Ibn Khaldun and Adam Smith: Parallels in Contributions to Modern Economic Thought

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Abstract

The contributions of Ibn Khaldun to the development of economic thought have gone largely unnoticed in the academic realm of Western nations, despite recent research focusing on Khaldun's magnum opus, The Muqaddimah. In this paper, we examine the similarities between The Muqaddimah and Adam Smith's Wealth of Nations, particularly as they discuss the benefits of a system of specialization and trade and the role of markets and price systems.

I. Introduction

Ibn Khaldun, while widely regarded in the Arab/Islamic world as a great 14th century social scientist, remains relatively unknown in the west for his scholarly contributions, particularly in the development of economic thought. This relative obscurity lingers despite the fact that western scholars have been analyzing the economics of Ibn Khaldun for over 50 years. Ameer Ali and Herb Thompson (1999) recently address this issue in the context of the tendency of the academy in the west to ignore the work of Muslim scholars in mapping the history of economic thought.¹

Whereas prior research has examined the contributions of Ibn Khaldun in the broad framework of the history of economic thought (Ali and Thompson, 1999; Essid, 1987) or strictly elaborating on those contributions (Soofi, 1995; Boulakia, 1971), in this essay, we seek to narrowly examine the contributions to economic thought of Ibn Khaldun as they compare to those of Adam Smith, particularly in regards to the benefits of division of labor, gains from trade and the role of money, prices and markets. Dieter Weiss touches on this in a 1995 paper entitled, *Ibn Khaldun on Economic Transformation*, looking at the similarities between Khaldun's and Smith's thoughts on the benefits to society of specialization and cooperation in production.

Weiss notes that Adam Smith devotes chapter one of *An Inquiry into the Nature and Causes of the Wealth of Nations* to the subject of the division

¹ Beginning with Schumpeter's *History of Economics Analysis* (1954), the authors argue that a trend was established in the sub-field of the history of economic thought of ignoring the work of Arab/Islamic scholars and that "at the very least, the history of economic thought should incorporate the work of Arab/Islamic thinkers."

of labor and its associated benefits, while Ibn Khaldun likewise discusses these same benefits four hundred years earlier in chapter one of *The Muqaddimah*. Certainly, the subject is expounded upon in far more detail by Adam Smith, but that should not preclude the interested scholar from further examination of the similarities between the economics of Ibn Khaldun as they relate to those of the "Father of Economics" himself.² We will expand this comparative analysis between these two great thinkers in the hopes of furthering the discussion of the history of economic thought outside of the typical western civilization boundaries.

II. Economic thoughts of Ibn Khaldun

Boulakia (1971) provides a succinct biography and introduces the economic ideas of Ibn Khaldun, as well as interpreting how Khaldun reached economic conclusions and "organized them into an extremely coherent model."³ Boulakia lays out Khaldun's ideas found in The *Muqaddimah* relating to a theory of production, theories of value, money and prices, a theory of distribution, as well as theories of cycles in population and public finance. We note here that these theories are essentially a collection of lines from *The Muqaddimah* that Boulakia has organized into categories of modern economic theory. Khaldun set out to write a history of the world and his consideration of economic concepts was subordinate to those of history and sociology. As organized by Boulakia, the economic theories of Khaldun are considerably coherent and there is little doubt that these ideas remain relevant to both modern economic theory and the development of a history of economic thought. There is also little doubt upon closer examination that there is a great deal in common between the sociological and economic thoughts of these two great thinkers.

A. Division of Labor

Perhaps the most direct link between the economics of Ibn Khaldun and Adam Smith lies in the idea of division of labor. Chapter 1 of *The*

² Smith allocates an entire chapter to the introduction of the subject of division of labor before expounding on the underlying principles and limits of the theory, while Khaldun includes a single paragraph on this topic. This is not unexpected as Khaldun was principally writing as a historian, incorporating elements of the other social sciences as a means of providing historical context to his writing. The extent of Khaldun's writing directly related to economics should not detract from the value of his contributions to the development of economic thought.

