

## UNIT-III

### Alfred Marshall (Importance of Alfred Marshall in Neo-classical economics)

Alfred Marshall was the dominant figure in British economics (itself dominant in world economics) from about 1890 until his death in 1924. His specialty was MICROECONOMICS—the study of individual markets and industries, as opposed to the study of the whole economy. In his most important book, *Principles of Economics*, Marshall emphasized that the price and output of a good are determined by both supply and demand: the two curves are like scissor blades that intersect at equilibrium. Modern economists trying to understand why the price of a good change, still start by looking for factors that may have shifted demand or supply, an approach developed by Marshall.

#### Biography

Marshall grew up in the London suburb of Clapham, being educated at the Merchant Taylor's School where he showed academic promise and a particular aptitude for mathematics. Eschewing the more obvious path of a closed scholarship to Oxford and a classical education, he entered St John's College, Cambridge, in 1862 on an open exhibition. There he read for the Mathematical Tripos, Cambridge University's most prestigious degree competition, emerging in 1865 in the exalted position of Second Wrangler, bettered only by the future Lord Rayleigh. This success ensured Marshall's election to a Fellowship at St John's. Supplementing his stipend by some mathematical coaching, and abandoning - doubtless because of a loss of religious conviction - half-formed earlier intentions of a clerical career, he became engrossed in the study of the philosophical foundations and moral basis for human behaviour and social organization. In 1868 he became a College Lecturer in Moral Sciences at St John's, specializing in teaching political economy. By about 1870 he seems to have committed his career to developing this subject and helping to transform it into a new science of economics.

Marshall had no great profundity as a philosopher of science and had little patience with metaphysics. His discussions of methodology largely reflect the philosophical presuppositions of his day. His method was in the general deductive tradition of Ricardo, John Stuart Mill and Cairnes. But he sought to emphasize the relativity of particular theories, as contrasted with the universality of the general theoretical frame work. And he was anxious to choose his assumptions with close regard to the facts of the case. Marshall's method was described by J.N. Keynes as "deductive political economy guided by observation".

To Marshall also goes credit for the concept of price elasticity of demand, which quantifies buyers' sensitivity to price. The concept of consumer surplus is another of Marshall's contributions. He noted that the price is typically the same for each unit of a commodity that a consumer buys, but the

value to the consumer of each additional unit declines. A consumer will buy units up to the point where the marginal value equals the price. Therefore, on all units previous to the last one, the consumer reaps a benefit by paying less than the value of the good to himself. The size of the benefit equals the difference between the consumer's value of all these units and the amount paid for the units. This difference is called the consumer surplus, for the surplus value or utility enjoyed by consumers. Marshall also introduced the concept of producer surplus, the amount the producer is actually paid minus the amount that he would willingly accept. Marshall used these concepts to measure the changes in well-being from government policies such as taxation. Although economists have refined the measures since Marshall's time, his basic approach to what is now called welfare economics still stands.

Wanting to understand how markets adjust to changes in supply or demand over time, Marshall introduced the idea of three periods. First is the market period, the amount of time for which the stock of a commodity is fixed. Second, the short period is the time in which the supply can be increased by adding labour and other inputs but not by adding capital (Marshall's term was "appliances"). Third, the long period is the amount of time taken for capital ("appliances") to be increased. To make economics dynamic rather than static, Marshall used the tools of classical mechanics, including the concept of optimization. With these tools he, like neoclassical economists who have followed in his footsteps, took as givens technology, market institutions, and people's preferences. But Marshall was not satisfied with his approach. He once wrote that "the Mecca of the economist lies in economic biology rather than in economic dynamics." In other words, Marshall was arguing that the economy is an evolutionary process in which technology, market institutions, and people's preferences evolve along with people's behavior.

Marshall rarely attempted a statement or took a position without expressing countless qualifications, exceptions, and footnotes. He showed himself to be an astute mathematician—he studied math at St. John's College, Cambridge—but limited his quantitative expressions so that he might appeal to the layman. Marshall was born into a middle-class family in London and raised to enter the clergy. He defied his parents' wishes and instead became an academic in mathematics and economics.

