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THE FRACTIONAL RESERVE BANKING DILEMMA: INSIGHTS AND IMPLICATIONS

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ABSTRACT

The study revisits the intricate world of Fractional Reserve Banking (FRB), investigating its historical evolution, operational mechanics, and profound impacts on contemporary economies. The repercussions of money creation and destruction such as endemic inflation, escalating private and public debt, and the creation of economic cycles are explored. The paper further examines the current monetary system and the symbolic relationship between money and debt, challenging notions of interest as well as implications for resource allocation and wealth inequalities. The arguments for and against FRB are discussed, providing a more complex assessment of their compatibility with Islamic banking principles. Potential reforms with a view to exploring possible alternatives and their consequences are reviewed. In order to give a comprehensive overview of the FRB landscape, we have based our analysis by reviewing literature that is anchored in real-world examples. The research not only contributes to the academic debate on banking systems, but also serves as a basis for discussion of sustainability and equity in monetary frameworks today.

Keywords: *Fractional Reserve Banking, Islamic Banking, Inflation.*

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1. INTRODUCTION

The economy of a society depends heavily on money. It is something that is used on a daily basis, and humans rarely stop to consider what it implies. A flawed financial system may affect our lives, therefore, understanding its true nature is crucial. A careful analysis of the history of money reveals that there can be four basic kinds of money: First, commodity money when money itself has an intrinsic value like gold, silver, copper, etc. Second, symbolic money, when money is paper money or anything else, but 100 percent redeemable and backed by a commodity. Third, fiat money, when money is not backed by anything real and does not have an intrinsic value. Unredeemable paper money or electronic money that are just an accounting entry, are examples of fiat money. Fourth, the latest addition, is the digital or cryptocurrency form that operate on a technology called blockchain. These are highly volatile and the regulatory framework for their use is still evolving.

The period of commodity money ended with the fall of the Bretton Woods agreement. The state money that is printed by the central bank is currently the most common form of money. But in actuality, commercial banks use the idea of fractional reserve banking to create the bulk of the money that is in circulation in the economy. To be more precise, the vast majority of total money supply in major economies is made up of broad money; a different kind of money that is continuously being created and destroyed. As a result, we are currently using a form of money that was not witnessed before which is fiat in nature i.e., the credit money. The basis of every contemporary

country's monetary system is the interest-based fractional reserve banking system which makes it all the more important to delve into the benefits and drawbacks of the fractional reserve banking. This study aims to investigate differing viewpoints in the body of existing literature while also examining the theoretical underpinnings, historical development, and practical after-effects of FRB. This study is significant because it examines the consequences of fractional reserve banking (FRB), a fundamental component of modern financial systems, and provides insights into its impact on economic stability and ethical considerations. The study contributes to academic discourse by combining past research, providing a thorough understanding of FRB, and offering a nuanced perspective on its effects on financial stability, ethics, and economic systems.

2. REVIEW OF LITERATURE

2.1 Definition and History of Fractional Reserve Banking

The central bank mandates that banks hold a portion of their customers' deposits as reserves which is known as Fractional Reserve Requirement. To cover depositors' typical daily withdrawals, this reserve is necessary. For a deposit of USD 100, the bank must retain USD 10 in reserves if the reserve requirement is 10%. It thus makes it possible for commercial banks to print money. The history and concept can be traced back to the practices of the goldsmiths.

Phase I: In the past, goldsmiths offered safe storage for people who wanted to deposit gold coins. The Goldsmith provided a receipt to the depositor when they made a gold coin deposit. Because these receipts were in "bearer" form, the bearer could

always claim the face value in gold from the goldsmith. This practice is where modern checking accounts got their start, because the Goldsmiths' receipts functioned as crude demand deposits.

Phase II: When people realized they could exchange the Goldsmiths' receipts for gold whenever they wanted, their acceptance as a means of exchange increased. These invoices developed into a kind of finite symbolic currency that could be fully exchanged for gold coins. The withdrawals were continually offset by new gold deposits, meaning that only a small portion of receipts were actually redeemed. That is why there were not many day-to-day fluctuations in the Goldsmiths' gold reserves. Their actions were carried out without the original depositors' express consent. Due to this, there were two claims made on the same gold: the borrower's and the original depositor's. And so there was an increase in the money supply. In spite of the fact that the borrower had been lent the money, the original depositor may have been using the receipts as currency in transactions. Under the impression that the gold had been borrowed straight from the goldsmith, the borrower carried out transactions at the same time.

Phase III: The Goldsmith continued in this manner and became extremely wealthy. But rising public mistrust resulted in a unified call for the evacuation of all gold reserves. Negotiation was used to find a solution when it became impossible to meet such a large-scale withdrawal. It was decided that going forward, the depositors would receive a portion of the interest earned by the Goldsmith. This signified the birth of the idea of

financial intermediation. Even though the concept seemed reasonable, modern banking does not work like it did in the past.

