

---

# A Brief History of Money in Islam and Estimating the Value of Dirham and Dīnār

*M. Zarra Nezhad*

**Abstract:** Before the appearance of Islam, dīnār and dirham were the currencies in use in the Byzantine and Iran empires, respectively. Both currencies were in use in pre-Islamic Arabia and continued to be so in the Islamic state. In 74 AH the Islamic dīnār and dirham were minted. Estimating their value is a matter of considerable importance to those doing research in Islamic economics. This paper estimates the value of these two currencies using two methods ‘natural value’ and ‘purchasing power’. It finds that a dīnār was worth 261 to 293 thousand riyals or USD 32.5-36.5.

## I. Introduction

Money has long been a medium of exchange, a standard of payment, the unit of account and a store of value. The currencies in ancient time were metal coins, particularly gold and silver. The dīnār (gold) was the currency unit in the Byzantine empire, and the dirham (silver) in the Persian empire before Islam. A few decades after the conquest of these empires, the Islamic state began to mint the Islamic dīnār and dirham. Estimating their equivalent value in modern times is necessary in the study of the economic history of Muslims and the economic system of Islam. The next section of this paper explains the role of money, section three discusses the Islamic coins and section four briefly reviews minting of money by Islamic states. Then, section five estimates the value of Islamic currency using two different methods, ‘natural value’ and ‘purchasing power’. The exchange rate

---

DR M. ZARRA NEZHAD is Assistant Professor of Economics, at the Shahid Chamran University, Ahvaz, Iran.

of dīnār to dirham is discussed in section six. A concluding section summarizes the findings of this paper.

## II. The Role of Money

An amazingly wide range of things have been used as money in different societies, at different times in the past. Among the necessary qualities of what may be used as a money are; that it is acceptable by every one; that it can be stored and carried easily; and that it does not wear out easily. For these reasons, the use of precious metals like gold and silver became widespread. These metals were used for a long time before the advent of paper money. To determine the measure and value of these metals, the state (sovereign) had to seal a quantity of them in the form of coin, which could be used by people in their exchanges. Money, as it is known today, first appeared in the form of coins made of gold, silver and other metals or alloys. The value of this money was determined by the value of the metal content, so that it was accepted publicly.

There were, however, problems with the use of gold and silver coins, and these problems affected the economic exchanges and productivity, eventually leading the institution of new forms of money. Some of the problems of money in the form of coins were:

- (i). It was easy for private and government swindlers to deliberately change the content and alloy of the coins.
- (ii). In the absence of a regulated method of minting coins, the coins in circulation could take different forms.
- (iii). The discrepancy between the weight and content of alloy in the coins was high.
- (iv). It was impossible to hold a balance between the amount of coins and the rate of productivity in an economic system.
- (v). Problems of counting and carrying the coins, as well as the dangers of highway robbery, reduced the capacity for and efficiency of transactions.

## III. Islamic Coins (Currency)

During the pre-Islamic era two weights, dīnār and dirham, were used to weigh gold and silver (Balādhurī, 1956: 425; Balādhurī, 1947: 5-

6). These names were also used for gold and silver coins. Arabia used both *dīnār*, the Byzantine currency, and the *dirham*, the Persian currency (al-Māwardī, 1938: 154; Ibn Khaldūn, 1336 AH: 48). When Islam came, the Prophet did not change the weights that were current in Makkah. He approved the use of *dirham* and *dīnār* as money (Balādhurī, 1956: 452; al-Maqrīzī, 1913: 6). Both are mentioned in the Qur’ān (3:75) “Among the people of the scripture there is one who if you trust him with a weight of treasure, will return it to you; and among them there is one who if you trust him with *dīnār*, he will not return it to you unless you keep standing over him. That is because they say we have no duty to the gentiles. They knowingly speak a lie concerning Allah” and the Qur’ān also says: “they sold him for a few *dirhams*” (Qur’ān, 12: 20).