#### **(a) Representative firm**

It is here that Marshall's "representative firm" enters the picture. It is best regarded as a parable which avoids the need to consider the entire distribution of firms. By definition, the long-period supply price of any level of industry output is the average cost of the representative firm at that level of output. Industry-level magnitudes may then be regarded as if they were generated by a fixed number of unchanging representative firms rather than by the actual heterogeneous body of ever-changing firms—that is, the manufacturing case may be treated as if it were an agricultural case. Such arguments add nothing conceptually and are prone to confuse, although it might be noted that Marshall believed an acute well-informed observer could select an actual firm which was close to being representative in this sense.

The average cost and size of the representative firm will change as *industry* output changes. There are two main reasons for this. A larger industry output is likely to generate more *external* economies, lowering the costs of every firm. But more importantly, the larger is industry demand the easier it will be for a new firm to build up a market, and so the larger the size to which firms will grow before they begin to decline. This will bring about greater access on average to unexhausted *internal*

economies of scale, again leading to lower costs on average. For both these reasons, long-period supply price is likely to decline as a larger industry output is considered, even though the opportunity cost of obtaining greater supplies of land services and rare natural talents may rise. Again, the particular expenses curve may be used to display the surpluses or rents accruing to such scarce factors at any given level of industry output, but the relationship of this family of curves to the long-period supply curve is tenuous and complex. Rent obviously cannot be represented by a “triangle” above the supply curve when the latter is falling.

The conception of competition in Marshall’s manufacturing case is much closer to later ideas of imperfect or monopolistic competition than to modern notions of perfect competition. Products are differentiated and firms are not price takers, but face at any time downward-sloping demand curves in their special markets. Even if the difficulties of rapidly building up a firm’s internal organization can be overcome, the resulting enlarged output cannot be sold at a price covering cost—even granted substantial scale economies in production—without going through the slow process of building up a

clientele and shifting the firm's particular demand curve. The time this takes is assumed to be considerable relative to the duration of the firm's initial vitality. But in some cases the difficulties of rapid expansion may be overcome. They may not have been very severe, as when different firms' products are highly substitutable, or the firm's founder may have unusual genius. In such cases the industry will pass into a monopoly or be dominated by a few, strategically-interacting firms, or "conditional monopolies" as Marshall termed them.

Marshall's reconciliation of persisting competition with increasing returns and falling supply price is complex and problematic, but it does not depend in any essential way on scale economies being external to the firm. The concept of external economies is one of his significant contributions, although his treatment of it can hardly be called pellucid. But it was added more for verisimilitude than because it was theoretically essential to the structure of his theory.

### **b. Consumer's Surplus:**

Marshall added the term consumer's surplus to economic literature. According to him, "The excess of price which he would be willing to pay rather than go without the thing, over that which he actually does pay, is the economic measure of this surplus satisfaction. It may be called consumer's surplus".

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

In the words of Eric Roll, "The whole field of welfare economics of which Marshall's disciple and successor, Prof. Pigou, is the founder, really rests on considerations of which the consumer's surplus doctrine is the intellectual ancestor".

### **c. Elasticity of Demand:**

It is another important concept which Marshall gave to economics. In Marshall's own words. 'The elasticity of demand in a market is great or small according as the amount demanded increases much or little for a given fall in price and diminish much or little for a given rise in price.

He distinguished between five degrees of elasticity—absolutely elastic, highly elastic, elastic, less elastic and inelastic. He laid down that the demand for luxuries was highly elastic, for comforts elastic and for necessities inelastic.

Elasticity of demand can be measured by the percentage change in the amount demanded/ percentage change in price. Generally, elasticity of demand refers to price elasticity. Marshall was the first to define price elasticity of demand. Marshall gave three kinds of price elasticity—unity, greater than unity and less than unit elasticity. He also enumerated the factors governing elasticity of demand, viz., price level, nature of commodities, and variety of uses, substitutes, time element, taste and habit.

#### **d. Marshallian Utility and Demand:**

Price of a commodity is determined not by supply alone as the classical economists believed and not by demand alone as the utility theorists believed but by both demand and supply curves. Marshall takes up the theory of demand to analyse consumer behaviour.

A rational consumer aims at maximising satisfaction from his consumption. The amount of satisfaction is closely related to the quantity of that commodity consumed by the consumer. Thus demand is based on the law of diminishing marginal utility. Marshall stated the law thus, “the additional benefit which a person derives from a given increase of the stock of a thing, diminishes with every increase in the stock that he already has”.

Demand refers to the quantity of a commodity demanded at a certain price, other things remaining the same. The individual demand curve can be directly derived from the law of diminishing marginal utility. Assuming the marginal utility of money to be constant as the satisfaction from the additional units of a commodity diminishes, the price offered to additional units will fall. Hence the demand curve slopes downwards.