³ Boulakia (1971, p. 1105).

Muqaddimah parallels the first chapter of Smith's *Wealth of Nations* in introducing the benefits of the division of labor. Khaldun actually presents the advantages of specialization in the form of a *necessary* condition for survival, illustrating this concept with a detailed accounting of the various skills (or crafts) and tools needed to produce bare subsistence levels of food:

However, the power of the individual human being is not sufficient for him to obtain (the food) he needs, and does not provide him with as much food as he requires to live. Even if we assume an absolute minimum of food-that is, food enough for one day, (a little) wheat, for instance-that amount of food could be obtained only after much preparation such as grinding, kneading, and baking. Each of these three operations requires utensils and tools that can be provided only with the help of several crafts, such as the crafts of the blacksmith, the carpenter, and the potter. Assuming that a man could eat unprepared grain, an even greater number of operations would be necessary in order to obtain the grain: sowing and reaping, and threshing to separate it from the husks of the ear. Each of these operations requires a number of tools and many more crafts than those just mentioned. It is beyond the power of one man alone to do all that, or (even) part of it, by himself. Thus, he cannot do without a combination of many powers from among his fellow beings, if he is to obtain food for himself and for them. Through cooperation, the needs of a number of persons, many times greater than their own (number), can be satisfied (1:89).⁴

This contrasts with the manner in which Adam Smith famously illustrates the benefits of the division of labor by providing an accounting of the detailed steps required in the trade of a pin-maker: a workman not educated to this business (which the division of Labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a

⁴ References to *The Muqaddimah* throughout this essay will be listed as the Chapter and Page number from Franz Rosenthal's 1958 translation. Rosenthal's comments appear throughout the translation in parentheses.

peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire; another straights it; a third cuts it; a fourth points it; a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations...(1:1:3).⁵

Smith continues with a comparison between the output of a single hypothetical pin-maker (without division of labor) and a pin factory that he had witnessed with ten employees specializing in one or several of the distinct operations mentioned. He opines that an individual could make no more than twenty pins per day in the absence of division of labor, while the ten employees could collectively produce twelve pounds, or roughly 48,000 pins in a day.

Smith further develops his argument with three particular circumstances that allow for improvements in productivity through the use of division of labor. The improved dexterity of a worker who specializes and the greater ability to improve productivity through the use of machines resemble the underlying premise for gains in Khaldun's domain. Although Khaldun seems to hint that returns to investment in human capital may be the true source of gains when he says, "each of these operations requires a number of tools and many more crafts than those just mentioned," when he reasons that one person does not have the power to even obtain the food he needs.⁶

B. Surplus and Trade

Both Khaldun and Smith extend the discussion of the gains from specialization to include the idea of trading the resulting surplus production. Khaldun first puts forward the idea that individuals cannot *survive* without the cooperation of others and subsequently expands that to suggest that such cooperation will result in more than enough production to satisfy the needs of the cooperating group:

But what is obtained through the co-operation of a group of human beings *satisfies the need of a number many times greater*

⁵ References to *An Inquiry to the Nature and Causes of the Wealth of Nations* throughout this essay will be listed as the Book, Chapter and Page number from an 1852 edition published in London by T. Nelson and Sons, Paternoster Row; and Edinburgh.

⁶ Crafts refer to skilled labor or skilled occupations.

(than themselves). 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 plowing 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 either 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 their own. The combined labor produces more than the needs and necessities of the workers (4:270).⁷

Khaldun continues on to explain how surplus can be used to trade with inhabitants of other cities:

If the labor of the inhabitants of a town or city is distributed in accordance with the necessities and 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 a surplus) through exchange or purchase. Thus, the (people who have a surplus) get a good deal of wealth (4:271).⁸

While Ibn Khaldun focuses on the benefits of trade from a macroeconomic perspective, Adam Smith first mentions the idea of trade in his second chapter on the division of labor as a distinct rationale for man to engage in specialization:

And thus the certainty of being able to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he may have occasion for, encourages every man to apply himself to a particular occupation, and to cultivate and bring to perfection whatever talent of genius he may possess for that particular species of business (1:2:7).

