The Monetary Thought of Two Sixteenth-Century Muslim Scholars

Abdul Azim Islahi

Money is one of the most fundamentals of all man's inventions. Every branch of knowledge has its fundamental discovery. … In economics, in the whole commercial side of man's social existence, money is the essential invention on which all the rest is based.

– Geoffrey Crowther in *An Outline of Money*

Abstract

Muslim scholars of the sixteenth century continued the tradition of writing on economic issues. Their work, however, is characterized by the period's overall feature of imitation and repetition and thus reflects hardly any advancement of monetary thought since the works of earlier Muslim scholars. This is clearly reflected in the two representative treatises on money: those of al-Suyuti (d. 1506), written at the beginning of the century, and of al-Tumurtashi (d. 1598), written at its end.

The history of Islamic economic thought is a well-researched area of Islamic economics. To the best of our knowledge, however, all such research stopped at the end of the fifteenth century, the age of Ibn Khaldun and al-Maqrizi. The present paper seeks to advance this research and intends to investigate the monetary thought of Muslim scholars during the sixteenth century (corresponding to the *hijr¥* years of 906 to 1009.) Beginning with an overview of earlier monetary thought in Islam to provide the necessary background information, it then goes on to note that par-

Abdul Azim Islahi is a professor of economics at the Islamic Economics Research Center, King Abdulaziz University, Jeddah, Saudi Arabia. This article is part of his research project on "Muslim Economic Thinking in the 10th/16th Century," financed by the Deanship of Scientific Research, King Abdulaziz University, which is thankfully acknowledged.

ticular century's monetary problems in order to provide a perspective for the discussion of monetary thought among Muslim scholars. For the purpose of comparison, European monetary thought of the same period is also analyzed.

Due to limitations of time and space, this paper concentrates on the relevant treatises and does not deal with the piecemeal opinions scattered throughout the voluminous corpus of Islamic literature. Thus, it focuses on al-Suyuti and al-Tumurtashi, as I could locate only their two exclusively monetary works. Hopefully this modest initiative will spur others to conduct more extensive research on the subject.

Monetary Thought of the Early Muslim Scholars

Muslim leaders and scholars had the idea of token money as early as the first/seventh century, for `Umar ibn al-Khattab (d. 23/644) once intended to issue money made of camel skin. But he refrained from doing so, because some of his close advisors worried that this might adversely affect the growth of camel stocks.[1] Perhaps based on this report, Imam Malik (d. 179/795) said that "if people accept skins as money, he would not like their exchange for gold and silver with deferred delivery," as it might lead to usurious practices.[2] Ahmad ibn Hanbal (d. 241/855) was reported to have said that if people decided to use something (other than gold and silver) as money, it would be quite acceptable.[3] Imam Abu Hanifah (d. 150/767) opined that gold and silver are money by nature, while *ful´s* (coins of another substance) are money by people's adoption and agreement, that is, a form of token money.[4]

In the later period, Muslim scholars discussed and analyzed various aspects of money. For example, al-Ghazali (d. 505/1111) dealt with the problems of barter exchange and the nature and functions of money.[5] Ibn Taymiyyah (d. 728/1328) noted its two main functions, to serve as a measure of value and a medium of exchange, and advised the ruler not to disturb these functions by debasing or counterfeiting the currency, for doing so might result in an outflow of real money from the country and an inflow of questionable money from abroad – an idea that came to be known as Gresham's law in the nineteenth century.[6] Ibn Khaldun's (d. 906/1408) statement on money is limited to his distinction of money by nature (gold and silver) and token money (the use of other metals). In his opinion, gold and silver were created to be used as money and thus function as the medium of exchange, measure, and store of value: "All other things are subject to market fluctuations, from which gold and silver are exempt. They are the basis of profit, property, and treasure."[7] His student al-Maqrizi (d. 845/1442) elaborated upon these ideas in his *Ighāthāt al-Ummah fī Kashf al-Ghummah* and discussed the inflation that followed the use of debased money and its adverse effects on various sections of society.[8]

Ibn Miskawayh (d. 421/1030), Ibn Rushd (d. 595/1198), al-Dawani (d. 907/1501), and other Muslim philosophers studied the Greeks' ideas on money and made substantial improvements upon them.[9] These scholars generally noted changing monetary conditions and expressed their juridical opinions on them. In many cases, their stands were supported by economic reasoning and evidence. Such enlightenment, however, was scarcely found among the ulama of the sixteenth century.

