

Role Of Credit Creation In Commercial Banks

Yogita Yadav

Assistant Professor of Economics

Sri Venkateswara College, University of Delhi

Email -yadav.yogita1611@gmail.com

Introduction

The most important function of a commercial bank is the creation of credit money—a function which overshadows all other banking functions. Before understanding credit creation it is better to understand money. Money is something which is generally accepted as a medium of exchange. Before money came into existence, exchange took place into barter system. Barter occur when people directly exchange their goods for someone else's goods. The barter system reduces the complexity of modern system. There is no problem of over/under production, concentration of economic power, foreign exchange crises, adverse BoP. In simple term anything that is generally acceptable as mean of exchange and at the same time acts as a measure and store of value is called money.

Credit creation or money creation refers to the power of the banks to expand or contract demand deposits through the process of more loans, advances and investments .It results in multiple expansion of banks demand deposits.

A bank keeps a certain part of its deposits as a minimum reserve to meet the demands of its depositors and lends out the remaining to earn income. The loan is credited to the account of the borrower. Every bank loan creates an equivalent deposit in the bank. Therefore, credit creation means expansion of bank deposits.

Credit money mainly: Cheques issued against the demand deposits.

It is an open secret that banks advance a major portion of their deposits to the borrowers and keep smaller part of them for the payment to the customers on demand. Even then the customers of the banks have full confidence that their deposits lying in the banks are quit safe and can be withdrawn on demand. • The banks exploit this trust of the customers and expand loans several times than the amount of demand deposits possessed by them. This tendency on the part of the commercial banks to make loans several times of the excess cash reserves kept by the bank is called creation of credit”.

The entire structure of banking is based on credit. Credit basically means getting the purchasing power now and promising to pay at some time in the future. Bank credit means bank loans and advances.

Credit creation refers to power of commercial banks to expend secondary deposits either through the process of making loans or through investment in securities.

Concepts of Credit Creation

- **Bank as a business institution** – Bank is a business institution which tries to maximize profits through loans and advances from the deposits.
- **Bank Deposits** – Bank deposits form the basis for credit creation and are of two types:
 - o **Primary Deposits** – A bank accepts cash from the customer and opens a deposit in his name. This is a primary or passive deposit. Because such deposit completely depend on the willness of depositors he/ she could withdraw it any time. Commercial bank does not play any role for such deposit.
 - o
 - o This does not mean credit creation. These deposits simply convert currency money into deposit money. However, these deposits form the basis for the creation of credit.
 - o **Secondary or Derivative Deposits** – creation of secondary deposit is credit creation, larger the amount that a bank advance, greater is the creation of secondary deposit or loan created. That why it is said loans create deposits and deposit create loan. A bank grants loans and advances and instead of giving cash to the borrower, opens a deposit [account](#) in his name. This is the secondary or derivative deposit. Every loan creates a deposit. The creation of a derivative deposit means the creation of credit.
- **Cash Reserve Ratio (CRR)** – Certainly banks earn profit by loans and advances but it does not means that it loans all its credits at the same time. So every time banks remain certain cash as reserve out of deposit. Banks know that all depositors will not withdraw all its at the same time. Therefore, they keep a fraction of the total deposits for meeting the cash demand of the depositors and lend the remaining excess deposits. CRR is the [percentage](#) of total deposits which the banks must hold in cash reserves for meeting the depositors' demand for cash.
- **Excess Reserves** create credit– The reserves over and above the(CRR) cash reserves are the excess reserves. When cash demand is excess than supply than bank uses such fund for expansion of credit. These reserves are used for loans and credit creation.
- **Credit Multiplier** – Given a certain amount of cash, a bank can create multiple times credit. In the process of multiple credit creation, the total amount of derivative deposits that a bank creates is a multiple of the initial cash reserves.