Phase IV: Even after disclosing it to depositors, the Goldsmith still felt that the interest income was inadequate. With Europeans expanding trade and business in their colonies, credit became increasingly in demand. The amount of gold kept in the vault limited the amount of credit that was available. But the fact became apparent that lending the actual vault gold was not necessary. The Goldsmiths started producing extra receipts that were not backed by gold and lending them out as the public started to accept their own receipts as money. Fiat money, or money that is not backed by gold, was first introduced at this time. This resulted in a notable and swift increase in the money supply within the economy. This entire system was a combination of fiat money and symbolic money. The money, which seemed to appear out of thin air, was essentially a kind of debt.

Phase V: At first, suspicion was slow to develop because it seemed so unbelievable that bankers could appear to create money out of thin air. Still, there was bound to be suspicion given the sizeable fortunes that bankers amassed from interest payments on money they, in effect, created. Banks were unable to satisfy the demand from people who wanted to redeem every piece of paper money. Because of the public's diminished confidence, the banking industry collapsed. Nevertheless, unrestricted credit availability provided the foundation for the commercial growth of credit in Europe. The legitimization of money creation was contingent on its quantity being restricted in order to resolve the problem. Fractional reserve banking, in

which banks could lend more money than they actually held, was formally introduced at this point. Typically, the ratio was 9:1, which meant that for every 1 USD worth of gold in bank vaults, banks could lend 9 USD of newly created money, creating debt. At the same time, central banks were established under laws mandating that they support nearby commercial banks with gold in the event of their depletion. With time, the combination of central banking and fractional reserve banking became the dominant global monetary system.

2.2 Money creation and destruction under the Fractional Reserve Banking

Under the fractional reserve banking system, the bank receives a $1,000 deposit from Customer X. The bank is required to maintain a 10% reserve, but it lends out 90% of the amount, creating a loan that is treated as an asset. The money supply is thereby increased once from USD 1000 to USD 1900 due to this initial deposit of USD 1000. The total money supply grows exponentially as this process is repeated across several banks, with each loan generating new deposits. With a tenfold increase in the money supply, or USD 10,000, the initial USD 1000 deposit could eventually lead to a required reserve ratio of 10%. This demonstrates how, in the context of a fractional reserve banking system, a single deposit can result in a significant increase in the overall money supply.

Similarly, money can be destroyed with equal ease in the fractional reserve banking system. A lack of reserves causes the bank to be unable to lend as much money if a customer, such as Mr. Z, takes out USD 1000 and hoards it instead of depositing it back. For example, if S received a loan of USD 800 from this

withdrawal, the bank might not be able to renew this loan or make new ones when it matures. An overall decrease of USD 4,000 in demand deposit money—which was initially generated through expansive lending—is the consequence of the cascading effect across the banking system. Because Mr. Z chose to hoard money, the total money supply is reduced by USD 4000 even though he has USD 1000 in cash that was not previously part of the money supply because it is kept as bank reserves. Therefore, bank withdrawals, loan repayments, and borrower defaults all result in the destruction of money. When money is withdrawn, it loses some of the value that was initially created by lending a portion of deposits. The money supply is generally reduced when loans are repaid because it lowers the matching deposit, and when defaults remove bad debts. As such, the dynamics of loans extended, returned, and defaulted have an impact on the quantity of money in circulation in an economy.

2.3 Diverse Perspectives on Fractional Reserve Banking: A Comprehensive Review of Scholarly Insights

Under a fractional reserve banking arrangement, commercial banks are allowed to lend out the remaining amount of their deposits by only holding a fraction of them in reserve. This financial practise has sparked discussions regarding its overall impact on the stability of financial systems, its ethical implications and its effects on the economy. It has also been extensively researched and discussed in scholarly circles. The literature on fractional reserve banking offers a wide range of viewpoints and insights into the concept's theoretical foundations, historical development, and practical applications.

In his study, Jordan (2018) refuted the idea about banks creating the money out of thin air. It is argued that customers and not the banks are the rightful owner of deposits made through the banking system, which they can use for transactions. Customers create credit and money, while Central banks, though able to print money, are constrained by laws aimed at maintaining price stability. According to White (2012), a fractional-reserve banking system is not inherently unstable when the banking system is free from cumbersome legal restrictions and privileges. The US legal constraints weakened the banking system of the 19th century. Savings with fractional reserves pose the drawback of increased default risk, but banks benefit from holding fractional reserves by earning interest on the money they lend out. The depositor might not get their money back in full if a bank's investments lose money. Rossouw et al, 2015, challenges the common belief that central banks, like the South African Reserve Bank (SARB), are detached from society. Contrary to the notion that 'money is created out of nothing' for the benefit of specific groups, the study presents evidence from South Africa. It argues that the SARB's ownership lies with private shareholders but operates openly and transparently. Drawing on post-Keynesian insights, the study asserts that the Reserve Bank effectively oversees and regulates the system in the public interest, refuting claims of secretive control by particular interest groups

