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Inflation: Lessons from al-Maqrīzī*

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Abstract

Inflation is not specific to the modern economy. It is argued that low and stable rates of inflation are beneficial in promoting economic growth. It is also attributed to the growing disparity between the economic classes. The 14th–15th Century CE Egyptian historian, Al-Maqrīzī, discussed the causes that worsened the famine and economic crisis of 805–808/1403–1406 of Mamlūk Egypt. He described the population of Egypt during the crisis and emphasised that which had been hit worst. Significantly, he suggested a more stable monetary system to avoid similar situations in the future.

Keywords

Al-Maqrīzī, Mamluk Economics, inflation, Historical Economics, Egypt.

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Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

Introduction on Inflation

In the classical theory of inflation, the prices of goods and services are inflated due to the excessive growth in the money supply. Inflation in its truest form is the erosion in the purchasing power of money or debasement of the currency. The aggregate price level is determined by the interaction between money supply and money demand. In other words, when the supply of money increases, the price of a similar amount of goods and services will increase and vice versa. The classical theory only puts money growth as the sole factor of inflation without considering other factors, such as war, political stability, trade shock, and central bank independence. In the modern economic landscape, low and predictable inflation is considered as one of the objectives of macroeconomic policy.²

Inflation and Inequality

Inflation has always been associated with income inequality. Whenever inflation increases, so does income inequality. This is partly due to the practice of low-income households that always make use of cash as a medium of transaction as it involves low transactional cost. The cost for cash is by foregoing the interest of income that they could attain by holding the currency in a certain period of time. The difference in the transactional method puts the low-income households more vulnerable to inflation.³

Peter Ireland, "The Classical Theory of Inflation and Its Uses Today," Shadow Open Market Committee Meeting (New York: Economic Policies for the 21st Century, November 2014), 1–2.

The most common objectives of macroeconomic policy are rapid output growth and low inflation. Atish Ghosh and Steven Phillips, "Warning: Inflation may be Harmful to Your Growth," *IMF Staff Papers* (December 1998): 672.

Stefania Albanesi, "Inflation and Inequality," Journal of Monetary Economics 54 (2007): 1088–1090.

Infations: Lessons from al-Magrīzī

This leads to the diversification of households into outsider and insider as shown by Bulir.⁴ Outsiders are those who receive nominal wage, as well as hold and trade in non-interest-bearing assets (currency). The value of the currency in their hold declines when inflation increases, as inflation is the debasement of currency. On the other hand, insiders are those who receive most compensation in stock options or inflation-adjusted nonwage benefits and hold assets other than currency. Even the return on assets might be better protected from inflation. The differences between insiders and outsiders lead to a wider gap in income distribution. The widening of income distribution gap may cause the government to attempt to close it by introducing taxes that would transfer wealth from the insiders to the outsiders. Such an action, however, is insufficient as the number of recipients (outsiders) is typically larger than the number that is taxed (insiders). This shows that fiscal equalisation measures are weakly correlated with inflation. Hewlett shares the same view in that inflation is followed by a redistributive process, by which the rich and powerful become richer while the weak and poor become poorer.⁵

Paul Krugman cited the return of the "Paradox of Thrift," in which the lack of inflation encouraged consumers to delay their spending and they would rather wait until better opportunity comes, i.e. when the price falls due to over productivity. Increased spending gives an upper hand to business owners but imposes a threat on consumers as they have lesser ability to increase their savings. Increased productivity from increased spending is supposed to benefit the society at large through the trickle-down effect. Yet, the trickle-down effect is non-existent according to a

^{4.} Ales Bulir, "Income Inequality: Does Inflation Matter?," *IMF Staff Papers* 48, no. 1 (Palgrave Macmillan on behalf of the IMF, 2001): 143–44.

^{5.} Sylvia Ann Hewlett, "Inflation and Inequality," *Journal of Economic Issues* 11, no. 2 (June 1977): 356.

^{6.} Paul Krugman, "The Conscience of a Liberal," *The New York Times*, last modified 7 July 2009, https://krugman.blogs.nytimes.com/2009/07/07/the-paradox-of-thrift-for-real. Accessed 17 December 2019.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

report by the International Monetary Fund, in that the inequality gap is not decreasing but increasing over time. The report predicted an inverse relationship between the income shares of the top 20 category and GDP growth in five years, and positive relationship between the income shares of the bottom 20 and GDP growth of the same period. This is supported by David Orrell who observed that of late, concentration of wealth had become more of a chronic problem. He quoted a United Nations report that half of the population controlled 99 per cent of the total wealth, while the other half only owned one per cent. The huge gap of inequality might be a sign that something was not right as the rich got richer due to exponential growth and gains annually, while poverty remained unsolved.

With prices and cost of living rising, any help might bring minimal benefit as the root cause was still unattended. Indeed, such a situation was described by al-Maqrīzī in the fifth category of the population of Egypt to be discussed in this article. ¹⁰

Era Dabla-Norris et al., "Causes and Consequences of Income Inequality: A Global Perspective," IMF Staff Discussion Note (June 2015).

^{8.} Ibid., 4, 7.

^{9.} David Orrell, Economyths: Ten Ways Economics Gets It Wrong (Ontario: John Wiley & Sons Canada, Ltd., 2010), 160.

^{10.} Taqī al-Dīn Ahmad Ibn 'Alī al-Maqrīzī (d. 845/1442) lived in Egypt during the flourishing days of the study of history. Among his contemporaries were al-'Ayni, al-Sakhāwī and al-Suyūtī. Ibn Hajar al-'Asqalānī regarded him as a friend and colleague, while Ibn Taghrīrbirdī, al-Sakhāwī, al-Sayrāfī, and Ibn Qādī Shuhbah, were his students or disciples of his students. He had managed to study with or received ijāzahs from more than 600 tutors in Cairo, among them were al-'Imād al-Hanbalī, al-Sirāj ibn al-Mulaqqin, al-Sirāj al-Balqīnī, al-Burhān ibn Jamā'ah, and Ibn Khaldūn. He wrote more than 100 works including an encyclopedia and among his exemplary works were al-Mawā 'īz al-Ttibār bi-Dhikr al-Khitat val-Athar (Khitat). His ancestors were the scholars of the Hanbalī school, his grandfather was a prominent scholar of the Hanafi school, which he previously followed. He then changed to the Shafi'i school, and had some Zāhirī friends. Subsequently, he was considered as a Zahirī by some, yet others still ascribed him as a Shāfi'ite.

Infations: Lessons from al-Magrīzī

Lessons from Medieval Egypt

Egypt is known to have occurrences of food shortages, which in certain times could lead to famine and outbreak of diseases, due to its dependency on the Nile River to provide irrigation for their crops. Annual harvest could be predicted by measuring the Nile hydrometer if it reached its plenitude of 16 *dhirā* ' (for sufficient harvest). 11 For the purpose of this study, the research is limited to

