

Deposit Money Banks Activity of Availing Credit Facilities to Customers as a Form of Liability Creation

¹Christopher Osega
Otubor, ²Joshua Chibi
Dariye & ³Aminu U. Yuguda

¹Department of Banking &
Finance,
University of Jos, Plateau State

²Federal Republic of Nigeria

³World Bank Finance Project,
Financial Management Unit,
Office of the Accountant
General, Gombe

Abstract

This article understudied the correlation between creations of bank facilities to liability creation simplified as where deposit money banks generate liability with particular reference to availing various facilities to their qualified customers. How deposits banks create liability is often misunderstood and in one direction of thought. Every new loan that a bank makes creates new money. This has greatly been ignored by stakeholders. Instead, management of these banks have 80% relied on outright source of deposit with various targets set for their staff. There is another dimension to that which is the creation of bank facilities. Research methodology was by ways of reviewing journals, books, accessing internet and personal observations. Findings showed that deposit money banks mostly concentrate on sourcing for raw deposits rather than lending out much of these deposits that are placed with them. The act of lending creates deposits. Most banks do not visualise this aspect as one of the sources of liability instead the sourcing of raw deposits directly from customers. This research work has shown that the principal way to survive is by these banks availing facilities. The reality of how money is created today differs from the description found some years back. The study concludes that whenever a bank avails a facility, it simultaneously creates a matching deposit in the borrower's bank account and when interest and facility fees are charged, they are creating new money. The study recommends that as deposit money banks give credit facilities, the various fees charged on the facilities should have majority plunge as deposit for the banks instead of total disbursement as profit shared.

Keywords: *Banks, Facilities, Liability, Creation, Survival*

Corresponding Author Christopher Osega Otubor

<http://internationalpolicybrief.org/journals/international-scientific-research-consortium-journals/intl-jrnl-of-innovative-research-in-soc-sci-strategic-mgt-techniques-vol3-no2-november-2016>

Background to the Study

The challenge of deposit money banks identifying that facilities availed to qualified customers builds up their business has not been known by the management of these deposit money banks that it further goes to create deposits for sustainability and development. Facilities create deposits is correct as an observation. Deposit money banks create money through lending; they cannot do so freely without limit. They are limited in how much they can lend if they are to remain profitable in a competitive banking system. The researcher has found out that it has been invoked accurately, in connection with a rejection of the 'money multiplier' fable found in economic textbooks. There is potential for confusion if 'facilities create deposits' is embraced too enthusiastically as the defining characteristic, without considering the full life cycle of facilities and deposits. Indeed, we shall see further below that 'deposits fund facilities' is as true as 'facilities create deposits' and that there is no contradiction between these two things. Monetary policy acts as the ultimate limit on money creation. More so, the challenge of deposit money banks not "lending reserves" to their non-bank customers in their operative activities contributes to slow sustainability and development of the business of these deposit money banks. Deposits are used to repay facilities, resulting in the 'death' of both facility and deposit. But there is more. As part of the birth/death analogy, there is the lifetime of facilities and deposits to consider. This sequence of birth, life, and death in total may be helpful in putting 'facilities create deposits' into a broader context.

The research study has equally found out that "Facilities create deposits" is an operation in endogenous money. When a loan is taken out, new money is created. As people borrow more, more new money comes into the economy. All the extra spending this newly created money funds gives people the impression the economy is doing well, which encourages them to borrow even more. As the debt goes up, so does the amount of money. Because deposit money banks create money when people borrow, for every of money in the economy there will be a naira of debt. If there is ₦4,100,000 in ones deposit money bank account, someone else must be ₦4,100,000 in debt. Across the whole economy there will be as much debt as money. Where central banks impose a level of required reserves based on deposits, the timing of the demand for and supply of reserves in respect of such a requirement follows the creation of the deposit it does not precede it. The money multiplier story is bunk.

Nevertheless, there is a larger context for deposits, which includes their fate after they have been created. The central bank does not fix the amount of money in circulation, nor is central bank money 'multiplied up' into more loans and deposits. Prudential regulation also acts as a constraint on banks' activities in order to maintain the resilience of the financial system. And the households and companies who receive the money created by new lending may take actions that affect the stock of money, they could quickly 'destroy' money by using it to repay their existing debt, for instance. The Central Bank of Nigeria aims to make sure the amount of money creation in the economy is consistent with low and stable inflation. Usually, the Central Bank of Nigeria implements monetary policy by setting the interest rate on central bank reserves.

