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Economic thought of
an Arab scholastic: Abu Hamid al-Ghazali¹
(A.H. 450-505/A.D. 1058-1111)

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1

This paper explores the economic thought of Abu Hamid al-Ghazali, an eleventh-century Arab scholar, "acclaimed as the greatest . . . certainly one of the greatest" (Watt, vi), and "by general consent, the most important thinker of medieval Islam" (Bagley, xvi). Ghazali's scholarship extended to many diverse fields of learning. His writings, as those of European scholastics and others of his era, emphasized the "holistic" intellectual approach.² While there have been other studies on his works (see, for example, McKee, Quatren, Watt), to the best of our knowledge, none has investigated his contributions to economics, especially on the basis of a detailed scrutiny of his original, Arabic-language writings. The present paper attempts to fill that void.

There are also other, secondary concerns. About twenty-five years ago Joseph Spengler wrote an excellent article on the economic thought of another Arab scholar, Ibn Khaldun (732-808/1332-1404), and while referring to Arab-Islamic literature of the era, he concluded that "the knowledge of economic behavior in some circles was very great indeed, and one must turn to the writings of those with access to this knowledge and experience if one would know the actual state of Muslim economic knowledge" (1964, 364). That indeed is true, for it is possible to identify at least thirty Arab scholars prior to Ibn Khaldun who wrote extensively on economic matters, Ghazali being one of the most prominent. Another scholar writing on Ibn Khaldun called him "among the fathers

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1. The term "holistic" refers to the philosophical approach followed by Europe's medieval scholars, concerned with the "possibility of reconciling reason with faith" (Doran, 96). Among the few known in St. Thomas Aquinas (1225-73/1225-1274), Maimonides Arab-Islamic scholars of the time fit that description. Further, although Ghazali was born in Persia (part of the Seljuq Domain, 424-502/1033-1190), he along with Ibn Sina, Ibn Arabi, and others is invariably identified as an Arab (or Islamic) theologian-scholar.

of economic science" but quite erroneously concluded that Ibn Khaldun was "an accident of history . . . without predecessors and without successors" (Roudhaki, 1118).

Another motivation, and a bit more fundamental, has to do with the "gap" in the evolution of economic thought alleged by Joseph Schumpeter in his magnum opus, *History of economic analysis*: "as far as our subject is concerned, we may safely leap over 500 years to the epoch of St. Thomas Aquinas (1225-74), whose *Summa theologiae* is in the history of thought what the south-western spire of the Cathedral of Chartres is in the history of architecture" (74). Schumpeter's section entitled "The great gap" referred to the five centuries before the European scholastics as "black centuries," implying that nothing of relevance to economics was said or written during that period. Such a claim of "discontinuity" in the evolution of human intellect generally but in the history of economic thought particularly is untenable. A substantial body of contemporary economics is traceable to medieval Arab scholastics such as Ghazali and others (see Irfani; for other Arab scholastics see Essad, and Spengler; some are also listed by name in our reference list). For new it suffices simply to refer to another distinguished economic historian, Karl Polanyi, who, in tracing the European Renaissance, stresses that the scholastics "derived their intellectual energy from the works of Arabian philosophers" (21). These were Ghazali (Algazel), al-Farabi (Alfarabius, 237-350/870-950), Ibn Sina (Avicenna, 370-428/980-1037), Ibn Rushd (Averroes, 520-595/1126-98), and others, whose works became available to medieval Europe during twelfth through fourteenth centuries. This period has been called by one author "the real age of translations" (mainly Arabic to Latin, but also to Hebrew), when in Europe "translation was the main intellectual task" (Myers, 78). Unfortunately, Schumpeter's "gap" thesis reinforced an already stubborn tradition in all contemporary literatures on economic thought (see Ghaznafar).

These larger perspectives aside, we aim here to sketch Ghazali's life and the environment in which he lived, offer a brief perspective on his socioeconomic outlook, and provide detailed discussions of his ideas on several major economic themes.

II

Born in 450/1058, Ghazali was orphaned at a young age. The promise of free lodging persuaded him to attend a school, which inclined in him an urge for learning. Later he traveled extensively and mastered the standard curriculum of Islamic higher education (Scriptures and jurisprudence). Becoming an accomplished scholar, he joined a prominent university in Baghdad (part of the domains of the Great Seljuq Dynasty). After a brief affiliation there he spent the next ten years in Syria,

Palestine, Arabia, Iraq, and Egypt. About 500/1106 he returned to his birthplace, where he lived till his death in 505/1111.

Throughout his student life he studied various subjects, prominent among them being the Islamic sciences. Among his several writings, one widely recognized as the most significant, his four-volume *Fiya Uluw al-Din* (The revival of the religious sciences), is the major source for discussion below and, incidentally, parallel to Aquinas's *Summa theologiae* (see, e.g., Durant, 950; Sartre, 904).

Consistent with the intellectual tradition of the time, Ghazali's scholarship was not dominated by economic aspects of life—true also of other Arab as well as European scholastics. Instead one chiefly encounters in such texts theological/philosophical ratiocination. Treatises on a specific field would have hardly been compatible with the prevailing "integrative" approach to learning. Like other scholars of his age Ghazali mixed philosophical, religious, ethical, sociological, and economic considerations into his writings. From time to time a poem, anecdote, aphorism, or quotation from the Scriptures (Islamic as well as others) enlightens his texts.

