## Money Multiplication in Islamic Banking - A discussion on its impact on distributive justice

#### Omar Javaid

Institute of Business Management, Karachi, Pakistan Email: s omar.javaid@iobm.edu.pk

DOI: 10.21154/invest.v3i1.5780		
Received: 2022-12-22	Revised: 2023-01-20	Approved: 2023-02-12

Abstract: This paper explores the legitimacy of the use of Fractional Reserve System in Islamic banking from the normative premise of Islamic economics. The paper uses a methodology of structured literature review and a conceptual analysis of the literature following the approach of Critical Interpretive Synthesis (CIS). The first section of the paper presents the analysis on fractional Reserve Bank (FRB) system, how it leads to multiplication of money supply and influence the long-term inflation and business cycles; the second part of the article explains the extent to which this framework obstructs in the achievement of the objectives of Islamic Economics. This is followed by a reflective analysis of concepts and information gathered from the literature to evaluate how FRB system fits into the fabric of Islamic Economic. The second section of this paper explains how Islamic Banks, with an FRB model and its inclination towards debt-based instruments, would allow Islamic banks to contribute to the problem of inflation, even if they use Musharakah and Mudarabah as a mode of finance.

**Keywords**: economic justice, fractional reserve banking, inflation; Islamic banking and finance, money multiplication.

Abstrak: Paper ini mengeksplorasi legitimasi perbankan syariah dari premis normatif ekonomi Islam. Paper ini menggunakan metodologi tinjauan literatur terstruktur dan analisis konseptual literatur yang mengikuti pendekatan Critical Interpretive Synthesis (CIS) yang lebih bersifat "iteratif, refleksif, dan eksploratif". Bagian pertama dari paper ini menyajikan analisis mengenai sistem fractional reserve bank (FRB), bagaimana sistem ini menyebabkan penggandaan jumlah uang beredar dan mempengaruhi inflasi jangka panjang dan siklus bisnis; bagian kedua dari artikel ini menjelaskan sejauh mana kerangka kerja ini menghalangi tercapainya tujuan Ekonomi Islam. Hal ini diikuti dengan analisis reflektif terhadap konsep dan informasi yang dikumpulkan dari literatur untuk mengevaluasi bagaimana sistem FRB cocok dengan struktur Ekonomi Islam. Bagian kedua dari makalah ini menjelaskan bagaimana Bank Islam, dengan model FRB dan kecenderungannya terhadap instrumen berbasis utang, akan memungkinkan bank Islam untuk berkontribusi terhadap masalah inflasi, bahkan jika mereka menggunakan Musyarakah dan Mudarabah sebagai mode pembiayaan.

**Kata kunci:** cadangan pecahan, inflasi, keadilan ekonomi, penggandaan uang, perbankan dan keuangan Islam.

#### INTRODUCTION

There was a time when gold and silver coins were used as a medium of exchange, store & standard of value of products and services. However, over time, the requirements of modern society changed, and the limited supply of gold and silver couldn't catch up with the growth requirements of secular and capitalist societies which evolved in Europe by





virtue of the enlightenment revolution<sup>1</sup>. The credit expansion ability of the modern framework of banking fulfilled that requirement by allowing payments in lieu of IOUs instead of metallic currency. Initially, these IOUs were backed by gold and silver, however later on, thanks to the fractional reserve model of banking, the number of IOUs issued surpassed many times over then the actual gold and silver. This system didn't consider human greed as a problem, as was considered in traditional societies, rather it was specifically designed to fulfill the demands of human greed at a collective level in society. This is done in the name of maximization of wealth, power, and freedom, which are fundamental rights of every human as enshrined by modern, secular and capitalistic societies<sup>2</sup>.

There is debate in economics about whether the system of fractional reserve system is something good or bad for the economy, for example, the Austrian School of Economics holds the view that such a system causes business cycles, gives unprecedented power to the banks and governments over market regulation etc. which hinders the smooth functioning of a free-market economy<sup>3</sup>.

Such a framework of banking doesn't operate in isolation; it needs the backing of the central bank and government, to respond to the bank runs by being the lender of the last resort and through deposit insurance, respectively. A strict regulatory framework (BASEL 1 & 2 etc) is also needed to prevent such a phenomenon from happening. Nevertheless, despite all such measures, various bank defaults, and bank runs, which subsequently contribute to economic depression, have been witnessed throughout the history of modern banking. The credit crunch after the sub-prime mortgage crisis in 2007 is the latest example.

Islamic Banking works with and under the same system. The basic idea behind Islamic Banking was to save the Muslim masses, who acquire services of conventional banks, from indulging in usurious and other prohibited transactions. This was done without touching the overall framework, which was considered to be value-neutral by academia and Islamic scholarship. Islamic banking, therefore, operates on the same system of fractional reserve which is designed to mass produce credit, by maintaining a fraction of reserves, for the upper strata of the society and/or the government.

<sup>&</sup>lt;sup>1</sup> Carl Wennerlind, 'The Alchemical Roots of the Financial Revolution', *Berfrois*, 2012, http://www.berfrois.com/2012/03/carl-wennerlind-credit-alchemy.

<sup>&</sup>lt;sup>2</sup> George Reisman, 'Capitalism: A Treatise on Economics', *Jameson Books, Ottawa, Illinois* (Jameson Books, 1996).

<sup>&</sup>lt;sup>3</sup> Reisman; Jesús Huerta de Soto, *Money, Bank Credit, and Economic Cycles*, ed. Unión Editorial Madrid, *Alabama: The Ludwig von Mises Institute*, 4th ed. (Ludwig von Mises Institute, 2020).



Many recent papers have been advocating that Islamic banking must operate on a full reserve model <sup>4</sup>. The reason has been generally theoretical, which suggests that by not avoiding fractional reserve banking (FRB), Islamic banking also has the capacity to create a bubble economy <sup>5</sup>. Some argue that even a crisis like 2007 cannot be averted by Islamic banking if they follow the FRB model <sup>6</sup>. The FRB model is also seen as the culprit due to which Islamic banking emulates conventional banks in many ways <sup>7</sup>, like transfer of wealth from the poor to the rich <sup>8</sup>.

FRB in Islamic banks allows them to expand the money supply like their conventional counter parts, which may contribute in inflation, particularly when Islamic banks product portfolio is predominantly based on non-PLS type modes of finance like Murabaha <sup>9</sup>. Inflation caused by monetary expansion, the literature argues, is a way of taxing the masses without their consent, benefiting the elite borrowers. Money supply expansion through credit creation is this seen as fraudulent, as money supply is literally created out of thin air in FRB system <sup>10</sup>. A paper even refers it to tantamount of riba which exists not on a contractual level, but on a systemic scale <sup>11</sup>. If all of these accusations are true then it is hard to defend an Islamic banking model built on FRB system from the point of view of *maqasid al-shariah*<sup>12</sup>.

<sup>&</sup>lt;sup>4</sup> Mohammad Jamour, Kamran Nadri, and Ahmad Shabani, 'Incorporating the Two Functions of Portfolio Management and Payment Services in the Banking System and Presenting a Favorable Model from the Islamic Banking Perspective', *Journal of Iran's Economic Essays: An Islamic Approach* 18, no. 36 (2022): 172–89.

<sup>&</sup>lt;sup>5</sup> E Nor, A A Pitchay, and M Usman, 'How "Islamic" Is Islamic Banking? A Revisit', *International Journal of Accounting, Finance and Business (IJAFB) EISSN* 5, no. 30 (2020): 219–37.

<sup>&</sup>lt;sup>6</sup> Hasna Maliha and Lina Marlina, 'Why Islamic Banks Are Relatively More Resilient to Crisis?', *Ekonomi Islam Indonesia* 1, no. 1 (December 2019): 34–55.

<sup>&</sup>lt;sup>7</sup> Naeem Ur Rahman M Yahya, 'The Role of Money in Capitalistic and Islamic Economic Systems: A Comparative Study', *Al-Milal: Journal of Religion and Thought* (Pakistan Society of Religions (PSR), 2020), https://doi.org/10.46600/almilal.v2i2.74.

<sup>&</sup>lt;sup>8</sup> Lailatis Syarifah et al., 'Maqasid Sharia and Islamic Bank Performance: A Systematic Review', *I-ECONOMICS: A Research Journal on Islamic Economics* 7, no. 2 (2022): 94–111, https://doi.org/10.19109/ieconomics.v7i2.9167.

<sup>&</sup>lt;sup>9</sup> Khoirul Umam et al., 'Islamic Endogenous Money: Evidence From Islamic Banking System in Indonesia and Malaysia', *Journal of Islamic Monetary Economics and Finance* (Bank Indonesia, Central Banking Research Department, 2021), https://doi.org/10.21098/jimf.v7i3.1351.

<sup>&</sup>lt;sup>10</sup> Mejd Aures Benlala, 'Perspectives on Islamic Banks Activity in Light of Money Creation and Cash Reserve Ratio (CRR)', *ELBAHITH d'études Académiques* 10, no. 1 (2023): 565–76.

<sup>&</sup>lt;sup>11</sup> Muhammad Zahid Siddique, 'Modern Money and Islamic Banking in the Light of Islamic Law of Riba', *International Journal of Finance and Economics* 27, no. 1 (2022): 993–1008, https://doi.org/10.1002/ijfe.2196.

<sup>&</sup>lt;sup>12</sup> Ahmad Yani Ismail, 'Money Creation by Banking Industry, Maqasid Al-Shariah and Ar Rawaj', *Journal of Muwafaqat* 2, no. 1 (2019): 30–44.



A recent paper argues in favor of FRB system in Islamic banks by suggesting that it has been less inflationary <sup>13</sup>, and that if Islamic banks practice PLS based contracts then then the inflationary effects can be curtailed. The problem of FRB isn't just about inflation, the idea of creation of money out of thin air to do business, raises concerns about the ethicality of the practice. Further the paper will show that the usage of FRB creates a unique risk profile for Islamic banks which makes it difficult for them to use PLS modes of finance in the first place. The presence of FRB perhaps explains why Islamic banks until now has been reluctant to use PLS based contracts <sup>14</sup>.