On the contrary, Bagus and Howden (2010) investigate the claims made by George Selgin regarding the optimal way to preserve monetary stability: a fractional reserve free banking system. There is a worry that the assertion that negative clearing balances restrict the growth of credit in such a system

may not be as accurate as first believed. Extended clearing times and agreements between banks are two examples of factors that can genuinely permit unchecked credit growth. The free banking theory causes economic cycles to get more intense when more money is issued because it conflates growth in money held with real savings. A central bank paradoxically emerges as a natural by-product of the fractional reserve free banking system because these economic cycles also provide an incentive to establish a coordinating agent, such as a lender of last resort. Murphy (2019) expands this discussion by Bagus and Howden (2010) by specifically addressing two points raised by FRFB proponents. According to the first claim, possessing banknotes implies lending money to the financial institution. For the stability of the banking system, critics claim that this could be dangerous. According to the second argument, the system's stability is demonstrated by past eras of comparatively free banking. While the evidence may support this theory, some disagree. In the banking industry, there has also been a centuries-long debate between 100 percent reserves and full reserves (FR). As per Musgrave (2021) two main issues prevent economists from being persuaded by the case for 100% reserves. First of all, the way the banking system is currently set up, private banks are able to take on risk and profit while passing losses through to taxpayers—a strategy that works well for the banks. To keep this system in place, they heavily fund lobbying efforts. Second, economists are typically conservative in their thinking and are resistant to radical ideas. This is why they are often against 100% reserves. Certain criticisms of 100% reserves made by economists are deemed feeble. As a fundamental human right, the study advocates for the

availability of a totally secure form of money, debating whether it should be issued by the government (i.e., 100% reserves) or privately issued money that is partially backed by the government and as per the author state-created money is favored.

Concerning the issue of credit expansion, Allen and Gale (1999) expressed that the opening of financial markets has caused asset price bubbles on several occasions in recent years. These bubbles burst, causing economic downturns and banking crises. It is suggested that uncertainty about credit expansion and the risk-shifting issue arising from agency relationships within financial intermediaries are the combined causes of these bubbles. Preventing asset price bubbles and reducing the effects of banking crises that ensue from these bubbles on the real economy are the two main policy objectives that are emphasized. Following COVID-19 pandemic, the financial crisis has ignited a broad debate about financing strategies, with Islamic financing coming up as one possible solution, as per Ishaq and Mahjabeen, (2022). Their study argues that the inherent characteristics of money, rather than its use, ultimately lead to financial hardship. The fractional reserve banking and fiat money used in the current monetary system have a substantial impact on the composition of the economic ownership structure. The study looks into this by looking at a sample of 25 banks from the Karachi Stock Exchange 100 Index between 2008 and 2012. It utilizes models of linear regression and correlation coefficients for panel data analysis to identify relationships between variables. According to the research, the creation of credit leads to money expansion, inflation, and nonperforming loans, which all affect the economy's ownership

structure. In the past, a study by Cochran et al. (1999) opined that recessions are particularly likely to occur when there is an imbalance in the money supply. Understanding this concept is crucial for comprehending how the economy recovers from downturns, or what Austrian economist Hayek referred to as 'Hayekian secondary deflation.' The real business cycle theory admits that the economy can experience ups and downs due to real-world events, such as technological advancements. It does, however, occasionally find it difficult to explain why economic downturns occur. This is where the theory of the Austrian business cycle is relevant. Economic cycles, according to Austrian theory, may be exacerbated by the creation of credit as well as malinvestment—investments made in the wrong places. The Austrian Business Cycle Theory offers a more thorough explanation of the boom (prosperity) and the required correction (recession) in the economy by taking into account both the positive aspects of economic growth (healthy) and the negative consequences (unhealthy). Overall, it provides a more comprehensive understanding of the dynamics of economic cycles, thereby enriching the real business cycle theory.

Hülsmann (2003) highlighted distinctions among three types of money-related documents: fractional-reserve money titles, easily accessible IOUs (I Owe You), and fully backed money titles. The ongoing effort to protect and advance fractional-reserve banking has been significantly influenced by the confusion surrounding these distinctions. This confusion has reached a point where monetary economists and financial analysts are now forbidden from granting genuine money titles, and their language has become warped. This circumstance sheds light on the historical relationship between fractional-

reserve banking and its close ties to the government. Furthermore, it elucidates the reason behind fractional-reserve banking's inherent tendency to cause economic imbalances, culminating in cyclical economic peaks and troughs (busts). In simpler terms, fractional-reserve banking has persisted due to a misunderstanding of these various financial instruments, leading to periodic economic fluctuations.

Scholars examining the ethical implications of fractional reserve banking, frequently express criticism not only towards its potential to cause inflation, but also towards the difficulty in fulfilling all legal obligations. Haymond and Beach (2020) investigate fractional reserve banking and its associated institutional structures that contribute to issues such as bank runs and inflation (e.g., legal tender laws and central banking). The objective is to evaluate whether fractional reserve banking, by itself, is inherently unethical. Bases on an analysis of existing scholarly viewpoints, the inference drawn is that fractional reserve banking might not possess an inherently unethical nature, especially when separated from central banking and legal tender laws.

