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Financial Performance Assessment of Small Banks using EAGLES Model#

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Abstract

The Small Finance Banks and Payments Banks are new introductions to the Indian Banking system and most of them complete more than 5 years of active operation. Both banks though are in the Small Bank (Niche Bank) category, the analysis of their financial performance using quantitative models is an unexplored horizon, which is the core objective of this article. This analysis applied the EAGLES (Earning, Assets Quality, Growth, Liquidity, Equity, and Strategy) model for measuring performance. For Small Finance Banks analysis, 7 years of data and for Payments Banks analysis 6 years of data are used. This study included 19 ratios that will improve the spread of learning to a larger perspective. The significance of the EAGLES was tested using One-way ANOVA. The analysis found the Payments banks to be performing better than the Small Finance Banks. The analysis suggests both the small banks drastically improved their loans, advances, and investments area, which may require regulatory policy changes, as the Strategic Response Quotient (SRQ), of all small banks, were found negative. This was also comprehensible from the lower Earnings, Asset quality and Returns on Equity. The Small Finance Banks' inability to utilise maximum deposits and borrowings for investment, loans and advances is evident from the analysis. The Growth and Liquidity position of both the bank groups stands strong. It can be implied that the new small banks are at the beginning of the growth stage and are expected to introduce innovative financial products at affordable cost resulting in further scaling up the growth.

Keywords: EAGLES, Financial Performance, Payments Banks, Small Banks, Small Finance Banks

1. Introduction

The Indian banking sector has undergone a remarkable transformation in recent decades, driven by liberalization, economic reforms, and the adoption of new technologies. While the focus has often been on the performance of large banks, the resilience and contribution of small banks in India deserve closer examination.

Small banks in India play a crucial role in the country's financial ecosystem, catering to the needs of underserved communities and fostering financial inclusion. These institutions have demonstrated their ability to withstand adverse economic conditions, as evidenced by their performance during the recent financial crisis (Brahmaiah & Ranajee, 2018). The new small banks alias niche banks have been introduced in India with the objective of furthering financial inclusion and providing banking services to the unbanked population in a cost-effective manner. The Small Finance Bank and the Payments Bank have operated in India since 2015 after the RBI licensed for the same. Now we have 12 small finance banks and 6 payment banks in India. Each of these banks categorically has different regulatory norms from other banks, which has its own merits and demerits in its business models.

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The small banks did have an early presence of services in India which they were able to advance to a scheduled banking category. The minimum requirement for licensing of SFBs in India is subject to the satisfaction of the following conditions. The promoters of SFB can be Individuals, professionals with a minimum of 10 years of experience in banking and finance, or entities (companies or societies) owned and controlled by residents or existing Non-Banking Financial Companies (NBFCs), Microfinance Institutions (MFIs), and Local Area Banks (LABs) can apply to convert into SFBs. The second option served as the strongest base as all the SFBs had a previous history of operating as NBFCs or MFI or LABs. Where as in the case of PBs license is given to applicants who are Individuals, corporate entities, mobile service providers, supermarket chains, and NBFCs with a successful track record of at least 5 years or Existing non-bank Pre-paid Payment Instrument (PPI) issuers authorized under the Payment and Settlement Systems Act, 2007. Joint ventures (*e.g.*, with technology or telecom firms) are also eligible to apply for a PB license. It is found that entities have shown interest in PB as it will help the payment easiness of their sister entities and can widen their operationality.

Analysing the financial performance comprises the collection of vital data from the bank's financial statements (Kurnia *et al.*, 2024; Adegboyegun *et al.*, 2020) and using a suited analytical model to conclude the performance level of banks in a standard form to the users of the information particularly to the management. India is a nation that has adopted the good practice of disclosure of financial and non-financial reports voluntarily (Naveenan *et al.*, 2024) but is now largely regulated by the Banking Regulation Act of 1949, Companies Act of 2013, RBI Act 1934 following the Ind AS. It is essential to understand that the disclosure policies and governance challenges faced by banks differ significantly from those of non-banking firms. This distinction arises mainly due to factors such as information asymmetry, moral hazard issues, cultural diversity, legal frameworks, and the inherently opaque nature of banking operations (Naveenan *et al.*, 2024). This helps to gather valid data for the research studies internally as well as externally. The strategic planning that the management results in superior performance is measured in terms of generally accepted financial measures like sales, net income, ROI, ROE, and ROS (Karger & Malik, 1975). The strategies are planned to be effective when the managers engage in the process with some intensity (Mintzberg, 1994). It was further proven that the strategic planning of a firm affects the financial performance of the firms (Miller & Cardinal, 2017). Hence, an increased level of profitability through soaring financial performance is shown in firms with high strategic planning (Hopkins, 1987). Research commonly indicates that the higher the perceived significance of the strategic planning process, the greater the level of management's satisfaction with the company's financial performance (Hopkins & Hopkins, 1997). The capacity of performance of financial services will be different under different circumstances; different volumetric assumptions will produce different outcomes (Davies, 2017). Factors such as clientele profile and neighbourhood characteristics of minority banks could also affect the performances when management changes alone will not necessarily solve their profitability and viability problems (Elyasiani & Mehdian, 1992). When it comes to minority or small banks underperformances are due to the concentration of minorities with lower incomes, less wealth accumulation, less education levels, especially financial literacy and unemployment (Barth *et al.*, 2024). But these factors should be expected to change over time for good. The financial innovation was found to be effectively increasing the banking efficiency and it is revealed that banks regularly improve the cost efficiency (Lozano-Vivas & Pasiouras, 2010). Hence a continuous assessment is needed for a steady performance improvement. Financial inclusion which the banks are mostly focusing on, it was found that different measures of financial inclusion exhibit varying associations with bank performance with credit deepening having a significant influence on the bank performances. 'Whereas in low-income nations number of deposits and the number of borrowers, does not affect bank performance adversely. Banks in low-income nations could achieve significant gains by improving financial access and enhancing regulatory environments'(Sha'ban *et al.*, 2023). Financial innovations were found capable of increasing the non-

interest income of banks (Calmès & Théoret, 2015). The evidence systemic banks which assessed their performance during the subprime crisis were able to manoeuvre to overcome the impact of the covid 19 pandemic (Saiz-Sepúlveda & Hernández-Tamurejo, 2024). Thus, it can be effectively understood that the assessment of the financial performance of the banks is crucial for taking crucial strategic decisions for the sustainability risk management and scaling up of growth.

The financial performance analysis of small banks has not received wide research attention. Most of the analyses have shown a tendency to focus on large banks and banks that have profound previous years of data to help analysis. Hence the new small banks require sufficient financial performance analysis to showcase their resilience, challenges, and future opportunities. In this analysis, nine small finance banks and five payment banks are studied in two parts in relation to the previous seven years and six years respectively. The study will help the small banks to make early policy decisions in their growth cycle; the regulator to revise its policies for this sector; and the industry to understand this emerging segment.

The small banks-SFB and PB are licensed by the RBI to operate pan India and it can be seen that they are now in the growth stage after the beginning stage. A large proportion of the small banks are in the stage of widening their operation horizon from its head place. Hence this study takes into consideration the small banks' full operational annual data to get a glimpse of how the banks and performing individually and within their group.

The objectives of the study in this paper are to study the financial performances of two new Small Banks functioning in India- Small Finance Banks and Payments Banks. The EAGLES model is used in this study to extensively analyse the actual performance over its active previous years. The objective also extends to finding the ranking of Small Finance Banks and Payments Banks and then suggesting improvements for the small banks to improve their performances. The study tests the model's significance using a One-Way Analysis of Variance at a 5% level of significance.

As an industry with a long history of service, many performance evaluation techniques have evolved to study bank performances. The evaluation model selected here for the small banks' financial performance is the EAGLES model- a model which will help to analyse banks from different angles of Earnings, Asset Quality, Growth, Liquidity, Equity and Strategy. This will give a strong financial view and will help to find areas where the improvements are to be incorporated for the growth of small banks.

