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Warning Signals - A Tool to Control NPA in Banks

R. V. Naveenan
Assistant Professor, Department of Management Studies
T.John Institute of Management and Science
Basavanapura, Bannargatta Road, Banglore, India

Abstract: A healthy banking system is considered as the back bone of a developing economy. RBI along with Government of India has come with numerous policies to strengthen the sector in order to achieve favorable growth, assets quality and profitability. Non-Performing Asset is the best indicator of a nation's Banking System. It reflects the performance of banks. Reduced NPA generally indicate that the credit appraisal process has been strengthened and growth in NPAs indicate the need for maintain provision in balance sheet which will affect the profitability of banks. To improve the efficiency and profitability of banks the NPA need to be reduced and controlled. RBI has suggested various warning signals which help us understand that assets are slipping to become NPAs. In this paper with aim of understanding the effectiveness of those warning signals in identifying NPA, the researcher has collected the opinions of bank managers and an analysis is made.

Keywords: Healthy Banking, RBI, Loans, Loan Recovery, Asset Quality, Profitability, NPA, Warning Signals.

I. INTRODUCTION

Number of economists argued that there will be a smooth flow of savings and investment in a well-developed financial system and thus aids economic growth (King & Levine, 1993), (Goldsmith, 1969). With the help of a healthy financial system it is possible to achieve efficient allocation of resources across time and space by tackling inefficiencies arising out of frictions in market and due to other socio-economic factors. Maintenance of NPA is considered as the most important one among various desirable characteristics of a well-functioning financial system. Beyond a certain level NPAs is indeed a major concern for everyone because credit is important for economic growth and NPAs affect smooth flow of credit. Resources are raised by banks not only by fresh deposits, but also by rotation of funds received from borrowers. Thus an NPA affects credit rotation and credit creation. Moreover, it also hurts the profitability of banks, as higher the NPA indicates higher provisions, which means a huge portion of profit is diverted for provisioning for NPA . Thus, NPA is not only a challenge for banks alone but also for policy makers who struggles to put the economy on growth track.(Rajeev & Mahesh, 2010).

In India because of the motto of social welfare banking, initially the policy makers did not give much priority to the problem of bad loans. But, after the reforms in the financial sector and the adoption of international banking practices, the problem of NPA received due focus. Thus, In India, only after considering the reforms recommended in the Report of the Committee on the Financial System (Narasimham, 1991), the concept of NPA came into picture and an appropriate accounting system was introduced (Rajeev & Mahesh, 2010).

Profit is the primary aim of any business. So any assets which are created in the course of business should bring income for the business. This is also applicable to banks. Banks, normally offset deposits by gaining higher margins through amounts advanced as loans. Interest payment due which exceeds 180days can be classified as NPA (www.rbi.gov.in). As per certain studies the term of credit to borrowers significantly impacts the amount of NPA at the bank(Ranjan.R & Dhal, 2003).When such assets created do not generate any income or become difficult to recover, then the very position of the banks on repaying the deposits on the due date would be a great challenge. Such banks would become weak and eventually such weak banks will lose

the faith and confidence of the investors. Finally such unrecovered amounts are written off as NPA's, which are a direct function of amounts advanced as loans (Mallick, Sarkar, Roy, Duttachaudhuri, & Chakrabarti, 2010).

II. Non Performing Assets and Banking Health

An asset becomes non-performing when it ceases to generate income for the bank. An non-performing asset (NPA) is a loan or an advance where;

i)   interest and / or installment of principal remain overdue for a period of more than 90 days in respect of a term loan,

ii)   the account remains 'out of order' in respect of an Overdraft/Cash credit (OD/CC),

iii) the bill remains overdue for a period of more than 90 days in the case of bills purchased or discounted,

iv)   The installment of principal or interest thereon remains overdue for the crop seasons for short duration crops,

v)   The installment of principal or interest thereon remains overdue for one crop season for long duration crops.

 Any amount due to the bank under any credit facility is 'overdue' if it is not paid on the due date fixed by the bank (Reddy, 2002).

Early Warning Signals:

As per the suggestion of RBI, an asset becoming non-performing can be identified using some early warning signals. Those Early warning signals can be classified into five broad categories viz.

