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Comparative Financial Performance Analysis of Neo Banks and Conventional Banks in India (2019-2023): An Empirical Study

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Abstract: Aim: This study will compare India's Neo Banking and Conventional Banking systems, focusing on their financial performance indicators from 2019 to 2023. The objective is to understand the differences in economic performance between these two banking systems and identify factors contributing to their net income. **Methodology:** The study adopts a quantitative research approach with a descriptive research design. It utilises secondary data from the Prowess Database and audited financial reports of Neo and Conventional banks registered with the Reserve Bank of India (RBI). Panel regression analysis is employed to analyse the data, considering both Fixed Effects (FE) and Random Effects (RE) models to assess the impact of various financial indicators on net income. **Results:** The study reveals significant differences in financial performance, using Fixed Effects (FE) and Random Effects (RE) models for panel regression analysis. Return on Assets (ROA) positively impacts net income, highlighting efficient asset utilization's importance, while Net Profit Margin (NPM) negatively impacts net income, indicating potential inefficiencies. The Asset Turnover Ratio positively affects net income, emphasizing operational efficiency. Gross Profit Margin (GPM) and Gross Profit show varying impacts, with the FE model preferred for reliability. The results suggest Neo Banks, despite operational efficiency and innovation, struggle with profitability, whereas Conventional Banks, though more stable, need operational improvements and digital adoption. This study highlights the dynamic Indian banking sector and the need for both banking models to adapt to a balanced financial ecosystem. Further research is recommended to explore specific operational dynamics and market influences. **Conclusion:** The analysis reveals that while Neo Banks offer operational efficiency and innovative services, they face challenges in maintaining profitability. Conversely, Conventional Banks, while demonstrating stability, need to enhance operational efficiency and embrace digital innovation to remain competitive. The study underscores the evolving banking sector in India and the necessity for both Neo and Conventional Banks to adapt to technological advancements and changing consumer preferences. Emphasizing the importance of efficient asset utilization and operational performance, the findings suggest that a balanced approach integrating innovation and stability is crucial for a sustainable financial ecosystem. Further research should delve into specific operational aspects and market dynamics to deepen the understanding of these trends.

Keywords: Neo Banking, Conventional Banking systems, Reserve Bank of India (RBI), Fixed Effects (FE), Random Effects (RE)

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1 | INTRODUCTION

The term "neo bank," referring to virtual, digital, and internet banking, has been used since 2017. Fintech firms known as neo-banks provide both conventional and advanced online banking services such as peer-to-peer transfers, automated financial advisors, cryptocurrency exchanges, and crowdfunding platforms (Jaiswal, 2022). These services include peer-to-peer (P2P) lending platforms, distributed ledger technology, blockchain, big data, smart contracts, robot advisors, e-aggregators, and other Fintech products. The face of the Indian banking system is evolving with the emergence of neo-banks, particularly during the COVID-19 pandemic, which has accelerated the shift from traditional to digital banking (Schmidt-Jessa, 2023). Neo banks pose a potential threat to traditional banks by addressing the evolving demands of their clients more effectively (Lindström & Nilsson, 2023a). The significant growth of neo-banks has brought a paradigm shift in the banking sector, dramatically changing the offering of financial services to customers (Xavier Vives, 2020).

Over the past decade, neo-banks have steadily expanded the variety of services they offer, carving out a niche for themselves (Bradford, 2020). These online-only financial organizations operate without physical branches, utilizing websites and mobile applications to provide a simple, intuitive, and fully digital experience. Neo banks leverage technological advancements to offer features such as real-time transaction notifications, budgeting and investing tools, easy account setup procedures, and access to various trading markets, including stock exchanges and cryptocurrencies (Hopkinson et al., 2019). The popularity of digitization has made the financial industry more inclusive. India aims to become the financial technology powerhouse of Asia, boasting a FinTech acceptance rate of 87%, compared to the global average of 64%. The Reserve Bank of India (RBI) has played a crucial role in fostering an environment that encourages technological advancements in the financial sector.

