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Ibn Khaldun's Contribution on Modern Economics Development: An Analysis based on Selected Economic Issues

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Abstract

This paper attempted to analyze economic concepts of one of the greatest Islamic scholars, namely Ibn Khaldun. Economic issues of Ibn Khaldun, which were examined in this paper, included agriculture concept, supply and demand analysis, and price interdependence. This paper found that Ibn Khaldun was able to identify three main sectors that become the foundation of GDP calculation of a country. It was also able to find that demand difference in two different countries is the basis for the existence of international trade. People's desire and government spending were found to be the variables affecting aggregate demand, while product scarcity and production cost were found to be the variables affecting aggregate supply. This paper also found that Ibn Khaldun has successfully described the interdependence between price of agriculture product and government employees' salary.

Keywords: agriculture, supply and demand analysis, price interdependence

1. Introduction

The history of Islam has given us valuable lessons from which the present and the next generations of the Muslim ummah can acquire a lot of benefits which can be implemented in their life. Islamic history has provided us a number of significant ideas

through which, if we are able to elaborate them comprehensively, we will be able to rebuild and redevelops Islamic civilization that meets the present and the future needs and challenges.

As a *manhaj al-hayah* (curriculum of life), Islam provides guidance in all aspects of life, including economic activities. Allah SWT has clearly stated that Islam is a complete code of life and that He has perfected Islam for all believers and faithful (Surah Al-Maaidah, verse 3). It is no doubt, therefore, to believe that economics is an integral part of Islamic teaching. The next question is that how far we can draw the basic economic principles according to Islam and translate them into our economic life.

As we already know that Muslims have given significant contribution to the development of science and civilization of human being. However, their contributions are often ignored and neglected. Joseph Schumpeter, for instance, was of the view that this world has been in the darkness for almost 500 years. It seems that at that time there was no improvement in the human's life and science development was stagnant. Obviously, this is totally incorrect. History has shown us that during this period a lot of brilliant Islamic scholars emerged. They have built critical foundation for modern sciences. A number of scholars have made Islamic heritage become very rich, such as Abu Yusuf, Al-Ghazali, Ibn Taimiyyah, Ibn Khaldun, al-Maqrizi, etc. They have lightened the world with their valuable works. This paper, however, will focus only on one personality, namely Ibn Khaldun.

Ibn Khaldun was born in Tunis on 27th May 1332 AD (1st Ramadan 732 AH). He acquired his great education in Islam, logic, philosophy, law, grammar and poetry, all of which were to contribute towards the moulding of a great statesman-like ability within him. Hence, it is no surprise to read of his pivotal role in the politics of North Africa and Spain, where he was exposed to very special opportunities in extending considered judgment and analysis of what transpired.

He has produced a lot of scholarly books which are of unrivalled value as a source of reference for the analysis of the history of his time, for example: his *Kitab al-Ibar* and *History of the Berbers*. Yet his book *Muqaddimah* remains till today a source of reference, unsurpassed in value by no other work of a Muslim or a non-Muslim scholar specializing in the History subject.

This paper attempted to analyze his economic thought with respect to selected economic issues by taking *Muqaddimah* as the main reference. According to our view, Ibn Khaldun has brilliant idea of economic thought that exists until today. This paper will focus on Ibn Khaldun's concepts of agriculture, demand and supply analysis, and price interdependence. The paper comprises five section, including introduction as the first one. Section two shall discuss about Ibn Khaldun's methodology in writing *Muqaddimah*, while section three shall describe his concept on agriculture, demand and supply, and price interdependence. These concepts will be explored further in the section four. Section five concludes the paper.