III

Of the socioeconomic aspects of his thinking we can only present a bare outline; but from this we can grasp what might be called his "Islamic social welfare function" as well as his views on the role of economic activities generally. An overriding theme throughout his works is the concept of *ma'ashah*, or social welfare or utility ("common good"), a concept which encompasses all human affairs, economic and others, and which establishes close links between the individual and society. Indeed one author has suggested that Ghazali discovered "the hard-to-pin-down concept of a social welfare function that modern economists long for" (Zarga, 14). Ghazali identified all matters in terms of whether they were *ma'ashah* (utilities) or *mu'ashah* (disutilities) in promoting social welfare. He further defined the welfare function in terms of a hierarchy of individual and social needs.

According to Ghazali, the welfare (*ma'ashah*) of a society depends upon the pursuit and preservation of five basic goals: (1) religion (*deen*), comprehensively defined as a way of life; (2) life or soul (*nafs*); (3) family or progeny (*nasl*); (4) property or wealth (*mal*); and (5) intellect or reason (*aqal*). He emphasizes that as per divine guidance, "the goodness of this life and the hereafter (*ma'ashah al-dunya wa al-akhirah*) represents the key objective" (*Ihya*, 2:109).

He defines the economic aspects of his social welfare function in terms of a tripartite hierarchy of individual and social utilities: necessities (*daruriyat*); conveniences or comforts (*hajiyyat*); and refinements or luxuries (*istihsanat*)—a classification reminiscent of the Aristotelian

tradition, identified by one scholar as "critical needs" (basic needs, need for "external" goods, and for psychic goods) (Lowy, 226). The key to preservation of these five basic goals lies in the provision of the first level, necessities, defined as food, clothing, and shelter. However, Ghazali recognizes that such basic needs tend to be flexible according to time and place and may include even sociopsychological needs. The second group of needs "encompasses all activities and things that are not vital to the five foundations, but, rather, are needed to remove impediments and difficulties in life." The third group "includes activities and things that go beyond the limits of consciousness; it includes matters that complement, brighten or adorn life" (Zarqa, 14).

Although salvation is the ultimate goal, Ghazali would not want that pursuit to be in disregard of one's mundane obligations. Indeed the pursuit of economic activities is not merely desirable, it is imperative for salvation (Ihya, 2:60). He emphasizes the "middle path" and the "consciousness" of one's intentions in all activities. When intentions are consistent with divine laws, then economic activities are tasteful to worship—part of one's calling (Ihya, 2:83).

In addition Ghazali considers the development of the economy as part of divinely ordained, socially obligatory duties (*fi-d-e-lyah*). If these were not fulfilled, worldly life would collapse and humanity would perish (Ihya, 2:32). And he insists upon efficiency in such pursuits, for doing so is part of fulfilling one's religious duties (Ihya, 2:249, 3:236; Mizan, 377). Further, he identifies as part of one's calling three reasons why one must pursue economic activities: (1) self-sufficiency, (2) the well-being of one's family, and (3) assisting others in need. Anything less would be religiously "blameworthy" (Ihya, 2:63, 249).

Ghazali criticizes those who would confuse the motives to the acquisition of a mere subsistence level of living: "If people stay confined to a subsistence level (*awal al-rasaq*) and become very fertile, deaths will increase, all work and industry will cease to a halt, and society will perish. Further, religion will be destroyed, as the worldly life is the preparation for the Hereafter" (Ihya, 2:108). Thus if subsistence living were the norm, human productive effort would suffer, in addition to society's spiritual loss.

Though Ghazali views people as "maximizers" and acquisitive, he sees nothing religiously condemnable about such tendencies: "Man loves to accumulate wealth and possessions of all kinds of property. If he has two valleys of gold, he would want to have a third" (Ihya, 2:283). Why? Because "man has high aspirations. He always thinks that the wealth which is enough now may not last, or might get ruined and then he would need more. He tries to overcome these fears by further accumulation. But such fears do not end—even if he has all the posses-

sions of the world" (Ihya, 3:348). Clearly Ghazali recognizes not only man's desire to accumulate wealth but also his need to be prepared for the future. However, he warns that if the acquisitive spirit leads to greed and pursuit of personal whims, it is condemnable (Ihya, 3:224, 4:191; Mizan, 296). It is in this sense that he regards wealth as the "greatest test" (Ihya, 3:51, 233).

How do income and wealth come about? Ghazali recognizes three sources: earnings through individual labor, profits from trading, and acquisitions of fortunes. He cites examples of the latter as through inheritance, finding a treasure, or receiving a gift. But he insists that sources of earnings must be religiously lawful and valid.

He is critical of forced equality of income and wealth. To the extent possible, sharing of wealth must be voluntary, as part of one's divinely ordained moral obligations toward others, rather than through the authority of the state—though conditions may warrant that approach. Indeed, as a corollary, he suggests that if subsistence were the norm, rulers would force people to surrender what they viewed as beyond that and would become tyrants. Further, he is concerned about the administrative problems of collecting this "surplus" as well as its distribution (Ihya, 2:106). Without voluntary sharing, he argues, two "blameworthy" results will follow: extravagance by some, and enviousness by others. The former leads to "wasteful" deeds, the latter to the hoarding of money or keeping it idle and not spending, which is like "the imprisonment of a public authority not allowed to perform its proper functions" (Ihya, 2:341). Incidentally, he has little sympathy for those who, on faith (*tasakkuf*) alone, choose to be poor, or those who, without making efforts, attribute their misfortunes to the "will of God" (*al-ahwib*, 246; Ihyā, 4:265).