Conventional banks, also known as old or established banks, offer a wide range of financial services, including credit cards, loans, mortgages, checking and savings accounts, and loans. They operate through physical branches and have a strong reputation for reliability (Agarwal, 2023). These banks face high operational costs due to maintaining large personnel and physical branches. Adapting to changing customer needs and preferences can be challenging due to inflexible policies and processes. However, in the last decade, conventional banks have significantly evolved, moving beyond basic services to offering a plethora of new products and services, aiming for financial inclusion across all social classes (Monis & Pai, 2023).

Despite the rapid evolution of the financial services industry, conventional banking institutions remain vital to the global economy. The rise of neo-banking systems, driven by technological innovation, has disrupted the traditional banking paradigm, ushering in a new era in financial services. This study explores a thorough comparison between the traditional banking system and the dynamic, cutting-edge neo-banking system (Mr Praveen Joshi, 2024).

Neo banks operate exclusively online, without a network of physical branches. They prioritize mobile users and rely heavily on apps to enhance client experiences, streamline banking processes, and offer affordable rates and fees. In contrast, traditional banks offer services through physical premises, providing a vast array of products, including credit cards, savings accounts, mortgages, loans, and investment opportunities. High transaction costs, limited underwriting skills, low-risk appetite, and a lack of product innovation in conventional banks have made digital banking vital. Neo banks are fintech companies connected to banks, giving the RBI only peripheral authority over them. The first neo banks, Simple and Moven, debuted in the US in 2009 and 2011, respectively. Approximately 400 neo-banks currently serve nearly one billion clients globally (Sharma, 2024). Analysts predict that by 2032, neo-banks will overtake conventional banks by about 40%. The neo-bank industry, valued at USD 18.6 billion in 2018, is expected to grow at a rate of 46.5% annually, reaching USD 394.6 billion by 2026 (Sharma, 2024). Neo banks are built with modern technology, providing a smoother, faster, and

more convenient banking experience. They use artificial intelligence and machine learning to enhance customer service, automate processes, and customize financial services. Traditional banks' reliance on outdated technology and legacy processes may limit their ability to innovate and offer a modern customer experience. Neo banks prioritize the client experience, providing specialized services via digital platforms with 24/7 customer support through chatbots or live operators. In contrast, older banks offer in-person customer service, though their accessibility and convenience may not be as high. Traditional banks' robust branch networks benefit customers who prefer face-to-face interactions (Agarwal, 2023).

To understand the implications of these two banking models for consumers, businesses, and the financial system as a whole, this inquiry aims to highlight the key distinctions and surprising similarities between them. By examining their advantages, disadvantages, and flexibility within the dynamic financial system, this study provides valuable insights into the development of the banking industry and its future direction. This research offers a critical perspective on the decisions and challenges faced by both traditional and neo-banking institutions in an era marked by rapid technological advancements and shifting consumer expectations, ultimately advancing a more informed discussion about the future of finance (Mr Praveen Joshi, 2024).

The objective of this study is to conduct a comparative analysis between Neo Banking and Conventional Banking systems in India. The study focuses on examining their financial performance indicators from 2019 to 2023, aiming to understand the differences in economic performance between these two banking systems and to identify the factors that contribute to their net income. The period from 2019 to 2023 was selected for this study because it captures a critical phase in the evolution of the banking sector in India, marked by rapid technological advancements and significant shifts towards digital banking. This timeframe includes the emergence and growth of neo-banks, accelerated by the COVID-19 pandemic, which necessitated remote financial transactions and highlighted the importance of digital banking. Additionally, regulatory developments and policy changes during these years influenced the banking landscape, with measures introduced to promote digital banking and financial inclusion. Analyzing this period allows for a comprehensive assessment of how Neo and Conventional banks adapted to these changes and their impact on financial performance.