The paper uses a methodology of structured literature review and a conceptual analysis of the literature in the light of the research goals, which is to evaluate the legitimacy of the fractional reserve system from the normative premise of Islamic economics. The review of literature following the approach of 'Critical Interpretive Synthesis' or CIS <sup>15</sup> which is rather "iterative, reflexive, and exploratory" <sup>16</sup>. This was followed by a reflective analysis <sup>17</sup> of the concepts and information gathered from the literature to evaluate how FRB system fits into the fabric of Islamic Economics.

This essay explores the issue of fractional reserve banking in Islamic economics. The study consists of a narrative review of both published and grey literature from various academic disciplines such as political science, global public health, international political economy, political philosophy and sociology, gender, and feminist political economy, humanitarian conflict, and post-conflict studies. Given the limited amount of literature on this topic, a narrative review was chosen for its ability to provide a comprehensive overview of the concepts. The use of FRB has been associated with inflation by expanding the money supply through credit creation which is seen as fraudulent.

<sup>&</sup>lt;sup>13</sup> Umam et al., 'Islamic Endogenous Money: Evidence From Islamic Banking System in Indonesia and Malaysia'.

<sup>&</sup>lt;sup>14</sup> Mohammad Dulal Miah and Yasushi Suzuki, 'Murabaha Syndrome of Islamic Banks: A Paradox or Product of the System?', *Journal of Islamic Accounting and Business Research* 11, no. 7 (11 January 2020): 1363–78, https://doi.org/10.1108/JIABR-05-2018-0067.

<sup>&</sup>lt;sup>15</sup> Joke Depraetere et al., 'The Critical Interpretive Synthesis: An Assessment of Reporting Practices', *International Journal of Social Research Methodology*, August 2020, 1–21, https://doi.org/10.1080/13645579.2020.1799637.

<sup>&</sup>lt;sup>16</sup> Yu Xiao and Maria Watson, 'Guidance on Conducting a Systematic Literature Review', *Journal of Planning Education and Research* 39, no. 1 (August 2017): 93–112, https://doi.org/10.1177/0739456X17723971.

<sup>&</sup>lt;sup>17</sup> Ryan Brydges and Deborah Butler, 'A Reflective Analysis of Medical Education Research on Self-Regulation in Learning and Practice', *Medical Education* 46, no. 1 (January 2012): 71–79, https://doi.org/10.1111/j.1365-2923.2011.04100.x.



So, the first section of the paper presents the analysis on fractional reserve system, how it leads to multiplication of money supply and influen the long-term inflation and business cycles; the second part of the paper explains the extent to which this framework obstructs in the achievement of the objectives of Islamic Economics.

#### **DISCUSSION**

On the impact of money multiplication in Islamic banking on distributive justice is an important area of concern for policymakers and Islamic finance scholars alike. Islamic monetary policy, with its goal of achieving welfare through optimal growth and distribution justice while stabilizing the value of money, emphasizes the importance of distributive justice in monetary management. One of the key aspects of distributive justice in Islamic banking is ensuring that the benefits of money multiplication are distributed fairly among all stakeholders.

## 1.1 Money Multiplication Phenomenon in Conventional Banking System

In economics the phenomena of increase in deposits through credit is known as 'Money Multiplication', where the amount of deposits exceeds by many times of cash reserves in a particular economy. When this happens each monetary unit comes in the constructive ownership (in forms of receipts like cheques and demand drafts) of many individuals, by virtue of the banking system hence physical ownership of the stock of money by all depositors remains a practical impossibility.

This multiplication is a function of the cash reserve ratio maintained by the banking industry. To explain this De Soto quotes Alfred Marshall (Alfred Marshall, "Memoranda and Evidence before the Gold and Silver Commission," December 19, 1887, in Official Papers by Alfred Marshall [London: Royal Economic Society, Macmillan, 1926]:

"... if each bank could lend two thirds of its deposits, the total amount of loaning power got by the banks would amount to three times what it otherwise would be. If it could lend four-fifths, it will then be five times, and so on. The question how large a part of its deposits a bank can lend depends in a great measure on the extent on which the different banks directly or indirectly pool their reserves." 18

After an extensive empirical analysis on the phenomenon of how artificial money out of nothing is created when deposit are misappropriated by the banks de Soto infers:

"... banks actually grant loans from nothing and back them with deposits they also create from nothing. Therefore, **rather than credit mediators**, **they are ex nihilo creators of credit** ... Though banks appear to derive their profit mainly from an interest rate differential, we know that in practice the **chief source of their profit is the** *exnihilo* **creation of money**, which provides banks with financing indefinitely. Banks appropriate these funds for their own benefit and charge interest on them to boot. **In** 

<sup>&</sup>lt;sup>18</sup> Alfred Marshall, Memoranda and Evidence before the Gold and Silver Commission, Official Papers by Alfred Marshall (MacMillan London, 1887), 36.



short, bankers create money from nothing, loan it and require that it be returned with interest [or profit]."  $^{19}$ 

## Joseph A. Schumpeter has also explained:

"[Depositors] lend nothing in the sense of giving up the use of their money. They continue to spend, paying by check instead of by coin. And while they go on spending just as if they had kept their coins, the borrowers likewise spend 'the same money at the same time.' ... It is much more realistic to say that the banks 'create credit,' that is, that they create deposits in their act of lending, than to say that they lend the deposits that have been entrusted to them. ... "20

## Henry Dunning Macleod also noted so a century earlier:

"Those banking Credits are, for all practical purposes, the sameas Money. ... They are, in fact, Capitalcreated out of nothing ... it appears that in 1884 there were, in Scotland, 108,582,418 of Banking Creditsmaintained on a basis of 4,220,258 in cash, which was, for all practical purposes, an augmentation of 104,856,160 to the monetaryresources of the country." <sup>21</sup>

There is significant empirical evidence available to substantiate that this is happens even today. The statistics of money multiplication is also officially published by central banks of respective economies. A document on State Bank of Pakistan's website defines that a Money Multiplier "is the ratio of stock of broad money (M2)<sup>22</sup> to the stock of reserve money (M0). The money multiplier is measure of the extent to which the creation of money in the banking system causes the growth in the money supply to exceed growth in monetary base." <sup>23</sup>. For Pakistani economy money multiplier for Jan 2023 is 3.6 as currency in circulation was Rs. 7,572 Billion and M2 was Rs. 27,602 Billion<sup>24</sup>.

It is important to note here that the amount of deposits are created by the loans or financing advanced by the banks to its borrowers, which in turn becomes deposits in the same banks or some other bank. When this happens in an economy the amount of credit and amount of deposits increases along with each other, where the additional deposit creation being dependent on the creation of credit by the banks.

It is important to note here that bank has its own interest attached with the phenomenon as more credit creation means more profitability, as by combining the deposit and lending functions the banking system as a whole can earn multiple times over the same amount of currency. Such a luxury is not available to any other form of

<sup>&</sup>lt;sup>19</sup> Soto, Money, Bank Credit, and Economic Cycles, 199.

<sup>&</sup>lt;sup>20</sup> Joseph A. Schumpeter, *History of Economic Analysis*, *History of Economic Analysis* (Great Britain: Taylor & Francis e-Library, 2006), 1080, https://doi.org/10.4324/9780203983911.

<sup>&</sup>lt;sup>21</sup> Henry Dunning Macleod, *Theory and Practice of Banking*, vol. II, The Theory and Practice of Banking (Longmans, Green, 1906), 408, https://books.google.bi/books?id=\_M4JAAAAIAAJ.

<sup>&</sup>lt;sup>22</sup> M<sub>2</sub> is the sum of all Private, Public Sector deposits and M0

<sup>&</sup>lt;sup>23</sup> State Bank of Pakistan, 'Glossary: Statistical Bulliten Feb 2012', State Bank of Pakistan, 2012, http://www.sbp.org.pk/reports/stat\_reviews/Bulletin/2012/Feb/Glossary.pdf.

<sup>&</sup>lt;sup>24</sup> State Bank of Pakistan, 'Broad Money (M2) Components', State Bank of Pakistan, accessed 1 April 2012, https://www.sbp.org.pk/ecodata/BroadMoney\_M2.pdf.



business or industry in any given economy, such that one unit of currency is expanded to as much as ten times and, on each expansion, would reap profits for the bank, depending upon the amount of cash reserve ratio and the phase of the business cycle. The banks are allowed to do so in an institutionalized fashion and on a mass scale. This has never happened in history. It is not surprising to note that such a practice would negatively affect the purchasing power of money and subsequently leading to inflation in the long run.

## 1.1.1 Contribution to Business Cycles and Inflation

Austrian School of economics is at the forefront to advocate the idea that business cycles are a result of credit expansion by the banks<sup>25</sup>. Nonetheless this theory has also attracted lots of criticism as well. Various economists believe that this theory incompletely explains the phenomenon of business cycle, as there are other factors as well which inflate and deflate an economy<sup>26</sup>. However as far as inflationary period is concerned there is also sufficient evidence to significantly correlate the credit expansion by the banks with

\_

<sup>&</sup>lt;sup>25</sup> Thorsten Polleit, 'Manipulating the Interest Rate: A Recipe for Disaster', Mises Institute, 2007, https://mises.org/library/manipulating-interest-rate-recipe-disaster; J de Soto, *Money, Bank Credit, and Economic Cycles, Books.Google.Com* (Alabama: Ludwig von Mises Institute, 2009), http://books.google.com/books?hl=en&lr=&id=73eheHP\_YHIC&oi=fnd&pg=PR3&dq=BMiIcBJwFx8J:s cholar.google.com/&ots=hbzITh-

wh2&sig=THHPKm\_oZsviYVXY\_VQw18HZGPQ%5Cnpapers2://publication/uuid/E500A887-A169-4F8D-BD51-46B5D87EF19F; W. A. E. et al., *Monetary Theory and the Trade Cycle.*, *Journal of the Royal Statistical Society*, vol. 96 (London, Toronto, 1933), https://doi.org/10.2307/2341796; Reisman, 'Capitalism: A Treatise on Economics', 512–26; Joseph A. Schumpeter, *History of Economic Analysis*, *History of Economic Analysis* (London: Routledge, 2006), 1083, https://doi.org/10.4324/9780203983911.