### 3.1. Dīnār

During the early Islamic era, the Byzantine *dīnār*, that weighed one *mithqāl* (a unit of weight, equal to about five grams) was the currency used by people in their exchanges. However, though it was the official currency of that time, the state did not have any control over its use by people in their exchanges. This situation lasted until the year of 74 (AH) (compare to Balādhurī, 1956: 454), when ‘Abd al-Malik ibn Marwān began the minting of new coins under the guidance of Muḥammad ibn ‘Alī (the fifth Shi‘ite Imām) (al-Shahīd al-Thānī, 1976: 1/50), and the Islamic *dirham* began to be used instead of the old *dīnār*. The value and the weight of the Islamic *dīnār* was the same as that of *dīnār* (al-Dhahabī, 1934: 2; Imām al-Shushtarī, 1964: 79). So the value and weight of the *dīnār* was not changed. So the *dīnār* can be considered as a basic measure of monetary value, and other values can be measured against it. Archeologists have unearthed coins of the Islamic era, of which it is clear that the weight of the *dīnār*, coined at the time of ‘Abd al-Malik ibn Marwān, was about 4.25 grammes (Ṣubḥī, 1976: 427).

### 3.2. Dirham

*Dirham*, the Persian (Sassanid) currency, was used before and after the appearance of Islam in Arabia. During the caliphate of ‘Alī ibn AbīṬālib new coins were coined with the name of Islamic government

engraved on them (Encyclopedia Britannica, 19/94). Some Qur'anic words the year and the place of the coinage were written on both sides of these coins in kufic script. The legend engraved on the coin was: 'this dirham has been coined in Baṣra in the year 40 AH' (al-Kattānī, n.d.: 1/413-428). So it can be said that the first independent coin was minted during the caliphate of 'Alī ibn Abī Ṭālib. However, that happened at the end of his caliphate and was not continued after his death. So, in effect, because of its rarity, the Islamic dirham was not accepted as the regular currency. Instead, the Sassanid dirham continued to be used as money until the caliphate of 'Abd al-Malik ibn Marwān (al-Shahid al-Thānī, 1976: 1/52).

There was a variety of Sassanid dirhams used in the early years of Islamic rule, differing in value and weight (al-Maqrīzī, 1913: 4; Dūrī, 1948: 210). The Baghlī dirham (named after the person who minted it) was minted under the order of 'Umar ibn al-Khaṭṭāb. It was in fact, a recoinage of the Wāfī (Kasravī) dirham and weighted 20 carats and contained 8 daneghs. The Ṭabarī dirham (from to Tabaristan, in the north of Iran), was recoined by Khālīd ibn al-Walīd in the year 15 AH, weighted 10 carats and contained 4 daneghs. The Juraghī dirham weighted 12 carats and contained 4.5 daneghs. In addition to these three, there were other dirhams in use: the Yamanī and the Maghribī dirham which contained one and three daneghs, respectively (al-Māwardī, 1938: 154).

According to some jurists, the variation in the value of the dirham led to difficulty in the estimation of financial religious duties. To clarify the rate and range of the alms, 'Umar ibn al-Khaṭṭāb, the second caliph, ordered that the most widely used dirhams be specified, and the legal dirham defined based on the average of these dirhams. However, scholars have argued that exchanges were estimated based on Baghlī and Ṭabarī dirhams; and the legal dirham was not coined until 74 AH during the Ummayyad caliphate (al-Ḥurr al-'Āmilī, 1978: 9/149; Kulagnī, n.d.: 4/64).

