Iranian Economic Review, Vol. 3, No. 3, 1998

THE LABOUR'S INCOME SHARE IN AN ISLAMIC FRAMEWORK: A PROPOSAL

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ABSTRACT

In standard discussions (capitalistic economy), business firms and the income distribution property of production factors are dealt with in a manner in which they are independent from each other, and there is no interaction as such between them. Furthermore, no role whatsoever is assumed for externalities. If we accept that there is interaction between production factors, and these factors, because of the existence of externalities affects each other, it is only natural to come to the conclusion that both the definition of business firm and the share of production factors should be changed. The proposal developed in this paper is based on this very important consideration.

The profits of Mudareb (in Mudarabah contract) has been used in this paper to cover more general issues, such as labor's income share in an Islamic system. The Mudareb's relative share might be justified on the grounds that he has the appropriate expertise, profession, so to speak. This justification can be extended to be applied to "labor" in general, be it in industry, services, and other economic activities. It seems that, it is not only the degree of expertise and skill which determine the labor's share, but also the interaction with other expertises which makes one qualified to

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share part of the profit. This interaction provides better results than the same of individual skills.

The application of the proposal not only increases output and hence the total revenue of a firm, but also helps keep the production cost at its lowest possible level. Furthermore, it leads one to look at a firm as an interacting body of different expertises.

Increase in efficiency together with low production costs are to the mutual benefits of both the workers and the firm. Furthermore, there would not only be zero monitoring cost, but also elimination of shirking while increasing the effort of the workers to the maximum level.

1. Introduction

In an interest free banking system, banks are, infact, suppliers of capital and not lenders as is stipulated in a traditional banking system. Therefore in Islamic banking, banks, after attending to the needs of firms or individuals by means of strengthening their financial capacities, can by selling their own shares in the stock market, easily accommodate other firms and individual's needs of capital. Thus, banks, in an Islamic banking system, with extremely large amount of financial resources at their disposal (namely deposits, internal resources composed of capital, assets, depreciation reserves, prudential reserves, undistributed profits, etc.) can effectively assist the Islamic society to achieve its goals and objectives.

One of the Islamic modes of finance which was expected to assume it's rightful role after the adoption of usury free banking law in Iran, and specially after the cessation of imposed war, was civil and legal participation contracts. The reason for this is that these two modes of finance are more conducive to meet the financial needs of firms and individuals in private sector than other modes of finance.

In this article, after providing a legal definition for participation, attempts are made to touch very briefly upon different definitions provided by economists as regards the word "capital". Then, ways and means to increase the profit share of banks within the framework of an interest free banking system would be discussed and explored.

It has to be noted that the proposed model in this article is primarily designed and developed to augment the profits of productive firms, taking in to account the fact that banks finance the bulk or the major part of the capital needed by firms, it is propsed that to safeguard the interests of society in general and depositors in particular in place, legal participation

contracts be also conducted and carried out within the framework of the same model. By implementing this model, banks will be in a position to add to their profits, and this process would be beneficial to Islamic society in general and depositors in particular. Furthermore, a solvent banking system which emerges as a result of the implementation of the model would be capable of rendering required help and assistance in situations and circumstances when their trouble shooting role is needed most by the economy.

2. The legal definition of partnership

In page 255 of the first volume of the book enetitled "sharayeul Islam" the partnership is defined as follows: partnership is the combination of the ownership rights which are belonged to in a two or more relationship to an object (thing) in the form of joint ownership. The subject of joint partnership could be property, object, usufruct, or unpecuniary rights, such as the right of retaliation (Ghesas). The cause of this partnership could be the institution of heritage of a contract ..... and when two properties are mixed in a way that do not separate from each other, partnership materializes, whether they are mixed deliberately and voluntarily or by factors and circumstances beyond the control of parties to the partnership (such as heritage) .... .

In page 256 of the said book reference is made to the profit and loss in a joint partnership. The concept is to the effect that, if capital is equally provided by parties to the partnership, the profit and loss will also be equally shared by them, but if the capital share of one party is in excess to the share of the other party, in that case the profit and loss share of the parties would be determined according to the size of the input of capital provided by each of the parties concerned .... and if a conditional clause is agreed upon to the effect that with equal capital participation, one party be entitled to more profits or with unequal share of capital, profits and loss be equally accrued to parties concerned, the conditions and arrangement are considered by some Islamic jurists, to be nul and void. (1)

3. Divergent views between economists and accountants as regards the definition of capital

Before embarking on a discussion regarding the different definition provided by economists for capital, it is worth to mention that there are wide and distinct differences between economic and accounting concepts as regards the capital. For example the word "cost" in accounting conveys the meaning of historical cost or book-keeping cost, regardless of whatever opportunity cost may be. On the other hand, in economics, "cost" is based on

the concept of opportunity cost and in fact is identical to replacement cost. Notwithstanding these different approaches, however, it is interesting to note that when economists speak of profit and its calculation methods, they clearly have accounting procedures and techniques at their disposal. Accountants, on the other hand, under the pressure of adverse effects of inflation which is an endemic and prevailing disease in capitalistic economies, are inclined to gradually replace the concept of "historical cost" by the concept of "opportunity cost".

Another concept which constitutes a source of conflict between the two is the concept of capital. According to accountants the capital of a firm is the registered capital, which in many cases, could be a very small fraction of the total assets of a firm. While economists do not share this view, they can not come to a unified definition for capital among themselves either. The immense divergent views between econimists are to the extent that it has been rightly pointed out that "if Western economists could agree on the concept and the theory of capital between themselves, they would easily come to a mutual understanding on other economic grounds". In my view this famous and well known statement is valid and drives its force from two sources: first, divergent views between economists themselves and second, disagreement with accountants on the concept of capital. The importance of the first source is to such that professor John Robinson, writes: (2)

"... The student of economic theory is taught to write Q=F (l,c) where L is quantity of labour, C is quantity of capital and Q rate of output of comodities. He is instructed to assume workers are alike, and to measure L in man-hour of labour; he is told something about the index number problem involving in choosing a unit of output; and then he is hurried on to the next question in the hope that he will forget to ask in what units C is measured. Before he does ask, he has become a professor, and so sloppy habits of thoughts are handed on from one generation to the next".

This statement clearly demonstrates the fact that economists do not have a common stand and a correct understanding of capital and they simply refer the answer from one generation to another.

Professor Harcourt on the same question, while confirming Robinson's view, refers to another delicate question. He writes: (3)

"... As Joan Robinson has stressed time and again, the argument has not really anything to do with the problem of measuring and valuing "capital", as opposed to the meaning of capital".

