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Fractional Reserve Banking in Islamic Finance: A Comparative Analysis of Islamic and Western Economic Perspectives

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Abstract

This article examines the concept and implementation of fractional reserve banking (FRB) through the lens of both Western economic thought and Islamic finance. Utilizing a qualitative methodology with a library research approach, this study investigates theoretical and practical differences between the two paradigms. In conventional Western finance, FRB is widely accepted as a mechanism that enables credit expansion, supports investment, and enhances liquidity within financial systems. Economists such as Mises, Keynes, and Rothbard offer varying justifications and criticisms of this system—ranging from monetary creation efficiency to moral hazards such as artificial credit inflation. Conversely, Islamic economic thought fundamentally challenges the legitimacy of FRB due to its connection with interest (riba), risk of gharar (uncertainty), and issues of dual ownership in deposit structures. Islamic scholars argue that the practice contradicts the principles of ownership (milkiyah) and justice in financial dealings, thereby undermining the ethical framework of Sharia-compliant finance. The paper highlights how the replication of conventional banking practices in Islamic finance raises concerns about authenticity and systemic risks. Additionally, it addresses the resurgence of proposals for full-reserve banking following global financial crises, suggesting growing discontent with the status quo. Ultimately, this comparative analysis reveals a significant philosophical and operational divide between Western and Islamic views on banking and monetary policy. The study contributes to ongoing discussions about ethical financial reform and provides critical insights into the viability of implementing fractional reserve banking in Islamic financial institutions.

1. Introduction

'The existence of banking in the world of economics is indeed an important part that cannot be separated from the socio-economic life of society. In the course of human life, banking has traditionally been used even though it is still very limited in all its functions and scope. However, along with the development of the times and the demands of the dynamics of the interests of the community that surround it, the banking industry has undergone major changes. This industry has become more competitive due to regulatory deregulation. Currently, banks have flexibility in the services offered, the locations where they operate, and the rates they pay for depositors' savings'.

However, along with the demands of the times, the banking system has increased to a technology-based system, digital services and applicable facilities. One modern banking system today is the fractional reserve banking system which is applied throughout the global banking system, both conventional and sharia.

In the discourse of the banking system, fractional reserve banking is a system that is often criticized by experts, because this system is considered by economists as a source of systemic problems and gives rise to recurring financial crises or is marked by the insolvency problem of banks (Demirgüç-Kunt and Enrica Detragiache, 1998). So from here a special concern arises, whether fractional reserve banking makes the banking system bankrupt or not. Thus, there is a clear tension between the impacts of fractional reserve banking, such as the ability to generate greater profits (short term), create investment opportunities, and the risks of implementing fractional reserve banking, especially in the case of Islamic banking (Al-Jarhi, 2004; Ngalawa, 2016).

In its development, there has been much criticism from world experts since the great depression of 1930, namely the emergence of the

Chicago Plan, proposed by various economists including Ksatria (1933), Angell (1935), and Fisher (1936). To overcome the instability of the banking sector, especially if there are bank runs. In recent decades, the Plan has re-emerged in various forms: for example Benes and Kumhof (2013) from the IMF, with Positive Money and the New Economics Foundation (NEF), Kay (2009) with the concept of Narrow Banking and Kotlikoff (2010) with the concept of Limited Purpose Banking (Benes, J., & Kumhof, 2013).

However, there are also many experts who acknowledge the existence of this system as a flexible and applicable system to be applied as a financial system and financial institution. Among the arguments is that fractional reserve banking allows for increasing bank asset returns, and return payments to customers will be much higher. Implicit in this argument is the assumption that a lower reserve rate certainly results in a higher return (or smaller discount) paid on bank liabilities, especially for customers whose payments are facilitated.