(a) Financial

(b) Operational

(c) Banking

(d) Management and

(e) External factors.

(a) Financial warning signals:

•   Persistent irregularity in the account

•   Default in repayment obligation

•   Devolvement of LC/invocation of guarantees

•   Deterioration in liquidity/working capital position

•   Substantial increase in long term debts in relation to equity

•   Declining sales

•   Operating losses/net losses

•   Rising sales and falling profits

•   Disproportionate increase in overheads relative to s

•   Rising level of bad debt losses

(b) Operational warning signals:

•   Low activity level in plant

- Disorderly diversification/frequent changes in plan

- Nonpayment of wages/power bills

- Loss of critical customer/s

- Frequent labor problems

- Evidence of aged inventory/large level of inventory

(c) Management warning signals:

- Lack of co-operation from key personnel

- Change in management, ownership, or key personnel

- Desire to take undue risks

- Family disputes

- Poor financial controls

- Fudging of financial statements

- Diversion of funds

(d) Banking related signals:

- Declining bank balances/declining operations in the account

- Opening of account with other bank

- Return of outward bills/dishonored cheques

- Sales transactions not routed through the account

- Frequent requests for loan

- Frequent delays in submitting stock statements, financial data, etc.

(e) Signals relating to external factors:

- Economic recession

- Emergence of new competition

- Emergence of new technology

- Changes in government / regulatory policies

- Natural calamities

These signals help the banks to identify those weak assets which may become NPA (Prasad & Veena, 2011).

III. REVIEW OF LITERATURE

(Francher, 1998)Pointed out that the basic characteristics of the risk in the banking business as a whole can be broken down into four different categories, which can be represented as concentric circles. The inner circle would stand for Credit risk, which basically consist of bad debt risk and the risk of general deterioration in the credit ratings of borrowers in the loan portfolio. The second circle would represent market risks or position risks, currency risks and tender writing risks. The risk in the third circle would be described as production or operational risks. These are risks that arise in the general course of

business, such as the risk of settlement failure on securities trade or foreign exchange transactions. This category also includes legal risks e.g. refusal by a court to recognize a certain clause in the contract, defects in computer programs and transmission errors, or simply the risk of fraud, theft or employees overstepping their authority. The outer circle would stand for the entrepreneurial or strategic risk, for instance, misleading market, needs of running into production bottlenecks or overcapacity problems.

(Badola&RichaVerma, 2006), Banking sector reforms have changed the face of Indian banking industry. The reforms have led to the increase in resource productivity, increasing level of deposits, credits and profitability and decrease in non-performing assets. However, the profitability, which is an important criterion to measure the performance of banks in addition to productivity, financial and operational efficiency, has come under pressure because of changing environment of banking. An efficient management of banking operations aimed at ensuring growth in profits and efficiency requires up-to date knowledge of all those factors on which the bank's profit depends.

(Rajaraman, Bhabymik, & Bhatia, 1999), The 1998 Report of the (PannirSelvam) Committee on NPAs of public sector banks mentions industrial and political unrest in some parts of the country among the contributory factors. Clearly, the variation across the country in the enforcement environment would affect all domestic banks, not just those in the public sector. Although publicly owned banks may suffer additional compulsions to expand into difficult regions of the country. Foreign banks have a largely metropolitan presence, and are to that extent immune to variations in the operating environment across the rest of the country.

(P.N.Joshi, 1999) , The compulsion on banks to reduce their non-performing assets ratio has given rise to munificent benefits to willful defaulters. Narasimham Committee report (II) has emphasized that the net NPA ratio of banks should be brought down below 5 percent by year 2000 and it should be brought down below 3 percent by 2002. (Banks having international exposures should bring down their net NPA below 3 percent by 2000 and to zero percent by 2002.) In the absence of proper atmosphere for recovery of bank loans in the form of efficient legal system, effective debt recovery tribunals (DRTs), fear of severe punishment for cheque bouncing, social stigma for willful defaults, etc., banks, being forced to reduce NPA, had no alternative but to make compromises with willful defaulters. This led to settlements of debts and compromises of loans at a high social cost. The defaulter was the gainer, banking system was the loser.

