

## EVALUATION OF FINANCIAL PERFORMANCE OF BANKING SECTOR IN INDIA – A CAMEL APPROACH

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| ARTICLE INFO                                                                               | ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Article history:</b><br><b>Received</b> 20 February 2023<br><b>Accepted</b> 08 May 2023 | <p><b>Purpose:</b> The study examines the financial performances of selected Public Sector Undertaking Banks (PSUB) and Private Sector Banks (PSB). Furthermore, this study examines banks' efficiency concerning various financial aspects such as stability, liquidity, and profitability and their impact on financial performance.</p> <p><b>Theoretical framework:</b> Numerous studies have been conducted to evaluate the financial performance of commercial banks. But after the COVID pandemic, only a few studies were conducted on the performance of banks. However, there is still much to assess regarding the comparative financial performance of public and private sector banks in India.</p> <p><b>Design/methodology/approach:</b> The study of financial performance of banks conducted on six PSUB and six PSB are selected based on advances as a percentage of deposits with the top three and bottom three banks from the PSUB and PSB. This research compares PSUB to PSB using a T-test for independent samples. The data is collected from secondary sources gathered from annual and RBI annual reports from 2017 to 2021.</p> <p><b>Findings:</b> Results from a comparison test show that, even though PSUB has made a lot of progress, they are still not performing up to the standard that PSB set. According to the report, PSB outperformed PSUB in the areas of CAR, NPA to NA, PPE, ROA, and liquid assets to total deposits concerning the CAMEL approach.</p> <p><b>Research, Practical &amp; Social implications:</b> Future studies can consider other indicators of CAMEL components, like the percentage of gross NPA, net profit margin, interest income to total funds, operating expenses to total funds, credit deposit ratio, cash to deposit ratio, and some other samples of banks, to assess the financial performance of banks.</p> <p><b>Originality/value:</b> This research focuses on the financial performances of selected PSUBs and PSBs. The findings of this scholarly article state that the performances of the PSBs are the best, which means the PSUBs are lacking towards the customers in their performances. This research may be helpful to the policymakers in the PSUBs to identify their problems and rectify them.</p> |
| <b>Keywords:</b><br>Commercial Banks;<br>Bank Performance;<br>Profitability;<br>Liquidity. | <p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i5.1647">https://doi.org/10.26668/businessreview/2023.v8i5.1647</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |



## AVALIAÇÃO DO DESEMPENHO FINANCEIRO DO SETOR BANCÁRIO NA ÍNDIA - UMA ABORDAGEM CAMELO

### RESUMO

**Objetivo:** O estudo examina o desempenho financeiro de Bancos Empreendedores do Setor Público (PSUB) e Bancos do Setor Privado (PSB) selecionados. Além disso, este estudo examina a eficiência dos bancos em relação a vários aspectos financeiros, como estabilidade, liquidez e lucratividade e seu impacto no desempenho financeiro.

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**Enquadramento teórico:** Numerosos estudos têm sido realizados para avaliar o desempenho financeiro dos bancos comerciais. Mas após a pandemia de COVID, apenas alguns estudos foram realizados sobre o desempenho dos bancos. No entanto, ainda há muito a avaliar em relação ao desempenho financeiro comparativo dos bancos dos setores público e privado na Índia.

**Desenho/metodologia/abordagem:** O estudo do desempenho financeiro dos bancos realizado em seis PSUB e seis PSB é selecionado com base nos adiantamentos como percentual de depósitos com os três primeiros e os três últimos bancos do PSUB e PSB. Esta pesquisa compara PSUB a PSB usando um teste T para amostras independentes. Os dados são coletados de fontes secundárias de relatórios anuais e RBI de 2017 a 2021.

**Resultados:** Os resultados de um teste de comparação mostram que, embora o PSUB tenha feito muitos progressos, eles ainda não estão de acordo com o padrão definido pelo PSB. De acordo com o relatório, o PSB superou o PSUB nas áreas de CAR, NPA para NA, PPE, ROA e ativos líquidos para depósitos totais em relação à abordagem CAMEL.

**Implicações de pesquisa, práticas e sociais:** Estudos futuros podem considerar outros indicadores dos componentes CAMEL, como a porcentagem de NPA bruto, margem de lucro líquido, receita de juros para fundos totais, despesas operacionais para fundos totais, taxa de depósito de crédito, taxa de caixa para depósito e algumas outras amostras de bancos, para avaliar o desempenho financeiro dos bancos.

**Originalidade/valor:** Esta pesquisa se concentra nos desempenhos financeiros de PSUBs e PSBs selecionados. As conclusões deste artigo acadêmico afirmam que os desempenhos dos PSBs são os melhores, o que significa que os PSUBs estão deixando a desejar em relação aos clientes em seus desempenhos. Esta pesquisa pode ser útil para os formuladores de políticas nos PSUBs para identificar seus problemas e corrigi-los.

**Palavras-chave:** Bancos Comerciais, Desempenho Bancário, Rentabilidade, Liquidez.

## EVALUACIÓN DEL DESEMPEÑO FINANCIERO DEL SECTOR BANCARIO EN LA INDIA: UN ENFOQUE CAMEL

### RESUMEN

**Propósito:** El estudio examina el desempeño financiero de Bancos Empresariales del Sector Público (PSUB) y Bancos del Sector Privado (PSB) seleccionados. Además, este estudio examina la eficiencia de los bancos en relación con varios aspectos financieros como la estabilidad, la liquidez y la rentabilidad y su impacto en el desempeño financiero.

**Marco teórico:** Se han realizado numerosos estudios para evaluar el desempeño financiero de los bancos comerciales. Pero después de la pandemia de COVID, solo se han realizado unos pocos estudios sobre el desempeño de los bancos. Sin embargo, aún queda mucho por evaluar con respecto al desempeño financiero comparativo de los bancos del sector público y privado en la India.

**Diseño/metodología/enfoque:** El estudio de desempeño financiero de los bancos realizado en seis PSUB y seis PSB se selecciona con base en los anticipos como porcentaje de los depósitos con los tres primeros y los tres últimos bancos del PSUB y PSB. Esta investigación compara PSUB con PSB utilizando una prueba t de muestras independientes. Los datos se recopilan de informes anuales secundarios y fuentes RBI de 2017 a 2021.

**Resultados:** Los resultados de una prueba comparativa muestran que aunque PSUB ha progresado mucho, todavía no está a la altura del estándar establecido por PSB. Según el informe, PSB superó a PSUB en las áreas de CAR, NPA a NA, PPE, ROA y activos líquidos a depósitos totales en relación con el enfoque CAMEL.

**Implicaciones de investigación, prácticas y sociales:** los estudios futuros pueden considerar otros indicadores de los componentes de CAMEL, como el porcentaje bruto de NPA, el margen de utilidad neta, los ingresos por intereses sobre los fondos totales, los gastos operativos sobre los fondos totales, la tasa de crédito de depósito, la tasa de efectivo para depósito y algunas otras muestras de bancos, para evaluar el desempeño financiero de los bancos.

**Originalidad/Valor:** Esta encuesta se enfoca en el desempeño financiero de PSUB y PSB seleccionados. Las conclusiones de este artículo académico afirman que los PSB funcionan mejor, lo que significa que los PSUB están rezagados con respecto a los clientes en su rendimiento. Esta encuesta puede ser útil para que los encargados de formular políticas en PSUB identifiquen sus problemas y los solucionen.