After the collapse of Lehman Brothers in 2008 in the United States which had a domino effect on the stability of the world economy,[1] the financial crisis still occurred in various countries, especially in European countries where high levels of public debt became an obstacle to economic recovery, but strangely banks are still one of the trusted institutions there. According to several economists, the source of this crisis came from the money system that has been implemented so far. And at the same time bank debt became a "popular" commodity and became a commercial barn, especially through its demand deposits which were used as money (Asutay, 2007).[2] Ironically, the reliability of this system is supported by government guarantees, such as deposit insurance. In addition, the use of bank debt as money indicates that every increase in the amount of money automatically requires more interest-based debt.

Thus, this article attempts to examine in depth Fractional Reserve Banking, especially from the perspective of Western and Islamic economists.

2. Theoritical Framework

2.1 Finacial Intermediary Theory

'In its development, the implementation of fractional reserve banking in banking has reaped pros and cons. However, the application of fractional reserve banking is still used in various banks around the world. This is certainly inseparable from the theoretical basis, academic footing and empirical facts that have been able to convince the public in general and stakeholders in banking policy makers in particular. The theoretical basis of fractional reserve banking is built on the theory of financial intermediaries. This theory actually has weaknesses that cause asymmetry information or imperfect information'.

However, this weakness is not always considered, because this theory is able to reduce information costs and transaction costs caused by information asymmetry between borrowers and borrowers. So this theory is able to help drive the efficient functioning of markets and can determine the factors that influence the credit that is channeled and have a significant impact on the macro economy (Iris Claus and Arthur Grimes, 2003).

'There are two bases that strengthen the existence of financial intermediaries. First, emphasizing financial intermediaries as providers of liquidity. Second, focusing on the ability of financial intermediaries to change the characteristics of assets. In this second case, financial intermediaries can reduce the cost of channeling funds between borrowers and

[1] This situation was triggered by the occurrence of bad credit in the property sector (subprime mortgage). This caused large-scale sub-prime mortgage industries such as the American Home Mortgage Investment Corporation (AHMI), Mortgage Guaranty Insurance Corporation (MGIC), and New Century Financial Corporation (NCFC), to go bankrupt. Investors lost billions of dollars to prevent sub-prime mortgage assets from disappearing. This action then triggered chaos in the global financial market..

[2] Greed has become the operational root of the capitalist system, which in turn has created a tsunami of the world's economy. This is actually the background of why Islam must "revive" the economic system with an Islamic view, so that the balance of humanity is restored and runs according to the normal rules of humanity.

lenders, which leads to a more efficient allocation of resources. Diamond and Dybvig (1983) concluded that depositors tend to reject and dislike uncertainty about the time of consumption needs in the future. Without financial intermediaries, all depositors are "forced" to choose long-term illiquid investments, while financial intermediaries promise higher returns and more guaranteed certainty with a relatively short time period'.

'Financial intermediaries can change the characteristics of assets because they can overcome market failures and overcome the problem of information asymmetry. Credit information asymmetry in the market arises because borrowers generally know more about investment projects than lenders. Asymmetric information can occur "ex ante" or "ex post". In "ex ante" information asymmetry arises when lenders cannot distinguish between borrowers with different credits before making loans and leads to adverse selection problems. The problem of information asymmetry occurs "ex post" when borrowers engage in moral hazard. Moral hazard arises when borrowers engage in activities that reduce the likelihood of loans being repaid'.

'Diamond (1984) argues that diversification in financial intermediation is the primary reason financial intermediaries exist. Financial intermediaries provide incentive contracts such that, like incentives for information, they make adequate payments to depositors. Providing these incentives is a costly decision and diversification can reduce these costs. The optimal contract in financial intermediaries is a debt contract (an agreement by a borrower to pay a lender a fixed return). The financial intermediary guarantees any shortfall in payment'.

In short, financial intermediaries play an important role in the credit market because they can reduce the cost of channeling funds between depositors who are less informed by using information-intensive and difficult to evaluate. In addition, financial intermediaries cause more efficient resource allocation.