Rozedd (2010) challenges the notion that fractional-reserve banking is inherently flawed in a free market environment. Insinuating that fractional-reserve banking practices are not intrinsically illegal, the study highlights that these actions are voluntary and known to all parties. It argues that judgments about theft, fraud, or counterfeiting are arbitrary and unrelated to the idea of liberty. Within the broader framework of liberty and voluntary exchanges in a free market, the study emphasizes the significance of allowing individuals the freedom to choose

their financial arrangements, even if those arrangements involve fractional-reserve banking.

Similarly, Chari and Phelan (2014) argue that individuals and businesses might be motivated to develop their own payment systems if they perceive that the government's control over the money supply is insufficient to prevent deflation, or a decline in overall price levels. These alternative systems use partially backed bank deposits with accrued interest. These alternative systems, however, are susceptible to bank runs—a scenario in which numerous individuals attempt to withdraw their money simultaneously—in a market that is open to competition. These runs may have detrimental effects on the community as a whole, making them socially costly. The issue lies in the fact that banks and individuals fail to fully account for these social costs, which may outweigh any benefits. The argument suggests that the social benefits of fractional reserve banking—in which banks hold only a portion of deposits as reserves—decline as communication technologies advance. People and banks continue to use these systems, though, since private advantages may still exceed private costs. The study proposes mandating banks to maintain 100% of their reserves, or all of the money that customers have deposited. This would mitigate financially damaging bank runs and the hazards related to fractional reserve banking.

The present banking system, which includes both conventional and Islamic banking, is examined by Dangulbi, et al (2013) in terms of fractional reserve banking (FRB). Employing the FRB framework, it investigates whether modern Islamic financial institutions align with the goals of Islamic law (*maqasid al-*

shariah). Based on theoretical justifications drawn from the Qur'an and Hadith, the study argues that fractional reserve banking is incompatible with shariah objectives and is, therefore, forbidden from an Islamic standpoint. The study also covers opinions of certain academics supporting the current system. The study concludes that in order to fulfil the goals of Islamic law, Islamic financial institutions ought to stay away from this system and function within a monetary framework that adheres to Islamic principles.

In order to drive the philosophy in practical operation, whether based on the Fractional Reserve Banking System (RBS) or 100 percent RBS, Syamlan (2016) analysed the challenges in deploying the 100 percent RBS and compare the epistemological bases to the mindset of Islamic banks. Considering the opinions of Islamic scholars and an epistemological analysis of money and the business cycle, 100 percent RBS should be the optimal option for Islamic banks. Sovereign Money, Narrow Banking, Limited Purpose Banking, and Pure Commodity Money are the four categories of 100 percent RBS. In order for the theory of 100% RBS to be applied for the benefit of Islamic banks, additional philosophical work needs to be done to select and fortify one of the types before implementing it into the economic system.

3. RESEARCH METHODOLOGY

This study utilizes a literature-based methodology to draw insights about Fractional Reserve Banking (FRB). This approach involves conducting a comprehensive research and analysis of existing academic literature to integrate ideas and empirical evidence related to FRB. The initial phase of the method

involves identifying significant themes, theoretical frameworks, and empirical research within the FRB literature. To ensure a full investigation of the topic, a methodical study is carried out across a variety of sources, including books, conference papers, peer-reviewed articles, and other academic publications. Through critical analysis and synthesis, the identified literature is evaluated with the goal of identifying overarching patterns, essential concepts, and areas of agreement or disagreement in the field of FRB. This literature-based approach aims to elucidate the evolution of FRB, including its theoretical foundations, historical advancements, and practical applications to financial systems. By drawing on the collective knowledge buried in the current literature, this study aims to provide valuable insights to the understanding of FRB, shedding light on its multiple elements and providing a nuanced perspective on the ramifications and arguments surrounding this banking practice.

4. FINDINGS AND DISCUSSION

Fractional reserve banking, a fundamental component of contemporary financial structures, allows banks to lend money above their real reserves, thereby stimulating economic activity. Despite inherent risks such as the possibility of bank runs and inflationary pressures, this mechanism plays a crucial role in fostering economic growth. Navigating the complex terrain of fractional reserve banking within modern financial systems requires striking a careful balance between promoting economic development and managing systemic risks.

To increase earnings, commercial banks capitalize on their ability to create money at low cost. This leads to a gap between the actual economy and the financial sector, where the latter's ability to provide goods and services is outpaced by the former's

explosive expansion in debt and money. The equation of exchange (MxV=PxY) demonstrates the link between money supply, velocity, price levels, and real output. Inflation, a feature of fractional reserve banking system, occurs where excessive money supply increases relative to real GDP growth, leading to more money competing for the same products and driving up prices.

