the transition to the abolition of all classes and to a classless society.

To sum up, Scientific Socialism was both a method as well as a content and body of scientific conclusions, later becoming both a theory and a practice. Just as it is impossible to separate program from strategy, and both from tactics, so it is impossible to divide the philosophical from the political and economic, or the method from the data. All are bound up together by the monist materialism of life. We turn first to the philosophy.

From the days of ancient society, two principal camps have existed in philosophy, the camp of the materialist and that of the idealist. To the

materialist, nature is primary, spirit secondary; thinking is a process of the brain and thought, basically, is but a reflection of the action of matter which exists outside and independent of man. The universality of all things consists in their materiality; that is, outside of the philosophic category of "matter" there is nothing.

The opposite to this is the position of the idealist, whose Right Wing consists of religionists of all sorts and whose Left is made up of the pure metaphysicians. Stripping aside theosophical aspects, both religion and metaphysical idealism agree, contrary to the materialists, that things are but a collection of images, matter is only the realization of an idea. It is the idea, the spirit, that is primary and real, and nature is but a reflection of the spirit.

From the earliest times the battle has raged fiercely. In ancient Greek society, the materialists were represented by Democritus and Heraclitus. The idealist position was represented principally by Plato and Socrates. According to Democritus and the early Atomists, nothing could be destroyed, nor could anything arise from nothing. All change was but a combination and separation of atoms. No change occurred of itself, but only through cause and necessity. Both teleology and religion had to be explained by efficient causes. Nothing existed save atoms and empty space. All else was but opinion.

The philosophy of these Greek materialists who lived in a stagnant slave society could not but take on a static character. The fact that matter could not be destroyed meant for them that all becoming and perishing was denied (Parmenides), or that all motion was denied, change being considered as phenomenal only (the Eleatics), or finally, where change did occur, it was believed the changing world would return to its old position (Heraclitus).

With Epicurus and the development of the Roman State, materialism took on a sensationalist guise. The sensationalist school accorded well with the Hedonists, who affirmed that desire is the moving principle of all human action, and that the true aim of life is not happiness but sensual pleasure alone; physical pleasure is better than mental, just as physical pain is worse.

There was no consciousness without sensation. However, this sort of sensationalism could be a bridge to idealism also; since sensations are the basis of knowledge and depend on the individual, it is easy to reach the conclusion that man is the measure of all change, and thus, that contradictory assertions are equally true. In this way, the material reality is forgotten in the stress on the sensations to which it gives rise.

The opposing idealism of Socrates and Plato took the form of insisting that name and thing are identical and that whatever proposition is most general is the most nearly correct. Like the materialists, all these idealists also built their closed systems.

In the middle ages, the fight between materialism and idealism assumed the nature of a conflict between nominalists and realists, and also, within the Catholic Church, of a struggle against various heresies. The theologians of the day argued the question regarding the creation of the world whether God created the world from nothing, or whether the matter had existed for God to create it into a world. They also argued about the relation of God to the worldwhether God existed in every particle of matter and thus was pantheistic, etc. The question of how many angels can stand on the point of a pin was important precisely from the point of view of materialism or idealism.

The eighteenth century development of the factory system and of science led to the creation of a new school of mechanical materialists who were non-historical and non-dialectical, and who regarded human nature abstractly. These materialists theorized on how to interpret the world; they made no efforts to change it. They belonged to the upper aristocratic classes rather than to the rebellious lower orders.

Nineteenth-century reaction returned to idealism. As it idealized the past and bemoaned the changes that the revolutions had brought from the age of the romantic, it elaborated the dialectic method of which the best exponent was the German, Hegel.

With Hegel, "in the beginning was the word." Analysing the working of his own mind, Hegel found that thesis constantly gave way to antithesis and both were resolved in a synthesis. No sooner did we have one than we had the other, and the whole, only to start all over again. The same process occurred in nature, which apparently was but the realization of the idea unfolded in history. The start was logic, the thesis; nature was the reflection of this logic, or the antithesis; the synthesis lay in the philosophy of Hegel, the acme of world's thought. Thus Hegel, whose dialectic method of incessant contradiction might have led to a revolutionary attitude, ends his theory with the conservatism of a closed system. To Hegel, all that was real was reasonable, that is, necessary; thus, could the status quo eternally be justified.

At the same time Hegel also could say, all that was reasonable was real. Therefore, if the masses found it reasonable to protest against a given system, the reasonableness would compel them to realize their aim. In this way, in spite of the fact that Hegel himself created a closed system, his really implied method was eternal and perpetual flux. For the reactionary idealistic dialectic of Hegel, Marx substituted his own materialistic dialectic.

Dialectic materialism is at least materialism, and materialism to the Marxist is thetexture of all science. Testing the positions of materialism and science through an examination of the basic questions of philosophy, he finds them identical. This is the reason why the Marxist boasts that he is scientific.

The first philosophical question is one of ontology-the nature of being. Does matter exist independently and outside us, or is it but a reflection of

our ideas? This question is put by the Scientific Socialists in another way; did nature exist prior to man? Science of course answers, yes. The whole theory of evolution is evidence of the opinion of the scientist that nature, the earth, existed before man and before the ideas of man came into being. Man is but a part of nature, a product of natural forces, of the material elements.

The second basic philosophical question is one of epistemology the nature of ratiocination, of the cognitive process. What is the relation of thinking to flesh? The Scientific Socialist puts the question in another way: Does man think with the help of his brain? Here, too, of course, science answers, yes. Thinking is a process of the material brain, just as the light from the electric lamp is the result of a material process.

The third basic philosophic question has to do with whether causation, the relation of cause and effect, really exists in nature, or whether the laws of science which have to do with the analysis of cause and effect are merely ideas of man. To this question is related another. Is there a necessity in nature? Must things happen? Can we predict them? Again, in answer to these questions, science supports materialism and affirms that the laws of science are really the expressions of actual relations in nature. Furthermore, the objectivity of scientific law applies not only to causality but to the laws of space and time. Space and time are not mere ideas of man, but are a real part of the dimensional materiality of the universe.

Of course, our ideas about things are approximate. We are always learning more and more about the qualities and functions of this or that form of matter. All science, dealing as it does with a becoming, deals with constant change. To the scientist there is no line to be drawn between matter and its functions. In proportion as we know more about the functions of a particular object it loses its mysterious character of being a "thing-in-itself" and becomes increasingly a "thing for-us."In that sense, all of the laws of science are relative. Nevertheless, these relative laws are absolute within the definite framework of relationships that may be under consideration. What is true today may be false tomorrow, but only when the frame of conditions has changed.

The idea of relativity early was expressed by the Scientific Socialists and became a part of the basic understanding of the dialectical process of nature. To the dialectician, all unity is the combination of contradictions, the result of diverse strains. Society, rocks, cabbages, ether waves, chemical solutions, buildings, and the macrocosm itself, all these, large and small, are the resultant of opposing forces. Each unity is composed of opposites and will break up into opposites. To view things in constant movement, to see them as the result of constant movement, to mark the movements as contrary and conflicting, this is the dialectic method. The dialectician tries to see the relation of each part to every other part, and of each part to the whole, as their mutual relations evolve from moment to moment.

The Scientific Socialist adopted the dialectic manner of approaching things in nature, not because of his wilfulness, but solely because this method of approach accurately reflects the actual contradictory processes of nature where everything is eternally posed, opposed, and composed.

However, it is not enough to say that the only thing changeless is change. The materialist must also add that the materiality of the universe is absolute. Here, then, is the dogma of the Scientific Socialists, their "absolute truth" so to speak. While the Marxist materialists are constantly on the alert for changes, trying to find out within what patterns a proposition is correct and where it becomes error, they are at the same time persistently resisting the spiritualists and bewildered idealists of all kinds who insist that the idea of change and relativity includes the concept of the materiality of the universe itself and that we must bow to the possibility that the universe might be made up of "accidental varia," God, luck, chance, spirits, etc., which have nothing to do with materiality. This dogma of the materialists, incidentally, forms the axiom of all scientific work.

When applied to history, the dialectical method of approach becomes historical materialism attempting to obviate the two chief defects in early historical theories, namely, their idealism and their neglect of the activities of masses. "Historical materialism first made it possible to study with scientific accuracy the social conditions of the life of the masses and the changes in these conditions."

The materialistic conception of history starts with the proposition that the mode of production, which itself is based upon the given level of technique prevailing at the time, is the prime mover of all social forces. In trying to understand the laws of motion of a given society, its evolution and its direction, the Marxist begins first of all with a study of the technique of that society, the level of its productive forces. These productive forces include not merely the means of production, the instruments and subject of labour, but the labourer as well. The whole is to be analysed concretely. Such a concretization does not overlook national, racial, or psychological traits or other secondary features of society. On the contrary, an adequate study must also trace the interconnection between these factors and their mutual development from the primary sources.

Starting from this foundation, the Marxist examines those economic relations between persons which have been rendered necessary by the technical plane of production. Upon these economic relations which constitute the given mode of production, there is erected the whole texture of political and social relations. Politics, family life, customs, ideology, thus flow fundamentally from the relations of the production and distribution of wealth.

In other terms, one must never lose sight of the reciprocal action of economics to politics and social life. A careful study of this interaction led Marx to the conclusion that the laws of motion involved in the capitalist

mode of production would lead to the throttling of the forces of production by the social relations inherent in capitalism.

## 2.6 SUMMARY

- Economics as a science generalize about the working of economic system.
- As an analytical engine, economics provides an apparatus through which actual economic problems are analyzed. Ricardo's greatest contribution to economics is the provision of engine of analysis.
- Marx questioned the idealism and abstract thought of philosophy and maintained his belief that reality lies in the material base of economics.
- Scientific Socialism has three principal divisions, namely, philosophy, economics, and politics.

## 2.7 QUESTIONS

Q1. Explain the following theories given by David Ricardo-

a) Theory of Rent
b) Theory of Wage
c) Theory of Value

Q2. Elaborate the Theory of Surplus Value by Karl Marx.

Q3. Make a note on The Materialistic Interpretation of History.

Q4. What is Scientific Socialism? Elaborate.

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# Module II

# 3

# NEO-CLASSICAL ECONOMICS - I

**Unit Structure:**



## 3.0 OBJECTIVES

1. Understand Alfred Marshall's life, ideas and various theories in economics.

## 3.1 INTRODUCTION

Neo-classical approach was adopted by Alfred Marshall and his followers to diverge from earlier economic theories and to formulate them in accordance with the changing situations. They paid more attention to the fact relating to the concrete economic realities. This approach was a reconciliation between deductive and inductive methods of study. The Neo-classical approach believed that "Inductive and Deductive reasoning are necessary for the science of economics just as the right and left feet are necessary for walking".

JosephSchumpeter, who believed that an entrepreneur could earn economic profits by introducing successful innovations. He believes that a large firm needs short-run legal protection which would provide enough short-run market power to create an incentive to invest in R&D. Without any protection, Schumpeter feels that large firms would not be as likely to invest in innovative activities and there would be no technological change.

Whereas, the approach of Pigou was categorised as welfare approach, which contains a qualitative presentation. It aims at maximizing the welfare of the people. The welfare approach lays importance of utility, demand and consumption whereas classical approach stressed on cost, supply and production.

## 3.2 LIFE SKETCH OF ALFRED MARSHALL

Marshall was born at Clapham, London on July 26, 1842. In 1861, he joined the Saint John's College (Cambridge University) from where he graduated with high honours in Mathematics. He taught Mathematics at Cambridge University for a period of 7 years. He began a serious study of Economics in 1867. While a student at Cambridge he came into contact with eminent philosophers like Professor Sidgwick, T.H. Green and Mourice under whose able guidance he studied the works of Kant and Hegel which considerable shaped his ideas. He regarded Kant as his guide – "the only man I ever worshipped." In order to study the original works of Kant he went to Germany in 1868 and 1870.

Marshall was the first Principal of the University College, Bristol from 1877 to 1881. He spent a year in Italy for the improvement of his health. Following the death of A. Toynbee he served the Balliol College, Oxford as a fellow from 1883 to 1885 which post he resigned in 1908 at the age of 66 years. Even after his retirement he continued his association with the University as a research specialist until his death which occurred on July 13, 1924.

He also served on the Royal Commission on Labour (1891-94) and appeared before several committees. Among his chief works are The Economics of Industry (1878), Principles of Economics (1890), Industry and Trade (1919) and Money, Credit and Commerce (1923).

**Economic Ideas of Marshall**

In 1875, Marshall visited the USA for 4 months. At Harvard and Yale he had long talk with academic economists, but his main purpose was to study the problem of protection. On his return home, he delivered one lecture on November 17, 1875 at the Moral Science Club, Cambridge on the development of American industry and the other at Bristol in 1878 on the Economic condition of America. The American trip influenced and coloured all his future work.

**Principles of Economics**

Marshall's *Principles of Economics* book was published by London based publisher Macmillan and Co in 1890. The eight edition was published in 1920 which has been reprinted 11 times. It's divided into 6 books; Book-I deals with the preliminary survey; Book-II examines some fundamental notions; Book-III discuses wants and their satisfaction; Book-IV describes and analyses the agents of production; Book-V deals with the general relations of demand, supply and value; and Book-VI presents a discussion on the distribution of national income.

**Marshall's Definition of Economics:**

"Political Economy or Economics is a study of mankind in the ordinary business of life; it examines the part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being. Thus,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."

It's clear from his definition that he laid emphasis on two things – study of man and study of wealth. Whereas earlier economists had stressed upon wealth-getting and wealth-spending activities only. Marshall stated that although money or general purchasing power or command over material wealth "is the centre round which the economic science clusters" yet that was not the main aim of human activity. It was simply a convenient means of measuring human motives. For him, economics was concerned with individuals as members of a social organism. The aim of economic science, then is to contribute to the solution of existing social problems. It's concerned with well-being of human also. Although the study of economics is confined to those forces which can be measured in terms of money, yet besides selfishness, other factors like habits, love of family, work for pleasure, etc., also influence economic actions.

## 3.3 MARSHALLIAN THEORY OF VALUE AND TIME ELEMENT:

For a very long time, there were different arguments regarding what determines the value of a product. The classical economists had an opinion that the cost of production and thereby the supply of the product determines its value. But the economists of the early marginalist school said that demand based on marginal utility determines the value of a commodity. But Marshall was an opinion that both supply and demand determine the value of any product.

Marshall did not try to demolish the economics of Smith, Ricardo and Mill, but he tried to supplement it. He sought a synthesis of the utility theory of the Austrian economists and the cost of production theory of classical economists.

Marshall associated supply and demand with two blades of a pair of scissors. It is useless to ask which does cutting. In his own words, "We might as reasonably dispute, whether it is the upper or under a blade of a pair of scissors that cuts a piece of paper, as whether the value is governed by utility or cost of production. It is true that when one blade is held still, and the cutting is effected by moving the other, we may say with careless brevity that cutting is done by the second; but the statement is not strictly accurate, and is to be excused only so long as it claims to be merely a popular and not a strictly scientific account of what happens".

Marshallian theory of value, owing to its emphasis both on supply and demand as forces governing value, is known as the Dual theory of value. It

is important to note that the theory emphasises the role of margin. Value is determined by the forces of supply and demand at the margin. It is marginal utility and marginal cost of production that govern value.

**Types of value (on the basis of time)**

i. Market value

ii. Short period value

iii. Long period value

iv. Secular value

The market price of a commodity may be defined as the price ruling at a particular period. In the case of market price, the supply is fixed and price depends mainly on demand.

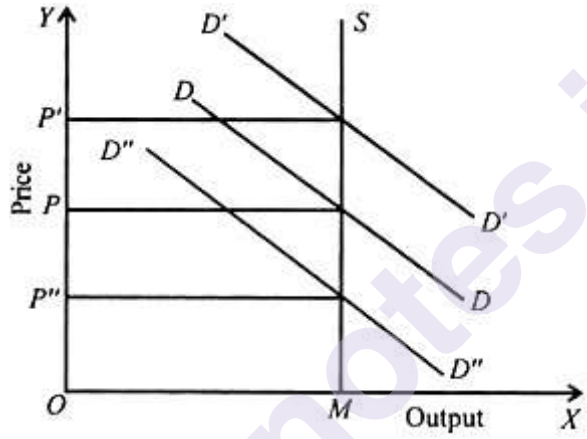


**Figure No. 3.1**

MS is the supply curve that is vertical because in the short period supply can't change with a change in the price of the product. DD is the market demand curve that is downward sloping. P is the equilibrium price level. If the demand increases to D'D', the price level will also increase to P' as the supply is fixed. If the demand decreases to D"D", the price will also fall to P". However, the equilibrium level of output OM never changes in the short run.

In the case of a short period, we think of supply as the amount which can be produced at a given price, with a varying amount of labour and raw material. It can be defined as "that period during which the variable inputs can be increased or decreased but the fixed plant can't be changed". So in the case of short period price, both demand and supply determine the price.

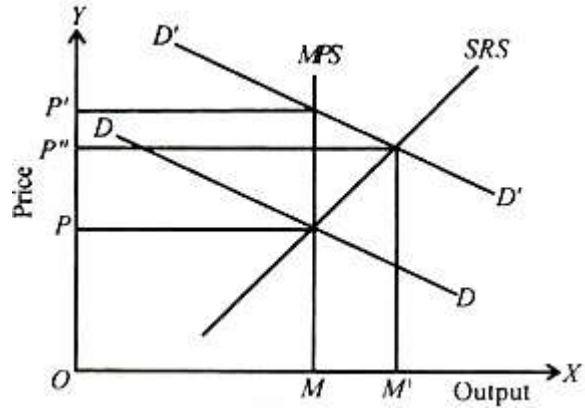


**Figure No. 3.2**

DD is the demand curve and MPS is the market period supply curve and SRS is the short-run supply curve. When there is an increase in demand, DD will shift to D'D' and the short-run price will be OP" at which new demand curve D'D' intersects the SRS. The quantity supplied has also increased from OM to OM'. Therefore, in the short run, if demand increases, a more amount of the quantity is sold and the price is also not as high as in the market period.

In the case of a long period, supply means "what can be produced by the plant which itself can be remuneratively produced and supplied within the given time". In the long run, the cost of production is the most important determinant of price. So, when there is an increase in the demand for the product in the long-run more factories can be built, more machinery can be employed, more workers can be trained and more raw material can be utilised.

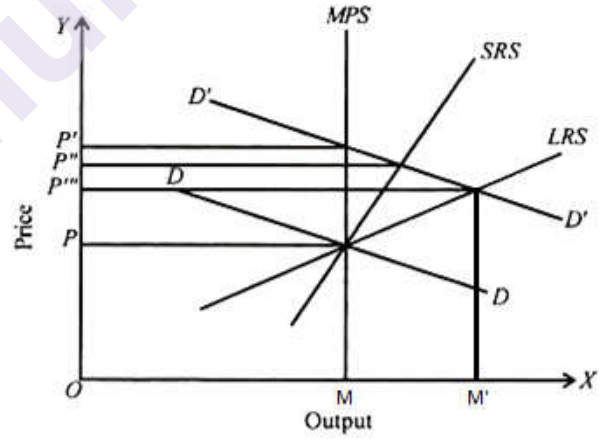


**Figure No. 3.3**

LRS is the long-run supply curve, which is relatively more elastic than the short-run supply curve. MPS is the market supply curve and SRS is the short-run supply curve. DD is the market demand curve and OP is the price. If the demand increases to D'D', the market price will increase to OP'. Short period price will be OP" at which SRS intersects the D'D' curve. But in the long-run, the price will be OP"' at which LRS intersects

the D'D' curve. Marshall defined long-run normal price as one which in the long-run would exactly balance supply and demand and which would be equal to long-run total cost of production. Marshall has also made the point market price will tend to fluctuate around normal price.

The secular period is very long. According to Marshall, it is a period of more than ten years in which changes in demand fully adjust themselves to supply. Since it is not possible to estimate the changes in demand due to changes in techniques of production, population, raw materials, etc. over a very long period, Marshall did not analyse pricing under the secular period.

Marshall has also conceived of gradual and secular changes in the normal value. The secular changes in the normal values are caused by the changes in the economic data like population, tastes and preferences of people, capital, organisation and so on.

Marshall's introduction of the time element in economic analysis was one of his many significant contributions to economic thinking. In conceiving of market broadly into the short and long period, his object was to "trace a continuous thread running through and connecting the applications of the general theory of equilibrium of demand and supply of different periods of time."

## 3.4 MARSHALL'S CONCEPT OF REPRESENTATIVE FIRM

According to Marshall, a representative firm as one which has had a fairly long life and fair success, which is managed with normal ability and which has normal access to the economies, external and internal, which belong to that aggregate volume of production the conditions of marketing them and the economic environment generally. His representative firm is in a sense an average firm. It is neither old nor new, neither very efficient nor inefficient. It is neither earning supernormal profits nor incurring losses. It is neither developing fast nor decaying.

Marshall says, "the firms rise and fall but the representative firm remains always of the same size as does the representative tree of the virgin forest".

Marshall has explained representative firm with an example of trees in a jungle. There are several types of trees, some are very old and are on the verge of dying. Some are very new and upcoming, some trees are there that do not allow the small trees to grow. Only a few will survive. They will gradually grow up. But we can find one such tree that is neither growing nor decaying. It is neither old nor new, that type of tree can be taken as the representative tree.

**Features**

1. Representative firm will be an average firm. It has a fair amount of internal and external economies.

2. It is neither declining nor increasing.
3. Its management is neither very efficient nor inefficient.
4. It is neither old nor new.
5. It is neither earning super normal profits nor incurring losses.
6. There can be more than one such firm.

**Criticisms**

1. If the law of increasing returns operates in a firm then the firm will be enjoying profits. On the other hand, if the firm is subject to the operation of decreasing returns, it will be incurring losses.
2. Robbins has said that even the clearest statement given by Marshall for his so-called representative firm does not make it clear whether it is a representative plant or a technical production unit or a representative business unit.
3. Representative firm is also criticised as an illusory and unnecessary one.
4. Robertson has pointed out that in practice it is not so easy to locate a representative firm. A firm that may be representative now may not be in future.
5. It is assumed that representative firm is neither increasing nor decaying. In practice, we cannot find firms that will be happy in that position.
6. Kaldor regards the representative firm as a state of mind rather than a concrete analysis.

