Directorate of Distance and Continuing Education

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Tirunelveli-627 012, Tamil Nadu.

B.A. ECONOMICS

(First Year)

HISTORY OF ECONOMIC THOUGHT

JEEC21

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HISTORY OF ECONOMIC THOUGHT

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UNIT-I
Pre-classical Thoughts

Nature and Scope of Economic Thought

History of Economic Thoughts as the title implies deals with the origin and development of economic ideas and their interrelations. It is a historical account of economics doctrines. Prof. Haney has defined it as “a critical account of the development of economic ideas, searching into their origin, interrelations and manifestations”. According to Prof. Bell, “It is the study of the heritage left by the writers on economic subjects”.

Prof. Schumpeter holds that “economic thought is the sum total of the opinions and desires concerning economic subjects especially concerning with public policies of different times and places”. Schumpeter further says that the history of economic thought traces the historical change of attitudes. It also speaks about the economic problems and the approaches to those problems.

History of the development of economic ideas can be studied under three periods, namely:

1. Ancient
2. Medivel
3. Modern

Further the history of Economic Thoughts may be broadly divided into two parts. The first part deals with the origin and the development of economic ideas before the development of economics as a science. The second part deals with the economic ideas after the development of economics as a science.

History of economic thought can be studied and analyzed by adopting different approaches.

1. Chronological approach
2. Conceptual approach

3. Philosophical approach
4. Deductive (or) Classical approach
5. Inductive approach
6. Neo-classical approach
7. Welfare approach
8. Institutional approach
9. Keynesian approach

1. **Chronological Approach**. In the approach, economic ideas are discussed in order of time. The economic ideas of different economists can be presented year wise and can be studied. In this approach we can find a continuity in the economic ideas of different economists.
2. **Conceptual Approach**. It speaks about the evolution of different economic concepts and the interdependence of these concepts. Conceptual approach can also be called as ideological approach.
3. **Philosophical Approach**. This was first adopted by the Greek philosopher, Plato. In the past economics was considered as a hand maid of ethics. Naturally philosophical approach was adopted by the early writers to discuss the economic ideas.
4. **Deductive Approach**. The classical economists adopted deductive method. They believed in the universal application of economic ideas.
5. **Inductive Approach**. The Historical School emphasized the inductive method. These economists believed that the laws of economics are not universal in nature.
6. **Neo-classical Approach**. This approach aims at improving the classical ideas by modifying them. Neo-classical approach was first adopted by Marshall. The Neo-classical approach believed that “Induction and Deduction are necessary for the science of economics just as the right and left feet are necessary for walking”.

7. **Welfare Approach**. It aims at providing the basis for adopting policies which are likely to maximize social welfare.
8. **Institutional Approach**. The institutionalists questioned the validity of classical ideas and gave importance to psychological factors.
9. **Keynesian Approach**. A major development in modern economics is associated with the name of J.M. Keynes. His approach is new and different from the classical school. It takes into consideration the operation of business cycles that affect the entire economic policies. Keynesian approach deals with the problem of the economy as a whole.

MERCANTILISM

The dominant system if economic thought that prevailed in Europe from 16th to 18th Century was Mercantilism. It was know by different names in different countries. In England it was called as commercial system or Mercantile system because it emphasized the importance of commerce and free trade. It was also known as "Restrictive system" because its practical policies consisted of numerous restrictions and regulations on commerce.

Mercantilism prevailed not only in England, France, Germany, and Italy, but also in countries like Russia, Spain and Scotland. It adopted itself to the changing circumstances. Alexander Grey observed that "It had three hundred years run and so it coloured the thought and still more the actions of every country in Europe". Haney says, "Mercantilism comprises the economic views that prevailed among the European statesmen from 16th to 18th century.

Factors shaping Mercantilism

Some economics, political, religious and cultural factors were responsible for the emergence of mercantilism.

Economic Factors

Towards the end of the 15th century changes were taking place in the economic life of the people. Domestic economy was giving way to an exchange economy. Agriculture was giving place to industry. Trade become very important and it changed the foundation of socio-economic set-up of the middle ages. Trade necessitated the use of money which was available in the form of gold and silver. Along with the expansion of commerce there were improvements in transport, agriculture, population, etc., so the Mercantilist was the outcome of these developments.

Political Factors

Towards the end of the middle ages nationalism became the strong force. Europe changed greatly due to Renaissance. As a result, there was a fundamental political change. It resulted in the emergence of strong nations like England, France, Spain, etc. Feudalism came to an end and the king became the more powerful. Each nation wanted to preserve its independence and considered other nations as enemies. In order to create a strong and powerful state the Mercantilists tried to regulate the political and economic activities of the people.

Religious Factors

The reformation movement was revolt against Roman Catholic Church. It challenged the authority of Pope. Initially the Roman Catholic Church controlled the political and economic activities of the nation. But after the reformation the authority of the Pope was challenged.

Cultural Factors

Culturally also Europe was undergoing a sharp change. Renaissance gave a new light of learning to the people. People were made to realize that this worldly life was more

important than the heavenly life. As a result, money came to occupy an important place in human activities.

Scientific Factors

In the field of science and technology great improvements and inventions were made. The discoveries of compass and printing press were of great importance, with the help of compass navigation became easier and it led to the discovery of new countries.

1. The fundamental aim of Mercantilism was to make a country strong. The strength of a country was tested with the help of the wealth of the country, above all, in that portion of wealth which consisted of precious of precious metals like gold and silver. So the Mercantilists attached greater importance to bullion because it was the most durable, useful and generally acceptable form of wealth.
2. If a country has gold mines and silver mines, it can get gold and silver but if a country has no mines, it can get gold and silver through trade. The country should have a favorable balance of trade. In other words, there should be an excess of exports over imports.
3. In the Mercantilist system of thought trade was the most important occupation. Industry and commerce were ranked second in importance. Agriculture was the least important of all. The state had an important role to play in the Mercantilist system. It should come forward to exploit the natural resources of the country to increase its exports. There was regulation of economic life by the government.

Main ideas or characteristics of Mercantilist

Wealth

The fundamental aim of the mercantilists was to make the country strong. The strength of the country in the wealth of the country, especially that portion of wealth which consisted of precious metals like gold and silver.

Mercantilist firmly believed that was basis of wealth and power. Hence the mercantilist slogan was' more gold, more wealth and more power'. All the economic activities in the country were centred around wealth. According to Gray, "Every body thought that his country was engaged in a race with other countries and in that race it must not be the looser.

This greatest importance given to precious metals may be attributed to the following reasons:

I) In the 16^{th} century, the only form of wealth, most useful and generally acceptable was gold and silver. Naturally the mercantilist attached more importance to gold and silver.

II) With the rise of absolute monarchy, taxation could be possible only if money was used as measure of value. Thus on the political side also money came to occupy greater importance.

III) For conducting wars money was essential. Three things were required for war-money, more money and still more money.

IV) Mercantilists believed that trade depended on plentiful of mony.

V) Money was also needed for development of exchange economy.

VI) Money in those days was identified with capital.

Foreign Trade

The mercantilist theory of foreign trade is known as the balance of trade theory. The aim of this theory was to get large amount of precious metals. Foreign trade was considered to be the only source for getting gold and silver. They believed that all those nations which did not possess their own gold and silver mines could become rich after getting gold and silver from foreign countries through trade. Sir Thomas Mun the greatest representative of Mercantilist declared that,"foreign trade ought to be encouraged, for upon it hinges the

great revenue of the king, the honour of the kingdom, the noble profession of the merchant, the supply of our poor, the improvement of our lands and means of our treasure".

Physiocracy

Introduction

Physiocracy is the collective name of those economic principles and policies which developed in France in the middle of the 18th century. Physiocracy is also known as the 'Agricultural system'.

Economic thinkers who contributed to the growth and development of physiocracy have been called as physiocrats. The physiocracts have been regarded as the founders of economic science because they were the first to grasp the general principles under-lying the economic phenomena and to evolve a theoretical system. Physiocracy is also remarked as the first school of economic thought. The term physiocracy means "Rule of Nature'.

Physiocracy may be defined as a reaction against Mercantilism and its concepts. The physiocracts believed that the mercantile policies instead of doing any good have done great harm to the nations. So they revolted against the mercantile policies.

Main ideas of physiocrats

The physiocrats contributed on the theoretical side, three important ideas, namely :

I) The concept of natural order.

II) The concept of net product.

III) The circulation of wealth.

Natural order

The physiocrats had firm in the philosophy of natural order. Nemours called Physocracy as “The science of natural order”. Gide and Rist said “The essence of physiocratic system lay in their contribution of natural order.

Natural order has been defined by the physiocrats as the providential order made by God for the welfare of mankind. It is universal and unchangeable. The natural laws are the expression of the will of God. To discover and to understand these laws is man’s first duty and to live according to them is his second duty.

Natural order will increase the happiness of mankind. “Divine in its origin it was universal in its scope”. In short, the natural order is the best and most advantageous order for the physiocrats. The physiocratic Natural order had 3 important features:

1. Natural order aimed at securing pleasure to the people.
2. It aimed to increase the rights of the people without imposing any restrictions on their liberty.
3. It stands against mercantilism.

2**. Net Product**

The physiocratic concept of net product was the outcome of their nature philosopher. Physiocrats held agriculture supreme among all occupations, since it was the source of wealth. It is agriculture that nature works along with man.

In the doctrine of net product the physiocrats introduced the fundamental idea of economic surplus. In the physiocrats system agriculture has been given a dominant place because of its important role in the economic development of a country. Agriculture is the only sector which yields net product or surplus produce. In other words it is only in agriculture the net wealth produced is greater than the wealth consumed. Net product is defined as the excess of wealth produced over and above what is reguired. The

physiocrats introduced the idea of surplus resulting from the bountry of nature which they called “Product-Net” or “Net Product”.

Thus, Prof. Haney considers “The idea of net Product was important for the development of economic analysis. From this developed the idea of surplus which was to play an important part in later theories.

The Circulation of Wealth

After having discovered the source of wealth, the physiocrats turned to the problem of how wealth produced by the agriculturists gets circulated among the different classes of the society. The physiocrats must be credited with being the first school of economists who analysed the problem of distribution. The idea was first given by a famous physiocrat Quaesnay through tableau economique.

Turgot said the “it constituted the very life of the body politic, just as the circulation of blood did of the physical.

As Hector Denise said, “the discovery of the circulation of wealth in economic society occupied in the history of science of same position as is occupied of the discovery of circulation of blood in the history of Biology.

In other words the physiocratic system is based on the division of society into the following three classes:

1. The productive class: It consisted of farmers, who cultivate the soil and pay the rent to the landlords.
2. The proprietory class: Included the landlords and the king.
3. The sterile class or unproductive class: This class included all those people who are engaged in non-agricultural occupations. Merchants, artisans, domestic servants, government servants, doctors, lawyers, teachers, etc. formed part of this

class. It must be remembered that the physiocrats did not consider the sterile class as useless.it was unproductive in the sense that it did not produce any net product.

Growth Models.

There is one more advantage from the Tableau Economique. It can help us to understand and construct models. Some fundamental truths of interdependence of various sectors is revealed by it. It also shows that a number of conditions will have to be fulfilled for an overall balance. How the expenditure behavior of one sector determines the constraints upon other sectors is also shown by this Tableau. In the growth models, these very ideas are used. Input requirements and output supplies are worked out or assumed for different sectors. And in conjunction with other assumptions, conditions of the overall economic balance of stability are also worked out. There is no denying the fact that modern growth models are much more complex. They consider the depreciation factors, time lags, gestation periods, changing supply position of various resource, technological changes, demand changes and so on. Today's models work out conditions of stability and instability in the economy.

Practical Ideas of Physiocrats

The physiocrats did not analyse the problem of value in a systematic manner. They were interested only in production. According to them, value is connected with the usefulness of the commodity. They did not differentiate between value and price. Quesnay said "what is called value is price". Value was not fixed but change from time to time depending upon the demand.

Interest

As for as interest is concerned physiocrats made a difference between money and capital. In their view capital is the result of saving and so interest on capital is justified.

The physiocrats allowed interest charging for the loans which were taken for agricultural purposes because such loans were productive.

Population

Physiocrats encouraged large population because they belived that large population increases consumption which results in an increase in production and so wealth will increase.

Taxation

The physiocratic theory of taxation is connected with net product. They believed that only land produced a surplus, taxes should be paid from the surplus or net product. In short, they advocated a single tax system on agriculture. But an objection was raised against the single tax system because the government's revenue will be less. Further, this type of taxation was not justified because it ignored the other sources of wealth to the government.

Private Property

The physiocrats were believers in the institution of private property. The physicrats regarded property as a tree and its branches are social institutions. In support of private property they stated that the landlords must enjoy 2\5 of the surplus because they are responsible for making land fit for cultivation. It is the landlord who provides the farmer the necessary funds for cultivation. So, if the landlords are not given their due share, they will take away the land form cultivation. At the same time, the physiocrats imposed certain duties upon the landlords. They should bring new lands under cultivation and help and protect the farmers.

Trade

The physiocrats thought that exchange was unproductive. Accordingly industry and commerce were considered unproductive. So foreign trade which had assumed so much

importance under mercantilism started loosing its importance. The physiocrats thought that foreign trade produced no real wealth. So some of the physiocrats even considered foreign trade as an evil. However the physiocrats were not entirely against foreign trade. They believed that a country should exchange only those goods which it cannot produce and those which are in excess of consumption. As a result the physiocrats advocated free trade.

Function of state

In the natural order of physiocrats, the functions of the state would be reduced to the minimum, i.e., to protect the country and the life, liberty and property of the individual. The physiocrats pointed out that the main cause for all troubles and poverty in France was due to government interference. Therefore, they advocated minimum state interference. They thought that a state must provide universal education and it should also undertake public works. Thus the functions of the physiocratic government were:

1. To preserve natural order.
2. To protect private property.
3. To spread education in natural order.
4. To undertake public works programme.
5. To eliminate international barriers.

In short, the physiocrats made the following contributions to economic theory:

- They put economics on a scientific basis.
- Their emphasis on the net product was notable.
- Their analysis of capital pointed the true nature of that factor of production.

They made important contribution to the theory of taxation.

Critical Estimate of Physiocracy

Physiocracy was the revolt of the French people against Mercantilism. It is from this angle, we have to judge the economic ideas of the physiocrats. While the mercantilists were occupied with gold, the physiocrats emphasized “Real life” in the from of raw produce. The mercantilists aimed at maximizing exports and minimizing imports with an object of securing a favourable balance of trade. But the physiocrats in general regarded foreign trade as an evil.while the mercantilists belived in the regulation of trade and industry, the physiocrats suggested freedom of trade and industry.

The weakest point in the physiocratic system is the theory of distribution. But at the same time we have to remember that the physiocrats made some important contributions to economic thought.

1. They put economic on a scientific basis by applying scientific methods.
2. Economic development was a major concern of the physiocrats. They realized the importance of agriculture which give surplus for capital formation.
3. The physiocrats were the first school of economic to analyse capital and capital formation.
4. The physiocrats realized the interdependence of different classes in the economic.
5. The physiocrats insisted that the government should restrict its functions.
6. They advocated direct taxes rather than indirect taxes.
7. Lastly, the physiocrats must be given a high place among those who prepared the ground for French revolution.

UNIT-II
Classical Economists and Karl Marx

Adam Smith

Adam Smith stands as an institution by himself in the history of economic thought. He is regarded as the founder of modern economics. It is no exaggeration to say that economic science was born in 1776 with Adam Smith's wealth of Nations'. He is the first economist who dealt economic problems in a systematic manner. In other words, he is the first academic economist. He has been rightly called the "Father of Political Economy". Alexander Gray has rightly said, "Before Adam Smith there had been much economic discussions, with him we reach the stage of discussing economic.

Adam Smith was born in 1723 in a small town of Kirkaldy in Scotland. He studied at the Universities of Glasgow and Oxford and specialized in Mathematic, Natural philosophy and moral and political science. At Glasgow, he worked as a professor of Logic and later became a professor of Moral philosophy. In 1759, he published his "Theory of Morel Sentiments" which earned him great fame. In 1764, Smith accepted to become the Tutor of the Duke Buccleuch. With the Duke, Adam Smith toured Europe. On his European tour, in France he met the famous Physiocrat Quesnay, Turgot and Voltaire. On his return to Scotland, he settled down to write his famous book, "An Inquiry into the Nature and Causes of the Wealth of Nations" which was published in 1778, he was appointed as Commissioner of Customs at Edinburg which position he held till his death in 1790.

Smith main Economic ideas

Labour

The concepts "labour" and "Division of labour" have attained significance through the excellent treatment of the subjects by Adam Smith in his "Wealth of Nations". The physiocrats considered land alone productive. They never recognised labour as productive.

But to Adam Smith, labour is the important factor which increases the wealth of nations. It is clearly stated in the opening sentence of the book as follows. “The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes and which consists always either in the immediate produce of that labour, or in what is purchased with that produce from other nations”. When Smith emphasized the importance of labour, he did not underestimate the important role played by nature in production. He was aware of the fact that both physical environment and labour determined the wealth of nations.

Here Adam Smith distinguished between productive and unproductive labour. Smith gave two definitions of productive labour:

(a) That labour is productive that produces durable commodities. It is called Durable-Vendible-commodity criterion.

(b) That labour is productive that adds value to the product.

This is known as value-added criterion. According to the first criterion, the labour which produces durable commodities that can be accumulated is productive labour. Whereas, unproductive labour produces services which are consumed at the time of production. For example, the labour of a worker in a shoe factory is productive and that of a personal servant is unproductive.