Based on observations by Dow et al. (2015), financial intermediaries and fractional reserve banking are still applied, even though the financial crisis arose from the implementation of this system, public trust remains, because of the existence of deposit insurance which guarantees public funds that are banked. Public trust is a social foundation as well as a basic strength of financial intermediaries and fractional reserve banking is still applied.

a. Definition of Fractional Reserve Banking

'Fractional Reserve Banking is a practice whereby banks maintain only a portion of customer deposits as available reserves (currency or deposits at the central bank) as an obligation to pay if there is a withdrawal from the customer. The remaining customer funds are used by the bank to make investments or loans (credit) to other customers. Most of these funds are then re-deposited in other banks, which allows for further loans. If in the monetary system the number of banks is infinite, then the lending process continues with endless acceleration and creates a multiplier effect (Manurung and Rahardja, 2004)'.

'In his book Capital, Marx (1991) argued that the embryo of fractional reserve banking practice actually existed in the book The Wealth of Nations written by Adam Smith in 1848. According to him, Smith had described the movement of money amounting to £1,000 gold in the bank which was used as a loan product and purchase of goods. Smith said that the loan "will be secured", and the goods may be used productively to gain profit so that it gives rise to an equivalent value between coins and paper money (giro)'.

According to King's notes (2012), the economist who first proposed that banks create money out of nothing (Creating Money out of Nothing) was Joseph Schumpeter in 1911 in his book The Theory of Economic Development. 'In the book, Schumpeter (2008) developed the theory of fractional reserve banking from an analogy to the behavior of entrepreneurs. Schumpeter's idea was based on economic equilibrium, namely 'circular flow'. Schumpeter saw that many entrepreneurs pursued innovation, an effort to create new and useful

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goods, or new ways of doing things that were useful to 'form new combinations'.

'Profit will be achieved, especially for entrepreneurs who are in the position of "newcomers", if the profit is pushed down to zero, it will stimulate balance. Based on this assumption, according to him that no profit will be obtained in a balanced state and on the one hand the loan is not intended for the maintenance costs of a production. This means that according to Schumpeter (2008) the business world has a "productive" meaning because innovation is based on the assumption of circular flow so that the business can grow, but at the same time something else must shrink (capital). However, Schumpeter realized that the banking world and the business world are different, because in the banking world, using money means spending 'customer savings'. So to get around this, Schumpeter proposed another method to obtain the necessary funds, namely in the form of 'creating bank purchasing power'. In detail he said: "This does not change the purchasing power that already exists in someone's ownership (depositor), but the creation of new purchasing power from nothing," Therefore, the main function of the bank is actually not as an intermediary for the commodity "purchasing power", but rather as a producer of commodities'.

3. Research Method

This study employs a qualitative approach, specifically utilizing library research (literature review) as the research design. The qualitative method was chosen to explore and analyze deeply the concepts, theories, and thoughts related to the object of study.

The data sources in this research are obtained from secondary sources, such as books, journal articles, and other relevant documents. The content analysis method is applied to interpret the theoretical perspectives and the evolution of thoughts of specific scholars or academic debates over a certain period. This method allows the researcher to critically assess the literature and construct a comprehensive understanding of the topic under study.

4. Results and Discussion

4.1 Western Economists' Perspective: Towards Fractional Reserve Free-Banking

'According to Mises (1981), the theory of money creation carried out by banks is based on the term "fiduciary media", which is substitute money. Mises distinguishes between certificate money that is backed by 'money' and certificate money that is not, the latter is what he calls fiduciary media. In his notes on 'Banks as Credit Negotiators' he describes that banks borrow money to lend it back, the difference between the interest rate paid by depositors to banks and the interest rate paid by banks to borrowers, that is the profit. Then Mises introduced the second loan mechanism. The second group, namely credit transactions characterized by the benefits for the borrower by creating a kind of unbacked fiduciary paper that can be spent in the real world'.