<sup>&</sup>lt;sup>26</sup> Milton Friedman, *Money Mischief: Episodes in Monetary History* (New York, New York, USA: HMH, 1994); Cordon Tullock, 'Why the Austrians Are Wrong about Depressions', *The Review of Austrian Economics* 2, no. 1 (December 1988): 73–78, https://doi.org/10.1007/BF01539299; B Caplan, 'What's Wrong With Austrian Business Cycle Theory', Library of Economics and Liberty, 2008, http://econlog.econlib.org/archives/2008/01/whats\_wrong\_wit\_6.html; Paul Krugman, 'The Hangover Theory: Are Recessions the Inevitable Payback for Good Times?', *Slate Magazine*, 1998, http://www.slate.com/articles/business/the\_dismal\_science/1998/12/the\_hangover\_theory.html.



'Monetary Inflation'<sup>27</sup>. The endogenous theory of inflation also asserts that banks are directly involved in this expansion leading to inflation<sup>28</sup>.

In view of Klein<sup>29</sup> many economists agree that the long-run inflation is caused by monetary expansion. Milton Friedman, who doesn't buy in the Austrian schools explanation of business cycles, though believes that Inflation results when money supply grows faster than growth in supply of goods and services, he once famously said "Inflation is always and everywhere a monetary phenomenon."<sup>30</sup>

## **1.1.2** Historical Perspective

Study of monetary history suggests that irrespective of the form of money, governments or authorities had been artificially (and fraudulently) inflating the supply of the currency to meet their requirements. During old times when money circulated in the form of coins, governments use to inflate the money supply by either reducing size of the coin or adding impurity in them. This would eventually increase the total size of monetary base, providing government the additional sum of money to cover its undue expense. Inflation use to be the natural outcome of such a debasement.

For example, during late 14<sup>th</sup> century in Ottoman Empire, "... those ... held onto state power ... benefited from debasements and those [the general public] that stood to suffer from a sliding currency and spiraling prices"<sup>31</sup>. Debasement of coins during the period of Mughal rule in Indian subcontinent was "defrauding of poor and the ignorant" in view of Amberkar<sup>32</sup>. Taqi al-Din Ahmed Al-Maqriz, the famous scholar of *Shafai* school, has also called the government's action to introduce an easily manufactured (thus

<sup>&</sup>lt;sup>27</sup> Mervyn King, 'No Money, No Inflation - The Role of Money in the Economy', *Economie Internationale* 88, no. 4 (2001): 111–32, https://doi.org/10.3917/ecoi.088.0111; T Polleit, 'Why Money Supply Matters', Ludwig von Mises Institute, 2005, http://mises.org/daily/2810; Barbara Roffia and Andrea Zaghini, 'Excess Money Growth and Inflation Dynamics', *International Finance* 10, no. 3 (2007): 241–80, https://doi.org/10.1111/j.1468-2362.2007.00206.x; Mohammad S. Hasan, 'Monetary Growth and Inflation in China: A Reexamination', *Journal of Comparative Economics* 27, no. 4 (1999): 669–85, https://doi.org/10.1006/jcec.1999.1607; L Benati, 'Long-Run Evidence on Money Growth and Inflation', *Bank of England Quarterly Bulletin*, n.d.

<sup>&</sup>lt;sup>28</sup> Christopher J. Niggle, 'The Endogenous Money Supply Theory: An Institutionalist Appraisal', *Journal of Economic Issues* 25, no. 1 (1991): 137–51, https://doi.org/10.1080/00213624.1991.11505132; Ben Bernanke, Mark Gertler, and Simon Gilchrist, 'The Financial Accelerator in a Quantitative Business Cycle Framework' (Cambridge, MA, March 1998), https://doi.org/10.3386/w6455.

<sup>&</sup>lt;sup>29</sup> D. B. Klein, 'The Demand for and Supply of Assurance', *Economic Affairs* 21, no. 1 (2001): 4–11, https://doi.org/10.1111/1468-0270.00268.

<sup>&</sup>lt;sup>30</sup> Friedman, Money Mischief: Episodes in Monetary History.

<sup>&</sup>lt;sup>31</sup> James E. Seaver, 'A Monetary History of the Ottoman Empire', *History: Reviews of New Books* 28, no. 4 (January 2000): 7, https://doi.org/10.1080/03612759.2000.10525602.

<sup>&</sup>lt;sup>32</sup> R Nageswari, 'Economic Visions of Dr. BR Ambedkar', *Shanlax International Journal of Economics* 7, no. 4 (2019): 29–35.



debase-able) coinage  $fulus^{33}$  to be one of the root-causes of inflation, poverty, economic decline and collapse of the second Mamluk period in Egypt starting from 1382 to 1517 AD<sup>34</sup>.

Previously governments use to expand money supply themselves once in need of more. Later in Europe after the evolution of banking industry, this job of multiplying the money supply was assumed by the banks once their fractional reserve nature was legitimized, numerous examples of such happenings are also found in history long before the industrial revolution as well<sup>35</sup>. Since then the monetary value of currency has been reducing or CPI is constantly on the rise in any of the country which operates on fractional reserve model of banking<sup>36</sup>. This increase of CPI is taken for granted by the mainstream economists; in fact it is also believed by some that a small percentage in inflation is beneficial for the economy<sup>37</sup>.

However, if it is due to monetary expansion, then it would tantamount to debasement of the coinage, like it was done during old times (Sussman & Zeira, 2003), advantage of which was reaped by initial spenders who belonged to the government mainly, or the elite class. This causes a loss in purchasing power of the debased money the general public received or the money they already had in the form of savings, once it is spread in the society. It is particularly the lower income groups of the society who suffered the most, as also noted by Pamuk and Al-Maqrizi, quoted above. This unjustifiable reduction in purchasing power of money, which occurs in a FRB system, is even believed to be tantamount to 'theft' from Islamic standpoint<sup>38</sup>. This is like rewarding the rich for their fortune, and punishing the poor for their poverty.

<sup>&</sup>lt;sup>33</sup> Coins of copper used as a loose change of silver or gold coins

<sup>&</sup>lt;sup>34</sup> T.a-D. Al-Maqrizi, *Ighathat Al-Ummah Bi-Kashf Al-Ghummah*, trans. A Allouche (Egypt: University of Utah Press, n.d.), 55–72.

<sup>&</sup>lt;sup>35</sup> Soto, Money, Bank Credit, and Economic Cycles, Chap 3.

<sup>&</sup>lt;sup>36</sup> T Polleit, 'Why Money Supply Matters', *Ludwig von Mises Institute* 16 (2005), http://mises.org/daily/2810.

<sup>&</sup>lt;sup>37</sup> Leif Danziger, 'Costs of Price Adjustment and the Welfare Economics of Inflation and Disinflation', **Economic** Review 78, (1988): no. http://www.aeaweb.org/aer/%0Ahttp://search.ebscohost.com.ezproxy1.lib.asu.edu/login.aspx?direct =true&db=eoh&AN=0213923&site=ehost-live; Sinto Sunaryo et al., 'Flexible Work Arrangement and Work-Related Outcomes during the Covid-19 Pandemic: Evidence from Local Governments in Indonesia', Perspectives Problems and in Management 20, no. (2022): 411-24, https://doi.org/10.21511/ppm.20(3).2022.33; M Grunwald, 'Bernanke's Bum Rap: Why a Little Inflation Is Good', n.d., http://www.time.com/time/nation/article/0,8599,2030919,00.html; José Encarnación, Optimum Quantity of Money Instability, Economics Letters, vol. 42 (Aldine Publishing Company, 1993), https://doi.org/10.1016/0165-1765(93)90064-J.

<sup>&</sup>lt;sup>38</sup> Ahamed Kameel Mydin Meera and Moussa Larbani, 'The Gold Dinar: The Next Component In Islamic Economics, Banking And Finance', *Review of Islamic Economics* 8, no. September (2004): 1–29,



## 1.1.3 Reduction of Private Ownership

It is widely believed that capitalism advocates private ownership of property and it is believed to be its most distinguishing feature. Alan Greenspan has repeatedly emphasized about this in his autobiography and has declared it as a reason for success of American economy<sup>3940</sup>. However it is a little discussed fact that private ownership in a capitalistic economy is abolished by the dominance of financial markets. Javed Ansari, while referring to various secondary sources, notes:

"... private property is ... abolished by the operation of the money and the capital markets ... Abolition of private property ... through the financial markets - establishes the social hegemony of capital... [at another point in the same paper he notes] accumulation of capital requires the abolishing of private property. Liberalism accomplishes this through the financial markets and socialism through the dictatorship of the proletariat."41

It was noted above that debt in a banking system increases constantly. Bank often require collateral against the credit it issues, which remains under the hypothetical possession of the bank until the debt is paid off. This is known as hypothecation. It is not impossible, at least theoretically, that banking system might have an amount of collateral in its hypothetical possession equivalent to the amount of domestic debt existing in an economy (government is an exception). Furthermore since the total money supply is a result of bank credit, therefore the bank can also virtually own capital equivalent to the amount created through giving credit. As the credit grows, the money supply also grows, so does the amount of collateral.

The penetration of financial system in an economy therefore abolishes private ownership of real asset to the degree of penetration, and replaces it with the ownership of debt instead. At the time of recession (which as per Austrian school of economics is also caused by excessive credit creation by the private banks) the amount of foreclosures and bankruptcies increases, which formally transfers the ownership of the real assets from the defaulters to the bank.