Aspects of creating credit

The two most important aspects of credit creation are:

1. **Liquidity** – The [bank](#) must pay cash to its depositors when they exercise their right to demand cash against their deposits.
2. **Profitability** – Banks are profit-driven enterprises. Therefore, a bank must grant loans in a manner which earns higher interest than what it pays on its [deposits](#).

The bank's credit creation process is based on the assumption that during any time interval, only a fraction of its customers genuinely need cash. Also, the bank assumes that all its customers would not turn up demanding cash against their deposits at one point in time.

Demand deposits are an important constituent of money supply and the expansion of demand deposits means the expansion of money supply. The entire structure of banking is based on credit. Credit basically means getting the purchasing power now and promising to pay at some time in the future. Bank credit means bank loans and advances.

Assumption of create credit

- 1 The bank **assumes** that all its customers would not turn up demanding cash against their deposits at one point in time.
- 2 Bank does not pay cash for accept credit it deposit the amount in the account of customers.
- 3 All banks follow the rule of minimum legal Reserve ratio.
- 4 Banks expansion its credit on the basis of additional funds.
- 5 People deposit amount in banks for demand in cash when cash require.
- 6 RBI does not change its credit policy.
- 7 most of People use paper money for trade and transaction.

Process of Credit creation

The existence of a number of banks, A, B, C etc. each with different sets of depositors.

- Every bank has to keep 20% of cash reserves, according to law
- Suppose, a person deposits Rs. 1,000 cash in Bank A. As a result, the deposits of bank A increase by Rs. 1,000 and cash also increases by Rs. 1,000.

Balance sheet of bank A

Liabilities		Assets	
Demand Deposits	1000	Cash	200
		Loan to B	800
Total	1000	Total	1000

Under the double entry system, the amount of • Rs. 1,000 is shown on both sides. The deposit of Rs. 1,000 is a liability for the bank and it is also an asset to the bank. Bank A has to keep only 20% cash reserve, i.e., Rs. 200 against its new deposit and it has a surplus of Rs. 800 which it can profitably employ in the assets like loans. Suppose bank A gives a loan to X, who uses the amount to pay off his creditors. After the loan has been made and the amount so withdrawn by B to pay off his creditors, the balance sheet of bank A will be as follows:

Balance sheet of bank B

Liabilities		Assets	
Demand Deposits	800	Cash	160
		Loan to B	640
Total	800	Total	800

Suppose B purchase goods of the value of Rs. 800 from C and pay cash. C deposits the amount with Bank B. The deposits of Bank A A now increase by Rs. 800 and its cash also increases by Rs. 800. After keeping a cash reserve of Rs.160, Bank A A is free to lend the balance of Rs. 640 to anyone. Suppose bank AA lends Rs. 640 to d, who uses the amount to pay off his creditors.

Suppose D purchases goods of the value of Rs. 640 from S and pays the amount. S deposits the amount of Rs. 640 in bank C. Bank C now keeps 20% as reserve (Rs.128) and lends Rs. 512 to a merchant. And this goes on till nth round then

Balance sheet of bank C

Liabilities		Assets	
Demand Deposits	640	Cash	128
		Loan to B	512
Total	640	Total	640

Methods of creating credit money by a commercial bank:**Mainly there are two methods for creating credit**

(a) By giving a loan, and

(b) By purchase of securities.

(a) By giving a loan:

Let us assume an isolated community having no foreign trade relations and only one bank where everybody keeps an account; further no cash circulates and transactions are settled by cheques. Bankers know that all the currency that depositors withdraw soon returns to the bank. They also know that all depositors will not withdraw all deposits at the same time. From experience they have learnt that if they just keep about 20% of their total demand deposits in cash reserves, they will have enough to meet all demands for cash.

Suppose an ordinary borrower goes to the bank for a loan of Rs. 1,000. After being convinced of the solvency of the borrower and the safety of the loan in his hands, the bank will advance a loan of Rs. 1,000 not by handing over cash or gold to the borrower, but by opening an account in his name. If the borrower, already has an account, he will be allowed an overdraft to the extent of Rs. 1,000.

