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ALFRED MARSHALL: LABOUR AND ORGANISATION

— TWO FACTORS OF PRODUCTION —

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ABSTRACT

The classical theory of production concentrated on a combination of three factors — land, capital and labour. Then Alfred Marshall introduced a fourth factor, organisation and entrepreneurship. The vital concept of Marshall's economics is organic growth. He developed the theory of organic growth of society in his economics. In the theory of organic growth, Labour and Organisation; the labouring class and the entrepreneur play an important role. Then Marshall wanted to increase 'the standard of life' in the labouring class and raise the ability of the entrepreneur.

Marshall was very interested in the labouring class and it is starting point of his economics. It can be said that Marshall's economics is labour economics. He wanted the labouring class to escape the poverty trap and advance into the gentleman class. This thesis was clarified that Marshall pointed out some methods of increase "the standard of life".

In this thesis, the definition of an entrepreneur which had been neglected in economic theory was clarified. The great economist in the past did not always have an economic theory, which included the concept of the entrepreneur. Again in modern economic theory, the concept of the entrepreneur was neglected, since the theories which centered around equilibrium did not pay attention to the entrepreneur. However, Marshall's economic theory has a theory of the entrepreneur and he discussed some functions of the entrepreneur. Marshall wanted the entrepreneur to raise the entrepreneurial ability.

Marshall wanted to make up the circle leading to an increased standard of life in the labouring class and the entrepreneurship, leading to high productivity and thus perpetuating organic growth. In this thesis it was clarified that Marshall regarded the entrepreneur and the labouring class as a vital factor of production which causes organic growth.
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The classical theory of production concentrated on a combination of three factors - land, capital and labour. When Alfred Marshall developed the arrangement of productive factors in his *Principles of Economics*, he introduced a forth factor, entrepreneurship and organisation.

We would now be unable to analyse economic systems without his concept of organisation. He did not regard organisation as something which would merely combine with land, labour and capital, but understood that it is the organic body itself which has value. Marshall developed the theory of organic growth of society. Industrial organisation performed differentiation and integration not unconsciously but intentionally. Differentiation means 'the division of labour, and the development of specialised skill, knowledge and machinery', while integration is 'a growing intimacy and firmness of the connections between the separate parts of the industrial organism'. On industrial organisation, it is the entrepreneur who is the key person effecting the differentiation and integration.

Marshall's concept of an entrepreneur is different from that of Schumpeter. Schumpeter's entrepreneur has only an innovative function but Marshall's has a multiplicity of functions. A fundamental part of entrepreneurship is knowledge-search. This involves of trying to accumulate knowledge about existing technology and opportunities, about technological possibilities. Marshall's entrepreneur is a decision maker and manager. In addition his entrepreneur possesses an altruistic element ("Economic Chivalry") and is an industrial leader. Moreover, his entrepreneur must be a natural
leader of men who can raise productive efficiency by combining land and capital, and can do the national dividend, make its distribution more equitable.

Marshall was interested in studying the condition of the laboring class. As he read Mill's *Political Economy*, he got excited about it. Then, in his free time he visited the most poverty-stricken quarters of several cities and walked through one street after another, looking at the state of the poor. Next, he resolved to make as thorough a study as he could of political Economy. He also gave a lecture in the Reform Club which was entitled 'The future of the working classes'. Therefore we can understand his interest in the role of labour as a factor of production. According to Mark Blaug, Marshall's *Principles of Economics* represents what is perhaps the most penetrating contribution to labour economics since *The Wealth of Nations* by Adam Smith. Again, Marshall thought that 'Political Economy or Economics' is on the one side a study of wealth; and on the other, and more important side, a part of study of man. It seemed that the study of man which Marshall thought is of the labourer. Marshall expected that labouring class will have some power and play a central part in production. With the entrepreneur, Marshall thought the labourer assumes an important part in the organic growth.

In the classical theory production involved a combination of the three factors of land, capital and labour. Why did Marshall regard the entrepreneur and organisation as important factors which rule production? Why did he feel it necessary to treat organisation as a special fourth factor of production? Organisation plays an active role. Hence, he regarded the entrepreneur as an important person in organic growth. Marshall's concern is with the inter-relationship of human progress and welfare. In addition he sees the
entrepreneur as being an essentially formative person for human progress. This thesis's intention is that Marshall's reasoning will be clarified. Hence first Marshall's analysis of factors of production will be discussed, second the role of labour in production, third the role of the entrepreneur in production and the form of the business management. Lastly, this thesis will be summarise and conclude of Marshall's idea of labour and organisation.
I. Marshall's analysis of the factors of production - land, capital and organisation

I-1. Factors of production

Alfred Marshall distinguished four factors of production - land, labour, capital and organisation. Marshall said:

"The agents of production are commonly classed as Land, Labour and Capital. By Land is meant the material and the force which Nature gives freely for man's aid, in land and water, in air and light and heat. By Labour is meant the economic work of man, whether with the hand or head. By Capital is meant all stored-up provision for the production of material goods, and for the attainment of those benefits which are commonly reckoned as part of income. It is the main stock of wealth regarded as an agent of production rather than as a direct source of gratification.

Capital consists in a great part of knowledge and organisation: and of this some part is private property and other part is not. Knowledge is our most powerful engine of production; it enable us to subdue Nature and force her to satisfy our wants. Organisation aids knowledge; it has many forms, e.g. that of a single business, that of various business in the same trade, that of various trades relatively to one another, and that of the State providing security for all and help for many."^5

Marshall thought that the relationship between organisation and knowledge was very important. We need to put our knowledge to practical use to
the maximum to improve our knowledge. It is organisation that puts our knowledge to practical use and improves our knowledge, so we need organisation to do this. Therefore Marshall emphasised the importance of organisation and knowledge very highly.

"Ideas, whether those of art and science, or those embodied in practical appliances, are the most "real" of the gifts that each generation receives from its predecessors. The world's material wealth would quickly be replaced if it were destroyed, but the ideas by which it was made were retained. If however the idea were lost, but not the material wealth, that would dwindle and the world would go back to poverty. And most of our knowledge of mere facts could quickly be recovered if it were lost, but the constructive idea of thought remained; while if the idea perished, the world would enter again on the Dark Ages."^6

Thus Marshall regarded knowledge as an important thing for the process of economic development. Moreover anybody who uses capital and land, needs to obtain organisation and knowledge. Marshall's organisation was deeply influenced by Charles Darwin's theory of biological evolution. Darwin (1809-1882) got inspiration from An Essay on the Principles of Population (1798) by Thomas Robert Malthus (1766-1834) about the struggle for existence of the human race. According to Marshall:

"Economists have much to learn from the recent experiences of biology: and Darwin's profound discussion of the question."^7

Marshall also said that the Mecca of Economists lies in economic biology rather than in economic dynamics. Marshall learned of the struggle for
existence and natural selection from Darwin's evolution and he utilised them for his theory of organisation. Biological evolution was applied to the field of social science by Herbert Spencer (1820-1903). Marshall's theory was also deeply influenced by him. Marshall discussed Spencer's views as follows:

"Herbert Spencer has insisted with much force on the rule that, if any physical or mental exercise gives pleasure and is therefore frequent, those physical or mental organs which are used in it are likely to grow rapidly. Among the lower animals indeed the action of this rule is so intimately interwoven with that of the survival of the fittest, that the distinction between the two need not often be emphasised. For as it might be guessed a priori, and as seems to be proved by observation, the struggle for survival tends to prevent animals from taking much pleasure in the exercise of functions which do not contribute to their wellbeing.

But man, with his strong individuality, has greater freedom."8

The organisation of society and biological experience an increasing degree of differentiation with advances of each organisation. The development of organisms, whether social or physical, involves an increasing subdivision of functions between its separate parts on the one hand, and on the other a more intimate connection between them.9

This is the so-called advancement of integration of organisation. In all organisations, the general trend is for differentiation and integration to advance. These two functions are the core of Marshall's organic growth.

As Marshall put it:

"The main concern of economics is thus with human beings who
are impelled, for good and evil, to change and progress. Fragmentary statistical hypotheses are used as temporary auxiliaries to dynamical- or rather biological- conceptions; but the central idea of economics, even when its Foundations alone are under discussion, must be that of living force and movement."

Marshall did not regard organisation as something which would merely combine with land, labour and capital, but understood that it is the organic body itself which has value. The industrial organisation would differentiate and integrate, then the leader of it would become an entrepreneur. Typical human beings who are impelled to change and progress are entrepreneurs and the industrial organisation would also change and progress.

This increases the subdivision of function, or 'differentiation' as it is called, manifests itself with regard to industry in such forms as the division of labour, and the development of specialised skill, knowledge and machinery: while integration, that is, a growing intimacy and firmness of the connections between the separate parts of the industrial organism, shows itself in such forms as the increase of security of commercial credit, and of the means and habits of communication by sea and road, by railway and telegraph, by post and printing- press.

Marshall's factors of production are examined in this section. They can be summarised as follows. As regards both organisation and Knowledge, we need to have forms of organisation which can utilise knowledge to advantage. Therefore an entrepreneur needs to have an organisation which can make good use of knowledge, and his ability and the organisation need to grow organically. The key person who fosters this organic growth is the entrepreneur.
I-2 Economic Growth

a) The theory of Organic Growth

According to J.K. Whitaker, Marshall arrived at the formulation of the mode of organic growth circa 1881 or 1882. However, Harrod argues there is no dynamic theory in Marshall’s economics. Harrod wrote.

“The lapse of Dynamics from favour is most remarkably illustrated by Marshall. We know well how lovingly he treasured all the bits and pieces of traditional theory. He could not bear to abandon the view that the rent of land does not enter into the cost of production. Even the iron law of wages reappears; its guise is softened and rendered kindly, but it is there all the same. To make sure of my ground I re-read the Principles before composing these lectures, and I can find scarcely any trace of that dynamic theory which occupied at least half of the attention of the old classical school.”

But Marshall’s strong interest in economic growth was seen in his economic system. Hence in this section, Marshall’s theory of organic growth will be discussed.

The central ideas, which he set out to clarify through his economics study, gave an explanation of organic growth. They are shown in the lecture ‘Present Position of Economics’ (1885). Marshall wrote:

“The change that has been made in the point of view of Economics by the present generation is then not due to the discovery of the importance of supplementing and guiding deduction by induction, for that was well known before. It is due to the discovery that man himself is in a great measure a creature of circumstance and changes
with them; and the importance of this discovery has been accentuated by the fact that the growth of knowledge and earnestness have recently made and are making deep and rapid changes in human nature.

At the beginning of the nineteenth century the mathematico-physical group of sciences was in the ascendant. These sciences, widely as they differ from one another, have this point in common, that their subject-matter is constant and unchanged in all countries and in all ages. The progress of science was familiar to men's minds, but the development of the subject-matter of science was strange to them. As the century wore on the biological group of sciences were slowly making way, and people were getting clearer ideas as to the nature of organic growth. 

First of all, Marshall's concept of mechanical and biological analogies in economics will be examined. Marshall called physical concept in social science the mechanical analogies and developed the equilibrium theory by the mechanical analogies. In the earlier stages of economic study, the mechanical analogies could be applied.

Marshall wrote:

"There is a fairly close analogy between the earlier stages of economic reasoning and the devices of physical statics. But is there an equally serviceable analogy between the later stages of economic reasoning and the methods of physical dynamics? I think not. I think that in the later stages of economics better analogies are to be got from biology than from physics; and, consequently, that economics reasoning should start on methods analogous to those of physical
Marshall thought that the mechanical analogies can not sufficiently analyse the organic growth of the society, so biological analysis will be needed. Marshall thought that distribution of the national dividend can not be explained by mechanical analogies. To make full use of the biological analysis, national income had to be analysed with the organic growth system.

Therefore a central theme of Marshall's economic system was to produce a basic theory to clarify the process of economic progress. His intention was a to produce a study of the progress and development of society. Hence he thought that the principles of economics is 'concerned throughout with the force that cause movement: and its key-note is that of dynamics, rather than statics.'

The background of Marshall's economics is not static economics but dynamic economics in which capital will be accumulated with technical change and the level of national dividend net national income will change. In addition to this, Marshall realised that the increase of the national dividend must also result in improvement in the quality of society, of human-beings.

Marshall wrote:

"'Progress' or 'evolution', industrial and social, is not mere increase and decrease. It is organic growth, chastened and confined and occasionally reversed by the decay of innumerable factors, each of which influences and is influenced by those around it; and every such mutual influence varies with the stages which the respective factors have already reached in their growth.

In this vital respect all sciences of life are akin to one another, and are unlike physical sciences. And therefore in the later
stages of economics, when we are approaching nearly to the condition of life, biological analogies are to be preferred to mechanical, other things being equal. Other things may not be equal; the mechanical analogy is apt to be the more definite and vivid."^17

Marshall insisted that the habits and institution of industry are liable to change. He thought that there are possibilities for vast improvements in the labouring classes.

The keynote of Marshall's description and analysis of the modern economic order is what he called "free industry and enterprise". A free enterprise system was seen as the framework most conducive both to growth of the standard of life and to growth of material welfare. Growth of the standard of life is a rise of supply price in the economic activities of the entrepreneur or labourer. Growth of material welfare is a rise of the standard of living and the increase of entrepreneurship. Economic Freedom is a main factor which has developed free industry and enterprise, having the characteristics of entrepreneurship, energy and originality. "Material welfare and progress were regarded by Marshall as mutually reinforcing. An increase in the average standard of life would contribute to material progress by enhancing labour efficiency, inventiveness, willingness to save, and investment in human capital. On the other hand, material progress would supply the wherewithal for the inevitably higher consumption level of basic necessities to maintain the labour efficiency required by an increase in the standard of life".18

Marshall's ultimate aim is an analysis related to progress and well-being in the process of organic growth. To respond to this problem, Marshall thought of an economic society as being like a biological body, and analysed it
by what he thought of as biological methodology. Thus he developed the theory of organic growth and made clear that the rise of the standard of life is the mainstay of economic growth. The standard of life supplies the motivation for economic activity. To be realistic, it must be based on the appropriate supply price for the economic activities of the entrepreneur or labourer. Marshall attached great importance to the issue of social welfare in the process of organic growth. He strove to establish justice in distribution.

In the next section, the notion of the standard of life which is such an important point in the theory of organic growth will be clarified.

b) Standard of Comforts and Standard of Life

The main idea discussed by Marshall in Principles of Economics is that of organic growth. Marshall understood the behaviour of an economic body through the relation between its wants and activities. He classified the satisfaction of certain desires and economic activities according to priorities. Marshall thought that economic development depends on a people's potential to attach importance activities than wants. Economic progress is caused by the behaviour of the subject in attaching greater importance to activities than wants. 'The progressives nature of man is one whole'. Therefore Marshall insisted that we need to study human efforts in their relation to activities, with a short study human efforts in their relation to activities, 'with a short study of the variety of human wants'. For that purpose we ought to be careful to view human behaviour in its entirety. Wealth is at once the subject of human wants and the effects of efforts to satisfy those wants. Economic activities are actions which cause wants and efforts to harmonise. The
transition from wants to activities occurs through the evolution of the type of desires.\textsuperscript{2,1}

The relation of desire to activities will be examined. Marshall discussed human wants and desires in the following sentence.

"The uncivilised man indeed has not many more wants than the brute animal, but every step in his progress upwards increases the variety of needs together with variety in his methods of satisfying them. He desires not merely larger quantities of the things he has been accustomed to consume, but better qualities of those things; he desires a greater choice of things, and things that will satisfy new wants growing up in him."\textsuperscript{2,2}

First, man has simple desires such as wanting to satisfy his hunger. "It is man's wants in the earliest stages of his development which give rise to his activities, the wants which rule the lower animals and man in those earlier stages are not wants in the ordinary sense, but simply biological needs."\textsuperscript{2,3}

Man has firstly "simple desires", but civilisation brings with it a "desire for variety" for its own sake.\textsuperscript{2,4} This will develop further into a "desire for distinction". Man tries initially to satisfy simply physiological desires, the desire for distinction is a chief source of the desire for costly dress. This desire 'appears to be wholly arbitrary, mere whims with no permanent foundation in life'.\textsuperscript{2,5} The desire for distinction will produce "the desire for excellence". Costly clothes may represent a high position in society but costly clothing itself does not produce that position. A high social position is produced by good social activity. Therefore people will seek spontaneously to perform good social activities. People who are most truly distinguished on
their own account, have a natural dislike of seeming to claim attention by their
dress. Marshall thought that the desire for excellence will spread through every
rank of society and it will 'lead not only to pursuit of science, literature and
art for their own sake, but to the rapidly increasing demand for the work of
those who pursue them as professions'.

As wants advance through all the sorts of stages, the desire for
variety, the desire for distinction, and the desire for excellence, so the
relation of wants to activities will differ. This relation, in which initially
wants are an aim and activities are a means, will gradually change.

Marshall wrote.

"... Although it is man's wants in the earliest stage of his
development that give rise to his activities, yet afterwards each new
step upwards can be regarded as the development of new activities
giving rise to new wants, rather than of new wants giving rise to new
activities."  

In every stage of man's progress, man is destined to contrive and
invent, to engage in new undertakings; and when these are accomplished to enter
with fresh energy upon others.

In a low stage of development, wants cannot be fulfilled except by
activities. In this case 'wants adjusted to activities'. In higher stage of
society, the activities themselves will become an aim and wants will become a
means by which the wants will be sustained. Marshall describes 'wants adjusted to
activities' by the term 'standard of comforts' and on the other hand describes
'activities adjusted to wants' as 'standard of life'.

"Standard of comforts" means "standard of consumption" and "standard of
life" means "standard of production". Marshall ascribed to these notions sociological meanings. ‘A rise in the standard of comforts may suggest an increase of artificial wants, among which perhaps the grosser wants may predominate’.30 ‘A rise in the standard of life implies an increase of intelligence and energy and self-respect, leading to more care and judgement in expenditure, and to an avoidance of food and drink that gratify the appetite but afford no strength, and of ways of living that are physically and moral unwholesome’.31

According to Marshall:

"A rise in the standard of life for the whole population will much increase the national dividend, and the share of it which accrues to each grade and to each trade. A rise in the standard of life for any one trade or grade will raise their efficiency and therefore their own real wages: it will increase the national dividend a little; and it will enable others to obtain their assistance at a cost somewhat less in proportion to its efficiency.”32

This idea implies that a rise in the wages of the labouring class brings an improvement of their life style and of their children’s education.33 It will thus increase the efficiency of production.

The term "standard of comforts" means an increase of wants in an unsophisticated man. A rise in the standard of comforts does not cause in activities, and do not improve their lives. The increase of wants makes their lives a misery. Therefore Marshall stressed the necessity of raising the standard of life. Marshall thought that people will adopt an attitude which emphasises activities rather than wants. If the wages of the labouring class
rise, they will use it not to raise the standard of comforts but to increase the standard of life; thus the efficiency of labour will improve.

Marshall’s ultimate goal was the analysis of the process of organic growth. To respond to this problem, Marshall likened economic society to a biological body and analysed it using a biological analogy. Thus he developed the theory of organic growth and explained that raising the standard of life is the mainstay of economic growth. The standard of life is the motivation for economic activity so, to be effective, it must be based on the actual price of the entrepreneur’s or labourer’s economic activities. Marshall thus attached great importance to the issue of social welfare in the process of organic growth. He strove to establish justice in distribution. Hence, in the next section the distribution of national income will be examined.
In 1898 in the *Economic Journal*, Marshall stated that Book V (which is entitled ‘General relations of demand, supply and value’) of his work *Principles of Economics* is preliminary and that construction begins with Book VI (which is entitled ‘The distribution of the national income’) which is concerned with distribution. Marshall’s central concern changes with Book VI from the relation of demand, supply and value to the distribution of national income.

In the second revision of his *Principles of Economic* Marshall clarified his theory of the distribution of national income. He criticised the doctrine of the wage-fund used by the classical school and formulated a different approach to the distribution of national income. The wages theory will be dealt with in another chapter in detail. In this book Marshall added the increase of labour efficiency and the increase of business power to his distribution theory as he intended to clarify the organic growth of economics. The subject of distribution of national income was a theoretical tool to inquire into organic growth.

In the first chapter of Book VI, Marshall wrote:

"...... our growing power over nature makes her yield an ever larger surplus above necessaries; and this is not absorbed by an unlimited increase of the population. There remain therefore the questions:- what are the general causes which govern the distribution of this surplus among the people? What part is played by conventional necessaries, i.e. the Standard of Comfort? What by the influence which methods of consumption and of living generally exert on efficiency; by wants and activities, i.e. by the Standard of Life? What by the many-
sided action of the principle of substitution, and by the struggle for survival between hand-workers and brain-workers of different classes and grades? What by the power which the use of capital gives to those in whose hands it is? What share of the general flow is turned to remunerate those who work (included here the undertaking of ventures) and "wait", as contrasted with those who work and consume at once the fruits of their endeavours? An attempt is made to give a broad answer to those and some similar questions." 34

Marshall pointed out that man's growing power over the natural world makes it yield increasing surpluses. Over time source of this is absorbed by limited population increase. There arises the problem of how to distribute this surplus among the people, and people have to face the problem of how to spend their money, and how to maintain their standard of life.

It is thus important to consider Marshall's wage theory. Marshall believed in the economy of high wages.

"...... an increase of wages, unless earned under unwholesome conditions, almost always increase the strength, physical, mental and even moral of the coming generation; and that, other things being equal, an increase in the earnings that are to be got by labour increase its rate of growth; ...... " 35

Regarding the increase of the labouring classes' wages, if they use it not to raise the standard of comforts but the standard of life, their wages will bring them an improvement in their housing, food and education. Moreover the increased wages will improve their children's physical and mental attributes. Low wages will conversely, cause a decline efficiency of labour. Thus wages
tend to retain a close, though indirect and intricate, relation with the cost of rearing, training and sustaining the energy of efficient labour.

Adam Smith believed that an increase of wages would improve the life of the labouring classes. However, according to Ricardian and Malthusian population theory, raising wages would hasten marriage amongst the working people and increase the number of their children. Thus raising the wages of the labouring classes did not raise their standard of life. Marshall accepted that this was true over much of the world.

In Marshall's view:

"..... throughout the greater part of the world the working class can afford but few luxuries and not even many conventional necessaries; and any increase in their earnings would result in so great an increase of their numbers as to bring down their earnings quickly to nearly the old level at their mere expense of rearing. Over a great part of the world wages are governed nearly after the so-called iron or brazen law, which ties them close to the cost of rearing and sustaining a rather inefficient class of labourers." 36

Under much condition the wages of the labouring classes did not rise above subsistence level. Marshall wrote.

"There are other considerations of which account ought to be taken;..... it seems *prima facie* advisable that people should not bring children into the world till they can see their way to giving them at least as good an education both physical and mental as they themselves had; and that it is best to marry moderately early provided there is sufficient self-control to keep the family within the requisite bounds"
without transgressing moral laws. The general adoption of these principles of action, combined with an adequate provision of fresh air and of healthy play for our town populations, could hardly fail to cause the strength and vigour of the race to improve. And we shall presently find reasons for believing that if the strength and vigour of the race improves, the increase of numbers will not for a long time to come cause a diminution of the average real income real income of the people."  

Moreover Marshall insisted on the benefits of high wage economy. He thought that high wages would cause the labouring classes to improve their lives. Marshall regarded highly Adam Smith's insight, and remarked that it is quite possible for the labouring classes to change their definition of necessaries. Therefore economic growth would change the labouring classes' necessaries. Marshall considered that 'the growth of population was checked by that rise in the standard of comfort which took effect in the general adoption of wheat as the staple of Englishmen during the half of the eighteenth century'. Thus, a given standard of comforts acted as a check to population growth. If the labouring classes attained this standard of comforts, they do not marry without considering their future. Then they will have improved their life style and they will have thought about their children's future. A rise in wages will induce a rise in the standard of life. But that standard of life responds only gradually to task wage. 'The growth in the efficiency of labour is not treated very explicitly' by Marshall. 'An important strand in Marshall's thought at this time was the belief that an increase in time wages could increase the efficiency of labour by improving living standards, so that task
wages may not be increased, or may be increased less than proportionately.\textsuperscript{40}

If a rise of wages leads to such an increase of efficiency that task-wages are no higher than before, it will not lower profits, but raise them. In other words a rise in wages almost always leads to an increase of "personal capital"; and the increase of the wages-and-profits fund depends on the manpower as much as on the material resources of the country. A rise in wages may be devoted to adding to the material and personal capital of the labouring classes, and increase their efficiency.

High wages cause labour to increase its efficiency, so labour does not actually become more expensive.\textsuperscript{41} However, Marshall believed that only in the previous generation was a careful study made of the effects that high wages have on increasing the efficiency not only of those who receive them, but also of their children and grandchildren.\textsuperscript{42}

If the labouring classes live in poor conditions the effect is self-sustaining, so their children will repeat the pattern. Marshall thought that paying the labouring classes high wages was one of the methods to break the vicious circle of bad condition and bad wages leading to their own perpetuation.\textsuperscript{43} He thought that the way in which the labouring classes use their high wages is also important.

Marshall was convinced that an increase in time wages can increase the efficiency of labour by improving living standards. The efficiency of man's labour in production depends on health and strength, physical, mental and moral.

Marshall wrote:

"They (health and strength, physical, mental and moral) are the basis of industrial efficiency, on which the production of material
wealth depends; while conversely the chief importance of material wealth lies in the fact that, when wisely used, it increases the health and strength, physical, mental and moral of the human race."^4^4

If the labouring classes use an increase in time wages for improving their standard of living, their wages would improve their lives. Therefore an increase in wages will cause organic growth. How did Marshall actually envisage the labouring classes using their high wages?

He thought that the labouring classes would use these wages not for raising the standard of comforts but for raising the standard of life, thus increasing their level of activity. Since labouring classes use the wages improving their standard of living, so it rises the efficiency of their work. Furthermore, Marshall pointed out that 'there is some misuse of wealth in all ranks of society'.^4^5 Marshall thought that 'the discussion of the influence exerted on general wellbeing which is exerted by the mode in which each individual spends his income is one of the most important of those applications of economic science to the art of living'\(^4^6\)

Marshall gave an example in which an experienced housekeeper urges on a young couple the importance of keeping accounts. He wrote:

"...... a chief motive of the advice is that they may avoid spending impulsively a great deal of money on furniture and other things; for, though some quantity of these is really needful, yet when bought lavishly they do not give high (marginal) utilities in proportion to their cost."^4^7

The different uses between which a commodity is distributed need not all be present uses; some may be present and some future. A prudent person will
endeavour to distribute his means between all their several uses, present and future, in such a way that they will have in each the same marginal utility.\textsuperscript{4.6} If people regard future benefits as equally desirable with similar benefits at the present time, they will probably endeavour to distribute their pleasures and other satisfactions evenly throughout their lives.\textsuperscript{4.9} In this sentences Marshall placed special stress on consideration of the future. The habit of clearly foreseeing the future and providing for it has developed itself slowly and fitfully in the course of man's history.