This inflation is also a transfer of purchasing power from owner to the borrower of the money in a banking system operating on fractional reserve system. Monetary data available at central banks suggests that the biggest borrower of from the private banks is

http://www.perpustakaan.depkeu.go.id/FOLDERJURNAL/8-1-Meera-Larbani\_1.pdf; Ahamed Kameel Mydin Meera and Moussa Larbani, 'Ownership Effects of Fractional Reserve Banking: An Islamic Perspective', Humanomics 25, no. 2 (2009): 101-16, https://doi.org/10.1108/08288660910964175; Rohimi Shapiee and Anowar Zahid, Addressing Economic Meltdown: An Evaluation of Fiat Andcredit Money from Islamic Perspective, US-China Law Review, 17th ed., vol. 11 (Las Vegas: ASBBS Annual Conference, 2014).

<sup>&</sup>lt;sup>39</sup> Alan Greenspan, *The Age of Turbulence*, 1st ed. (London: Penguin Books, 2007).

<sup>&</sup>lt;sup>40</sup> See index entry 'Property rights' in the book.

<sup>&</sup>lt;sup>41</sup> J A Ansari, 'Rejecting Freedom and Progress', Jareedah 29 (2004): 47–224.



the government itself. When government uses the borrowed money the first time, its purchasing power is intact however once it flows in the economy it increases the money supply while decreasing the purchasing power. If a poor fellow has Rs. 10,000/- in saving, which he legally earned through hard work, its purchasing power would be taken away without his consent, because the government or the elite class borrowed more money into existence.

As a consequence, "... control of capitalist property has necessarily to be vested in the representative of capital [and] ... corporate managers [which would include bankers as well]. ... Capitalist society ... is necessarily fractured into an increasing mass of powerless people and decreasing elite of more and more powerful controllers." (Ansari, 2004). Therefore, the rich get richer, and the poor gets poor in a purely capitalistic society, and its financial system plays a significant part in the process.

Furthermore, the penetration of such a modern form of financial system when increases in a society, each individual subsequently is inclined to get indebted to finance his needs and wants through a bank. This is already happening in capitalist societies with a culture dominated with consumerist mentality like in America (Wright & Rogers, 2010). It has been noted in various scholarly papers that when a significant number of public have financed their assets like car, house, education of children, inventory or assets for their business, or grocery items from their credit cards (which are also now being offered by some Islamic banks) for example, then a percentage of their income goes in the debt servicing. The more the financing they have taken from the bank, the more they have to pay back every month or year out of their disposable income. Henceforth in a consumerist culture where the public is obsessed with buying products and commodities, personal savings rates becomes negligible<sup>42</sup>.

It is pertinent to ask in this context that what would happen to the institution of Zakat<sup>43</sup> and Inheritance, once the concept of private property evaporates due to heavy dominance of debt and personal saving go away in debt servicing in a society where a debt based Islamic financial system dominates the entire market?

<sup>&</sup>lt;sup>42</sup> E A Sartell and A J Vierra, 'Overview of the United States Economy 1950-2011: Four Lessons for Brazil', *World Review of Business Research* 2, no. 3 (2012): 1–11; Till van Treeck, 'A Synthetic, Stock-Flow Consistent Macroeconomic Model of "Financialisation", *Cambridge Journal of Economics* (Düsseldorf, Germany: Macroeconomic Policy Institute, 2009), https://doi.org/10.1093/cje/ben039; Robert Guttmann and Dominique Plihon, 'Consumer Debt and Financial Fragility', *International Review of Applied Economics* 24, no. 3 (2010): 269–83, https://doi.org/10.1080/02692171003701420.

<sup>&</sup>lt;sup>43</sup> Zakat is equivalent to 2.5% of total savings which is above the prescribed limit and is in the form of cash, gold, silver or any other tradable commodity which a Muslim male or female has in his or her ownership; it is mandatory for him or her to pay to a poor who qualifies to receive Zakat. Zakat cannot be paid via an IOU.



Banks don't pay Zakat except which is applicable on their paid-up capital, they though become an agent to deduct Zakat amount from the deposits and submit it to *Bait-ul-mal*; therefore it's the depositors who pay Zakat if the funds in his accounts are more than the minimum limit which qualifies them to pay Zakat. The same depositor could also be a client of the same bank or some other bank, who might have also availed financial services, and pays an amount in debt servicing. This depositor will then eventually pay Zakat at the end of the year from his net savings after paying for debt servicing, only if the net savings exceeds the minimum threshold limit. In this context it is not so surprising to note the severity with which taking debt especially for luxuries of life is condemned in various ahadith (sayings of Prophet Muhammad s.a.w).

Therefore, in a factional reserve system, where the depositor is also the borrower of his own deposits from the bank, the amount of net savings would reduce to the extent of consumerist culture, which the banks has to promote in a capitalistic society so that its own objective of profit maximization is possible. In pursuit of gaining market share, Islamic banks are doing the same as noted above, if they continue on the same trend to promote debt and values of consumerism then they would contribute towards a kind of an economy where public would gradually reduce the amount of Zakat people pay due to the amount of debt they owe to the banks.

Similar would be the case with inheritance, as increased level of personal debt would force the heirs to first payback the debt and then distribute the remaining assets among each other as per the ratios prescribed by Shariah.

Would the same happen in a society if the conventional financial institutions are replaced by contemporary system of Islamic banks? Keeping in view the prevalent trends of the Islamic financial industry, the way it is competing with the conventional one and the pace with which it is designing and offering alternatives for almost every conventional debt-based product, the scenario might not be too different in this regards<sup>44</sup>.

## 1.2 Institutional structure of Islamic Banks: Theory and Practice

It has been noted that the institutional structure used by Islamic Banks, which is also acknowledged by its theory, is in compliance with that endorsed by neo-classical school of economics<sup>45</sup>. In other words, the structure which was designed to advance objectives of free-market capitalism is now is in use of Islamic Banks.

<sup>&</sup>lt;sup>44</sup> Ansari, 'Rejecting Freedom and Progress'.

<sup>&</sup>lt;sup>45</sup> Mehmet Asutay, 'Conceptualisation on the Second Best Solution in Overcoming the Social Failure of Islamic Banking and Finance', *IIUM Journal of Economics and Management* 15, no. 2 (2007): 167–95; M Nejatullah Siddiqi, 'Islamic Finance and Beyond Premises and Promises of Islamic Economics', in



Mufti Muhammad Taqi Usmani (d.b) also have acknowledged the expansion of credit-money by conventional banks due to their fractional reserve nature and have acknowledged the contribution of banks to monetary debasement and inflation<sup>46</sup>, but he later argued that the problem of "artificial … money supply … multiplied without creating real asset in the same quantity" can be solved via Islamic Banking because it is "… backed by asset, [therefore] it [money supply] is always matched with corresponding goods and services"<sup>47</sup>.

It can be inferred from the claims stated above that credit or debt creation done by Islamic banks is non-inflationary or will not cause debasement of currency. The Islamic Bank (IB) would first take the ownership of an asset (let it be constructive ownership), i.e. IB would bear the risk of the asset for a while, before selling it on Installments (*Murabaha* or *Bai' Muajjal*) or renting (*Ijarah*) to its client, or use any other modes of Islamic Finance. *Salam* or *Istisna* are exceptions with stringent conditions, however in these two modes, an asset does come into existence at a future time<sup>48</sup>. This implies that there is nothing wrong with creating money supply out of thin air, and its ill-effects on the economy can be cured by Islamic Banks also operating on fractional reserve system when the money creation would be backed by real assets.

#### 1.2.1 The Real Bill Doctrine

It is interesting to note that the same argument presented by Mufti Taqi Usmani (d.b) of Islamic Banks being non-inflationary due to their asset backed nature has also been presented for conventional banks. This is known as the 'Real Bills Doctrine' which assumes that "inflationary over issue [of credit] is impossible provided money is issued on loans made to finance real transactions" <sup>49</sup>. This doctrine though looks fine at theoretical level however looking more closely reveals various flaws in it which have been explained by Humphrey while referring to Henry Thornton (1760-1815), who was a British banker, a monetary theorist, and long-time Member of British Parliament <sup>50</sup>. The three flaws are as follows:

Single Asset, Multiple Exchanges. Any asset may exchange many hands and during each transaction a financial intermediary may create credit-money if required by

Proceedings of the Third Harvard University Forum on Islamic Finance: Local Challenges, Global Opportunities (Cambridge, Massachusetts: Harvard University, 1999), 49–53, http://ifp.law.harvard.edu/login/contact.

<sup>&</sup>lt;sup>46</sup> Sheikh Taqi Usmani, *Islam Aur Jadeed Maeeshat* (Karachi: Idara Al Maraf, 1993), 123.

<sup>&</sup>lt;sup>47</sup> Mufti Muhammad Taqi Usmani, An Introduction to Islamic Finance (Brill, 2021), 21.

<sup>&</sup>lt;sup>48</sup> Usmani, 90-189.

<sup>&</sup>lt;sup>49</sup> Thomas M Humphrey, 'The Real Bills Doctrine', *Economic Review of the Richmond Fed*, no. Sep/Oct (1982): 4.

<sup>&</sup>lt;sup>50</sup> Humphrey, 'The Real Bills Doctrine'.



the buyer of the asset; "Goods ... may be sold a number of times, each sale giving rise to a real bill. Also, the period for which a given bill is customarily drawn may exceed the turnover period of goods ... In general, the volume of bills outstanding will be 'B = mGt'. Where B is the volume of bills, m their maturity, G the nominal stock of goods, and t its annual turnover rate." (ibid, p. 9). This would mean that a piece of land, a vehicle etc. for example can be sold many times over, for all or some of these purchases of the same asset the buyer may seek the services of a financial intermediary. In commodity markets today even if the transactions are done within Shariah rules, like abstaining from selling a commodity unless constructive ownership of it is not acquired, avoiding interest based transaction etc, a particular commodity might exchange the hands of many traders just for the sake of seeking profits from market fluctuations. Each of such transaction can involve an intermediary thus creating a debt each time for the same asset or a set of commodities. Another example would be the subsequent purchases along the supply chain of a product from raw material, to subcomponents, to finish good, to whole seller, to retailer then finally to the end user. At each stage a financial intermediary may be asked to provide financing for purchases particularly in case of durable goods. Islamic banks would use *Murabaha*, *Salam* or *Istisna* instead, for that matter.

