Ibn Khaldun: The Father of the Division of Labor

Dr. Mohaned Talib Al-Hamdi
Assistant Professor
Department of Economics and Finance
College of Business Administrations
Gulf University for Science and Technology
P.O. Box: 7207
Hawalli 32093
KUWAIT
Tel: (965) 224-0130 Ext. 5518
Fax: (965) 264-5795
E-mail: alhamdi.m@gust.edu.kw

NOTE: This draft paper is prepared for presentation at the international Conference on Ibn Khaldun in Madrid, Spain November 3-5, 2006 hold by the Islamic Research and Training Institute in collaboration with Univerisdad Nacional de Education a Distance (UNED), and the Islamic Culture Center of Madrid.
Introduction:

Although that the western world recognizes Ibn Khaldun as the father of sociology, it hesitates in recognizing him as a great economist who laid many of its foundations. Even more than 600 years have passed since the writing by Ibn Khaldun especially his famous Introduction (Muqaddima), the thinker is not adequately presented in the academic economic literature.

He was introduced to the West in the early 18th century when some of his writings were translated into French, and the efforts of Nashat (1945), Issawi (1950), Spengler (1964), Boolaqia (1971), made him relatively known in the field of economics (Soofi 387). In his "History of Economic Analysis", Schumpeter talks about the Great Gap in the history of economic thought where he argued that the "economic analysis begins only with the Greeks" (Schumpeter 73). He did not discover Ibn Khaldun until the last days of his life, and he declares Ibn Khaldun "was far more original than Adam Smith".

This article aims to analyze the contribution of Ibn Khaldun in the introduction of one of the most important and famous issues in economic science, the division of labor. I, first explain why Ibn Khaldun analysis of economic issues is considered to be so important. Second, I will review other thinkers’ work about the division of labor, and third, I will look at the analysis of division of labor on its various levels by Ibn Khaldun with comparison to Adam Smith analysis. The paper concludes with some remarks about the originality of Ibn Khaldun’s work in economic science.

Why Ibn Khaldun?

What makes Ibn Khaldun one of the greatest minds of the late Medieval world and the forerunner of a number of scientific fields is his methodology in analyzing the social and economic phenomena.

It is worth mentioning that Ibn Khaldun was not like the traditional scholars in the Muslim world. He was different in a way that he discussed things by logic and evidences. He greatly depended on logic and deduction. He used logic in analyzing observations that led him to induction. Ibn Khaldun depended on history as a tool for his analysis, and through that he was able to deduce things and arrived at reasons that can explain the socio-economic issues.

Ibn Khaldun departed from the Aristotelian logic of the Greeks which turned into fixed frames that make its user moving in a closed circle as did AL-Farabi, Averroes, and other Muslim thinkers. But Ibn Khaldun broke that circle and became so creative in his social studies (AL-Wardi 14-15).

According to Schmidt, that transition to the use of new logic happened because Ibn Khaldun lived thru an era where the social structures of societies where changing and he was able to capture the essence of that change thru his observation of the socio-economic factors that affect every society (Schmidt 41).
He was not interested to explain those socio-economic factors by asserting that they are the will of Allah, but had a deep understanding of the law of causality and tried to discover the natural laws that governed the development of Societies. He writes "this world with all the created things in it has a certain order and solid construction. It shows nexuses between causes and things caused, in a pattern that is both remarkable and endless" (Ibn Khaldun 741). This scientific approach makes his writing, particularly his economic opinions, the most advanced of those expressed in Medieval Islam (Spengler 258).

Arab historical works contributed little to economic analysis because the Muslim thinkers did not consider history as a science because of the deep Greek influences on them (277). But Ibn Khaldun was looking at history differently. He states that "history is a discipline that has a great number of approaches. (Is useful) aspects are very many. Its goal is distinguished. History makes us aquatinted with the conditions of past nations as they are reflected in their national character”. He continues to say that any one who "trusts historical information in its plain transmitted form and has no clear knowledge of the principles resulting from customers, the fundamental facts of politics, the nature of civilization, or the conditions governing human social organization, he often cannot avoid stumbling and slipping and deviating from the path of truth" (Ibn Khaldun 11). Here, we clearly see that Ibn Khaldun considers history as science based on relating the causes and results of social phenomena and tries to understand the general rule that govern societies in consequential connected pattern.

He speaks elaborately about the need to understand the origins of the social structures and the factors that shape the development of the society and how to use it to explain any social issue. He states that "we must study human society and distinguish its essential features from its accidental ones and trace the social laws that at work within it and use them as criteria as to the value of historical assertions" (Ibn Khaldun 34-39). It is clear that with this power of abstraction, Ibn Khaldun was able to develop insight into many socio-economic and political phenomena.