Objectives of the study:

1. To study the warning signals that may help the bankers in controlling NPA.

2. To know the effectiveness of warning signals in helping the bankers in controlling NPA.

Scope of the study:

1. It helps us to know the perception of Bank Manager about these warning signals.

2. It helps us to know the effectiveness of these Warning Signals as a NPA indicator.

3. It also creates awareness about the importance and effectiveness of considering these warning signals in the process of dealing with loans and NPAs.

Hypothesis in Study:

H01: There is a significant difference between means of financial warning signals.

H02: There is a significant difference between means of operational warning signals.

H03: There is a significant difference between means of managerial warning signals.

H04: There is a significant difference between means of banking warning signals.

IV. RESEARCH METHODOLOGY

In order to achieve the objective of the study an appropriate methodology has been adopted. Research done is descriptive in nature.

1) *Source of Data:*

The present study is mainly based on Primary data. Respondents are mainly bank managers of public sector banks from all India. The tool used for collecting data is personal interview.

2) *Data Collection Tool:*

The tool used for collecting data is structured telephonic interview schedule.

3) *Sampling Technique:*

Sampling Technique adopted is Simple Random Sampling. Samples include data collected from 103 bank managers.

4) *Statistical Tool:*

Friedman Test:The Friedman Test is a non-parametric test. It is used to test for differences between groups when the dependent variable being measured is ordinal.

Data Analysis and Interpretation:

Table 1: Mean and SD of Financial warning signals

Sl.No.	Financial warning signals	Mean	Std. Deviation
1	Continuous irregularity in the account	2.75	0.637
2	Default in repayment	2.29	0.666
3	Declining sales compared to previous period	1.87	0.763
4	Deterioration in working capital position or liquidity	2.31	0.686
5	Incurring operating losses or net losses	2.17	0.806

Source: Statistically analyzed data

Inference:

From the above table, mean and SD of Continuous irregularity in the account are 2.75 and 0.637, mean and SD of Default in repayment are 2.29 and 0.666, mean and SD of Declining sales compared to previous period are 1.87 and 0.763, mean and SD of Deterioration in working capital position or liquidity are 2.31 and 0.686 and mean and SD of Incurring operating losses or net losses are 2.17 and 0.806.

Continuous irregularity in the account has the highest mean followed by Deterioration in working capital position or liquidity, Default in repayment, Incurring operating losses or net losses, Declining Sales compared to previous period. Highest standard deviation of Incurring operating losses or net losses shows low focus on the particular external components that contribute to NPA. This shows the effectiveness of different components as a Financial Warning Signal.

Table 2: Friedman test for significant difference between mean ranks of Financial Warning Signals

Sl.No.	Variables	Mean Rank	Chi-Square Value	P Value
1	Continuous irregularity in the account	4.01		
2	Default in repayment	3.03		
3	Declining sales compared to previous period	2.10	187.093	0.000**
4	Deterioration in working capital position or liquidity	3.08		
5	Incurring operating losses or net losses	2.77		

Source: Statistically analyzed data   ** Denotes significance at 1% level

Null Hypothesis: There is no significant difference between mean ranks of Financial Warning Signals.

Inference:

Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance. Hence it is concluded that there is a significant difference between mean ranks of Financial Warning Signals.

Table 3: Mean and SD of Operational warning signals (For SME Loan only)

Sl.No.	Operational warning signals (For SME Loan only)	Mean	Std. Deviation
1	Underutilization of plant capacity	2.00	0.804
2	Non-payment of electricity wages	1.87	0.605
3	Frequent labour problems	1.89	0.685
4	Evidence of overstocking and aged inventory	1.85	0.692
5	Loss of important customers	2.01	0.846

Source: Statistically analyzed data

Inference:

From the above table, mean and SD of Underutilization of plant capacity are 2.00 and 0.804, mean and SD of Non-payment of electricity wages are 1.87 and 0.605, mean and SD of Frequent labour problems are 1.89 and 0.685, mean and SD of Evidence of overstocking and aged inventory are 1.85 and 0.692 and mean and SD of Loss of important customers are 2.01 and 0.846.