**Palabras clave:** Bancos Comerciales, Desempeño Bancario, Rentabilidad, Liquidez.

## INTRODUCTION

Any economy needs a strong banking system to function (Gupta, 2014; Jain & Gupta, 2004; Koundal, 2012). Banks are also important for promoting economic growth as they are the primary source of capital for business (Abusharbeh, M.2020). In this regard, according to Allay (2013), the banking system is crucial to the survival of financial institutions and markets. The banking sector had a major impact on the financial inclusion of the nation's economy (Hawaldar, Lokesha, Kumar, Pinto, and Sison (2017) . Many reforms occurred in banking sector in between 1922-1993 for development of banking sector in India to give the better service to the beneficiaries (Koundal, 2012). To safeguard the interest of beneficiaries the government of India nationalized the 14 major banks in 1969. To assess the strengths and inefficiencies of the banking industry, a financial performance assessment of banks is essential. Following independence, the RBI launched several policies to boost economic growth. The globally accepted CAMEL approach i.e., Capital adequacy, Assets quality, Management efficiency, Earning, and Liquidity (RBI, 2012) includes financial performance and position, operating and management conditions, Compliance and Summary evaluation as prescribed by RBI for Indian banks and a CACS model (capital adequacy, Asset quality, Compliance, Systems, and Controls) for foreign banks. According to Dash & Das (2009), Mousa (2016), and Rostami (2015), bank regulatory bodies developed the uniform financial institution rating system in 1979. In the USA, the CAMEL rating system was first implemented in 1980. As a rating system within examinations of banking institutions, it was implemented by the regulatory authority (Mousa, 2016; Shaddady & Moore, 2018). Six elements are taken into account when determining a bank's CAMEL rating: capital adequacy, assets quality, management efficiency, earning, and liquidity (Aweke & Alemu, 2017; Mousa, 2016; RBI, 2012; Rostami, 2015; Srinivasan & Britto, 2017).

The PSUB in India is still struggling and underperforming in many areas, such as profitability, controlling of nonperforming assets (NPAs), and operations. PSUB must reevaluate their policies in light of its benefits and drawbacks and the marketplace they are servicing (Sandeep Kaur 2021). Therefore this study attempts to evaluate the financial performance of banking sector in India by applying the CAMEL approach which consisting of capital adequacy, asset quality, management efficiency, earnings and liquidity.

## Statement of the Problem

Economic development of a country depends on the performance of commercial banks. Financial performance is measured by the considering the various factors which could be used by management, regulators, and supervisors to understand performance in banking industry. If we look at the total business in the banking sectors business increasing consistently for both public and private sectors bank (figure 1).

Figure 1. The Business volume of PSUB and PSB

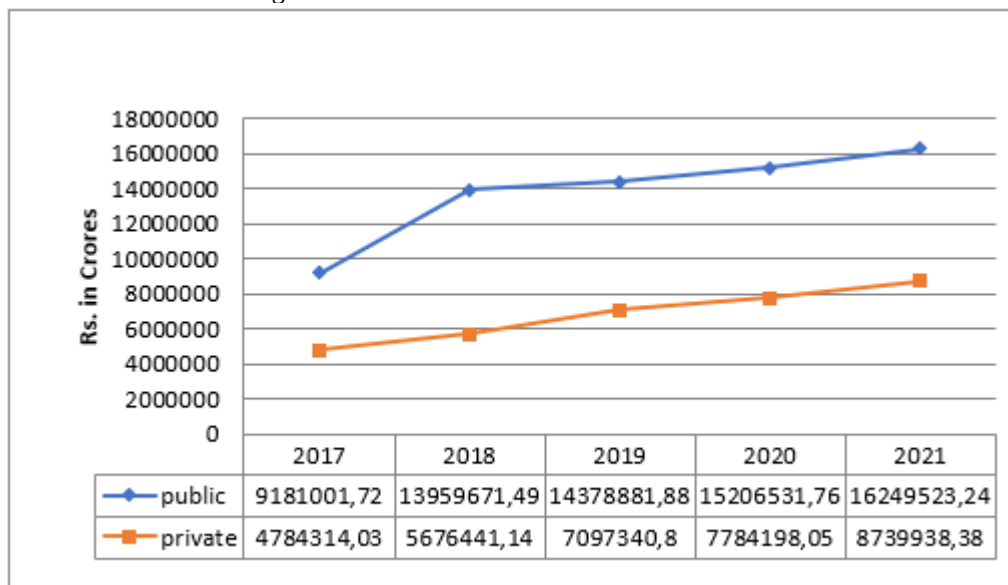


Figure 1 shows year wise total business for both public and private sectors bank. Business volume of both PSUB and PSB have consistently increasing from 2017-2021. However business volume of the PSUB is higher than PSB over the periods. Hence the PSUB growth is very high as compare to the PSB with subject to business size.

Figure 2. Borrowings of PSUB and PSB.

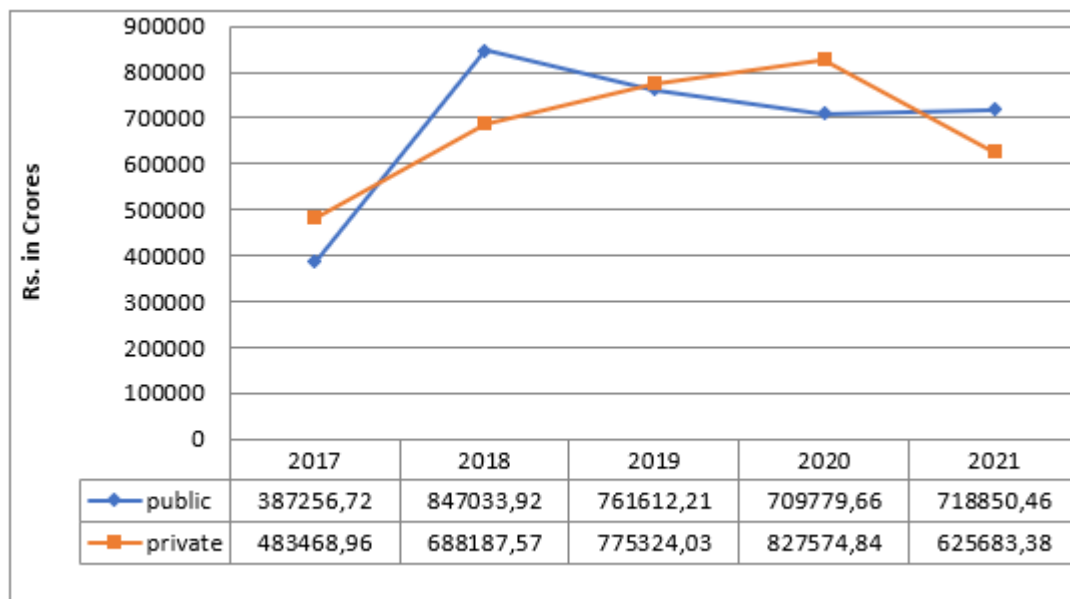


Figure 2 shows year wise borrowings for both PSUB and PSB. Borrowings of the PSB have consistently increasing till 2020 after that it is decreases. In PSUB is also increased till 2018 after that it is decreasing. Overall the debt borrowings of the PSB are more than the PSUB during the study period. Hence the PSB is highly leveraged with respect to borrowings.

Figure 3. Net profit of PSUB and PSB.

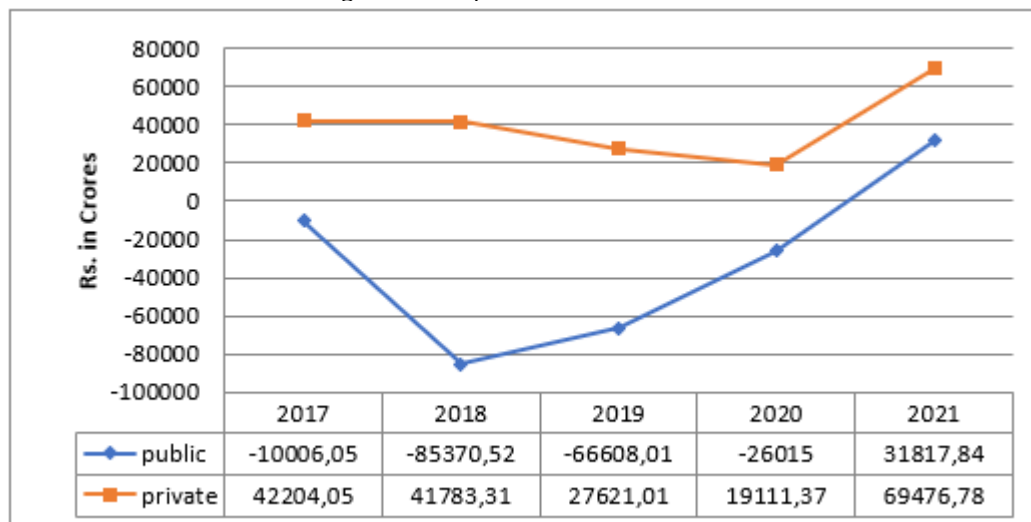


Figure 3 shows year wise net profit of both PSUB and PSB. Net profit of the PSUB is showing negatively and decreasing till 2018, after that it is consistently increased, finally 2021 it shows positively. In PSB net profit is showing positively it is consistently decreased till 2020

then after it is increased. It indicates PSB net profit is very high as compare to the PSUB with subject to net profit.