'Mises suggested that credit given by banks to customers should be backed up with a certain amount of money, because with the distribution of credit, the bank also does not experience a reduction in satisfaction. In fact, if necessary, technical or administrative costs may be waived. As explained by Mises (1981)':

> "In the first kind of credit transactions, what is surrendered consists of money or goods, disposal over which is a source of satisfaction and renunciation of which a source of dissatisfaction. In the credit transactions of the second group, the granter of the credit renounces for the time being the ownership of a sum of money, but this renunciation (given certain assumptions that in this case are justifiable) results for him in no reduction of satisfaction. If a creditor is able to confer a loan by issuing claims which are payable on demand, then the granting of the credit is bound up with no economic sacrifice for him. He could confer credit in this form free of charge, if we disregard the technical costs that may be involved in the issue of notes and the like".

'In his book A Treatise on Money, Keynes (2011) also wrote about the theory of Creating

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Money out of Nothing, although he took many references from the thoughts of Marx, Schumpeter and Mises. Regarding the concept of bank money, Keynes uses the term "actively creating a deposit" which means a loan, and "passively creating a deposit" which means a return on deposits'.

'Keynes disagreed with the statement that the banking system as a whole is dependent on depositors, so that banks can lend no more than the amount of depositors' previous savings. This means that the bank's ability to distribute credit is limited to the amount of depositors' savings. According to Keynes, when customers no longer ask for loans from the bank, it does not mean that the bank loses one customer account, but still has other customer deposit accounts at the same bank. For example, there are five banks in a country: when Bank A provides a loan of 20%, then 20% becomes a deposit in the same bank and 80% in another bank. However, if we take the banking system as a whole, then clearly 100% of loans are deposits (as long as there is no cash hoarded). Keynes likened it to a 'closed' banking system where all payments are made by check and there are no cash reserves. Keynes concluded in his book':

> "I have endeavoured to say enough to show that the familiar controversy as to how and by whom bank-deposits are 'created' is a somewhat unreal one. There can be no doubt that, in the most convenient of language all deposits are 'created' by the bank holding them. It is certainly not the case that the banks are limited to that kind of deposit, for the creation of which it is necessary that depositors should come on their own initiative bringing cash or cheques. But it is equally clear that the rate at which an individual bank creates deposits on its own initiative is subject to certain rules and limitations; – it must keep step with the other banks and cannot raise its own deposits relatively to the total deposits out of proportion to its quota of the banking business of the country. Finally, the 'pace' common to all Member Banks is governed by the aggregate of their reserve-resources".

Like Schumpeter and Mises, Keynes believed that banks did not need depositors' savings to make loans. He thought lending money to one customer created deposits in other accounts. But Keynes said there was a limit to the amount of money that could be created—the requirement was to be in line with other banks, and this process was regulated by total reserves.

Rothbard (2008) banks can print fake deposit receipts and set interest charges on loans from customers, so as to earn income. As he said:

> "The English goldsmiths discovered and fell prey to this temptation in a very short time, in fact by the end of the Civil War. So eager were they to make profits in this basically fraudulent enterprise, that they even offered to pay interest to depositors so that they could then 'lend out' the money. The 'lending out,' however, was duplicitous, since the depositors, possessing their warehouse receipts, were under the impression that their money was safe in the goldsmiths' vaults, and so exchanged them as equivalent to gold. Thus, gold in the goldsmiths' vaults was covered by two or more receipts. A genuine receipt originated in an actual deposit of gold stored in the vaults, while counterfeit ones, masquerading as genuine receipts, had been printed and loaned out by goldsmiths and were now floating around the country as surrogates for the same ounces of gold".

4.2 Muslim Economist Perspective: More than Interest Free-Banking

'In relation to the implementation of Fractional Reserve Banking, many economists have voiced their support for immediately reviewing the implementation of this system as a modern banking system, among them Chicago economists have urged reforming the banking system that has been in place so far, because it has been proven to be the main cause (major reason) of the Great Depression that occurred in the 1930s'.

