

Existing Systems / Procedures for NPA Identification

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Abstract: *This article provides an in - depth analysis of the identification and management of Non - Performing Assets NPAs in commercial banks, highlighting the multifaceted nature of risks involved, including credit, market, liquidity, interest rate, foreign exchange, country, and operational risks. It outlines various methodologies for risk identification, emphasizing the critical importance of credit risk management in preventing losses due to borrower defaults or deteriorations in credit quality. The article further explores standardized approaches and models for assessing credit risk, as well as innovative strategies for managing other types of risks associated with NPAs. Through a comprehensive examination of risk measurement, management, and mitigation techniques, including the application of new regulatory frameworks and risk - based auditing, the study underscores the significance of continuous risk monitoring and effective risk management practices in enhancing the resilience and sustainability of banking institutions.*

Keywords: Credit Risk Management, Non - Performing Assets, Operational Risk, Risk Assessment Models, Commercial Banking

1. Introduction

This head deals with existing systems/procedures for NPA identification at Commercial banks. In this regard various risks namely Credit risk, Market risk, Liquidity risk, Interest rate risk, Foreign exchange risk, Country risk and Operational risk are explained and different approaches are also explained.

1.1 Credit Risk

For banks and financial institutions, management of credit risk is critical. Credit risk is defined as the possibility that a borrower or counter party will fail to meet its obligations in accordance with agreed terms. These losses in a bank's portfolio stem from outright default due to inability or unwillingness of a customer or counter party to meet commitments in relation to lending, trading, settlement, and other financial transactions. Losses also result from reduction in portfolio value arising from actual or perceived deterioration in credit quality. Credit risk is a combined outcome of default risk and exposure risk, which also includes off - balance sheet exposures such as forex forward contracts, swaps, options, etc. Credit risk, therefore, arises from the banks' dealings with or lending to a corporate, individual, another bank, financial institution or a country. The effective management of credit risk is a critical component of comprehensive risk management and is essential for the long - term success of any banking organization. Credit risk management encompasses identification, measurement, monitoring and control of the credit risk exposures.¹

The Credit Risk Management (CRM) focuses on the aspects relating to:

- Default, and
- Credit quality

Default is a situation in which bank does not receive the amount due from the obligator as per the contract. This has two aspects-

- Solvency (which relates to non - payment), and

- Liquidity (which relates to delay in payment).

Credit quality relates to changes in the asset value. The value of credit asset may decline due to increase in likelihood (or even perceived likelihood) of default. In order to manage and control the risk within the set limits (risk appetite of the bank), the risk will have to be measured and quantified. It is said that if you cannot measure the risk properly you cannot manage and control it. Measurement of risk is thus a critical stage in credit risk management. The RBI has advised the banks to put in place appropriate risk management architecture to comply with the new Basel accord. RBI guidelines² on credit risk management stipulate that, it is imperative that banks have a robust credit risk management system, which is sensitive and responsive to all major risk factors. Credit risk rating framework is recognized as a key instrument for rating of bank's borrowers in various sectors like industrial, trade, and agriculture, etc. In pursuance of these requirements, banks have designed a Credit Risk Rating (CRR) framework in the form of eight models to be utilized for risk rating of borrowers. These models, guidelines, and scoring norms are now being implemented in many banks. The applicability and coverage of the eight models are as under:

CRR Model - 1 Industrial and Hi - Tech Agricultural activities (excluding PSUs) Exposure exceeding Rs.100 lacs

CRR Model - 2 Industrial and Hi - Tech Agricultural activities (excluding PSUs) Exposure exceeding Rs.10 lacs and upto Rs.100 lacs

CRR Model - 3 Industrial and Hi - Tech Agricultural activities (excluding PSUs) Exposure Rs.2 lacs to Rs.10 lacs

CRR Model - 4 Public Sector Units (PSUs)

CRR Model - 5 Traders (General and Agricultural Indirect) and services Exposure exceeding Rs.100 lacs

CRR Model - 6 Traders (General and Agricultural Indirect) and services Exposure exceeding Rs.10 lacs and up to Rs.100 lacs

CRR Model - 7 Traders (General and Agricultural Indirect) and services Exposure Rs.2 lacs to Rs.10 lacs

CRR Model - 8 Agricultural borrowers (excluding Agricultural Indirect and Hi - tech activities) Exposure Rs.2

¹ Chaitalia, Divyesh and Redkar Onkar (2006), "Setting up and working of asset reconstruction companies in India-A perspective on

the impediments. "Symbiosis institute of business management, pune.