These individual demand curves can be added together to get market demand curve. The market demand curve represents the total demand of all the consumers for a commodity at various prices. On the basis of diminishing utility, Marshall has developed the law of substitution.

So far consumer behaviour has been analysed with reference to only one commodity. In practical life, the consumer has to choose between more than one commodity. A rational consumer will spend his money in such a way that his total satisfaction is maximum. He will go on substituting one commodity for another till he gets maximum satisfaction.

#### **7. Welfare Economics**

To serve as a tool of welfare economics, monetary measures of changes in consumer surplus, producer surplus and rent must be aggregated over individuals, but how are the resulting sums to be

interpreted? Marshall's very limited and proximate attempts at formal welfare arguments are carried out within a utilitarian framework, for which the goal is maximizing aggregate utility. He implies that interpersonal utility comparisons are possible in principle and that utility functions will be similar for all members of any group that is homogeneous in terms of mental, physical and social attributes. Within such a group, the marginal utility of money will be the same for two individuals having the same income, and lower for the richer of two individuals having different incomes, assuming in each case that both individuals face the same trading opportunities. A postulated change (e.g. a government action) will impose gains and losses on individuals which can be measured and aggregated in money-equivalent terms, but how can these measures be translated into statements about aggregate gains and losses of utility? Marshall emphasizes two special cases. If the gains are distributed over groups, and over income classes within each group, in exactly the same proportions as the losses are distributed, then aggregate utility gain will stand in the same proportion to aggregate monetary gain as aggregate utility loss stands to aggregate monetary loss. Even without knowing this proportion, the aggregate net monetary gain or loss will serve as an index of the aggregate utility gain or loss (although it can only rank alternatives having the same *relative* distributions of monetary benefits and costs as the case in question). Alternatively, if money gains and losses are distributed similarly over groups, but within each group the gains accrue to individuals of lower income than those bearing the costs, then there must be an aggregate net utility gain even if the aggregate net monetary gain is zero—a warrant for certain redistributive policies. Marshall believed that these special cases were of quite wide applicability. In other cases, he saw that careful judgemental assessments of the marginal utility of money to the various injured and benefited groups would be necessary, assessments which could be used to transform monetary gains and losses into utility measures. But he gave little indication as to how these assessments might be obtained in practice.

Marshall's best known and most successful foray into formal welfare analysis was his proof that total welfare might be increased by using the proceeds of a tax on an "agricultural" industry to subsidize a "manufacturing" industry. All comparisons involved long-period equilibria and relied on the validity of aggregated money-equivalent measures of gains and losses. He demonstrated that the gain in consumer surplus in the expanded decreasing-cost manufacturing industry might exceed the combined loss in consumer surplus and producer rents in the contracted increasing-cost agricultural industry. No formal account was taken of the possible gain in producer rent in the manufacturing industry as this merely made the argument *a fortiori*. The crucial point in this argument, as Marshall recognized, is that producers are not harmed by "a fall in price which results from improvements in industrial organization" (1920, p. 472). It is immaterial whether the improved organization of the enlarged manufacturing industry is due to external economies or to internal economies resulting from an increase in the size of the representative firm. Contrary to much subsequent opinion, Marshall's tax-subsidy argument is not necessarily dependent upon external economies.

Another significant, but overlooked, welfare analysis provided by Marshall was that of a monopolistic public enterprise in a situation where taxation involves an excess burden (1920, pp. 487–93, 857–8). Marshall proposes the goal of "compromise benefit" which effectively sums consumer surplus and monopoly revenue, but the latter multiplied by the marginal cost of raising a unit of government revenue from other sources. Maximization of compromise benefit leads to the setting of

what has come to be termed a Ramsey price. In the absence of an excess burden, when the marginal cost of extra government revenue is unity, this reduces to marginal cost pricing.

The two examples of welfare analysis just described proceed within a partial equilibrium framework, treating each industry as negligible compared to the entire economy and regarding the marginal utility of money as approximately constant to each individual. The gains or losses to producers need only take account of the narrow differential advantages obtained by operating in the industry in question rather than in any other use. Marshall's rather fragmentary remarks on optimal tax systems, income redistribution, and the "doctrine of maximum satisfaction" cannot be restricted in this way, and so raise serious unresolved analytical difficulties. On the other hand, his tax-subsidy argument was offered as a valid counterexample to arguments that competition must lead to a social optimum, or that optimal indirect tax systems must involve uniform tax rates. It must also be borne in mind that utilitarian welfare economics was for Marshall only a proximate step towards a more evolutionary analysis of modes of improving the physical quality and the values and activities of mankind.