Richard (2014) posited that the first empirical evidence in the history of banking on the question of whether banks can create money out of nothing also that the banking crisis has revived interest in this issue, but it had remained unsettled. He went to say whereby money is borrowed from a cooperating bank, while its internal records are being monitored, to establish whether in the process of making the loan available to the borrower, the bank transfers these funds from other accounts within or outside the bank, or whether they are newly created. This then influences a range of interest rates in the economy, including those on bank loans. The money that deposit money banks create is not the paper money that bears the logo of the government-owned bank. It's the electronic deposit money that flashes up on the screen when balance is checked at an Automated Teller Machine (ATM). Right now, this money (bank deposits) makes up over 97% of all the money in the economy. The flip-side to the creation of money is that with every new loan comes a new debt. Christa (2013) said, liquidity creation is a core function of banks and an economic service of substantial importance to the economy.

The key variables of dependent and independent variables can be mentioned here and explained. The dependent variables are: liability creation while the independent variables are: availing credit.

Liability creation is an addition to the existing money in the hand of deposit money banks which results as a function to the money given out to qualified bank customers in return to both the principal and other charged fees as moneys owed and debts or pecuniary obligations, opposed to assets. It involves an obligation that legally binds an individual or company to settle a debt. When one is liable for a debt, they are responsible. Also it is the process in which deposit money banks increase the amount of funds in deposits accounts by using reserves to make loans. The contending issue is that liability creation is made possible through fractional-reserve banking. Because deposit money banks keep only a fraction of deposits as reserves, extra reserves can be used to back up and create additional deposits (money) that did not previously exist. Government policy makers like the Central Bank rely on the money creation process when conducting monetary policy. Liability creation by banks is a modern alternative to printing paper currency. Availing credit, on the other hand, is the position the deposit money bank has taken to agree to make funds available to their qualified customers to transact their business in return to the bank's coffers at a later date on demand. The scheme is intended to make short-term working capital finance available to business owners at comparable interest rates.

Deposit Money Banks are financial commercial institutions where money is placed into the institution for safekeeping and other banking transactions. Bank deposits are made to deposit accounts at a banking institution, such as savings accounts, current accounts and many more.

Customers in this context are those who bank at the institution and who cash do banking transactions from the bank. A bank customer can be someone who banks at the institution. Depositing of money in deposit money banks and availing same as credit facility are interrelated and the function of one is the function of the other. Based on the above discussions, the availing of credit facilities propels the creation of liability for the deposit money banks.

Statement of the Problem

The problem of general acceptability that the practice of fractional-reserve banking makes it possible for deposit money banks to create valuable money out of significantly less valuable inputs is not commendable because the money creation process undertaken by these banks is assumed to be the printing valuable paper currency out of less valuable ink and paper. Printing paper currency is the "traditional" method of money creation. However, when it comes to monetary policy and controlling the money supply, the creation of checkable deposits is the more important of the two methods.

Also the general belief that reserves are the assets (vault cash and Federal Reserve deposits) used by banks to conduct day-to-day transactions, especially processing cheques or providing the "cash" needed for cash withdrawals. While prudently managed banks are inclined to keep reserves in the due course of business, bank regulators stipulate specific reserve. Any reserves that banks have over and above those required by regulators are excess reserves. Excess reserves can only be meaningful for the banks if they are used to make loans, a process that involves the creation of deposits. If banks obtain excess reserves, if they have more reserves than needed to keep deposits then they make interest-paying, profit-generating loans. These loans find their way into the hands of the borrowers as deposits. When a deposit is made at a bank, that bank must keep a portion the form of reserves.

There is the problem of the fees accumulated from the availing of credit facilities not channeled as part of bank deposits instead are shared among staff above average. The total amount of money created with a new bank deposit can be found using the deposit multiplier, which is the reciprocal of the reserve requirement ratio. Multiplying the deposit multiplier by the amount of the new deposit gives the total amount of money that may be created.

Objectives of the Study

To investigate the fractional-reserve banking system as a means of creating banks deposit.
To investigate the general belief that reserves are the assets (vault cash and Federal Reserve deposits) used by banks to conduct day-to-day transactions, especially processing cheques or providing the "cash" needed for cash withdrawals.