According to the value-added criterion, productive labour not only maintains itself but also brings profits to its employers.

Adam Smith’s distinction between productive and unproductive labour is faulty. Smith tried to broaden the physiocratic idea of productive labour but did not succeed. The physiocrats regarded only agricultural labour as productive. But Smith’s concepts of productive labour include all types of labour which produces tangible goods. But he did not included the services.

DIVISION OF LABOUR

The Division of labour" emphasizes the importance of division of labour. It occupies the central and dominant position in Smith's theory of production. While is the sources of wealth, division of labour will increase the productivity of labour and thereby the wealth of nation.

The concept of division of labour was not used by Adam Smith first. Both the name and idea existed in Mandevilla's "Fables of the Bees". The idea was also used by Harris in 1757. The only remarkable feature of smith's division of labour is as Schumpeter points out that, "nobody, either before or after Adam Smith, ever thought of putting such a burden upon division of labour. With Adam Smith it is practically the only factor in economic progress'.

Adam Smith concentrated upon the social division of labour. It emphasized the co-operation of all individuals for the satisfaction of the desires of each. Division of labour is a process by which a particular type of labour which produces goods to satisfy the individual needs are transformed into social labour which produces goods for all.

The following are the advantage of division of labour as pointed by Adam Smith:

(a) it increases the productivity of labour through specialization.

(b) As work is sub-divided and done quickly, production also increases.

(c) Worker's efficiency and skill increase when work is subdivided into various parts and a worker is asked to do a small part of the whole job.

(d) There is saving of time and tools.

(e) As production increases quickly, it forms an incentive to investors.

Adam Smith also pointed out the disadvantages of division of labour.

- As worker is confined to one or two operations, there is no personal satisfaction of having made a full product.

- It leads to immobility of labour because of specialization.
- As the same work is done repeatedly, the worker gets bored which leads to mental stagnation.

  Adam Smith pointed out that division of labour was limited by the extent of the market. The wider the market for the commodity, the grater the division of labour. So in order to have a high degree of division of labour, large scale production is essential. Division of labour was limited by the availability of capital also.

Capital

Smith regarded capital as the fountain of national wealth. It has a greater role to play in production. The wealth of a nation depends upon division of labour and division of labour itself is governed by capital. In his book "Wealth of Nations" capital appears in three forms: (1) as an instrument of production (2) as a fund maintaining the workers and (3) as sources of revenue.

Smith distinguished between two types of capital, namely, fixed capital and circulating capital. Smith advocated that capital could be employed in four different ways- (1) in procuring raw materials annually for the consumption of the society (2) in the manufacture of raw materials (3) in transporting the finished goods and (4) in the distribution. In the other words capital is used for the cultivation is the land, mines and fisheries, secondly for manufacturing, thirdly for whole sale distribution and fourthly for retail distribution.

Agriculture

Having been influenced by the physiocratic ideas, Adam Smith gave a high place to agriculture. Smith believed that investment in agriculture was the most productive form of capital investment. Because, in agriculture, Nature labours along with men".

Money

After discussing the concept of division of labour in the first three chapter the first book, smith discuses about money regarding the origin of money, he held the view that, “Every man…become in some measure of merchant and therefore in effect, a currency is needed to serve as the universal instrument of commerce”. Thus money is an instrument which facilitates exchange and without it large scale production and commerce would not be possible. So it is an important factor contributing to the extension of division of labour.

According to Smith, money developed spontaneously to remove the difficulties in the barter system of exchange. He stressed the two important functions of money viz., medium of exchange and measure of value.

He regarded money as the nominal price of commodities. He rejected the bullionist policies of the mercantilists which aimed at keeping surplus money at home. He demonstrated clearly that the surplus quantity of money would be exposed to other countries. He suggested that the quantity of money in circulation should be determined by the level of internal economic activity.

THEORY OF VALUE

Adam Smith started hid discussion of value by distinguishing between value in use and value in exchange. The first refers to the utility of the commodity and the second the power of purchasing other goods. This he explained with the “diamond-water paradox”. The commodities like water possessing greatest value-in-use have little value-in-exchange. On the other hand, the commodities like diamond having little value-in-use have the greatest value-in-exchange. Even though Smith made a distinction between value in use and value in exchange, he was concerned only with the true measure of the exchangeable value.

Regarding the determination of value, Smith explained through two theories of value, namely, labour theory of value and cost of production theory of value. Smith believed that labour was the real source of value. The value of a thing depended upon the amount of labour spent for its production. According to him, the real price of everything was “the toil and trouble of acquiring it”. This was the essence of his Labour Theory of Value. Thus the theory that labour is the cause of value was first formulated by the Father of Political Economy. It is the same theory which was used later on by Karl Marx to attack capitalism.

SMITH’S IDEAS ON DISTRIBUTION

Rent

Smith’s ideas on rent were not well formed. At some places, he is surprisingly close to the modern viewpoint on rent, at others he is hopelessly embedded in physiocratic notions.

Rent is considered as a monopoly price paid to the landlord for the use of land. It varies with fertility and situation. Improvement in transport services tend to lower and equalize rents. Haney considers that except for the mistaken notion of the landlord as a monopolist and rent as a monopoly price, this viewpoint is allied to the modern concept of rent.

Gide and Rist, however, emphasized that Adam Smith, under the physiocratic influence, considered rent as a gift due to the special natural powers of the soil. In manufactures, man worked without the aid of nature, hence the remuneration just covered his cost of production. In agriculture, he worked in Cooperation with nature, hence the rent of land was a special surplus available to the owner of land over and above the cost of production.

Wages

Smith's theory of wages is also confused. In fact, he had thought of practically all the theories that have been emphasized by later economists.

Generally, he talks of demand and supply of labour as the factors determining wags. The supply of labour is limited by the cost of living of workers, depending on current prices of commodities. The demand for labour is determined by the quantity of stock available, the level of national capital. In an expanding economy, higher wages will prevail due to greater demand for labour. In a stationary economy, wages will sink below the subsistence level.

Adam smith also indicates the outlines of the wages fund theory, by speaking of a "fund predestined for payment of wages". However, he does not elaborate the idea further.

Thomas Robert Malthus

Introduction

Thomas Robert Malthus was the second of the trinity, who laid the foundations of English classical political economy. Though he had many contributions in the field of economics, Malthus was best known for his theory of population in the history of economic thought. He was also called as a pessimist along with David Ricardo.

To add to the whole dark picture, the English Poor Law was defective both in substance and administration. The rates of grains were enormously high. The freedom of the workers was drastically curtailed leading to pauperism and incompetence everywhere. The miseries of the people prompted Malthus to investigate their causes. Thus a practical interest was created in him, which led to the formulation of his economic theories.

Malthus, famous book "Essay on Population" (seven editions) was published in 1798.

Main Economic Ideas

1. **Theory of population**

(i) Production of food (the means of subsistence) is subject to the law of diminishing returns.

(ii) On the other hand population left to itself tends to grow faster than food production. According to Malthus, population has a tendency to grow in a geometrical progression (2,4,6,8…). Thus population increases at a much faster rate than food production and has a tendency to double itself every twenty-five years.

(iii) Food production and population growth are affected by independent factors. Food production is influenced by the law of diminishing returns, whereas the human beings have greater power of reproduction.

(iv) Due to this disequilibrium, the increasing population cannot be maintained at the existing level. The cultivation of new lands and emigration are not sufficient to counteract the superior famines, floods, earthquakes, epidemics, wars and other natural calamities take the lives of the people.

(v) Man could avoid the positive checks by restoring to what Malthus called prevention checks. Prevention checks are applied by people consciously to limit the number.

Thus Malthus was the first to devote a treatise to the principles of population. He deserves great consideration for calling attention to the economic significance of an important subject which had been neglected.

The Malthus theory is also important from the fact that it was instrumental in leading Darwin to his doctrine of National Selection. Darwin himself has said that his theory of the whole animal kingdom".

Further Malthus collected a number of valuable facts in order to illustrate his doctrine. His principle of population is not based on assumptions. Thus Malthus introduced a dynamic factor into economics. Malthusian theory is essential to an understanding of the problems of social reforms.

Criticisms

- The mathematical character of the theory is opened to objection
- The theory neglects the influence of education and standard of living.
- Malthus ignored scientific discoveries and inventions.
- Too much importance to population and food supply.
- Neglects the effects of over population.
- Excludes international trade.
- Pessimistic theory.
- Incomplete theory.
- Importance of preventive checks undermined.
- Malthus failed to provide a satisfactory economic theory of population.

Theory of surplus value

The theory of surplus value is the corner stone of Marxian economic theory. It provides the framework on the basis of which Marks has built up his theory of capital accumulation.

To Marx, in capitalism, production was not simply production of commodities, but was production of surplus value. The worker produces not for himself but for the

capitalist. From capitalist point of view, that laborer alone is productive who produces a surplus.

Under capitalism, labour power itself become a commodity and is brought and sold in the market. The main aim of the capitalist is to maximize profit. It is possible for him because labour power has the peculiar character of being able to create more value than is needed for its own production. In other words, the worker can produce more in a day's labour than is needed for his own subsistence. The capitalist pays only those wages with which the later can purchase the means of subsistence. Thus Marx divided the labour into two kinds-necessary labour and surplus labour.

For example, let us assume that if a laborer works for eight hours a day to produce a commodity, it is sufficient to maintain himself. Then the exchange value of the product should be equal to eight hours labour. But if the wages paid to the laborer are equal to four hours labour-this labour is the necessary labour and the remaining four hours is known as surplus labour. It creates surplus value which goes to the capitalist.

Thus surplus value is the difference between the selling of the commodity and the actual wages paid to the laborer. In a capitalist society the workers are thus exploited by the capitalists.

Marx classified capital as constant capital and variable capital. Capital invested in stocks or raw materials or equipments which directly assist the productivity of labour was called by Marx as constant capital. Capital spent for the purchase of labour power in the form of wages was called variable capital. According to Marx, it was only the variable capital which was capable of creating surplus value.

There are three components of the value of commodity: (a) constant capital (b) variable capital and (c) surplus value. Suppose 'C' stands for constant capital, 'V' for variable

capital and ‘S’ for surplus value, then the total value=C+V+S. the rate of surplus value will be S=S\v.

Criticism

1. Marxian theory of surplus value is derived from the labour theory of value. But there is no proof that labour alone creates surplus value.
2. In the real world, we are not concerned with values, but real tangible prices.
3. Marxian theory ignores the demand side.
4. Marx exaggerated the scope of exploitation.
5. Critics have pointed out that the rate of profit is not only related to variable capital, but also depends on the demand and supply of commodities.

Unit-III
Neo-Classical and Institution a list Thoughts

The Marginalist Revolution

The Marginalist Revolution, also known as the Marginal Revolution, was a pivotal development in economic theory that took place in the late 19th century. This revolution introduced the concept of marginal utility and significantly shifted the way economists understood value and price determination. Here are the key aspects of the Marginalist Revolution:

Key Figures

1. William Stanley Jevons (1835-1882) - An English economist who independently developed the theory of marginal utility. In his work "The Theory of Political Economy" (1871), Jevons argued that value is determined by the utility of the last unit of a good consumed, rather than the total utility derived from all units consumed.

2. Carl Menger (1840-1921) - An Austrian economist who founded the Austrian School of Economics. In his book "Principles of Economics" (1871), Menger emphasized the subjective nature of value and introduced the concept of marginal utility to explain how prices are formed in the market.

3. Léon Walras (1834-1910) - A French economist known for his work in general equilibrium theory. His major contribution, "Elements of Pure Economics" (1874-1877), outlined how markets tend toward equilibrium where supply equals demand, driven by the marginal utility of goods.

Core Concepts

1. Marginal Utility - The additional satisfaction or benefit obtained from consuming one more unit of a good or service. Marginal utility diminishes as more units are consumed, a concept known as diminishing marginal utility.

2. Subjective Value - The idea that value is not inherent in objects but rather determined by the preferences and utility of individuals. This was a shift from the classical labor theory of value, which tied value to the labor required to produce a good.

3. Price Determination - Prices in a market are determined by the marginal utility of goods. As individuals make decisions based on the additional utility they gain from consuming more units, these decisions collectively influence market prices.

4. Equilibrium - The state in which market supply equals demand, and all economic agents are maximizing their utility. The Marginalist Revolution laid the groundwork for later developments in general equilibrium theory, particularly through the work of Walras.

Impact on Economics

Shift from Classical to Neoclassical Economics - The Marginalist Revolution marked the transition from classical economics, which focused on labor and production costs, to neoclassical economics, which emphasizes individual choice, utility, and marginal analysis.

Foundation for Modern Microeconomics - The concepts introduced during the Marginalist Revolution are fundamental to modern microeconomic theory, including consumer choice, demand curves, and price formation.

Influence on Subsequent Theories - The revolution influenced later economic theories and schools of thought, including the development of welfare economics, the theory of market structures, and the analysis of public goods and externalities.

The Marginalist Revolution fundamentally transformed economic thought by introducing a more precise and mathematically rigorous framework for analyzing individual decision-making and market behavior.

Marshallian theory of value and time element

The Marshallian theory of value, developed by Alfred Marshall, is a cornerstone of neoclassical economics. It focuses on how prices and quantities of goods and services are determined in markets. One of the key aspects of Marshall's theory is the concept of the time element in determining value. Let's break this down:

Marshallian Theory of Value

1. Supply and Demand: Marshall's theory emphasizes the interaction between supply and demand in determining the price and quantity of goods. He proposed that the value of a good is determined by the equilibrium point where supply equals demand.

2. Consumer Surplus: Marshall introduced the concept of consumer surplus, which is the difference between what consumers are willing to pay for a good and what they actually pay. This concept helps to measure the welfare that consumers derive from market transactions.

3. Producer Surplus: Similar to consumer surplus, producer surplus is the difference between what producers are willing to accept for a good and what they actually receive. This measures the welfare gain to producers from market transactions.

Time Element in Marshall's Theory

Marshall recognized that time plays a crucial role in determining value and prices, and he divided the analysis into three periods:

1. Market Period (Very Short Run): In this period, the supply of a good is fixed because there is no time to adjust production. Prices are determined entirely by demand. For

example, the price of fresh fish at a market on a given day is determined by the available quantity and the buyers' demand.

2. Short Run: In the short run, firms can adjust production levels by changing the variable inputs (like labor and raw materials), but the fixed inputs (like capital equipment) remain unchanged. Prices are influenced by both supply (which is somewhat flexible) and demand.

3. Long Run: In the long run, all factors of production are variable. Firms can enter or exit the market, and capital equipment can be increased or decreased. The long-run supply curve is more elastic because firms have the flexibility to adjust all inputs and respond to price changes. In the long run, prices tend to settle at a level where firms earn normal profits, with no economic profit remaining due to free entry and exit.

Key Points of Time Element

Market Period: Price is highly responsive to demand changes due to fixed supply.

Short Run: Price is influenced by both supply and demand, with some ability to adjust production.

Long Run: Price is determined by long-term supply adjustments, leading to a more elastic response to demand changes.

By incorporating the time element, Marshall's theory provides a more nuanced understanding of how prices adjust over different time horizons and how firms and consumers respond to these changes. This approach helps explain short-term price volatility and long-term market equilibrium.

Marginal Utility

Marginal utility is an economic concept that refers to the additional satisfaction or benefit (utility) that a person derives from consuming an additional unit of a good or

service. It is a measure of how much more satisfied or better off a person is as a result of consuming one more unit of something.

In more technical terms:

Marginal Utility (MU): It is the change in total utility that comes from consuming one additional unit of a good or service.

Marginal utility typically decreases as more units of a good or service are consumed, a phenomenon known as the law of diminishing marginal utility. This law states that as a person consumes more units of a good, the additional satisfaction gained from consuming each subsequent unit tends to decline. For example, the first slice of pizza you eat when you are very hungry provides a high level of satisfaction, but by the fourth or fifth slice, the additional satisfaction you get from eating another slice is much less.

Consumer's Surplus

Consumer's surplus, also known as consumer surplus, is an economic concept that measures the difference between what consumers are willing to pay for a good or service and what they actually pay. It represents the extra benefit or value that consumers receive when they purchase a product for less than the highest price they are willing to pay.

Here's a more detailed explanation:

Willingness to Pay: This is the maximum price a consumer is prepared to pay for a good or service. It reflects the perceived value or utility that the consumer derives from the good.

Market Price: This is the actual price at which the good or service is sold in the market.