2. Literature Review

The new small banks alias niche banks in India have had a presence in the Indian Economy since 2015. These banks have started to receive researchers' attention as most of the research in the Indian banking system is concentrated on large banks' performance. Since India is a growing economy and 5th largest economy presently has a GDP of 4,112 USD billion (Makalesi & Mandal, 2024), The Findex data (World Bank Group, 2021) shows India's 58% of the population is linked to financial institutions. Only 38% of accounts were opened for receiving wages and another 38% were for receiving government benefits. The debit card usage was reported to be 12% and people with credit cards to be 5%. This shows the wide scope of small banks to penetrate unbanked or underbanked areas by providing affordable banking products which will boost the economic activities and also improve the life of low-middle income people forming the largest cluster.

The SFBs during the initial years of operations largely focused on rapid asset developments (Chaturvedi, 2022) creating a sufficient base for smooth functioning. The PB's assets have shown its intention to increase over time. The performances of the selected four SFBs were done by Navanitkumar and Dave (2024) using the CAMEL (Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity) model and the ANOVA test found that there were no significant differences in the financial performances. A different result was found by Ray and Shantnu (2021),

in which all the CAMELs were found to be significant except Earnings of SFBs. A similar analysis of 4 listed SFBs was done by Choudhary and Kanchan (2023) using the CAMEL model but the final ranks remained uncomprehending. The Asset Liability management of the SFBs studied by Sugirtham and Gowri (2021) finds that a greater number of SFBs are exposed to Liquidity risks. A comparative study of the SFBs in India compared with the equals in the UK (Arun *et al.*, 2024) found microfinance institutions in the UK are more contributing to financial inclusion, and a dedicated small finance bank was lacking. They also state that 67% of the loan book is dense towards microfinance. The general outlook of such banks is found to be optimistic fostering efforts in financial inclusion, digital transformation, collaboration with fintech, regulatory support, and enhanced risk management. Bamba and Aggarwal (2024) study how sustainable financial inclusion in India is through SFBs. They sought the goals of the sustainable financial inclusion plan through the growth of indicators - account penetration, digital financial inclusion, and geographic reach. Digital financial inclusion as they find can positively impact sustainable financial inclusion by augmenting accessibility, and efficiency and also reducing environmental footprints. Tikku *et al.* (2024) evaluate the SFBs and Private banks in India using the Ordinary Least Squares (OLS) method to conclude that the board of directors' independence has a significant relation to the bank's profitability, and suggests the presence of more independent directors with varied experience to improve the profitability. Shah (2024) through chi-square analysis found there is a significant difference between availing e-banking services offered to the customers by the small finance banks in Gujarat through a pilot study and it was also concluded that the customers of the SFB are well aware of their e-banking services and are more aligned to using such facilities. The SFBs were able to pass through the COVID-19 pandemic and are well-equipped to reach and sustain the finances of low-income people during economic downfalls were suggested by Kuriakose and Johnson (2024).

Payments bank service improvements were studied by Kaur *et al.* (2022) and it was found that customer satisfaction and intentions had the highest impact. They also found the reputation of the service provider, service quality and trust (Kumar, 2024) to be relevant antecedents to the findings. Similar results were also found by Kaur *et al.* (2021) the perceived ease of use of PB products had the highest impact on behavioural intentions, followed by initial trust and social influence. Gupta *et al.* (2023) study used the Fuzzy Analytic Hierarchy Process and the study postulated that ease of use and facilitating conditions are the most prioritized factors. At the same time, personalization is ranked as the least preferred factor among all the factors. In a study among low-income people by Sharma *et al.* (2024) factors of payment banks like banking model, technological awareness, customer security, cost of payment, and growth of infrastructure were found to have a solid critical relationship with the cashless economy. The payment banks' inability to compete with other banks was pointed out in Kumar (2024). The income from payment banks was not found to help its survival and is easily loss-making due to its inability to provide credit products Ashta and Pillarisetti (2020). Phung *et al.* (2024) finds the bank's investments in mobile payment services improve the profitability of the banks and also helps surge in efficiency. This has also been reflected in the performance of the PBs as the study by Mittal *et al.* (2017) shows Mobile recharge, Grocery Bill Payments, Restaurants, Cab booking, Utility bill payments, Mobile transfer of funds (Mamatha & Dev, 2024), savings banks' purpose and interest rate as the services used by PB customers in descending order. The argument that the current regulatory framework does not adequately respond to the real challenge of enabling success for payment banks was pointed out in Ghosh and Ranade (2020).

The rating system of a bank's performance goes back to 1979 when the Federal Deposit Insurance Corporation introduced CAMEL which analyses a Bank's Capital Adequacy, Asset Quality, Management, Earnings, and Liquidity (Dang & Vong, 2020). But later in the year 1997 Sensitivity to Market Risk was also added thus becoming the CAMELS rating model. It was then widely used worldwide as a standard tool for measuring and analysing the performance of banks with or without variations. The score derived from the analysis is used

the express the bank's stability, which would help the public to understand in common man's language. This indicator rating was done on a scale of 1-5 in CAMELS which was changed from the EAGLES model (Vong & Song, 2015). In the EAGLES model of assessment, each of the indicators or criteria is denoted using the actual values, which will give a clearer picture of the pattern of financial ratios. The Strategic Response Quotient (SRQ) which is marked as S considers interest income (ITI), interest cost (ITC), non-interest income (NII), and non-interest cost (OHC) which is the sum of the Cost of Goods Sold (COGS) and Operating Expense. They are crucial for management policies and pricing strategies. It will show how the bank strategically responds to the market in lending, saving deposits, new product innovation and cost control (Ristanti & Ismiyanti, 2021). They suggested the SRQ equation as

$$\frac{ITI - ITC}{NII - OHC}$$

Since the introduction of EAGLES and its perversion of EAGLE, many performance analyses of the banks have been done to generate an inclusive financial view. Ali (2019) through EAGLES analysis found that in Kuwait the conventional banks outperformed the Islamic banks except in growth, and had a growing trend in all the indicators except for Liquidity. An EAGLE-ANOVA model was used by Sathavara and Christian (2021) to evaluate Indian Private sector banks' finance data and ranked the private banks based on each indicator. The study also found the variance among the financial variables of the private bank to be statistically significant. Four factors-Loan Deposit Ratio (LDR), Net Interest Margin (NIM), Net Interest Income Margin/Net Operating Cost (NIM/NOC), and Loan Growth (LG) were found to be significant by Ristanti and Ismiyanti (2021) to ROA when the top ten banks of Indonesia were analysed. The other five factors- Non-Performing Loans (NPL), NPL Growth, Deposit Growth (DG), Staff Cost Growth (SCG), and Capital Adequacy Ratio (CAR) were found not statistically significant in the context of the study. Dang & Vong (2020) in the study takes 3 sub-criteria under Strategy- SRQ, NIM and Cost of Funds (COF) but stresses its importance on SRQ. The study through OLS does not reject the alternate hypothesis all EAGLES strategic factors are significant in determining bank performance. Mistri and Kshatriya (2021) evaluated the financial performance of select public sector banks and foreign sector banks using the EAGLES-ANOVA model and found there is no significant difference between Public and Foreign Banks in terms of asset quality and Growth. There is a significant difference between Public and Foreign Banks in terms of Earning Ability, Liquidity, Equity, and Strategy. It found that the Financial Performance of Foreign Banks are better compared to Public Sector Banks in India. In another comparative evaluation of three public sector banks and three private sector banks in India by Suresh & Krishnan (2020) the analysis using the EAGLES and t-test showed that, in the majority of the instances private sector banks were performing better than the public sector banks which show that private sector banks are more efficient in utilization of resources compared to public sector banks. A similar study by Kumari and Prasad (2017) found there exists a significant difference between the financial performance of select public sector banks and private sector banks. A study about the pre-merger and post-merger financial performance analysis of the Union Bank of India was done (Dadresha, 2023) using the EAGLE model. It was found that the earning capacity of the bank has increased due to its high dividend payment ratio, and return on assets, were as the asset quality declined. In another similar study, both EAGLE and CAMEL model was applied to evaluate the financial performance of Canara Bank pre-merger and post-merger (Prasanna & Shailaja, 2023). Findings reveal that the merger significantly influenced Canara Bank's financial performance, particularly in asset quality, capital adequacy, and management quality. While the merger initially posed challenges in terms of integration, the bank's subsequent performance improvements suggest successful strategic planning and execution.