European Monetary Thought during This Period

In economic history as a whole, the sixteenth century is distinguished by its overemphasis on gold and silver as money and the race for increasing the stock of precious metals, especially in western Europe, as reflected in the works of its mercantilist writers. This was the period when controversies over usury and interest entered their decisive stage.[10] John Hales (d. 1571), for example, "deplores the evils of debasement. In this connection, paper money is mentioned, albeit as an absurdity. Gresham's law, by then a commonplace, is stated. The prince or his subjects must accumulate treasure to have on hand in time of war or of death."[11]

European historians of economic thought opine that the quantity theory of money was also discovered during the sixteenth century. Credit for its discovery is usually given to Jean Bodin (1530-96).[12] As early as 1522, however, the great astronomer Copernicus had observed that "money usually depreciates when it becomes too abundant."[13] "After Copernicus' rudimentary statement of the quantity theory in 1520s, it was not until the 1550s that related brief references appear again in the literature." In 1550, the Dominican priest Navarrus published "a manual on moral theology with an appendix devoted to a discussion of usury." In this work, he stated the reasons for the disparities in the value of money in two different countries in terms of their relative scarcity. In other words, he developed the quantity theory of money in conjunction with a discussion of international prices.[14]

According to Henry Spiegel, "[t]he emergence of the quantity theory of money in the second half of the sixteenth century constitutes an event of momentous importance in the history of economics."[15] This important discovery was refined in various ways and also criticized over the course of time. Nevertheless, its importance in doctrinal history cannot be denied, for

> [b]y implicitly involving the demand and supply apparatus it prepared the ground for the eventual emergence of demand and supply analysis as a general explanatory principle, a development that stretched over three centuries and culminated in the work of Alfred Marshall at the close of the nineteenth century.[16]

The Quantity Theory of Money and Muslim Scholars

Muslim scholars of the earlier period had some idea of the embryonic quantity theory of money in terms of debasement as the reason for the undue expansion of money and, eventually, rising prices.[17] Al-Maqrizi argued that a return to gold and silver, the natural substance of money, would solve the problem.[18] No doubt they were right in their time. But in the sixteenth century, with the discovery of the New World, a never-ending stream of treasure arrived in Spain and was diffused throughout Europe. Prices rose, and as the traditional explanation for changes in price levels (the debasement of money was the principal cause) no longer seemed to fit the changing circumstances as well as it had before, thoughtful people in many lands searched for a better reason.[19] As noted above, Muslim scholars thought no further than the traditional framework of debased currency and deferred payment. Nor did they analyze new trends in the monetary sphere, although the effects of the changing situation were felt in the Ottoman Empire as well.

Muslim scholars of the sixteenth century also wrote on monetary issues. To know the nature of their thought, I present two representative figures, one from the early sixteenth century and the other from the end of it: Jalal al-Din al-Suyuti (d. 911/1506) and Muhammad ibn Abd Allah al-Tumurtashi (d. 1004/1599), respectively. The selection is not based on any choice; I simply could not find any other authors who had discussed the monetary problem.

But first I review the monetary system of their time, as this will help readers to understand and evaluate their thoughts on the subject properly.

Monetary Problems of the Sixteenth Century

Mamluk history is full of instances of monetary malpractices.[20] As early as the eighth/fourteenth century, Mamluk rulers debased their money and followed a policy of unrestricted monetary expansion to satisfy their lust for riches. Ibn Taymiyyah (d. 728/1328), the great scholar of the period who witnessed the resulting turmoil, suggested that “the authority should mint the coins (other than gold and silver) according to the just value of people’s transactions [and] without any injustice to them."[21] He also advised the ruler not to start a business in money by purchasing copper and minting coins and thus doing business with them; rather, he should mint coins having real value and not seek to gain any profit by so doing.[22] Generally, three kinds of monetary units were in circulation: the *d¥nŒr* (gold), the *dirham* (silver), and the *fals* (a copper coin; pl. *ful´s*). As the *d¥nŒr* was very scarce, the *fals* was the predominant coin. The circulation of the *dirham*, which was two-thirds silver and one-third copper at the beginning of the Mamluk era, always fluctuated; over time, its proportions were reversed.[23]

Al-Maqrizi gave a rather detailed account of the currency debasement and ensuing inflation that occurred in the later Mamluk period. While discussing the unrestricted supply of token money in place of gold and silver coins during his time, he reported:

> During the reign of al-Zahir Barquq (d. 801/1399), the Ustadar Muhammad ibn Ali was entrusted with supervising the royal treasury. He was greedy for profits and for accumulating wealth. Among his evil deeds was a large increase in the quantity of *ful´s*; he dispatched his men to Europe to import copper and secured the mint for himself in exchange for a sum of money. Under his administration, *ful´s* were minted at the Cairo mint. He also opened a mint in Alexandria for the purpose of striking *ful´s*. An extremely large quantity of *ful´s* came into the hands of people, and they circulated so widely that they became the dominant currency in the country. ... This caused a catastrophe that rendered money useless and foodstuffs scarce ...[24]

Al-Maqrizi noted two reasons for that sad situation: silver coins had disappeared either because they were not being minted or were being melted down to make ornaments.[25] Robert Lopez noted:

> Egypt's economic crisis was accompanied by a breakdown of its monetary system. Gold and silver currency became increasingly scarce, and copper coins predominated in internal circulation and on all levels of transaction. For Maqirzi, the deterioration of its monetary system was the simple most important cause of Egypt's economic difficulties. As a panacea, he prescribed a return to the gold and silver standard and a relegation of copper coinage to the role that God and custom had ordained for it, viz. restricting it to petty transaction.[26]

Al-Suyuti, the great scholar of the later Mamluk period, observed that during 821/1414, the *ful´s*, after having been abundant and cheap, became expensive and debtors were finding it very difficult to repay their loans in terms of it. Earlier, the *ful´s* had had an exchange rate of 8:1 or 9:1 to the *dirham;* it now had an exchange rate of with the *afl´r¥*[27] *d¥nŒr* of 260:1, with the *úarjah* of 280:1, with the *na§¥r¥* of 210:1, and with the Egyptian *qin‹Œr* of 600:1. After the *ful´s* became expensive, its exchange rate to the *dirham* became 7:1. As far as the *d¥nŒr* is concerned, all of its various kinds lost fifty *ful´s* in exchange: 210:1 to the *afl´r¥ d¥nŒr*, 230:1 with the *úarjah*, 160:1 with the *na§¥r¥*, and 550:1 with the Egyptian *qin‹Œr*. The situation was reversed at the end of the century, when it was announced that 30 *dirhams* would be exchanged for 1 *ra‹l ful´s*; before, the amount had been 36 *dirhams*.[28] This led al-Suyuti to pen his treatise *Qa‹` al-MujŒdalah `ind Tagh¥r al-Mu`Œmalah* (Deciding the Controversy in the Wake of Changes in Monetary Matters). This book will be examined below.

During the rule of Qansawh al-Ghawri (d. 1516), the last Mamluk sultan, the monetary system deteriorated even further due to frequent changes in monetary units and exchange rates. The contemporary historian Ibn Iyas reported that a new exchange rate was proclaimed in 917/1511: henceforth, all *ful´s*, whether new or old, would have the exchange rate of 1 *ra‹l* to 18 *nuqrah*. The new *ful´s* caused the trader a 33 percent loss.[29] Just one year later, the *muútasib* (market inspector) announced new coins by weight: 2 *ni§fs* would equal 1 *ra‹l*.[30] Again the next year, an announcement was made that new coins would be exchanged not by number, as before, but by weight. This caused the people great financial losses,[31] because, as they complained, the new coins effectively doubled their prices. And so the sultan announced that the *ful´s* would be exchanged at the rate of 2 *ni§fs* per 1 *ra‹l*, the old exchange rate; before, it had been 3 *ni§fs* per 1 *ra‹l*. At this, the people felt relief.[32] Ibn Iyas also mentioned that in 919/1513, new and old *ful´s* were to be exchanged by weight: 1 *ra‹l ful´s* would equal 2 *ni§fs*.[33]

As far the Ottoman Empire's monetary situation was concerned, the Egyptian *Qanunnamah* laid down the rule that 250 *pare* (pieces) were to be struck from every 100 *dirhams* of silver. These pieces were not called *akce* (as in the *Qanunnamah*), but rather *mu'ayyidi*, a colloquial term that was pronounced *midi*; Europeans called them *medin*. It appears that the Ottomans of that time called them *para* (money).[34] "All sources are in agreement in presenting the rates of exchange in the middle of the sixteenth century as being roughly 40 *akces* to the *kara kurus* (foreign silver), 50 to Austrian *ducat* (gold), and 60 to the Venetian *ducat* and Ottoman *serifi*."[35]

