International Journal of Financial Management (IJFM)
ISSN (P): 2319–491X; ISSN (E): 2319–4928
Vol. 12, Issue 2, Jul–Dec 2023; 1–12

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

ANALYSIS OF CREDIT RISK MANAGEMENT IN KARUR VYSYA BANK

Mythreyi Jayanthi[1] & Dr. P. Hima Jagathi[2]

[1]Independent Researcher, Hyderabad, India

[2]Associate Professor, KL Global Business School, Hyderabad, India

ABSTRACT

Credit risk management is the process of identifying, assessing, and mitigating risks associated with lending activities. This project explains about the Credit risk management theoretical framework, analyse the changes of NPA's from 2017-18 to 2021-22 of Karur Vysya Bank, To analyse Credit Risk Management in Karur Vysya Bank using financial ratios, To understand financial position & Credit Risk Management Strategy adopted by Karur Vysya Bank and to suggest certain measures to improve Credit Risk Management in Karur Vysya Bank.

KEYWORDS: *Karur Vysya Bank, Credit Risk Analysis, Ratios*

Article History

Received:* *14 Nov 2023* | *Revised:* *16 Nov 2023* | *Accepted:* *16 Nov 2023

1. INTRODUCTION

Credit risk management is the process of identifying, assessing, and mitigating risks associated with lending activities. It is essential for financial institutions such as banks, credit unions, and other lenders, as well as for investors and other organizations that deal with credit. The theoretical framework of credit risk management in banks is based on a number of principles and practices aimed at identifying, measuring, monitoring, and controlling credit risk.

- **Credit Risk Identification:** Banks need to identify the sources of credit risk in their operations. This includes assessing the creditworthiness of borrowers, evaluating the quality of collateral, and analysing the potential impact of economic and market conditions on the creditworthiness of borrowers.
- **Credit Risk Measurement:** Banks need to quantify the level of credit risk in their portfolios. This includes developing credit scoring models, conducting stress testing, and using other quantitative methods to measure the probability of default, loss given default, and exposure at default.
- **Credit Risk Monitoring:** Banks need to monitor their credit portfolios to ensure that they remain within acceptable risk levels. This includes tracking key risk indicators, such as the level of nonperforming loans, and taking corrective action when necessary.
- **Credit Risk Control:** Banks need to implement controls to manage credit risk. This includes setting credit limits, establishing loan covenants, and developing risk management policies and procedures.

- **Credit Risk Mitigation:** Banks need to implement measures to mitigate credit risk. This includes diversifying their credit portfolios, hedging against credit risk through credit default swaps or other financial instruments, and using credit insurance.

Overall, the theoretical framework of credit risk management in banks is focused on developing a comprehensive and integrated approach to managing credit risk.

Importance of Credit Risk Management in KVB

Credit risk management is extremely important for Karur Vysya Bank, as it is a crucial aspect of ensuring the bank's financial stability and profitability. Here are a few reasons why credit risk management is vital for Karur Vysya Bank:

Protecting the Bank's Assets

Karur Vysya Bank lends money to various borrowers, and it's essential to manage credit risk to avoid losses on these loans. Effective credit risk management helps the bank minimize the risk of default and, in turn, reduce the losses that could arise from such defaults.

Maintaining Regulatory Compliance

The Reserve Bank of India (RBI) mandates that all banks in India maintain a minimum capital adequacy ratio (CAR) to ensure that they can absorb losses from credit risks. Effective credit risk management helps Karur Vysya Bank maintain regulatory compliance and avoid penalties from RBI.

Maintaining Investor Confidence

Investors are always concerned about the riskiness of their investments, and Karur Vysya Bank's investors are no exception. Effective credit risk management helps maintain investor confidence, which is vital for the bank's financial stability and growth.

Improving the Bank's Reputation

Karur Vysya Bank's reputation is essential, and any default on loans can lead to reputational damage. Effective credit risk management ensures that the bank is seen as a reliable institution, which can lead to more business and growth opportunities.