Small Finance Banks (SFBs) and Payment Banks (PBs) can be understood as areas of increasing research interest. The existing studies largely focus on the service side and the customers except for SFB analysis, which was done with limited ratios and time periods. CAMEL model is found to have been used but

the scope of using the EAGLES model in assessing the financial performance of the SFB and PB can be found substantial as a continuous assessment over the past more than five years needs to be done for getting a micro and macro picture of the niche banks.

3. Methodology

The methodology incorporates collecting secondary data related to financial performance from ProwessIQ and from the published annual reports of respective Small finance banks and Payments banks. MS Excel and Stata were used to analyse the ratios required for the EAGLES. The EAGLES analysis of Small Finance Bank and Payments Bank is done in two parts due to the dissimilarity in the Financial Year Data availability.

1. 9 Small Finance Banks are analysed for 7 years from 2018 to 2024.
2. 5 Payments Banks are analysed for 6 years from 2019 to 2024.

Recently incorporated small banks and those that are yet to publish their FY 2023-2024 annual report are excluded from this study.

The study also analysed the significance of SFBs and PBs using the One-way ANOVA test at a 95% confidence level. The hypothesis is framed as follows

H_o: There is no significant difference between the group means of SFB/PB.

H_1: There is a significant difference between at least one pair of group means of SFB/PB.

Following are the ratios included in EAGLES analysis

The mean of all the ratios over its years respective to each bank are found which is taken as the value for each sub-criterion. The next step involved finding the mean of the sub-criteria in each criterion to find the value of the respective criterion. The ranks associated with the

Table 1. Ratios included in EAGLES

Criteria	Sub-Criteria	Expression	Indication of improvement
(E) Earnings Ratio	1. Net Interest Margin (NIM)	(Interest Income-Interest Expense)/Total Assets	Increase
	2. Non-Interest Income to Total Income (NIITI)	Non-Interest Income/Total Income	Increase
	3. Interest Income to Total Income (IITI)	Interest Income/Total Income	Increase
(A) Asset Quality Ratios	4. Return on Assets (ROA)	Earnings After Tax/Total Assets	Increase
	5. Total Revenue to Total Assets (TRTA)	Total Income/Total Assets	Increase
	6. Total Advances to Total Assets (TAdTA)	Total Advances[1]/Total Assets	Increase
	7. Total Deposits to Total Assets (TDTA)	Total Deposits [2]/Total Assets	Increase
	8. Gross Non-Performing Assets (NPAG)	(Gross NPA/Gross Advances)	Decrease
(G) Growth Ratios	9. Return on Capital Employed (ROCE)	EBIT/Total Capital	Increase
	10. Productivity Ratio (COCE)	Cash from Operations/Total Capital	Increase
	11. Net Profit Margin (NPM)	Earnings After Tax/Total Income	Increase
	12. CASA ratio (CASA)	(Current Account Deposit + Savings Account Deposit)/Total Deposit	Increase
	13. Total Advances to Total Deposits (TAdTD)	Total Advances[1]/Total Deposits[2]	Increase
(L) Liquidity Ratios	14. Working Capital Turnover Ratio (TRNWC)	Total Income/ (Current Asset – Current Liability)	Increase
	15. Current Ratio (CACL)	Current Assets/Current Liabilities	Increase
	16. Total Provision to Total Asset (TPTA)	Total Provisions /Total Assets	Increase
(E) Equity Ratio	17. Return on Equity (ROE)	EAT/Equity	Increase
	18. Capital to Risk-Weighted Assets Ratio (CRAR)	(Tier 1 Capital + Tier 2 Capital) / Risk-Weighted Assets	Increase
(S) Strategies	19. Strategic Response Quotient (SRQ)	(Interest Income - Interest Expense)/(Non-Interest Income-Operating Cost)	Increase

1 Total Advances is taken as the summation of Loans and Advances with Investments.
2 Total Deposit is taken as the summation of Deposits and Borrowings.

value are further averaged to find the ranks of SFBs and PBs. The analysis has also done a mean average of all individual sub-criteria under every criterion to derive its group-wise performance score.

4. Analysis and Discussion

The analysis is divided into two parts- Part A-Small Finance Banks, and Part B-Payments Banks that explain the EAGLES and the significance of the model. The supporting Tables and Figures of Part A are presented in Annexures I and III and that of Part B in Annexures II and IV.

5. Part A - Small Finance Banks

5.1 Earnings

Earnings in Table 2 show how strong the SFBs income is. By looking at the IITI and NIITI it is evident that the largest portion of Revenue comes from the Interest Income and the least from the Non-interest Income. A CAMEL study was done by Ray and Shantnu (2021) for the FY 2019-2020 shows IITI ranged between 34% and 57%. The listed SFBs are able the generate interest income to total deposits between 13% and 20% (Choudhary & Kanchan, 2023). The NIM of 0.066 shows SFBs are better than that of the Public Sector Banks and Private Sector Banks. The cause of higher NIM is due to its asset size which is lesser than the large banks, while the interest is charged at competitive levels in the market. Hence, there is the likeliness of NIM getting reduced as the SFBs accumulate more assets. The proportion of the Interest Income and Non-interest income is expected less volatile in the near future, thou the respective amounts will be growing. The bank-wise average earnings show that SFBs have very close scores in the range of 0.345 to 0.361, with an average of 0.355, with the average earnings Ujjivan SFB scored the best, and Capital SFB scored the lowest.

The ANOVA test of the Earnings ratio in Table 8 rejected the Null Hypothesis in NIM, showing there is a significant difference in the SFB's performance. However, the test Failed to Reject the Null Hypothesis of NIITI and IITI, proving there is no significant difference in at least one pair of SFBs.

5.2 Asset Quality

The Asset Quality of the SFBs is of the highest priority as the very survival and growth depend on how well the banks maintain their Assets. Shown in Table 2, The ROA and TRTA of the banks on average score -0.001 and 0.138 respectively which are improvable by increasing the revenues. The lower ROA and TRTA are caused by the SFBs are in the niche group of small banks and are in the growing stage of widening their operations. ROA of SFB are in similar ranges to other scheduled banks. However alarming information from the TAdTA, that shows all the SFBs are not improving their loans and advances as well as investments, as it average stood at 18.8%. Its proportion is suggested to be increased for scaling up the profits and strengthening the assets. Sugirtham and Gowri (2021) found the loans and advances in the categories of 15 days to 1 year of SFBs are underperforming, an improvement of these loan categories has to be anticipated in the coming years. This may have caused an NPAG of 4.7% on average. The NPAG of SFB stands between the Private Sector Banks (PrSB) on the lower end and PSB on the upper end. It is expected that NPAG can be more effectively reduced with more effective recollection strategies, even while income prospects are increased. The TDTA had a higher proportion to total assets with an average of 0.842 due to the inclusion of borrowings in deposits. It is suggested to maintain a higher TDTA to enable more loans and advances. And the ranks of the average of Asset Quality Sub Criteria shows ESAF SFB scoring best (0.240) and North-East SFB the least (0.206). and the combined average of the Asset quality stands at 0.224.

The ANOVA test of the Criteria Asset Quality rejected the Null Hypothesis of ROA, TRTA and TDTA, whereas the TAdTA and NPAG failed to reject the Null Hypothesis. The result can be found in Table 8.