Thus, the most usual method of making a loan is merely to credit the account of the borrower with Rs. 1,000. The borrower will then draw cheques on the bank while making purchases. Those who receive the cheques deposit them with the banks in their own accounts. Therefore, a bank loan of Rs. 1,000 has resulted in deposits of Rs. 1,000. The point to be noted and understand is that loans are made by creating a deposit.

When a person deposits Rs. 1,000 with a bank, the bank does not keep the entire cash but only a certain percentage (say 20%) of it to meet the day-to-day cash obligations. Thus, the bank keeps Rs. 200 and lends to another person B, Rs. 800 by opening a credit account in his name. Again, keeping 20% to meet B's obligations, the bank advances the rest Rs. 640 to C ; further keeping 20% to meet C's obligations the bank advances Rs. 512 to D and so on, till Rs. 1,000 are completely exhausted.

Thus, an original deposit of Rs. 1,000 leads to additional deposits of Rs. 800 plus Rs. 640 plus Rs. 512 plus Rs. 409, plus Rs. 328 and so on. By adding up all the deposits we get total Rs. 5,000. It is clear, therefore, that the total amount of credit creation will be the reverse of the cash reserve ratio. Here cash reserve ratio has been assumed to be 20% or $\frac{1}{5}$, therefore,

the credit is Rs. 5,000 i.e., five times the original deposit of Rs. 1,000. Although, we have assumed one bank, yet the credit creation will take place when there are many banks.

It is clear that the main limitation on credit creation is the reserve ratio of cash to credit. Therefore, the amount of credit that a system of banking can create depends upon the reserve ratio. The banks can multiply a given amount of cash to many times of credit. If the public would demand no cash, credit would go on expanding indefinitely. But the reserve ratio is a sort of leakage from the stream of credit creation.

We can, thus, think of a credit creation multiplier. The higher the reserve ratio, the smaller is the credit creation multiplier. In our example above, with an original deposit of Rs. 1,000 the bank was in a position to create credit of Rs. 5,000. The credit creation multiplier is obviously $5(Rs\ 5,000/Rs\ 1,000)$.

In general, the credit creation multiplier is related to the reserve ratio in the following way:

$$1/(1-\text{reserve ratio}) = 1/\text{reserve ratio}$$

If the reserve ratio is $1/3$, credit creation multiplier is 3 a reserve ratio of $1/5$ will give us a higher value 5.

Multiple Credit or Money Expansion:

This process can also be shown in 'T' form. Suppose Mr. Z, who is a government employee gets his pay cheque of Rs. 100. The cheque is used by the government is drawn on R.B. of India. Let us assume Mr. Z has an account in Bank 'A' in which he deposits the cheque. Bank 'A' presents this cheque to RBI for collection, as a result of which, the deposits of Bank 'A' increase by Rs. 100 and its cash will also increase by Rs. 100.

By experience Bank A finds that Z will need hardly 10% of it in cash. It means Bank 'A' can lend Rs. 90%, The bank 'A' grants a loan? What happens? It does not take out cash and give it to the borrower. It either allows the Borrower (X) to overdraw his account (if he has one with the bank) or it (Bank A) opens an account in his name to the extent of loan taken (Rs. 90), if he is a new customer. Let us say Bank 'A' grants a loan to X by opening an account in his favour.

Importance of Credit Creation

The creation of credit or deposits is one of the most important functions of commercial banks. Like other corporations, banks aim at earning profits. For this purpose, they accept cash in demand deposits and advance loans on credit to customers.

When a bank advances a loan, it does not pay the amount in cash. But it opens a current account in his name and allows him to withdraw the required sum by cheques. In this way, the bank creates credit or deposits.

