

TYPES OF RISK & CREDIT RISK MANAGEMENT



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RISK MANAGEMENT IN BANK

- ❖ Indian banking system is the lifeline of the nation and its people.
- ❖ There have been many downturns in the economy and in the recent past the global economy has undergone a huge turmoil situation but then also Indian Banking sector has been able to hold its same position.
- ❖ The main business of any bank across the globe is dependent on credit or loan.
- ❖ Today, Indian banks can confidently compete with modern banks of the world and Indian banking is looked out for all over the world.

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RISK MANAGEMENT IN BANK

- ❖ The incidence of Non- performing assets (NPAs) is affecting the performance of the credit institutions both financially and psychologically.
- ❖ The threat of growing credit risk is improving day by day.
- ❖ NPA is a disorder resulting in non – performance of a portion of loan portfolio leading to no recovery or less recovery/income to the lender.
- ❖ NPA represent the quantified “Credit Risk”.

RISK MANAGEMENT IN BANK

- ❖ With the Indian economy becoming global, the banks are realising the importance of different types of risks.
- ❖ Some of the risk are credit risks, market risks, operational risks, reputational risks and legal risks, using quantitative techniques in risk modelling.
- ❖ The Reserve Bank of India is a very pioneer institution which controls the whole banking sector in a very proper and well organized way.
- ❖ RBI issued the first set of guidelines to Banks on Risk Management on October 20, 1999.

DEFINATION OF RISK IN BANK

- ▶ A risk can be defined as an unplanned event with financial consequences resulting in loss or reduced earnings.
- ▶ Therefore, a risky proposal is one with potential profit or a future loss.
- ▶ In commercial and business risk generates profit or loss depending upon the way in which it is managed.
- ▶ Risk is the possibility of something adverse happening.

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MANAGEMENT OF RISK

Measurement of risk is a very important step in risk management process. Therefore it is important to identify and appreciate the risk and quantify it. Only then the next step management of risk can be attempted.

The management is a process consisting of the following steps.

- Identify all areas of risk
- Evaluate these risks
- Set various exposure limits for
 - ❖ Type of business
 - ❖ Mismatches
 - ❖ Counter parties
- Issue clear policy guidelines / directives.

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VARIOUS TYPES OF RISK IN BANK

1. Credit Risk: This is the risk of non recovery of loan or the risk of reduction in the value of asset.

The credit risk also includes the pre-payment risk resulting in loss of opportunity to the bank to earn higher interest income.

Credit Risk also arises due excess exposure to a single borrower, industry or a geographical area.

The element of country risk is also present which is the risk of losses being incurred due to adverse foreign exchange reserve situation or adverse political or economic situations in another country.

2. INTEREST RATE RISK

This risk arises due to fluctuations in the interest rates.

It can result in reduction in the revenues of the bank due to fluctuations in the interest rates which are dynamic and which change differently for assets and liabilities.

With the deregulated era interest rates are market determined and banks have to fall in line with the market trends even though it may stifle their Net Interest Margins.

3. LIQUIDITY RISK

Liquidity is the ability to meet commitments as and when they are due and ability to undertake new Transactions when they are profitable.

Liquidity risk may emanate in any of the following situations-

(a) Net outflow of funds arising out of withdrawals/non renewal of deposits,

(b) Non recovery of cash receipts from recovery of loans,

(c) Conversion of contingent liabilities into fund based Commitment, and

(d) Increased availment of sanctioned limits.

(4) Foreign Exchange Risk: Risk may arise on account of maintenance of positions in forex operations and it involves currency rate risk, transaction risks (profits/loss on transfer of earned profits due to time lag) and transportation risk (risks arising out of exchange restrictions).

(5) Regulatory Risks: It is defined as the risk associated with the impact on profitability and financial position of a bank due to changes in the regulatory conditions, for example the introduction of asset classification norms have adversely affected the banks of NPAs and balance sheet bottom lines.

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(6) Technology Risk - This risk is associated with computers and the communication technology which is being increasingly introduced in the banks. This entails the risk of obsolescence and the risk of losing business to better technologically.

(7) Market Risk-This is the risk of losses in off and on balance sheet positions arising from movements in market prices.

(8) Strategic Risk-This is the risk arising out of certain strategic decisions taken by the banks for sustaining themselves in the present day scenario for example decision to open a subsidiary may run the risk of losses if the subsidiary does not do good business.