5.3 Growth

The five growth ratios in Table 3 show how confidently the banks are growing. The growth ratios have relevance as it's important criteria in which the investors of the SFB are deeply interested. ROCE and COCE showed their closeness to each other as their averages stood at 3.731 and 2.457 respectively, it also proves a higher

proportion of operating cash movements that can be counted better, keeping the fact that Capital SFB and North East SFB are not generating positive cash flows. The study has taken the initial years of the operational beginning of SFBs, this shows that the EBIT was negative during the beginning and the SFBs are showing a gradual progress to overcome the initial lowliness. The EBIT and EAT also did not largely affect the SFBs during the lockdown years of 2021 and 2022. But the alarming sub-criteria is the NPM whose value (0.006). This was caused by the slow growth of the EAT of Jana SFB and North East SFB. The rest of the banks are showing an upward trend of EAT. The only SFB with an NPM greater than 0.10 was AU SFB (0.144) and North East SFB scored the highest negative NPM of (-0.159). The CASA proportion to the total deposit stands at 0.236, showing a larger portion of the deposit of SFB comes from the Term deposits. This is due to banks' easiness of having devoted amounts for loans and advances. Improvement of Savings deposits is suggested in this study to improve the deposit capabilities, and to push more amounts for this purpose, which will enable more customers to bank with SFB. The average TAdTD shows 0.223 showing SFBs are not utilising the deposits, or borrowings for higher and innovative loans and advances, investment products. Ranking the average growth AU SFB secured the highest rank for a value of 3.806 and North East growth was the lowest at 0.084. The combined average growth of the SFB stood at an average of 1.33.

The ANOVA test done for the Growth ratios resulted in the rejection null hypothesis of all ratios. ROCE, COCE, NPM CASA and TAdTD showing the performances of SFB are significantly different in the mentioned sub-criteria. The result can be found in Table 8.

5.4 Liquidity

The Liquidity position of the SFBs in Table 3 has a safer position with a combined average of 2.22. It was contributed by TRNWC having a safer average of 1.657. Among this sub-criteria (category) Capital SFB and Suroday SFB have weaker indications of 0.608 and 0.801respectively whereas the remaining SFB has values higher than 1.00. CACL which is a basic current ratio showing the liquidity power of the banks proves true in SFB. The Average CACL stood at 4.98, largely due to Capital SFB having the highest current ratio of 17.081 and the lowest value was for Jana SFB (1.759). The SFB keeps a total provision of 0.024 to total assets. It is suggested that the SFBs maintain the working capital ratio and liquidity ratio in the near future. The banks- Capital SFB and Jana SFB need to bring down the current assets to a controlled level. The highest Provision of 0.058 was maintained by Jana SFB and the lowest provision was maintained by Capital SFB (0.005), and the average TPTA of 2.4% shows Total provisions are rightly maintained by SFBs. Ranking of the Liquidity gives Capital (5.898) the top rank and the Jana SFB (1.142) the lowest rank.

TRNWC testing of ANOVA has resulted- failed to reject the null hypothesis proving there is no significant difference in the SFBs performance. The other sub-criteria CACL and TPTA have rejected the null hypothesis at a 95% confidence level proving at least one pair of SFBs is significantly different in the performance of SFBs. The result can be found in Table 8.

5.5 Equity

The Equity criteria (0.082) include two sub-criteria ROE and CRAR. This can be found in Table 4. The ROE shows a disturbing value of -0.066 for the interested parties. The Jana (-0.585) and North East (-0.685) SFBs have the largest negative ROE and have pulled down the average ROE. The highest ROE is maintained by AU SFB (0.142). It is suggested that the returns available to the equity holder need to be sufficiently increased by the Jana and North East, and also due to an increasing trend in the total capital and reserves of SFBs. The PSBs and PrSB have higher ROEs that which is due to their wide and large earning capacities. CRAR (0.230) on the next shows extra buffers kept when the legal requirement for SFB stands at 15%. This shows SFB's better preparedness to absorb shocks in economic, industry, or bank specific. It is anticipated that the SFBs will maintain the status quo until RBI changes its minimum level. The PSBs and the PrSB maintain a lower CRAR since their minimum CRAR level is 9% and have more operational support not to lead to risk-affected. The recent mergers of PSBs

have resulted in the increased CRAR maintained by them. The Ranking of Equity criteria's means show Suryoday SFB having the highest rank and Jana SFB the lowest ranked.

The ANOVA test of the Equity shows the null hypothesis being rejected for both ROE and CRAR, proving they are significant. The result can be found in Table 8.

5.6 Strategy

The Strategic response in Table 4 is measured in this study using the Strategic Response Quotient (SRQ), which is unique in the EAGLES and not included in CAMELS. The SFBs not efficiently growing their loan and advances, investments which have reflected through a negative SRQ ratio of -0.586. All the SFB has a negative SRQ which gives a clear indication that they have to expand their loan and advance products in a controlled cost of the transactions enabling more fintech usage. This will help to reach and service more customers in real time, at a controlled cost.

The ANOVA test of the Strategy shows the null hypothesis being rejected for SRQ. The result can be found in Table 8.

5.7 Final Ranks

The Ranks secured by SFBs in each of the EAGLES were averaged to generate the final ranks of SFBs as shown in Table 4. The results say AU SFB secured the top rank, followed by Capital, Equitas, Esaf, and Equitas sharing the same position, Ujjivan, Suryoday, Jana, and Utkarsh sharing the last but second position and North East the last rank. The combined score of EAGLES of SFB came to 3.626.

6. Part B - Payments Banks

6.1 Earnings

Payments Banks have a combined average Earnings of 0.343 as shown in Table 5, where its sub-criteria contributed NIM (0.03) is a low margin as they have limited income. It can be seen from the data that the major source of income for the PBs except Jio and IP PB came from Non-interest Income (NIITI 0.662) and Interest forms only 0.338 (IITI). The very survival and sustenance of the PBs depend on the business of their large parent companies, which enables them to generate a larger part of non-interest income. It is evident from the data that the lockdown during the years 2020 and 2021 has affected PBs' income sources backwards. Among the five PBs, Jio PB secured the first rank (0.349) and Fino PB (0.339) secured the lowest rank. The score speaks the PBs have a very close earnings pattern. Hence this study strongly recommends the unwinding of regulatory norms for PB to generate more Interest Income, failing which could affect PBs survival.

The ANOVA test of all the sub-criteria in the Earnings rejected the null hypothesis proving that there is a significant difference in performance of at least one pair of SFBs. The result is exhibited in Table 9.

6.2 Asset Quality

The Asset quality of PBs (0.231) was found higher than the SFBs Table 5. All PBs in the study are alarmingly negative in ROA (-0.095), which can be improved only through growth in income. However, the ROA of PB is better off when compared to SFB. This is because a large portion of the income of PB comes from their secured investments. The TRTA was positioned better with an average of 0.408. NSDL PB (0.850) has the highest TRTA compared to India Post PB (0.0755) the lowest in the sub-criteria. The PB regulatory restriction to provide retail loans and advances has impacted the TAdTA (0.491) and is better for SFB. Jio has a better value of 0.8429 indicating their better regulated investments. The lowest TAdTA was 0.2329 from the NSDL. With the prevailing RBI restrictions on deposits, TDTA (0.35) is not showing a very strong position with Airtel PB (0.42) scoring the highest and NSDL PB (0.052) the lowest. It can be understood that, by acting as the payment medium for their sister concerns PBs are having higher deposits. The NPAG for all the banks was found zero as they don't provide retail loans and advances. The combined average of Fino PB (0.219) was found to be the highest securing the top rank and Jio PB (0.016) was the lowest rank.

The ROA in the ANOVA test in Table 9 has failed to reject the null hypothesis. TRTA, TAdTA and TDTA have rejected the null hypothesis proving a significant difference in the performance of at least one pair of PBs. The test for the NPAG is not possible due to a constant value of zero.