Consumer's surplus is calculated as the area between the demand curve (which represents consumers' willingness to pay) and the market price, up to the quantity consumed. Mathematically, it can be expressed as:

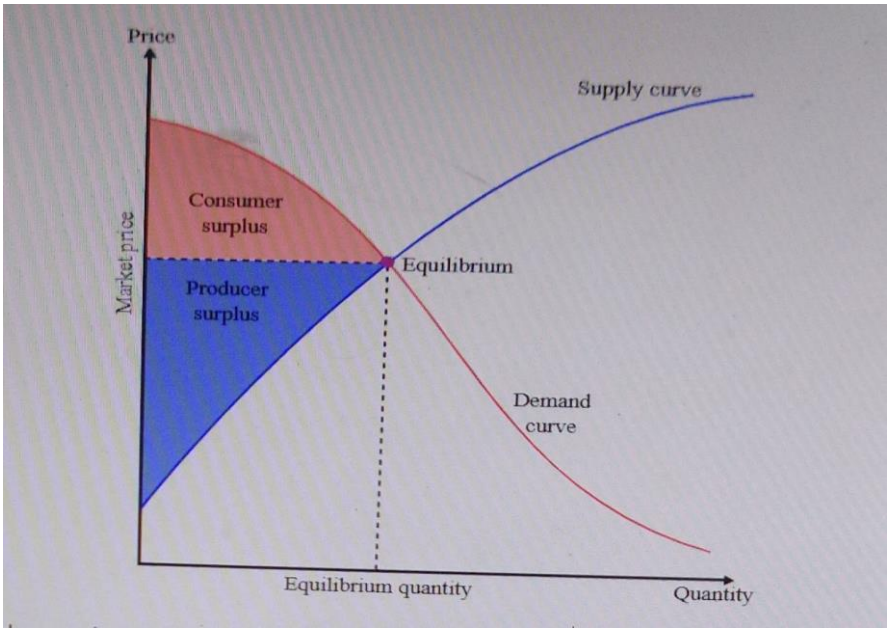
Consumer Surplus = Willingness to Pay – Actual Pay

Graphically, consumer surplus is shown as the area under the demand curve and above the market price line, up to the point of quantity purchased.

Consumer Surplus

Consumer surplus is the difference between the maximum price a consumer is willing to pay and the actual price they do pay.

Consumer surplus is the difference between the maximum price a consumer is willing to pay and the actual price they do pay. If a consumer would be willing to pay more than the current asking price, then they are getting more benefit from the purchased product than they spent to buy it. Consumer surplus plus producer surplus equals the total economic surplus in the market.



This chart graphically illustrates consumer surplus in a market without any monopolies, binding price controls, or any other inefficiencies. The price in this chart is set at the Pareto optimal. This means that the price could not be increased or decreased without one of the parties being made worse off. The consumer surplus, as marked in red, is bound by the y-axis on the left, the demand curve on the right, and a horizontal line

where y equals the equilibrium price. This area represent the amount of goods consumers would have been willing to purchase at a price higher than the Pareto optimal price. Generally, the lower the price, the greater the consumer surplus.

Consumer Surplus: Consumer surplus, as shown in upper portion, represents the benefit consumers get for purchasing goods at a price lower than the maximum they are willing to pay.

Another way to define consumer surplus in less quantitative terms is as a measure of a consumer's well-being. Some goods, like water, are valuable to everyone because it is a necessity for survival. But the utility, or "usefulness," of most goods vary depending on a person's individual preferences. Since the utility a person gets from a good defines her demand for it, utility also defines the consumer surplus an individual might get from purchasing that item. If a person has no use for a good, there is no consumer's surplus for that person in purchasing the good no matter the price. However, if a person finds a good incredibly useful, consumer surplus will be significant even if the price is high. An individual's customer surplus for a product is based on the individual's utility of that product.

Example:

Imagine a consumer is willing to pay up to $10 for a particular product but finds it available in the market for $7. The consumer's surplus in this case would be $3 ($10 - $7).

Importance:

1. Measure of Economic Welfare: Consumer surplus is a key measure of economic welfare, indicating the benefit that consumers receive from market transactions.

2. Market Efficiency: High consumer surplus generally indicates that markets are efficient and competitive, providing products at prices lower than consumers' maximum willingness to pay.

3. Policy Decisions: Understanding consumer surplus can help policymakers evaluate the impacts of taxes, subsidies, and other interventions on consumers' well-being.

Overall, consumer surplus is a vital concept in economics, highlighting the additional value and satisfaction that consumers gain from participating in the market.

Marshallian Concepts

Marshallian economics, based on the work of Alfred Marshall, is foundational in understanding key concepts in microeconomics and industrial organization.

1. Representative Firm

The concept of the "representative firm" was introduced by Alfred Marshall to simplify the analysis of industry behavior. A representative firm is an idealized firm that reflects the average characteristics of all firms in the industry. It is used to illustrate the typical responses of firms to changes in economic variables such as prices, costs, and market conditions. The representative firm helps to aggregate the behavior of individual firms and study the industry's overall equilibrium without getting bogged down by the complexities of firm-specific differences.

2. Economies of Scale

Economies of scale refer to the cost advantages that a firm can achieve due to the scale of its operations, with cost per unit of output generally decreasing with increasing scale. This concept can be divided into two main types:

Internal Economies of Scale: These are cost savings that accrue to a firm as it grows larger. They can result from factors like improved production techniques, better utilization of resources, bulk buying of inputs, and spreading fixed costs over a larger output.

External Economies of Scale: These are cost benefits that accrue to all firms within an industry as the industry grows. They can arise from factors such as a more skilled labor

pool, development of specialized suppliers, and improvements in infrastructure and technology.

3. Quasi-Rent

Quasi-rent refers to the earnings of a firm or factor of production in the short run that exceed its opportunity cost. It is not the same as economic rent, which is earned by a factor in perfectly inelastic supply. Quasi-rent occurs because some inputs are fixed in the short run, meaning their supply cannot be increased immediately. For instance, the earnings from a specialized machine that exceed its operational costs until more such machines can be produced and introduced into the market would be considered quasi-rent.

4. Institutional Economics

Institutional economics is an approach that emphasizes the role of institutions—rules, norms, and laws—in shaping economic behavior and outcomes. This branch of economics focuses on how these institutions evolve and how they influence the performance of economies. Key aspects include:

Historical Context: Understanding the historical development of institutions.

Behavioral Aspects: How institutions affect the behavior of individuals and firms.

Broader Perspective: Considering social, political, and legal factors that influence economic activities.

Evolutionary Approach: Viewing economic processes as dynamic and evolutionary rather than static and equilibrium-focused.

Prominent figures in institutional economics include Thorstein Veblen, who critiqued the emphasis on individual rationality in classical economics, and Douglass North, who explored the role of institutions in economic development and change.

These concepts are crucial for understanding the dynamics of firms, markets, and economies, highlighting how internal efficiencies, market conditions, and institutional frameworks shape economic performance.

Thorstein Bunde Veblen

Introduction

Veblen was the founder of institutionalism and the spiritual leader of renaissance in the American Economic thought.

Main Economic Ideas

1. **Criticism of earlier schools of thought**: Veblen was an inspired critic. Veblen was not satisfied with the methods, doctrines, and theories of the classical school and marginalist school. It is only through his criticisms of the existing economic theories; he has contributed to the development of economic thought.

He criticized the existing economics as it was not an evolutionary science. Similarly he holds that the laws of classical economics are based on a wrong conception that there is a natural order in which maladjustment are automatically corrected.

He also criticized the Austrian Economists on the ground that they could not make any advance in the direction of reconstructing economic science. Truly speaking he was greatly influenced by the development that took place in the field of social psychology. He main ideas in this regard are contained in his book “The Instinct of workmanship”.

2. **Significance of institutions**: Veblen considered the entire civilization as “a scheme of institutions”. He believed that the human behavior ultimately developed into an institution. Hence he tried to prove that the present institutions were the product of a continuous process of cultural development which had been in operation for many centuries.

According to Veblen, industry and business were the two important institutions of capitalism. Around these two institutions, several small institutions like competition, private property, banks, money etc., have developed. He further believed that these institutions have developed because of the process of evolution.

He has divided the society into two classes-productive and leisure. The former comprise those who work and produce, while the latter depend on acquisition, Veblen believed that the existing institutions have helped in creating class struggle.

Thus Veblen's institutionalism rests on two stones, namely economic conflict and change. Further, even though Veblen has traced the evolution of institutions, he has not sure about their further. Life for him was an endless process which would continue for all times and in which old changes will give place to new changes.

3. **The theory of business enterprise**: Veblen's book, "The Theory of Business Enterprise" presents a theoretical analysis of the working of the large scale business enterprises and other institutions of American capitalism.

According to Veblen, it is the machine that provides the scope and method to modern industry. Machine had standardized the human life, goods, processes and consumer taste. It had improved the efficiency of work and decreased the unit cost. But these advantages of machinery are not fully obtained.

Veblen, therefore, concludes that it is through the establishment of monopolies and monopolistic activities that the captains of industry meddle with the economic and industrial mechanism and the results are wastes, depression and unemployment. According to Veblen, large business enterprises are mere parasites on the community, and their activities only add to the instability of the capitalistic system.

Corporation: According to Veblen, technological basis of industry has given rise to a new form of business enterprise, namely corporation. Corporations depend mainly on

corporate credit system. They have greater earning capacity and use it only for their benefits and not for the benefits of consumers in the form of lowering prices. Further, these corporations have changed the nature and functions of private property. They have introduced collective action and given stimulus to class conflict.

The theory of the leisure class : In this book, Veblen pointed out that leisure class was an ancient institution. In almost every society upper class men are exempted from occupations which expressed their "superior rank". This class, based on the ownership of property was aggressive. It never helped in providing the necessaries of life. It was always interested in getting money. Veblen regards the activities of this class as waste because they do not serve human well-being. The culture of this class was somewhat savage like because of its dress, ways of living, expenditure etc. this class spent much time money and energy on unproductive things.

On the other hand in the society, there has developed a class which does not have enough money, but which is faithful to the rich and is always subservient to it. Veblen's analysis of the leisure class appears to be more or less similar to that of Marx.

Trade cycle: Veblen's analysis of the causes of financial crisis and unemployment is quite interesting. Veblen noticed that in the society there are two classes of people-one was busy in supplying the requirements of human society and the other was engaged in speculation and profit making. He regarded the cyclical occurrences as the result of the finance capitalism.

At the later stages of boom, profits decrease and a limit is reached when prices do not increase any further due to increased cost of labour and materials. Bank loans become costlier. Due to the pressure by the creditors for the return of loans, the businessmen get nervous.

Veblen thought that the market glut was created by producers themselves because they produced without anticipating demand. The efforts made by the entrepreneurs towards the adjustment of supply and demand have been termed by Veblen as "Capitalistic sabotage". He also remarked that whereas in the olden days, producers thoroughly understood the technique of production, in his days, they entirely depended upon engineers and technicians.

According to Veblen, competition is at the root of all cyclical depressions. He therefore suggested that Government expenditure in efficient and low cost public works or preparations for war can ease the pressure of competition and reduce the power of monopolists. In any case, he was not in favor of overthrowing private capitalism. He was only opposed to those producers who were money makers, that is who under-valued productivity, efficiency and gave importance to profit making.

Class conflict: According to Veblen, under the existing system of production, the society was divided into two classes-productive class and leisure class. To Veblen, the technological change was the most introduced factor that changed the economic institutions and through them, the human behavior. He emphasized the fact that class conflict arose out of cultural lag.

Value: Veblen differentiated between economic value and pecuniary value. The end products produced by the industrial system possessed economic value. In the Veblen sense, a commodity has economic value, which satisfies both the individual and social needs. As against economic value, pecuniary value, or exchange value is the final product of an industry. It is psychological and rests on uncertain foundations of vendibility-that is the capacity of an article to bring the pecuniary gain to its owner.

WESLEY CLAIR MITCHELL

Wisely Clair Mitchell was one of the three great figures of the institutional school, the other two being Veblen and commons.

Main Economic Ideas

The main economic ideas of Mitchell are discussed below:

Method of study:

Mitchell emphasized the quantitative analysis in economic investigations. Through this quantitative method, he was able to give a systematic account of cyclical fluctuations.

Institutional Approach

According to Mitchell each individual has lot of instincts which are different from individual to individual. The behavior of an individual that resulted from inborn capacities is an unreasoning form of behavior. According to Mitchell, three institutions-arts, writing, speech and religion provided a standard behavior, habits of felling, acting and thinking that are approved by the community and finally embedded in social institution.

Social institutions are powerful agents to direct human behavior. They are the embodiments of past achievements of human intelligence. Mitchell analyzed the origin and development of institutions and customs and supplemented them with money, banking and labour problems. He felt that the role of money would broaden the scope of economic theory.

Theory of Economic Guidance

Mitchell in his theory of economic guidance put forward the idea that the introduction corporate enterprise separated ownership and management as a result, powers were

concentrated in the hands of a few directors and executives. Those who control the affairs of a corporation do it in their own interests.

Economic Welfare and Planning

Mitchell thought that when economic become a science of human behavior, it would emphasize more human welfare and less wealth.

To Mitchell welfare did not simply mean and abundant supply of goods, but also a satisfactory working life, full of interesting activities. The depression and the new deal called for economic planning Mitchell considered economic planning the most important and difficult task. He believed that planning by business alone would not succeed.

Business Cycle:

Mitchell is greatest contribution was the study of business fluctuations his book entitled "The Rhythm of Business Activity" was the pinnacle of his ideas and finding on the working of trade cycles. He collected huge statistical data and with the help of that he could carry on a deep study of the individual cycles, group and parts of the cycle.

Mitchell did not considered the study of trade cycles as a branch of economic theory. According to him, the study of trade cycle was more important and fruitful for gaining knowledge about the working of modern economic system.

He attributed business cycles to the imbalance between production and distribution. When imbalance occurs, it results in results in glut in the market. Business cycles recur because there is no proper business planning. Business fluctuations are aggravated by factors such as widening of markets, monopolies, migration of people etc.

According to the self generation theory given by Mitchell, each phase of a trade cycle would automatically generate the other. He held the view that business crises were but one feature of a recurrent cycle. A crises was expected to be followed by depression by recovery, recovery by prosperity and prosperity by crisis and so on.

Further Mitchell stated that during the revival period, there would be an increase in the price level, high business expectations, more production, increased demand for goods, and the level of employment would increase. Business optimism, increased investment heavy orders for machinery would lead to a further increase in the price level.

JOHN ROGERS COMMONS

John Rogers Commons was a leading member of the institutional school. Commons contributed to the study of the legal aspects of institutionalism.

Main Economic Ideas

The main economic ideas of commons are the following:

Economic institutions:

In his book "Institutional Economics", Commons defined institution as a "collective action in control of individual action". Commons emphasized the mutual dependence of men and the need for co-operation. He emphasized the need for collective action to reconcile the clash of interests which the institution of private property created.

Institutional Economics:

This type of economic started with the conflict of interests. To him, institutional economics took its place as the proprietary economics of rights, duties, and liberties and gave to collective actions.

Pragmatic Approach:

His work was characterized by two qualities, namely historicity and relativity. He shifted from pure theory to pragmatic theory which stressed the importance of inductive analysis.

Economic Transactions:

According to commons, human behavior was a social phenomenon as it affected the entire society. Men have to depend on one another and the existence of private

property created conflicts in them. The dependence of man upon man, and the conflicts between human beings should always be kept in order which was possible only by a study of economic transactions.

He classified these economic transactions into bargaining transactions, managerial transactions and rationing transactions. Bargaining transactions lead to the change in the ownership of wealth, managerial transactions create wealth and rationing transactions ration the burden and benefits of the wealth so created. All these transactions are symbolized in a "going concern".

Theory of Going Concerns:

Commons defined a going concern as an institution which promised the expectation of beneficial bargaining, managerial and rationing transactions which were bound together by the working rules.

This theory of going concern was different from the duty theory and the Liberty theory of the state. Further commons differentiated between two other terms-going plant and going business. In commons' opinion, the best going business is that in which sales and purchases, technology, and business are rightly proportioned.

Public Utility Theory of Labour:

According to commons, labour constituted an important part of the national economy, because they created public utilities. He was fully aware of the psychology of labour and the working of corporate managements.

Commons believed that there was a cultural lag between the technological progress and the psychological attitude of employers and workers. He predicted that the future of industry was psychological.

Capitalism:

Capitalism evolved very slowly during the course of countries. Commons divided capitalism into 3 kinds, namely, merchant capitalism or mercantilism, employer capitalism, and banker capitalism. In employer capitalism, there was factory-method of production and legal control of commodities was separated from its physical control. In banker capitalism, the banker entered into economic activities and the stage of abundance caused by an industrial revolution was merged into an era of stabilization.

Explanatory Principles:

Commons introduced 5 explanatory principles namely efficiency, scarcity, working rules, sovereignty and futurity. He discussed the notions of scarcity and efficiency in a detailed manner. Veblen thought that under capitalism a balance could be attained between the two. Whereas the classical economists used scarcity as the basis for value, the Austrian economists adopted hedonistic approach.

Collective Action:

Common discussed elaborately the several stages of the development of the economy of collective action. The impetus for the first stage was provided by the development of the market. Technology and credit led to other stages-the retail shop stage to the whole sale stage.

Economic System:

Comparing the various economic systems, commons felt that under the existing conditions, it was difficult to decide the best system. Common wanted labour to increase its bargaining power and favored the organization of trade unions. He never wanted revolutions and strikes, but “collective bargaining on something like an organized equilibrium of equality….it seems to be the only way to save us from communism, Fascism or Nazism.

Unit-IV
Keynesian Revolution and Modern Thoughts

Keynes – Psychological law of Consumption

Keynes' Psychological Law of Consumption, proposed by the economist John Maynard Keynes, is a concept in macroeconomics that describes the relationship between income and consumption. According to this law, as people's income increases, their consumption also increases, but not by as much as the increase in income. In other words, the marginal propensity to consume (MPC) is less than one.

Further, Keynes put forward a psychological law of consumption, according to which, as income increases consumption increases but not by as much as the increase in income.

In other words, marginal propensity to consume is less than one.

$$1 > \Delta C/\Delta Y > 0$$

While Keynes recognized that many subjective and objective factors including interest rate and wealth influenced the level of consumption expenditure, he emphasized that it is the current level of income on which the consumption spending of an individual and the society depends.

