

# Risk Management

Risk management is the process of identifying, assessing and controlling threats to an organization's capital and earnings. These threats, or risks, could stem from a wide variety of sources, including financial uncertainty, legal liabilities, strategic management errors, accidents, and natural disasters. [IT](#) security threats and data-related risks, and the risk management strategies to alleviate them, have become a top priority for [digitized](#) companies. As a result, a risk management plan increasingly includes companies' processes for identifying and controlling threats to its digital assets, including proprietary corporate data, a customer's personally identifiable information ([PII](#)) and intellectual property.

Every business and organization faces the risk of unexpected, harmful events that can cost the company money or cause it to permanently close. Risk management allows organizations to attempt to prepare for the unexpected by minimizing risks and extra costs before they happen.

## **Importance**

By implementing a risk management plan and considering the various potential risks or events before they occur, an organization can save money and protect their future. This is because a robust risk management plan will help a company establish procedures to avoid potential threats, minimize their impact should they occur and cope with the results. This ability to understand and control risk will allow organizations to feel more confident about their business decisions. Furthermore, strong corporate governance principles that focus specifically on risk management can help a company reach their goals.

Other important benefits of risk management include:

- Creates a safe and secure work environment for all staff and customers.
- Increases the stability of business operations while also decreasing legal liability.

- It protects from events that are detrimental to both the company and the environment.
- Protects all involved people and assets from potential harm.
- It helps establish the organization's insurance needs to save on unnecessary premiums.

The importance of combining risk management with patient safety has also been revealed. In most hospitals and organizations, the risk management and patient safety departments are separated; they incorporate different leadership, goals, and scope. However, some hospitals are recognizing that the ability to provide safe, high-quality patient care is necessary to the protection of financial assets and, as a result, should be incorporated with risk management.

In 2006, the Virginia Mason Medical Center in Seattle, Washington integrated their risk management functions into their patient safety department, ultimately creating the Virginia Mason Production System (VMPS) management methods which focus on continuously improving the patient safety system by increasing transparency in risk mitigation, disclosure, and reporting. Since implementing this new system, Virginia Mason has experienced a significant reduction in hospital professional premiums and a large increase in the reporting culture.

## **Risk management strategies and processes**

All risk management plans follow the same steps that combine to make up the overall risk management process:

- **Establish context.** Understand the circumstances in which the rest of the process will take place. The criteria that will be used to evaluate risk should also be established and the structure of the analysis should be defined.
- **Risk identification.** The company identifies and defines potential risks that may negatively influence a specific company process or project.

- **Risk analysis.** Once specific types of risk are identified, the company then determines the odds of it occurring, as well as its consequences. The goal of [risk analysis](#) is to further understand each specific instance of risk, and how it could influence the company's projects and objectives.
- **Risk assessment and evaluation.** The risk is then further evaluated after determining the risk's overall likelihood of occurrence combined with its overall consequence. The company can then make decisions on whether the risk is acceptable and whether the company is willing to take it on based on its [risk appetite](#).
- **Risk mitigation.** During this step, companies assess their highest-ranked risks and develop a plan to alleviate them using specific risk controls. These plans include risk mitigation processes, risk prevention tactics and contingency plans in the event the risk comes to fruition.
- **Risk monitoring.** Part of the mitigation plan includes following up on both the risks and the overall plan to continuously monitor and track new and existing risks. The overall risk management process should also be reviewed and updated accordingly.
- **Communicate and consult.** Internal and external shareholders should be included in communication and consultation at each appropriate step of the risk management process and in regards to the process as a whole.

Risk management strategies should also attempt to answer the following questions:

1. What can go wrong? Consider both the workplace as a whole and individual work.
2. How will it affect the organization? Consider the probability of the event and whether it will have a large or small impact.
3. What can be done? What steps can be taken to prevent the loss? What can be done recover if a loss does occur?
4. If something happens, how will the organization pay for it?

## **Risk management approaches**

After the company's specific risks are identified and the risk management process has been implemented, there are several different strategies companies can take in regard to different types of risk:

- **Risk avoidance**. While the complete elimination of all risk is rarely possible, a risk avoidance strategy is designed to deflect as many threats as possible in order to avoid the costly and disruptive consequences of a damaging event.
- **Risk reduction**. Companies are sometimes able to reduce the amount of effect certain risks can have on company processes. This is achieved by adjusting certain aspects of an overall project plan or company process, or by reducing its scope.
- **Risk sharing**. Sometimes, the consequences of a risk is shared, or distributed among several of the project's participants or business departments. The risk could also be shared with a third party, such as a vendor or business partner.
- **Risk retaining**. Sometimes, companies decide a risk is worth it from a business standpoint, and decide to keep the risk and deal with any potential fallout. Companies will often retain a certain level of risk if a project's anticipated profit is greater than the costs of its potential risk.

## **Limitations**

While risk management can be an extremely beneficial practice for organizations, its limitations should also be considered. Many risk analysis techniques -- such as creating a model or simulation -- require gathering large amounts of data. This extensive data collection can be expensive and is not guaranteed to be reliable.

Furthermore, the use of data in decision making processes may have poor outcomes if simple indicators are used to reflect the much more complex realities of the situation. Similarly, adopting a decision throughout the whole project that was intended for one small aspect can lead to unexpected results.