The second hypothesis is the more persuasive, for the following reasons:

- (i). As mentioned, the first Islamic dirham was coined during the caliphate of 'Alī ibn Abī Ṭālib in the year of 40 AH. However, this was not followed up by subsequent governors, so the

- limited number of Islamic dirhams could not take the place of the prolific number of Sassanid dirhams in circulation.
- (ii). The variety of dirhams was considerable during the time of the Prophet, but this had not led to any difficulty in the estimation of the scope and rate of the alms-tax. It seems that, at that time, 6 daneghs were considered as one dirham, and this credit dirham was used to estimate the rate and value of the alms-tax (al-Ḥurr alt-ʿĀmilī, 1978: 9/149; Kulaynī, n.d.: 4/64; al-shaykh Ṣadūq, 1957: 1/34). The same ratio would have been practicable for the second caliph, without minting a new dirham.
  - (iii). It has been reported that ʿUmar ibn al-Khaṭṭāb ordered the dirham to be re-minted the Baghlī dirham. Similarly, Khālīd ibn al-Walīd re-minted the Ṭabarī dirham. This suggests that these two dirhams were supplied by the government to become the money of the time.
  - (iv). If a new dirham had been minted during the caliphate of ʿUmar ibn al-Khaṭṭāb and widely circulated as currency, ʿAbd al-Malik ibn Marwān would have not feared the Romans threat to engrave blasphemies against Islam on the coins they minted. All he would have needed to do was forbid all exchanges except those that used the Islamic dirham. However, he did face this threat and did not know how to respond – until Muḥammad Ibn ʿAlī al-Bāqir suggested the minting of an Islamic dirham. In this way, ʿAbd al-Malik ibn Marwān began to coin new dirhams.
  - (v). As can be understood from the record (al-Damīrī, n.d.: 1/63), the early Islamic governments did not have their own coins. This can be seen from the Roman emperor's claim, addressed to ʿAbd al-Malik ibn Marwān, that only he as Roman emperor could mint the coins then circulating.
  - (vi). The oldest unearthed coins belong to the years of the caliphate of ʿAlī ibn Abī Ṭālib and ʿAbd al-Malik ibn Marwān. This confirms the hypothesis.

Large numbers of Islamic dirhams were minted during the caliphate of ʿAbd al-Malik ibn Marwān. About 30 dirhams were selected from three different varieties, weighing 10, 6 and 5 mithqāls.

The Islamic dirham was defined as the average weight of these three dirhams:

$$\frac{10(1+0.6+0.5)}{30} = 0.7$$

The exchange rate between dirham and dīnār was set out as 7/10. That is, 0.7 methgal was the weigh of the Islamic dirham. Using this ratio, the weight of this dirham can be estimated as follows:

$$4.25\left(\frac{7}{10}\right) = 2.275$$

Thus, the weight of the Islamic dirham was 2.275 grams, and this was the basis for the relevant consideration in Islamic law.

#### IV. Coinage

As stated earlier, the Islamic government did not have any control over coinage on the value of in-money circulation until the year 74 AH. There was no consistency and growing dishonesty, in the alloy, the content and weight of coins. In addition, when ‘Abd al-Malik ibn Marwān came to know that borders of curtains imported from Rome were woven with proclamation of the Christian Trinity, he ordered this to be changed to a proclamation of the Islamic creed in the textile factories of Egypt. It is in retaliation for this that the Roman emperor threatened to engrave blasphemy against the Prophet on Roman coins.

To solve this problem, the Islamic government sought to establish control of and improve the monetary system. Thereafter, the government established legal Islamic dirham, and steadily expelled the old coins in circulation out of its territory, and the new money replaced them.

After the establishment of the mint houses, the people paid a charge to have their gold turned into coins. The charge was one percent of the weight of the given gold, to cover the cost of minting (wages and fuel). In this way, the government managed to take control of the assay of the coins and did its best to raise their quality and consistency. It was ‘Umar ibn al-Ḥumayrī, the governor of Iraq,