As could be deduced from the statement, Professor Harcourt, puts more emphasis and importance on the concept of capital than its measurement.

Irving Fisher defines "capital" as the average ratio of cost of capital to its future return. ($\bar{n}$)

In principle, the complexity which exists in relation to capital and it's definition, could be attributed to certain conceptual factors. The most important of these divergent or conflicting conceptual approaches are:

1. Money and capital are distinguish able concepts except by the length of time they are used. The former for one year or less and the latter for more than a year.

2. Capital is one of the factors of production. But working capital does not play a role in production function, despite it's importance.

3. Capital is a mixture of non-homogenous elements (namely different types of machineries,) which could not be aggregated.

4. It is not clear how to calculate the rate of profit? Should it be on the basis of registered capital, machineries, or assets of a firm? Some favor one over another and vice versa. Depending on the choice made, the results would be different.

5. As mentioned earlier, there is a wide difference of opinion among the economists as regards the concept of capital. What follows is a brief reflection of the views of some of the famous economists on the subject:

- Adam Smith puts emphasis on the economic development and the accumulation of capital. He divides capital into: fixed and working capital.

- David Ricardo, while following the approach of Smith, considers the capital as the funds which are spent for the employment of labour force. He, unlike Smith, believes that "durability" is the main feature of capital goods and the working capital.

- Jevons does not look upon capital as a factor af production which is independent from labour and land. In his view, the effects of capital and capital accumulation is quite distinct from trade or exchange relations.

-Bohm Bawerk is of the opinion that in the production of goods, the only factors involved are land and labour force. What capital does in the process of production is nothing more than acting as an intermediate to combine labour force and natural resources together for the purpose of producing nonconsumption intermediate goods.

-Clark distinguishes between capital and capital goods. In his opinion, capital goods are associated with the element of patience. In other words, patience and time element is an inherent property of capital goods. It is used for getting results from the labor force. Thus, the process needs time and patience, and on the contrary, capital as such, prevents patience to be instrumental. He unlike the Austrian school of Bohm Bawerk considers capital as an independent factor of production.

- Although Wicksell in the beginning had, to some extent, accepted the concept of average period of production and was considering himself to be belonged to Austrian school, eventually he relinquished the idea. In his

view, while the possibility of measuring the labor force and land by their own measurment units (such as man-hour of labor or acre of land) exists, capital should be measured only by its transaction value (money). In other words, all capital goods are measured by units which are independent and different from their own nature.

- Irving Fisher, by adding time element to his analysis of capital, puts the whole subject in a new perspective. He, by distingushing between a point in time and a period of time, has paved the way for clearly specifying what should be considered as capital. He has the defintion in a nutshell:

"Accumulated wealth which exists in all points in time is called capital and ensuing services in a period of time is revenue". Thus, in his wisdom, whatever creates revenue is capital.

- John Meynard Keynes, in his analysis, does not attempt to put forward a definition for capital. He has not tried to justify the profit either. As regards capital, Keynes is inclined to accept the pre-classical approach to capital. According to this approach, labour force is the main factor of production. He not only rejects capital as factor of production, but he also does not believe in its power of productivity as such.

To sum up, the theory which considers capital as an independent factor of production took some time to evolve and be adhered to by economists. The idea was launched first by Wicksell and Clark. What is the case now is that almost all Western economists hold the view that for the measurement of the aggregate capital, monetary units should be utilized (namely the price of comodities which constitute (represent) the accumulated wealth).

4. Proposed definition for capital and the criteria for its measurement

As mentioned earlier economists do not have a unified and common stand as regards to the definition of capital but, in my view, the definitions made by Wicksell, Clark and Fisher do contain merits and interesting points which could help the evolution and form of the new proposal which I am going to elaborate on. The gist of these points is the fact that, despite different interpretations regarding the definition of capital, all economists could agree to a unified and common stand as to the productivity function of the capital. A question which arises is: which type of capital is capable of discharging this task? Is really the registered capital (accounting approach) the only source of doing the job? Are machineries the only source of production? Other existing instruments and factors existing in a firm do not play any role in the process of production? The possibility of accepting one way or another is not ruled out, but what is important and has to be taken into account in any proposal of this type is the crucial role of the rate of profit yield of a firm, which is produced as a result of interaction of all

factors of production; not just "capital".

To provide a criterion for measurement of the efficiency of the management of a firm, accountants normally make use of different ratios. The numerators of these ratios are either gross profit, net profit or volume of sales, and the denominators could consist of different concepts which vary according to the objective concerned and could be comprised of capital or assets.

A cursory look at the balance sheet of a typical firm which is managed prudently and with maximum degree of efficiency reveals that, all assests, in its accounting, sense, of a firm are directly or indirectly involved in the production process. In other words, all assests contribute to the creation of an atmosphere which we call "the environment of production". The production of each comodity requires its own productive environment and this evnironment is created by the technical deployment or arrangement of all assests and other factors of production (including the labor) of a firm. This deployment of resources is in fact the driving force behind maximizing the volume of production, and hence, profits. This view suggests that capital, however defined, must be replaced by assets in the production function.

Taking into account these brief observations, we can define a firm as a complex or a mixture of assets and labor which are conducive to the creation of a particular environment for the purpose of the production of a particular kind of product. Needless to say, each new product or even a minimal change in production line would require its specific and corresponding new environment.

The assets are not merely the registered capital of a firm; if a capitalistic system meets it's financial needs by resorting to financial institutions (such as banks), this liability will also be included in the assets of a firm. In effect, all of the assets and not partial assets of firms are involved collectively in the process of production. What is at the stake is the proper combination of factors for the maximization of efficiency and the maximum of efficiency is secured by optimal deployment of factors involved which in turn is part and parcel of the production environment.

Since opportunity costs, in their economic sense, are bases of economic adjustments, the volume of net investment in two periods of time could be calculated on the basis of the difference between economic value of assets and the depreciation reserves in two periods concerned.

In view of the foregoing, and drawing on the definition put forward by Irving Fisher, one could define "capital" in its economic sense as follows: (7) it is the accumulation of wealth existed in any point of time, which through its own and specific deployment in any point of time produces goods and/or services, and total assests of a firm with due regard to the concept of

opportunity cost is the basic criterion for the measurement of the "capital" of a firm. Thus, the profit rate which is one of the most decisive factors in economic analysis, could therefore be defined as the ratio of net profit to the economic value of the "gross" assets of a firm. The word gross means including depreciation reserves; the reason for it's inclusion is that management for the purpose of producing a given product during specific period of time draws upon all production possibilities, including assets and their depreciation during the process of production.