Another limitation is the lack of analysis expertise and time. Computer software programs have been developed which simulate events that might have a negative impact on the company. While cost effective, these complex programs require trained personnel with comprehensive skills and knowledge in order to accurately understand the generated results. Analyzing historical data to identify risks also requires highly trained personnel. These individuals may not always be assigned to the project. Even if they are, there frequently is not enough time to gather all their findings, thus resulting in conflicts.

Other limitations include:

- **A false sense of stability.** Value-at-risk measures focus on the past instead of the future. Therefore, the longer things go smoothly, the better the situation looks. Unfortunately, this makes a downturn more likely.
- **The illusion of control.** Risk models can give organizations the false belief that they can quantify and regulate every potential risk. This is not true because it is impossible to expect the unexpected. Furthermore, there is no historical data for new products, so there's no experience to base models on.
- **Failure to see the big picture.** It's difficult to see and understand the complete picture of cumulative risk.
- **Risk management is immature.** There is still a long way to go before techniques and models are developed that truly fit the risk management purpose.

## **Risk management standards**

Since the early 2000s, several industry and government bodies have expanded [regulatory compliance](#) rules that scrutinize companies' risk management plans, policies and procedures. In an increasing number of industries, boards of directors are required to review and report on the adequacy of [enterprise risk management](#) processes. As a result, risk analysis, [internal audits](#) and other means of risk assessment have become major components of business strategy.

Risk management standards have been developed by several organizations, including the National Institute of Standards and Technology ([NIST](#)) and the International Organization for Standardization ([ISO](#)). These standards are designed to help organizations identify specific threats, assess unique vulnerabilities to determine their risk, identify ways to reduce these risks and then implement risk reduction efforts according to organizational strategy.

The ISO 31000 principles, for example, provide [frameworks](#) for risk management process improvements that can be used by companies, regardless of the organization's size or target sector. The ISO 31000 is designed to "increase the likelihood of achieving objectives, improve the identification of opportunities and threats, and effectively allocate and use resources for risk treatment," according to the ISO website. Although ISO 31000 cannot be used for certification purposes, it can help provide guidance for internal or external risk audit, and it allows organizations to compare their risk management practices with the internationally recognized benchmarks.

The ISO recommended the following target areas, or principles, should be part of the overall risk management process:

- The process should create value for the organization.
- It should be an integral part of the overall organizational process.
- It should factor into the company's overall decision-making process.
- It must explicitly address any uncertainty.
- It should be systematic and structured.
- It should be based on the best available information.
- It should be tailored to the project.
- It must take into account human factors, including potential errors.
- It should be transparent and all-inclusive.

- It should be adaptable to change.
- It should be continuously monitored and improved upon.

The ISO standards and others like it have been developed worldwide to help organizations systematically implement risk management [best practices](#). The ultimate goal for these standards is to establish common frameworks and processes to effectively implement risk management strategies.

These standards are often recognized by international regulatory bodies, or by target industry groups. They are also regularly supplemented and updated to reflect rapidly changing sources of [business risk](#). Although following these standards is usually voluntary, adherence may be required by industry regulators or through business contracts.

## **Risk management examples**

One example of risk management could be a business identifying the various risks associated with opening a new location. They can mitigate risks by choosing locations with a lot of foot traffic and low competition from similar businesses in the area.

Another example could be an outdoor amusement park that acknowledges their business is completely weather-dependent. In order to alleviate the risk of a large financial hit whenever there is a bad season, the park might choose to consistently spend low and build up cash reserves.

Yet another example could be an investor buying stock in an exciting new company with high valuation even though they know the stock could significantly drop. In this situation, risk acceptance is displayed as the investor buys despite the threat, feeling the potential of the large reward outweighs the risk.

# What is Basel II?

Basel II is the second set of international banking regulations defined by the Basel Committee on Bank Supervision (BCBS). It is an extension of the regulations for minimum capital requirements as defined under Basel I. The Basel II framework operates under three pillars:

- Capital adequacy requirements
- Supervisory review
- Market discipline

## The Three Pillars under Basel II

### *Pillar 1: Capital Adequacy Requirements*

Pillar 1 improves on the policies of Basel I by taking into consideration operational risks in addition to [credit risks](#). Credit risk is the risk of loss that may occur from the failure of any party to abide by the terms and conditions of any financial contract, principally, associated with risk-weighted assets (RWA). It requires banks to maintain a minimum capital adequacy requirement of 8% of its RWA. Basel II also provides banks with more informed approaches to calculate capital requirements based on credit risk, while taking into account each type of asset's risk profile and specific characteristics. The two main approaches include the:

#### **1. Standardized approach**

The standardized approach is suitable for banks with a smaller volume of operations and a simpler control structure. It involves the use of credit ratings from external [credit assessment institutions](#). A rating agency is a company that assesses the financial strength of companies and government entities, especially their ability to meet principal and interest payments on their debts. The rating assigned to a given debt shows an agency's level of confidence that the borrower will honor its debt obligations for the evaluation of the creditworthiness of a bank's debtor.