6.3 Growth

The Growth of the PBs (2.562) thou higher than SFB is not sufficient with a significant requirement to reframe the growth and product objectives is captured in Table 6. The Fino PB has a positive ROCE (4.921) whereas all other PBs secure negative ROCE bringing down the average to 0.921. The COCE (0.059) also does not show a good movement of operating cash, where India Post (0.252), Fino PB (0.163) and NSDL PB (0.006) were able to secure positive scores and the remaining PB could secure only negative scores. It is anticipated that the cash from operations will not steadily improve and is highly subject to market environment. The above scores have significantly impacted the business profits of PBs, where the NPM seriously stood at -1.045. Thou the EAT is increasing most of the PBs are on the negative axis. Thus, all the PBs in the study have a negative NPM, which is a matter of concern and immediate attention. Since the RBI does not allow the PB to do business on the Term Deposits, all the CASA stood at value 1. The TAdTD (11.876) was in a positive position with investments in secured instruments, NSDL having the highest value of 51.1009 showing it is sourcing finances for investments other than deposits and borrowings as well. Fino was found to be the least with 0.8036. Ranking of combined averages of sub-criteria ranks NSDL (10.299) as having the top rank and India Post the lowest with a score of 0.097.

The ANOVA test of the Growth criteria expresses the ROCE to have rejected the null hypothesis whereas the COCE, NPM and TAdTD failed to reject the null hypothesis stating there is no significant difference between the performance of PBs. The CASA test was not performed due to its constant value of 1. The result is exhibited in Table 9.

6.4 Liquidity

The Liquidity position of the PB showed safer information with a higher combined mean of 2.029 close to SFB's. It can be found in Table 6. TRNWC mean stood at 2.825, in which the NSDL PB has the highest value of 15.031 and Jio PB has the lowest value of -7.122. It can be anticipated that PBs are well-managing their current assets and current liabilities. They are showing an upward trend, which is beneficial for short-term investments and operations. CACL (3.264) had a higher ratio. NSDL PB (7.882) secured the highest score and the Airtel PB (1.063) the least. The TPTA (-0.002) shows almost no provision as the PB may be assuming the chances of no NPAs. The Combined averages show NSDL PB as having the highest liquidity rank (7.641) when compared to Jio PB having the lowest liquidity position (-1.516).

The One-way ANOVA test for the PB Liquidity criteria failed to reject the null hypothesis of all TRNWC, CACL and TPTA. The result is exhibited in Table 9.

6.5 Equity

The PBs give a worrisome figure in ROE as all figures are negative and the average stood at -0.29 in which Airtel PB was having a very high -0.765. This has to be immediately improved if the PBs are in the process of expanding the capital sources which at present are not in an upward trend. The risks related to the returns and the economic, industrial and bank-specific should have possibility forced the PBs the maintain an unusual intensified of CRAR far above the minimum requirement of 15%. Jio PB maintains an elevated ratio of 27.17 and Fino PB (0.78) is the least maintained. Due to the impact of CRARs the Jio PB (13.431) has secured the top rank and the lowest rank was -0.093 by Airtel PB. Thus, the average of the Equity stands at 3.064 in Table 7.

The ANOVA test of the Equity exhibited the result that ROE failed to reject the null hypothesis meaning no significant difference in the performance of the PBs. Whereas in CRAR the null hypothesis was rejected. The result is exhibited in Table 9.

6.6 Strategy

The SRQ in Table 7 was found to be declined in PB with a combined average of -0.257. The value comparison with that of the SFB shows a better-off position which could be due to the secured investments by the PB. Even then, all PBs are getting a negative score, which shows it immediate need for regulatory policy changes to incorporate loans and advances to its line.

The ANOVA test has failed to reject the null hypothesis of SRQ of PB. The result is exhibited in Table 9.

6.7 Final Ranks

The Rank analysis averaging all the ranks in EAGLES of PB generates the final ranks as NSDL being the highest performing followed by Fino, Jio. The last position was shared by India Post and Airtel. The combined score of PB was found to be 7.972. This is shown in Table 7.

7. Cross Comparison

Comparing the results with a similar analysis, it was found the earnings, assets, growth, liquidity, and equity can picture the gain ability of five private sector banks in India (Sathavara & Christian, 2021) and seven banks by Rajesh (2024) 13 ratios indicating sub-criteria without taking the SRQ to the analysis purview. HDFC was found to be the best performing private sector bank taken for study with top position for all criteria except the growth. Similar to the findings of the small bank, it was found that the private banks are keeping the capital adequacy ratio as per the regulatory norms. Solid competition was found between the competitors in terms of earnings and liquidity, whereas in SFB and PB, earning and asset quality can be seen as high competition. This is further expected to increase with the growth of SFBs and PBs, which will cause the introduction of innovative financial products in the banking system in niche as well as priority sectors. In testing the ANOVA, all the criteria of EAGLE were found to be significant for the private sector banks, whereas in the SFB and PB, all sub-criteria were not found to be significant. A study of the performances of the banks in Indonesia concluded only four sub-criteria out of 9 were found to be significant (Ristanti & Ismiyanti, 2021) by using multiple linear regression. Canara Bank (Prasanna & Shailaja, 2023), and Union Bank of India's pre-merger and post-merger 3 years were studied using the EAGLE approach, taking the merger date to be April 1st of 2020. The bank proved an improved performance post-merger. Out of 17 sub-criteria used to analyze the performance, 15 sub-criteria were found to be significantly influencing the bank. ROA of Union Bank was in line with the PB and contrast to the SFB. Net NPA was found to be insignificant in the study of Union Bank, which was not included in SFB and PB analysis as Gross NPA was included. The inclusion of Gross NPA was not found to be significant in the case of SFB, whereas, in the union bank, it remains significant and not processable for the ANOVA test of PB as the gross NPA remained zero. The Foreign banks operating in India are more efficient in handling the Gross NPAs (Mistri & Kshatriya, 2021) than the SFBs. The average Gross NPA of the SFA is more efficient than the Union Bank but approximately in the same range as other PSBs, PrSB (Suresh & Krishnan, 2020) as well as banks in Kuwait (Ali, 2019). Nevertheless, the large size of the public sector banks, private sector banks and the efficiency of foreign banks in India (Mistri & Kshatriya, 2021) has caused them to score a higher ROA, Return on Capital Employed (Suresh & Krishnan, 2020; Kumari & Prasad, 2017)and Total advances to Total Assets than the SFB. The Loan to the deposit of foreign banks in India (Mistri & Kshatriya, 2021) and Conventional banks and Islamic banks in Kuwait remained higher than SFBs and PBs. It is also interesting to note that the foreign bank's proportion of investments is higher which draws a similarity with the PBs. The public sector banks keep the CRAR ratio above the RBI limit for the PSBs but below the minimum requirement for the SFBs and PBs, at the same time the private sector banks and foreign banks in India keep a higher CRAR than the PSBs. A similar pattern of higher CRAR was also found with different banks in Kuwait (Ali, 2019). The proportion of the interest income to the total income of the SFB is found to be higher than that of the Union Bank, proving the growth of the efficiency in SFBs, a contrasting Union Bank, proving the growth of the efficiency in SFBs, a contrasting view remains for the PBs due to the less ability to reap the interest income. The commercial banks in Nepal (Vaidya, 2023) and Islamic banks in Indonesia (Kurnia *et al.*, 2024), Kuwait (Ali, 2019) and PSBs and PrSBs (Suresh & Krishnan,

2020) (Kumari & Prasad, 2017) Foreign Banks in India (Mistri & Kshatriya, 2021) were strategically better than the SFBs and PBs, which is due to the difference in the operating years and longer management of systems. The banks in Kuwait have a higher ROE for their higher returns to equity than the SFBs and PBs in India. It is also proven that there is a significant difference in the ROAs, Gross NPAs, Loans, Investments, CRAR, and Non-interest Income strategies between PSBs and PrSBs. The t-test analysis of EAGLES showed the significance of all sub-criteria excluding Return on Net worth (Kumari & Prasad, 2017). In foreign banks, all the sub-criteria were found to be significant in the ANOVA (Mistri & Kshatriya, 2021). This endorses the concept that banks in different sector require tailored structures and systems to improve their financial performances. The next five financial years can be counted for the crucial growth and organisational changes for the SFBs and PBs. A study comparing SFBs and PBs in comparison to more PSBs and PrSB will widen the horizon on this perspective.