Figure 4. Percentage of net NPA's on advances of PSUB and PSB.

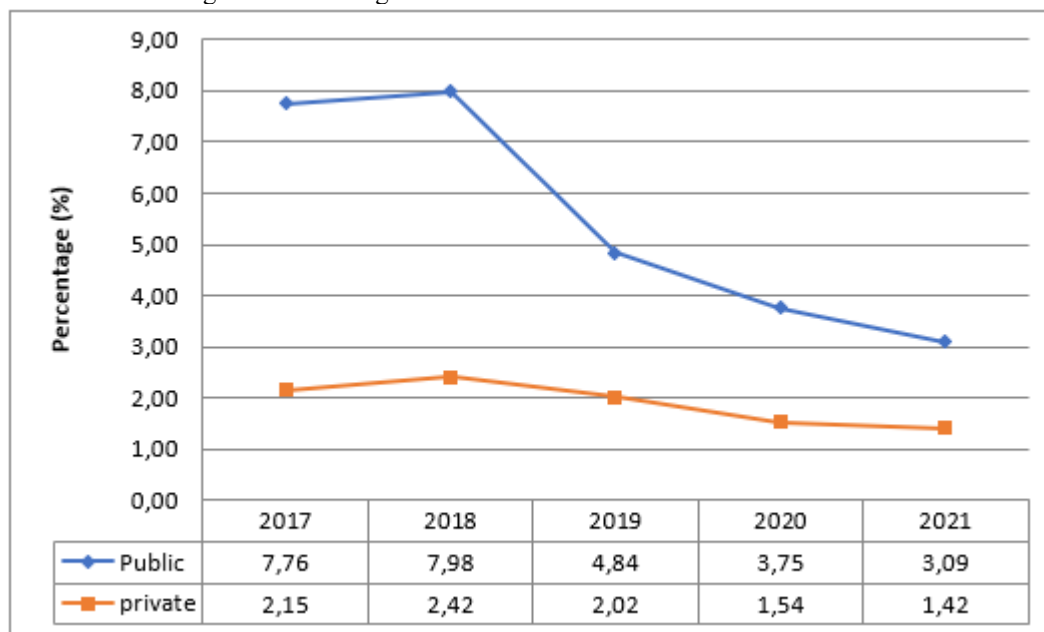


Figure 4 shows net NPAs of both PSUB and PSB from 2017-2021. NPAs of both PSUB and PSB have consistently decreasing from 2017-2021. However NPAs of the PSB is lower than the PSUB. Hence the PSB performed well in management of NAPs as compare to the PSUB with respect to the NPAs.

The overall business and the overall borrowing of the PSUB are higher than PSB (figure 1 and figure 2). But the Net profit of the PSUB shows negative results and PSB shows positive results (Figure 3) over the study period. The PSUB faces difficulties in controlling the nonperforming assets than PSB (Figure 4). The Covid-19 crisis affected the performance of all sectors, including the banking sector. Only a few analyses have been conducted on the financial performance of PSUB and PSB banks after the Covid-19 crisis. As a result, the current study aimed to draw attention to this previously unexplored area. Therefore this study analyzes the financial results of PUSB and PSB in India to understand requirement of minimum capital, quality of assets which is managed by the banks, management efficiency, earning capacity, and liquidity positions of the banks buy using the CAMEL approach.

## LITERATURE REVIEW

Many academics and researchers have measured the financial performance by applying the some evaluation techniques in banking industry. Some of literatures have been highlighted bellow.

The financial health of a bank is important both for developing and developed nations because it allows for the efficient use of available resources, the distribution of necessary funding to the economy, and the encouragement of trade and industry (Demirguc-Kunt et al., 2011; Saini and Sindhu, 2014; Fulford, 2015). A robust financial system not only speeds up the flow of money but also permits a nation's overall economic expansion. Many scholars have researched the variations in the financial stability of various bank groupings (Doumpos et al., 2017). Generally, for measuring the financial performance, the profitability of banks, asset ratios, liquidity ratios, cost/income ratios are used (Harahap, 2018; Ibrahim, 2020; Hanif et al., 2012). Huong (2023) says that the short-term debt ratio and the long-term debt ratio, which together make up the capital structure, are two independent variables that can have a big effect on how profitable a business is. Some study consider the Return on Assets (ROA) and Return on equity (ROE) to assess the bank performance Saha and Bishwas (2021), Robin et al. (2018), Islam et al. (2017), and Mahmud et al. (2016). According to Nawaf Almaskati (2022), the elements unique to a certain bank have a significant influence on its profitability, while those unique to a given nation have a significant impact on its risk. Furthermore, the results indicate that market dominance and size proxies have substantial effects on the bank's profitability and risk profile.

The CAMEL approach is discovered, (Pekkaya and Demir, 2018; Todorovic et al., 2018; Mohammed et al., 2015) to measure financial performance. These approach which one of the effective instrument to know the efficiency, profitability and soundness of the banks. Due to this, many researcher applied the same approach to assess PSUB and PSB's financial performance in India (Poonam Sharma and Neha Mathur (2020); Selvakumar and Nedunchezian (2020); Anas Khan (2018); Birajit Mohanty (2017); Madhusudhana Rao (2014); Rohit Bansal and AnoopMohanty (2013); Binish Varghese and Suman Chakraborty (2010)). Ping and Kusairi (2020) employed CAMEL components for measuring the bank performance. They found that capital strength and earning capacity have a favorable impact on performance, whereas the remaining three CAMEL variables had a negative impact. Among these factors, the bank's profits decrease due to high liquidity, because the liquid assets will reduce the rate of returns. Meena (2016) evaluates the performance of various public and private



sector banks using CAMEL model. She finds the management of non-performing assets (NPAs) is the weakest area of both private sector and public sector banks, which also looks at the elements like profit per employee, debt-equity ratio, total assets to total deposits and net NPA's to total advances ratio influencing the financial results of the select PSUB and PSB. Kumar et al. (2012) also used the CAMEL framework to assess banks with distinct organizational structures and they concluded that the private sector banks are outperformed than public sector banks. Srinivasan and Saminathan (2016) used the CAMEL methodology to rank the public, private, and international banks between 2012 and 2014 based on their financial performance. Additionally, they discover that there was a substantial difference between the mean CAMEL ratios of the public, private, and foreign banks over the study period. Ali and Puah (2019) found that credit risk has a negative impact on a bank's profitability but it has positive impact to increase bank size. Because of their large size the banks get more benefits from economies of scale as results of which boosts their revenue. Alarussi and Alhaderi (2018) examined the relationship between bank asset ratio and ROA to measure bank performance. Financial strength increases the bank performance while financial leverage decreases the financial performance in Bangladesh. Dhanabhakym and Kavitha (2012) used a various ratios to evaluate the financial performance of public sector banks in India, including advance to assets, capital to deposits, capital to working fund, demand deposit to total deposit, credit to deposit, return on average net worth ratio, and liquid assets to working funds. In respect of growth rate & profitability during the time period, they noticed that the PSUB have performed well. Sagarika Mohanty (2021) has evaluated the financial performance of selected PSUB and PSB. The study concluded that ICICI bank better performed then the Indian Overseas Bank (IOB). Mubarak and AlisabNadaf (2021) studied to evaluate PSUB and PSB's performance in India during COVID-19. In this study, the COVID-19, had negative impact on the financial performance of India's private and PSUB. The study concluded that the banks must use RBI preventive measures to mitigate the impact of natural disasters on the financial performance of Indian banks. Sandeep Kaur (2021) studied the performance of the top five PSUBs and PSB based on total assets and market capitalization. The study finds that PSUB lag in many financial parameters and, as a result, they face numerous challenges. The study suggested that PSUB must improve their strategies and net worth ratios to attract stakeholders. Roger Antoun et al. (2018) analyzed the financial performance of banks in Central and Eastern Europe using CAMEL model tools for five years, from 2009 – 2014. The current analysis found that scale



negatively influences bank asset quality and earnings, whereas company mix and inflation had a positive influence.