(9) Business Strategy & Environment Risk: These arises due to adoption of inappropriate business proposition or non-viable business proposition or absence of appropriate or viable business proposition. The adverse macro economic indicators and business cycle will also add to the risk factors.

(10) Operational Risk: Operational Risk arises due to failure or inadequate processes, people, technology and also adverse reputation, operating environment and legal decisions.

WHAT IS CREDIT RISK?

Credit risk is also called default risk. It is the probability of default on the part of the borrower, after availing a loan with all its terms & conditions.

It is the chance of borrower not repaying the loan. (transaction risk)

Credit risk consists of transaction risk and portfolio risk.

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PORTFOLIO RISK

- ▶ Portfolio risk consists of intrinsic risk and concentration risk.
- ▶ Intrinsic risk is inherent in certain types of lending like crop loan, credit card etc.
- ▶ Concentration risk is due to disproportionate concentration of loans to specific industries, sectors, regions or types.
- ▶ Some times this leads to liquidity risk due to high loan losses.

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EXTERNAL FACTORS FOR CREDIT RISK

- ▶ State of the Present Economical Condition;
- ▶ Natural calamities;
- ▶ Government policies;
- ▶ Business cycles;
- ▶ Sector/industry recession;

Remedies for external factors:

- ▶ Sound lending policies;
- ▶ Credit diversification;
- ▶ Loan syndication and consortium financing.

INTERNAL FACTORS BANK LEVEL

- ▶ Defective loan policy;
- ▶ Loan volume ;
- ▶ Loan procedures;
- ▶ Unsound prevention strategies;
- ▶ Inexperienced credit officers.

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INTERNAL FACTORS CUSTOMER LEVEL

- **Incomplete information;**
- **Character;**
- **Level and stability of cash flow;**
- **Real net worth;**
- **Collaterals .**

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CREDIT RISK MANAGEMENT PROCESS

Traditional model of credit risk management process consists of:

- ▶ RISK RATING
- ▶ RISK PRICING
- ▶ RISK MONITORING

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RISK RATING

- ▶ Default risk analysis based on linking probability of default to credit-worthiness.
- ▶ Rating helps to determine credit risk; pricing; terms and conditions and differentiation of good and bad borrowers.

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TRADITIONAL APPROACH: 5Cs

Character of Borrower

Willingness to Pay

Capital

Borrower's Risk-bearing Commitment

Capacity

Ability to Pay / Cash Flow Adequacy

Collateral

Priority of Charge and Value

Condition

Business of Borrower and Industry Trend

Credit worthiness of Borrower

CREDIT (RISK) RATING MODELS

- ▶ The entire delegation of powers (to be exercised by the delegatee) is linked to Credit Rating Models.
- ▶ Hence, the delegatee before exercising the delegation of powers should be aware of the credit rating assigned to that particular account.
- ▶ At present, credit rating of the borrower is carried out for credit limit of Rs. 10.00 lacs and above.

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CREDIT (RISK) RATING MODELS

- ▶ The Internal ratings are used for credit decision, pricing & for capital computation, the delegatee has to ascertain that the ratings have been vetted/approved by RMD (Risk Management Department) of ZOs/DMOs/LCBs/NBGs/HO.
- ▶ All Credit Proposals which are under branch sanction, the credit rating should be vetted by an officer other than rating officer, at the branch itself.
- ▶ Rating carried out on the basis of latest Audited/Provisional financial shall be considered for delegation.

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CREDIT RATING MODELS

SN	Segment	Criteria	Reference
01.	Small Business Segment (SBS) Model	For credit limits from Rs. 10 lacs to below Rs. 1 crores and/or turnover 50 lacs to less than Rs.5 crore	99/185 dated 20.02.2006
	SME Model	For Credit limits from Rs. 1 crore to less than Rs. 5 crore and/or turnover Rs. 5 crore to less than Rs. 50 crore.	
02	Mid Segment (MS) Model	For credit limits from Rs. 5 crores to below Rs. 30 crores and/or turnover of Rs. 50 crores and above but not exceeding Rs. 150 crores.	105/7 dated 06.04.2011
03	Hybrid Large Corporate (HLC) Model	For credit limits from Rs. 30 crores onwards and/or turnover of Rs. 150 crore and above.	104/96 dated 16.11.2010
04	Project Finance/ Infrastructure (RG Model)- Risk Grade	<ul style="list-style-type: none"> a. Road Project Model b. Power Project Model c. Generic Infrastructure Model d. Greenfield Model e. Real Estate Model 	104/95 dated 16.11.2010
05	NBFC Model	For credit rating of NBFC proposals.	105/57 dated 04.01.2012
06	SB Model	For Stock Brokers	108/190 dated 15.01.2015