Loss of important customers has the highest mean followed by Underutilization of plant capacity, frequent labor problems, Non-payment of electricity wages, Evidence of overstocking and aged inventory. Highest standard deviation of Loss of important customers shows low focus on the particular Operational warning signal that indicate the possibility of a loan becoming NPA. This shows the effectiveness of different components as an Operational Warning Signal.

Table 4: Friedman test for significant difference between mean ranks of Operational Warning Signals

Sl.No.	Variables	Mean Rank	Chi-Square Value	P Value
1	Underutilization of plant capacity	3.18	26.419	0.000**
2	Non-payment of electricity wages	2.87		
3	Frequent labor problems	2.92		
4	Evidence of overstocking and aged inventory	2.82		
5	Loss of important customers	3.21		

Source: Statistically analyzed data   ** Denotes significance at 1% level

Null Hypothesis: There is no significant difference between mean ranks of Operational Warning Signals.

Inference:

Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance. Hence it is concluded that there is a significant difference between mean ranks of Operational Warning Signals.

Table 5: Mean and SD of Managerial warning signals

Sl.No.	Managerial warning signals	Mean	Std. Deviation
1	Diversion of funds and poor financial controls	2.79	0.588
2	Lack of co-operation from key personnel	2.17	0.755
3	Change in management or ownership or key personnel	1.74	0.816
4	Undertaking of undue risks	1.83	0.658
5	Fudging of financial statements	2.50	0.712

Source: Statistically analyzed data

Inference:

From the above table, mean and SD of Diversion of funds and poor financial controls are 2.79 and 0.588, mean and SD of Lack of co-operation from key personnel are 2.17 and 0.755, mean and SD of Change in management or ownership or key personnel are 1.74 and 0.816, mean and SD of Undertaking of undue risks are 1.83 and 0.658 and mean and SD of Fudging of financial statements are 2.50 and 0.712.

Diversion of funds and poor financial controls has the highest mean followed by Fudging of financial statements, Lack of co-operation from key personnel, Undertaking of undue risks, Change in management or ownership or key personnel. Highest standard deviation of Change in management or ownership or key personnel shows low focus on the particular Managerial warning signal that indicate the possibility of a loan becoming NPA. This shows the effectiveness of different components as a Managerial Warning Signal.

Table 6: Friedman test for significant difference between mean ranks of Managerial Warning Signals

Sl.No.	Variables	Mean Rank	Chi-Square Value	P Value
1	Diversion of funds and poor financial controls	4.13	232.555	0.000**
2	Lack of co-operation from key personnel	2.94		
3	Change in management or ownership or key personnel	2.08		
4	Undertaking of undue risks	2.17		
5	Fudging of financial statements	3.68		

Source: Statistically analyzed data ** Denotes significance at 1% level

Null Hypothesis: There is no significant difference between mean ranks of Managerial Warning Signals.

Inference:

Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance. Hence it is concluded that there is a significant difference between mean ranks of Managerial Warning Signals.

Table 7: Mean and SD of Banking warning signals

Sl.No.	Banking warning signals	Mean	Std. Deviation
1	Frequent request for further loans	2.37	0.671
2	Delays in servicing of interest	2.71	0.517
3	Dishonor of cheques or return of bills sent for collection	2.51	0.592
4	Frequent excesses in the account	2.33	0.617
5	Reduction of operations in the account or reduction of bank balances	2.61	0.547

Source: Statistically analyzed data

Inference:

From the above table, mean and SD of Frequent request for further loans are 2.37 and 0.671, mean and SD of Delays in servicing of interest are 2.71 and 0.517, mean and SD of Dishonor of cheques or return of bills sent for collection are 2.51 and 0.592, mean and SD of Frequent excesses in the account are 2.33 and 0.617and mean and SD of Reduction of operations in the account or reduction of bank balances are 2.61 and 0.547.

Delays in servicing of interest has the highest mean followed by Reduction of operations in the account or reduction of bank balances, Dishonor of cheques or return of bills sent for collection, Frequent request for further loans, Frequent excesses in the account . Highest standard deviation of frequent request for further loans shows low focus on the particular Banking warning signal that indicate the possibility of a loan becoming NPA. This shows the effectiveness of different components as a

Banking Warning Signal.