An important topic that has attracted a lot of attention in the finance literature is capital adequacy for banking industry. Thoa et al. (2020) conducted an empirical study on the determinant of capital adequacy ratios. The study finds out a negative effect in the ROE ratio in Vietnamese banks with lower levels of capital ratios. Olarewaju and Akande (2016) conducted an empirical study of capital adequacy determinants in the Nigerian banking sector and found that ROE has a negative influence on capital adequacy and that ROA is statically significant in determining the capital adequacy of Nigerian deposit money banks. According to Nuzula's (2018) research, environmental costs hurt both return on assets (ROA) and net profit margin. However, it was found that environmental costs do not have a significant effect on return on equity (ROE) and price-to-earnings ratio. Ezike and Oke (2013) conducted research on capital adequacy rules, the Basel Agreement, and performance of banks on selected Nigerian banks. The findings revealed that capital adequacy regulations had a significant impact on bank performance. Buyukşalvarci and Abdiolu (2011) conducted research on the factors influencing capital adequacy ratios in Turkish banks. The study used panel data from 2006 to 2010 and concluded both Return on Equity and Return on Assets are adversely associated with CAR.

Several studies have been conducted in India to assess the bank's financial performance. Sunaina Dubey and Yogesh Puri (2021) analyzed and compared the overall financial performance of India's PSUB and PSB. They discovered that Kotak Mahindra Bank performed the best and was placed first among all banks; the Punjab National Bank was ranked last. PSB hold the top five ranks. As determined by Biswajit Patra et al. (2023), PSUBs have better average efficiency ratings than commercial banks. According to the Z-score, both PSUBs and PSB are vulnerable to stability threats. The findings of a Tobit regression model show that PSB's' return on assets and capital positions are strongly correlated with all measures of efficiency. Manish Dadhich et al. (2021) assessed the financial performance of selected PSUB and PSB using the CAMEL model. The top 5 banks from PSUB and PSB are sample units based on their market capitalization and total assets value. The findings were consistent with previous studies, which discovered a significant difference in net profit to total funds between PSUB and PSB. Compared to PSUB, PSB has a higher profit per employee. Jyotirmoy Koley (2019) used the CAMEL model in her research to assess the performance of Indian PSUB and PSB banks. In this study, SBI and HDFC banks are used as sample units. The study period is five years, from 2013-14 to 2017-18. As a result, HDFC bank has been established as the largest

private sector bank. SBI also outperformed as the largest public sector bank in terms of financial performance and efficiency. Puja Agarwal (2019) used (ROA) (ROE), net interest margin (NIM), and operating profits to examine the profitability of Indian PSUB and PSB, the main objective of the study. The study's conclusions, which expanded from 2005 to 2017, say that banks in the private sector are more profitable than banks in the public sector. The PSUB's non-performing assets have suffered a negative ROA in recent years, lowering its earnings. Saranya and Sridevi (2018) used CAMEL analysis to select Indian banks. The study finds that HDFC Bank and AXIS Bank are the best performing banks based on the overall grade of the CAMEL analysis. Singh and Richa Jain (2017) studied multi-dimensional performance analysis of PSB in India. The study is a descriptive analysis employing the CAMEL model and an analytical research method. The present research outcome is that Kotak Mahindra bank Ltd has the highest CAR of 19.4%. Karur Vysya Bank Ltd. It stands top in the group in advances to assets ratio at 61.7%. Balaji and Praveen (2016) concentrated on a five-year comparative review of the PSUB and PSB of India's financial performance from 2011–12 to 2015–16. It reveals that the PSUB lag in several financial criteria and suffers a lot of obstacles. The study concludes that PSUB needs to adjust their strategy in light of its assets and liabilities and the market they operate. Sneha and Shukla (2015) aim to analyze the financial strength of PSUB and PSB using the CAMEL approach. The study findings are that HDFC Bank and BOB hold the top positions in terms of capital adequacy. In terms of asset quality, HDFC Bank ranked first. Rajesh et al. (2014) examined PSUB and PSB financial performance. The sample units are taken from all scheduled commercial banks in India. The study attempts to demonstrate that PSUB has a higher penetration rate than PSB. The conclusion is that the new generation of banks is positioned to fundamentally alter the very foundations of traditional banking services, while our PSUB is stumbling around in the dark. Manoj Kumar and Rinku (2013) analyzed the performance of chosen Indian PSB and PSUB. They discovered that PSUB outperformed PSB in terms of operating expenses. BPE is likewise higher in the public sector than in the private sector. PSB have a more deposit investment than PSUB and a higher credit deposit ratio. PSUB have better provision and contingency funds than PSB. Vohra (2011); found that with the increasing competition in the banking industry and the limited prospects in the current business, it is high time for the entire banking sector to diversify into new areas such as leasing, hire-purchase, factoring, consumer financing, and merchant banking advisory services to expand their business and improve their profitability is measuring financial efficiency of commercial banks from 2008 2011.

The preceding literature review emphasises the importance of evaluating the financial performance of Indian banks.

### **Objectives**

1. To study long term solvency positions of banks.
2. To measure the asset quality of banks
3. To find out management efficiency of banks.
4. To analyze the profitability of banks.
5. To study the banks' liquidity position to meet the short-term payments.

### **Hypothesis:**

Ho: There is no significant difference in financial performance between PSUB and PSB.

### **DATA AND METHODOLOGY**

The research is based on a comparative analysis, which falls under the descriptive and analytical categories. The five-year research period is from 2016-17 to 2020-21. The secondary data is used for the analysis, gathered through financial statements of concerned PSUB, PSB, and RBI annual bulletins. The sample consists of six PSUB and six PSB based on advances as a percentage of deposits, with the top three and bottom three banks coming from the PSUB and PSB. Bank of Baroda (BOB), Indian Bank, State Bank of India (SBI), Central Bank of India (CBI), Indian Overseas Bank (IOB) and UCO Banks are selected under PSUB. IDFC First Bank Ltd (IDFC), Bandhan Bank Ltd, Yes Bank Ltd, Nainital Bank Ltd, Dhanalakshmi Bank Ltd, and Jammu and Kashmir Bank Ltd (J&K) are selected under PSB.

(Note: Due to the privatization of IDBI bank from a PSUB on January 21st, 2019, the study selected the next bank as The Dhanalakshmi Bank, Ltd., for this study).

The data is analyzed using a variety of financial and statistical methods. The CAMEL model is used to determine a bank's financial health. In short, CAMEL stands for capital adequacy, asset quality, management abilities, earnings efficiency, and liquidity. It is now commonly used to assess bank performance.

### **Analysis and Results**

From the below PSUB and PSB financial information is analyzed and discussed in detailed manner.