#### **2. Internal ratings-based approach**

The internal ratings-based approach is suitable for banks engaged in more complex operations, with more developed risk management systems. There are two IRB approaches for calculating capital requirements for credit risk based on internal ratings:



- Foundation Internal Ratings-based approach (FIRB): In FIRB, banks use their own assessments of parameters such as the [Probability of Default](#) Probability of Default (PD) is the probability of a borrower defaulting on loan repayments and is used to calculate the expected loss from an investment., while the assessment methods of other parameters, mainly risk components such as Loss Given Default and Exposure at Default, are determined by the supervisor.
- Advanced Internal Ratings-based approach (AIRB): Under the AIRB approach, banks use their own assessments for all risk components and other parameters.

### ***Pillar 2: Supervisory Review***

Pillar 2 was added owing to the necessity of efficient supervision and lack thereof in Basel I, pertaining to the assessment of a bank's internal capital adequacy. Under Pillar 2, banks are obligated to assess the internal capital adequacy for covering all risks they can potentially face in the course of their operations. The supervisor is responsible for ascertaining whether the bank uses appropriate assessment approaches and covers all risks associated.

- [Internal Capital Adequacy Assessment Process \(ICAAP\)](#): A bank must conduct periodic internal capital adequacy assessments in accordance with their risk profile and determine a strategy for maintaining the necessary capital level.
- Supervisory Review and Evaluation Process (SREP): Supervisors are obligated to review and evaluate the internal capital adequacy assessments and strategies of banks, as well as their ability to monitor their compliance with the regulatory capital ratios.
- Capital above the minimum level: One of the added features of the framework Basel II is the requirement of supervisors to ensure banks maintain their [capital structure](#) Capital Structure Capital Structure refers to the amount of debt and/or equity employed by a firm to fund its operations and finance its assets. above the minimum level defined by Pillar 1.
- Supervisor's interventions: Supervisors must seek to intervene in the daily decision-making process in order to prevent capital from falling below the minimum level.

### ***Pillar 3: Market Discipline***

Pillar 3 aims to ensure market discipline by making it mandatory to disclose relevant market information. This is done to make sure that the users of financial information receive the relevant information to make informed trading decisions and ensure market discipline.

## **Credit Management**

Credit Management refers to the process of providing credit, recovering credit on the due date and also formulating a credit policy for a company or organization. Credit Management is one of the techniques in order to manage the bad debts of the company in an efficient manner. Usually the credit period consist of the 15 days to 60 days and in some case even 90 days. Firm's credit policy is decided based on the investment a firm does in account receivable.

### **Objectives of Credit Management**

The objectives of the Credit Management is to

- Maintaining strong and effective cash collections.
- Scrutinizing accounts receivables portfolio and warning signs.
- Defining the credit levels for various customers.
- Defining the credit policy.
- Preventing non-payment and delayed payments.
- Controlling Finances and limiting of debts.

### **Why is Credit Management Important?**

We have heard that many business start and get closed in a very short span of their operations saying that they have gone bankrupt or having high cash crunches. Have you ever what why did it happened? That it's because of improper management of credit or poor credit policy. Thus it is important for every business to maintain optimal credit policy to overcome problem related to cash or **cash management**. Credit Management helps to

- Determination of the Credit rating of the customer.
- Assessing the credit risk associated with the customers by studying the credit payments of the customers.
- Maintaining and building the customer relationship.
- Detection of late payments in advance.
- Preventing and avoiding bad debts from arising.

### **Problems Arising From The Improper Credit Management**

Improper Credit Management gives rise to big problems such as

- Cash Crunches in Business.
- Increase in Bad debts.
- Increase in Debts to creditors.

- Inadequate working capital.
- Affecting day to day operations.
- Low cash conversion or cash inflow.
- Losing Credit Rating.
- Unable to take benefits of cash discount from suppliers.

### **Advantages of Credit Management**

- Increase in cash conversion or cash inflow.
- Low bad debts.
- Increase in profitability.
- Increase in liquidity.
- Helps to increase production level and lower the cost.
- Builds Credit Rating and brand reputation.
- Efficient management of working capital.

I hope now you have understood what is credit management means, objectives of credit management, importance of credit management and also problems arising from improper credit management and lastly the advantages of credit management. Thus to conclude credit management plays a very important and vital role in the business so that the business runs smoothly without any liquidity or cash problems.

# What is Credit Risk Analysis?

Credit risk analysis can be thought of as an extension of the credit allocation process. After an individual or business applies to a bank or financial institution for a [loan](#) Commercial Loan A commercial loan is a loan that is extended to businesses by a financial institution. Commercial loans are generally used to purchase long-term assets or help fund day-to-day operational costs., the lending institution analyzes the potential benefits and costs associated with the loan. Credit risk analysis is used to estimate the costs associated with the loan. To learn more, check out CFI's [Credit Analyst Certification program](#) CBCA™ Certification The Certified Banking & Credit Analyst (CBCA)™ accreditation is a global standard for credit analysts that covers finance, accounting, credit analysis, cash flow analysis, covenant modeling, loan repayments, and more. .