² Reserve Bank of India Bulletin, Speech article, January, 2003.

lacs and above

business opportunities, when desired.

1.2 Standardized Approach

It is based on the External Credit Assessment Institution (ECAI) rating for sovereign, banks and corporate and is more sensitive as compared to the existing standardized approach.

1.2.1 Internal Rating Based Approach (IRB)

Measurement of credit risk involves quantification of:

- 1) Expected Losses (EL);
- 2) Unexpected Losses (UL).

Expected loss is denoted by the formula

$$EL = PD \times LGD \times EAD$$

Unexpected loss is denoted by the formula

$$UL = EAD \times (PD \times \sigma^2 LGD + LGD^2 \times \sigma^2 PD)$$

Thus, for the measurement of credit risk, quantification of the following components is necessary:

- Probability of default (PD).
- Expected exposure at default (EAD).
- Loss given default (LGD).
- Maturity or tenor of the exposure.
- Degree of diversification in a banks credit portfolio.

The above equation shows that the unexpected loss arises due to the variance (σ^2) of the LGD and PD. In case the σ^2 LGD, and σ^2 PD are zero, i. e. there is no variance in PD or in the LGD, the above expression becomes zero and the UL is zero. It is only on account of the variations in PD and LGD values ex - post from their values taken ex - ante the UL arises. As the EL indicates the average or mean loss expected, it is to be taken care of through provisioning i. e. by booking it as loss. The unexpected loss (UL) can be taken care by maintaining proper capital adequacy (Chaubal, R. P., June 2003).

1.3 Risks in NPA

1.3.1 Market Risk

Market Risk may be defined as the possibility of loss to a bank in the terms of earnings and capital, caused by the changes in the market variables. It is the risk that movements in equity and interest rate markets, currency exchange rates, and commodity prices will adversely affect the value of on/off balance sheet positions.

1.3.2 Liquidity Risk

Liquidity is the ability to efficiently accommodate deposit and reduction in liabilities as also to fund the loan growth and possible funding of the off - balance sheet claims.

The cash flows are placed in different time brackets based on future behavior of assets, liabilities, and off - balance sheet items. Liquidity risk consists of funding risk, time risk, and call risk.

- Funding Risk: The need to replace net outflows due to unanticipated withdrawal/non - renewal of deposit.
- Time Risk: The need to compensate for non - receipt of expected inflows of funds, i. e. performing assets turning into non - performing assets.
- Call Risk: It happens on account of crystallization of contingent liabilities and inability to undertake profitable

1.3.3. Interest Rate Risk

Interest Rate Risk is the potential negative impact on the net interest income and it refers to the vulnerability of an institution's financial condition to the movement in interest rates. Changes in interest rate affect earnings, value of assets, liability, off - balance sheet items, and cash flow. Management of interest rate risk aims at capturing the risks arising from the maturity and re - pricing mismatches and is measured both from the earnings and economic value perspective. Earnings perspective involves analyzing the impact of changes in interest rates on accrual or reported earnings in the near term. This is calculated by measuring the changes in the net interest income equivalent to the difference between total interest income and total interest expense. Economic value perspective identifies risk arising from long - term interest rate gaps and involves analyzing the expected cash inflows on assets minus expected cash outflows on liabilities plus the net cash flows on off - balance sheet items.

1.3.4 Foreign Exchange Risk

Foreign exchange risk arises when a bank may suffer loss as a result of adverse exchange rate movement during a period in which it has an open position, either spot or forward, or both in same foreign currencies. Even, in case, where spot or forward positions in individual currencies are balanced, the maturity pattern of forward transactions may produce mismatches. There is also a settlement risk arising out of default of the counter party and out of time lag in settlement of one currency in one center and the settlement of another currency in another time zone.