^{11.} Taqī al-Dīn Ahmad Ibn 'Alī al-Maqrīzī, Kītāb al-Sulīk li-Ma'rīfati Duwal al-Mulūk, ed. Sa'īd 'Abd al-Fatāh 'Ashūr and Muḥammad Muṣṭafā Ziyādah, vol. 3 (Cairo: Matba'ah Dār al-Kutub, 1956–1972), 1115; Adam Sabra, Poverty and Charity in Medieval Islam: Mamluk Egypt, 1250–1517 (Cambridge: Cambridge University Press, 2000), 146. Al-Magrīzī mentioned in *Khitat* that the most beneficial plenitude level of the Nile river was 17 dhirā', where the lands were sufficiently irrigated. At 18 dhirā', agricultural production would reach its maximum output but it was detrimental to animals as they lost grazing lands and grass due to flooding. Thus, the maximum accepted plenitude was 18 dhirā; and anything more than that was devastating. However, al-Magrīzī continued to elaborate the situation that those were the practices during the earlier years (354/965) when the Nile did reach 16 dhirā', yet prices still increased (perhaps due to flooding). The situation was different at the time of al-Maqrīzī due to the bad condition of dykes, waterways, and canals that caused the sufficient plenitude to be much higher especially during the months of drought. It was al-Maqrīzī's original opinion that when the water reached 20 dhirā', it would flood into the farms. But after 806/1403, there was no longer flood when the water reached 20 $dhir\bar{a}'$ due to the destroyed and inefficient dykes. Thus, the minimum acceptable Nile plenitude according to him prior to 806/1403 should be 17 dhirā' and no more than 18 dhirā', Taqī al-Dīn Aḥmad Ibn 'Alī al-Maqīzī, Kitāb al-Mawā' iz wa al-Itibār bi-Dhikri al-Khiṭat wa al-Āthār, vol. 1 (Cairo: General Organization for Culture Centers, n.d.), 59–60. The required plenitude for sufficient harvest were varied during different periods: 1) During the 1st Century AH/5th Century CE, 16 dhirā' was sufficient to make lands fertile and able to produce stocks for two years. 2) 4th Century AH/8th Century CE, 16 dhirā 'was enough for the people but 1/4 of the lands were still unirrigated, 17 dhirā was the most beneficial, and 18 dhirā' was detrimental to the people as some of the lands would be flooded. 3) 7th Century AH/11th Century CE, 18 dhirā' was needed to assure that all lands be sufficiently irrigated. 4) 9th Century AH/15th Century CE, lands were not irrigated until it are 20 dhirā'. 5) 11th Century AH/16th Century CE, 23 dhirā' was enough to irrigate lands. See Muhammad Hamdī al-Manāwī, Nahr al-Nīl fī al-Maktabah al-Arabiyyah (Cairo: al-Thagāfah wa al-Irshād al-Qawmī, 1966), 168. There were many different equivalences for dhirā'in metric

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

the crisis that occurred within the years 805–808 /1403–1406 during the Mamlūk era. Al-Magrīzī opined that the famine of 805-808 / 1403-1406 was different from the previous disasters that had befallen Egypt. 12 Indeed, prices escalated tremendously despite the supposedly sufficient irrigation from the high level of the Nile River. Such a situation indicated that other factors might have caused the inflation, which al-Magrīzī viewed to be monetary.¹³ Al-Magrīzī described that the disaster of the period could be traced to as early as 796/ 1393-4 during which the Nile reached 16 dhirā but only for a short period, which caused the land to be insufficiently irrigated and in turn, increased the prices of goods. The Nile only returned to its original level after the harvest of 798/1395–6.14 The prices of goods then increased following the death of Sultan al-Zāhir Barqūq (r. 784–801/1382–1399) in Shawwāl 801/ June 1399 and only worsened until the Nile failed to reach its plenitude in 806/1403-4.15

Causes of the Egyptian Inflation on 805-808 /1403-1406

In *Sulūk*, al-Maqrīzī described the inflation that occurred in Rajab 805/ January 1403 as "prices soared with an unprecedented increment in Egypt." In the previous month of Jamād al-

terms and it was specific to those that had been used to calculate the old Nilometre from the year 861. This <code>dhirā</code> 'according to an expedition by Napoleon Bonaparte was equivalent to exactly 54.04 cm. It was also called the "black cubit" of the 'Abbāsid period. See Walther Hinz and Ismail Marcinkowski, <code>Measures</code> and <code>Weights</code> in the Islamic World: <code>An English Translation of Walther Hinz's <code>Handbook</code> Islamische Masse und Gewichte (Kuala Lumpur: ISTAC-IIUM, 2003), 80–81.</code>

- 12. Taqī al-Dīn Ahmad Ibn 'Alī al-Maqrīzī, *Ighāthat al-Ummah bi Kashfi al-Ghummah.*, ed. Jamal al-Din al-Shayyal Muhammad Muṣtafā Ziyādah, 2nd ed. (Cairo: Maṭba'ah Lajnah al-Ta'lif wa al-Tarjamah wa al-Nashar, 1954), 41.
- 13. Al-Magrīzī, *Sulūk*, 3: 1131–1132.
- 14. Ibid., 816–18.
- 15. Al-Maqrīzī, Ighāthah, 42.
- "Wa fī hadhā al-Shahr Irtafa at al-As ār Irtifā an Lam Yu had Mithluhu bi-Miṣr." Al-Maqrīzī, Sulūk, 3: 1100.

Infations: Lessons from al-Maqrīzī

Ākhir 805/ December 1402, al-Maqrīzī already mentioned of increased prices and the exchange rate of one gold dīnār reaching 65 dirham *fulūs* from a previous 50 dirham *fulūs* in Muḥarram 805/ August 1402, while one gold ducat was exchanged for 60 dirham *fulūs* from a previous 47 dirham *fulūs* in the same period. ¹⁷ He attributed this to the depreciation of copper *fulūs*. ¹⁸ Adam Sabra described that it was the first time in the Mamlūk history that massive inflation was caused by purely monetary factors as well as the government's inability or unwillingness to maintain a stable monetary system. ¹⁹

In addressing the famine and economic crisis of 805–808 /1403–1406, al-Maqrīzī wrote his treatises *Ighāthah al-Ummah bi Kashf al-Ghummah* and *Shudhūr al-Uqūd fī Dhikr al-Nuqūd*, describing the importance of monetary stability. The main cause of the economic crisis of Egypt from 805–808 /1403–1406 according to him was the corruption of officials.²⁰ Due to their corruption in the monetary management, the balance of the currencies was disturbed which worsened the epidemic.²¹ At least three recurring examples were mentioned by al-Maqrīzī on the practices that brought inflation and worsened the epidemic.

Firstly, one of his main concerns was about the supply of copper coins that overwhelmed Egypt that led to increased prices and wages. ²² Al-Maqrīzī highlighted the doings of Mahmūd Ibn 'Alī, the Ustadār (majordomo) to Sultan Barqūq who

^{17.} Ibid., 1098.

^{18.} Ibid., 1097.

^{19.} Sabra, Poverty and Charity, 151.

He also mentioned the corruption of the officials through practices of bribery in order to secure administrative and religious positions. Al-Maqrīzī, Ighāthah, 43; Allouche, Mamluk Economics: A Study and Translation of al-Maqrīzī's Ighāthah (Salt Lake City: University of Utah Press, 1994), 52.

^{21.} Al-Maqrīzī, *Ighāthah*, 45–50.; Allouche, *Mamluk Economics*, 50–57.

