

FINANCIAL PERFORMANCE OF PUNJAB NATIONAL BANK BY APPLYING THE EAGLE MODEL: A FOURTEEN-YEAR STUDY

Dr. Kulpreet Kaur Department of Commerce, Khalsa College (Asr.) of Technology and Business Studies, Mohali

Email: kulpreetkaur87@yahoo.co.in

Abstract

The present study evaluates the financial performance of Punjab National Bank (PNB) using the five-dimensional EAGLE model over fourteen financial years from FY2011-12 to FY2024-25. The EAGLE framework examines Earnings, Asset Quality, Growth, Liquidity and Equity. The study is based exclusively on secondary data obtained principally from PNB's annual reports, financial disclosures and Reserve Bank of India (RBI) statistical publications.

The study analyses Return on Assets (ROA) as the principal earnings indicator, Gross Non-Performing Asset (GNPA) ratio as the asset-quality indicator, deposits and advances as growth indicators, Credit-Deposit Ratio (CDR) as a liquidity-related indicator and Capital to Risk-Weighted Assets Ratio (CRAR) as the equity/capital indicator. Year-on-year growth and compound annual growth rate (CAGR) are used to examine long-term expansion.

The findings reveal three broad phases in PNB's financial performance. The first phase, covering the early years of the study, was portrayed by comparatively stronger profitability and moderate asset-quality stress. The second phase, particularly FY2015-16 to FY2018-19, witnessed a severe deterioration in profitability and asset quality. ROA became negative in FY2015-16 and FY2017-18, while GNPA reached 18.38% in FY2017-18. During the same period, CRAR declined to 9.20%. The third phase, beginning around FY2019-20, shows a substantial recovery. GNPA declined progressively to 3.95% in FY2024-25, ROA increased to 0.97%, and CRAR strengthened to 17.01%.

A major consideration is the amalgamation of Oriental Bank of Commerce and United Bank of India with PNB effective 1 April 2020. PNB itself cautions that pre-amalgamation and post-amalgamation financial information is not fully comparable. Therefore, changes in deposits, advances and total assets after FY2020-21 should not be interpreted entirely as organic growth of the pre-merger PNB.

Overall, the study demonstrates a substantial long-term transformation in PNB's financial profile from a period of high stressed assets and weak profitability to a period of improved asset quality, stronger capitalisation and substantially higher profitability.

Keywords: Punjab National Bank, EAGLE Model, Earnings, Asset Quality, Growth, Liquidity, Equity, GNPA, CRAR, ROA, Banking Performance.

1 INTRODUCTION

1.1 Background of the Study

Banks perform a central role in a modern financial system by mobilising savings and allocating financial resources to productive economic activities. The financial health of banks is therefore important to depositors, borrowers, investors, regulators and the broader economy. A financially sound bank should ideally demonstrate adequate profitability, controlled credit risk, sustainable business growth, sufficient liquidity and adequate capital.

Punjab National Bank (PNB) is one of India's major public sector banks and has a long operating history. Its performance during the last decade and a half is particularly significant because the period encompasses several major developments in Indian banking, including the recognition of stressed assets, deterioration in public-sector-bank asset quality, strengthening of provisioning and capital requirements, the COVID-19 pandemic and the amalgamation of Oriental Bank of Commerce (OBC) and United Bank of India (UBI) with PNB.

PNB's official annual-report archive provides annual reports for the entire period covered by the present study, including FY2011-12 through FY2024-25.

The present study therefore adopts a fourteen-year longitudinal perspective. Such a period permits the identification of longer-term changes in profitability, asset quality, business expansion, liquidity-related deployment and capital adequacy.

1.2 The EAGLE Model

The EAGLE framework is a ratio-based approach for assessing bank performance through several important dimensions. The framework commonly incorporates:

E - Earnings

A - Asset Quality

G - Growth

L - Liquidity

E - Equity

The present research adopts the five-dimensional EAGLE framework to provide a focused longitudinal analysis of PNB's financial indicators.