To investigate and state that the inclusion of various fees charged customers should be part of deposits for the banks when credit facilities are availed these customers.

Literature Review

This aspect of the study is divided into the conceptual framework, theoretical framework and the empirical study.

Conceptual Framework

Ravn, (2015) introduced five easy-to-grasp analogies or concepts that educators and reformers might use to convey key money-creation concepts to a lay audience. The analogies offered includes: money as patches in an expandable patchwork quilt that covers a nation's real assets; the money supply as water in a bathtub with a faucet and a drain; money understood as debt in a model economy run by schoolchildren; the misleading concept of a bank "loan" explained by reference to gold that a London goldsmith *could have lent*, and the money-creating capacity of bankers' clearing systems illustrated by the example of neighbors working for each other without money.

Deposit creation or destruction will also occur any time the banking sector (including the central bank) buys or sells existing assets from or to consumers, or, more often, from companies or the government. Banks buying and selling government bonds is one particularly important way in which the purchase or sale of existing assets by banks creates and destroys money. Banks often buy and hold government bonds as part of their portfolio of liquid assets that can be sold on quickly for central bank money if, for example, depositors want to withdraw currency in large amounts.⁽¹⁾ When banks purchase government bonds from the non-bank private sector they credit the sellers with bank deposits. In evaluating and assessing the above discussions, they are institution that deals in money of various denominations and its substitutes and provides other money-related services. In discharging its functions as a financial intermediary, they accept deposits and give loans thereby making a profit from the difference between the costs (including interest payments) of attracting and servicing deposits and the income it receives through interest charged to borrowers or earned through securities. More so, many banks provide related services such as financial management and products such as mutual funds and credit cards.

Theoretical Framework

This study is anchored on the theory of Transaction Costs and Asymmetric Information by Franklin and Anthony (1998). Traditional theories of intermediation are designed to account for institutions which take deposits or issue insurance policies and channel funds to businesses. In recent years, it has shown that there have been significant changes. However, transaction costs and asymmetric information have declined while intermediation has increased. Banks are merely intermediaries like other non-bank financial institutions, collecting deposits that are then lent out. Fractional reserve banking is one theory that can be said to be a banking system in which only a fraction of bank deposits are backed by actual cash-on-hand and are available for withdrawal by customers which is done to grow the economy by freeing up funds that can be loaned out to other qualified parties. The fractional reserve theory of banking states that individual banks are mere financial intermediaries that cannot create money, but collectively they end up creating money through systemic interaction.

Empirical Study

According to Matthew (2013) *"The key function of banks is money creation, not intermediation.* He also said fractional reserve banking is thought to have evolved through the observations and actions of goldsmiths. He said that before the advent of central banks, goldsmiths assumed a role similar to depository institutions. They would accept gold and silver for safekeeping and provide a "note" as proof of deposit. These notes slowly gained acceptance as a medium of exchange, thereby acting as a form of paper money.

Anil, Raghuram and Jeremy (2002) said since banks often lend via commitments, their lending and deposit-taking may be two manifestations of one primitive function: the provision of liquidity on demand. Also that there will be synergies between the two activities to the extent that both require banks to hold large balances of liquid assets: If deposit withdrawals and commitment takedowns are imperfectly correlated, the two activities can share the costs of the liquid-asset stockpile they developed an idea with a simple model, and used a variety of data to test the model empirically.

Stating his position, John (2014) said free banking is a process where the market makes the ultimate judgment on where to draw the line between money as a present good and money as a future good. He said bankers must make a judgment on the proportion of their deposits that represent saving and the proportion that are currently serving as present money for the holders of the deposits. More so, that only funds held as savings may be safely “invested” or loaned. Gingered by Keynes and Minsky, Dirk Bezemer pieces together a cross-country data set of credit and debt, investigating whether the two faces of credit are different for different forms of credit. And using agent-based modeling, he strives to capture the interaction between the financial and the real; this is new economic thinking. The financial sector is vital to economic growth; but finance is also a cause of crises. This two-sided potential is missing in most of today's theoretical models and empirical research, the key reason why the 2007-8 credit crises came as a surprise to leading policy and research institutions.

Mervyn (2003) who was the Governor of the Bank of England from 2003-2013, explained this point to a conference of business people: “When banks extend loans to their customers, they create money by crediting their customers' accounts.” According to Farag, Harland and Nixon (2013), holdings of some government bonds are counted towards meeting prudent framework and empirical liquidity requirements.