According to Sahillioglu:

> During periods when there was an abundance of gold in circulation, Ottoman gold and silver did not suffer a notable decline in value. Around 1565, the weight of the *akce* was adjusted downwards to a weight of

> 0.683 grams. Similarly the weight of the gold coin was reduced to 3.544 grams in 1552 and to 3.517 grams in 1565 (a *ducat* weighed 3.426 grams in 1526).[36]

From the reign of Ottoman sultan Salim I (1512-20) until the beginning of Murad III’s reign (1574-95), the weight of the *akce* remained stable at 10 grains, or roughly one-fifth of a *dirham*. Under Murad III, however, a financial crisis was caused by the influx of American silver and its subsequent spread to the Ottoman territories. In 1584, the silver content of the *akce* and of the European *para* were reduced by about half and its value fell proportionally in terms of the *serifi*.[37] According to Gibb and Bowen, the *akce* never recovered from this decline:

> The Ottoman Treasury lacked the means by which the parallel difficulties were palliated in the Western countries, and the most that later competent *Vezirs* ever succeeded in achieving was its restoration to this level from still lower depths. To add to their troubles, a second scourge, spreading from the West in the reign of Mehmed III (1595-1603) and his successors, alternatively distracted and tempted the treasury. This was the plague of false and adulterated money which reduced the *akce* to a rate of 220 to the *serifi*.[38]

Writing about the economic events of 986/1578, Sahillioglu noted:

> The weight and standard of silver coins like the *akce*, *pare*, and *shahi* could not be preserved. Even the state mints engaged in issuing defective, lighter coins of lower metal content. A devaluation was carried out in 1584 by minting 800 *akces* from 100 *dirhems* of silver as opposed to the previous 450. This caused the price of gold coins to rise from 60 to 120 *akces*. Just as an attempt at stabilization was being made in 1586, the first and most spectacular janissary revolt in Ottoman history took place; in it the governor of Rumelia, the treasurer and the superintendent of the mints were murdered because the *ulufe* (salary) had been paid with *akces* of a lower standard.[39]

Perhaps these were the circumstances that led al-Tumurtashi to write his *Badhl al-Majh´d f¥ As’ilat Taghayyur al-Nuq´d* (Efforts to Solve the Questions of Changing Currencies).[40]

In addition, Sahillioglu rightly observed that:

> The Ottoman Empire covered [a] huge tract of territory. Within it were what might be called monetary areas, the *akce* area (Anatolia), the *pare* area (Egypt), the *sahi* area (Persia-Iraq) and the *penz* area (Balkan). In each area different factors and choices operated on the gold and silver

> market. For example, the same foreign coin was valued differently in each region. The conditions of the silver market were also radically altered after the introduction of American silver into the market. Generalization[s] made about the Ottoman monetary system, for this reason, may often be misleading.[41]

For example, "according to the day-book (*ruznamce*) of the treasury on 27 August 1569, 790 *sultaniyyes* (Ottoman gold coins) priced at 60 *akces* and another 100 priced at 59 *akces* with 282 *efrenciyyes* (European gold coins) and 108 *gurus* (silver large coins)[42] priced at 40 *akces* entered the treasury. A week later, a quantity of *gurus* valued at 40, 20 and 10 *akces* had also entered."[43] Until the end of the sixteenth century, the Ottomans did not distinguish between large silver coins of varying size and weight, be they of western European or American origin. They identified all of them simply as *gurus*. For example, in the budget of 1582-83, entries of *gurus* valued at 55, 48, 44, 40, and 39 *akces* appear without giving each variety a different name.[44]

Al-Suyuti and His Treatise on Money

Jalal al-Din al-Suyuti (849-911/1445-1506), a prolific writer who mastered Qur'anic studies, the prophetic traditions, jurisprudence, grammar, literature, history, and other subjects, was born in Egypt. A very well-travelled scholar, he had memorized the Qur'an by the age of eight and spent the rest of his life learning and memorizing many legal and literary texts. He described himself as "allergic" to mathematics and logic, but nevertheless claimed to have acquired all of the instrumental sciences necessary for conducting *ijtihŒd* (original thinking followed by ruling on new issues). He is supposed to have written over 500 works; however, his writings are generally compilations as opposed to original works. In his *î usn al-MuhŒèarah*, he gave his biography and mentioned that at that point in time, the number of his works stood at 300 in total.