2. OBJECTIVES OF STUDY

- To study the Credit Risk Management theoretical framework.
- To analyse the changes of NPA’s from 2017-18 to 2021-22 of Karur Vysya bank.
- To analyse Credit Risk Management in Karur Vysya Bank by using financial ratios.
- To understand the financial position of Karur Vysya Bank.
- To study the Credit Risk Management Strategy adopted by Karur Vysya Bank.
- To suggest certain measures to improve Credit Risk Management in Karur Vysya Bank.

3. LIMITATIONS OF STUDY

- The study is limited to the extent of available data.
- An in - depth study cannot be done because of time constraint.
- Owing the confidentially enforced by the bank, all the data could not be obtained.

4. RESEARCH METHODOLOGIES

The study was done using secondary data from a published information. The published information contains the annual financial reports of the data.

4.1. Research Design of the Study

This study uses a descriptive research design, which deals with gathering quantitative data for statistical analysis, to assess the credit risk associated with Karur Vysya Bank, one of India's private banks.

4.2. Research Method

Data was gathered from Karur Vysya Bank's yearly financial reports, and ratios were computed to assess the bank's financial position and credit risk.

4.3. Study Period

5 years financial statements is been considered in the study that is from 2017-18 to 2021-2022.

5. TOOLS APPLIED FOR STUDY

To evaluate Credit Risk in Karur Vysya Bank, the following tools were applied to the analysis:

- Deposits
- Reserve Fund position
- Credit to Deposit Ratio
- Investment to Deposit Ratio
- Loans & Advances
- Share Capital
- Non - Performing Assets- Gross NPA & Net NPA
- Net Interest Income
- Net Interest Margin
- Capital Adequacy Ratio
- Return on Equity & Return on Assets

6. DATA ANALYSIS & INTERPRETATION

Table 1: Deposits

YEAR	DEPOSITS (IN CRORES)	PERCENTAGE (%)
2017-18	56,890	100% (BASE YEAR)
2018-19	59,868	105.23%
2019-20	59,075	103.91%
2020-21	63,278	111.02%
2021-22	68,676	119.55%

Source: Annual Report

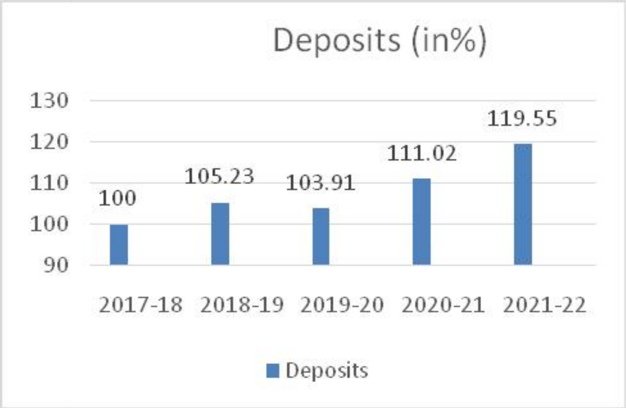

Figure 1.

Findings & Interpretation

From the above analysis, we came to know that Deposits shows an increase from the base year 100% i.e., 56,890 crores in 2017-18 to 119.55% i.e., 68,676 crores in 2021-22. An increase in deposits can indicate that customers have confidence in the bank and are willing to entrust their money to it.

Table 2: Reserve Fund Position

YEAR	RESERVE FUND (IN CRORES)	PERCENTAGE (%)
2017-18	6,066	100% (BASE YEAR)
2018-19	6,205	102.29%
2019-20	6,440	106.07%
2020-21	6,760	111.03%
2021-22	7,436	121.03%

Source: Annual Report

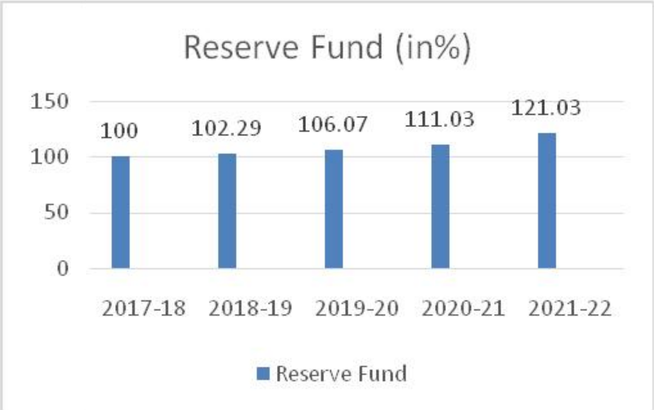

Figure 2.