^{22.} Al-Maqrīzī, *Ighāthah*, 71–72; *Sulūk*, 4:1131–1132; *Nuqūd al-Islāmiyyah al-Musammā bi-Shudhūr al-Uqūd fī Dhikr al-Nuqūd*. Ed. Muhammad al-Sayyid 'Alī Bahr al-'Ulūm, 5th ed. (Najaf: Manshūrāt al-Maktabah al-Haidariyyah wa Matba'atuhā fī al-Najaf, 1967), 39., 31, 39; Allouche, *Mamluk Economics*, 71–72.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

imported copper from Europe and increased the money supply tremendously without any obvious increase in demand. 23 In the 14th century, Europe faced a serious silver shortage as the European silver mines were exhausted. 24 This coincided well with al-Magrīzī putting the blame on Mahmūd Ibn 'Alī al-Ustadār for exporting copper to the West (Europe) in return for his own benefit and the Europeans for taking away Egyptian silver to their lands.²⁵ Boaz Shoshan also noted that the price of silver was cheaper in Egypt while being more expensive in Europe. 26 In this regard, Eliyahu Ashtor concurred with al-Magrīzī by showing that beginning from the mid-8th/14th century, copper was one of the main imports from Europe to Egypt while the Egyptian silver was exported to Europe. ²⁷ Al-Magrīzī also attributed the shortage of silver dirhams in Egypt to the dignitaries who used silver jewellery as a form of status symbol instead of having it being minted into coins. Hence, the minting of silver dirhams stopped. For al-Magrīzī, the monetary landscape could be better if silver was turned into coins to maintain liquidity instead of being hoarded while the quantity of copper coins and bullion were to be regulated to maintain its value. Indeed, this showed how concerned al-Magrīzī was with the way the quantity of money could affect prices, not being limited only to the material aspect of the coins.

Secondly, the continuous debasement of the *fulūs* after it had been widely circulated among the Egyptians. ²⁸ Al-Maqrīzī called this as the deterioration of the *fulūs* (al-fasād fī al-fulūs) in which the *fulūs* that were minted in Alexandria were lighter in

^{23.} Al-Maqrīzī, Ighāthah, 71-72; Sulūk, 3: 1132; Nuqūd, 31, 39.

^{24.} Boaz Shoshan, "From Silver to Copper: Monetary Changes in Fifteenth-Century Egypt," *Studia Islamica* no. 56 (1982): 101.

^{25.} Al-Maqrīzī, al-Nuqūd, 39.

^{26.} Shoshan, "From Silver to Copper", 102.

^{27.} Bacharach, "Copper," 34; Boaz Shoshan, "Exchange-rate Policies in Fifteenth-Century Egypt," Journal of the Economic and Social History of the Orient 29, No. 1 (Feb., 1986): 42.

^{28.} Al-Maqrīzī, *Sulūk*, 3: 1132.

Infations: Lessons from al-Magrīzī

weight compared to those minted in Cairo. The debasement continued until the weight of copper fulus became lighter than a quarter of dirham (0.74 grams) in 807/1404 from the theoretical weight of copper *fulūs* at 2.975 grams (a dirham weight).²⁹ The unregulated debasement tremendously increased the quantity of money in circulation and worked simultaneously with the increased supply of copper from the importation by Mahmud Ibn 'Alī al-Ustadār to create hyperinflation. Such a continuous re-coinage and debasement recurred during the Mamlūk period.³⁰ Mamlūk rulers were keen to reintroduce new coinage that came with new standard.³¹ Apart from being a tool to display their power through symbols and diagrams on the new coinage, 32 it also functioned as a source of income by which the government could issue lighter new coins at the same or even higher value than the older heavier coins and decreed the value of the old coins to be much less than its worth. 33 The people would send their old coins to the mint just to get lighter coins (with lower intrinsic value) with the same face value (one dīnār/dirham).

^{29.} Ibid.; Shaykh al-Islām al-Hāfiz Ibn Hajar al-'Asqalānī, *Inbā' al-Ghumr bi Abnā' al-'Umr*, ed. Hasan Habshī, vol. 2 (Cairo: Lajnah Ihyā' al-Turāth al-Islāmī, 1969-1997), 297; Albeit the theoretical weight of 2.975 grams, there were few specimens that weighed more and Hassanein Rabie contributed that to the absence of economic crisis in the early Baḥrī Mamlūk period. Hassanein Mohamad Rabie, "The Financial System of Egypt 564-741 A.H./ 1169–1341 A.D." (PhD diss., University of London, November 1968), 341.

^{30.} Al-Magrīzī, *Ighāthah*, 62–72; *Nuqūd*, 31, 39.

^{31.} John L. Meloy, "Copper Money in Late Mamluk Cairo: Chaos or Control?" Journal of Economic and Social History of the Orient 44, no. 3 (Brill: 2001): 299.

^{32.} The control of a given area and time can be known through coinage. Additionally, the issuer's policies were indicated by unusual legends. See Clive Foss, "The Coinage of the First Century of Islam—Stephen Album and Tony Goodwin, Sylloge of Islamic Coins in the Ashmolean Museum Volume 1: The Pre-Reform Coinage of the Early Islamic Period (Ashmolean Museum, Oxford 2002)," Journal of Roman Archaeology 16 (2003): 752.

Jere L. Bacharach, "Circassian Monetary Policy: Silver," The Numismatic Chronicle 11, 7th series (London: London Numismatic Society, 1971): 278–280.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

With this practice, the people were charged with hidden tax (seigniorage) as the prices of goods and services were more expensive than they actually were. The government benefitted from this practice as they could gain more coins with higher value using the same amount of gold and silver. However, it is important to note that debasement in itself is neither erroneous nor totally rejected in Islam. Debasement is not acceptable when it is done continuously and only for the exclusive benefit of a certain group.³⁴ For example, the famous Kāmilī dirhams of Egypt was a result of debasement during the reign of the Ayyubid Sultan Muhammad al-Kāmil ibn al-'Adil (r. 615–35/1218–38). Al-Kāmil introduced the new rounded silver coins in 622/1225 and the old Egyptian Stq/wariq and Nāṣirī dirhams were nullified and prohibited in transactions. 35 This was a debasement since the Kāmilī dirhams only contained one-third of silver and another two-thirds of copper, while the Nāsirī dirhams were made from equal halves of copper and silver. 36 Sultan al-Kāmil also made permissible the usage of copper fulūs as coins for small exchange.³⁷ The wisdom in this is that al-Kāmil made his dirhams as the monetary standard instead of several coins that served as the

^{34.} Al-Maqrīzī described how an official disturbed the monetary stability in 759/1357–58 that was set forth by Sultan al-Kāmil in 622/1225 by utilising the mint for a sum of money that he received for his own interest. He set the weight of one fals to be equal to one mithqāl and one dirham was equivalent to 48 fulūs from the original 24 fulūs. This had created a massive inflation as goods that were sold at half a dirham were sold at one dirham, meaning a 100 per cent increase in price. Al-Maqrīzī, Ighāthah, 70; Allouche, Mamluk Economics, 70.

^{35.} Al-Maqrīzī, *Nuqūd*, 29–30.

^{36.} Ibid.; The Kāmilī dirhams contained two-thirds silver and one-third copper according to al-Maqrīzī. However, Balog discovered through his analysis that its content was the reverse from al-Maqrīzī's account, which was one-third silver and two-thirds copper. It is possible that al-Maqrīzī was mistaken and reversed the numbers. P. Balog, "History of the Dirhem in Egypt form the Fāṭimid Conquest until the Collapse of the Mamlūk Empire (358–922 H/968–1516 AD)," *Revue Numismatique*, 3 (1961): 131.

Al-Maqrīzī, Ighāthah, 65–70; Nuqūd, 30; Allouche, Mamluk Economics, 67–70.

Infations: Lessons from al-Maqrīzī

standard which could lead to confusion—i.e. Nāṣirī, wariq and other types of unregulated copper coins and "bad" (also called black) dirhams—while copper fulūs were permitted for smaller transactions. Hence, from his reform (debasement), al-Kāmil was able to gain control of the monetary management by excluding the unregulated coins out of the monetary circulation and, at the same time tackling the issue of gold deficit in Egypt during the Ayyubid era. This had proved to be quite successful as it was maintained until the end of the Ayyubid period and the name, Kāmilī, became synonymous in quoting silver dirhams up to the time of al-Maqrīzī. Al-Maqrīzī described that the introduction of large quantities of fulūs brought prosperity to the needy, and this remained until 795/1357—58 when a government official debased the currency for his own benefit.