Table 8: Friedman test for significant difference between Banking Warning Signals

Sl.No.	Variables	Mean Rank	Chi-Square Value	P Value
1	Frequent request for further loans	2.66	102.151	0.000**
2	Delays in servicing of interest	3.50		
3	Dishonor of cheques or return of bills sent for collection	3.02		
4	Frequent excesses in the account	2.56		
5	Reduction of operations in the account or reduction of bank balances	3.26		

Source: Statistically analyzed data   ** Denotes significance at 1% level

Null Hypothesis: There is no significant difference between mean ranks of Banking Warning Signals.

Inference:

Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance. Hence it is concluded that there is a significant difference between mean ranks of Banking Warning Signals.

V. FINDINGS

1. From Table1, Financial warning signals are ranked on the basis of the response and mean score calculated. Continuous irregularity in the account has the highest mean followed by Deterioration in working capital position or liquidity, Default in repayment, Incurring operating losses or net losses, Declining Sales compared to previous period.

2. From Table3, Operational warning signals are ranked on the basis of the response and mean score calculated. Loss of important customers has the highest mean followed by Underutilization of plant capacity, frequent labour problems, Non-payment of electricity wages, Evidence of overstocking and aged inventory.

3. From Table5, Managerial warning signals are ranked on the basis of the response and mean score calculated. Diversion of funds and poor financial controls has the highest mean followed by Fudging of financial statements, Lack of co-operation from key personnel, Undertaking of undue risks, Change in management or ownership or key personnel.

4. From Table7, Banking warning signals are ranked on the basis of the response and mean score calculated. Delays in servicing of interest has the highest mean followed by Reduction of operations in the account or reduction of bank balances, Dishonor of cheques or return of bills sent for collection, Frequent request for further loans, Frequent excesses in the account .

5. By Friedman Test it is concluded that there is significant difference between mean ranks of Financial Warning Signals. This shows the validity of ranking based on mean.

6. By Friedman Test it is concluded that there is significant difference between mean ranks of Operational Warning Signals. This shows the validity of ranking based on mean.

7. By Friedman Test it is concluded that there is significant difference between mean ranks of Managerial Warning Signals. This shows the validity of ranking based on mean.

8. By Friedman Test it is concluded that there is significant difference between mean ranks of Banking Warning Signals. This shows the validity of ranking based on mean.

VI. CONCLUSION

NPAs are considered as a great problem of Indian Banking Sector. NPA will adversely affect the profitability of banks if it is not properly or effectively managed. According to (Gupta, 2010) Swift identification of NPAs, containing NPA at the minimum level and making sure that their impingement on the financials is minimum are the important components of a sound NPA management system. Than in private sector banks, in public sector banks, NPA and advances are positively correlated and they are positively managed. The level of NPA is considered as an indicator for assessing banks credit risk, asset quality and efficiency in allocation of resources to productive sector. The committee on financial system has expressed concern over the erosion in the quality of assets of which non-performing advances constitute the maximum. The funds locked up in NPA are not available for productive use (Ahmed, 2008).Proper credit assessment and risk management mechanism is achieved only when the problem of NPA is addressed. Because NPAs are direct reflections of asset quality, estimating tem can prove useful in overall credit management (RajveerRawlin, ShwethaSharan, & PradeepLakshmipathy, 2012). It is better to avoid NPAs at the nascent stage of credit consideration by putting in place of rigorous and appropriate credit appraisal (Prasad & Veena, 2011).

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AUTHOR(S) PROFILE
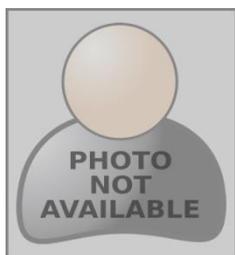
Prof. R. V. Naveenan, is presently working with T.John Institute of Management and Science, Banglore as an Asst. Professor with Seven years of teaching experience. Presently has submitted thesis of doctoral study in Manonmaniam Sundaranar University, Tirunelveli.