8. Conclusions

The study focused on empirically analysing the financial performances of Small Finance Banks (SFB) and Payments Banks (PB) under Small Banks alias Niche banks in India. The study analyses nine SFBs and five PBs separately using the EAGLES model used in bank performance analysis. The significance of the EAGLES was tested using One-way ANOVA. Ratios reflecting the financial performance were used as sub-criteria and it was found the performance of the SFBs is approximately half that of PBs. The study found that the SFBs are critically affected by fewer loans and advances as they have a huge potential for expansion and development of financial products. The financial performance of PBs on the same aspect faces similar conditions due to the regulatory limitations on retail loans and advances. It was heavily reflected in the negative Strategic Response Quotient (SRQ) of all SFBs and PBs. The study suggests loosening the regulatory frameworks for introducing more innovative products from the small bank line. The small banks have a sufficient Asset and Liquidity position to improve the revenue means, which could ultimately improve the present negative ROE. The CRAR ratio of the SFB was found to be sufficient and above the regulator's minimum requirement whereas PB was found to be maintaining an enormous CRAR higher than SFB. The study found AU SFB and NSDL PB to be the highest performing among its group. Discounting in comparison unequal periods and consideration of possible outliers of PBs, it is found that the PBs are performing better than the SFBs.

The study scope was limited to nine SFBs and five PBs due to the data availability aspects. The data used in the study are highly dependent on the repositories which may have led to accuracy variations. The study sheds wider scope for analysing the Operational aspects, Human resource aspect, Selling and Distribution aspects of small banks which when collectively brought together can help the banks to initiate changes in management policies and new strategies for product improvements and introductions that will help the revenue generation and hone the competitive edges. The new financial products development specific for the small banks is a crucial scope by keeping the EAGLES analysis as a base. The results in this study can be applied in Multi-criteria Decision Analysis models to find the ranking based on the weights.

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Annexure I

Small Finance Bank's EAGLES Analysis

Table 2. Earnings and asset quality of SFBs

SFB	Earnings					Asset Quality						
	NIM	NIITI	IITI	Avg. E	Rank E	ROA	TRTA	TAdTA	TDTA	NPAG	Avg. A	Rank A
A U	0.0464	0.1576	0.8424	0.349	8	0.015999	0.1112	0.219226	0.844604	0.021914	0.234	3
Capital	0.0342	0.0809	0.9191	0.345	9	0.007682	0.0898	0.200886	0.908292	0.020443	0.237	2
Equitas	0.072	0.131	0.869	0.357	5	0.012623	0.1453	0.180769	0.819471	0.030857	0.225	4
Esaf	0.078	0.1095	0.8905	0.359	2	0.011643	0.1527	0.199348	0.877699	0.041014	0.240	1
Jana	0.0604	0.1322	0.8678	0.353	7	-0.06084	0.155	0.207747	0.868054	0.117	0.211	8
North East	0.0648	0.1261	0.8739	0.355	6	-0.02528	0.1417	0.154963	0.838142	0.0798	0.206	9
Suryoday	0.0776	0.113	0.887	0.359	3	0.009156	0.1442	0.210326	0.759008	0.0506	0.214	7
Ujjivan	0.0836	0.1183	0.8817	0.361	1	0.011678	0.1549	0.166719	0.824643	0.035657	0.224	5
Utkarsh	0.0735	0.1048	0.8952	0.358	4	0.010891	0.1456	0.151551	0.840551	0.027914	0.224	6
	0.066	0.119	0.881			-0.001	0.138	0.188	0.842	0.047		
	0.355					0.224						

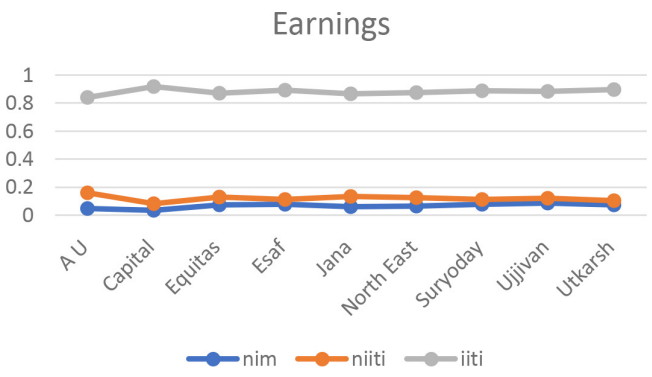


Figure 1. Earnings of SFBs.

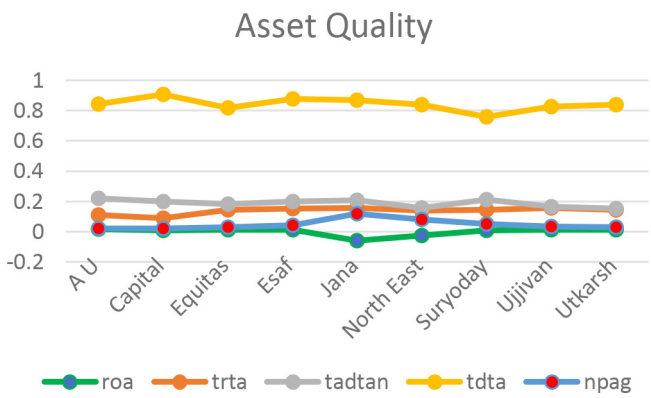


Figure 2. Asset quality of SFBs.

Table 3. Growth and liquidity of SFBs

Growth								Liquidity				
SFB	ROCE	COCE	NPM	CASA	TAdTD	Avg. G	Rank G	TRNWC	CACL	TPTA	Avg. L	Rank L
A U	9.3766	8.9759	0.1435	0.2743	0.259235	3.806	1	2.2449	2.52857	0.0104	1.595	4
Capital	10.6836	-0.526	0.0853	0.3959	0.221103	2.172	3	0.6079	17.0814	0.0051	5.898	1
Equitas	1.7737	1.0319	0.0865	0.3363	0.220919	0.690	6	2.531	3.55143	0.0169	2.033	3
Esaf	2.6377	0.8553	0.0736	0.1765	0.227047	0.794	5	2.2215	1.76286	0.0217	1.335	8
Jana	1.6954	9.509	-0.3761	0.1353	0.239465	2.241	2	1.6097	1.75857	0.0582	1.142	9
North East	0.2382	-0.1549	-0.1583	0.314	0.1815	0.084	9	1.1055	9.32286	0.0315	3.487	2
Suryoday	4.4086	0.3563	0.0581	0.1503	0.2762	1.050	4	0.8008	3.57	0.0303	1.467	7
Ujjivan	1.6647	1.1532	0.0748	0.184	0.201362	0.656	7	1.6507	2.92857	0.0216	1.534	5
Utkarsh	1.0965	0.9167	0.0692	0.1575	0.180484	0.484	8	2.1399	2.31143	0.0241	1.492	6
	3.731	2.457	0.006	0.236	0.223			1.657	4.980	0.024		
	1.33							2.22				

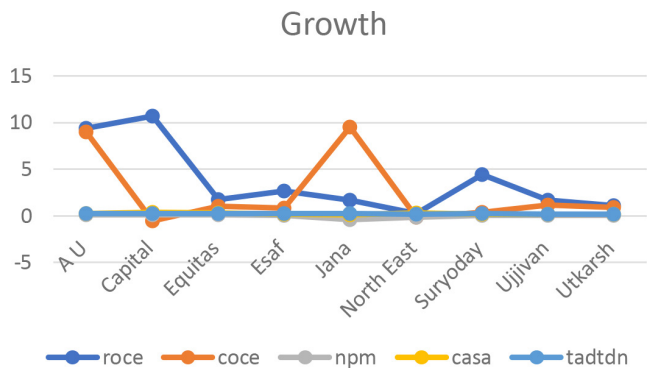


Figure 3. Growth of SFBs.\

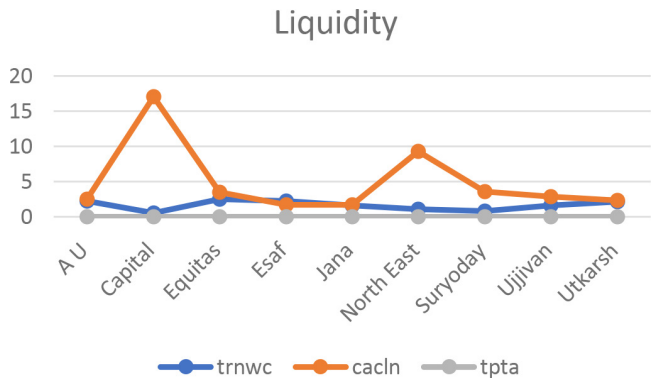


Figure 4. Liquidity of SFBs.