The proposed definitions implies the following:

First, the divergence of opinions between accountants and econmists as regards the conceptual approaches to the definition is narrowed down to its minimal possible extent level.

Second, A clear and well defined measurement criterion for "capital" will evolve for all countries.

Third, The determination, and not the estimation, of the volume of "capital" would be based upon specific and well defined rules and the possibilties for personal judgements and discretionary attitudes are ruled out. In other words, at any point of time the respective figure for the volume of "capital" would correspond to the economic value of total assets of all firms within a country. Since in most countries firms are required to declare this figure for taxation purposes, therefore access to the aggregate figure for the total volume of the "capital" existing in a country is easily and readily possible.

5. Type of participations: (profit sharing arrangements) and the share of the labour force in business firms.

The controversy over the question of maximization of the profits of firms by encouraging workers to enhance and increase their efforts through profit sharing arrangements is not a new subject, but rather this topic is an old debate which has a long precedent in the economic literature. For example, J. Vanderlint in his book published in 1734 under the title "Money Answers All Things" writes: "higher wages are tantamount to higher efficiency". In another instance, Gregory Clark in his book entitled "Productivity Growth Without Technical Change; European Agriculture Before 1850" touches upon the question and holds the view that the higher levels of wages lead to the higher levels of production. On this very same question J. Schoenhof in his book, "The Economy of High Wages" states: the workers who are paid the most will acquire and at the same time yield highest degree of productivity. In another development, T. Scitovsky in a paper published in 1945, under the title "Some Consequences of The Habit of Judging Quality By Price" puts forward some important and interesting points as to the

relationship between the quality and the price.

Since the main theme of the present paper is to discuss and provide a mechanism capable of enhancing the productivity of labour and as a corollary to that, the augmentation of profits by means of encouraging the worker to engage themselves in more efforts (of course against higher level of earning), it is therefore advisable to first, have a cursory look at some of the theories, which have more or less devoted themselves to the same theme. For this purpose, we concentrate on two important and well known theories, namely : Japanese approach as outlined in the book "The Share Economy (1984)" and "Efficiency Wage Theory" as embodied in papers by Janet L. Yellen (1984) and J.E. Stiglitz (1987). The selection of these two papers (8) does not necessarily mean that all proposals have been exhausted, but on the contrary, there is considerable literature in this field and the reasons are still far from being perfect, and hence ideal, nevertheless are more comprehensive than the others.

5.1. Participation as outlined in "The share economy (conquering stagflation)"

In presenting the main characteristics of a capitalist society, Professor Weitzman, implicitly accepts that the capitalistic system is confronted with and suffering heavily from certain intrinsic and underlying problems which are built in the system; Specifically, stagflation. He admires Keynes for his attempts in clarifying that the Classical schcool is devoid of self- adjustment property and far behind the assertion of self securing full- employment in the economy. He has chosen the Japanese model and based his analyses on this model and its implications. The successful achievements resulted from the implementation of the model by Japanese people has been the main driving force behind the choice. As a general observation, it could be said that he exaggerates on the positive aspects of the model, and fails to recognize the influence of other important factors in bringing about such a success. Some of these factors could be outlined as: historical background, culture, traditions, the efficiency of the system as a whole, remarkable technological progress and developments, and the degree of effective contribution of workers and engineers to this technological growth.

In his presentation of the model he concentrates and puts emphasis on a payment transfer system by which workers are rewarded in addition to their initial wages. (9) This reward or additional payment is not contingent upon a prior agreement or a contract. It is also not bound to certain rules or regulations. Furthermore he considers this bonus system a suitable and desirable device or scheme for reducing the cost of labor in a recessionary period. Professor Weitzman, after introducing certain participation formulas

and arrangements which are equally important to him, concludes that the share economy is tailored and suitable for U.K and big companies in U.S.A. He looks upon the concept of share economy as any type of payment to workers which is in excess to their money wage. This payment is carried out by enterpreneur and under his sole discretion and free from being tied to any kind of rules or regulations. (P.80). He, in some instances, recommends per capita revenue and in other instances per capita profit as the proper criterion for profit sharing scheme (pages 82, 136, 137). Regardless of the criteria, participation in profits materializes when all expenses of a corporation are met and are set aside. These expenses are: taxes, reserves for the maintenance and the expansion of the firm, and dividends to shareholders (P.81). He also demonstrates in a proper manner, the impacts of the system on the marginal and average costs of labour curves. (pages 84, 85).

5.2. "The share economy" and the question of participation of o:some general remarks and observations

The model presented by Weitzman which tenets he has borrowed from the Japanese economy, is simply an immitation or reproduction of that economy in his model. What he intends to achieve is to enhance the workers income without changing the concept of business firm and entering in to the discussion of externalities and the interaction between production factors and as a result of that the increase in the aggregate demand. The model does not have anything to do with elaboration of the concept of "capital". Furthermore, he does not consider the profits emanating from labor participation.

To overcome these shortcomings and for rectifying the flaws mentiond, what is proposed in this article is a model which places emphasis on the important role of skilled manpower and considers this type of labour force as assistance to the managers. As stated earlier, capital is conducive to the creating of an atmosphere or an environment in which production is accomplished. Human resources, whether skilled or semi-skilled are part and parcel to this process and contribute effectively to that environment and its better functioning. Accordingly, there evolves a new concept for the business firm to the effect that the externalities associated with the factors of production and these factors will exert mutual effects on each other. This is a reality that hardly could be challenged. The important contribution of labour force to the creation of production environment, it's interation with other factors of production, and the question of compensation for such an important factor is in fact the main reason behind the proposal of participation of workers in the profit. In a system which is functioning under

market forces, (specifically perfect competition) no role whatsoever is assumed for externalities. Therefore, this factor which infact is the cause of participation and contributes so much to the participation concept is ignored and completely overlooked. Again, contrary to this system, the present article which is provided within the framework of Islamic economy puts due emphasis on exernalities and the important role which this factor plays in the economy in general and the concept of participation in particular. Therefore, it is only natural to see that externalities occupy a rightful position in the proposal.

In view of the above- mentiond comments and remarks, it becomes abundantly clear that the proposal put forward by professor Weitzman runs against the new interpretation of business firm. What is more surprising is the complete ignorance of the role of externalities in participation, and what is even more surprising is that he still proposes participation as a remedy to overcome stagflation in a capitalist system. In this connection, it is worthwhile to mention that he has added the phrase "conquering stagflation" to the title of his book to show that implementation of his proposal will erradicate stagflation, and by doing so the capitalist system will be secured and saved.

