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Full reserve system and the Maqasid Shariah

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ABSTRACT

The essence of the monetary system today is in using the fractional reserve banking system. Nonetheless, this system is not free of critics such as the fraud of making loans and creating deposits out of nothing which are argued to create distortion to the economy. Since 1930s, many economic scholars have debated the use of full reserve system as an alternative tool of monetary system.Islamic scholars also argue and reject the working of fractional reserve banking system and propose the idea of full reserve system. From the view of Islamic scholars, the full reserve system should be applied to avoid the *riba'* in the monetary system. Hence, this study tries to assess whether the use of full reserve system can attain the *Maqasid Shariah* to support the alternative banking system. Using the argument on fractional reserve system, discussion on the concept of full reserve system, analysis of the impacts of full reserve system and the support from *Quran* and *Hadith*, this study concludes that the injustice and *riba'* can be avoided under thefull reserve system, hence,attaining the *Maqasid Shariah*.

1. Introduction

The essence of the monetary system today is in using the fractional reserve banking system. Nonetheless, there appears to be little agreement among researchers on the use of of fractional reserve banking. Fractional reserve banking has been criticized asthe fraudulent mechanism of making loans and creating deposits, whereby banks manufacture new money effectively 'out of nothing'**.**Most of the conventional scholars (Simon, 1934; Fischer, 1935; Friedman, 1948; Litan, 1987; Pierce, 1991; Hillinger, 2010) argue that the fractional reserve system creates many sources of problems such as inflation and seignorage. These conventional scholars support the full reserve system on the basis of economic and ethical reasons.

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While Islamic economic scholars are also against the fractional reserve banking system. The proposal of full reserve system as an alternative of current system has been highlighted by Iqbal and Khan (1981), Choudhury (1997 & 2004), MydinMeera (2006), Siddiqui (2008), as well as Ascharya and Sakti (2008). Overall, they argue on the process of fractional reserve banking system which brings more harms than benefits. For example, the extra purchasing power obtained from the money without assuming risk has the element of *riba*' that is not parallel to the Islamic teaching.

Recent studies such as Mydin Meera and Labarni (2009) and Sani et al. (2013) specifically discuss on the incompatible practice of fractional reserve system. Their studies found the fractional reserve system would harm the banking system and economy as a whole. Thus, this practice is against the *Maqasid Shariah* or the goal of Islamic law. As the fractional reserve system is claimed by previous and recent Islamic scholarsto benot in parallel with Islamic teaching, this study attempts to assess whether the alternative banking system (full reserve system) as proposed by many scholars can attain the *Maqasid Shariah*.

This paper is organized as follows: Section 1 highlights the introduction. Discussion on the injustice offractional reserve banking system is carried out in Section 2. Section 3 explains the concept of full reserve system. Section 4 follows with the discussion on the impact of full reserve on the banking system. Section 5 assesses the full reserve system and the attainment of *Maqasid Shariah* and the last section provides the conclusion.

2. The injustice of fractional reserve banking system

Modern banking is based on the fractional reserve banking system. This means that banks need to keep a fraction of their customers' deposit as a reserve, while the rest can be lent out. Banks have the capability to lend out money and cash because at any given time, the depositors will only need or demand a small fraction of deposits the banks are holding on their behalf. The fraction of the reserve requirement is determined by the central bank which thus impacts on the banking system and subsequently on the economy.

The process of credit creation through fractional reserve banking allows distortion of demand and supply where manipulation of money supply exists. In this case, the bank will use deposited money from savings to grant credit to others. With the manipulation of the money supply, people believe they have more money and will consume more. De Soto (2008) stated that credit expansion granted from credit will increase factors of production but does not increase the ratio of saving. Thus, a monetary expansion of deposit will be created outside the banking system where there will be more spending for productive factors but less saving to ensure the bank has enough fund to give more credit to borrowers.