Findings & Interpretation

From the above analysis, we came to know that Reserve Fund shows an increase from the base year 100% i.e., 6,066 crores in 2017-18 to 121.03% i.e., 7,436 crores in 2021-22. An increase in the reserve fund can indicate that the bank is taking steps to strengthen its financial position and increase its ability to withstand financial shocks.

Table 3: Credit to Deposit Ratio

YEAR	LOANS (IN CRORES)	DEPOSITS (IN CRORES)	CTDR (%)
2017-18	45,973	56,890	80.81%
2018-19	50,616	59,868	84.54%
2019-20	48,516	59,075	82.12%
2020-21	52,820	63,278	83.47%
2021-22	57,550	68,676	83.79%

Source: Annual Report

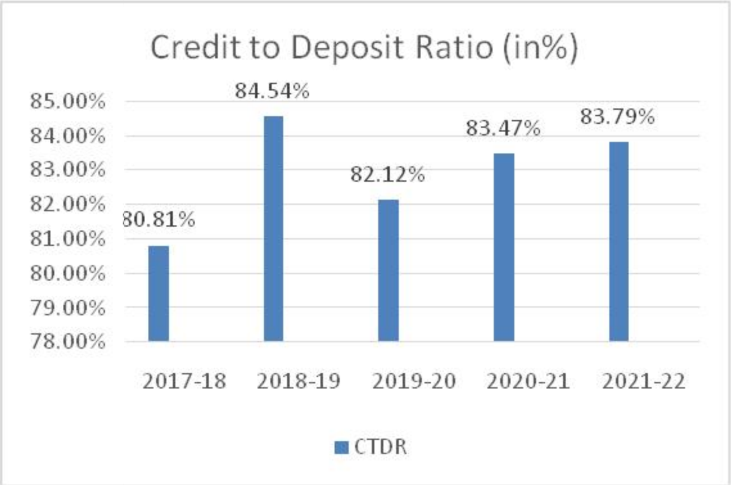

Figure 3.

Findings & Interpretation

From the above analysis, we came to know that CTDR has been increased from 80.81% in 2017-18 to 83.79% in 2021-22. This increase indicates that the bank is lending a larger portion of its deposits to borrowers.

Table 4: Investment to Deposit Ratio

YEAR	INVESTMENT (IN CRORES)	DEPOSITS (IN CRORES)	CTDR (%)
2017-18	15,992.25	56,890	28.11%
2018-19	15,136.52	59,868	25.28%
2019-20	16,072.60	59,075	27.20%
2020-21	16,465.98	63,278	26.02%
2021-22	17,755.08	68,676	25.85%

Source: Annual Report

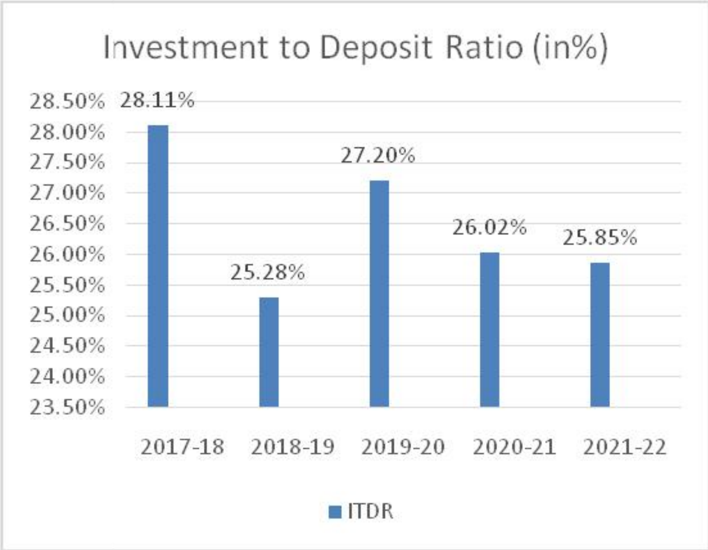

Figure 4.