The reason for writing his treatise, as he mentioned at its beginning, was his distress over the increasing controversy as regards the amount and mode of payment in the wake of the approximately 17 percent fall in value of copper coins (*ful´s*) during his time.[45] Thus, he mainly addressed this question, although he did give much useful information on the subject. As he noted at the beginning, his teacher Alam al-Din al-Bulqini had asked a similar question about half a century earlier, but at that time the problem faced was due to a revaluation and the scarcity of copper *ful´s*.

Basically agreeing with his teacher's judgment that one has to pay an equivalent quantity of *ful´s* or their value in terms of gold and silver when the *ful´s* become rare or disappear altogether, al-Suyuti explained this by saying that the *ful´s* are *mithl¥* objects (something that vanishes with use and is replaceable with a similar thing). Furthermore, if such an object becomes rare or disappears, its equivalent value has to be accepted. According to him, even pure and standardized gold and silver coins are *mithl¥*. Coins that are debased and mixed with alloy are to be considered *q¥m¥* or *mutaqawwam* (treated according to their value or something subject to valuation).[46] As for the question of whether repayment has to be made according to the value of copper *ful´s* on the due date (*yawm al-mu‹alabah*) or the date of transaction, al-Suyuti ruled that the value of the due date would be considered in the case of valid transactions, while the date of possession (*yawm al-qabè*) would be taken into account in the case of invalid transactions.[47]

Thus, if someone had lent 1 *ratl ful´s*, the borrower would have to return 1 *ratl fulus* regardless of whether it is cheaper or costlier, and irrespective of whether its value is determined by weight or by number. This is the case when there is a controversy and when the matter is subject to legal enforcement. Otherwise, the two parties could agree upon any terms that suited them. Al-Suyuti showed the wide application of this provision in cases of forward sale (*al-salam*), debt arising out of credit sale,[48] due wages, dowry money (*al-§adŒq*), compensation for usurpation, possession in an invalid contract of sale, destruction caused to another's property, the allocated portion or amount in an endowment (*waqf*), a person's will (*wa§¥yah*), sustenance provided by a judge in a case of divorce, and other instances.[49] Although written in a legal and juridical tone, the treatise provides some interesting insights in economic areas as well.

Based on a famous tradition, al-Suyuti considered it undesirable for a ruler to cancel a legal currency if there were no pressing reasons to do so. He also opposed debasing and counterfeiting the currency, because the Prophet (pbuh) prohibited such deception and the resulting corruption of the monetary system harms those who rightfully own the coins. Such policies also cause inflation, as counterfeiting leads to unrestricted coinage, which, in turn, causes importers to decrease their activities because they know that people will buy their goods with counterfeit money. The minting of money should be the ruler's unique prerogative, for it is a symbol of sovereignty. Moreover, if other people mint their own money, corruption and deception will ultimately follow.[50] According to al-Suyuti, when pure metals were used for minting coins, it was considered sinful to hold counterfeit money. He noted various scholarly opinions when debasement had become the norm. Most of the scholars allowed the acceptance of token money when it became the dominant currency.[51]

One important aspect of his treatise is that it provides original source material for the history of money in Islam. On the authority of al-Khattabi (d. 386/998), he reports and gives an account of the monetary system during the Prophet's time, when the Muslims used different types of silver coins and Roman gold coins. This continued until the time of Abd al-Malik ibn Marwan (d. 86/705), who issued silver and gold coins based upon the average weight of those coins that coincided with the weight of the Makkan *dihram* standard in Islam.[52] In this connection, he related further details from al-Mawardi (d. 450/1058) as well as an account of the development of money in early Islam from Ibn Abd al-Barr's (d. 463/1070) *Al-Tamú¥d*. A slightly different story of the monetary system during the Prophet's time has been provided on the authority of Qadi `Iyad (d. 544/1149) and al-Rafi`i (d. 623/1226). Their account was supported by al-Nawawi (d. 676/1277), who provided more details on the subject with reference to Ibn Hazm (d. 445/1063), as quoted by Abu Muhammad Abd al-Haqq in his *Kit₢b al-Aúk₢m*. Two other historians, Ibn Sa`ad (d. 230/845) and Ibn 'Asakir (d. 571/1176), also recorded relevant information.[53]