who raised the purity of the silver coins for the first time. After him, Khālid ibn ʿAbdullāh and Alghasry, the governors of Iraq at the time, of Hishām ibn ʿAbd al-Malik, tried to raise the standard of the coins with more care. Yūsuf ibn ʿUmar was the most successful governor in this respect. Accordingly, the best money during the time of Ummayyads was the ‘Khālidiyya’ and ‘Yūsufiyya’ and Abū Jaʿfar took the tribute based on these coins (Balāhurī, 1956: 455-456). During the ʿAbbasid caliphate these efforts were continued and led to fruitful results. Surviving coins from the Ummayyads and ʿAbassid periods, tested with modern equipment, show that the standard values of the Ummayyad dīnār and the dīnār current during the caliphate of Hārūn al-Rashīd respectively were 87.9 and 97.1 percent of a common measure (Imām Shushtarī, 1964: 80). These figures are remarkable, given the relatively primitive equipment that would have been available.

## V. Value of Money

### 5.1. The ‘natural value’ of money

The ‘natural value’ of dirham and dīnār refers to the value of the alloy contents in dīnār (gold) and dirham (silver). As mentioned, before the appearance of Islam, dirham and dīnār used to be exchanged according to their weights. So the value of dīnār and dirham was determined by their contents (silver or gold), i.e., the value of money was the same as the natural value of the metal content of the coins, therefore, the term *value of money* (i.e. purchasing power) was not under consideration.

Here, we estimate the natural value of the Islamic dirham and dīnār against the riyāl (Iranian currency), based on the fitness of gold during the Ummayyad caliphate (87.9 percent), the weight of Islamic dīnār (4.25 grams), and the price of each gram of gold 18 carats fine on 24th June, 2003 which is 71600 riyāls in Tehran. It is worked out as follows:

$$4.25 \times \frac{87.9}{100} = 3.73575$$

That is, the amount of the pure gold in each methgal is about 3.74 grammes. To estimate the amount of net gold used in each gram of gold, we have:

$$\frac{18}{24} \times 100 = 0.75$$

Thus, the ratio of the pure gold in each gram is 75 percent of gold 18 carats fine. So, the value of the Islamic dīnār, on 24th June, 2003 can be estimated at 261168 rials.

$$2.73575 \times \frac{71,600}{0.75} = 261,168.16$$

Against the dollar rate of 8,500 riyāls, each dīnār can then be estimated to be about 37 dollars.

## 5.2. Monetary value

The ‘monetary value’, or purchasing power of money has been defined as the amount of goods or services that can be purchased by some specific amount of money. Today, the value of money is determined using the price index and it is easy to determine whether the value of money has risen or declined with reference to the base year.

To determine the monetary value of Islamic dīnār and dirham, we need to figure out their purchasing power and compare them with current purchasing power. To do that, we need to study different sources for information about the prices of goods and services and the rates of wages. With that information, we can, in theory, form a basket of goods and services and estimate the purchasing power of Islamic dīnār and dirham. However, there are some practical limitations to how far and how well we can do this:

- (i). Costs and prices at the time cannot be surveyed directly; they have to be inferred and adjustments made for inflation at the time.
- (ii). The methods and costs of production were very different then, compared to today. If we ignore these differences, it will be



- impossible to compare prices, which are determined based on methods and costs of production.
- (iii). Since the goods and services of the two periods are different with regard to their value and quality, it may be difficult to find goods of comparable quality and value.
- (iv). In old days, land transport was limited to animals, which (in contrast to today), were very important in transportation. This is an important factor that has to be taken into consideration.

In spite of these limitations, the fact that in those times production methods were relatively stable make it possible to infer information about costs and prices. Also, there were no marked changes in international trade so that, over the long term (excluding periods of famine and inflation), the costs stayed unchanged. Accordingly, we can with some confidence ignore temporary aberrations and get the information needed for our comparison.

We have three types of baskets of goods.

