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Loan delinquency in private sector banks in Kerala

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Abstract: The Indian Banking Sector faces significant difficulties in recovering debt. The banker must understand the underlying causes of loan delinquency to address the problem efficiently. A delinquent loan becomes a NPL (Non Performing Loan) when the borrower failed to repay the loan for a period of 90 days or more. Delinquency is the sign of increased credit risk, warnings of willful default, poor asset quality management and operational inefficiency. It may help to predict the loan loss provision for the sub standard, doubtful and loss assets. This article explores the various causes of loan delinquencies of private-sector banks operating in Kerala. The analysis revealed that the retails and SMEs registered high level of loan delinquency. A significant difference was found between the old and new generation private sector banks for the Poor loan portfolio management, inadequate collateral, inadequate monitoring and follow-up. From the mean score it is evident that the NPA management in new generation private sector banks is appreciable when compared to old generation private sector banks.
Keywords: *Bank, Delinquency, NPA, NPL.*

1. Introduction

The Indian Banking system was dominated by the private players since the beginning of the banking system. During that period the banks which were operating in the Indian economy was on private in character and mostly controlled by the business groups. The first Private Sector Bank in India was The Nedungadi Bank, which was established in the year 1899 (the bank was merged with Punjab National Bank in 2003). The later years witnessed the formation of many local Banks in India, especially in the states of Kerala and Tamilnadu. The structured forms of banks were formed in this state, mostly in private sectors. In the meantime, many other Banks were formed by the business communities also. The year 1935 witnessed the formation of Reserve Bank of India (Reserve bank of India Act 1934) which later becomes the regulator of Indian Banking. The major changes of the Indian banking came in the year 1969 when the Government took the decision to nationalize major banking players of India.

The entire picture began to change during the 90s when the government opens the Indian banking to new players. The new generation banks started their operation with high capital, new technology and they have started attracting the traditional as well as the new customers to their branches. The high level of competition compelled the old private sector banks to come out of their traditional way of doing business. Meanwhile the capacities of the traditional customers to absorb the liquidity of the banks are getting low and the banks are compelled to lend to the growing business which was outside the purview of the traditional banking. This new step to the business started the curse of the NPA in the banks. Non-performing assets are the most important issue faced by the banks in India. The higher the ratio of the NPA, the lower is the profit potentials of the banks. The Government policies, strategies of the banks, the changing economic and industrial atmosphere caused an increase in the level of NPA of the Banks. The total GNPAs of Private Sector Banks amounted to Rs.1,27,958 crore during 2022-23.

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1.1. Statement of the Problem

Loan Delinquency occurs when borrowers fail to repay the debt as per agreed terms. In recent past the private sector banks are experiencing mounting NPAs. From 2010-11 to 2022-23 the average gross NPAs of private sector banks stood at Rs.1,05,420 crore. The book value of bad loans acquired by the asset reconstruction companies reached at Rs 7,66,915 as of March 2023 from Rs 5,88,706 crore in March 2022, registering a growth of nearly 30 percent. Against this backdrop the researcher has analysed the three major causes of loan delinquency namely internal, external and borrower related causes. Understanding and addressing these three causes will mitigate the NPA issues in private sector banks in Kerala. The researcher has compared the old generation private sector banks and new generation private sector banks with respect to the various causes of loan delinquency. This comparison will be helpful to identify the efficiency of banks in NPA Management.

1.2. Objectives of the Study

1. To analyse the various causes of loan delinquency.
2. To compare the causes of loan delinquency between old and new generation private sector banks.

1.3. Hypotheses of the Study

1. H_{01}: There is no significant difference between old and new generation private sector banks on the internal cause of loan delinquency.
2. H_{02}: There is no significant difference between old and new generation private sector banks on the external cause of loan delinquency.
3. H_{03}: There is no significant difference between old and new-generation private sector banks on the borrower-related causes of loan delinquency.

2. Research Methodology

2.1. Data Sources

The study requires both Primary and Secondary data. The Primary Data is collected from the 400 bankers of Private Sector Banks in Kerala. The structured questionnaire is framed for collecting the primary data. The secondary data is collected from the various publications of RBI, IBA and from the financial reports of respective banks.

2.2. Sample Size

There is 2440 Private Sector bank branches operating in Kerala, 400 bank branches is selected proportionately. The sample size 331 is arrived by using Krejcie & Morgan table (1970).

2.3. Sampling Technique

A Multistage sampling technique is employed. In the first stage the population is divided into three regions Northern Kerala, Central Kerala and Southern Kerala.