2. Methodology of Ibn Khaldun

Ibn Khaldun can be regarded as the first scholar introducing what we call today as "scientific methodology". This can be seen from his methodology in writing *Muqaddimah*, in which he also elaborated economic problem and various economic issues. He used, according to our view, the following methods:

- i) **Historical analysis:** He always tried to show the relation or the link between the economic, social, and political events through careful review, examination, and analysis of historical events.
- ii) **Sociological analysis:** He used this analysis by examining the influence of social environment and behaviour on the economic behaviour and economic activity. For example, he said that a ruler needs to exercise his political leadership and get people to submit to him to the degree he desires and be satisfied, both with his intentions regarding them and with the fact that he alone has all the glory and they have none. This requires an extraordinary measure of psychology. He further said that "moving mountains from their places is easier for me than to influence people psychologically". These statements give clear indicator that Ibn Khaldun included sociological factor as variable determining his entire analysis.

- iii) **Ecological analysis:** He preceded his age by five centuries in showing how the economic behaviour is influenced by the relations of mankind to other creatures and by the surrounding environment.
- iv) **Induction and deduction:** He has mainly relied on induction, showing a real proficiency in employing it. He showed real skill by taking sharp observations from practice on the studied phenomenon. Then by defining, screening and classifying these observations and depending on logical inference he tried to find out an explanation to the phenomenon or to set a rule as to its cause and effect. He employed deduction in dealing with some issues to build a rule upon some known facts, after examining the truth of these facts by pure logical reasoning. Yet, dependence on deduction was not pure, as in the Aristotelian style, because of his frequent reliance on induction to prove the truth of the primary facts before building upon them.

It will be noticed that it was only Adam Smith (1723-1790) who followed a similar style to that of Ibn Khaldun in his economic analysis. Yet, Adam Smith was not as proficient as Ibn Khaldun in employing induction. The reader of the text of Ibn Khaldun will notice that his sharp accuracy in taking observations from practice has enabled him to reach some profound economic rules which came to be discovered centuries later by classical and modern economists. The use of induction has influenced the world of science. Yet, today, thinking cannot be said as a theory unless it has been proven empirically through induction method.

3. Ibn Khaldun's Concept on Agriculture, Supply and Demand, and Price Interdependence

3.1. Agriculture Concept

In his famous book, Muqaddimah volume two, Ibn Khaldun discusses his concept on agriculture issues. He identified agriculture as a source of livelihood or making a living. The term "livelihood" means the desire for sustenance and the effort to obtain it.

When this livelihood is obtained either from domesticated animals by extracting surplus products which are used by the people, such as milk from animals, silk from silk worms, and honey from bees; or from plants such as are planted in fields or grow as trees, through cultivating and preparing them for the production of their fruits; then all this is called agriculture (vol. 2 page 315). Beside agriculture, Ibn Khaldun also identified crafts and commerce as natural way of making a living. In other words, agriculture, industry, and trade are the sources of livelihood.

He said that agriculture is prior to all the other (ways of making a living) by its very nature, since it is something simple and innately natural. It needs no speculation or (theoretical) knowledge (vol. 2 page 316). Therefore, invention of it is ascribed to Adam, the father of mankind. He also said that agriculture is a way of making a living for weak people and Bedouins in search of subsistence (vol. 2 page 335). The reason of his statement is simple: it is because agriculture is a natural and simple procedure. Agriculture is different from crafts. The latter is regarded posterior to the former. It is because crafts are composite and scientific. Thinking and speculation are applied to them (vol. 2 page 317). Therefore, as a rule, crafts exist among sedentary people, or people who lie in luxury, while agriculture is practiced by those who are characterized by humility (vol. 2 page 335).

In later part of his book he classifies the crafts. He mentions a number of crafts needed by human being, such as crafts of agriculture, architecture, carpentry, weaving and tailoring, midwifery, etc. However, he said, except for agriculture crafts, all other types of crafts exist in sedentary civilization. He argued that agriculture craft is the oldest craft which is practiced by the Bedouins and unknown by sedentary people. Meanwhile, regarding commerce, Ibn Khaldun observed that most of its practices and methods are tricky and designed to obtain the profit margin between purchase prices and sale prices. The gap between the two is the source of profit.