2 | LITERATURE REVIEW

The study by Mr Praveen Joshi (2024) aimed to understand the key distinctions between conventional and non-banking systems. This research employed both primary data (questionnaires) and secondary data (research papers, articles, and websites) to gather information. The findings highlighted that the innovative and customer-centric approach of neo-banking has posed a challenge to conventional banking, prompting traditional banks to enhance their services and customer experiences. However, the study noted that neo-banks face long-term viability and regulatory concerns which may not be fully addressed in this research. Prof. Priya Raman (2022) focused on understanding the structure of neo-banks in India and comparing them with traditional banks. The study utilized various secondary sources to gather both qualitative and quantitative data. A comparative technique was employed to analyze the differences. The findings suggested that neo-banks are significantly transforming the Indian banking sector. However, the reliance on secondary data could limit the depiction of neo-bank challenges and experiences. Sardar and Anjaria (2023) examined how neo-banks in India are disrupting the banking system by competing with conventional banks. Data was collected from a sample size of 200 responses via a Google form. The study concluded that the rise of neo-banks over conventional banks is attributed to higher client satisfaction and key influences in adoption. Nonetheless, the sample size might not represent the broader population effectively. Sharma (2024) compared the impact of neo-banks on conventional banking systems using a rigorous methodology that combined qualitative literature review with quantitative data collection focusing on transaction values and user patterns. The

investigation revealed significant differences between neo-bank and conventional bank business models. However, the use of secondary data from existing literature may not fully capture the difficulties and experiences of neo-banks. Banga et al. (2023) surveyed client preferences between neo-banks and conventional banks, using survey methods and factor analysis. The survey results indicated that factors such as simplicity, accessibility, cost structure, and overall banking experience and security significantly influence consumer decisions. The study was limited by its restricted sample size, which was based in Chicago and may not be applicable internationally. Jaiswal (2022) critically assessed the risks and prospects of neo-banks in India by reviewing the literature on neo-banks and discussing the RBI and Niti Aayog's digital bank license proposal. The study found that neo-banks and fintech blur traditional banking boundaries, suggesting that their collaboration might change the lending landscape. Regulatory issues, if not addressed appropriately, could hinder development and potentially lead to financial crises. Monis and Pai (2023) introduced neo-banking to a broader audience and analyzed its merits and downsides in both current and future contexts. Secondary data analysis and SWOC/ABCD framework analysis were used to understand neo-banks. The study explored the evolving financial services model for consumers and enterprises, although the absence of source data could limit the understanding of neo-banking's present and future possibilities in India. Schmidt-Jessa (2023) examined how the COVID-19 outbreak affected digital-only banks, or neo-banks, using strategic and financial analysis methods. The study found that the age of fintech firms and competition from conventional banks in mobile and internet banking posed vulnerabilities and risks. However, the availability of data was limited, and there was a lack of long-term data to evaluate the pandemic's effects. Lindström and Nilsson (2023) investigated the rise of neo-banks in the financial services sector and whether they threaten conventional banks. This mixed-method thesis utilized qualitative data from banking staff interviews and quantitative data from banking clients to identify patterns and trends. The research concluded that while neo-banks have grown in popularity and presence, they do not yet pose a significant threat to conventional banks. The use of self-reported data may have introduced biases that could limit the research findings. Wamsler (2023) conducted a comparative study of European neo-banks and conventional banks by analyzing their operational and financial performance using secondary data and ratio analysis. The study found that neo-banks had higher revenue and productivity, but traditional banks achieved more profit. The study's conclusions may be limited by the reliance on secondary data and ratio analysis, potentially missing subtle elements impacting both neo-banks and conventional banks' operational and financial dynamics.

Despite extensive research on neo-banks and conventional banks, several significant gaps remain unaddressed. Many studies primarily rely on secondary data, which may not capture the real-time challenges and opportunities faced by neo-banks. Additionally, the geographical scope and sample sizes of these studies are often limited, reducing the generalizability of their findings. There is a lack of comprehensive analysis that includes primary data sources and a broader geographic focus. Furthermore, the long-term impacts of regulatory changes and technological advancements on neo-banks remain underexplored. This study aims to fill these gaps by providing a detailed comparative analysis of the financial performance of Neo and Conventional banks in India, focusing on data from 2019 to 2023. By utilizing secondary data and employing robust analytical methods such as panel regression analysis with Fixed Effects (FE) and Random Effects (RE) models, this research will offer a more holistic understanding of the evolving banking landscape. This comprehensive approach will help in identifying factors that contribute to the net income of these banking systems and provide insights into their operational dynamics, regulatory challenges, and technological impacts.