The goal of Ibn Khaldun was to study the political economy. As he mentions that the essence of history was to explain the nature of civilization in its various stages which happen in organized system. He tried to explain the nature of that system and how politics and economics are related thru the development of society (Bu Thrwa 64-56).

Ibn Khaldun’s main concern was to explain "social organization" with its essential and accidental characteristics and preconditions which needed an interdisciplinary approach which embraced knowledge of "politics" and of various social activities, among them those economic in character. Given this concern and his approach of study, it was inevitable that economic matter, if not always economic analysis, would occupy high place in his search for explanation and generalization (Spengler 286).
Division of Labor before Ibn Khaldun:

Before Ibn Khaldun, Plato and his contemporary Xenophon presented, probably for the first time in writing, a crude account of the specialization and division of labor (Sun 37-50). On a non theoretical level, the ancient Egyptians used the techniques of specialization, particularly in the era of the Eighteenth Dynasty, in order to save time and to produce more work per hour (Oweiss 1). Although Aristotle proposed a definition of economics and considered the use of money in his analysis, he was not very clear about the division of labor (Sun 50-51).

In the Medieval Islamic era, some Muslim scholars provided objective analysis of economic problems of their time when economics had not emerged as yet as an independent discipline. This could be observed in the writing of Al-Ghazali (1085-111 AD) about money and its functions as medium of exchange and standard of value. Ibn Taimiyyah (1263-1328) and Taqiuddin Ahmad AL-Maqrizi explicitly discussed what is known now as Gresham Law (Ghazanfer and Islahi 33-36).

Sooﬁ mentions a partial list of the scholars who wrote on the behavioral and social science such as Abu Yusuf (8th century), Abul-Fadl AL-Dimishgi (9th century), AL-Farabi (10th century), and Ibn Khaldun (14th century). He points out that the writing of Ibn Khaldun were unique in nature "unlike the writings of this predecessor and contemporaries, his writing on economic topics transcend the tradition of making disjointed remarks on and isolated references to important questions of political economy" (Sooﬁ 287).

AL-Farabi, the founder of Arabic political philosophy, has little to say of economic issues. His account of division of labor in the "ideal city" emphasizes that each citizen must occupy himself to "a single art", since men differ in aptitude, improve skills with practice, and are capable of supplying all needs only if each is responsible for specific assignment. Though, he fails to examine the relationship of specialization to prices, distribution, the use of money, or the development of societies (Spengler 279).

AL-Ghazali noticed that cities and states arose out of the advantages men derived from division of labor and co-operation and that each should engage in a useful activity. AL-Dimishgi explained how man's dependence upon division of labor and co-operation makes necessary use of a suitable means of exchange (280-282). But the superior handling of Ibn Khaldun of economic matter certainly points out that economic practices were first discussed in a comprehensive fashion in the Muqaddimah which was finished in 1377. The belief that the state and other human associations emerged because of man's insufficiency as an individual and his consequent need to co-operate was known to Ibn Khaldun but he developed it somewhat uniquely and differently than the others.

In the rest of this article, I will focus on the labor theory of value developed by Ibn Khaldun and mainly on his explanation of the division of labor to show that the sections in the Muqaddimah on that speciﬁc economic and social issue was superior and he was a pioneer in a field that westerners tend to get credit for. In that aspect, I will compare Ibn Khaldun analysis of division of labor to that of Adam Smith to show that Ibn Khaldun had already expressed the ideas that later polished by Smith.
Ibn Khaldun Analysis of the Division of Labor:

In the contemporary literature on the history of economic thought credit for the analysis of the importance of division of labor goes to Adam Smith. Ibn Khaldun discussed the matter on three levels of economic activity about four centuries ahead of Adam Smith. He hinted, even before Durkheim, that division of labor enforces social solidarity.

What makes Ibn Khaldun analysis of division of labor unique is that he discussed it in three levels: the industry level, the societal level, and the international level. In each of those levels, he discussed the importance of the division of labor and its development and how it could benefit the labor involved in it and the society that this division of labor is practiced in and the international community as a whole. I will shed the light on the three levels of the analysis based on the writing of Ibn Khaldun in his Muqaddimah.

a. the industry level:
The example of the pin factory used by Adam Smith to show that the division of labor is the icon of the analysis of this matter used in the history of economic thought. He emphasizes that "the division of labor, in the general business of society, will be more easily understood by considering in what manner it operates in some particular manufactures" (Smith 9-10). This is a clear sign that Smith looked at the importance of the division of labor on the industry level.

