

CREDIT CREATION

Some Concepts:

1. Bank as a business institution – Bank is a business institution which tries to maximize profits through loans and advances from the deposits.
2. Bank Deposits – Bank deposits form the basis for credit creation and are of two types:
 - a) Primary Deposits – A bank accepts cash from the customer and opens a deposit in his name. This is a primary deposit. 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.
 - b) Secondary or Derivative Deposits – 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.
3. Cash Reserve Ratio (CRR) – Banks know that all depositors will not withdraw all deposits 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.
4. Excess Reserves – The reserves over and above the cash reserves are the excess reserves. These reserves are used for loans and credit creation.
5. 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.

Q. What is Credit Creation?

Credit creation is the expansion of deposits. And, banks can expand their demand deposits as a multiple of their cash reserves because demand deposits serve as the principal medium of exchange. Credit creation separates a bank from other financial institutions. (For 1 Mark)

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.

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.

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.

Q. How do banks create credit?

Credit creation is the expansion of 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.

There are two ways of analyzing the credit creation process:

- a) Credit creation by a single bank
- b) Credit creation by the banking system as a whole

Credit creation by a single bank

In a single bank system, one bank operates all the cash deposits and claques. The process of creating credit is explained with the hypothetical example below:

Table 1: Credit Creation by Single Bank

| Rounds | Primary Deposits | Cash Reserves ($r = 20\%$) | Credit Creation or Derivative Deposits (ΔD) |
|---------------|--|---------------------------------|---|
| 1. (Person A) | Rs. 1000 (Initial primary deposits) | Rs. 200 | Rs. 800 (Initial excess reserves ΔR) |
| 2. (Person B) | 800 | 160 | 640 |
| 3. (Person C) | 640 | 128 | 512 |
| 4. (Person D) | 512 | 102 | 410 |
| - | - | - | - |
| - | - | - | - |
| Total | 5000 | 1000 | 4000 |

Let's assume that the bank requires to maintain a CRR of 20 percent.

- If a person (person A) deposits 1,000 rupees with the bank, then the bank keeps only 200 rupees in the cash reserve and lends the remaining 800 to another person (person B). They open a credit account in the borrower's name for the same.
- Similarly, the bank keeps 20 percent of Rs. 800 (i.e. Rs. 160) and advances the remaining Rs. 640 to person C.
- Further, the bank keeps 20 percent of Rs. 640 (i.e. Rs. 128) and advances the remaining Rs. 512 to person D.

This process continues until the initial primary deposit of Rs. 1,000 and the initial additional reserves of Rs. 800 lead to additional or derivative deposits of Rs. 4,000 (800+640+512+....).

Adding the initial deposits, we get total deposits of Rs. 5,000. In this case, the credit multiplier is 5 (reciprocal of the CRR) and the credit creation is five times the initial excess reserves of Rs. 800.

Multiple Credit Creation by the Banking System

The banking system has many banks in it and it cannot grant loans in excess of the cash it creates. When a bank creates a derivative deposit, it loses cash to other banks. The loss of deposit of one bank is the gain of deposit for some other bank. This transfer of cash

within the banking system creates primary deposits and increases the possibility for further creation of derivative deposits. Here is an illustration to explain this process better:

Table 2 : Multiple Credit Creation by Banking System

| Banks | Primary Deposits | Cash Reserves ($r = 20\%$) | Credit Creation or Derivative Deposits (ΔD) |
|-------|--|---------------------------------|---|
| A | Rs. 1000 (Initial primary deposits) | Rs. 200 | Rs. 800 (Initial excess reserves ΔR) |
| B | 800 | 160 | 640 |
| C | 640 | 128 | 512 |
| D | 512 | 102 | 410 |
| - | - | - | - |
| - | - | - | - |
| Total | 5000 | 1000 | 4000 |

As explained above, the initial deposit of Rs. 1,000 with bank A leads to a creation of total deposits of Rs. 5,000.

Q. Explain briefly the process of credit creation when there is only one bank.

Ans: Credit creation is the expansion of 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.

There are two ways of analyzing the credit creation process:

- c) Credit creation by a single bank
- d) Credit creation by the banking system as a whole

Credit creation by a single bank

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Let's assume that the bank requires to maintain a CRR of 20 percent.

- If a person (person A) deposits 1,000 rupees with the bank, then the bank keeps only 200 rupees in the cash reserve and lends the remaining 800 to another person (person B). They open a credit account in the borrower's name for the same.
- Similarly, the bank keeps 20 percent of Rs. 800 (i.e. Rs. 160) and advances the remaining Rs. 640 to person C.
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This process continues until the initial primary deposit of Rs. 1,000 and the initial additional reserves of Rs. 800 lead to additional or derivative deposits of Rs. 4,000 (800+640+512+....).

Adding the initial deposits, we get total deposits of Rs. 5,000. In this case, the credit multiplier is 5 (reciprocal of the CRR) and the credit creation is five times the initial excess reserves of Rs. 800.