He further elaborated his agriculture concept by citing one hadith of Rasulullah Muhammad SAW when he saw a plowshare in one of the houses of the Anshar in Medina. The prophet said: “such a thing never entered anyone’s house save accompanied by humbleness.” Imam Bukhari when explaining it said that this statement as referring to too intense an occupation with agriculture and he entitled the chapter in which he dealt

with the tradition in question: “warning against the consequences of (too intensive an) occupation with agricultural implements or transgression of the stipulated limit.”(vol. 2 page 336). However, the reason for it might be that imposts come to be (exacted from farmers) and lead to their domination and control (by others). In this position Ibn Khaldun did not stand against farmer. He just said when a farmer is heavily depending upon his farm production without making any diversification on his/her products; he/she will be in weaker position.

He then stated that the person who has to pay imposts is humble and poor, because a superior force takes (his possessions) away (from him). He quoted the saying of Muhammad SAW in which the Rasul said: “the Hour will not arise until the charity tax becomes an impost.” This refers to tyrannical ruler who uses force against the people, who is domineering and unjust, and who forgets the divine rights of (private) capital and considers all rights to be (subject to) imposts (to be paid) to rulers and dynasties (vol. 2 page 336). Normally, a weak person becomes a victim of injustice done by oppressive ruler. Farmers usually are treated unjustly since they have no bargaining power. Protecting their interest is the way to assist them in managing their life.

3.2. Supply Concept

Ibn Khaldun interestingly talked about the supply side of agriculture. He stated that the cost of agricultural production also affects the value of foodstuffs and determines their price. He took the example of Andalusia as evidence supporting his statement. He said that a rise in price of agriculture products is not merely because of scarcity of grain and foodstuff. Instead, it is because of increasing production cost. He argued by analyzing the condition in which the Christians taking for themselves the rich and fertile lands drove the Muslims into the coastal and hilly regions, whose soil is unfit for agriculture. The latter were forced to apply themselves to improving the conditions of those fields and plantations. They did this by applying valuable work and manure and other costly materials. All this contributes to the rise in agricultural production cost, which forces them to offer higher price. Since then Andalusia has been well-known for its high prices.

Furthermore, Ibn Khaldun also stated that in the land of Berbers, the reverse condition takes place. Since their land is fertile and rich, they do not have to bear any expenses in the agriculture production. Therefore, the foodstuffs price is cheap in this region. He also tried to include labor value concept. He said that the value of labor must be added to the cost of production. Ibn Khaldun has brilliantly come up with analysis of production cost and its relation with supply aspect. He was able to identify cost of production as an important variable that affects supply.

3.3. Demand Concept

Ibn Khaldun was also discussing the concept of demand. He said that crafts improve and increase when the demand for their products increases. The reason for this is that man will not give his labour free of charge, for it is his source of livelihood and gain – indeed, his only source of profit throughout his life. Consequently he will only direct it towards those things which have value in his town in order to make profit. And when a craft is the object of demand, attracting more expenditure (i.e. on the consumers side), it becomes like a commodity which, being in demand, is brought for sale in larger quantities. Therefore, the people of that city will try to learn (the skills necessary for) that craft in order to make their livelihood from it.

However, should the craft not be in demand, its sales will fall and there will be no attempt to learn it. It will be then neglected and forgotten. This is the meaning of the reported saying of Caliph Ali bin Abi Thalib: *“the worth of every man lies in his skill”*. That is, the craft which that man has mastered is the measure of his value, or rather the value of his labour which is the source of his livelihood. In this regard, he again included the concept of labour value, which is measured, according to our analysis, from the labor’s skill in mastering and producing certain product. Ibn Khaldun also included state demand on the craft as another factor creating demand, and the goods demanded by the state enjoy the highest sales. The state, according to him, is the greatest market spending on things without too much calculation.