What is really surprising is that despite the huge literature on that subject, no one mentions any other example on a similar level of analysis prior to Smith's example, and that is probably the major reason that no body challenged the precedence of Smith’s analysis. Even with the work done on Islamic economic thought to "fill the Schumpeterian gap", no one tried to address the Ibn Khaldun antecedence in that matter. But by a close look at the Muqaddimah, we can find a specific example used by Ibn Khaldun to show the "improvement in the productive powers of labor" as Smith says, in producing furniture.

Ibn Khaldun analyzes the division of labor on the industry level by concentrating on the development of crafts as a way of improving production. He stresses that labor is the source of value and the real measure of the exchangeable value of all commodities. He classifies crafts in to simple and advanced ones. But he stress that they develop based on the level of civilization "Some crafts are simple, and others are composites" (Ibn Khaldun 314). He goes on "The susceptibility of the crafts to refinement, and the quality of (the purpose) they are to serve in view of the demands made by luxury and wealth, they correspond to the civilization of a given country" (315).

Therefore as the society develops, it will require different types of crafts and that will lead to the demand of goods related to those goods "if a particular craft is in demand and there are buyers for it, that craft, then, corresponds to a type of goods that is in great demand and imported for sale" (315).
Ibn Khaldun points out that there some crafts are necessary for civilization like Carpentry and Tailoring (321-322) specifically he points out their importance to society "this crafts is one of the necessities of civilization" (321) and then asserts that the use of its output depends on the level of development of the society "Bedouins use wood for tent poles and pegs, for camel litters for their women, and for the lances, bows, and arrows they use for weapons. Sedentary people use wood for the roofs of their houses, for the locks of their doors, and for chairs to sit on. The particular form needed in each case is the result of craftsmanship" (321). He then develops the analysis of the Carpentry industry in a specific way to talk about the labor that practice it, the carpenter "The man in charge of this craft is the carpenter. He is necessary to civilization" (321). Very importantly that Ibn Khaldun mentions that as civilization flourishes, and advances , the demand for the type of product of this industry increases in both quantity and quality which requires the industry to improve its products "these things come to be produced in a most elegant way through mastery of remarkable techniques" (322).

Then he comes to the most important point of his analysis of division of labor on the industry level when he talks about dividing the whole job of production into various parts of work to be carried out by different individuals "such include, for instance, the use of carvings for doors and chairs. Or one skillfully turns and shapes pieces of wood in a lathe, and then one puts these pieces together, so that they appear to the eye to be of one piece" (322).

This passage shows how elegantly Ibn Khaldun noticed the divisions of the process of making a product made of wood by different people to increase the quality and quantity of the product. This is so similar to Smith's example of the pin factory where "one man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head" (Smith 11), but four centuries ahead of him.

The Ibn Khaldun analysis of the division of the process of making that piece of furniture has some characteristics. First, it coincides perfectly with the overwhelmingly accepted definition of division of labor put forward and used by Peter Groenewegen in the New Palgrave's Dictionary of Economic which says "The division of labor may be defined as the division of a process or employment into parts, each of which is carried out by a separate person" (Sun 4). Second, it differs from Smith's pin factory example by not generalizing that the labor who perform each task in the production process needs not to be educated in that business as Smith claims but to link the skills to the type of the task performed in the production process.

From that comes the importance of the phrase "One skillfully turns and shapes pieces of wood in a lathe” which clearly says that the task of making the essential pieces of the output need special skills to be used while this skill may not be necessary to perform the other types of tasks to finish the process "and then one puts these pieces together in certain symmetrical arrangements". The task here requires less skill because the high level of skills were required and used "skillfully" in making the different pieces of the product first. This analysis makes Ibn Khaldun analysis so elegant and unique but unfortunately is not mentioned in any piece of literature deals with the division of labor (Sun 3-31) or with Islamic Economic thoughts (Ghazanfar
et. al. 1-5) or even in the literature that deals with the work of Ibn Khaldun on economic issues (Soofi 387-404; Boulakia 1105-1118; Spengler 268-306).

b. the society level:
Ibn Khaldun emphasis that the production can not be obtained without human labor. Although he acknowledges that there are some natural means of production, which includes rain as an example, but these factors are not sufficient for production though sometimes necessary, but the main and the original factor of production is labor "There is nothing here [originally] except the labor, and it is not desired by itself as acquired [……., but the value realized from it]" (Ibn Khaldun 298).