1.3 Need for the Study

The period covered by this research contains substantial changes in PNB's financial condition. The bank experienced:

1. comparatively stronger profitability in the early years;
2. deterioration in asset quality during the middle years;
3. substantial losses and negative ROA during the stressed-asset period;
4. pressure on capital adequacy;
5. amalgamation with OBC and UBI in 2020; and
6. significant recovery in asset quality, capital adequacy and profitability thereafter.

1.4 Objectives of the Study

The study has the following objectives:

1. To analyse the financial performance of PNB from FY2011-12 to FY2024-25.
2. To evaluate PNB under the five dimensions of the EAGLE model.
3. To examine long-term trends in earnings, asset quality, growth, liquidity and equity.
4. To calculate selected growth rates and CAGR.
5. To identify the major period of financial stress and the subsequent recovery.
6. To examine the effect of the 2020 amalgamation as a structural break in the time series.
7. To provide suggestions for strengthening the bank's future financial performance.

2. REVIEW OF LITERATURE

Financial performance of banks has been examined through several frameworks, including CAMEL, CAMELS, EAGLE and EAGLES. The EAGLE family of approaches is particularly useful because it focuses on financial indicators covering profitability, asset quality, growth, liquidity and capital/equity.

Guru, Avvari and Balachandran (2004) examined the selection of merger partners among Malaysian banks and proposed a systematic financial approach to the

problem. Their study is important for understanding the EAGLE/EAGLES tradition of using banking-performance indicators for comparative evaluation.

Santhoshi Kumari and Prasad (2017) applied the EAGLES approach to selected Indian banks and demonstrated how earnings, asset quality, growth, liquidity, equity and strategic response can be used to evaluate banking performance.

Suresh and Krishnan (2020) applied the EAGLES model to Indian commercial banks. Their study argues that a multidimensional ratio framework can provide a more systematic assessment of bank soundness than reliance on a single profitability measure. The study is particularly relevant because it demonstrates the application of EAGLES in the Indian banking environment.

Ristanti and Ismiyanti (2021) applied EAGLES to the ten largest banks in Indonesia for 2010-2019. Their study used financial indicators including NPL, loan growth, deposit growth, loan-deposit ratio, capital adequacy and profitability measures to investigate determinants of ROA.

Sathavara and Sathavara (2021) examined selected private-sector banks in India using the EAGLE framework. Their study supports the use of annual-report data and financial ratios to assess banking performance.

Vaidya (2023) evaluated Nepalese commercial banks using EAGLES. The study demonstrates the applicability of the framework in a South Asian banking context and considers earnings, asset quality, growth, liquidity and equity as important dimensions of bank performance.

Srivastava and Kumar (2024) examined PNB in the post-merger period in European Economic Letters. Their work focused on PNB's financial transformation following the merger and therefore provides an important recent reference point for the present study.

Dayma (2025) specifically examined the financial performance of PNB after its merger with OBC and UBI using the EAGLE model. The existence of this study means that the present research should not claim that no previous study has applied EAGLE to PNB. Instead, the present study contributes through its longer fourteen-year longitudinal coverage and its systematic treatment of the pre-stress, stress, merger and post-merger periods.

Srivastava, Kumar, Mishra and Mishra (2025) applied the EAGLE model to twelve major Indian commercial banks using FY2024-25 information. PNB was included in the comparative analysis. This recent study further confirms the

continuing relevance of EAGLE as a framework for Indian banking research.

Research Gap

Existing studies have examined PNB through financial-ratio analysis, CAMEL/CAMELS and EAGLE/EAGLES frameworks. Some recent studies have specifically examined PNB's merger with OBC and UBI. Consequently, the novelty of the present study is not the first application of EAGLE to PNB.

The research gap lies instead in the longitudinal design of the present study. The research covers fourteen consecutive financial years, from FY2011-12 to FY2024-25, and brings together four important stages of PNB's financial history: the relatively stable early period, the stressed-asset period, the amalgamation period and the subsequent recovery period. It also explicitly treats the April 2020 amalgamation as a structural break and avoids interpreting post-merger scale expansion as purely organic growth.

3. RESEARCH METHODOLOGY

3.1 Research Design

The study follows a descriptive and analytical research design. It examines changes in selected financial indicators of PNB over fourteen financial years.

3.2 Nature and Sources of Data

The research is based entirely on secondary data.