At the macroeconomic level, money is now the balance sheet equivalent of interest-bearing debt, which leads to a constant and growing debt burden for people, companies, and governments. This link between money and debt is the foundation of the indebtedness of private citizens, businesses, and the government. However, a rising debt-to-equity ratio adversely impacts a company's capital structure. When it becomes intolerable, a level is reached and businesses in the economy would fail and can take no more of it. When taken as a whole, it increases national debt. That's the reason Japan, a highly productive country with highly intellectual and diligent citizens, has seen its economy decline over the past almost twenty years. Such individuals should be able to create in large quantities and lend to others whatever surplus money they may save in the real economy. However, in a system built on compound interest, Japan has emerged as the nation with the highest overall debt relative to GDP, and it is unable to escape the liquidity trap even in the event of a zero percent interest rate.

When financial institutions create money out of thin air for company loans, the payback schedule that follows is spelled out in the contract and is seen as an apparently risk-free cash flow inside financial frameworks. However, businesses remain inherently unpredictable, even in spite of this financial

certainty. Consequently, businesses need to proactively participate in competitive market dynamics in order to service debt. In addition, they face a natural financial shortage because interest is not included in physical currency, which has shaped the modern monetary environment.

The modern system generates a 'business cycle' that is unrelated to actual economic forces and is fuelled by the growth and fall of bank money. Starting with limited labour and capital resources and a fixed productivity level, there ultimately comes a point at which the real sector reaches its peak and unemployment is at its lowest. Real production cannot be increased any more after the economy has reached its potential GDP. As a result, the financial industry struggles with excess capital that has few options for useful use since there aren't many good investment prospects. This cycle leads to excess liquidity in the financial industry, which flows into sectors, especially real estate and equities, which have easier access to bank credit, against a backdrop of low or declining interest rates. Absurd price levels in such areas, especially in the stock market, eventually force investors—individuals as well as corporations—to reassess and modify their holdings. The significant decline in stock and real estate values, as well as the overall price level, is caused by this portfolio rebalancing. A decline in the stock and real estate markets would put some people and businesses in financial trouble, which would manifest as non-performing loans (NPLs) and bankruptcy. Through a multiplier effect, NPLs erode the money supply through the reverse process of money creation, thus reducing the money base and loanable funds. In response, banks may seize collateral and demand early loan payback. Employers may begin to lay off employees in order to free up funds for debt repayment. This shifts an issue that was first plaguing the

financial sector to the actual economy. Through a multiplier effect, retrenchments would reduce aggregate demand and decrease the economy, leading to more unemployment, company bankruptcies, etc. This economic unpredictability weakens consumer and corporate confidence, discourages long-term planning and investment, and can irreversibly harm a firm's resources and commercial connections if they are surrendered to a recession. Although economic downturns are typically succeeded by recoveries, they are often followed by a rebound, and some people and companies suffer greatly in the process. These individuals' data, especially those who entered the stock and real estate markets during the height of their respective rises, might not be included in any aggregate financial or economic data. These investors can become significant borrowers in the economy. This has the economic ramification that, excluding these people and companies from declaring bankruptcy, the financial industry, which gave the loans to invest in these industries, would be entitled to their future output of products and services.

Banks are usually the ones that gain from the creation of purchasing power when they generate money out of nothing. They don't have to take any risks or give anything in exchange in order to access actual assets. The transfer of wealth from the general public to banks is paid for by the whole community, but throughout this process, the value of money decreases. However, none of this is done with the original asset owner's knowledge or approval. For instance, if a businessman uses a loan to deal with freshly produced money and acquires ownership of any real assets, the value of the wealth transferred plus the inflation-related loss of buying power equals the amount of the loss.

The use of fractional reserve banking results in resource misallocation and wealth inequality. Every member of society, affluent or poor, is subject to inflation, a hidden tax brought on by the ongoing expansion of the money supply, as has already been mentioned. An individual's buying power eventually diminishes if their rate of income growth is less than the average yearly rise in prices. It's possible for some people to have less purchasing power than they need to survive. By selecting the most creditworthy borrowers, the newly produced money also goes to the wealthy first. Furthermore, the amount of interest charged concentrates wealth in the hands of a tiny minority and reduces the quantity of money that is available for economic circulation. Thereafter, there is competition among the members of society for the scarce money in circulation. Consequently, a portion of the economy continues to see a decline in real income and a widening income distribution gap (Meera and Larbani, 2006). Poverty is constantly and inevitably created by this system.

Excessive exchange rate volatility, which encourages currency speculation and arbitrage is a significant issue within the fiat monetary system. The continuous volatility of currency rates deprives policymakers of a useful anchor and adds another level of risk and uncertainty to the markets. The volatility makes it challenging for business owners and investors to create trustworthy forecasts for the future. Those who are knowledgeable about financial markets, economic cycles, etc. are the speculators. They intervene to take advantage of circumstances when they observe a country nearing the top of an economic cycle and exhibiting indicators of an impending economic slump. Speculators enter the market to short the currency during a recession to reduced demand for a country's currency, which would lead to a decline in value. An assault on

the currency would result from speculators acting together. A persistent onslaught may be challenging for the central bank to match, even though it may be countered to maintain exchange rates within acceptable bounds. This is a result of speculators collectively amassing enormous holdings. A nation on the edge of a severe economic disaster could experience it. While not the primary cause of a crisis, the aggressive collective activities of speculators do exacerbate the situation during a crisis. While some argue that speculators attacking a currency is unethical, existing financial systems in countries facilitate speculative, manipulative and arbitrage activities in the foreign exchange market.