Table 1: The Basket of Goods (A)

| Goods        | Weight of Goods |                 | Cost         |         |
|--------------|-----------------|-----------------|--------------|---------|
|              | Old             | Current (riyāl) | Old (dirham) | Current |
| Wheat        | 0.323 ghafīz    | 1kg             | 0.969        | 2500    |
| Meat         | 2.586 ratls     | 1kg             | 0.043        | 32000   |
| Broad bean   | 1.2 mods        | 1kg             | 0.041        | 5000    |
| Date         | 2.586 ratls     | 1kg             | 0.043        | 5000    |
| Salt         | 0.163 makooks   | 1kg             | 0.163        | 3000    |
| Denim shirt  | 1 suit          | Suit            | 4.0          | 5000    |
| <b>Total</b> |                 |                 | 5.259        | 97500   |

To clarify the figures pointed out in the table according to some record, acre of wheat cost 1 dirham (in cash) and one ghafīz of cereal. In other records, only the cash has been registered (4 dirhams). From this we can work out that 1 ghafīz of wheat cost 3 dirhams. The data presented in al-Kāmil (Ibn al-Athīr, 1973: 10/131) and al-Āḥkām (al-Māwardī, 1938: 148), confirm this estimate.

The weight of each kgm in ghafeez is:

$$1/3.094 = 0.32321$$

Thus, the cost in dirham is estimated to be:

$$0.32321 \times 3 = 0.9692$$

According to the History of Baghdad (al-Khaṭīb al-Baghdādī, 1913: 1/70) each 60 ratls of mutton cost one dirham. The data suggested by al-Kāmil (al-Khaṭīb al-Baghdādī, 1913: 1/70) confirm this. The weight of 60 *ratls* is estimated to be 27.76 kgms. Considering that each *ratl* equals 386.75 gm (Zarra, 1988: 296), we have:

$$1000/386.75=2.5856$$

Thus, the cost in dirham can be estimated as follows:

$$(1 \times 2.5856)/60=0.04308$$

According to the History of Baghdad (al-Khaṭīb al-Baghdādī, 1913: 9/466) each 30 mods of broad bean cost one dirham. The weight of one kgm in *ratl* is:

$$100/696.15=1.4365$$

Thus, the cost in dirham is estimated to be:

$$1.4365/696.15=0.0408$$

According to al-Kāmil (Ibn al-Athīr, 1937: 12/227), each 60 *ratls* of date cost one dirham. Thus, the cost in dirham is estimated to be:

$$2.5856/60=0.0431$$

As in al-Kāmil (Ibn al-Athīr, 1937: 12/227), each makūk of salt cost one dirham. Since each 0.163 makūk equals one kgm, then the cost of each kgm salt is estimated to be 0.163 dirham.

Ibn Abī al-Ḥadīd says: ‘Alī ibn Abī Ṭalib brought a denim shirt, which cost 4 dirhams (Ibn Abī al-Ḥadīd, 1959-1964: 2/15). As recorded in the History of Baghdad (al-Khaṭīb al-Baghdādī, 1913: 9/62), a medium quality and cheap shirt cost 8 and 4 dirhams, respectively (al-Khaṭīb al-Baghdādī, 1913: 9/62).

Now, in the second step, we form the next basket. The second basket of selected goods are as follows:

Table 2: The Basket of Selected Goods (B)

| Good   | Weight of goods |         | Cost         |                 |
|--------|-----------------|---------|--------------|-----------------|
|        | Old             | Current | Old (Derham) | Current (Riyāl) |
| Rice   | 0.163 makook    | 1kgms   | 1.961        | 6500            |
| Egg    | 30              | 30      | 0.667        | 12000           |
| Oat    | 0.323 ghfreez   | 1kgms   | 0.323        | 2500            |
| Oil    | 2.586 ratls     | 1kgms   | 0.163        | 36000           |
| Almond | 2.586 ratls     | 1kgms   | 1.939        | 37000           |
| Honey  | 2.586 ratls     | 1 kgms  | 0.259        | 19500           |
| Total  |                 |         | 5.311        | 113500          |