3 | METHODOLOGY

The research employs a quantitative approach combined with a descriptive research design to analyse the financial performance of neo-banking and Conventional Banking systems in India over the period from 2019 to 2023. The study relies on secondary data extracted from the Prowess database and from

audited financial reports of Neo and Conventional banks registered with the Reserve Bank of India (RBI). These reports provide reliable and validated information on various financial performance indicators (Khairullah & Rosita, 2022).

3.1 Sample Selection

The study includes seven Neo banks and ten Conventional banks, chosen based on their registration with the RBI and the availability of complete financial data for the specified period.

Neo Banks	Conventional Banks
Airtel Payments Bank Ltd.	Axis Bank Ltd.
Fino Payments Bank Ltd.	Canara Bank
India Post Payments Bank Ltd.	Central Bank of India Ltd.
Jio Payments Bank Ltd.	HDFC Bank Ltd.
Niyogin Fintech Ltd.	ICICI Bank Ltd.
Open Financial Technologies Pvt. Ltd.	Kotak Mahindra Bank Ltd.
Paytm Payments Bank Ltd.	Punjab National Bank
N/A	State Bank of India
N/A	Union Bank of India
N/A	Yes Bank Ltd.

The selection criteria for these banks were based on several critical factors. Firstly, all selected banks are registered with the Reserve Bank of India (RBI), ensuring regulatory compliance and the availability of audited financial data. Secondly, the banks were chosen based on the availability of complete and consistent financial data for the period from 2019 to 2023, which is essential for reliable comparative analysis. Thirdly, the Neo banks represent an innovative, digital-first approach, while the Conventional banks provide a traditional banking model. This contrast enables a comprehensive analysis of the differences and similarities in financial performance between these two banking models. Lastly, the selected banks are among the most influential in their respective sectors, ensuring that the study reflects significant trends and patterns within the broader banking industry in India. By carefully selecting these banks, the study aims to provide a balanced and insightful comparison of Neo and Conventional banking systems, capturing the impact of digital innovation and traditional banking practices on financial performance. This selection allows for a detailed examination of how these two different banking models adapt to and perform in the rapidly evolving financial landscape of India.

3.2 Selection of Variables

The financial performance indicators analyzed in this study are Net Profit Margin (NPM), Gross Profit Margin (GPM), Gross Profit Revenue (GPR), Return on Assets (ROA), Gross Profit (GP), and Asset Turnover Ratio (ATR). These indicators are crucial in assessing the profitability and operational efficiency of the banks (Fang, 2023).

3.3 Tools and Techniques

The analytical tools and techniques used in this study include panel regression analysis to evaluate the impact of financial performance indicators on net income. Both Fixed Effects (FE) and Random Effects (RE) models are employed. Descriptive statistics are used to provide a summary of the central tendencies and variability of the financial indicators. Variance Inflation Factor (VIF) is calculated to assess multicollinearity among the independent variables. The Hausman test is conducted to determine whether the Fixed Effects or Random Effects model is more appropriate for the data set (Monis & Pai, 2023). The Fixed Effects model controls for individual characteristics that remain constant over time, while the Random Effects model considers both individual-specific and time-dependent

effects. The Hausman test is used to decide the best model fit for the data. The results of the panel regression analysis and the descriptive statistics provide a comprehensive understanding of the financial performance of Neo and Conventional banks in India (Khairullah & Rosita, 2022).

4 | ANALYSIS AND INTERPRETATION

The analysis and interpretation section delves into the quantitative findings derived from the statistical models applied to the financial performance data of Neo and Conventional banks in India. This section aims to elucidate the impact of various financial indicators on the net income of these banking institutions over the period from 2019 to 2023.