Marshall thought that the growth of capital depends on the power and will to save.\textsuperscript{5.0} He wrote.

"It has greatly increased the supply of capital. The growth of wealth is promoted by man's increased willingness to sacrifice the present for the future." \textsuperscript{5.1}

Marshall did not recommend the labouring classes to save for the sake of accumulation of capital. He thought that the labouring classes should not waste money, but rather save it, to increase the human capital of the labouring classes. The will to save depends upon the degree to which individuals are imbued with foresight and family affection, and also rate of interest.\textsuperscript{5.2}

Marshall wrote.

"Man, though still somewhat impatient of delay, has gradually become more willing to sacrifice ease or other enjoyment in order to obtain them in the future. He has acquired a greater "telescopic" faculty; that is, he has acquired an increased power of realising the future and bringing it clearly before his mind's eye: he is more prudent, and has more self-control, and is therefore more inclined to
estimate at a high rate future ills and benefits — these being used broadly to include the highest and lowest affection of the human mind.”

Marshall felt it was necessary for the labouring classes to gain the will to save and pointed out that generally a rise in their wages does not improve their lives soon. Therefore the progress of the people and the advance of civilisation is indispensable to the improvement of their lives; they have to develop their intellect. Hence it is important that they receive an education.

Family affection is also important. The accumulation of wealth is governed by a great variety of causes; by custom, by habits of self-control, by consideration of the future, and above all by the strength of family affection. Security is a necessary condition for family affection, and progress of knowledge and intelligence further it in many ways.

The motive with which the labouring classes save money is to improve the properties of their children. Labouring classes want to bring their children up respectable men, so they will save the money for their children and use for them. The will to save depends on being willing to sacrifice ease or other enjoyment in order to obtain them in the future. To save they need therefore to acquire an increased power to consider the future. If they get this ability, they will be more unselfish, and therefore more inclined to work and save in order to secure a future provision for their families.

Marshall wrote of family affection.

“That men labour and save chiefly for the sake of their families and not for themselves, is shown by the fact that they seldom spend, after they retired from work, more than the income that comes in
from their savings, preferring to leave their stored-up wealth intact for their families; while in this country alone twenty millions a year are saved in the form of insurance policies and are available only after the death of those who save them.

A man can have no stronger stimulus to energy and enterprise than the hope of rising in life, and leaving his family to start from a higher round of social ladder than that on which he began. It may even give him an overmastering passion which reduces to insignificance the desire for ease, and for all ordinary pleasures, and sometimes even destroys in him the finer sensibilities and nobler aspirations. ^5^5

The existence of such affection depends upon whether the labouring classes think of selecting a different life for their children. But this, Marshall believed, depended on the effect of their education.

The next issue to be considered is the interest rate. The will to save depends upon the rate of interest. However, Marshall thought that even if interest were negative, some saving might conceivably be made. Therefore he consider that interest can be regarded as the reward for waiting. ^5^6

He wrote:

"And human nature being what it is, we are justified in speaking of the interest on capital as the reward of sacrifice involved in the waiting for the enjoyment of material resources, because few people would save much without reward; just as we speak of wages as the reward of labour, because few people would work hard without reward." ^5^7
It could be argued, indeed, that the will to save is affected not only by the rate of interest but by family affection, and foresight. This will is brought about by considering the education of children. Marshall thought that the rise of the standard of life, which is based on human action, is the essence of organic growth. The rise of the standard of life restrains human desires and causes the development of material and physical wealth. If the people have a lot of wants, a rise in wages for the labouring classes can not improve their condition. For they use the money for the pleasure of eating, drinking and gambling. They squander their wages and do not use them to improve their activities. If the rise in wages for the labouring classes is not used for the standard of comforts but the standard of life, it does not adversely affect the accumulation of capital. By contrast, a rise in wages will improve the life of the labouring classes and raise the efficiency of labour. Therefore it will benefit economic growth. Marshall thought that if the labouring classes received a rise in wages, they would not waste their wages but rather would invest for their children's education. Marshall hoped that the labouring classes would develop this attitude. To achieve this, they need to acquire an increased power of considering the future, foresight and an unselfish affection for their families.

Marshall’s economic development involved two themes. One is the logic of an organisation's development, and the other the logic of the advancement of life. The latter is mainly concerned with improving the quality of a labourer's life, and also states the entrepreneur will develop the quality of life of the labouring classes. The former implies that organisation is central to economic growth. Furthermore, the entrepreneur, who controls the organisation, is closely
related to it. Therefore the role of labour and the role of the entrepreneur as productive factors will be examined in the two chapters.
II. THE ROLE OF LABOUR IN PRODUCTION

II - 1. Marshall's view of the labourer

At the very beginning of the Principles of Economics, Marshall stated:

"Political Economy or Economics is a study of mankind in ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requites of wellbeing.

Thus it is on the one side a study of wealth; and on the other, and more important side, a part of the study of man. For man's character has been moulded by his every-day work, and the material resources which he thereby procures, more than by any other influence unless it be that of his religious ideals; and the two great forming agencies of the world's history have been the religious and the economic."

From these sentence, Economics is at once a study of wealth and mankind. What image of man did Marshall have as a result of studying economics? His view of the labourer will be examined below. Marshall also thought that man's character is formed by his day's work and his wages, so the relationship between work and man will also be examined

Firstly, how did Marshall define the working class? He gave a lecture at the Reform Club in Cambridge in which he said:

"Who are the working classes? Of course they are not all who work; for every man, however wealthy he may be, if he be in wealth and a true man, does work, and work hard. They are not all who live by
selling the work of their hands, for our noblest sculptors do that. They are not all who for payment serve and obey, for officers in the army serve for payment, and most implicitly obey. They are not all who payment perform disagreeable duties, for the surgeon is paid to perform duties most disagreeable. They are not even all those who work hard for low pay, for hard is the work and low is the pay of the highly cultured governess.”

Thus Marshall did not regarded the working classes as all 'those who live by selling the work of their hands, or serve and obey or perform disagreeable duties for payment, or work hard for low pay'. Marshall's attention is not focussed on the effect that the labourer produces on his work but rather on the effect that his work produces on him.

Now, the subject of Marshall's study is not the skilled labourer but the unskilled labourer. Marshall wrote:

"Let us turn our eye on that darker scene which the lot of unskilled labour presents. Let us look at those vast masses of man who, offer long hours of hard and unintellectual toil, are wont to return to their narrow homes with bodies exhausted and with minds dull and sluggish. That men do habitually sustain hard corporeal work for eight, ten or twelve hours a day, is a fact so familiar to us that we scarcely realise the extent to which it govern the moral and mental history of the world; we scarcely realise how subtle, all-pervading and powerful may be the effect of the work of man's body in dwarfing the growth of the man."
their jobs would undermine their minds and disturb their mental development. Based on his own experience whilst climbing the Alps, he thought physical weariness would tend to prevent intellectual activity. The poor and unhealthy condition of the labouring classes was thought to be an inevitable direct result of their character. However Marshall questioned this idea, pointing out that labours who did hard physical work had no chance to enlighten themselves. Self-improvement was impossibly burdensome for them. Thus the labouring classes do not have any desire to learn and understand the pleasure of art. According to Marshall they spend their free time as follows:

"He (the labourer) may pass a tranquil and restful evening in a healthy and a happy home, and so may win some of the best happiness that is granted to man. He may, but alas! if he be uneducated, he is not likely to have a very healthy home. He may: but if his toil has been fierce, and so his brain is dulled, he is apt to seek there only the coarser pleasure-drink, ignore jests, and noise. We have all heard what rude manners have been formed by the rough work of the miners; but even among them the rougher the work of the body, the lower the condition of the mind."

As a result of his study of the labouring class, Marshall understood what caused them to be unhealthy and deprived, and why they cannot escape the poverty trap. Therefore he thought that 'man ought to work in order to live' (rather than vice versa): 'the physical, moral, and mental, aspects of his life should be strength and enriched by his work'.

Marshall wanted that labourer's daily task tend to give culture and refinement to his character. Thus he said about the occupations which promote
culture and refinement of character.

"They (occupations) demand the faculty of maintaining social intercourse with a large number of persons; they demand, in appearance at least, the kindly habit of promptly anticipating the feeling of others on minor points, of ready watchfulness to avoid each trivial word or deed that may pain or annoy. These qualities are required for success, and they are therefore prepared in youth by a careful and a long continued education."^8

Marshall knew how to value time and leisure for himself and to care more for this than for mere increase of wages and material comforts. He had independence and manly respect for himself, and therefore, a courteous respect for others, and he accepted the private and public duties of a citizen.^9

A man's character is moulded by the amount of his income and the way in which it is earned. Furthermore, poverty degrades his character. His unhealthiness and poor living conditions do not depend on his character but on his poverty. He was brought up with insufficient food, clothing, and housing, and his education is broken off early in order that he may go to work for wages. After that, he is engaged for long hours in exhausting toil with a malnourished body.^10

Marshall thought that the labouring class would escape the poverty trap and advance to the gentleman class. Also, he hoped that the labouring class would disappear entirely in the future.
Marshall's idea about population will be examined in this section. He had a lecture, which titled 'The pressure of Population on the Means of Subsistence, at Toynbee Hall in 1885. On this lecture, it seemed that Marshall supported Malthus's population doctrine. On Principles of Economics Marshall wrote about Malthus as follows.

"... more far-seeing men began to inquire whether the race could escape degradation if the numbers continued long to increase as they were then doing. Of these inquires the chief was Malthus, and his Essay on the Principle of Population is the starting-point of all modern speculation on the subject.

Malthus's reasoning consists of three parts, which must be kept distinct. The first relates to the supply of labour. His second position relates to the demand for labour. Thirdly, he draws the conclusion that what had been in the past, was likely to be in the future; and that the growth of population would be checked by poverty or some other cause of suffering unless it were checked by voluntary restraint."

He judged that Malthus's position with regard to the supply of population remains substantially valid. Marshall thought that 'the change which the course of events has introduced into the doctrine of population relate chiefly to the second and third steps of his reasoning'. Therefore he discussed 'the fact that Malthus did not foresee these changes makes the second and third steps of his argument antiquated in form; though they are still in a great measure valid in substance.'
From Marshall's predecessors, he thought the issue which an increase of
the man as a factor of production of wealth was advisable or not. One of basic
problem of Marshall's population idea is that how to improve the labourer's
living condition. Thus the relation between labourer and the marriage rate will
be examined. Population growth can increase through a change in the marriage
rate. The marriage rate itself is affected by the difficulty of supporting a
family. The average age of marriage depends on the ease with which young people
can establish themselves, and support a family according to standard of comfort.

Marshall wrote:

"In the middle class a man's income seldom reaches its maximum
till he is forty or fifty years old; and the expense of bringing up his
children is heavy and lasts for many years. The artisan earns nearly
as much at twenty-one as he ever does, unless he rises to responsible
post, but he does not earn much before he is twenty-one: his children
are likely to be a considerable expense to him till about the age of
fifteen; unless they are sent into a factory, where they may pay their
way at a very early age; and lastly the labourer earns nearly full
wages at eighteen, while his children begin to pay their own expense
very early. In consequence, the average age at marriage is highest
among the middle classes; it is low among the artisans and lower still
among the unskilled labourers."  

The average age of marriage is connected with the standard of comfort.
Therefore members of the middle classes married late and unskilled labourers
early. Unskilled labourers married recklessly without any thought of future.
As a result so many children were born, they can not suffice to nourish and
education their children. Additionally Marshall wrote about unskilled labourer's marriages.

"This class (unskilled labour) would marry improvidently: an increased population would press on the means of subsistence, the difficulty of imparting a high education would increase, and society would retrograde until it had arrived at a position similar to that which it now co-position in which man, to a great extent, ignores his duty of anticipating, before he marries, the requirements of the bodily and mental nurture of his children; and thereby compels Nature, with her sorrowful but stern hands, to thin out the young lives before they grow up to misery. This is the danger most to be dreaded."^16

In other words the mortality rate among the children of the very poor was extremely high. Marshall thought that 'other things being equal, an increase in the number of children who are born causes an increase of infantile mortality; and that is an unmixed evil'.^17 'Many of the children of the working-class were imperfectly fed and clothed; they were housed in a way that promoted neither physical nor moral health'.^18 Therefore Marshall considered basic necessities of life were food, clothing, housing and fuel. When these are lacking the mind become sluggish, and ultimately physical health is undermined.^19

Next, the relation between the Poor Law and population will be discussed. Marshall wrote:

"At the end of the century, when Malthus wrote, the Poor Law again began to influence the age of marriage; but this time in the direction of making it unduly early. .... with the practical effect
of making the father of many children often able to procure more indulgences for himself without working than he could have got by hard work if he had been unmarried or had only a small family. Those who availed themselves most of this bounty were naturally the laziest and meanest of the people, those with least self-respect and enterprise. So although there was in the manufacturing towns a fearful mortality, particularly of infants, the quantity of the people increased fast; but its quality improved little, if at all, till the passing of the New Poor Law in 1834. Since that time the rapid growth of the town population has, tended to increase mortality, but this has been counteracted by the growth of temperance, of medical knowledge, of sanitation and of general cleanliness. Emigration has increased, the age of marriage has been slightly raised and has increased, the age of marriage has been slightly raised and a somewhat less proportion of the whole population are married; but, on the other hand, the ratio of birth to a marriage has risen; with the result that population has been growing very nearly steadily."

Marshall thought that the Poor Law would cause the population of the labouring class to increase. However, Marshall's main concern was labouring class' condition and their character. Thus he argued what thing outdoor relief will cause the labouring class. In a letter to The Times newspaper Marshall discussed political economy and outdoor relief, saying:

"It is often said that political economy has proved that outdoor relief must do more harm than good. I venture to question this. When outdoor relief was given simply to avoid the expense of
indoor relief, it no doubt did great harm. For it was managed carelessly — so as to foster improvidence and make life too pleasant for those who wanted to get through it without doing any hard work."^1

Marshall thought that the Poor Law and outdoor relief tended to make the labourer lazy rather than encourage him to improve his life. Therefore a labourer could marry earlier than before. Marshall was hostile to outdoor relief in general but he was not prepared to argue for its total abolition. 'He offered only limited approval of public charitable works as a supplement to poor relief and believed that the latter should be confined to deserving cases only, and thus he took a strong interest in the work of the Charity Organisation Society'.^2

Marshall's wage theory focussed on the economy of high-wages. Increase of labourer's wage would 'result in so great an increase of their numbers as to bring down their earnings quickly to nearly the old level at their mere expenses of rearing'. However, 'in many parts of the world wages are governed by the so-called "iron law", which ties them closely to the cost of rearing and sustaining a rather inefficient class of labourers'.^3 Marshall thought that the population of labouring classes tended to increase up to the margin of subsistence. Hence his population idea was also influenced by Adam Smith. He considered the relationship between the population and the standard of living to be important.

If there is a rise in the incomes of any class of the people, the number of marriages and births among this class will increase. However, it may happen instead that a rise in the income of any class is accompanied by a rise in their Standard of Life, which precludes any increase in the birthrate.^4 A larger
number grows up to be efficient workers in the next generation if the standard of life is high than if it is low.

Although the Classical population theory, at least for the majority of Classical writers, stemmed quite directly from the writings of Malthus, it would be misleading if the impression were given that Malthus was advancing new ideas. Marshall was continuing a standard classical tradition. However, the basic model which is to be found in Classical economics is that which appeared in a work by Malthus. From Malthus' study, Marshall advanced a sort of weak Malthusian mechanism, incorporating eugenic and natural selection components under Darwin's influence.

Marshall made a critical study of the work of Malthus. Marshall discussed Malthus' theory of the supply of labour as follows:

"By a careful study of facts he proves that every people, of whose history we have a trustworthy record, has been so prolific that the growth of its numbers would have been rapid and continuous if it had not been checked either by a scarcity of the necessaries of life, or some other cause, that is, by disease, by war, by infanticide, or lastly by voluntary restraint. ... His position with regard to supply of population, with which alone we are directly concerned in this chapter, remains substantially valid."

Then Marshall stressed on the "quality" of the people and his expectation that they would obtain the standard of life. He thought that if they attained the standard of life, they would improve their lives and provide a healthy environment for their children. Also they would want to secure a good social position for their children. Therefore people do not bring children into the
world until they can see their way to give them at least as good an education (both physical and mental) as they themselves had.  

Marshall's idea about population advanced the Malthusian mechanism utilising the concept of standard of life. Marshall thought that if the labouring class had fewer children and gave them adequate education and good living environment, the quality of their labour would increase. Therefore the population issue is closely linked to the standard of life.
I-3 Education

a) Informal education in the home

Marshall argued that education played a central role in society. In his description of his ideal society, everyone was entitled to an education. The purpose of this education was not purely to enable the individual to work more efficiently, but also give him the capacity to lead a more refined life outside work. Since the individuals of society would be socially upright, the society itself would reflect this quality.

Marshall argued that a human being's nature is shaped by his home environment and that he is likely to be included with a desirable character if his parents have the will and interest to instill it in him. Marshall attached importance to the home background and upbringing of the labouring class and he particularly focussed attention on the influences of the mother. However, Marshall's childhood cared from his father have to be discussed. Marshall's father was a strict disciplinarian but bad educator. His father wanted Marshall to go to Oxford to study classics. But his father, who made Alfred a sort of Calvinist, was very far from the ideal set out by Marshall.

Marshall attached importance to the role of the mother in home education. The mother has a particular closed and immediate relationship with children. Also character is developed in the home. If the mother works as a labourer, the children are not cared for in the home. Marshall discussed the labouring class mother, saying:

"If we compare one country of the civilized world with another, or one part of England with another, we find that the degradation of the working-classes varies almost uniformly with the amount of rough
work done by women. The most valuable of all capital is that invested in human beings; and of that capital the most precious part is the result of care and influence of the mother, so long as she retains her tender and unselfish instincts, and has not been hardened by the strain and stress of unfeminine work.\(^3\)

The social and employment conditions of the mother are therefore a crucial factor in the development of the children. Where the mother has to undertake hard labour she is unable to bring to bear the feminine and maternal instincts that would nurture her children's potential. This potential, Marshall expresses in terms of "human capital", a concept that we shall consider in greater depth in appendix C. The contribution of the father is also important: able workers and good citizens are not likely to come from homes from which the mother is absent for during a great part of the day; but nor from homes to which the father seldom returns before his children are asleep.\(^3^2\)

Marshall made distinction the term between general ability and specialised ability. The general ability is 'those faculties and that general knowledge and intelligence which are in varying degrees the common property of all higher grades of industry', and the specialised ability is 'that manual dexterity and that acquaintance with particular materials and processes which are required for the special purposes of individual trades'. Marshall thought that 'general ability depends largely on the surroundings of childhood and youth'.\(^3^3\) In short Marshall believed that parental upbringing was importance as providing a foundation on which formal education could build.

However, labouring class children cannot be brought up in their homes. Moreover, as soon as they have learnt the basics of reading, writing, arithmetic
and drawing, they very often have to leave school.\textsuperscript{34} Marshall described the educational condition of labouring class children thus:

"Many of the children of the working-classes are imperfectly fed and clothed; they are housed in a way that promotes neither physical nor moral healthy; they receive a school education which, in modern England it may not be very bad so far as it goes, yet goes only a little way; they have few opportunities of getting a broader view of life or an insight into the nature of the higher work of business, of science or of art; they meet hard and exhausting toil early on the way, and for the greater part keep to it all their lives. At least they go to the grave carrying with them undeveloped abilities and faculties."\textsuperscript{35}

The children of the labouring class cannot get enough food and clothes in their home and cannot receive enough education in school. They leave school early. Hence they have no chance to improve their physical and moral qualities, and their mental and physical health continually deteriorates throughout their lives. Therefore even if they have a particular facility, they will die without developing it.

Why does not the labouring class give an education to its children? Marshall explained the reason:

"...... in those grades most people distinctly realise the future, and "discount it at a low rate of interest." They exert themselves much to select the best careers for their sons, and the best trainings for those careers; and they are generally willing and able to incur a considerable expense for the purpose ......"
But in the lower ranks of society the evil is great. For the slender means and education of parents, and the comparative weakness of their power of distinctly realising the future, prevent them from investing capital in the education and training of their children with the same free and bold enterprise with which capital is applied to improving the machinery of any well-managed factory.

Marshall saw the problem in terms of the inability of labouring class parents to realise the potential advantage that could result from his children's education, seeing only the immediate gain that will accrue to him from his son's labour. And Marshall argues that the degree of shortsightedness of the parents is in direct proportion to their own lack of education and their financial hardship. They are unable to see that education is an investment.

Therefore Marshall urged the labouring class to plan for the future. If they will acquire it, their children will be better nourished, and better trained; will have more wholesome instincts; and more regard for others and self-respect; these qualities are the mainsprings of human progress. Marshall hoped that the labouring class could gain such a character. Marshall stressed that the home should shape the nature of labouring class children; especially attached importance to the role of the mother and demanded that the State provide that education which the individual cannot give. State education will be discussed in the next section.

b) State education

Marshall here introduced an economic argument for education which he further develops in the context of the State's role.
what is society bound to do? It is bound to see that no child grows up in ignorance, able only to be producing machine, unable to be a man ••••. It is bound to compel children, and to help them to take the first step upwards; and it is bound to help them to make, if they will, many steps upwards. ••••. It is abundantly clear that, unless we can compel children into the schools, we cannot enable multitudes of them to escape from a life of ignorance so complete that they cannot fail to be brutish and degraded. It is not denied that a school-board alone can save from this ruin those children whose parents are averse to education; that at least in our towns there are many whom no voluntary system can reach. 37

Since labouring class parents held education in low esteem, it was the State's duty to provide an education and he emphasised that compulsory State education is the only means by which an opportunity can be given to children whose parents are averse to education.

Marshall paid attention to the people who came from the labouring class and have the ability to rise to a higher class. He also thought that there is no extravagance more harmful to the growth of national wealth than wasteful negligence which allows genius that happens to be of humble birth to expend itself in unskilled work.

"We must look not so much at those who stay in the rank and file of the working classes, as at those who rise from a humble birth to join the higher ranks of skilled artisans, to become foremen or employers, to advance the boundaries of science, or possibly to add to the national wealth in art and literature." 38

—43—
Marshall's argument that the State should provide an education here emphasises both the economic and cultural benefits to society that will result. Marshall, perhaps recognising that there would always remain a labouring class, stressed the opportunity that education gave for social mobility and that upward mobility provided a source of new talent to the educated classes. The spread of education could gradually efface distinctions of mind and character between the different social strata. Although the different classes could change their character and become increasingly flexible, 'the chief change would be 'the assimilation of the best educated and most able members of the working classes to those of the well-to-do'. Marshall made importance of utilising the labouring classes' latent ability since 'much of the best natural ability in the nation is born among the labouring classes, and too often runs to waste'. He wrote.

"To the abilities of children of the working classes may be ascribed the greater part of the success of the free towns in the Middle Ages and of Scotland in recent times. Even within England itself there is a lesson of the same kind to be learn: progress is most rapid in those parts of the country in which the greatest proportion of the leaders of industry are the sons of working men." An area, where mobility between grades is limited, remains stagnant in terms of the social development. The greater part of the success of Scotland was supported by the abilities of the children of the labouring class. Also, area, where the leaders of industry are labouring class children have advanced more rapidly. Scotland developed an excellent system of education very early.

Marshall discussed the relation between the labour mobility and the
education. He wrote.

"... the division between the "upper" and "lower" classes in industries seemed to grow broader during the second and third quarters of last (nineteenth) century.

More recently however an opposite tendency has set in. The movement towards the better education of the people at large, which had been gradually growing, received great impetus from the Education Act of 1870; and it has proceeded so fast and steadily that the more alert of the working classes now stand on nearly as high an intellectual level as do the great majority of the middle classes."

Marshall thought that the Elementary Education Act of 1870 influenced the mobility of the labouring classes. Before this law education had been dealt with either as a series of individual problems in respect of which provisions were made for the education of upper classes of persons. This Act was followed by a series of Acts, known collectively as the Education Acts which together established a system of free and compulsory elementary education of nondenominational character.

Therefore Marshall thought that an education system which can make use of labouring class ability, is essential for the society. On one hand, Marshall urged the labouring class to prepare good home conditions but on the other, he expected the State to contribute generously and even lavishly to those aspects of well-being of the labouring class which they cannot easily provide for themselves.

Marshall thought that the State education will promote an increase in national wealth and provide an escape from class background. Marshall said;
"We have to strive to keep mechanical progress in full swing: and to diminish the supply of labour, incapable of any but unskilled work; in order that the average income of the country may rise faster even than in the past, and the share of it got by each unskilled labourer may rise faster still. To that end we need to move in the same the direction as in recent years, but more strenuously. Education must be made more thorough." \(^4\) \(^6\)

Marshall thought the diffusion of education among the labouring classes. Then, what kind of education will ask for the labouring classes. He said.

"According to the best English opinions, technical education for the higher ranks of industry should keep the aim of developing the faculties almost as constantly before it as general education does. It should rest on the same basis as a thorough general education, but should go to work out in detail special branches of knowledge for the benefit of particular trades." \(^4\) \(^7\)

Marshall pointed out that the general education is becoming more necessary to the labouring class every year, and insisted that the labouring class required accurate judgement and skill in their work. Since, 'some kinds of manual work require long-continued practice in one set of operations, but these cases are not very common, and they are becoming rarer: for machinery is constantly taking over work that requires manual skill of this kind'. \(^4\) \(^8\)

Marshall thought that the absence of careful general education for the child of the labouring classes has been detrimental to industrial progress. \(^4\) \(^9\)

Marshall rejected the idea that the labouring class ought to receive merely a technical education as they would leave school early. \(^5\) \(^0\) Marshall discussed that
the technical education should be begun at school, but a great deal of the education that is wanted in many trades can only be got in workshop. For he thought that 'those whose example is to be followed, are relatively few in a school but they are numerous in workshop'. The technical education in school was limited. 'Whatever a youth learns for himself by direct experience in well-conducted works, teaches him more and stimulates his mental activity more than if it were taught him by a master in a technical school with model instruments'. Hence he planned a curriculum to be followed during the years immediately after leaving school. This involved spending the six winter months in learning science at college, and the six summer months as articled pupils in large workshops. Also Marshall wrote the article 'Education for Business Men' which appeared in The Times.