Brief accounts of the monetary system in later centuries are also found in the treatise under review. Al-Suyuti notes that al-Dhahabi (d. 748/1348) was quoted on monetary changes in 632/1334, Ibn Kathir (d. 774/1373) for 756/1355, and Ibn Hajar (d. 825/1449) for 776/1374.[54] Through literary sources, al-Suyuti proved that Arabs had been acquainted with the use of *fulus* since ancient days, as the words *fals*, *ful´s*, and *ifl₢s* existed in the original Arabic language. Muslims were already using *ful´s* during the first Islamic century, as a number of reports exist on the question of exchanging of *ful´s* for *ful´s*.[55] But al-Suyuti was silent about the position of *fals* as a monetary unit during Islam's early period, although his words seem to indicate that *fulus* were an inferior and discarded type of commodity money at that time, one that had not acquired the importance it would enjoy under the Mamluks.

Al-Tumurtashi on Currency Changes

The Hanifi scholar Muhammad ibn Abd Allah al-Tumurtashi (939-1004/1532-1598) was born and lived in Gaza (Palestine), although he did travel to Aleppo, Hamah, Damascus, Cairo, and other neighboring cities to pursue his academic studies. In Cairo, he studied under the famous Hanafi scholar

Ibn Nujaym (d. 970/1562). He authored around forty books, some of which were never completed. His famous works are *Tanw¥r al-Ab§Œr wa JŒmi` al-BiúŒr* (on Hanafi jurisprudence), *Al-Wu§´l ilŒ QawŒ`id al-U§´l, Mu`¥n al-Muft¥ `alŒ JawŒb al-Mustaft¥*, and *RisŒlah f¥ al-Nuq´d*, or, more correctly, *Badhl al-Majh´d f¥ Tahr¥r As'ilat Taghayyur al-Nuq´d*. This last one is the focus of attention in this section.

By the end of the sixteenth century, the monetary system was greatly disturbed by political and economic changes and the influx of American silver into Europe and, from there, to the Ottoman Empire. Generally, four types of problems were faced: a monetary unit had totally lost common acceptance, was cancelled, was only partially accepted (i.e., in some regions but not in others), or the exchange rate was changed, thereby making a particular monetary unit more expensive or cheaper. These changes and circumstances, which especially affected deferred payments or transactions that were in process, provided the context for his treatise on money, as he himself stated.[56]

It may be noted that the problem arose in the case of copper *ful´s* or *d¥nŒrs* and *dirhams* of mixed alloy. Pure gold and silver possessed full value even after being cancelled and replaced with new coins of the same purity. Top Hanafi leaders – Imam Abu Hanifah (d. 150/767) and his two students Abu Yusuf (d. 182/798) and Imam Muhammad (d. 189/805) – addressed the issues of cancellation or disappearance and fluctuation in the value and acceptance of copper *ful´s* and coins of mixed metals. Their opinions differed. Imam Abu Hanifah held that a sale contract would be null and void if the currency in which the transaction had taken place had disappeared or been cancelled. In such a case, the buyer would have to return the sold object if it were intact in hand or return an identical good if had been used up. If the object was *q¥m¥* (treated according to the value), the buyer would be required to return its equivalent value.[57]

His two students, however, ruled that the sale transaction would be valid, but that the buyer would have to pay the value of the object (in terms of new currency). Again, they differed on the question of the value date. Abu Yusuf said that it would be the value of the object on the sale date, while Muhammad said that it would be the value on the day of demonetization or cancellation.[58]

Al-Tumurtashi based his opinion on the leaders of the Hanafi school. He agreed with Abu Yusuf's decree on how to proceed when the coins that had been used in the transaction had disappeared completely or were no longer accepted.[59] But if the coins were still partially accepted, then the buyers would have the option either to accept them or demand the equivalent value. The reasoning here was that the money had become defective, since it was no longer accepted in certain regions even though it was still in circulation.[60] Lastly, if the value of the coins had increased or decreased, Imam Abu Hanifah said that the payment would have to be made using the equivalent amount of the same coins, as opposed to different ones (*laysŒ `alayhi ghayruhŒ*).