“The amount of aggregate consumption depends mainly on the amount of aggregate income. The fundamental psychological law, upon which we are entitled to depend with great confidence both a priori from our knowledge of human nature and from the detailed facts of experience is that men (and women, too) are disposed, as a rule and on an average to increase their consumption as their income increases, but not by as much as the increase in their income”

In the above statement about consumption behaviour, Keynes makes three points. First, he suggests that consumption expenditure depends mainly on absolute income of the current period, that is, consumption is a positive function of the absolute level of current

income. The more income in a period one has, the more is likely to be his consumption expenditure in that period.

In other words in any period the rich people tend to consume more than the poor people do. Secondly, Keynes points out that consumption expenditure does not have a proportional relationship with income. According to him, as the income increases, a smaller proportion of income is consumed. The proportion of consumption to income is called average propensity to consume (APC). Thus, Keynes argues that average propensity to consume (APC) falls as income increases.

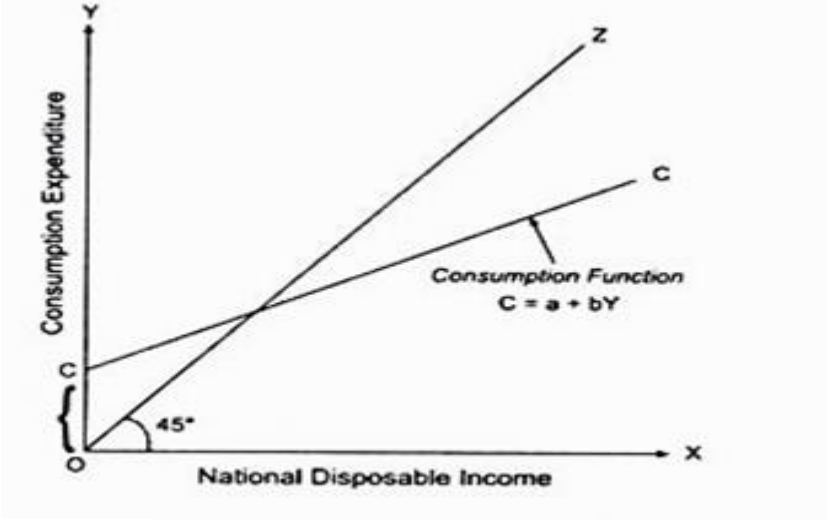
The Keynes' consumption function can be expressed in the following form:

$C = a + bYd$

where C is consumption expenditure and Yd is the real disposable income which equals gross national income minus taxes, a and b are constants, where a is the intercept term, that is, the amount of consumption expenditure at zero level of income. Thus, a is autonomous consumption. The parameter b is the marginal propensity to consume (MPC) which measures the increase in consumption spending in response to per unit increase in disposable income. Thus

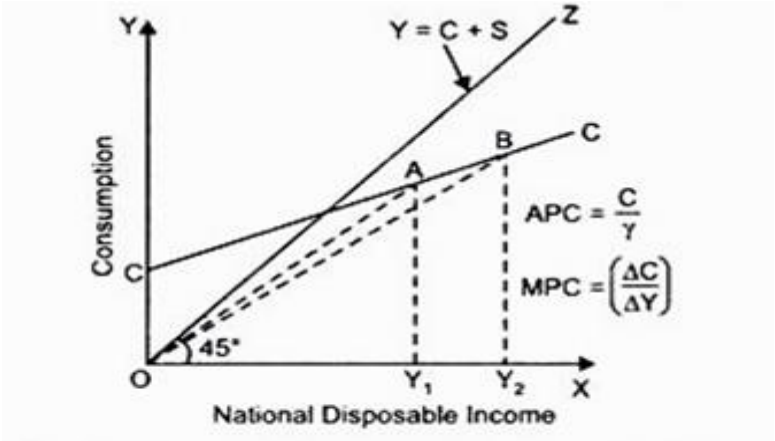
$MPC = \Delta C/\Delta Y$

It is evident from Fig. 1 and 2 the behaviour of consumption expenditure as perceived by Keynes implies that marginal propensity to consume (MPC) which is measured by the slope of consumption function curve CC at a point is less than average propensity to consume (APC) which is measured by the slope of the line joining a point on the consumption function curve CC to the origin (that is, MPC < APC).



Keynesian Linear Consumption Function

This is because as income rises consumption does not increase proportionately and as income falls consumption does not fall proportionately as people seek to protect their earlier consumption standards. This can be seen from Fig. 9.3 the slope of consumption function curve CC' measuring MPC and the slopes of lines OA and OB which give the APC (i. e C/Y) at points A and B respectively are falling whereas slope of the linear consumption function CC' remains constant.



Keynes's Consumption Function: Declining Average Propensity to Consume

The above figure have shown a linear consumption function with an intercept term. In this form of linear consumption function, though marginal propensity to consume (AC/AF) is constant, average propensity to consume (C/F) is declining with the

increase in income as indicated by the slopes of the lines OA and OB at levels of income F, and F_2 respectively.

The straight line OB drawn from the origin indicating average propensity to consume at higher income level F_2 has a relatively less slope than the straight line OA drawn from the origin to point/t at lower income level F_r The decline in average propensity to consume as the income increases implies that the proportion of income that is saved increases with the increase in national income of the country.

This result also follows from the studies of family budgets of various families at different income levels. The fraction of income spent on consumption by the rich families is lower than that of the poor families. In other words, the rich families save a higher proportion of their income as compared to the poor families.

The assumption of diminishing average propensity to consume is a significant part of Keynesian theory of income and employment. This implies that as income increases, a progressively larger proportion of national income would be saved. Therefore, to achieve and maintain equilibrium at full-employment level of income, increasing proportion of national income is needed to be invested.

If sufficient investment opportunities are not available, the economy would then run into trouble and in that case it would not be possible to maintain full-employment because aggregate demand will fall short of full-employment output.

On the basis of this increasing proportion of saving with the increase in income and, consequently, the emergence of the problem of demand deficiency, some Keynesian economists based the theory of secular stagnation on the declining propensity to consume.

Key points of Keynes' Psychological Law of Consumption include:

1. Marginal Propensity to Consume (MPC): This is the fraction of additional income that a household spends on consumption. For example, if the MPC is 0.8, it means that for every additional dollar of income, 80 cents will be spent on consumption and 20 cents will be saved.

2. Average Propensity to Consume (APC): This is the total consumption divided by total income. According to Keynes, the APC declines as income increases because people tend to save a larger proportion of their income as they become wealthier.

3. Consumption Function: Keynes proposed that consumption is a function of disposable income (income after taxes). The consumption function can be represented as:

$$C = a + bY$$

where C is the total consumption, a is the autonomous consumption (consumption when income is zero), b is the marginal propensity to consume, and Y is the disposable income.

4. Implications for Economic Policy: Keynes' law suggests that during economic downturns, when income falls, consumption will also fall, but by a smaller proportion. This indicates the importance of government intervention to boost aggregate demand, as higher consumption can lead to higher production and employment.

Overall, Keynes' Psychological Law of Consumption emphasizes the stability and predictability of the consumption patterns in an economy, which can help in formulating effective fiscal policies.

Keynes' Theory of Employment: Concept of Effective Demand

According to classicists, there will always be full employment in a free enterprise capitalist economy because of the operation of Say's Law and wage-price flexibility.

This classical theory came under severe attack during the Great Depression years of 1930s at the hands of J. M. Keynes. He rejected the notion of full employment and instead suggested full employment as a special case and not a general case.

Full employment is a temporary phenomenon, an astrological coincidence.

He claimed his theory to be 'general', i.e., applicable at any point of time. That is why he christened his epoch-making book: The General Theory of Employment, Interest and Money (1936). Thus, Keynes' theory is "general". In this book, he not only criticized the classical macroeconomics, but also presented a 'new' theory of income and employment. He is often described by economists as a revolutionary one in the sense that it was Keynes who salvaged the capitalist economy from destruction in the 1930s. Critics, however, label him as a 'conservative revolutionary'.

Keynes' theory of employment is a demand-deficient theory. This means that Keynes visualised employment/unemployment from the demand side of the model. His theory is, thus, known as demand-oriented approach, as opposed to the classical supply side model. According to Keynes, the volume of employment in a country depends on the level of effective demand of people for goods and services. Unemployment is attributed to the deficiency of effective demand.

It is to be kept in mind that Keynes' theory is a short run theory when population, labour force, technology, etc., do not change. Once Keynes remarked that since "in the long run we are all dead", it is of no use to present a long run theory. In view of this, one can argue that the volume of employment depends on the level of national income/output. Higher (lower) the level of national output higher (lower) is the volume of employment. Thus, Keynesian theory of employment determination is also the theory of income determination.

1. Meaning of Effective Demand:

Keynes' theory of employment is based on the princi-ple of effective demand. In other words, level of employment in a capitalist economy de-pends on the level of effective demand. Thus, unemployment is attributed to the deficiency of effective demand and to cure it requires the increasing of the level of effective demand.

By 'effective' demand, Keynes meant the total demand for goods and services in an economy at various levels of employment. Total demand for goods and services by the people is the sum total of all demand meant for consumption and investment. In other words, the sum of consumption expenditures and investment expenditures constitute effec-tive demand in a two-sector economy.

In order to meet such demand, people are employed to produce all kinds of goods, both consumption goods and investment goods. However, to complete our discussion on ef-fective demand, we need another component of effective demand—the component of government expenditure. Thus, effective demand may be defined as the total of all expenditures, i.e.,

$$C + 1 + G$$

where C stands for consumption expenditure,

I stands for investment expenditure, and G stands for government expenditure.

Here we ignore government expenditure as a component of effective demand. According to Keynes, the level of employment is determined by the effective demand which, in turn, is determined by aggregate demand function or aggregate demand price and aggregate supply function or aggregate supply price. In Keynes' words; "The value of D (Aggregate Demand) at the point of Aggregate Demand function, where it is intersected by the Aggregate Supply function, will be called the effective demand."

2. Aggregate Supply (AS):

Employers hire and purchase various inputs and raw materi-als to produce goods. Thus, production in-volves cost. If sales revenue from the sale of output produced exceeds cost of production at a given level of employment and output, the entrepreneur would be induced to employ more labour and other inputs to produce more.

At any given level of employment of labour, aggregate supply price is the total amount of money that all entrepreneurs in the economy expect to receive from the sale of output produced by given number of labourers employed. For each particular level of employment, there is an aggregate supply price. Here, by 'price' we mean the amount of money received from the sale of output, i.e., sales proceeds.

Thus, aggregate supply price refers to the proceeds from the sale of output at each level of employment and there are dif-ferent aggregate supply prices for different levels of employment. If this information is expressed in a tabular form, we obtain "ag-gregate supply price schedule" or aggregate supply function. The aggregate supply func-tion is a schedule of the minimum amounts of proceeds required to induce varying quanti-ties of employment. Simply, it shows various aggregate supply prices at different levels of employment. Plotting this information graphi-cally, we obtain aggregate supply curve.

According to Keynes, aggregate supply function is an increasing function of the level of employment. Aggregate supply (AS) curve slopes upward from left to right because volume of employment increases with the increase in sale proceeds. But there is a limit to increase output level. This is called full employment level of output beyond which output cannot be increased, it is because of full employment that AS curve becomes vertical or perfectly inelastic. This means that the level of employment cannot exceed full employ-ment (LF) level even by increasing aggregate supply price. This is shown in Fig. 3.4.

3. Aggregate Demand (AD):

Aggregate demand or aggregate demand price is the amount of money or price which all entrepreneurs expect to receive from the sale of output produced by a given number of men employed. Or it refers to the expected revenue from the sale of output at a particular level of employment. Each level of employment is associated with a particular aggregate supply price and there are different aggregate demand prices for different levels of employment.

Like the aggregate supply schedule, aggregate demand schedule shows the aggregate demand price for each possible level of employment. Plotting the aggregate demand schedule we obtain aggregate demand curve as there is a positive relation between the level of employment and aggregate demand price, i.e., expected sales receipts. This is shown in Fig. 3.4. It rises from left to right.

4. Equilibrium Level of Employment— The Point of Effective Demand:

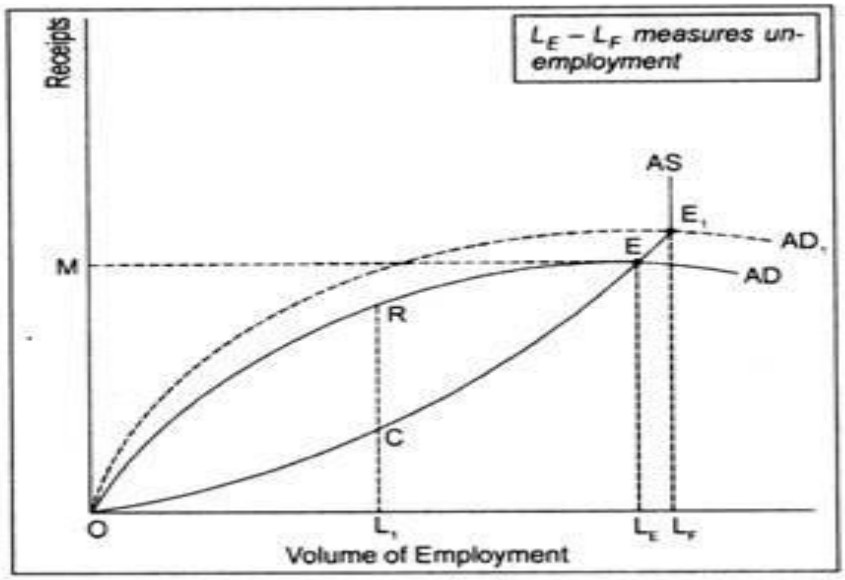
We have studied separately aggregate demand and aggregate supply as the two determinants of effective demand. Now we will describe how equilibrium level of employment is deter-mined in an economy by using the concept of effective demand.

The level of employment in an economy is determined at that point where the aggregate supply price equals the aggregate demand price. In other words, the intersection of the aggregate supply function with the aggregate demand function determines the volume of income and employment in an economy.

It is, thus, clear that so long as expected sales receipts of the entrepreneur (i.e., aggregate demand schedule) exceed costs (i.e., aggregate supply schedule), the level of employment should be increasing and the process will continue until expected receipts equal costs or aggregate demand curve intersects aggregate supply curve.

Note that the AS curve starts from the origin. If aggregate receipts (i.e., GNP) are zero, entrepreneurs would not hire workers. Likewise, AD curve also starts from the origin. The equilibrium level of employment is determined by the intersection of the AS and AD curves. This is the point of effective demand— point E in Fig. 3.4. Corresponding to this point, OL_E workers are employed. At the OL_1 level of employment, expected receipts exceed necessary costs by the amount RC. Entrepreneurs will now go on hiring more labour till OL_E level of employment is reached.

At this level of employment, entrepreneurs' expectations of profits are maximised. Employment beyond OL_E is unprofitable because costs exceed revenue. Thus, actual employment (OL_E) falls short of full employment (OL_F). Keynesian system shows two kinds of equilibria—actual employment equilibrium determined by AD and AS curves and underemployment equilibrium.



Effective Demand and Determination of Employment

Keynes made little emphasis to the aggre-gate supply function since its determinants (such as technology, supply or availability of raw materials, etc.,) do not change in the

short run. Keynes was examining the possibility of unemployment in a capitalistic economy against the backdrop of Great Depression of the 1930s.

After diagnosing the problem, Keynes recommended policy prescription so as to create more employment in the economy. Indeed, for curing unemployment problem, he did not subscribe to the classical ideas—the supply-oriented policies. Keynes attached great importance to demand-stimulating poli-cies to cure unemployment. In other words, Keynes paid emphasis on the aggregate de-mand function. That is why Keynes' theory is known as a 'theory of aggregate demand'.

The diagram shows the situation of equilibrium at less than full employment level. Actual equilibrium, OLE, is short of full employment equilibrium, OLE. Thus, the distance OLF – OLE measures unemployment. This is called involuntary unemployment—a situation at which people are willing to work but do not find jobs.

This unemployment, according to Keynes, is due to the deficiency of aggregate demand. This unemployment can be removed by stimu-lating aggregate demand. Aggregate demand is the sum total of consumption and invest-ment demand or expenditures in the economy. By raising consumption expenditure, level of employment can be raised.

But there is a limit to consumption expenditure. So what is needed is the raising of (private) investment demand. Anyway, an increase in consump-tion demand and investment demand will raise the level of employment in the economy. The point of effective demand has been changed because of the shifting of AD curve from AD to AD1New effective demand is now given by E1 Corresponding to this point, equilibrium level of employment is OLF—the level of full employment.

Thus, in Keynes' theory, unemployment is due to the deficiency of effective demand. Only by stimulating effective demand can a higher level of employment be achieved.

However, Keynes goes on arguing that equi-librium level of employment will not neces-sarily be at full employment.

A capitalist economy will always experience underem-ployment equilibrium—an equilibrium situ-ation less than full employment. Full employ-ment, according to Keynes, can never be achieved. In Keynes' scheme of things, both consumption and investment cannot be raised enough to employ more work force. Therefore, he recommends government to come forward and take appropriate action to cure unemploy-ment problem.

This means that aggregate demand is now the sum total of all consumption, investment and government expenditures. It is because of the multiplier effect of both pri-vate investment expenditure and government expenditure, that there will be larger income, output and employment. But equilibrium in the economy will be established at less than full employment situation because of (i) wage rigidity, (ii) interest inelasticity of investment, and (iii) liquidity trap.