Despite the above criticisms, some economists have tried to discover a representative firm. Chapman and Taussig have tried to locate a representative firm in 1914 in England. Prof. J.K. Mehta had also tried to prove that the concept is not altogether incorrect.

## 3.5 MARSHALL'S CONCEPT OF CONSUMER'S SURPLUS

Another significant contribution of Marshall in the economic literature was the concept of consumer's surplus. According to Marshall, "The excess of price which he would be willing to pay rather than go without the thing, over that which he does pay, is the economic measure of this surplus satisfaction. And it may be called as consumer's surplus".

Consumers are generally prepared to pay a higher price for a commodity rather than go without it. But actually, they pay less for it. As a result, the consumer enjoys a surplus satisfaction and it is known as consumer's surplus. The concept of consumer's surplus has become the basis of welfare economics.

**Consumer's Surplus = The price a consumer is ready to pay – The price he actually pays**

In the words of Eric Roll, "The whole field of welfare economics of which Marshall's disciple and successor, Prof. Pigou, is the founder, really rests

on considerations of which the consumers surplus doctrine is the intellectual ancestor".

The concept of consumer surplus is derived from the law of diminishing marginal utility. As per the law, as we purchase more of a commodity, its marginal utility reduces. Since the price is fixed, for all units of the goods we purchase, we get extra utility. This extra utility is consumer surplus.

**Example**

The consumer is in equilibrium when the marginal utility is equal to the price. That means, he purchases those many numbers of units of a good at which its marginal utility is equal to the price. Now, the price is fixed for all units. Hence, he gets a surplus for all units except the one at the margin. This extra utility is consumer surplus.

**Table No. 3.1**

| No. of Units | Marginal Utility | Price (Rs.) | Consumer's Surplus |
|---|---|---|---|
| 1 | 20 | 12 | 8 |
| 2 | 18 | 12 | 6 |
| 3 | 16 | 12 | 4 |
| 4 | 14 | 12 | 2 |
| 5 | 12 | 12 | 0 |
| Total | 80 | 60 | 20 |

As we can see from the above table, a first unit gives the 20 utility which gradually falls as there is an increase in the unit consumption. However, the price of the product has remained the same as Rs. 12. A rational consumer will consume 5 units as the marginal utility is equal to its price. Here the total utility is 80 units and the price he paid is Rs. 60, therefore he will have a 20 as consumer's surplus.

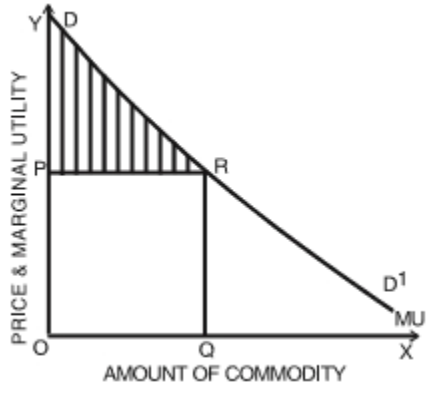


**Figure No. 3.4**

In the above figure, the X-axis measures the amount of commodity, while the Y-axis measures the price and marginal utility. Further, MU represents the marginal utility curve, which is sloping downwards. This indicates that as the consumer consumes more units its marginal utility falls. However, the price of the commodity is fixed as OP. The total utility he derived here is ODRQ and total price paid is OPRQ. Therefore, consumer enjoys DPR as a consumer's surplus.

**Criticism:**

1. The objective measurement of utility and therefore consumer's surplus is not possible.
2. For necessary goods, the marginal utilities of the first few units are infinitely large. Hence the consumer's surplus is infinite for such goods.
3. The availability of substitutes also affects the consumer's surplus.
4. Deriving the utility-scale for prestigious goods like diamonds is very difficult.
5. We cannot measure the consumer's surplus in terms of money. This is because the marginal utility of money changes as a consumer makes purchases and his stock of money diminishes.

## 3.6 INTERNAL AND EXTERNAL ECONOMIES OF SCALE

The Economies of scale are an important concept for any business in any industry and represent the cost-savings and competitive advantages larger businesses have over smaller ones.

In microeconomics, economies of scale are the cost advantages that enterprises obtain due to their scale of operation, and are typically measured by the amount of output produced. A decrease in cost per unit of output enables an increase in scale. At the basis of economies of scale, there may be technical, statistical, organizational or related factors to the degree of market control.

There are two types of economies of scale; internal and external.

### 1. Internal Economic of Scale:

Internal economies are borne from within the company. The vital sources of economies of scale are discussed below:

- Purchasing: A large firm can buy raw materials in bulk through long-term contracts can save a lot of its money.
- Managerial: A big firm can recruit specialized managers. By utilising their skills they can cut down the per-unit cost of production.

- Financial: For a large firm it is relatively easy to raise a fund. They can obtain funding at a lower interest when borrowing from banks. They are also having access to a greater range of financial instruments.

- Marketing: A large firm can spread the cost of advertising over a greater range of output in media markets.

- Technological: A large firm can afford machinery with the latest technology. That can be used to take advantage of returns to scale in the production function.

**2. External Economies of Scale:**

The external economies of scale, on the other hand, are achieved because of external factors, or factors that affect not a firm but an entire industry. That means no one company controls costs on its own. These occur when there is a highly-skilled labour pool, subsidies and/or tax reductions, and partnerships and joint ventures—anything that can cut down on costs to many companies in a specific industry.

External economies of scale are generally described as affecting the whole industry. So, when the industry grows, the average costs of business drop. External economies of scale can happen because of positive and negative externalities. Positive externalities include a trained or specialized workforce, relationships between suppliers, and/or more innovation. Negative ones happen at the industry levels and are often called external diseconomies.

There are several contributing factors behind external economies of scale. When competing companies set up shop in one area, specialized workers will seek employment. An example of this would be the IT industry in Silicon Valley, which has attracted a special set of skilled workers. Secondly, certain industries may become so important, they can develop bargaining power with politicians and local governments. This, in turn, can lead to more favourable treatment in the form of subsidies or other concessions. The fertilizer industry has a long history of subsidies in India, which were historically given to continue a steady flow of domestic supply of chemical fertilizers.

## 3.7 MARSHALL'S CONCEPT OF QUASI RENT

Marshall introduced another term quasi-rent. Quasi meaning as if. Distinguishing between rent and interest in relation to tie element he remarked in the preface to the first edition of his book –"That which is rightly regarded as interest on free or floating capital or on new investment of capital, is more properly treated as a soft rent – a quasi-rent on old investment of capital." Quasi-rent is a temporary differential gain or profit yielded by the agents of production other than land. It occurs to fixed capital – capital which is invested in machinery or factory, may yield for a short period, a return in excess of the current rate of interest.

According to Ricardo, the term rent is applied to income from land and other free gifts of nature, whereas quasi-rent is the income derived from man-made appliances and machines. The supply of these man-made producer goods cannot be increased in a short period even though the demand for them may increase. Marshall, therefore, coined the term quasi-rent for the earnings of such capital goods in a short period.

In addition, Marshall gave an exposition of the Quantity Theory of Money-Value as part of the General Theory of Value, drew a distinction between the real rate of interest and the money rate of interest; and enunciated the Purchasing Power Parity theory, appended to his evidence given before the Gold and Silver Commission 1888. Moreover, he introduced the chain method of index numbers, proposed paper currency based on gold and silver symmetallism and suggested an official tabular standard for optional use in the case of long contracts.

Durable factors like machines, ships, houses and even human skills are similar to the land whose supply is fixed in the short run. When the demand for them increases suddenly, their supply cannot be increased in the short run, therefore they earn a surplus which is not rent but is similar to rent.

**Example**

Due to the increase in urban population the demand for houses increases. But the supply cannot be increased because of the scarcity of land and building materials. This abnormal increase in their earnings is quasi-rent. It is not rent proper or pure rent because the supply of houses can be increased in the long-run.

## 3.8 QUESTIONS

**A. Short-Answers**

1. Explain Marshall's theory of Representative Firm.
2. Write a note on Internal and External Economies of Scale.
3. Highlight the concept of Quasi Rent.

**B. Long-Answers**

1. Discuss the Marshall's thoughts of Value.
2. Explain the Marshall's concept of Consumer's Surplus.

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# 4

# NEO-CLASSICAL ECONOMICS - II

**Unit Structure:**



## 4.0 OBJECTIVES

1. Discuss Schumpeter's life and innovation and economic development theory.
2. Learn Pigou's life, views on economics of welfare and concept of Pigovian Tax.

## 4.1 JOSEPH SCHUMPETER

Another Neo-classical economist who contributed a significant literature in the economic science is Joseph Schumpeter. He was a political economist and was born on February 8, 1883, in Moravia, the Czech Republic. Schumpeter was one of the most influential and renowned 20$^{th}$-century economists and promoted the phrase "creative destruction" an economic conceptwhich was coined by Werner Sombart.

Schumpeter's work centred on business cycles and development theories, where he argued that entrepreneurs disrupt equilibriums and are the predominant driver of economic growth, which progresses cyclically across a series of time scales.Furthermore, he described innovation as an essential element for economic reform. He also concluded that economic development is centred around innovation, entrepreneurial activity, and market forces.

**Life Sketch**

Joseph Alois Schumpeter entered was born in the Austrian province of Moravia (now in Czech Republic) in the Catholic German-speaking family.

His father owned a factory, but he died when Joseph was just four years old. In 1893, Joseph and his mother moved to Vienna. After attending school at the Theresianum, Schumpeter began his career studying law at the University of Vienna under the Austrian capital theorist Eugen von Böhm-Bawerk, taking his PhD in Law in 1906.

After practising law for a short period in Cairo, he decided to specialise in economics. He had the privilege of studying under Professors Weiser, Philippovich and Bohm-Bawer; and those who participated in seminars included Ludwig Von Mises, Felix Somary, Otto Bauer and Rudolf Hilferding. In 1909, after some study trips, he became a professor of economics and government at the University of Czernowitz in modern-day Ukraine. In 1911, he joined the University of Graz, where he remained until World War I.

In 1918, Schumpeter was a member of the Socialization Commission established by the Council of the People's Deputies in Germany. In March 1919, he was invited to take office as Minister of Finance in the Republic of German-Austria, where he proposed a capital levy as a way to tackle the war debt and opposed the socialisation of the Alpine Mountain plant.

From 1925 to 1932, Schumpeter held a chair at the University of Bonn, Germany. He lectured at Harvard in 1927–1928 and 1930 and from 1932 to 1950.

Schumpeter received an honorary D.Litt. from the Columbia University in 1914. He was famous far and wide for his scholarly achievements. He was President of the Econometric Society from 1937 to 1941, and of the American Economic Association in 1949. His best-known works are The Theory of Economic Development (1992, English translation 1934), Business Cycles 2 Volumes (1939), Capitalism, Socialism and Democracy (1942), Ten Great Economists (1951), Essays (1951), Imperialism and Social Classes (1951), History of Economic Analysis (edited by his wife, 1954) and Economic Doctrine and Methods (1957).

## 4.2 SCHUMPETER THEORY OF ECONOMIC DEVELOPMENT AND INNOVATION

Schumpeter's theory of development is also known as the innovation theory of development. This theory assigns a paramount role to the entrepreneur and innovations in the process of economic development. According to Schumpeter, the process of production is marked by a combination of material and immaterial productive forces. The material productive forces arise from the traditional factors of production, viz., land and labour, etc., while the immaterial sets of productive forces are

conditioned by the 'technical facts' and 'facts of social organization'. The Schumpeterian production function can be written as

$Q = f\ [k, r, I, u, \nu)$

Where Q stands for the output, k for capital, r for natural resources, and l for the employed labour force. The symbol u represents the society's fund of technical knowledge and ν represents the facts of social organization, i.e., the socio-cultural environment of the economy.

The above function shows that the rate of growth of the output depends upon the rate of growth of productive factors, the rate of growth of technology and the rate of growth of the investment-friendly socio-cultural environment. Schumpeter held that the alterations in the supply of productive factors can only bring about gradual, continuous and slow evolution of the economic system. On the other hand, the impact of technological and social change calls for spontaneous, discontinuous change in the channels of output flow.

Schumpeter regarded land to be constant. The growth component will, therefore, include only the effects of changes in population and of increase in the producer goods. But Schumpeter further maintains that there does not exist any a priori relationship between the changes in population and the changes in the flow of goods and services. In other words, Schumpeter considers the population growth to be exogenously determined. The increase in producer goods results from a positive rate of net savings. The major part of savings and accumulations are attributed by Schumpeter to profits. According to him, profits can arise if innovations are introduced. Hence ultimately it is the change in the technical knowledge (i.e., variable u) that is responsible for any change in the stock of producer goods, i.e., the rate of capital accumulation directly depends on the rate of technical change. In other words, according to Schumpeter, the growth of output is geared by the rate of innovations.

No doubt, Schumpeter holds that the trend of economic growth shall be fixed by the exogenous variable of population growth, yet according to him, the process of economic development is synonymous with discontinuous technical change, i.e., innovations. The agent which brings about innovations is called by Schumpeter as an entrepreneur. Thus, the entrepreneur becomes the pivot of Schumpeter's model.

According to Schumpeter, entrepreneurs play a key role in economic development. The credit for innovations and the outburst of economic activity goes entirely to the entrepreneur. According to him, innovation may be of five types:

1. Introduction of a new good
2. Introduction of a new method of production
3. The opening of a new market
4. The discovery of a new source of supply of raw materials or semi-manufactured goods
5. Introduction of a new organisation in an industry

In a world characterised by a high degree of risk and uncertainty, only a few people who have the exceptional ability and daring will be able to undertake innovations and launch enterprises and exploit opportunities for profit. But these entrepreneurs are not only lured by profit but are also motivated with a desire to found a dynasty in the business world or a desire for conquests in the competitive world or have the joy of creating. Thus, in the Schumpeterian analysis, the role of the entrepreneur is a determining factor of the rate of economic growth. In his absence, the growth rate is bound to be slow.

The supply of entrepreneurs depends not only on the rate of profits (which is obvious) but also on the favourable social climate. They will appear and continue only in a society that honours them, where prestige is attached to them and the social rewards or recognition they are able to earn. Any tendency to squeeze profits, increase taxes, intensify welfare programmes, strengthen the trade union movement or measures of redistribution of income will deteriorate the climate for investment and so for economic development. Schumpeter's starting point in the "circular flow" is a stationary equilibrium in which there is no investment, population growth is at a standstill position and there is full employment. But there are numerous opportunities in business which the entrepreneurs are quick to exploit and innovations are undertaken. As the economy is in equilibrium, saving is equal to investment. So, when the innovators make an investment, he does it bank loan. The banks provide loans to the innovators through credit creation. Thus, according to Schumpeter credit creating plays an important role in economic development.

The success of the original innovators attracts many others who follow them. The economic activity becomes brisker and brisker and the boom gathers momentum with the result that prices and money incomes rise. There is then the secondary economic wave 'imitative investment' superimposed upon the earlier one, i.e., 'innovational investment'. But soon follows the process of creative destruction. The boom gives way to slump or recession. Completion of innovations brings in a large supply of goods that cannot be marketed at a profitable price. There are forced bankruptcies since the banks call back loans.

The repayment of bank loans accentuates deflationary forces. Business risks scare away prospective entrepreneurs. In this unfavourable climate, the innovational activity comes to a halt. After this painful process of adjustment in which weak enterprises are liquidated, the businessmen find conditions again ripe for a further spurt of entrepreneurial activity. The economic activity is resumed at a higher equilibrium. This is how the circle of the development process is completed. There is a new wave of innovations and the development cycle repeats itself.

**Critical Evaluation**

Schumpeter has been a great 'theorist' whose writings contain brilliant thoughts and a deep insight into the working of an economy. However, his analysis of the entrepreneurial innovations is not applicable to modern

conditions in which the act of invention and innovation is carried on not by individual entrepreneurs but by large corporations as a routine affair. It is not possible to identify entrepreneurs who introduced many actual innovations.

Critics also pointed out that what Schumpeter gives is the theory of business cycles and not an analysis of economic development. Even Schumpeter's analysis of business cycles can be accepted only with some modifications to suit modern economic conditions. According to Schumpeter, a crisis in capitalism is brought about by maladjustment caused by waves of innovations. But big businesses in modern times can absorb these waves and produce steadier and larger expansion of the total output.

The assumption that innovations are financed by borrowing from credit creation by the banks is also not very realistic. It is a well-known fact that most bank loans are short-term loans whereas the implementation of innovations requires long-term finances.

## 4.3 ARTHUR PIGOU (1877-1959)

Arthur C. Pigou was a British economist and is best known for his work in welfare economics. In his book The Economics of Welfare (1920) Pigou further developed Alfred Marshall's concept of externalities. According to him, externalities are the costs imposed or benefits conferred on others that are not taken into account by the person taking the action. He also claimed that the existence of externalities is sufficient justification for government intervention.

If someone is creating a negative externality, such as pollution, for instance, he is engaging in too much of the activity that generated the externality. Pigou advocated a tax on such activities to discourage them. Someone creating a positive externality—say, by educating himself and making himself more interesting or useful to other people—might not invest enough in education because he would not perceive the value to himself as being as great as the value to society. Pigou advocated subsidies for activities that created such positive externalities. These are now called Pigovian taxes and subsidies, respectively.

**Life sketch of Pigou**

Arthur Cecil Pigou was born on 18 November 1877at Ryde on the Isle of Wight, the son of Clarence George Scott Pigou, an army officer and was educated at Harrow and King's College, Cambridge. He started off with reading history but later went on to study economics under Alfred Marshall as part of the Moral Science Tripos, rapidly becoming a prized scholar. Through Marshall's efforts, Pigou began lecturing himself in economics in 1901, became a member of King's in 1902 and won the popular Adam Smith Prize in 1903.

Pigou was considered one of the best students of Alfred Marshall. When Marshall retired as a professor of political economy in 1908, he was

named as Marshall's substitute. Pigou was responsible for disseminating many of Marshall's ideas and thereby presented the leading hypothetical basis for what came to be known as the Cambridge school of economics.

## 4.5 PIGOU'S WELFARE ECONOMICS

Pigou provided the first organized hypothetical basis of welfare economics and unified the normative problems with the progressive ones. He delivered a foundation for state interference at places here reserved and social net product deviated but his policy proposals were all value-based as his study was more normative than theoretical. Though it was the first clear analysis of welfare economics, was criticized on many grounds.

Welfare is reflected in a person's mental condition or awareness which are made up of his satisfaction or utilities. The basis of welfare, therefore, is essentially the level to which an individual's basic needs are met.

Social welfare is deliberated as the core of the welfare of all the people in a society. Subsequently, overall welfare is a very broad, complex and unfeasible idea. Pigou set the limits of the assortment of his study to economic welfare. According to him, economic welfare is by no means a directory of aggregate welfare as several other components, like the excellence of work, one's surroundings, human relations, prestige, accommodation, and public safety are far away from economic welfare.

Pigou, therefore, described economic welfare as "that part of social (general) welfare that can be brought directly or indirectly into relation with the measuring rod of money." Thus, economic welfare, in the Pigovian sagacity, comprises the aspiration of utility resulting from the usage of negotiable goods and services.

**Pigovian Welfare Conditions**

In Pigou's opinion the economic welfare and national revenue as basically synchronized. Based on this, he sets two situations for maximization of welfare. The first incident states that welfare will increase when there is national income rises.

Second, for welfare maximization, the sharing of the national income is similarly essential. If national income rests steady, flowing of income from the rich to the deprived would ensure welfare. According to Pigou, such allocations mean a minor amount to the prosperous than to the deprived, as a consequence the financial situation of the former is improved. This welfare circumstance is based on the double Pigovian postulates of 'equal capacity for satisfaction and retreating marginal utility of income.'

He argued that different people obtain the same pleasure out of the same real income and that "people now rich are different in kind from the people now poor having in their original nature greater capability for enjoyment." With income subject to moving back to marginal utility, and transfers of income from the rich to the poor will boost social welfare by

satisfying the more passionate wants of the latter at the expense of the less intense wants of the former. Thus, it is equal economic opportunity that maximizes welfare.

**Dual Criterion**

To find up-gradation in social welfare, Pigou implements a dual criterion:

a. A rise in the national revenue 'brought about either by increasing some goods without diminishing others or by relocating factors to activities in which their social value is higher,' is regarded as development in welfare without dropping the share of the poor.

b. Any restructuring of the economy which adds to the share of the poor without sinking the national income is also considered a development in social welfare.

**Assumptions**

1. Each person tries to maximize his satisfaction and happiness from his expenses on different goods and services.
2. Satisfactions are comparable interpersonally.
3. The law of diminishing marginal utility of income applies. It means that the marginal utility of income decreases as income rises. As a consequence, the growth in the utility of a surplus volume of income to a deprived man is superior to the cost of utility to an opulent man from a similar extent of revenue.
4. There is an equivalent capability for satisfaction. It follows that different people gain the same satisfaction out of the same real income. Given this theory, it is possible to satisfy the Pigovian circumstances of maximum social welfare based on his double measure.

## 4.6 CONCEPT OF PIGOVIAN TAX

The notion of externalities is established by A.C. Pigou. He argued that the government should intervene to correct them by taxing undertakings that harm the entire economy and financing activities that help society as a whole.

A Pigovian tax is a tax assessed against private individuals or businesses for engaging in activities that create adverse effects for society. Adverse effects are those costs that are not included as a part of the product's market price. These include environmental pollution, strains on public healthcare from the sale of tobacco products, and any other side effects that have an external, negative impact.