There are several ways that fractional reserve banking affects environmental, social, and governance (ESG) factors. The system is not without risk, since the quest of profit in a setting with fractional reserves may compel investments in businesses or activities that are harmful to the environment or exhibit irresponsible social behaviour. Fractional reserve banking may have an adverse effect on the environment by funding initiatives that exacerbate ecological issues like deforestation and climate change. Socially, the system may unintentionally foster businesses that engage in dubious labour practices or pose ethical dilemmas. In terms of governance, the built-in leverage may magnify the effects of bad financial choices, thereby resulting in systemic crises with wider societal ramifications. Since developing countries are often non-industrialized, they would use abundant natural resources or agricultural goods to pay off their debt. Therefore, nations possessing forests would often want to deplete them in their pursuit of repaying their foreign debt. Global warming and climate change have been associated with this type of

deforestation. Numerous scholars have offered thorough proof that foreign debt contributes to deforestation.

Since the implementation of the floating exchange regime in the 1970s, on average of ten countries have been impacted annually by the 425 systemic crises that the IMF has recognized. These crises are the result of the sum of the banking (145), currency (208), and sovereign (72) crises (Lietaer, Arnspenger et al., 2012). The recurrent instances of economic distress may provide as factual support for the hypothesis that the current financial and monetary system is inherently unstable and pro-cyclical. A wide spectrum of crises in 20 nations, including five industrial and fifteen developing ones, are studied by Kaminsky and Reinhart (1996). Significant growth of credit and financial deregulation were typical preludes to most of the crises that were examined. These were followed by an average annual increase in stock prices of almost 40% over what would normally occur. Real estate and other asset values also saw notable increases. The stock and real estate markets eventually collapse as the bubble bursts. Consequently, the bursts resulted in a significant fall in output and the economic recession.

The financial industry has significant patronage influence over other members of society due to its capacity to produce money and then lend it out. This power essentially manifests as the ability to select which businesses to fund. More sinisterly, it manifests as endorsing political ideology consistent with the goals of financial institutions. For many years, the main lending countries have profited from their ability to exert patronage on debtor countries. Developing countries who take out loans from global financial organizations such as the World Bank and IMF frequently don't realize that all of these loans are

unrepayable. As a result, some of these countries end up in default and are likely to continue stealing from their natural resources in an effort to pay back their debts. All of them aim to enslave the emerging and underdeveloped nations by trapping them in a cycle of debt. This enslavement differs from previous enslavement in that the slave may be unaware of his situation. The slave continues to labour diligently, believing that he or she is working for himself or herself, his or her nation, or community. However, by deceptive economic means, the majority of the results of his or her labour are transferred to the slave-masters, leaving just what is deemed necessary for their survival. Debtor nations are obligated to listen to their creditors during this process, even if it is against their national interests, thus attacking the nation's sovereignty.

4.1 Islamic Banking under the Fractional Reserve Banking

The three key components make up the present monetary system include: interest, fractional reserve banking, and fiat money. The advent of Islamic financial institutions more than three decades ago is one of the most significant events in the global financial services sector's recent history. It emerged in reaction to the people's desire that all aspects of their lives be governed by *Shari'ah* principles (Siddiqi, 2006). In contrast to traditional lending-based finance, the Islamic financial system fosters partnerships and equity-sharing financing as well as risk-sharing, innovation, and entrepreneurship. It attempts to eradicate the one problematic aspect of the present financial system by establishing several Shari'ah-compliant modes of funding. However, as we can see from the system's mechanism, fractional reserve banking is fundamentally interwoven with an interest-based, collateral-dependent system. Islamic banks find it very challenging to successfully avoid the interest aspect

since they too function under the same "umbrella" framework. As a result, the two systems have begun to converge. The phrase convergence has become more prevalent in the more recent Islamic financial literature. It refers to the movement of two things in opposite directions such that there is a constant tendency for the distance between them to get smaller. Islamic finance has profited from convergence in many ways, which has aided in its quick expansion and prevented it from being isolated from international frameworks. However, the fundamentally unidirectional nature of this convergence presents a challenge. Due to its size and maturity, the conventional system exerted a great magnetic pull on the nascent Islamic system, which was difficult to resist. The pressures for unidirectional convergence have led specialists and scholars to adapt *Shari'ah* standards to accommodate the needs of modern finance and its more wilful procedures. As a result, rather than functioning as a rival system to the conventional financial system, Islamic finance today functions more as an addition to it, with Islamic products being viewed as a subset of its offerings (Hasan, 2010). The utilization of interest rates by Islamic banks' as a reference rate for their marked-up-based products or benchmark to price trade financing instruments and Islamic leasing funds marks a significant milestone in this convergence process. Historically, a number of variables had a role in the development of the current practice. At first, in order for Islamic financial institutions to participate actively in the global financial business, they needed a standard reference rate. Second, conventional banks need a comparable benchmarking against their funding costs in traditional markets when they entered the Islamic financial markets. Ultimately, in a dual banking system, the common rate became a competitive tool to attract depositors (Iqbal, 2002). The interest rate is only