Cost of debt leading to more debt. The manufacturer after acquiring debt from a bank would add the debt servicing expense into the cost of goods thus adding to the selling price, this increase would subsequently become an excuse for a further creation of debt when the whole seller would purchase the manufactured item from the manufacturer in case he used a financial intermediary for this purchase. This would make inflation a "vicious circle", as Humphrey quotes Henry Thornton to explain his argument: "forgot that there might be no bounds to the demand for paper; that the increasing quantity would contribute to the rise of commodities: and the rise of commodities require, and seem to justify, a still further increase.". This can be explained through a simple illustration, for example, if a car manufacturer seeks financial services from a bank to pay of the wages then interest (in case of a conventional bank's loan) or profit (in case of Islamic financial product like *Tawarruq*) over the debt incurred would become the part of the cost of goods sold in the market. The working class would go and buy the same products at a higher price at cash or credit. This would reduce the savings of the workers who would thus demand higher salaries, which would eventually further increase the cost of goods. This leads us to the third point of continuous inflationary spiral.

Continuous Inflationary Spiral. Finally as a result of the above two, Humphrey explained while referring to Thornton, that "... the interest [profit in case of IBs]



differential, if maintained indefinitely, produces a continuous and not merely a one-time rise in money and prices. This is so, he said, because as long as the differential persists, borrowing will continue to be profitable even at successively higher price levels. The result will be more borrowing, more lending, more monetary expansion, still higher prices and so on ad infinitum in a cumulative inflationary spiral." As stated in the above example that the workers and manufacturer when seek to take credit to meet the expanses, the money supply increases creating inflation, which tempts the manufacturer to increase prices and the worker to demand for more wages. Increased wages of the workers and debt servicing expense would further force the manufacturer to increase the price of his products, which would force workers to demand more wages and so on. Increasing prices would also increase the amount of credit required to make purchases for both manufacturer and worker ... further causing the spiral to continue at a greater pace.

Therefore, keeping in view the arguments stated above, one can also expect contemporary Islamic Banks to be as inflationary as the conventional banks if they resort to the debt based financing practices. This is due to their fractional reserve nature which makes them very similar to conventional banks, not in terms of nature of contracts, but in terms of the structure which enables them to expand the money supply just like conventional banks<sup>51</sup>. It is also a requirement of the central banks that the Islamic Banks may operate on the same system, i.e. by maintaining Statutory Liquidity and Cash Reserve Requirements<sup>52</sup>. In Section-22 of The Banking Company Ordinance-1962<sup>53</sup> of Pakistan, which also applies on Islamic Banks, requires the banks to maintain a cash reserve no less than a small fraction of its total liabilities:

"Every banking company ... shall maintain by way of cash reserve in cash with itself, or in current account opened with the State Bank or its agent or partly in cash with itself and partly in such account or accounts a sum equivalent to at least two per cent of its time liabilities in Pakistan and five per cent of its demand liabilities in Pakistan."

<sup>&</sup>lt;sup>51</sup> Ahamed Kameel Mydin Meera and Moussa Larbani, 'The Gold Dinar: The Next Component In Islamic Economics, Banking And Finance'; Kameel Mydin Meera and Larbani, 'Ownership Effects of Fractional Reserve Banking: An Islamic Perspective'; Zubair Iqbal and Abbas Mirakhor, *Islamic Banking*, Occasional Paper (International Monetary Fund) TA - TT - (Washington, D.C. SE -: International Monetary Fund, 1987), https://doi.org/ LK - https://worldcat.org/title/1058628819; Mahmood Ahmed, 'Practice of Mudaraba and Musharaka in Islamic Banking', in *SSRN Electronic Journal*, 2018, https://doi.org/10.2139/ssrn.3161208.

<sup>&</sup>lt;sup>52</sup> S.B.P., 'BSD Circular No. 08 of 2008:Cash Reserve Requirements Against FE-25 Deposits Maintained by IBs & IBBs', n.d., http://www.sbp.org.pk/bsrvd/2008/c8.htm.

<sup>&</sup>lt;sup>53</sup> Available on the internet: <a href="http://www.sbp.org.pk/publications/prudential/ordinance\_62.pdf">http://www.sbp.org.pk/publications/prudential/ordinance\_62.pdf</a>, last accessed: 14th May 2012



This suggests that even by claiming to be asset backed Islamic Banks (along with their orientation to maximization of profit, market share, share holder's value etc while competition competing with conventional banks on the same lines) would expand the money supply and generate a money multiplier effect, and would subsequently contribute in debasing the currency, at least in theory. In other words inflationary effects of FRB may not be curtained by simply bringing assets backed-debt based transactions in Islamic Banks. If that be the case then IBs would lead themselves away from where Mufti Taqi Usmani (d.b) didn't wanted it to be:

"The original concept of Islamic financing [which] is undoubtedly in favor of equity participation rather than creation of debts, because it is only equity participation that brings an equitable and balanced distribution of wealth in the society. Debt-ridden economy, on the other hand, tends to concentrate wealth in the hands of the rich, and creates a bubble economy which fuels inflation and brings many other social and economic evils." 54.

Inflation or Debasement of Money Supply: Continuous inflation due to expansion of money supply in a privately owned financial intermediation is tantamount to debasement of currency, defrauding of poor, and even equivalent to theft of purchasing power from the money supply, as stated above in section-3. Unfortunately this phenomenon is also found in Islamic history, however inflation in Islamic history in nominal terms has been primarily<sup>55</sup> due to the debasement of coinage by the government to finance wars etc.; for e.g., which has occurred constantly throughout the history of Ottomon Empire<sup>56</sup>, such a debasement of currency which also occurred during Mamluk period in Egypt was also severely criticized by Al-Maqrizi (quoted above); however in the long run the prices of commodities, particularly in terms of fixed weight of silver, changed only slightly, over the period of four and half centuries<sup>57</sup>. Pamuk concludes after thoroughly analyzing four and half centuries of monetary history of Ottoman Empire:

"... [T]hat fiscal causes dominated Ottoman debasements. ... [whose] benefits were primarily fiscal in character, the most important cost they incurred was political. ... It is difficult to identify a social group outside the state that consistently benefited from debasements." <sup>58</sup> [Later he concluded] "... simple calculations thus suggest that there was only a limited increase in both the money stock per capita and the velocity of circulation of money during these four and one-half centuries." <sup>59</sup>

In contemporary world, by virtue of fiat currency and FRB, which now occurs electronically, driven by market forces, has also made inflation a constant phenomenon in the history of western economic. Reisman, while advocating Austrian School's

<sup>&</sup>lt;sup>54</sup> M M Usmani, *Islam Aur Siyasi Nazaryat* (Karachi: Maktaba Maraful Quran, n.d.).

<sup>&</sup>lt;sup>55</sup> Other causes could include influx of gold and silver coins from outside like in a war booty, or shortage caused due to export to other areas where a higher price of product was offered etc.

<sup>&</sup>lt;sup>56</sup> Seaver, 'A Monetary History of the Ottoman Empire', 40–235.

<sup>&</sup>lt;sup>57</sup> Seaver, 240.

<sup>58</sup> Seaver, 227.

<sup>&</sup>lt;sup>59</sup> Seaver, 242.



viewpoint, even blames government for allowing the banks to inflate the money supply, in which government is single greatest contributor, hence causing various economic problems including boom and bust cycles<sup>60</sup>.

On theoretical ground it is suggested that Islamic Banks, with a fractional reserve system and its inclination towards debt based instruments, would allow IBs to contribute to the problem of inflation, even if they use *Musharakah* and *Mudarabah* as a modes of finance. This contribution could be lesser then the conventional banking system, however it would take a while to empirically establish its magnitude as reasonable amount of statistical data is not yet available because Islamic Banking doesn't dominates in any particular economy in the world as of today.

## 1.3 Status of created money in Islamic Jurisprudence

In a legal sense, money isn't created in fractional reserve system; in fact, the right to use the same stock of money is given to a number of people. In conventional banking the depositor deposits their money in the banks for safekeeping which the bank gives it out as loan. De Soto has explained in detail the legal problem with this dual status of same stock of money held at the bank. He critically writes:

"Even though the doctrinal association between irregular deposits and monetary loan or mutuum contracts is the perfect tool for justifying fractional-reserve banking, this association is so awkward that the most prestigious experts in commercial law have failed to accept it" 61 ... "Theorists who attempt to equate the irregular deposit contract with the loan contract fail to realize that their doctrinal stance ignores the true cause or purpose motivating the contracting parties to enter into a contract. And no matter how many relatively empty statements they make about the equivalence of the two contracts, they inevitably come up against the same legal wall: the radical, essential difference between the legal *cause* behind each contract. Therefore, they can go no further than to state that each of the parties to the monetary bank-deposit contract *thinks* it is entering into a "different" contract. In other words, *depositors' hand over money as if making a deposit and bankers receive it as if it were a loan*. Yet, what kind of contract has two essentially distinct legal causes? Or to put it another way: How is it possible that both parties to the same contract simultaneously intend to retain the availability of the same sum?" 62

Islamic Banking solves this problem by allowing the bank and the depositor to do a *Mudarabah* or *Qard-e-Hasana* agreement<sup>63</sup>. In both of these contracts the bank gets the right to use the money for business purposes as and when is required. This right is legitimate in Islamic Jurisprudence.

<sup>&</sup>lt;sup>60</sup> Reisman, 'Capitalism: A Treatise on Economics'; G Reisman, *Capitalism* (Illinois: Jameson Books, n.d.), 516.

<sup>&</sup>lt;sup>61</sup> de Soto, Money, Bank Credit, and Economic Cycles, 133.

<sup>62</sup> de Soto, 136.

<sup>&</sup>lt;sup>63</sup> See terms and conditions mentioned on bank account opening form of any Islamic bank for example see clause 3.1 and 3.7 in Meezan Bank's account opening form.