The principal sources are:

1. PNB annual reports from FY2011-12 to FY2024-25;
2. PNB audited financial results and investor disclosures;
3. RBI Statistical Tables Relating to Banks in India;
4. RBI Database on Indian Economy (DBIE); and
5. RBI banking-sector publications.

PNB's official annual-report archive contains the annual reports for the study period. RBI states that its bank-wise statistical information includes assets, earnings, CRAR, provisions, gross and net NPAs and banking ratios. Reserve Bank of India

3.3 Study Period

The study covers: FY2011-12 to FY2024-25 = 14 financial years.

3.4 EAGLE Variables

EAGLE Dimension	Indicator Used	Interpretation
Earnings	Return on Assets (ROA)	Profitability generated from total assets base
Asset Quality	Gross NPA Ratio	Level of stressed/non-performing advances
Growth	Deposit and Advance Growth	Expansion of banking business
Liquidity	Credit-Deposit Ratio	Degree of deposit deployment into advances
Equity	CRAR	Capital buffer against risk-weighted assets

3.5 Formulas

Return on Assets

$$\text{ROA} = \text{Net Profit} / \text{Average Total Assets} \times 100$$

A higher positive ROA generally indicates stronger profitability.

Gross NPA Ratio

$$\text{Gross NPA Ratio} = \text{Gross NPAs} / \text{Gross Advances} \times 100$$

A lower ratio indicates better asset quality.

Credit-Deposit Ratio

$$\text{CDR} = \text{Advances} / \text{Deposits} \times 100$$

The ratio indicates the proportion of deposits deployed as advances. An excessively high ratio may indicate greater liquidity pressure, whereas a very low ratio can indicate relatively low credit deployment.

Growth Rate

$$\text{Growth Rate} = (\text{Current Year Value} - \text{Previous Year Value}) / \text{Previous Year Value} \times 100$$

CAGR

$$\text{CAGR} = \left[\frac{\text{Ending Value}}{\text{Beginning Value}} \right]^{1/n-1} \times 100$$

CAGR is used to examine long-term growth in deposits, advances, and assets.

3.6 Structural Break

A major methodological issue is the amalgamation of OBC and UBI with PNB effective 1 April 2020. PNB's own disclosure states that financial and operational information before and after amalgamation is not directly comparable because post-amalgamation information represents the merged entity. Accordingly, the study interprets the FY2020-21 onward data with caution.

4. RESULTS AND DISCUSSION

4.1 Selected EAGLE Indicators

Table 1. Selected EAGLE Indicators of Punjab National Bank

FY	ROA %	Gross NPA %	Credit-Deposit Ratio %	CRAR%
2011-12	1.19	2.83	77.39	12.63
2012-13	0.99	4.27	78.86	12.72
2013-14	0.64	5.25	77.38	11.52
2014-15	0.53	6.55	75.90	12.21
2015-16	-0.61	12.90	74.55	11.28
2016-17	0.18	12.53	67.47	11.66
2017-18	-1.60	18.38	67.54	9.20
2018-19	-1.25	15.50	67.79	9.73
2019-20	0.04	14.21	67.04	14.14
2020-21	0.17	14.12	60.94	14.32
2021-22	0.26	11.78	60.36	14.50
2022-23	0.18	8.74	64.85	15.50
2023-24	0.54	5.73	71.80	15.97
2024-25	0.97	3.95	71.30	17.01

Source: Compiled by the author from Punjab National Bank annual reports and financial disclosures; RBI publications used for cross-verification. PNB's official annual-report archive contains the underlying reports for the study period.

5. EARNINGS ANALYSIS

ROA is used as the principal indicator of earnings performance.

PNB's ROA was 1.19% in FY2011-12 and declined gradually to 0.53% by FY2014-15. Profitability deteriorated sharply thereafter. ROA became negative at -0.61% in FY2015-16 and reached -1.60% in FY2017-18.

The deterioration coincided with a sharp increase in gross NPAs. The GNPA ratio increased from 6.55% in FY2014-15 to 12.90% in FY2015-16 and 18.38% in FY2017-18.