Demand deposits arise in two ways: one, when customers deposit currency with commercial banks, and two, when banks advance loans, discount bills, provide overdraft facilities, and make investments through bonds and securities. The first types of demand deposits are called “primary deposits”. Banks play a passive role in opening them. The second types of demand deposits are called “derivative deposits”. Banks actively create such deposits.

Limitation on Credit Creation

The commercial banks do not have unlimited power of credit creation. Their power to create credit is limited by the following factors:

1. Amount of Cash
2. Cash Reserve Ratio
3. Banking Habits of the People
4. Nature of Business Conditions in the Economy
5. Leakages in Credit-Creation
6. Sound Securities
7. Liquidity Preference
8. Monetary Policy of the Central Bank Limits to credit creation.

While banks would prefer an unlimited capacity for creating credit to increase profits, there are many limitations. These limitations make the process of creating credit non-profitable. Therefore, a bank continues to create additional credit as long as:

- There is a negligible chance of the loans turning into bad debts
- The interest rate that banks charge on loans and advances is greater than the interest that the bank gives to depositors for the money deposited in the bank.

Hence, we can say that the limitations of credit creation operate through shifts in the balance between liquidity and profitability. The factors that affect the creation of credit are:

- The capacity of banks to create credit.
- The willingness of the banks to create credit
- Also, the demand for credit in the market.

Capacity to create credit is a matter of:

- The availability of cash deposits with banks

- The factors which determine their cash deposit ratio

As regards the demand for credit:

- The demand must exist in the market
- Creditworthy borrowers (to avoid bad debts)
- The amount of loan granted should not exceed the paying capacity of the borrower

Leakages

- If the banks are unwilling to utilize their surplus funds for granting loans, then the economy is headed towards recession
- If the public withdraws cash and holds it with themselves, then it reduces the bank's power to create credit

The capacity of the bank to create credit is subject to certain limitations which are given below

- (i). Cash Drain
- (ii). Transfer of deposit to non bank financial institution
- (iii). Willingness to borrow
- (iv). Different types of loan

From the account of credit creation given above, it would seem that the banks 'reap where they have not sown'. They advance loans or buy securities without actually paying cash. But they earn interest on the loans they give, or earn dividends on the securities they purchase, all the same. This is very tempting. They make profits without investing cash. They would, of course, like to make as much profit, like this, as they can.

But they cannot go on expanding credit indefinitely. In their own interest, they have to apply the brake and they do actually apply it, for it is well known that the profits made by the banks are not very high. The overriding limitation arises from the obligation-of the banks to meet the demands of their depositors.

Benham has mentioned three limitations on the powers of the banks to create credit ;

- i) The total amount of cash in the country;
- (ii) The amount of cash which the public wishes to hold; and
- (iii) The minimum percentage of cash to deposits which the banks consider safe.

As for (i), it may be said that credit can be created on the basis of cash. The larger the cash (i.e., legal tender money), the larger the amount of credit that can be created. But the amount of cash that a bank may have is such to the control of the Central Bank.

Here it may suffice to say that the Central bank has the monopoly of issuing the cash. It may increase it or decrease it, and expand or contract accordingly. The power of the central bank to control currency is thus the controlling influence on the extent of credit, that Create.

The second limitation arises from the habit of the people regarding the use of cash. If people are in the habit of using cash and not cheques, as in India, then as soon as credit is granted by the bank to a borrower, he will draw the cheque and get cash. When the bank's cash reserve is thus reduced, its power to create credit is correspondingly reduced.

On the other hand, if people use cash only for very small and odd transactions, then the cash reserve of the banks is not much drawn upon, and their power of creating credit remains unimpaired. This is the case in advanced countries like the U.S.A., U.K. and other European countries. There the banks keep only 4-5 per cent cash reserve.

The third limitation is the most important. It arises from the traditional reserve ratio of cash to liabilities which the banks must maintain to ensure their own safety and to maintain the degree of liquidity that is considered desirable. It is clear that when a bank creates a credit or grants a loan, it undertakes a liability.