As regards the flaws and deficiencies of the proposal put forward by Weitzman, raising certain observations and points are in order:

- He has rightly accepted that a capitalistic economy suffers from stagflation. This phenomenon is inherent in the system and is a very unfortunate reality which is more or less common to almost all capitalist systems.

- Contrary to his claim that the wage payment system is responsible for stagflation, (pages 106, 108, 138,) it has to be stated that the real factors which give impetus to stagflation are rooted elsewhere. While no one can deny the fact that payments to workers as suggested by him, would improve the distribution pattern of income and wealth and the results gained would increase the aggregate demand and to some extent would lower the level of unemployment, we should not lose sight of the fact that the money market and interest rate which are present in his proposal are detrimental to proper fuctioning of capital.

The analyses contained in the standard text books, which discuss the capitalist school of thought fully substantiate this. According to these analyses, the optimum level of capital is determined at a point in which the marginal efficiency of capital becomes equal to the interest rate, and decause of this, the curve of production is downward sloping. Therefore, as long as this curve does not reach to the zero point, the gap would persist. Thus, the amount of capital which could have been otherwise utilized for

the employment of labor (as a supplementary factor of production) would be directed to and absorbed by the money market. Consequently, the volume of savings always would exceed investments, and as a result of this process, stagflation and unemployment would sustain.

- The interest rate which is the underlying factor in the money market, is the basis of money in traditional banking. Thus, so long as interest rate and money market exist, banks can create money and inflation would persist, (contrary to what is expressed by Professor Weitzman in pages 111- 113- 138 of his book). In the light of what was mentioned, the proposed remedies by Weitzman to fight stagflation in a capitalist system such as the one prevailing in the U.S.A. are not effective as long as money market and interest rate prevail. The only pending question which remains to be answered is: Are the successful economic achievements of Japan, specifically after the second world war, were due to the application and implementation of this system of transfer to the workers? The answer is a flat no. The reasons are:

First, as has been demonstrated in an article enlled "Cost of Capital Cripples American Industries", the cost of capital in Japan is far behind the one, which is the case in U.S.A.

Second, the rate of growth of technology and the factors which constitute the procuction function coefficient are admirably high in Japan, which in turn diminishes the rate of unemployment. Furthermore, as a result of the implementation of policies such as involving workers in the activities of firms, the aggregate demand is high and the rate of unemployment is low in Japan.

5.3. Efficiency wage theory; an overview. (10)

According to efficiency wage theory, payment of wages higher than that of the prevailing competitive wage, by preventing shirking on the jobs, increases the productivity of the workers. The goal is labor efficiency and to attract better workers and eventually to increase profits of the firm. Despite merits associated with the theory, nevertheless it suffers from an important shortcoming which even undermined its credibility. This liability of the theory is the fact that there always exists some level of unemployment in efficiency wage models and these models are unable to solve this problem.

In effect, efficiency wage theory makes certain extensions to the competitive labour market as propounded in the standard text books. Other theories attribute labour productivity to the workers abilities and invested capital of firms. The efficiency wage theory adds a new dimension to what has been recognized by earlier theories. It puts emphasis on the important role of wage in the productivity of labor. In other words, according to this theory labor productivity also depends on the wage rate paid.

The explanations which had been given for this kind of linkage vary from developing to developed countries. In developing countries, nutritional reasons provide the answer. Better paid workers are healthier and therefore can make a high amount of effort and work harder. Although this logic and reasoning justifies the existence of causulity relationship between wage and productivity in developing countries, it does not work for developed countries, because nutritional considerations are not so much at stake in these countries.

Economists for substantiating the application of the efficiency wage theory to the developed countries have developed certain models called "shirking models". In these models, because monitoring workers is costly, it is assumed that firms have imperfect information regarding workers productivity. Therefore, in these models all workers earn the same wage regardless or irrespective of their productivity which is also assumed to be equal.

Based on these assumptions, workers are free to choose to work productively or shirk, and since information about their effort is not readily and easily available, because of shirking, they might not get fired. In other words, there is no firing as a result of slacking off or shirking.

To demonstrate how the model works, the excellent explanation given in Microeconomics, R.S. Pindyck & K. L. Rubinfeld, Macmillan Publishing CO., N.Y. 1989 is literally reproduced as follows:

The model works as follows. If a firm pays its workers the market clearing wage W^*, they have an incentive to shirk. Even if they get caught and are fired (and they might not be), they can immediately get hired somewhere else for the same wage. In this situation, the threat of being fired does not impose a cost on workers, so they have no incentive to be productive. As an incentive not to shirk, a firm must offer workers a higher wage. At this higher wage, workers who are fired for shirking will have to face a decrease in wages if they get hired by another firm at W^*. If the difference in wages is large enough, workers will be induced to be productive, and this firm will not have a problem with shirking. The wage at which no shirking occurs is the efficiency wage.

Up to this point, we have looked at only one firm. But all firms face the problem of shirking. This means that all firms will offer wages greater than the market clearing wage W^*, say, We (efficiency wage). Does this remove the incentive for workers not to shirk, because they will be hired at the wage by other firms if they get fired? No, because all firms are offering wages greater than W^*, the demand for labor is less than the market- clearing quantity, and there is unemployment. This means that workers fired for shirking will face a spell of unemployment before earning we at another

firm.