A general education is required prior to a technical education. Since Marshall thought that a lack of the general education caused the labouring class children to be rough, and so insisted that technical education be built upon a general education. Marshall considered that the chief function of education to be the development of faculties, that is to bring them out and promote them. Therefore a youth, who has picked up knowledge for himself, has educated himself by so doing.

Marshall wrote of a good education that it.

“... confers great indirect benefits even on the ordinary workman. It stimulates his mental activity; it fosters in him a habit of wise inquisitiveness; it makes him more intelligent, more ready, more trustworthy in his ordinary work; it raises the tone of his life in working hours and out of working hours.”
The following sentence summaries Marshall's ideas about the education of the labouring class.

"The schoolmaster must learn that his main duty is not to impart knowledge, for a few shillings will buy more printed knowledge than a man's brain can hold. It is to educate character, faculties and activities; so that the children even of those parents who are not thoughtful themselves, may have a better chance of being trained up to become thoughtful parents of the next generation. To this end public money must flow freely.

Thus the State seems to be required to contribute generously and even lavishly to that side of the wellbeing of the poorer working class which they cannot easily provide for themselves: and at the same time to insist that the inside of the houses be kept clean, and fit for those who will be needed in after years to act as strong and responsible citizens."

Marshall's view of state education is that it should bring out the labouring class child's latent ability. If he cannot use his talent to the full, the state will suffer. Therefore Marshall thought that the state should expend money for education, and that it ought to give the people a general education. That is to say, Marshall attached importance to the human development of the labouring class. Education could draw out the latent ability of labouring class and improve their lifestyle. Furthermore they would change their attitude towards their children's education and foster their good behaviour. Education could play an important part in raising the standard of life. Also, Marshall's economics regarded education as extremely important.
a) The Wages of labour

Marshall classified three types of wages: Time-wages, payment by piece-work and Efficiency-earnings. Competition tends to make weekly wages in similar employments not equal, but proportionate to the efficiency of the workers.\(^5\) Marshall wrote about the relation of efficiency to competition.

"... competition tends to make the earnings got by two individuals of unequal efficiency in any given time, say, a day or a year, not equal, but unequal; and, in like manner, it tends not to equalise, but to render unequal the average weekly wages in two distinct in which the average standards of efficiency are equal. Given that the average strength and energy of the working-classes are higher in the North of England than in the South, it then follows that the more completely "competition makes find their own level", the more certain is it that average weekly wages will be higher in the North than in the South."\(^6\)

He also thought that the tendency of competition, to cause each person's to find their own level, is a tendency to equality of efficiency-earnings in the same district.\(^6\)

Marshall commented on the conditions needed to strengthen this tendency:

"... the greater is the mobility of labour, the less strictly specialised it is, the more keenly parents are on the look-out for the most advantageous occupations for their children, the more rapidly they are able to adopt themselves to change in economic conditions."
and lastly the slower and less violent these changes are."\(^6\)2

Every agent of production tends to be applied in production as far as it is profitable, according to the principle of substitution. If employers, and other business men, think that they can get a better result by using a little more of any agent they will do so.\(^6\)3 Therefore the wage tends to equal the net product of labour; its marginal productivity rules the demand-price for it.\(^6\)4

Marshall wrote:

"\ldots the dynamical principle of "Substitution" is seen ever at work, causing the demand for, and the supply of, any one set of agents of production to be influenced through indirect channels by the movements of demand and supply in relation to other agents, even though situated in far remote fields of industry."\(^6\)5

'The principle of substitution is constantly tending, by indirect routes, to apportion earnings according to efficiency between trades, and even between grades, which are not directly in contact with one another, and which appear at first sight to have no way of competing with one another'.\(^6\)6

In the short run, increased remuneration causes an immediate increase in the supply of efficient work.\(^6\)7 In the long run the supply of labour depends on the reward and the method of expenditure. An increase in wages increases the strength, physical, mental and even moral, of the coming generation. Furthermore an increase in the earnings that are to be got by labour increase its rate of growth.\(^6\)8 Marshall was concerned about the vicious circle of poverty leading to poor health and education, leading in turn to low productivity and thus perpetuating low wages.\(^6\)9 However, any change that awards to the workers of one generation better earnings, together with better opportunities of developing
their best qualities, will increase the material and moral advantages which they have the power to offer to their children." Therefore in the next section economy of high wages will be discussed.

b) Economy of High Wages

Marshall thought that the wage issue is a key element which affects the welfare of the labouring class. Moreover he entrusted the solution to the growth of the economy. In Marshall's mind, the desirability of growth was very much linked with the question of welfare. Hence he believed in a high-wage economy for the reasons outlined in the previous section. "Wages tend to retain a close through indirect and intricate relation with the cost of rearing, training and sustaining the energy of efficient labour."

Therefore Marshall wrote:

"If at any time it (the action of demand and supply on the earnings of labour) presses hardly on any individual or class, the direct effect of the evils are obvious. But the sufferings that result are of different kinds: those, the effects of which end with the evil by which they were caused, are not generally to be compared in importance with those that have the indirect effect of lowering the character of the workers or of hindering it from becoming stronger. For these last cause further weakness and further suffering, which again in their turn cause yet further weakness and further suffering, and so on cumulatively. On the other hand, high earnings, and a stronger character, lead to greater strength and higher earnings, which again lead to still greater strength and still higher earnings, and so
Moreover he thought that an increase of wages cause the the unskilled class to improve their lives. He wrote:

"... an increase by (say) a quarter of the wages of the poor class of bona fide workers adds more to the sum total of happiness than an increase by a quarter of the incomes of an equal number of any other class. And that seems reasonable: for it arrests positive suffering, and active causes of degradation, and it opens the way to hope as no other proportionate increase of income does."\(^7\)

Besides that, middle class income were increasing faster than those of the rich; the earnings of artisans were increasing faster than those of professional classes, and the wages of healthy and vigorous unskilled labours were increasing even faster than those of the average artisan.\(^5\)

Marshall insisted on the importance of not only the increase of income but also the reduction of earnings differentials between the classes. He commented that:

"The inequalities of wealth thought less than they are often represented to be, are a serious flaw in our economic organisation. Any diminution of them which can be attained by means that would not sap the springs of free initiative and strength of character, and would not therefore materially check the growth of the national dividend, would seem to be a clear social gain."\(^6\)

Marshall attached importance to the expenditure of the labouring classes as well as to high wages. He did not think that high wages alone would resolve the poverty of the labouring class. As already discussed, he thought that if
the labouring class used their increased wages not for a rise in the standard of comfort but for a rise in the standard of life, it would strengthen their physical and mental powers and would improve those of their children. Marshall required the labouring classes to change their life style for example improvement of their housing and eating habits. He also thought that the labouring classes should save their wages and use their savings for their children's education. Marshall wrote:

"...... we may conclude, that any change in the distribution of wealth which gives more to the wage receivers and less to the capitalists is likely, other things being equal, to hasten the increase of material production, and that it will not perceptibly retard the storing-up material wealth. Of course other things would not be equal if the change were brought about by violet method which gave a shock to public security. But a slight temporary check to the accumulation of material wealth need not necessarily to be an evil, even from a purely economic point of view, if, being made quietly and without disturbance, it provided better opportunities for the great mass of the people, increased their efficiency, and developed in them such habits of self-respect as to result in the growth of a much more efficient race of producers in the next generations."^^

He thought that high wages would not postpone capital accumulation but rather would cause more effective accumulation. For high wages would improve the living condition of the labouring class, and rise the labour efficiency in them. Hence high wages would cause to rise 'the standard of life' and the rise of standard of life would produce effective capital accumulation and increase of
national dividend. Marshall analysed the high-wage economy not only from the labour point of view but also from the viewpoint of the entrepreneur. Marshall wrote about a high-wage economy that as far as the entrepreneur is concerned.

"It is true that high-paid labour is really cheap to those employers who are aiming at leading the race, and whose ambition it is to turn out the best work by the most adventure methods. They are likely to give their men high wages and to train them carefully; partly because it pays them to do so, and partly because the character that fits them to take the lead in the arts of production is likely also to make them take a generous interest in the well-being of those who work for them." 7,8

Also in paying his workforce high wages and in caring for their happiness and education, the liberal employer confers benefits which do not end with his own generation. The children of his workforce also share in them, and grow up stronger in body and in character than they otherwise would have done.7,9 He thought that a high wage economy not only leads to benefits for the labouring class and the entrepreneur, but also it ensure an economic labouring force. Therefore the workers who earn the most in a week when paid at given rate for their work, are those are actually cheapest to their employers. Low-wage labour is generally dear, if working with expensive machinery. 'The total cost of that done by those who are more efficient, and get the higher time-wages, is lower than the total cost of that done by those who get the lower time-wages at the same rate of piece-work payment'.8,0

Marshall broadened the issue of wages to cover not only the study of wealth but also only the study of human nature. He did not think that just one
thing, namely the payment of high wages to the labouring class, is the solution to poverty. It was necessary that they should use their wages for strengthening their physical and mental power, and investing in their children's education.

Furthermore Marshall wrote:

"There is constant improvement in the way in which wages spent. As a cup of salt water increase thirst, so an-ill-spent rise in wages deepens misery. But in the main increased wages are used improve the physical, mental, and moral strength of the present and rising generation. In so far as they are so used, high wages are a cause of that efficiency and "social morality" which enable wages to be permanently high."  

Marshall broadened the concept of high wages to includ how the wages one spent. Since he thought that the labouring classes have to use the high wages for rising 'the standard of life'. For Marshall, high wages are not an aim of their own; how the wages are used is important.
To Marshall, trade unions were a puzzle. They were both good and bad, and always complex. Although Marshall's opinion to the condition of the working classes was throughout his lifetime unwaveringly favourable and sympathetic, his attitude to the position and function of trade unions changed from favourable to an ambivalent attitude which tended to be unfavourable. Also the gradual change in Marshall's opinion toward unions from a favourable and hopeful one in the 1870's to one of doubt and uncertainty in the 1880's and to a final position bordering on hostility is consistent with his interpretation of British economic history of the period. His opinion was also consistent with the philosophical idealism of the mid-Victorian period. It has already been seen that Marshall had a strong sympathy for the labouring class and wished to see their conditions improved. J.M. Keynes evaluated the Economics of Industry as the first satisfactory treatment, on modern lines, of Trade Unions and Trade Disputes. The Economic of Industry was written as follows about trade unions.

"Trade unions are modern representative of series of movements that have exercised great influence over the growth of the people of England, and indeed of all other countries of Western Europe. For the spirit which leads the members of a trade to combine together and concert action for their common benefit, has been present throughout the whole period in which modern civilisation has grown up."

As Trade Unions were originally craft unions, unskilled workers were not included in them. It is more difficult for unskilled labourers than for skilled artisans to themselves into strong and lasting combinations.
Economic of Industry have been written as follows:

"... the trade unions have grown very much on the lines laid down by the old guilds. The good and evils of the guilds, their individual self-sacrifice and their class selfishness, are reproduced in modern unions."^®

Alfred Marshall and Paley Mary Marshall published the Economics of Industry in 1879. However, after Alfred Marshall published Principles of Economics in 1890, the Economics of Industry was out of print. The Elements of the Economics of Industry which he published in 1892, replaced the Economics of Industry and consists of materials from the Principles.

An unskilled labourer is at disadvantage when bargaining with an employer. As labour is perishable, the sellers of it are commonly poor and have no reserve fund, so they cannot easily withhold it from the market. ^® Also their wages leave very little margin for saving, partly because if any group of them suspended work, there were large numbers who are capable of filling their places.^^

Marshall wrote:

"It is certain that manual labourers as a class are at a disadvantage in bargaining; and that the disadvantage wherever it exists is likely to be cumulative in its effects. For though, so long as there is any competition among employers at all, they are likely to bid for labour something not very much less than its real value to them, that is, something not very much less than the highest price they would pay rather than go on without it; yet anything that lowers wages tends to lower the efficiency of the labour's work, and therefore to
lower the price which the employer would rather pay than go without that work."^1

'While the advantage in bargaining is likely to be pretty well distributed between the two sides of a market for commodities, it is more often on the side of the buyers than on that of sellers in a market for labour. Another difference between a labour market and a market for commodities arises from the fact that each seller of labour has only one unit of labour to dispose of'.^2

The bearing of the theory of wages on the issue of particular trade conflict is indirect and remote. 'The theory of wages whether in its older or newer form has no direct bearing on the issue of any particular struggle in the labour market: that depends on the relative strength of competing parties'.^3 However, Marshall expected that economy of high-wage will give a key to settlement of a dispute between employer and employee. Hence the relation between increase of the wage and a strike will be argued.

Marshall examined the process of development of trade unions and wished the unskilled labour to be included. He thought that trade unions caused the labouring class to improve their lives and as a result to advance all mankind. The significance of trade unions, as Marshall thought, is to improve the life and character of the labouring class. He also thought that 'the trade union must aim at raising the standard of life among the workers of the present and the coming generation by fostering habits of sobriety and honesty, independence and self-respect'.^4

Trade unions intentions are not only connected with raising wages, but also with a increasing the standard of life. Trade unions' earlier efforts
told in improving the labour class standard of life and character as much as in raising their wages. The original aims of British trade unions were almost as closely connected with the standard of life as with the rate of wages. Marshall wrote:

"We have still to consider that the strongest claim of Unions to sustain wages depends on the influence they exert on the character of the workers themselves. Unions have been at once a chief product and chief cause of this constant elevation of the Standard of Life: where the Standard is high, Unions have sprung up naturally; where Unions have been strong, the Standard of Life has generally risen; and in England to-day few skilled workers are depressed and oppressed."

The law prohibiting the formation of unions had the effect of slightly lowering the wages of the labourer, and caused a decline in the character of the labouring class. Marshall wrote:

"They [the original aims of British trade unions] derived their first great impulse from the fact that the law, partly directly and partly indirectly, sustained combinations among employers to regulate in their own supposed interest; and prohibited under severe penalties similar combinations on the part of employees. This law depressed wages a little; but it depressed much more the strength and richness of the workman. His horizon was generally so limited that he could not be fully drawn out of himself by a keen and intelligent interest in national affairs: so he thought and cared little about any mundane matters, expect the immediate concerns of himself, his family and his
neighbours.™

The early struggle for workmen's right to join trade unions was in effect an attempt on their behalf to obtain true self-respect and broad social interest, as much as a struggle for high wages. Freedom to combine with other would have widened labour's horizons, and given them larger matters to think about.

Therefore, Marshall believed that the trade unions movement played a great role in educating the labouring class. 'As a youth grows up, the influence of his parents and his school master declines: and thenceforward his character is moulded chiefly by the nature of his work and the influence of those with whom he associates for business'.™ Beside this Marshall wrote:

"... it matters a great deal to the seller of labour, who undertakes to perform a task of given difficulty, whether or not the place in which it is to be done is wholesome and a pleasant one, and whether or not his associates will be such as he cares to have. In those yearly hirings which still remain in some parts of England, the labourer inquires what sort of temper his new employer has, quite as carefully as what rate of wages he pays."™

Marshall insisted that the increase of wages, which the labourer has got through the trade unions, allowed him to raise his standard of life, but that it was also used for his children's education.

"The better the influences which Unions exert in those respects the more likely is any increase of wages that they may obtain, to be turned to account in promoting the industrial efficiency of the present and the coming generation of workers. In so far as they do this, the
Unions have an effective answer to the argument, recently given, that any check to the growth of capital caused by a rise of wages at the expense of profits is likely to be cumulative. If they do what they can to make labour honest and hearty, they can reply that an addition to the wages of their trade is as likely to be invested in the Personal Capital of themselves and their children, as an increase in profits is to be invested in Material Capital: that from the national point of view persons are at least as remunerative a field of invested as things: and that investment in persons are cumulative in their effects from year to year and from generation to generation."

Marshall thought that raising wages caused the labouring class to increase the standard of life, so he rejected a method of raising wages which increase the standard of comfort." Beside that Marshall opposed trade unions seeking sectional gains at the expense of other workers."

Marshall wrote:

"It is true that, if plasters or shoemakers could exclude external competition, they would have a fair chance of raising their wages by a mere diminution of the amount of work done by each, whether by shortening the hours of labour or in any other way; but these gains can be got only at the cost of greater aggregate loss to other shares in the national dividend; which is the source of wages and profits in all industries in the country."  

Therefore every check to national dividend falls in part on the labouring class. The high wage, 'gained by means that hinder production in any branch of industry, necessarily increases unemployment in other branches'"
The relation between unskilled labourer and the machine can be examined. Machinery diminished the demand for labour of the kind which used to be regarded as unskilled. Marshall wrote:

"...... the wages of unskilled labour have risen faster than those of any other class, faster even than those of skilled labour. And this movement towards the equalisation of earnings would have gone much faster, had not the work of purely unskilled labour been meanwhile annexed by automatic and other machinery faster even than that of skilled labour; so that there is less whole unskilled work to be done now than formerly. ...... If mechanical progress had been much slower the real wages of unskilled labour would have been lower than they are now, not higher; for the growth of the national dividend would have been much checked that ever the skilled workers would generally have had to content themselves with less real purchasing power for an hour's work than the 6d. of the London bricklayer: and the unskilled labour's wages would of course have been lower still."^{105}

The growth of capital will increase the national dividend, and open out new and rich fields for the employment of labour in other directions.^{106} A new demand will come from the makers of new and more expensive machinery.^{107} However, Marshall discussed the case in which a trade union opposes the improvement of machinery and methods.

"Obstacle were put in the way of the use of improved methods and machinery; and attempts were made to fix the standard wages for a task at the equivalent of the labour required to perform it by methods long antiquated. This again tended to sustain wage in the particular
branch of industry concerned; but only by so great a check to production, that the policy, if generally successful, would have greatly curtailed the national dividend, and lessened at good wages in the country generally." ^108

It seemed that Marshall always considered the trade union from the point of view of increasing the national income. Therefore Marshall thought that even if the trade unions did in the short run bring benefits to sectors of labouring class, they would not continue to do so in the long run. For Marshall expected that trade unions would cause the national income to increase in the long run, bring benefits to the labouring class and raise the standard of life in the long run. Thus he opposed the idea of organising trade unions in this manner. He held much the same view about strikes. Marshall wrote:

"Let us suppose that some particular mode of conducting strikes is under discussion. Political economy may perhaps prove that if a strike be conducted in this mode, it will cause but little net gain to the class of workmen who strike, that it will arrest against their will the work of vast numbers of work-men of other classes, that it will cause great losses, direct and indirect, to the consumer and capitalist, and that it will give rise needlessly to habits of distrust and unfriendliness." ^109

Marshall thought even if trade unions succeed in increasing wages through strikes, the damage caused by stopping production, is so serious neither the employer nor the employee benefit. As a result, strike would not lead to increasing wages in the future.

In other words, Marshall considered trade unions not from the viewpoint
of class struggle but from the viewpoint of market mechanism. He thought good working relations were in the interest of both employee and employer. He believed that to strike is to confess failure. Hence Marshall expected that the employer, who has an advantageous position when bargaining about wages, will pay high wages to the workers. The gradual change in Marshall's attitude toward unions from a favourable and hopeful one in the 1870's to one of doubt and uncertainty in the 1880's and to final position bordering on hostility is consistent with his interpretation of British economic history of the period.¹¹⁰ According to A. Petridis, there were two main factors shaping Marshall's attitude. On the one hand there was his desire to do good, his high moral tone of a mid-Victorian form of evangelical idealism, and on the other, the conclusion reached about the trade unions from his competitive model. The former, while not necessarily in conflict with the latter, did pose a dilemma for him; for while his heart was with the trade unions, his head told him that what they believed to be in their own best was not actually so, and certainly not in the best interest of the whole community.¹¹¹

However, Marshall's instinctive reaction towards trade unions was warm and friendly.¹¹² He conceived of the replacement of trade unions by other forms of worker action, which will be examined in chapter 3.
I. THE ROLE OF THE ENTREPRENEUR IN PRODUCTION

II-1. Entrepreneurship

Marshall emphasised the importance of the entrepreneur's leadership. He wrote of the faculties required by the entrepreneur as follows:

"... in his first role as merchant and organiser of production, have a thorough knowledge of things in his own trade. ... Secondly in this role of employer he must be a natural leader of men. He must have a power of first choosing his assistants rightly and then trusting them fully; of interesting them in the business and of getting them to trust him, so as to bring out whatever enterprise and power of organisation there is in them; while he himself exercises a general control over everything, and preserves order and unity in the main plan of the business."

In addition to business ability Marshall emphasised the faculties of natural leadership of men.

Marshall attached importance to the organisation of a firm. The entrepreneur must have an eye for his subordinates' ability and organise them. Hence he needs the ability to attract subordinates. With the faculties of natural leader, a relationship of confidence between the entrepreneur and the subordinates will be established. This relationship also enables them to respond to the market. Therefore there is an intimate relationship between the first and second roles. Marshall wrote:

"The tasks of the head of a large business are heavier than those of a small one, and yet they may be fewer in number. For he must
delegate multitudinous business details to others: and the details even of a small business are generally more numerous than the broad problems of a large one. He is primarily responsible for the general plan of the business: but second in importance only to that is his selection and quite control of officials who are responsible for details. In a very large business he may indeed delegate the greater part even of that responsibility to chief officials: but he bears the weighty task of reading the character of strong men."  

Nonespecialised business ability is also needed. Technical knowledge and skill become less important relative to the broad and nonspecialised faculties, which increase in importance as the scale of business increases. This is because if the entrepreneur lacks a particular specialised skill, he can find a subordinate who has expert ability. Marshall considered that business ability is strongly dependent on broad faculties which are not specific to any one trade. Marshall wrote as follows:

"...... the greater part will be serviceable in any trade that is in any way allied with that; while those general faculties of judgement and resource, of enterprise and caution, of firmness and courtesy, which are trained by association with those who control the large issues of any one trade, will go a long way towards fitting him for managing almost any other trade."  

He thought that business ability is highly non-specialised but deeply dependant on 'natural qualities'. This is the core of the entrepreneur's faculties. Furthermore Marshall wrote:

"...... just as industrial skill and ability are getting every
day to depend more and more on the broad faculties of judgement, promptness, resource, carefulness and steadfastness of purpose — faculties which are not specialised to any one trade, but which are more or less useful in all — so it is with regard to business ability. In fact business ability consists more of these non-specialised faculties than do industrial skill and ability in lower grade: and the higher the grade of business ability the more various are its applications.”

Marshall thought that the most important thing is to convince a sufficient number of those around the entrepreneur that he has natural qualities. Then he can get the loan of the capital required to start him in business.

Marshall gave an example as follows:

“When a man of great ability is once at the head of an independent business, whatever be the route by which he has got there, he will with moderate good fortune soon be able to show such evidence of his power of turning capital to good account as to enable him to borrow in one way or another almost any amount that he may need.”

Marshall thought that if the entrepreneur has natural qualities, he can make the best use of his specialised ability. Therefore Marshall laid stress on the entrepreneur’s specialised ability with natural qualities as follows:

“A manufacture of exceptional ability and energy will apply better methods, and perhaps better machinery than his rival.”

The person who has natural qualities is suited for playing an active part as the entrepreneur. For the entrepreneur, natural qualities are essential to business ability.
"An able man, assisted perhaps by some strokes of good fortune, gets a firm footing in the trade, he works hard and lives sparsely, his own capital grows fast, and the credit that enables him to borrow more capital grows still faster; he collects around him subordinates of more than ordinary zeal and ability; as his business increases they rise with him, they trust him and he trusts them. This process may go on as long as his energy and enterprise, his inventive and organising power retain their full strength and freshness, and so long as the risks which are inseparable from business do not cause him exceptional losses."

Marshall expected the entrepreneur to acquire leadership abilities and natural qualities in addition to specific abilities to manage the company. The specific ability will be examined in the next sections.
2. Co-ordination

Marshall regarded one of the roles of the entrepreneur to be that of co-ordinator of the organisation. Therefore he thought that the entrepreneur should keep everyone employed at such work as his abilities and training fit him to do well, and should equip him with the best machinery and other appliances for his work. However, an entrepreneur's first task is to choose assistants who have ability and experience.

Marshall wrote:

"It may be inferred that the chief hindrance to the advance of working-men to the control of business lies in a lack, not of capital, but of the training and habits of mind needed for dealing with the larger problems of business policy; and especially deciding on doubtful ventures in regard to technique and plant, to marketing; and last, but not least, on the selection of the right men to fill the higher and more responsible posts."

The entrepreneur is directly responsible for the choice of his chief subordinates: he needs quick insight into character, and some power of influencing it; he must exercise this insight and power to employ men who have similar abilities. Once the entrepreneur has obtained his chief subordinates, he can reserve his energies for considering the overall, his most fundamental problems. He can keep his mind fresh and clear for thinking out the most difficult and important problems of his business, for studying the broader movements of the markets, the potential consequences of current events both at home and abroad, and for devising ways to improve the organisation of his internal and external relations.
Walter Bagehot (1826-1877) compared the head of the business to a military commander of modern times. Marshall also regarded the function of the entrepreneur as similar to that of a commander like Bagehot. However, Bagehot did not distinguish the entrepreneur from the capitalist.

With increased organisation, the entrepreneur entrusts his subordinates with the routine work and deciding details, whilst he takes the important decisions regarding managements of the firm. Marshall wrote:

"He [the head of a large business] is primarily responsible for the general plan of the business: but second in importance only to that is his selection and quiet control of officials who are responsible for details. In a very large business he may indeed delegate the greater part even of that responsibility to chief officials."  

The entrepreneur is a natural leader and a strong personality who has to bear the heavy burden of reading the characters of his subordinates.

On subordinates Marshall wrote:

"There is a rapid increase in the number of those who have strength and the elasticity of mind and character needed for the larger responsibility that the best men will be brought to the front in being diminished by several causes."  