The depositor in both cases also has the right to use the same amount in the form of *Hawala*. This right is also legitimate in Islamic Jurisprudence. He can make payments through bank cheques, demand drafts, pay orders etc, as all of these modes will qualify to hold the status of *Hawala* (Arabic for IOU). A cheque or pay order represents the right to receive the money or asset, which is transferred to the third person whom the cheque is forwarded. Now this third person will now may receive the payment from the bank, into his account, or as hard cash depending upon the nature of the cheque. It is very much possible that the bank might not possess the cash at that time, however through the cheque the rights to a specific some of money are transferred from the account of one person to the account of another.

Since the numbers transferred, from one account to another via *Hawala*, were also backed by a fraction of cash reserve, therefore this mode of payment (pay order for e.g) can also be used to make advance payment for an asset whose possession is expected on a future date. In case of cheques, the advance payment can be made with a small sum of cash being paid on the spot, to avoid the transaction to qualify as sale of debt for debt, which is prohibited in Islamic Jurisprudence.

However it is very much possible that the amount mentioned on all *Hawala* instruments circulating in an economy might exceed the total cash available, making it impossible in literal sense to exchange all *Hawala* instruments with cash; would Shariah allow circulation of *Hawala*, in a given economy, in a greater quantity of the total cash they represent? Furthermore such increased circulation of *Hawala* instruments would subsequently increases the reliance of the economy on debt similar to its conventional counterpart, making the economy vulnerable and volatile to shocks and recessions, let alone making inflation a constant phenomenon as well in an economy dominated Islamic Banks.

Legal status of Fiat Currency: The assumption in the above discussion is that the contemporary form of cash i.e. paper notes issued by the central bank, also known as fiat currency, themselves qualify as a medium of exchange and are not representation of any other financial or real asset. However in real, fiat currency is a representation of debt owed by issuer to the buyer of the currency. This would make things even more complicated when making advance payments, as this would tantamount to exchange of debt for debt which is prohibited in Islamic Shariah. As per the analysis of Mufti Ismatullah (d.b) market norms of considering fiat currency as a legitimate medium of exchange would be respected by Islamic Shariah and considered as a standard of its qualification as a legitimate medium of exchange. In other words if market doesn't have a problem then Shariah also doesn't have a problem in this particular case, however if



market would began to treat as a representation of debt then the respective rules of Shariah would also be applied. In this context he has quoted the verdict of School of Islamic Jurisprudence, Jeddah which considers "Paper notes are artificial money and have firm purchasing power. All the rulings on Riba, Zakat and forward sale in context of gold and silver are also applicable on paper notes."

Mufti Taqi Usmani (d.b) also concurs to the same view<sup>65</sup>, also he has briefly quoted the history of transformation of medium of exchange from gold and silver to fiat currency while not denying that "the first act of introducing fiat money was in fact a fraud, because it was not something sincere but a maneuver that took the opportunity of the relationship already in existence between redeemable currencies and the commodities that backed them. It is comparable to the goldsmith receipts in the early years of banking. It is a scam made legal through a government's or a sovereign's decree that allows no other choice for the market but to accept it."<sup>66</sup>. Keeping in view such a sinister history, its legal status of being a debt, its imposition upon the people by the government<sup>67</sup>, it's easy creation and multiplication in the banking system to benefit a few at the expense of many (ibid) and that lack of *Ijma* (consensus) over its status as per Islamic jurisprudence, makes the perceived legitimacy of fiat currency very much questionable.

If the fiat currency is considered a certificate of debt owed by the issuing authority then creating of 'credit money' in fractional reserve system, would be tantamount of creating credit out of credit (ibid). This would open a Pandora box of various Shariah related problems. If fiat currency is itself considered as a medium of exchange not a representation of a liability, then it would legitimize the inherent injustice which is present in it. The author isn't qualified to issue a fatwa in favor or against fiat currency, however it is recommended here that its adoption as a legitimate medium of exchange may be as per the doctrine of necessity and efforts may be required to replace it with Gold and Silver (Dinar and Dirham) which has been declared as *Saman-e-Haqiqi* by Shariah<sup>68</sup>.

<sup>&</sup>lt;sup>64</sup> Ismatullah, *Masla-e-Zar Ka Tehqiqi Muta'allah: Sharee Nuqtae Nazar Se*, 1st ed. (Karachi: Maktaba Darululoom, n.d.).

<sup>&</sup>lt;sup>65</sup> Usmani, Islam Aur Siyasi Nazaryat, 103.

<sup>&</sup>lt;sup>66</sup> Shapiee and Zahid, Addressing Economic Meltdown: An Evaluation of Fiat Andcredit Money from Islamic Perspective.

<sup>&</sup>lt;sup>67</sup> Initially it was forced upon the people who were accustomed to the use of gold and silver, but later generation were mislead and accepted the system out of oblivion, today the common man doesn't know much about the reality of currency he uses.

<sup>&</sup>lt;sup>68</sup> Mt Usmani, 'Looking for New Steps in Islamic Finance', *Retrieved on April*, 2010, 105, http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Looking+for+New+Steps+in+Islamic+Finance#0.



## 1.4 Mitigating the Bank Run

It has been discussed that the representation of physical stock of currency is multiplied many times over in the fractional reserve system when the same currency is deposited in multiple accounts various times. Its inflationary aspect has already been explained. This phenomenon does another peculiar thing in the economy. Since the deposits in the banking system are only backed by a fraction of physical cash and securities, therefore it is impossible for all depositors to take physical possession of the money stock equivalent to their deposits. In fact banks can only release cash equivalent to the amount kept as reserve which is only a small fraction of the deposits.

It can be argued that since conventional banks don't trade in commodities or assets, they only lend money on interest; therefore in case of a Bank Run (all depositors demanding their money to be returned as they have lost trust in the bank) conventional banks won't have anything to return other then the fraction of the cash reserve they have. They might have a hold on the collateral (against the loans they have advanced); however they can only acquire this collateral unless the borrowers have defaulted.

The case of Islamic Banks is different, as they don't loan money on interest, in fact their transactions are equivalent to sale and purchase with differed payment at least in theory, hence they acquire ownership of an asset before selling it, for example in case of *Murabaha* or *Bai-Moajjal* contract, the customer might take possession of the asset and agree to pay on installments, now till the time the banks receive all the installments the ownership will remain at the bank equivalent to value of the asset minus the amount returned by the client as installments.

Henceforth an Islamic bank would either have cash or it would own an asset on the behalf of the depositor who in case of a PLS account is the *Rab-ul-Mal* (investor) and bank is *Mudarib* (working partner). Therefore in case of all depositors coming to Islamic banks to take back their cash, the IB would either give them cash, but if that's not available then IB would issue ownership receipts (perhaps) for the asset it might have in its possession. Since the depositor is *Rab-ul-Mal* and the bank *Mudarib*, therefore bank also reserve the right to hold payment of cash until the asset which were purchased from it are liquidated in the market. In *Mudarabah* contract the depositor is also entitled to share the profit and loss of the bank, such that in case of an unprecedented loss, not caused by negligence of the bank, the depositor will bear all the loss. If Islamic Banks are not able to liquidate the assets in hard cash, as the cash in the economy is also only a fraction as compare to the total deposits, then central bank would act as a lender of last resort to protect the bank from defaulting.



However in case of current account the amount deposited in the IB is *Qard-e-Hasana*; bank is allowed to use it for commercial purposes but is also bound to return the principle amount to the depositor as and when demanded. Islamic banks therefore must keep cash in easy access equivalent to the amount deposited in the current accounts by the depositors, so that to fulfill their promise of return on demand all the deposits when required by all the borrowers. The risk of a bank run is although very low, one in a few decades, though its implications are of historic proportions, therefore no matter how low the risk may be, due to severity of the matter, Islamic banks may keep themselves prepared to mitigate the crisis by honoring all the claims when required.

# 1.5 Does an Islamic Bank have the right to earn money over the same cash twice or more times?

Assume in an economy a bank, which also claims to be Islamic, is established for the first time. The first depositor Ahmed deposits Rs. 1,000,000 in a current account in this bank. The state bank has put a reserve requirement of 20%. Since this amount was a *Qard-e-Hasana* for the Bank therefore bank decided it to put the cash for commercial usage. A farmer who needs to purchase a tractor approaches the bank. The bank purchases the tractor from Millat Tractors worth of Rs. 800,000 for the farmer, and offers it to sell it for Rs. 840,000 (keeping 5% profit), which the farmer would pay exactly after 4 months. Bank is now liable to pay Rs. 800,000 to Ahmed till the farmer would pay it back.

The farmer accepts the offer, takes possession of the tractor, which is presently in the ownership of the bank as the farmer hasn't paid for it yet. The farmer uses the tractor to plough his field etc, and after 3.5 months his harvest is ready for sale in the market. The farmer sells the entire crop to Ahmed (who was also a whole seller of agricultural products) for Rs. 1,000,000. Ahmed who was the first depositor in the bank writes a cheque in the name of the farmer. The farmer goes to the bank, the bank also ask the farmer to open an account, and transfers Rs. 1,000,000 into his account. Now Ahmed's account is empty as he transferred the right to use Rs. 1,000,000 to the farmer. The cheque has performed the function of *Hawala*. The bank transferred Rs. 20,000 cash which was available in Ahmed's current account, and also transferred entitlement to receive Rs. 800,000 which was initially taken by the bank from Ahmed's account to purchase the tractor.

Since it was also time to pay back the bank Rs. 840,000 therefore the farmer writes a cheque in the name of the bank and pays it the due amount. The bank transfers the ownership of the tractor to the farmer against his payment; adjusting the tractor's value with the liability to pay Rs. 800,000 to the farmer.



Let's assume that Millat Tractor Company was also invited to open a bank account in the same bank and Rs. 800,000 were transferred into its account by the bank against the purchase of tractor. The bank would now have a total deposit of Rs. 1,800,000. i.e. total assets are Rs. 1,000,000 cash and a tractor worth Rs. 800,000. However, a liability of Rs. 800,000 also exists at the bank. After the farmer would receive the tractor, the bank's liability would be cleared, and the total deposits in the bank would now become Rs. 1,000,000 again. Now Rs. 16,000 remains in the account of the farmer, the bank keeps Rs. 40,000 as a profit and Rs. 800,000 in the account of Millat Tractors.