Q. How is credit created when there are more than one bank?

Ans: Credit creation is the expansion of 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.

There are two ways of analyzing the credit creation process:

- a) Credit creation by a single bank
- b) Credit creation by the banking system as a whole

Multiple Credit Creation by Banking System

| Banks | Primary Deposits | Cash Reserves ($r = 20\%$) | Credit Creation or Derivative Deposits (ΔD) |
|-------|--|---------------------------------|---|
| A | Rs. 1000 (Initial primary deposits) | Rs. 200 | Rs. 800 (Initial excess reserves ΔR) |
| B | 800 | 160 | 640 |
| C | 640 | 128 | 512 |
| D | 512 | 102 | 410 |
| - | - | - | - |
| - | - | - | - |
| Total | 5000 | 1000 | 4000 |

Let's assume that the banks require to maintain a CRR of 20 percent.

- If a Bank (Bank A) deposits 1,000 rupees with the bank, then the bank keeps only 200 rupees in the cash reserve and lends the remaining 800 to another Bank (Bank B). They open a credit account in the borrower's name for the same.
- Similarly, the bank B keeps 20 percent of Rs. 800 (i.e. Rs. 160) and advances the remaining Rs. 640 to Bank C.

- Further, the bank keeps 20 percent of Rs. 640 (i.e. Rs. 128) and advances the remaining Rs. 512 to Bank D.

This process continues until the initial primary deposit of Rs. 1,000 and the initial additional reserves of Rs. 800 lead to additional or derivative deposits of Rs. 4,000 (800+640+512+....).

Adding the initial deposits, we get total deposits of Rs. 5,000. In this case, the credit multiplier is 5 (reciprocal of the CRR) and the credit creation is five times the initial excess reserves of Rs. 800.

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Q. What are the limitations of Credit Creation?

Ans: Credit creation is the expansion of deposits . There are specific limitations on the power to create deposits. 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:

- a) There is a negligible chance of the loans turning into bad debts
- b) 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.

Various draw backs are:

1. Cash Reserve Ratio: The credit creation power of banks depends upon the amount of cash they possess. The larger the cash, the larger the amount of credit that can be created by banks.

Thus, the bank's power of creating credit is limited by the cash it possesses.

2. Availability of Adequate and Proper Securities: If proper securities are not available with the public, a bank cannot create credit. As Crowther has written—"the bank does not create money out of thin air, it transmutes other forms of wealth into money."

3. Keeping of Reserve with the Central Bank: Every affiliated and attached bank has to keep certain reserves with the Central Bank of the country. The Central Bank keeps on changing the percentages of these reserves from time to time. When the Central Bank increases the percentages of these reserves, then the power of the commercial banks to create credit is reduced in the same proportion.

4. Banking Habits of the People: The banking habits of the people are an important factor which governs the power of credit creation on the part of banks. If people are not in the habit of using cheques, the grant of loans will lead to the withdrawal of cash from the credit creation stream of the banking system. This reduces the power of banks to create credit to the desired level.

5. Volume of Currency in Circulation: Volume of currency in circulation is an important factor of creation of credit. If the primary deposits are large, then the derivative deposits created on their basis will also be large. But the volume of primary deposits is closely connected with the actual volume of currency in circulation.

6. If heavy with-drawl of Cash by the Borrowers: If the borrowers will withdraw money in cash, then the balance of deposits will be disturbed. With the withdrawal of cash, the

excess reserves of the banks are automatically reduced. This reduces the power of credit creation.

7. Existence of Cash Transactions in the Economy: This system of doing transaction sets another limitation on the power of the banks to create credit. In under-developed area most of the transactions have to be effected in cash. This puts a question as to what extent banks power to create credit is reduced.

8. Economic Conditions of Trade and Business: Banks cannot continue to create credit limitlessly. Their power to create credit depends upon the economic climate present in the country. If there are boom times, there is a greater scope of profitable investment and thus greater demand for bank loans on the part of businessmen.

9. If Good Collateral Securities are not Available: We are aware that every loan made by the bank must be backed by some valuable security like stocks, shares, bills and bonds etc. If these collateral securities are not available in sufficient number the banks cannot expand their lending activities and consequently cannot expand credit in the economy.

10. It is Essential to Maintain Statutory Liquidity Ratio: The Commercial Banks under law are required to maintain a second line of defence in the form of the liquid assets. In India it has become essential to keep 34% of the assets in liquid forms. The liquid assets have been considered as government bonds and securities, treasury bills and other approved securities which can be en-cashed quite easily in emergency. Such restrictions reduce the lendable resources with the banks and curtail their power to create credit to that extent.

11. If the Behaviour of Other Banks is Not Co-operative: If some of the banks do not advance loans to the extent required of the banking system, the chain of credit expansion will be broken. The effect will be that the banking system will not operate properly.

Q. How CRR affects credit creation?

If the Cash Reserve Ratio (CRR) is increased by the RBI, its impact on the expansion of credit creation will be to decrease it. In short, credit creation is the reciprocal of the CRR.

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