Some figures used in the table require some explanations. As recorded in al-Kāmil (Ibn al-Athīr, 1937: 12/183), each makūk of rice cost 12 dirhams. To estimate the weight of one kgm in makūk we have:

$$1/6.11827=0.1634$$

and the cost in dirham is estimated to be:

$$0.1634 \times 12 = 1.961$$

According to the History of Baghdad (al-Khaṭīb al-Baghdādī, 1913: 4/318), the price of 30 good *nabat* eggs was 4 *dānighs*. Thus, the cost in dirhams is:

$$4/6=0.667$$

The way the cost of oats is estimated is the same as what we did in basket A. But, the cost of wheat was twice as much as that of oats (Abū Ubayd, 1919: 68; Ibn al-Athīr, 1937: 15/131).

According to the History of Baghdad (al-Khaṭīb al-Baghdādī, 1913: 1/70), each 16 *raṭls* of olive cost one dirham. Thus:

$$2.5856/16=0.16162$$

As recorded in the History of Baghdad (al-Khaṭīb al-Baghdādī, 1913: 9/261), one kore of almond costed 60 *dīnārs*. Thus, cost in dirhams is:

$$2.5856 \times 60 = 155.136$$

$$155.136 \times 15 = 2337.04$$

$$2337.04/1200 = 1.9395$$

The third basket consists of some selected services and their prices as follows:

Table 3: The Basket of Selected Services (C)

| Worker                         | Daily Wage    |              |
|--------------------------------|---------------|--------------|
|                                | Dirham        | Riyāl        |
| Architect <sup>(i)</sup>       | 5             | 100000       |
| Bricklayer <sup>(ii)</sup>     | 4             | 100000       |
| Carpenter <sup>(iii)</sup>     | 2             | 55000        |
| Mud worker <sup>(iv)</sup>     | 0.286         | 40000        |
| Farm hound <sup>(v)</sup>      | 0.167         | 65000        |
| Making a dress <sup>(vi)</sup> | 0.0714        | 25000        |
| <b>Total</b>                   | <b>11.524</b> | <b>38500</b> |

Notes: (i) Gardeezy, 1934: 5.; (ii) Bayhaqī, 1923: 1/411; (iii) Bayhaqī, 1923: 1/411; (iv) al-Khaṭīb al-Baghdādī, 1913: 6/275; (v) al-Khaṭīb al-Baghdādī, 1913: 6/275; (vi) al-Khaṭīb al-Baghdādī, 1913: 6/275.

Using the data reported in these three tables, the purchasing power of the Islamic dirham in comparison to rial can be estimated as follows:

$$\begin{aligned}
 97,500/5.295 &= 18,539.65 && \text{based on basket A} \\
 113,500/5.311 &= 21,370.74 && \text{based on basket B} \\
 385,000/11.524 &= 33,408.54 && \text{based on basket C} \\
 18,539.65 + 2,170.74 + 33,408.54 &= 73,318.93 \\
 73,318.93/3 &= 24,439.64
 \end{aligned}$$

Thus, it can be said that the purchasing power of one dirham is equal to the purchasing power of 24440 riyāls, and considering the transfer rate of the value of dīnār to dirham (12) in that time, the purchasing power of each dīnār in riyāl is estimated to be:

$$24,439.64 \times 12 = 293,275.72$$

As can be seen, the estimation of dirham by this method gives a close result (293,000) in comparison to the previous one (261,000).