Table 4. Equity, Strategy and Ranks of SFBs

	Equity				Strategy		Rank Analysis	
SFB	ROE	CRAR	Avg. Eq.	Rank Eq	SRQ	Rank S	Rank Avg.	Final Rank
A U	0.1417	0.2124	0.177	2	-0.583	4	3.67	1
Capital	0.0971	0.2013	0.149	7	-0.420	1	3.83	2
Equitas	0.0889	0.2436	0.166	4	-0.595	5	4.50	3
Esaf	0.117	0.2207	0.169	3	-0.700	8	4.50	3
Jana	-0.5848	0.1991	-0.193	8	-0.437	2	6.00	7
North East	-0.6845	0.1712	-0.257	9	-0.516	3	6.33	9
Suryoday	0.0479	0.3712	0.210	1	-0.703	9	5.17	6
Ujjivan	0.0921	0.2382	0.165	5	-0.674	7	5.00	5
Utkarsh	0.0917	0.2149	0.153	6	-0.650	6	6.00	7
	-0.066	0.230			-0.586			
	0.082				-0.586		3.626	

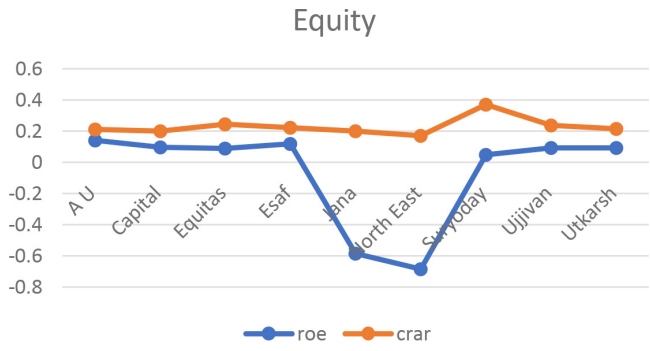


Figure 5. Equity of SFBs.



Figure 6. Strategy of SFBs.

Annexure II

Payment Bank's EAGLES Analysis

Table 5. Earnings and asset quality of PBs

	Earnings					Asset Quality						
PB	NIM	NIITI	IITI	Avg E	Rank E	ROA	TRTA	TAdTA	TDTA	NPAG	Avg A	Rank A
Airtel	0.0293	0.8861	0.1139	0.343	3	-0.14612	0.3691	0.4714	0.419149	0	0.223	3
Fino	0.016	0.9471	0.0529	0.339	5	-0.00754	0.661	0.3604	0.432187	0	0.289	1
India Post	0.0252	0.4507	0.5493	0.342	4	-0.0873	0.0755	0.5485	0.6457	0	0.236	2
Jio	0.047	0.3566	0.6434	0.349	1	-0.19678	0.0832	0.8429	0.201628	0	0.186	5
N S D L	0.0331	0.668	0.332	0.344	2	-0.03695	0.8497	0.2329	0.052293	0	0.220	4
	0.030	0.662	0.338			-0.095	0.408	0.491	0.350	0		
	0.343					0.231						

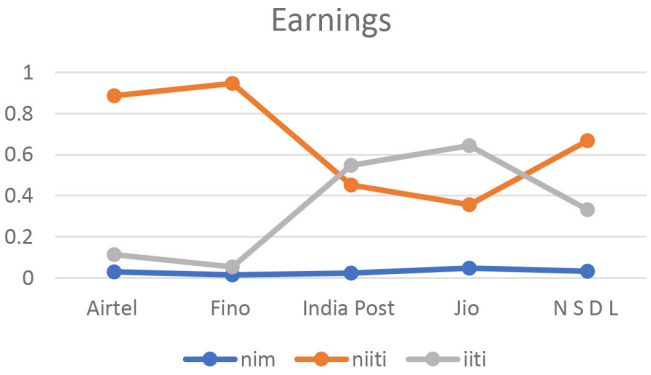


Figure 7. Earnings of PBs.

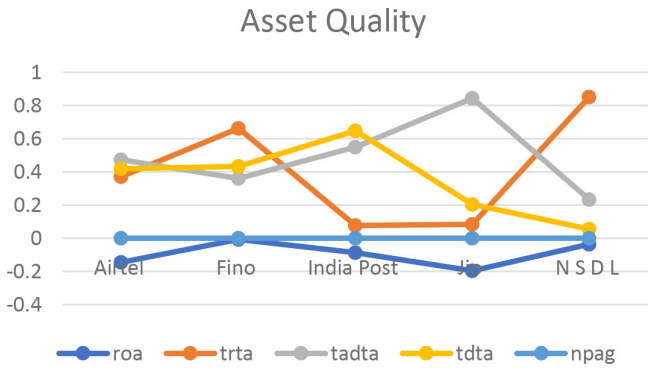


Figure 8. Asset Quality of PBs.

Table 6. Growth and liquidity of PBs

	Growth							Liquidity				
PB	ROCE	COCE	NPM	CASA	TAdTD	Avg G	Rank G	TRNWC	CACL	TPTA	Avg L	Rank L
Airtel	-0.0865	-0.0184	-0.492	1.000	1.1931	0.319	4	5.652	1.063	0.003	2.239	2
Fino	4.9205	0.1627	-0.0058	1.000	0.8036	1.376	2	1.082	1.263	0.001	0.782	4
India Post	-0.0827	0.2521	-1.8849	1.000	1.2005	0.097	5	-0.5164	3.5350	-0.0228	0.999	3
Jio	-0.113	-0.1078	-2.2632	1.000	5.0798	0.719	3	-7.122	2.575	0.000	-1.516	5
N S D L	-0.0328	0.0064	-0.58	1.000	51.1009	10.299	1	15.031	7.882	0.010	7.641	1
	0.921	0.059	-1.045	1.000	11.876			2.825	3.264	-0.002		
	2.562							2.029				

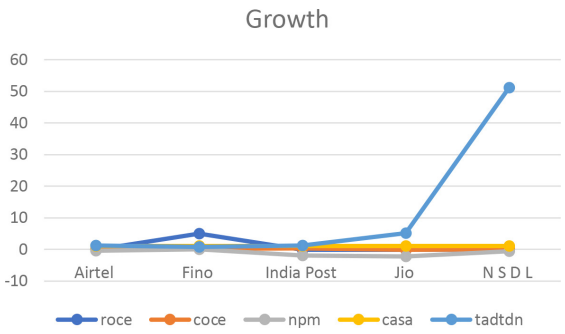


Figure 9. Growth of PBs.

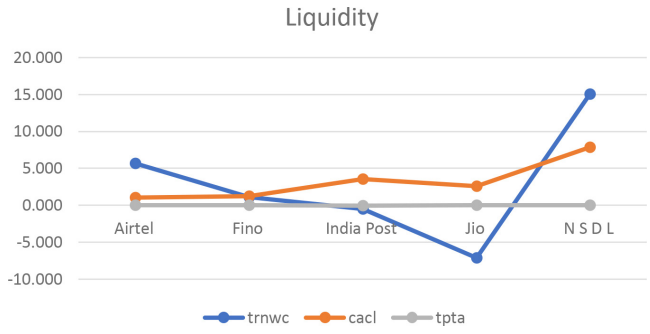


Figure 10. Liquidity of PBs.