Keynesian Theory of Employment

As per Keynes theory of employment, effective demand signifies the money spent on the consumption of goods and services and on investment.

The total expenditure is equal to the national income, which is equivalent to the national output.

Therefore, effective demand is equal to total expenditure as well as national income and national output.

The theory of Keynes was against the belief of classical economists that the market forces in capitalist economy adjust themselves to attain equilibrium. He has criticized classical theory of employment in his book General Theory of Employment, Interest

and Money. Keynes not only criticized classical economists, but also advocated his own theory of employment.

His theory was followed by several modern economists. Keynes book was published post-Great Depression period. The Great Depression had proved that market forces cannot attain equilibrium themselves; they need an external support for achieving it. This became a major reason for accepting the Keynes view of employment.

The Keynes theory of employment was based on the view of the short run. In the short run, he assumed that the factors of production, such as capital goods, supply of labor, technology, and efficiency of labor, remain unchanged while determining the level of employment. Therefore, according to Keynes, level of employment is dependent on national income and output.

In addition, Keynes advocated that if there is an increase in national income, there would be an increase in level of employment and vice versa. Therefore, Keynes theory of employment is also known as theory of employment determination and theory of income determination.

Principle of Effective Demand:

The main point related to starting point of Keynes theory of employment is the principle of effective demand. Keynes propounded that the level of employment in the short run is dependent on the aggregate effective demand of products and services.

According to him, an increase in the aggregate effective demand would increase the level of employment and vice-versa. Total employment of a country can be determined with the help of total demand of the country. A decline in total effective demand would lead to unemployment.

As per Keynes theory of employment, effective demand signifies the money spent on the consumption of goods and services and on investment. The total expenditure is equal to the national income, which is equivalent to the national output. Therefore, effective demand is equal to total expenditure as well as national income and national output.

The effective demand can be expressed as follows:

Effective demand = National Income = National Output

Therefore effective demand affects employment level of a country, national income, and national output. It declines due to the mismatch of income and consumption and this decline lead to unemployment.

With the increase in the national income the consumption rate also increases, but the increase in consumption rate is relatively low as compared to the increase in national income. Low consumption rate leads to a decline in effective demand.

Therefore, the gap between the income and consumption rate should be reduced by increasing the number of investment opportunities. Consequently, effective demand also increases, which further helps in reducing unemployment and bringing full employment condition.

Moreover, effective demand refers to the total expenditure of an economy at a particular employment level. The total equal to the total supply price of economy (cost of production of products and services) at a certain level of employment. Therefore, effective demand refers to the demand of consumption and investment of an economy.

Determination of Effective Demand:

Keynes has used two key terms, namely, aggregate demand price and aggregate supply price, for determining effective demand. Aggregate demand price and

aggregate supply price together contribute to determine effective demand, which further helps in estimating the level of employment of an economy at a particular period of time.

In an economy, the employment level depends on the number of workers that are employed, so that maximum profit can be drawn. Therefore, the employment level of an economy is dependent on the decisions of organizations related to hiring of employee and placing them.

The level of employment can be determined with the help of aggregate supply price and aggregate demand price. Let us study these two concepts in detail.

Aggregate Supply Price:

Aggregate supply price refers to the total amount of money that all organizations in an economy should receive from the sale of output produced by employing a specific number of workers. In simpler words, aggregate supply price is the cost of production of products and services at a particular level of employment.

It is the total amount of money paid by organizations to the different factors of production involved in the production of output. Therefore, organizations would not employ the factors of production until they can recover the cost of production incurred for employing them.

A certain minimum amount of price is required for inducing employers to offer a specific amount of employment. According to Dillard, “This minimum price or proceeds, which will just induce employment on a given scale, is called the aggregate supply price of that amount of employment.”

If an organization does not get an adequate price so that cost of production is covered, then it employs less number of workers. Therefore the aggregate supply price varies

according to different number of workers employed. So, aggregate supply price schedule It can be prepared as per the total number of workers employed.

Aggregate supply price schedule is a schedule of minimum price required to induce the different quantities of employment. Thus, higher the price required to induce the different quantities of employment, greater the level of employment would be. Therefore, the slope of the aggregate supply curve is upward to the right.

Aggregate Demand Price:

Aggregate demand price is different from demand for products of individual organizations and industries. The demand for individual organizations or industries refers to a schedule of quantity purchased at different levels of price of a single product.

On the hand, aggregate demand price is the total amount of money that an organization expects to receive from the sale of output produced by a specific number of workers. In other words, the aggregate demand price signifies the expected sale receipts received by the organization by employing a specific number of workers.

Aggregate demand price schedule refers to the schedule of expected earnings by selling the product at different level of employment Mo higher the level of employment, greater the level of output would be.

Consequently, the increase in the employment level would increase the aggregate demand price. Thus, the slope of aggregate demand curve would be upward to the right. However, the individual demand curve slopes downward.

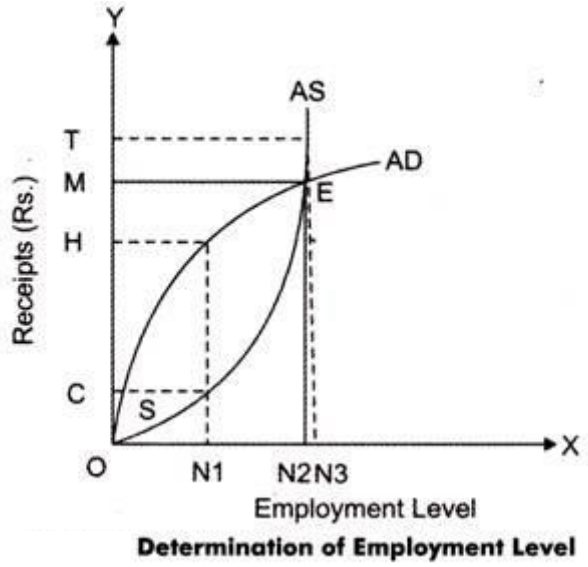
The basic difference between the aggregate supply price and aggregate demand price should be analyzed carefully as both of them seem to be same. In aggregate supply price, organizations should receive money from the sale of output produced by employing a specific number of workers.

However, in aggregate demand price, organizations expect to receive from the sale of output produced by a specific number of workers. Therefore, in aggregate supply price, the amount of money is the necessary amount that should be received by the organization, while in aggregate demand price the amount of money may or may not be received.

Determination of Equilibrium Level of Employment:

The aggregate demand price and aggregate supply price help in determining the equilibrium level of employment.

The aggregate demand (AD) and aggregate supply (AS) curve are used for determining the equilibrium level of employment, as shown in below figure.



Determination of Employment Level

In above figure, AD represents the aggregate demand curve, while AS represents the aggregate supply curve. It can be interpreted from Figure-3 that although the aggregate demand and aggregate supply curve are moving in the same direction, but they are not alike. There are different aggregate demand price and aggregate supply price for different levels of employment.

For example, in above figure, at AS curve, the organization would employ ON1 number of workers, when they receive OC amount of sales receipts. Similarly, in case of AD curve, the organization would employ ON1 number of workers with the expectation that they would produce OH amount of sales receipt for them.

The aggregate demand price exceeds the aggregate supply price or vice versa at some levels of employment. For example, at ON1 employment level, the aggregate demand price (OH) is greater than the aggregate supply price (OC). However, at certain level of employment, the aggregate demand price and aggregate supply price become equal.

At this point, aggregate demand and aggregate supply curve intersect each other. This point of intersection is termed as the equilibrium level of employment. In Figure-3, point E represents the equilibrium level of employment because at this point, the aggregate demand curve and aggregate supply curve intersect each other.

In above figure, initially, there is a slow movement in the AS curve, but after a certain point of time it shows a sharp rise. This implies that when a number of workers increases initially, the cost incurred for production also increases but at a slow rate. However, when the amount of sales receipt increases, the organization starts employing more and more workers. In above figure, the ON1 numbers of workers are employed, when OT amount of sales receipts are received by the organization.

On the other hand, the AD curve shows a rapid increase initially, but after some time it gets flattened. This means that the expected sales receipts increase with an increase in the number of workers. As a result, the expectations of the organization to earn more profit increases. As a result, the organization start employing more workers. However, after a certain level, the increase in employment level would not show an increase in the amount of sales receipts.

In Figure, before reaching the employment level of ON2, the employment level keeps on increasing as the organizations want to higher more and more workers to get the maximum profit. However, when the employment level crosses the ON21 level, the AD curve is below the AS curve, which shows that the aggregate supply price exceeds the aggregate demand price. As a result, the organization would start incurring losses; therefore would reduce the employment rate.

Thus, the economy would be in equilibrium when the aggregate supply price and aggregate demand price become equal. In other words, equilibrium can be achieved when the amount of sales receipt necessary and the amount of sales receipt expected to be received by the organization at a specified level of employment are equal.

Schumpeter's Theory of Innovation

Joseph Schumpeter considered trade cycles to be the result of innovation activity of the entrepreneurs in a competitive economy.

In his view trade cycles are an inherent part of the process of economic growth of a capitalist society.

Schumpeter develops his model of the trade cycle as consisting of two stages.

The first stage deals with the initial impact of the innovation which entrepreneurs introduce in their production process. The second stage follows as a result of the reactions of competitors to the initial impact of the innovation.

Schumpeter starts his analysis by assuming the equilibrium state of the economic system where all the factors of production are fully employed. Every firm is producing efficiently with average costs equal to price. Product prices are equal to both average and marginal costs.

Profits in the Schumpelerian sense are zero. There is no net saving and no net investment. Schumpeter calls this equilibrium state of the economy as a "circular flow" of economic

activity which just repeats itself period after period like the circulation of blood in the animal organism.

The circular flow of economic activity gets disturbed when an entrepreneur successfully carries out an innovation. According to Schumpeter, the primary function of an entrepreneur is innovation activity which yields him real 'profit'. By an innovation he means "such changes in the production of goods as cannot be effected by infinitesimal steps or variations on the margin."

An innovation may consist of:

(1) The introduction of a new product;

(2) Adoption of a new method of production;

(3) The opening up of a new market; food

(4) The conquest of a new source of raw materials or semi-manufactured goods; and

(5) Re-organisation of production processes within a firm. Innovations are the commercial applications of inventions by entrepreneurs.

An entrepreneur is not a man of ordinary ability in that he introduces in his business something which is entirely 'new' to the existing economic system. He is not a capitalist but an organizer who can mobilise the needed cash for introducing his innovation.

The innovator-entrepreneur requires two things to perform his function; one, technical knowledge for the introduction of innovations, and two finance for the completion of his task. In Schumpeter's view, a reservoir of untapped technical knowledge exists in a capitalist society on which he can draw for shaping his innovation. Regarding funds, Schumpeter believes that an entrepreneur can attract bank credit easily.

Introduction of an innovation spells a start for the business cycle. As the innovator-entrepreneur begins bidding away resources from other industries, money incomes increase and prices begin to rise thereby stimulating further investment. As the innovation

steps up production, the circular flow in the economy swells up. Supply exceeds demand. The initial equilibrium is disturbed.

There is a wave of expansion of economic activity. This is what Schumpeter calls the "primary wave". This primary wave is followed by a "Secondary wave" of expansion. This is due to the impact of the original innovation on the competitors.

As the original innovation proves profitable, other entrepreneurs follow it in "swarm-like clusters." Innovation in one line induces innovations in related lines. Money incomes and prices rise. There is a cumulative expansion of economic activity. Since the purchasing power of consumers increases, the demands for the products of the non-innovating industries also go up and their prices are pushed up.

As potential profits in these industries increase, a wave of expansion in the whole economy follows. This is the secondary wave of credit inflation that gets superimposed on the primary wave of expansion. Over optimism and speculation add to the enthusiasm for expansion under boom conditions.

The period of prosperity ends as soon as 'new' products induced by the waves of innovations replace old ones. Since the demand for old products goes down, their prices fall and consequently their producer-firms are forced to contract their output.

Some of them may be forced into liquidation. When the innovators begin repaying their bank loan out of the newly-earned profits, the quantity of money in circulation is reduced as a result of which prices tend to fall and profits decline.

In this atmosphere, uncertainty and risks increase. Depression sets in. The impulse for further innovation is sapped up. The painful process of readjustment to the point of "previous neighbor-hood of equilibrium" begins. The economy is on its way downward into depression.

The economy cannot continue in depression for long. Innovation-minded entrepreneurs continue their search for profitable innovations. The natural forces of recovery bring about a revival. Schumpeter points out that the deflationary forces generated by depression are gradually offset by certain other forces one of which is the ‘dilution or diffusion of effects’.

This is the effect of bankruptcies, shut-downs and collapses of individual markets on general economic activity.

The impact of these events goes on falling as these occur. Another factor reducing the effect of depression is that the collapse of some firms enables remaining firms to expand their operations to eater to the market fed by the collapsing firms.

These offsetting influences have a restorative effect. Further, the decline in aggregate consumption throughout the downswing will be less than that in income which results in the depletion of inventories to the point where there is a need to replenish them.

As fresh investments take place, some of the more adventurous entrepreneurs will start innovating. Others follow and investment surges up again in a spurt and another boom are on the way. This completes the phases of a full trade cycle.

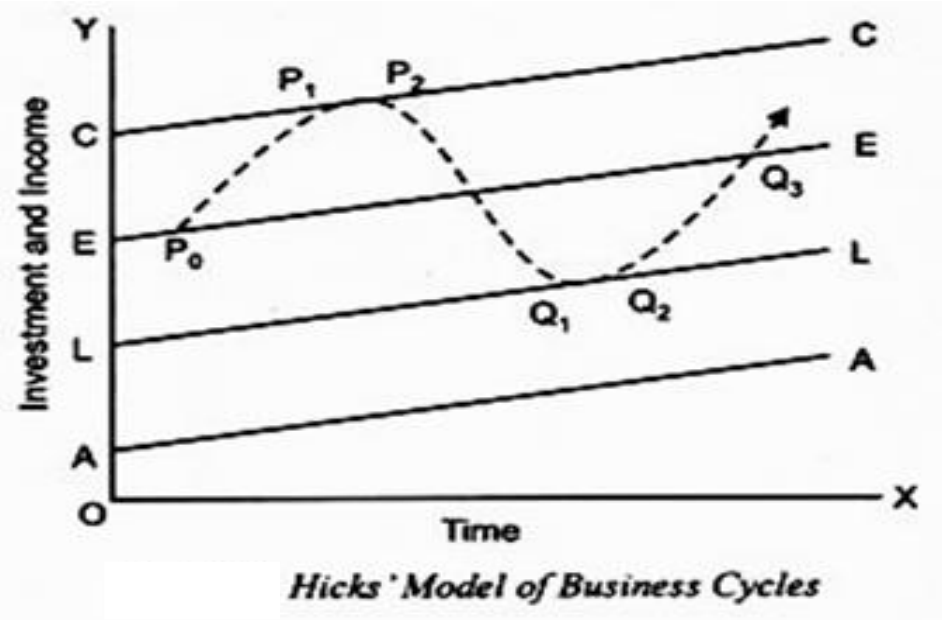
Hicks’ Theory of Trade Cycle

Hicks put forward a complete theory of business cycles based on the interaction between the multiplier and accelerator by choosing certain values of marginal propensity to consume (c) and capital- output ratio (v) which he thinks are representative of the real world situation.

According to Hicks, the values of marginal propensity to consume and capital-output ratio fall in either region C or D of the following figure.

As seen above, in case values of these parameters lie in the region C, they produce cyclical movements (i.e., oscillations) whose amplitude increases overtime and if they fall in region D1 they produce an explosive upward movement of income or output without oscillations. To explain business cycles of the real world which do not tend to explode, Hicks has incorporated in his analysis the role of buffers.

On the one hand, he introduces output ceiling when all the given resources are fully employed and prevent income and output to go beyond it, and, on the other hand, he visualizes a floor or the lower limit below which income and output cannot go because some autonomous investment is always taking place.



Hicks' Model of Business Cycles

Another important features of Hicks' theory is that business cycles in the economy occur in the background of economic growth (i.e., the rising trend of real income of output over time). In other words, cyclical fluctuations in real output of goods and services take place above and below this rising line of trend or growth of income and output. Thus in his theory he explains business cycles along with an equilibrium rate of growth.

In Hicks' theory of long-run equilibrium growth that is determined by rate of increase of autonomous investment over time and, therefore, long-run equilibrium growth of income

is determined by the autonomous investment and the magnitudes of multiplier and accelerator. Hicks assumes that autonomous investment, depending as it is on technological progress, innovations and population growth, grows at a constant rate.

With further assumptions of stable multiplier and accelerator, equilibrium income will grow at the same rate as autonomous investment. It follows therefore that the failure of actual output to increase along the equilibrium growth path, sometimes to move above it and sometimes to move below it, determines the business cycles.

Hicks' theory of business cycles has been explained with the help of above figure. In this figure, AA line represents autonomous investment. Autonomous investment is that investment which is not induced by changes in income and is made by entrepreneur as a result of technological progress or innovations or population growth. Hicks assumes that autonomous investment grows annually at a constant rate given by the slope of the line AA.

Given the marginal propensity to consume, the simple multiplier is determined. Then the magnitude of multiplier and autonomous investment together determine the equilibrium path of income shown by the line LL. Hicks calls this the floor line as this sets the lower limits below which income (output) cannot fall because of a given rate of growth of autonomous investment and the given size of the multiplier. But induced investment has not yet been taken into account.