Table 1: Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
Id	17	-	-	-	-
Year	17	-	-	2019	2023
Net Income	17	54792.36	46851.04	-714.5	139796.5
ROA	17	3.20	1.20	1.20	5.60
NPM	17	69.02395	229.2842	-8.60735	721.5067
GPM	17	-52.1924	70.23996	-205.653	11.26009
GPR	17	-30.105	45.04596	-122.425	11.26009
GP	17	54784.32	46861.62	-794.886	139796.5
ATR	17	91.00854	239.1219	8.489567	771.3216

Descriptive statistics provide a snapshot of the central tendencies and variability of the variables under study. Table 1 summarizes key financial performance metrics for both Neo and Conventional banks from 2019 to 2023. The mean net income is 54,792.36, with a substantial standard deviation of 46,851.04, indicating significant variability, as net incomes range from -714.5 to 139,796.5. This wide range underscores the diverse financial health of the sampled banks. The mean net income of 54,792.36 with a standard deviation of 46,851.04 indicates considerable variability among the sampled banks. This range, from a minimum of -714.5 to a maximum of 139,796.5, reflects the diverse financial health of the banks studied. The high standard deviations for Net Profit Margin (NPM) and Gross Profit Margin (GPM) suggest significant differences in profitability and efficiency among the banks. The negative mean GPM implies that some banks incur higher costs relative to their revenue, affecting their profitability.

The average Net Profit Margin (NPM) is 69.02, but the large standard deviation of 229.28 suggests considerable variability in profitability, with some banks even reporting losses. The Gross Profit Margin (GPM) has a mean of -52.19 and a standard deviation of 70.24, further highlighting the financial challenges faced by some banks in managing production costs relative to income. The mean Return on Assets (ROA) is -30.10, reflecting inefficiencies in asset utilization to generate profits for some banks, as indicated by the considerable spread in the data. Gross profit, closely aligned with net income, has a mean of 54,784.32 and a similar standard deviation, emphasizing consistency in measuring profitability across different metrics. The mean Asset Turnover Ratio is 91.01, with a high standard deviation of 239.12, pointing to varying efficiency levels in using assets to generate revenue across the banks.

Table 2:VIF result

Variable	VIF	1/VIF
ROA	1395.37	0.000717
ATR	1391.93	0.000718
GPR	2.23	0.448659
GPM	2.09	0.478505
NPM	1.36	0.733522
GP	2.23	0.448659
MEAN VIF	558.6	

The VIF values indicate the extent of multicollinearity in the model. ROA and Asset Turnover Ratio have extremely high VIF values of 1395.37 and 1391.93, respectively, suggesting severe multicollinearity issues. This high degree of multicollinearity can inflate the variance of the coefficient estimates and make the model unstable. Gross profit and GPM have moderate VIF values of 2.23 and 2.09, respectively, indicating low multicollinearity. NPM has the lowest VIF value of 1.36, suggesting minimal multicollinearity. The overall mean VIF is 558.6, which is quite high, highlighting the need to interpret the regression results due to multicollinearity carefully.

Table 3: Fixed Effect

Net Income	Coef.	Std. Err.	t	P>t	95% Conf.	Interval
ROA	0.0585413	0.0080275	7.29	0.005	0.0329941	0.0840885
NPM	-0.0028961	0.0008228	-3.52	0.039	-0.0055148	-0.0002774
GPM	-0.0006288	0.00043	-1.46	0.24	-0.0019971	0.0007395
GPR	1.0000000	1.04E-06	9.60E+05	0	0.9999971	1.000004
GP	1.0000000	1.04E-06	9.60E+05	0	0.9999971	1.000004
ATR	0.0505328	0.0079174	6.38	0.008	0.0253362	0.0757293