Credit risk or credit default risk is a type of risk faced by lenders. Credit risk arises because a debtor can always renege on their debt payments. Commercial banks, [investment banks](#) List of Top Investment Banks List of the top 100 investment banks in the world sorted alphabetically. Top investment banks on the list are Goldman Sachs, Morgan Stanley, BAML, JP Morgan, Blackstone, Rothschild, Scotiabank, RBC, UBS, Wells Fargo, Deutsche Bank, Citi, Macquarie, HSBC, ICBC, Credit Suisse, Bank of America Merrill Lynch, asset management companies, [private equity funds](#) Private Equity Funds Private equity funds are pools of capital to be invested in companies that represent an opportunity for a high rate of return. They come with a fixed, venture capital funds, and insurance companies all need to analyze the credit risks they are exposed to in order to profitably operate in the market.

## Summary:

- **Credit risk analysis can be thought of as an extension of the credit allocation process. After an individual or business applies to a bank or financial institution for a loan, the bank or financial institution analyzes the potential benefits and costs associated with the loan.**
- **Credit risk or credit default risk is a type of risk faced by lenders. Credit risk arises because a debtor can always renege on their debt payments.**
- **In the lead-up to the 2008 Great Recession, commercial banks, investment banks, and other financial markets participants underestimated both the default probability and the loss rate and consequently underestimated the credit risk they were facing.**

## What is Credit Risk?

Credit risk or credit default risk associated with a financial transaction is simply the expected loss of that transaction. It can be defined as follows:

$$\text{Credit Risk} = \text{Default Probability} \times \text{Exposure} \times \text{Loss Rate}$$

Where:

- **Default Probability** is the probability of a debtor reneging on his debt payments.
- **Exposure** is the total amount the lender is supposed to get paid. In most cases, it is simply the amount borrowed by the debtor plus interest payments.
- **Loss Rate = 1 – Recovery Rate**, where Recovery Rate is the proportion of the total amount that can be recovered if the debtor defaults. Credit risk analysts analyze each of the determinants of credit risk and try to minimize the aggregate risk faced by an organization.

## Types of Credit Risk

### *1. Concentration risk*

Concentration risk, also known as industry risk, is the risk arising from gaining too much exposure to any one industry or sector. For example, an investor who lent money to battery manufacturers, tire manufacturers, and oil companies is extremely vulnerable to shocks affecting the automobile sector.

### *2. Institutional risk*

Institutional risk is the risk associated with the breakdown of the legal structure or of the entity that supervises the contract between the lender and the debtor. For example, a lender who gave money to a property developer operating in a politically unstable country needs to account for the fact that a change in the political regime could drastically increase the default probability and the loss rate.

## Credit Risk, the Housing Bubble, and the Great Recession

Improper risk management by banks and other financial institutions was a key factor behind the US housing bubble in the mid-2000s that eventually led to the [2008 recession](#) 2008-2009 Global Financial Crisis. The Global Financial Crisis of 2008-2009 refers to the massive financial crisis the world faced from 2008 to 2009. The financial crisis took its toll on individuals and institutions around the globe, with millions of Americans being deeply impacted. Financial institutions started to sink, many were absorbed by larger entities, and the US Government was forced to offer bailouts. Commercial banks, investment banks, and other financial markets participants underestimated both the default probability and the loss rate and consequently underestimated the credit risk they were facing.

In the lead-up to the recession, most lenders gave loans to individuals and businesses with questionable credit history. The fact was most evident in the housing market, where easy credit led to [house prices](#) rising rapidly in the mid-2000s. Increased house prices meant borrowers could refinance their mortgages and borrow even more money, which fueled the bubble even further.

### Additional Resources

CFI offers the [Certified Banking & Credit Analyst \(CBCA\)™](#) CBCA™ Certification. The Certified Banking & Credit Analyst (CBCA)™ accreditation is a global standard for credit analysts that covers finance, accounting, credit analysis, cash flow analysis, covenant modeling, loan repayments, and more. program for finance professionals looking to take their careers to the next level. To keep learning and developing your knowledge base, please explore the additional relevant CFI resources below:

- [Commercial Credit Analyst](#) Commercial Credit Analyst A commercial credit analyst is essentially the same as a credit analyst, with the added specification of reviewing companies or entities looking for
- [Debt Covenants](#) Debt Covenants Debt covenants are restrictions that lenders (creditors, debt holders, investors) put on lending agreements to limit the actions of the borrower (debtor).
- [Financial Intermediary](#) Financial Intermediary A financial intermediary refers to an institution that acts as a middleman between two parties in order to facilitate a financial transaction. The institutions that are commonly referred to as financial intermediaries include commercial banks, investment banks, mutual funds, and pension funds.
- [Probability of Default](#) Probability of Default Probability of Default (PD) is the probability of a borrower defaulting on loan repayments and is used to calculate the expected loss from an investment.

# The Six Elements for A Successful Credit Risk Management Process

Banks have been under increasing pressure for some time now due to the low interest rate policy. For more than three years now, the European Central Bank has been charging banks penalty interest when they park their money there. The idea is that institutions should not hoard their customers' deposits, but issue them as loans to get the economy moving. The result is that banks are increasingly granting loans. In order to keep the default risk as low as possible, banks should follow the following six steps of [credit risk management](#).