3.4. Price Interdependence Concept

Ibn Khaldun stated that if the price of agriculture decreases and remains low, then this persistent cheapness will lead to deterioration condition of all those engaged in the agricultural operations. Their profit will shrink or even disappear, and their capital will cease to grow or grow at a very low rate. They may have to spend out their capital, which will soon push them sink into poverty. This will be followed by deterioration of those engaged in operations connected to agriculture, such as milling, baking, and other industries which transform agricultural product into foodstuffs. Similarly, the army will deteriorate since they are paid, at his time, from the taxes imposed on agricultural sector which allotted to them by the King. In this regard he tried to show that there is multidimensional effect of a fall in one product. He concluded that prosperity is best insured by moderate prices and quick turnover. It seems that Ibn Khaldun is of the view that maintaining moderate price is the best method to guarantee prosperity. Therefore, it is in the interest of society as a whole to have moderate price of agriculture. Excessive low as well as excessive high prices are injurious to people.

Ibn Khaldun also identified the role of the state that affects price level through taxation instrument. When government imposes taxes which are light in their rate, but obtain in large revenue, the economy will grow. People will actively get involved in the business and enterprises will develop. People feel that they just give small share of their profit in the form of taxation to the government. On the contrary, when the government start increasing the tax at high rate, the businessmen will be discouraged because they feel that the burden of the tax they must pay is too heavy. Consequently production falls off, and with it the yield of taxation. The rulers may, mistakenly, try to remedy this decrease in the yield of taxation by raising the rate of taxation. Hence, taxes imposed leave no profit for businessmen. This will destroy the economic condition of the country.

From these explanations, we can construct Ibn Khaldun's thought in the following figure.

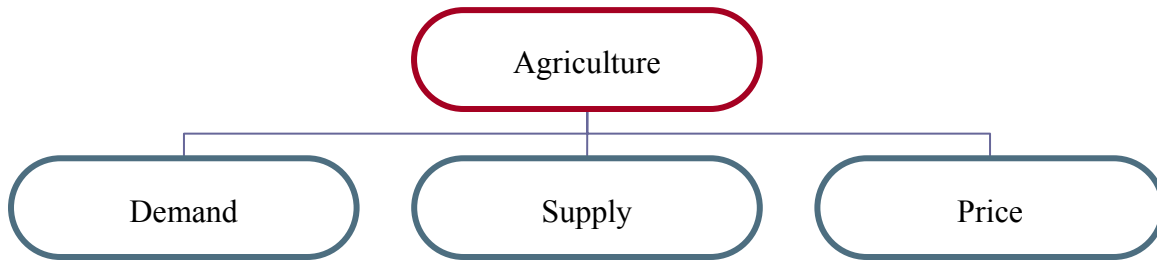


Figure 1. Chart of Ibn Khaldun’s Analysis

Source: Author’s own

In the figure 1 above, it can be seen that Ibn Khaldun was able to develop the concept of demand, supply, and price from agriculture analysis. In constructing this idea, Ibn Khaldun used induction as his methodological approach.

4. Towards Foundation of Modern Economics

The previous section has discussed Ibn Khaldun’s thought which is based on agriculture concept. Interestingly, from analysis of agriculture, he then was able to develop further studies which touched other matters that have become the topics that widely discussed in the modern economics literature. They are the concepts of demand, supply, and price interdependence. These concepts are built from observable facts that he has investigated through careful examination. Therefore they have attracted this paper to elaborate them further, so that we can get clearer picture on Ibn Khaldun’s contribution in giving foundation of modern economic theories. This section attempts to analyze and to extract Ibn Khaldun’s thinking and contribution, particularly in the area of formulation of Gross Domestic Product (GDP) and international trade concepts, supply and demand analysis, and price interdependence.