There is an increase in its liabilities, and there is correspondingly a fall in the reserve ratio. The bank will not let the ratio fall below a certain minimum. When that minimum is reached, the power of the bank to create credit comes to an end. To grant any further credit will be risky unless the bank's experience is reassuring enough to permit the adoption of a lower percentage. Then that would become the limit.

To these may be added the fourth limitation: The bank cannot create credit without acquiring assets (in this case the borrower's promise to pay or some security). An asset is a form of wealth. Thus the bank only turns immobile wealth into mobile wealth. Hence, as Crowder observes, "the bank does not create money out of thin air, it transmutes other forms of wealth into money."

To sum up: The essential conditions for the creation of credit are that the banks obtain fresh cash reserves, they should be willing to lend and the businessmen should be willing to borrow, and the borrowers should not withdraw the amount of the loan, but be content to leave it in the form of deposits with the bank. The initiative is in the hands of the borrowers.

The deposit is, in fact, created not by the amount borrowed, but by the amount not withdrawn.

We may then conclude that for achieving soundness:

- (a) A bank should not advance funds for speculation;
- (b) It should not invest heavily in industrial undertakings which yield returns only after long periods;
- (c) It should not lend very large sums of money to an individual borrower or a particular group of borrowers; if they fail, the bank may have to face ruin;
- (d) It should maintain a high ratio of cash to deposits, loans and advances. Its other reserves should be as liquid as possible.

Thus, on the one side are profits and on the other reserves. High reserves mean less profit. The bank has to follow a path midway between the two extremes. It should strike a happy compromise between liquidity on the one side and profitability on the other.

It must keep sufficient liquid assets so that it may be able to meet the demands of the depositors. If the bank itself speculates, it may have to face disaster one day. The early history of joint-stock banking in India is full of examples where a bank had to close doors on account of its speculative activities.

There is no fixed principle about the proportion of reserves to liabilities. In the last resort, the amount of reserve depends upon the normal demands of a bank's customers. To meet sudden calls—and no one can predict them—the bank's investments should be as liquid as possible so that they can be easily converted into cash.

Nowadays every bank has to keep a percentage of its deposits with the Central Bank of the country. These balances, called bankers' deposits, are as good as money in the bank's own till. The Central Bank uses them as a handle to control its member banks and the total issue of credit in the country. They are also used to help member banks in an emergency, if otherwise they are sound.

It is seen that in countries, where the people are educated and bank-minded, the ratio of reserves to advances is lower than in backward countries. In the U.K., this ratio sometimes falls as low as per cent while in India it is usually much higher. The ratio is lower in the case of old banks with a reputation than in the case of smaller new banks. Deposit insurance

schemes are intended to inspire faith among the people in the banking system and thus give it strength and stability.

References

Abdoli, M. (2012). Corporate governance and earnings management and the relationship between economic value added and created shareholder value. *African Journal of Business Management*. VI(15), 5376-5382.

Ahamed, M. M. (2013). Market Concentration and Profitability of Indian Banks: Does Size Matter in the Impact of Bad Loans and Bank Capital. In GPEN-CGR Annual Conference 2013– Global Policy, Global Institutions and Global Development.

Ahmadi, A. (2006) Evolution of the information content of value added statement compared to the profit and loss statement, University of Shahid Beheshti.

Akalu, M (2002). Measuring and ranking value drivers: a shareholder value prospective. Tinbergen, Erasmus university Rotterdam, Netherlands Al., G. E. (2005). *Valuation: measuring and managing the value of companies*, 4th edition. New Jersey: John Wiley and Sons, 684.

Allen, F. (2001). Financial structure and financial crisis (No. 10). ADBI Research Paper Series. Anderson, A. M. (2005). Economic value added adjustments: much to do about nothing?