## 1. Know Your Customer

Know your customer (KYC) is an integral part of the credit risk management process and forms the basis for all subsequent steps in the lending process. On the one hand, this involves mandatory verification of new and existing customers' credentials to prevent money laundering. On the other, it is also important to collect pertinent, accurate, timely information to establish a solid client relationship so that the bank can position itself as a financial advisor and provider of financial products and services.

## 2. Analyze Non-financial Risks

In addition to a creditworthiness assessment, qualitative criteria play an important role in assessing the future of a company. Among the qualitative rating criteria ("soft factors") are non-quantifiable criteria that can have a lasting adverse effect on company development. Here, the financial institution pays special attention to analyzing success criteria, which are important for the future development of the company.

Factors such as management, competitive situation and market position (local competitors, market share, competitiveness of services, etc.), industry, etc. are assessed qualitatively. These soft factors usually allow the bank to predict future corporate crises with a longer lead time than is possible with quantitative criteria.



### 3. Understand the Numbers

Establishing a banking relationship and granting loans is associated with various advantages, but also risks. Lenders should therefore know how and for what the requested funds are used, and how they are expected to be repaid. In addition, all risks associated with the customer should be identified, categorized, and prioritized in the credit risk management process. In order to understand the figures, the focus should be on the company's financial performance – to this end, the company's economic situation is examined. Documents relating to the company's net assets and earnings are analyzed. These documents are generally current annual financial statements, business evaluations or, as necessary, net income statements.

### 4. Give the Deal A Price Tag

Setting an appropriate price is one of the key elements of credit risk management. Qualitative and quantitative evaluations form the basis for assessing the risk associated with granting loans to a company. Rating procedures or other valuation models are used to assess risk, which is used, in turn, to calculate the interest rate. A number of complex factors determine the final interest rate. Among the most important are (1) the company's economic situation (creditworthiness) and (2) the collateral provided (value retention of collateral). The principle is: the better the financial situation of the company and the more valuable the collateral provided, the lower the interest rate. The interest rate assigned ensures that the financial institution is adequately compensated for the risk associated with the transaction.

### 5. Present and Close the Deal

The well-founded and professional communication of the rating and scoring results and the costs is an important prerequisite for the deal being accepted and concluded. Credit decisions should not be made solely based on credit ratings. This would not be complete without an equal emphasis on qualitative elements such as the competence of management, the competitive, etc. When analysis, structuring, and pricing are completed, there is nothing else in the way of concluding the transaction.

## 6. Monitor the Business Relationship

In today's competitive environment, banks cannot afford to wait for repayment of their loans, expecting customers to actively ask for other products and services. In order to maintain its market position, a bank must continue to monitor the client's risk profile, looking for opportunities to develop and expand the relationship.

A profitable relationship can quickly become an unprofitable one. Even when loan payments remain timely, deterioration of collateral, untapped potential, or unpaid taxes can pose a serious risk to a bank. Periodic reviews, evaluations, and audits can ensure that the client remains profitable for the bank in the long term.

## **Introduction to Liquidity Management:**

Liquidity means an immediate capacity to meet one's financial commitments. The degree of liquidity depends upon the relationship between a company's cash assets plus those assets which can be quickly turned into cash, and the liabilities awaiting payments could be met immediately. The liquidity and the Investments are two corners opposite to each other.

If more earning is required more and more investment is to be made which may result into less degree of liquidity, which may result ,on account of not fulfilling the commitments, into penalties/high rate of interests or other type of losses.

In case and also in view of being fully capable of meeting any sort of financial commitments if sufficient liquidity is maintained and the funds are kept idle just to maintain the liquidity and are therefore not invested, this situation may also bring a stage of losses.

If the liquidity is kept at high level under the fear of not being capable of meeting financial requirements in time and the funds available are not invested is sure to count on losses for no returns on the funds available.

In case all the funds available are invested without care for even minimum requirement of liquidity/cash, in case of urgent need the financial commitments made may not meet the dead line and may also result in losses in form of penalty or very high rate of interest.

## **Management of Liquidity and Cash by Banks:**

In case of banks investments are made out of the cash available with it, deposits received from public, companies, institutions and all other types of deposits both demand deposits and term deposits. Additionally a part of profit earned by the bank is also available. The main problem is a fact that every bank is bound by law that the deposits held with it are payable according to the obligation terms to depositors.

Demand deposits should always be kept ready by bank to be able to make immediate payment in case any demand arises. This very fact requires every

bank to have sufficient liquidity to meet the contractual obligations as and when they arise without any delay.

Now the opposite or contrary picture also appears to be true because every bank wants to deploy maximum funds in advances and investments in hope of getting maximum possible returns. If all the funds available with any bank are lent or invested, there may be possibility that such funds are not recovered by the bank immediately and the bank is not able to meet its obligations towards its customers.

In order to retain the customer base the banks must adopt a liquidity/investment policy to be able to repay to depositors on demand. In case bank deploys its maximum funds in loans/investment without caring for the requisite amount of liquidity to be able to meet the immediate financial requirements particularly towards demand depositors, it may tarnish its image which can be a fatal event for any bank.

Yes if a bank under the fear of protecting its image to be able to meet all the demand requirements instantly keeps a large portion of its funds in liquid form either in cash with itself or deposits with the Central Bank i.e. RBI without earning sufficient returns or at low level of interest, naturally may face a situation of loss.