If national income grows from one year to the next, as it would move along the line LL, there is some amount of induced investment via accelerator. The line EE shows the equilibrium growth path of national income determined by autonomous investment and the combined effect of the multiplier and accelerator. FF is the full employment ceiling. It is a line that shows the maximum national output at any period of time when all the available resources of the economy are fully employed.

Given the constant growth of autonomous investment, the magnitude of multiplier and the induced investment determined by the accelerator, the economy will be moving along the equilibrium growth path line EE. Thus starting from point E, the economy will be in equilibrium moving along the path EE determined by the combined effect of multiplier and accelerator and the growing level of the autonomous investment.

Suppose when the economy reaches point P0 along the path EE, there is an external shock—say an outburst of investment due to certain innovation or jump in governmental investment. When the economy experiences such an outburst of autonomous investment it pushes the economy above the equilibrium growth path EE after point P0.

The rise in autonomous investment due to external shock causes national income to increase at a greater rate than that shown by the slope of EE. This greater increase in national income will cause further increase in induced investment through acceleration effect. This increase in induced investment causes national income to increase by a magnified amount through multiplier.

So under the combined effect of multiplier and accelerator, national income or output will rapidly expand along the path from P0 to P1. Movement from PQ to P1 represents the upswing or expansion phase of the business cycle. But this expansion must stop at P1 because this is the full employment output ceiling. The limited human and material resources of the economy do not permit a greater expansion of national income than shown by the ceiling line CC.

Therefore, when point P1 is reached the rapid growth of national income must come to an end. Prof. Hicks assumes that the full employment ceiling grows at the same rate as autonomous investment. Therefore, CC slopes gently unlike the very steep slope of the line from P0 to P1. When point P1 is reached the economy must grow at the same rate as the usual growth in autonomous investment.

For a short time the economy may crawl along the full employment ceiling CC. But because national income has ceased to increase at the rapid rate, the induced investment via accelerator falls off to the level consistent with the modest rate of growth determined by the constant rate of growth of autonomous investment. But the economy cannot crawl along its full employment ceiling for a long time.

The sharp decline in growth of income and consumption when the economy strikes the ceiling causes a sharp decline in induced investment. Thus with the sharp decline in induced investment when national income and hence consumption ceases to increase rapidly, the contraction in the level of the income and business actually must begin.

Once the downswing starts, the accelerator works in the reverse direction. That is, since the change in income is now negative the inducement to invest must begin to decrease. Thus there is slackening off at point P2 and national income starts moving toward equilibrium growth path EE. This movement from P2 downward therefore represents the downswing or contraction phase of the business cycle.

In this downswing investment falls off rapidly and therefore multiplier works in the reverse direction. The fall in national income and output resulting from the sharp fall in induced investment will not stop on touching the level EE but will go further down. The economy must consequently move all the way down from point P2 to point Q1. But at point Q1 the floor has been reached.

Whereas the upswing was limited by the output ceiling set by the full employment of available resources, in the downswing the national income cannot fall below the level of output represented by the floor. This is because the floor level is determined by simple multiplier and autonomous investment growing at constant rate, while during the downswing after a point accelerator ceases to operate.

It may be noted that during downswing the limit to negative investment (disinvestment) and therefore the limit to the contraction of output is set by the depreciation of capital stock. There is no way for the businessmen to make disinvestment at a desired rate higher than the depreciation.

When during downswing such conditions arise, accelerator becomes inoperative. After hitting the floor the economy may for some time crawl along the floor through the path Q1 to Q2. In doing so, there is some growth in the level of national income. This rate of growth as before induces investment and both the multiplier and accelerator come into operation and the economy will move towards Q3 and the full employment ceiling CC. This is how the upswing of cyclical movement again starts.

Critical Appraisal of Hicks' Theory:

But Hicks' theory of trade cycles is not without critics. A major weakness of Hicks' theory, according to Kaldor, is that it is based on the principle of acceleration in its rigid form. If the rigid form of acceleration principle is not valid, then the interaction of the multiplier and accelerator which is the crucial concept of the Hicksian theory of trade cycles is not valid.

Thus Duesenberry writes, "The basic concept of multiplier-accelerator interaction is important one but we cannot really accept to explain observed cycles by a mechanical application of that concept." and, according to him, Hicks in his business cycle theory actually tries to do so.

It may be noted that Kaldor puts forward a theory of business cycles which does not make use of the rigid or strict form of the acceleration principle. In his trade cycle theory Kaldor provides for investment being directly related to the level of income and inversely related to the stock of capital.

Thus Kaldor's approach which is also supported by Goodwin abandons the rigid and inflexible relation of investment to changes in income (output) as implied by the rigid acceleration principle [i.e., It = la + v (yt-1 – yt-2)] and instead has used the following form of the investment function

It = Ia + gYt-1 – jKt

where It stands for investment in period t, Ia for autonomous investment, Yt-1 for income in the previous period, Kt for the stock of capital, and g and j are constants.

A look at the above investment function used by Kaldor will reveal that investment is directly related to the income and inversely related to the stock of capital. Thus in Kaldor-Goodwin investment function, the increase in income, the capital stock remaining constant, will cause an increase in investment which will enlarge the stock of capital.

On the other hand, according to this new investment function, if capital stock increases, output or income remaining constant, investment will fall due to its being negatively related to capital stock.

Thus, Kaldor-Goodwin approach to investment while gives up the rigid acceleration principle but still retains the basic idea of investment related to income because in this approach investment will cause the capital stock to expand towards the stock of capital as desired for the production of output of the preceding year.

However, despite the shortcomings of Hicks' theory of business cycles, this is a valuable contribution to the theory of business cycles. Even its critics such as Kaldor though indicating some of its weaknesses acknowledge its merit.

Thus Kaldor writes that "Hicks' theory of trade cycles provides us many brilliant and original pieces of analysis". Duesenberry considers it as an "ingenious piece of work'.

New Keynesian Economics

New Keynesian economics is the school of thought in modern macroeconomics that evolved from the ideas of John Maynard Keynes. Keynes wrote The General Theory of Employment, Interest, and Money in the 1930s, and his influence among academics and policymakers increased through the 1960s. In the 1970s, however, new classical economists such as Robert Lucas, Thomas J. Sargent, and Robert Barro called into question many of the precepts of the Keynesian revolution. The label "new Keynesian" describes those economists who, in the 1980s, responded to this new classical critique with adjustments to the original Keynesian tenets.

The primary disagreement between new classical and new Keynesian economists is over how quickly wages and prices adjust. New classical economists build their macroeconomic theories on the assumption that wages and prices are flexible. They believe that prices "clear" markets—balance supply and demand—by adjusting quickly. New Keynesian economists, however, believe that market-clearing models cannot explain short-run economic fluctuations, and so they advocate models with "sticky" wages and prices. New Keynesian theories rely on this stickiness of wages and prices to explain why involuntary unemployment exists and why monetary policy has such a strong influence on economic activity.

A long tradition in macroeconomics (including both Keynesian and monetarist perspectives) emphasizes that monetary policy affects employment and production in the short run because prices respond sluggishly to changes in the money supply. According to this view, if the money supply falls, people spend less money and the demand for goods falls. Because prices and wages are inflexible and do not fall immediately, the decreased spending causes a drop in production and layoffs of workers. New classical economists

criticized this tradition because it lacks a coherent theoretical explanation for the sluggish behavior of prices. Much new Keynesian research attempts to remedy this omission.

Menu Costs and Aggregate-Demand Externalities

One reason prices do not adjust immediately to clear markets is that adjusting prices is costly. To change its prices, a firm may need to send out a new catalog to customers, distribute new price lists to its sales staff, or, in the case of a restaurant, print new menus. These costs of price adjustment, called "menu costs," cause firms to adjust prices intermittently rather than continuously.

Economists disagree about whether menu costs can help explain short-run economic fluctuations. Skeptics point out that menu costs usually are very small. They argue that these small costs are unlikely to help explain recessions, which are very costly for society. Proponents reply that "small" does not mean "inconsequential." Even though menu costs are small for the individual firm, they could have large effects on the economy as a whole.

Proponents of the menu-cost hypothesis describe the situation as follows. To understand why prices adjust slowly, one must acknowledge that changes in prices have externalities—that is, effects that go beyond the firm and its customers. For instance, a price reduction by one firm benefits other firms in the economy. When a firm lowers the price it charges, it lowers the average price level slightly and thereby raises real income. (Nominal income is determined by the money supply.) The stimulus from higher income, in turn, raises the demand for the products of all firms. This macroeconomic impact of one firm's price adjustment on the demand for all other firms' products is called an "aggregate-demand externality."

In the presence of this aggregate-demand externality, small menu costs can make prices sticky, and this stickiness can have a large cost to society. Suppose General Motors

announces its prices and then, after a fall in the money supply, must decide whether to cut prices. If it did so, car buyers would have a higher real income and would therefore buy more products from other companies as well. But the benefits to other companies are not what General Motors cares about. Therefore, General Motors would sometimes fail to pay the menu cost and cut its price, even though the price cut is socially desirable. This is an example in which sticky prices are undesirable for the economy as a whole, even though they may be optimal for those setting prices.

The Staggering of Prices

New Keynesian explanations of sticky prices often emphasize that not everyone in the economy sets prices at the same time. Instead, the adjustment of prices throughout the economy is staggered. Staggering complicates the setting of prices because firms care about their prices relative to those charged by other firms. Staggering can make the overall level of prices adjust slowly, even when individual prices change frequently.

Coordination Failure

Some new Keynesian economists suggest that recessions result from a failure of coordination. Coordination problems can arise in the setting of wages and prices because those who set them must anticipate the actions of other wage and price setters. Union leaders negotiating wages are concerned about the concessions other unions will win. Firms setting prices are mindful of the prices other firms will charge.

To see how a recession could arise as a failure of coordination, consider the following parable. The economy is made up of two firms. After a fall in the money supply, each firm must decide whether to cut its price. Each firm wants to maximize its profit, but its profit depends not only on its pricing decision but also on the decision made by the other firm.

If neither firm cuts its price, the amount of real money (the amount of money divided by the price level) is low, a recession ensues, and each firm makes a profit of only fifteen dollars.

If both firms cut their price, real money balances are high, a recession is avoided, and each firm makes a profit of thirty dollars. Although both firms prefer to avoid a recession, neither can do so by its own actions. If one firm cuts its price while the other does not, a recession follows. The firm making the price cut makes only five dollars, while the other firm makes fifteen dollars.

The essence of this parable is that each firm's decision influences the set of outcomes available to the other firm. When one firm cuts its price, it improves the opportunities available to the other firm, because the other firm can then avoid the recession by cutting its price. This positive impact of one firm's price cut on the other firm's profit opportunities might arise because of an aggregate-demand externality.

What outcome should one expect in this economy? On the one hand, if each firm expects the other to cut its price, both will cut prices, resulting in the preferred outcome in which each makes thirty dollars. On the other hand, if each firm expects the other to maintain its price, both will maintain their prices, resulting in the inferior solution, in which each makes fifteen dollars. Hence, either of these outcomes is possible: there are multiple equilibria.

The inferior outcome, in which each firm makes fifteen dollars, is an example of a coordination failure. If the two firms could coordinate, they would both cut their price and reach the preferred outcome. In the real world, unlike in this parable, coordination is often difficult because the number of firms setting prices is large. The moral of the story is that even though sticky prices are in no one's interest, prices can be sticky simply because price setters expect them to be.

Efficiency Wages

Another important part of new Keynesian economics has been the development of new theories of unemployment. Persistent unemployment is a puzzle for economic theory. Normally, economists presume that an excess supply of labor would exert a downward pressure on wages. A reduction in wages would in turn reduce unemployment by raising the quantity of labor demanded. Hence, according to standard economic theory, unemployment is a self-correcting problem.

New Keynesian economists often turn to theories of what they call efficiency wages to explain why this market-clearing mechanism may fail. These theories hold that high wages make workers more productive. The influence of wages on worker efficiency may explain the failure of firms to cut wages despite an excess supply of labor. Even though a wage reduction would lower a firm's wage bill, it would also—if the theories are correct—cause worker productivity and the firm's profits to decline.

A New Synthesis

During the 1990s, the debate between new classical and new Keynesian economists led to the emergence of a new synthesis among macroeconomists about the best way to explain short-run economic fluctuations and the role of monetary and fiscal policies. The new synthesis attempts to merge the strengths of the competing approaches that preceded it. From the new classical models it takes a variety of modeling tools that shed light on how households and firms make decisions over time. From the new Keynesian models it takes price rigidities and uses them to explain why monetary policy affects employment and production in the short run. The most common approach is to assume monopolistically competitive firms (firms that have market power but compete with other firms) that change prices only intermittently.

The heart of the new synthesis is the view that the economy is a dynamic general equilibrium system that deviates from an efficient allocation of resources in the short run because of sticky prices and perhaps a variety of other market imperfections. In many ways, this new synthesis forms the intellectual foundation for the analysis of monetary policy at the Federal Reserve and other central banks around the world.

Policy Implications

Because new Keynesian economics is a school of thought regarding macroeconomic theory, its adherents do not necessarily share a single view about economic policy. At the broadest level, new Keynesian economics suggests—in contrast to some new classical theories—that recessions are departures from the normal efficient functioning of markets. The elements of new Keynesian economics—such as menu costs, staggered prices, coordination failures, and efficiency wages—represent substantial deviations from the assumptions of classical economics, which provides the intellectual basis for economists' usual justification of laissez-faire. In new Keynesian theories recessions are caused by some economy-wide market failure. Thus, new Keynesian economics provides a rationale for government intervention in the economy, such as countercyclical monetary or fiscal policy. This part of new Keynesian economics has been incorporated into the new synthesis that has emerged among macroeconomists. Whether policymakers should intervene in practice, however, is a more difficult question that entails various political as well as economic judgments.

Rational Expectation Hypothesis

While rational expectations is often thought of as a school of economic thought, it is better regarded as a ubiquitous modeling technique used widely throughout economics.

The theory of rational expectations was first proposed by John F. Muth of Indiana University in the early 1960s. He used the term to describe the many economic situations

in which the outcome depends partly on what people expect to happen. The price of an agricultural commodity, for example, depends on how many acres farmers plant, which in turn depends on the price farmers expect to realize when they harvest and sell their crops. As another example, the value of a currency and its rate of depreciation depend partly on what people expect that rate of depreciation to be. That is because people rush to desert a currency that they expect to lose value, thereby contributing to its loss in value. Similarly, the price of a stock or bond depends partly on what prospective buyers and sellers believe it will be in the future.

The use of expectations in economic theory is not new. Many earlier economists, including A. C. Pigou, John Maynard Keynes, and John R. Hicks, assigned a central role in the determination of the business cycle to people's expectations about the future. Keynes referred to this as "waves of optimism and pessimism" that helped determine the level of economic activity. But proponents of the rational expectations theory are more thorough in their analysis of expectations.

The influences between expectations and outcomes flow both ways. In forming their expectations, people try to forecast what will actually occur. They have strong incentives to use forecasting rules that work well because higher "profits" accrue to someone who acts on the basis of better forecasts, whether that someone is a trader in the stock market or someone considering the purchase of a new car. And when people have to forecast a particular price over and over again, they tend to adjust their forecasting rules to eliminate avoidable errors. Thus, there is continual feedback from past outcomes to current expectations. Translation: in recurrent situations the way the future unfolds from the past tends to be stable, and people adjust their forecasts to conform to this stable pattern.

The concept of rational expectations asserts that outcomes do not differ systematically (i.e., regularly or predictably) from what people expected them to be. The concept is

motivated by the same thinking that led Abraham Lincoln to assert, “You can fool some of the people all of the time, and all of the people some of the time, but you cannot fool all of the people all of the time.” From the viewpoint of the rational expectations doctrine, Lincoln’s statement gets things right. It does not deny that people often make forecasting errors, but it does suggest that errors will not persistently occur on one side or the other.

Economists who believe in rational expectations base their belief on the standard economic assumption that people behave in ways that maximize their utility (their enjoyment of life) or profits. Economists have used the concept of rational expectations to understand a variety of situations in which speculation about the future is a crucial factor in determining current action. Rational expectations is a building block for the “random walk” or “efficient markets” theory of securities prices, the theory of the dynamics of hyperinflations, the “permanent income” and “life-cycle” theories of consumption, and the design of economic stabilization policies.

Understanding the Concept of Rational Expectations

The idea of rational expectations was first developed by American economist John F. Muth in 1961. However, it was popularized by economists Robert Lucas and T. Sargent in the 1970s and was widely used in microeconomics as part of the new classical revolution.

The theory states the following assumptions:

With rational expectations, people always learn from past mistakes.

Forecasts are unbiased, and people use all the available information and economic theories to make decisions.

People understand how the economy works and how government policies alter macroeconomic variables such as price level, level of unemployment, and aggregate output.

The rational expectations theory comes in weak and strong versions. The "strong" version assumes that actors are able to access all available information and make rational decisions based on the information.

The "weak" versions assume that people lack time to access all relevant information but make decisions based on their limited knowledge. For example, if they buy cornflakes, it is "rational" to keep buying the same brand and not worry about getting perfect information about relative prices of other cornflakes brands.

Rational Expectations in Theory and Practice

Most macroeconomists today use rational expectations as an assumption in their analysis of policies. When thinking about the effects of economic policy, the assumption is that people will do their best to work out the implications.

The rational expectations approach is often used to test the accuracy of inflation forecasts. For example, Pet is an individual's forecast in year t-1 of the price level in year t. The actual price level is denoted by Pt. The difference between the actual price level and the individual's forecast is the forecast error for year t.