In this example it was assumed that no new client approaches the bank to seek financing till the time the farmer returns his liability, in reality that might not be the case, till the time bank had Rs. 1,800,000 in deposits and it could have used 80% of the additional Rs. 800,000 for financing another transaction, and kept its 20% as reserve (while assuming no new depositor approached the bank). That's around Rs. 640,000. The fractional reserve system has allowed the bank to use the same sum (80% of it) twice. The cycle would repeat and the bank would again have Rs. 2,440,000 (Rs. 1,800,000 + Rs. 640,000) at its disposal if the farmer hasn't yet returned the sum. The liability of the bank would also be increased to Rs. 1,440,000. Now the bank would again use 80% of Rs. 640,000 i.e. Rs. 512,000. The cycle will continue until the deposit amount gets less than cash reserve requirement.

From the perspective of Islamic Jurisprudence there is nothing wrong with this in a literal sense. Each of the contracts which are leading to this phenomenon is legitimate in isolation or not *Haraam* (utterly prohibited) from Islamic perspective. However, the combined effect of sequential use of these contracts has to be evaluated in the light of objectives of an Islamic socioeconomic system, as some of its effects may include:

- 1. Creation of money out of thin air, and then profiting from it by investing in real economic activity (perhaps credit creation in a non-profit way may be the way forward, but only if its inflationary effects are curtailed);
- 2. Creation of extra deposit may inflate or debase the money supply, as discussed.
- 3. Increases the wealth concentration toward upper strata of society:
  - a. Take the purchasing power from the poor, without their consent, and transfer it to rich borrower and government,
  - b. Incline the bank toward rich and so-called credit worthy clients; financing the poor is believed to be riskier (although experience in microfinance, particularly in Bangladesh has proved this wrong), more cumbersome and less profitable,
  - c. Encouraging the rich class toward hoarding and wealth accumulation and to earn without participating in real economic contribution (investing in new



projects), i.e. by depositing their money in PLS accounts, hence indirectly affecting real economic development and employment generation negatively;

- 4. Incline the bank toward using debt based instruments, which are less risky, and avoiding PLS modes of finance i.e. *Musharakah* and *Mudarabah*, thus Islamic banks do not prefer financing of new ventures as they are more risky;
- 5. Bankruptcies becomes a permanent feature of the economy, transferring ownership of real assets to an institution which create money out of thin air.
- 6. Gives privately owned banks unprecedented power over the economy. To evaluate its permissibility in future research it is recommended that Islam's perspective on political economy is used to question the legitimacy of such power.

Keeping this in view, the practice of FRB deserves a critical review from the goal of promotion of just and equitable distribution of wealth, and protection of private ownership for every member of society.

#### CONCLUSION

FRB is the norm of the present financial order, and Islamic banking also use the same. Islamic finance takes pride in eliminating interest on a contractual level, however, the task doesn't end here as the overall structure of the FRB brings with itself various effects which may not fit in the socioeconomic ideals envisioned by Islam. This system prefers debt-based modes, institutionalizes & legitimizes debasement of currency for the benefit of elite and powerful, keep the circulation of wealth among the upper strata, even facilitating them in unjust syphoning of wealth from the masses. FRB was initially designed to fulfill the objectives of an emerging industrial society in Europe which was rapidly adopting capitalist ideals. These objectives or ideals are distinct from the ideals and standards of justice envisioned in Islamic socioeconomic model. Additionally, in the same context, the nature and system of money or currency upon which the fractional reserve system is based, also needs a critical and through review as well.

The academics and scholars of Islamic banking and finance need to work out an alternative model, at least on a theoretical plane, not just for Muslim population, but for the all humanity, in order the save them from undue transfer of wealth from their ownership to those in power. Unfortunately, FRB system has been institutionalized and has legal protection in almost all countries of the world. Keeping this in view, it is hoped that, that the concerned Islamic bankers and scholars may not support such a system to prevail at least under the name of Islam, rather they may work around to bring an alternative to the model grounded in the idea of socioeconomic justice for all.



#### **DISCLOSURE**

#### **Conflicts of Interest**

The author declares that there is no conflict of interest regarding the publication of this paper.

## **Funding Statement**

This research received no external funding.

#### **Disclaimer Statement**

This work was part of my MS thesis which I did at PAFKIET under the supervision of Dr. Mehboob ul hasan. The title of the thesis was "<u>Islamic Conception of Economic Justice</u> and Its <u>Implication for Framework of Islamic Financial Institutions</u>" The discussion in this paper is coming from chapter 3 and 4 of my MS thesis.

## Acknowledgments

The research documented in this paper was conducted under my MS thesis supervisor Dr. Mehboob ul Hasan.

#### **Author Bio note**

Dr. Omar Javaid, currently serving as Associate Professor at Institute of Business Management, has a Ph.D. in Community based Entrepreneurship from the Institute of Business Management, MS in Islamic Economics and Finance from PAF-KIET, MBA-Exec from IoBM with majors in Marketing and BE in Industrial & Manufacturing Engineering from NED University. He has also published various research articles and editorials in various journals, magazines, and newspapers; He is a reader of Entrepreneurship, Social Entrepreneurship, Institutional Analysis, Islamic Economics and Finance, and the Philosophy of Economics and Business Management.

#### **BIBLIOGRAPHY**

Ahamed Kameel Mydin Meera, and Moussa Larbani. 'The Gold Dinar: The Next Component In Islamic Economics, Banking And Finance'. Review of Islamic Economics 8, no. September (2004): 1–29. http://www.perpustakaan.depkeu.go.id/FOLDERJURNAL/8-1-Meera-Larbani\_1.pdf.

Ahmed, Mahmood. 'Practice of Mudaraba and Musharaka in Islamic Banking'. In *SSRN Electronic Journal*, 2018. https://doi.org/10.2139/ssrn.3161208.



- Al-Maqrizi, T.a-D. *Ighathat Al-Ummah Bi-Kashf Al-Ghummah*. Translated by A Allouche. Egypt: University of Utah Press, n.d.
- Ansari, J A. 'Rejecting Freedom and Progress'. Jareedah 29 (2004): 47–224.
- Asutay, Mehmet. 'Conceptualisation on the Second Best Solution in Overcoming the Social Failure of Islamic Banking and Finance'. *IIUM Journal of Economics and Management* 15, no. 2 (2007): 167–95.
- Benati, L. 'Long-Run Evidence on Money Growth and Inflation'. *Bank of England Quarterly Bulletin*, n.d.
- Benlala, Mejd Aures. 'Perspectives on Islamic Banks Activity in Light of Money Creation and Cash Reserve Ratio (CRR)'. *ELBAHITH d'études Académiques* 10, no. 1 (2023): 565–76.
- Bernanke, Ben, Mark Gertler, and Simon Gilchrist. 'The Financial Accelerator in a Quantitative Business Cycle Framework'. Cambridge, MA, March 1998. https://doi.org/10.3386/w6455.
- Brydges, Ryan, and Deborah Butler. 'A Reflective Analysis of Medical Education Research on Self-Regulation in Learning and Practice'. *Medical Education* 46, no. 1 (January 2012): 71–79. https://doi.org/https://doi.org/10.1111/j.1365-2923.2011.04100.x.
- Caplan, B. 'What's Wrong With Austrian Business Cycle Theory'. Library of Economics and Liberty, 2008. http://econlog.econlib.org/archives/2008/01/whats\_wrong\_wit\_6.html.
- Danziger, Leif. 'Costs of Price Adjustment and the Welfare Economics of Inflation and Disinflation'. *American Economic Review* 78, no. 4 (1988): 633–46. http://www.aeaweb.org/aer/%0Ahttp://search.ebscohost.com.ezproxy1.lib.as u.edu/login.aspx?direct=true&db=eoh&AN=0213923&site=ehost-live.
- Depraetere, Joke, Christophe Vandeviver, Ines Keygnaert, and Tom Vander Beken. 'The Critical Interpretive Synthesis: An Assessment of Reporting Practices'. *International Journal of Social Research Methodology*, August 2020, 1–21. https://doi.org/10.1080/13645579.2020.1799637.
- E., W. A., Friedrich A. Hayek, N. Kalder, and H. M. Croome. *Monetary Theory and the Trade Cycle. Journal of the Royal Statistical Society*. Vol. 96. London, Toronto, 1933. https://doi.org/10.2307/2341796.
- Encarnación, José. *Optimum Quantity of Money Instability. Economics Letters.* Vol. 42. Aldine Publishing Company, 1993. https://doi.org/10.1016/0165-1765(93)90064-J.
- Friedman, Milton. Money Mischief: Episodes in Monetary History. New York, New York, USA: HMH, 1994.