In the beginning Abu Yusuf also held this view; later on, however, he said that payment had to be calculated according to the value of coins on the day of sale and possession (*q¥matuhŒ min al-darŒhim yawm al-bay` wa al-qabè*).[61] Al-Tumurtashi also adopted this view and supported it with traditional rules in Hanafi jurisprudence.[62] He never advocated the adoption of an opinion in the light of reason and temporal requirements; rather, he warned against any original thinking and deviation from imitation (*taql¥d*).[63]

A Journey of a Hundred Years

This article has provided two samples of various works that tried to answer questions arising out of changes in monetary units and variations in their value. Both sought to present a juristic solution: al-Suyuti based his opinion on the Shafi`i stand, while al-Tumurtashi offered solutions derived from the rulings of the Hanafi school. Al-Suyuti supported his view with analogical reasoning, whereas al-Tumurtashi did not plead in such a logical way. The former's treatise may prove to be a useful source of monetary history as regards the earlier period of Islam; however, the latter's treatise contains no such information. This simply shows how creative thinking and the application of reasoning declined during the sixteenth century, especially with regard to an important economic element: money.

In these two works, I could not find any discussion of what caused the value of money to fluctuate and the resulting consequences on various section of society in terms of inflation and deflation, the working of Gresham's law, or similar ideas found in the works of earlier Muslim scholars and those that were attracting the attention of western European scholars, as pointed out above. Thus, the overall characteristic of this period, imitation and repetition, is reflected in the works of these two scholars. As a result, hardly any advancement on the monetary thought of earlier Muslim scholars is noticeable in their treatises.

Finally, I would like to restate that I studied these two particular works not out of choice, but out of necessity, because no other books of a juridical nature could be found on these topics. The possibility that some works on this issue by sociopolitical thinkers of that time may be lying somewhere in manuscript form, however, cannot be discounted. Thus, these two works cannot be taken as the final word on the subject.

Endnotes

1. Ahmad al-Baladhuri, *Fut´ú al-BuldŒn*, ed. Ridwan Muhammad Ridwan (Beirut: Dar al-Kutub al-`Ilmiyyah, 1983), 456.
2. Imam Malik ibn Anas, *Al-Mudawwant al-KubrŒ* (Beirut: Dar al-Fikr, 1978), 3:90-91.
3. Ibn Qudamah, *Al-Mughn¥* (Beirut: Dar al-Kitab al-Arabi, 1972), 4:176.
4. Muhammad ibn `Abd Allah al-Tumurtashi, *Badhl al-Majh´d f¥ As'ilat Taghayyur al-Nuq´d*, ed. and ann. Husam al-Din ibn Musa Alaffanah (Jerusalem: 2001), 50.
5. Abu Hamid al-Ghazali, *IhyŒ' `Ul´m al-D¥n* (Beirut: Dar al-Nadwah, n.d.), 4:114-15.
6. Abdul Azim Islahi, *Economic Concepts of lbn Taimiyah* (Leicester, UK: The Islamic Foundation, 1988), 139, 143-44.
7. Ibn Khaldun, *Muqaddimah of Ibn Khaldun,* trans. Franz Rosenthal (New York: Princeton University Press, 1967), 313.
8. Muhammad Ali al-Maqrizi, *Mamluk Economics: IghŒthŒt al-Ummah*, trans. and ed. Adel Allouche (Salt Lake City: University of Utah Press, 1994), 71-72 and 77-79.
9. For a discussion of their monetary thought, refer to Abdul Azim Islahi, *Contributions of Muslim Scholars to the History of Economic Thought and Analysis* (Jeddah: Scientific Publishing Centre, KAAU, 2005), 48-49.
10. H. W. Spiegel, *The Growth of Economic Thought* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1971), 82-83.
11. Ibid., 85.
12. Ibid., 89; Eli F. Heckscher, *Mercantilism*, trans. Mendal Shapiro (London: George Allen and Unwin, 1955), 2:225; Joseph A. Schumpeter, *History of Economic Analysis* (Great Britain: Oxford University Press, 1954; London: Routledge, 1997), 311-12. (page numbers refer to the reprint edition).
13. Spiegel, *The Growth of Economic Thought*, 88.
14. Ibid., 89.
15. Ibid., 86.
16. Ibid., 86-87.
17. Islahi, *Economic Concepts of lbn Taimiyah*, 141.
18. Al-Maqrizi, *Mamluk Economics*, 80-81.
19. Spiegel, *The Growth of Economic Thought*, 87.
20. In the early part of the tenth/sixteenth century, the heartland of Islam was ruled by the Mamluk sultans of Egypt (1250-5117), with Cairo as their capital. In

923/1517, the Ottomans ended the Mamluks' rule and took control of the whole region.