Smith then draws the controversial (for the time period) distinction between monetary wealth (stockpiles of gold and silver) and the true

⁷ Our emphasis in italics.

⁸ Here and throughout much of *The Muqaddimah*, labor is used to mean the product of labor.

wealth of a country, the value of the exchange of goods amongst countries. Thus, Smith advocates a system of specialization and individual trade that ultimately supports the wealth of entire nations.

The idea that the wealth of a country did not lie in its stock of precious metals was somewhat novel for the 18^{th} century, but it was not unprecedented. As Ibn Khaldun put it four hundred years prior:

The common people who hear them think that the prosperity of these peoples is the result of the greater amount of property owned by them, or of the existence of gold and silver mines in their country in larger number (than elsewhere), or of the fact that they, to the exclusion of others; appropriated the gold of the ancient nations. This is not so... A large civilization yields large profits because of the large amount of (available) labor, which is the cause of (profit) (4:280-281).

This closely resembles the words of Adam Smith:

It was not by gold or by silver, but by labour, that all the wealth of the world was originally purchased; and its value, to those who possess it, and who want to exchange it for some new productions, is precisely equal to the quantity of labour which it can enable them to purchase or command (1:5:13).

C. The Impact of Population Differences

The benefits of specialization and trade lead both authors to similar thoughts on the impact of population growth on the economy. Khaldun in general writes of the rise and fall of empires, and in doing so frequently makes comparisons between rural and urban settings. Specifically, he discusses the impact of population growth during the rise of a city:

When civilization (population) increases, the (available) labor again increases. In turn, luxury again increases in correspondence with the increasing profit, and the customs and needs of luxury increase. Crafts are created to obtain (luxury products). The value realized from them increases, and, as a result, profits are again multiplied in the town. Production there is thriving even more than before. And so it goes with the second and third increase. All the additional labor serves luxury and wealth, in contrast to the original labor that served (the necessities of) life. The city that is superior to another in one (aspect of) civilization (that is, in population), becomes superior to it also by its increased profit and prosperity and by its customs of luxury which are not found in the other city. The more numerous and the more abundant the civilization (population) in a city, the more luxurious is the life of its inhabitants in comparison with that (of the inhabitants) of a lesser city. This applies equally to all levels of the population, to the judges (of the one city) compared with the judges (of the other city), to the merchants (of the one city) compared with the judges and merchants, so with the artisans, the small businessmen, amirs, and policemen (4:272).

Thus, as population (and the supply of labor) increases, there is a concurrent increase in demand for luxury goods and services. Moreover, these increasingly unnecessary goods and services are produced by workers that specialize in the development of narrower and more idiosyncratic crafts. Khaldun likewise suggests that inhabitants of the desert will have only the necessities of life as long as they remain nomadic and are unable to take advantage of specialization and trade like those that are able to adopt a sedentary lifestyle.⁹ This idea is similar to that expressed in the opening paragraph of chapter 3 of Smith's *Wealth of Nations*:

When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment, for want of the power to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for. There are some sorts of industry, even of the lowest kind, which can be carried on nowhere but in a great town (1:3:8).

Smith suggests a porter as an example of the type of worker that could only "find employment and subsistence" in such a place. He then offers the counter-example of the relative need for a variety of skills in less populated areas:

In the lone houses and very small villages which are scattered about in so desert a country as the highlands of Scotland, every farmer must be butcher, baker, and brewer, for his own family. In such situations we can scarce expect to find even a smith, a carpenter, or a mason, within less than twenty miles of another of the same trade (1:3:8).