Findings & Interpretation

From the above analysis, we came to know that the Investment to Deposit Ratio shows decrease from 28.11% in 2017-18 to 25.85% in 2021-22.A decrease in the investment to deposit ratio can be seen as a sign that the bank is holding a larger portion of its deposits in low-risk assets, such as cash or reserves, rather than investing them in higher-yielding assets like loans or securities.

Table 5: Loans & Advances

YEAR	LOANS & ADVANCES (IN CRORES)	PERCENTAGE (%)
2017-18	45,973	100% (BASE YEAR)
2018-19	50,616	110.09%
2019-20	48,516	105.95%
2020-21	52,820	114.82%
2021-22	57,550	123.77%

Source: Annual Report

Figure 5.

Findings & Interpretation

From the above analysis, we came to know that Loans & Advances shows an increase from the base year 100% i.e., 45,973 crores in 2017-18 to 123.77% i.e., 57,550 crores in 2021-22. An increase in loans and advances in bank is not necessarily a good or bad thing in and of itself. It's important to consider the broader economic and financial context to understand what is driving the increase and whether it is sustainable.

Table 6: Share Capital

YEAR	SHARE CAPITAL (IN CRORES)	PERCENTAGE (%)
2017-18	145.33	100% (BASE YEAR)
2018-19	159.86	109.99%
2019-20	159.86	109.99%
2020-21	159.86	109.99%
2021-22	160	110.07%

Source: Annual Report

Figure 6.

Findings & Interpretation

From the above analysis, we came to know that Share Capital shows an increase from the base year 100% i.e., 145.33 crores in 2017-18 to 110.07% i.e., 160 crores in 2021-22. An increase in share capital in banks showcases the bank's commitment to capital adequacy, its pursuit of growth opportunities, adherence to regulatory requirements, and the confidence that investors have in its prospects.

Table 7: Non-Performing Assets- Gross NPA & Net NPA

YEARS	GROSS NPA (%)	NET NPA (%)
2017-18	6.56	4.16
2018-19	8.79	4.98
2019-20	8.68	3.92
2020-21	7.85	3.41
2021-22	5.96	2.28

Source: Annual Report

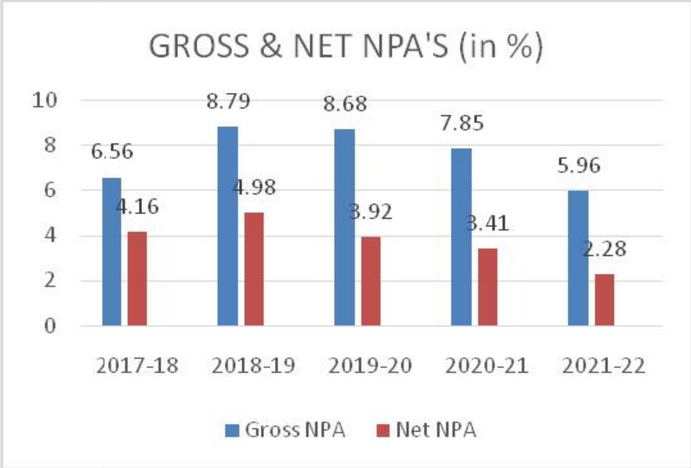

Figure 7.

Findings & Interpretation

From the above analysis, we came to know that Gross NPA has been decreased from 6.56% in 2017-18 to 5.96% in 2021-22. Net NPA has been decreased from 4.16% in 2017-18 to 2.28% in 2021-22.This shows Credit Risk Management strategy has got improved in KVB.