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CREDIT RATING (ENTRY LEVEL NORMS)

Model	Criteria	Minimum Rating
HLC	FB and NFB limits aggregating Rs. 30 crore & above and/or turnover of Rs. 150 crore & above.	HLC5
MS	FB and NFB limits aggregating Rs. 5 crore & above but not exceeding Rs. 30 crore and/or turnover of Rs. 50 crore & above but not exceeding Rs. 150 crore.	MS5
SBS	FB and NFB limits aggregating Rs. 10 lacs & above but less than Rs. 1 crore or turnover Rs. 50 lacs to less than Rs. 5 crore (109/118)	SBS5
SME	FB and NFB limits aggregating Rs. 1 crore & above but less than Rs. 5 crore or turnover Rs. 5 crore to less than Rs. 50 crores (109/118)	SME5
RG	Generic Infrastructure/Road/Power/Greenfield	RG7
RG	Real Estate involving Commercial Projects	RG6
RG	Other Real Estate Projects	RG7
NBFC	Non-Banking Finance Companies	NBFC4

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CONCLUSION

- ❖ **Better credit risk management improves overall performance and secure competitive advantage .**
- ❖ **Reduces financial risk and generate greater revenues.**
- ❖ **Better profitability.**
- ❖ **Chief goal of risk management-adopt universal and best practices followed worldwide.**

SMALL BUSINESS SEGMENT (SBS) MODEL

▶ Applicability:

- ▶ Limit of Rs. 10 lakh and above but below Rs. 1 crore and/or turnover of Rs. 50 lakh and above but below Rs. 5 crore.
- ▶ Engaged in Manufacturing, Trading and Services;
- ▶ Usage would be Web-based (similar to other credit rating models like HLC, MS etc.)

▶ Architecture:

- | | |
|---------------------|-----|
| ▶ Financial Module | 30% |
| ▶ Management Module | 40% |
| ▶ Business Module | 20% |
| ▶ Security | 10% |

SBS MODEL- FINANCIAL RISK

- ▶ Net Sales Growth
- ▶ EBIT/Net Sales
- ▶ Quick Ratio
- ▶ $NWC \text{ (Net Working Capital) / Average Sales}$;
- ▶ $TNW = (TA - IA - \text{Outside liabilities})$

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SBS MODEL- MANAGEMENT RISK

- ▶ Integrity
- ▶ Business Commitment
- ▶ Financial Strength
- ▶ Management Competence;
- ▶ Business Experience
- ▶ Internal Control
- ▶ Employee relations/quality
- ▶ Succession Planning
- ▶ Credit Track Record;
- ▶ Firms' Age
- ▶ Reputation with Customers & Suppliers

SBS MODEL - BUSINESS RISK

- ▶ Sales Trend (Product);
- ▶ Product seasonality;
- ▶ Competition impact on Gross Profit Margin;
- ▶ Impact of duties (Product);
- ▶ Technology Dependence (Product);
- ▶ Environmental impact (Product);
- ▶ Customer quality & concentration;
- ▶ Supplier reliability & concentration;

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SBS MODEL- SECURITY PARAMETER

- ▶ Collateral Coverage Ratio;
- ▶ Type of Collateral/Liquidity of Collateral
- ▶ Enforceability of Collateral.

SME MODEL- OVERVIEW

▶ Applicability:

- ▶ Sanction Limit of Rs. 1 crore and above but below Rs. 5 crore and/or turnover of Rs. 5 crore and above but below Rs. 50 crore.
- ▶ Web-based like HLC, MS etc.