Therefore the entrepreneur's selection is naturally beneficial. The supply of business ability is large and flexible because it is drawn from wide area. There is no other profession which depends so little on training, and so much on 'natural qualities'. Furthermore business ability is highly non-specialised, because in most areas technical knowledge and skill are becoming
less relevant compared to the broad, non-specialised skills of 'judgement, promptness, resource, carefulness and steadfastness of purpose'. Marshall advanced the case for the Economics Tripos in Cambridge on the grounds that this provided for business. For Marshall made an effort to make an Economic Tripos, whose purpose was to meet the needs of professional students in economics and politics, as well as the special needs of employment in public and private business enterprises. Marshall thought that economic was not a practical science but the science which was intended to cultivate the entrepreneurship and acquire the service of the poor.

The entrepreneur needs general skills, which increase in importance as 'the scale of business increase'. It is these skills which distinguish him as a leader and 'enable him to go straight to the heart of the practical problems' he has to deal with, to perceive almost by instinct the relative importance of various matters, to draw up sound, 'far-reaching, politics, and to execute them calmly and resolutely'. The entrepreneur delegated the greater part of even these responsibilities to his chief subordinates. The study of the organisation and policy of his business is likely to require great originality, and broad outlook. The dynamism of the organisation depends on the leadership of the entrepreneur. If the detailed tasks have been systematically allocated to others, the entrepreneur is free to display his - the skills of judgement, promptness, resource, carefulness and steadfastness of purpose. Therefore the division of labour in the organisation will not only increase the efficiency of its production, but also enable it to predict accurately and keep to pace with market trends, which change with such lightening speed. Also the entrepreneur knows his subordinates' abilities and co-ordinates them within the organisation.
Such arrangement is an essential prerequisite for the technical efficiency of production and opening up new markets.

The level of organisation within the firm will accordingly be raised. Expansion will signify increased division of labour and responsibility. The entrepreneur needs to co-ordinate the division of labour and responsibility. Hence one of the essential abilities of the entrepreneur is leadership, able to think comprehensively about the firm and market. The relation between division of labour and machine is important and will be discussed in section seven.
The principle of Substitution permeates all the economic adjustments of the modern world. The entrepreneur chooses and organises the factors of production as best as he can. The role of the entrepreneur in all this is clearly central. The entrepreneur, following what Marshall calls the 'principle of substitution' searches endlessly and simultaneously both for best practice with existing technology and for new technology.

Before the principle of substitution is examined, the principle of diminishing return is discussed, as the former is closely connected with, and partly based on, the tendency to latter. In addition, the principle of substitution is closely linked to the principle of diminution of marginal utility which is in general a result of increased expenditure. Marshall wrote:

"This principle of substitution is closely connected with, and is indeed partly based on, that tendency to a diminishing rate of return from any excessive application of resources or of energies in any given direction, which is in accordance with general experience. It is thus linked up with the broad tendency of a diminishing return to increased applications of capital and labour to land in old countries which plays a prominent part in classical economics. And it is so closely akin to the principle of the diminution of marginal utility that results in general from increased expenditure, that some applications of the two principles are almost identical."

Marshall discussed the factors of production as follows:

"As far as the knowledge and business enterprise of the
producers reach, they in each case choose those factors of production which are best for their purpose; the sum of the supply prices of those factors which are used is, as a rule, less than the sum of the supply prices of any other set of factors which could be substituted for them; and whenever it appears to the producers that this is not the case, they will as a rule, set to work to substitute the less expensive method."^2^9

Marshall defined this rule as the principle of substitution. He thought that 'the applications of this principle extend over almost every field of economic inquiry'.^3^0 The entrepreneur 'ceaselessly applies the principle of substitution, with the purpose of increasing his profits'.^3^1 Marshall believed that when the entrepreneur appliedd the principle of substitution, he seldom failed to increase the total efficiency of work, the total power over nature which man derives from organisation and knowledge'.^3^2

The entrepreneur first considers whether he has the right number of men for his work.^3^3 He is also constantly comparing the service of machinery, and of labour, and of extra foremen and managers; he is constantly devising and experimenting with new arrangements which involve the use of different factors of production, and selecting those most profitable for him. In short one of the chief functions of the principle of substitution.^3^4 In every phase of any branch of production there are certain distributions of resources between various expenditures which yield better result than any others.^3^5 Hence the entrepreneur is constantly endeavouring to evaluate the relative efficiency of every factor of production that he employs.^3^6 He strives to achieve the ideal perfect distribution.^3^7

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According to the principle of substitution, the entrepreneur will continually set to work to substitute the cheaper arrangement or process. Machinery will displace manual labour whenever it can do the work more cheaply.

"In the modern world nearly all the means of production pass through the hands of employers and other business men, who specialise themselves in organising the economic force of the population. Each of them chooses in every case those factors of production which seem best for his purpose. And the sum of the prices which he pays for those factors which he uses is, as a rule, less than the sum of the prices which he would have to pay for any other set of factors which could be substituted for them: for, whenever it appears that this is not case, he will, as a rule, set to work to substitute the less expensive arrangement or process." 

However, Marshall did not think that human labour would be totally replace by machinery. He wrote:

"...... a new demand [for labour] will come from the makers of new and more expensive machinery. For when it is said that machinery is substituted for labour, this means that one class of labour combined with much waiting is substituted for another combined with less waiting: and for this reason alone, it would be impossible to substitute capital for labour in general, except indeed locally by the importation of capital from other places."

There is a relation between substitution and complementarity. The agents of production are always competing with one another for the field of employment, yet at the same time those agents provide for one another that field
of employment. The relationship between the labouring class and machinery has already been discussed in chapter two, and the technological aspect of the entrepreneur will be examined in section seven in this chapter.

The principle of substitution is an important theory underpinning capital investment and co-ordination, since this theory is the basis of entrepreneurial behaviour. This is to say, the principle of substitution is central to the entrepreneur's search for optimal factor combination. Marshall thought that the applications of this principle extended over almost every field of economic inquiry.
Marshall's world is one of disequilibrium; the real economy is always in a state of disequilibrium. Marshall's economics depends on consistency between theory and the real world. However, equilibrium theory states that an equilibrium is automatically created. In equilibrium there is no room for the entrepreneur. Marshall thought that the market is not in perfect competition. He wrote:

"... it may be well to insist that we do not assume that competition is perfect. Perfect competition requires a perfect knowledge of the state of the market; and though no great departure from the actual facts of life is involved in assuming this knowledge on the part of dealers when we are considering the course of business in Lombard Street, the stock Exchange, or in a wholesale Produce Market; it would be an altogether unreasonable assumption to make when we are examining the cause that govern the supply of labour in any of the lower greats of industry."\(^4\)

Marshall 'discussed the "fear of spoiling the market" and the firms with negatively sloping demand curves in the main chapters on competition.\(^4\) Again Marshall thought that the entrepreneur as a middleman will cause imperfect competition. Marshall wrote:

"A producer, a wholesale dealer, or a shopkeeper, who has built up a strong connection among purchasers of his goods, has a valuable property. He does not generally expect to get letter prices from his clients than from others. But he expects to sell easily to them because they know and trust him; and he does not sell at low prices in
order to call attention to his business, as he often does in a market
where he is little known."  

Marshall believed that the entrepreneur would look for a disequilibrium state and spot a gap in the market. He considered the activity of the entrepreneur as follows:

"... business enterprise tends to increase the supply of anything, when the price at which it can be marketed will return its expenses of production with fairly good profits: and this tendency is working at any moment towards an imaginary position of equilibrium, which would be promptly reached if the general condition then prevailing were rigidly fixed."  

Also Marshall defined the entrepreneur as a middleman intervening between the manual worker and the consumer. Therefore he considered the entrepreneur to be not only the manufacture but also the merchant. Marshall regarded the production of utilities to be one of the activities of the entrepreneur. 'Man cannot produce matter, but only utilities inherent in matter.' In other words Marshall thought that men produce utilities, but cannot do more.

"According to popular usage agriculture, fishing, mining and manufacture are productive, because they produce new goods into the field of business: while transport and commerce merely change the position and the ownership of goods which are already in that field. But man does not make coal, he merely transports it from its bed to the surface; and thus makes it potentially useful; its usefulness is nearly complete when delivered by carrier and merchant into a private cellar.
and is quite complete when delivered by a domestic servant to the fireplace. Thus the common distinction between “productive” industries and other rests on no scientific basis.”

Marshall thought that the wholesale business is an excellent example of productive agents. Marshall considered it the function of a middleman to be a link between producer and consumer. He used as an example the case of a physician or a lawyer, where much valuable activity is wasted or produces little profit as these professional men of first-rate ability, usually do not have the special aptitude necessary to build up their business. If their work can be organised for them by the entrepreneur, they can obtain high salaries and provide better service for the world. Hence the entrepreneur should study the consumer needs and demands, and the producers’ resources. These functions are important, even in regard to the minor requisites of business.

The entrepreneur is able to make a better study of the requirements of consumers and of the varieties and qualities of producers’ goods than could be effected by any means other than extensive subdivision of labour and specialisation of knowledge and skill.

The function of the entrepreneur as a middleman is indispensable in regard to household goods and clothing, as such things must commonly be seen before purchase and they must be delivered in small quantities to innumerable consumers, often on credit. Furthermore Marshall wrote:

“The growing imperious of demand, combined with the growing subtlety of the brewing trade, makes the brewer increasingly willing to pay a little premium to middlemen for supplying him with hops carefully graded: he would often lose more than he gained by buying at first hand.
from the farmer.

Again experience shows that a retailer does not succeed as well with butter of varying qualities, as with a steady supply of a uniform quality, even though that be rather below the average."^5^4

The entrepreneur as a middleman plays a very important role for the manufacture and the retailer. The entrepreneur requires the ability to forecast the general trends of production, to spot opportunities for supplying a new commodity that will meet a real want or to improve the method of producing an established commodity.^5^5 Furthermore the entrepreneur middleman should undertake the risks and the marketing, since the activity of the entrepreneur involves some 'speculation based on well-informed confidence'.^5^6
Marketing

Marshall considered the real world to be in a disequilibrium state. An equilibrium approach being concentrated on locating the distribution of resources does not pay attention to the entrepreneur who is an agent of market mechanism. With perfect information, there is no real market. When information is not perfect, the market mechanism operating through competition is important. Marshall regarded the entrepreneur as a middleman able to spot a gap in the market by gathering information. A real market experiences disequilibrium states with imperfect information. The entrepreneur needs to locate disequilibrium, so he has to obtain information. Marketing is thus an important entrepreneurial ability as it seeks out a disequilibrium state.

Marketing always involves uncertainty, so the entrepreneur has to guess at the future under conditions of uncertainty about the relation of supply and demand. He has to predict the future, bearing in mind the uncertainties, and decide the levels of production and development of new products.

Marshall thought that the division of labour caused the expansion of production but that the sales volumes do not automatically increase with the increase in production. That is to say, there is a limited demand in the world. However, the producer does not want to lower the price. For 'each man fears to spoil his chance of getting a better price later on from his own customers'. Marshall wrote:

"The new age has set mechanical power to do most of the hard work of production. But the burden of marketing must still be borne mainly by men: and the present tendency of associated effort to become broader, and to reach further, in marketing, than in making, is in
great measure the result of natural causes."

In the short run, 'a buyer can nearly always get what he wants from other sellers and about the same terms, if his negotiations with a particular seller fall through'. The seller 'has less certainty of selling at current prices whenever he wants to do so, than the buyer has of buying at those price'. Hence Marshall thought that 'the ever increasing energy, with which sellers push their goods on the notice of buyers, is an inevitable result of modern developments'.

An equilibrium approach normally assumes the existence of a condition of perfect information within which uncertainty does not exist, but Marshall thought that uncertainty does exist under conditions of imperfect information. In fact, the real world is full of uncertainty.

".... we cannot foresee the future perfectly. The unexpected may happen; and the existing tendencies may be modified before they have had time to accomplish what appears now to be their full and complete work."

The future cannot be foreseen, so the entrepreneur needs to analyse the existing conditions and to estimate the future. In short the entrepreneur must have the ability to anticipate the future course of demand and tastes, and of fluctuations of general economic prosperity. The entrepreneur sought out producers who had skill and aptitude for making certain classes of things economically and well. He instructed them as to the precise character of the thing which he wanted, and supplied the material and plant. 'By ever widening experience learnt how better to enlarge and economise the processes of marketing'. Again the entrepreneur must have the skill of interpreting events
in a relatively narrow sphere of the affairs of the world, and of turning to profit the fleeting opportunities which are offered by his ever changing relations with men and objects.\textsuperscript{6}

The entrepreneur needs to possess these abilities and to be able to devise new methods of manufacture to supply goods which can be produced in large quantities at low cost, and also to take into account new fashions and customers' taste.\textsuperscript{6} Marshall thought that production could be increased very quickly and economically, in contrast to sales.\textsuperscript{6} The entrepreneur has to study the wants of consumers, and the resources of producers, and bring the two into connection.\textsuperscript{6} Marshall thought most of the hard work of production could be done by mechanical power but that marketing must still be mainly undertaken by men. Furthermore he considered that the details of marketing had become important.\textsuperscript{6} Marshall wrote:

"And it remains true generally that the several strata of trade make more thorough studies of the requirements of consumers and of the varieties and qualities of producers' goods than could be effected by any means other than extensive subdivision of labour and specialisation of knowledge and skill."\textsuperscript{6}

The entrepreneur has to carve out his way to general favour slowly.\textsuperscript{6}

We look at advertising, changes in fashion and brand name as part of marketing.

Israel. M. Kirzner appraised Marshall's consideration of advertising as an economist.\textsuperscript{7}

"During the relatively few decades when economic theorists have paid explicit attention to advertising, they have almost invariably
been quick to concede that advertising may fill a useful informational role." 71

Marshall also realised the informational aspect of advertising.

Marshall wrote:

"Constructive uses of "advertisement" in that original broad use of the term, ...... includes all measures designed to draw the attention of people to opportunities for buying or selling ......" 72

However, Marshall believed that the modern expenditure on advertising was not constructive, but combative.73 He thought that combative advertisements generally involve social waste. The chief influence of such advertising is not exerted through reason, but rather the force of blind habit. In general people are inclined to prefer that which is familiar to that which is not.74 Marshall defined as constructive advertising, all those measures needed for explaining to the general public the claims of some new item, which is capable of fulfilling a great but latent want.75 He gave as an example the advertising of a typewriter for commercial travellers. Marshall wrote:

"When the idea of a typewriter was first conceived, very few people were included to take seriously the suggestion that it could rival the pen in efficiency. It could not therefore be sold by mere printed notices: and the retailers of writing materials were not inclined to master its manipulation. The only practicable method therefore was to show it working rapidly in the hands of expert agents throughout the land." 76

Hence Marshall thought that lavish expenditure on developing a new want, based on clear foresight, was fully justified by the result.77 Furthermore, he
thought that the effect of advertisement would 'extend in varying degrees to all products made or handled by the business, a name or trade mark which has gained good fame in regard to one product is a great aid to the marketing of others'.

Marshall thought that advertisement has a cumulative effect. He discussed it as "brands" or "trade marks". As far as a brand influences the methods of marketing of the goods, it gives the manufacturer a good reputation. It also enables the retailer, who uses it, to acquire a good reputation. He thought that the brand is also made by marketing. The entrepreneur 'starts at once with the devotion of large resources to setting up the most advanced plant for making a thing which seems likely to meet a general want; together with a vast system of advertising its merits to traders and consumers alike by vigorous, various and well-planned measures'.

Moreover Marshall attached importance to goodwill. He wrote:

"Reputation for fairness and generosity in dealing, is a property seldom acquired without special effort and sacrifice, and is a powerful factor of success in all the undertakings of a business."

Marshall used the example of the returned articles system. Marshall thought that the entrepreneur can build a good reputation by introducing this system. Marshall wrote about a great American trader as follows:

"... when a customer, who did not know her own mind, brought back a recent purchase somewhat the worse for its journey, it was to be taken back, and the full money returned, unless there was reason to suppose that she had not acted in good faith: he reckoned that where he thus lost half a dollar in money, he would gain a dollar's worth of good will. The success of his method points to the fundamental
principle that the marketing side of the work of a business is an integral process, and not a series of independent transactions."^\text{82}

Marshall also considered fashion to be a part of marketing. Therefore the entrepreneur needed the ability to set fashion trends as follows:

"Changes in fashion are not now products of a wayward fancy, which is its own reward. They are, in large part at all events, deliberately planned several months before they obtain vogue. They are planned with a view to successful effect: for if they fail in that, they reap only a short-lived commercial success. But those who control them have always a general interest in causing anyone, who wishes not to be out of fashion, to discard the costumes of last season: and they are able to secure for themselves some of the gain which arises out of the ownership, or early preparation, of large stocks of material adapted for fashions which they have foreseen further ahead than other people."^\text{83}

Marshall's marketing theory is based on the idea of an economy with imperfect information and the belief that in the real world people do not have perfect information and the entrepreneur needs the ability to market. The entrepreneur is a middleman who can foresee the future and is able to spot a gap in the market. By entrepreneurial activity, the producer has the opportunity to utilise fully the division of labour and machinery. Besides that he will be able to provide the consumer with goods which convey a guarantee of quality. Marshall thought the entrepreneur must have 'a thorough knowledge of things in his own trade', 'the power of forecasting the broad movements of production and consumption'.^\text{84} However marketing and the activities of the entrepreneur always

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involve many risks. The risks will be discussed in the next section.
In Marshall's view, the entrepreneur was one who took the risks and carried out the management of business as his share in the work of organised industry. Marshall wrote:

"This term [undertaker], which has the authority of Adam Smith and is habitually used on the Continent, seems to be the best to indicate those who take the risks and the management of business as their share in the work of organised industry."  

Marshall defined the entrepreneur as an 'adventure' or 'bearer' of risks. He thought that the entrepreneur must be able to judge cautiously and undertake risks boldly. Marshall attached great importance to risk-bearing as one of the entrepreneur's functions. However, Schumpeter thought that the entrepreneur is never the risk bearer. Schumpeter wrote:

"The entrepreneur is never the risk bearer. In our example this is quite clear. The one who gives credit comes to grief if the undertaking fails. For although any property possessed by the entrepreneur may be liable, yet such possession of wealth is not essential, even though advantageous. But even if the entrepreneur finances himself out of former profits, or if he contributes the means of production belonging to his "static" business, the risk falls on him as capitalist or possessor of goods, not as entrepreneur. Risk-taking is in no case an element of the entrepreneurial function. Even though he may risk his reputation, the direct economic responsibility of failure never falls on him." 

Moreover, R.F. Hebert and A.N. Link observed that Marshall did not
adequately study risk-bearing as the function of the entrepreneur. They wrote:

"Aware of the writings of Cantillon and Say on the role of the entrepreneur as important element within a well-conceived theory of economic progress, Marshall nevertheless opted for the more traditional English scenario of the entrepreneur (or more precisely the undertaker) as a multifaceted capitalist."^8^9

M.Casson also thought that Marshall changed the entrepreneur's function from dynamic to static. He wrote:

"The static approach of the emerging neoclassical school did not readily accommodate a concept with dynamic connotations, such as the entrepreneur. Alfred Marshall, for example, laid much more stress on the routine activities of management and superintendence than he did on the innovative activity of the entrepreneur."^9^0

However, Marshall did not always think like Casson's idea. Marshall's risk-bearing idea plays an important role in evaluating the function of the entrepreneur. This function is closely connected with others. In this section risk-bearing is examined. Not only the entrepreneur but also ordinary people face many risks in the course of everyday life. Since the future is uncertain, everybody has to make choices at critical turning point in their lives. The great risks of business have much in common with the many small risks which must be faced by everybody.^9^1 Marshall thought that great progress can only be attained by bold daring. If considerable risks are not taken, there can be no great progress.^9^2 Furthermore, progress largely depends on taking the right risks.^9^3

Marshall thought that managing business constantly involves speculative
Furthermore, the division of labour brought its own risks. Thus the entrepreneur could not rely on 'tradition was' 'changing conditions requiring an alert mind, which seldom looked backwards'. Marshall wrote about risks as follows:

"The speculative taking of high risks has many varieties. Some are in effect mere reckless gambling. Others are shrewd business ventures, aimed at gains, that must be balanced by losses to traders who are concerned in the same affairs. Others tend to improve the general application of efforts to the attainment of desirable ends: these last alone are entitled to be called "constructive" in the full sense of the term.""^6

Marshall regarded the constructive taking of high risks as important, since it brings increased wealth to the world. All the processes of production and selling face risks. Therefore the entrepreneur 'must be able to judge cautiously and undertake risks boldly'.^8

However, Marshall did not consider that the entrepreneur simply undertakes all and any risks. It is important to point out that the entrepreneur disperses, reduces and insures the risks which he takes on. Business activity is accompanied by risks, so the role of the entrepreneur is to lessen the risks by spreading their incidence. Marshall thought that there are two types of risks, insurable and non-insurable risk.

However, the entrepreneur cannot transfer the risks to his subordinates without transferring the function to which they are related. The entrepreneur 'cannot insure against the results of errors of judgement in such matters unless by sub-letting contracts; that is, by handing over to middlemen certain
Marshall wrote: "...... when a man has superior knowledge that the supply of anything is likely to run short in any particular country or in the world generally; and buys it either outright or for future delivery; then, on the assumption that his judgement is right, his action is to be regarded as constructive speculation. Such work adds to the world's wealth, just as diverting a stream to work a watermill does, for it tends to increase the supply of things where and when they are likely to be most wanted, and to check the supply of things where and when they are likely to be in less urgent demand. This is its most conspicuous service.

But it also renders another service; which, though less conspicuous, is not much less important; for it often enables a man whose whole energies are needed for the internal work of his business, to insure himself against the risk that the materials which he will need in his business will not need to be purchased at an enhanced price. The risk is governed by broad causes over which he has scarcely any control, and the study of which requires knowledge and faculties other than his own." 100

The entrepreneur can transfer the risks from the shoulders of one set of men to those of others, more fitted to bear them.101 Thus the problem of dispersing the risk is closely connected with co-ordination. For Marshall thought that 'modern organisation tends so to distribute the risks inherent in making and marketing that they fall increasingly on shoulders best fitted to bear them'.102 An important point to be noted is that the entrepreneur can...
select the subordinates who undertake the risks and the functions. Moreover the entrepreneur transfers the risks to specialists who undertake them. Marshall wrote:

"When industry was unsettled by the introduction of new methods, and unknown men were rising rapidly to the front, it seemed to be to the general advantage that bankers and other professional dealers in command over capital should act as intermediaries. So they lent, mainly at their own risks, the command over capital, deposited with them, to such manufactures and others as seemed to them able and trusty: the people were shy of investments in business beyond their immediate ken." ¹⁰³

Therefore the entrepreneur transfer the risks to the specialist as a form of insurance but the entrepreneur's work is management with mere routine superintendence as Casson argued.

Marshall thought that 'there is generally a choice of risks, but seldom any choice as to whether to take a risk inherent to a function, save by transferring function and risk together'.¹⁰⁴ The entrepreneur's function 'can be delegated easily without associated risks: but the class of risks which can be delegated without any corresponding function is narrow'. 'The risks, which can be transferred without function, relate almost exclusively to definite particular transactions'.¹⁰⁵ Marshall wrote:

"..... by private contract or otherwise it is sometimes practicable to insure a business against loss by definite changes in recognised prices, as thoroughly as against losses by fire or other specific accident. But it is not possible, it is scarcely even
conceivable, that insurance should be effected against the results of slackness in action or errors of judgement. Such risks must remain with those who control the business and appoint its officers. They may delegate some of their functions, and yet bear these risks either in whole or in part: but it is generally impracticable to transfer such risks without transferring the functions to which they are related. A producer can indeed transfer to middlemen some of the risks of marketing, which he must otherwise bear himself: but he can do so only because that transference is incidental to a transference of some functions to them." 

The entrepreneur cannot transfer all his risks to specialists or his subordinates. He can transfer a part of the total risks to them but he has to bear non-insurable risks by himself.

Marshall wrote:

"The control of a great part of business organisation may be diffused: but decision as to the taking of risks generally, and of new departures in particular, should remain, for the present at least, in the hands of those who will bear the burden of the risks."

Marshall thought that the entrepreneur must boldly undertake the risks and possess the foresight to judge correctly. Again, he insisted that 'great progress can be attained only by bold daring' and 'where no considerable risks are run, there can be no great progress'.

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Marshall attached importance to organisation as related to knowledge. Knowledge is the most powerful engine of production. With it man is able to harness and exploit nature. Knowledge and organisation are important constituents of capital. Marshall wrote:

"Capital consists in a great part of knowledge and organisation: and of this some part is private property and other part is not. Knowledge is our most powerful engine of production; it enables us to subdue Nature and force her to satisfy our wants. Organisation aids knowledge; it has many forms, e.g. that of a single businesses, that of various business in the same trade, that of various trade relatively to one another, and that of State providing security for all and help for many."\(^{109}\)

He defined 'capital as a store of things, the result of human efforts and sacrifice, devoted mainly to securing benefits in the future rather than in the present'.\(^{110}\) Marshall regarded social capital as a provision for the future. He considered that provision is the thing which shows a great desire for future satisfaction rather than present.\(^{111}\)

Moreover Marshall regarded capital as a prerequisite to acquire an income in the form of money, or by means of trade. He called such capital 'trade capital'. Trade capital is composed of the factory and the business plant of a manufacturer, machinery, raw materials, the good-will of business and the food, clothing, and any house-room that he provides for employees.\(^{112}\)

Marshall said about the decision to start a business.

"... each [entrepreneur] tries every opening, forecasting
probable future events, reducing them to their true relative proportions, and considering what surplus is likely to be afforded by the receipts of any undertaking over the outlay required for it. All his prospective gains enter into the profits which draw him towards the undertaking; all the investments of his capital and energies in making the appliances for future production, and in building up the “immaterial” capital of a business connection, have to show themselves to him as likely to be profitable, before he will enter on them: the whole of the profits which he expects from them enter into the reward, which he expects in the long run for his venture. And if he is a man of normal ability (normal that is for that class of work), and is on the margin of doubt whether to make the venture or not, they may be taken as true representatives of the (marginal) normal expenses of production of the service in question. Thus the whole of normal profits enter into true or long-period supply price.”^113

Hence Marshall thought the supply price of business ability is a part of normal profits. The demand price of business ability is also something which determines normal profits. Quasi rent is essentially a return to capital which is only a quasi rent. However, Marshall defined the term quasi-rent instead of rent as ‘the income derived from machines and other appliances for production made by man’.^114 In addition to this he thought that the quasi-rent which can only exist in short term equilibrium. Marshall wrote about the short and the long periods:

“The supply of specialised skill and ability, of suitable
machinery and other material capital, and of the appropriate industrial organisation has not time to be fully adapted to demand; but the producers have to adjust their supply to the demand as best they can with the appliances already at their disposal. On the one hand there is not time materially to increase those appliances if the supply of them is deficient; and on the other hand, if the supply is excessive, some of them must remain imperfectly employed, since there is not time for the supply to be much reduced by gradual decay, and by conversion to other uses.