Table 8: Net Interest Income

YEAR	NET INTEREST INCOME (IN CRORES)	PERCENTAGE (%)
2017-18	2,298	100% (BASE YEAR)
2018-19	2,363	102.82%
2019-20	2,348	102.19%
2020-21	2,360	102.7%
2021-22	2,715	117.74%

Source: Annual Report

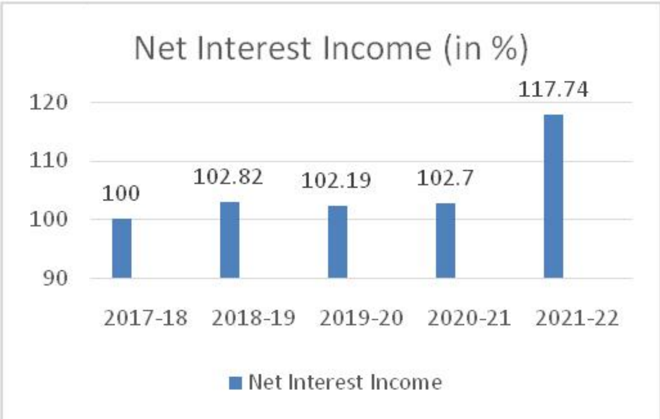

Figure 8.

Findings & Interpretation

From the above analysis, we came to know that Net Interest Income shows an increase from the base year 100% i.e., 2,298 crores in 2017-18 to 117.74 i.e.,2,715 crores in 2021-22. This shows that the bank is earning more interest on its loans and investments compared to what it pays out in interest to depositors and other creditors.

Table 9: Net Interest Margin

YEAR	COST OF FUNDS (%)	NET INTEREST MARGIN (%)
2017-18	5.91	3.86
2018-19	5.82	3.67
2019-20	5.80	3.44
2020-21	4.99	3.40
2021-22	4.32	3.69

Source: Annual Report

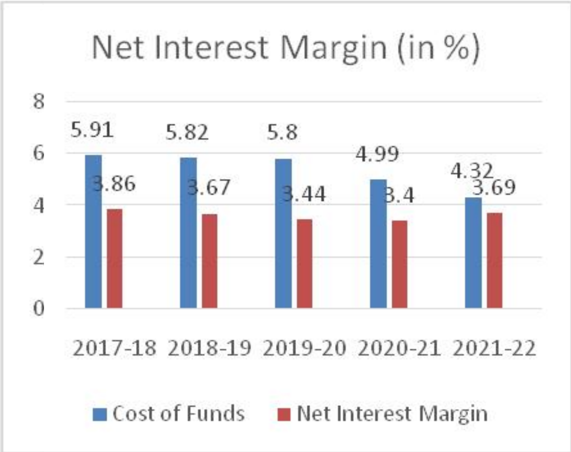

Figure 9.

Findings & Interpretation

From the above analysis, we came to know that Cost of Funds shows decrease from 5.91% in 2017-18 to 4.32& in 2021-22.It means that the bank is paying less interest on its liabilities, which can have both positive and negative effects. Also, Net Interest Margin shows decrease from 3.86% in 2017-18 to 3.69% in 2021-22. It means that the difference between the interest income earned by the bank and the interest expense paid by the bank has decreased.

Table 10: Capital Adequacy Ratio

YEAR	CAPITAL ADEQUACY RATIO (%)
2017-18	14.43%
2018-19	16%
2019-20	17.17%
2020-21	18.98%
2021-22	19.46%

Source: Annual Report

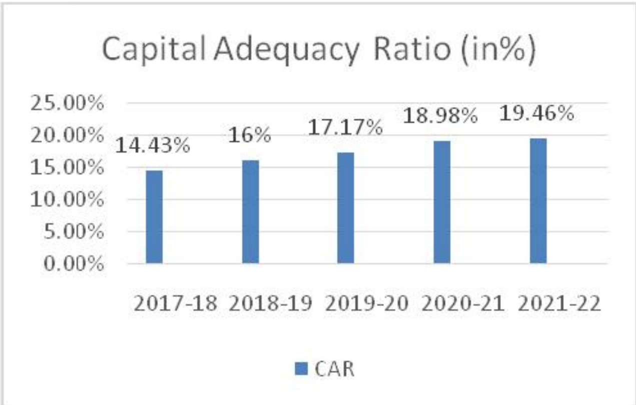

Figure 10.