A.C. Pigou argued that businessmen seek their own private interests, so when the social interest of the society diverges from the private interest of these businesses the industrialists have no incentive to curb this cost. For example, if a businessman builds a factory in the middle of a crowded city the factory causes higher congestion, loss of flight and loss of health for

the neighbours. These are not services but disservices that remain uncharged. Let's take another example of businesses that sell alcohol, the sale of alcohol necessitates higher costs in policemen and prisons. Because of the crime associated with alcohol. In other words, the net social impact of the alcohol business is relatively large to the net private impact of the same business. So A.C. Pigou gave a solution to solve this problem, a Pigovian tax. This is one of the major reasons why many countries tax alcohol businesses. It is placed on any good which creates negative externalities and the aim of tax is to make the price of the good equal to the social marginal cost and create a more socially efficient allocation of resources.

The main dispute against the Pigovian tax is that the objective measurement of externalities is challenging. The distortive effects of an imperfectly set tax, especially added with the administrative costs of implementation, outweigh any potential benefit. But with the costs of pollution and climate change so extensive, the wrong increase in the cost of pollution is almost certainly better than none at all.

## 4.7 QUESTIONS

**A. Short-Answers**

1. Explain different types of Innovations in Schumpeter's theory
2. Write a note on Pigovian Tax

**B. Long-Answers**

1. Critically evaluate the Schumpeter's theory of Innovation and Economic Development.
2. Explain in details the Pigou's Welfare Economics

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# Module III

# 5

# KEYNESIAN IDEAS – I

**Unit Structure:**



## 5.0 OBJECTVES

- To study the Keynesian theory of employment.
- To analyse the money-wage rigidity model.
- To understand the concepts of multiplier and accelerator and their interaction.

## 5.1 INTRODUCTION

Keynes is perhaps the greatest economist of the twentieth century and will remain one of the greatest in the history of economics. Keynes introduced a new paradigm in the analysis of economics. Keynes was basically a classical economist. Keynes' contribution to the classical tradition is his famous Treatise on Money. Keynes is primarily a monetary economist. He analysed the monetary problems in macro perspective. Keynes found that the classical prescription of monetary policy could not eliminate unemployment and the great depression of the thirties. Then he examined very closely the problems associated with unemployment and depression. This is treated in his General Theory of Employment, Interest and Money, which was published in 1936. Keynesian economics, therefore, is sometimes called the economics of depression. Anyway, Keynes pointed out the inefficacy of monetary policy and prescribed the use of fiscal policy for curing unemployment and depression. Keynes has written a number of books including Indian Currency and Finance (1913), A Tract on Monetary Reform (1923) and how to pay for the War (1940). However, the General Theory is his magnum opus.

## 5.2 KEYNESIAN THEORY OF EMPLOYMENT

In his General Theory, Keynes attacks the classical theory of employment and systematically develops his own theory of employment, output and income. According to Keynes, total income of an economy is a function of total employment. The volume of employment depends on effective demand. The effective demand depends on aggregate demand price and aggregate supply price. The equilibrium point between aggregate demand (AD) function and aggregate supply (AS) function determines effective demand. The Keynesian model, aggregate supply function is assumed as given, and the whole analysis centres round the factors that determine and influence aggregate demand function. Effective demand depends on consumption demand and investment demand. Consumption depends on the level of income and the propensity to consume. The propensity to consume does not increase in the same proportion as the increase in income. Keynes observes that in the short period, consumption function is more or less stable. Therefore, for increasing employment in the short period, the main emphasis is placed on investment. Investment bridges the gap between income and consumption. If the volume of investment is insufficient, the aggregate demand price will fall short of aggregate supply price, and employment and income would be reduced. Thus, variation in employment and income mainly depends on the variation in investment.

**Investment depends on two factors:**

a. Marginal efficiency of capital, and
b. Rate of interest.

Marginal efficiency of capital depends on the supply price of capital and the prospective yield from capital. The supply price of capital depends on the physical and technical conditions of production, which, in the short run, cannot be significantly altered. Therefore, in the short run, prospective yield becomes a more dominant factor in investment decision. When profit expectations are high and the entrepreneurs are guided by "animal spirits", the rate of investment generally becomes higher. On the other hand, when profit expectations are low, investment goes down.

The rate of interest (another determinant of investment) depends on the quantity of money and the liquidity preference. If the supply of money is given, the rate of interest will be determined by the liquidity preference, Liquidity preference depends on three human motives

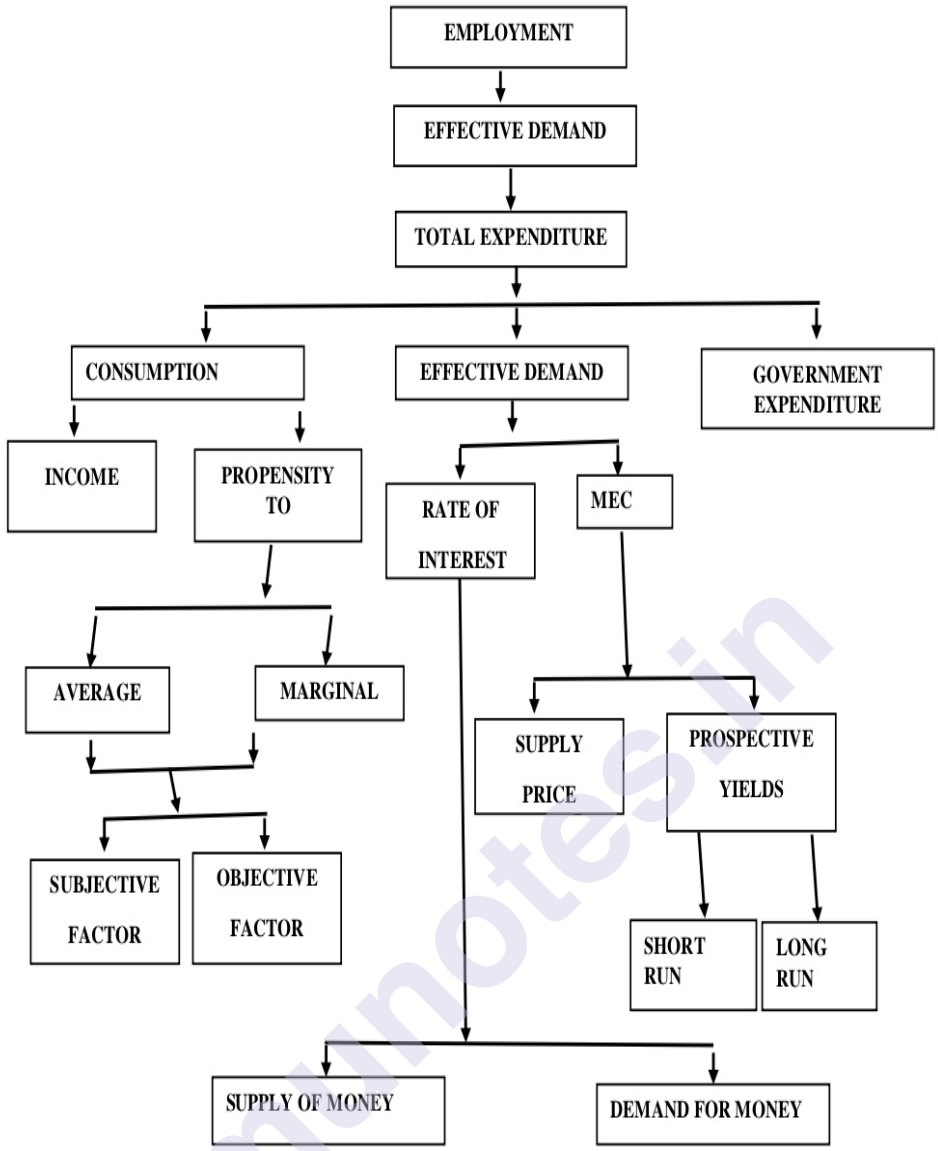
1. Transaction motive,
2. Precautionary motive, and
3. Speculative motive.

The first two motives for holding money are generally interest-inelastic, while the third one may be said to be interest-elastic. However, if liquidity preference is given, the rate of interest is determined by the monetary policy of the banking system. Investment can be stepped up either by raising the marginal efficiency of capital or by lowering the rate of interest, or by both.

Ordinarily, an increase in investment leads to increase in income and employment. But employment will not increase, if the propensity to consume of the people is reduced at the same time. In fact, consumption function is the "heart of Keynesian analysis" of employment and income. A rise in income and employment without a corresponding increase in investment, is sustained by increased consumption at least up to a point.

The importance of investment and consumption, for employment, income and output, in the Keynesian theory, can be best understood with reference to the operation of the multiplier effect. The multiplier refers to the numerical coefficient indicating the increase in income that results from a given increase in investment. The multiplier "establishes a precise relationship, given the propensity to consume, between aggregate employment and income and the rate of investment." A rise in investment leads to a rise in income, out of which there arises a higher demand for consumption goods which again leads to a further increase in income and employment.

When the process becomes cumulative, a given rise in investment causes a multiple increase in income, via the propensity to consume. The size of the multiplier depends on the marginal propensity to consume. If the marginal propensity to consume is high, the multiplier will be large and vice versa. Therefore, for increasing income and employment, both marginal propensity to consume as well as investment have to be increased. But since marginal propensity to consume is likely to fall with an increase in income, what is necessary is to step up the rate of investment in the economy. Investment demand along with consumption demand will determine the effective demand which, in turn, will determine the level of income and employment of an economy. This, in a sense, is the Keynesian theory of employment, income and output. Keynesian theory of employment is summarised in the chart.




## 5.3 MONEY-WAGE RIGIDITY MODEL

According to J.M. Keynes money wage rigidity means downward inflexibility of money wages causing involuntary unemployment of labour at a given wage rate supply of labour exceed demand for labour which causes unemployment according to him money wage will not change sufficiently e in the short run to keep the economy at full employment. To understand money wage rigidity causing unemployment we should examine why labour market doesn't clear through reduction in wage rates.

### 5.3.1 Causes of Money-Wage rigidity Model

**1. Money Illusion:**

Firm will not cut wages despite an excess supply of labour because workers will resist any move to cut wages which they accept fall in real wages due to rise in prices. Workers does not realise the value of money

or purchasing power of money. They feel money has stable value so they strongly oppose fall in wages but they does not resist if real wages are reduced by increase in prices.

**There are two reasons of money illusion**

Firstly, workers of a firm think that through rise in prices reduce their real wages it equally affects workers in other industries so their relative wages as compared to those employed in others remain the same.

Secondly, workers blame their employees for cut in money wages for cut in real wages that think working of general economic forces in this case strike has live little effect because Trade union remain silent spectator.

**2. Wage fixation through contracts:**

In the USA and UK wages are fixed by contract with in form and workers for a given period in situation of surplus or deficit labour supply money wage remains same.

Under trade unions bi collective bargaining money wage rate is much more it is fixed for 3-4-5 yes also.

Trade unions never accept wage cuts even if some union workers remain unemployed so labour market does not clear in the short run and money wage rigidity leads to involuntary unemployment.

**3. Minimum wage Laws:**

Due to government law over fixed minimum wages below which employers are not permitted to pay wages below which employers are not permitted to pay wages.

**4. Efficiency wages**:

Employers are also not interested in reducing wages as high wages make workers more efficient and productive. These difficulties are are hotels for firms in reducing wages so money wage rigidity exists in the short run.

Keynes money wage rigidity and flexible price model

Emergence of involuntary unemployment

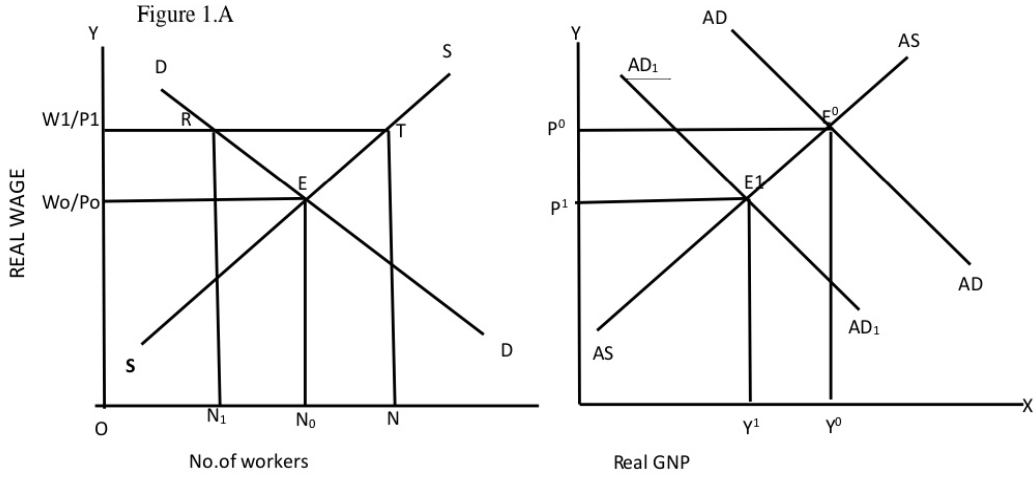



**Figure No. 5.1**

In Keynes contractual labour market it is assumed that :-

**1.** Price are free to vary
**2.** Money wage is fixed

According to Keynes money wage rigidity doesn't mean money wage is completely fixed or sticky. His mean money wage do not fall quickly to bring demand for and supply of labour to rich full employment money wages are slow to adjust to ensure full employment because involuntary unemployment comes into existence kings was concerned about downward money wage rate.

- In the diagram (b) short run AS & AD intersection determines Po price level & Yo real GDP level.
- AS is down with fixed money wage rate Wo level of labour employment number shows number of jobs when economy is producing Yo output ( GNP).
- At No workers are demanded and employed it represents full employment.
- Suppose due to fall in in in marginal efficiency of capital there is reduction in investment the multiplier effect causes leftward shift in AD curve due to fixed money wage rate aggregate supply curve remains unchanged the new AD curve is $AD_1$& AS curve intersect at point K determining new equilibrium lower price P1 & smaller real GNP Y1 with less than full employment.
- At higher real wage rate W0/P1 small amount of labour N1 will be demanded and employed so RT number of workers are jobless according to him with money wage rate remaining fixed at Wo, with flexible prices the fall in aggregate demand results in involuntary unemployment.

- Keynes theory is a departure from the classical view of free market economy which denied the existence of involuntary unemployment.

## 5.4 MULTIPLIER AND ACCELERATION: INTERACTION

One has to consider combined effects of the multiplier and the acceleration to know the aggregate increase in income due to an initial rise in autonomous spending. Any rise in autonomous spending results in an equal increase in income in the first instance, which in turn induces consumption causing a further rise in income. This, as already pointed out, is the multiplier effect. In the absence of an excess capacity in consumer goods industries, an increase in consumption induces investment and further increase in income takes place. This, as we know, is the acceleration effect. Hence total increase in income in response to a rise in autonomous spending can be understood only in terms of interaction between the multiplier and acceleration.

Now we shall like to explain the interaction between the multiplier and acceleration with the help of an example. Let us assume that the marginal propensity to consume (MPC) is 0.5 and the acceleration coefficient is 2. If, under these circumstances, the autonomous investment rises by Rs. 100 crore, the total increase in income in the first multiplier period would be of the order of Rs. 250 crore. The process of income propagation in the multiplier period 1 has been clearly shown in Figure.

**Figure No. 5.2**

**Multiplier and accelerator**

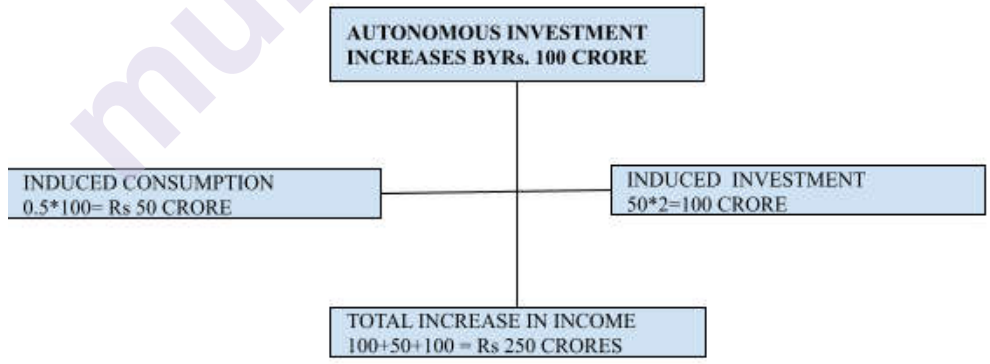



FIGURE "1.B" RISE IN INCOME IN THE FIRST MULTIPLIER PERIOD

Shows the process of rise in income only in the first multiplier period in response to an increase in autonomous investment equal to Rs. 100 crore. The total increase in income will materialise in an infinitely large number of multiplier periods through the interaction between the multiplier and acceleration. In Table "5.1", we have considered the impact of a rise in

autonomous investment equal to Rs. 100 crore on income in the first four multiplier periods.

**Table No. 5.1**

Combined Impact of Multiplier and Acceleration on Income

| Multiplier Period | Increase in Autonomous Investment | Induced Consumption (Rs. crore) | Induced Investment (Rs. crore) | Total Increase in Income (Rs. crore) |
|---|---|---|---|---|
| 0 | 100 | - | - | 100 |
| 1 | 100 | 50 | 100 | 250 |
| 2 | 100 | 125 | 150 | 375 |
| 3 | 100 | 187.5 | 125 | 412.5 |
| 4 | 100 | 206.5 | 37.5 | 343.75 |

In Table"B.1 the rise in income due to increase in autonomous investment has been shown. In the multiplier period 0, the rise in income is just equal to the amount of initial increase in investment i.e., Rs. 100 crore. In the multiplier period 1, this increase in income will induce consumption, and since MPC is 0.5 the spending on consumer goods will rise by Rs. 50 crore which in turn, on the basis of acceleration coefficient being 2, induces investment equal to Rs. 100 crore.

Hence the total increase in the multiplier period 1 will be equal to Rs. 250 crore. In the multiplier period 2, half (or 0.5) of this increased income will be spent on consumer goods and thus induced consumption will amount to Rs. 125 crore. Since in the previous multiplier period additional capacity has been created for producing consumer goods worth Rs. 50 crore, in the current period i.e.multiplier period 2, firms will like to expand their capacity for producing additional consumer goods worth Rs. 75 crore. Thus, in the multiplier period 2, induced investment will amount to only Rs. 150 crore (2x Rs. 75 crore) and the total increase in income will be equal to Rs. 375 crore. The amount of induced consumption in the multiplier period 3 will be Rs. 187.5 crore.

Since the consumption in this period has risen by only Rs. 625 crore, the induced investment in this period will amount to Rs. 125 crore and the rise in income will be of the order of Rs. 412.5 crore. This, in fact, is the highest limit, that income will reach in response to a rise in autonomous investment equal to Rs. 100 crore. In the subsequent multiplier period the income level will fall. Consider the multiplier period 4, in which the

amount of induced consumption is equal to Rs. 206.25 crore. It exceeds the amount of induced consumption in the multiplier period 3 by only Rs 18.75 crore.

Hence in this period, induced investment will be just Rs. 37.5 crore. Compared to induced investments in the earlier multiplier periods, this is too little. It is this sharp decline in induced investment which causes a beginning of the recessionary process. Considering this fact, J.R. Hicks has enunciated his theory of trade cycle.

**Check Your Progress:**

1. Who is the author of the book 'General Theory of Employment, Interest and Money'?
2. On which factor Keynesian Theory of Employment depends?
3. _____ is the determining factor for investment
4. According to J.M. Keynes money wage rigidity means _____inflexibility of money wages.
5. With increase in investment, MEC_____.
6. Money wages rigidity causing _____unemployment.
7. The combined effects of the multiplier and the acceleration to know the _____due to an initial rise in autonomous spending.
8. The marginal propensity to consume (MPC) is 0.5 and the acceleration coefficient is _____.

## 5.5 QUESTIONS

Q1. Explain Keynesian theory of employment.

Q2. Explain money wage rigidity

Q3. What are the causes of involuntary unemployment?

Q4. Explain multiplier and acceleration interaction.

Q5. Find out the value of multiplier when C=20+.75Y

Q6. Find out the value of income multiplier when MPS = .25

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# 6

# KEYNESIAN IDEAS - II

**Unit Structure:**



## 6.0 OBJECTIVES

- To study the Keynesian theory of trade cycle.
- To understand the Keynesian theory of inflation.
- To know the Keynes idea on role of fiscal policy.
- To study the relationship between Keynesian economics and developing countries.

## 6.1 KEYNESIAN THEORY OF TRADE CYCLE

According to Keynes, business cycle is caused by variations in the rate of investment caused by fluctuations in the Marginal Efficiency of Capital. The term 'marginal efficiency of capital' means the expected profits from new investments. Entrepreneurial activity depends upon profit expectations. In his business cycle theory, Keynes assigns the major role to expectations.

Business cycles are periodic fluctuations of employment, income and output. According to Keynes, income and output depend upon the volume of employment. The volume of employment is determined by three variables:

1. The marginal efficiency of capital,

2. The rate of interest and,

3. The propensity to consume.

Keynes suggest that the essential character of the Trade Cycle and, especially, the regularity of time-sequence and of duration which justifies us in calling it a cycle, is mainly due to the way in which the marginal efficiency of capital fluctuates. The Trade Cycle is best regarded, Keynes think, as being occasioned by a cyclical change in the marginal efficiency

of capital, though complicated and often aggravated by associated changes in the other significant short-period variables of the economic system.

The following short notes will be sufficient to indicate the line of investigation which our preceding theory suggests.

By a cyclical movement we mean that as the system progresses in, e.g., the upward direction, the forces propelling it upwards at first gather force and have a cumulative effect on one another but gradually lose their strength until at a certain point they tend to be replaced by forces operating in the opposite direction; which in turn gather force for a time and accentuate one another, until they too, having reached their maximum development, wane and give place to their opposite. We do not, however, merely mean by a cyclical movement that upward and downward tendencies, once started, do not persist for ever in the same direction but are ultimately reversed. We mean also that there is some recognisable degree of regularity in the time sequence and duration of the upward and downward movements.

