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Asset Quality And Profitability: A Case Study On State Bank Of India (SBI)

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Abstract
The present study examines the relationship between asset quality and profitability in State Bank of India (SBI) for the period starting from 2008 till 2024. The objective is to investigate the effect of the asset quality determining variables on the profitability of State Bank of India. The effect of the independent variables, Non-Performing Loans to Total Assets (NPL/TA), Non-Performing Loans to Customer Deposits (NPL/CD) and Loan Loss Provision to Total Loans (LLP/TL) on the dependent variable Return on Equity (ROE) is assessed. The statistical techniques of correlation and regression analysis along with relevant diagnostic tests were used for the purpose. The results showed significant negative relationship among all the independent variables and the dependent variable. Thus the study was able to establish the fact that there lies significant relationship between asset quality and profitability in State Bank of India. It is recommended that maintenance of adequate credit risk and loan recovery management is needed. This shall help to lower the volume of Non-Performing Loans and thus maintain adequate asset quality. Since loan loss provision adversely affects profitability, such provision must be made taking into consideration the varied credit risks of loans according to customer segments and sectors to which loans are disbursed, and also the present macroeconomic condition of the economy.
Keywords: *Asset Quality, Non-Performing Loans, Loan Loss Provision, Profitability, Return on Equity, State Bank of India*

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I. Introduction

Banks in general are financial intermediaries dealing with the sourcing funds from units of surplus and disbursing them to units of deficit (Isanzu, 2017). They manage the assets and liabilities for smooth operation of their financial activities. In 1997, a financial crisis was set off by mismanagement of loans by banks and impacted countries like Thailand and Indonesia. The countries took the help of International Monetary Fund to stabilize their banks. The sub-prime crisis in United States of America, is another glaring example of how granting of loans to non-creditworthy customers can trigger a banking crisis, and in turn impact the entire economy drastically. The management of quality of assets has direct impact on its present and future credit risks, be it in loans, investments or other assets. San and Heng (2013) and Sanathanee (2020), testify to the fact that poor asset quality management is linked to Non-Performing Loans of a bank. Disbursement of loans to non-creditworthy customers is the main reason of credit risk in a bank. Patwari and Tasneem (2019) were of the opinion that Non-Performing Loans affect the profitability of banks all over the world.

State Bank of India (SBI) is one of the oldest banks in India, dating back to the inception of Indian banking sector. In 1921, Bank of Bombay, Bank of Madras and Bank of Calcutta merged to form the Imperial Bank of India. On nationalization, Imperial Bank of India became known as State Bank of India. SBI is the largest public sector bank in India, with diverse operations and products in its portfolio. The financial products offered by SBI stands on the pillars of retail, corporate and priority sectors. SBI has a large network of almost 22500 branches all over India and caters to diverse customer segments by mobilizing deposits and providing credit. SBI has strong presence internationally as well. It thus impacts the banking sector in India extensively and in an extension the financial market of India. The bank has faced global economic slowdown as well as the spectre of Non-Performing Assets due to loans turning into bad debt, but has withstood the challenges by mergers and increasing the online services.

II. Literature Review

Boahne et al. (2012) investigated the relationship of credit risk to profitability in banks. The study was conducted on six commercial banks in Ghana over the period of 2005 to 2009. The study established a positive correlation between the percentage of Non-Performing Loans and profitability (which was measured by the variables Return on Assets and Return on Equity).

Abata (2014) examined the asset quality of six listed Nigerian banks from the period spanning 1999 to 2013. The independent variables were the asset quality variables, namely Loan Loss Reserves (LLR) and Non-Performing Loans (NPL) and the dependent variable was Return on Assets (ROA) representing profitability. Both the independent variables were found to have a negative relationship with ROA. This substantiated the fact the inability to manage risk can adversely affect profits of banks.

Cheruiyot (2016) analysed the relationship of the effect of asset quality on profitability of 43 commercial banks in Kenya. The study substantiated the fact that lower Non-Performing Assets (NPAs) contributed to increased profitability. It means that proper management of asset quality helps in improvement of profitability in banks.