### **8. Arthur Cecil Pigou( 1877 - 1939 )**

Arthur Cecil Pigou was born in the family home of his mother on November 18, 1877, at Ryde, in the Isle of Wight. He was the eldest son of Clarence and Nora Pigou. His father came from the Huguenot line and his mother's family came from a line that had won fame and fortune in Irish administration. The pride and background of Pigou's family helped to push him along his path later in life. His abilities in academics gained him an entrance scholarship to the school. Athletics was also one of Pigou's strong points. His talents in sports allowed him to be approved of by many at a time in history where athletics was looked at as being more important than academics. He ended his stay at Harrow as head of the school. Pigou's work is notable in two areas: welfare economics and the theory of unemployment. As in his major work *The Economics of Welfare* Pigou was strongly influenced by his former teacher Alfred Marshall.

Afterwards, he went to King's College, Cambridge as a history scholar. There, he came to economics through the study of philosophy and ethics under the Moral Science Tripos. He studied economics under Alfred Marshall, and in 1908 Pigou was elected professor of Political Economy at

Cambridge as Marshall's successor. He held the post until 1943. One of his early acts was to provide private financial support for John Maynard Keynes to work on probability theory. Pigou and Keynes had great affection and mutual regard for each other and their intellectual differences never put their personal friendship seriously in jeopardy. Pigou was a devoted expositor of Marshallian economics while he held the Cambridge chair. His most important work was published in 1912 as *Wealth and Welfare*, but was expanded to become the better known *The Economics of Welfare* in 1920. He became a Fellow of the British Academy in 1927. Pigou pioneered welfare economics with his concerns for justice and the protection of the interests of the poor. These views were rejected by John Maynard Keynes. Pigou retaliated by producing a severe review of Keynes' book. Despite their academic differences they remained firm friends. Later, Pigou began to appreciate the ideas of Keynes, acknowledging that he had come with the passage of time to feel that he had failed earlier to appreciate some of the important things that Keynes was trying to say. Pigou gave up his professor's chair in 1943, but remained a Fellow of Kings College until his death. In his later years, he gradually became more of a recluse, emerging occasionally from his rooms to give lectures or take a walk. Pigou died in 1959 in Cambridge.

#### **(a) Object of Economics:**

Pigou was of the view that the main aim of economic science is to increase social welfare. In that case, economics would be realistic and more beneficial to the society. In his definition, Pigou defines economics as a study of economic welfare which is that part of social welfare that can be brought directly or indirectly into relation with the measuring rod of money". He, therefore, considers economics as a normative science or welfare economics.

#### **(b) The Economics of Welfare**

Pigou's major work, *Wealth and Welfare* (1912) and *Economics of Welfare* (1920), developed Alfred Marshall's concept of externalities, costs imposed or benefits conferred on others that are not taken into account by the person taking the action. Pigou attributed welfare gains to the greater marginal utility a dollar of income had for the poor compared to the rich; a transfer of income from rich to poor increased total utility that could also be defined as increased "quality of life." Pigou also argued that welfare gains came from improving the quality of the work force through changes in the distribution of income or by improved working conditions. He argued that the existence of externalities was sufficient justification for government intervention. The reason was that if someone was creating a negative externality, such as pollution, he would engage in too much of the activity that generated the externality. Someone creating a positive externality, say, by educating himself and thus making himself more interesting to other people, would not invest enough in his education because he would not perceive the value to himself as being as great as the value to society. To discourage the activity that caused the negative externality, Pigou advocated a tax on the activity. To encourage the activity that created the positive externality, he advocated a subsidy. These are now called Pigovian (or Pigovian) taxes and subsidies.