Thirdly, the acceptance of copper *fulūs* and later, dirham *fulūs* as legal tender and its utilisation beyond merely fulfilling household needs. ⁴¹ When the copper *fulūs* were first accepted as legal tender by Sultan al-Kāmil, copper *fulūs* were only meant for household needs and for small transactions. ⁴² However, due to the reasons mentioned earlier, when copper coins were minted excessively coinciding with the increased supply of copper and the disappearance of silver, copper *fulūs* gained popularity as the most commonly used currency and became the monetary

^{38.} Al-Maqrīzī, *Ighāthah*, 70, Allouche, *Mamluk Economics*, 70.

^{39.} Al-Magrīzī, Nugūd, 30; Allouche, Mamluk Economics, 93.

^{40.} Al-Magrīzī, Ighāthah, 70, Allouche, Mamluk Economics, 70.

^{41.} Dirham *fulūs* as the dirham of account. A unit of account introduced after the collapse of bimetallic monetary system of the Mamlūks. Allouche mentioned the reference to this money of account was in 1401, but the official adoption as the basis of the monetary system was in 1403. The exchange rate remained constant at 6 dirhām *fulūs* to a *ratl* of *fulūs* until 1421. Allouche, *Mamluk Economics*, 90–91. Bacharach believed that the original meaning was the value of pure copper at the weight of a silver dirham (2.975 gm) but it lost its original meaning and only became fictitious money of account with no fixed relationship with existing coins. See Bacharach, "Copper," 38.

^{42.} Al-Maqrīzī, *Ighāthah*, 65–70; *Nuqūd*, 30; Allouche, *Mamluk Economics*, 67–70.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

standard of Egypt where prices and wages were quoted in fulūs, which happened before the death of Sultan Bargūg (d. (801/1399). But then, the dirham fulūs were introduced as the money of account in Egypt. There is no clear reference from al-Magrīzī about the date for the transition of using copper fulūs to the money of account, dirham min al-fulūs (also dirham fulūs) as the monetary standard following the disappearance of fulūs. 44 Allouche referred to the year 1401 as the starting point when the dirham *fulūs* was introduced in Egypt, which coincided with both accounts of al-Magrīzī and the collapse of Mamlūk bimetallic monetary system, to establish the time that dirham fulūs was introduced in Egypt. However, the official decision for it to be the basis of the monetary system was only made in 1403.45 The dirham *fulūs* was meant to replace the dirham Kāmilī as the currency of Egypt as both were transacted at the same rate, which was equivalent to 24 copper fulūs. 46 The

^{43.} Al-Maqrīzī, Sulūk, 1132.

^{44.} Bacharach, "Copper", 37-38. In the beginning to mid-Rabī'l-Awwal 808/ September 1405, al-Maqrīzī mentioned the exchange rate of gold dīnār to dirham fulūs as 1: 150 and ducat to dirham fulūs as 1: 130. At the end of the month, 27 Rabī'l-Awwal 808/ 22 September 1405, the value of gold relative to dirham fulūs dropped to 1: 140 and 1: 120 respectively. He ascribed the decline in the price of gold to the scarcity of copper fulūs. The shortage of fulūs was highlighted by al-Maqrīzī when the sellers refused to accept gold dīnārs due to its lower value and transactions were put into halt. Al-Maqrīzī, Sulūk, 4: 3; Allouche, Mamluk Economics, 98.

^{45.} In a statement by the Chief Judge in Rabī'l-Awwal 806/ Sept.—Oct. 1403, all wages, rents, dowries and others should be in terms of (dirham) fulūs and no longer quoted in silver dirhams. This is an example that al-Maqrīzī might only refer to dirham fulūs as only fulūs. Al-Maqrīzī, Sulūk, 3: 1117; Al-Maqrīzī mentioned the exchange rate in Muḥarram 806/ July 1403 to be a gold dīnār at 60 dirham fulūs, a ducat at 45 dirham fulūs, and dirham Kāmilī which was the currency of Egypt at 24 dirham fulūs, despite it gaining scarcity. See Al-Maqrīzī, Sulūk, 3: 1111; Allouche, Mamluk Economics, 17, 90–91.

^{46.} One *ratl* (428.4 grams) would have 144 copper coins with theoretical weight (2.975 grams). Thus, one dirham *fulūs* would equal one-sixth of the *ratl*, which was 24 copper *fulūs*, holding the exact exchange rate as the dirham Kāmilī, strengthening the argument that dirham *fulūs* was supposed to be the replacement for dirham Kāmilī. Allouche, *Mamluk Economics*, 17; Al-Maqrīzī, *Sulūk*, 3: 1111.

Infations: Lessons from al-Magrīzī

emergence of dirham fulūs was as a medium of exchange in which six dirham *fulūs* represented the value of one *ratl* copper fulūs (about 428.4 grams or 144 copper fulūs).47 The said rate remained constant until 824/1421 before developing into the money of account with no fixed relationship with existing coins, representing varying amounts of copper coins quantified in ratl. 48 The dirham fulus did not mean an individual copper coin weighing a dirham (2.975 grams), but rather the amount of copper coins necessary to equal the value of one silver dirham.⁴⁹ Such a development of dirham *fulūs* as a money of account and then taking it as the monetary standard where everything was priced in terms of dirham fulus, even the price of gold dīnārs and silver dirhams were in terms of copper *fulūs* and dirham *fulūs*, were among the worries of al-Magrīzī. ⁵⁰ In *Ighāthah*, al-Magrīzī pointed out that the inflation in Egypt would not have been so high had prices been measured in terms of gold and silver, which would only be increased slightly. However, when prices and wages were quoted in *fulūs*, and considering the abundance of copper *fulūs*, the situation got far worse than what it could have been. 51 In such a case, al-Magrīzī already implied the precursor to "the quantity theory of money," in which an increase in the money

^{47.} Al-Maqrīzī, *Sulūk*, 3: 1112. Copper coins were to be transacted only in weight and not tale, and that a *ratl* of copper *fulūs* would worth six dirham (*fulūs*); Shoshan, "Silver to Copper," 112; Shoshan presented a table of the fluctuating value of the *ratl* which became more pronounced in the second quarter of the 9th/15th century when there was a serious copper shortage in Egypt.

^{48.} Bacharach gave an example that in 838/1435, new copper coins were to be exchanged at 24 dirham *fulūs* per *raṭl* while the old ones at 18 per *raṭl*, Bacharach, "Copper", 38–39.

Warren C. Schultz, The Cambridge History of Egypt. ed. Carl F. Petry and M. W. Daly, vol. 2 (Cambridge: Cambridge University Press, 1998), 337.

^{50.} At the beginning of the introduction of dirham *fulūs*, the value was set at one *raṭl* of copper *fulūs* to six dirham *fulūs*, hence one dirham *fulūs* would be equivalent to the worth of 71.4 grams of copper coins. Al-Maqrīzī's criticisms towards copper *fulūs* were applicable towards the dirham *fulūs* due to their relationship. Al-Maqrīzī, *Sulūk*, 3: 1132; *Ighāthah*, 77; Allouche, *Mamluk Economics*, 77, 139.