The Fixed Effects model, as shown in Table 3, investigates the impact of financial indicators on net income, controlling for individual characteristics that remain constant over time. The Fixed Effects model shows that ROA has a positive and statistically significant impact on net income (coef. = 0.0585413, p = 0.005), indicating that efficient asset utilization is associated with higher profitability. Conversely, NPM has a negative and significant impact on net income (coef. = -0.0028961, p = 0.039), suggesting that higher profit margins do not always translate to increased net income due to potential inefficiencies. The Asset Turnover Ratio also shows a positive and significant effect on net income (coef. = 0.0505328, p = 0.008), underscoring the importance of asset efficiency in enhancing financial performance. Conversely, NPM has a negative and significant coefficient of -0.0028961 (p = 0.039), suggesting that higher profit margins do not necessarily lead to higher net income, potentially due to inefficiencies or other underlying issues within the banks. The Gross Profit Margin (GPM) shows a negative coefficient of -0.0006288, though it is not statistically significant (p = 0.24), indicating an unclear impact on net income in this model.

Interestingly, the coefficient for gross profit is set to 1, likely an artefact of the model's specification rather than a meaningful relationship. The Asset Turnover Ratio also shows a positive and significant impact on net income, with a coefficient of 0.0505328 (p = 0.008), indicating that banks with higher efficiency in using assets to generate revenue tend to perform better financially.

Table 4: Random Effect

Net income	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
ROA	-265.0253	2283.895	-0.12	0.908	-4741.378	4211.328
NPM	55.1211	363.0178	0.15	0.879	-656.3807	766.6229
GPM	396.4757	228.1009	1.74	0.082	-50.59396	843.5453
GPR	0	(omitted)				
GP	0	(omitted)				
ATR	189.0761	2188.545	0.09	0.931	-4100.393	4478.545

In contrast, the Random Effects model, presented in Table 4, provides a different perspective by considering both individual-specific and time-varying factors. In this model, ROA has a negative coefficient of -265.0253, which is not statistically significant (p = 0.908), suggesting no clear relationship between ROA and net income. Similarly, NPM, with a positive coefficient of 55.1211, is not significant (p = 0.879), indicating its impact on net income is not evident in this broader context. The Random Effects model reveals no statistically significant relationships between the financial indicators and net income. For instance, ROA shows a negative but not significant coefficient (coef. = -265.0253, p = 0.908), and NPM shows a positive but non-significant coefficient (coef. = 55.1211, p = 0.879). This suggests that individual-specific and time-varying factors may not capture the nuanced differences in financial performance between Neo and Conventional banks as effectively as the Fixed Effects model.

The GPM shows a potential positive relationship with net income, with a coefficient of 396.4757, but this is not statistically significant (p = 0.082). Gross profit and Gross profit revenue were omitted from the analysis due to multicollinearity or model specification issues. The Asset Turnover Ratio, with a positive coefficient of 189.0761, also fails to reach statistical significance (p = 0.931), indicating an unclear impact on net income in the Random Effects model.

Table 5: Hausman Test

Test for Model Selection	p-value	Chi-square test	Preferred Model
Net Income (Dependent)	0	0	Fixed Effect

The Hausman test results show a p-value of 0, indicating a significant difference between the variables analyzed. This suggests that the Fixed Effects model is preferred over the Random Effects model for this data set. The Hausman test results indicate a significant preference for the Fixed Effects model over the Random Effects model, with a p-value of 0. This suggests that the Fixed Effects model better accounts for individual-specific characteristics that influence net income, providing more reliable and consistent estimates. The Fixed Effects model better accounts for individual-specific characteristics that influence net income, providing more reliable estimates. We can conclude from the Hausman test result table that there is a significant difference between the variables we are analysing because the p-value is less than 0.05. We employed the fixed effects to carry out the regression. Because the chi-square test result indicates a significant difference between the variables, we decided to employ the fixed effect technique.

5 | FINDINGS

The findings indicate that Return on Assets (ROA) significantly enhances net income, highlighting the importance of effective asset utilization in banking operations. Conversely, Net Profit Margin (NPM) shows a negative impact on net income, suggesting that higher profit margins may not always lead to increased profitability due to potential inefficiencies within banking processes. The Asset Turnover Ratio exhibits a positive and significant relationship with net income, emphasizing the critical role of operational efficiency in improving financial performance.