The subsequent recovery was gradual. ROA returned to positive territory in FY2019-20. It reached approximately 0.17% in FY2020-21, 0.26% in FY2021-22, 0.18% in FY2022-23, 0.54% in FY2023-24 and 0.97% in FY2024-25.

The FY2024-25 figure is particularly significant because PNB's official financial disclosure reports ROA of 0.97% for the year.

The earnings trend indicates a broad U-shaped pattern:

- comparatively strong profitability at the beginning;
- severe deterioration during the stressed-asset period;
- gradual recovery after FY2018-19; and
- substantial improvement by FY2024-25.
- The temporary decline from 0.26% in FY2021-22 to 0.18% in FY2022-23 also demonstrates that recovery was not completely linear.

6. ASSET QUALITY ANALYSIS

GNPA ratio is used as the principal asset-quality indicator.

PNB's GNPA ratio increased from 2.83% in FY2011-12 to 6.55% in FY2014-15. It subsequently rose to 12.90% in FY2015-16 and reached a study-period peak of 18.38% in FY2017-18.

Table 2. GNPA Trend During the Stress and Recovery Period

Year	GNPA Ratio
2017-18	18.38%
2018-19	15.50%
2019-20	14.21%
2020-21	14.12%
2021-22	11.78%
2022-23	8.74%
2023-24	5.73%
2024-25	3.95%

The improvement after FY2017-18 is substantial. By FY2024-25, GNPA had declined to 3.95%. PNB's official FY2024-25 financial information confirms GNPA of 3.95% and NNPA of 0.40%.

The asset-quality recovery is one of the most important findings of the study.

However, a decline in the GNPA ratio should not automatically be interpreted as evidence that every new loan generated during the period was of higher quality. The GNPA ratio is affected by many factors like; recoveries; upgrades; write-offs; provisioning; changes in gross advances; and recognition of new NPAs.

Therefore, GNPA should be interpreted together with recovery, provisioning and credit-growth information.

7. GROWTH ANALYSIS

Growth is examined through deposits and advances.

PNB's FY2011-12 annual report records deposits of approximately ₹3,79,588 crore and advances of approximately ₹2,93,775 crore. By FY2024-25, global deposits had reached ₹15,66,623 crore and global advances ₹11,16,637 crore. PNB's official FY2024-25 disclosures also report global business of approximately ₹26.83 lakh crore.

Table 3. Long-Term Growth in Major Balance-Sheet Indicators

Indicators	FY2011-12	FY2024-25	Approximate CAGR
Deposits	₹3.80 lakh crore	₹15.67 lakh crore	11.51%
Advances	₹2.94 lakh crore	₹11.17 lakh crore	10.81%
Total Assets	₹4.58 lakh crore	₹18.18 lakh crore	11.19%

The calculations show substantial long-term expansion in PNB's size.

However, the growth must be interpreted in the context of the 2020 amalgamation. The post-amalgamation PNB was a materially larger entity because the operations of OBC and UBI were incorporated into it. PNB's own disclosure specifically cautions that pre- and post-amalgamation financial information is not comparable in a simple manner.

The growth dimension is positive in absolute terms. Nevertheless, the experience of FY2015-16 to FY2018-19 shows that growth without adequate credit discipline can result in significant deterioration in asset quality.

Therefore, business growth should be interpreted jointly with ROA, GNPA and CRAR.

8. LIQUIDITY ANALYSIS

CDR is used as a simple liquidity-related indicator.

PNB's CDR was relatively high during the early study period, at approximately 77-79%. It subsequently declined to around 67% during FY2016-17 through FY2019-20.

After amalgamation, CDR declined further to 60.94% in FY2020-21 and 60.36% in FY2021-22. It then increased to 64.85% in FY2022-23, 71.80% in FY2023-24 and 71.30% in FY2024-25.

The FY2024-25 ratio can also be derived from global advances of ₹11,16,637 crore and global deposits of ₹15,66,623 crore.

The CDR trend highlights three broad phases:

1. relatively high credit deployment during the early period;
2. lower deployment around the merger and immediate post-merger period;
3. increased credit deployment during the recent recovery period.