In a historical context it is useful briefly to point out that Ghazali's scholarship, infused as it was with his deep Islamic faith, assumes its greatest significance in relation to the larger philosophical-theological controversies of the time—between reason and revelation, between faith and skepticism. Examining beyond the inherited nonverbal of Aristotelian logic, he challenged other Arab-Islamic scholars of his era, such as al-Farabi, Ibn Sina, and Ibn Rushd, whose rationalistic interpretations of Aristotle threatened Islam itself. This challenge and his attempt at a reconciliation appeared in his treatise *Talaifu al-Fularifih* (The Incoherence of philosophers).

Subsequently, as the translated works of the Arabic-Islamic Aristotelian rationalists reached medieval Europe, they even threatened the "liquidation of Christian theology" (Dante, 954). Indeed, the list of 219 condemnations ("Averroistic" heresies, as they were called) published in 1277 by Étienne Tempier, the bishop of Paris, was a clear manifesta-

tion of those fears (Durant, 957-58). Thus, relying heavily on Ghazali's works, "St. Thomas Aquinas was led to write his *Summa*" to overcome that threat (Durant, 954). And, "since al-Ghazali placed science, philosophy, and reason in positions inferior to religion and theology, the Scholastics accepted his views, which became characteristic of most medieval philosophy" (Myers, 39-40).

IV

With this general perspective on Ghazali's socioeconomic outlook in mind, we may now identify several specific economic concepts and principles similar to those found in the works of his Arab cohorts, European scholastics, and others. Indeed, many of Ghazali's ideas are almost identical to those found in contemporary texts.

Much of his discussion on economic matters is found in his *Ahya Ulum al-Din*. Some of his other writings are also important sources. From these it becomes possible to pull together several logically coherent, closely interrelated economic themes, under four broad topics: (1) voluntary exchange and the evolution of markets; (2) production activities; (3) barter and the evolution of money; and (4) the role of the state and public finances.

1. Voluntary exchange and the evolution of markets

Ghazali provides a surprisingly detailed discussion of the role and significance of voluntary trading activities and the emergence of markets, based on demand and supply forces in determining prices and profits. Indeed he seems to lay the foundation of what was later called the "spirit of capitalism."

For Ghazali, markets evolve as part of the "natural order" of things—an expression of self-motivated desires to satisfy mutual economic needs. A full appreciation of the depth and breadth of his insights becomes evident from the following:

Perhaps farmers live where farming tools are not available. Blacksmiths and carpenters live where farming is lacking. So the farmer needs blacksmiths and carpenters, and they in turn need farmers. Naturally, each will want to satisfy his needs by giving up in exchange a portion of what he possesses. But, it is also possible that when the carpenter wants food in exchange for tools, the farmer does not need the tools. Or, when the farmer needs tools, the carpenter does not need food. So such situations create problems. Therefore, persons emerge leading to the creation of trading places where various tools can be kept for exchange and also warehouses where farmers' produce can be stored. Then, customers come to obtain these goods and markets are established.

Farmers bring produce to the markets and if they cannot readily sell or exchange what they possess, they sell them at a lower rate to the traders who in turn store the produce and sell to the buyers at a profit. This is true for all kinds of goods. (*Ahya*, 3:227)

He is also explicit on regional trade:

Thus, such practices extend to various cities and countries. People travel to different places to obtain tools and food and transport them. People's economic affairs become organized into cities which may not have all the tools needed and into villages which may not have all the food-stuffs needed. People's needs and interests necessitate transportation. Thus, a class of traders who carry goods from one place to another emerges. The motive behind all these activities is the accumulation of profits, undoubtedly. These traders exhaust themselves by traveling to satisfy others' needs and to make profits, and then these profits too are rates by others when they themselves obtain things from others. (*Ibid.*, 3:227)

Ghazali thus clearly suggests the "mutuality" of economic exchange, which necessitates specialization and division of labor with respect to regions and resources. Further, he recognizes that trading activities add value to goods by making them available at a useful place and time. Motivated by participants' self-interest, exchange leads to the creation of profit-motivated middlemen, or traders. Though accumulation of wealth in this manner was not viewed as among the noblest activities in the prevailing environment, he recognizes it as essential to the proper functioning of a progressive economy. Moreover, while discussing trading activities, he also mentions the need for safe and secure trading routes and remarks that the state should provide protection so that markets can expand and the economy can grow. He shows a sound understanding of the interaction of demand and supply, as well as the role of profits as part of the divinely ordained scheme of things. He even provides a rather well-defined ethical code for the business community.

Demand, supply, prices, and profits. Though Ghazali does not discuss demand and supply in modern terms, numerous passages from his works demonstrate considerable depth in this respect. Throughout he talks in terms of "prevailing price" as determined by market practices, a concept referred to as "just price" by some of his Arab contemporaries, later to be similarly labeled by the European scholastics, and still later to become "equilibrium price."

Ghazali is referring to an upward-sloping supply curve when he says that "if the farmer does not get a buyer for produce, then he sells it at a very low price" (*Ibid.*, 3:227). His awareness of market forces is evident when, concerning high food prices, he suggests that the price should be

induced down by reducing demand, implying a leftward shift in the demand curve (*Ihya*, 1:37). He also seems to have some insight into the concept of price elasticity of demand: "a cut in profit margin by price reduction will cause an increase in sales and thus in profits" (*Ihya*, 2:80). He likewise recognizes "price-inelastic" demand, for he says that since food is a necessity, trading in food should be minimally motivated by profits, as exploitations through excessive prices and profits could occur, and that "since profits represent an 'extra,' they should be, in general, sought from non-necessaries" (*Ihya*, 2:73).