He further talked about the nature of production and the necessity of cooperation among the members of society to fulfill the production needs. There are various production processes which are like rings that are overlapping and compound. Production is characterized by interdependence and interaction in the production process. In other words, he sheds light on the social interaction in the process of production which is the second level of the analysis of the division of labor.

Ibn Khaldun starts by emphasizing that the individual on his own can not produce all what he needs in life, for example food, by himself "The individual human being cannot by himself obtain all the necessities of life" (273). Which means he needs to work with others to obtain what he needs "All human beings must cooperate to that end in their civilization" (273). This cooperation will lead to the increase of production which is the main implication of the division of labor "what is obtained through the co-operation of a group of human beings satisfies the need of a number many times greater than themselves" (273).

This cooperation is not among people of the same trade only, but necessary among people of different trades "for instance, no one, by himself, can obtain the share of the wheat he needs for food. But when six or ten persons, including a Smith and a Carpenter to make the tools, and others who are in charge of the oxen, the ploughing of the soil, the harvesting of the ripe grain, and all the other agricultural activities, undertake to obtain their food and work toward that purpose of their separately or collectively and thus obtain through their labor a certain amount of food, (that amount) will be food for a number of people many times more than their own. The combined labor produces more than the needs and necessities of the workers" (273). It is clear from the passage above, that he understands that there are several production stages and this teamwork is necessary. The group of individuals would get much more output per capita as compared to an individual working alone. Cooperation enables the society to obtain large scale as well as simple production. Labor is divided and there is division of labor. So people have to work together to get more.

This social cooperation and specialization will lead to the higher production or what is known as the "Multiple effect" which leads to form the human social organization which Ibn Khaldun sees as "something necessary" because "Man is political by nature" (54), because “without it, the existence of human beings would be incomplete (46). This social organization of production is obtained thru specialization and division of labor. This division of labor will make the aggregate production made by men working in cooperation “larger than the sum total of the individual production of each working alone and larger than the amount they need to subsist through co-
operation, the needs of a number of persons, many times greater than their own number, can be satisfied" (45). This leads to surplus of the production and it can be used for trade. When Adam Smith explained this, he could not reach the sociological point of cooperation. He stressed that each person would do the job according to his skill without pointing out the social dimension of the co-operation and division of labor.

c. the international level:

According to Ibn Khaldun, people will feel better off and there will be more welfare due to the surplus as a result of division of labor. This surplus can be used for exchange of commodities with the outside world which leads to the creation of International Trade which is known as the vent for surplus. Ibn Khaldun further adds that people enjoy life by looking for better qualities, more varieties, and new commodities. There is more progress through the industry. Thus there is advancement in every field "Subsequent improvement of their conditions and acquisition of more wealth and comfort than they need, cause them to rest and take it easy. Then, they co-operate for things beyond the bare necessities. They use more food and clothes, and lay out towns and cities for protection". Then he continues to say "They differ in the quality of the clothes, the beds, the vessels, and the utensils they employ for their purpose" (91).

To attain that level of comfort and luxury, the production needs to be increased thru division of labor not just in one country but on the global scene as well.

The international division of labor is not based on the natural resources of the countries, but on the skills of their inhabitants since Ibn Khaldun considers labor as the most important factor of production. "Certain cities have crafts that others lack" (291). He stresses that the production increases "With the increase of population with regard to the amount of prosperity and business activity, cities and towns differ in accordance with the different size of their population" (273).

The surplus that comes from increase in production can be exported and therefore increases the property of the city "A great surplus of products remains after the necessities of the inhabitants have been satisfied. This provides for a population far beyond the size and extent of the actual one, and comes back to the people as profit that they can accumulate. Prosperity, thus, increases, and conditions become favorable" (279). It is clear that Ibn Khaldun notices the benefit of trade between nations in terms of exporting the surplus after they satisfy the domestic demand and the increase in the prosperity of people. The mutual benefit of international trade is the gain in this case.

The interesting part in this level of analysis is that Ibn Khaldun was ahead of Adam Smith in discussing the comparative advantage among nations in producing certain goods. Adam Smith talked about the differences in production in agriculture and manufactures "The most opulent nations, indeed, generally excel all their neighbors in agriculture as well as in manufacture. Their lands are in general better cultivated, and, having more labor and expense bestowed upon them, produce more in proportion to the extent and natural fertility of the ground. But this superiority of produce is seldom much more than in proportion to the superiority at labor and expense. In agriculture,
the labor of the rich country is not always much more productive than that at the poor; or, at least, it is never so much more productive" (Smith 13).