There is, however, another characteristic of what we call the Trade Cycle which our explanation must cover if it is to be adequate; namely, the phenomenon of the crisis the fact that the substitution of a downward for an upward tendency often takes place suddenly and violently, whereas there is, as a rule, no such sharp turning-point when an upward is substituted for a downward tendency.

Any fluctuation in investment not offset by a corresponding change in the propensity to consume will, of course, result in a fluctuation in employment. Since, therefore, the volume of investment is subject to highly complex influences, it is highly improbable that all fluctuations either in investment itself or in the marginal efficiency of capital will be of a cyclical character. One special case, in particular, namely, that which is associated with agricultural fluctuations, will be separately considered in a later section of this chapter. Keynes suggest, however, that there are certain definite reasons why, in the case of a typical industrial trade cycle in the nineteenth-century environment, fluctuations in the marginal efficiency of capital should have had cyclical characteristics. These reasons are by no means unfamiliar either in themselves or as explanations of the trade cycle. His only purpose here is to link them up with the preceding theory.

Keynes can best introduce what he have to say by beginning with the later stages of the boom and the onset of the "crisis".

We have seen above that the marginal efficiency of capital depends, not only on the existing abundance or scarcity of capital-goods and the current cost of production of capital-goods, but also on current expectations as to the future yield of capital-goods. In the case of durable assets it is, therefore, natural and reasonable that expectations of the future should play a dominant part in determining the scale on which new investment is deemed advisable. But, as we have seen, the basis for such expectations is

very precarious. Being based on shifting and unreliable evidence, they are subject to sudden and violent changes.

Now, we have been accustomed in explaining the "crisis" to lay stress on the rising tendency of the rate of interest under the influence of the increased demand for money both for trade and speculative purposes. At times this factor may certainly play an aggravating and, occasionally perhaps, an initiating part. But he suggest that a more typical, and often the predominant, explanation of the crisis is, not primarily a rise in the rate of interest, but a sudden collapse in the marginal efficiency of capital.

The later stages of the boom are characterised by optimistic expectations as to the future yield of capital goods sufficiently strong to offset their growing abundance and their rising costs of production and, probably, a rise in the rate of interest also. It is of the nature of organised investment markets, under the influence of purchasers largely ignorant of what they are buying and of speculators who are more concerned with fore casting the next shift of market sentiment than with a reasonable estimate of the future yield of capital-assets, that, when disillusion falls upon an over-optimistic and over-bought market, it should fall with sudden and even catastrophic force.

Moreover, the dismay and uncertainty as to the future which accompanies a collapse in the marginal efficiency of capital naturally precipitates a sharp increase in liquidity-preference-and hence a rise in the rate of interest. Thus the fact that a collapse in the marginal efficiency of capital tends to be associated with a rise in the rate of interest may seriously aggravate the decline in investment. But the essence of the situation is to be found, nevertheless, in the collapse in the marginal efficiency of capital, particularly in the case of those types of capital which have been contributing most to the previous phase of heavy new investment. Liquidity-preference, except those manifestations of it which are associated with increasing trade and speculation, does not increase until after the collapse in the marginal efficiency of capital.

It is this, indeed, which renders the slump so in tractable. Later on, a decline in the rate of interest will be a great aid to recovery and, probably, a necessary condition of it. But, for the moment, the collapse in the marginal efficiency of capital may be so complete that no practicable reduction in the rate of interest will be enough. If a reduction in the rate of interest was capable of proving an effective remedy by itself, it might be possible to achieve a recovery without the elapse of any considerable interval of time and by means more or less directly under the control of the monetaryauthority. But, in fact, this is not usually the case; and it is not so easy to revive the marginal efficiency of capital, determined, as it is, by the uncontrollable and disobedient psychology of the business world. It is the return of confidence, to speak in ordinary language, which is so insusceptible to control in an economy of individualistic capitalism. This is the aspect of the slump which bankers and business men have been right in emphasising, and which the economists who have put their faith in a "purely monetary" remedy have underestimated.

This brings me to my point. The explanation of the time-element in the trade cycle, of the fact that an interval of time of a particular order of magnitude must usually elapse before recovery begins, is to be sought in the influences which govern the recovery of the marginal efficiency of capital. There are reasons, given firstly by the length of life of durable assets in relation to the normal rate of growth in a given epoch, and secondly by the carrying-costs of surplus stocks, why the duration of the downward movement should have an order of magnitude which is not fortuitous, which does not fluctuate between, say, one year this time and ten years next time, but which shows some regularity of habit between, let us say, three and five years.

Let us recur to what happens at the crisis. So long as the boom was continuing, much of the new investment showed a not unsatisfactory current yield. The disillusion comes because doubts suddenly arise concerning the reliability of the prospective yield, perhaps because the current yield shows signs of falling off, as the stock of newly produced durable goods steadily increases. If current costs of production are thought to be higher than they will be later on, that will be a further reason for a fall in the marginal efficiency of capital. Once doubt begins it spreads rapidly. Thus at the outset of the slump there is probably much capital of which the marginal efficiency has become negligible or even negative. But the interval of time, which will have to elapse before the shortage of capital through use, decay and obsolescence causes a sufficiently obvious scarcity to increase the marginal efficiency, may be a somewhat stable function of the average durability of capital in a given epoch. If the characteristics of the epoch shift, the standard time-interval will change. If, for example, we pass from a period of increasing population into one of declining population, the characteristic phase of the cycle will be lengthened. But we have in the above a substantial reason why the duration of the slump should have a definite relationship to the length of life of durable assets and to the normal rate of growth in a given epoch.

The second stable time-factor is due to the carrying costs of surplus stocks which force their absorption within a certain period, neither very short nor very long. The sudden cessation of new investment after the crisis will probably lead to an accumulation of surplus stocks of unfinished goods. The carrying-costs of these stocks will seldom be less than 10 percent per annum. Thus the fall in their price needs to be sufficient to bring about a restriction which provides for their absorption within a period of, say, three to five years at the outside. Now the process of absorbing the stocks represents negative investment, which is a further deterrent to employment; and, when it is over, a manifest relief will be experienced.

Moreover, the reduction in working capital, which is necessarily attendant on the decline in output on the downward phase, represents a further element of disinvestment, which may be large; and, once the recession has begun, this exerts a strong cumulative influence in the downward direction. In the earliest phase of a typical slump there will probably be an investment in increasing stocks which helps to offset disinvestment in working-capital; in the next phase there may be a short period of

disinvestment both in stocks and in working capital; after the lowest point has been passed there is likely to be a further disinvestment in stocks which partially offsets reinvestment in working-capital; and, finally, after the recovery is well on its way, both factors will be simultaneously favourable to investment. It is against this background that the additional and superimposed effects of fluctuations of investment in durable goods must be examined. When a decline in this type of investment has set a cyclical fluctuation in motion there will be little encouragement to a recovery in such investment until the cycle has partly run its course.[1]

Unfortunately a serious fall in the marginal efficiency of capital also tends to affect adversely the propensity to consume. For it involves a severe decline in the market value of Stock Exchange equities. Now, on the class who take an active interest in their Stock Exchange investments, especially if they are employing borrowed funds, this naturally exerts a very depressing influence. These people are, perhaps, even more influenced in their readiness to spend by rises and falls in the value of their investments than by the state of their income. With a "stock-minded" public, as in the United States to-day, a rising stock-market may be an almost essential condition of a satisfactory propensity to consume; and this circumstance, generally overlooked until lately, obviously serves to aggravate still further the depressing effect of a decline in themarginal efficiency of capital. When once the recovery has been started, the manner in which it feeds on itself and cumulates is obvious. But during the downward phase, when both fixed capital and stocks of materials are for the time being redundant and working-capital is being reduced, the schedule of the marginal efficiency of capital may fall so low that it can scarcely be corrected, so as to secure a satisfactory rate of new investment, by any practicable reduction in the rate of interest. Thus with markets organised and influenced as they are at present, the market estimation of the marginal efficiency of capital may suffer such enormously wide fluctuations that it cannot be sufficiently offset by corresponding fluctuations in the rate of interest. Moreover, the corresponding movements in the stock-market may, as we have seen above, depress the propensity to consume just when it is most needed. In conditions of laissez faire the avoidance of wide fluctuations in employment may, therefore, prove impossible without a far-reaching change in the psychology of investment markets such as there is no reason to expect. I conclude that the duty of ordering the current volume of investment cannot safely be left in private hands.

The preceding analysis may appear to be in conformity with the view of those who hold that over investment is the characteristic of the boom, that the avoidance of this over-investment is the only possible remedy for the ensuing slump, and that, whilst for the reasons given above the slump cannot be prevented by a low rate of interest, nevertheless the boom can be avoided by a high rate of interest. There indeed, force in the argument that a high rate of interest is much more effective against a boom than a low rate of interest against a slump.

According to Keynes analysis, however, it is only in the former sense that the boom can be said to be characterised by over-investment. The situation, which he indicating as typical, is not one in which capital is so abundant that the community as a whole has no reasonable use for any more, but where investment is being made in conditions which are unstable and cannot endure, because it is prompted by expectations which are destined to disappointment.

It may, of course, be the case-indeed it is likely to be that the illusions of the boom cause particular types of capital-assets to be produced in such excessive abundance that some part of the output is, on any criterion, a waste of resources;-which sometimes happens, we may add, even when there is no boom. It leads, that is to say, to misdirected investment. But over and above this it is an essential characteristic of the boom that investments which will in fact yield, say, 2 percent in conditions of full employment are made in the expectation of a yield of, say, 6 per cent., and are valued accordingly. When the disillusion comes, this expectation is replaced by a contrary "error of pessimism", with the result that the investments, which would in fact yield 2 percent in conditions of full employment, are expected to yield less than nothing; and the resulting collapse of new investment then leads to a state of unemployment in which the investments, which would have yielded 2 percent in conditions of full employment, in fact yield less than nothing. We reach a condition where there is a shortage of houses, but where nevertheless no one can afford to live in the houses that there are.

Thus the remedy for the boom is not a higher rate of interest but a lower rate of interest for that may enable the so-called boom to last. The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a semi slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom.

The boom which is destined to end in a slump is caused, therefore, by the combination of a rate of interest, which in a correct state of expectation would be too high for full employment, with a misguided state of expectation which, so long as it lasts, prevents this rate of interest from being in fact deterrent.  boom is a situation in which over-optimism triumphs over a rate of interest which, in a cooler light, would be seen to be excessive.

It may be convenient at this point to say a word about the important schools of thought which maintain, from various points of view, that the chronic tendency of contemporary societies to under-employment is to be traced to under-consumption;-that is to say, to social practices and to a distribution of wealth which result in a propensity to consume which is unduly low. In existing conditions-or, at least, in the conditions which existed until lately-where the volume of investment is unplanned and uncontrolled, subject to the vagaries of the marginal efficiency of capital as determined by the private judgment of individuals ignorant or speculative, and to a long-term rate of interest which seldom or never falls below a conventional level, these schools of thought are, as guides to

practical policy, undoubtedly in the right. For in such conditions there is no other means of raising the average level of employment to a more satisfactory level. If it is impracticable materially to increase investment, obviously there is no means of securing a higher level of employment except by increasing consumption.

Practically Keynes only differ from these schools of thought in thinking that they may lay a little too much emphasis on increased consumption at a time when there is still much social advantage to be obtained from increased investment. Theoretically, however, they are open to the criticism of neglecting the fact that there are two ways to expand output. Even if we were decide that it would be better to increase capital more slowly and to concentrate effort on increasing consumption, we must decide this with open eyes after well considering the alternative. He himself impressed by the great social advantages of increasing the stock of capital until it ceases to be scarce. But this is a practical judgment, not a theoretical imperative.

Moreover, He was readily concede that the wisest course is to advance on both fronts at once. Whilst aiming at a socially controlled rate of investment with a view to a progressive decline in the marginal efficiency of capital, he support at the same time all sorts of policies for increasing the propensity to consume. For it is unlikely that full employment can be maintained, whatever we may do about investment, with the existing propensity to consume. There is room, therefore, for both policies to operate together;-to promote investment and, at the same time, to promote consumption, not merely to the level which with the existing propensity to consume would correspond to the increased investment, but to a higher level still.

If to take round figures for the purpose of illustration the average level of output of to-day is 15 percent below what it would be with continuous full employment, and if 10 percent of this output represents net investment and 90 percent of it consumption-if, furthermore, net investment would have to rise 50 per cent. in order to secure full employment with the existing propensity to consume, so that with full employment output would rise from 100 to 115, consumption from 90 to 100 and net investment from 10 to 15:-then we might aim, perhaps, at so modifying the propensity to consume that with full employment consumption would rise from 90 to 103 and net investment from 10 to 12.

Another school of thought finds the solution of the trade cycle, not in increasing either consumption or investment, but in diminishing the supply of labour seeking employment; i.e. by redistributing the existing volume of employment without increasing employment or output.

This seems to me to be a premature policy-much more clearly so than the plan of increasing consumption. A point comes where every individual weighs the advantages of increased leisure against increased income. But at present the evidence is, I think, strong that the great majority of individuals would prefer increased income to increased leisure; and I see

no sufficient reason for compelling those who would prefer more income to enjoy more leisure.

It may appear extraordinary that a school of thought should exist which finds the solution for the trade cycle in checking the boom in its early stages by a higher rate of interest. The only line of argument, along which any justification for this policy can be discovered, is that put forward by Mr. D. H. Robert son, who assumes, in effect, that full employment is an impracticable ideal and that the best that we can hope for is a level of employment much more stable than at present and averaging, perhaps, a little higher.

If we rule out major changes of policy affecting either the control of investment or the propensity to consume, and assume, broadly speaking, a continuance of the existing state of affairs, it is, I think, arguable that a more advantageous average state of expectation might result from a banking policy which always nipped in the bud an incipient boom by a rate of interest high enough to deter even the most misguided optimists. The disappointment of expectation, characteristic of the slump, may lead to so much loss and waste that the average level of useful investment might be higher if a deterrent is applied. It is difficult to be sure whether or not this is correct on its own assumptions; it is a matter for practical judgment where detailed evidence is wanting.

It may be that it overlooks the social advantage which accrues from the increased consumption which attends even on investment which proves to have been totally misdirected, so that even such investment may be more beneficial than no investment at all. Nevertheless, the most enlightened monetary control might find itself in difficulties, faced with a boom of the 1929 type in America, and armed with no other weapons than those possessed at that time by the Federal Reserve System; and none of the alternatives within its power might make much difference to the result. However this may be, such an outlook seems to me to be dangerously and unnecessarily defeatist. It recommends, or at least assumes, for permanent acceptance too much that is defective in our existing economic scheme.

The austere view, which would employ a high rate of interest to check at once any tendency in the level of employment to rise appreciably above the average of, say, the previous decade, is, however, more usually supported by arguments which have no foundation at all apart from confusion of mind. It flows, in some cases, from the belief that in a boom investment tends to outrun saving, and that a higher rate of interest will restore equilibrium by checking investment on the one hand and stimulating savings on the other. This implies that saving and investment can be unequal, and has, therefore, no meaning until these terms have been defined in some special sense.

It is sometimes suggested that the increased saving which accompanies increased investment is undesirable and unjust because it is, as a rule, also associated with rising prices. But if this were so, any upward change in the existing level of output and employment is to be deprecated. For the rise in

prices is not essentially due to the increase in investment; it is due to the fact that in the short period supply price usually increases with increasing output, on account either of the physical fact of diminishing return or of the tendency of the cost-unit to rise in terms of money when output increases. If the conditions were those of constant supply-price, there would, of course, be no rise of prices; yet, all the same, increased saving would accompany increased investment. It is the increased output which produces the increased saving; and the rise of prices is merely a by-product of the increased output, which will occur equally if there is no increased saving but, instead, an increased propensity to consume. No one has a legitimate vested interest in being able to buy at prices which are only low because output is low.

Or, again, the evil is supposed to creep in if the increased investment has been promoted by a fall in the rate of interest engineered by an increase in the quantity of money. Yet there is no special virtue in the pre-existing rate of interest, and the new money is not "forced" on anyone;-it is created in order to satisfy the increased liquidity-preference which corresponds to the lower rate of interest or the increased volume of transactions, and it is held by those individuals who prefer to hold money rather than to lend it at the lower rate of interest. Or, once more, it is suggested that a boom is characterised by "capital consumption", which presumably means negative net investment, i.e. by an excessive propensity to consume. Unless the phenomena of the trade cycle have been confused with those of a flight from the currency such as occurred during the post-war European currency collapses, the evidence is wholly to the contrary. Moreover, even if it were so, a reduction in the rate of interest would be a more plausible remedy than a rise in the rate of interest for conditions of under-investment. I can make no sense at all of these schools of thought; except, perhaps, by supplying a tacit assumption that aggregate output is incapable of change. But a theory which assumes constant output is obviously not very serviceable for explaining the trade cycle.

In the earlier studies of the trade cycle, notably by Jevons, an explanation was found in agricultural fluctuations due to the seasons, rather than in the phenomena of industry. In the light of the above theory this appears as an extremely plausible approach to the problem. For even to-day fluctuation in the stocks of agricultural products as between one year and another is one of the largest individual items amongst the causes of changes in the rate of current investment; whilst at the time when Jevons wrote-and more particularly over the period to which most of his statistics applied this factor must have far outweighed all others.

Jevons's theory, that the trade cycle was primarily due to the fluctuations in the bounty of the harvest, can be re-stated as follows. When an exceptionally large harvest is gathered in, an important addition is usually made to the quantity carried over into later years. The proceeds of this addition are added to the current incomes of the farmers and are treated by them as income; whereas the increased carry-over involves no drain on the income-expenditure of other sections of the community but is financed out of savings. That is to say, the addition to the carry-over is an addition to

current investment. This conclusion is not invalidated even if prices fall sharply. Similarly when there is a poor harvest, the carry-over is drawn upon for current consumption, so that a corresponding part of the income-expenditure of the consumers creates no current income for the farmers. That is to say, what is taken from the carry-over involves a corresponding reduction in current investment. Thus, if investment in other directions is taken to be constant, the difference in aggregate investment between a year in which there is a substantial addition to the carry-over and a year in which there is a substantial subtraction from it may be large; and in a community where agriculture is the predominant industry it will be overwhelmingly large compared with any other usual cause of investment fluctuations. Thus it is natural that we should find the upward turning-point to be marked by bountiful harvests and the downward turning-point by deficient harvests. The further theory, that there are physical causes for a regular cycle of good and bad harvests, is, of course, a different matter with which we are not concerned here.

More recently, the theory has been advanced that it is bad harvests, not good harvests, which are good for trade, either because bad harvests make the population ready to work for a smaller real reward or because the resulting redistribution of purchasing-power is held to be favourable to consumption. Needless to say, it is not these theories which I have in mind in the above description of harvest phenomena as an explanation of the trade cycle. The agricultural causes of fluctuation are, however, much less important in the modern world for two reasons. In the first place agricultural output is a much smaller proportion of total output. And in the second place the development of a world market for most agricultural products, drawing upon both hemispheres, leads to an averaging out of the effects of good and bad seasons, the percentage fluctuation in the amount of the world harvest being far less than the percentage fluctuations in the harvests of individual countries. But in old days, when a country was mainly dependent on its own harvest, it is difficult to see any possible cause of fluctuations in investment, except war, which was in any way comparable in magnitude with changes in the carry-over of agricultural products.

Even to-day it is important to pay close attention to the part played by changes in the stocks of raw materials, both agricultural and mineral, in the determination of the rate of current investment. I should attribute the slow rate of recovery from a slump, after the turning point has been reached, mainly to the deflationary effect of the reduction of redundant stocks to a normal level. At first the accumulation of stocks, which occurs after the boom has broken, moderates the rate of the collapse; but we have to pay for this relief later on in the damping-down of the subsequent rate of recovery. Sometimes, indeed, the reduction of stocks may have to be virtually completed before any measurable degree of recovery can be detected. For a rate of investment in other directions, which is sufficient to produce an upward movement when there is no current disinvestment in stocks to set off against it, may be quite in adequate so long as such disinvestment is still proceeding.

We have seen, I think, a signal example of this in the earlier phases of America's "New Deal". When President Roosevelt's substantial loan expenditure began, stocks of all kinds-and particularly of agricultural products-still stood at a very high level. The "New Deal" partly consisted in a strenuous attempt to reduce these stocks-by curtailment of current output and in all sorts of ways. The reduction of stocks to a normal level was a necessary process-a phase which had to be endured. But so long as it lasted, namely, about two years, it constituted a substantial offset to the loan expenditure which was being incurred in other directions. Only when it had been completed was the way prepared for substantial recovery.

Recent American experience has also afforded good examples of the part played by fluctuations in the stocks of finished and unfinished goods-"inventories" as it is becoming usual to call them-in causing the minor oscillations within the main movement of the Trade Cycle. Manufacturers, setting industry in motion to provide for a scale of consumption which is expected to prevail some months later, are apt to make minor miscalculations, generally in the direction of running a little ahead of the facts. When they discover their mistake they have to contract for a short time to a level below that of current consumption so as to allow for the absorption of the excess inventories; and the difference of pace between running a little ahead and dropping back again has proved sufficient in its effect on the current rate of investment to display itself quite clearly against the background of the excellently complete statistics now available in the United States.

## 6.2 KEYNESIAN THEORY OF INFLATION

Keynes's theory of inflation is considered as 'only a little more than an extension and generalisation of classical theory especially of Wicksell's view". Keynes has, however, made an important departure from the classical view. While classical economists considered an increase in money supply as the only cause of an increase in aggregate demand and the only cause of inflation, Keynes too postulated that inflation is caused by increase in aggregate demand.

According to Keynes, the aggregate demand might increase because of increase in real factors, increase in consumer demand due to increase in MPC, increase in investment demands due to upward shift in marginal efficiency of investment (MED) and increase in government expenditure. Such changes may take place even when supply of money remains constant. Increase in aggregate demand, aggregate supply remaining constant, creates demand-supply gap which he called the 'inflationary gap". According to Keynes, the inflationary gap is the cause of inflation.