Adding to that, a mismatch of short term deposits might be used to finance long term credit. Depositors reduce their consumption in certain periods to save, hoping to earn some profit from interest rates. Banks will grant loans to the borrowers from deposited savings. Fractional reserve banking works with the belief that depositors are unlikely to withdraw all their money from their saving. However, if there is a mismatch of duration in lending and borrowing and if depositors attempt to withdraw more funds than available reserves, fractional reserve banking cannot possibly pay the money as promised. As a consequence, the entire banking system could crash.

On the other hand, Diamond (1983) regards a bank as an entity that distinguishes good potential borrowers from bad ones. Nevertheless, in reality, even though there are monitoring activities, it is not easy to distinguish the borrowers who would default on loans. Thus, this is a critical part in bank lending decisions. If the borrowers default, the bank will suffer the loss of the borrowed money together with the expected profit from the interest rate. In a situation of bank runs, the bank may not have enough funds on hand, which could be a serious problem and cause the bank to become insolvent. An example is the financial crisis of 2007 in the United States banking system where a crisis was triggered by a liquidity shortfall. It has resulted in the collapse of large financial institutions.

The credit creation process increases liquidity in the market. As more money is created it may bring about more liquidity. According to the Austrian school, a fractional reserve system is deceitful because it promises to pay amounts in excess of what actually exist. However, the liquidity created from the money creation process can be justified by the transfer of wealth unjustly and indiscriminatingly among the subjects of the economy. The ability of the banks to keep money moving and to create debt in the population results in the formation of ongoing profit from the interest rate. Since money creation requires loans from the banking system, people are required to go into debt in order for any new money to be created. This situation will violate money as the means of exchange.

3. The concept of full reserve system

The concept of full reserve system is the 100 percent mobilization of bank deposits in commercial banks into productive assets, goods and services in exchange. Choudhury (1997, 2004) defined the system as based on the unicity concept (*tawhid*) with knowledge induced factors related to the money and real sectors. This system stresses that money in the economic system must be fully utilized and will not be kept by commercial banks as a reserve. Nonetheless, if there is any balance of bank deposits which is not being used in the economy it must be returned to the central bank. This implies that the commercial banks are unable to direct funds into interest bearing savings. The accumulated amount of excess funds after resource mobilization by the commercial banks that is held at the central bank should be supported by stock of gold. Therefore, multiple credit creation could be reduced and the process goes back to the central bank as there is zero excess reserve with the commercial banks.

The source of instability in the economy can be from money creation. Inherent instability will cause inflation and volatility in business cycle. In order to manage the problem of inflation, Friedman (1948) believes the logic for full reserve system is by stabilizing the deposit currency and deposit reserve ratio. It is parallel to the suggestion of Choudhury (2004) to get more stabilized currency by using the backed up asset. As a consequence there is no purchasing power created and there is no inflationary effect. Under the full reserve system the price will likely to fall gently overtime. Nonetheless, if inflation occurs, Shakespeare (2006) believes it could be sensible at times to remove the restraint of 100 percent reserve.

Overall, the commercial banks still act as saving and investing institutions. The full reserve system based on Choudhury (1997, 2004) promotes investment rather than saving. Besides that, the full reserve system has led the central bank to have less need to control the economy via interest rates. As it relies on the real sector, the volume of money will be the main factor to the economy. Thus, central bank can directly control the money supply in the economy.

4. The impact of full reserve on banking system

Modern conventional banking mixes two different operations with very different effect which are loans and deposits. Banks act as loan brokers from the deposits they receive and pay interest to the depositors. The banks then lend out these deposits at higher rates and get profit from the difference, as well as from the creating of deposits via the fractional reserve system. Thus, using the full reserve system will give the different impacts on the banking system such as:

4.1 Low Risk to the Depositors

Channeling funds from depositories to lending subsidiaries for bank to earn the income from interest rate is prohibited. In addition banks are prohibited from bailing out risky affiliates using demand deposits. This prevents the failure of depository subsidiary should the lending subsidiary fail. Banks will therefore be a risk averse than risk taker. In the case of deposit taking, the bank will provide safety for depositor's fund. As a full reserve requirement acts like the saving function, this provides a relatively low risk to depositors.

4.2 Avoiding bank runs

Related to the low risk deposit banks with full reserve, institutions could provide custody and safekeeping while charging the corresponding market price for this service. As late as the twentieth century, court decision in Europe has upheld the demand for a 100 percent reserve requirement, the embodiment of the essential element of custody and safe keeping in the monetary irregular deposit (De Soto, 2009). It avoids the risk of bank runs. For example, normally the reserve ratio is defined as follows:

$$Reserve\ Ratio = \frac{The\ money\ held\ by\ the\ bank}{The\ money\ deposited\ by\ the\ bank} \tag{1}$$

From equation (1), the higher the reserve ratio, the smaller the risk of a bank run. If the ratio is 100% (full reserve) this implies that even if ever single customer demanded to take out their money, the bank will have it all available. Therefore, this is clearly a safe form of banking.

4.3 Act as financial intermediaries

There are always arguments that the deposit taking activity of a full reserve banking system is generally less profitable than the lending activity. In this system, the full amount of each depositor's funds are available in reserve, where each depositor is always able to retrieve his/her deposits. In this case the bank cannot act as financial intermediaries between savers and borrowers. In order to argue with this problem, the equation needsto be slightly adjusted as follows:

$$Reserve\ Ratio = \frac{The\ money\ held\ by\ the\ bank}{The\ money\ deposited\ by\ the\ bank} \tag{2}$$

In expression (2), by using the full reserve system, banks can act as intermediaries between savers and borrowers. The Islamic banks can "lend out" the money whilst maintaining 100% reserve ratio. Thus, the deposit taking and lending activities will not be separated in the full reserve in Islamic banking. However, the bank will mobilize the saving by using the equity based profit and lost sharing. When a financial institution lends money to finance a business project, its return will be a specific percentage of the business's net profits for a given number of years. This share of the profits is used to pay back the principal and to provide a profit for the bank to pass on to its depositor. In the case that the venture fails and the business loses money, the borrower, the bank and its depositors will all absorb the losses (Garcia et al., 2004).

4.4 Income generated from interest rate is impossible

In the full reserve system, banks would not be able to generate profit from interest on loans. In the traditional fractional banking system the source of revenue is derived principally from depositors. Generally, in conventional banking, the higher the reserve requirement, the less of a depositor's money the bank can lend out, and the less interest can be earned and in turn paid on deposits. Profit would have to come exclusively from the storage function. That is, customers would have to pay banks to safely store their money. In the full reserve case, no interest can be earned on a bank account (Grey, 2002). Instead of banks paying depositors interest for their funds, depositors would have to pay the banks for the safekeeping of their money. Nonetheless, this is not rigid as those who are willing to bear for risks can have contractual agreement for the banks to use their deposits for investment purposes.

4.5 Liquidity transformation

In the simplest form of balance sheet, a fractional reserve bank holds liquid demand deposits on the liability side, while a small fraction of reserves and illiquid loans are held on the asset side. In other words, banks lend demand deposits, which are also means of payment. This process is referred to as the liquidity transformation services of a fractional reserve banking system (Soh, 2004). It is argued that without credit creation, such as under the full reserve banking system, liquidity transformation services cannot be generated. Nevertheless, under this system, liquidity transformation can still be generated by using alternative financing instruments such as Islamic securitization and equities.

The fractional reserve system and full reserve system would have different policy implications. Under the former system, banks would have the ability to draw profits on funds that they have exerted no productive effort. Such earnings however, is against the spirit of Islamic banking. Thus, one of the solutions may lie in the full reserve system, whether this system can attain the *Maqasid Shariah*.

5. Full reserve system and the attainment of *Maqasid Shariah*

Maqasid al-Shariah, or the goals and objectives of Islamic law in which the laws are designed so as to protect these benefits and facilitate the improvement and perfection of the conditions of human life on earth (Kamali, 2008). It reflects the basis of Islamic law and helps Islamic scholars in determining the prohibition and permissibility in Muslim actions. The objective of *Shariah* according to Al Ghazalli(505 HA) is to promote the welfare of the people. It includes the safeguarding of faith, life, intellect, prosperity and wealth. This will be considered as *maslahah* or desirable if it can protect or promote the objectives of *maqasid*.

The *Shariah* does not prohibit banking activities and financial transaction in order to generate economic activities in a system or country. Nevertheless, these activities and transactions must be parallel to the Islamic teaching, thus, attaining the *Maqasid Shariah*. On the other hand, the fractional reserve banking system that has been discussed in the earlier section is negating the *Maqasid Shariah* as it brings more harm than benefit. Meanwhile, the full reserve system is justified to be more just and fair and of the upmost importance, the *Maqasid Shariah* can be attained through this system. Thus, this section will look into the fractional reserve and full reserve system in attaining the *Maqasid Shariah*.

One of the arguments for the use of fractional reserve system is that the banks can borrow the depositor's money from the leftover ratio of required reserve and then lend out the depositor's money. The conventional banks gain the profit through interest rate.It is clear in Islam any transaction that involves *riba* (interest) is void. All forms of transaction must be free from *riba*. Islam prohibits a Muslim from taking or giving *riba* regardless of the rates at which *riba* is charged. It includes all returns from loan, and anything above the principal and all form of commercial loans.

Allah said:

> *O you who believe! Fear Allah and give up what remains of your demand of usury if you indeed believers.*
>
> (*Al Baqarah:* 275)

Besides that, when money is used as a debt by banks, they exist only in numbers. Money will be created out of money. According to Farruq Ahmad and Hassan (2006), money serves only as a medium of exchange which is a way of defining the value of things. As a consequence, money is generated out of nothing and with no backup asset it will increase the money supply relative to the real economy. This leads to the inflation problem. Mydin Meera and Labarni (2009) for example explained the effect of inflationary situation. During inflation those who hold money purchasing power of their money would be relinquished. Fewer things can be bought in the economy even with more money. This situation is considered as entailing a 'hidden tax' on the entire economy. With less purchasing power, the things in the economy are paid by transferring asset through an increase in the price level (inflation). The problem occurs as the money created is in excess and does not match the real value in the economy. In fact, the total loss of the real purchasing power in the economy equals to the total value of assets transferred to the bank.

Due to inflation, the poor will suffer the most as they generally have low savings. Money is created out of nothing in the fractional reserve requirement system to benefit large savers, banks and corporations (Shakspeare, 2002). The newly created money is likely to go to the rich first. The inflation is like the hidden tax that is transferred from the poor to the rich. Contrary to the Islamic teaching, wealth transfer should be from the rich to the poor in the form of *zakat*, charity and other philanthropic initiatives. The wealth is concentrated in the hands of a small minority by taxing the majority. The concentration and accumulation of wealth among the rich is discouraged in Islam. The implication is on the wealth distribution in the society and is not following the *Maqasid Shariah*. Another effect it has on the society is that the poor will remain poor while the rich becomes a lot richer. This can lead to the breeding of enmity in a society. When the inequality worsens there can be loss of life and destruction of property. It is injustice, thus, the inability to attain the *Maqasid Shariah*, as the protection of property and life are some of the core principles of the *Shariah*.

Another issue argued by Mydin Meera and Labarni (2009) and Kahf (2006) is the ownership structure of the asset and sovereignty. Fractional reserve banking has a distributive effect where the concept of ownership can be questioned. According to Mydin Meera and Labarni (2009) fractional reserve banking creates ownership out of nothing. The customers' deposits are loaned out, introducing new money in the system. If the asset is bought from the loan, it means the ownership of the asset can be transferred easily using the fractional reserve banking system using the money created. It is a violation of the principle of private ownership that requires entitling an asset owner of all increments that may happen in her owned asset and that no entitlement may be assigned to any other person (Kahf, 2006). The *Maqasid Shariah* with regards to the protection of wealth is unattainable. Furthermore it is a disturbance in the property rights and gives room for other violations too, for example on faith and posterity. It is taking the possession of assets belonging to others without their knowledge and their ability to protect their wealth. The protection of wealth is important as it can subsequently protect other elements such as faith. This is not in conformity to *darruriyah* which basically is the protection of five crucial matters which are faith, life, posterity, property and reason (*Aql*).