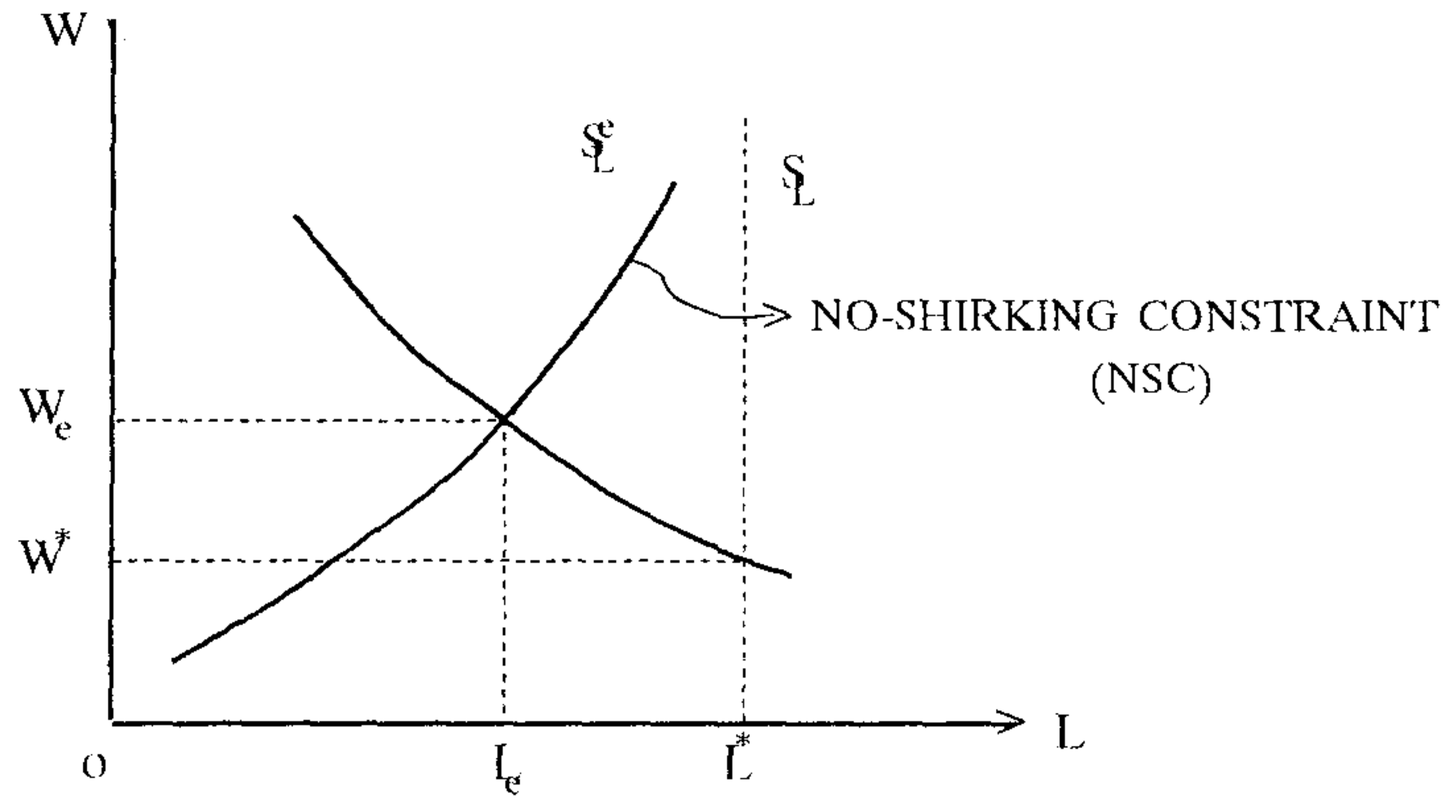

FIGURE (1) Unemployment in a Shirking Model

Unemployment can arise in other labor markets when employment cannot accurately monitor workers. In the figure the "no shirking constraint" gives the wage necessary to keep workers from shirking on the job. The firm hires the workers (at a higher than competitive efficiency wage we), creating L^* - Le of unemployment.

The Figure (1) shows shirking in the labor market. The demand for labor DL is downward- sloping for the traditional reasons. If there were no shirking, the intersection of DL with the supply of labor (SL) would set the market wage at W^* and full employment would result (L^*). With shirking, however, individual firms are unwilling to pay W^*. Rather, for every level of unemployment in the labor market, firms need to pay some wage greater than W^* to induce workers to be productive. This wage is shown as the no shirking constraint (NSC) curve. This curve shows the minimum wage workers need to earn in order not to shirk, for each level of unemployment. Note that the greater the level of unemployment, the smaller the difference between the efficiency wage and W^*. This is because with high levels of unemployment, people who shirk risk long periods of unemployment and therefore don't need much inducement to be productive.

In the Figure (1) the equilibrium wage be at the interesection of the NSC curve and DL curves, with Le workers earning we. This is because the NSC curve gives the lowest wage that firms can pay and still avoid shirking. Firms do not need to pay more than this to get the number of workers they need, and they will not pay less than this because of shirking. Note that NSC curve never crosses the labor supply curve. This means that there will always

be some unemployment in equilibrium.

One of the early examples of the payment of efficiency wages can be found in the history of Ford, one of America's major automobile producers. Before, 1913 automobile production had depended on skilled workers. But the introduction of the assembly line drastically changed the workplace. New jobs demanded much less skill, and production depended more and more on maintaining the assembly line equipment. As the automobile plants changed, workers became increasingly disenchanted. In 1913, turnover at Ford was 380 percent. The following year, it rose to 1000 percent, and profit margins fell sharply.

Ford needed to maintain a stable work force, and Henry Ford (and his business partner James Couzens) provided it. In 1914, when the going wage for a day's work in industry averaged between $2.00 and $3.00 Ford Motor Company introduced a pay policy of $5.00 a day for its workers. Improved labor efficiency (not generosity) was behind this policy. The goal was to attract better workers who would stay with their jobs, and eventually to increase profits.

Although Henry Ford was criticized for it, this policy succeeded. The work force did become more stable, and the publicity helped Ford's sales. And because Henry Ford had his pick of workers, he could hire a group that was on average more productive. Ford stated that wage increase did in fact increase the loyalty and personal efficiency of his workers, and quantitative estimates support his statements. According to calculations by Ford's chief of labor relations, productivity increased by 51 percent. Another study concluded that absenteeism had been halved, and discharges for cause had declined sharply. So the efficiency increase more than offset the increase in wages. As a result, Ford's profitability rose substantially: from $30 million in 1914 to $60 million in 1916.

6. The proposed model for profit sharing based on equity and externalities considerations

In previous pages we considered the two main models regarding profit sharing payments arrangements. In this respect, we discussed bonus arrangements and the efficiency wage model. We also referred to the shortcomings of the two arrangements and schemes. In order to have a more plausible and better model, devoid of all or at least some of the failures inherent in similar models, attempts are made to develop the present model. In approaching the model, it has to be borne in mind that it is strictly based and built on the Islamic principles. Before introducing the model, a reference to the salient interpretations of the author regarding Islamic economy is in order.

6.1. Islamic economy: An intrpretation

Islamic economy is full of teachings and rules which consider the existence and importance of externalities. What God Almighty orders us to do as to the merits of benevolency, or sayings of our prophet (P.B.U.H.) such as "The best people are those who provide the most benefits to the society". Are among the numerous examples which fully substantiate the fact.

Another important factor which has to be taken into account in studying the Islamic economy is having a proper understanding of the word "Adle or qest". This word which means "equity" plays a distinct role in the concepts related to Islamic economy. What is meant by this word is to put things in their right position and order of preference. Morteza Mottahari gives following interpretations for equity:

- First: to be balanced.
- Second: equality and devoid of any form of discriminations.
- Third: to give people what they really deserve to receive (paying system on the basis of merits).