In long periods on the other hand all investments of capital and effort in providing the material plant and the organisation of a business, and in acquiring trade knowledge and specialised ability, have time to be adjusted to the incomes which are expected to be earned by them: and the estimates of those incomes therefore directly govern supply, and are the true long-period normal supply price of the commodities produced.\textsuperscript{115}

Quasi-rent is connected with innovation. The entrepreneur, who 'opens out a new and improved methods of business', can get more profit than those who 'follow beaten tracks'.\textsuperscript{116} However, the profit of monopoly will disappear in the long run. Marshall wrote as follows:

"But as time goes on, he thinks out a way of dispensing with one of the heatings that have hitherto been customary; and in consequence, without increasing his expenses, he is able to increase his annual output by things which can be sold for £2000 net. So long, therefore, as he can sell his wares at the old price, his
earnings of management will be £2000 a year above the average; and he will earn the full reward of his service to society. His neighbours however will copy his plan, and probably make more than average profits for a time. But soon competition will increase the supply, and lower the price of their wares, until their profits fall to about their old level; for no one could get extra high wages for making eggs stand on their ends after Columbus's plan had become public property."

Marshall discussed the fact that the entrepreneur has to assimilate technical knowledge and knowledge of market conditions. 'Large inventions and other advancements are seldom completed by a single man; and not always by a single generation'. Marshall wrote:

"..... each new knowledge [is] the offspring of others that went before, and the parent of many that follow. A simple form of such knowledge, which has contributed greatly to the progress of technique, is embodied in improved constructions of material objects - house, furniture, clothing, implements, etc. But early in last century some ideas, which had been for some time in the make, developed into the great architectonic principle that a well driven machine tool could become the parent of new machine work more exact than itself, which could become in its turn the parent of yet more exact machines; and so on."

'Technique is less dependent on personal peculiarities' and 'others are able to start for further investigation from the point which he has reached, and with nearly the same advantage as if they had made the original experiments

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themselves'. Marshall attached importance to the assimilation of technical knowledge in an organisation. He wrote:

"... a business which has been created by a man of exceptional organising or inventive genius, or by one who has a great faculty for anticipating coming movements of taste or fashion, will retain its vigour after a reorganisation".  

Next, the assimilation of knowledge of market conditions will be discussed. The entrepreneur's excess profit will be lost in the long run, so Marshall decided that excess profit can continue to exist in the long run.

Marshall thought that 'if the entrepreneur retained his originality, and versatility and power of initiation, his perseverance, his tact and his good luck for very many years together', he would be successful in his business. Again 'Reputation for fairness and generosity in dealing, is a property seldom acquired without special effort and sacrifice, and is a powerful factor of success in all the undertaking of a business'. He thought that 'a producer, a wholesale dealer, or a shopkeeper, who has built up a strong connection among purchasers of his goods, has a valuable property'.

Then Marshall emphasised that the entrepreneur does not merely combine the factors of production but produce more than the sum of the factor.

Marshall wrote.

"The earnings of a successful business, looked at from the point of view of the business man himself, are the aggregate of earnings, firstly, of his own ability, secondly, of his plant and other material capital, thirdly, of his good-will, or business organisation and connection. But really it is more than the sum of
In evaluating the total sum of the earnings of a business which he described as 'more than the sum of these', Marshall used the term 'composite quasi-rent'. This composite quasi-rent is not a short-term phenomenon, it can continue to exist perpetually. Part of the gains of business are derived from its connections and organisation as the entrepreneur's efficiency depends partly on his being in that particular organisation. The composite quasi-rent come not from the single individual but the organisation. That is to say, a part of the gains of a business would often be lost if the employees deserted it.

Marshall wrote:

"...... the head clerk in business has an acquaintance with men and things, the use of which he could in some cases sell at a high price to rival firms. But in other cases it is of a kind to be of no value save to the business in which he already is; and then his departure would perhaps injure it by several time the value of his salary, while probably he could not get half that salary elsewhere."

Marshall named the rent, which does not clearly apply to an individual item composite rent and in the same way he called the quasi rent, which does not clearly apply, a composite quasi rent. Every individual working in the firm can demand the distribution of the composite quasi rent. It will be divided among the different persons in the business by bargaining, supplemented by custom and by notions of fairness. Not all of the composite quasi rent in the firm is retained. It can be appropriated for providing the working class with a high wage. In addition, Marshall said about profit sharing.
“Even where the same price is paid all over the market for the same work with the same machinery, the prosperity of a firm increases the chance of advancement for each of its employees, and also his chance of continuous employment when trade is slack, and much coveted overtime when trade is good.

Thus there is de facto some sort of profit-and-loss sharing between almost every business and its employees; and perhaps this is in its very highest form when, without being embodied in a definite contract, the solidarity of interests between those who work together in the same business is recognised with cordial generosity as the result of true brotherly feeling.”

Furthermore, Marshall thought that the relations between employers and employed are raised to a higher plane both economically and morally by the adoption of the system of profit-sharing. Also it is regarded as a step towards co-operation. Co-operation will be discussed in appendix.

The entrepreneur will not ‘follow beaten tracks’ but ‘open out new and improved methods of business’. However, the profit of monopoly will disappear in the long run. Thus Marshall place importance on knowledge assimilation on the organisation. If the entrepreneur assimilate technical knowledge and knowledge of market condition, the organisation will produce a excess profit in the long run. The excess profit will be distributed among the people who have a connection with the organisation and it will continue as a composite quasi rent. The excess profit, produced by technical and market knowledge, is then included in the composite quasi rent. This process is important for the organic growth of economics. Thus the next section will study technological search.
Marshall regarded the introduction of technological advance as a continuous process, having the function of both introducing and incorporating innovation. Technological advance is caused by the division of labour. The latter is necessary for the realisation of internal economies.  

Marshall wrote:

"This increased subdivision of functions, or "differentiation", as it is called, manifests itself with regard to industry is such forms as the division of labour, and the development of specialised skill, knowledge and machinery: while "integration", that is, a growing intimacy and firmness of the connections between the separate parts of the industrial organism, shows itself in such forms as the increase of security of commercial credit, and of the means and habits of communication by sea and road, by railway and telegraph, by post and printing-press."  

Marshall defined external economies and internal economies as follows: external economies depend on 'the general development of the industry' and internal economies depend on 'the resources of the individual houses of business in it, on their organisation and the efficiency of their management'.  

First internal economies will be examined. Marshall thought that 'the first condition of an efficient organisation of industry is that it should keep everyone employed at such work as his abilities and training fit him to do well, and should keep equip him with the best machinery and other appliances for his work.' When the division of labour is carried very far a man's whole attention is concentrated on one operation. Hence the labour will be done
quickly without any considerable exertion. On the Economics of Industry, it was called 'economy of skill' and 'of other mental and physical excellencies'.

Next he thought that when the action has been reduced to a routine it has nearly arrived at the stage where it can be taken over by machinery. Marshall described the relation between the division of labour and machinery as follows:

"... machinery constantly supplants and renders unnecessary that purely manual skill, the attainment of which was, even up to Adam Smith's time, the chief advantage of division of labour. But this influence is more than countervailed by its tendency to increase the scale of manufactures and to make them more complex; and therefore to increase the opportunities for division of labour of all kinds, and especially in the matter of business management."

The effect of machinery is to cheapen and make more accurate the work which would have been subdivided. Thus the entrepreneur needs to have the abilities to improve 'the plan of producing an old commodity'. Again 'an improvement in business method is initiated' by the entrepreneur, 'who set himself to attain a particular practical end by the best route'. On the Economics of Industry 'the economy of invention' was discussed:

"The economy of invention is best attained when it is the business of a certain set of people to study every new invention which bears on their particular trade. For each new leading idea with regard both to processes and machinery has many practical applications."
Knowledge is acquired in working out one invention that is likely to be of use in seeking for others.\textsuperscript{146}

Furthermore Marshall mentioned 'the system of Interchangeable Parts' as an effect of the economy machinery.\textsuperscript{147}

Although Marshall analysed the negative influence of machinery, he saw the advance of machinery as causing a rise in productivity and an improvement in the condition of the working class. He believed that machinery had lightened man's labour and sooner or later would do all the monotonous work in manufacturing. He also considered that complex machinery increases the demand for judgement and general intelligence.\textsuperscript{148}

Marshall wrote:

"... the more delicate the machine's power, the greater is the judgement and carefulness which is called for from those who see after it. Take for instance a beautiful machine which feeds itself with steel wire at one end, and delivers at the other tiny screws of exquisite form; it displaces a great many operatives who had indeed acquired a very high and specialised manual skill, but who lived sedentary lives, straining their eyesight through microscopes, and finding in their work very little scope for any faculty except a mere command over the use of their fingers. But the machine is intricate and costly, and the person who minds it must have an intelligence, and an energetic sense of responsibility, which go a long way towards making a fine character; and which, though more common than they were, are yet sufficiently rare to be able to earn a very high rate of pay."\textsuperscript{149}
Large-scale production is a precondition for the division of labour and machinery. Marshall considered the chief advantage of production on a large scale to be 'economy of skill', 'economy of machinery' and 'economy of materials'. He thought that the largeness of markets and the increased demand for great numbers of things of the same kind, lead to division of labour.

Marshall thought that the entrepreneur operating in large-scale manufacture was at an advantage over small-scale manufacture in relation to production, because he could afford to acquire more specialised machinery. Capital was needed in ever increasing quantity by the new developments of industry. Marshall wrote:

"... a business, which has abundant capital and is controlled by men with scientific interests and large faculty for high enterprise, may constantly introduce into the world not only new methods, but also new things.

... a great firm may long hold a prominent place in [industries], if it is managed with discretion and energy, and has an alert apprehension of any improvement in method or product that are on their way."

Also the entrepreneur who has large scale capital has an advantage in relation to costs of transportation and marketing. The way in which the entrepreneur can acquire a large capital, will be discussed in appendix

On the economy of machinery, Marshall thought that technological search, which is a function of the entrepreneur, not involves not only searching for new technological possibilities but also searching for the best existing practice. The entrepreneur seeks to gather information about the best technological
practice, and also about new technological possibilities which have not yet been introduced. Marshall wrote:

"Mechanical standardisation spread from one process to another in the same industry, and from one industry to another. And gradually it was found that the machines, adjusted to standardised work, helped one another; because the uniformity of the product, when it left one machine, suited it for being operated by the next. So progress went on cumulatively. Each step forward made the next simpler; and by slow step were evolved the root notions of those semi-automatic machines of the present day, each of which performs a great many operations one after another on the material fed into it."\(^{157}\)

Marshall thought that 'each new knowledge is the offspring of others that went before, and the parent of many that follow'.\(^{158}\) Thus Marshall thought that the entrepreneur also needs to gather knowledge of existing technology. Again the entrepreneur has to make an effort to introduce new methods of production. 'An improvement in business method is generally initiated' by the entrepreneur 'who sets himself to attain a particular practical end by the best route'.\(^{159}\) Hence he considered that the entrepreneur will resolve to have the best plan and best methods existing for that particular task which he has taken in hand.\(^{160}\) Marshall thought that technological search is not merely innovation or invention. His concern is the organisation to adopt them and incorporate them.

He wrote:

"... when bicycles first came into vogue, every year brought some striking change in their construction and their methods of
manufacture: and the products of a firm, which had no initiative, were obsolete almost as soon as they were made. But now a cycle firm with adequate capital, administrative capacity and assiduity, can manufacture at a comparatively low cost for general consumption an ordinary cycle, that is immeasurably superior to those made by the first leaders of industry; and is but very little inferior to the best that can be made to-day."  

Marshall thought that the localisation of industry will serve to promote the division of labour. He pointed out the various origins of localised industries; 'physical condition', 'the patronage of courts' and 'deliberate invitation of rulers'. Marshall wrote about the advantage of localised industries as follows:

"great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvement in machinery, in processes and the general organisation of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighbourhood, supplying it with implements and materials, organising its traffic, and in many ways conducing to the economy of its material." 

As a further advantage of localised industries, Marshall considered that
where industries of supplementary character are in the same neighbourhood, they moderate each other's depressions. 'A district which is dependant chiefly on one industry is liable to extreme depression, in case of a falling-off in the demand for its produce, or of a failure in the supply of the raw material which it uses.' However 'this evil is in a great measure avoided by those large towns or large industrial districts in which several distinct industries are strongly developed.'

Also the entrepreneur can use the advantage of improved means of communication. Therefore, this meant external economies were important in growth, particularly in relation to the labour force and transport and their origin lay largely in the localisation of industry.

The entrepreneur has an ability which makes full use of internal and external economies. The division of labour led to the development of machinery, its invention and innovation. The entrepreneur has to look for the chance to effect the division of labour in the organisation. Advance in industrial technique is initiated by the entrepreneur, who sets himself to attain a particular practical technique or division of labour, which plays an important part in economic growth.
The free market inevitably produced combinations, cartels and trusts. Marshall thought that though monopoly and free competition are ideally far apart, they shade into one another by imperceptible degrees. Hence he believed there is an element of monopoly in all competitive business. Marshall disapproved of combination as it disturbs the origin of economic development. He thought that although combination removes prominent social and industrial discords it causes bigger and more enduring discords in the future.

In the free market, the interests of the consumer are defended by the competition of producers in each stage of industry. However this defence is impaired when the price in each stage is arranged by a combination of producers in it. Marshall wrote about the combination as follows:

"Associations of producers are liable to develop policies, of which the chief purpose is to stay dissensions in the group affected, and to introduce harmony and good-will where sharp competition formerly prevailed. Concord is indeed obtained within a section of the nation: but generally at the expense of injuries to the nation at large, and particularly to other section of it, which far outweigh the good achieved by concord within that section."

Marshall believed that combination enhanced the profits of the producers at the expense of the consumers. Again combination is apt 'to incur great expense for strategic purpose'.

He thought that competition is constructive in an open market. However, as a big business is striving to repel rivals from ground which it wishes to make its own, it is under a strong temptation to use ferocious and unscrupulous
methods to achieve their undoing. Marshall considered that monopoly is ungenerous. Moreover Marshall wrote:

"... the most malignant features of unscrupulous competition, which recent research has brought to light, have been seen in the pursuit and maintenance of monopolistic control in industries which might retain an open market. ... in a really open market no one has very much to gain by destroying any one of his rivals."  

Hence Marshall condemned destructive competition. In destructive competition the entrepreneur cannot play an innovative part in the market. This is to say, the entrepreneur might have done excellent work but will go under when faced with the sharp competition posed by large monopolistic companies. Therefore in conjunction with the tendency to increasing return, it strengthens those who are strong, and hands over the business of the weak to those who have already obtained a partial monopoly.

Again combination contracts the area over which the competition of other businesses in the same industry can have full play.

However, Marshall's attitude towards monopoly in general, and towards monopolisation through cartelisation, was somewhat ambivalent, since he recognised a conflict between the advantage of cooperation and the dangers of market power. Marshall recognised that in combination the firm may be able to introduce 'economies of scale'. The large business can afford to make large and more frequent experiments than the small business can. Hence 'economies of scale' will afford the firm a lot of advantages in production and selling. Moreover combination will benefit not only the producer but also the consumer.

Marshall wrote:

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"Where there is a strong combination, tacit or overt, producers may sometimes regulate the price for a considerable time together with very little reference to cost of production. And if the leaders in that combination were those who had the best facilities for production, it might be said that the price was governed by that part of the supply which was most easily produced."  

However at the same time Marshall pointed out that in fact this idea was not realised.  

A monopoly can generally be worked economically. It can make full use of its advantages; 'the promotion of technical studies, the organisation of appropriate information as to distant markets, the collecting of debts under certain conditions'. Marshall recognised that monopoly price was not necessarily higher than competitive price, at least in the short run.  

Marshall wrote of economy of a monopoly as follows:  

"For when the production is all in the hands of one person or company, the total expenses involved are generally less than would have to be incurred if the same aggregate production were distributed among a multitude of comparatively small rival producers. They would have to struggle with one another for the attention of consumers, and would necessarily spend in the aggregate a great deal more on advertising in all its various forms than a single firm would; and they would be less able to avail themselves of the many various economies which result from production on a large scale. In particular they could not afford to spend as much on improving methods of production and the machinery used in it, as a single large firm which knew that it was certain
itself to reap the whole benefit of any advance it made.\textsuperscript{186}

However the monopolist's attempts to set a high price may drive away a large body of customers, so he may lower his price with a view to the future development of his business or from a direct interest in the welfare of consumers.\textsuperscript{187} Beside that, Marshall described the relation between the aggregate national wealth and the selling of the output of combinations.

"\ldots it is true that the economies in marketing, belonging to a trust with almost undisputed sway, make net contributions to aggregate national wealth; the importance of which is not to be entirely ignored, merely on the ground that they fall chiefly to the share of those who are already rich."\textsuperscript{188}

The advantage of combination dose not necessarily work in the long run. That is to say, the advantage is valid for short periods, since the combination 'will not continue for long to have as large a share of the best business genius of the country as it had, when it first achieved its semi-monopolistic power'.\textsuperscript{189}

A combination may have 'owed its origin to the exceptional business genius of its founders'. 'The founders of great trusts have been eminent, even among able business men, for their power of anticipating future relations between productive resources and market requirements'.\textsuperscript{190} 'Large combinations can turn economically to account such knowledge as already exists'.\textsuperscript{191}

However, the combination is not an organisation which can good use of the entrepreneurial ability. 'In a multitude of independent undertakers there is more inventive energy'.\textsuperscript{192} Marshall wrote:

"It has always been recognised that large firms have great
advantage over their smaller rivals in their power of making expensive experiments; and in some of the modern "scientific" industries they use part of their resources in hiring specialists to make experiments for them in the technical applications of science. But on the whole observation seems to show, what might have been anticipated a priori, that these advantages count for little in the long run in comparison with the superior inventive force of a multitude of small undertakers."¹⁹³

Marshall thought that the big business or the combination does comparatively little to educate high creative faculty.¹⁹⁴ He wrote:

"Youth of exceptional faculty are often found in lowly work of various kinds in large business as well as small. But, as soon as they become conscious of their strength, they are likely to be attracted by the chance of developing their own powers of initiative; and the lower posts in a vast business seldom offer as much scope for that, as do those of a small business, in which, on occasion, a subordinate may be called to do what he can at a task which has been supposed to be beyond his powers. It has been justly said that small businesses are the nurseries for the best brains in large business."¹⁹⁵

Also Marshall considered that a public corporation cannot make enough use of entrepreneurial ability. Hence Marshall objected to the control of enterprise by the government.¹⁹⁶ He thought that the public sphere should not even manage the companies which cannot avoid having a monopoly in certain areas, such as electricity, water and transportation. The public corporation will be examined in the appendix.

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As far as oligopolistic interdependence is concerned, His viewpoint was dependent on whether the combinations served the public interest. Marshall wrote:

"It is clear that combinations and partial monopolies will play a great part in future economic history; that their effects contain much good as well as much evil, and that to denounce them without discrimination would be to repeat the error which our forefathers made with regard to Protection. If we do not take time by the forelock, and begin early to consider how their evil effects may be minimised and their possible good developed, we shall miss an opportunity that will never recur. For a later generation will find it more difficult to extricate the good from the evil than those who are contemporary with that great growth of the facilities of communication which are giving to the forces of combination and monopoly a new character, and in some directions a new strength." \(^\text{197}\)

In summary, although Marshall pointed out the advantage of combination, he proposed a situation in which the entrepreneur plays an active part in the free market. Marshall wrote:

"..... 'competition' and 'monopoly' do not cover the whole field of industry and trade. Some good work is done and more might with great advantage be done by associations which aim at the joint performance of special tasks. Some of this 'cooperative work', in the original use of the term, has long been done by several Institutes of Engineers and others, whose interests are partly of a professional and partly of a business character." \(^\text{198}\)
Marshall thought Economic Chivalry was an important ethical factor in organic growth. Hence he anticipated that Economic Chivalry would diffuse among entrepreneurs to alienate the poverty of the labouring classes. Marshall attached importance not to socialism but to Economic Chivalry. Socialism has already been discussed in chapter two, but the relation between socialism and Economic Chivalry will now be considered. Marshall thought that 'all socialist schemes' 'seem to be vitiated by want of attention to the analysis which the economists of the modern age have made of the functions of the undertaker of business enterprises'. The reason for which all socialism schemes were wrong, was not made clear by the difference between the capitalist's and the entrepreneur's function. The entrepreneur introduces new methods of production due to his original ideas and responsibility for himself and the organisation. Marshall demanded that the entrepreneur cultivate Economic Chivalry for the attainment of economic welfare without the methods of collectivism or bureaucratism. Marshall wrote:

"In many other ways evil may be lessened by a wider understanding of the social possibilities of economic chivalry. A devotion to public wellbeing on the part of the rich may do much, as enlightenment spreads, to help the tax-gatherer in turning the resources of the rich to high account in the service of the poor, and may remove the worst evils of poverty from the land."

Marshall expected Economic Chivalry to be one of the ways to resolve poverty. He wrote as follows about Economic Chivalry:

"I want to suggest that there is much latent chivalry in
business life, and that there would be a great deal more of it if we sought it out and honoured it as men honoured the medieval chivalry of war. If we do this for a generation or two, then people bringing the latest news from this world may talk boldly of the chivalry of wealth: they may be proud of the elevation of life which has been achieved by training the finer elements of human nature to full account in the production of wealth and in its use.

Chivalry in business includes public spirit, as chivalry in war includes unselfish loyalty to the cause of prince, or of country, or of crusade. But it includes also a delight in doing noble and difficult things because they are noble and difficult: as knightly chivalry called on a man to begin by making his own armour, and to use his armour for choice in those contests in which his skill and resource, his courage and endurance, would be put to the severest tests.”

For the entrepreneur, the success of business is thought to be the accumulation of wealth so it tends to cause an inequality in the distribution of wealth. Accordingly, for the rectification of the inequality of the distribution of wealth, Marshall wanted the entrepreneurial cultivation of Economic Chivalry. Economic Chivalry involves the entrepreneur pursuing not the desire for distinction but the desire for excellence. Marshall thought that the entrepreneur needed to have a public spirit as chivalry in the medieval period had unselfishness allegiance. That is to say, Marshall insisted that the employer should not seek just his profits but think of the employee’s profit, and the wellbeing and development of society. Hence Marshall thought of the entrepreneur as follows:
"It has indeed been remarked with increasing frequency by careful observers during recent years that those business men, on whose work the progress of industry most depends, care for wealth more as an indication of successful achievement than for its own sake. Success in science, in literature, and in art can be judged directly; and a man engaged in those occupations seldom cares for money beyond a mere competence, unless he is rather sordid. He wants to be sure that he has worked well; and if he earns the laurel wreath of approval of the cultivated public, he is content. On the other hand, if business men were arranged in order according to the merits of their proposals as written down on paper and judged a priori, it would be a very bad order. And for that reason, more than for the money it brings them, the ablest and best business men value success. Assuming that a man's career is free from the suspicion of fraud, malign destruction of rivals, and oppression of employees, success is good prima facie evidence of leadership. It is often the only trustworthy evidence that is available to public, and can be appreciated by those near to him, whose joy in his success is one of his chief rewards."

The employer is expected to succeed in his business. There is no significance in success, if a man's career is tainted by the suspicion of fraud, malign destruction of rivals, and oppression of employees. It is very important for the employer to succeed in his business while thinking about the employee's wellbeing and the social development. Marshall demanded that the employer have this ability. Again the employee has to 'undertake to perform a task of given difficulty, whether or not the place in which it is to be done is a wholesome
and a pleasant one, and whether or not his associates will be such as he cares to have. The employee had to have been little affected by his family and school since he had grown up, so the people with whom he is working are one of the important factors of human progress. Again Marshall pointed out that the formation of public opinion in which people want Economic Chivalry, is also an important thing. Marshall wrote:

"An endeavour should be made so to guide public opinion that it becomes an informal Court of Honour. Then wealth, however large, would be no passport to social success if got by chicanery, by manufactured news, by fraudulent dealing, or by malignant destruction of rivals: and that business enterprise which was noble in its aims and in its methods, even if it did not bring with it a large fortune, would receive its due of public admiration and gratitude; as the work of the progressive student of science, or literature, or art does now.

The discriminating favour of the multitude at Athens and at Florence gave the strongest stimulus to imaginative art. And if coming generations were to search out and honour that which is truly creative and chivalric in modern business work, the world would grow rapidly in material wealth and in wealth of character. Noble efforts would be evoked; and even dull men would gradually cease to pay homage to wealth per se without inquiring how it had been acquired. Wealth-getting by sordid means would not win its way in society, nor in popular favour.

Moreover Marshall demanded that the rich man should pay his money for public welfare. He thought that if the employer had accomplished Economic
Chivalry, it would help to raise the standard of life and solve the poverty of the labouring classes. Marshall thought that the formation of circumstance, in which the entrepreneur cultivated Economic Chivalry by enlightenment and organisation of public opinion was important. A method which will improve the social welfare is the acquisition of wealth. The employer will supply the chance of employment and pay a fair wage. Therefore the employee will be able to enjoy an increased the standard of life and social welfare. Marshall attached importance not only to the method of co-operation but to Economic Chivalry as well. In conclusion he anticipated that Economic Chivalry would diffuse among the people.
Overall Summary and Conclusion

The preceding chapters have dealt with the factors of production, Labour and Organisation, and have also analysed the labouring class and the entrepreneur. In this chapter, an attempt is made to provide a concise account of the two factors components.