Kadioglu et al. (2017) studied 55 Turkish banks from 2005 to 2016. The study showed that Non-Performing Loans had a significant negative relationship with Return on Assets and Return on Equity. Hence, it established the negative or inverse relationship of poor asset quality and profitability in banks.

Psalia et al. (2019) studied the effect of Non-Performing Loans on Return on Assets of 35 banks in Euro-Mediterranean region between 2013 and 2017. Statistical Techniques of Arellano-Bond, Fixed Effects, Random Effects and Pooled Ordinary Least Squares were employed in the study. The results showed a negative effect of Non-Performing Loans on Return on Assets.

Gayathri and Chandraiah (2020) conducted a comparative study on profitability of public sector banks in India. Among all the banks, State Bank of India recorded the highest average net profit. The highest variability in net profit was also seen in the case of State Bank of India.

Yuan et al. (2022) testified to the fact that effective asset quality management helps in reduction in Non-Performing Loans and improves profitability.

Velliscig et al. (2023) conducted the study on 63 listed European banks from 2005 to 2018 and analysed the relationship between capital and asset quality to bank risk and performance. The study concluded that proper provisioning and asset quality management helps in contributing to long term stability.

Navyashri and Jogish (2023) conducted a study on the management of Non-Performing Assets of State Bank of India. The study focussed on the analysis of gross and net NPAs of SBI over different sectors and segments derived from the annual reports of SBI from 2019 to 2023. The study corroborated the fact that, SBI had improved its NPA management as gross and net NPAs showed a downward trend while profitability showed upward trend.

Research Gap

Based on the review of existing literature, the present study aims to analyse on how asset quality impacts the profitability or performance of State Bank of India. In assessment of asset quality, the credit risk associated with loans disbursed is one of the most important factors in a commercial bank. Non-Performing Loans in an important component to be monitored in the asset-liability risk management practices in a bank. Also, there is a trade-off between provisioning to be maintained for loan loss and profitability. Hence, in this study the effect of Non-Performing Loans and Loan Loss Provision on profitability of State Bank of India is analysed.

Objectives of The Study

The objectives of the study are as follows:

1. To analyse the effect of Non-Performing Loans to Total Assets on the Return on Equity of State Bank of India.
2. To examine the effect of Non-Performing Loans to Customer Deposits on the Return on Equity of State Bank of India.
3. To investigate the effect of Loan Loss Provision to Total Loans on the Return on Equity of State Bank of India.

Research Hypotheses

The following research hypotheses have been formulated for the study:

Hypothesis 1

Ho: There is no significant effect of Non-Performing Loans to Total Assets on the Return on Equity of State Bank of India.

Hypothesis 2

Ho: There is no significant effect of Non-Performing Loans to Customer Deposits on the Return on Equity of State Bank of India.

Hypothesis 3

Ho: There is no significant effect of Loan Loss Provision to Total Loans on the Return on Equity of State Bank of India.

III. Research Methodology

The study is based on secondary data obtained from annual reports of State Bank of India from their own website, covering a period of 17 years, from financial year ended 2008 to 2024. The statistical technique used for analysis are correlation and regression analysis along with the relevant diagnostic tests of normality of residuals, autocorrelation, heteroskedasticity and multicollinearity. The dependent variable is the profitability variable Return on Equity (ROE) (Kadioglu et al., 2017), and the independent variables denoting asset quality are Non-Performing Loans to Total Assets (NPL/TA), Non-Performing Loans to Customer Deposits (NPL/CD) and Loan Loss Provision to Total Loans (LLP/TL) (Lucky and Andrew, 2015). It is to be noted that the increase in Non-Performing Loans indicates a decrease in asset quality. The econometric model formulated for the analysis is as follows:

$ROE= \beta_0+ \beta_1\ NPL/TL+ \beta_2 NPL/CD+ \beta_3 LLP/TL + \mu$

Where β_0 is the regression intercept and μ is the error term.