Table 1. Year wise financial information of PSUB

| Bank           | CAR   | LONG<br>DEBT/EQT | NNPA/NA | BPE            | PPE            | ROA   | ROE    | LA/DEPO | LA/TA |
|----------------|-------|------------------|---------|----------------|----------------|-------|--------|---------|-------|
|                | (%)   | (%)              | (%)     | (₹ In<br>Lakh) | (₹ In<br>Lakh) | (%)   | (%)    | (%)     | (%)   |
| <b>2016-17</b> |       |                  |         |                |                |       |        |         |       |
| BOB            | 12.24 | 75.95            | 4.72    | 1749           | 2.64           | 0.2   | 4.53   | 44.22   | 38.29 |
| INDIAN         | 13.64 | 73.63            | 4.39    | 1488           | 6.72           | 0.67  | 8.19   | 41.15   | 34.41 |
| SBI            | 13.11 | 168.72           | 3.71    | 1624           | 5.11           | 0.41  | 5.56   | 39.73   | 30.02 |
| CBI            | 10.95 | 53.75            | 10.2    | 1181           | -6.49          | -0.8  | -14.12 | 55.46   | 49.35 |
| IOB            | 10.49 | 117.12           | 13.99   | 1228           | -11.4          | -1.21 | -24.85 | 41.82   | 35.76 |
| UCO            | 10.93 | 74.76            | 8.94    | 1348           | -7.5           | -0.75 | -15.94 | 43.75   | 38.06 |
| <b>2017-18</b> |       |                  |         |                |                |       |        |         |       |
| BOB            | 12.13 | 144.19           | 5.49    | 1766           | -4             | -0.34 | -7.64  | 40.95   | 33.63 |
| INDIAN         | 12.55 | 107.11           | 3.81    | 1856           | 6.34           | 0.53  | 6.82   | 39.14   | 32.26 |
| SBI            | 12.74 | 165.26           | 5.73    | 1670           | -2.43          | -0.19 | -2.98  | 41.7    | 32.67 |
| CBI            | 9.04  | 31.72            | 11.1    | 1271           | -13.86         | -1.61 | -28.38 | 46.13   | 41.69 |
| IOB            | 9.25  | 69.52            | 15.33   | 1310           | -22.43         | -2.33 | -47.45 | 40.35   | 35.28 |
| UCO            | 10.94 | 83.23            | 13.1    | 1274           | -18.48         | -1.88 | -25.5  | 44.76   | 37.67 |
| <b>2018-19</b> |       |                  |         |                |                |       |        |         |       |
| BOB            | 13.42 | 146.27           | 3.33    | 1888           | 0.78           | 0.06  | 1.18   | 40.16   | 32.84 |
| INDIAN         | 13.21 | 62.6             | 3.75    | 2174           | 1.64           | 0.12  | 1.66   | 32.98   | 28.51 |
| SBI            | 12.72 | 182.43           | 3.01    | 1877           | 0.33           | 0.02  | 0.39   | 37.06   | 29.31 |
| CBI            | 9.61  | 27.66            | 7.73    | 1278           | -15.55         | -1.7  | -29.79 | 49.92   | 45.26 |
| IOB            | 10.21 | 37.56            | 10.81   | 1421           | -14.18         | -1.35 | -26.63 | 41.03   | 36.52 |
| UCO            | 10.7  | 47.86            | 9.72    | 1369           | -18.64         | -1.84 | -24.84 | 51      | 43.79 |
| <b>2019-20</b> |       |                  |         |                |                |       |        |         |       |
| BOB            | 13.3  | 129.52           | 3.13    | 1877           | 0.65           | 0.05  | 1.23   | 40.04   | 32.71 |
| INDIAN         | 14.12 | 94.3             | 3.13    | 2462           | 4.02           | 0.26  | 3.41   | 34.02   | 28.6  |
| SBI            | 13.06 | 135.62           | 2.23    | 2105           | 5.79           | 0.38  | 6.24   | 35.93   | 29.48 |
| CBI            | 11.72 | 27               | 7.63    | 1406           | -3.27          | -0.35 | -5.23  | 55.38   | 48.77 |
| IOB            | 10.72 | 33.54            | 5.44    | 1438           | -34.27         | -2.95 | -52.78 | 43.84   | 37.48 |
| UCO            | 11.7  | 81.7             | 5.45    | 1370           | -10.84         | -0.96 | -12.68 | 52.7    | 43.16 |
| <b>2020-21</b> |       |                  |         |                |                |       |        |         |       |
| BOB            | 14.99 | 86.76            | 3.09    | 1957           | 1              | 0.07  | 1.5    | 37.8    | 31.64 |
| INDIAN         | 15.71 | 68.14            | 3.37    | 2217           | 7.22           | 0.5   | 7.82   | 41.99   | 36.09 |
| SBI            | 13.74 | 164.37           | 1.5     | 2373           | 8.28           | 0.48  | 8.03   | 42.32   | 34.36 |
| CBI            | 14.81 | 25.19            | 5.77    | 1560           | -2.74          | -0.26 | -8.31  | 56.21   | 50.24 |
| IOB            | 15.32 | 21.66            | 3.58    | 1612           | 3.53           | 0.27  | 4.9    | 50.31   | 44.12 |
| UCO            | 13.74 | 76.88            | 3.94    | 1470           | 0.76           | -0.06 | 0.73   | 55.43   | 45.05 |

Sources: Prepared by the authors (2022)

Table 1 shows the financial performance of selected PSUB (BOB, Indian Bank, SBI, CBI, CBI, IOB, and UCO) on various factors from 2017 to 2021. According to RBI guidelines, PSUB should maintain a CAR of 12 per cent. The findings reveal that BOB, Indian Bank, and SBI maintained an adequate ratio. Still, CBI, IOB, and UCO banks could not maintain an adequate ratio of 12 per cent, except in 2021. The long-term debt-to-equity ratios of SBI and BOB are both high. CBI, Indian Bank, IOB, and UCO banks have low long-term debt-to-equity ratios. SBI has the highest maximum value (182.43%), while IOB has the lowest minimum

value (21.66%). The ratio of NPA to NA of these banks has been increasing for the past two years, except for the Indian bank, which has steadily decreased from the first to last year. However, the results show that the NPAs of banks have decreased in the last year, with the figures being BOB (3.09 per cent), Indian Bank (3.37 per cent), SBI (1.5 per cent), CBI (5.77 per cent), IOB (3.58 per cent), and UCO (3.58 per cent) (3.94 per cent). From 2017 to 2021, SBI, CBI, and IOB increased their BPE. In the year 2019–20, INDIAN Bank had the maximum BPE (₹.2462 lakhs), while CBI had the lowest BPE (₹.1181 lakhs) in the year 2016-17. PPE of selected PSUB fluctuated. SBI had the highest PPE (₹.8.28 lakhs) in 2020-21, while IOB had the highest negative PPE (₹.-34.27 lakhs). The assets' ability to generate revenue for banks was highlighted through the ROA. In 2016-17, INDIAN Bank had the highest ROA (0.67 per cent) among all PSUB, but it subsequently began to drop until 2018-19, while IOB had the poorest ROA earned (-2.95 per cent) in the year 2019-20. In 2016-17, Indian Bank had the highest ROE (8.19 per cent) among all the chosen PSUB, while IOB had the lowest ROE (-52.78 per cent) in 2019-20. CBI had the highest liquid assets to deposits ratio (56.21%) in 2020-21, while Indian Bank had the lowest liquid assets to deposits ratio (32.98%) in 2018-19. The LA to TA assesses a company's overall liquidity condition. CBI had the highest ratio (50.24 per cent) in 2020-21, while Indian Bank had the lowest ratio (28.51 per cent) in 2018-19.

Table 2. Year wise financial information of PSB

| Bank           | CAR   | LONG DEBT/E QT | NNPA/NA | BPE         | PPE         | ROA   | ROE    | LA/TD  | LA/TA |
|----------------|-------|----------------|---------|-------------|-------------|-------|--------|--------|-------|
|                | (%)   | (%)            | (%)     | (₹ In Lakh) | (₹ In Lakh) | (%)   | (%)    | (%)    | (%)   |
| <b>2016-17</b> |       |                |         |             |             |       |        |        |       |
| IDF            | 18.9  | 342.43         | 1.14    | 2132        | 32          | 1.04  | 6      | 108.2  | 38.79 |
| BANDHAN        | 26.36 | 23.14          | 0.36    | 170         | 5           | 4.46  | 6.94   | 55.45  | 42.6  |
| YES            | 17    | 175.05         | 0.81    | 1596        | 20          | 1.81  | 25     | 46.41  | 30.83 |
| NAINITAL       | 12.78 | 0              | 1.25    | 1217        | 7           | 0.73  | 8.22   | 58.18  | 51.78 |
| DHANALAK SHMI  | 10.26 | 22.18          | 2.58    | 885         | 1           | 0.1   | 1.89   | 35.64  | 32.64 |
| J &K           | 10.8  | 22.47          | 4.87    | 1220        | -16         | -2.04 | -28.75 | 32.41  | 28.63 |
| <b>2017-18</b> |       |                |         |             |             |       |        |        |       |
| IDF            | 18    | 375.49         | 1.69    | 1894        | 18          | 0.72  | 5.74   | 116.74 | 44.47 |
| BANDHAN        | 31.38 | 3.03           | 0.58    | 232         | 5           | 4.03  | 5.63   | 39.22  | 29.97 |
| YES            | 18.34 | 290.75         | 0.64    | 2130        | 23          | 1.78  | 16.9   | 43.93  | 28.22 |
| NAINITAL       | 14.95 | 0              | 1.16    | 1170        | 6           | 0.63  | 7.86   | 61.99  | 56.01 |
| DHANALAK       | 13.87 | 52.32          | 3.19    | 919         | -1.32       | -0.2  | -3.31  | 38.77  | 34.45 |
| J &K           | 11.42 | 26.42          | 4.9     | 1199        | 2           | 0.25  | 3.29   | 33.13  | 29.55 |
| <b>2018-19</b> |       |                |         |             |             |       |        |        |       |
| IDF            | 15.47 | 385.38         | 1.27    | 1499        | -21         | -1.2  | -11.64 | 82.09  | 34.6  |
| BANDHAN        | 29.2  | 4.65           | 0.58    | 258         | 6           | 4.25  | -10.7  | 34.72  | 26.59 |
| YES            | 16.5  | 403            | 1.86    | 2327        | 8.9         | 0.52  | 6.39   | 42.96  | 25.67 |