^{51.} Al-Magrīzī, *Ighāthah*, 79.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

supply would increase the prices of goods and services, if there were similar supply of goods and services in the market. His suggestion to use gold and silver not exclusively pointed to his proposal that only gold and silver were considered to be legal tender, but due to gold and silver not being oversupplied to cause inflation as the copper *fulūs* did in that period in Egypt. The price of goods and wages would increase only slightly in terms of gold and silver, but the situation reflected a huge increment in terms of dirham *fulūs*. The price of grain would only increase about 20 per cent in constant gold terms, but raked a 200 per cent increase in dirham *fulūs* and a 240 per cent in copper *fulūs* between 1402 and 1404. The price of goods and services in copper *fulūs* between 1402 and 1404.

Al-Maqrīzī's Proposals for Monetary Reform

Al-Maqrīzī proposed that the government was to regulate the copper *fulūs* and dirham *fulūs* in relation to the bimetallic canonical system. ⁵⁴ Even though some researchers pointed out that al-Maqrīzī only accepted gold and silver as currency, ⁵⁵ he chose the precious metals as the only acceptable currency not because of their physical forms as silver and gold, but the nature of those metals, which tended to be more stable than any other

^{52.} Allouche, Mamluk Economics, 79.

Olivia Orozco de la Torre, Monetary Thought in Islamic and Christian Scholars (13th–16th Century): A Comparative Perspective on Debasement and the Rise of the Quantity Theory of Money (PhD diss., European University Institute, 27 June 2008), 153.

^{54.} Al-Maqrīzī, *Ighāthah*, 70–71; *Nuqūd*, 39–40; Allouche, *Mamluk Economics*, 80–81; de la Torre, "Monetary Thought," 195–198. Bacharach pointed out that the rulers of Mamluk Egypt issued large numbers of *fulūs* to manipulate the exchange rates for their own immediate profit; Bacharach, Copper, 45–46.

^{55.} Meloy went as far as to say that "Al-Maqrīzī seems not to have been aware of the importance of regulating the quantity of copper money in circulation." John L. Meloy, "The Merits of Economic History: Rereading al-Maqrīzī's Ighāthah and Shudhūr," *Mamlūk Studies Review* 7, no. 2 (2003): 191–192, 201; Abdul Azim Islahi, "Economic and Financial Crises in Fifteenth-Century Egypt: Lessons from the History," *Islamic Economic Studies* 21, no. 2 (2013): 90.

Infations: Lessons from al-Magrīzī

options available at that time.⁵⁶ In medieval Egypt, gold dīnārs and silver dirhams had an established relationship of one dīnār equalling to 20-25 silver dirhams and rarely going below or beyond the exchange rate.⁵⁷ But this relationship was ruined with the advent of dirham fulūs. 58 Although dirham fulūs were initially meant to replace the Kāmilī dirhams, bearing the same exchange rate in relation to copper *fulūs*, the value of dirham *fulūs* deteriorated drastically in time and achieved unprecedented exchange rate in gold. Thus, it was imperative for al-Magrīzī to return the monetary landscape to what it used to be by fixing the value of dirham *fulūs* to gold *dīnārs*. Since dirham *fulūs* had a fixed rate of six dirham fulūs to one rath of copper coins up until 824/1421, the deterioration in the value of copper fulūs would also mean a decrease in the value of dirham *fulūs*. ⁵⁹ Even though copper coins were widely used in Egypt, they still did not have a proper place in relation to the bimetallic currencies that had been legally accepted in the Islamic tradition, which were gold and silver. 60 Thus, due to the absence of this relationship, al-Magrīzī recognised the usage of currencies other than gold and silver, such as copper coins, bread crumbs, and beads, for only small transactions as they were not properly regulated within the Islamic tradition in his view.⁶¹ Due to lack of regulations caused by the absence of proper relationship regarding currencies other

^{56.} Al-Maqrīzī, Nuqūd, 38.

^{57.} Petry, ed., Cambridge History, 334.

^{58.} During the crisis of inflation and drought of 805–808/1403–1406, the lowest exchange rate of dirham fulūs to dīnār was at the beginning of the crisis, from Shawwāl 805/ April—May 1403 to Muharram 806/ July 1403, at 60 dirham fulūs to one gold dīnār. While the highest rate during the crisis was in Rabī' al-Awwal 808/ September 1405 at 150 dirham fulūs to one gold dīnār. Compare this to the usual rate of 20–25 dirham Kāmilī to one gold dīnār before the advent of dirham fulūs. Allouche, Mamluk Economics, 95–98.

^{59.} Al-Maqrīzī, Sulūk, 3: 1132; Ighāthah, 77; Allouche, Mamluk Economics, 77,

De la Torre, "Monetary Thought," 195–197; Bacharach, "Copper", 39.

^{61.} Al-Maqrīzī, Nuqūd, 37–39.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

than the bimetallic ones, the currencies were more susceptible to fluctuations, especially when considering the high quantity of copper coins minted and the frequency of re-coinage among the Mamlūk rulers. ⁶²

The proposal for a more stable currency by al-Magrīzī was intended to explain the causes and eradicate the crisis that befell Egypt in 805–808 /1403–1406 C.E. The crises of famine and poverty were caused by the uncertain flow of the Nile River, which was a recurrent incident in Egypt. Yet, for that particular period, the monetary instability had worsened the situation. 63 There were two monetary reforms that had been proposed by al-Maqrīzī, one in *Ighāthah*, and another in Nugūd. In 808/1405, al-Magrīzī proposed in *Ighāthah* to fix the exchange rate of silver dirhams to gold dīnārs as only gold and silver could be accepted as legal tenders for him. 64 He put the exchange rate of one gold dīnār equalled to 24 silver dirhams and also equalled to 23 1/3 ratl of fulūs which was 140 dirham fulūs. The rates were the result of al-Magrīzī's calculation that pure silver metal weighing 100 dirhams would cost six gold dīnārs and one ratl of copper fulūs was worth six dirham fulūs. 65 Another quarter dīnār was added to the cost as minting fee (for copper to produce alloy), taxes, firewood, and wages. Pure silver weighing 100 dirhams then would produce 150 silver dirham coins after it had been mixed with copper to form silver-copper alloy mixture. The 150 dirhams divided by 6 ½ (cost of minting) would equal to the rate of one gold dīnār to 24 silver dirhams, and one dirham would equal to five dirham *fulūs* and the value

^{62.} See Bacharach, "Copper."

^{63.} Al-Maqrīzī, *Ighāthah*, 53–47; Allouche, *Mamluk Economics*, 50–55.

^{64.} Al-Magrīzī, *Ighāthah*, 70–71.; Allouche, *Mamluk Economics*, 80–81.

^{65.} The Arabic text mentioned 100 dirhams would cost five gold dīnārs, Allouche corrected this to six as the number did not add up to the exchange rate of 1: 24 from gold to silver. The same correction applied to the final production of 150 silver dirhams equalled to 6 \(^1/4\) dīnārs, from the Arabic text 5 \(^1/4\) dīnārs. See Al-Maqrīzī, Ighāthah, 70–71; Allouche, Mamluk Economics, 140.

Infations: Lessons from al-Magrīzī

of the weight of 140 copper fulūs. The wisdom in fixing the rates, according to al-Maqrīzī, was that people would no longer hoard silver and would bring it to be minted as silver dirhams. Thus, prices would decrease, as he stated earlier that prices were much lower in terms of gold and silver instead of fulūs. 66 No longer would there be a shortage of silver as well as the necessity to use copper in transactions involving more than the value of one dirham because as he mentioned, copper *fulūs* could only be used for transactions amounting to less than one dirham.⁶⁷ Since dirham *fulūs* were used to replace the silver dirhams, and the exchange rates of dirham *fulūs* to one gold *dīnār* fluctuated between 50–65: 1, al-Magrīzī hoped that when the supply of silver was sufficient, silver could gain its former place as the currency (that were replaced by dirham *fulūs*) in which prices and wages were quoted, and at the rate of 1: 24 to gold dīnār, prices and wages would return to its previous level. 68 From this proposal, it is understandable that al-Magrīzī was trying to decrease the value of dirham *fulūs* while increasing the value of silver dirham in relation to dirham *fulūs* and to gold *dīnār* (from 1 dīnār to 50–65 dirham fulūs, to 1 dīnār to 24 silver dirhams) in an effort to return the rates prior to the crisis. By increasing the value of silver dirhams, al-Magrīzī hoped that silver would no longer be hoarded as it held more monetary value (thus more profitable for the public to turn it in to the mint instead of holding it) and subsequently when sufficient quantity was achieved in circulation, it could gain the place of a legal tender. Only then was it possible that prices and wages be quoted in silver dirhams, as al-Magrīzī proposed.