⁹ Chapter 1, page 249.

Smith provides these examples in the context of establishing limitations to the benefits of division of labor, specifically defining the limits placed by the extent of the market. He continues by demonstrating the benefits of founding cities on waterways in order to extend the market as widely as possible, providing both contemporary and historical examples. Adam Smith's thoughts once again parallel those of Ibn Khaldun, though in this case Smith provides the further insight that more populous areas provide more ability for workers to specialize as an aside to his specific detailing of the impact of the extent of the market.

D. Markets, Price Systems and Theory of Value

Adam Smith echoes Ibn Khaldun's thoughts on the underlying value of a good as a product of the labor necessary to acquire it. As Adam Smith put it, "Labour, therefore, is the real measure of the exchangeable value of all commodities." (1:5:12) Ibn Khaldun, likewise attributes the prosperity of individuals to the "value realized from their labour." (5:308) Khaldun further credits the wealth of large nations to the "large amount of (available) labour, which is the cause of (profit)." (4:281)

These ideas are further developed by both Khaldun and Smith into an understanding of how markets function to determine prices. Khaldun discusses the differences in prices for labor in different locations and attributes the differences in wages to the differences in the stages of development of the localities. That is, when demand for luxury goods increase due to increasing population (and therefore increased prosperity), the wages of those that provide these goods will rise.

Then, when a city has a highly developed, abundant civilization and is full of luxuries, there is a very large demand for those conveniences and for having as many of them as a person can expect in view of his situation. This results in a very great shortage of such things. Many will bid for them, but they will be in short supply. They will be needed for many purposes, and prosperous people used to luxuries will pay exorbitant prices for them, because they need them more than others. Thus, as one can see, prices come to be high. (4:277)

This eventually provides incentives for others to join the profession and the increase in the supply of labor will bring wages down. Khaldun also applies the concepts of supply and demand to goods markets:

Likewise, it is more advantageous and more profitable for the merchant's enterprise, and a better guarantee (that he will be able

to take advantage of) market fluctuations, if he brings goods from a country that is far away and where there is danger on the road. In such a case, the goods transported will be few and rare, because the place where they come from is far away or because the road over which they come is beset with perils, so that there are few who would bring them, and they are very rare. When goods are few and rare, their prices go up. On the other hand, when the country is near and the road safe for traveling, there will be many to transport the goods. Thus, they will be found in large quantities, and the prices will go down. (5:336)

Adam Smith discusses the concepts of price and markets by introducing the idea of natural price, or equilibrium price, and the role of changes in demand and supply in explaining deviations from the natural price. Smith repeats the idea that profits in an industry will lead to greater competition and thus falling profits:

When by an increase in the effectual demand, the market price of some particular commodity happens to rise a good deal above the natural price, those who employ their stocks in supplying that market are generally careful to conceal this change. If it was commonly known, their great profit would tempt so many new rivals to employ their stocks in the same way, that, the effectual demand being fully supplied, the market price would soon be reduced to the natural price, and perhaps for some time even below it. If the market is at a great distance from the residence of those who supply it, they may sometimes be able to keep the secret for several years together, and may so long enjoy their extraordinary profits without any new rivals. Secrets of this kind, however, it must be acknowledged, can seldom be long kept: and the extraordinary profit can last very little longer than they are kept. (1:7:25)

Yet again, the parallels between Smith's and Khaldun's thoughts are easily drawn. Both authors discuss the roles of supply and demand on prices, both utilize the concept of labor as the underlying source of value of goods, and they both discuss the role that the labor of a population plays in the wealth of that nation.