|                |       |        |      |      |       |       |        |       |       |
|----------------|-------|--------|------|------|-------|-------|--------|-------|-------|
| NAINITAL       | 14.85 | 0      | 5.77 | 1258 | 3     | 0.34  | 4.17   | 59.82 | 53.8  |
| DHANALAK SHMI  | 13.75 | 26.32  | 2.41 | 972  | 1     | 0.1   | 1.53   | 35.46 | 31.87 |
| J & K          | 12.46 | 39.6   | 4.89 | 1237 | 4     | 0.49  | 7.01   | 29.17 | 25.79 |
| <b>2019-20</b> |       |        |      |      |       |       |        |       |       |
| IDF            | 13.38 | 374.1  | 0.94 | 959  | -18   | -1.79 | -17.1  | 65.53 | 28.59 |
| BANDHAN        | 27.43 | 107.78 | 0.58 | 322  | 8     | 4.18  | -18.66 | 41.09 | 25.57 |
| YES            | 8.5   | 523.74 | 5.03 | 1195 | -73.4 | -5.39 | -75.56 | 46.27 | 18.9  |
| NAINITAL       | 12.94 | 0      | 4.89 | 1247 | -8    | -0.79 | -11.68 | 55.88 | 50.85 |
| DHANALAK SHMI  | 14.41 | 21.46  | 1.55 | 1033 | 4     | 0.55  | 7.95   | 35.69 | 31.73 |
| J & K          | 11.4  | 31.58  | 3.48 | 1285 | -9    | -1.1  | -17.69 | 31.86 | 28.61 |
| <b>2020-21</b> |       |        |      |      |       |       |        |       |       |
| IDF            | 13.77 | 257.11 | 1.86 | 768  | 2.07  | 0.28  | 2.73   | 51.67 | 28.09 |
| BANDHAN        | 23.47 | 97.42  | 3.51 | 322  | 5     | 2.13  | 2.53   | 40.32 | 27.21 |
| YES            | 17.5  | 192    | 5.88 | 1360 | -15.1 | -1.43 | -10.42 | 42.65 | 25.4  |
| NAINITAL       | 13.67 | 0      | 5.77 | 1094 | 0.13  | 0.02  | 0.21   | 57.19 | 51.81 |
| DHANALAK SHMI  | 14.47 | 17.35  | 4.76 | 1137 | 2     | 0.29  | 4.3    | 45.09 | 40.32 |
| J & K          | 12.2  | 29.52  | 2.95 | 1448 | 4     | 0.38  | 6.33   | 37.23 | 33.45 |

Sources: Prepared by the authors (2022)

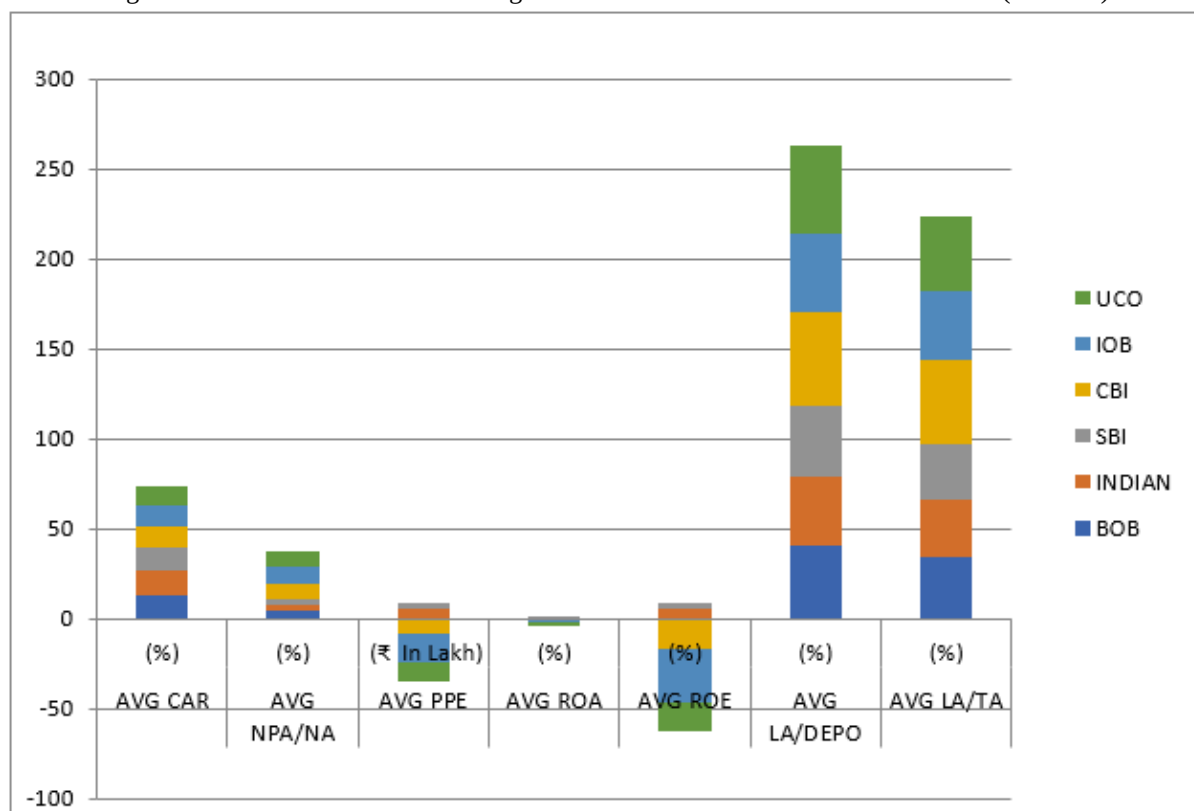
The figures in Table 2 illustrate the financial standing of selected private banks during 2017-2021. Except for YES bank (8.5 per cent) in 2019–20, the chosen banks' entire CAR is good. The Reserve Bank of India requires scheduled commercial banks to maintain a minimum CAR of 12%. Except for YES Bank, almost all of the selected PSB was able to cover the future unabsorbed risk from 2017 to 2021. YES, bank (523.74 per cent) and IDF bank have a high long-term debt-equity ratio, but Nainital bank has a 0% long-term debt-equity ratio and Bandhan Bank, Dhanalakshmi Bank, and J & K have a low debt-equity ratio. Bandhan Bank had the lowest NPA (0.36 per cent) in 2016-17, while YES Bank had the highest NPA (5.88 per cent) in 2018-19. The highest BPE shows a bank's efficiency; YES Bank outperformed all other PSB in 2018-19, with a BPE of ₹.2327 lakhs. In 2016-17, IDF Bank had the most PPE (₹.32 lakhs) among the chosen banks, while YES Bank had the negative PPE (₹.-73.4 lakhs) in the year 2019-20. Bandhan Bank had the best ROA (4.46 per cent) in 2016-17, while YES Bank had the lowest (-5.39 per cent) in 2019-20. In 2016-17, Bandhan Bank had the best ROE (25 per cent), while YES Bank had the ROE (-75.56 per cent) in 2019-20. The ratio of LA to TD represents the bank's liquidity with total deposits. In 2017-18, IDF Bank had the highest ratio (116.74%), while J & K Bank had the lowest ratio (29.17%) among the selected PSB in 2018-19. The ratio of LA to TA must be calculated to determine the bank's liquidity situation. In 2017-18, Nainital Bank had the greatest ratio (56.01%), while YES Bank had the poorest (18.9%) in 2019-20.