Keynes had expressed his view on inflation in his book, How to Pay for the War (1940), wherein he gave the concept of inflationary gap. Inflationary gap is defined as the gap between the planned expenditure and the real output available at full employment.

Following Keynes, the British Chancellor of Exchequer defined the inflationary gap in his budget speech of 1941 as the amount of the government's expenditure against which there is no corresponding release of real resources of manpower or material by some other members of the community. The 'inflationary gap' is so called because it causes inflation, without increasing the level of output.

It is important to note here that Keynes linked inflationary gap and the consequent inflation tofull-employment output. In his opinion, if the economy is at less-than-full-employment level, a price rise is not inflation. It implies that the expenditure creating demand in excess of output supply at less-than full-employment level is not inflationary even if prices increase. For, such increase in price generates additional employment and output. The additional output supply absorbs the excess demand with a time lag. According to Keynes, price rise during the time lag is not inflation.

According to the Keynesian theory of inflation, a price rise due to excess demand only at full employment level is inflationary, i.e., inflation takes place only when the economy is at the level of full employment.

The concept of inflationary gap and its impact on the price level is exemplified by using the 'Keynesian cross' in Fig. 2.A. Suppose that the economy is in full-employment equilibrium at point E□ where aggregate demand (C+I+G) = AD, schedule intersects the aggregate supply (AS) schedule.

At point E□, resources are fully employed. At the full employment level of output, the aggregate income equals the aggregate expenditure, that is, OY□ = E□Y□.

Given the full-employment status of the economy, let us suppose that the government increases its spending by E, E AD. Consequently, the aggregate demand schedule shifts upward to AD=C+I+GAG and equilibrium point shifts from point E, to point E.

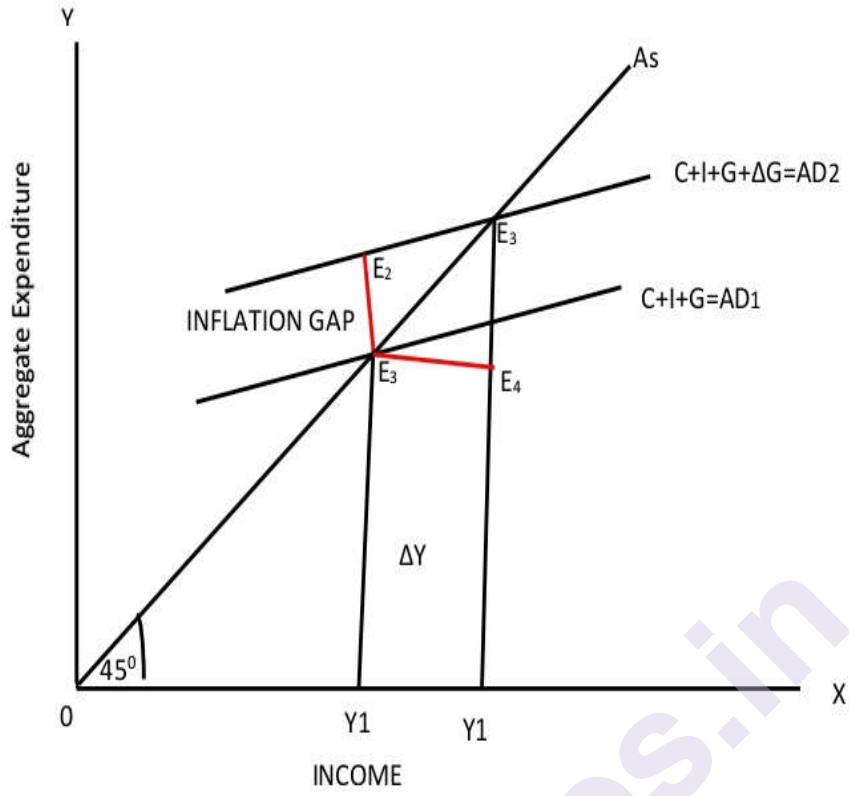


Figure: "2.A" Inflation Gap & Inflation

**Figure No. 6.1 Inflation Gap & Inflation**

However, since there full employment, additional resources (capital and labour) would not be forthcoming in response to the additional demand. Therefore, higher factor prices would be offered to draw the factor inputs from the existing employment. This creates an inflationary pressure in the economy. This inflationary pressure b arisen due to AG -EE, Therefore, EE, is inflationary gap. The inflationary gap generates only money income without creating matching real output because the economy is in full employment equilibrium the rise in money income would create multiplier effect depending on the MPC. Since the economy is in the state of full employment and additional goods and services would not be forthcoming, the multiplies would work only on the money income generating more and more demand. The prices would, therefore, rise until the entire extra money income and excess demand are absorbed by the rise in the general price level. According to Keynes, this price rise is inflation - not the price rise prior to full employment level.

**The Rate of Inflation**

According to the Keynesian theory of inflation, the rate of inflation equals the percentage of additional money income (AY) generated by AG to the pre-AG money income. Since pre-AG money income equals OY1,

Inflation rate (%) = $\Delta Y/OY1 \times 100$

As figure "C" shows, ΔY=OY2 - OY1=Y1Y2. By subtracting Y1Y2 for ΔY, we get

Inflation rate (%) = Y1Y2/OY1×100

## 6.3 KEYNES VIEW ON ROLE OF FISCAL POLICY

As an instrument of macroeconomic policy, fiscal policy has been very popular with the modern governments to influence the size and composition of the national product, employment, industrial production, prices, etc., in the economy. The deliberate use of fiscal policy as a means to achieve and maintain full employment and price stability in the economy has been a characteristic feature of the past seven decades after the publication of John Maynard Keynes' well-known book titled The General Theory of Employment, Interest and Money in 1936.

The post-Keynesian popularity of fiscal policy has been largely due to the following three factors:

1. Ineffectiveness of the monetary policy as a means of removing mass unemployment in the great depression of the 30s;
2. The development of 'new economics' by John Maynard Keynes with its stress on the role of aggregate effective demand; and
3. The growing importance of government spending and taxation in relation to thenational income and output. From its modest beginnings in the 40s, fiscal policy today has become a majormacroeconomic policy instrument employed by the governments to achieve fullemployment, to prevent inflation and to promote rapid economic growth.

Following Keynes, economists have argued that substantial amount of spending and fund raising in the form of taxation by government are capable of changing the size of national product and the tempo of aggregate economic activity in the system. By determining what goods and services will be produced, the fiscal operations of the government affect significantly the direction of employment of the economy's resources.

Government expenditure and tax revenue are not, however, closely related to one another. In any given year, government's total expenditure and total tax receipts may be unequal in which case the budget will be either a deficit or a surplus budget. When the expenditure and income of the government are equal, the budget is said be a balanced budget. The use of budget deficit and surplus in order to affect the level of the aggregate economic activity or to maintain economic stability or to promote economic growth in the economy is the essence of fiscal policy. Both the Keynesian and the neo-Keynesian economists rely primarily on the fiscal policy to stabilize the economy. During a major recession, such as the one which occurred in the 1930s, even the monetarists believed that fiscal

policy could be used more effectively to increase the level of aggregate demand in the economy.

**Meaning of Fiscal Policy**

In his epoch-making book The General Theory of Employment, Interest and Money, Keynes used fiscal policy when referring to the influence of taxation on savings and government investment spending financed through loans raised from the public. Keynes looked a it as state policy which used public finance as a balancing factor in the economy's development. Ordinarily, by fiscal policy is meant a policy which affects the important macroeconomic variables-aggregate output, employment, saving, investment, etc., through the budgetary manipulation. Fiscal policy refers to the regulation of the level of government spending, taxation and public debt. According to Arthur Smithies, the term fiscal policy refers to 'a policy under which a government uses its expenditure and revenue programmes to produce desirable effects and avoid undesirable effects on the national income, production and employment. According to Buehler, "by fiscal policy s meant the use of public finance or expenditure, taxes, borrowing and financial administration to further our national economic objective. According to Fred R Glahe, by fiscal policy is meant the regulation of the level of government expenditure and taxation to achieve full employment in the economy. While referring to fiscal policy here we mean pure fiscal policy. A fiscal policy affects the level of government spending or taxation while the nominal money supply remains constant. Fiscal Policy and Economic Activity

Government expenditure, tax income and public debt act as important levers to influence aggregate outlay, employment and prices in the economy. A given change-increase of decrease in aggregate government expenditure causes a change increase of decrease in the aggregate demand thereby increasing or decreasing the factor incomes. Government expenditure incurred on wages and salaries of its employees, interest paid on government debt, social security and old age pension payments, all tend to increase the disposable personal income of people as a consequence of which the aggregate demand for consumer goods increases. Thus an increase in the total expenditure of government tends to expand the aggregate economic activity in the economy. On the other hand, taxes levied on the people to finance government expenditure tend to reduce disposable personal and corporate incomes which could have been either spent on consumption or devoted to capital formation through saving. Thus taxes tend to reduce the aggregate demand and income in the economy. These effects of government budget are equally valid for the central, state and local government budgets although the budget of the central government is much more powerful in affecting the level of aggregate economic activity in the economy than are the combined budgets of all the states and local bodies like the municipal and district boards.

Government expenditure and revenue can be combined in several ways in order to stimulate or depress the aggregate effective demand and economic

activity in the economy. A surplus in the budget will exert a deflationary effect on national income because the inflow of aggregate government into the circular income flow will be less than the tax leakage from the circular income flow. Conversely, a deficit in the budget expands the net national product since the leakage from the aggregate income flow due to taxes is less than the additional inflow into the circular flow in the form of government expenditure. It follows, therefore, that in slump when there is need for expanding the aggregate demand deficit budget while in inflation when the problem is of preventing the aggregate demand from exceeding the aggregate supply, surplus budget should be prepared. This generalization should not, however, lead us to conclude that a balanced budget is neutral in its effects on the national income and economic activity in the system. Depending upon the particular circumstances, a balanced budget may be no less important than an unbalanced-deficit or surplus-budget.

For a correct appraisal of the effects of government's fiscal policy on the level of aggregate economic activity, apart from the magnitude of government expenditure and revenue, their composition or structure is also equally significant. A given amount of revenue can be realized by the government in several ways-by levying taxes, by increasing the area of and profits from commercial activities and by borrowing from the public. However, even though the revenue raised through these several alternative methods may be the same, each method of raising revenue will affect the economy differently. For example, the same amount of revenue may be raised either through taxing the people or through floating bonds in the market but the effect of each one of these two methods is of raising the government revenue will be different. Even in the case of taxes the effects will be different in the case of different tax levies like the income tax and excise duty.

Similarly, the government can incur a given expenditure in several ways. It might, for example, spend upon building hospital or slum clearance or on the construction of a sugar mill or on unemployment doles. The effect on the level of aggregate economic activity will be different although the total expenditure is the same in each case. An expenditure of 5 crore incurred on constructing a new national highway or on slum clearance will not affect the aggregate investment activity in the private sector adversely; if anything, it will affect private investment favourably by causing an increase in the demand for raw materials and equipment needed for road construction or for housing the slum dwellers. But if the same amount is spent for starting a new sugar factory, it might cause an offsetting fall in the aggregate private investment by depressing the marginal efficiency of capital in the private sector. Consequently, the beneficial effects of public expenditure on the level of aggregate economic activity will be partially lost. Thus a balanced budget is not neutral in its effects on national income and economic activity unless it is assumed that the composition of expenditure and income remains unchanged from year to year. Although the level of aggregate economic activity in the economy can be affected by varying the size of a balanced budget, the stabilizing effect of the fiscal policy depends largely on the size of the surplus or deficit in the budget.

The extent to which fiscal policy can prove effective as an instrument of economic stability depends on the extent to which the government can vary the difference between the income and expenditure rather than upon the balanced budget and the change in its size.

**Objectives of Fiscal Policy**

As an instrument of macroeconomic policy, the goals of fiscal policy are likely to be different in different countries and in the same country in different situations. For example, while in a developed economy operating either at the full or at near-full employment level the goal of fiscal policy should be the maintenance of full employment while in a developing economy the main concern of fiscal policy has to be the promotion of economic economy growth with stability and reduction in the economic inequalities.

Broadly speaking, overall fiscal policy involves two types of important decisions. While one of these two decisions is related to the goal of full employment, the other is concerned with determining the social priorities. The second policy decision is concerned with the issue of allocation of economy's productive resources as between their different rival uses should more resources be allocated for education, health care, public housing slum clearance, transport, etc. The government expenditure on different items in any society will be determined by the prevailing social values.

Economists generally agree that fiscal policy should be employed to achieve full employment and economic stability in the economy. Before the great depression of the 30s, by economic stability was largely understood the stability of the general price level. The severity of the depression focussed attention on the need to remove unemployment and to employ fiscal policy for this purpose. The Employment Act of 1946 in the USA stated that it was the responsibility of the federal government to use all possible means, including fiscal policy, to promote maximum employment, production and purchasing power in the economy.

After the Second World War, inflation has become a worldwide problem. Consequently, economic stabilization has come to be widely defined so as to include the elimination of inflationary pressures in the economy. This means that the achievement of full employment and price stability should be simultaneously attained through the instrument of fiscal policy. At times, however, both these goals may be difficult to achieve as these might be mutually inconsistent. An economy which wants to achieve full employment must accept moderate price rise unless it resorts to price control, rationing and wage freeze policies.

## 6.4 KEYNESIAN ECONOMICS AND DEVELOPING COUNTRIES

Some writers are of the view that Keynesian economics does not command universal application. Its application, they say, is limited to

advanced countries like the U.K. or the U.S.A. Keynesian economics is believed to be the economics of Depression; and hence, according to some, it cannot be applied to the cases of under-developed countries, for such countries are in the midst of secular inflation. Schumpeter contends that "practical Keynesianism is a seedling which cannot be transplanted into foreign soil; it dies there and becomes poisonous before it dies." In the same sentiment, Harris writes that "those who seek universal truths applicable in all places and at all times, had not better waste their time on the General Theory.

Some Indian economists also hold a similar view. A.K. Dasgupta remarks: "Whatever the generality of the General Theory may be in the sense in which the term 'general' was used by Keynes, applicability of the propositions of the General Theory to conditions of an underdeveloped economy is at best limited."5 V. K. R. V. Rao observes that the "blind application of the Keynesian formulae to the problems of economic development has inflicted considerable injury on the economies of underdeveloped countries and added to the forces of inflation that are currently affecting the whole world."

But there are others who hold quite opposite views. Some writers in this latter group maintain that "the Keynesian theory is a general theory of income determination; it is valid for a developed as well as underdeveloped economy." A few among these writers have challenged the views of the former group of writers who are opposed to the application of Keynesian economics to backward countries. According to this latter camp, Keynesian tools and concepts are still applicable to cases of underdeveloped countries. Let us examine the views of both the groups of writers side by side with reference to Keynesian concepts, tools and assumptions.

**Nature of Unemployment**

Keynes is mainly concerned with the problem of involuntary unemployment in the advanced countries and his whole thesis relates to the question of how to secure full employment in the case of these countries.? In Keynesian theory unemployment is caused by deficiency in effective demand. V. K. R. V. Rao maintains that in underdeveloped countries, there is no involuntary unemployment, but there is disguised unemployment. Again, unemployment here is caused not by lack of effective demand but by lack of complementary resources.

The above view, however, is not always correct for underdeveloped countries. In these countries, unemployment is rampant, both in the agricultural sector as well as in the industrial sector. Similarly, under employment, be it visible or disguised, is partly involuntary in nature, and arises out of lack of alternative openings. It is also not right to say that in backward economies, there is always a lack of resources. Underdeveloped countries are often rich in resources; but the problem is that these resources are not yet properly utilised. These resources can be utilised with the help of higher monetary incentives and effective demand. In fact,

effective demand in underdeveloped countries is not adequate. Effective Demand

It is often contended that in underdeveloped countries, effective demand is quite sufficient, and the Keynesian analysis which mainly advocates the raising of effective demand for removing unemployment is not applicable in backward economies.

In underdeveloped countries, due to the low per capita income, effective demand (ie., purchasing power) is never adequate; on the other hand, it is very low. The principle of aggregate demand has the same significance in the explanation of inflationary conditions in developing countries as in the case of the inflationary gap analysis in mature economies. The principle provides a theoretical basis for policies aimed at controlling inflation in developing countries. But for the concept of aggregate demand and the related tool of analysis, the technique of national income accounting, which forms such an important basis for development planning, would not have been possible. Even in backward economies, the conditions of rising effective demand are essential for a favourable investment outlook, at least in the private sector. Rising aggregate demand is very important for breaking the vicious circle and for initiating a take-off.

Multiplier

Rao believes that Keynesian multiplier analysis does not work in underdeveloped economies. The working of the multiplier requires the existence of the following conditions:

(1) Involuntary unemployment,

(2) Elastic supply of output,

(3) Excess capacity,

(4) Elastic supply of working capital.

According to Rao, absence of the above conditions in backward economies stands in the way of operation of the multiplier process.

We have already explained that involuntary unemployment exists in backward countries. Here, all the above mentioned conditions are very much present. Excess capacity in industries, particularly in the public sector, as in India, is a problem. Investment itself has a capacity-creating effect in the long run.10 Supply of output and working capital in developing countries is not completely inelastic. Monetary and credit-creating institutions have been expanding the supply of working capital in all such countries in recent years. Outputs of the agricultural and consumption goods sector have also shown an upward movement in recent decades.

There are enormous possibilities for increasing the output in these sectors still further. In the long run, forward and backward linkage effects may help to increase output. Rao views the multiplier process in a quite static

setting. In a developing economy (and not in the traditional society of Rostownian type), in the long run, output cannot be inelastic. In the developing countries, interaction between the multiplier and the accelerator is likely to come about almost immediately after the initial injection of invest ment.11 Multiplier in underdeveloped countries will increase output, and bottlenecks and skill will not be stumbling blocks, if investment is taken up in moderate doses, and confined to quick-yielding type of consumer goods industries. In that case, Rao's fear of possible inflation may be eliminated,

Rao asserts that the existence of disguised unemployment in backward countries hinders the working of the principle of multiplier. To be operationally effective, multiplier requires, among other things, an elastic supply of the labour force willing to accept employment at the current wage level. However, Rao's view is not a correct presentation of the real situation in backward countries. In such countries, labour is abundant and cheap. A high magnitude of unemployment in the industrial sector, not to speak of the agricultural sector, makes the supply of labour elastic at current wages, as Prof. Lewis observes. Disguised unemployment of the primary sector can also be mobilised, as shown by Nurkse, at the current industrial wage rate, which is higher than the agricultural wage.

**Deficit Financing**

Prof. Rao maintains that the economic policy of deficit financing advocated by Keynes for securing full employment does not apply in backward countries. He holds this view primarily on the ground that the supply curve of output is inelastic in an underdeveloped country, and deficit financing in such a context is bound to be inflationary.

Rao himself accepts that deficit financing need not always be inflationary. It is rather self-liquidating in character. As we have already noted, the supply curve of output in developing countries is not really inelastic. If deficit financing is used for increasing the capacity and for expanding the output in the quick-yielding type of consumer goods industries, it need not be inflationary. Deficit financing, on the other hand, creates forced saving in the economy and thereby can increase the rate of capital formation in poor countries. Prof. Rao accepts this to be true. Deficit financing should be properly planned and should be moderate in dose.

Saving and Investment According to Prof. Rao, Keynesian policy of disregard for thrift is not helpful for economic progress in backward countries. He holds that the old-fashioned classical prescription of saving more and working harder is relevant for poor countries.

It is not right to believe that saving always determines investment. Saving and investment are independently taken up by different categories of people. Mere increase in saving cannot do anything favourable if it is hoarded or not productively utilised. It is investment and not saving that determines growth. The idea that low saving is bad arises implicitly from the connection that is believed to exist between saving and investment, more particularly from the connection that savings determines investment.

In fact, more correctly, investment determines saving and not vice versa. Investment has its effects on prices, which in turn influence income distribution and shares of profit and wage; and given the marginal propensity to save, the magnitude of saving is determined.

Low saving is sometimes beneficial. Low saving means higher consumption which means, other things being the same, higher profit, higher or investible surplus and higher investment. Thus, low savings need not hinder investment. The main bottleneck in underdeveloped countries is not low saving, but lack of utilisation of resources and of organisational ability. However, the bottlenecks can be reduced to a very great extent by increasing the tempo of investment, a large part of which can be financed by foreign capital. Thus, Keynes's analysis in which saving plays a passive role is still valid in backward countries.

Importance of Other Measures Keynes lays great emphasis on the role of state in eradicating depression. In underdeveloped countries, state action is indispensable in guiding and in lifting the economy from the rut of low level stagnation trap. The state can increase investment in social overhead capital and can create a favourable climate for increasing private investment. In other words, without increasing state responsibility, no plan of economic development can be a success.

Keynesian policy of public investment to achieve a higher standard of living and to provide increasing employment opportunities is applicable to underdeveloped countries.

Keynes emphasised the positive role of monetary and fiscal policies in advanced countries. In underdeveloped countries, monetary and fiscal policies are becoming more and more growth oriented. Keynesian monetary theory provides a logical framework for the discussion of the place of money in economic development. His framework helps us to identify the points at which quantitative monetary expansion may fail to generate economic development. Keynesian concepts of liquidity, national income accounting, inflationary gap and deficit financing, etc., are still being used with much popularity in developing economies.

## 6.5 SUMMARY

On concluding point of view Keynesian analysis has been used in recent years by Joan Robinson, Harrod-Domar and others for analysing long-run dynamic growth problems. Though not in the stagnant traditional society, Keynesian economics is largely valid in the case of developing societies with a growing organised sector. Keynesian theory provides an apparatus of thought, and its essential contents can be used for analysing a wide range of problems under varying conditions. Keynesian concepts and tools may be more or less applicable in our context much the same way as Malthusian, Marxian or Marshallian concepts. What is more important is not so much the written words of Keynes but the spirit of his analysis. Keynesian system as a whole may not be fully applicable, but taken with a grain of salt, the tool kits can be of great significance in the analysis and

solution of economic problems in underdeveloped countries. To use Dr. K.N. Raj's words, "discarding the Keynesian thesis as altogether inoperative in underdeveloped countries, is really throwing the baby away with the bath water.