1.3.5. Country Risk

This is the risk that arises due to cross - border transactions that are growing dramatically in the recent years owing to globalization. In the process there arises, a situation in which seller (exporter) may deliver the goods, but may not be paid or the buyer (importer) might have paid the money but was not delivered the goods for one or the other reasons. As per the RBI guidelines, banks should reckon both fund and non - fund exposures from their domestic as well as foreign branches, if any, while identifying, measuring, monitoring and controlling country risk. It also advocates that bank should also take into account indirect country risk exposure. For example, exposures to a domestic commercial borrower with large economic dependence on a certain country may be considered as subject to indirect country risk. The exposures should be computed on a net basis, i. e. gross exposure minus collateral, guarantees, etc. Banks are expected to disclose the "country risk management" policies in their annual report by way of notes.

1.3.6 Operational Risk

Operational risk is the risk of loss arising from various types of technical or human errors or failed internal process, legal hurdles, fraud, and failure of people and systems or from external agencies. It can result into low productivity and have greater impact on performance as compared to market and credit risk. There is no fixed formula for probability of occurrence of operational risk and as such these are classified in the category of non - measurable risk. Most banks, internationally, admit in having poor measures of operational

risk. Banks measure credit and market risk because they can, not because these are the biggest risk they face.

Operational risk is larger, more dangerous and no one knows exactly what to do about it. Risk education for familiarizing the complex operations at all levels of staff can also reduce operational risk. Insurance cover is one of the important mitigators of operational risk. Operational risk events are associated with weak links in internal control systems or laxity in complying with the existing internal control procedures. Operational risk involves breakdown in internal controls and corporate governance leading to error, fraud, and failure to perform in a timely manner, compromise on the interest of the bank resulting in financial loss. In order to mitigate this, internal control and internal audit are used as the primary means. Putting in place proper corporate governance practices by itself would serve as an effective risk management tool. The new Basel accord outlines three approaches in the assessment of the requirements for operational risk.

1.4 Various Approaches

1.4.1. Basic Indicator Approach (BIA)

BIA allocates capital for operational risk using a single indicator, i. e. gross income as a proxy for an overall operational risk exposure. Each bank holding capital for operational risk equal to the amount of a fixed percentage, multiplied by the individual amount of gross income.

1.4.2. Standardised Approach (SA)

This approach differs from the BIA in that a bank's activities are decomposed into eight standardized business lines (corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and retail brokerage). Thus the SA is better able to reflect the different risk profiles across the banks as reflected by their broad business activities. However, like the BIA, the capital charge would continue to be standardized by the supervisor.

1.4.3. Internal Management Approach (IMA)

Under IMA, bank's activities are categorized into a number of business lines, and a broad set of operational loss types is defined and applied across business lines. In the regulated banking environment, banks had to primarily deal with credit or default risk but the current scenario demands the dealing with the whole range of risk like exchange risk, interest rate risk, operational risk, etc. Operational risk, which had always existed in the system, would become more pronounced in the coming future, as the technology has become the new factor in today's banking. Traditional risk management techniques become obsolete with the growth of derivatives and off - balance sheet operations, coupled with diversifications. The expansion of e - banking will lead to continuous vigilance and revision of regulations. The RBI, presently, has supervisory mechanism by way of no - site inspection and off - site monitoring based on the audited balance sheet of a bank. In order to enhance the supervisory mechanism, the RBI has decided to put in place, beginning from the last quarter of the financial year 2002 - 03, a system of risk - based supervision (RBS). The RBS is expected to focus supervisory attention in accordance with the risk profile of the bank. It is designed to

ensure continuous monitoring and evaluation of risk profile of the institution through risk matrix. This may optimize the utilization of the supervisory resources of the RBI so as to minimize the impact of a crises situation in the financial system.

The implementation of risk - based auditing would imply that greater emphasis is placed on the internal auditor's role for mitigating risks. By focusing on effective risk management, the internal auditor would not only offer remedial measures for current trouble - prone areas, but also anticipate problems and play an active as well as important role in protecting the bank from risk hazards. If the above procedure of integrated risk management is put in place in the banks, past due loans (NPAs) can be managed to a large extent.

Ultimately the management of NPAs boils down to -

- 1) Credit monitoring, as a tool to arrest the slippage of assets into the non - performance zone.
- 2) Credit monitoring as a tool for drafting and implementing rehabilitation programme for converting NPAs into performing assets.
- 3) Skillful negotiation for evolving a compromised payment - settlement to annihilate NPAs.
- 4) Timely filing of civil suits and effectively managing the litigation to build up pressure on the defaulting borrowers for repayment.