Table 3: Average of important key variables per bank period (2017-2021) for PSUB

| S.No.         | Banks  | AVG CAR (%) | AVG LONG DEBT/EQT (%) | AVG NNPA/NA (%) | AVG BPE (₹ In Lakh) | AVG PPE (₹ In Lakh) | AVG ROA (%) | AVG ROE (%) | AVG LA/DEPO (%) | AVG LA/TA (%) |
|---------------|--------|-------------|-----------------------|-----------------|---------------------|---------------------|-------------|-------------|-----------------|---------------|
| 1             | BOB    | 13.2        | 116.5                 | 4               | 1847.4              | 0.2                 | 0           | 0.2         | 40.6            | 33.8          |
| 2             | INDIAN | 13.8        | 81.2                  | 3.7             | 2039.4              | 5.2                 | 0.4         | 5.6         | 37.9            | 32            |
| 3             | SBI    | 13.1        | 163.3                 | 3.2             | 1929.8              | 3.4                 | 0.2         | 3.4         | 39.3            | 31.2          |
| 4             | CBI    | 11.2        | 33.1                  | 8.5             | 1339.2              | -8.4                | -0.9        | -17.2       | 52.6            | 47.1          |
| 5             | IOB    | 11.2        | 55.9                  | 9.8             | 1401.8              | -15.8               | -1.5        | -29.4       | 43.5            | 37.8          |
| 6             | UCO    | 11.6        | 72.9                  | 8.2             | 1366.2              | -10.9               | -1.1        | -15.6       | 49.5            | 41.5          |
| Grand Average |        | 12.35       | 87.15                 | 6.23            | 1653.96             | -4.38               | -0.48       | -8.83       | 43.9            | 37.23         |

Sources: Prepared by the authors (2022)

Figure 5. Public Sector Banks : Average Results of Different Financial Parameters (2017-21)



Sources: Prepared by the authors (2022)

Table 3 and Figure 5 show the average outcomes of selected public sector banks from 2017 to 2021 based on several key variables. BOB (13.2%), Indian (13.8%), and SBI (13.1%) had adequate CAR, whereas CBI, IOB (11.2%), and UCO (11.6%) had low CAR. Compared to other PSUs, SBI has a high long-term debt equity ratio (163.3 per cent). IOB had the highest proportion (9.8%) of nonperforming assets (NPAs), while SBI had the lowest rate (3.2%). SBI's average BPE was higher than that of other PSUBs (₹.2039.4 lakhs). Indian Bank had the highest average PPE (₹.5.2 lakhs), whereas IOB had the lowest average PPE (₹.-15.8 lakhs), and overall the grand average value showed as negative (₹.-4.38 lakhs). BOB and PNB earned positive



ROA (0.4%) and (0.2%), respectively, while CBI, IOB, and UCO Banks earned negative ROA (-0.9%), (-1.5%), and (-1.1%), respectively.

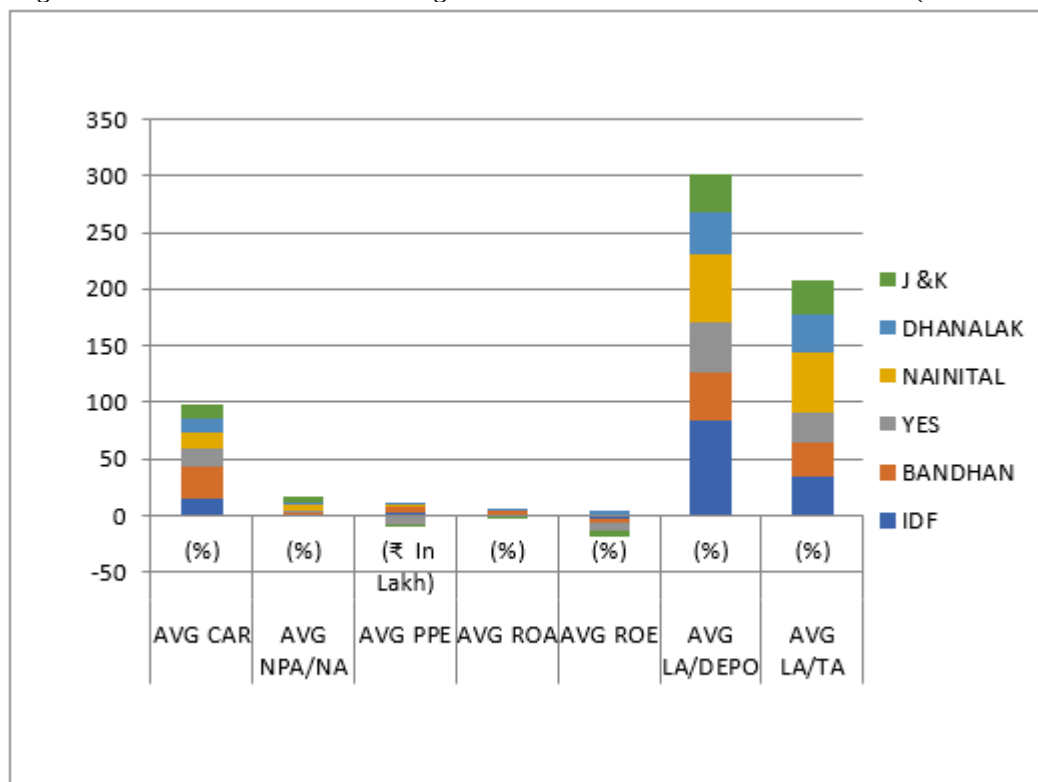
Indian Bank had shown the highest average ROE (5.6%), whereas IOB had shown a negative ROE (-29.4%), and the overall grand average showed negative results (-8.83%). The CBI has the greatest average ratio of LA to TD (52.6 %), while the Indian Bank has the lowest (39.3%). Regarding LA to TA, the SBI has the lowest ratio (31.2%), and the CBI has the highest (47.1%).

Table 4: Average of important key variables per bank period (2017-2021) for PSB

| S.No.         | Banks         | AVG CAR<br>(%) | AVG LONG DEBT/EQT<br>(%) | AVG NNPA/NA<br>(%) | AVG BPE<br>(₹ In Lakh) | AVG PPE<br>(₹ In Lakh) | AVG ROA<br>(%) | AVG ROE<br>(%) | AVG LA/TD<br>(%) | AVG LA/TA<br>(%) |
|---------------|---------------|----------------|--------------------------|--------------------|------------------------|------------------------|----------------|----------------|------------------|------------------|
| 1             | IDF           | 15.9           | 346.9                    | 1.4                | 1450.4                 | 2.6                    | -0.2           | -2.9           | 84.8             | 34.9             |
| 2             | BANDHAN       | 27.6           | 47.2                     | 1.1                | 260.8                  | 5.8                    | 3.8            | -2.9           | 42.2             | 30.4             |
| 3             | YES           | 15.6           | 316.9                    | 2.8                | 1721.6                 | -7.3                   | -0.5           | -7.5           | 44.4             | 25.8             |
| 4             | NAINITAL      | 13.8           | 0                        | 3.8                | 1197.2                 | 1.6                    | 0.2            | 1.8            | 58.6             | 52.9             |
| 5             | DHANALA KSHMI | 13.4           | 27.9                     | 2.9                | 989.2                  | 1.3                    | 0.2            | 2.5            | 38.1             | 34.2             |
| 6             | J &K          | 11.7           | 29.9                     | 4.2                | 1277.8                 | -3                     | -0.4           | -6             | 32.8             | 29.2             |
| Grand average |               | 16.33          | 128.13                   | 2.7                | 1149.5                 | 0.16                   | 0.51           | -2.5           | 50.15            | 34.56            |

Sources: Prepared by the authors (2022)

Figure 6. Private Sector Banks : Average Results of Different Financial Parameters (2017-2021)



Sources: Prepared by the authors (2022)

Table 4 and Figure 6 illustrate the average performance of selected PSB on key financial parameters from 2017 to 2021. Except for J&K Bank, the average CAR of all chosen PSB has remained good. Compared to Bandhan, Dhanalakshmi, and J&K Bank, IDF Bank and YES Bank have the highest average long-term debt equity value. Bandhan Bank was deemed financially healthy compared to the other five banks, with the lowest average NPA (1.1%). BANDHAN Bank has the lowest average BPE (₹.1450.4 lakhs), whereas IDF Bank has the highest average BPE (₹.1450.4 lakhs) (₹.260.8 lakhs). The average PPE of Bandhan Bank (₹.5.8 lakhs) was more than the grand average of PPE (₹.0.16 lakhs), while YES Bank had a negative average PPE (₹.-7.3 lakhs). The ROA of Bandhan Bank (3.8%) was higher than that of the other five selected PSB. The Dhanalakshmi and Nainital Banks have shown positive ROE of (2.5%) and (1.8%), while the remaining four selected private banks showed negative results for ROE. IDF Bank has more average LA to TD ratio than other private banks (84.8%). Nainital Bank has more average LA to TA (52.9%), while YES Bank has the lowest (25.8 %).