**Check Your Progress:**

1. According to Keynes, business cycle is caused by variations in the rate of investment caused by fluctuations in the_____.
2. According to Keynes, the aggregate demand might increase because of _____.
3. The _____output supply absorbs the excess demand with a time lag.
4. According to Keynes, price rise during the time lag is _____inflation.
5. According to the Keynesian theory of inflation, a price rise due to excess demand only _____level is inflationary
6. Keynes used fiscal policy when referring to the influence of _____on savings and government investment spending financed through loans raised from the public.

## 6.6 QUESTIONS

Q) Explain following questions in detail

1. Explain Keynesian view on trade cycle.
2. Explain Keynes theory of inflation
3. What is the rate of inflation?
4. Explain inflationary gap.
5. What are the objectives of fiscal policy?
6. Explain Keynes view on role of government in economic activity of state.
7. Explain Keynesian theory of development special reference to developing countries.

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# Module IV

# 7

# POST KEYNESIAN ECONOMICS - I

**Unit Structure**



## 7.1 OBJECTIVES

- To make the readers aware ofthe development of theories breaking Keynesian tradition.
- To Elaborate evolution of new concepts that emphasized supply side
- To understand the monetary theory of trade cycles
- To study the Life Cycle Theory of consumption

## 7.2 INTRODUCTION

Post Keynesian Economics is a segment of economic theories that were developed either to break the tradition of Keynesian arguments or to supplement Keynesian arguments and make them applicable in modern times by providing supportive evidence. This section includes the topics like supply-side economics which emphasizes the supply side to provide solutions to economic problems. New Trade cycle Theory like Hayek's Theory of Trade Cycle and the Life cycle Theory of Consumption.

## 7.3 SUPPLY-SIDE ECONOMICS

### 7.3.1 Introduction

Supply-side economics is a relatively new thought in macroeconomics. Economists who believe that the supply side factors are more influential to reduce economic problems are called supply-siders. Their thoughts and ideas are called supply-side economics. The economic theory is divided into the Supply-siders and the Demand siders or Keynesians.Lord Keynes

and his followers emphasized the importance of demand. according to them the problems of recession and unemployment can be reduced by applying expansionary fiscal and monetary policies to increase aggregate demand.

But in the 1970s the western world experienced a crisis marked by simultaneous unemployment and inflation. The Keynesian theory had no solution to such a situation of simultaneous inflation and unemployment. A group of economists like Laffer, Irving Kristol, Paul Roberts, John Rutledge, Norman True supported supply-side solutions to the problem.

**7.3.2 The Difference Between Supply-Side Economics and the Demand Side Economics:** Although both the supporters of demand-side economics and supply-side economics aim at economic growth their policies and methodologies to achieve the desired objectives are different. The differences can be observed in the following lines.

**1 Emphasis on producer's V/S Consumers:** The demand side economists claim thatthe demand for goods can be generated by assisting consumers through governments spendings. If the Governments spends on creating jobs, for example, will help to increase incomes of the people which they will spend on the consumption of goods. But supply-side economics concentrates on encouraging businesses. According to them, production will generate employment and income which will create demand.

**2 Emphasize on Tax Cut Policy:** Supply-side economistsadvocatetax cut as a policy to encourage supply. Such policy is useful for businesspersons to encourage business activity. But demand-side economists believed that tax cuts should be granted to the consumers to encourage them to spend more on consumption.

**3 Government intervention:** The Supply-side economists claim for minimum government control for production and the economy. But demand-side economists expect intervention by the Government to encourage demand and growth through public spending. If Spending generated deficits in the short run, but as the economy grows and tax revenues increase, the deficits will diminish.

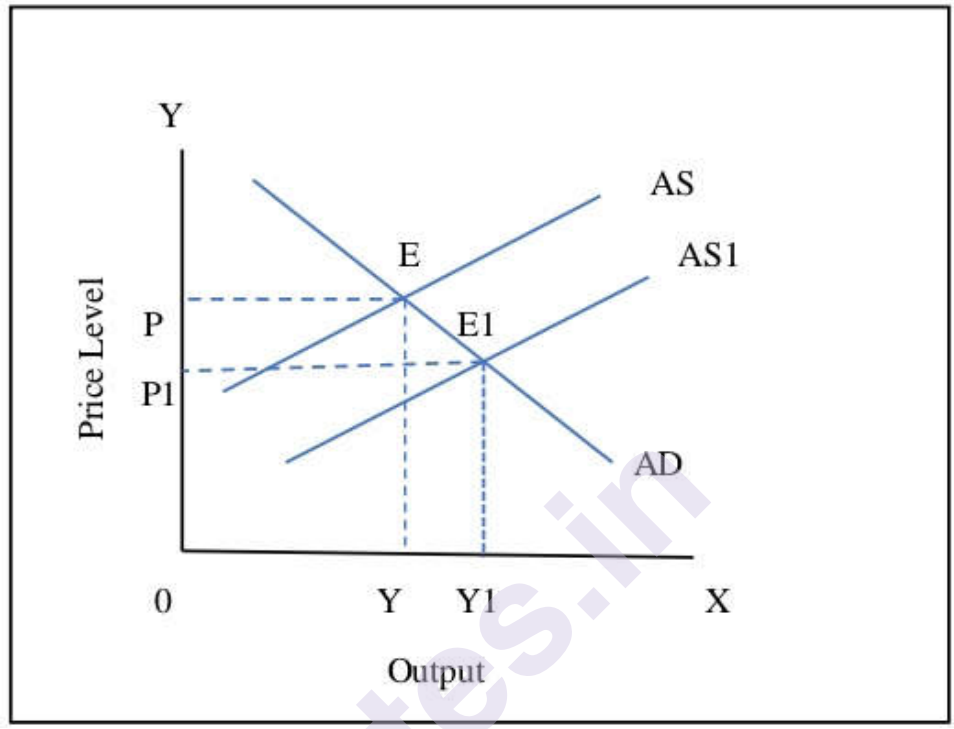
**4 Offer consumers more options versus more money:** Supply-side economics emphasizes Supply; the objective is to provide consumers with more products and service options to purchase. It implies supporting the businesses to devote resources for production and research to make a variety of products available to the consumers. As against, demand-side economics focuses on helping consumers maximize their income by reducing taxes to spend more on goods and services.

**7.3.3 Propositions of supply-side economics**

**1 Taxation and labour supply**– According to supply-side economists, if the rate of tax is reduced, labor supply increases this is becausethe after-

tax return on labor will increase.An increase in labor supplyleads to a change in the aggregate supply curve as denoted in the diagram.

**Figure 7.1**




In the above diagram, X-axis represents output, and Y-axis represents the price level. AD is the aggregate demand curve. AS is the original aggregate supply curve. E is the original equilibrium situation where the aggregate demand curve intersects the aggregate supply curve. At point E, theOP price is determined. When the government reduces the income tax rate, the labour supply increases. as a result, the aggregate supply curve ships to its right. Movement in the supply curve changes the equilibrium situation, E1 becomes the new equilibrium situation. At this new equilibrium point,the price falls from OP to OP1. But the output increases from OY to OY1. An increase in the level of output reduces unemployment in the economy. The problem of stagflation can be reduced by reducing tax rates.

2 **Incentive to save and invest**- According to supply-side economists, reduction in tax rates helps to increase saving and investment in the economy.Lower tax rates encourage savings. Lower tax rates for a business, will increase profit margin and encourage further investment and capital formation.

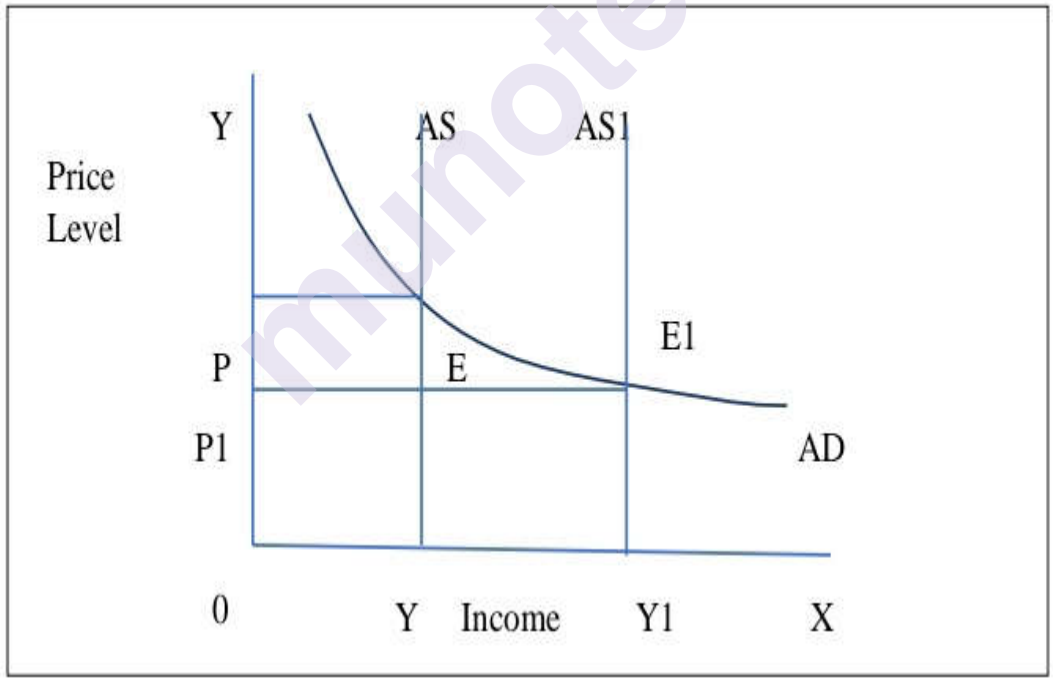
An increase in capital formation and investment also helps to increase labor productivity. The use of capital in the form of technology improves labor productivity. It will reduce labor costs. Lower labor costs, an increase in investment,and capital formation will increase the aggregate supply. The curve will shift to its right as denoted in the diagram. Which

will reduce the price. This way price can be reduced by increasing employment.

3 **Cost-Push effect of tax- Wedge-** In modern times there has been an increase in the activities of the government. The government requires more revenue to finance its activities.The welfare functions of the government also have increased in modern times. For that reason, the government requires revenue. The government gets revenue from taxes. According to demand-side economists (Keynes) increase in taxation reduces demand. When demand falls, output declines which reduces employment. But according to supply-side economists increased taxation increases the cost of production. As the cost of production increases, it shifts the supply curve to the backward direction. Thus, the growth of the public sector requires more funds. It imposes a high taxwhich causes the aggregate supply curve to shift to its left.

**4 Factor Supply and Out-Put Growth -** According to supply-side economists the long-term and medium-term growth of output is determined by the supply of the factors. For example, the supply of Labor and capital along with technology determines the growth of output in the economy. It is denoted with the help of the following diagram.

Figure 7.2

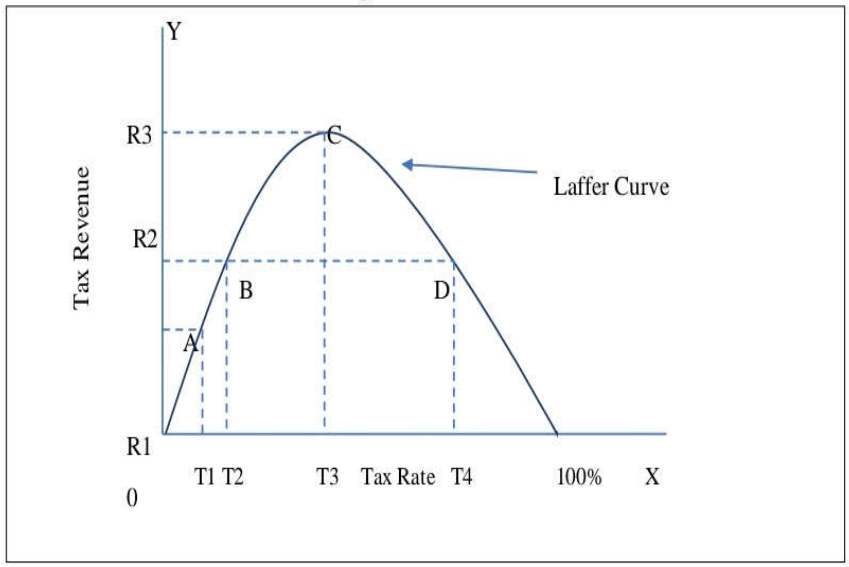


In the above diagram, Income is denoted on X-axis and the price level is denoted on the Y-axis.AS is the aggregate supply curve,AD is the aggregate demand curve.Both the curves intersect each other at point E. It is the original equilibrium situation. When the supply of labor and other factors of production including technology increases, the aggregate supply curve shifts to its right. This rightward movement of the aggregate supply curve changes the equilibrium situation. Now AS1 becomes the new aggregate supply curve. E1 is a new equilibrium situation. At the new equilibrium situation E1, OY1 one level of income and P1 price is determined. This income level is higher than the earlier level of income or output. OP1 price is less than the earlier price. This shows that an increase in supply or factors leads to an increase in output or growth of the economy. Thus,the medium-term growth rate of the economy is determined by supply-side factors.

**5 Underground Economy-** The supply-side economists advocated that the rate of taxes should be reduced by the government. If the rate of tax is very high, it encourages people to operate in the underground economy. The underground economy is also called a parallel economy or a black economy. when the taxes are very high people evade taxes. Sometimes it becomes difficult for the government to find out those people who evade taxes. This reduces the value of the government. Therefore, the supply-side economists advocated that the lower taxes would not only increase the revenue of the government but also discourage the people to evade taxes and operating in the black economy.

**6 Laffer Curve-** Arthur Laffer has pointed out the relationship between tax rate and tax revenue. According to him the relationship between tax rate and tax revenue is inverse. The demand-side economists could not explain any relationship between the tax and the revenue ofthegovernment. But according to supply-side economists when the government reduces tax, revenue earned by the Government through taxes, increases. The Laffer curve shows the limit on the increase in tax rates. The relationship between tax rate and tax revenue can be explained with the help of theLaffercurve.

Figure 7.3




In the diagram, the tax rate is measured on X-axis, andtax revenue is denoted on the Y-axis. LC is the Laffer Curve. The curve starts from zero. It slopes upwards up to point C. It slopes upwards upward till the tax rate OT3. When tax is OT3 the tax revenue is maximum it is OR3. After the OT3 tax rate, the tax revenue decreases. Suppose the tax rate is increased up to OT4, the tax revenue OR2.

But before the OT3 tax rate, the tax revenue can be raised. For example, If the tax rate is increased from OT1 to OT2 the tax revenue increases from OR1 to OR2.

In short, the Laffer Curve suggests that the tax revenue can be raised with an increase in tax rate only up to a certain extent. (OT3 in the diagram) but beyond that, it is not possible to increase the tax revenue by increasing the tax rate. Rather reduction in the tax rate would increase tax revenue.

## 7.4 HAYEK'S THEORY OF TRADE CYCLE

### 7.4.1 Introduction

The theories of trade cycles or business cycles are useful to understand fluctuations in the macroeconomic variablesin the economy. Economists suggest different causes of trade cycles. Earlier theories of trade cycles emphasized instability of investment in capital asset and investment, while Changes in relative input and output prices, interest rates, and profits were also emphasized. Factors like Uncertainty about the profitability of future business ventures and volatility of the associated expectations received much attention even before Keynes. But monetary factors got very little attention in Keynesian works. Hayek who represents the Austrian school emphasized that trade cycles occur due to inequality between the market rate of interest and the natural rate of interest.

### 7.4.2 Hayek's Monetary over-investment Theory:

Hayek's theory of trade cycles is a monetary theory.It emphasizes the importance of monetary factors in determining changes in the economic variables. According to him, it is necessary to examine deviations of prices from their equilibrium position which were caused by the monetary factor rather than movements in the general price level.

Hayek developed his theory based on the ideas of Wicksell. Wicksell made difference between the natural rate of interest and the market rate of interest. The natural rate of interest is the rate at which the demand for loanable funds equals the supply of loanable funds. The market rate of interestis the one that prevails in the market at a particular time. The two rates must be brought into equality for attainingequilibrium.

Hayek's theory is called 'monetary' overinvestment theory because it explains that overinvestment of resources in the capital goods sector is the only cause of the business cycle, and the overinvestment occurs when there is too much expansion of money. Cheaper money encourages the producers to undertake capital-intensive methods of production as capital is less costlyand mayprovide a higher rate of profit.

According to him, the economy is in balance, if the proportion of the resources devotedfor consumer goods and capital goods are in balance. Producers decide to invest resources in their capacity. According to Hayek, so long as the natural rate of interest equals the market rate of interest, the economy remains in a state of equilibrium and full employment.

**Prosperity:**

when the market rate of interest is less than the natural rate of interest the prosperity phase begins. As the demand for investment funds is more than the supply of existingsavings, theinvestment demand is satisfied by increasing the supply of money. As a result, the interest rate falls. Itencourages producers to demand more loans. Theloans are investedto produce more capital goods. The capital-intensive methods are used for producing more capital goods. Consequently cost of production declines and profits increase. As the production process becomes very extensive with the adoption of capital-intensive methods, prices of capital goods in comparison to consumer goods.

If there is full employment in the economy, there will bea transfer of factors of the production from the consumer goods sector to the capital goods sector. Consequently, the production of consumer goods falls, their prices increase,and consumption decreases. Forced savings increase with the fall in consumption which is invested to produce capital goods. This leads to an increase in their production. On the other hand, with an increase in the prices of consumer goods, their producers earn more profits. They try to produce more as they are encouraged by high profits. They are ready to pay higher remuneration to factors of production. Due

tocompetition between the two sectors, prices of factors and prices in the economy increase. This leads to prosperity.

**Depression:**

According to Hayek, when the prices of factors are rising continuously, the rise in production costs bringsa fall in the profits of producers. The producers invest less in capital goods to avoid loss. Consequently, the natural interest rate falls. As a result, banks put restrictions on loans. With low profits and restrictions on loans, producers reduce the production of capital goods. Labor-intensive techniques are preferred in such situations.

There is less investment in capital goods. The production process is small and labor-intensive, the demand for money is reduced, which increases the market interest rate which is more than the natural interest rate. There is a transferof the factors from the production from capital goods to that of consumer goods. The consumer goods sector can not absorb the factors of production beyond a certain capacity. As a result price of factors falls and resources become unemployed. Due to a reduction in the prices of goods and factors and unemployment in the economy is pushed into depression.

**Revival:**

Hayek suggests that when the decrease in prices ends duringthe depression, banks increase the supply of money. This may reduce the market rate of interest below the natural interest rate. This provides support to investment and the process of revival begins.

**7.4.3 Implications:**

**1. Price as Signals-**

According to Hayek, Prices are determined by the market forces, but they provide a signal to the market players that is buyers and sellers. It conveys necessary information to each participant in the market about changes in valuation made by buyers and the relative scarcity of resources. The price signals provide the basis for economic coordination. If price signals are misrepresented there is discoordination.

**2. Role of Interest Rates-**

Interest rates bring equilibrium in the loanable funds market. It brings savings and investment into equality. Change in rate of interest due to change in saving patterns determines investment patterns. Lower interest rates encourage investment.

**3. Monetary Manipulations -**

Monetary manipulations create unfavorable conditions. Credit expansion reduces the rate of interest. It stimulates demand for loans for production, but beyond the capacity to produce in time. But with low-interest income earners save less. As a result, monetary management may create unfavorable conditions.

**4. Heterogeneous Capital Goods**

Capital goods are heterogeneous in nature and are related to each other at different degrees of substitutability and complementarity. If monetary manipulation (Artificial Supply of Money) creates over-investment in higher-order capital goods. The relationship between high order capital (Machines)goods and low order capital goods (Labour) is distorted over time which creates an imbalance.

**5. Effect on Capital Goods**

During the early phase of the cycle, a low rate of interest favours investment in higher-order capital goods (Machines). As a result, lower-order capital goods (labours) trigger their prices to move up sharply. Increased demands in the credit market push the interest rate higher. It affects investment in higher-order capital goods.

**6. Opposite Demand for Output and Factors-** In a particular period, consumption spending and investment spending move in opposite directions especially when there is full employment. The shifting of resources between consumption and investment activities and between the different stages of the production process as a response to changes in consumer preferences over time brings the economy to adjust for equilibrium.

**7. Imperfect Information About Market-** Participants in the market do not have perfect knowledge about consumer preferences, resource availabilities, technology, the plans of other market participants, and the effect of the plan on one another. if market participants were already having the information that the price system conveys, then distortions of price signals could not cause cyclical fluctuations or any other kind of disequilibrium.

**7.4.4 Criticisms:**

The monetary over-investment theory of Hayek has been criticized on the following counts:

**1. Narrow Assumption of Full Employment:**

The theory assumes that there is full employment and therefore more capital goods can be produced by reducing consumer goods. But in the realworld, there is no full employment. If the resources are unutilized, there would be simultaneous expansion in the capital goods sector and consumer goods sector as result, a need of transferring resources from one sector to the other may not arise.

**2. Unrealistic Assumption of Equilibrium:**

The theory assumes that initially savings and investment are in equilibrium,but the banking system breaks this equilibrium. But this assumption is unrealistic. The equilibrium situation changes due to internal and external reasons.

**3. Interest Rate, not the only Determinant:**

According to Hayek changes in the rate of interest is the cause of changes in the economy. But apart from changes in the rate of interest, the factors like expectations of profit, innovation, invention, etc. also affect trade cycles.

**4. Excessive Importance to Forced Savings:**

Prof. Strigl has criticized this theory as it givesexcessive importance to forced savings. According to him, when people with fixed incomes reduce their consumption due to high prices the high-income groups also reduce their consumption. In such a situation savings will be voluntary. The expression of forced saving is wrong.