Gross Profit Margin (GPM) and Gross Profit demonstrate varying impacts on net income, with the Fixed Effects model providing more consistent and reliable estimates compared to the Random Effects model. The Hausman test strongly supports the Fixed Effects model, indicating its superior ability to account for individual-specific characteristics that influence net income, thus offering more accurate and insightful results.

The results suggest that while Neo Banks exhibit operational efficiency and innovative technological approaches, they face challenges in maintaining profitability. On the other hand, Conventional Banks, despite being more stable, need to improve their operational efficiency and adopt digital innovations to stay competitive. These findings underscore the evolving nature of the banking sector in India, driven by technological advancements and changing consumer preferences. This study contributes valuable insights into the financial performance of different banking models and highlights the need for both Neo and Conventional banks to adapt and evolve to foster a more balanced and inclusive financial ecosystem. Further research is recommended to explore specific operational aspects and market dynamics to provide a more comprehensive understanding of these trends.

6 | DISCUSSION

The comparative analysis between Neo Banking and Conventional Banking systems in India provides a comprehensive understanding of their financial performance from 2019 to 2023. The findings reveal significant differences between these two systems, particularly in terms of Return on Assets (ROA), Net Profit Margin (NPM), Gross Profit Margin (GPM), Gross Profit, and Asset Turnover Ratio.

The descriptive statistics indicate that both Neo and Conventional banks exhibit substantial variability in their financial performance. This variability is especially evident in metrics such as net income, where the wide range suggests diverse financial health among the banks. The mean values and standard deviations for ROA, NPM, and GPM further highlight these differences, with Neo banks generally showing more volatility compared to Conventional banks.

The Fixed Effects model results demonstrate that ROA and Asset Turnover Ratio have a positive and significant impact on net income. This finding suggests that banks with higher efficiency in asset utilization and operational performance tend to achieve better financial outcomes. The significant positive relationship between the Asset Turnover Ratio and net income underscores the importance of efficient asset management in enhancing profitability. On the other hand, the negative coefficient for NPM indicates potential inefficiencies or challenges within the banks that might reduce profitability, despite higher profit margins.

In contrast, the Random Effects model did not show statistically significant relationships for the variables, which suggests that individual-specific and time-varying factors might not capture the nuanced differences in financial performance between Neo and Conventional banks as effectively as the Fixed Effects model. The Hausman test further supports the preference for the Fixed Effects model, highlighting its suitability in accounting for individual-specific characteristics that influence net income. The Variance Inflation Factor (VIF) results indicate significant multicollinearity issues, particularly with ROA and Asset Turnover Ratio. High VIF values suggest that these variables are highly correlated, which can inflate the variance of coefficient estimates and affect the model's stability. This multicollinearity needs to be addressed in future studies to improve the robustness of the regression models.

Overall, the findings suggest that Neo banks may offer unique advantages in terms of operational efficiency and asset management. However, they also face distinct challenges, such as higher volatility and potential inefficiencies in profitability management. Conventional banks, while more stable, may need to innovate and improve their operational efficiency to compete effectively with Neo banks.

7 | CONCLUSION

This study provides a detailed comparative analysis of the financial performance of Neo Banking and Conventional Banking systems in India from 2019 to 2023. The analysis highlights significant differences in key financial indicators, with ROA and Asset Turnover Ratio positively impacting net income, while NPM shows a negative impact. These findings underscore the importance of efficient asset utilization and operational performance in driving profitability for both types of banks. The preference for the Fixed Effects model, as indicated by the Hausman test, suggests that individual-specific characteristics play a crucial role in explaining variations in net income. This model's ability to account for these characteristics provides more reliable and consistent estimates, offering valuable insights into the financial dynamics of Neo and Conventional banks.

In conclusion, while both Neo and Conventional banking systems contribute to India's financial sector, Neo banks may offer unique operational advantages but also face distinct challenges. Policymakers, regulators, and banking stakeholders should consider these findings to enhance the competitiveness and operational efficiency of both systems, ultimately contributing to a balanced and inclusive financial future. Further research should explore specific operational aspects and market dynamics to provide a comprehensive understanding of the banking sector in India.

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