^{66.} Al-Maqrīzī, Ighāthah, 71; Allouche, Mamluk Economics, 81.

^{67.} Al-Maqrīzī, *Sulūk*, 3: 1131.

^{68.} Notice the normal rates of silver dirhams to gold *dīnār* were around 20–25: 1, thus, the cost estimated by al-Maqrīzī of 1 *dīnār* for 24 silver dirhams is acceptable.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

However, in 841/1438, ⁶⁹ al-Magrīzī revised his proposal in Nuque to include the role of copper as one of the circulating currencies. 70 The later proposal mentioned that the government should look into the cost of the imported red copper disc from Europe for one qintār (256.4 kilogrammes, could also mean a huge amount).⁷¹ Following this, the government should estimate by calculating how many copper coins could be produced from the said amount of copper metal. From this, they could estimate the exchange rate of one gold dīnār to copper fulūs. When the rate of $d\bar{n}a\bar{r}$ to copper was established, its equivalent to Mu'ayyadī dirham could also be known. The wisdom in this was that the people would have the option to transact between Mu'ayyadī dirham and Mu'ayyadī fūlūs (the copper fulūs that had an established relationship with dīnār and dirham).⁷² This is a clear example that al-Magrīzī did accept copper coins as a currency, by properly establishing the exchange rates based on the intrinsic value of copper, gold, and silver, thus lowering the possibilities of fixing the value of copper *fulūs* simply based on the political will that often ended with sudden fluctuations in the exchange rates. This is important as al-Magrīzī always mentioned that prices and wages should only be quoted in gold $d\bar{\imath}n\bar{a}rs$ or silver dirhams, and establishing the rate based on the two coins would automatically make the prices dependent on the value of gold and silver relative to copper. He also proposed in Nuque that every contract should only be quoted in Mu'ayyadī dirhams, which would become the monetary standard.⁷³

^{69.} De la Torre pointed that the manuscript dated 841/1438 was a revision from the one that al-Maqrīzī wrote earlier in 818/1415, in which he maintained his proposal in 1415 to be still valid in 1438. He revisited his proposal after the death of Sultan Barsbay in 1438, who manipulated the copper coins in 1435. See De la Torre, "Monetary Thought," 191–193.

^{70.} Al-Maqrīzī, *Nuqūd*, 39–40.

^{71.} Ibid., 109–110.

Fa idhā duribat hādhihi al-fulūs sāra naqd al-nās mā bayna dirham mu'ayyadī, wa fulūs mu'ayyadiyah; Al-Maqrīzī, Nuqūd, 40.

^{73.} Al-Magrīzī, *Nugūd*, 35–36.

Infations: Lessons from al-Magrīzī

Al-Maqrīzī commended the reforms by Caliph 'Abd al-Mālik Ibn Marwān (r. 65–85/685–705) and Sultan Mu'ayyad Shaykh (r. 815–824/1412–1421).⁷⁴ In the two reforms mentioned, both rulers established a clear standard and fixed the value and weight of the currency. The standardisations were implemented to minimise uncertainty if the value of the currency was unregulated and constantly changing. Indeed, money as a medium of exchange and storage of value needs to have more stability in value.⁷⁵

Effects of the Inflation on the Population

Stability in the value of money is important for it to function as an excellent method of wealth distribution. Compared to other methods, the control of money is supposed to be more efficient as it is more inclusive, wide usage, be it in cash or other forms as a medium of exchange and storage of value. For it to be able to perform its functions as mentioned, it must be stable, dependable, and not volatile or rapidly losing its value over time. A miscalculated monetary policy will have the most severe impact on the poorest and lowest income population. This has been well illustrated by al-Maqrīzī in *Ighāthah*, ⁷⁶ in which he divided the population of Egypt into seven categories: the ruler (one who held the reign of power); the rich and wealthy merchants; the average earners among the traders; the peasants; the recipients of the stipend including students of knowledge;

^{74.} Al-Maqrīzī, *Ighāthah*, 56–57; *Nuqūd*, 13–14, 33–34.

^{75.} Naṣīr al-Dīn Tūsī described the criteria of money to be from solid substance, firmly constituted, perfectly composed, of a stable and fixed value, while changes and disappearance in value would nullify its purpose as the preserver of justice, the universal adjuster and the lesser law. Naṣīr al-Dīn Tūsī, *The Nasirean Ethics*, trans. G. M. Wickens. (London: George Allen & Unwin Ltd., 1964), 157.

^{76.} The summarised version of a partial translation from al-Maqrīzī's text was done by this writer to fit in this article, and he referred to Allouche for some of the technical terms. Al-Maqrīzī, *Ighāthah*, 72–75.; Allouche, *Mamluk Economics*, 73–79.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

jurists and soldiers; the artisans and those whose income from wages; and the needy and the paupers, who lived off the others.

The first category was unaffected, their conditions in the tested times appeared good to them, and their wealth seemed to be more than before, by which they could increase revenues from the taxes. They received more than before the inflation rose. Previously, they received 20,000 silver dirhams but now 100,000 dirham *fulūs*. This showed that even though the amount might look to increase numerically, in fact the value had decreased.⁷⁷ Indeed, they had incurred losses yet erroneously thought they had made profits.

The second category—the rich and wealthy merchants—who previously made a profit of 1,000 silver dirhams (equalled to 50 gold *mithqal*), only made a profit of 3,000 dirham *fulūs* (20 gold *mithqāl*) from the same item sold. Obviously, the benefit they gained from 1,000 dirham was more than the benefit of the 3,000 dirham *fulūs*. Similar to the first, the second category might think they made profits while in fact they had incurred losses.

The third category—the average earners in the form of small merchants and shopkeepers—depended on the profits they received from their businesses. Every one of them tried to be as contented as possible. Shortly after their pleasant day (of gaining profit), they spent all their earnings for their needs. They did not go into debt for their wants, and hence, were contented.

The fourth category—the peasants who worked on lands—who had most perished from the difficult early years and continuous calamities of scarce irrigation except for a few who

^{77.} Al-Maqrīzī gave an exchange rate of 20 silver dirhams equivalent to 1 mithqāl of gold (the exchange rate in 786–788/ 1384–86) compared to 150 dirham fulūs = 1 mithqāl (the exchange rate in Rabī¹l-Awwal 808/ September 1405), and 100,000 dirhām fulūs was valued at 666 mithqāl, thus he arrived at the conclusion that they already lost 33 per cent of the value from their income. (1 mithqāl = legal weight of one gold dīnār, 4.25 grams). However, if the exchange rate of 30 silver dirhams was equivalent to the value of 1 mithqāl of gold (the exchange rate in Muharram 803/ August–September 1400), meaning 20,000 silver dirham = 666.6 mithqāl, there would be no significant decline in the value of their income. Allouche, Mamluk Economics, 95, 98.