Also Button, Pezzini and Rossiter (2010) said, banks guard against liquidity risk by holding liquid assets (including reserves and currency), which either can be used directly to cover outflows, or if not can quickly and cheaply be converted into assets that can. If banks purchase liquid assets such as government bonds from non-banks, this could create further deposits.

Furthermore Bridges, Rossiter and Thomas (2011) and Butt (2012) mention that commercial banks' purchase of government bonds and their issuance of long-term debt and equity have both been important influences on broad money growth.

Tobin (1963) argued that banks do not possess a 'widow's cruse', referring to a biblical story in which a widow is able to miraculously refill a cruse (a pot or jar) of oil during a famine. He further argued that there were limits to how many loans could be automatically matched by deposits.

In evaluation of the above, the money loaned out for businesses generates various charged fees which add to bank deposit.

Research Methodology

The research method adopted was the qualitative method by reviewing of journals, books, accessing internet and personal observation.

Management of Deposit Money Bank Reserve

The ultimate purpose of reserve management is not reserve positioning per se. The end goal is balance sheets that are in balance, institution by institution – and where deposits fund loans, alongside various other asset-liability matching configurations. The reserve system records the effect of this balance sheet activity. The reserve account is the inverse exogenous money

image of the nominal configuration of the rest of the balance sheet. The balance sheet requires asset liability management coordination in order to match up assets and liabilities both in nominal terms and in a way that is financially effective. And even if loan books remain temporarily unchanged, all manner of other banking system assets and liabilities may be in motion. This includes securities portfolios, deposits, debt liabilities, and the status of the common equity and retained earnings account. And of course, loan books do not remain unchanged for very long, in which case the loan/deposit growth dynamic comes directly into play on a recurring basis. For example, suppose an individual bank lowers the rate it charges on its loans, and that attracts a household to take out a mortgage to buy a house. The moment the mortgage loan is made, the household's account is credited with new deposits. And once they purchase the house, they pass their new deposits on to the house seller. The buyer is left with a new asset in the form of a house and a new liability in the form of a new loan. The seller is left with money in the form of bank deposits instead of a house. It is more likely than not that the seller's account will be with a different bank to the buyer's. So when the transaction takes place, the new deposits will be transferred to the seller's bank. The buyer's bank would then have fewer deposits than assets. In the first instance, the buyer's bank settles with the seller's bank by transferring reserves.

Brief Analysis of Liability Creation

According to Boundless Economics (2016), the lending bank presents the borrower with a cheque or bank draft and debits the borrower's loan account and credits a payment liability account. The bank's balance sheet grows. Also i said, the borrower may then deposit that cheque with a second bank. At that moment, the balance sheet of the second bank, the deposit issuing bank grows by the same amount, with a payment due asset and a deposit liability. The end result is that the system balance sheet has grown by the amount of the original loan and deposit. The loan has created the deposit, although loan and deposit are domiciled in different banks. The system has expanded in size. The growth is now reflected in the size of the deposit issuing bank's balance sheet, with an increase in deposits and reserve balances. The 'loans create deposits' is best understood as a balance sheet growth dynamic, distinct from any reserve effect that might occur as part of an associated interbank clearing transaction at the that are reflected as accounting entries. Also Boundless Economics (2016), focused on two banks: Anderson Bank and Brentwood Bank. With the assumption that all banks are required to hold reserves equal to 10% of their customer deposits. When a bank's excess reserves equal zero, it is loaned up. Anderson and Brentwood both operate in a financial system with a 10% reserve requirement. Each has 10,000 in deposits and no excess reserves, so each has \$9,000 in loans outstanding, and \$10,000 in deposit balances held by customers. Suppose a customer now deposits 1,000 in Anderson Bank. Anderson will loan out the maximum amount 11,000 in deposits in Anderson with \$9,900 in loans outstanding. The debtor takes her 900 loan and deposits it in Brentwood bank. Brentwood's deposits now total 10,900.