Investments by banks are its assets and demand and term deposits are liabilities.

Derived from above discussion it may be observed that an investment policy of a Bank should be a balanced approach for managing its assets and liabilities. In case of enhancing or increasing assets without taking into account the proportion of liabilities may bring more profit or income but the bank may likely fail in meeting its obligations.

In reverse position of quantum of liquidity is more than the required limit it may be a cause of losses. It may please be understood that Profitability and Liquidity stand against each other and are required to be managed in a planned manner.

## **Steps in Cash and Liquidity Management:**

**For cash and liquidity management by banks following steps are adopted:**

### ***1) Cash:***

Cash is complete liquidity consisting of cash in hand held by the bank itself or deposited with Central Bank (RBI). The quantum of cash to be kept by a bank is regulated by statutory requirements known as SLR (Statutory liquidity Ratio) and CRR (Current Reserve Ratio). In addition to rules and regulations the practical experience of bankers also play a vital role in deciding the quantum of cash to be kept as cash in hand. Any idle cash kept earns no income.

It is therefore every bank adopts a system of complete cash management and investment management in order to measure and manage the liquidity needs. Measuring liquidity is a ticklish task and mostly gauged by Assets and Liability management system.

### ***(2) Investments:***

Investment by banks is largely regulated by specific guidelines as discussed above in portfolio management. Likewise cash management is also subject to SLR and CRR norms.

### ***(3) Loans and Advances:***

Commercial Banks function as financial intermediaries. They mobilise funds through various deposit schemes and a large portion of these funds are deployed as bank credit in various sectors of economy. In a way banks also function like trustee of savings and idle funds of the society.

The quality of the credit portfolio decides their efficiency of discharging their duty. In providing loans to different sectors of society is best suited method of managing excess cash by banks as this sector is more secure than making investment in capital market.

#### ***(4) Inter Relationship of Cash, Liquidity, Asset and Liability Management:***

If the management of cash, liquidity and liabilities are put under one umbrella it would be seen as a process where all of them are inter linked and no single item can be managed separately without having look on other items.

**Following brief description about these items may help to understand the position:**

##### **A. Asset and Liability Management:**

It is a process of effectively managing a bank portfolio mix of assets, liabilities and when applicable off-balance sheet contracts. This process involves two primary financial risks, interest rate and foreign exchange, and directly relates to sound over all liquidity management.

##### **B. Interest Rate Risk:**

It is the process of the exposure of a bank's financial condition to adverse movements in interest rates. Changes in interest rates can have significant impact on a banks earnings as well as the underlying economic value of a bank assets, liabilities and off balance sheet items.

##### **C. Liquidity:**

The ability to fund all contractual obligations of the bank. Notably lending and investment commitments and deposit withdrawals and liability maturities, in the normal course of business, that is the ability to fund increases in assets and meet obligations as they come due.

##### **D. Liquidity Management:**

It is an on-going process to ensure that cash needs can be met at reasonable cost in order for a bank to maintain the required level of reserves with RBI (CRR) and to meet expected and contingent cash needs. Required CRR/SLR with the RBI should not be considered to be a routine source of liquidity.

Good management information systems, analysis of net funding requirements under alternative scenarios, diversification of funding sources, and contingency planning are crucial elements of sound liquidity management.

##### **E. Liquidity Risk:**

It is a risk of loss to a bank resulting from its liability to meet its needs for cash or from inadequate liquidity levels, which must be covered by funds, at excess cost.

#### **F. Net Funding Requirements:**

The liquid assets necessary to fund a bank cash obligations and commitments going forward determined by performing a cash flow analysis, all cash inflows against all cash outflows, to identify potential net shortfalls.

#### **Principles of Liquidity Management:**

The Bank for International Settlements' Basel Committee on Banking Supervision in its document No. 69 February, 2000 has provided principles and details of key elements for effective management of liquidity.

**Banks should formally adopt and implement these principles for use in overall liquidity management process:**

##### ***A. Banks must develop a structure for liquidity management:***

1. Each banks should have an agreed strategy for day-to-day liquidity management. This strategy should be communicated throughout the organization.
2. A Bank Governing board should approve the strategy and significant policies related to liquidity management. The governing board should also ensure that senior management of the bank takes the steps necessary to monitor and control liquidity risk. The Governing Board should be informed regularly of the liquidity situation of the bank and immediately if there are any material changes in the bank current or prospective liquidity position.
3. Each Bank should have a management structure in place to effectively execute the liquidity strategy. This structure should include the on-going involvement of members of senior management. Senior management must ensure that liquidity is effectively managed, and that appropriate policies and procedures are established to control and limit liquidity risk. Banks should set and regularly review limits on the size of their liquidity positions over particular time horizons.

4. Banks must have adequate information systems for measuring, monitoring, controlling and reporting liquidity risks. Reports should be provided on a timely basis to the banks governing board, senior management and central bank. (In case of India Reserve Bank of India)

***B. Banks must measure and monitor net funding requirements:***

1. Each bank should establish a process for the ongoing measurement and monitoring of net funding requirements.
2. Banks should analyze liquidity utilizing a variety of scenarios.
3. Banks should frequently review the assumptions utilized in managing liquidity to determine that they continue to be valid.