- Greenspan, Alan. The Age of Turbulence. 1st ed. London: Penguin Books, 2007.
- Grunwald, M. 'Bernanke's Bum Rap: Why a Little Inflation Is Good', n.d. http://www.time.com/time/nation/article/0,8599,2030919,00.html.
- Guttmann, Robert, and Dominique Plihon. 'Consumer Debt and Financial Fragility'. *International Review of Applied Economics* 24, no. 3 (2010): 269–83. https://doi.org/10.1080/02692171003701420.
- Hasan, Mohammad S. 'Monetary Growth and Inflation in China: A Reexamination'. *Journal of Comparative Economics* 27, no. 4 (1999): 669–85. https://doi.org/10.1006/jcec.1999.1607.
- Humphrey, Thomas M. 'The Real Bills Doctrine'. *Economic Review of the Richmond Fed*, no. Sep/Oct (1982): 3–13.
- Iqbal, Zubair, and Abbas Mirakhor. *Islamic Banking. Occasional Paper (International Monetary Fund) TA TT -*. Washington, D.C. SE -: International Monetary Fund, 1987. https://doi.org/LK https://worldcat.org/title/1058628819.
- Ismail, Ahmad Yani. 'Money Creation by Banking Industry, Maqasid Al-Shariah and Ar Rawaj'. *Journal of Muwafaqat* 2, no. 1 (2019): 30–44.
- Ismatullah. *Masla-e-Zar Ka Tehqiqi Muta'allah: Sharee Nuqtae Nazar Se.* 1st ed. Karachi: Maktaba Darululoom, n.d.
- Jamour, Mohammad, Kamran Nadri, and Ahmad Shabani. 'Incorporating the Two Functions of Portfolio Management and Payment Services in the Banking System and Presenting a Favorable Model from the Islamic Banking Perspective'. *Journal of Iran's Economic Essays: An Islamic Approach* 18, no. 36 (2022): 172–89.
- Kameel Mydin Meera, Ahamed, and Moussa Larbani. 'Ownership Effects of Fractional Reserve Banking: An Islamic Perspective'. *Humanomics* 25, no. 2 (2009): 101–16. https://doi.org/10.1108/08288660910964175.
- King, Mervyn. 'No Money, No Inflation The Role of Money in the Economy'. *Economie Internationale* 88, no. 4 (2001): 111–32. https://doi.org/10.3917/ecoi.088.0111.
- Klein, D. B. 'The Demand for and Supply of Assurance'. *Economic Affairs* 21, no. 1 (2001): 4–11. https://doi.org/10.1111/1468-0270.00268.
- Krugman, Paul. 'The Hangover Theory: Are Recessions the Inevitable Payback for Good Times?' Slate Magazine, 1998. http://www.slate.com/articles/business/the\_dismal\_science/1998/12/the\_han gover\_theory.html.
- M Yahya, Naeem Ur Rahman. 'The Role of Money in Capitalistic and Islamic Economic Systems: A Comparative Study'. *Al-Milal: Journal of Religion and Thought*. Pakistan Society of Religions (PSR), 2020. https://doi.org/10.46600/almilal.v2i2.74.



- Macleod, Henry Dunning. *Theory and Practice of Banking*. Vol. II. The Theory and Practice of Banking. Longmans, Green, 1906. https://books.google.bi/books?id=\_M4JAAAAIAAJ.
- Maliha, Hasna, and Lina Marlina. 'Why Islamic Banks Are Relatively More Resilient to Crisis?' *Ekonomi Islam Indonesia* 1, no. 1 (December 2019): 34–55.
- Marshall, Alfred. Memoranda and Evidence before the Gold and Silver Commission. Official Papers by Alfred Marshall. MacMillan London, 1887.
- Miah, Mohammad Dulal, and Yasushi Suzuki. 'Murabaha Syndrome of Islamic Banks: A Paradox or Product of the System?' *Journal of Islamic Accounting and Business Research* 11, no. 7 (11 January 2020): 1363–78. https://doi.org/10.1108/JIABR-05-2018-0067.
- Nageswari, R. 'Economic Visions of Dr. BR Ambedkar'. Shanlax International Journal of Economics 7, no. 4 (2019): 29–35.
- Niggle, Christopher J. 'The Endogenous Money Supply Theory: An Institutionalist Appraisal'. *Journal of Economic Issues* 25, no. 1 (1991): 137–51. https://doi.org/10.1080/00213624.1991.11505132.
- Nor, E, A A Pitchay, and M Usman. 'How "Islamic" Is Islamic Banking? A Revisit'. *International Journal of Accounting, Finance and Business (IJAFB) EISSN* 5, no. 30 (2020): 219–37.
- Polleit, T. 'Why Money Supply Matters'. Ludwig von Mises Institute, 2005. http://mises.org/daily/2810.
- ———. 'Why Money Supply Matters'. *Ludwig von Mises Institute* 16 (2005). http://mises.org/daily/2810.
- Polleit, Thorsten. 'Manipulating the Interest Rate: A Recipe for Disaster'. Mises Institute, 2007. https://mises.org/library/manipulating-interest-rate-recipe-disaster.
- Reisman, G. Capitalism. Illinois: Jameson Books, n.d.
- Reisman, George. 'Capitalism: A Treatise on Economics'. *Jameson Books, Ottawa, Illinois*. Jameson Books, 1996.
- Roffia, Barbara, and Andrea Zaghini. 'Excess Money Growth and Inflation Dynamics'. *International Finance* 10, no. 3 (2007): 241–80. https://doi.org/10.1111/j.1468-2362.2007.00206.x.
- S.B.P. 'BSD Circular No. 08 of 2008:Cash Reserve Requirements Against FE-25 Deposits Maintained by IBs & IBBs', n.d. http://www.sbp.org.pk/bsrvd/2008/c8.htm.
- Sartell, E A, and A J Vierra. 'Overview of the United States Economy 1950-2011: Four Lessons for Brazil'. *World Review of Business Research* 2, no. 3 (2012): 1–11.
- Schumpeter, Joseph A. *History of Economic Analysis*. *History of Economic Analysis*. Great Britain: Taylor & Francis e-Library, 2006. https://doi.org/10.4324/9780203983911.



- ———. History of Economic Analysis. History of Economic Analysis. London: Routledge, 2006. https://doi.org/10.4324/9780203983911.
- Seaver, James E. 'A Monetary History of the Ottoman Empire'. *History: Reviews of New Books* 28, no. 4 (January 2000): 180–180. https://doi.org/10.1080/03612759.2000.10525602.
- Shapiee, Rohimi, and Anowar Zahid. *Addressing Economic Meltdown: An Evaluation of Fiat Andcredit Money from Islamic Perspective. US-China Law Review.* 17th ed. Vol. 11. Las Vegas: ASBBS Annual Conference, 2014.
- Siddiqi, M Nejatullah. 'Islamic Finance and Beyond Premises and Promises of Islamic Economics'. In *Proceedings of the Third Harvard University Forum on Islamic Finance:* Local Challenges, Global Opportunities, 49–53. Cambridge, Massachusetts: Harvard University, 1999. http://ifp.law.harvard.edu/login/contact.
- Siddique, Muhammad Zahid. 'Modern Money and Islamic Banking in the Light of Islamic Law of Riba'. *International Journal of Finance and Economics* 27, no. 1 (2022): 993–1008. https://doi.org/10.1002/ijfe.2196.
- Soto, J de. *Money, Bank Credit, and Economic Cycles. Books.Google.Com.* Alabama: Ludwig von Mises Institute, 2009. http://books.google.com/books?hl=en&lr=&id=73eheHP\_YHIC&oi=fnd&pg=P R3&dq=BMiIcBJwFx8J:scholar.google.com/&ots=hbzITh-wh2&sig=THHPKm\_oZsviYVXY\_VQw18HZGPQ%5Cnpapers2://publication/uuid/E500A887-A169-4F8D-BD51-46B5D87EF19F.
- Soto, Jesús Huerta de. *Money, Bank Credit, and Economic Cycles*. Edited by Unión Editorial Madrid. *Alabama: The Ludwig von Mises Institute*. 4th ed. Ludwig von Mises Institute, 2020.
- State Bank of Pakistan. 'Broad Money (M2) Components'. State Bank of Pakistan. Accessed 1 April 2012. https://www.sbp.org.pk/ecodata/BroadMoney\_M2.pdf.
- — . 'Glossary: Statistical Bulliten Feb 2012'. State Bank of Pakistan, 2012. http://www.sbp.org.pk/reports/stat\_reviews/Bulletin/2012/Feb/Glossary.pdf
- Sunaryo, Sinto, Hunik Sri Runing Sawitri, Joko Suyono, Lilik Wahyudi, and Sarwoto. 'Flexible Work Arrangement and Work-Related Outcomes during the Covid-19 Pandemic: Evidence from Local Governments in Indonesia'. *Problems and Perspectives in Management* 20, no. 3 (2022): 411–24. https://doi.org/10.21511/ppm.20(3).2022.33.
- Syarifah, Lailatis, Muhfiatun Muhfiatun, Tettet Fitrijanti, and Prasojo Prasojo. 'Maqasid Sharia and Islamic Bank Performance: A Systematic Review'. *I-ECONOMICS: A Research Journal on Islamic Economics* 7, no. 2 (2022): 94–111. https://doi.org/10.19109/ieconomics.v7i2.9167.



- Treeck, Till van. 'A Synthetic, Stock-Flow Consistent Macroeconomic Model of "Financialisation". *Cambridge Journal of Economics*. Düsseldorf, Germany: Macroeconomic Policy Institute, 2009. https://doi.org/10.1093/cje/ben039.
- Tullock, Cordon. 'Why the Austrians Are Wrong about Depressions'. *The Review of Austrian Economics* 2, no. 1 (December 1988): 73–78. https://doi.org/10.1007/BF01539299.
- Umam, Khoirul, Abdul Ghafar Ismail, Achmad Tohirin, and Jaka Sriyana. 'Islamic Endogenous Money: Evidence From Islamic Banking System in Indonesia and Malaysia'. *Journal of Islamic Monetary Economics and Finance*. Bank Indonesia, Central Banking Research Department, 2021. https://doi.org/10.21098/jimf.v7i3.1351.
- Usmani, M. M. Islam Aur Siyasi Nazaryat. Karachi: Maktaba Maraful Quran, n.d.
- Usmani, Mt. 'Looking for New Steps in Islamic Finance'. *Retrieved on April*, 2010. http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Looking+for +New+Steps+in+Islamic+Finance#0.
- Usmani, Mufti Muhammad Taqi. An Introduction to Islamic Finance. Brill, 2021.
- Usmani, Sheikh Taqi. Islam Aur Jadeed Maeeshat. Karachi: Idara Al Maraf, 1993.
- Wennerlind, Carl. 'The Alchemical Roots of the Financial Revolution'. *Berfrois*, 2012. http://www.berfrois.com/2012/03/carl-wennerlind-credit-alchemy.
- Xiao, Yu, and Maria Watson. 'Guidance on Conducting a Systematic Literature Review'. *Journal of Planning Education and Research* 39, no. 1 (August 2017): 93–112. https://doi.org/10.1177/0739456X17723971.



© 2023 by the authors. Published as an open-access publication under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/).