Infations: Lessons from al-Magrīzī

became wealthy, were those whose lands were irrigated during the years of drought. The fifth category—the recipients of stipends who were mostly jurists and seekers of knowledge, as well as those affiliated among the witnesses (wa man yalhaqu bihim min alshuhūd)—many of whom were from the army (ajnād al-halaqah),⁷⁸ and those in similar situation. They were either dying or wishing for death due to the misfortune that befell them. They had to spend 100 dirham fulūs for things that were formerly worth 20 silver dirhams.⁷⁹ The loss from the exchange rate worsened their already unfortunate situation due to the calamities.

The sixth category—the salaried and waged workers—whose salaries increased many times, only because a few of them remained as most had died. They were indeed rare as they would only be found after a long and difficult search. The seventh category was the needy and the poor, who had most died due to hunger and cold, and only a few from a handful remained (*aqall min al-qalīl*).

From the third to the seven categories discussed by al-Maqrīzī, the average earners and below, made up the highest percentage of the current population.⁸⁰ They had barely enough

^{78.} Allouche described the *ajnād al-halaqah* as "the non-Mamlūk cavalry and the sons of Mamlūks. They were born and bred in Egypt and thus could not aspire to be part of the Mamlūk elite. They usually held a small fief and were required to participate in the expeditions if ordered to do so." Allouche, *Mamluk Economics*, 138; Carl F. Petry described them as "Originally, the bodyguard of the Ayyūbid sultan; later, a non-elite military corps composed primarily of descendants of Mamlūks." Warren C. Schultz, *The Cambridge*, 521.

^{79.} This example is not quite in line with his previous examples. If al-Maqrīzī wanted to use the exchange rate of 150 dirham fulūs = 1 mithqūl like he did in the previous two examples, he should consider 150 dirham fulūs for things that were worth 20 silver dirhams, as 100 dirham fulūs would only be equivalent to 0.667 mithqūl.

^{80.} Middle income constituted 13 per cent, low income 56 per cent, and poor 15 per cent (living on \$2 or less daily was classified as poor) of the Global population distribution by income in 2011 by Pew Research Center. Pew Research Center, "World Population by Income," https://www.pewresearch.org/global/interactives/global-population-by-income/. Accessed 30 December 2019.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

income to fulfil their needs, and at times, needed to incur debt just for the necessities. With the advent of modern banking and financial institutions, the average earners could perform loans relatively easy compared to the pre-modern banking era. However, such a facility might impose a dilemma; when the have-nots wanted to apply for loans or financing, the probability of their application being rejected was high due to the lack of collateral to back their application. Thus, they would use the only asset they had, i.e. house, small plots of lands, and cars to finance their needs, whether to sell those or to use those as collateral for financing. When inflation rises, the value of money becomes depleted, hence the value from the amount of money received from the sale/financing of assets is not as valuable as before the rise of inflation, making the amount received less in value to be utilised by the poor. Since their needs—whether personal or business—had to pay for their loans, they would be unable to fulfil their debt obligation, causing their collateralised property to be confiscated by the financial institution.

However, the flip side of inflation is that borrowers tend to gain because, since the value of money declines progressively, the value they are going to repay would be lower than when sums borrowed were received, meaning that the future value would be lower than the present value. During the beginning of the crisis discussed in 806/1403, debts and contracts were quoted in terms of dirham *fulūs* and no longer silver dirhams. Hen Mamlūk rulers issued new coins with new exchange rate, the problem of new rates benefitting debtors while the old rates benefitting creditors surfaced. This happened because the new rates set the value of dirham *fulūs* lower then the old rates. Given the unstable nature of dirham *fulūs* such that it flactuated very much in relation to gold dinars, the debtors actually pay lower in value than what they had borrowed despite being the same amount, and the exact opposite occurred for the old rates.

^{81.} Al-Maqrīzī, Sulūk, 3: 1117.

^{82.} De la Torre, "Monetary Thought," 192.

Infations: Lessons from al-Magrīzī

As a solution to the decreasing value of dirham *fulūs*, in 832/1429, the Chief Judge of Egypt issued a ruling that all contracts between parties, including dowry, should be quoted only in gold *dīnār*s or silver dirhams, nullifying the decree made in 806/1403.⁸³ This again is in support for al-Maqrīzī's proposal for a more stable currency that could avoid injustices involving transacting parties. Based on the examples given, either party could gain or lose during an inflationary period. Indeed, it is important to resort to one common monetary standard that could do justice to both parties. Interestingly, the British economist and founder of the Keynesian economics, John Maynard Keynes, stated that:

It follows, therefore, that a change in the value of money, that is to say in the level of prices, is important to Society only in so far as its incidence is unequal. Such changes have produced in the past, and are producing now, the vastest social consequences, because, as we all know, when the value of money changes, it does not change equally for all persons or for all purposes. A man's receipts and his outgoings are not all modified in one uniform proportion. Thus, a change in prices and rewards, as measured in money, generally affects different classes unequally, transfers wealth from one to another, bestows affluence here and embarrassment there, and redistributes Fortune's favours so as to frustrate design and disappoint expectation.⁸⁴

The transfer of wealth could only be worsened in the upcoming economic crisis. From such transactions, those who had wealth could acquire the properties from the defaulted debtor through auctions, normally at a much lower price than the market price as the financial institutions needed to liquidate

^{83.} Al-Magrīzī, *Sulūk*, 4: 795.

^{84.} John Maynard Keynes, *Essays in Persuasion* (New York: W. W. Norton & Company, Inc., 1963), 80.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

their assets as soon as possible to make up on the defaulted debts. The inequality gap would worsen as the poor would lose their only asset, and at times, their only source of income, not to mention the depleted value of the cash received through those transactions. On the other hand, the wealthy could acquire property at a much lower price, due to auctioned prices and also a drop in the value of currency through inflation, hence worsening the inequality gap as the impact of inflation was much lesser to the wealthy compared to the poor, in accordance with al-Maqrīzī's observation regarding the population of Egypt.

Conclusion

The problems caused by inflation are not exclusive to the modern economy. Inflation might be beneficial for short-term growth and as a temporary solution to solve unemployment. The effects of inflation in the long-run might be positive for those who possess wealth but it will have negative side effects especially for the poor and deprived. One should take heed from the past so that one does not repeat the same mistakes and avoids wasting one's time and resources reinventing the wheel. By providing a more just monetary solution, the problems of poverty and extreme inequality could be reduced, and hopefully solved. In this context, al-Magrīzī had described the problems of inflation as well as its effects on the diverse population of Egypt, and proposed the solution to the problem, by solving the monetary disturbances and resorting to a more stable currency, which is not limited to the forms and materials, as long as the desired stability is achieved. Al-Magrīzī had recognised that increase in money supply would drive prices upwards, yet he had also recognised that inflation would have different impacts on different groups of people. It is interesting that al-Magrīzī made a reference that the currency should be a monetary standard to which prices and wages should be subjected in a similar way that Allah made the names of everything under His Powers subjected to His Names, emphasising the permanence aspect that should be present in

Infations: Lessons from al-Magrīzī

a legal tender as a monetary standard. ⁸⁵ Indeed, to conclude, al-Maqrīzī disregarded copper *fulūs* as legal tender unless they were valued in terms of gold *dīnārs* or silver dirhams so that their quantity could be controlled and their value sustained over time.