In the second stage the number of districts in each region and number of bank branches in each district were identified. There are four districts in North Kerala viz., Kasaragod, Kannur, Wayanad, and Kozhikode; six districts in the Central Kerala viz., Palakkad, Thrissur, Ernakulam, Idukki, Malappuram, and Kottayam; and four district in the South Kerala namely, Thiruvananthapuram, Kollam, Alappuzha and Pathanamthitta. The total number of private sector bank branches operating in Kerala is 2440 bank branches. There are 888 private sector bank branches in south Kerala, 1212 branches in central Kerala and 340 branches in north Kerala.

In the third stage, the sample size of each private sector bank is determined proportionately in three regions and the individual private sector bank branch in each district is chosen based on the intensity of NPA.

3. Sample Characteristics
To determine the sample characteristics, a percentage analysis on demographic data was performed.

Table 1.
Demographic profile.

Variables	Groups	Number	Percentage
Branch locality	Urban	197	59
	Rural	138	41
Type of bank	Old generation	188	56
	New generation	147	44
Experience	2-5 years	112	34
	5-10 years	145	43
	>10 years	78	23
Designation	Manager	87	26
	Chief manager	75	22
	Senior manager	89	27
	Credit officer	84	25

Source: Primary data

The structure of the sample based on branch locality, type of bank, designation, and the number of years spent in the job is shown in Table 1. The majority of the bank branches 59% contacted for this study are located in urban areas, signifying a potential focus on urban branches and 41% located in rural areas. The private sector banks are categorized into old and new generation banks, 56% of the bank branches are old generation banks and 44% are new generation banks indicating a slight dominance of old generation banks over new generation banks. The work experience of the respondents revealed that 43% having 5-10 years of experience, followed by 34 % with 2-5 years of experience and a smaller proportion 23% having more than 10 years of experience. The researcher contacted a diverse designation of the respondents with a slight predominance of Senior Managers (27%), followed closely by Managers (26%), Credit Officers (25%) and Chief Managers (22%).

4. Garret Ranking
To find out the extent of the influence of the factors, Garrett's ranking technique is adopted. The method is applied to rank the respondents' preferences based on many parameters. The respondents were asked to rank the given segment of the customers who get the maximum number of defaulters from 1 to 5, giving 1 to the highest defaulter and 5 to the least high. The merit ranking provided by the respondents was transformed into a percentage position.

$$\text{Percentage position} = \frac{100(R_{ij} - 0.5)}{N_j}$$

Where Rij = Rank given for the ith variable by jth respondents Nj = Number of variables ranked by jth respondents.

Garret and Woodworth's (1969) Table, known as Garrett's Table, converts the projected percentage position into scores. Next, the mean values of the scores with the total value of the scores are calculated, adding the individual scores for each of the items. The components with the greatest mean value are considered the most significant. The result is provided in the following table.

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Table 2.
Segment of the customers with maximum defaulters -garret ranking.

Percent positions and garret values					
	Formula	**Percent**	**Score**	**Mean**	**Rank**
Individual	100(1-0.5)/5	10	75	61.3024	2
Retails and SME	100(2-0.5)/5	30	65	67.09581	1
Corporate sector	100(3-0.5)/5	50	50	57.69461	3
Service sector	100(4-0.5)/5	70	39	31.00599	5
Farmers	100(5-0.5)/5	90	24	31.67964	4

Source: SPSS output computed by the researcher using primary data.

Table 2 identifies the customers segment with maximum defaulters using Garret's Ranking Technique. Based on the result it is understood that 'Retails and SMEs' are the major defaulters with the highest Garret score of 65 and an average score of 67.096. Accordingly, 'Individual' with scores of 75 and an average score of 61.3024 is signified second. The calculation with an average score of 50 ranked 'Corporate Sector' third. 'Farmers with an average score of 29 come 4th and a score of 39 with an average score of 31.00599 service sector is the least.

5. Testing of Hypothesis

To examine if there is any difference between old and new generation private sector banks on reasons for loan delinquency, debt recovery procedures, debt recovery challenges and measures taken to increase debt recovery, an independent sample t-test has been used.

5.1. Internal Cause of Loan Delinquency - Variables Considered for The Analysis

Lack of knowledge about credit policy and procedures (IC1),
Inadequate staff training (IC2)
For poor loan portfolio management (IC3)
Inadequate monitoring and follow-up (IC4)
Inadequate collateral (IC5)

Table 3.
Independent sample t-test on the internal cause of loan delinquency of private sector banks.