4.1. Foundation of GDP and International Trade

If we look at carefully Ibn Khaldun’s work, he has identified three important sectors that determine economic growth of a community (or a country). He has identified

agriculture, trade, and industry as the most important sources of livelihood. He also makes relation between these three types of occupations with the development process of a certain community. A community practicing industry and trade must be more developed than the community practicing agriculture sector only. He calls the former as sedentary civilization, while the latter as Bedouins civilization. Hence, every community tries to move from Bedouins life to sedentary life as human beings always want to have better condition than before. He even stated that sedentary civilization is the goal of civilization. However, it does not necessarily mean that sedentary civilization will neglect agriculture since it is needed for maintaining life sustainability.

If we look at today, categorization of these three groups of occupations has become foundation of calculating national income of a country as mentioned in all macroeconomics textbooks, although he did not name it GDP. There are three main sectors, namely agriculture, manufacturing (in Ibn Khaldun's language is called "crafts"), and services which are computed for GDP. The identification made by Ibn Khaldun is very accurate. Every economy must have these sectors as the basis for its economic development.

In his book *Muqaddimah*, Ibn Khaldun also discusses the importance of trade. He analyzes the role of international trade that takes place at his time. Economic relation between one place and other places can be seen from their trade relationship. The emergence of international trade according to him is caused by demand differences between two different countries. If the demand in one country on certain goods is greater than demand in other country, then the merchant of the latter will export their goods to the former (Vol. 2 page 337). Here he introduced the concept of market interdependence between two countries. It means that condition which exists in one market will affect that in other market. This will then create trade between the two markets. Therefore, we can conclude that export and import of goods and services appear as the result of market interdependence.

Ibn Khaldun is seems to regard trade as an indicator, which determines whether an economy is categorized as open or closed economy. Again, this preposition has become fundamental concept in mainstream macroeconomic analysis. Figure 2 below describes Ibn Khaldun thought which has been explained above.