The classical theory of production concentrated on a combination of three factors — land, capital and labour. However, Alfred Marshall introduced a fourth factor, organisation and entrepreneurship. One of the vital concepts of Marshall’s economics is organic growth. Marshall has developed the theory of organic growth of society in his economics. In the theory of organic growth, Labour and Organisation; the labouring class and the entrepreneur play an important role. It is in this context that this thesis has examined the labouring class and the entrepreneur.

First, the definition of an entrepreneur which had been neglected in economic theory was clarified. The most eminent economist of the past did not always have an economic theory which included the concept of the entrepreneur. Moreover in modern economic theory, the concept of the entrepreneur is neglected. Hence, the theories which centre around equilibrium also do not pay attention to the entrepreneur. However, in the real world, there is much disequilibrium so the entrepreneur finds disequilibrium and changes it to equilibrium. In this thesis a genealogy of the entrepreneur is discussed and it is made clear that Marshall’s economics has a theory of the entrepreneur. Moreover the entrepreneur plays an important part in Marshall’s organic growth.

Marshall’s economic development involved two themes. One is the logic
of an organisation's development, and the other is the increase of the standard of life in the labouring class. The latter is mainly concerned with improving the quality of the labourer's life. The former implies that an organisation is central to economic growth and the entrepreneur, who controls the organisation, is closely related to it.

Marshall was very interested in the labouring class. Marshall, by his study of the labouring class clarified, what caused them to be unhealthy and deprived, and why they could not escape the poverty trap and suggested some ways of increase the standard of life in the labouring class. Marshall wanted the labouring class to escape the poverty trap and advance into the middle class. Marshall's idea about population advanced the Malthusian mechanism utilising the concept of standard of life. Marshall thought that if the labouring class had fewer children and gave them adequate education and a good living environment, the quality of their labour would increase. Marshall discussed population migration and the problem of urbanisation. Migration to towns caused many ill effects, and rapid population growth has often been accompanied by unhealthy and enervating life styles in overcrowded towns. Hence he proposed that the people of towns be given an adequate provision of fresh air and healthy recreation to retain the strength and increase the vigour of the race. The most important capital in a nation is that which is invested in the physical, mental, and moral nurture of its people, he argued. Marshall pointed out it is the duty of a government by its people, to collect new taxes and return to them and their children an equivalent of their payments in such benefits as would increase physical and mental health and vigour.

Marshall thought that education was of central importance in enabling
the labouring classes to escape the poverty trap. He attached importance to the home background and upbringing of the labouring class. For the children of the labouring class cannot get enough food and clothes in their home and do not receive enough education in school, and they leave school early to start work. They do not have an opportunity to improve their physical and moral qualities, and their mental and physical health continually deteriorates throughout their lives. Marshall stressed that the parents have a duty of shaping the nature of the labouring class and argued that the State provide that education which the individual cannot give. Hence the State should expend enough money for children. The State has to perform its duty to invest in the people. Education can draw out the latent ability of the labouring class and improve their lifestyle. Furthermore the investment of human capital is closely connected with the will to raise the standard of life. Marshall considered the notion of human capital to be important for his theory of organic growth.

Marshall criticised the doctrine of the wage-fund; he thought that a rise in wages caused an increase in labour productivity. He considered the improvement of business ability and the rise of efficiency of the labourer to be important factors. Marshall was concerned about the vicious circle of poverty leading to poor health and poor education, leading in turn to low productivity and thus perpetuating low wages. However, any change that awards better earnings together with better opportunities of developing their best qualities, to the workers of one generation, will increase the material and moral advantage which they have the power to offer to their children. Marshall believed in a high-wage economy, as it would strengthen their physical and mental power and would improve those of their children too. Marshall thought that a high wage
economy leads to benefits for the labouring class and the entrepreneur. He analysed the high-wage economy not only from the labour point of view but also from the viewpoint of the entrepreneur. Moreover Marshall was cautious about advocating remedies for low wages. He thought that prompt action was needed to deal with the Residuum, so he proposed an administration of public aid to the helpless. Marshall paid attention to progressive taxation as a remedy for them.

Marshall's attitude to the position and function of trade unions changed from a favourable to be an ambivalent attitude which tended to be unfavourable. Marshall examined the process of the development of trade unions and wished unskilled labour to be included. Again he thought that trade unions caused the labouring class to improve their lives and as a result to advance all mankind. The significance of trade unions is also to improve the life and character of the labouring class. Trade unions' intentions are not only connected with raising wages, but also with increasing the standard of life. Moreover Marshall believed that the trade union movement played a great role in educating the labouring class. Marshall thought that even if trade unions succeeded in increasing wages through strikes, the damage caused by stopping production is so serious that neither the employer nor the employee benefit. As a result, a strike would not lead to increasing wages in the future. It seemed that Marshall always considered the trade unions from the point of view of increasing the national income.

Marshall had a deep interest in socialism but considered it from the viewpoint of aiming at a market economy. He sharply criticised anything which adversely affected the market mechanism. Marshall did not regard socialism as a suitable means of resolving the poverty of the labouring class. Again Marshall
was concerned about the dangers of collectivism. He regarded that collectivism would disturb the development of human nature and not increase productivity. Marshall thought that the socialist idea could not increase the standard of life.

Marshall introduced organisation as a fourth factor. Organic growth is connected with the organisation. Organisation is essential to produce organic growth. Organisation does not naturally exist from the beginning but is created. It is a result of economic activity and raises the efficiency of the interaction between labour and capital. The ability of the entrepreneur plays an important part in organisation. Marshall considered the organisation and ability of the entrepreneur to be important factors governing production.

Marshall emphasised the importance of the entrepreneur's leadership. In addition to business ability Marshall attached importance to the faculty of natural leadership of men. Marshall considered that business ability is strongly dependent on broad faculties which are not specific to any one trade. This is because if the entrepreneur lacks a particular specialised skill, he can find a subordinate who has expert ability. Marshall expected the entrepreneur to acquire leadership abilities and natural qualities in addition to specific abilities to manage the company.

The essential abilities of the entrepreneur is leadership, and an ability think comprehensively about the firm and market. The entrepreneur keep his mind fresh and clear for thinking out the most difficult and important problems of his business, for studying the broader movements of the markets, for considering the potential consequences of current events both at home and abroad, and for devising ways to improve the organisation of his internal and
Marshall regarded one of the roles of the entrepreneur to be that of co-ordinator of organisation. The entrepreneur's first task is to choose those who have ability and experience. The entrepreneur needs to co-ordinate the division of labour and responsibility.

The Principle of Substitution is one of Marshall's important entrepreneurial theories. The Principle of Substitution permeates all the economic adjustments of the modern world. The entrepreneur chooses and organises the factor of production as best he can. According to the Principle of Substitution, the entrepreneur continually sets to work to substitute the cheaper arrangement or process.

Marshall's world is one of disequilibrium; the real economy is always in a state of disequilibrium. Marshall's economics depends on consistency between theory and the real world. Marshall believed that the entrepreneur would look for a disequilibrium state and spot a gap in the market. Hence Marshall defined the entrepreneur as a middleman intervening between the manual worker and consumer. He regarded the production of utilities to be one of the activities of the entrepreneur. The entrepreneur requires the ability to forecast the general trends of production, to spot opportunities for supplying a new commodity that will meet a real want or to improve the method of producing an established commodity.

When information is not perfect, the market mechanism operating through competition is important. Marshall regarded the entrepreneur as a middleman able to spot a gap in the market by gathering information. Market is the place where entrepreneurial ability displayed, as it seeks out a state of
disequilibrium. The entrepreneur must have the ability to anticipate the future course of demand and taste, and of fluctuation of general economic prosperity. Through entrepreneurial activity, the producer has the opportunity to fully utilise the division of labour and machinery. Besides that he will also be able to provide the consumer with goods which convey a guarantee of quality.

Marshall defined the entrepreneur as an 'adventurer' or 'bearer' of risks. The entrepreneur is one who takes the risks and carries out the management of business as his share in the work of organised industry. The entrepreneur must be able to judge cautiously and undertake risks boldly. Business activity is accompanied by risks, so it is the role of the entrepreneur is to lessen the risks by spreading their incidence. Thus the entrepreneur must boldly undertake the risks and possess the foresight to judge correctly.

Marshall attached importance to organisation as related to knowledge. Knowledge is the most powerful engine of production. Knowledge and organisation are important constituents of capital. The entrepreneur will follow the beaten tracks but open out new and improved methods of business. However, the profit of monopoly will disappear in the long run. Thus Marshall places importance on knowledge assimilation in the organisation. If the entrepreneur assimilate technical knowledge and knowledge of market conditions, the organisation will produce an excess profit in the long run. For the excess profit will be distributed among the people who have connection with the organisation and it will continue as a composite quasi rent. Thus this process is important for the organic growth of economics.

Marshall introduced the concept of external economies which depend on the general development of the industry and of internal economies which depend
on the resources of the individual houses of business in it, on their organisation and the efficiency of their management. Marshall discussed the economy of skill, of other mental and physical excellencies, of invention, of machinery, of materials and so on. The entrepreneur has to use fully the potential for internal and external economies. These technological searches play an important part in economic growth.

The free market inevitably produces combinations, cartels and trusts. Marshall believed there is an element of monopoly in all competitive business. He disapproved of collusion as it disturbs economic development. However, Marshall's attitude towards cartels was somewhat ambivalent. Although he pointed out the advantage of combination, he proposed a situation in which the entrepreneur played an active part in the free market.

Marshall thought that Economic Chivalry was an important ethical factor in organic growth. He expected that this Economic Chivalry would diffuse among entrepreneurs. Marshall insisted that the employer should not seek just his profits but think of the employee's welfare, and the wellbeing and development of society. It is important for the employer to succeed in his business while thinking about the employee's wellbeing and social development. Marshall wanted the entrepreneur to have this ability. He thought that if the employer showed Economic Chivalry, it would help to raise the standard of life and solve the poverty of the labouring class. Economic Chivalry is an important element in entrepreneurship.

The supply of business ability may be discussed in connection with the forms of business management. These parts are discussed in the Appendix F. Marshall thought that a small-sized company has disadvantages of business
management. The small sized company cannot fully utilise economies of scale, but Marshall thought that the small sized company would make full use of entrepreneurship. The management form, private firms and joint-stock companies, co-operative societies and public co-operations, take a constantly increasing share in the management of business. They offer an attractive field to people who have good business abilities, but have not inherited any great business opportunities. Marshall thought that the ideal company was not a private company, but a private partnership. Marshall thought that private partnership had vitality and was capable of keeping up with a great variety of problems.

Marshall thought that joint-stock companies would take the place of private companies and joint-stock companies would continue to develop. They offered very large opportunities to men with ability for business management, who had not any material capital, or any business connection. The expansion of joint-stock companies has resulted in the general democratisation of ownership, as distinguished from the control of business. Marshall discussed the advantages of joint-stock companies but he also pointed that these were accompanied by disadvantages and limitations. The directors of a company could suffer loss of employment, which they share with other employees, but the shareholders bore the risks. The share holders who undertook the risks could not always judge whether the business was well managed. Marshall thought joint stock companies had a weak point which is in the separation between share holder and manager. Beside that, the joint stock companies tend to become larger scale, and this leads to bureaucracy. They seldom have the enterprise, the energy, the unity of purpose and the quickness of action of private business.

Marshall thought that co-operation was the ideal model of business
management. Co-operation has succeeded by utilising the higher abilities of many of the labouring class. Again co-operation can educate and utilise latent faculties of the labouring class. Marshall believed that co-operation will be able to remedy the evils of the present system. Co-operation works on ethical motives and the true co-operators combine a keen business intellect with a spirit full of an earnest faith, being all the time content with lower pay than they could have got as business managers on their own account or for a private firm. Marshall thought that the advance of co-operation was evidence that human nature was ready for considerable advances towards an organisation of industry on a plan more generous and under a less rigid cash-nexus than at present.

Marshall expected the entrepreneur to manage the organisation for organic growth. He analysed the various functions of the entrepreneur, and he wanted the entrepreneur to raise entrepreneurial ability. A rise in activity in by the entrepreneur caused economic growth which could distribute extra national dividend for the labouring class. Hence the labouring class also would increase its standard of life.

Marshall encouraged a circle in which an increased standard of life in the labouring class and entrepreneurship, led to high productivity thus perpetuating organic growth. Marshall regarded the entrepreneur and the labouring class as vital factors of production which caused organic growth. He introduced the organisation, and the entrepreneur, as key notions for organic growth.
Appendices

A. A Genealogy of the Entrepreneur

The definition of an entrepreneur which is neglected in economic theory will be clarified. The greatest economists in the past did not always have an economic theory which included the concept of an entrepreneur. Moreover, in modern economic theory, the concept of an entrepreneur was neglected because theories are centered around equilibrium. Equilibrium theory does not pay serious attention to the forces which move the market mechanism, it only pays attention to the outcome of such forces, resulting in the distribution of resources under perfect information. However, perfect information does not exist in the real world of markets. There is a significance to the market mechanism based on the principle of competition. It can be said that the role of the entrepreneur must lie behind the process of attaining the equilibrium of the market. The role of the entrepreneur is closely related to the market mechanism, and moves it. Thus the true role of the entrepreneur is to seek economic equilibrium. In the real world, there is much disequilibrium so the entrepreneur finds disequilibrium and changes it to equilibrium. The market system does not always guarantee the best distribution of resources. The degree of attainment depends on the inventiveness and energy of the entrepreneur who operates within the market system. The market is an experimental place where the entrepreneur will try his originality. The result of such tests always involves some risks. Any activity in the real world is strictly constrained by the imperfection of information, so the entrepreneur has to overcome uncertainty by his foresight and his ability to assume the risks. It is the entrepreneur
who combines the various factors of production by his initiative and competes using his ingenuity to raise the efficiency of the factor of production.

From the current view of the entrepreneur, the issue who the entrepreneur is and what he does will be clarified. First of all, the understanding of entrepreneurship in the intellectual prehistory of economics will be examined.

The term entrepreneur does not appear often in the prehistory of economics. It is a word of French origin that first appeared in the writing of Richard Cantillon (1680?–1734?), an eighteenth century businessman and financier. Cantillon is significant in this connection because he not only infused it with precise economic content but also gave the concept analytic prominence. He defined the word “entrepreneur” as one who undertakes a project, a manufacture, or is a master builder. A previous form of the word, “entrepreneur” appears as early as the fourteen century. Throughout the sixteenth and seventeenth centuries the most frequent usage of the term connoted a government contractor, usually of military fortifications or public works.¹

On the Essai sur la nature du commerce en général (1755), Cantillon referred to the function of the entrepreneur. Cantillon indicated the importance of the role of the market. The market was that of a selfregulating network of reciprocal exchange arrangements. His markets produced equilibrium prices, and the entrepreneur had a central role in effecting this result.²

Cantillon wrote:

“Prices are fixed by the proportion between the produce exposed for sale and the money offered for it; this takes place in the same spot, under the eyes of all the Villagers of different Villagers and
of the Merchants or Undertakers of the Town. When the price has been settled between a few the others follow without difficulty and so the Market-price of the day is determined.”

Cantillon explicitly recognised that entrepreneur is involved in both production and exchange. The entrepreneur is defined by Cantillon as the person who buys at a known price to sell at an uncertain price. Cantillon wrote that the entrepreneur was someone who had the foresight and willingness to assume risk and takes the action requisite to make profits. The entrepreneur is a risktaker with respect to the price at which he sells his goods or services. He searches out market signals concerning overall demand and supply conditions. Anybody who is willing to face uncertainty, is an entrepreneur and for such a person it may not necessary to own capital. Moreover, uncertainty is a fact of everyday life, and those who must deal with it continuously in their economic pursuits are entrepreneurs.

Cantillon’s view of the entrepreneur can be expressed as follows. It is the entrepreneur who faces uncertainty and has the foresight and willingness to assume economic risks. Cantillon’s contribution to describing the role of the entrepreneur is thus partly the risk-bearing theory of entrepreneurship. However, he did not separate the function of capitalist and entrepreneur. Indeed, according to Cantillon the entrepreneur embraces the function of a capitalist but is not a capitalist in the strict, pecuniary sense. The role of an entrepreneur using his own labour but without capital is very important because this idea takes us very close to the modern concept of human capital.

No French writer on economics produced anything of the calibre of Cantillon’s Essai until François Quesnay (1694-1774), founder of the
Physiocratic school, made his mark in economics with his *Tableau économique* (1758). Among French writers, the distinction between capitalist and entrepreneur was common until the Physiocrats introduced new shades of meaning to the term. Quesnay seemed to have been influenced to some extent by Cantillon. However he was unable to develop the theory of the entrepreneur further than Cantillon's. Quesnay did not use the term entrepreneur in any technical sense. He thought the operator of a large farm is an entrepreneur. He stressed the function of farmer-entrepreneur in providing capital, hiring other factors of production, and reinvesting his profits in improving agriculture. He merely referred to the operator of large firm as an entrepreneur who guides his enterprise with his intelligence and wealth and turns it to his own account his enterprise by his intelligence and wealth. Quesnay elaborated a full theory of entrepreneurship which contain many modern elements.

It was not Quesnay but his followers who developed a theory of entrepreneurship that contained many modern elements. The first of these physiocrats who helped advance the theory of entrepreneurship was Abbé Nicolas Baudeau (1730-1790). What he did was to place the agricultural entrepreneur in essentially the same position as Cantillon's risk bearer, then take the concept one step farther. His entrepreneur is clearly motivated by profits. He is a decision-making individual who bears risk because of the nature of his activities, but he also invents or innovates in order to reduce his costs thereby raise his profit. This second feature of entrepreneurship represents an advance over Cantillon's theory.

Where Baudeau went beyond Cantillon was in emphasising and analysing the significance of ability. Baudeau underscored the importance of "intelligence", 

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the entrepreneur’s need for knowledge and information. Therefore, his entrepreneur is an innovator, and he thinks progress is caused by innovation. It can be said that he attached importance to knowledge as he thought it would be adopted by alert entrepreneurs who would be spurred to action by the opportunity for profit. Therefore it have to pay serious consideration to Baudeau’s theory of entrepreneurship.

The work of Anne-Robert Jacques Turgot (1727-1781) will be considered. The difference in emphasis between Baudeau and Turgot seems to derive from the fact that each paid primary attention to a different branch of production. Turgot used the concept of the entrepreneur as the terminology in the industrial branch. Turgot wrote:

"Subdivision of the industrial stipendiary class into capitalist entrepreneur and ordinary workmen.

Thus the whole class which is engaged in meeting the different needs of society with the vast variety of industrial products finds itself, so to speak, subdivided into two orders: that of the entrepreneurs, manufacturers, and masters who are all possessor of large capitals which they turn to account by setting to work, through the medium of their advances, the second order, which consists of ordinary artisans who possess no property but their own hands, who advance nothing but their daily labour, and who receive no profit but their wages." 

His chief accomplishment was in mapping out the theory of an entrepreneurial economy. He assumed the entrepreneur to be a wealthy man who employed labour in a productive process either in agriculture or in
manufacturing. Independent workmen and artisans were thereby excluded from this category. In practice and in theory, Turgot did not distinguish between capitalist and entrepreneur. In contrast to Cantillon, Turgot considered that capital is a pre-requisite for the entrepreneur.

The nineteenth-century economist whose name more than any other, is identified with the entrepreneur is J.B.Say (1767-1832). "Say's theory of entrepreneurship is much closer to that of the Physiocrats to that of Cantillon. And yet it may justly be doubted whether the works of Turgot or Quesnay should be regarded as a source of Say's inspiration, precisely because of his fundamental opposition to their theories. True, Say had admiration for their advocacy of laissez-faire and, in particular, the economic policy of Turgot.  

He stressed is a principal agent of production, as his role is vital to production of useful goods. Say's theory of the entrepreneur begins with his division of human industry into three distinct operations. He wrote:

"The first step towards the attainment of any specific product, is the study of the laws and course of nature regarding that product. A lock could never have been constructed without a previous knowledge of the properties of iron, the method of extracting from the mine and refining the ore, as well as of mollifying and fashioning the metal.

The next step is application of this knowledge to an useful purpose: for instance, the conclusion, or conviction, that a particular form, communicated to the mental, will furnish the means of closing a door to all the wards, except to the possessor of the key.

The last step is the execution of the manual labour, suggested and pointed out by the two former operations; as for instance, the
forging, filing, and putting together of the different component parts of lock.”

The second step is the “entrepreneurial” function of Say’s theory. Say’s entrepreneurial role is the decision-maker in production. Therefore Say attached importance to the sound judgement of the entrepreneur. In Say’s view, although human industry requires all three operations mentioned above, it is the entrepreneur who is the catalyst. He recognised that in carrying out his function the entrepreneur frequently puts himself at risk, but this is not the main burden of his argument.

In the classical English school there is no distinction between the entrepreneur and the capitalist. Say wrote about the point as follows:

“We have seen how industry, capital and natural agents concur in production, each in its respective department; and we have likewise seen that these three sources are indispensable to the creation of products. It is not, however, absolutely necessary that they should all belong to the same individual.

An industrious person may lend his industry to another possessed of capital and land only.”

Say insisted that it has to be distinguish the function of the entrepreneur from that of capitalist. However, theoretically, Say saw no difficulty in separating the entrepreneurial function from the capitalist function, even though both functions could be, and often were, combined in the same person. The basic distinction was that the entrepreneur-manager was an expert at superintendence and administration, whereas the capitalist was a lender of money.
Next, Say's entrepreneurship is the function of gathering information in the market.

"Judgment, perseverance, and a knowledge of the world, as well as of business. He is called upon to estimate, with tolerable accuracy, the importance of the specific product, the probable amount of the demand, and the means of its production: at one time he must employ a great number of hands; at another, buy or order the raw material, collect labourers, find consumers, and give at all times a rigid attention to order and economy: in a word, he must possess the art of superintendence and administration."^{16}

Finally, Say's innovation function of the entrepreneurship will be discussed. Say thought that the entrepreneur gathers and accumulates the knowledge in the firm, and then that he will try the experience with the risks involved. Say wrote an innovation:

"I have said that the cultivator, the manufacture, the trader, make it their business to turn to profit the knowledge already acquired, and apply it to the satisfaction of human wants. I ought further to add, that they have need of knowledge of another kind, which can only be gained in the practical pursuit of their respective occupations, and may be called their technical skill. In the arts there is a certain sort of perfection, that results only from repeated trials, sometimes successful and sometimes the contrary."^{17}

Overall Say's entrepreneur is the person who was an industrial leader, bore risk and provided capital and information. Say directed attention to the entrepreneur's influence as a force of change in a dynamic economy. Therefore
Say though the entrepreneur a key person in the analysis of his economics. The French economists shewed the importance of the entrepreneur's role in their theory. They recognised the distinction between entrepreneur and capitalist.

Next, analogies of the role of the entrepreneur by English Classical School will be examined.

There were three commonly used English equivalents of the French term entrepreneur in the eighteenth century: "adventurer", "projector" and "undertaker". The first term was applied in the fifteenth century to merchants operating at some risk, and in the seventeenth century to land speculators, farmers, and those who directed certain public works projects. In the eighteenth century, the term adventurer gradually gave way to the more general term undertaker. This undertaker had become synonymous with an ordinary businessman. The term projector was equivalent to the other two in a fundamental sense, but it more often had the pejorative connotation of a cheat and a rogue. At first, "undertaker" simply meant someone who set out to do a job or complete a project, but its meaning eventually narrowed into the concept of government contractor, someone who, at his own financial risk, performed a task imposed on him by the government. The term was later extended to include those individuals who held exclusive franchises from the crown or the Parliament. Eventually the government connection was dropped, and the term simply came to designate someone involved in a risky project from which an uncertain profit might be derived. The economic meaning of the term undertaker eventually came to be replaced by the term capitalist.

In the Wealth of Nations (1776) Adam Smith (1723-1790) separated the function of projector from that of capitalist and stressed the fact that the
profits of the capitalist are different from the wages paid to the projector for
his management. He used the term "projector" or "undertaker" in English which
is equivalent to "entrepreneur" in French, but simply used these terms
synonymously with business projector.

Smith was one of the first economic writers to recognise innovation as
a professional activity, a view which was ahead of its time.

"The greatest improvement in the productive powers of labour,
and the greater part of skill, dexterity, and judgement with which it
is anywhere directed, or applied, seem to have been the effects of
division of labour."\(^2\)º

"Many improvements have been made by the ingenuity of the
makers of the machines, when to make them became the business of a
peculiar trade; and some by that of those who are called philosophers
or men of speculation, whose trade it is not to do anything, but to
observe everything; who, upon that account, are often capable of
combining together the power of most distant and dissimilar
objects."\(^2\)¹

He held that innovation is the product of the division of labour,
which in turn depends on the extent of the market. Therefore innovation appears
first in the market that is enlarged by cheap transportation. Opulence and
progress, accompany the division of labour, and with this progress the innovator
or inventor becomes more specialised, and the quantity of science is
considerably increased."\(^2\)²

R.F.Hébert and A.N.Link discussed only an innovative function of
entrepreneur on Adam Smith. However, there are capital supply and risk-bearing
functions in Smith's entrepreneur. Smith wrote:

"As soon as stock has accumulated in the hands of particular persons, some of them will naturally employ it in setting to work industrious people, whom they will supply with materials and subsistence, in order to make a profit by the sale of their work, or by what their labour adds to the value of the materials. In exchanging the complete manufacture either for money, for labour, or for other goods, over and above what may be sufficient to pay the price of the materials, and the wages of the workmen, something must be given for the profits of the undertaker of the work who hazards his stock in this adventure. The value which the workmen add to the materials, therefore, resolves itself in this case into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced. He could have no interest to employ them, unless he expected from the sale of their work something more than what was sufficient to replace his stock to him: and he could have no interest to employ a great stock rather than a small one, unless his profits were to bear some proportion to the extent of his stock."²³

Smith's entrepreneur is the subject of producing and selling by using his capital. In short, his entrepreneur is the capitalist-entrepreneur. Again Smith referred to the function of risk-bearing. Smith connected with the resources of entrepreneur's profits and risk-bearing. He thought that the profits are not merely wages of inspection and direction of the entrepreneur.²⁴ Profit is the compensation for the risk and trouble of employing the stock.²⁵

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The ordinary rate of profit always rises more or less with risk.\textsuperscript{26} Again, part of the profit naturally belongs to the borrower of the capital, who runs the risk and takes the trouble of employing it.\textsuperscript{27} Therefore Smith also made importance of the function of risk-bearing on his entrepreneur.