Like other scholars of his era, Ghazali discusses prices and profits more or less together, without clear reference to costs and revenues. While expressing fierce disdain, through not condemnation, for profit-seeking, he recognizes the motivations for, as well as sources of, profits. Profits are viewed as the return on risk and uncertainty, as "they [traders and businesses] bear a lot of trouble in seeking profits and take risks and endanger lives in voyages" (*Ihya*, 4:118).

As indicated above, Ghazali is critical of "excessive" profits. He suggests that if a buyer offers a "high" price, relative to the "prevailing price," the seller should not accept, for profit will be excessive—although that would not be an injustice if there *was* no fraud (*Ihya*, 2:79). He suggests, however, that "normal" profits should be around 5 to 10 percent of the price of a good (*Kimya*, 358). He insists that sellers should be guided by "profits" of the "ultimate" market—i.e., the Hereafter (*Ihya*, 2:75–76, 84).

Ethics of market behavior. Ghazali visualized the functioning of markets as the basis of an ethical-moral code of conduct on the part of participants. Specifically, he warns against profiteering by hoarding foodstuffs and other necessities. This would be a great injustice, especially in time of scarcity, and must be condemned (*Kimya*, 351).

He considers false advertisement as one of the evils of the market which must be prohibited. He admonishes traders that "they should not give false information about weight, quantity, or the price. Such practices mean fraud, which is to be strictly prohibited" (*Ihya*, 2:75). While unambiguous, informative advertisement is acceptable, he says, it is wasteful to point out the obvious qualities of a good. Emphatic on the necessity for truth and honesty in business, he condemns practices such as adulteration, deceptive grading or marketing, and control of markets by secret dealings and price manipulations (*Ihya*, 2:76).

Thus, according to Ghazali, markets are to function freely and must be free from deception. Indeed the participants' behavior should reflect benevolence (*Ihya*), meaning "doing something extra for another in transactions beyond the material benefits, though that extra is not an obligation, but merely an act of generosity" (*Ihya*, 2:79). He then enumerates several guidelines concerning the exercise of benevolence in

the marketplace, such as leniency in dealing with the poor, flexibility in debt transactions, even forgiving debt repayment from some poor.

2. Production activities

Ghazali devotes considerable attention to describing various kinds of production activities in a society, including their hierarchy and nature. He classifies production activities in terms of their social importance and emphasizes the need for cooperation and coordination. His primary focus is on the types of activities that are consistent with the underlying Islamic ethos.

Production of necessities a social obligation. We noted above that Ghazali considers economic pursuits as part of the individual's worship (*Ihya*, 2:61). Production of necessities is specifically viewed as a socially obligatory duty (*Ihya*, 2:83). If some are engaged in producing such goods in sufficient quantities for society's needs, then the obligation of all is fulfilled in this respect. However, if no one is pursuing such activities or if insufficient quantities are produced, then all will be held accountable in the Hereafter. In an ultimate sense, the state must assume the responsibility of ensuring that necessities are produced in sufficient quantities. Indeed, Ghazali argues, an imbalance concerning necessities will tend to create socially destructive conditions.

Hierarchy of production. Ghazali suggests a classification of productive activities quite similar to that found in contemporary discussions: primary (agriculture), secondary (manufacturing), and tertiary (service). He identifies three broad categories (*Ihya*, 1:12, 13, 16; *Mizan*, 328–29):

1. *Basic industries:* those which sustain human life. There are four subgroups: agriculture for food, textiles for clothing, construction for shelter, and activities of the state (including the provision of infrastructure), particularly for facilitating the production of necessities and for promoting cooperation and coordination among those engaged in production.
2. *Auxiliary activities:* adjuncts to basic industries, such as iron industry, mineral exploitation and development, and forest resources.
3. *Complementary activities* relating to basic industries, such as grinding and baking of agricultural products.

Ghazali recognizes the first group as the most important and suggests that within this group the role of the state, as a mediating force, is rather crucial.

Given this classification, he believes that to ensure proper harmony of the socioeconomic environment, all three groups must be actively promoted and pursued; indeed their fulfillment represents a socially obliga-

tery duty," a "divine duty." And "if people abandon them, human beings could not survive—and it is God's blessing that people have skills for different occupations" (*Ihya*, 2:8; *Mi'yan*, 366).

Stages of production, specialization, and linkages. Ghazali is also aware of the various production stages before a product's final consumption. Farther, he is conscious of the "linkages" that often exist in the production chain—a notion well recognized in present-day discussions. Thus, he says, "the farmer produces grain, the miller converts it into flour, the baker prepares bread from the flour." As to interdependence in production, he says: "Further, the blacksmith makes tools for farmer's cultivation, and the carpenter manufactures tools needed by the blacksmith. The same goes for all those who engage in the production of tools and implements needed for the production of foodstuff" (*Ihya*, 4:178).

The various production stages and linkages require division of labor as well as coordination and cooperation. GHAZALI provides a clear description:

You should know that the plants and animals cannot be eaten and digested as they are. Each needs some transformation, cleaning, mixing, and cooking, before consumption. For a bread, for example, first the farmer prepares and cultivates the land, then the bullock and tools are needed to plough the land. Then the land is irrigated. It is cleared from weeds, then the crop is harvested and grains are cleaned and separated. Then there is milling into flour before baking. Just imagine—how many tasks are involved, and we here mention only some. And, imagine the number of people performing these various tasks, and the number of various kinds of tools, made from iron, wood, stone, etc. If one inquires, one will find that perhaps a single loaf of bread takes its final shape with the help of perhaps more than a thousand workers. (*Ihya*, 4:180)

Ghazali elaborates his argument by using the example of a needle, analogous to Adam Smith's pin-factory example seven centuries later: "even the small needle becomes useful only after passing through the hands of needle-makers about twenty-five times, each time going through a different process" (*Ihya*, 4:179). He also offers insights as to specialization and interdependence within a family (*Ihya*, 2:31, 3:226).