**5. No decline in Investment with Increase in Consumer Goods:**

It has been suggested by Hayek that with an increase in the productionof consumer goods and profits in the consumer goods sector,investment in capital goods declines. But according to Keynes,with the increase in profits of consumer goodsmarginal productivity of capital increases. As a result, investment in capital goods also increases.

**6Various Phases of Trade Cycles not explained:**

As the theory explains only a few phases of the trade cycle, therefore it is regarded as an incomplete explanation.

## 7.5 LIFE CYCLE HYPOTHESIS

### 7.5.1 Introduction

The life cycle hypothesis is associated with the name of Ando Modigliani and Richard Brumberg. It substituted the hypothesis developed by Keynes. Keynes proposed that Savings grow with income growth, but at the aggregate level, it may reduce aggregate demand. Ando Modigliani and Richard Brumberg suggested that individuals plan their consumption and savings over a long period to allocate their consumptionover the lifetime. Their theory was contemporary to Friedman's work on the permanent income hypothesis, they developed a theory of consumer expenditure based on the life cycle of income and consumption requirements of households. Friedman's hypothesis is suited for cross-section data, but Modigliani and Brumberg tried to derive time-series implications of their hypothesis.

According to the Life Cycle hypothesis,lifetime consumption is a function of the lifetime expected income of the consumer. It asserts that an individual plans his/her consumption and savings pattern based on their anticipated lifetime income. The consumption of the individual consumer depends on the resources available to him, the rate of return on capital, the spending plan, and the age at which the plan is made. The present value of his resources includes income from assets or wealth or property and current and expected Labour income. Thus, his total resources consist of

his income and wealth. Life Cycle theory links consumption and savings behavior to demographic factors, especially to the age distribution of the population. The marginal propensity to consume out of permanent income, changes with age. With growing age MPC declines. In an economy, there are people of many different ages and life expectancies, so the MPC for the economy is a mixture of corresponding MPCs. As a result, economies with different age mixtures have different marginal propensities to save and consume.

### 7.5.2 Assumptions

The following are assumptions of the Life Cycle Hypothesis

1 There is no change in the price level during the life of the consumer.

2 The rate of interest paid on assets is zero.

3 The net assets of the consumer are the result of his savings.

4 Future consumption is the outcome of a consumer's current savings.

5 A Consumer expects to consume his total lifetime earnings plus current assets.

6 He does not plan any donations.

7 There is certainty about consumers' present and future flow of income.

8 The consumer has a definite conscious vision of life expectancy.

9 Consumer is aware of the future emergencies, opportunities, and social pressures which will affect his consumption spending.

10 The consumer is rational.

Based on these assumptions life cycle hypothesis explains that the consumer will maximize his utility over the lifetime. His utility maximization depends upon his lifetime resources.

In symbolic terms

$$C_t = f(V_t)$$

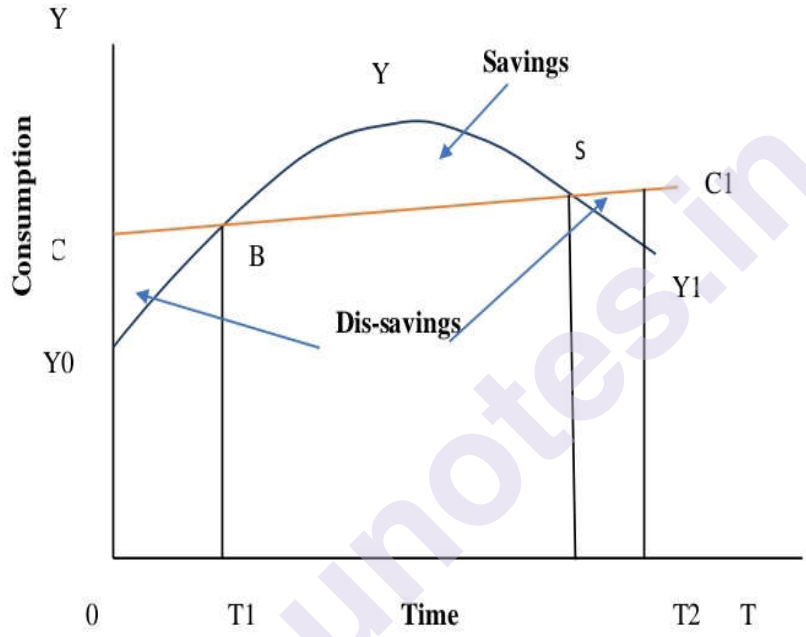
Where $C_t$ – Consumption at time t

$(V_t)$ - Total resources at time t

Life cycle theory connects the consumption and saving behaviour of people with the age distribution of the population. The consumption of the consumer is proportionate to the resources available to him. But the consumption of the individual depends upon whether the consumption plan is made at an early age or later age. An Individual's income is relatively low in the early years of life. In the middle of life, an individual's income is high. He earns from his labour and assets. Again, at the later stage of life, an individual's income is modest because he earns

very little from his labours and, he has few assets. As in the middle of life income of the individual is high, the consumption level throughout the life remains constant. The life cycle hypothesis explains that in general, the individuals maintain the same level of consumption because in the later stage of life they utilize the savings created in their prime earning years or they may liquidate their assets. In the early stage of life, if income is not sufficient to maintain certain levels of consumption, the individuals may maintain their consumption level through borrowings. The theory predicts that wealth accumulation takes a hump-shaped pattern as denoted in the diagram.

Figure 7.4




In the figure, C C1 is the consumption curve. Y0Y1 is an individual's income curve, it shows an individual's income over the lifetime T. During the early period of life (OT1) individual's income is less than his consumption. The consumption curve CC1 is above income curve Y0Y, he borrows to maintain his consumption level. Y0CB is dissaving. His consumption level is CB which is almost constant. The middle years of the life of an individual are denoted by T1T2. In the middle years, his income is greater than his consumption. The income curve Y0Y1 is above the consumption curve CC1. His saving level is very high. BYS is the total savings in middle age. Further, in the later stage of the life denoted by T2T, again his income drops but consumption level remains somewhat the same. The consumption curve in this phase of life is above the income curve. He utilizes savings in the earlier phase of life to maintain the constant level of consumption. SC1Y1 is the dissaving.

### 7.5.3 Implications

**1. Saving rate is determined by the growth rate of Income-**

According to the Keynesian theory, the aggregate saving rate is determined by the level of income, but the life cycle hypothesis implies that the savings rate depends on the growth rate of income.

**2. Different Marginal Propensities to Consume-**

The life cycle hypothesis implies different marginal propensities to consume from permanent income, transitory income, and wealth. His consumption determined by his lifetime expectations of income remains constant, but his income at different stages of life changes as a result ofMarginal propensity to consume changes.

**3. Average Propensity to consume remains Constant-**

As income increases, APC remains constant with growth in income because the share of Labour income in total income and the ratio of wealth (assets) to total income are constant as the economy grows.

**4. Smooth and Uninterrupted Consumption-**

The life cycle hypothesis shows that savings change over the lifetime of a consumer. In an early phase of life, a consumer may not have wealth, but he will save and collect wealth during his working years. But again, in the later stage of his life, during retirement, he will use earlier savings. It implies that the consumer wants smooth and uninterrupted consumption over his lifetime. During working years, he saves and later he dissaves.

**5. Economies with different age compositions and wealth have different MPCs and MPS**

Consumption and saving propensities will change with wealth composition and age composition. A high-income family consumes a smaller proportion of their income than a low-income family. Economies with different wealth composition different age groups have different propensities to consume and save.

### 7.5.4 Criticisms

1. **Wrong Assumption ofLifetime Consumption-** The hypothesis assumes that a consumer plans his consumption over his lifetime. But a consumer may focus on the present rather than on future consumption as the future is uncertain.

2. **Higher Savings for Next Generations.** The life cycle hypothesis assumes that at the later stage of life, savings decline, but people may accumulate more wealth to pass the heritage to the next generation. Also, they may consume less due to unwillingness to consume more at old age.

3. **Consumption depends on the Mindset of Consumers** - Consumption not only depends upon income and wealth but it may depend upon one's

attitude towards life. People with the same income and assets may have different levels of consumption and savings.

**4. Consumer May Behave Irrationally –** It has been assumed that the consumer is rational he has complete knowledge about his income and future income. His consumption decisions are determined by the lifetime income, he plans his consumption over the lifetime. But this is an unrealistic assumption because consumers cannot be completely rational, they may not have entire knowledge about their lifetime income, and they may not have the capacity or willingness to plan their consumption for their lifetime.

**5. Requires Estimation of Many Variables-** This theory depends on many variables such as current income, the value of assets, future expected Labour income, wealth, etc., the assessment of numerous variables becomes very difficult.

**6. Credit Constraints**. An individual may have little opportunity for borrowing in the capital market in the early stage of life based on his expected future income. As a result, consumers may change with changes in current income than predicted income based on the lifetime income.

**7. No Consideration of Windfall Gains** The hypothesis does not take into consideration sudden gains and their effects on consumption.

**8 Consumption is not smooth-** The life cycle theory assumes that the consumption is smooth and constant throughout the life of an individual, but it has been observed in US and UK that consumption increases in the middle age, and it falls in the later stage of the life.

Despite the limitations,the Life cycle hypothesis has a key position in modern macroeconomic theory.

## 7.6 SUMMARY

Post Keynesian Economics is a school of thought that is based on Keynesian ideas but rejects the ideas of mainstream economics. Supply-side economics emphasizes the supply side or production. Economists who believe that the supply side factors are more influential to reduce economic problems are called supply-siders. both the supporters of demand-side economics and supply-side economics aim at economic growth their policies and methodologies to achieve the desired objectives are different. The proposed reduction in taxes to encourage production or supply. The theory that belongs to post Keynesian theory is Hayek's theory of trade cycles. Earlier theories of trade cycles emphasized instability of investment in capital asset and investment, while Changes in relative input and output prices, interest rates, and profits were also emphasized while analyzing trade cycles.Ando Modigliani and Richard Brumberg. It substituted the hypothesis developed by Keynes. Keynes proposed that Savings grow with income growth, but at the aggregate level, it may reduce aggregate demand. Ando Modigliani and Richard Brumberg suggested that individuals plan their consumption and savings

over a long period to allocate their consumption in the best possible way over the lifetime.

## 7.7 QUESTIONS

1 What is supply-side economics?Explain the prepositions of supply-side economics.

2 Bring out the difference between demand-side economics and supply-side economics.

3 Critically evaluate Hayek's theory of Trade Cycles.

4 Describe Hayek's Theory of Trade Cycles. What are its implications?

4 Explain Life Cycle Hypothesis. What are its implications?

5 Examine Life Cycle Hypothesis.

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# 8

# POST KEYNESIAN ECONOMICS -II

**Unit Structure**



## 8.1OBJECTIVES

1. Understanddifferentiate between Milton Friedman's demand for Money and earlier versions of demand for money
2. To evaluate Friedman's Theory of demand
3. To examine the behaviour of Long Run Philips Curve
4. To study New Keynesian Approach
5. To understand Mankiw's model of New Keynesian Economics

## 8.2 INTRODUCTION

Post Keynesian Economics is a body of knowledge that is evergrowing. Many theories and arguments are based on Keynesian theories. A few more theories are included in this unit. One of the prominent theories among these is Friedman's Demand for money theory. The theory of demand by Milton Friedman is partly based on Keynesian ideas but it deviates in some respects from Keynesian Theory. Another argument based on the Keynesian idea is Philips Curve which expresses the opposite relationship between inflation and unemployment. The argument that such a relationship does not hold in the long run is explained in detail.

Mankiw tried to support the Keynesian argument that there prevails involuntary unemployment in the economy through his theory of menu

costs. The problem of the existence of inflation and unemployment at the same time in the economy termed as stagflation also has a prominent position in Post Keynesian Economics, The problem of stagflation has been discussed in this unit.

## 8.3. MILTON FRIEDMAN'S DEMAND FOR MONEY

### 8.3.1 Introduction

The Classical quantity theory of money was criticized by the Cambridge economists, especially by Keynes. He argued that the classical theory treated monetary theory and the value theory separately. Keynes reformulated the quantity theory of Money by connecting monetary theory and value theory and linked interest rate determination theory to the monetary theory. Keynes's theory of money got wide acceptance. But a group of economists at the University of Chicago were working on the traditional quantity theory of money. At the University of Chicago, the scholars like Milton Friedman Henry Simons, Lloyd Mints, Frank Knight, and Jacob Viner developed a relevant version of the quantity theory of money. They integrated quantity theory money with general price levels. Milton Friedman published an article in 1956"Quantity Theory of Money - ARestatement". The model of the new version of the quantity theory of money was discussed in the article. With the publication of the article, Monetarist's revolution turned out to be significantly stronger. The theory of demand by Milton Friedman is partly based on Keynesian ideas as he treats demand for money as a part of the theory of capital but the theory by Milton Friedman does not consider the classification of the motives for holding money as it was considered by Keynes.

### 8.3.2 Friedman's Theory

Milton Friedman in his restatement of Quantity Theory Money treatedmoney as one type of asset. The demand for money is properly equal to that of the demand for a consumption service. He treats thenumber of real cash balances (M/P) as a commodity. It is demanded because it is useful for the person who owns it. Economic agents such as households, firms, andthe government want to hold a certain portion of their wealth in the form of money.Thus, money is an asset or capital which has a positive return. Hence Friedman'sdemand for money theory is a part of wealth theory. Friedman takespermanent income as a proxy for wealth.

### 8.3.3 Money Demand Function

According to Friedman, demand for money is for holding money.He asserts that money is one type of asset in which people hold their wealth. Individuals hold money for transaction purposes. Money serves as purchasing power, and it is also very convenient for buying goods and services. His approach to the demand for money does not consider any other motives for holding money.

According to Milton Friedman wealth takes five different forms, Money, Bonds, Equities,Physical Goods, and Human Capital. Each form of wealth has distinctivequalities and they give returns.

1. Money – It includes currency, demand deposits, and time deposits which yield interest on deposits. Money also generates a real return in the form of accessibility, security, etc. to the holder.

2. Bonds - Bonds are securities that give interest income, fixed in nominal terms. The yield on bonds is the rate of interest and anticipated capital gain or loss due to expected changes in the market rate of interest.

3. Equities- are a claim to a time stream of payments that are fixed in real units. The return from equity is determined by the rate of dividends, expected capital gain or loss, and expected changes in the price level.

4. Physical Goods -Physical goods or non-human goods are stocks of producer and consumer durables.

5. Human capital – is the income-generating productive capacity of human beings such as education, skill, or good health.

The first four formswere categorized as non-human wealth while the last one is human wealth.Non-human wealth can be converted into money very easily. Human wealth can neither be liquidated easily nor can it be used as securityto borrowmoney.

The wealth can be expressed in a symbolic term as under-

$W = \frac{y}{r}$Where $W$- Current value of total wealth, y –the total flow of expected income from five types of wealth, r-rate of interest

## 8.3.4 Determinants of Demand for Money

Keynesian demand for money is a function of the level of income and the rate of interest. But Friedman's theoryjustifies that the demand for money or an asset is determined by the following factors.

**1 Total wealth:** An individual's total stock of wealth is one of the importantdeterminants of money demand in Friedman's Theory. The greater the wealth of an individual,the more money is demanded transactions and another purpose.Friedman used discounted value of permanent income as an index ofwealth. The permanent income is the aggregate expected yield fromwealth during the person's lifetime.

**2 The proportion of human to non-human wealth:** The proportion of human to non-human wealth (permanent income) is an important factor in determining the moneydemand.The ratio of non-human to human wealth or the ratio of wealth to income is denoted as***w.*** But Friedman in his Permanent Income Hypothesissuggested that the MPC out of human wealth is lower. Therefore,even if the ratio of human wealth to non-human wealth isrelevant, it does not play an important role in Friedman's theory.

**3 The expected rate of return on money and other financial assets:**Unlike other theories that demand money, Friedman takes a broad definitionof money. He includes time deposits along with the demanddeposits and currency. So, money has expected a nominal returnlike other forms of assets. As the permanent income of an individual is steady,his wealth is stable. Moneyand other financial assets compete to get their shareout of this fixed wealth. In other words, the proportion of money or other financial assets is determined by the incentivesfor holding other assets like bonds, equities relative to money. If the return on the financial assets for example bonds and equities is higher the demand for money will be lower. But if the returns on other financial assets like bonds and equity are lower, the demand for money will be greater.

**4 Price and expected inflation:**Inflation has twoopposite effects on demand for money. Inflation reduces the purchasing power of money. As a result, an individual will want to hold highermoney balances so that he will be able to maintain the same purchasing power as earlier. But due to inflation, there is an increase in the relative return on non-human assetssuch as real estate, gold, etc. as a result,people will hold less money and invest in high-yielding non-human assets. Therefore, the demand for money depends on the

**5 Other variables:** Variables such as taste and preference, expectedeconomic instability like global financial crisis, phases of the business cycle, etc.,and institutional factors like a method of wage payment, payments ofbillstoo affect the demand for money.

## 8.3.5 Friedman's Equation for Demand for Money:

$$\frac{Md}{p} = f(y_p, w, (R_b - R_m), (R_e - R_m), (\pi^e - R_m), z)$$

In the equation

$\frac{Md}{p}$ - Demand for real money balances

*f*- Functional relationship

$y_p$- Real permanent income

$w$- Ratio of human wealthto nonhuman wealth

$R_m$- Expected nominal return from money

$R_b$- Expected nominal return from bonds

$R_e$- Expected nominal return from equity

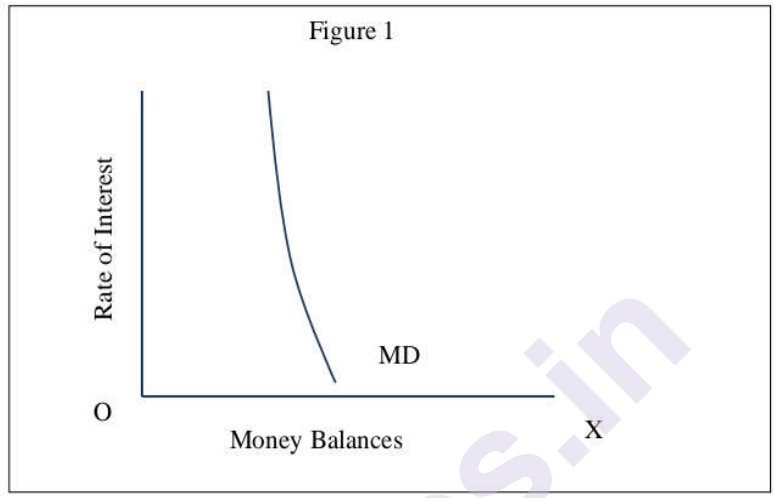
$\pi^e$- Expected rate of inflation

$z$- Any other variables which seem to have the power to affect the utility derived from real money

The demand for real money balances, according to Friedman, increases when permanent income increases and declines when expected returns on bonds, equities, or assets increase compared to the expected nominal return on money.

This is indicated with help of the following diagram.

**Figure No. 8.1**




In figure 8.1 Money balances are denoted on X-axis while the Rate of Interest is shown on Y-axis. MD is demand for money. The demand for money has a very little effect due to changes in the rate of interest. As the rate of interest changes, change in the long run demand for money is negligible.

Friedman introduces the quantity theory as the theory of the demandfor money and the demand for money is assumed to depend on assetprices or relative returns and wealth or income. He demonstrates that a theory of demand for money becomes a theory of prices and output.

He argues that a change in the stock of money leads to a change in the price level or income or both in the same direction. It implies that if there is less than full employment in the economy, an increase in money supply will lead to a rise in output and employment because of a rise in expenditure in the short period. Changes in money supply cannot affect money balances in the long run. At the full employment level, an increase in money supply will raise prices.

## 8.3.6 Critical Evaluation

**1 Very Broad Definition of Money-**Friedman includes currency anddemand deposits (M1) and time deposits with commercial banks (M2) in his definition of Money. His broad definition suggests that the interestelasticity of the demand for money is negligible. For example, if the rate of interest on time deposits increases, the demand for time deposits (M2) will rise. But thedemand for currency and demand deposits (M1) will fall. As a result, the overall effectof the rate of interest will be

negligible on the demand for money. Further, Friedman's analysis does not make any difference between long-term and short-term interest rates for the deposits. For demand deposits (M1), a short-term rate of interest is preferable, buta long-term rate of interest ismore suitable for time deposits (M2).

**2. Money, not a Luxury Good-** Friedman treated moneyas a commodity. Most probably money in his theory was treated as a luxurious commodity as includedtime deposits in the definition of money.He included time deposits in the notion of money because he observed that in the United States, there was a highermoney supply than income. But suchobservation proved wrong in the situation ofEngland.

**3 Excessive Importance to Wealth Variables-** In Friedman's demand formoney function, wealth variables are desirable to income.In this case, thesimultaneousoperation of wealth and income variables is not acceptable to some economists. For example, Johnson explains that the incomein Milton Friedman's Theory is the return on wealth,also wealth is the present value of income. The presence of the rate ofinterest and one of these variables in the demand for money functionmakes the other variable redundant.

**4 Much Importance to Demand for Money-** Friedman describes the supply of money tobe unstable as it is determined and changed by the monetary authorities.But the money supply consists of bank deposits created bychanges in bank lending. Bank lending is determined by bankreserves which expand and contract withdeposits and withdrawals ofcurrency by non-bank financial intermediaries; borrowings bycommercial banks and inflows andoutflows of money from abroad;purchase and sale ofsecurities by the Central Bank. But Friedman just considers the supply of money as an exogenous factor which is unreasonable.

**5. Does not consider Time Factor-** Friedman doesnot specify thetime dimension. The time required for the variables to cause difference andthe time required for the adjustmentis not specified.