A CDR of approximately 71% should not by itself be classified as a liquidity problem. CDR measures the relationship between advances and deposits, whereas a complete liquidity assessment would require indicators such as Liquidity Coverage Ratio, liquid assets, funding concentration and maturity mismatches.

9. EQUITY AND CAPITAL ADEQUACY ANALYSIS

CRAR is used as the principal indicator of the equity/capital dimension.

PNB's CRAR was 12.63% in FY2011-12 and remained above 11% during most of the early study period. It declined to 9.20% in FY2017-18, coinciding with the period of severe asset-quality deterioration and losses.

Thereafter, capital adequacy strengthened considerably.

Table 4. CRAR Trend During the Recovery Period

Year	CRAR
2017-18	9.20%
2018-19	9.73%
2019-20	14.14%
2020-21	14.32%
2021-22	14.50%
2022-23	15.50%
2023-24	15.97%
2024-25	17.01%

PNB's FY2024-25 disclosures report CRAR of 17.01%, demonstrating a substantial strengthening of capital adequacy.

The CRAR trend is one of the clearest indicators of PNB's financial strengthening.

The increase from 9.20% in FY2017-18 to 17.01% in FY2024-25 represents a major improvement in the bank's capital buffer. This provides greater capacity to absorb unexpected losses and support future business expansion.

10. OVERALL EAGLE ASSESSMENT

Table 5. EAGLE-Based Long-Term Assessment

Dimension	Early period	Stress Period	Recent Period	Overall Trend
Earnings	Strong/moderate ROA	Negative/very weak ROA	Strong recovery	Improved
Asset Quality	Moderate GNPA	Very high GNPA	GNPA substantially reduced	Improved
Growth	Steady expansion	Continued expansion with stress	Strong business expansion	Positive
Liquidity	CDR around 77-79%	CDR around 67%	CDR around 70%	Broadly stable
Equity	CRAR around 12%	CRAR fell to 9.20%	CRAR increased to 17.01%	Strong improvement

The EAGLE analysis demonstrates that PNB's performance was not constant throughout the fourteen-year period. Rather, it followed a pattern of deterioration followed by substantial recovery.

11. THE 2020 AMALGAMATION AS A STRUCTURAL BREAK

The amalgamation of Oriental Bank of Commerce and United Bank of India into PNB became effective on 1 April 2020. PNB's official information records the amalgamation and related regulatory disclosures.

The structural effect of the merger is important for interpreting the growth indicators. From FY2020-21 onward, PNB represents a larger consolidated banking entity.

PNB itself states that historical information before the amalgamation is not directly comparable with information subsequent to the amalgamation.

Therefore, the substantial increase in deposits, advances and assets after FY2020 should not be interpreted entirely as internally generated organic growth.

This distinction strengthens the methodological quality of the present research because it prevents an inflated interpretation of the Growth component of EAGLE.

12. MAJOR FINDINGS

The major findings of the study are as follows:

1. PNB's profitability was comparatively strong at the beginning of the study period, with ROA of 1.19% in FY2011-12.
2. Profitability deteriorated significantly during the stressed-asset period, with ROA becoming negative in FY2015-16 and FY2017-18.
3. Asset quality deteriorated sharply between FY2014-15 and FY2017-18, with GNPA increasing from 6.55% to 18.38%.
4. The highest GNPA ratio of the study period was recorded in FY2017-18.
5. Capital adequacy weakened during the stressed period, with CRAR declining to 9.20% in FY2017-18.
6. PNB subsequently achieved substantial improvement in asset quality, with GNPA declining to 3.95% by FY2024-25.
7. ROA recovered to 0.97% in FY2024-25.
8. CRAR strengthened progressively and reached 17.01% in FY2024-25.
9. Deposits, advances and assets expanded considerably over the fourteen-year period.
10. The amalgamation of OBC and UBI represents a structural break and limits direct comparison of pre- and post-2020 balance-sheet size.
11. CDR declined substantially after the merger and subsequently increased as credit expansion accelerated.
12. The overall EAGLE profile indicates substantial improvement in PNB's financial condition after the stressed-asset period.

13. CONCLUSION

The fourteen-year EAGLE analysis of Punjab National Bank demonstrates a significant transformation in its financial performance.