Ibn Khaldun noticed that when he talked about the effect of population or the level of production and therefore on the level of wealth. He links the increase in the wealth of a city to its population thru the increase in labor available for production. "When population increases, the available labor again increases. In turn, luxury again increases in correspondence with the increasing profit. Production there is thriving even more than before. All the additional labor serves luxury and wealth in contrast to the original labor that served the (necessities of) life” (Ibn Khaldun 274). This clearly indicates that Ibn Khaldun noticed that if a city has large population it can use the labor more efficiently to produce more by division of labor between necessary and luxury goods.

The increase in the available labor in a city makes it prosperous and superior to other cities because of increase in production "the city that is superior to another in (population) becomes superior to it also by its increased profit and prosperity” (274).

This population superiority, if used efficiently, thru specialization and division of labor will make the labor needed to produce the necessities for the domestic consumption more productive and therefore less labor needed to produce it. The consequence is that more labor is available to produce goods that will not be consumed domestically and can be exported and therefore cities engage in trade "If the labor of the inhabitants of a town or city is distributed in accordance with the necessities and the needs of those inhabitants, a minimum of that labor will suffice. The labor available is more than is needed. Consequently, it is spent to provide the conditions and customs of luxury and to satisfy the needs of the inhabitants of other cities. They import the things they need from people who have surplus through exchange or purchase. Thus, the people who have surplus get a good deal of wealth" (273). In here, Ibn Khaldun elaborates a theory of economic development based on the interaction of different countries which is based on the use and constitution of labor. The basis of this theory are the social and international division of labor which results in a process of increasing wealth and benefit of the parties involved in the process of trade.

**Conclusion:**

As it is known, Adam Smith's ideas were new to westerners at the time they were first presented and they had a powerful impact on the development of modern economic thought. However, Ibn Khaldun, had already expressed many of the same ideas in his writings. In his works, Ibn Khaldun presented theories not only about history and philosophy of history, but also about society and economics.

Ibn Khaldun, before Smith, developed a labor theory of value where he claimed that the value of the commodity is mainly derived from the labor embodied in it. He further stated that labor is also the criteria for the determining the value of worker.
According to Ibn Khaldun, labor is the source of value and profit and "without it, no gain will be obtained" (298). This view that the value of a product is related to the labor involved in producing it, was echoed four centuries later in the work of Adam Smith.

Despite their difference in orientation, however, Ibn Khaldun and Adam Smith reached similar conclusions on certain theoretical issues. For example, they both agreed that the division of labor is a normal part of economic life. Ibn Khaldun emphasized how the division of labor plays a role in economic efficiency and the growth of wealth before Adam Smith. He also emphasized how the division of labor plays a role in the maintenance of social stability which was not even mentioned by Smith.

The example of the pin factory by Adam Smith is probably the most famous example used in discussing the division of labor on the industry level. Ibn Khaldun had a similar example four centuries before that when he talked about the increase in the quantity and quality of producing furniture by dividing the job of manufacturing a peace of furniture into different tasks where each labor performs a specific task. This example by Ibn Khaldun was totally ignored by researchers in the field of history of economic thought for no obvious reason.

Ibn Khaldun indicates, before Smith, that there is more efficiency with a group of specialists working together toward a common interest than there is with a single person trying to accomplish the same thing for himself. Ibn Khaldun indicates that six to ten people, along with a group of tool-makers, could not only accumulate enough food for themselves, but "for a number of people many times their own". (273).

Since co-operative labor results in production that is "more than the needs and necessities of the workers" (273), Ibn Khaldun argues that the system allows people to trade their surplus which resulted from specialization and the division of labor, with other communities. Thus, in turn, is a source of profitability and wealth. As such, Ibn Khaldun expressed a view regarding the connection between the division of labor and international trade as a cause for wealth way before Adam Smith.

This paper has shown, that many of the ideas of Adam Smith that were broadly accepted in the nineteenth century had already been expressed by Ibn Khaldun centuries before. He discovered the virtues and the necessity of division of labor before Smith. No one before Ibn Khaldun had appreciated the central importance of division of labor and specialization in increasing production, social solidarity, and determining living standards. Ibn Khaldun had an insightful analysis and produced original economic thought and clearly demonstrated real depth in his coverage of the division of labor and its effects. The solid understanding of Ibn Khaldun of the division of labor issue should not only make him the pioneer of the analysis of it but the real father of it.
References: