Credit Creation Process and its Consequences Under Fractional Reserve System

Sani Saidu Alhaji[1], Umar Isa Jarengol[2]

[1& 2]*Accounting Department Adamawa State University, Mubi*

Email: sanisaidu1987@gmail.com

Abstract

This study aimed at discussing the credit creation process and its consequences under fractional reserve system. The study has critically reviewed stakeholder input on the concept relating to the process of creating new credit specifically in developed countries which has been established that private banks can create around nine (9) times of the customers deposit held by them from a mere debit and credit entry of transaction. The study has established that the created credit was not squarely invested into real economic activities as mostly used to purchase the pre-existing asset especially stock and properties which has leads to persistent rise in property prices. It also captures the two major concepts of inflation and interest rate that has negative consequences on household and the economy at large. The study recommends that major stakeholders should work on having a stable and efficient monetary system that will be capable of fostering economic stability through actual economic growth. Such a system should be capable of curtailing credit creation, inflation control, poverty reduction, creation of employment opportunities, housing affordability, inequality control, crime reduction and provision of sustainable economic, environmental and social atmosphere that will trigger better living standard of people and the economy at large.

Keywords: credit creation, fraction reserve, transaction system, inflation, interest rate.

1.0 Introduction

Transaction is the major necessity of human existence and is known to be a life cycle activity that human being must partake in during their life. These activities are mostly conducted between two or more person with the aim of satisfying the need or utility of one another. The parties can relate through offer and acceptance from the owner of the good or provider of the services to the beneficiary or user of those goods or services. Since it involves give and take, there must be an exchange in respect of the goods or service supplied by the owner to satisfy the demand of the user. A well design system needs to be established to coordinate and simplify the process of this relationship between the provider of good and services and the consumer of the provided goods and services. The system should be void of inflating hardship on any of the parties involved and the entire community or society where the transaction is taking place (Agan, Lothian, & Mcnelis, 2013).

Economic stability can be achieved through having a stable monetary policy which regulates and coordinate the routine transaction within and outside the country. The monetary policy is key in transactional activities of a nation especially in terms of transaction monitoring and regulation. Central bank of countries has been shouldered with the responsibility of formulating the monetary policy that will provide conducive environment for every stakeholder to engage in his/her day to day transaction without fear of favour (Stoop 2010). Control of money supply is paramount in the national policy and it has been drawing serious attention over time because it was seen of having a tremendous effect that have direct bearing on the living condition of the people and the healthiness of the economy. It is against this, that Central bank uses some tools to regulate the money supply because an uncontrolled money supply will cause harm to economic activity of the nation and it will generate hardship for the people.

The increase in money supply is attributed to the current system of fiat and fractional reserve where central government produce a paper/coin money that is not backed by any real asset but just a promise and guarantee of value (England, 2016). The money supply issue went off control with the money creation by private bank where private banks multiply/create money from the customers' deposits as loans to the third party and new money was created out of thin air (Warner, 2014). The bank of England report (England, 2016), shows that more than 95% of the money in circulation are created by private banks while less than 5% was the government owned money and this escalated the increase in money supply especially the collapse of Bretton wood in 1973.

The critical issue with fractional reserve is the treatment of debt as money and vice versa and this has caused households and nations to be highly indebted as nations and individuals are majorly living on debt. Experts have argued that if all debt will be settled there would be very little or no money in circulation because every money in ones' wallet is a debt of someone and this make money lose it value (US$1 in 1960s is equivalent to 22.30 as of 2017) Tashtamirov, (2013). This is because the private bank created money steals its value from the less than 5% of the legitimate money created by the central bank as captured in the modern money mechanics (Tashtamirov, 2013). This has caused an overwhelming increase in countries debt which is alarming as many countries struggle with debt servicing rather than sectorial developments. This is evidenced from the published report of the Institute of International Finance (IIF) Global debt monitor of 13th January 2020 that world debt is about $253trillion which is almost 322% of the total world GDP in 2019 and most countries debts have gone beyond their GDP especially developing.

The power of credit creation by private banks has been highlighted as one of the root cause of the Great Depression of the 1930s, Asian crises of 1997 and the subprime crisis of 2007 (Turner, 2015). It is also seen as a key driver or facilitator of financial instability, asset price bubbles, unaffordable housing and unsustainably high private sector debt (André 2016) Essentially, Adair Turner, the former chairman of the UK's Financial Services Authority, has argued that, "The financial crisis of 2007/2008 occurred because we failed to constrain the private financial system's creation of private credit and money" as captured in Turner (2017). Therefore, it is pertinent to study the money creation under fractional reserve transaction and the consequences of such created money on the economy at large and household in specific. This study will critically review the fractional reserve system especially the money creation process for major stakeholder to know it consequences and to recommend measure for curtailing it in future.

2.0 Literature Review

This section will critically review the fractional reserve system which include similarities to Goldsmith banking, credit creation process, key factors in the system (inflation, fractional reserve, interest rate, fiat money), thereafter relevant theories will be analyzed to show its linkage to the study.

2.1 Fractional Reserve system

Fractional Reserve System (FRS) is a system where the regulators who are usually the central bank of a country use the tools of reserve requirement and interest rate to coordinate and regulate the money supply in the country with the aim of having a healthy economy. The commercial banks are the critical actors in fractional reserve system since they act as intermediaries where customers keep their deposit for safe keeping sometimes the amount were kept for some time without withdrawal. Banks transfers such deposits to another firms or individual who are looking for funds to finance their activities and the transferred sum will yield additional income to the bank. Looking at the risks associated with the transaction and the consequences on the depositors the government through central bank comes up with the reserve requirement for bank lending (McLeay, Radia, & Thomas, 2014). It was further argued that some countries, investment banks exist which are operated as part of commercial banks but with sole responsibility of coordinating the capital market activities. The investment banks aim on assisting corporations and governments in raising capital by underwriting and acting as the agent in the issuance of securities as captured in the mainstream economic theory. The fractional reserve is the minimum deposit seal that a bank should maintain in its accounts as part of the customer deposit (Mallett 2015). This implies that individual bank cannot lends out the whole amount of deposit within the bank without holding certain percent as the reserve. This requirement differ from country to country depends on the aim and focus of the monetary policy. IMF Financial Statistic Yearbook data shows that in general, the reserve ratios have decreased over time. That is, the theoretical amount of money that can be created has increased (higher leverage) and the system became more unstable over time (increased liquidity risk in case of a bank run). The higher the reserve requirements, the lower the amount of additional money that can be created. The central banks do not often change reserve requirements because of the exponential impacts on the money supply and the large time lag between their implementation and the corresponding effect of inflation (Greenbaum, Thakor, & Boot, 2019).

In the Fractional Reserve Banking (FRB) system, money is created by extending loans. The central bank has the power to create money out of thin air which is termed as fiat money thereafter such created money is moved to commercial banks through several means as could be initiated by the central bank which can either be through government securities and stock exchange with the bank. The commercial banks will lend out part of these money to individuals or firm who are in need of the funds to finance their business activities by keeping a fraction of the money in their accounts. It can be clearly seen that money is created originally by the government and it further created through lending and re-lending among banks as maintained by the mainstream economic theory (Palley 2015). They believe that money is exogenously created by central banks as it determines the seal of the money creation through the reserve requirements and it is coordinated through money multiplier which determine maximum amount of money to be created in the economy. The possible amount of money that theoretically can be created out of a deposit is the inverse of the reserve requirement (RR) multiplied by the money created by the central bank (Xiong, Li, Wang, & Stanley 2020). The money multiplier (mm) is the factor by which the existing amount of money maximally can be multiplied. (mm = 1/RR).

However, the reserve requirement depends on the country economic policy drivers, the reserve varies from fractional reserve, full reserve, no reserve or depleted reserve (Stoop 2010). Under the full reserve banking the bank has no power to lend any part of the customer's deposit as the reserve is 100%. This technique eliminates the liquidity risk and the money supply is fully controlled while the danger of business failure exist as entrepreneurs will not have access to funds that will enable them finances their businesses and this could eventually lead to business closure and unemployment.

Similarly, some countries like United Kingdom and others operate a zero-reserve requirement where a bank has the power to lend the whole deposit at their disposal. This has caused unlimited loans growth, expanded liquidity risk and increased money supply which will result to inflation and bubble. Contrarily, depleted reserve banking exists in some countries around the globe where the reserve requirement is greater than 100% and private banks lend out money more than the actual deposit they hold (Calomiris, Heider, & Hoerova 2015). This approach is achieved with credit easing where special intervention is launched by the state to save the economy and this was the major cause of the subprime mortgage crises. This kind of system usually triggers uncontrolled loans which will lead to bubble burst as created money from the deposits and interventions are not tied to any real economic growth (Muzhikyan, Farid, & Youcef-Toumi 2017).

Fractional reserve banking was necessitated as a result of customers keeping deposits with the bank as in Goldsmith and such banks takes advantage of such deposit by giving out such deposit as loan to other parties who are looking for funds to finance their routine business activities. To have a better understanding of fractional reserve system we need to align its operation to the Goldsmith system in 16th century where it operated in the form of a bank to keep the transactional precious asset (gold) of the merchant. Goldsmith gives the merchant a receipt indicating that the gold is with him and since he was a trusted person, merchant offers those receipts to other parties in exchange of goods and services and the third party use the receipt to claim the gold in the vault of Goldsmith. This makes the gold to stay for some time without withdrawal by the owner(s), then Goldsmith decided to give out this gold as loan to other customers to the extent of giving a fictitious receipt as loan to loan seekers and this makes him doubled the income of the principal amount together with the interest. Consistently, this is a direct replica of the happenings in the modern banking system where private banks multiply/create money from the customers deposits as loans to the third party because these deposit remain with them for a long time and the cheques and draft are acceptable means of exchange so individual banks now has the power to create money from thin air as in Goldsmith system (Warner, 2014.

In the FRS new money were created through giving out loans which are numbers held as bank deposits that usually appear as in bank accounts, through the normal accounting process of asset and liability. When a bank gives out a loan to household or cooperation, in actual sense thousands of dollars will not be given to him at a sport but the bank credits the customers' bank account with a bank deposit of the size of the requested and agreed amount (Ravn, 2015). Using this process, a new money was created equivalent to the amount of the loan. However, it is good to note that the described process of money creation contradict our basic understanding that banks can only lend out pre-existing money and bank deposits are simply a record of how much the bank itself owes its customers and they are a liability of the bank, not an asset that could be lent out (McLeay, Radia & Thomas, 2014). The created money is destroyed whenever the repayment of such loans occurred because the created money in circulation will be taken back to the bank and it will disappear in the economy (England, 2016)

These bank deposits represent a promise by the bank to pay out (or transfer) state-issued money on demand as they are now the primary means of payment, used in most of the world, however businesses and households perceived bank deposits as equivalent of having cash in hand (Payments Council, 2014). A critical view on money creation conclude that banks today operate differently from pure intermediaries (middlemen between savers and borrowers) and now rose to the higher capacity of writing out or creating new money, paper that purports to represent real resources (Ravn, 2015).

Countries over the world have provided a support for the money creation by the private banks through establishment of certain agencies such as Financial Services Compensation Scheme (UK), Federal Deposit Insurance Corporation (USA), and National Deposit insurance corporation (Nigeria) that provides liquidity guarantees as Lender of Last Resort function which ensure that banks can always borrow from the central bank to ensure that they can settle their payments. The agencies provide credit guarantees of promising to repay deposits in the event of a bank failure, effectively guaranteeing the liabilities of private companies with the full backing of the state (Pozsar, Adrian, Ashcraft & Boesky 2010). While bank deposits appear to be the liabilities of private sector firms, the existence of this official support from the state means that they are really a contingent liability of the state (and ultimately of the taxpayer). The last crisis, in which many banks around the globe had to be rescued by governments with taxpayer's money. This scenario has clearly explained the operation and happenings in the present banking system where deposits and landings serve as key determinant of the sustainability and otherwise of the modern banks.

The general perception by most of the economic actors in the world is that loans is a viable means of straightening or boosting entrepreneurship that will go a long way in improving the economic position of the country as entrepreneurs has good ideas but have no money to implement those ideas. It was assumed that the loan (new money created) will be used by those entrepreneurs to fund their business activities and stimulate the country's economic growth through the purchase of production machinery and equipment which will be used in the production of the output that could be consumed and exported. The loan could also be used in generating employment by investing in small and medium size enterprises (SMEs) and subsequently the generated income could be used in debt servicing and payment of tax to government (Stoop, 2010). However, such scenario is not in practice for majority of it. Rather most of the created money are used to buy the pre-existing assets especially housing and financial assets.

Naturally, if the created money by the private banks could be invested in SMEs and other real economic activities that are geared toward wealth creation, employment generation and real economic growth. Those investment will yield income which will stimulate economic activities that aid stability in the whole economy. Thereafter, the global challenges being faced as a result of the current system could have been minimized or even eliminated and the frequent financial crises wouldn't have been reoccurring. However, in reality this only applies to the insignificant percentage of the bank lending today as documented by Howells, (2000) that only a little portion of the created money (loans) were directly used to finance production or any form of economic activity that can contribute to the output and real GDP of the economy, while majority of bank lending finances the purchase of pre-existing assets, especially property. This can be seen clearly from the Bank Negara report 2018 where the household debt is on increase and most of the debt were for properties like cars with significant percentage going for mortgage. This is an indication that the real economic activities will continue suffering since most of the fund taken as loans from financial institution were not invested in real asset but rather used in creating additional burden to the economy in-terms of environmental and social related issues.

The critical issue with fractional reserve is the treatment of debt as money and vice versa and this has caused households and nations to be highly indebted as nations and individuals are majorly living on debt. Experts have argued that if all debt will be settled there would be very little or no money in circulation because every money in ones' wallet is a debt of someone and this make money lose it value (US$1 in 1960s is equivalent to 22.30 as of 2017). This is because the private bank created money steals its value from the less than 5% of the legitimate money created by the central bank as captured in the modern money mechanics by Tashtamirov, (2013) and this has caused a lot of trauma in the global economy. This scenario has contributed to overwhelming national and household debt and at no point individuals and nations will be free from debt under such system. There is this popular saying that "debt is used to enslave the society and the weapon of such slavery is interest rate and naturally the funds to service such debt especially the interest comes from inflation. Actually, most of the economic indices follows earning circles of households but inflation does not segregate between the rich and the poor.

2.2 Money Creation Process

The money creation by private banks has escalated especially with the advancement in the technology where the use of physical cash in transactions especially large transactions are no longer visible. Instead of the fictitious deposit/receipt as in the case of Goldsmith such evidence does not need to be there for effective money creation. This is because money values in recent times are represented in figures (digital cash) originated by the private banks and as such is easily transferable to a third party without necessarily meeting with each other and this makes the money creation so easy (Gans & Halaburda 2015). Table 1.1 illustrates the money creation especially in the recent years where cashless transaction is on the edge.

Table 1: Money creation process (reserve requirement is 10%)

Bank A			
Assets	N	Liability	N
Reserve	1000	Deposit	10,000
Loan	**9,000**		
Bank B			
Assets	N	Liability	N
Reserve	900	Deposit	9,000
Loan	**8,100**		
Bank C			
Assets	N	Liability	N
Reserve	810	Deposit	8,100
Loan	**7,290**		
Bank D			

Assets	N	Liability	N
Reserve	729	Deposit	7,290
Loan	**6,561**		

From Table 2 it can be seen clearly that banks have been able to create up N30,951 (9,000+8,100+7,290 +6,561) out of the initial deposit of N10,000, this can continue up to 10 times of the reserve requirement. This will continue up to 9th stage as capture in money multiplier as such the purchasing power in the economy has increase without any proportionate increase in real economic activities of the country. The said increase through credit creation is tantamount to creating inflation especially in real asset like housing. This is the scenario in many countries especially countries like Nigeria that are moving toward a cashless system of transaction where the computer-generated figures will be used in transactions and this will further do away with the 5% or less government created money in the economy.

2.3 Inflation

Inflation is argued to be the major output of fractional reserve system as money is the key factor in causing inflation and this affects the general living condition of household and economic activities of the economy. Inflation is a serious issue of concern as it affects a day to day living condition of people and their ability to meet and coordinate the livelihood which sometimes lead to business closure and eventually generate to unemployment. In a simpler term, inflation can be viewed as the persistent raise in the price of goods and services as a result of some economic factors (Balassa, 1964 & Mazumder (2018).

Scholars over time have attributed inflation to the increase in money supply especially for speculative motive. Money supply is an important determinant of inflation because money has been used in all economic transactions as such it affects economic activities significantly (Krause & Moyen 2016). When the amount of money supply is increased whether through reduction in interest rate which in-turn will encourage borrowing that will lead to more debt of household and nations. Sometimes increase in wages or any of the monetary policy that will cause increase in the money supply without proportionate increase in the economic activities that will stimulate the economy is tantamount of creating confusion in the economic activity of the country. If the amount of money supply continues to increase in a given economy, the general price level of goods and services will go up, especially when output has already achieved its capacity limits (Cherif & Hasanov 2018).

Milton Friedman (1970) left an indelible mark on modern economics with the famous saying, “Inflation is always and everywhere a monetary phenomenon”. Despite the continuous dispute on many aspects of inflation, economists have arrived at a consensus that inflation is caused by the growth rate of money supply surpassing the growth rate of output in a given economy (Graziani, 1996). Inflation has been an issue of concern by researchers and policy makers which is seen as majorly caused by the monetary policy related matters which was evidence as the great menace that compounded the 2008 financial crisis. It was also argued that turbulence in price levels in America has always been co-occurring with the comparable change in money supply and it clear that the major world challenge today is persistent increased in money supply. For instance, the American Dollar broad money, M4 quantity, has increased by 165% in a 10-year period, from 2005 to 2014, while the Australian Dollar has increased in quantity by 239%, was Japanese Yen was increased by 117% (The World Bank Group, 2015). This implies that the expansion of money supply is a worldwide phenomenon as several authors have validated the role that monetary policies play in triggering inflation (Bernanke & Mishkin, 1997).

The untying of currency from real asset is apparently the root cause of the expansion in monetary supply at will countries as it allows more means of money creation especially by private individuals. An economic expansion is only credible and sustainable through investments from savings, and unsustainable when unrestrained credit creation exceeds the equilibrium level of supply and demand (Tempelman, 2010). The increased money supply in today's economy is being caused by these interconnected factors of fractional reserve banking, low interest rate and high debt which will lead to high cost of living, unemployment, unaffordability of housing, crime and other sustainability issues which have negative impacts on human and nations. According to Quantity Theory of Money, there is a proportionate positive relationship between price level and money supply within the economy of the country. This means that when money supply increases by a certain percentage, it will cause price level to increase by certain percentage. Besides that, this theory also stated that inflation is caused by a rise in money supply which is not supported by an increase of output level in a given economy will lead to bubble in asset especially housing.

2.4 Compounding Interest

There are certain measures taken by the central bank to control the money supply which are regularly aimed to influence the pace and direction of overall economic activity of a country. The action is also aimed at having the level of aggregate output and employment together with proper control of the rate at which the general prices of goods and services raises or fall. Borrowing and spending is critical in the prices fluctuation and the key tools that controls borrowing is the interest rate fluctuation (Sornette & Woodard 2010). As posit by mainstream economics that interest rate is the price of money which serves as an indicator and forecasting tool for the business cycle in a given economy. Government through certain regulatory agencies keenly monitor the happenings in the economy especially with regard to the money supply and the commodity prices. Whenever there is need to fight recession an expansionary policy by lowering interest rates is applied to encourage borrowing while to curtail inflation interest rate is raised through contractionary policy that will discourage borrowing and the stability could be achieved especially in the open market economy.

Warner (2018) has reached a conclusion that Interest rates do not cause economic growth, but rather it follows economic activity. They argue that when a time series data on interest rates and economic growth were to be plotted on a graph, it is obvious that low interest rates could not cause economic growth, but it only follows economic growth together with economic activity. Therefore, interest rates could not be considered as playing a significant role in economic stability because when the rate is lowered it encourages more borrowing and in most cases those borrowings are not channelled to real economic activities but to the financial and property assets. For such reasons the lowering of interest has caused a great increase in private sector borrowing which are mostly reinvested in property asset. It can be said that interest rate manipulation as a tool for economic stimulation has not achieved it aim as this can be seen clearly in most cases specially in the case of Japan lost decade where interest rates had been lowered to zero and it does not lead to accelerated growth. Instead, Japan's low interest rate policy gave rise to a carry trade which triggered un-boosted demand that eventually led to increased deflation and bankruptcies.

Likewise, interest rate manipulations is argued to be the roots cause of the 2008 financial crisis as In 2001, the US Federal Reserve (Fed) lowered rate in order to fight the early 2000s recession down from 6.5% to 1.75% in 2002 and a year after it was lowered to 1% and this encourages tremendous borrowing (Masters & White, 2009). The borrowed money was invested in financial asset and property specifically housing as it was realized that the housing market promised high returns because of the U.S. government focus on increasing the minority homeowners. Such investment was further stimulated by the belief that housing is a safe and good investment and that housing prices will keep going up. Real estate prices raise leads to low savings and this lead to housing market halt in 2006 and many debtors defaulted in servicing their debts and the home prices goes down and this also affected the sales negatively and consequently the many subprime industry were declared bankrupt and degenerated to other financial institutions which later triggered the general financial crises (Parkinson, Ball, Blake, & Key, 2009).

The 2007 financial crisis left millions of low-income homeowners especially in United State confused with the disappearance of their perceived wealth as a result of the Federal Reserve expansive monetary system of keeping interest rates low "beyond discreet constraints" which funded the bubble in assets. This policy resulted to unrestrained borrowing and the general expansion in the money supply mostly for speculative motives (Sornette & Woodard, 2010). Many financial analysts and economist are of the opinion that interest rate manipulation ushered in bubble economy where the price of certain asset is extremely high and the return from investment in such assets is also high, this makes everybody to invest in such assets and as a result other sectors of the economy suffers. Bubble is among the complex scenario to cope with because whenever bubble occur there is little could be done either through monetary or fiscal policy to address it especially when it is at the peak and a serious sign of burst is indicated at that point most of the measures will even worsen the situation. The most recent bubble which interest rate played key role in worsening it are the Japan real estate and stock market bubble of 1980, Japan lost decade bubble of 1992, Internet (dotcom) of 2002, U.S. real estate and leverage bubble of 2007 which lead world financial crises.

2.5 Theoretical consideration

The study is best explained using the theory of money creation as captured by Bank of England report in their quarterly bulletin of 2014 which explain how new money is created form the customers deposits. The theory comes to be as a result of the existence of private banks where individuals and corporations keeps their money and makes withdrawal when necessary. The most critical part that attracted the theory evolution is the lending aspect of the bank where the customer deposit is given out as loan with interest to other customers. This is seen as increase in the money supply as captured in the money multiplier technique which ushered in the credit creation theory. The theory was supported majorly by the 19 century researchers such as Withers (1909, 1916), Schumpeter (1912), Cassel (1918), Hahn (1920), Hawtrey (1919) as cited in Werner, R. A. (2016). They believed that money multiplier principles have not critically captured the process of the lending which is critical in monetary and transactional system of every nation.

The credit creation theory of banking ague that individual banks can create money, and banks do not solely lend out deposits that have been provided to the by them the depositors but rather a multiple of the deposit. Banks do not separate customer funds (deposit) from the funds owned by the bank itself as such the two funds are treated as the same. This process makes bank to creates a bank deposits and credit the borrower's account with the borrowed amount, although no new deposit has taken place and this is termed as credit creation out of nothing (Werner, 2014). Consequently, the amount of money that a bank can create is not constrained by their deposit taking activities but rather by the reserve requirement which guarantee multiplying a deposit up to nine (9) stages as presented in money multiplier technique. This created money through bank lending creates new purchasing power that did not previously exist. The creation of money (credit) is now being aided by the cashless transactions through transfer of digital figure to borrowers by the banks in which are the custodian of accounting and monetary information (Werner, 2014). This process makes it difficult for stakeholders to differentiate between the created credit and the real deposit.

In recent times, the money creation has captured much attention of various stakeholder especially from the collapse of Breton Wood system and the full adaption of fiat and fractional reserve system couples with the consistent re-occurrence of economic crises either at national, regional or at global level. Researchers and policy makers like Warner, positive money movement and Bank of England has focused on the issue of money/credit creation as documented by (McLeay, Radia, & Thomas, 2014) which they see it as the process of where privates banks creates new money from the customers deposits with the aid of fractional reserve system. Bank of England in recent times have reiterated in their routines reports and recognises that the credit creation theory is critical in understanding the money creation process by the banks.

The money creation as was seen in this theory is born out of the customers' deposits and bank lending powers as prescribed by the relevant monetary regulatory agencies in the world. The use of reserve requirement and interest rate as the only control tools that the central bank uses in controlling the rate at which banks gives out loans has escalated the credit/money creation in recent years. Under the current system of fractional reserve banking private banks were given a window to give out loans at their wish by only maintaining the minimum reserve requirement set by the central bank. This process of money creation has become overwhelming in recent years where most transactions are longer held with physical cash rather cashless transaction which is initiated and controlled by the banks.

3.0 Conclusion

Transactional system that is properly formulated and operated plays a significant role in the realization of the economic stability and better living condition of people. This is because every human or nation partake in one transaction or the other in the day to day activities. However, it is clear from the review of the fractional reserve transactional that it has caused too much money in circulation through credit creation by private banks from customers' deposit. The created credit triggered inflation which is the bases for rise in prices of goods and services that directly affect the living condition of household in the economy. It was also reviled that interest rate as a tool for monetary control has not being effective in addressing the oversupply of money and this is evidenced in the 2007 subprime crises of United States. Therefore, it pertinent especially with the advancement in technology for stakeholders to work on having a stable and efficient monetary system that will be capable of fostering economic stability through actual economic growth. It should focus on the challenges of fractional reserve system especially curtailing credit creation, inflation control, poverty reduction, creation of employment opportunities, housing affordability, inequality control, crime reduction and provision of sustainable economic, environmental and social atmosphere that will trigger better living standard of people and the economy at large.

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