The two main conceptual principles of the proposed model are inspried by those two latter interpretations. The two main principles of the model are:

- First: whenever externalities exist, it is necessary to decide collectively, so that individuals be persuaded to pay due attention to commmon (public) rather than individual interests. So that individuals get used to prefering common (public) interests to individual interests.
- Second: for outlining the second principle, it is worthwhile to come back to what was said earlier as to the definition of "capital", and its role in creating the production environment. In my view, in addition to the assets of a firm which contribute to the creation of such an environment, special type of labour force i.e. skilled and semi- skilled labour is also influential in creation of this atmosphere. These elements, namely assets and skilled and semiskilled labour force, are intertwined in such a way in the framework of this environment that they could not be separated from each other. In the framework of this environment, therefore, the existence of externalities justifies the participation of the workers in the profits of the firm. In mudarabed, mudared is entiled to the share of profit, because of the fact that the labor force provided in this mode of finance is a skilled one. Unskilled labor is not entitled to any share of profit and it is simply used by the hiring mechanism. Therefore, the person who provides unskilled labor is entitled only to the corresponding wage. In other words, the profit share accruing to mudared is justified only on the basis of the fact that in mudarabah the mudareb uses skilled labor and enterpreneurship in the

business involved. In the proposal contained in this article, the abovementioned principle has been generalized.

According to this model, skilled and Semi- skilled workers whose work is not physical only, but could be of help and assistance to the management of a business firm are also considered to be influencial in the profit creation process of the firm, and hence entitled to their respective share of the profit. After this very brief comment, time is ripe now to turn to the second principle. As follows:

Externalities emanated as a result of the application of skilled and semi-skilled man power and the utilization of the total assets of firms, give reasons to believe that according to the definition of equity these factors be entitled to their deserved profits according to their shares and contributions.

After these introductory remarks, we now try to present the model. By definition, the unskilled labour force does not play a decisive role in the process of production, therefore it recives a wage which is capable of meeting only the subsistence needs of life.

Therefore $\pi \leq 0 \Rightarrow \beta_s = 0$. In other words workers are not responsible in the losses of the business firms and they only receive hgher wages. This wage which is not entitled to any share in the profit is denoted by $\bar{W}$, in the model. Contrary to unskilled workers, skilled and semi- skilled workers are entitled to participation profits according to their respective share of skill, which is shown by (S). Accordingly, we can write:

(I) $W_s = \bar{W} + \beta S.II$

$S = 0, 0.1, 0.1, 0.2, ..., 1$

$S = 0 \Rightarrow \beta \quad S = 0$

Where:

S = Level of skill

II = profit of the firm

W_s = wage of a worker with the degree of skill equal to S.

If "S" equal to = 0 therefore βS would be equal to zero, which means that the worker is unskilled and is not entitled to any share from the profit and accordingly his wage would be equal to $\bar{W}$ which is capable only to meet the subsistence requirements of life. The greater the degree of skill, the greater would be the respective labour force's share in the profit. Therefore we can write:

(2) $\beta S = F(SL)$

where:

SL = skill level

Figure (2) represents this relationship. Needless to say that, the more the categories of skilled workers in firm, the SL curve would become closer to the shape of figure 2.

Figure 3 represents a situation in which there are three skilled and one un-skilled workers present in a firm.

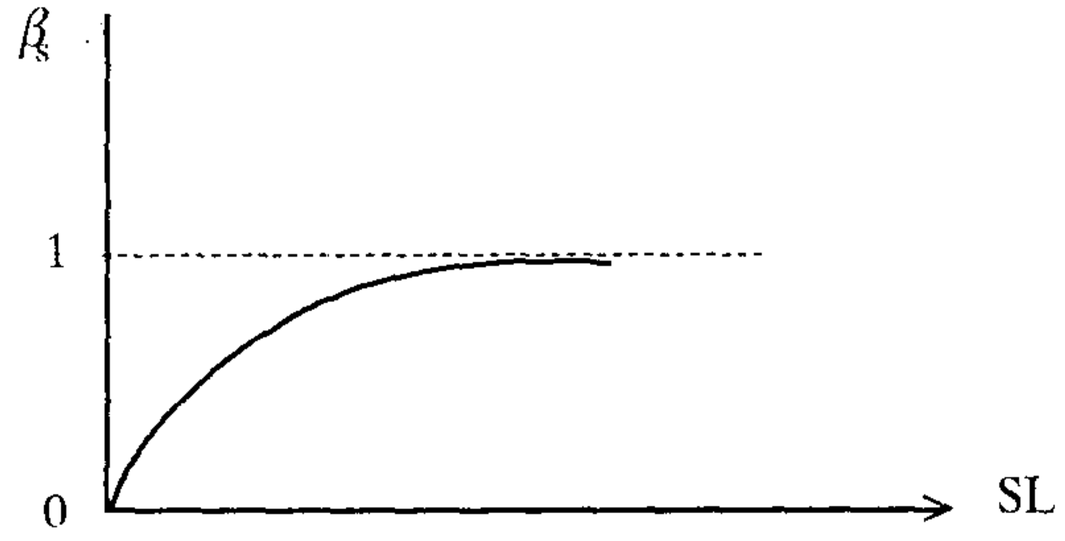

Fig. (2): Relationship between skill and profit share assuming numerous skills (continuous case)