**8.3.7 Summary:** Milton Friedman analyzed money as a consumer good and demand for money as a direct extension of the demand for any consumer durable goods which has utility. According to him,Individuals hold money for transaction purposes. Money works as purchasing power, and it is also very convenient for buying goods and services. His approach to the demand for money does nottake into account other motives for holding money. In his theory wealth is one of the important determinants of demand. He categorizes wealth into human and non-human wealth but takes permanent income as a proxy for wealth. Friedman's stable demand for money is a function of the permanent income of individual consumers.The demand for real money balances, according to Friedman, increases when permanent income increases and declines when expected returns on bonds, equities, or other assets increase compared to the expected nominal return on money.He argues that a change in the stock of

money leads to a change in the price level or income or both in the same direction. It implies that if there is less than full employment in the economy, an increase in money supply will lead to a rise in output and employment because of a rise in expenditureonly in the short run. Changes in money supply cannot affect money balances in the long run.

## 8.4 PHILIPS CURVE

Classical economists believed in full employment equilibrium. Keynes refuted the idea and stated that the economy can attain equilibrium atless than full employment level. A.W. Philips a professor at the London School of Economics analyzed the data and developed a theory in 1958 about the relationship between unemployment and inflation.

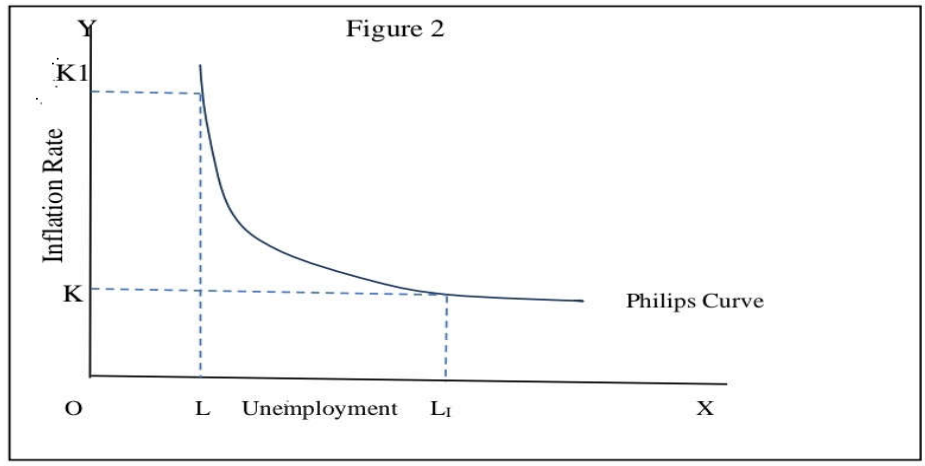
He gathered data about unemployment and changes in wage levels in the UK from 1861 to 1957. By observing the relationship between wage rates and unemployment rates, he explained the relationship between inflation and unemployment rate. He observed that there is a trade-off between inflation and unemployment. Inflation and unemployment are inversely/negatively related. If the rate of inflation is high, the rate of unemployment is low. At a lower rate of unemployment, there is a high degree of inflation.

Low unemployment means high demand for workers. At low unemployment when there is a high demand for workers, wages increase. An increase in wages increases incomes and inflation. Therefore, at a low level of unemployment, there is a high inflation rate. The trade-off between inflation and unemployment suggests that the government cannot achieve lower inflation and lower unemployment simultaneously. 1 To achieve lower inflation it must accept higher unemployment. Or 2 Achieve lower unemployment it must accept the higher inflation rate

The relationship between unemployment and inflation is denoted with the help of the Philips curve.

**Figure No. 8.2**

**Philips Curve**



As denoted in the diagram,the Philips curve showsan inverse relationship between unemployment and inflation. For example, when the rate of inflation is OK the level of unemployment is OL1. It means, at a lower inflation rate, the unemployment rate is higher. In other words, to achieve a lower inflation rate the government must accept a higher unemployment rate.

But on the other hand, when the rate of inflation is higher, i.e.Ok1, the unemployment rate is lower as OL. It implies that if the government wants to keep the unemployment rate under control, it must accept a higher level of inflation.

The Philips curve shows a trade-off between inflation and unemployment. It also suggests that economies cannot have lower inflation with lower unemployment. The lower inflation rate is achieved at the cost of the high unemployment rate.

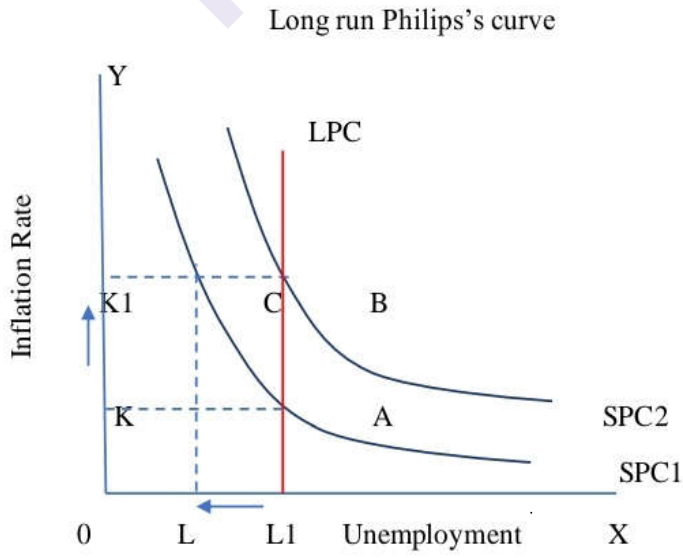
Indirectly the Philips curve suggests that if the economy is operating below capacity, an increase in aggregate demand (C+I+G) leads to a reduction in the unemployment rate.

Economists like Paul Samuelson and Robert Solowobserved the data for the US economy for the year 1960-61 and recommended the theory for policy measures. But monetary economists criticized the theory of the Philips curve.

## 8.4.1 Long Run Philips Curve

According to economists like Milton Friedman and Edmund Phelps, workers take into consideration real wages and inflation-adjusted money wages. Therefore, the government cannot get lower unemployment with higher inflation at least in the long run.

**Figure No. 8.3**



According to economists like Edmond Phelps, the long-run Philips curve is a vertical straight lineas indicated in the diagram. In the short run, there is an inverse relationship between the unemployment rate and inflation as denoted by the downward sloping Philips curve SPC1. The curve suggests that the rate of unemployment can be reduced from $OL_1$ to OL by accepting a higherinflation rate from OK to $OK_1$ (or through expansionary monetary policy) But it can be done onlyin a shortperiod. Overa long period, people expect a rise in prices equal to current prices. The Philipscurve shifts to its right. SPC2 becomes the new Philips curve. People expect inflation, the inflationrate increases from OK to oK1, but there is no change/ fall in the unemployment rate. In the longrun, the Philips curve becomes a vertical straight line. In the diagram, LPC is the long-run Philipscurve. It indicates that in the long run monetary expansion or accepting inflation rate, would notwork to reduce the unemployment level or to increaseemployment. There is no trade-off betweenthe inflation rate and unemployment rate in the longrun.

## 8.5 MANKIW'S NEW KEYNESIAN MODEL

### 8.5.1 Introduction

New Keynesian economics is a branch of modern macroeconomics which is based on Keynesian thoughts. Keynesian thoughts influenced the world from 1930 till 1970 but some new classical economists questioned many beliefs of Keynesian theory. The economists who responded to the critiques of the new classicalists with the adjustments in Keynesian ideologies are called new Keynesians.

The New classical economists developed their macroeconomic theory based on assumption that wages and prices of flexible. According to them prices clear the market and balance supply and demand by adjusting quickly. But according tothe New Keynesian economists,market-clearing models cannot explain short-run economic fluctuations.They supported the theories regarding sticky wages and prices. They argue the stickiness of wages and prices can explain the existence of involuntary unemployment and the strong influence of monetary policy on the economy. Some of the leading new Keynesian economists are George Mankiw, Robert Gordon, David Romer, Oliver Blanchard Lawrence Summers, Joseph Stiglitz, and Bruce Greenwald.

The Keynesian model emphasized involuntary unemployment and the role of aggregate demand in determining output and employment. The new Keynesian Economists have given an additional explanationof involuntary unemployment. The Main contributors are N. Gregory Mankiw and David Romer. They tried to combine this microeconomic foundation in the Keynesian system.

### 8.5.2 Mankiw's model - Nominal price stickiness

Classical economists believed in the assumption of flexibility in prices. Flexible prices can bring equilibrium to the market. But according to new

Keynesian economists' prices are sticky. They argue that the menu costs are the reason for price stickiness. Gregory Mankiw in his article." Small Menu Costs and Large Business Cycles: A Macro-Economic Model of Monopoly" claimed that adjusting price is costly. Menu costs are the costs of modifying prices. According to Mankiw, markets do not clear quickly (Attain equilibrium through adjustments in prices) because adjusting prices is costly. The theory of price stickiness is based on the following assumptions.

## 8.5.3 Assumptions

1. The market is imperfect and there isa large number of monopolistic competitive firms.

2. Firms produce standardized or differentiated products.

3. Majority of the firms are price-makers with control over the prices of their products.

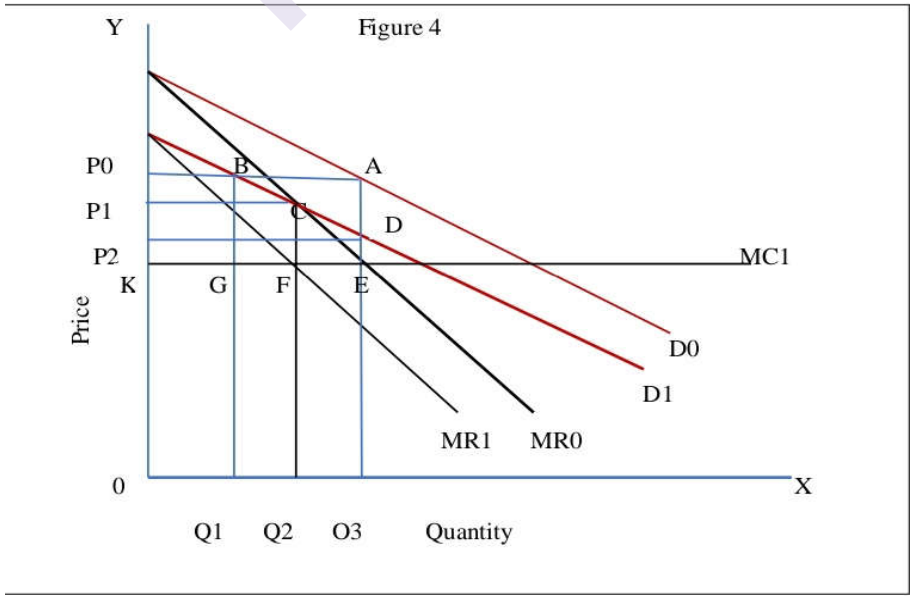
4. There is a cost involved for price adjustments.

5. The firms have linear demand curves.

6. The marginal cost curve is horizontal.

Based on these assumptions, it has been argued that menu costs affect the price and quantity of the firms. When the firms change the prices, it involves costs like printing a new price list (Menu), although such costs are less, they affect the price and output of the firms. Mankiw suggests that it is profitable for firms to react to small changes in demand by keeping prices constant over a short period. In this case, the firms may respond by changing the output. The hypothesis can be explained with the help of the following diagram.

**Figure No. 8.4**



In the above figure, the original demand curve is D0, D1 indicates a decrease in demand. MR0 is original Marginal Revenue MR1 indicates a change in the Marginal Revenue curve due to increase in demand. MC1 is a new marginal cost curve. OP0 is the original price. When MR0 intersects MR0, P0 price, and OQ1 quantity the firm earns AEKP0 profit. As the demand declines, D1 become new demand curve. MR1 is the new Marginal Revenue Curve. It intersects Marginal cost at point F. At F OP1 becomes the new price and OQ2 is the new quantity. The profit becomes KFCP1. If the menu cost is high, the firms will keep price OP0 and keep output at OQ1. The profit of the firms will be KGBP0. The firms will reduce price up to OP2 only if the profit KEDP2 is greater than KFCP1(KEDP2> KFCP1) The firms will not reduce the price therefore there will be price rigidity at OP0.

The hypothesis also explains the macroeconomic impact of the price reduction. Reduction in price benefits other firms in the economy. Whenthe price is reduced by the firm, the average price level slightly declines which will increase the real income of the consumers. The increase in real income will increase the demand for the products of all firms in the market. This macroeconomic impact of price adjustment by a firm on the demand for the products of all firms in the market is called an aggregate-demand externality by Mankiw.

### 8.5.4 Criticisms

The hypothesis has been criticized on the following grounds.

1. The approach neglects adjustment in quantity of production. The theory emphasizes adjustments in the price. Output adjustments also achieve the expected impact of bringing the economy into equilibrium.

2. It has been assumed that as the demand changes the marginal cost changes in the same proportion, but in reality, marginal cost is not perfectly correlated to the aggregate demand.

3. It has been pointed out that the menu costs are small and in modern times they have become smaller due to the digital revolution.

4. The theory explains the stickiness of prices, but it overlooks the stickiness of the rate of prices.

5. Some economists disagree that the small menu cost can explain the stickiness of the prices. The costs are very small, and it cannot explain the situations like recession and depression.

## 8.6 STAGFLATION

Lord Keynes emphasized the importance of effective demand in his theory. According to him, the solution to reduce unemployment is to increase effective demand. Phillips introduced the idea of trade-off unemployment and inflation. He further explained that the Government cannot reduce unemployment without accepting a certain degree of

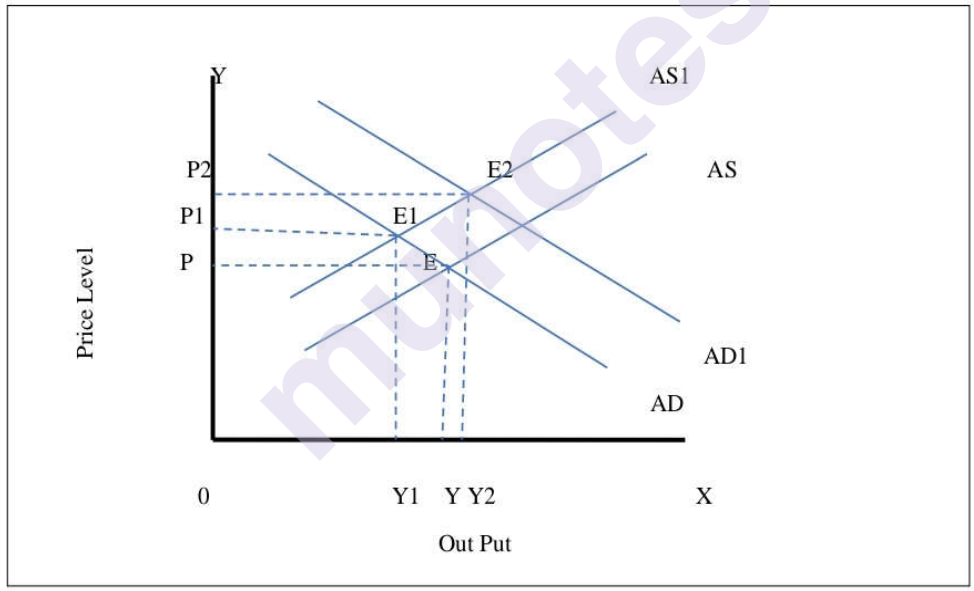
inflation. In other words, if there is inflation there is less degree of unemployment in the economy.

But in recent times, the economies experiencea situation in which price level continuously increases but unemployment level also increases. Professor Samuelson has described this situation as stagflation. According to him,stagflation implicatesan inflationary rise in prices and wages at the same time, peopledo not get jobs and firms cannot find customers for the products produced. In other words, stagflation is a situation where there exists unemployment and inflation at the same time. India and other developing economies in the world are facing the problem of stagflation. In such economies, prices are continuously increasing but at the same time, there is unemployment in the economy. Stagflation is an economic phenomenon that occurs when inflation is high and economic growth is low there is a high degree of unemployment.

Stagflation = high inflation +high unemployment +low economic growth

Stagflation occurs because of many factors. Such factors affect supply which affects prices as denoted in the diagram.

**Figure No. 8.5**




In the diagram, the output is denoted on X-axis and the price level is denoted on the Y-axis. AD is the aggregate demand curve. AS is the original aggregate supply curve. E is an equilibrium situation. At the E OY level output and op price is determined. Due to some supply-side factors, the supply decreases. The supply curve moves backward. AS1 becomes the new supply curve. If the demand remains the same (AD) E1 becomes the new equilibrium. At E1, the price is OP1, and the out-put falls up to OY1. As output declines employment also declines. Decrease in output and employment with an increase in price stagflation. Here, inflation is associated with unemployment.

Suppose the government / central bank takes measures like change in monetary policy or printing of new currency, these are demand-side factors, it changes the aggregate demand curve. The aggregate demand curve shifts to its right AD1 becomes the new aggregate demand curve. E2 becomes the new equilibrium situation, in this situation, out-put slightly increases from OY to OY2 but the price increases from OP to OP2.

The causes and consequences of stagflation are listed below.

### 8.6.1 Cause and Consequences of Stagflation

1. **The rise in the oil prices:**Stagflation occurs when an economy experiences a sudden increase in the prices of fuel oil and other petroleum products, resulting in a sharp increase in the cost of production and higher prices of manufactured products. As a result of a sharp increase in oil prices, the aggregate supply curve shifts to its left which increases prices and reduction in output. There is an existence of both inflation and unemployment.

**2. Shortageof agricultural products:**Stagflation occurs when an economy experiences a shortage of agricultural products. A short supply of agricultural products leads to an increase in the prices of raw materials. It raises the cost of production which affects the supply. It causes a shift in the aggregate supply curve to the left (backward). As a result, inflation, and unemployment.

**3. Devaluation of rupees:**Another factor causingstagflation is the devaluation of rupees. Devaluation reduces the value of the currency. The devaluation of rupees raises the prices of imports and increases the cost of production of those industries which are using imported goods as inputs. This shifts the aggregate supply curve to the left or backward because higher cost results in the backward shift of supply and the product prices increase.

**4. Higher taxes:**If the government increases taxes, the cost of production increases, and on the other hand, production falls. This may affect supply and shift the aggregate supply curve to the left and further create inflation in the economy.

**5. High-interest rate:**Stagflation occurs when there is an increase in the lending rates of interest. This raises the costs of production of the firms which affect supply and thus the supply curve shifts to the left which will further contribute to the rise in the inflation rate.

**6. Increase in administered prices:** Administered prices are the prices that are determined by the Government. An increase in administered prices of steel, coal, cement, fertilizer raises the cost of production. Higher cost affects supply and shifts the aggregate supply curve to the left (backward) resulting in a sharp increase in the prices of the product and further leading to the rise in the inflation rate.

**7. Slow industrial Growth:**Stagflation occurs when there is slow industrial growth.Important factors responsible for the slow growth of the industrial sector are:

1. Restriction on imports of raw materials required for the industries,

2. The decline in public investment,

3. High investment rate and

4. Reduced availabilities of credit

All these factorsreduce growth in output. This sow industrial growth and a high rate of inflation create a situation of stagflation.

**8. Expectations about Prices:** If people expect that shortly prices would increase people decide to buy products immediately and this creates aggregate demand which leads to a further increase in prices. The worker's unions demand higher wages as compensation for price rise. Such inflationary expectations create inflation and stagflation.

**9. Monetary Policies:**The central bank monetary policies create credit in the economy. This leads to an increase in the money supply resulting in additional demand and this causes the aggregate demand curve to shift to the right and further raise the inflation rate giving rise to stagflation.

**10. Deficit financing:** When the government goes for deficit financing, (when the government prints new currency) it increases the money supply in the economy causing the aggregate demand curve to shift to the right and further raise the inflation rate and the economy slows down giving rise to stagflation.

The rise in oil price, devaluation of rupee, slow industrial growth, increase in administered prices, inflationary expectation, etc. are supply-side factors that shift the aggregate supply curve to the left causing stagflation.

### 8.6.2 Policy Measures

To bring the economy out of stagflation the government must adopt measures such as

1 To reduce the fiscal deficit

2 To control the growth of the money supply

3 To remove restrictions on private investment, especially in theinfrastructure.

4 To reduce corporate and personal income taxes

5 To reduce excise and customs duties etc.

## 8.7 SUMMARY

Post-Keynesian economics is a broader stream. A range of theories that were developed to break Keynesian tradition is included in this school of thought. One such theory breaking the traditional thought is the theory by Milton Friedman. He integrated quantity theory money with general price levels.He argues that a change in the stock of money leads to a change in the price level or income or both in the same direction. It implies that if there is less than full employment in the economy, an increase in money supply will lead to a rise in output and employment because of a rise in expenditure only in the short run. Changes in money supply cannot affect money balances in the long run.

Another remarkable argument by Milton Friedman and Edmond Phelps is the expression about the behaviour of the long-run Philips curve. Philips Argued for an inverse relationship between the Inflation rate and unemployment rate. Which implied that the Government could reduce unemployment by accepting some degree of inflation. But Milton Friedman and Edmund Phelps, in the long workers, take into consideration real wages and inflation-adjusted money wages. Therefore, the government cannot get lower unemployment with higher inflation at least in the long run.

A school of thought that was developed after Keynesian tradition was New Keynesians. Mankiw developed an argument that there exists involuntary unemployment in the economy because firms do not want to adjust the price to reach equilibrium. To attain equilibrium by adjusting prices is costly. As firms do not change prices and prices become sticky, there is involuntary unemployment in the economy.

Lord Keynes emphasized the importance of effective demand in his theory. According to him, the solution to reduce unemployment is to increase effective demand. But economists observed that in modern times there is the existence of inflation and unemployment at the same time. The situation has been termed stagflation. The Keynesian theory could not provide a solution to this problem. But it has been suggested that measures like reducing the money supply, reducing fiscal poly can help to bring the economy out of stagflation.

## 8.8 QUESTIONS

1 Explain Friedman's Demand for money. What are its limitations?

2 Explain the behaviour of Long run Philips curve.

3 Critically examine Mankiw'es model of nominal price stickiness.

4 What is stagflation? What are the causes and consequences of stagflation?

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