'In line with the above opinion, Islamic economic figure, Ahmed Kamil (2009) from the International Islamic University Malaysia (IIUM), also criticized double ownership which could cause the economy to collapse. According to him, Islam does not allow banks to take ownership of community assets and lend them to others for productive or consumptive purposes. This clearly violates the principles of ownership in Islam. This can be said to be equivalent to theft, namely taking ownership of other people's assets without their knowledge and permission (Ismail, 2017)'.

'This can even be called worse than theft because in theft, the thief takes the risk of being caught and punished. However, under fractional reserve banking, theft takes place neatly within the provisions of the law. Therefore, the practice of fractional reserve banking can be called "the legalized theft". This activity also has elements of usury so that it clearly contradicts the Qur'an Al Baqarah verse 188 which commands Muslims not to consume other traits in arrogance'.

'However, the many criticisms from economists about fractional reserve banking, apparently also unable to reform the banking system to become fractional reserve free-banking. Even until now this system can be seen in various world banks, including Islamic banks themselves. What is interesting here is that Islamic Banks are present with the spirit to eliminate all banking practices that can cause harm, such as the elimination of usury (interest), but it turns out that Islamic Banks are also not completely free from practices that are not in accordance with sharia principles. According to Ahmed Kamil, many Islamic banks in Malaysia still implement fractional reserve banking'.

In fact, the next problem is, if it is true that Islamic banking still applies fractional reserve banking as its system, then actually Islamic banking will be at much greater risk compared to conventional banking, because the features and products of Islamic banking are much more complicated and varied. This means that under fractional reserve banking, the door for Islamic banking to create more money compared to conventional banking which only has one door, namely loan-based.

'In addition, according to some economists, Islamic Banking is also suspected as an alternative banking system that is believed to have immunity to global economic shocks. The basic question is where is the argument based on? Is it just considering the aspect of interest-free banking, so that Islamic banking is relatively stronger when compared to conventional banking. It seems that Islamic banking has a much greater risk when compared to conventional banking, because it has many products that must involve extra supervision. Although this actually depends on how effective the risk management is (Khan, 1986)'.

While on the one hand, theoretically, Muslim economists actually distinguish between savings/current accounts and investment deposits as two different contracts. That is why some Muslim economists insist on separating demand (savings and current accounts) and investment deposits through 100% reserve (Al-Jarhi, 1981). This can be seen from the various opinions of Muslim economists who are concerned with the development of Islamic banking, such as Nejatullah ash-Siddqi, Tarek ad-Diwany, Zubair Hasan, MS Khan, AKM Meera, MA Choudury and others (Choudhury & Mostaque, 2005).

5 Conclusion

'Based on the discussion above, it can be concluded that the practice of fractional reserve banking has become a fundamental yet controversial pillar in the modern banking system. From the Western economic perspective, thinkers such as Mises, Keynes, and Rothbard present differing views ranging from support for its credit-creating flexibility to criticism of its ethical and systemic implications. In Islamic economics, the application of fractional reserve banking is even more problematic due to the prohibition of riba (interest) and the emphasis on clear ownership and risk-sharing.

Although Islamic banking aims to offer an alternative financial system based on sharia principles, the continued application of fractional reserve mechanisms within Islamic banks raises concerns about the consistency of these practices with Islamic economic ethics. Furthermore, the complexity of Islamic banking products may increase systemic risks if not accompanied by robust governance and risk management.

Therefore, a critical re-evaluation of fractional reserve banking within Islamic financial institutions is necessary. Scholars and practitioners need to further explore alternative frameworks uch as 100% reserve banking or equity-based financing that align more closely with Islamic legal and ethical norms. Further research should also investigate the operational feasibility and macroeconomic impact of transitioning towards such models in the modern financial system.

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