▶ Architecture:

- ▶ Financial Module 30%
- ▶ Management Module 30%
- ▶ Business Module 20%
- ▶ Industry Risk Module 10%
- ▶ Security 10%

SME MODEL- FINANCIAL RISK (PARAMETERS)

- ▶ **Sales Growth**
- ▶ **Gearing (Company's debt related to its equity capital)**
- ▶ **Quick Ratio**
- ▶ **Cash Flow Adequacy;**
- ▶ **EBITD/Net Sales**
- ▶ **Average Sales**

SME MODEL- MANAGEMENT RISK

- ▶ Integrity
- ▶ Business Commitment
- ▶ Competence
- ▶ Experience
- ▶ Succession Planning
- ▶ Financial Strength
- ▶ Credit Track Record
- ▶ Ability to raise funds;
- ▶ General Reputation
- ▶ Internal Control
- ▶ Intra Company/Group conflicts

SME MODEL- BUSINESS RISK

- ▶ **Customer Quality and Concentration**
- ▶ **Supplier Reliability and Concentration**
- ▶ **Order Book position/Demand**
- ▶ **Competition impact on GP Margin**
- ▶ **Industrial/Employee relations.**

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SME MODEL- INDUSTRY RISK

- ▶ **Industry Cyclicalilty**
- ▶ **Industry Seasonality**
- ▶ **Regulatory Issues/Fiscal Policy dependence**
- ▶ **Technology Dependence;**
- ▶ **Environmental Impact;**
- ▶ **Demand Supply situation**

SME MODEL- SECURITY PARAMETER

- ▶ **Collateral Coverage Ratio**
- ▶ **Type of Collateral/Liquidity of Collateral**
- ▶ **Enforceability of Collateral**

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SME MODEL- BASIC CREDIT RISK SCORE

- ▶ The Basic credit risk score under this model is determined as a function of the Financial Risk, Management Risk, the Business Risk, the Industry Risk and the Security Parameters.
- ▶ In addition, the “Conduct of Account is analyzed, which is an indicator of the historical extent of credit behaviour exhibited by the firm.

SBS/SME MODEL - RATING GRADES

Rating	Description
SBS1/SME1	Very strong capacity to meet its financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.
SBS2/SME2	Rating denotes expectations of very low credit risk. Indicate a Strong capacity for payment of financial commitments.
SBS3/SME3	Strong capacity to meet its financial commitments but somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions that obligors in higher-rated category.
SBS4/SME4	Rating indicates that expectations of credit risk are currently low. The capacity for payment of financial commitments is considered to be Adequate.
SBS5/SME5	Rating indicates that expectations of credit risk are currently Low. The capacity for payment of financial commitments is considered to be moderate but adverse business or economic conditions are more likely to impair this capacity.

SBS/SME MODEL - RATING GRADES

Rating	Description
SBS6/SME6	Obligors are Less Vulnerable in near term than other lower rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial or economic conditions that would impair its capacity to meet its financial commitments.
SBS7/SME7	Obligors are more vulnerable than the obligors rated '6', but the obligors currently has capacity to meet its financial commitments. Adverse business, financial or economic conditions will likely to impair the capacity to meet its financial commitments.
SBS8/SME8	Obligors are more vulnerable than the obligors rated '7' , but the obligors currently have less capacity to meet its financial or economic conditions likely to impair the capacity to meet its financial commitments.
SBS9/SME9	Obligors rated '9' are the Lowest rated class and typically have very low capacity to meet their financial commitments and/or high levels of persistent overdue.
SBS10/SME10	Default Grade. This is classified as NPA in line with RBI's IRAC norms (Ex: Above 90 days from payment due date).

VETTING OF CREDIT RATING PROCESS/WORKFLOW

▶ Three Levels:

▶ Maker (A)

▶ Forward Proposal;

▶ Checker (B)

▶ Approve and Forward Proposal; and

▶ Vetter (Approver)- (C)

▶ Approve and Close workflow.

VETTING OF CREDIT RATING- PROCESS/WORKFLOW

Proposal Sanction Level	Maker	Checker	Vetter
Branch	Branch Officer	Branch Officer- Other than Maker	Branch Officer- Other than Maker and Checker.
SZLCC	Branch Officer	ZO-Credit	ZO-Risk Management
ZLCC	Branch Officer	ZO-Credit	NBG-Risk Management
NBGLCC	Branch Officer	ZO/NBG-Credit	HO-Risk Management
GMLCC/EDLCC/ M.Com	Branch Officer	Branch(LCB)/ZO/ NBG-Credit <small>*07-03- 2020</small>	HO-Risk Management <small>*41</small>

IMACS RISK SCORER (URL)

http://172.1.20.117/irs_boi/

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Questions ?

THANK YOU

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