Andreas Dietrich, Gabrielle Wanzenried (2011). Determinants of bank profitability before and during the crisis: Evidence from Switzerland. *Journal of International Financial Markets, Institutions and Money*; pp.307-327 Retrieved on 15, August, 2016

Anna P. I. Vong and Hoi Si Chan (2009). Determinants of bank profitability in Macao. *Macao Monetary Research Bulletin* Retrieved on 19, August 2016

Asogwa, R. C. (2009). Measuring the determinants of value creation for publicly listed banks in Nigeria: a random effect probit (rep) model analysis.

Annual Conference on Econometric Modelling for Africa. 1-21. B. C. (July 2008). Value creation in Indian banking, Bacidore, J. B. (1997).

The search for the best financial performance measure. *Financial Analysts Journal*, 53(3), 11-20. Bain, J. (1951). Relation of profit rate to industry concentration: American manufacturing. *Quarterly Journal of Economics*. 1936-1940.

Banerjee, A. (1999). Economic value added and shareholder wealth: an empirical study of relationship. *Paradigm*, 3 (1), pp. 99-135.

Banerjee, A. (2000, July – September). Linkage between economic value added and market value: an analysis. *Vikalpa* 25(3).

Banking industry: an eva analysis. (2006). *The IUP Journal of Accounting Research and Audit Practices*. 8 (3/4), 52-60,220. Bao, B.-H. and H. (1998). Usefulness of value added and abnormal economic earnings: an empirical examination. *Journal of Business Finance and Accounting*, XXV(1and2), 251-264.

Bardia, S. (2008). Evaluation of financial performance: a dialectics. *ICFAI Journal of Accounting Research*, 7 (1), 36-49.

Barfield, R. (1998). Putting on a performance. *The Banker*, 148 (864) 66-68.

Barfield, R. (1998). The true test of performance. *The Banker*, 148 (869)26-27.

Bauer, P. W., Berger, A. N., Ferrier, G. D., and Humphrey, D. B. (1998). Consistency conditions for regulatory analysis of financial institutions: a comparison of frontier efficiency methods. *Journal of Economics and business*, 50(2), 85-114.

Beccalli, E. C. (2006). Efficiency and stock performance in European banking. *Journal of Business Finance and Accounting*, 33 (1-2), 245,209.

Beccalli, E., Casu, B., and Girardone, C. (2006). Efficiency and stock performance in European banking. *Journal of Business Finance and Accounting*, 33(1-2), 245-262. Berger, A. (2003). Explaining the dramatic changes in performance of US banks: technological 220 change, deregulation, and dynamic changes in competition. *Journal of Financial Intermediation*. 12(1), 57.

Berger, A. (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. *Journal of Banking and Finance*, 30 (4),, 1065.

Berger, A. a. (1992). 'Measurement and efficiency issues in commercial banking': output measurement in service sectors, National Bureau of Economic Research Studies in Income and Wealth, Chicago: University of Chicago Press. vol. 56.

Berger, A. A. (1997). 'Efficiency of financial institution: international survey and directions for future research' . European journal of Operational Research.

Berger, A. D.-K. (2004). Bank concentration and competition: an evolution in the making journal of money, . Credit and Banking, 36(3), 433.

Berger, A. H. (1997). Efficiency of financial institution: international survey and directions for future research'. European journal of Operational Research.

Berger, A. N., and Di Patti, E. B. (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. Journal of Banking and Finance, 30(4), 1065-1102.

Berger, A. N., and Humphrey, D. B. (1997). Efficiency of financial institutions: International survey and directions for future research. European journal of operational research, 98(2), 175- 212.

Berger, A. N., Demirguc-Kunt, A., Levine, R., and Haubrich, J. G. (2004). Bank concentration and competition: An evolution in the making. Journal of Money, Credit, and Banking, 36(3), 433-451.

Bhadeshiya ,H (2015). Shareholder value creation in private sector indian banks . Indian Journal of Research Vol.4 issue.9