Findings & Interpretation

From the above analysis, we came to know that CAR has been increased from 14.43% in 2017-18 to 19.46% in 2021-22. This increase indicates that the bank has improved its ability to absorb losses and meet its financial obligations.

Table 11: Return on Equity & Return on Assets

YEAR	RETURN ON ASSETS (%)	RETURN ON EQUITY (%)
2017-18	0.53	5.52
2018-19	0.31	3.28
2019-20	0.32	3.56
2020-21	0.49	5.16
2021-22	0.86	8.86

Source: Annual Report

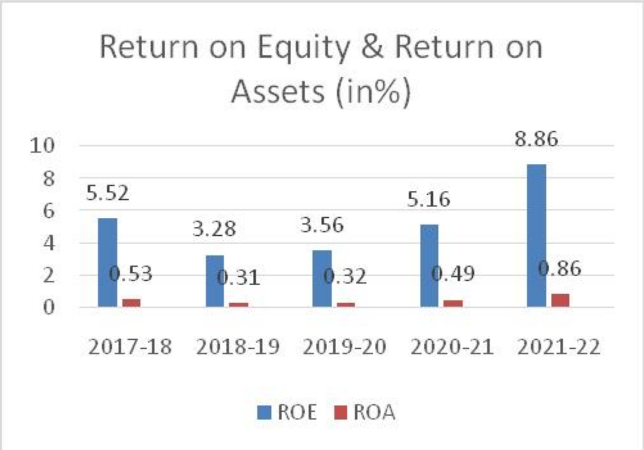

Figure 11.

Findings & Interpretation

From the above analysis, we came to know that ROE & ROA has been increased from 5.52% in 2017-18 to 8.86% in 2021-22 and 0.53% in 2017-18 to 0.86% in 2021-22 respectively. An increase in the ROE indicates that the bank is generating more profit for its shareholders relative to the amount of equity invested in the bank.Whereas the increase in ROA indicates that the bank is generating more profit for each dollar of assets held.

7. RECOMMENDATIONS

- Strengthen the bank's credit assessment process by implementing robust due diligence measures. This includes thorough analysis of borrowers' financial statements, credit history, and collateral valuations.
- Reduce concentration risk by diversifying the bank's credit portfolio across various sectors, industries, and borrower types.
- Implement a proactive credit monitoring system to identify early warning signals of potential credit deterioration. This involves setting up key performance indicators (KPIs) and triggers to identify deteriorating credit quality and taking appropriate actions in a timely manner.
- Improve collateral management practices by ensuring accurate valuation and regular monitoring of pledged assets.

- Develop and implement risk mitigation strategies such as credit risk transfer through securitization or credit insurance.

REFERENCES

1. *Saunders, A., & Allen, L. (2013). Credit Risk Management in and out of the Financial Crisis: New Approaches to Value at Risk and Other Paradigms. Wiley.*
2. *Crouhy, M., Galai, D., & Mark, R. (2014). The Essentials of Risk Management. McGraw-Hill.*
3. *Journal of Risk Management in Financial Institutions*
4. *Journal of Credit Risk*
5. *Bagade, S. R., & Bagade, V. V. (2018). Credit Risk Management in Banks: A Case Study of Karur Vysya Bank. International Journal of Advanced Research in Management, Architecture, Technology, and Engineering, 4(2), 61-70.*
6. *Palaniappan, P., & Radhakrishnan, S. (2017). A Study on Credit Risk Management in Karur Vysya Bank. International Journal of Management and Applied Science, 3(10), 105-109.*
7. *Bank for International Settlements. (2017). Principles for the Management of Credit Risk.*
8. *Moody's Investors Service. (2021). Credit Opinion: Karur Vysya Bank Limited.*
9. *https://www.kvb.co.in/investor-corner/annual-general-meeting/agm-annual-reports/*