As stated in a *hadith,* Umar (r.a) said:

> *Poverty leads to Kufr*

On the contrary, the full reserve system which is operating in deposit multiplier equal to zero, provides no sources of inflation from the credit creation process. Instead, it creates money that has a more stable value. Assets backed reserve has a counter inflationary effect. Thus, there is no inflationary effect and there is no party suffered any lost. As wealth is not diluted by inflation and instead, protect the poor, the full reserve system is compatible to the *Maqasid Shariah* as it protects wealth, the *darruriyah*.

Besides that, since full reserve system money is being backed up by asset and circulates based on the value of the real sector, the quantity of money in circulation matches the existing projects and spending value. Thus, speculation which is prohibited in Islam, will be avoided. There is a matching formula in the full reserve system. The volatility is eliminated when there is stability of relative prices on complementary money and financial as well as real goods and services.

Islamic banks mobilize money based on the contract between banks and depositors. It is based on contracts agreemeent for example the *Mudharabah* contract, which is in the form of profit and loss sharing of equity. If an Islamic financial institution lends money to finance a business project, the bank’s return will be a specific percentage of the business's net profits for a given number of years. This share of the profits is used to pay back the principal and to provide a profit for the bank to pass on to its depositors. In the case that the venture fails and the business loses money, the borrower, the bank and its depositors will all absorb the losses (Garcia, et al., 2004). In order to attain justice and fairness and fulfill the *Maqasid Shariah*, there is a need to create and maintain equilibrium within a society. Therefore, it protects the harmony in the society by reducing the gap between the rich and the poor. Wealth will not accumulate and circulate only among the rich in the society.

Allah said:

> *O ye who believe! stand out firmly for justice, as witnesses to Allah, even as against yourselves, or your parents, or your kin, and whether it be (against) rich or poor: for Allah can best protect both. Follow not the lusts (of your hearts), lest ye swerve, and if ye distort (justice) or decline to do justice, verily Allah is well-acquainted with all that ye do.*
>
> (*An-Nisa* :135)

Adding to this argument, the full reserve system discourages saving but promotes more investment. Nevertheless, depositors can still have the option to save their money under the contract of *amanah*. *Amanah* is where one party is entrusted with the custody or safekeeping of someone else’s property. In the context of intermediation, *amanah* refers to a contract where a party deposits its assets with another for the sole of safekeeping. Banks will get the profit of its safekeeping service. The justification is to be fair as deposit comes from people irrespective of their financial status. The different status of rich, poor, old and young will save their money as saving or investment. However, for the older, retired people, who generally engage in risk aversebehaviour, the money is kept as saving where there is no risk.

On the other hand, for the risk taker the money can be invested where both parties share the risk. The money saved for investment should not be taken as proportion of reserve requirement and make it idle since it was placed as investment funds. It means that the money invested should go to the productive investment as the owner of the money has already accepted the consequences of gaining profit or suffer the loss. Thus, using the full reserve system, money will be fully invested and the financial intermediation will be more just and fair.

6. Conclusion

Fractional reserve banking creates money out of nothing that brings other problems to society. These problems include the inflationary pressures that result in the depreciation of the currency value. Moreover, the liquidity created from the fractional reserve system allows instability and chaos in the banking system. Thus, from the Islamic scholars' perspectives, the issue of injustice will arise in the fractional reserve banking system. The flaws in the fractional reserve system have encouraged the quest for an alternative. The full reserve system is suggested by most well known conventional and Islamic economists. Based on the arguments, concept, andthe analysis conducted on the full reserve system as well as the support from the *Quran* and *Hadith,* the system appears to attain the *Maqasid Shariah*. Hence, the full reserve banking system is recommended to be applied in the Islamic monetary system instead.

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