Table 7. Equity, strategy and rank of PBs

	Equity				Strategy		Rank Analysis	
PB	ROE	CRAR	Avg Eq	Rank Eq	SRQ	Rank S	Rank Avg	Final Rank
Airtel	-0.7647	0.5793	-0.093	5	-0.232	3	3.33	4
Fino	-0.0257	0.7812	0.378	3	-0.187	1	2.67	2
India Post	-0.3116	0.6114	0.150	4	-0.220	2	3.33	4
Jio	-0.3056	27.1667	13.431	1	-0.268	4	3.17	3
N S D L	-0.0412	2.94678	1.453	2	-0.378	5	2.50	1
	-0.290	6.417			-0.257			
	3.064				-0.257		7.972	

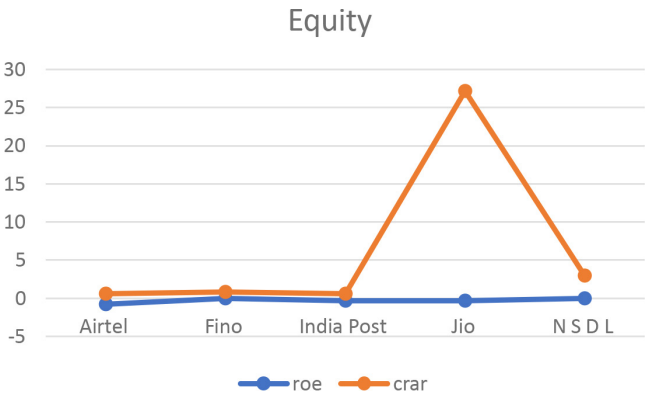


Figure 5. Equity of PBs.

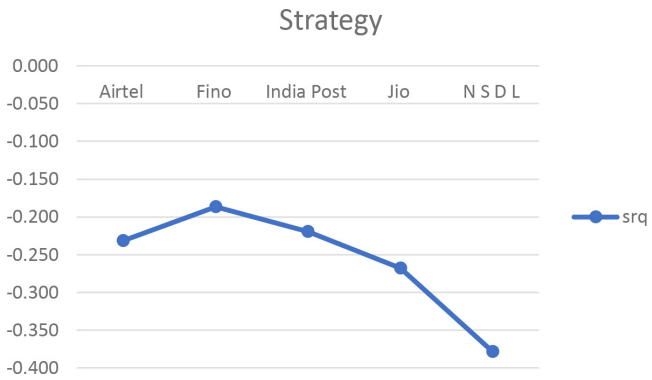


Figure 4. Strategy of PBs.

Annexure III

Table 8. One-way ANOVA test results of SFB

EAGLES	Sub-Criteria	Source	SS	df	MS	F	Prob > F	H_o
E	NIM	Between groups	0.014761078	8	0.001845135	16.1	0.0000	R[1]
		Within groups	0.006189138	54	0.000114614			
	NIITI	Between groups	0.025481641	8	0.003185205	2.01	0.0625	FR[2]
		Within groups	0.085539782	54	0.00158407			
	IITI	Between groups	25481636	8	0.003185205	2.01	0.0625	FR
		Within groups	0.085539784	54	0.00158407			
A	ROA	Between groups	0.036994731	8	0.004624341	2.48	0.023	R
		Within groups	0.100881161	54	0.00186817			
	TRTA	Between groups	0.027954377	8	0.003494297	14.6	0.0000	R
		Within groups	0.012948598	54	0.000239789			
	TADTA	Between groups	0.035583875	8	0.004447984	1.99	0.0658	FR
		Within groups	0.120926894	54	0.002239387			
	TDTA	Between groups	.098471289	8	.012308911	10.29	0.0000	R
		Within groups	.064604478	54	.001196379			
	NPAG	Between groups	0.056785276	8	0.00709816	1.60	0.1470	FR
		Within groups	0.23976728	54	0.004440135			
G	ROCE	Between groups	792.754981	8	99.0943726	2.64	0.0160	R
		Within groups	2024.65002	54	37.493519			
	COCE	Between groups	847.197598	8	105.8997	2.87	0.0099	R
		Within groups	1995.85414	54	36.9602619			
	NPM	Between groups	1.54485887	8	0.193107358	2.56	0.0190	R
		Within groups	4.06618771	54	0.075299772			
	CASA	Between groups	0.511430663	8	0.063928833	8.68	0.0000	R
		Within groups	0.397590864	54	0.007362794			
	TADTD	Between groups	0.059056236	8	0.00738203	2.62	0.0167	R
		Within groups	16886045.8	54	312704.552			
L	TRNWC	Between groups	26.6101075	8	3.32626344	0.54	0.8191	FR
		Within groups	331.035767	54	6.13029197			
	CACL	Between groups	1451.80445	8	181.475556	22.9	0.0000	R
		Within groups	427.960591	54	7.92519612			
	TPTA	Between groups	0.014187154	8	0.001773394	2.92	0.0087	R
		Within groups	0.032771885	54	0.000606887			
E	ROE	Between groups	5.89156392	8	0.736445491	2.41	0.0265	R
		Within groups	16.5023889	54	0.305599794			
	CRAR	Between groups	0.182440333	8	0.022805042	9.62	0.0000	R
		Within groups	0.128032377	54	0.00237097			
S	SRQ	Between groups	0.653730307	8	0.081716288	6.81	0.0000	R
		Within groups	0.647622748	54	0.011993014			

3 Rejected the H_o at 5% significance level

4 Failed to reject the H_o at 5% significance level

Annexure IV

Table 9. One-way ANOVA test results of PBs

EAGLES	Sub-Criteria	Source	SS	df	MS	F	Prob > F	H_0
E	NIM	Between groups	0.003113627	4	0.000778407	6.31	0.0012	R[3]
		Within groups	0.003082615	25	0.000123305			
	NIITI	Between groups	1.61682197	4	0.404205492	6.02	0.0016	R
		Within groups	1.67931347	25	0.067172539			
	IITI	Between groups	1.61682202	4	0.404205504	6.02	0.0016	R
		Within groups	1.67931349	25	0.06717254			
A	ROA	Between groups	0.14430681	4	0.036076703	2.25	0.0923	FR[4]
		Within groups	0.400853886	25	0.016034155			
	TRTA	Between groups	2.86000972	4	0.71500243	4.35	0.0083	R
		Within groups	4.10823836	25	0.164329534			
	TADTA	Between groups	1.26716996	4	0.316792491	17.4	0.0000	R
		Within groups	0.455771495	25	0.01823086			
	TDTA	Between groups	1.25774328	4	.31443582	10.72	0.0000	R
		Within groups	.733391291	25	0.028065595			
	NPAG	Between groups	0	4	0			
		Within groups	0	25	0			
G	ROCE	Between groups	119.985164	4	29.996291	4.19	0.0099	R
		Within groups	179.163847	25	7.1665539			
	COCE	Between groups	0.507761564	4	0.126940391	0.26	0.9031	FR
		Within groups	12.3878956	25	0.495515824			
	NPM	Between groups	22.7477903	4	5.68694759	2.39	0.0775	FR
		Within groups	59.3870534	25	2.37548214			
	CASA	Between groups	0	4	0			
		Within groups	0	25	0			
	TADTD	Between groups	11612.8373	4	2903.20934	2.32	0.0847	FR
		Within groups	31309.9287	25	1252.39715			
L	TRNWC	Between groups	1620.64446	4	405.161114	1.17	0.3497	FR
		Within groups	8689.90265	25	347.596106			
	CACL	Between groups	184.299643	4	46.0749107	2.02	0.1225	FR
		Within groups	570.534048	25	22.8213619			
	TPTA	Between groups	0.00371511	4	0.000928778	2.67	0.0556	FR
		Within groups	0.008695513	25	0.000347821			
E	ROE	Between groups	2.14716351	4	0.536790878	2.56	0.0635	FR
		Within groups	5.24393984	25	0.209757594			
	CRAR	Between groups	3252.82337	4	813.205842	31	0.000	R
		Within groups	656.241411	25	26.2496564			
S	SRQ	Between groups	0.130964412	4	0.032741103	0.95	0.4506	FR
		Within groups	0.859549574	25	0.034381983			