Pt – Pet = rt is the individual's forecast error in year t. With rational expectations, the forecast errors are due to unpredictable numbers. However, if people systematically under-predict or over-predict numbers, the price level expectations are not rational.

Under rational expectations, what happens today depends on the expectations of what will happen in the future. But what happens in the future also depends on what happens today. Many macroeconomic principles today are created with the assumption of rational expectations.

The theory is also used by many new Keynesian economists because it fits well with their assumption that people want to pursue their own self-interest. If people's expectations were not rational, the economic decisions of individuals would not be as good as they are.

Unit V
Nobel Laureates in Economics and Indian Economic Thought

Paul A. Samuelson (1970)

Introduction

Paul A. Samuelson has been awarded the second Nobel Prize for economics in 1970 for his brilliant contributions. He has been given Nobel Prize for his work, "Development of New Economic Theories" and for finding new applications for old theories. The Swedish Academy, while declaring this award, has rightly said that Samuelson has done more than any other economist to raise the level of scientific analysis in the field of economic theory". He has tried his best to shape the U.S economic and fiscal policies all through. Samuelson was the first to receive the Nobel Prize in Economics from America.

His contribution

Samuelson's contributions are mainly in the fields of economic analysis, public expenditure, consumer welfare, etc. he introduced the notion of revealed preference. Rather than harping on tastes and utilities which cannot be observed, he developed an approach based on the actual choice made by the consumer. The theory of revealed preference has been a practical instrument.

1. **Theory of Revealed Preference**

In revealed preference theory, the consumer is supposed to reveal his preferences. When consumer selects a combination out of various alternative combinations open to him, he reveals his preference over all other alternative combinations. Thus 'Choice reveals preference'.

Assumptions:

With the help of the simple principle of RP, we may build up a powerful theory of consumer demand. The assumptions that we shall make here are:

(i) The consumer buys and uses only two goods (X and Y). The quantities x and y of these goods are continuous variables.

(ii) Both these goods are of MIB (more-is-better) type. This assumption is also known as the assumption of monotonicity. This assumption implies that the ICs of the consumer are nega-tively sloped.

(iii) The consumer's preferences are strictly convex. This assumption implies that the ICs of the consumer would be convex to the origin, which again implies that there would be obtained only one point (the point of tangency) on the budget line of the consumer that would be chosen by him over all other affordable combinations.

Revealed preference hypothesis can be shown graphically in the following diagram.

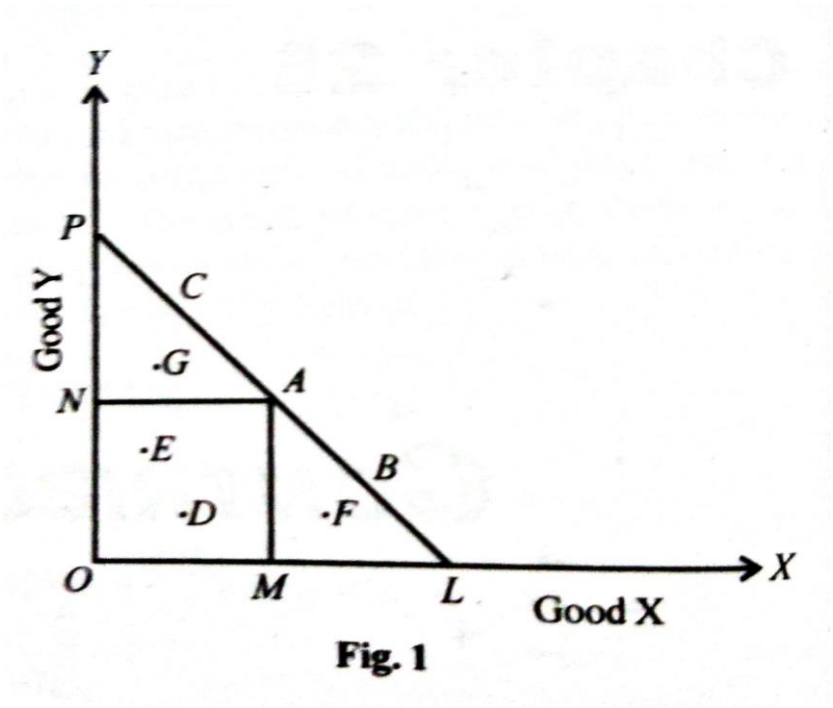


Fig. 1

Give the price of two commodities and income of the consumer, the price line PL is drawn. Given the price line PL is drawn, Given the price income line Pl the consumer

can choose any combination within or the triangle OPL. The combinations A, B, C lying on the line PL and D, E, F, G lying below the Pl line are alternative combinations available to the consumer. If the consumer selects the combination A, it means he reveals his preferences for A overall other combinations. At A, the consumer is buying OM of commodity X and ON quantity of commodity Y.

Business Cycles

Prof. Samuelson has developed a model of multiplier-accelerator interaction on explain the process of income propagation and also the different types of cyclical fluctuations.

Samuelson shows five types of cyclical fluctuation in the following figure-2:

Types of Fluctuations

Case	Values		Behavior of the cycle
1	a=.5	b=0	Cycle less path
2	a=.5	b=1	Damped fluctuations
3	a=.5	b=2	Fluctuations of constant amplitude
4	a=.6	b=2	Explosive cycles
5	a=.8	b=4	Cycle less explosive path.

Figure A (case 1) shows cycle less path. Income moves upward or downward at a diminishing rate. As accelerator is zero, there is no cycle. It is based only on multiplier. Figure B shows damped oscillations (case 2), i.e., they will become weaker and slowly disappear. Figure C depicts (case 4) explosive fluctuations. The cycle will become stronger and stronger. Figure D (case 3) illustrates cycles of constant amplitude. This type of cycle is a regular one. Figure E (case 5) relates to a cycle less explosive path. Income moves in an upward path.

Social welfare Function

Samuelson makes use of his social welfare function which describes the factors on which the welfare of all individuals in a society depends. It makes welfare of the society depend upon economic as well as non-economic factors- the amount of each and every kind of goods consumed and services performed, the amount of capital investment undertaken and so on. This social welfare function possesses some special properties which give it an edge of superiority over the earlier ones.

1. It introduces value judgments into the welfare analysis and does not in any way feel shy of them. Thus the function involves inter-personal comparisons and hence value judgments.
2. It is a general welfare function. Any set of assumptions of compounding individual utility functions into the social welfare function can be fed into the Bergson social welfare function.
3. The ethical norms, on which the social welfare function is built, are assumed to be ordinal in nature. So the assumption of additively of individual utilities is not there.
4. The social welfare function dose not has any element of indeterminacy in it. It deals with distribution of welfare as much as production and exchange condition of welfare.

Sir John Hicks (1972)

Definition of Economics

To Hicks, economics is essentially a branch of human science. He has defined economics as “the science which deals with business affairs”. He considers it to be superior to other human science in the sense that it has been able to apply scientific methods to the study of human conduct in a better way.

Consumer Equilibrium

A Hick has made notable contribution to the study of consumer equilibrium by making use of indifference curve approach. The ordinalist approach of Hicks is considered superior to the Marshalling utility approach or cardinalist approach. Indifference curve technique assumes what is called “ordinal measurement of utility”. Another distinct

improvement made by Hicks is unlike Marshell, he explains consumer's behavior without the assumption of constant marginal utility of money. Further through his indifference curve technique effects.

The distinction between income effect and substitution effect of a price change enables us to gain better understanding of the effect of a price chance on the demand for a good.

The amount demanded of a good generally rises as a result of the fall in its price due to two reasons. Firstly, because real income rises as a result of the fall in price (income effect) and secondly, because the good whose price falls becomes relativity cheaper than others and therefore the consumer substitutes it for other (substitution effect).

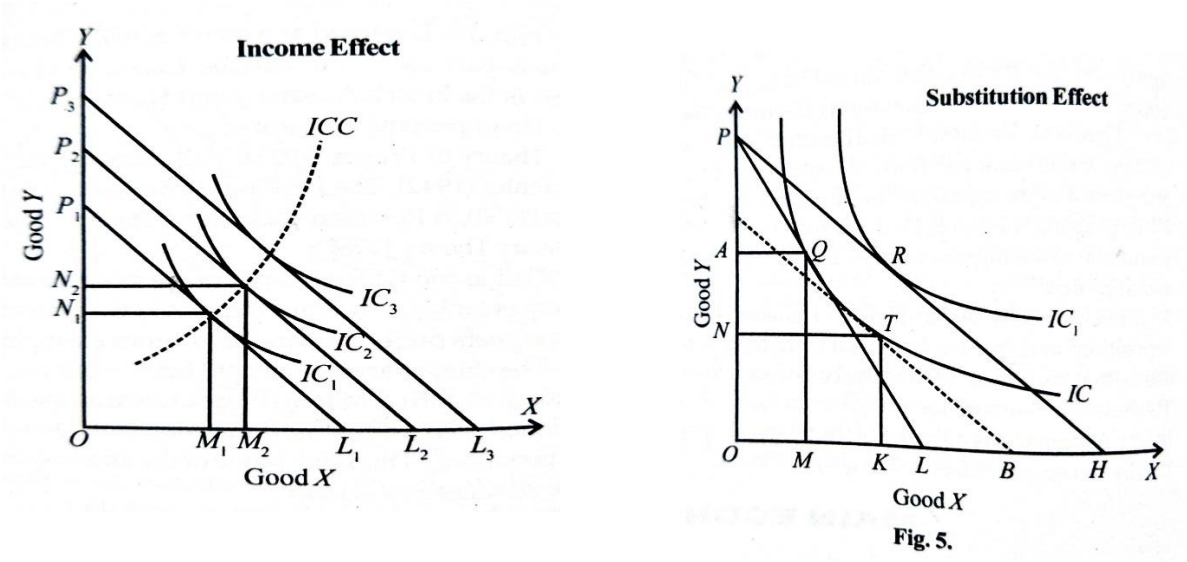


Fig. 5.

Revision on Demand Theory

Hicks in his "Revision of Demand Theory", has taken note of some of the recent developments in demand theory and incorporated them.

He used ordinal utility theory but he rejected indifference curve technique for two reasons:

(1) Indifference curve technique is useful only if we have to select between two goods. If there are more than two goods, then we have to rely on mathematics.

(2) Second disadvantage of indifference curve is that it is based on the assumption of continuity. He therefore dispenses indifference curve along with this assumption of continuity.

Assumptions

(1) It is based on preference hypothesis. It states that the consumer selects the one which he prefers the most from among the alternatives open to him.

(2) More of a commodity is always preferred to less of it.

(3) It is based on weak ordering that is items cannot be arranged one after another. It can only be grouped. Those groups can be strongly ordered but within the group ordering is not possible.

(4) Weak ordering depends on two conditions:(a) two term consistency condition and (b) transitivity condition

(5) There are two commodities x and m. price of x changed and that of m remain constant. M is a composite commodity. The difference between revealed preference theory and revision of demand theory is shown in fig.6.

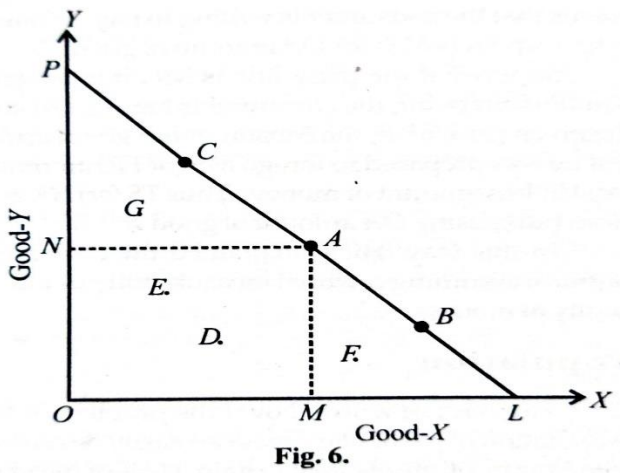


Fig. 6.

According to revealed preference theory, which is based on strong ordering, chosen point is preferred to all points within and on the triangle. Revision of demand theory is based on weak ordering in which chosen point 'A' is preferred to all points within the triangle but may be indifferent to other points on the boundary line.

Consumer's Surplus

Consumer's surplus, as developed by Marshall is based on the assumption that the marginal utility of money is constant. This assumption is considered wrong. If we relax the assumption, the size of the consumer's surplus is smaller than the Marshallian theory. Indifference curve analysis has been used by Hicks to demonstrate this.

Indifference curves technique does not make the assumption of cardinal measurability of utility, nor does it assume that marginal utility of money remains constant. How consumer's surplus is measured with the aid of indifference curves is illustrated in the following figure.

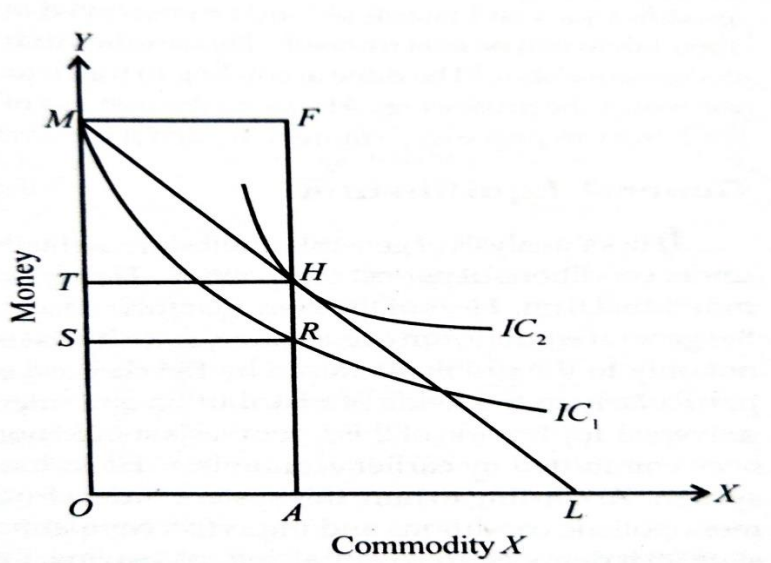


Fig. 7.

Suppose a consumer has OM amount of money which he can spend on good A and other goods. The difference curve IC_1 touches this point M indicating that all combinations of money and commodity x give same satisfaction to the consumer. For example at point R on IC_1, OA amount of commodity and OS amount of money will give the same

satisfaction. In other words, it means that the consumer is willing to pay MS amount of money for OA amount of X. He is prepared to give up FR (=MS) for OA amount of good X.

Suppose if the price line is ML, it is tangent to the difference curve IC_2 at point H. in this equilibrium point, the consumer is having OA amount of good X and OT amount of money. Thus at the given price of X, the consumer has given up MT amount of money for acquiring OA amount of X. but he was prepared it forego MS (or FR) amount of money for OA. Therefore the consumer pays TS (or) HR less amount of money. Thus TS (or) HR is the consumer's surplus which the consumer derives from purchasing OA amount of good X.

In this way, Hicks explained the consumer's surplus with his indifference curve technique without assuming cardinal measurability of utility and without assuming constancy of the marginal utility of money.

Population

Hick's is not worried over the problem of over population in a country. He feels that "the over population of particular areas can easily be remedied by industrialization". In this connection he has cited the example of Great Britain. He is of the view that for meeting the needs of food, clothing etc. of an increasing population, the production should also be simultaneously increased. If agricultural production cannot be increased owing to the shortage of land, industrial production must be increased.

Right Man on the Right Job

According to Hicks, the economic organization of a community must be done in such a way that the working force is utilized in an efficient manner. He means to say that persons with particular qualifications and talents should be employed on those jobs for which they are best suited or where their talent can be best utilized. This implies that the

distribution of labour force among the various occupations should be done according to the method of incentives is better than the method of compulsion, the latter can prove to be more fruitful if it is followed by an adequate system of selection.

General Equilibrium

Hick's analysis of general equilibrium is chiefly concerned with the problem of general equilibrium under conditions of perfect completion. He has only studied the problem from the point of view of an individual firm. He is of the view that this concept of equilibrium has a wider application than that of the general equilibrium of exchange, since it relates to production.

Economic Dynamics

According to Hick's economic statics includes the study of those elements of economic theory, whose dating is not required. In economic dynamics these questions are the most significant and the economists after knowing the "when" of the problem try to create a relationship between the variation in time, the quantity of factors and the goods produced and also the way these changes in dates have affected the relationship between factors and product.

Stationary State

According to Hicks the stationary state is a special case of dynamic system. In such a state, taste, techniques and resources remain stationery over a given period of time. Again in such a state, the problem of distinguishing between actual price and expected price, income and commodities, money and real of interest, is not felt.

Hick's feels that, it is the treatment of the stationary state that has hampered the development of a proper theory of interest. In such a state, equilibrium is not only established when demand and supplies are equal, at the current prices, but also when the price are constant over a period of time. Hence he concludes that equilibrium over a

period of time can only be possible in a much longer period and therefore, it cannot be achieved in real life.

Theory of Trade Cycle

Hick's contribution to the "Theory of Trade Cycle" has been regarded as one of the major contributions to trade cycle theories. It is apt to quote, "A beautiful theory of the cycle is here built up with an admirable economy of means…..undoubtedly a tour de force".

Hick's has developed the theory by making use of the accelerator-multiplier interaction principle and autonomous and induced investment. Dussenberry describes it as an, "ingenious piece of work" and "the first coherent theory of the cycle to appear in some years". The multiplier is related to the autonomous investment of the government. The acceleration is based on induced investment. We can show the influence of the two types of investment on the level of income and cyclical fluctuation with the help of a diagram.