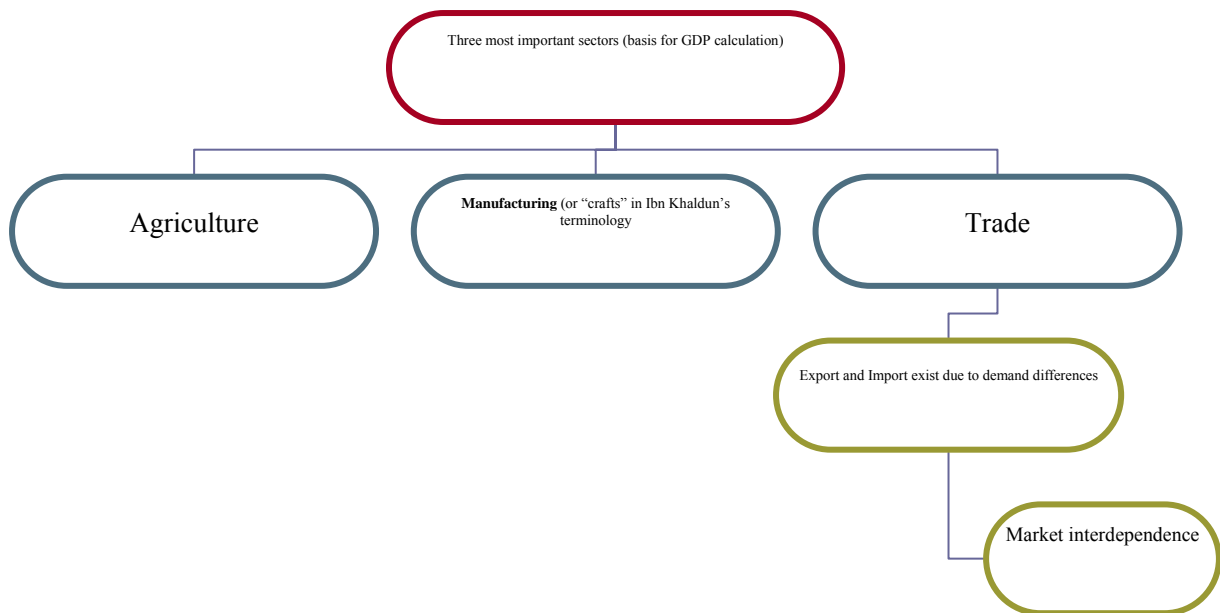


Figure 2. Flow of Ibn Khaldun’s Concept on GDP and International Trade

Source: Author’s own

Based on this figure, it is clear to say that Ibn Khaldun has built these concepts three hundred years before the emergence of classical economists. Nevertheless, his contribution is often neglected by the mainstream economists.

4.2. Supply and Demand Analysis

As it is mentioned in section three, Ibn Khaldun was able to identify two sources affecting supply. The first is scarcity of product, which is indicated by lack of grain and foodstuff. The second one is the cost of production. Both are affecting the supply of the goods and services. If the product scarcity increases, then the availability of the product in the market will fall. This means that supply will decrease. Similarly, when the product scarcity decreases, the supply will rise since availability of goods increases.

These two factors affect the price level. When those factors increase, price will go up. Likewise, when both decrease, price will go down. If we analyze further, Ibn Khaldun actually attempted to portray shifts in the supply curve. Supply curve can shift upward or downward. Let us take the help of following figure for clearer picture.

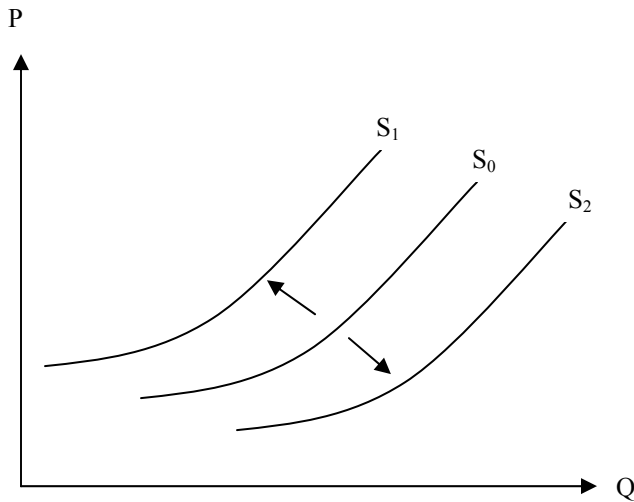


Figure 3. Shifts in Supply Curve
Source: Author's own

From figure 3 above, when cost of production increases, the price will rise and supply shifts upward from S_0 to S_1 . Similarly, when this cost of production goes down, the price will fall and supply shifts downward from S_0 to S_2 .

Now we take a look at demand side. As it is stated in the section three, Ibn Khaldun also talked about the factors that create demand. He mentioned, according to our analysis, two variables which affect demand. The first is people's desire, and the second one is state or government expenditure. People's desire on certain goods or services will push the demand to move up, while on the contrary, if the people have no intention to purchase such goods or services, a fall in the demand will become the result.

If we take the second variable into consideration, the same fashion will take place. When the government spends more by purchasing more goods and services, then the demand will rise. Likewise, when government expenditure decreases, the demand will also fall. To illustrate this, let us consider the following figure.