IV. Results And Discussion

Correlation Analysis

Table No.1: Correlation Analysis

	ROE	NPL/TA	NPL/CD	LLP/TL
ROE	1.000			
NPL/TA	-0.8802	1.000		
NPL/CD	-0.6491	0.3417	1.000	
LLP/TL	-0.8222	0.5617	0.2604	1.000

Source: Author's Own Computation

The results of the correlation analysis are as given in Table 1. It shows the association between dependent variable Return on Equity (ROE) indicating profitability, and independent variables Non-Performing Loans to Total Assets (NPL/TA), Non-Performing Loans to Customer Deposits (NPL/CD) and Loan Loss Provision to Total Loans (LLP/TL), indicating asset quality. A moderately strong negative association can be noticed between all the independent variables and the dependent variable. It indicates with the increase in Non-Performing Loans in relation to total assets or in relation to customer deposits sourced, the profitability of SBI suffers a decline. Also, if the loan loss provision is increased it affects the returns of the equity shareholders or the profitability of SBI, adversely.

Regression Analysis

Table No.2: Regression Analysis

Adjusted R-squared	F-Statistic	Variable	Coefficient	Standard Error	t-Statistic	Probability (p-value)
0.9201	47.08 (p-value= 0.000)	Constant	0.1696	.01367	12.40	0.000
		NPL/TA	-0.0332	0.0167	-1.98	0.049
		NPL/CD	-0.0146	-0.0053	2.75	0.047
		LLP/TL	-0.0136	0.0026	-5.11	0.000

Source: Author's Own Computation

On interpreting Table 2, it can be inferred that the model is a good fit as p-value of F statistic (which is 0.000) is significant at both 5% and 1% level of significance. Adjusted R-Square value of 0.9201 also shows goodness-of-fit of the model. It indicates 92.01% of the variation in dependent variable ROE, can be explained by the independent variables. All the independent variables can be seen to share a significant negative relationship with the dependent variable ROE, with p-values of 0.049 (significant at 5% level of significance),0.047 (significant at 5% level of significance and 0.000 (significant at 5% and 1% level of significance) respectively. A unit increase in Non-Performing Loans to Total Assets (NPL/TA) leads to 0.0332 decrease in ROE; a unit increase in Non-Performing Loans to Customer Deposits (NPL/CD) leads to 0.0146 decrease in ROE; and a unit increase in Loan Loss Provision to Total Loans leads to 0.0136 decrease in ROE. Null hypothesis of research hypotheses 1,2 and 3 are rejected as is evidenced from the p-values. This indicates the need for the management of SBI, to continue to impose effective regulatory practices relating to volume of loans disbursed, sectors to which loans are being disbursed and credit worthiness of the customers. The results show that the volume of Non-Performing Loans and provisioning for Non-Performing Loans are adversely affecting profitability. Effective credit risk management relating to disbursement of loans must be strictly adhered to.

Table No. 3: Diagnostic Test Results of Regression Analysis

Shapiro Wilk Test for Normality of Residuals or Error Term	Durbin-Watson Test for Autocorrelation	Breusch-Pagan Test for Heteroskedasticity	Multicollinearity Test

Residuals or Error Term: W=0.97413 Prob>z=0.88585 A probability value above 0.05 denotes normality of the residuals or error term at 5% level of significance.	It indicates a value of 1.785719, indicating there is no autocorrelation as it lies within the acceptable range of 1.5-2.5.	Indicates a p-value of (Prob>chi2) of 0.6004 and Chi-Square value of 0.27. Hence, H_0 gets accepted at 5% level of significance in this case, meaning there is homoskedastcity present.	The mean Variance Inflation Factor comes to 4.03, which is acceptable as it is below 5. So, there is no multicollinearity issue present.

Source: Author's Own Computation

Table 3 summarizes the diagnostic test checks for regression analysis that is needed to check the stability of the regression model. It indicates normality of error term, and also indicates the absence of autocorrelation, heteroskedasticity and multicollinearity.