Thus, you can see that total deposits were 20,000 before the initial 1,000 deposit, and are now 21,900 after. Even though only 1,000 were added to the system, the amount of money in the system increased by 1,900. The 900 in deposits is new money; Anderson created it when it issued the \$900 loan. Mathematically, the relationship between reserve requirements (rr), deposits, and money creation is given by the deposit multiplier (m). The deposit multiplier is

the ratio of the maximum possible change in deposits to the change in reserves. When banks in the economy have made the maximum legal amount of loans (zero excess reserves), the deposit multiplier is equal to the reciprocal of the required reserve ratio ($m=1/rr$). In the above example the deposit multiplier is $1/0.1$, or 10. Thus, with a required reserve ratio of 0.1, an increase in reserves of \$1 can increase the money supply by up to \$10. Fig. 1 below shows the total amount of money that can be created with the addition of \$100 in reserves using different reserve requirements.

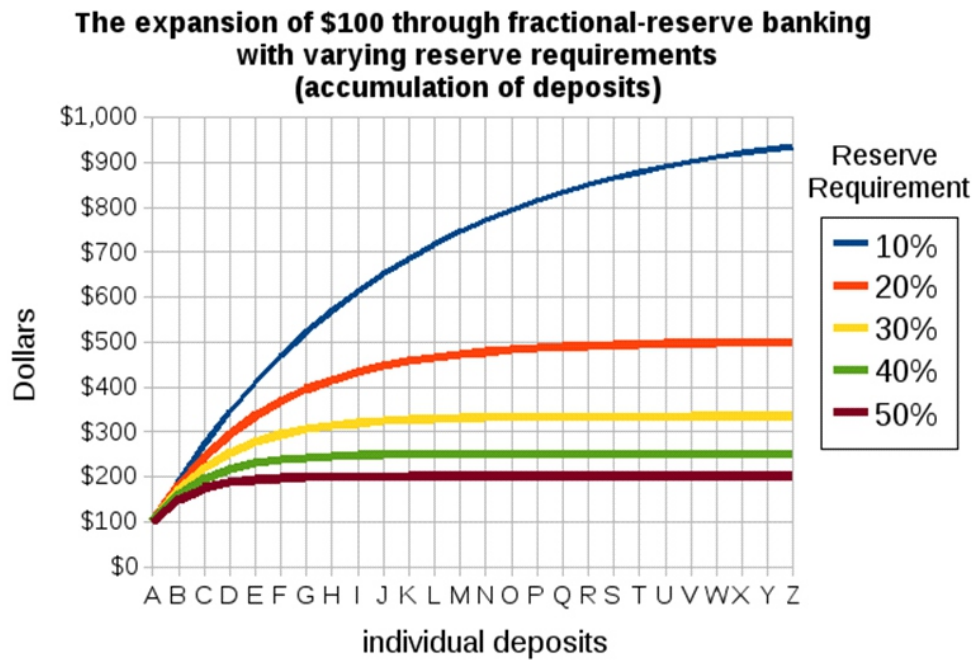


Fig 1: Money Creation and Reserve Requirement
Source: Boundless Economics, 2016

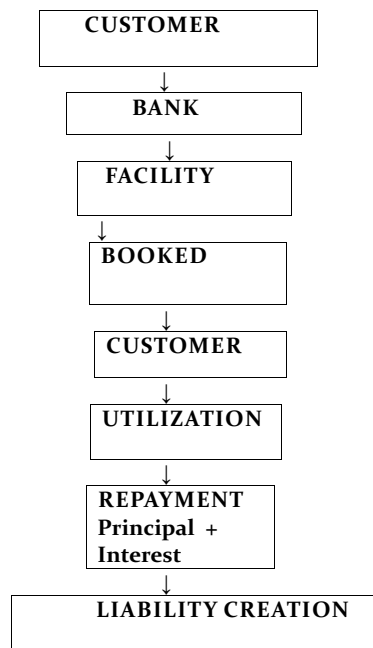


Fig. 2: Flowchart Representation of Liability Creation

Source: Researcher's Survey Model

From fig 2, above which is the researcher's model, additional liability is created when customer approaches a bank for bank facility and on approval the facility is booked for the customer in his or her account. On utilization of the facility by the customer, repayment is made where both the principal and the interest are paid to the bank.

Research Methodology

Findings

1. This study has revealed that the study of 'facilities create deposits', means at least that the marginal impact of new lending made by any deposit money banks will be to create a new asset and a new liability for the banking system, typically for the originating lending bank at first and a bank makes a facility to a borrowing customer that is a debit under bank assets and simultaneously it credits the deposit account of the same customer. That is a new bank liability.
2. Both of those accounting entries represent increases in their respective categories. This is operationally separate from any notion of reserves that may be in association with the creation of deposits and loans are critical as source of banks deposit creation.
3. Loans creates deposits is a reference point and standard for the process of deposit creation and the price of loans, that is, the interest rate (plus any fees) charged by banks, determines the amount that households and companies will want to borrow.