^{85.} Allāhumma alhama mawlānā al-sultān bi-husni al-safārah al-karīmah an ya nifa min an yakūna nuqduhu mudāfān ilā ghayrihi, wa an yaj ala nuqdahu tudāfu ilayhi al-nuqūdu, kamā ja ala Allāhu ismahu al-sharīf yudāfu ilayhi ismun kullu min ra īyyatihi. Al-Maqrīzī, Nuqūd, 35.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

References

- Albanesi, Stefania. "Inflation and Inequality." *Journal of Monetary Economics* (Elsevier) no. 54 (2007): 1088–1114.
- Allouche, Adel. Mamluk Economics: A Study and Translation of al-Maqrīzī's Ighāthah. Salt Lake City: University of Utah Press, 1994.
- al-'Asqalānī, Ibn Ḥajar. *Inbā' al-Ghumr bi Abnā' al-'Umr*, ed. Ḥasan Ḥabshī, 4 vols. Cairo: Lajnah Iḥyā' al-Turāth al-Islāmī, 1969—1997.
- Ayalon, David. "Studies on the Structure of the Mamluk Army–I." *Bulletin of the School of Oriental and African Studies*, University of London 15, no. 2 (1953): 203–28.
- Bacharach, Jere L. "Circassian Monetary Policy: Copper." Journal of the Economic and Social History of the Orient (Brill) 19 no. 1 (1976): 32–47.
- _____. "Circassian Monetary Policy: Silver." *The Numismatic Chronicle* 11, 7th series (London: London Numismatic Society, 1971) 278–280.
- Balog, Paul. 1961. "History of the Dirhem in Egypt from the Faimid Conquest until the Collapse of the Mamlūk Empire." *Revue Numismatique* 3: 109–146.
- Bulir, Ales. "Income Inequality: Does Inflation Matter?" *IMF* Staff Papers (Palgrave Macmillan on behalf of the IMF) 48 no. 1 (2001): 139–159.
- Dabla-Norris, Era, Kalpana Kochhar, Frantisek Ricka, Nujin Suphaphiphat, and Evridiki Tsounta. "Causes and Consequences of Income Inequality: A Global Perspective." *IMF Staff Discussion Note*. (June 2015): 42.
- De la Torre, Olivia Orozco. "Monetary Thought in Islamic and Christian Scholars (13th–16th century): A Comparative Perspective on Debasement and the Rise of the Quantity Theory of Money". (PhD diss., European University Institute, 27 June 2008).

Infations: Lessons from al-Magrīzī

- Foss, Clive. "The Coinage of the First Century of Islam Stephen Album and Tony Goodwin, Sylloge of Islamic Coins in the Ashmolean Museum Volume 1: The Pre-Reform Coinage Of The Early Islamic Period (Ashmolean Museum, Oxford 2002)." Journal of Roman Archaeology 16 (2003): 748–760.
- Ghosh, Atish, and Phillips Steven. "Warning: Inflation May Be Harmful to Your Growth." *IMF Staff Papers*, (December 1998).
- Hewlett, Sylvia Ann. "Inflation and Inequality." *Journal of Economic Issues*. (June 1977): 353–368.
- Hinz, Walther and Muhammad Ismail Marcinkowski. *Measures* and Weights in the Islamic World: An English Translation of Walther Hinz's Handbook Islamische Masse und Gewichte. Kuala Lumpur: ISTAC, 2003.
- Ireland, Peter. "The Classical Theory of Inflation and Its Uses Today." *Shadow Open Market Committee Meeting*. New York: Economic Policies for the 21st Century, 2014.
- Islahi, Abdul Azim. "Economic and Financial Crises in Fifteenth-Century Egypt: Lessons From the History." *Islamic Economic Studies* 21 No. 2 (2013): 71–94.
- Keynes, John Maynard. Essays in Persuasion. New York: W. W. Norton & Company, Inc., 1963.
- _____. The General Theory of Employment, Interest and Money. Cambridge: Palgrave Macmillan, 2018.
- Kochhar, Rakesh. A Global Middle Class Is More Promise Than Reality.

 Last Modified August 13, 2015. https://www.pewresearch.
 org/global/2015/07/08/a-global-middle-class-is-more-promise-than-reality/. Accessed 30 December 2019.
- Krugman, Paul. "The New York Times." *The Conscience of a Liberal.* 7 July. https://krugman.blogs.nytimes.com/2009/07/07/the-paradox-of-thrift-for-real. Accessed 17 December 2019.
- al-Manāwī, Muḥammad Ḥamdī. *Nahr al-Nīl fī al-Maktabah al-'Arabiyyah*. Cairo: al-Nāshir al-Dār al-Qawmiyyah al-Ṭabā'ah wa al-Nashr al-Qāhirah, 1966.

Muhammad Khairi / TAFHIM 13 No. 2 (Dec 2020): 85–113

- al-Maqrīzī, Taqī al-Dīn Aḥmad Ibn 'Alī. *Ighāthah al-Ummah bi Kashfi al-Ghummah*. Edited by Jamal al-Din al-Shayyal Muhammad Muṣṭafā Ziyādah. Cairo: Maṭba'ah Lajnah al-Ta'lif wa al-Tarjamah wa al-Nashar, 1954.
- ______. al-Nuqūd al-Islāmiyyah al-Musammā bi-Shudhūr al-'Uqūd fī Dhikr al-Nuqūd. Edited by Muhammad al-Sayyid 'Ali Bahr al-'Ulum. Najaf: Manshūrāt al-Maktabah al-Ḥaidariyyah wa Matba'atuhā fī al-Najaf, 1967.
- _____. Kitāb al-Sulūk li-Ma'rifati Dual al-Mulūk. Edited by Sa'īd 'Abd al-Fatāh 'Asyūr Muḥammad Muṣṭafā Ziyādah. 4 vols. Cairo: Maṭba'ah Dār al-Kutub, 1972.
- _____. Kitāb al-Mawā'iz wa al-I'tibār bi Dhikr al-Khiṭaṭ wa al-Āthār. Reprint from the Būlāq edition with offset. 4 vols. Cairo: General Organization for Cultural Centers, n.d.
- Meloy, John L. "Copper Money in Late Mamluk Cairo: Chaos or Control?" *Journal of the Economic and Social History of the Orient* 44, no. 3 (2001): 293–321.
- _____. "The Merits of Economic History: Re-Reading al-Maqrīzī's Ighāthah and Shudhūr." *Mamlūk Studies Review* 7, no. 2 (2003): 183–203.
- Mohamad Rabie, Hassanein. 1968. "The Financial System of Egypt 564–741 A.H./ 1169–1341 A.D." PhD diss., University of London.
- Orrell, David. *Economyths: Ten Ways Economics Gets It Wrong*. Ontario: John Wiley & Sons Canada, Ltd., 2010.
- Petry, Carl F and M. W. Daly, ed. *The Cambridge History of Egypt.* 2 vols. Cambridge: Cambridge University Press, 1998.
- Pew Research. "World Population by Income". Last Modified 8 July 2015. https://www.pewresearch.org/global/interactives/global-population-by-income/. Accessed 30 December 2019.
- Sabra, Adam. *Poverty and Charity in Medieval Islam: Mamluk Egypt,* 1250–1517. Cambridge: Cambridge University Press, 2000.

Infations: Lessons from al-Magrīzī

- Shoshan, Boaz. "From Silver to Copper: Monetary Changes in Fifteenth-Century Egypt." *Studia Islamica*. (Maisonneuve & Larose) no. 56 (1982): 97–116.
- ______. "Exchange-rate Policies in Fifteenth-Century Egypt." *Journal of the Economic and Social History of the Orient* 29, No. 1 (Feb., 1986): 28–51.
- Tūsī, Naṣīr al-Dīn. *The Nasirean Ethics*. Translated by G. M. Wickens. London: George Allen & Unwin Ltd., 1964.