V. Conclusion

The results of the study are consistent with the findings of Kadioglu et al. (2017). The results can also be said to be consistent with the findings of Abata (2014), which corroborates the negative relationship of Non-Performing Loans and Loan Loss Reserves to profitability in banks. Cheruiyot (2016), Psalia et al. (2019) and Yuan et al. (2022) also testified to the negative relationship between Non-Performing Loans and profitability of banks. The credit worthiness of customers must be carefully analyzed and loan recovery process must be closely monitored by the management of State Bank of India, to avoid or decrease the incidence of Non-Performing Loans which are adversely affecting the profitability of the bank. With the reduction in Non-Performing Loans, the bank shall be able to allocate more resources to generate revenue than keeping it in hold in provisioning purposes. This shall help in increasing the returns for the equity shareholders. Effective asset quality maintenance shall also help State Bank of India to attract more investors in the market. Asset quality is critical to risk management and capital adequacy, and again both are in turn essential to sustain profitability. Strict vigilance on the loan recovery process, the quality of the collaterals obtained against the loans, the legal validity and valuation of such collaterals must also be carefully observed.

The Loan Loss Provision must be made by State Bank of India, taking into consideration the macroeconomic variables and regulatory framework that can affect the credit function. The credit risk associated with the various sectors and types of customers to whom loans have been disbursed must be carefully analysed. However, a very conservative provisioning may lead to low profitability. Taking the market dynamics into consideration, the asset quality parameters must be changed accordingly.

References

[1] Abata, M. (2014). Asset Quality And Bank Performance: A Study Of Commercial Banks In Nigeria. Research Journal Of Finance And Accounting, 5(18), 39-44. Retrieved From Https://Core.Ac.Uk/Reader/234630150

[2] Boahne, S., Dasah, J., & Agyei, S. (2012). Credit Risk And Profitability Of Selected Banks In Ghana. Research Journal Of Finance And Accounting, 3(7), 6-14. Retrieved From Https://Core.Ac.Uk/Download/Pdf/234629317.Pdf

[3] Cheruiyot, R. (N.D.). The Effect Of Asset Quality On Profitability Of Commercial Banks In Kenya. Master's Thesis. University Of Nairobi.

[4] Gayathri, K., & Chandraiah, M. (2020). Examining The Financial Performance Of Indian Commerial Banks. International Journal Of Scientific Research, 10, 9849. Doi:10.29322/Ijsrp.10.02.2020.P9849

[5] Isanzu, J. (2017). The Impact Of Credit Risk On The Financial Performance Of Chinese Banks. Journal Of International Business Research And Marketing, 2(3), 14-17.

[6] Kadioglu, E., Telceken, N., & Ocal, N. (2017). Effect Of The Asset Quality On Bank Profitability. International Journal Of Economics And Finance, 9(7), 60-68. Doi:10.5539/Ijef.V9n7p60

[7] Lucky, A., & Andrew, N. (2015). Asset Quality And Profitability Of Commercial Banks: Evidence From Nigeria. Research Journal Of Finance And Accounting, 6(18), 26-34.

[8] Navyashree, S., & Jogish, D. (2023). A Study On Non-Performing Assets Management In State Bank Of India. International Journal Of Scientific Research In Engineering And Management. Doi:10.55041/Ijsrem26618

[9] Patwary, S., & Tasneem, N. (2019). Impact Of Non-Performing Loan On Profitability Of Banks In Bangladesh: A Study From 1997 To 2017. Global Journal Of Managment And Business Research, 19(1), 13-27.

[10] Psalia, A., Spiteri, J., & Grima, S. (2019). The Impact Of Non-Performing Loans On The Profitability Of Listed Euro-Mediterranean Commercial Banks. International Journal Of Economics And Business Administration, 7(4), 166-196. Doi:10.35808/Ijeba/338

[11] San, O., & Heng, T. (2013). Factors Affecting The Profitability Of Malaysian Commercial Banks. African Journal Of Business Management, 7(8), 649-660.

[12] Velliscig, G., Floreani, J., & Polato, M. (2023). Capital And Asset Quality Implications For Bank Resilience And Performance In The Light Of Npls' Regulation: A Focus On The Texas Ratio. Journal Of Banking Regulation, 24, 66-88. Doi:10.1057/S41261-021-00184-Y