***C. Banks should Manage market access:***

Each banks should periodically review its efforts to establish and maintain relationships with liquidity holders, to maintain the diversification of liabilities, and aim to ensure its capacity to sell assets.

***D. Banks should have contingency plans:***

Banks should have contingency plans in place that address the strategy for handling liquidity crises and which include procedures for making up cash flow shortfalls in emergency situations.

***E. Banks should manage their foreign currency Liabilities:***

1. Each bank should have measurement, monitoring and control system for its liquidity positions in the major currencies in which it is active. In addition to assessing its aggregate foreign currency liquidity needs and the acceptable mismatch in combination with its domestic currency commitments, a bank should also undertake separate analysis of its strategy for each currency individually.
2. Subject to analysis undertaken, a bank should, where appropriate, set and regularly review limits on the size of its cash flow mismatches over particular time horizons for foreign currencies in aggregate and for each significant individual currency in which the bank operates.



**F.** Each bank must have an adequate system for internal controls over its liquidity risk management process. A fundamental component of the internal control system involves regular independent reviews and evaluations of the effectiveness or enhancements to internal controls are made.

**G.** Each bank should have in place a mechanism for ensuring that there is an adequate level of disclosure of information about the bank in order to manage public perception of the organization and its soundness.

## CAMELS Rating

**Definition: CAMELS Rating** is the rating system wherein the bank regulators or examiners (generally the officers trained by RBI), evaluates an overall performance of the banks and determine their strengths and weaknesses.

CAMELS Rating is based on the financial statements of the banks, Viz. Profit and loss account, balance sheet and on-site examination by the bank regulators. In this Rating system, the officers rate the banks on a scale from 1 to 5, where **1** is the **best** and **5** is the **worst**. The parameters on the basis of which the ratings are done are represented by an acronym “CAMELS”.

1. **Capital Adequacy:** The capital adequacy measures the bank’s capacity to handle the losses and meet all its obligations towards the customers without ceasing its operations. This can be met only on the basis of an amount and the quality of capital, a bank can access. A ratio of **Capital to Risk Weighted Assets** determines the bank’s capital adequacy.
2. **Asset Quality:** An asset represents all the assets of the bank, Viz. Current and fixed, loans, investments, real estates and all the off-balance sheet transactions. Through this indicator, the performance of an asset can be evaluated. The ratio of **Gross Non-Performing Loans to Gross Advances** is one of the criteria to evaluate the effectiveness of credit decisions made by the bankers.
3. **Management Quality:** The board of directors and top-level managers are the key persons who are responsible for the successful functioning of the banking operations. Through this parameter, the effectiveness of the management is checked out such as, how well they respond to the changing market conditions, how well the duties and responsibilities are delegated, how well the compensation policies and job descriptions are designed, etc.
4. **Earnings:** Income from all the operations, non-traditional and extraordinary sources constitute the earnings of a bank. Through this parameter, the bank’s efficiency is checked with respect to its capital adequacy to cover all the potential losses and the ability to pay off the dividends. **Return on Assets Ratio** measures the earnings of the banks.
5. **Liquidity:** The bank’s ability to convert assets into cash is called as liquidity. The ratio of **Cash maintained by Banks and Balance with the Central Bank to Total Assets** determines the liquidity of the bank.
6. **Sensitivity to Market Risk:** Through this parameter, the bank’s sensitivity towards the changing market conditions is checked, i.e. how adverse changes in the interest rates, foreign exchange rates, commodity prices, fixed assets will affect the bank and its operations.

Thus, through CAMELS rating, the overall financial position of the bank is evaluated and the corrective actions, if any, are taken accordingly.

# IMPORTANT GUIDELINES ON DISCLOSURE IN FINANCIAL STATEMENTS \*

## 1. PURPOSE

- The financial statements are required to provide the information about the financial position and performance of the bank in making economic decisions by the users. They are interested in the bank's liquidity and solvency and the risks related to the assets and liabilities recognized on its balance sheet and to its off balance sheet items. This useful information can be provided by way of 'Notes' to the financial statements, being supplementary information for market discipline. Market discipline has been given due importance under Basel II framework on capital adequacy by recognizing it as one of its three Pillars.

## 2. DISCLOSURE REQUIREMENT

- In this direction, RBI has, over the years, developed a set of disclosure requirements which allow the market participants to assess key pieces of information on capital adequacy, risk exposures, risk assessment processes and key business parameters which provide a consistent and understandable disclosure framework that enhances comparability. Banks are also required to comply with the Accounting Standard – 1 (AS -1) on disclosure issued by ICAI. This can be achieved through revision of Balance Sheet and P & L Account of banks and enlarging the scope of disclosures in "Notes to Accounts".