#### Comparison Between PSUB and PSB with Respect to CAMEL Components:

In this section, the researchers attempt to compare the PSUB and PSB with respect to CAMEL components using the Independent sample T-test. The results of the group statistics of CAMEL components are given in the table 5.

Table 5: Group Statistics

| CAMEL components | sector  | N | Mean     | Std. Deviation | Std. Error |
|------------------|---------|---|----------|----------------|------------|
| CAR              | Public  | 6 | 12.350   | 1.1485         | .4689      |
|                  | Private | 6 | 16.333   | 5.7298         | 2.3392     |
| Debtequity ratio | Public  | 6 | 87.150   | 46.4686        | 18.9707    |
|                  | Private | 6 | 128.133  | 158.8437       | 64.8477    |
| NPA to NA        | Public  | 6 | 6.233    | 2.9098         | 1.1879     |
|                  | Private | 6 | 2.700    | 1.2458         | .5086      |
| BPE              | Public  | 6 | 1653.967 | 318.6017       | 130.0686   |
|                  | Private | 6 | 1149.500 | 500.4117       | 204.2922   |
| PPE              | Public  | 6 | -4.383   | 8.5131         | 3.4755     |
|                  | Private | 6 | .167     | 4.6211         | 1.8866     |
| ROA              | Public  | 6 | -.483    | .7834          | .3198      |
|                  | Private | 6 | .517     | 1.6351         | .6675      |
| ROE              | Public  | 6 | -8.833   | 13.9882        | 5.7107     |
|                  | Private | 6 | -2.500   | 4.0264         | 1.6438     |
| LA to Deposits   | Public  | 6 | 43.900   | 5.9205         | 2.4170     |
|                  | Private | 6 | 50.150   | 19.0500        | 7.7771     |
| LA to TA         | Public  | 6 | 37.233   | 6.1879         | 2.5262     |
|                  | Private | 6 | 34.567   | 9.5851         | 3.9131     |

Sources: Prepared by the authors (2022)

The mean value of Capital adequacy ratio, profit per employee, return on assets, and liquid assets to total deposits for PSB is higher than the PSUB. This indicates that the PSB perform better than the PSUB with respect to the maintaining minimum reserves of capital, profit generated per employee, assets used for profit generation, and maintenance of liquidity with respect to total deposits. Similarly the mean value of NPA to NA of PSB is lower than PSUB which indicates PSB is efficiently controlling the non performing assets as compare to the PSUB. However the mean value of debt equity ratio of PSUB is lower than PSB which indicating the PSUB bear the less debt burden as compare to the PSB. In additions to the PSUB maintain the high liquidity (LA to TA) as compare to the PSB. With respect to return on equity both sectors are resulted the negative but the ROE of PSB is lower than PSUB. To find out the significant difference between the PSUB and PSB with respect to the various ratios, the Independent sample T-test is employed.

Table 6. Independent Sample Test

| CAMEL component                            | T      | df    | Sig. (2-tailed) |
|--------------------------------------------|--------|-------|-----------------|
| CAR                                        | -1.670 | 10    | .126            |
| Debt equity ratio                          | -.607  | 5.850 | .567            |
| NPA to NA                                  | 2.734  | 6.773 | .030            |
| BPE                                        | 2.083  | 10    | .064            |
| PPE                                        | -1.151 | 7.711 | .284            |
| ROA                                        | -1.351 | 10    | .206            |
| ROE                                        | -1.066 | 5.823 | .329            |
| Liquid Assets to Total Deposits (LA to TD) | -.767  | 10    | .461            |
| Liquid Assets to Total Assets (LA to TA)   | .573   | 10    | .580            |

Sources: Prepared by the authors (2022)

The table 6 shows that the T- value and its significant value for various ratios of CAMEL components. The t- value of NPA to NA is 2.734, and its significant value is less than 0.05 which indicates that there is a significant difference between PSUB and PSB with respect to NPA to NA. However CAR, Debt equity ratio, BPE, PPE, ROA, ROE, LA to TD, and LA to TA are insignificant, which indicating there is no significant difference between PSUB and PSB with respect to these ratios. Hence it can be concluded that the PSUB has more nonperforming assets as compare to the PSB.

## DISCUSSION

The financial results of PSUB and PSB are as a result of the analyses mentioned above.

The bank can keep a higher amount of capital because the capital adequacy ratio for PSB is higher than PSB in 2018. In 2020, the PSB has a larger debt-to-equity ratio than the PSUB. It explains that PSUB is exposed to increasing financial risk while simultaneously attempting to benefit from financial leverage. PUSB strives to give depositors a large margin of safety and is very risk-averse in 2021. In 2017, the PSB's NPA to NA is superior to the PSUB's. It is clear that PSUB would benefit less from efficient management of customer advances. In 2021, PSUB's profit per employee is higher. In 2021, PSUB's business per employee increased. The outcomes occurred as a result of higher market capitalization. In the year of 2018, it found a significant improvement in PSB's profit per employee. It can be concluded that PSB's human resources are more productive and efficient than those of PSUB. In 2018, PSB's return on assets is outstanding because of PSB effective management and profitability. The main indicator of an institution's overall performance is the return on equity. During 2016–17, PSB has maintained high return on equity ratio. In terms of all liquidity ratios, such as the liquid assets to total deposits (LA to DEPO) & liquid assets to total assets (LA to TA) ratios, the PSB performed better in the 2016–17 period. It may be said that PSB has a significantly stronger liquidity situation than PSUB. The study find that the NPA of PSUB is higher than the PSB because inefficient management of loans and advances and tight credit policy.

## CONCLUSION

The CAMEL rating model was initially established in the USA in the 1970s. It was only used in the USA initially but has now spread to other countries. Currently, it's common practice to evaluate a company's performance using a modified CAMEL model. Eighteen ratios have been computed using this approach under five headings. The study finds that PSB has kept a sufficient amount of capital to cover any future needs, but it also has a higher volume of borrowings than PSUB, which suggests that PSB is highly leveraged. In controlling the nonperforming assets PSB performed well than PSUB. The amount of NPAs in PSUB is rising, which has a negative impact on the bank's managerial effectiveness and profitability. In terms of liquidity position, the PSB is better than PSUB in terms of liquid assets to deposit. In comparison, the PSUB is better than PSB concerning LA to TA. It also showed that there is no significant difference between PSB & PSUB in all ratios, except for net NPAs to NA. In case

of NPA to NA ratio, the PSUB has more nonperforming assets due to unable to collect the debt amount from the borrowers on time.

### Scope for Further Research:

The CAMEL rating model was initially established in the USA in the 1970s. It was only used in the USA initially but has now spread to other countries. Currently, it's common practice to evaluate a company's performance using a modified CAMEL model. Eighteen ratios have been computed using this approach under five headings. This analysis considers that selected ratios did not differ significantly amongst the banks investigated. Public banks outperform private ones in terms of long-term solvency, according to the findings of this research. In terms of liquidity position, the PSB are better than PSUB in terms of liquid assets to deposit. In comparison, the PSUB is better than PSB concerning LA to TA. It also revealed that the overall financial performance of PSB is better than PSUB.

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