Though he emphasizes cooperation and coordination, Ghazali is conscious of the competitive environment in which economic activities take place: "When people live in a society and their desires for different things develop, there tends to be a struggle in fulfilling those desires. . . . There is competition, but balance can be maintained by the exercise of authority and maintenance of justice" (*Ihya*, 1:35). He uses the word

"competition" in broader terms than its current usage and suggests that competition in general is not to be condemned or prohibited. Rather, he identifies three levels of competitive: obligatory, desirable, and permissible. "Obligatory competition pertains to religious duties in pursuit of salvation. Desirable competition relates to the acquisition of necessities and comforts, as well as spending on others' needs. Permissible competition relates to the acquisition of luxuries" (*Ihya*, 3:790-91). However, he insists, a competition must not lead to jealousy and contempt for others.

As an aside, it is interesting to note that Ghazali anticipated Thomas Malthus by several hundred years on the subject of population and how to regulate its growth. He suggests at least two economic motives for practicing birth control: the burden of a large family, and the possibility that such an excessive burden could force one into illicit means of livelihood. But though birth control (as, or catas interruptus, is the suggested method) may be acceptable, actions based on such motives "tend to place a person below the rank of praiseworthy and preferable people" (*Ihya*, 2:52). Clearly, Ghazali was far ahead of his times (see also Spengler 1971).

3. *Barter and the evolution of money*

Money is perhaps one of the most important inventions in the conduct of economic affairs. Ghazali recognized this and offered a rather sophisticated discourse as to the evolution of money and its various functions. He explains how money overcomes the problems of barter. He discusses the harmful effects of counterfeiting and currency debasement (participating similar observations by Nicholas Oresme during the fourteenth century and by Thomas Grechian, Richard Cantillon, and others much later).

Problems of barter and the need for money. The following passage suggests the depth and rigor of Ghazali's insights on the subject:

Creation of dirhams and dinars [gold and silver coins] is one of the bounties of God. All economic transactions are based on these two kinds of money. They are metals, with no benefits in themselves. However, people need them, to exchange them for different things—food, clothing, and other goods. Sometimes a person needs what he does not own and he owns what he does not need. For example, a person has saffron but needs a camel for transport and one who owns a camel does not presently need one but he wants saffron. However, there must be a measure of the two objects in exchange, for the camel owner cannot give the whole camel for a quantity of saffron. There is no similarity between them so that equal amount of that weight and form could be given. These goods have no direct proportionality so one cannot know how much

saffron will equal a camel's worth. Such barter transactions will be very difficult.

Various goods such as these need a medium which could rate justly and determine their value in exchange. When their place and grades are ascertained, it is possible to distinguish which ones are equal to each other and which are not. So it is said a camel is, say, equal to 100 dinars and this much quantity of saffron is worth 100 dinars. Since each is equal to a given amount of dinars, the two quantities are equal to each other. But these dirhams and dinars are not needed for themselves. They are created to change hands and to establish rules for exchange with justice and fair buying goods which have usefulness. A thing (such as money) can be exactly linked to other things if it has no particular form or feature of its own—for example, a mirror has no color but can reflect all colors. (Ihya, 4:91–92)

Ghazali is clearly pointing out here the problems of a barter system that modern jurists would label as (1) lack of a common denominator, (2) indivisibility of goods, and (3) the problem of double coincidence of wants. Although exchange can take place through barter, differences in the characteristics of goods (e.g., camels and saffron) make it inefficient. Indeed, the choice of various examples manifests Ghazali's keen understanding of "barter" problems. He asserts that money evolved as a convention only; no society could exist without the exchange of goods, no exchange could effectively take place without equivalence, and such equivalence is only properly determined when there is a common measure.

It might be noted that Ghazali recognizes not only the fundamental basis of value of a good, i.e., its usefulness or utility, but also its value in exchange. Both concepts—use value and exchange value—became very significant in subsequent debates by classical economists and others.

Unlawful money and hoarding against divine rules. As indicated above, Ghazali understood the various functions of money. But he stresses that money is not desired for its own sake; it carries value only in exchange—only when parted with. Moreover, he observes that about the only purpose served by gold and silver is as money—dirhams and dinars. He condemns those who hoard pieces of money or convert them into other objects:

If someone hoards dirhams and dinars, he is a transgressor. Dirhams and dinars are . . . useless by themselves. They are created to circulate from hand to hand, to govern and facilitate exchange . . . [so] symbols to know the value and grades of goods. Anyone who

converts them into utensils of gold and silver is ungrateful to his Creator and worse than the hoarder of money, for such a person is like one who forces the ruler to perform unprofitable functions—stitching cloth, collecting taxes, etc. Hoarding of coins may be preferable to conversion, for there are other metals and materials—copper, bronze, iron, clay—unable to make utensils. But, clay and iron cannot be used for the functions performed by dirhams and dinars. (Ihya, 4:91–92)

Counterfeiting and currency debasement. Historically, gold and silver have been the most important metals used as commodity money. Governments started mixing these coins to avoid costly weighings whenever a transaction occurred. Money could be privately produced by simply taking one's mined gold or silver to the mint. Under a commodity standard of money, a coin's metal content used to be equivalent in value to the coin's value as money. On that basis, if more of a metal was discovered, the supply of money would increase, as would prices, and money would depreciate; the opposite would hold if there was a decrease in the supply of the metals. Such is the simple explanation of inflationary-deflationary cycles under a commodity standard of money.