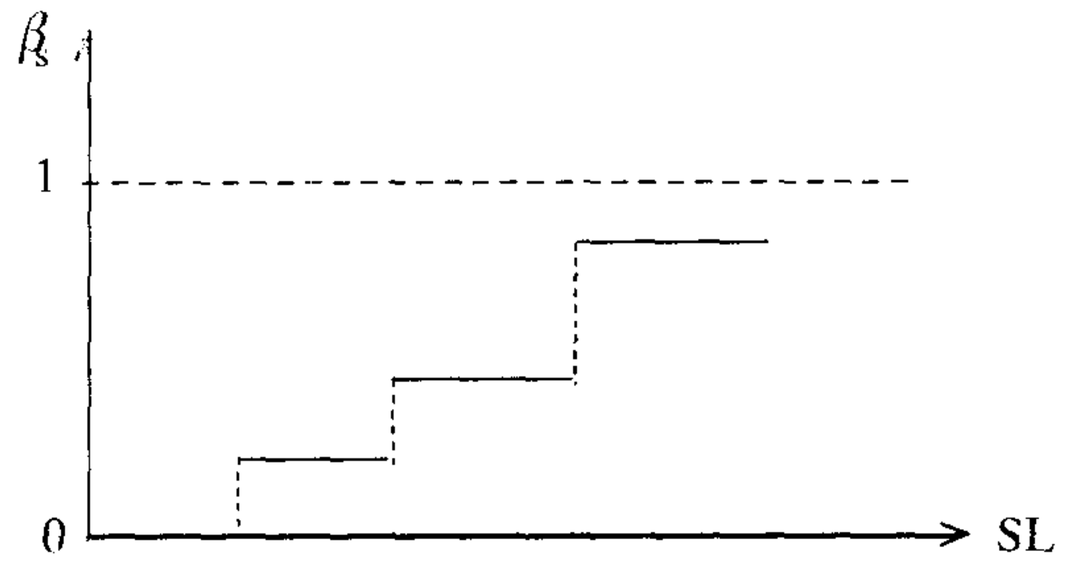

Fig. (3): Relationship between skill and profit share assuming three skilled and one unskilled calss of labor (discrete case).

6.2. A Detailed description of the model and its merits compared to other models

The main positive aspects of the present model which other models are lacking are as follows:

1- Unlike the two models which lack formidable theoretical foundation or justification, the proposed model is based on a clear- cut theoretical concept which is embeded in the two above mentioned principles.

2- In the model contained in the book "The Share Economy" it is naively suggested that the successful economic achievements of Japan could constitute a good example to follow. It is also indicated that the expericence of Japan is a requisite and at the same time a sufficient condition for success. What is also surprising is the fact that in the model, the role of other economic, social, and cultural factors is totally ignored.

3- The Efficiency Wage Theory and the model therein provides short

term solutions, and is not capable of creating sustainable long- term incentives for higher attempts by workers. This is probably because of the weak theoretical basis of the model.

4- Contrary to the weaknesses and discrepancies inherent in the two models, the proposed model provides a clear and distinct managerial approach to conducting business in productive firms.

Futhermore, in the first model, there is not a firm proposal as to the specific scheme of profit sharing. In some instances, income sharing and in other instances profit sharing is suggested to be adopted as the criterion for participation, whereas in the second model, the choice of Efficiency Wage is not based on any well defined and robust criterion, but rather it is contingent upon the generosity of the management. Besides the proposed equal treatment to workers, irrespective of their expertise, know- how and professional training is a matter which is devoid of proper justification and is therefore unfounded.

5- Against these defects and flaws, the model proposed in this paper stipulates three distinct and clear positive results:

First: Since workers are entitled to their rightful and deserved share of the profit of the firm, and this factor is adhered to in the model, shirking does not occur and workers provide their best and their highest efforts. Consequently, the supply curve would take the shape as plotted in figure (1)

Second: Since the income level of the worker would depend on his productivity, he would do his best. This is because he is assured and confident that whatever he accomplishes directly helps and affects his own interests. This effect will also increase the productivity of labour force and consequently would shift the DL curve to its new position of DL 2. In this case the wage which the workers deserve will rise and get to the point W^e_s as shown in figure 4.

quantity, and there is unemployment. This means that workers fired for shirking will face a spell of unemployment before earning we at another firm.

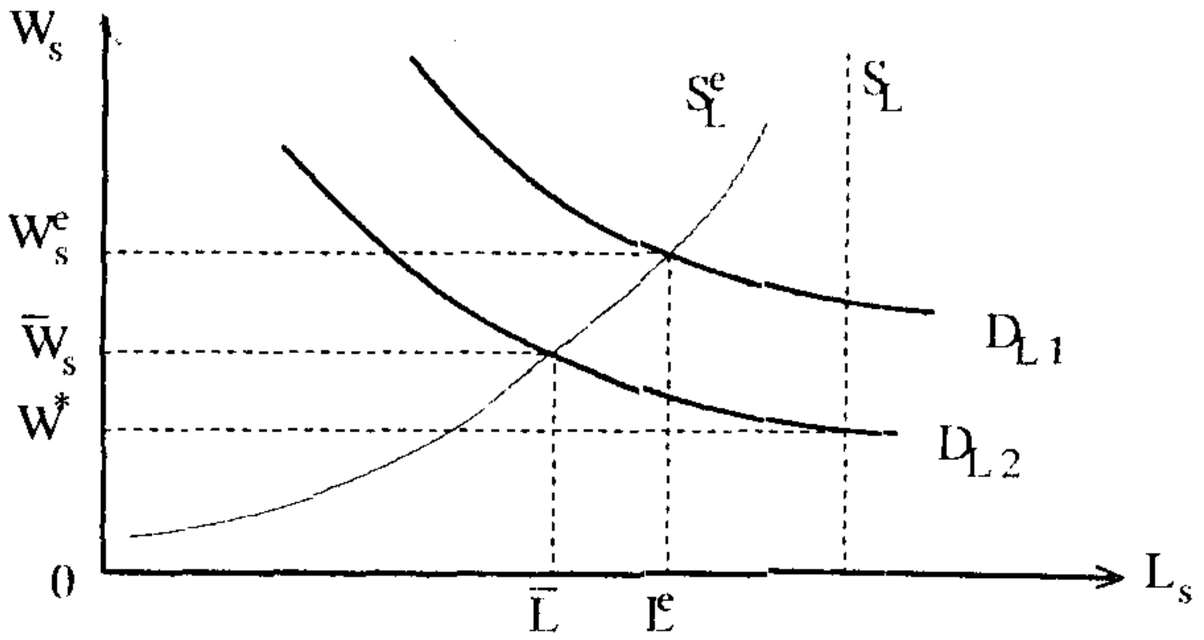

Fig. (4): Demand and supply of labor in the proposed model

As regards the amount of wage for each group, namely skilled and unskilled workers the situation would be as follows:

a- For unskilled workers, the supply and demand curve would be SL and DL1 respectively. Consequently, their respective wage would be determined at the intersection of the supply and the demand curves, which corresponds to point W^* in figure 4.

b- The wage rate belonging to skilled and semi- skilled workers are determined under the influence of two positive effects. These effects are the shifts of DL_1 and SL curves to DL_2 and S_1^e curves respectively. Accordingly, the minimum wage for this group would be $\bar{W}_s$ while they deserve a rate equal to W_s^e. The reason why the latter wage is not recommended is to keep the production cost at its low level, so that this group of workers can benefit better from the profits of the firm, which may well exceed the differential. This is due to the enhanced demand for the firm's products which materializes as a result of the reduced production which in turn leads to increased profit.