E. The Role of Money

Adam Smith makes clear reference to the transactions demand for money as well as the use of money as a unit of account and store of value:

But when barter ceases, and money has become the common instrument of commerce, every particular commodity is more frequently exchanged for money than for any other commodity. The butcher seldom carries his beef or his mutton to the baker or the brewer, in order to exchange them for bread or for beer; but he carries them to the market, where he exchanges them for money, and afterwards exchanges that money for bread and for beer. The quantity of money which he gets for them regulates, too, the quantity of bread and beer which he can afterwards purchase. It is more natural and obvious to him, therefore, to estimate their value by the quantity of money, the commodity for which he immediately exchanges them, than by that of bread and beer, the commodities for which he can exchange them only by the intervention of another commodity; and rather to say that his butcher's meat is worth threepence or fourpence a-pound, than that it is worth three or four pounds of bread, or three or four quarts of small beer. Hence it comes to pass, that the exchangeable value of every commodity is more frequently estimated by the quantity of money, than by the quantity either of labour or of any other commodity which can be had in exchange for it. (1:5:13)

Likewise, Ibn Khaldun discusses the use of money as a store of value and a unit of account (as well as a medium of exchange):

Furthermore, God created the two mineral "stones," gold and silver, as the (measure of) value for all capital accumulations. (Gold and silver are what) the inhabitants of the world, by preference, consider treasure and property (to consist of). Even if, under certain circumstances, other things are acquired, it is only for the purpose of ultimately obtaining (gold and silver). All other things are subject to market fluctuations, from which (gold and silver) are exempt. They are the basis of profit, property, and treasure. (5:312)

And, the office of the mint is concerned with the coins used by Muslims in (commercial) transactions, with guarding against possible falsification or substandard quality (clipping) when the number of coins (and not the weight of their metal) is used in transactions, and with all else relating to (monetary matters.) (3:463)

So we have an overlap on the observations of Smith and Khaldun regarding the three basic functions of money. As Soofi (1995) mentions, Ibn Khaldun also brings a discussion of inflationary pressure during times of expansion. Though, as Soofi remarks, Ibn Kaldun did not consider inflation to be a purely monetary phenomenon as he described demand-pull and cost-push inflation.

As with the above-mentioned economic ideas, inflation is a topic also discussed by Adam Smith with much more detail than by Ibn Khaldun. Smith raises the issue in the context of the discovery (and ultimate flow) of precious metals in America, as well as the tendency of governing parties to inflate currency, "For in every country in the World, I believe, the avarice and injustice of princes and sovereign states, abusing the confidence of their subjects, have by degrees diminished the real quantity of metal, which had been originally contained in their coins." (1:4:11) Adam Smith makes other references to this type of monetary inflation, including:

Princes and sovereign states have frequently fancied that they had a temporary interest to diminish the quantity of pure metal contained in their coins; but they seldom have fancied that they had any to augment it. The quantity of metal contained in the coins, I believe of all nations, has accordingly been almost continually diminishing, and hardly ever augmenting. Such variations, therefore, tend almost always to diminish the value of a money rent. (1:4:14)

III. Conclusion

It is well known that many of the ideas put forth in *Wealth of Nations*, including the benefits of division of labor, did not originate entirely with Adam Smith. Although some debate remains regarding the extent of the originality of Smith's ideas, this debate has largely ignored the contributions of Ibn Khaldun to the development of key economic principle attributed to Smith.¹⁰ We have examined some of the similarities between the major works of Ibn Khaldun and Adam Smith in order to encourage the inclusion of Khaldun's writing in the study of the development of economic thought. Further research is necessary to more closely examine how Khaldun's thoughts on the role of prices and markets, money, taxes and the economic role of government fit into the context of modern economic theory. To be sure, this is not the first paper acknowledging the role of Ibn Khaldun, but one that attempts to more

¹⁰ Much of the debate centers on the extent of Smith's dependence upon the works of the French philosophers in general, and Diderot's *Encyclopedie* in particular, though others argue that there are other influences found in Smith's writing.

firmly establish the role of Khaldun as progenitor of much of the foundation of modern economic thought, particularly as put forth in Adam Smith's *Wealth of Nations*.

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