Pigou's approach came under attack from Lionel Robbins and Frank Knight. The New Welfare Economics that arose in the late 1930s dispensed with much of Pigou's analytical toolbox. Later, the Public Choice theorists rejected Pigou's approach for its naive "benevolent despot" assumption. Finally,



Nobel Laureate Ronald Coase demonstrated that efficient outcomes could be generated without

government intervention when property rights are clearly defined. Coase presents his case in the article “The Problem of Social Cost” (1960). To explain this alternative let us continue with the paper mill example. There is a second approach likely taken. In this line of thinking the economist considers the paper mill and others who wish to consume or enjoy water quality as part of a competitive market where people bargain for the use of rights to scarce property. This analysis has nothing to do with polluters’ imposing cost on society, but everything to do with competing demands for use of an asset. If rights to the asset are defined and assigned to members of the river-basin community, then those planning to build the paper mill must bargain with the rightholders to determine just how much, if any, waste will discharge into the river. If the rights are held by the mill, then the existing communities along the river must bargain with the mill owner for rights to water quality. Again, bargaining determines the amount of discharge to the river.

This approach relies on the work of Ronald Coase (1960). Using this framework, an economist might recommend a meeting of the mill owners and others who have access to the river. After organizing the parties, negotiations would ensue. If existing river users owned water-quality rights, the mill would have to buy the rights in order to discharge specified amounts of waste. If the mill had the right to pollute, existing river users would have to buy water quality from the mill, paying the mill to limit its discharges. In other words, Pigouvian taxes do embody the important principle that polluters should pay for the damages they inflict on society. But in both law and economics, a more conservative analysis has gained popularity. Legal scholar Ronald Coase argued that taxes and regulation might be unnecessary, since under some circumstances polluters and those harmed by pollution could engage in private negotiation to determine the appropriate compensation. While Pigou’s examples of externalities often involved simultaneous harms to large numbers of people, Coase’s examples tended to be localized, individual nuisances, where one person’s behavior disturbed the immediate neighbors. The image of environmental externalities as localized nuisances serves to trivialize the real problems of widespread, collective threats to health and nature. Creative alternative readings of Coase have been suggested at times, but the dominant interpretation of his work has provided an intellectual basis for the retreat from regulation.

### **(c) Theory of Unemployment**

Pigou’s classical theory of unemployment (Pigou 1933) is based on two fundamental postulates, namely: The wage is equal to the marginal product of labour. That is to say, the wage of an employed person is equal to the value which would be lost if employment were to be reduced by one unit (after deducting any other costs which this reduction of output would avoid); subject, however, to the qualification that the equality may be disturbed, in accordance with certain principles, if competition and markets are imperfect. The utility of the wage when a given volume of labour is employed is equal to the marginal disutility of that amount of employment. That is to say, the real wage of an employed person is that which is just sufficient (in the estimation of the employed persons themselves) to induce the volume of the actually forthcoming labour; subject to the qualification that the equality for each individual unit of labour may be disturbed by combination between employable units analogous to the imperfections of competition which qualify the first postulate. Disutility here must be understood to cover every kind of reason which might lead a man, or a body of men, to withhold their labour rather than accept a wage

which had to them a utility below a certain minimum.

This second postulate is compatible with what may be called “frictional” unemployment. For an elastic interpretation of it, we must legitimately allow for various inexactnesses of adjustment which stand in the way of continuous full employment. For example, unemployment due to a temporary loss of balance between the relative quantities of specialized resources as a result of miscalculation or intermittent demand; or to time-lags consequent on unforeseen changes; or to the fact that the change-over from one employment to another cannot be effected without a certain delay, so that there will always exist in a non-static society a proportion of resources unemployed “between jobs.” In addition to “frictional” unemployment, the postulate is also compatible with “voluntary” unemployment due to the refusal or inability of a unit of labour, as a result of legislation or social practices or of combination for collective bargaining or of slow response to change or of mere human obstinacy, to accept a reward corresponding to the value of the product attributable to its marginal productivity.

But in his thinking, these two categories of “frictional” unemployment and “voluntary” unemployment are considered comprehensive. The classical postulates do not admit of the possibility of the third category, which we might define as “involuntary” unemployment. Subject to these qualifications, the volume of employed resources is duly determined, according to the classical theory, by the two postulates. The first gives us the demand schedule for employment, the second gives us the supply schedule; and the amount of employment is fixed at the point where the utility of the marginal product balances the disutility of the marginal employment. From this it follows that there are only four possible means of increasing employment: An improvement in organization or in foresight which diminishes “frictional” unemployment. A decrease in the marginal disutility of labour, as expressed by the real wage for which additional labour is available, so as to diminish “voluntary” unemployment. An increase in the marginal physical productivity of labour in the wage-goods industries (to use Pigou’s convenient term for goods upon the price of which the utility of the money-wage depends); or an increase in the price of non-wage-goods compared with the price of wage-goods, associated with a shift in the expenditure of non-wage-earners from wage-goods to non-wage-goods.