Third in addition to increasing the income, the level of employment in firms and as a whole will be increased equal to the distance $\bar{L}$, L^e and as a result of that, aggregate demand would also go up. Therefore, the level of employment would not be shirked, as was the case in efficiency wage theory, but rather it would show an improvement and even an increased. There are further complications involved in the latter model. The economists who have originally developed and presented the model, have rightly left the demand curve unchanged. It is implied that the increase of wage from W^* to we in figure (1) after its initial impact and effect would manifest itself as the right of the workers and therefore would not be tantamount to increasing the incentives for higher attempts on their part. Another subject which weakens the model is that the level of unemployment Le L^* would remain unchanged.

As regards the other model namely the share economy model, it has to be indicated that Professor Weitzman has not taken it upon himself to elaborate on the details mentioned. What is highlighted in the model is the impact of participation of the aggregate demand.

6- According to the present model, the cost of labour could be written as:

(3) $W = W^* . L_{us} + \bar{W}_s . L_s$

Where:

L_{us} = unskilled labour

L_s = skilled labour

Accordingly, since the cost of labour decreases, the price of manufactured goods would be reduced too, and this process would in turn increase the demand for those goods and consequently the increased

volume of sale would yield higher levels of profits. While this is the case in the proposed model, the situation is reversed in the wage efficiency model. In the latter model the possibility of total wage cost increase exists, and this increase would push the price level to its higher levels.

7- The shifts which occur in the supply and demand curve of the labor force provides a source of satisfaction for the management of the firms, because of two main reasons:

First: The increased productivity of worker (The shift in demand curve for labor) will increase the volume of production.

Second: The workers devotion to their job and the sense of ownership being felt by them would reduce the different costs which are associated with shirking and this would create:

- Better and favorable environment for the maintenance and on-time repair of machinery and equipment.
- Indegenous supervision and control by the workers themselves.
- Amicable and friendly relations between the management and the workers, which in turn facilitate co - operation and the process of decision making.

In other words in equation $\Pi = TR - TC$, where TR is P.Q, the workers will cause Q to increase, and at the same time, they will do their best to reduce TC.

Turning to the two other models, we can easily come to this conclusion that since in the share economy model, there is no criterion as to the choice between participation in profits or revenues, the effectiveness of the model remains ambiguous. The effectiveness of the second model is also tentative and unsustainable.

8- The two previous models have failed to suggest any recommendation as to the possibility of enhancing and improving the degree of the skill of workers. Contrary to this, according to the proposed model, the increased income of skilled and semi - skilled workers would create incentives for unskilled workers to improve themselves and move to higher levels of standards of living and this mechanism could function automaticaly.

9- The co - efficient of the workers profit, $0 \leq \beta_s < 1$ implies that the co-efficient of the assets return of a firm which is $(1 - \beta_s)$ is in the hand of the authorities of firms and they can make use of this strong leverage as a policy variable. Needless to say, the two previous models lacked such a devisive and important mechanism.

The management should not construe the reducing of the co - efficient $(1 - \beta_s)$ as the reduction of profit rate (net profit divided by assets) because if participation leads to the increase in the volume of profit, then the reduction of $(1 - \beta_s)$ could lead to the increase of the profit share of the

share holders and this in turn would cause the profit rate to increase. In other words, if the profit pie increases the rate of profit would increase too.

7. Concluding remarks and recommendations

The primary objective in an Islamic economy is securing qest or equity. This fact prompts us to believe that all factors engaged in producton should receive their deserved share of profit. Islam considers labor as a prayer to God, but this does not necessarily mean that workers should not be rewarded by the people who hire their labor force.

The model proposed in this paper propounds a new approach towards skilled and semi- skilled labour. Although the arrangement (deployment) of the assests of a firm creates the appropriate and proper environment for the absorbtion of different types of skills, at the same time, man power's effective contribution to the process of decision making and ensuring positive and fruitful interaction with the management of the firm becomes more and more crucial and important. This increasing role of the skilled and semi - skilled man power would necessarily demand more rights and privileges. This right stems from principle No. 1 of the proposal and as was mentioned, could have numerous positive economic results for societies whether they be Islamic or not. Furthermore, the proposed model, while ensuring the participation of workers in the profits of firms, tries to pave the way for and facilitate such an adjustment and even increases the level of employment and the aggregate demand.

Finally, what remains to be accomplished in due course is:

1- To show whether the proposed model enjoys the pareto efficiency condition.

2- Whether in the proposed model what is called "Inflation as a result of increasing cost" would emerge.

END NOTES

1- Some Islamic jurists (theologians), hold the view that, for apportioning the share of loss, taking due account of the ratio of capital is permissible. They also do not reject the idea of relating the ratio of profit share to the ratio of capital share (as an example, see page 73, Umer chapra 1985).

2- See page 76 of his book (1979).

3- See page 355 of his book, prue kerr (ed, 1982).

4- The author, in the article entitled "money in Islamic economy", tries to define capital in its relation to money, in such a way that could convey both the meaning and the criterion of measurement. He also attempts to show that money is potential capital which upon legal combination with production factors converts to actual capital. For this reason, he believes

that in Islamic economy, actual capital produces return and therefore, the potential capital is not entitled to any return or profit.

5- See page 308-309 of book (1966).

6- For details see J.A.Kregel (1976) pages 20-48.

7- The reason of putting the word capital in inverted comas, is that capital in the proposal does not, convey neither it's legal and accountant concept and nor its economical one (machineries used by workers). In the proposal the word "asset" as defind in accounting has been used in place and instead of "capital". This proposal not only dispells doubts and removes misunderstanding, is also closer to realities of our time.

8- There is a considerable literatures regarding different aspects of the topic, among them see the following article:

J.E. Stiglitz (1974), A. Weiss (1980), J.M. Malcomson (1981), G.A. Akerlof (1984), S.A. Ross (1984), J.L. Guasch and A. Weiss (1980).

9- It is interesting t note that professor S.Wintraub in the introduction of the second chapter of his book (1966) writes:

A capitalist economy is one in which labor is hired by business firms in the expectations that output of labor will be marketable later in the market place.

He continues:

This is the nature of the capitalistic system ... an appreciation of this proposition is crucial to an understanding of a market economy.

10- The general discussion builds on Janet L Yellen. "Efficiency wage models of unemployment", American Economic Review, 74 (May 1984): 200-205. The graphical analysis relies on joseph E. Stiglitz, "The causes and consequences of the Dependence of Quality on Price", Journal of Economic Literature 25 (March 1987): 1-48.

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