Ghazali seems to have grasped the rudiments of this cycle theory, though his analysis is not as specific. His concern is primarily with problems that arise from counterfeiting and currency debasement—the mixing of inferior metals with gold or silver coins, or mutilation of the metallic content. He regards counterfeit money as not only an individual *sin* but, most importantly, potentially harmful to the society generally:

It is a great injustice to place counterfeit money in circulation. All those handling it are harmed . . . circulation of one counterfeit dirham is worse than stealing a thousand dirhams, for the act of stealing is one *sin*, ending once committed; but counterfeit money is something that affects many who use it in transactions for a long time. (Ihya, 2:73)

As to currency debasement, Ghazali says:

By *naq'* [alloy, mixed metal] we mean that unit of money which contains no silver at all; it is only polished, or dinars with no gold in them. If a coin contains some silver but it is mixed with copper and that is the authorized coin in the country, this is acceptable whether silver content is known or not. But, if it is not authorized, then it will be acceptable only if silver content is known. (Ihya, 2:74)

He seems to suggest that if debasement is fraudulent it is to be condemned, whereas if the mixture of metals in coins is state-authorized and known to all users it is acceptable. Thus, he allows for the possibility

(Al-Mubashir, 303-4). Here is an obvious antecedent of what is now referred to as cost-benefit analysis: taxes may be levied to avoid greater loss later.

While discussing taxation, Ghazali also provides insights on other related matters, such as tax administration and apportioning burden among taxpayers. In particular he admonishes that "no ruler should ever tolerate extortion from the subjects by any revenue official. . . . the ruler must look after the society as he would his own house, so society may prosper and grow. What he takes in taxes must be in moderation, and what he gives must be in moderation; for each has its limits and its measure" (Cousnet, 80-81).

He also seems aware of both the benefits received and the ability-to-pay principles of taxation, as the terms are used in current literature. He suggests the *quid-pro-quo* basis of some taxes when he discusses the benefits-related levy of *jizyah* (poll tax). However, as a general principle of equity, he advocates the ability-to-pay concept; indeed, on the basis of this concept he implies a highly progressive tax system. He even suggests that taxpayers should know the uses of their resources: "when they [rulers] demand revenue from the subjects, they must demand only at the proper seasons and times. Subjects must know the usages and burdens must be fixed in accordance with their capacity and ability [to pay]. They [the rulers] must be 'crane-slayers, not sparrow-slayers, at the hunt.' That is, they must take little or nothing from the poor" (Cousnet, 112).

(2) Public borrowing. Ghazali is among the few scholars of his era who discuss public borrowing as another source of revenue. He states: "One cannot deny permission to the ruler to borrow from the people when the needs of the state so require. However, the question is: if the ruler does not anticipate revenues in the public treasury which would exceed what is needed for the armies and other public officials, then on what basis can the funds be borrowed?" (Jahid, 24). Thus it appears that given the conditions of the economy, Ghazali would permit public borrowing if it is possible to ensure repayment from future revenues. In present-day usage such borrowing is exemplified by "revenue bonds," extensively used by state and local governments in the United States.

(3) Public expenditures. As with sources of revenue prevalent at the time, Ghazali is also critical of the manner and areas of public expenditure: "At this time the rulers do not reward the deserving people, but those who they think could be useful in safeguarding their own interest, who make their courts decreed and who could be used to praise them and give them compliments in their presence as well as absence" (Jahid, 2:177). The functional delimitation of public expenditures that Ghazali recommends is rather broad and flexible: establishment of socioeco-

nomic justice, security and stability of the state, and development of a prosperous society—almost in the order mentioned (Cousnet, 58, 76, 81).

In addition to what has already been noted about ensuring such conditions, it might be said that though Ghazali prefers voluntary sharing as a means of promoting socioeconomic justice, he would allow state intervention as an option, if necessary, to eliminate poverty and widespread distress:

When the sultan's subjects fall into penury or suffer distress, it is his duty to assist, especially in times of drought or when they are incapable of earning livelihood (on account of higher prices). The king must [then] provide the subjects with food and extend assistance and ensure that his officials do not oppress people—for, if that happens, people would become impoverished and leave the territory. Then revenue flow would be shattered; profits would accrue to hoarders, and the Sultan would [earn] curses and a bad name. It was for this reason that the rulers in the past practiced utmost frugality in such situations, and thus aided the deserving subjects. (Cousnet, 105-2).

Clearly, Ghazali is linking people's impoverishment, aggravated by deficient public services, to their migration, leading to a general economic decline, reduced tax base, and further deterioration, and the potential emergence of profiteers who exploit the poor.

As for general development of the society, Ghazali points out the need for building socioeconomic infrastructure. He says that public resources "should be spent on the construction of bridges, religious structures (mosques), shelters, roads, and other similar activities whose benefits are shared by people generally" (Ihya, 2:100). He seems aware of the "joint consumption" and "spillover" aspects of public goods. Elsewhere he suggests that public spending may be incurred for functions such as education, general law and order (public administration), defense, and health care (Ihya, 2:140).

Ghazali insists on honesty and efficiency in the affairs of the public sector. He views the public treasury as a trust in the hands of the ruler, who must not be extravagant. As for a secure and stable social environment, he declares: "Whenever sultans [rulers] rule oppressively, insecurity appears; and however much prosperity there may be, this will not visit the subjects if accompanied by insecurity. However little prosperity there may be, this will not displease them if accompanied by security; on the contrary, it will visit them. . . . Now the security of the society depends upon the discipline maintained by the Sultan" (Cousnet, 76).