## VI. Exchange Rate of Dīnār to Dirham

As a general rule the exchange rate of dīnār to dirham is determined by the demand for and supply of gold and silver. In the earliest period of Islam, the ratio of dīnār to dirham was 10 to 1 (Ibn 'Asākīr, 1975:1/182). But after the conquest of Persia, Syria and Egypt during the caliphate of 'Umar ibn al-Khaṭṭāb, the increase in the supply of silver led to an increase in its cost. So the relative cost of gold increased in such a way that the value of each dīnār was equal to 13 dirhams (Imām al-Shushtarī, 1964: 90). This ratio did not change until the time of the caliphate of Hīshām ibn 'Abd al-Malik in the Ummayyad caliphate (al-Ḥusaynī, 1976: 97). The rate rose to 15 dirhams to each dīnār at the beginning of the Abassid government (al-Ḥusaynī, 1976: 103). This ratio did not change until the year of 227 (AH) (Qudāma Ibn Ja'far, 1974: 249-51; al-Dhahabī, 1934: 2/847). After that, this ratio rose and reached 22 at the beginning of 244 (AH) (al-Ḥusaynī al-Shirāzī, 1976: 281), but it began to decline again in such a way that the value of one dīnār was equal to 10 dirhams in 299 (AH) (Ibn al-Jawzī, 1932: 120). Then in the middle of the Fatimid rule, the value of dīnār again rose and reached 18 dirhams (Imām al-Shushtarī, 1964: 90).

As it can be seen, the value of dirham to dīnār has experienced a decreasing trend. Sometimes there were severe fluctuations away from this trend, because of non-economic events, such as those that happened during the caliphate of al-Ḥākīm bi-Amrillāh. But these fluctuations were short lived, and the normal trend was soon restored.

When America was 'discovered' and the supply of silver began to increase, the speed of this trend increased in such a way that, considering the current value of dīnār and dirham to riyāl, the transfer rate of dīnār to dirham has been estimated as about 156.

## VII. Summary

From ancient times, money has been used as a medium of exchange, a standard of payment, a store, a gauge of value and also a unit of account. The unit of money in times past was gold and silver, i.e. Byzantine dīnār and Persian dirham. These kinds of currencies had their natural values. The natural value was always subject to cheating by dishonest people. In addition to this problem, the counting and

exchange of such coins was difficult. Therefore, coins were gradually replaced by paper money. The earliest Islamic governments coined their own Islamic dirham in 40 AH, but this dirham did not hold its grounds as a currency in the country. In 74 AH, the Islamic dīnār was coined by the Islamic government, which established a mint for this purpose and monopolized the coinage of dīnār and dirham. According to the findings of this study, one Islamic dīnār, in terms of the quantity and fineness of gold in it, is estimated to be 261168 riyāls, i.e., about 32.5 dollars. Using another method, we estimated the purchasing power of the dīnār for three baskets of goods and services in terms of riyāl and dīnār (or dirham), with the following result: one Islamic dīnār was estimated to have a monetary value of 293275 riyāls, i.e. about 36.5 dollars. According to these two methods one Islamic dīnār can be estimated at between 32.5 to 36.5 dollars.

## REFERENCES

- Ibn Salām Abū Ubayd, G. (1919). *Alamval (Properties)*. Cairo: Maktabatu Alkoliat Alazharia.
- Abū Yalā, M. H. (1938). *Aḥkām Abū Yalā (Governmental Laws)*. Cairo: Matbaatu Alhalabi.
- al-Dhahabī, Shams al-Dīn M. (1934). *Taḥrīru al-dirham wa al-dīnār (History of Dirham and Dīnār)*. Cairo: Edaratu Altabaa.
- al-Ḥurr al ‘Amilī, M. (1978). *Wasā’il al-shī’a (Shiite Traditions)*. Tehran: Āl al-Bayt.
- al-Ḥusaynī al-Shirazī, M. (1976). *Min al-tamaddn al-Islāmī (From Islamic Development)*. Beirut: Dar Al-Ṣādiq.
- ‘Abd al-Ḥayy al-Kattanī. (n.d.). *al-Tarātīb al-Idāriyya (Administrational Systems)*. Beirut: Hassan Jalalasa.
- Al-Maqrīzī, Abū’l-Abbas A. (1911). *al-Mawā’iz wa’l-ʿtibār bi-dhikr al-khiṭaṭ wa’l-Ālbār (Advice and Taking Advice by Recalling the Previous Works)*. Cairo: Matbaatu Ahalabi.
- Al-Maqrīzī, Abū’l-Abbas A. (1913). *al-Nuqūd (Currencies)*. Cairo: Daru Ehia Aluloom.
- Al-Māwardī, ‘Alī ibn Mohammad. (1938). *al-Aḥkām al-Sulṭaniyya (Governmental Laws)*. Beirut: Daru Altabaa.
- al-Shahīd al-Thānī, Z. M. (1976). *Sharḥ al-Luma’ (Exposition of Luma’ Traditions)*. Qum: Moasesatu Ahlelbait.

