BANK'S MONEY CREATION 101

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ABSTRACT

For the past three editions of the International Conference on Management and Muamalat, the researcher has written and presented articles with respect to bank's money creation. Based on the author's observation during the presentations and via author's research, many still not clear of how bank creates money in practice. This is evidenced in the meagre responses by the audience. During the author's Proposal Defence for Philosophy of Doctorate degree and in-depth interview sessions with some Islamic Banks' Shariah Committee members, the author continues to receive "Money creation is an old issue" and "There is no issue with bank's money creation" comments. Understanding how bank creates money in reality is vital to alleviate such confusion and conclusions. These wrong and false conclusions will result in the failure to understand the problem contributed by bank's money creation. This article will explain, based on the researcher's experience in understanding the issue, the practical and easiest way in explaining and understanding how bank creates money. The author proposes a model for understanding bank's money creation.

Keywords: *Bank's money creation, money creation, model, explanation.*

ABSTRAK

Sejak tiga edisi International Conference on Management and Muamalat yang lepas, penulis telah menulis dan membentang kajian oleh penulis berkaitan penciptaan wang oleh bank. Berdasarkan pemerhatian dan penyelidikan penulis, masih ramai yang kurang jelas bagaimana bank, secara praktikal dan situasi sebenar, mencipta wang. Ini terbukti dengan respon-respon yang kurang serius daripada peserta-peserta. Dalam sesi peperiksaan cadangan oral (proposal defence) untuk pengajian peringkat Falsafah dan juga sesi temuduga bersama beberapa ahli Jawatankuasa Shariah untuk perbankan Islam, penulis mendapat komen-komen seperti "Isu penciptaan wang oleh bank adalah isu lama" dan "Tiada isu dalam penciptaan wang oleh bank". Memahami bagaimana bank, dalam situasi sebenar, mencipta wang adalah penting bagi mengelakkan daripada kekeliruan dan kesimpulan-kesimpulan sedemikian. Kesimpulan-kesimpulan yang salah dan palsu ini akan mengakibatkan kegagalan memamahi masalah-masalah yang di sumbangkan oleh penciptaan wang oleh bank ini. Artikel ini akan menerangkan, berdasarkan kepada pengalaman penulis dalam memahami isu ini, kaedah yang parktikal dan paling mudah dalam menerangkan dan memahami bagaimana bank mencipta wang. Penulis juga mencadangkan satu model bagi memahami penciptaan wang oleh bank.

Introduction

The issue of how bank creates money in practice continues to be misunderstood by many hence resulting in the failure to gain insight on the negative impact of bank's money creation. The author's bewilderment supported by Greco (2001), the author of a ground breaking book titled "Money: Understanding and Creating Alternatives to Lega Tender". He wrote:

> "When I try to explain to people the way in which conventional money is created these days, I am generally met with a blank stare. I think it is not that they don't understand what I am saying; they just can't believe it" – Greco, page 4

The ability to understand how bank creates money became more critical with the birth of Islamic Banking and Finance (IBF) Industry using the same infrastructure as conventional bank. The failure to clearly understand bank's money creation by the IBF fraternity has resulted in the general perception that "Since Islamic banks utilise Shariah contracts with underlying assets in their financing products, Islamic banks do not create money". The scenario becomes complicated with the ever changing definition of money and the advancement in the body of knowledge surrounding the banking and finance muddling the basic issue of bank's money creation.

The author himself takes time to try to comprehend how a bank creates money in reality. It takes the author to question and re-question his previous understanding on the matter hence going the process of "emptying your cup of knowledge first" or "Learn-Relearn and Learn" until the process of bank's money creation becomes clear. It is so simple but yet we fail to grasp it, echoing Galbraith (1975) who stated:

> "The process by which banks create money is so simple that the mind is repelled" Galbraith, pg 18

He meant even though the process of which a bank creates money in practice is simple but our mind rejected or ignored it. Greco (2001) explained that generally people perceive that money was created by the government. This is only true for money as in the physical printed notes and coins or widely known as fiat money. But the definition of money has included "bank deposits", "bank credit", "currency", "checking accounts", "fixed deposits" and "debts". In other words what people perceived as money is not the same as what money has been defined. This also contributes to the scenario of misunderstanding of how bank creates money.

The article will commence with the method employed for this research and continued with literatures on bank's money creation. Consistent with the title "Bank's Money Creation 101", the author then proceeds with presenting the model for understanding how bank creates money. "Bank's Money Creation 101" explain the process of money creation for the beginners. Numerous literatures have explained the process of bank's money creation through three banking theories namely Financial Intermediation Theory, Fractional Reserve Banking Theory and Credit Creation Theory (Werner, 2014a). It is not the intention of the author to re-invent the wheel by repeating the same explanation. The researcher believes the framework proposed enables the laymen to understand how bank creates money in practice. This is the contribution of the article.

Research Method

In achieving the objective of the research as well as the narratives data that required, the author employed qualitative research method. In doing so, the author reviewed the numerous literatures published with respect to bank's money creation. To identify the source of misconception on understanding bank's money creation, the author also analysed few elementary economics text books that discuss bank's money creation issue.

Literature Review

Economists, bankers, researchers, central bankers, policy makers, accountants and other interested parties generally admitted that banks create money from lending transactions. Borges (2016), Mishkin (2012); Vengedasalam & Madhavan (2013) stated that bank creates money whenever loans are granted to the borrowers via Fractional Reserve Banking system. Werner (2014a, 2015) and Standard and Poor's (2013) argued that bank creates money from nowhere to fund the loan amount disbursed to borrowers. Former governor of central bank of Canada, Graham Towers (1939) argued that for each loan transaction, bank will create new bank credit, new deposits and hence new money. Berry, Harrison, Thomas and de Weymarn (2007), from Bank of England, explained that bank creates additional deposits for the borrowers when bank approves a loan. Mervyn King (2012), the former Governor of the Bank of England: "When banks extend loans to their customers, they create money by crediting their customers' accounts."

On the contrary to the above, some authors reject the notion that bank is the one that creates money. Vivian & Spearman (2015), for example, argued that bank is not the source of money creation process and argued that the process is initiated by the signing of loan agreement between the bank and the borrowers. In congruent with Vivian et al. (2015), Bacchetta (2018) added that bank does not simply create money every time they want. The money creation process will not commence without the request by the borrowers via loan application. Additionally, bank credit does not necessarily lead to money creation (Bacchetta, 2018).

Prior to presenting the gap of the research, the following paragraphs will record the narrative that clarify the issue of "What is the problem with bank's money creation?" This will also answer the question of "Why bank's money creation is an issue that requires further investigation?"

Money created by banks are the blamed for the occurrence of inflation in the economy (Hulsmann, 2004; Khan & Mirakhor, 1994; Meera et al., 2009; Moosa, 2018; Rowbotham, 1998; Rothbard, 2008; Salerno, 2012; Shapiee & Zahid, 2014; Sigurjonsson, 2015; Syamlan, 2016). According to De Soto (2006) and Hulsmann (2008), the practices of money creation by bank is fraudulent, immoral, unfair, destructive and result in instability. The practices also lead to inequality in the society (Murray, 2009; Paul, 2013), unemployment (Hickson & Turner, 1996), cyclical economic recessions (De Soto, 2006), market cycle (De Soto, 2006), business failures and bankruptcies (Hulsmann, 1998). McLeay, Radia & Thomas (2014a) Smirna (2014) and Turner (2012) identified the creation of money by banks as factor that result in financial crisis. The above economic malaise is as a result of high debt that is operationalise by bank's money creation (Mohd Nazari, 2018). From Islamic perspective, bank's money creation consists of *riba* elements hence inconsistent with *Maqasid al-Shariah* (Meera & Labarni, 2009). Meera et al. (2009) argued the prohibition of *riba* in Islam is partly due the resultant injustice from bank's money creation issue.

Having addressed the enormous negative implications of bank's money creation to humanity, the following paragraphs will explain how banks create money. The author will then highlight the research gap.

Most economic textbooks explain money creation in this manner (McLeay, Radia & Thomas, 2014a). Melvin and Boyes (2011), admitted that banks create money by lending money. As banks' core business is lending and by lending banks create money, there is no issue whether or not banks do not choose to create money. They also confirm that banks lend out a portion of the deposits to earn interest. A fraction of the deposits is kept as reserve to meet withdrawal requests. Banks' money creation is discussed with the explanation on the required reserves which are imposed by the central bank (Federal Reserve). Melvin and Boyes (2011) explain money creation process starts with a total deposit of $1,000,000 at First National Bank. With required reserves is 10%, the bank must keep $100,000 (10% x $1,000,000). Melvin et al. (2011) also discusses the impact of bank's lending to the country's money supply. Supposing that the bank lends out $90,000 to Mr. A who deposited the money into borrower's First National Bank, Melvin et al. (2011) exerts that First National Bank's lending of $90,000 has increased the country's money supply by the same amount.

However, bank creates money in practice is different from those taught at universities and explained in the economic textbooks (McLeay, Radia & Thomas, 2014; Vivian et al., 2015). They concluded that it is the bank's lending that creates eposits. Their conclusion is consistent with Nadler (1979) explanation on the Fractional Reserve Banking system which is the apparatus that enables bank to create money. According to Nadler (1979), if the Reserve Requirement ratio is set at 10% and a commercial bank has a total deposit of RM10 million, the bank must keep RM10 million as a reserve at the central bank hence and the amount that the bank can lend out is RM90 million. In other words, the amount of money created by bank is RM90 million. The former's explanation, in actuality, does not result in bank's money creation. The above two explanation differs in the order of the money creation process. The former narrative commences with the amount of deposits that the banks have while the second analogy starts with the amount of loans made (Ahmad Yani, 2018).

The above scenarios have led to the confusion on understanding the process of how bank creates money. How bank creates money as described in major elementary economic textbooks contradicts with the real money creation process in practice. The general acceptable understanding of the money creation process is as per the description in most economic textbooks. However, in practice bank creates money differently. This gap in understanding how bank creates money in practice must be addressed. The failure to bridge the gap may result in the ignorance attitude on the negative impacts posed by the issue of bank's money creation. Hence, to close the vacuum, the author proposes a model of understanding bank's money creation elaborated in the following section.

The Model of Understanding Bank's Money Creation

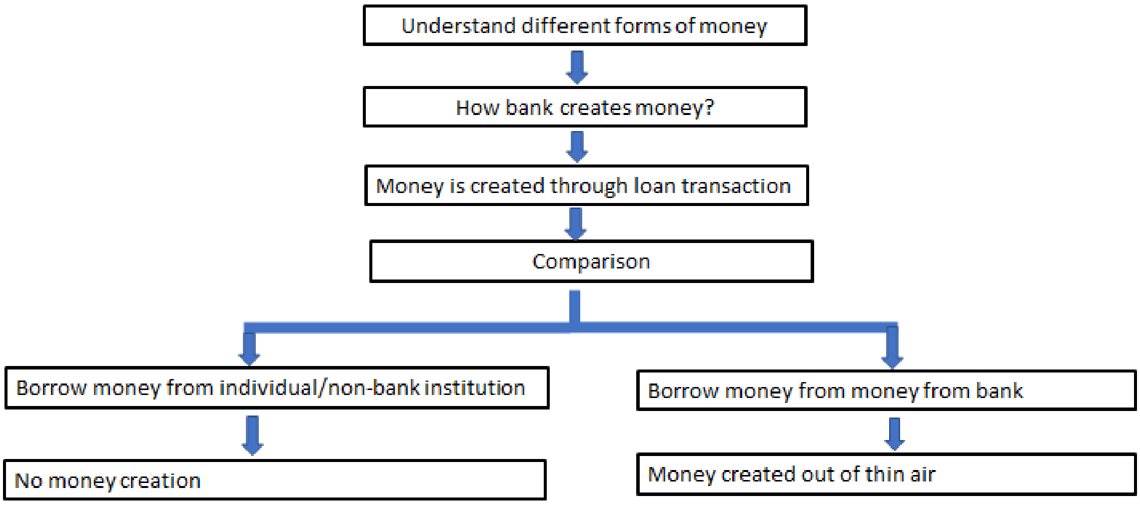

Diagram 1: Ahmad Yani's Model of Understanding Bank's Money Creation™

Diagram 1 entitled Ahmad Yani's Model of Understanding Bank's Money Creation™ depicts how to explain the process of money creation by bank. The following paragraphs will elaborate the above diagram further.

Understand different forms of money

One of the reasons for failure to comprehend how bank creates money is due to the failure to understand that money exists in different form. Generally, people only associate money with the physical money in the form of notes and coins. If in Malaysia, it is the Ringgit Malaysia notes and coins. In Singapore, it is the Singapore Dollar and cents. They do not associate bank credit and loans as money. In the era of digitalisation where people use less cash and settle transactions with debit card or e-wallet, these are also money. In addition to this, people know that only central bank print money because they think money is only the Ringgit Malaysia notes and coins.

Hence, the first step to understand how bank creates bank is by understanding that money exists in different forms. Money takes the form of bank credit (Graham Towers, 1939), bank deposit (McLeay et al., 2014), physical cash and coins (currency), balances in checkable accounts and other checkable deposits (Federal Reserve Bank of Chicago, 1992). In economic terms, the above forms of money are measured and categorised as M0, M1 and M2. M0 refers to the physical Ringgit Malaysia notes and coin circulated in the economy, M1 consists of M0 and demand deposits, M2 refers to M1 plus savings deposits, fixed deposits, Negotiable Instruments of Deposit, Repurchase Agreements and foreign currency deposits while M3 equals M2 and deposits in other banking institutions (Bank Negara Malaysia, 2021). Physical cash and coins are printed by Bank Negara Malaysia and other forms of money are created by banks.

Having clearly differentiate various forms of money and bank creates money refers to the creation of non-physical money, the following step will present how bank creates these forms of money.

How Bank Creates Money?

As described in the previous section, bank creates money every time loan is extended to borrowers (Werner, 2014). The loan disbursed to borrowers are funded by bank credit created *ex nihilo* with just a stroke of digits on computer keyboard and assisted by the accounting treatment that recognises the newly created fictitious fund (Standard and Poor's, 2013; Salleh et al., 2015). The bank's money creation narrative as presented in the above economic textbooks does not reflect the process of bank's money creation in reality and misrepresents as well as bewilders the public.

In an attempt to understand clearly how bank creates money, the author suggests a comparison of lending transaction between individual or non-bank institution with banking institution. This is illustrated further in the following section.

Borrow from non-bank vs borrow from bank

In this paragraph, the author will deliberate a comparison between borrowing from non-bank and bank to describe clearly only bank creates money. For example, Mr A wants to borrow RM2,000 from Mr B. Upon checking his banking account, Mr B notice that he has RM5,000 in his account. He then agreed to lend RM2,000 to Mr A who then give him his account number. After transferring RM2,000 into Mr A's account, Mr B observes that his banking account balance has reduced to RM3,000 (RM5,000 – RM2,000). His lending of RM2,000 to Mr A is fully funded by his money available in his banking account. Since the loan amount extended to Mr A is backed by his money, no money creation involved.

Now consider the scenario of Mr A goes to Bank A to borrow the same amount of money. As explained in the above, after approving the borrowing amount of RM2,000 from Mr A, Bank A will transfer the loan amount to Mr A's bank account. The accounting records of Bank A will show no fund is used to back the RM2,000 loan disbursed to Mr A (Werner, 2014; Salleh et al., 2015). The RM2,000 loan amount granted to Mr A is funded by the RM2,000 fictitious deposit created by key-in the number of 2 0 0 0 on the computer key board by the bank's personnel (Werner, 2014; Salleh et al., 2015). To put in the context, Bank A has created new money of RM2,000 on the loan transaction.

Conclusion

The general confusion and misunderstanding of how bank creates money stem from few factors as follows:

1. The general perception that money only refers to the physical printed notes and coins;
2. The failure to understand that money exists in other forms than the printed notes and coins;
3. Bank's money creation process as described in elementary economic textbooks differs from how bank creates money in the real world;
4. There are three inconclusive banking theories describing how bank creates money;
5. Not many empirical investigations on the process of money creation in reality.

The birth of IBF employing the same infrastructure of conventional banking (except for shariah governance policy) makes it more crucial to gain insights on the implication of bank's money creation.

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