The entrepreneur’s function of Smith is innovation, capital supply and risk-bearing.

The work, \textit{On the Principles of Political Economy and Taxation} (1817), of David Ricardo (1772-1823) did not use the term entrepreneur, moreover no concept of business leaders as agents of change is embraced in his treatment of economic principles. Ricardo did not separate capitalist and entrepreneur; he had not got this idea from anybody. According to Héber and Link, Ricardo ‘assumed that the capitalist acts rationally in seeking to maximise profits but shed no light on nature of the trouble and risks involved in investing’.\textsuperscript{28} However, Ricardo also had discussed the risk-bearing function of a farmer and manufacturer in his \textit{Principles}. Ricardo wrote:

“The farmer and manufacturer can no more live without profit, than the labourer without wages. Their motive for accumulation will diminish with every diminution of profit, and will cease together when their profits are so low as not to afford them an adequate compensation for their trouble, and the risk which they must necessarily encounter in employing their capital productively.”\textsuperscript{29}

Ricardo discussed the merit of introducing and improving an agricultural tools. They enable us to obtain a produce with less labour.\textsuperscript{30} Furthermore, Ricardo introduced a chapter on machinery in the third edition (1821). In this chapter, he made clear his idea about the machine. Ricardo thought that the
entrepreneur was prepared to invest in machinery to earn the same income as before and to produce a smaller output. However, he recognised that the discovery and introduction of machinery was gradual and that it was likely to affect the employment of new capital rather than involve the conversion of existing circulating capital into fixed capital.\textsuperscript{31}

Ricardo wrote:

"To elucidate the principle, I have been supposing, that improved machinery is suddenly discovered, and extensively used; but the truth is, that these discoveries are gradual, and rather operate in determining the employment of the capital which is saved and accumulated, than in diverting capital from its actual employment."\textsuperscript{32}

Ricardo treated innovation as exogenous to the economic system. He regarded production and investment as the automatic processes which do not involve the decision maker. He admitted that the capitalist, who first introduces a new and original improvement — for example a new machine — can obtain the profits, but he did not get as far as discussing the fact that the ability to improve distinguishes the entrepreneur from the capitalist.

Ricardo saw political economy as a means to discover the general laws of society. For Ricardo, political economy was a science of law — laws of equilibrium and laws of progress.\textsuperscript{33}

Principles of Political Economy (1848) which was published by John Stuart Mill (1806-1873) spread the term entrepreneur among the English economist.\textsuperscript{34} Though he accepted Smith’s and Ricardo’s concept of the entrepreneur as a capitalist with a wide range abilities, Mill discussed the various function of the entrepreneur. He wrote:
The gross profits from capital, the gains returned to those who supply the funds for production, must suffice for these three purposes. They must afford a sufficient equivalent for abstinence, indemnity for risk, and remuneration for the labour and skill required for superintendence. These different compensation may be either paid to the same, or to different persons. The capital, or some part of it, may be borrowed: may belong to some one who does not undertake the risks or the trouble of business. In that case, the lender, or owner, is the person who practises the abstinence; and is remunerated for it by the interest paid to him, while the difference between the interest and the gross profits remunerates the exertions and risk of the undertaker.\

Mill thought that the entrepreneur had a risk-bearing function and a skill required for superintendence. In addition to this, Mill discussed the capital supplier's role of the entrepreneur. Mill attached importance to the managerial ability of the entrepreneur. Hence he discussed the superintendence function. He wrote:

"...... to carry on a great business successfully, requires a hundred things which, as they cannot be defined beforehand, it is impossible to convert into distinct and positive obligations. First and principally, it requires that the directing mind should be incessantly occupied with the subject; should be continually laying schemes by which greater profit may be obtained, or expense saved. This intensity of interest in the subject it is seldom to be expected that any one should feel, who is conducting a business as the hired
servant and for the profit of another."

'To exercise this control of the operation of industry with efficiency', the entrepreneur requires great assiduity, and often no ordinary skill. Therefore the entrepreneur have to be remunerated for this assiduity and skill.

Mill also discussed the entrepreneur and the industry organisation. He showed the importance of intellectual and active abilities as qualification of the entrepreneur in the organisation.

"Where the concerned is large, and can afford a remuneration sufficient to attract a class of candidates superior to the common average, it is possible to select for the general management, and for all the skilled employments of a subordinated kind, person of a degree of acquirement and cultivated intelligence which more than compensates for their inferior interest in the result."

Mill showed importance of skill and knowledge. He thought that they were amongst the elements which determine productivity. Mill's treatment of scale and organisation was strongly influenced by Charles Babbage (1792-1871) who was Lucasian Professor of Mathematics at Cambridge. As Babbage laboured to translate his designs for a computer into a workable machine, he undertook a tour of factories throughout England and the Continent in order to learn more about the practical problems of manufacturing mechanical parts. In this book, Babbage built upon one particular part of the Wealth of Nations - that dealing with the technology of industrial advance.

Furthermore, in the Fortnightly Review Mill compared with the innovation's motive power in the private property and Communism. He emphasised
the role of innovation of industry. Mill wrote:

"Communistic management would thus be, in all probability, less favourable than private management to that striking out of new path and making immediate sacrifices for distant and uncertain advantages, which, though seldom unattended with risk, is generally indispensable to great improvements in the economic condition of mankind, and even to keeping up the existing state in the face of a continual increase of the number of mouths to be fed."\(^2\)

Overall Mill discussed entrepreneur's function as the risk-bearer and the management of the organisation, capital supplier. He could not advance the entrepreneur theory of his economics more than other economist did.

The English variant of the old paradigm (Smith-Ricardo-Mill) tended to conflate the roles of capitalist and entrepreneur. Therefore they did not develop a separate theory of the entrepreneur.\(^3\) However, English Classical economists discussed some functions of the capitalist-entrepreneur. On Hébert \& Link's view of the entrepreneur theory they attached importance to distinction between capitalist and entrepreneur. Therefore they underestimated the English variant of old paradigm. Moreover they did not refer to McCulloch and Tooke who have discussed a distinction between the capitalist and the entrepreneur. According to D.P. O'Brien, they have distinguished the entrepreneur from capitalist.

O'Brien wrote:

"Profit was distinguished by the Classical economists from wages of management from Adam Smith onwards. It was identified by Smith as interest plus a risk premium, and he offered the rule of
thumb that the ruling rate of interest was about half the average rate of profit. Further clarification was supplied by Tooke, followed by McCulloch. They distinguished the following elements in gross profits: pure interest, payment for risk (McCulloch was particularly clear here that risk involved was of the non-insurable variety), wages of management, return to skill, and advantages of situation or connection. McCulloch also deducted rent of market position from pure profit."

The system of the form as a corporate body, which ascribes the role of capitalist to the stock-owner and the role of decision maker to manager / entrepreneur, was created some centuries ago. However, at that time the dealings on the English Stock Exchange were almost entirely limited to exchequer bonds and public utility stock. In the Industrial Revolution the firms were generally medium and small sized family companies, so share capital was held by the owner, and his relatives. Consequently, economists in the English Classical school could not clarify and distinguish the function of the entrepreneur.

This was undertaken by the later economists, principally by Alfred Marshall. Marshall's entrepreneur has a multiplicity of function, for instance middleman, risk-bearer and innovator. It is not until we can understand Marshall's theories that we can fully appreciate and comprehend the function of the entrepreneur. Therefore Marshall's conception of the entrepreneur will be studied in detail in chapter three.

Writing in 1982, Hebert and Link criticised Marshall, saying that Marshall's intellectual contributions on the topic of entrepreneurship did not match his legacy in other areas. they added that:

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"Aware of the writings of Cantillon and Say on the role of the entrepreneur as an important element within a well-conceived theory of economic progress, Marshall nevertheless opted for the more traditional English scenario of the entrepreneur (or more precisely the undertaker) as a multifaceted capitalist."^4^5

It can be said that they undervalued Alfred Marshall's concept of entrepreneurship. They did not adequately consider the positive aspects of Marshall's entrepreneurial theory. In addition they did not thoroughly understand the role of the entrepreneur as a manager who operates the organisation. According to B.F.Hoselitz, 'only with the more refined analysis of economic functions in a complex society which began after the middle of the nineteenth century and culminated in the Marshallian system was the entrepreneur rediscovered by English economists'.^4^6 Marshall understood that production is the creation of utilities. Therefore the entrepreneur produces the utilities. It can be also regarded the role of Marshall's entrepreneur as that of middleman. This idea of Marshall's entrepreneurship will be studied in chapter three.
B. Population migration and the problem of urbanisation

The growth in numbers of a people also depends on migration which is examined here. ‘In almost all countries there is constant migration towards the towns. The large towns and especially London absorb the best blood from the rest of England; the most enterprising the most highly gifted, those with the toughest physique and the strongest characters go there to find scope for their abilities’. However, not only especially able men but also many ordinary people migrated to towns of England, for the towns offered solution to those who could not find work and could not get married in their home area. The town become a place of refuge for them. Therefore ‘in some respects the mobility of the working classes was the greater than that of the well-to-do’. According to Marshall, ‘residence for many generations amid pollution air, with scarcely any sunshine and green fields, gradually lowers the physical constitution’. It is said that this deterioration is seen even in families who earn high wages and spend them well. The descendants of the dissolute are naturally weak, and especially those of the dissolute in large towns. Hence there are large numbers of people with poor physique and feeble will, with no enterprise, no courage, no hope, and scarcely any self-respect, whom misery drives to work for lower wages than the same work commands in the country. For instance Marshall showed that if their lives were devoid of joy, they would tend to drink for excitement; they would continue deteriorating; and if increasing numbers of their children attained adulthood the average physique and mortality of the coming generation would be lowered.

Consequently migration to towns caused many ill effects, in Marshall’s view. In addition rapid population growth has often been accompanied by
unhealthy and enervating life styles in overcrowded towns. Marshall viewed the relation of industrial expansion to social well-being as follows:

"A rapid growth of population has often been accompanied by unhealthy and enervating habits of life in overcrowded towns. And sometimes it has started badly, outrunning the material resources of the people, causing them with imperfect appliances to make excessive demands on the soil; and so to call forth the stern action of the law of diminishing return as regards raw produce, without having the power of minimising its effects. Having thus begun with poverty, an increase in numbers may go on to its too frequent consequences in that weakness of character which unfits a people for developing a highly organised industry." 

Rapid population growth also contributed to living conditions. A crowded district is impoverished by each person who adds new buildings or raises an old one higher. 'The lack of air and light, of peaceful repose out-of-doors for all ages and of healthy play for children, exhausts the energies of the best blood of England which is constantly flowing towards our large towns'.

Marshall proposed that the people of the towns be given an adequate provision of fresh air and healthy creation to retain the strength and increase the vigour of the race. If the strength and vigour of the race improves, the increase in numbers will not cause a diminution of the average real income of the people for a long time to come. Furthermore, Marshall wrote about the increase of population that:

"An increase of population accompanied by an equal increase in the material sources of enjoyment and aids to production is likely to
lead to a more than proportionate increase in the aggregate income of enjoyment of all kinds; provided firstly, an adequate supply of raw produce can be obtain without great difficulty, and secondly there is no such overcrowding as cause physical and moral vigour to be impaired by the want of fresh air and light and of healthy and joyous recreation for the young.\textsuperscript{52}

Marshall thought that public funds should be used to provide fresh air and healthy recreation facilities for children in all working class areas.\textsuperscript{53} Marshall wrote.

"I hold that the most important capital of a nation is that which is invested in the physical, mental, and moral nurture of its people. That is being recklessly wasted by the exclusion of, say some ten millions of the population from reasonable access to green spaces, where the young may play and the old may rest. To remedy this evil is, in my opinion, even more urgent than the provision of the old-age pension; and I wished the first change upon the rapidly-growing value of urban land to be a "Fresh Air" rate (or general tax) to be spent on breaking out small green spots in the midst of dense industrial districts, and on the preservation of large green areas between different towns and between different suburbs which are tending to coalesce. I thought that the gross amount of the Fresh Air rate or tax should be about ten millions a year, till we have cleared off the worst evils caused by many generations of cruel apathy and neglect.\textsuperscript{54}

In towns the cause of high land value was the density of population. This cause such a severe scarcity of fresh air and light and playroom that the
vigour and well-being of the rising generation was threatened. Great expenditure was needed to secure air and light and playroom; Marshall considered that the most appropriate source of such funds was private property rights over land.\(^5\)^\(^5\)

He thought a "fresh air rate" should be imposed on all town dwellers. He believed that this fresh air rate would not be a very heavy burden on property owners, for a good deal of it would be returned to them in the form of higher values for those building sites which remained. Moreover he thought rates should be graduated but no one should be exempted altogether.\(^5\)^\(^6\)

In addition to the 'Fresh air rate', Marshall proposed remodeling towns. He suggested:

"For instance, improvements which have recently been made in some American cities indicate that by a sufficient outlay of capital each house could be supplied with what it does require, and relieved of what it does not, much more effectively than now, so as to enable a large part of the population to live in towns and yet be free from many of the present evils of town life."\(^5\)^\(^7\)

He also thought that the State should provide public parks and playgrounds in large cities, the railways to increase the number of trains for workmen and help those of the working classes who are willing to leave the large towns to do so, and to take their industries with them.\(^5\)^\(^8\) Marshall pointed out the difficulties which would arise with railway nationalisation.\(^5\)^\(^9\) He did not direct state action to resolve the problems of the towns.\(^5\)^\(^0\)

Marshall wrote.

"Nearly all the schemes for enabling the poor to live better
in London tend to raise their self-respect as well as to make them more comfortable, and by so doing help them indirectly to live out of London. But such schemes, admirable as they are, require to be worked in conjunction with other schemes for directly helping the poor to move out.”

Furthermore Marshall discussed construction of railways for the suburbs.

“If railways and some at least of the employers will cooperate, the committees will be able to provide all whom the gradual improvement need drive out of London with healthy homes without separating them from their employment.”

At the beginning of nineteenth century, a lot of people had migrated to towns seeking the benefits they had to offer, and in particular the labouring class had moved to towns to find employment. However, the benefits had gradually declined and the harmful influence of the town had adversely affected the people. The main victim of this harmful influence was the labouring class which was in a disadvantaged position within society. Members of the labouring class spent the daily lives in poor living conditions. Moreover, their surroundings injured their health and reduced their strength. The following sentence summarised Marshall’s idea of urbanisation:

“But allowing vacant spaces to be built on recklessly we are committing a great blunder from a business point of view. For the sake of little material wealth we are wasting those energies which are the factors of production of all wealth: we are sacrificing those ends towards which material wealth is only a means.”

The deleterious effects extended to the children of the labouring class.
Therefore Marshall thought that the 'Fresh air rate or tax' was imposed on the people. He insisted that this tax rates should be graduated but no one wholly exempted.® For Marshall considered that we have to clear off the worst evils caused by many generations of cruel apathy and neglect. The most important capital in the nation is that which is invested in the physical, mental, and moral nurture of its people. For the sake of a little material wealth, those energies, which are the factors of production of all wealth, were being wasted. Those ends towards which material wealth is only a means were sacrificed. Therefore Marshall thought small green spots, the preservation of large green areas and play grounds for the children should be built using that tax. In short Marshall urged that the government to collect the new tax and return to the people and their children the equivalent of their payments in such benefits as would increase physical and mental health and vigour."
C. Human Capital

Marshall's notion of human capital was influenced by the work of Adam Smith.

"Pursuing the lines indicated by Adam Smith, and followed by most continental economists, we may define personal wealth so as to include all those energies, faculties, and habits which directly contribute to making people industrially efficient; together with those business connections and associations of any kind, which we have already reckoned as part of wealth in the narrower use of the term."\(^66\)

Marshall cited Adam Smith and endorsed his view that a man employment 'require extraordinary dexterity and skill, may be compared to one of those expensive machine'.\(^67\) Marshall thought that the older economists took too little account of the fact that human faculties are as important a means of production as any other kind of capital.\(^68\) However, McCulloch and J.S. Mill had in fact paid attention to human capital, they saw 'as a social investment which would increase economic growth through investment in human capital.'\(^69\) Marshall attached importance to the role of education in resolving poverty, and he expected the labouring class to accumulate human capital for their children as the education in the form of education. Marshall wrote:

"Just as a man who has borrowed money is bound to pay it back with interest, so a man is bound to give to his children an education better and more thorough than he has himself received."\(^70\)

In addition to that, the State also has to perform its duty to invest in the people.\(^71\) Marshall also wrote:

"In trust material welfare, as well as spiritual, will be the
lot of that country which, by public and private action, devotes its full energies to raising the standard of the culture of the people. The difference between the value of the labour of the educated man and that of the uneducated is, as a rule, many time greater than the difference between the cost of their education."^7^2

Let us now turn to the change in his treatment of human capital in the Principles of Economics. He altered drastically the definition of human capital in Book II, chapter four 'Income. Capital' in the fourth edition and withdrew it from the fifth edition. Therefore Marshall limited the sphere to which the term capital can be applied.^7^3 B.F.Kiker insisted that "the concept of human capital was somewhat prominent in economic thinking until Marshall discarded the notion as 'unrealistic'".^7^4 R.Blandy also criticised this idea. But, to say that Marshall discarded the notion of human capital as 'unrealistic' is to ignore both his explicit definitional scheme in early editions of the Principles of Economics and to ignore the substance of his work. Blandy insisted that the concept of human capital continued to treat improvements in the quality of human beings as capital investment in the Principles of Economics.^7^5 He thought that Marshall's problem with human capital was definitional, not conceptual, and Marshall used the notion extensively in the Principles of Economics to analyse the economic causes and effect of change in the quality of human beings.^7^6

Kiker agreed with Blandy argument that 'Marshall was interested in improvement in the quality of human beings; on occasion he treated such improvements as capital investment".^7^7 However, Kiker insisted that Marshall certainly made no significant contribution to the human capital literature. On the human capital there was a controversy between Kiker and Blandy. Marshall's
notion of human capital was the central point of his education theory, so we can not agree with Kiker's insistence. Therefore, we can concur with Blandy's discussion of human capital on Marshall but we can disagree his reason which Marshall deleted some passages of human wealth from fifth edition. For Marshall continued to attach greater importance to the notion of human capital from first edition to eighth edition. Marshall thought that the most valuable of all capital is that invested in human beings.\textsuperscript{78}

There is a general correspondence between the causes that govern the supply prices of material and of personal capital: the motives which induce a man to accumulate personal capital in his son's education, are similar to those which control his accumulation of material capital for his son.\textsuperscript{79} However, Marshall did not treat material capital and human capital as the same things. He defines material capital as that which is invested and collected by the same agency. In contrast, human capital is invested by a different agency from that which collected it. That is to say, in general parents invest capital and their children collect it. Before the introduction of pension systems, investment in their children played the role of pension provision. Since parents could directly receive benefit through support of aged parents by their children when they had become wage earners.

Marshall wrote:

"We meet the difficulty that whoever may incur the expense of investing capital in developing the abilities of workman, those abilities will be the property of the workman himself: and thus the virtue of those who have aided him must remain for the greater part its own reward."\textsuperscript{80}
There is a standard contrast between general and specific training; general training the worker takes with him when he change job but specific training yields benefits which can be captured by the investor, as employer. General and specific training of firm is closely related with a "composite quasi rent", so this topic will be discussed another chapter. Also human capital will take longer than material capital to recoup the original capital. Marshall commented about the period of time required to reap the results:

"For independently of the fact that in reaping and educating their children, parents are governed by motivates different from those which induce a capitalist undertaker to erect a new machine, the period over which the earning power extends is generally greater in the case of a man than of a machine; and therefore the circumstances by which the earnings are determined are less capable of being foreseen, and the adjustment of supply to demand is both slower and more imperfect. For though factories and houses, the main shafts of a mine and the embankment of railway, may have much longer lives than those of the men who made them; yet these are exceptions to the general rule.

Not much less than a generation elapses between the choice by parents of skilled trade for one of their children, and his reaping the full results of their choice."  

Therefore the investment of capital in the rearing and early training of the labouring class is limited by the forethought, their power of forecasting the future, by the altruism of his parents, their willingness to sacrifice themselves for the sake of their children.  

Blandy's note is critical of Kiker's claim that Marshall discarded the
idea of human capital as unrealistic. Blandy's comment is thought by the
present writer to be correct. However, it can not be concluded that Marshall's
hailed to perceive the full logic of his revisions.\footnote{83}

Marshall considered that the notion of human capital to be important for
his theory of organic growth, and that the investment of human capital is
closely connected with the will to raise the standard of life. If a labouring
class parent has this will, be realised the future, by selecting the best career
for his son, saving some money and investing in him. Therefore Marshall urged
the labouring class to adopt this attitude.
D. Wages

D-1. The doctrine of the wage-fund

The wage paid to the labouring class was decided by the productivity of labour. However, labour productivity was not fixed. When wage rises, the income of labouring class increases. If the labouring class uses its income not for the standard of comfort but rather for the standard of life, labour productivity will increase. Marshall wrote about the wage that:

"Wages tend to equal the net product of labour; its marginal productivity rules the demand-price for it; and, on the other side, wages tend to retain a close though indirect and intricate relation with the cost of rearing, training and sustaining the energy of efficient labour. The various elements of the problem mutually determine (in the sense of governing) one another; and incidentally this secures that supply-price and demand-price tend to equality: wages are not governed by demand-price nor supply-price, but by the whole set of causes which govern demand and supply."  

Marshall attached importance to the relationship between living expense and labour productivity. Marshall thought that a rise in wages caused an increase in labour productivity. This idea is thought to have been produced to criticise the doctrine of wage-fund. Marshall’s distribution theory stemmed from the work of J.S. Mill but was worked out fully only in the 1880's and owed a good deal to Von Thünen and F.A. Walker. However, it took him some time to free himself of wage fund analysis.

According to Whitaker, although Marshall lectured in 1869 on the analogy of laws of wages and rents, there is little indication of his groping
towards a general-productivity doctrine in the present essay, which can hardly have been written before 1870, as it refers to a book published in that year.\textsuperscript{86}

Marshall wrote in a letter to Prof. J.B.Clark as follows:

"I think I did so partially at least; for my acquaintance with economics commenced with reading Mill, while I was still earning my living by teaching Mathematics at Cambridge; and translating his doctrine into differential equation as far as they would go; and, as a rule, rejecting those which would not go. On that ground I rejected the wage-doctrine in Book II, which has a wage-fund flavour."\textsuperscript{87}

The time at which Marshall rejected the doctrine of wage fund was the same time as that of his reading Mill's Principles. 'The Essay on Value seems to be presupposed in both the Essay on Money, which Marshall dated at about 1871, and the Essay on Wages which represents a very early and crude stage of Marshall's thought. In all these Essays the only contemporary economist, beside Mill, who gets much notice is W.T.Thornton.'\textsuperscript{88} Marshall pointed out that false application of the supply and demand theory which gave rise to the wages fund theory from the controversy between Mill and Thornton.\textsuperscript{89} Marshall wrote the second edition's preface in the Economics of Industry which is a joint work with his wife. Marshall discussed 'there is but little in the careful exposition of it given by John Stuart Mill which is not, when properly interpreted, true as far as it goes'. Therefore Marshall thought that 'it seems necessary to go a good way apart from Mill with regard to one important question'. Mill never, 'worked out fully the applications of his own principles to the problem of Distribution: his last utterance on the question in his review of Thornton, in an unsatisfactory state. Hence Marshall made an attempt to supply the solution
In the *Economics of Industry*, the doctrine of wage-fund was discussed.

"The difference between the new doctrine and the old can be well illustrated by the case of immigration of labour into country. According to the old doctrine wages have to be paid out of wealth that has already been set apart as capital: and since the labourers will require some raw material and implements to work with, there must be an increase of Auxiliary capital, and therefore a diminution of Remuneratory; and therefore the total amount of wage got by the larger number of labourers must be less than that which has been got by the smaller. According to the new doctrine this result will not necessarily follow: indeed the opposite result is the more probable. For the increase in the supply of labour will increase the net produce of capital and labour, and therefore the Wages-and-profits Fund. The end method of stating the wages problem led working men to regard their wages as paid out of a fund of capital already stored up, the amount of which is, for the time at least, fixed independently of their exertions. The new doctrine shews how their wages depend not only on the capital which others have stored up, but also, and to a great extent, on the efficiency of their own work."

Professor S.M. Macvane criticised the authors' views in the *Economics of Industry* on the theory of distribution. He wrote:

"I must hold that the authors of the *Economics of Industry* have also fallen into error as to the method in which wages are determined. They proceed by first deducting rent and taxes from the whole product..."
of industry: the remainder they call the "Wages-and-Profits Fund." The task they set before themselves is to discover and explain the principles according to which this fund is "shared" or dividend into wages, interest, and earnings of management. It is, so far as concern wages, a process of eliminating or deducting from the whole product of industry the portions called rent, interest, and earnings of management, in order to discover how much remains for wages. It is to be said for the authors of the Economics of Industry that they do not mistake the statement of the problem for the solution of it. Their one serious error lies in not sufficiently regarding the element of time in their problem.”

A. Marshall replied thus:

"I admit that "the Wages-and-profits Fund" is not a good term. I adopted it as a catch-word, to indicate my opinion that wages and profits have their normal values determined by causes of the same general character. For that purpose, I retained the latter half of the old term wages-fund. But really what is meant is not a fund of stored up wealth sufficient to afford wages and profits for a fixed period, say a year: it is rather a flow of income to be distributed." In other words Marshall rejected the doctrine of a fixed wage-fund. He criticised the doctrine of wage-fund as follows:

"Reason will be shown for thinking that it [the Wage-fund] laid excessive stress on the side of demand for labour, to the neglect of the cause which govern its supply; and that it suggested a correlation between the stock of capital and the flow of wages, instead of the true
correlation between the flow of products of labour aided by capital and the flow of wages.”

It seems that the flow of products of labour aided by capital signify the flow of the national income. Moreover it is affected by the causes which governs the supply of labour. The national income is the flow of products of labour aided by capital, so it is affected by the accumulation of capital.