V

Writing several centuries before the well-known European classical economists, Ghazali was the product of an era when man, not matter, was the measure of all things and economic concerns were relatively secondary—the ultimate test of all human activities being one's salvation. Such were the underlying assumptions of Arab scholastics generally, and, indeed, of their European counterparts. Thus Ghazali is very much in company with such European scholastics as Aquinas (1622-73/1225-1273) and Albertus Magnus (d. 678/1280), whose writings, as influenced by the Arab scholars, also extended to all facets of the human condition.

Ghazali defines a divinely ordained social welfare function, based upon rather specific social objectives, as well as guidelines for "prioritizing" individual and social needs (necessities, comforts, and luxuries), interpreted broadly to include material and nonmaterial aspects of life.

More specifically, his scholarship reveals a deep understanding of the voluntary, market-oriented exchange that "naturally" evolves among freely acting individuals, motivated by self-interest and mutual necessity. Such an avowalment is guided by a divinely inspired code of ethics and moral values. Further, while warning against worldly evils, Ghazali clearly acknowledges—indeed, mandates—the need for economic pursuits, both private and public. In fact he accords such activities an aura of piety and nobility by his constant reminders as to their religious validity—a "calling."

In discussing production behavior, Ghazali posits a tripartite hierarchy of industries—also part of man's socially obligatory duties in addition to individual, materialistic motivations. This scheme complements his social-welfare function. He also recognizes stages and linkages in production. He discusses the efficiency results of specialization and division of labor, but he is also aware of the social problems that can arise from excessive specialization. Thus he emphasizes a major role for the spirit of cooperation in production.

The evolution of a monetary economy from a simple barter setting has been a subject of enduring interest among economists. It is fair to state that almost no other scholar up to his time had provided as sophisticated an exposition of this topic as did Ghazali. Certainly, in terms of its broad content and analysis it is remarkably similar to what one finds in any present-day textbook. He provides a lucid exposition of how the problems of barter are mitigated by money. Like European scholastics and other Arab scholars, he condemns usury and money hoarding, for both cause money to deviate from its key function. He also discusses the problems of counterfeiting and debasement of money; he condemns

both. Indeed, he develops an early version of what later became known as Gresham's law.

Ghazali wrote a special treatise on the role of the state and functions of the ruler. In this volume and elsewhere he discusses public finances, including taxes, borrowing, and public expenditures. Though many of his contemporaries wrote on this subject, his discourse is especially elaborate. He distinguishes between religious and "extrareligious" revenues, and he is critical of the prevalent "antireligious" levies. Further, he allows for additional taxes, as dictated by the spirit of *maslaha*, or social welfare. He advocates the well-known "ability-to-pay" principle of tax justice and is also aware of the "benefits-received" concept. He is also concerned with tax administration issues and criticizes the malpractices of rulers and tax-collectors.

With respect to public expenditures Ghazali identifies various functional needs, not simply in terms of *maslaha*, but from the standpoint of promoting society's economic development and prosperity (in when he recognizes the need for socioeconomic infrastructure). And he is aware of the need for efficiency in the use of public funds, as they are a "public trust." And given his hierarchy of society's needs, we could say that Ghazali suggests methods of "prioritizing" the use of public funds.

In conclusion, it is fair to say that perhaps more than any other Arab scholastic of the era, Ghazali achieved a clear understanding of the operation of a voluntary-exchange economic system, albeit within the larger theological framework which viewed all human behavior in teleological terms. He left behind a rich legacy of economic thought upon which, through transference and translation, much more could be built by his successors. His influence on European intellectual developments is widely acknowledged. "Europe as well as the Muslim East felt the impact of Al-Ghazali's teaching. Echoes of his voice are heard in the reflections of Blaise Pascal, and his work was paralleled by Thomas Aquinas in the discourse on Christian doctrine and in other portions of the *Summa Theologiae*" (Calkin's *Encyclopedia*, 1979, 13:312-13).

Such "paralleling" (the field of economics included) becomes obvious from a rather cursory comparison of Aquinas's works with those of Ghazali. To the discomfiture of Schumpeter's "great gap" notion, substantial evidence points to Ghazali's great impact on European scholastics, especially Aquinas. His "teaching is quoted by St. Thomas and other scholastic writers" (O'Leary, 208), and it is generally known that Aquinas "was deeply influenced by Muslim philosophers, chiefly al-Ghazali" (Sartan, 914; see also Copelman, 181; Myers, 42; Rescher, 156; Sheikh, 189). It has been suggested that Aquinas's *Summa theologiae*, the chief source of "Thomistic economics," was "an attempt to harmonize Christianity with Aristotelian philosophy" (Newman, 163, 17

seems fair to assert that such "humanization" was significantly facilitated by the Arab-Islamic version of that philosophy, as developed by Ghazali particularly.

Clearly Ghazali must be acknowledged as a distinguished pioneer of modern economic thought, with several predecessors as well as successors, deserving (if not equal) at least as much disciplinary recognition as Aquinas, the best-known of medieval Europe's scholastics.