Conclusion

The original connection by which deposits are created by loans typically disappears at some point following deposit creation at the micro bank level and/or the macro system level. The original demand deposits associated with specific facility creation become commingled as they move back and forth between different banks. And they not only move between banks, but they can change in form within any bank. They can be converted into term deposits or other funding forms such as bank debt or common and preferred stock. So when lots of people try to pay down their debts at the same time, money disappears from the economy. As a result of there being less money and less new lending spending slows down. When this happens, it is like draining the oil from the engine of a car: pretty soon, everything stops working. This means that it's almost impossible to reduce our debts without causing a recession. 'Loans create deposits' only describes the marginal growth dynamic at the inception of deposit creation. 'Deposits fund facilities' is the more apt description that applies to a good portion of what constitutes ongoing balance sheet management in competitive banking. Banks will need to formulate their strategies in the midst of unprecedented changes. This aspect of mobile technology and social media has been critically researched upon by this study. The explosive growth of smart phone technology has created a new distribution channel.

Recommendations

1. Banking leaders need to quickly and decisively adopt the identification of fees generated from availing credit facilities as genuine part of deposits.
2. Also banks must contend with restrictive new laws impacting their relationships with retail customers, taking notice that changing consumer behaviours and expectations assist the control of time and retail banks should capitalize on consumers' new focus on thrift and financial planning.
3. Both availed credit facilities and deposits should be recognised as the strength of the banking activities hence any inflow should be recognised as deposits no matter where it comes from into the business.

References

- Anil, K. K., Raghuram, R., & Jeremy, C. S. (2002). Banks as liquidity providers: an explanation for the coexistence of lending and deposit-taking, *The Journal of Finance*, 57 (1)
- Boundless, E. (2016). How a bank can create money. Boundless Economics. "Example Transactions Showing How a Bank Can Create Money." *Boundless Economics*. <https://www.boundless.com/economics/textbooks/boundless-economics-textbook/the-monetary-system-27/creating-money>
- Bridges, J., Rossiter, N., & Thomas, R. (2011). Understanding the recent weakness in broad money growth. *Bank of England Quarterly Bulletin*, 51(1); 22–35.
- Bridges, J., & Thomas, R. (2012). The impact of QE on the UK economy — some supportive monetarist arithmetic. *Bank of England working paper* No. 442.
- Butt, N. (2012). What can the money data tell us about the impact of QE?. *Bank of England Quarterly Bulletin*, 52 (4); 321–31.
- Button, R., Pezzini, S., & Rossiter, N. (2010). Understanding the price of new lending to households. *Bank of England Quarterly Bulletin*, 50 (3), 82–172.
- Christa, H.S. B. (2013). Liquidity: How banks create it and how it should be regulated, *Case Western Reserve University and Wharton Financial Institutions Center, The Oxford Handbook of Banking*, 2nd ed.
- Farag, M., Harland, D., & Nixon, D. (2013). Bank capital and liquidity. *Bank of England Quarterly Bulletin*, 53 (3), 15–201.
- Franklin, A. & Anthony, M. S. (1998). The theory of financial intermediation. *Journal of Banking & Finance*, 21, 1461–1485
- John, P. C. (2014)**. Free banking and credit creation. Implications for business cycle theory. *Quarterly Journal of Austrian Economics*, 3, (3) (Fall 2000)
- Marvyn (2003). Unconventional monetary policy. The assessment. *Oxford Review of Economic Policy*, 28 (4), 603–21.
- Matthew, K. (2013). Fractional reserve banking. How to create and destroy money. *Financial Sense, F. S Insider Publishers*
- Richard, A. W. (2014) Can banks individually create money out of nothing? The theories and the empirical evidence. *International Review of Financial Analysis*, 36, 1–19
- Ravn, I. B. (2015). Explaining money creation by commercial banks. Five analogies for public education, *[Aarhus University, Denmark] real-world economic review*, 71
- Tobin, J. (1963). Commercial banks as creators of 'money'. *Cowles Foundation Discussion Papers*. 159.