Independent samples test									
Items	**Type of bank**	**N**	**Mean**	**SD**	**Levene's test for equality of variances**		**t-test for equality of means**		
					F	**Sig.**	**t**	**df**	Sig. (2-tailed)
IC1	Old generation	188	4.0638	0.72847	5.133	0.024	-1.286	333	0.199
	New generation	147	4.1565	0.54522			-1.331	332.40	0.184
IC2	Old generation	188	4.0372	0.68887	0.127	0.722	-1.404	333	0.161
	New generation	147	4.1361	0.56906			-1.437	331.97	0.152
IC3	Old generation	188	4.0319	0.70827	0.002	0.965	-2.217	333	0.027
	New generation	147	4.1905	0.56536			-2.279	332.84	0.023
IC4	Old generation	188	4.0053	0.68986	0.009	0.926	-2.344	333	0.020
	New generation	147	4.1701	0.56586			-2.401	332.21	0.017
IC5	Old generation	188	4.0479	0.68821	0.008	0.925	-2.492	333	0.023
	New generation	147	4.0816	0.53006			-2.507	332.93	0.023

Source: SPSS output computed by the researcher using primary data.

An independent samples t-test is performed to compare the scores for several factors on the internal cause of loan delinquency between the old and new generation private sector banks on the internal cause of loan delinquency and the results are given in the Table 3. For the lack of knowledge about credit policy and procedures (IC1), there was no significant difference in scores between old-generation (M = 4.06, SD = 0.73) and new-generation banks (M = 4.16, SD = 0.55); t(333) = −1.29, p = .199. Similarly, no significant difference was found in the scores for inadequate staff training between old generation (IC2) (M = 4.04, SD = 0.69) and new generation private sector banks (M = 4.14, SD = 0.57); t(333)=−1.40 p=.199. However, significant differences were observed in three other factors. For poor loan portfolio management (IC3), scores were significantly different between old-generation (M = 4.03, SD = 0.71) and new-generation private sector banks (M = 4.19, SD = 0.57); t(333) = −2. p = .027. In terms of inadequate monitoring and follow-up (IC4), there was a significant difference in scores between old generation (M = 4.01, SD = 0.69) and new generation private sector banks (M = 4.17, SD = 0.57); t(333)=−2.34, p=.020. Finally, for inadequate collateral (IC5), a significant difference was found between old-generation (M = 4.05, SD = 0.69) and new-generation private sector banks (M = 4.08, SD = 0.53); t(333)=−2.49, p=.023.

5.2. External Causes of Loan Delinquency – Variables Considered

EC1 Impact of government schemes like debt waiver and restructuring on loan delinquency
EC2 Business failures due to natural disasters
EC3 Low business activities and economic slowdowns
EC4 Changes in laws and regulations
EC5 Global economic conditions

Table 4.
Independent sample t-test on external causes of loan delinquency of private sector banks.

Independent samples test

Items	Type of bank	N	Mean	SD	Levene's test for equality of variances		t-test for equality of means		
					F	Sig.	t	df	Sig.(2-tailed)
EC1	Old generation	188	3.8670	0.73737	10.288	0.001	-1.576	333	0.116
	New generation	147	3.9864	0.61917			-1.610	331.28	0.108
EC2	Old generation	188	3.8617	0.72541	0.819	0.366	-2.591	333	0.010
	New generation	147	4.0612	0.66440			-2.619	324.74	0.009
EC3	Old generation	188	3.8670	0.73009	0.706	0.401	-1.865	333	0.063
	New generation	147	4.0136	0.69229			-1.878	320.88	0.061
EC4	Old generation	188	3.5904	0.85738	17.109	0.000	-2.354	333	0.019
	New generation	147	3.7959	0.70165			-2.412	332.29	0.016
EC5	Old generation	188	3.8777	0.74642	19.175	0.000	-1.578	333	0.115
	New generation	147	3.9932	0.54265			-1.639	331.34	0.102

Source: SPSS output computed by the researcher using primary Data.

The results in table 4 indicated that there is no significant differences between old (M = 3.867, SD = 0.737) and new generation banks (M = 3.9864, SD = 0.61917) regarding the impact of government schemes like debt waiver and restructuring on loan delinquency (t(333) = -1.576, p = 0.116). However, significant differences were found in perceptions of the impact of business failures due to natural disasters (t(333) = -2.591, p = 0.01) and low business activities and economic slowdowns (t(333) = -

2.354, p = 0.019) between old and new generation private sector banks. Conversely, no significant differences were observed in perceptions of changes in laws and regulations (t(333) = -1.865, p = 0.063) and global economic conditions (t(333) = -1.578, p = 0.115) on loan delinquency between the two types of banks. Overall, the findings suggest varying perceptions among banks regarding specific external factors influencing loan delinquency, highlighting potential areas for targeted risk management strategies.

5.3. Borrower Related Causes of Loan Delinquency – Variables Considered

Business failure due to poor financial management and competition (BC1),
Loan funds being diverted to other activities (BC2)
Multiple borrowing (BC3)
Job loss (BC4)

Table 5.
Independent sample t-test on borrower-related causes of loan delinquency in private sector banks.