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References

- Abu-Yusuf, Yahya bin Ibrahim (s.d. 791-796). 1921. *Kitab al-Kharaj* (The book of taxation). Translated into French by E. Fagnat as *Libre de l'impôt* (livre des impôts). Paris: Guethen.
- Aquinas, Saint Thomas. 1967. *Summa theologiae*. 3 vols. New York: Benziger Brothers.
- Bagley 1964. See al-Ghazali 1964a.
- Boulikas, J. David. 1971. Ibn Khaldun: a fourteenth-century economist. *Journal of Political Economy* 79:5 (September-October): 1125-18.
- Burke, Pierre. 1932. *Fourteenth-century editions of Arabic authors in Latin translation. In the McDonald precession volume*. Prospect, N.Y.: Books for Libraries Press.
- Copleston, F. C. 1972. *A history of medieval philosophy*. New York: Harper & Row.
- Demsey, Bernard W. 1963. *Interest and money*. Washington, D.C.: American Council on Public Affairs.
- al-Donashy, Is'afar (12th cent.). 1977. *Kitab al-Ikhar al-Maharib al-Tijara* (The book of knowledge of the virtues of commerce). Cairo: Maktabat al-Ma'arif. Translated into German by H. Ritter as Ein Arabisches Handbuch der Handelswissenschaften. *Der Islam* 7 (1971): 1-19.
- Dorset, Will. 1959. *The story of civilization*, vol. 4, *The age of faith*. New York: Simon & Schuster.
- Elsafi, M. Yassin. 1987. Islamic economic thought. In *Pre-classical economic thought: from the Greeks to the twentieth Englishmen*. Edited by S. Todd Lowry. Norwell, Mass.: Kluwer Academic.
- al-Ghazali, Abu Hamid, al-Ash'arī's *Ufal al-Din*. Cairo: Maktabah al-Tijariyah, s.d.
- . *al-Mawarid min al-fa'wal Usul*. Beirut: al-Maktabah al-Aminiyah, 1992.
- . *Ufal Ufal al-Din*, 4 vols. Beirut: Darul Madinah, n.d.
- . *Al-mawarid min al-fa'wal*. Urdu translation by Ghulam Yazdani, referred to as "The source of Ufal Ufal al-Din." Lahore: Nazimata-e-Quran Ltd., 1975.
- . *Kitab Tahafut al-Falafala* (Incoherence of philosophers). Beirut, 1977.
- . *Mizan al-Awal*. Edited by Sulaiman Durrani. Cairo: Dar al Ma'arif, 1964.
- . *Nasahat al-Muluk*. Edited and translated from the Persian by F. R. Bagley as *Book of counsel for kings*. New York and London: Oxford University Press, 1964.
- Ghazafar, S. M. 1988. Scholastic economics and Arab scholars: the "great gap" thesis reconsidered. Paper presented at the conference of the History of Economics Society, Toronto, June.
- . *Kitab al-Ijtihad* (The book of politics). Published with an introduction by Louis Cheikho. *Al-Masriq* 21:566-73, 22:1017-43, 23:1073-78.
- . *Al-Azam*. 1985. Ibn 'Asim's concept of market mechanism. *Journal of Research in Islamic Economics* 2:2 (Winter): 53-66.
- . *Islam*. 1979. Islam. In *Collier's encyclopedia* 12:312-13. New York: Macmillan Educational.
- Langholm, Odd. 1979. *Peace and salvation in the Aristotelian tradition*. Oslo: Universitetsforlaget. Distributed by Columbia University Press, New York.
- Lowry, S. Todd. 1987. *The archeology of economic ideas: the classical Greek tradition*. Durham: Duke University Press.
- McKane, William. 1963. *Al-Ghazali's book of fear and hope*. Leiden: E. J. Brill.
- Mauro, George F. 1924. *Algebra of religions*, Vol. 2. New York: Charles Scribner's Sons.
- Myer, Eugene A. 1966. *Arabic thought and the Western world*. New York: Frederick Ungar.
- Newman, Philip, et al., eds. 1954. *Source readings in economic thought*. New York: W. W. Norton.
- O'Leary, De Lacy. 1922. *Arabic thought and its place in history*. New York: Dutton.
- Pelicans, Karl. 1983. *A history of economic reasoning*. Baltimore: The Johns Hopkins University Press.
- Quanz, M. Abul. 1975. *The ethics of al-Ghazali: a composite ethics in Islam*. Penang, Ind. Selangor: Universiti Kebangsaan Malaysia.
- Reuber, Nicholas. 1966. *Studies in Arabic philosophy*. Pittsburgh: University of Pittsburgh Press.
- Serve, George. 1971. *Introduction to the history of science*, Vol. 2, part 2. *Islam*. Carnegie Institution of Washington.
- Schwartz, Joseph A. 1954. *History of economic analysis*. New York: Oxford University Press.
- Sheikh, M. Saad. 1982. *Islamic philosophy*. London: Octagon Press.
- Spengler, Joseph J. 1964. *Islamic thought of Islam: Ibn Khaldun*. *Contemporary Studies in Society and History* 6:3: 266-88.
- . 1971. *Islamic classical-century Iranian Mathnasium? HOPE* 3:1 (Spring): 92-104.
- Taqi, Muhammad, [s. n. 1281-74]. 1964. *Al-halag-e-Nazari* (The Nazarian ethics). Translated from the Persian by G. M. Wickham as *The Nazarian Ethics*. London: Allen & Unwin.
- Watt, W. Montgomery. 1953. *Faith and practice of al-Ghazali*. London: George Allen & Unwin.
- . 1963. *Muslim intellectual: a study of al-Ghazali*. Edinburgh: Edinburgh University Press.
- Zarga, Anas. 1980. *Islamic economics: an approach to human welfare. In Studies in Islamic economics*. Edited by Khairul Ahsanul. Leicester: The Islamic Foundation.