being used as a benchmark here, thus the majority of scholars have nothing against its usage. However, it is crucial to recognize that there is a significant distinction between the demanded and intended benchmarks. The convergence hypothesis states that when the disparities between the two financial systems narrow, the interest rate will become the required rate in Islamic finance rather than the targeted rate, even if interest rates are used as targets in Islamic financing. Some contend that by utilizing the legal mechanism to avoid riba, all Islamic financial instruments are just replicas of their conventional counterparts. The establishment of a genuine Islamic financial system would bring about these changes. It would guarantee socioeconomic fairness, which would have an influence at the core of the monetary system.

In fact, the Islamic Banking mode can be more attractive to the bankers as per Meera and Labrani (2006). As interest is not part of the principal amount under the conventional arrangement but the profit is added up front in the Islamic system. The balance of the Islamic system may still exceed the initial funding even after ten years. In the conventional method, the loan balance never goes over the principal amount, therefore this doesn't occur. The end result is that the Islamic approach may appeal to bankers more under the fractional reserve banking system as mentioned. Under the fractional reserve system, Islamic banking could be even more detrimental to the economy due to probable socioeconomic drawbacks.

Moreover, there are several violations of Shariah in the present operations of Islamic banks under FRB framework which were highlighted by Dangulbi et al (2012). Preserving wealth is a primary goal of Shariah, which seeks to ensure both individual and communal prosperity. However, Fractional Reserve

Banking (FRB) undermines this goal by exacerbating the inequality between the wealthy and the poor. In the FRB system, money creation through lending helps just a small group of people, typically bank owners, while the remainder of the population suffers. This contradicts the maqasid al-shariah, which seeks to improve the community's general well-being. It undermines individual sovereignty, a key goal in Shariah. Concentration of wealth in the hands of a select few, particularly institutions responsible for money production, negatively impacts people's faith, well-being, intellect, and future generations. This is consistent with Prophet Muhammad's (PBUH) tradition, which strongly shows an association between poverty and the likelihood of unbelief (kufr) (Baihaqi and Tabarani). The transfer to wealth via asset confiscation triggers a chain reaction of societal disasters such as robbery, corruption, theft, adultery, and other forms of social breakdown. This results from a violation of the principles of *maqasid al-shariah*. *Shariah* also promotes justice and fairness in human dealings. This is principle is violated by lending customers' money to other clients without their explicit authorization or approval. This conduct of FRB is unethical and violates Shariah norms.

Again, as per Meera and Labrani (2009) the concept of money creation through Fractional Reserve Banking (FRB) is defined as the creation of purchasing power from nothing, resulting in unjust transfers of asset ownership from the general economy to banks. This transfer is mostly funded by the entire economy through inflation. It entails obtaining ownership without the legitimate acquisition of assets by human labour, without the knowledge or approval of the original owners. This is against Islamic ownership norms by imitating theft and integrating aspects of *riba*. Islamic governments should avoid creating fiat

money, as it is a form of seizing people's assets without remuneration, regardless of wealth. Examining the epistemological study of money and the business cycle in the context of Islamic banking, Syamlan (2016), together with the opinions of Islamic scholars, points to the advantages of a 100% Reserve-Based System (RBS) over a Fractional Reserve-Based System (FRB). This preference is based on how the Islamic intellectual framework evaluates *maslahah* (benefit) and *mafsadah* (damage), and the analysis shows that an RBS of 100% is thought to be more beneficial for Islamic banks.

5. CONCLUSION

The study aimed to reinitiate a comprehensive discussion on Fractional Reserve Banking. It explores the historical development of FRB, examines its workings, and evaluates its impact on various economies. Furthermore, the contemporary monetary system is examined from the perspectives of numerous researchers, exhibiting a range of opinions from support to opposition. The findings highlight the effects of FRB, shedding light on themes such as chronic inflation, the business cycle, debt, sovereignty challenges, and wealth transfer. The study expanded its examination to include the functioning of Islamic banks inside the current monetary system and to determine the appropriateness of including Islamic banks into the FRB system. It also aimed to shed light on whether aligning Islamic banking practices with the FRB brings about any ethical or operational issues, thereby providing useful insights to the ongoing discussion about the intersection of Islamic finance and conventional banking systems.

REFERENCES

Allen, F., & Gale, D. (1999). Bubbles, crises, and policy. Oxford review of economic policy, 15(3), 9-18.

Bagus, P., & Howden, D. (2010). Fractional reserve banking: Some quibbles.

Bank Negara Malaysia. (2014). Monthly Statistical Bulletin March 2014: Monetary Aggregates: M1, M2 and M3.