- al-shaykh, Şadūq. (1957). *al-Faqīh (Jurisprudent)*. Najaf: Sadooq.
- Al-Balādhurī, A. (1956). *Futūh Al-buldān (Conquest of Cities)*. Cairo: Alkutobu Alarabia.
- Al-Bayhaqī, E. (1923). *al-Maḥāsīn Wa'l-Masāwi' (Virtues and Evils)*. Tehran: Nashr 'Im.
- Damīrī, Kamāl al-Dīn (n.d.). *Hayāt Al-Ḥayawān (Life of Creature)*. Cairo: Kubra.
- Dūrī, 'Abdulazīz. (1948). *Tārīkh al-Irāq al-Iqtisādī (Economic History of Iraq)*. Bagdad: Mabaatu Alhorīa.
- Gardeezy, Abusaeed (1934). *Zayn al-Akbbār (Good Traditions)*. Tehran: Doniaeh Ketab.
- Ibn Abī al-Ḥadīd, E. M. (1959-64). *Sharḥ Nahj al-Balāqha (Exposition of Nahj al-Balāqha)*. Corrected by A. Ebrahim Mohammad. Cairo: Matbaatu Almonīria.
- Ibn al-Ukhwā (1934). *Ma'ālim Al-qurba fī Aḥkām Al-ḥisba (Signs of Similarity in Municipal Rules)*. Beirut: Markaz Nashr Maktab Aluloom Alislāmīa.
- Ibn al-Athīr, E. Sh. (1937). *al-Kāmil fī'l-Tārīkh (The Complete History)*. Cairo: Matbaatu Almonīria.
- Ibn al-Jawzī (1932). *al-Muntaẓam fī Tārīkh al-Mulūk wa'l-Umam (History of Kings and Nations)*. Cairo: Maṭba'at al-Ādāb.
- Ibn Khaldūn, A. M. (1917). *Muqaddīmat (Introduction to History)*. Cairo: Ketabu Alshabab.
- Ibn Khaldūn, A. M. (1962). *Sikka (Coins)*. Cairo: n.a.
- Ibn 'Asakīr, A. (1975). *Tārīkh Madīnat Dimashq (History of Damascus)*. Beirut: Rawḍat al-Shām.
- Imām Shushtarī (1964). *Tārīkh Miqyāsāt dār Aṣr Ḥukūmat Islāmī, (History of Measurements in Islam)*. Tehran: Chup Alrahīm.
- al-Khaṭīb al-Baghdādī, A. (1913). *Tārīkh Baghdād (History of Baghdād)*. Beirut: Dār al-Kutub al-Islāmīya.
- Kulaynī, Rāzī. (n.d.). *Uṣūl al-kāfi (Adequate Principals)*. Tehran: Islāmīa.
- Qudāma Ibn Ja'far (1974). *al-Kharāj*. London: Nashru bin Shams.
- Şubḥī, Şālīḥ (1976). *al-Nuẓum al-Islāmīya (Islamic Systems)*. Beirut: Dār al-'Ālim.
- Zaydān, Jurjī (1958). *Tārīkh al-Tamaddun al-Islāmī (History of Islamic Development)*. Cairo: Daru Alhelal.
- Zarra Nezhad, Mansour (1988)., *Review of Economic Problems of Primary Islamic States*, Masters Dissertation. Tehran: Tarbiat Moddares University.