#### **(d) The Pigou effect**

What is now known as the Pigou effect was first popularized by Pigou in 1943. The term refers to the stimulation of output and employment caused by increasing consumption due to a rise in real balances of wealth, particularly during deflation. Pigou had proposed the link from balances to consumption earlier, Gottfried Haberler having made a similar objection the year after the publication of John Maynard Keynes’ General Theory. In fact, Haberler in 1937 and Pigou in 1943 both showed that a downward wage-price spiral had the effect of increasing real money balances. As price declines drove up the value of the existing money supply, the increase in real money balances would at some point satisfy savings desires and result in a resumption of consumption. Wealth was defined by Pigou as the sum of the money supply and government bonds divided by the price level. He argued that Keynes’ General theory was deficient in not specifying a link from “real balances” to current consumption, and that the inclusion of such a “wealth effect” would make the economy more “self correcting” to drops in aggregate demand than Keynes predicted. Because the effect derives from changes to the “Real Balance,” this critique of Keynesianism is also called the Real Balance effect. Pigou later dismissed his “Pigou effect” or “real balance effect” as an academic exercise, because a government would not

employ a downward wage-price spiral as a means of increasing the real money supply. In contrast, Karl Polanyi recognized the real world policy implications of the real balance effect. He dismissed the wage-price flexibility discussion as irrelevant and stated the “Pigou effect” in terms of constant prices and increases in the nominal stock of money. In Polanyi’s approach, the policy issue is not obscured by adverse effects on expectations caused by price level declines.

All this, moreover, has its reverse side. In an exchange economy everybody’s money income is somebody else’s cost. Every increase in hourly wages, unless or until compensated by an equal increase in hourly productivity, is an increase in costs of production. An increase in costs of production, where the government controls prices and forbids any price increase, takes the profit from marginal producers, forces them out of business, and means a shrinkage in production and a growth in unemployment. Even where a price increase is possible, the higher price discourages buyers, shrinks the market, and also leads to unemployment. If a 30 percent increase in hourly wages all around the circle forces a 30 percent increase in prices, labour can buy no more of the product than it could at the beginning; and the merry-go-round must start all over again.

#### **(e) Elasticity of demand for labour**

An important factor in this analysis is the elasticity in the demand for labour. In this case, elasticity is defined:  $e = (\text{percentage change in employment}) / (\text{percentage change in wage})$ . Elasticity is the percentage change in quantity (in this case employment) divided by the percentage change in price (or wage.) The labour elasticity should actually be defined in negative numbers. For the sake of simplification we shall use the positive coefficients here as well. For example, an elasticity coefficient of two shows that the labour force responds a great deal to a change in wage. If, on the other hand, a ten percent change in wage causes only a five percent change in employment, the elasticity coefficient will be only one-half. Economists would say in this case that demand is inelastic. Demand is inelastic whenever the elasticity coefficient is less than one. When it is greater than one, economists say that demand is elastic.

While analyzing the elasticity of demand for labour, Paul H. Douglas in America from analyzing a great mass of statistics and Pigou in England, by almost purely deductive methods, arrived independently at the conclusion that the elasticity of the demand for labour is somewhere between three and four. This means, in less technical language, that “a one percent reduction in the real rate of wage is likely to expand the aggregate demand for labour by for labour by not less than three percent” (Pigou 1933). Or, to put the matter the other way, “If wages are pushed up above the point of marginal productivity, the decrease in employment would normally be from three to four times as great as the increase in hourly rates” (Pigou 1933) so that the total incomes of the workers would be reduced correspondingly. In Pigou’s view, Even if these figures are taken to represent only the elasticity of the demand for labour revealed in a given period of the past and not necessarily to forecast that of the future, they deserve the most serious consideration (Pigou 1933, 96).

**(f) Modification of Capitalism :** Though Pigou was a supporter of capitalism, he believed that it required some modification. He held that a moderate form of socialism was needed to solve certain important is a purely psychological one since he emphasized on the demand for labour and rejected the role of investment. He held that cyclical changes take place on account of changes in the demand schedule of

labour. The main force underlying this schedule is the expectations regarding prospective yield. In this way he rejected the investment element and emphasised the psychological factor.