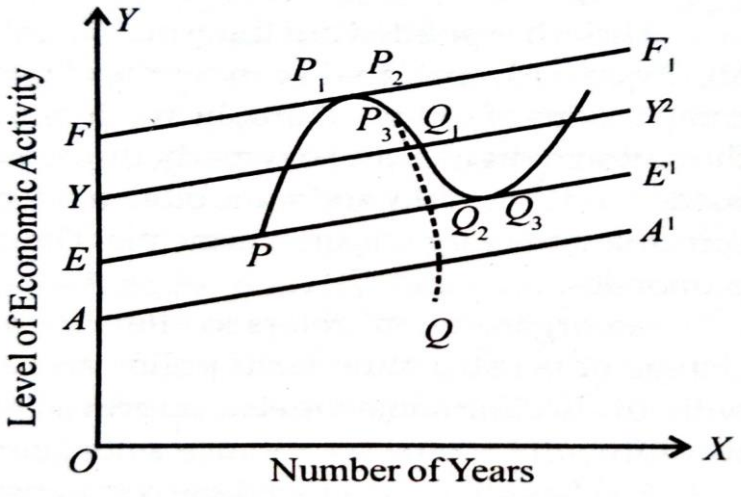


Fig. 8.

In fig.8, the horizontal axis represents the number of years and the vertical axis, the level of economic activity. Line AA^1 represents the progress over the years. It slants upward at

a uniform rate to indicate that autonomous investment grow over time at a constant rate. Line EE_1 represents the income or output corresponding to the autonomous investment line AA^1 and EE^1 is at a higher level because it represents the combined influence of multiplier and acceleration effects as a result of autonomous investment (AA1). In fact the distance between AA^1 and EE^1 will depend upon the combined influence of the multiplier and acceleration effects. Finally, line FF_1 represents the level of full employment income-"full employment ceiling".

Amartya Kumar Sen

Amartya Sen has been identified as the single most important thinker in the area of general equilibrium theory and welfare economics after Hicks and Arrow by the Nobel Committee. Sen has been awarded the Nobel Prize in economics for the year 1998. This is the most significant achievement in economics. Sen is the first Asian and the Indian to achieve this distinction of the Nobel award in economics. The Nobel citation refers to (a) Sen Contributions to social choice theory (b) Sen Work in development economics, especially in the analysis of the relation between poverty and famines and (c) Sen Concepts of entitlements and capability development. Sen Work covers a vast domain in the above areas. He is proficient in symbolic logic and in the use of the axiomatic approach. His ideas cannot be labeled as belonging to any particular school of political economy. However he should be credited for having established his own special paradigm in welfare economics, particularly in the analysis of the relation between poverty and human development. He has put forth a number of few measures like poverty index and the capability index, which have been attempted to be empirically estimated.

Sen must be compliment for the axiomatic approach to widen the range of social welfare function models. The field of application of social choice theory in the Sen direction can be equated with alternative political economy and social action models

concerning development. It is in this direction to which Sen has taken welfare economic that seems to have won the admiration of the Nobel Committee. Social decisions are then taken by individuals, each of whom may have a separate sphere in which they do consider improvement in their own well-being, as the dominant yardstick in ranking social choice.

Poverty and Inequality

Sen has carried out massive work on poverty and inequality in India. Sen Major Point has been that the gap simpliciter approach will not do. The distribution of income consumption among the persons below the poverty line is to be taken into account. Sen Produce a neat formula, termed as the poverty measure, known as the Sen Index.

$$P= [1+(1-1)G]H$$

Where P is the poverty index, 1 is the measure of distribution, G is the Gini coefficient, and H is the head count proportion of the people below the poverty line. Sen Measure is sensitive to change in distribution parameter in the largely independent change in the price index of wage-goods, changes in the relative prices of wage-goods due to productivity changes in the latter etc.

Sen's view is that the causes of poverty in India are illiteracy, poor health care, unemployment bureaucratic administration etc. an illiterate person can hardly engage himself in production or in service. He is unaware of modern means of livelihood. Sen has suggested removal of illiteracy malnutrition, unemployment etc. within a specific time period. He found that unequal distribution of wealth and income or concentration of wealth in fewer hands, illiteracy were the causes of poverty in countries like India.

The concept of capability

The concept of capabilities developed by Sen has been cited as a better index of wellbeing than commodities or utilities. Capability, as defined by Sen, is the ability to transform Rawlaian primary goods to the achievement of wellbeing. Capability of human

being is his ability of functioning in different capacities in a society such as to enable him to achieve the components or the constitutions of his well-being. Such functioning ability con-cretely implies access to adequate and nutritious food. Sen has helped to induct indicators regarding the above in the human development index.

Capability includes also an environment of freedom of choice and ability to make use of the various freedoms. Hence capability is prior to the attainment of the desired welfare states of individuals. Sen has argued that poverty is a result of capability failures. Sen has a wide ranging critique of conventional welfare economics on account of neglect of the capability dimension. Capability is a normative concept. Capability development involves costs to society through the benefits may exceed the cost. If capability is deemed as a measure of surplus in human being, classical economic analysis can be applied do it.

Dadabhai Naoroji

Dadabhai Naoroji, "The grand old man of India" was one of the founders of Indian Nationalism. Naoroji's economic ideas are contained in his book, "Poverty and Un-British in India"(first published in 1901 and reprinted in 1962). Naoroji analyzed the effects of the British rule on the Indian economy. He pointed out how the Britishers were responsible for causing drain on the Indian resources and generating poverty in India. He also suggested some remedial measures for the improvement of the Indian economy.

National Income of India

Naoroji was not satisfied with the official estimates regarding the national income of India during the British rule. "The Indian Economist" was the only journal which gave such knowledge in those days. Naoroji regarded this information regarding the country's prosperity as insufficient and misleading. He pointed out that unless complete information about (a) the average annual income per head and (b) "the requirements of labourer to

live in working health and not as a starved beast of burden" was supplied every year, it was useless to make unsounded statement that Indian was progressing.

On the basis of the official data, Naoroji himself calculated the per capita income for the years 1867-70 at Rs.20 only. On the other hand, the basic requirements of an ordinary labourer, as calculated by him was about Rs.34. he calculated that evan for such food and clothing which was provided to a criminal, a good seasonal production was not enough. The high and middle clases get a larger share, while the poor masses did not get enough for their basic necessaries of life. It was in this context of growing disparities of income that Naopoji spoke of two Indians one of the prosperous and the other poor. The prosperous India was the India of the British and the foreigners, while the poor India was the India of the Indians.

But while calculating the percapita income, Naoroji had equally appointed the value of agricultural produce and manufactures among all the people without taking care of the actual number of persons employed in agriculture, industries and other professions.

Drain Theory

Naoroji was famous as an economist for his "Drain Theory". He developed this theory to explain the conditions of poverty in India. The drain theory emphasized the fact that the management and institutions of British India were prone to a mechanism of the economic drain.

The drain of wealth took place is several ways. 1. Large remittances were made by European officials of their savings in India. 2. Large remittances were made in the form of salaries and pensions. 3. India had to pay for government expenditure in England also. 4. Non-official Europeans made remittances from their business profits in India. The money which had gone out of India, to England came back as British capital and

foreigners had monopolized trade and industry. It had once again resulted in the drain of wealth. Thus the drain became continuous and it had affected capital formation in India.

Naoroji collected a lot of statistical data to prove his drain theory. He examined the imports and exports between 1835 and 1872 and pointed out that the value of exports was greater than that of imports by 500 million pounds. The drain would have been greater, if interest had been calculated on the amount.

Thus according the Naoroji, the economic resources of India were drained in two ways: (a) through internal drain, i.e., through the transfer of purchasing power by means of taxation, interest payments and profits from poor classes/ regions to the rich classes/ regions. (b) Through external drain, i.e., through unrequited exports which produced no equivalent returns in the form of imports.

The effects of external drain on the Indian Economy can be explained with the following model.

$$P>Y$$

$$Y-T = E- (X-M) \quad = (C+1d) – (X-M)$$

As a result of economic drain or unilateral transfer (T), national income (Y) remains below its total production (P). T is leakage from Y. on the expenditure side, the corresponding leakage is exports surplus (X-M), where X stands for the value of exports and M for the value of imports. Export surplus is to be deducted from total expenditure E; C and Id, i.e., consumption and domestic investment, being the constituents of E.

Gandhian Economics (1869-1948)

Introduction

The economic ideas of Gandhi and his followers many collectively be called Gandhian Economics. Gandhi himself was not a professional economist. He was a great political and spiritual leader. But consistent with his philosophy of truth and non-

violence, he gave a set of economic ideas which are sharp in contrast against the traditional economics of the west. Gandhi's ideas have considerable influence on Indian thought and policy. Mahatma Gandhi, The Father of the Nation was born in Porbander on October 2, 1869.

Influence on Gandhi

In his economic thought, Gandhi was greatly influenced by Ruskin's Unto This Last. From this book he learnt (a) that the good of the individual is contained in the good of all (b) that a lawyer's work has the same value as the barber's in as all have same right of earing their livelihood from their work, and that a life of labour, i.e., the life of the tiller of the soil and the handicraftsman is the life worth living.

Three Phases of Gandhi's Economic Thought

The economic ideas of Gandhiji in three phases : (a) the negative phase up to 1919 during which he criticized the western pattern of economic development and adopted a non-materialistic attitude which is embodied in his book Hind Swaraj (1909). (b) The positive phase (1919-1934): During this phase, he presented an alternative to the western civilization in the ideal of Swadeshi. (c) The constructive phase (1934-1948): In this phase, Gandhi became more practical. He gave a constructive programmer for village regeneration and put forward the ideal of Sarvodaya

Economic Ideas of Gandhi

Gandhi considered human beings as wealth and not gold and silver. He said, "The final consummation of all wealth is in producing as many as possible, full-breadth, bright-eyed and happy-hearted human beings. "He considered a country to be richest if it nourished the greatest number of happy individuals. Thus in Gandhian economic thought, man occupied a prominent position than wealth.

Economic Laws

According to Gandhi, economic laws which aim at material progress as well as social harmony and moral advancement, should be formulated according to the law of nature. There is no conflict between the laws of nature and laws of economics. The law of nature is universal. The economic laws of a country are determined by the climatic, geological and temperamental conditions of that country. Hence they vary with the conditions of the nations.

Non-violent Economy

Gandhi advocated non-violence and hence his economics may be called economics of non-violence. The principle of non-violence is the principle of Gandhian philosophy. As there was no industry and no activity without certain violence, he wanted to minimize it. He believed that violence in any form breeds greater violence. He defined a non-violent occupation as one "which is fundamentally free from violence and which involves no exploitation or envy of others". The solution of Indian basic problems lies in the practice of non-violence. Gandhiji opposed capitalism as it resulted in exploitation of human labour. He believed that nature produced enough for the satisfaction of the people's wants and there would be no pauperism and starvation if everybody took only that much that was sufficient to him.

Decentralization: Cottage Industries

Gandhi was not in favor of large scale industrialization, as it was responsible for many socio-economic evils. He believed that large scale use of machinery led to drudgery and monotony. He was in favor of decentralized economy. In such an economy, exploitation of labour would be nil. His belief was strong in the context of the Indian economy. India has plenty of human resources but capital supply was poor, therefore labour intensive technology should be followed. Gandhiji advocated a decentralized economy.

As Gandhiji was for the development of cottage and rural industries, he suggested delocalization of industries. Gandhi preferred the decentralization of small units of production to the concentration of large scale units in few places. He wanted to carry the production units to the homes of the masses, particularly in village. Cottage and village industries help increasing employment. Commodities can be produced cheaply as there is no need for a separate establishing; very few tools are needed. There is no problem of storage. Transport cost is negligible. There is no overproduction and wastes of competition.

These industries increase the income of the villages and satisfy their basic requirements. They not only remove poverty and unemployment from villages but also make them self-sufficient units.

Khadi Industry

Every Indian needed at least 13 yards of cloth per year. Gandhiji believed that multiplication of mills could not solve the problem of cloth supply; therefore he stressed the development of Khadi industry. Khadi means the decentralization of production and distribution of the necessaries of human life. He believed that Khadi industry would save millions of people from starvation and would supplement the earnings of poor people. To him, the music of the spinning wheel was sweeter and profitable than harmonium.

Use of Machines

Gandhiji was not against machinery. He says “the spinning wheel itself is a machine; a little toothpick is a machine, what I object to is the craze for labour saving machinery. Men go on saving labour, till thousands are without work and thrown on the opens streets to die of starvation”. But he was against all destructive machinery. He welcomed such instruments and machinery that saved individual labour and lightened the burden of millions of cottage workers. Gandhiji emphasized that he was against large scale

production only of those things which village can produce without difficulty. He believed that machinery was harmful when the same thing could be done easily by millions of hands.

Regeneration of Villages or Village Sarvodaya

Gandhiji evolved the ideal of village Sarvodaya. Production was for immediate use not for distant markets. The whole structure of society was founded on non-violence. “Gandhiji wanted the revival of ancient village communities with prosperous agriculture, decentralized industry and small scale co-operative organizations. He also wanted that there should be the participation of people at all levels.

The T Rusteeship Doctrine

Gandhiji remarked that the capitalist who had amassed a large sum of money was a thief. If a person had inherited a big fortune or had collected a large amount of money by way of trade and industry, the entire amount did not belong to him. It belonged to the entire society and must be spent on the welfare of all. He wanted to avoid a violent and bloody revolution by gearing a permanent stability of economic equality. He wanted the capitalists to be trustees and he enunciated the doctrine of trusteeship.

Law of Bread Labour

The law of Bread Labour was propounded by T.M. Bondaref and popularized by Ruskin and Tolstoy. To Gandhiji the law of bread labour related to agriculture alone. But as everybody was not a cultivator, he could earn his bread by doing some other work. If all people labored for their bread, there would be enough food and clothing for all, they would be healthier and happier, and there would be no problem of food shortage, no disease and no misery. He strongly believed that without physical labour no one was entitled to get his food. He advised the rich also to do bodily labour for the bread.

Food Problem

Gandhiji had seen the worst famine of his life during 1943-44, when Bengal suffered heavily owing to the country-wide shortage of food. To start with, Gandhiji thought that this scarcity of food had been artificially created. But after visiting Madras, Bengal and Assam, he arrived at the conclusion that the shortage of food was real and not artificial. He suggested the following measures for solving the problem of food shortage in India: (i) every individual should curtail his or her requirements of food to the minimum and as far as possible the consumption of food grains and pulses should be reduced to the minimum by substituting vegetable, milk, fruits, etc., for them; (ii) every flower garden should be utilized for cultivation purpose; (iii) the consumption of food grains and pulses by the army personnel should be economized; (iv) black-marketing should be stopped; (v) deep wells should be sunk by the government so as to provide irrigational facilities; (vi) export of oil seeds, oil cakes, etc., should be stopped.

Population

The most important problem which attracted the attention of Gandhiji was the rapid increase in population. Gandhiji opposed the use of contraceptives as its use in India would make the middle class male population imbecile through abuse of the creative functions. Gandhiji was in favor of birth control through self-control or brahmacharya and not through the use of artificial methods. He considered self-control as the “infallible sovereign remedy”. Gandhiji was against the sterilization of women, as it was inhuman. But he was not against vasectomy, especially in the case of those men suffers from chronic diseases, and because he thought that it was men who were the aggressors.

Prohibition

According to Gandhiji, the use of coffee, tea, tobacco, and alcohol was detrimental to the mental, physical, and moral development of an individual. In his opinion, the use of liquor was a disease rather than a vice. He had no objection to the use of liquor if taken

under medical advice. He would have preferred India to be reduced to a state of pauperism than have thousands of drunkards in our midst.

Labour Welfare

One of the important fields where Mahatma Gandhi extended his right for economic equality was the factory. He saw that workers were subjected to gross injustice and the treatment meted out to them was below dignity. To him, the employment of children was a national degradation. He always pleaded for shorter hours of work and more leisure so that workers might not be reduced to the condition of beasts, he also demanded safety measures inside factories. Mahatma Gandhi laid emphasis on the welfare of the worker, his dignity and proper wages.

Simplicity

Mahatma Gandhi was against the multiplication of human wants. In order to lead a simple life a life untouched by immorality, untruth and political gain, he did not want many things. He eventually succeeded in complete renunciation.

Exchange Economy

Gandhian idea on exchange economy is based on the swadeshi spirit. Every Indian village should be a self supporting and self contained unit exchanging only necessary commodities with other villages where they are not locally producible. The person who has accepted the discipline of swadeshi would not mind physical discomfort or inconvenience caused by the non-availability of certain things which he has been using.

Mahatma Gandhi recognised money as a token of exchange only. In the economy envisaged by him, commodities were to be exchanged with commodities.

Constructive Programme

Mahatma Gandhi constructive programmed was a big undertaking which included 18 items enumerated below: Communal unity, removal of untouchability, prohibition, khadi, other village industries, village sanitation, uplift of women, basic education, adult education, hygiene and health, economic equality, village, propagation of national language, provincial languages, kisans, labour adivasis, lepers and students.

Untouchability

Gandhi believed that untouchability was a sin against God and man. Mahatma Gandhi admitted that untouchability was an old institution; but as it was an evil, it could not be defended on this ground. Mahatma Gandhi the removal of untouchability mean fighting against the impurity found in man. It meant also love for, and service of, the whole world. It would remove the barrier between man and man.

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