21. Ibn Taymiyah, *Majm´` FatŒwŒ Shaykh al-IslŒm Aúmad ibn Taym¥yah*, ed. `Abd al-Rahman ibn Muhammad al-Najdi (Riyadh: Matabi` al-Riyad, 1963), 29:469.
22. Ibid.
23. Al-Qalqashandi, *êubú al-A`shŒ* (Cairo: Dar al-Kutub al-Khadiwiyyah, 1913), 3:443.
24. Al-Maqrizi, *Mamluk Economics*, 71-72, 77-79.
25. Muhammad al-Maqrizi, *KitŒb al-Sul´k* (Cairo: Lajnah al-Talif wa al-Tarjamah, 1956), 2:71.
26. R. Lopez, H. Miskimin, and A. Udovitch, "England to Egypt, 1350-1500: Long-Distance Trade" in *Studies in the Economic History of the Middle East*, ed. M. A. Cook (London: Oxford University Press, 1970), 123-24.
27. *Aflori'* or *florin* gold pieces, bearing a flower on the reverse [whence – from *florino* – the name] were minted in Florence in 1252.
28. Jalal al-Din `Abd al-Rahman ibn Abi Bakr al-Suyuti, *Al-îŒw¥ li al-FatŒw¥* (Beirut: Dar al-Kutub al-`Ilmiyyah, 2000), 1:96.
29. Muhammad ibn Ahmad ibn Iyas, *BadŒ'i` al-Zuh´r f¥ WaqŒ'i` al-Duh´r* (Cairo: Lajnat al-Talif wa al-Tarjamah, 1960), 4:251.
30. Ibid., 295.
31. Ibid., 328.
32. Ibid., 338.
33. Ibid., 339.
34. Hamilton A. R. Gibb and Harold Bowen, *Islamic Society and the West* (London and Oxford: Oxford University Press, 1965), 2:39n.
35. Ibid, 2:51.
36. Halil Sahillioglu, "The Role of International Monetary Metal Movements in Ottoman Monetary History 1300-1700," in *Studies on Ottoman Economic and Social History* (Istanbul: IRCICA, 1999), 40.
37. Gibb and Bowen, *Islamic Society and the West*, 2:51.
38. Ibid., 52.
39. Sahillioglu, "The Role of International Monetary Metal Movements," 12.
40. The treatise was edited and annotated by Husam al-Din ibn Musa Alaffanah and published in Jerusalem during 2001. Ibn `Abidin (d. 1258/1842) mentions its title as *Badhl al-Majh´d f¥ Mas'alat al-Nuq´d* in his own treatise, entitled *Tanb¥h al-Ruq´d `alŒ AúkŒm al-Nuq´d*, in which he incorporated the major portion of al-Tumurtashi's work.
41. Sahillioglu, "The Role of International Monetary Metal Movements," 38.
42. "The Ottomans gave the name of *gurus* (derived from the German *groschem*) to the large silver coins, weighing 9.5 *dirhams* (29.184 grams), which the Western European merchants imported in increasing numbers to the Empire. This unit, so far as we know, first appears in treasury accounts from Hungary.

The treasury accounts from Budin reveal that a *gurus* was worth 100 *penz* or 50 Ottoman *akces* in 1554." Ibid., 40.

43. Ibid., 41n.
44. Ibid., 41.
45. Al-Suyuti, *Al- î Œw¥ li al-FatŒw¥,* 1:95.
46. Ibid., 96.
47. Ibid., 97.
48. Ibid., 97-98.
49. Ibid., 98-100.
50. Ibid., 100-01.
51. Ibid., 97. For example, al-Ghazzali, who strongly opposes debasing any currency, admits that "if the issuer is state." Al-Ghazali, *IúyŒ' `Ul´m al-D¥n*, 2:73-74. This means that he allows the permissibility of "representative" or "token" money in modern terms.
52. Al-Suyuti, *î Œw¥ li al-FatŒw¥,* 1:100-01.
53. Ibid., 102-03.
54. Ibid., 103-04.
55. Ibid., 104.
56. Al-Tumurtashi, *Badhl al-Majh´d,* 46.
57. Ibid., 48.
58. Ibid., 49.
59. Ibid., 53, 56.
60. Ibid., 51.
61. Ibid., 53.
62. Ibid., 54-56.
63. Ibid., 58-60.