3. ADDITIONAL/SUPPLEMENTARY INFORMATION "Notes to Accounts" may contain the supplementary information such as:-

a) Capital (Current & Previous year) with breakup including CRAR – Tier I/II capital (%), % of share holding of GOI, amount of subordinated debt raised as Tier II capital, etc.

b) Investments including details of Repo transactions, Non-SLR investment Portfolio, and Sales & transfers to/from HTM category.

c) Derivatives with breakup of Forward Rate Agreement/Interest Rate Swap, Exchange Traded Interest Rate Derivatives, and Disclosures on risk exposure in derivatives.

d) Asset Quality with details such as Non-Performing Assets, Particulars of Accounts Restructured, Details of financial assets sold to Securitization / Reconstruction Company for Assets Reconstruction, Details of Non-Performing financial assets purchased, Details of Non-Performing Assets sold, and Provisions on Standard Assets.

e) Business Ratios giving Interest Income as a % to Working Funds, Non-interest income as a % to working funds, Operating Profit as a % to working funds, etc.

f) Asset Liability Management giving the maturity pattern of certain items of assets and liabilities such as deposits, advances, investments, borrowings, foreign current assets, and foreign currency liabilities.

g) Exposures giving the segment wise breakup on Exposure to Real Estate Sector, Exposure to Capital Market, Risk Category wise Country Exposure, Details of Single Borrower Limit (SGL)/Group Borrower Limit (GBL) exceeded by the bank, and Unsecured Advances.

h) Miscellaneous relating to Amount of Provisions made for Income Tax during the year, and Disclosure of Penalties imposed by RBI.

4. Disclosure Requirements as per Accounting Standards where RBI has issued guidelines in respect of disclosure items for “Notes to Accounts” a) AS-5 – relating to Net Profit or Loss for the period, prior period items and changes in accounting policies.

b) AS -9 – Revenue Recognition giving the reasons for postponement of revenue recognition.

c) AS – 15 – Employee Benefits

d) AS – 17 – Segment Reporting such as Treasury, Corporate/wholesale Banking, Retails Banking, ‘Other Banking Operations’ and Domestic and International segments, etc.

e) AS – 18 – Related Party Disclosures

f) AS – 21 – Consolidated Financial Statements (CFS)

g) AS – 22 – Accounting for Tax & Income – Adoption of AS – 22 entails creation of Deferred Tax Assets (DTA) and Deferred Tax Liabilities (DTL) which have a bearing on the computation of capital adequacy ratio and banks’ ability to declare dividends. DTA represents unabsorbed depreciation and carry forward losses which can set-off against Assets future taxable income which is considered as timing difference. DTA has an effect of decreasing future income tax payments which indicates that they are prepaid income taxes and meet the definition of assets. It is created by credit to opening balance of Revenue Reserves on the first day of application of AS – 22 or P & L Account for the current year. DTA should be deducted from Tier I capital.

Deferred Tax Liability (DTL) is created by debit to opening balance of Revenue Reserves on the first day of application of AS-22 or P & L Account for the current year and will not be eligible for inclusion in Tier I and Tier II capital for capital adequacy purpose. DTL have an effect of increasing the future year’s income tax payments which indicates that they are accrued taxes and meet the definition of liabilities.

h) AS – 23 – Accounting for investments in Associates in Consolidated Financial Statements. It relates to the effects of the investments in associates on the financial position and operating results of a group

i) AS – 24 – Discontinuing Operations – resulted in shedding of liability and realization of the assets by the bank, etc. j) AS – 25 – Interim Financial Reporting – Half yearly reporting.

k) Other Accounting Standards Banks are required to comply with the disclosure norms stipulated under the various Accounting Standards issued by ICAI.

5. Additional Disclosures a) Provisions and contingencies – Banks are required to disclose in the “Notes to Accounts” the information on all Provisions and Contingencies giving Provision for depreciation on Investment, Provision towards NPA, Provision towards Standard Assets, Provision made towards Income Tax, and Other Provision and contingencies.

b) Floating Provisions - comprehensive disclosures on floating provisions.

c) Draw Down from Reserves - Details of draw down of reserves are to be disclosed.

d) Complaints - Brief details on Customer Complaints and Awards passed by the Banking Ombudsman.

e) Letters of Comfort (LOC) issued by banks - Details of all the Letters of Comfort (LoCs) issued during the year, including their assessed financial impact, etc.

f) Provision Coverage Ratio (PCR) - ratio of provisioning to gross non-performing assets

g) Bancassurance Business - Details of fees/remuneration received, etc.

6. Concentration of Deposits, Advances, Exposures, and NPAs

a) Concentration of deposits – Total deposits of 20 large depositors and percentage of the deposits to total deposits of the bank.

b) Concentration of Advances - Total advances to 20 largest borrowers and percentage of the advance to total advances of the bank.

c) Concentration of Exposures - Total Exposure to 20 largest borrowers/customers and percentage of the exposures to total exposure of the bank on borrowers/customers.

d) Concentration of NPAs - Total exposure to top 4 NPA accounts

7. Sector-wise NPAs - Details of sector-wise NPAs such as Agriculture & Allied Activities, Industry (Micro & Small, Medium and Large), Services, and Personal Loans. 8. Movement of NPAs - Additions, Recoveries, Upgradation, Write-offs, etc. from Gross NPAs and the final position as on the date of the Financial Statement. 9. Overseas Assets, NPAs, and Revenue - Giving the Total assets, Total NPAs, and Total Revenue. 10. Off-balance sheet SPVs sponsored - (consolidated) giving Domestic and Overseas SPVs sponsored.

The prescribed formats in respect of certain disclosures are given in RBI Circular.