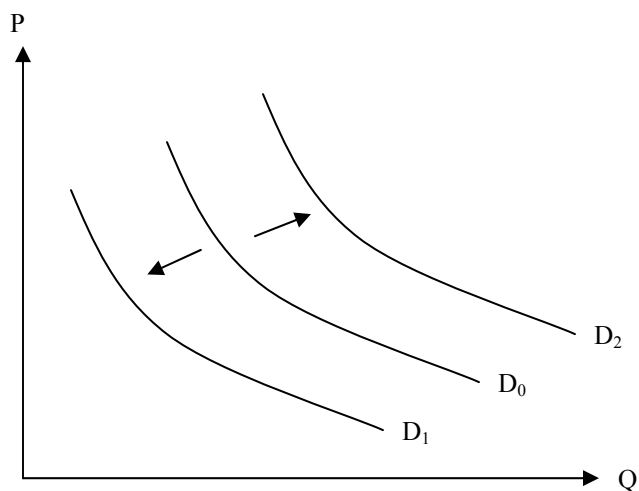


Figure 4. Shifts in Demand Curve

Source: Author's own

The figure 4 above shows the shifts in demand curve. Suppose the initial demand curve is D_0 . If either one or both variables (i.e. people's desire and government spending) increase, the demand curve will shift rightward to D_2 . The reverse will take place when these two factors decrease. The demand curve D_0 will shift leftward to D_1 .

One thing that should be noted is that these demand and supply analysis are in terms of aggregate. Therefore, what we have discussed above is in the context of aggregate supply and aggregate demand. It is because Ibn Khaldun's analysis was conducted at macro level. He did not elaborate individual firm or individual consumer in order to explain both supply and demand. To conclude our discussion, the following figure will summarize the variables that affect demand and supply sides, respectively.

Figure 5. Variables affecting Demand and Supply

| Demand Side | Supply Side |
|--|--|
| Affected by 2 variables: 1. People's desire 2. Government spending | Affected by 2 variables: 1. Product scarcity 2. Cost of production |

Source: Author's own

4.3. Price Interdependence

Figure 6 below attempts to describe Ibn Khaldun's concept on price interdependence. He was trying to show relationship between agriculture, agriculture-related sectors, and salary paid to the government employees.