In the preface to the second edition of the Principles of Economics Marshall wrote:

“For the demand for the labour of the various grades of workers, and for that “service of waiting” by which capital is accumulated, all come from the aggregate National Dividend produced by those very agents of production (acting upon the free gifts of nature) and though they are always competing with one another for the field of employment, yet at the same time those agents provide for one another that field of employment. A rise in the efficiency of any one group of workers may tend to glut the market with their wares: but a general increases in the efficiency of all workers would increase the National Dividend, and raise earnings nearly in proportion. And thus the cost of production of labour cannot be determined as definitely as can that of a commodity; for the “conventional necessaries” of labour, as well as all superfluous comforts and luxuries are not a fixed sum, but depend on the efficiency of labour. The right means therefore to raise wages is to raise, not merely the Standard of Comfort or of wants, but the Standard of Life which includes activities as well as wants.”

On the one hand the various agents of production are often rivals for
employment; any one that is more efficient than another in proportion to its cost tends to be substituted for it, thus limiting the demand for the other. Though the agents are always competing with one another for the field of employment, yet at the same time the agents provide for one another that field of employment. This statement implies that the creation of the field of employment means raising the demand price. The dividend of the natural income rises according to increase in supply, causing increased demand and thus raising the price of demand.

Beside that, Marshall considered the improvement of business ability and the rise of efficiency of the labourer to be important factors. Therefore he attached importance to the rise of the wages of labour and progress of capital accumulation.

D-2. A minimum wage

Marshall treated the Residuum warm heartedly but strongly objected to outdoor relief. However he was not prepared to argue for its total abolition. Marshall defined Residuum who 'have little opportunity for friendship; they know nothing of the decencies and the quiet, and very little even of the unity of family life', 'cannot turn the system of economic freedom to good account'. In the same way 'Marshall was a firm believer in the economics of high wages, but he was cautious about advocating remedies for low wages'.

Marshall wrote:

“Prompt action is needed in regard to the large, though it may be hoped, now steadily diminishing, “Residuum” of person who are
physically, mentally, or morally incapable of doing a good day's work with which to earn a good day's wage."  

He thought that prompt action was needed to deal with the Residuum, so he proposed an administration of public aid to the helpless. Marshall also wrote about the minimum wage.

"... the proposal that a minimum wage should be fixed by authority of Government below which no man may work, and another below which no woman may work, has claimed the attention of students for a long while. If it could be made effective, its benefits would be so great that it might be gladly accepted, in spite of fear that it would lead to malingering and some other abuses; and that it would be used as a leverage for pressing for a rigid artificial standard of wages, in cases in which there was no exceptional justification for it."  

However he thought rigid national rules as to the minimum wages for men and women were to be deprecated. Therefore Marshall's attitude towards minimum wage is noncommittal. Marshall's idea about trade unions was examined in the chapter two.

Thus it seems that Marshall did not support a minimum wage. He wrote.

"He (The economist) must analyse the method which people are tempted to take for securing a high minimum wage, falsely called a living wage, in a particular trade; and trust must show which of them will have indirect effects that will cause to working men as a whole a loss greater than the benefit."  

Demands for a living wage received the support of the market-place, but if these demands had been met the result would have been to impoverish all.
Therefore Marshall wrote:

"There is popularity in doctrine of living wages; so we had better leave politicians to praise it and set ourselves to criticise it." 105
E. Socialism

Marshall had a deep interest in socialism but considered it from the viewpoint of aiming at a market economy. Therefore he sharply criticised anything which adversely affected the market mechanism. Again his ideas about socialism changed during his life.

First his definition of the socialism will be examined. Marshall wrote:

"We are told sometimes that everyone who strenuously endeavours to promote the social amelioration of the people is a Socialist at all events, if he believes that much of this work can be better performed by the State than by individual effort. In this sense nearly every economist of the present generation is a Socialist. In this sense I was a Socialist before I knew anything of economics."  

Furthermore Marshall wrote a letter to Lord Reay about the notion of Socialism and the State budget. He wrote:

"I do not know what "socialistic" means. The Times has just said that it means taking way property from individuals and giving it to the State. But the Budget proposes to take money: and if, £M150 have to be levied by taxation, the Budget, whatever its form, must be accordingly Socialistic to the extent of £M150, neither more or less.

My own notion of Socialism is that it is a movement for taking the responsibility for a man's life and work, as far as possible, off his shoulders and putting it on the State."  

Marshall's main concern was a resolution of poverty and an improvement of the labouring class' life, so it was necessary to increase the standard of life. Hence, Marshall thought that high wages and labouring class education

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would increase the standard of life and insisted that the state also has to play a positive role. For this reason, it seems that Marshall was in that sense a socialist.

In 1874 he contributed two articles to Bee-Hive (the socialist journal) sympathetically inclined towards socialism. In 1886, Marshall gave a lecture entitled “Socialism and the Function of Government”, consisting of extracts from several socialist writers. He told his students that ‘the socialist schemes are not ridiculous and are pooh-poohed only by those who know nothing of them’.

Marshall also agonised over the treatment of socialism like J.S.Mill. According to Lionel Robins, ‘the early Classical Economist were much too preoccupied with pushing their own reforms to regard the current socialism as anything but a side issue.’ ‘We have to wait until John Stuart Mill’s Principles, for a systematic discussion of socialist proposals.’ However, J.S.Mill never said that ‘the type of socialism he was discussing was ultimately workable or desirable.’ He thought that ‘socialism was an open question and that we had not yet the information which would enable us to judge’. Marshall also did not regard socialism as a suitable measure of resolving the poverty of labouring class.

In ‘Some Aspect of Competition’ (1890) Marshall wrote that all socialist schemes ‘seem to be visited by want of attention to the analysis which the economists of the modern age have made of the function of the entrepreneur of business/enterprise’. ‘They seem to think too much of competition as the exploiting of labour by capital, of poor by the wealthy, and poor little of it as the constant experiment by the ablest men for their respective tasks, each trying to discover a new way in which to attain some important end’.
Marshall attached importance to the function of the entrepreneur which was distinguished from that of capital. He thought that the entrepreneur's originality and invention would discover new methods, and that he would promote economic development.

'In earlier days, particularly between 1885 and 1990, Marshall was fond of asking working-men leaders to spend a week-end with him. Sometimes these visits would be fitted in with meeting of Social Discussion Society, which the visitors would address. In this way he came to know most of the leading cooperators and Trade Unionists of the past generation. He really sympathised with the Labour Movement and Socialism (just as J.S. Mill had) in every way except intellectually'. At first Marshall was influenced by Mill's essay on Socialism but in a letter to Helen Bosanquet, he wrote:

"And now that democratic economics are so much more popular than they were a generation ago; now that the benefits of socialistic and semi-socialistic action are so much more widely advertised, and its dangers so much underrated by the masses of the people, I think it is more important to dwell on the truths in Mill's Liberty than on those in his Essay on Socialism."

A socialist idea spread, Marshall grew increasingly fearful and correspondingly more outspoken in his condemnation of them. In the Economics and Industry, Marshall's change of attitude towards socialism emerged clearly.

"I developed a tendency to socialism; which was fortified later on by Mill's essays in the Fortnightly Review in 1879. Thus for more than a decade, I remained under the conviction that the suggestions, which are associated with the word "socialism", were the most important
subject of study, if not in the world, yet at all events for me. But the writings of socialists generally repelled me, almost as much as they attracted me; because they seemed far out of touch with realities: and, partly for that reason, I decided to say little on the matter, till I had thought much longer."

The next issue to be focussed on is collectivism. Marshall was very concerned about the dangers of collectivism. He regarded that collectivism would disturb the development of human nature and not increase productivity.

Marshall defied the collectivist as one who would transfer to the State the ownership and management of land, machinery, and all other agents of production. He also considered the relation between the collectivism and the human beings. Marshall wrote:

"I am convinced that, as soon as collectivist control had spread so far as to narrow considerably the field left for free enterprise, the pressure of bureaucratic method would impair not only the springs of material wealth, but also many of those higher qualities of human nature, the strengthening of which should be chief aim of social endeavour."

Moreover Marshall thought that the growth of bureaucratic rule, was hostile to the construction of the highest business ability. The collective ownership of the means of production would blunt the energies of mankind, and arrest economic progress and would probably destroy much that is beautiful and joyful in life. Marshall did not think that socialism and collectivism would increase production and increase the income of labourer. Marshall wrote:

"No socialistic scheme, yet advanced, seems to make adequate
provision for the maintenance of high enterprise, and individual strength of character; nor to promise a sufficiently rapid increase in the business plan and other material implements of production, to enable the real income of the manual labour classes to continue to increase as fast as they have done in the recent past, even if the total income of the country be shared equally by all."\(^\text{121}\)

Marshall thought that governmental interference in businesses which require constant inventiveness and innovation is danger to social progress, the more to be feared because it is insidious. Although government departments employ highly-paid professionals in engineering and other progressive industries, very few invention of any importance are made by them.\(^\text{122}\) Beside that Marshall thought that the scope for creative enterprise is further narrowed by needlessly intruding collective administration into industries in which incessant free initiative is needed for progress.\(^\text{123}\)

It seems that Marshall was an individualist and a liberal. Hence he considered socialism from a free market point of view. He believed the inequalities of wealth to be less than they were often represented to be, but nonetheless a serious flaw in British economic organisation. Thus he supported the reduction of these inequalities by any method that would not check initiative and strength of character and hinder the growth of the national dividend, considering such a reduction to be a clear social gain for the ultimate benefit of all.\(^\text{124}\) Marshall thought that socialism would lead to equality of distribution of wealth but not work effective by regarding production. Marshall wrote:

"I think that the chief dangers of Socialism lie not in its
tendency towards a more equal distribution of income, for I can see no harm in that, but in its sterilising influence on those mental activities which have gradually raised the world from barbarism, and have made the average English working man of today really richer than the average Englishman was not long ago."

Although Marshall was genuinely concerned with the alleviation of poverty, he did not believe that socialism had much to offer in this connection. He respected the hearts of socialists; but not their heads. Marshall thought that the socialist ideas could not increase the standard of life, which would remove poverty, and improve the labouring class' human nature. Furthermore, he thought that socialism would not give the people the hope, freedom and change which are the three necessities required for full efficiency. Marshall believed that economic chivalry could suppress adverse bad effects. Therefore Marshall wrote:

"It many other ways evil may be lessened by a wider understanding of the social possibilities of economic chivalry. A devotion to public well-being on the part of rich may do much, as enlightenment spreads, to help the tax-gatherer in turning the resources of the rich to high account in the service of the poor, and may remove the worst evils of poverty from the land."

Economic chivalry has been discussed in chapter three.
F. THE FORMS OF BUSINESS MANAGEMENT

F-1. The private partnership

'The supply of business ability may be discussed in connection with the forms of business management'. The effects of the entrepreneur on organisation will be discussed in this chapter. Again a relationship between the entrepreneur and the organisation will be examined. First of all, a small-sized company has a disadvantage of business management.

He wrote:

"The head of a large business can reserve all his strength for the broadest and most fundamental problems of his trade: he must indeed assure himself that his managers, clerks and foremen are the right men for their work, and are doing their work well; but beyond this need not trouble himself much about details. He can keep his mind fresh and clear for thinking out the most difficult and vital problems of his business; for studying the broader movements of the markets, the yet undeveloped results of current events at home and abroad; and for contriving how to improve the organisation of the internal and external relations of his business.

For much of this work the small employer has not the time if he has the ability; he cannot take so broad a survey of his trade, or look so far ahead; he must often be content to follow the lead of others. And he must spend much of his time on work that is below him; for if he is to succeed at all, his mind must be in some respects of a high quality, and must have a good deal of originating and organising
force; and yet he must do much routine work."\(^{129}\)

Again the small sized company was placed 'under a great disadvantage by the growing variety and expensiveness of machinery' and 'cannot often afford to experiment'.\(^{130}\) Marshall thought that the small sized company cannot fully utilise economies of scale. Then Marshall expected that entrepreneur in a small sized company would make full use of his abilities. He 'has to set his energy and flexibility, his industry and care for small details, against the broader economies of his rivals with their large capital, their higher specialisation of machinery and labour, and their large trade connection'.\(^{131}\) Marshall thought that the large sized company was not always superior in organisation which make use of entrepreneurship. His ideal organisation was a middle sized company.

Marshall wrote:

"There are but few exceptions to the rule, that large private firms, though far superior to public departments, are yet, in proportion to their size, no less inferior to private business of a moderate size in that energy and resource, that restlessness and inventive power, which lead to the striking out of new paths."\(^{132}\)

Furthermore Marshall referred to many advantages of a managed firm as controled with a single proprietor. Their organisation could make full use of the ability of employees.\(^{133}\) The management forms, 'private firms and joint-stock companies, co-operative societies and public corporations, are taking a constantly increasing share in the management of business'. They offer an attractive field to people who 'have good business abilities, but have not inherited any great business opportunities'.\(^{134}\)

The son of a business man has a good start but he does not form a caste,
because his abilities and taste are not always inherited. Marshall wrote:

"It is obvious that the son of a man already established in business starts with very great advantages over others. He has from his youth up special facilities for obtaining the knowledge and developing the faculties that are required in the management of his father's business: he learns quietly and almost unconsciously about men and manners in his father's trade and in those from which that trade buys and to which it sells; he gets to know the relative importance and the real significance of the various problems and anxieties which occupy his father's mind: and he acquires a technical knowledge of the processes and the machinery of the trade. . . . .

It would therefore at first sight seem likely that businessmen should constitute a sort of caste; dividing out among their sons the chief posts of command, and founding hereditary dynasties, which should rule certain branches of trade for many generations together. But the actual state of things is very different. For when a man has got together a great business, his descendants often fail, in spite of their great advantages, to develop the high abilities and the special turn of mind and temperament required for carrying it on with equal success."

The son of a business man has a good chance to acquire knowledge and ability from his father. However the actual state of things is very different. Hence in most cases the descendants of a business man conduct their company to bankruptcy by a short route. By mere assiduity and caution, availing themselves of the tradition of the firm, they may hold together for a long time. However
when a full generation has passed, the old traditions are no longer a safe
guide. Therefore into their business 'new blood must be brought in by some
method'.\textsuperscript{137} Marshall wrote about the method of private partnership.

"The oldest and simplest plan for renovating the energies of
a business is that of taking into partnership some of its ablest
employees. The autocratic owner and manager of a large manufacturing
or trading concern finds that, as years go on, he has to delegate more
and more responsibility to his chief subordinates; partly because the
work to be done is growing heavier, and partly because his own strength
is becoming less than it was. \\

But there are now, and there always have been, private
partnerships on more equal terms, two or more people of about equal
wealth and ability combining their resources for a large and difficult
understanding."\textsuperscript{138}

Marshall thought the ideal company was not private company, but a
private partnership. Marshall thought that 'private partnership was capable of
adapting itself to a great variety problems', so 'played a great part in the
past and it is full of vitality now'.\textsuperscript{139} Moreover, Marshall thought that the
representative firm is a private partnership which has attained a good
reputation of personal and individual character.

Marshall wrote:

"Not very long ago the representative firm in most industries
and trades was a private partnership; which in the course of one or two
generations had attained a goodly reputation, of a personal and
individual character. Its plant had become larger and more various,
until it commanded all, or nearly all, those economies of production on a large scale, that were inherent in the most advanced methods then known for its particular branch of business. · · · · each firm, though of moderate size, might reasonably hope to obtain most of the advantages in production, which would be accessible only to vast business, if each had been mainly dependent on its own resources. Under these conditions, a very large capital in the aggregate was distributed over many firms of moderate size, each with its own individual life, its own power of initiative, and its own personal relations with its employees. If any firm became slack in enterprise, or weak in purpose, it passed away and made room for others, with but little disturbance to the industrial organism; just as a forest tree, which has lost its vigour, passes and leaves an opening, through which some strong young plant may shoot up towards the light."

Marshall's ideal company was a small and medium sized and in these organisations the entrepreneur can make full use of his ability. Moreover Marshall thought private partnership had vitality and was capable of keeping up with a great variety of problems.

W-2 Joint-stock companies

'From the end of the Middle Ages to the present time there has been in some classes of trade a movement towards the substitution of joint-stock companies' for private companies." Marshall thought that joint-stock companies would take the place of private companies and would continue to develop.

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Joint-stock companies 'offer very large opportunities to men with ability for business management, who have not any material capital, or any business connection'. Hence, 'the expansion of joint stock companies has resulted in the general democratisation of ownership, as distinguished from the control, of business'. They have 'great elasticity and can expand themselves without limit when the work to which they have set themselves offers a wide scope; and they are gaining ground in nearly all directions'. The varieties of joint stock company organisation are numerous and fitfulness. Therefore joint stock companies have special advantages, many of which do not materially dwindle with age. They can utilise new ideas and new appliances that have been created by independent workers and they have special opportunities for the introduction of new blood into their management. The system of joint stock companies is rendered workable only by the modern growth of business morality.

As Marshall wrote:

"There is every reason to hope that the progress of trade morality will continue, aided in the future as it has been in the past, by a diminution of trade secrecy and by increased publicity in every form; and thus collective and democratic forms of business management may be able to extend themselves safely in many directions in which they have hitherto failed, and may far exceed the great services they already render in opening a large career to those who have no advantages of birth."

Joint stock companies have 'a positive advantage in ordinary banking and insurance', 'in most of the transport industries', because their unbounded commanded over capital gives them almost undisputed sway. Marshall discussed
the advantages of joint-stock companies but he also pointed that they are accompanied by disadvantages and limitations. 'The conversion of private business into a joint stock company, though occasionally inevitable and very frequently convenient to those immediately concerned, sometimes acts adversely to national prosperity and industrial leadership'.

Most of the work of management is divided between salaried directors, who hold a few stock, and salaried managers and other subordinate officials, most of whom have little or no capital of any kind. Therefore they do not undertake the risks, the share-holders bear them. As Marshall wrote about the share-holders.

"The ultimate undertakers of the risks incurred by a joint stock company are the shareholders; but as a rule they do not take much active part in engineering the business and controlling its general policy; and they take no part in superintending its detail. After the business has once got out of the hands of its original promoters, the control of it is left chiefly in the hands of Directors; who, if the company is a very large one, probably own but a very small proportion of its shares, while the greater part of them have not much technical knowledge of the work to be done. They are not generally expected to give their whole time to it; but they are supposed to bring wide general knowledge and sound judgement to bear on the broader problems of its policy; and at the same time to make sure that the 'Managers' of company are doing their work thoroughly."

The directors of company run no risks from its failure, beyond some loss of prestige, and a possible loss of employment, which they share with other employees; but the shareholders bear the risks. 'The private owner is more
diligent, more assiduous in attention to business, more intimately acquainted with all its details, and better trained for the position he fills, than are the directors of a joint stock company".\textsuperscript{151} Dealings in the securities of large companies tend in the direction of democratising the ownership of capital. The stock companies issue shares for very small values; so that an investor of limited means can increase his holding gradually as small savings are made; and he can obtain the advantage, formerly beyond his reach, of distributing his risks rather widely. In addition to this, Marshall thought the system of joint stock companies would suggest developments of economic organisation, which the new education and wealth of the working classes might possibly affect before long. Working-men often have exceptional opportunities for starting and controlling co-operative, co-partnership, and ordinary joint stock undertakings for work with which they are familiar.\textsuperscript{152}

The expansion of joint stock companies has resulted in the general democratisation of the ownership, as distinguished from the control, of business but there were some system problems with joint stock companies. The shareholders who undertake the risks can not always judge whether the business is well managed. In other words, the joint stock companies have one great source of weakness in the absence of any adequate knowledge of the business on the part of shareholders who undertake its chief risks.\textsuperscript{153}

Marshall wrote:

\begin{quote}
\ldots joint stock companies are hampered by internal frictions, and conflicts of interest between shareholders and debenture holders, between ordinary and preferred shareholders, and between all these and the directors; and by the need for an elaborate system of
\end{quote}
checks and counterchecks. They seldom have the enterprise, the energy, the unity of purpose and the quickness of action of a private business."\(^{154}\)

Marshall thought that in private companies the employer, who undertakes the risks himself, could not only provide the management of the business but could judge the work conditions of his subordinates. However, in joint stock companies no one had the authority, as well as the opportunities and the interest that might empower and impel them to make a careful study of the abilities and aptitude of each employee in the lower grades; but this was needed to direct those abilities and aptitudes to their most appropriate work and educate them in it.\(^{155}\)

The joint stock companies gave a chance to men with business ability who have no capital but Marshall thought the companies had a weak point which is in the separation between share holder and manager. Beside that, the joint stock companies tend to become larger scale, and this leads to bureaucracy. Hence Marshall thought that the joint stock companies ‘seldom have the enterprise, the energy, the unity of purpose and the quickness of action of private business’.\(^{156}\)

“A man of restless constructive force, who finds himself on such a Board, may urge a reorganisation of some parts of the procedure on more advanced lines, or for the scrapping of some plant that is no longer in the front rank: but he is not unlikely to appeal in vain, if the change would cause much trouble, suggest some criticism of past management, and be of such a nature that its ultimate pecuniary advantage cannot be proved with absolute certainty. As a separate

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business man he would make the venture; and, if he were a member of private firm, he might probably succeed in carrying his partners with him. But the vis inertiae of a great company is against him: he can seldom argue the case effectively with numerous scattered shareholders, who do not understand the business. He is therefore inclined to acquiesce, however unwillingly, in the general opinion, that a company, the ownership of whose capital is almost wholly in hands of public, must for the greater part adhere rather closely to routine."

The same thing can be said of the undertakings of central and local government. At first the democratic element in Governmental enterprise was almost wholly vivifying but experience shows creative ideas and experiments in business technique, and in business organisation, to be very rare in Governmental undertakings.

Marshall considered whether a co-operation system or the growth of Economic Chivalry would overcome the harmful effect of joint stock companies or governmental undertakings.

F-3. Co-operation

Marshall was drawn to co-operation by the influence of J.S. Mill as he showed in The Future of the Working Classes. Marshall served as the presidential address delivered on the occasion of the twenty-first Annual Co-operative Congress (1889) held at Ipswich.

Marshall believed that co-operation was the typical and most representative product of the age. Again he pointed out the case that some
co-operations had failed 'through engaging in unsuitable business'. Marshall discussed the Rochdale model of co-operation. He made a distinction between the strength and the limitations of co-operative trading.

Marshall wrote:

"...Englishmen have no liking for things controlled and drilled by a central government. What suits their character best is to have a broad and solid association based on many smaller associations, not controlling and directing them, not interfering with their freedom without absolute necessity, but acting as a common centre for help and advice; serving as a channel by which any member that is in special need may receive the aid of others, and taking perhaps an active part in administering aid and the wholesome advice by which it may perhaps have to be accompanied. It seems to me that the three great features of English social life, trade unions, provident societies, and co-operation, owe their success to adopting this plan. Broad-based, highly-organised freedom of action is characteristically English: and the true future of English co-operation lies, I am convinced, in adhering to these lines." "

Marshall thought that co-operation does not rapidly reform but gradually improves the moral and material condition of the labouring class. Moreover 'the co-operative faith is a belief in the beauty and nobility, the strength and efficiency of collective action'. In a business co-operation has succeeded by utilising the higher abilities of many of the labouring class, the undeveloped, the choked-up and wasted faculties for higher work, that for lack of opportunity have come to nothing. Hence, Marshall thought that
co-operation can educate and utilise the latent faculties of the labouring class. Again co-operation has 'a sufficient broad basis to be able to do this great work on a great scale'.

Marshall wrote:

"... the great evil of our present system, which it is one chief aim of co-operation -as I take it- to remove, lies in the fact that the hope and ambition by which men’s exertions are stimulated have in them too much that is selfish and too little that is unselfish."

Marshall believed that co-operation will be able to remedy the evils of the present system. Hence co-operation can use the latent ability of the labouring class. A development of the co-operation could be a means by which the labouring class would help themselves. Its strength would be a moral strength and rest on a broad basis of democracy and of equity. Marshall thought that co-operation was a democratic business system. Co-operation was the system which 'competition labour is hired by business ability in command of capital', and 'it may be hired by the business ability that lives in the heads that working men have on their shoulders'. Co-operation gives the labouring class a chance to get an important position. Moreover there are many cases in which the advice of a workman is of great use to a co-operative society, while the opportunity for giving it is a gain for him. Marshall thought that the vote which the labourer had for electing a representative had an educating effect. However he pointed out that the labourer had to make an effort in electing a representative to receive this educating effect.

Marshall wrote about co-operation in its ideal model.
“In that ideal form of co-operative society, for which many still fondly hope, but which as yet has been scantily realised in practice, a part or the whole of those shareholders who undertake the risks of the business are themselves employed by it. The employees, whether they contribute towards the material capital of the business or not, have a share in its profits, and some power of voting at the general meetings at which the broad lines of its policy are laid down, and the officers appointed who are too carry that policy into effect. They are thus the employers and masters of their own managers and foremen; they have fairly good means of judging whether the higher work of engineering the business is conducted honestly and efficiently, and they have the best possible opportunities for detecting any laxity or incompetence in its detailed administration. And lastly they render unnecessary some of the minor work of superintendence that is required in other establishments; for their own pecuniary interests and the pride they take in the success of their own business make each of them averse to any shirking of work either by himself or by his fellow-workmen.”

Co-operation has a special charm for those in whose tempers the social element is stronger. It works on ethical motives and the true co-operator combines a keen business intellect with a spirit full of an earnest faith, ‘being all the time content with lower pay than they could have got as business managers on their own account or for a private firm’. Marshall analysed the forms of the business management and regarded co-operation as the ideal form. He pointed out unsuccessful cases and the difficulties of co-operation but expected
that co-operation would spread among the people. Therefore Marshall expected an advance of co-operation and that a leader of co-operation would come into existence from the labouring class.

Marshall wrote:

'The fact that co-operation and profit-sharing have done much excellent work is evidence that human nature is ready for considerable advances towards an organisation of industry on a plan more generous and under a less rigid cash-nexus than at present. But the fact that progress on these lines has been less rapid and continuous than had been hoped by many, suggests that further movements in this direction must be cautious as well as resolute: that each advance must be well established and consolidated before making new calls on the chivalrous spirit that lies deep down in human nature and that the greatest error which reforms can make is to move so fast as to induce reaction.'

Marshall realised the limitation of co-operation and expected co-operation as a ideal form of business management. He thought that co-operation can advance the latent ability of the labouring class and give them a leadership position in the co-operation. Marshall thought that co-operation among highly educated people have to be tried. Again he believed that such co-operation can not but succeed. Hence Marshall thought that the leader need to get the ability of economic chivalry. Economic chivalry was examined in the chapter three.
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4. Ibid., p.51.
14. Ibid., p.71 (p.77)
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