Chari, V. V., & Phelan, C. (2014). On the social usefulness of fractional reserve banking. Journal of Monetary Economics, 65, 1-13.

Cochran, J. P., Call, S. T., & Glahe, F. R. (1999). Credit Creation or Financial Intermediation? Fractional Reserve Banking in a Growing Economy. The Quarterly Journal of Austrian Economics, 2(3), 53-64.

Cochran, John P. and Call, Steven T. (2000). Free Banking and Credit Creation: Implications For Business Cycle Theory. The Quarterly Journal of Austrian Economics Vol. 3, No. 3, pp. 35–50.

Cochran, John P., and Call, Steven T. (1999). The Role of Fractional-Reserve Banking and Financial Intermediation in the Money Supply Process: Keynes and the Austrians. The Quarterly Journal of Austrian Economics, Vol. 1, No. 3, pp. 29–40.

Dangulbi, S. M., Salleh, A., Meera, A. K., & Aziuddin, A. (2012). Fractional Reserve Banking and Maqasid Al-

Shariah: An Incompatible Practice? Available at SSRN 2071164

Hatch, Charles T. (2005). Inflationary Deception: How Banks Are Evading Reserve Requirements and Inflating The Money Supply. 1525 Mill Creek Way, Gardnerville, NV 89410.

Haymond, J., & Beach, R. (2020). The Morality of Fractional Reserve Banking. Journal of Markets & Morality, 23(1).

Hülsmann, J. G. (2003). Has Fractional-Reserve Banking Really Passed the Market Test?. The Independent Review, 7(3), 399-422.

Ishaq, H. M., & Mahjabeen. (2022). Impact of Fractional Reserve Banking System on the Ownership Structure of Economy. Pakistan Journal of Social Sciences, 35(2), 619-628.

Jordan, T. J. (2018). How money is created by the central bank and the banking system. Speech at the Zürcher Volkswirtschaftliche Gesellschaft, Zurich, 16.

Kaminsky, G. and Reinhart, C. (1996). The Twin Crises: The Causes of Banking and Balance-of-Payments Problems. Working paper, Board of Governors of the Federal Reserve, Washington, D.C.

King, Robert G. and Plosser, Charles I. (1984). Money, Credit, and Prices in a Real Business Cycle. American Economic Review, American Economic Association, Vol. 74(3), pp. 363-380, June.

Larbani, A. K. M. M. (2009). Ownership effects of fractional reserve banking: an Islamic perspective. Humanomics, 25(2), 101-116.

MD, S., Arfah, S., Meera, A. K. M., & Aziuddin, A. (2013). Fractional Reserve Banking and Maqasid al-shariah: An Incompatible Practice.

Meera, A. K. (2002a). The Islamic Gold Dinar. Subang Jaya, Malaysia: Pelanduk Publications.

Meera, A. K. (2004). The Theft of Nations – Returning to Gold. Kuala Lumpur: Pelanduk Publications.

Meera, A. K. and Larbani, M. (2006). Part I: Seigniorage of Fiat Money and The Maqasid Al-Shari'ah: The Unattainableness of The Maqasid. Humanomics, Vol. 22, No. 1.

Meera, A.K. and Larbani, M. (2009). Ownership Effects of Fractional Reserve Banking: An Islamic Perspective. Humanomics, Vol. 25, No. 2.

Meera, Ahamed Kameel Mydin (2009). Real Money – Money and Payment Systems from an Islamic Perspective. Kuala Lumpur: International Islamic University Malaysia.

Murphy, R. (2019). More than quibbles: Problems with the theory and history of fractional reserve free banking. Quarterly Journal of Austrian Economics, 22(1), 3-25.

Murphy, R. P. (2010). Is Our Money Based on Debt?. *Mises Institute*.

Musgrave, R. S. (2021). Our absurd fractional reserve bank system.

Rossouw, J., Padayachee, V., & Bordiss, B. (2015). Central banks and fractional reserve banking: money creation out of nothing?. African Review of Economics and Finance, 7(2), 105-131.

Rothbard, Murray. N. (2002). History of Money and Banking in the United States: The Colonial Era to World War II. Ludwig von Mises Institute, Auburn, Alabama, pp. 155-168.

Rozeff, M. S. (2010). Rothbard on fractional reserve banking: a critique. The Independent Review, 14(4), 497-512.

Salerno, J. T. (2012). A Reformulation of Austrian Business Cycle Theory in Light of the Financial Crisis. The Quarterly Journal of Austrian Economics, Vol. 15, No. 1, pp. 3–44.

Salin, P. (2001). In Defence of Fractional Monetary Reserves. Paper prepared for the Austrian Scholars Conference, Mises Institute, Auburn, March 30-31,2001.

Syamlan, Y. T. (2016). The Epistemological Perspective of Fractional Reserve Banking and Full Reserve Banking: Where Islamic Banking Should Stand?. Tazkia Islamic Finance and Business Review, 10(1), 271341.

White, L. (2012). Fractional Reserve Banking. Mercatus Institute: June, 28.