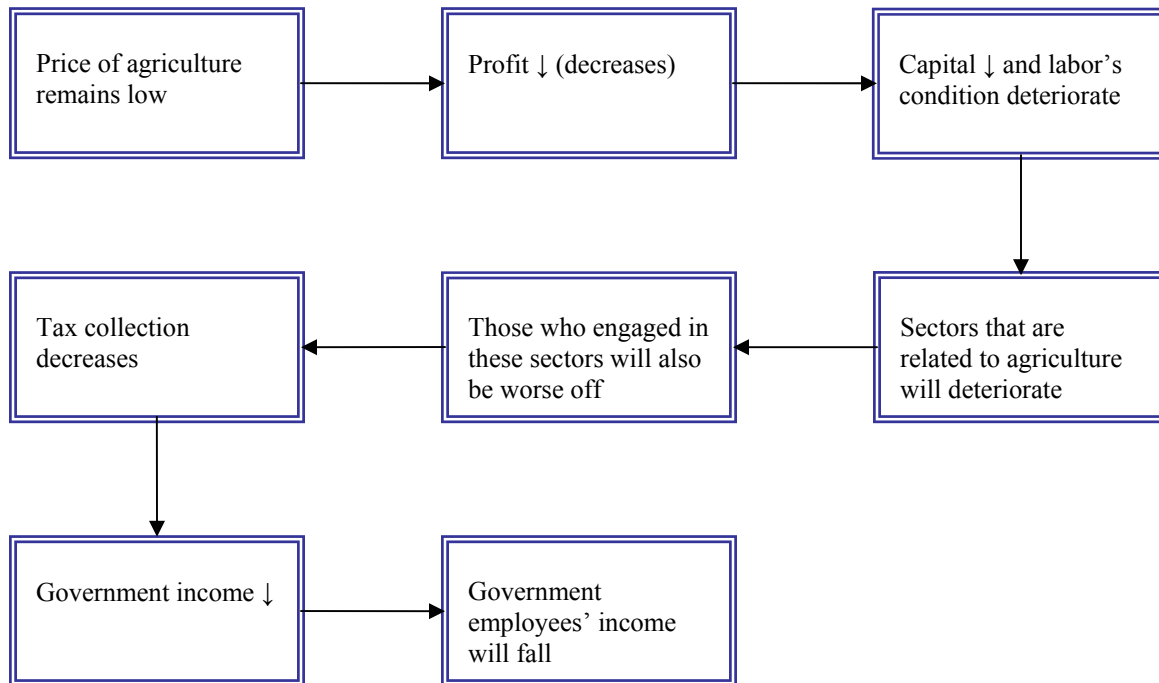


Figure 6. Effect of Low Price in Agriculture Product on Public Sector Employees

Source: Author's own

When the price of agriculture product decreases and remains low, the profit earned will also fall. This situation makes capital gone and labour's condition deteriorates. Sectors which are related to agriculture, such as baking, will be affected too. Here again he shows the concept of market interdependence. In this case, output of agriculture sector becomes input for industries that transform agriculture produce to foodstuffs. Therefore, when agriculture market is disturbed, these industries' market will also be affected. They will deteriorate since this disturbance has negative effect.

This situation will make those who are engaged in these industries worse off. As the result, tax collected by the government decreases. Government income will become

less which eventually forces the government to pay its employees lesser amount of salary. At Ibn Khaldun's time, the army officers will be worse off since they are paid from these taxes.

It is also interesting to note Ibn Khaldun's idea about state intervention through tax instrument. According to our best knowledge, it is he who firstly stated that tax can be used as state instrument to interfere the market. He said that if the government levies tax excessively to the business world, then state revenue will become less and the whole economy is in danger. Therefore, he was against the implementation of excessive tax policy. He favours charging tax at very low rate, so that business environment can be promoted in pushing economic growth.

5. Conclusion

Ibn Khaldun is one of the greatest scholars that have given significant contribution. His ideas encompasses the time dimension and still relevant with our present condition. He has great contributions on various economic issues, such as concepts of agriculture, demand and supply, and price interdependence as written in his Muqaddimah. There several conclusions that can be derived from the explanations above.

First, methodology of Ibn Khaldun in writing Muqaddimah combines four approaches: historical analysis, sociological analysis, ecological analysis, and induction and deduction. Second, Ibn Khaldun has laid down the formulation of Gross Domestic Products and international trade analysis. He has identified agriculture, trade, and industry as the most important sources of livelihood. Trade between two countries takes place when there is demand difference in both countries market.

Third, in the supply and demand analysis, Ibn Khaldun was able to identify two variables, respectively, that affect demand and supply at macro level. People's desire and government spending are found to be the variables affecting aggregate demand, while product scarcity and cost of production are found to be the variables affecting aggregate supply. Fourth, Ibn Khaldun was also able to draw price interdependence between one sector and other sectors in the economy. In his case, salary of army officers (and other

government employees) was lower due to persistent cheapness in the price of agriculture product.

If we look at fairly on Ibn Khaldun's thought, we will come up with conclusion that Ibn Khaldun has built very fundamental analysis for modern economics development. However, in many mainstream economics literature, his contributions are often neglected. This paper is just a small step to re-dig Islamic heritage in science and it has shown that Islamic scholars have played important role in the development of modern sciences including economics.

Bibliography

Choudhury, Masudul Alam. 1986. '*Contributions to Islamic Economic Theory – A Study in Social Economics*', Macmillan.

Ibn Khaldun. 1967. '*The Muqaddimah*' (translated by Franz Rosenthal), Patheon Press, New York, United States.

Nicholson, Walter. 2002. '*Microeconomic Theory: basic Principles and Extensions*', Thomson Learning, United States.

Olson, Mancur. 1971. '*The Logic of Collective Action*', Harvard University Press, United States.

Sadeq, AbulHasan M. and G. Aidit. 1991. '*Reading in Islamic Economic Thought*', Longman, Malaysia.

Scarth, William. 1996. '*Macroeconomics: An Introduction to Advanced Methods*', Harcourt Brace & Company, Canada.