Independent samples test									
Items	Type of bank	N	Mean	SD	Levene's test for equality of variances		t-test for equality of means		
					F	Sig.	t	df	Sig. (2-tailed)
BC1	Old generation	188	0.98	0.73	1.85	.174	-3.16	333	.002
	New generation	147	0.88	0.55			-3.20	327.31	.002
BC2	Old generation	188	0.94	0.69	5.83	.016	-5.20	333	.000
	New generation	147	0.81	0.57			-5.30	330.19	.000
BC3	Old generation	188	0.97	0.71	15.57	.000	-5.10	333	.000
	New generation	147	0.76	0.57			-5.26	332.99	.000
BC4	Old generation	188	0.86	0.69	17.10	.000	-2.35	333	.019
	New generation	147	0.70	0.57			-2.41	332.29	.016

Source: SPSS output computed by the researcher using primary Data.

The borrower-related causes of loan delinquency are compared and the result is given in Table 5. An independent samples t-test showed that the old banks and new generation private sector banks differ in all the borrower-related causes. Firstly, there is a notable discrepancy regarding business failure due to poor financial management and competition (BC1), with old-generation banks perceiving this factor (M = 0.98, SD = 0.73) as more influential compared to new-generation banks (M = 0.88, SD = 0.55), a statistically significant difference (t(333) = -3.16, p = 0.002). Similarly, perceptions diverge significantly on the issue of loan funds being diverted to other activities (BC2), where old-generation banks (M = 0.94, SD = 0.69) attribute more risk compared to new-generation banks (M = 0.81, SD = 0.57), with a strong effect size (t(333) = -5.20, $p < 0.001$). Additionally, there is a substantial difference in views concerning multiple borrowing (BC3), with old-generation banks (M = 0.97, SD = 0.71) viewing it as riskier than new-generation banks (M = 0.76, SD = 0.57), showing a significant statistical distinction (t(333) = -5.10, $p < 0.001$). Finally, perceptions of job loss (BC4) impacting loan delinquency differ significantly, as old-generation banks (M = 0.86, SD = 0.69) attribute higher risk compared to new-generation banks (M = 0.70, SD = 0.57), with a statistically significant finding (t(333) = -2.35, p = 0.019). These findings show varying risk assessments and possibly different approaches to borrower risk management strategies between old and new-generation banks, suggesting the need for tailored

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risk mitigation approaches and borrower support initiatives to address these divergent perceptions effectively.

6. Results and Discussion

The majority of the bank branches 59% are located in urban areas and 43% of the respondents having 5-10 years of experience. The Senior Managers (27%) are contacted more, Retail and SMEs registered major defaulters. A significant difference is found between the old and new generation private sector banks in the following factors viz., Poor loan portfolio management, inadequate monitoring and follow-up and inadequate collateral of internal causes of loan delinquency. In the case of external causes of loan delinquency, a significant difference were found in the perception of the impact of business failures due to natural disasters and low business activities and economic slowdowns between old and new generation private sector banks. The borrower-related causes of loan delinquency revealed a significant difference in the business failure due to poor financial management and competition, issue of loan funds being diverted to other activities, multiple borrowing, job loss and risk management strategies.

It is revealed from the interaction with the bankers, the metro branches have given huge loans to construction sectors which are under stress now. Hence banks need to reconsider the sectoral portfolio of credit and re fix the margin and recovery measures. Also some banks are monopolized by gold loan portfolios' RBI need to fix a sectoral exposure to such concentrating portfolio in order to avoid any kind of sectoral failures. Also banks need to advance on other retails products than concentrating on a single product in the name of profit generation. In case of unsecured loans if the defaulter made the dues intentionally, criminal action to be taken against the borrower than filing civil suit and revenue recovery actions since the banks credit is public money and non-repayment of dues is a crime against the society and nations well-being.

7. Conclusion

It is always better to grant loans to those sectors which have regular cash flow and business income flow like salaried people and high rated companies/firms. Hence proper analysis of income generation sources both for present and future period is necessary. Adequate margin and exposure limit need to fix in case any risk is found to be occurred in future time. The urban branches have given huge loans to construction sector which is under stress now. Hence banks need to re-consider the sector-wise portfolio of credit and re fix the margin and recovery measures. Also some banks are monopolized by gold loan portfolios 'RBI need to fix a sector-wise exposure to such concentrating portfolio in order to avoid any kind of sector-wise failures. Also banks need to focus on diversified retail products than concentrating on a single product for earning high interest income. It is concluded that new generation banks are at better position in the NPA management and the old generation banks must adopt technology in credit management to mitigate the risk arise from NPA.

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