The early period was portrayed by relatively healthy profitability and moderate asset quality. The middle period, especially FY2015-16 to FY2018-19, represented the most difficult phase. Rising stressed assets, substantial NPAs and weak profitability adversely affected the bank's earnings and capital adequacy.

The subsequent period shows a clear turnaround. GNPA declined from the peak of 18.38% in FY2017-18 to 3.95% in FY2024-25. ROA improved from deeply negative levels to 0.97%, while CRAR strengthened from 9.20% to 17.01%.

The findings therefore indicate that PNB has moved from a period of considerable financial stress toward a significantly stronger financial position.

At the same time, the study demonstrates why bank performance cannot be evaluated through a single ratio. The reduction in GNPA, recovery in ROA, increase in capital adequacy and continued business expansion together provide a more complete picture.

The 2020 amalgamation also demonstrates the importance of structural considerations in longitudinal banking studies. The increase in the size of PNB following the merger should not be interpreted entirely as organic growth.

Overall, the EAGLE framework provides a useful and relatively simple approach for analysing the long-term financial transformation of PNB.

14. SUGGESTIONS

Based on the findings, the following suggestions are made:

1. Maintain credit discipline: PNB should continue strengthening underwriting standards to prevent the recurrence of high stressed assets.
2. Strengthen early-warning systems: Data-driven monitoring should be used to identify emerging stress before accounts become non-performing.
3. Sustain recovery efforts: Recovery and resolution mechanisms should remain a strategic priority even though GNPA has declined substantially.
4. Protect capital strength: The strong CRAR position should be maintained through prudent capital planning.
5. Ensure sustainable credit growth: Future growth in advances should be consistent with risk appetite and asset-quality objectives.
6. Improve profitability: The bank should continue focusing on operating efficiency, net interest income, fee-based income and controlled credit costs.
7. Strengthen liquidity management: CDR should be considered together with LCR and other liquidity indicators.
8. Use post-merger synergies: The larger branch and customer network created through amalgamation should be leveraged to improve productivity and profitability.
9. Maintain transparency: Financial disclosures should continue clearly distinguishing comparable and non-comparable historical figures.

15. LIMITATIONS OF THE STUDY

The study has the following limitations:

1. It is based entirely on secondary data.
2. The EAGLE model uses a limited number of indicators and therefore

- cannot capture every aspect of banking performance.
3. CDR is only a simplified liquidity indicator and should not be treated as a complete measure of liquidity risk.
 4. GNPA does not independently explain recoveries, upgrades, write-offs and provisioning.
 5. The 2020 amalgamation creates a structural break in the time series.
 6. Post-merger balance-sheet growth cannot be interpreted entirely as organic growth.
 7. The study does not employ advanced econometric techniques or statistical significance testing.
 8. The research is limited to PNB and therefore the findings cannot automatically be generalised to all Indian banks.

16. REFERENCES

- Balachandher, K. G., Avvari, M., & Balachandran, B. (2004). Merger of Malaysian banks: Selecting appropriate partners. *Managerial Finance*, 30(4), 19-28. <https://doi.org/10.1108/03074350410769001>
- Basha, J. V., & Tejesh, H. R. (2021). Financial performance appraisal of South and North Indian banks: An empirical study of selected banks. *International Journal of Research and Analytical Reviews*, 8(1), 72-90.
- Dayma, R. (2025). Evaluating the impact of merger on Punjab National Bank financial performance. *EPRA International Journal of Environmental Economics, Commerce and Educational Management*, 12(6). <https://eprajournals.com/IJCM/article/16797> EPRA Journals
- Guru, B. K., Avvari, M., & Balachandran, B. (2004). Merger of Malaysian banks: Selecting appropriate partners. *Managerial Finance*, 30(4), 19-28. <https://doi.org/10.1108/03074350410769001>
- Kumar, R. (2022). Financial performance analysis of Punjab National Bank: A study based on profitability and asset quality ratios. *International Journal of Economic Perspectives*, 16(9), 70-84.
- Rani, P., & Mittal, V. (2019). Financial performance of Punjab National Bank: Analyzing the financial performance of Punjab National Bank in India. *Journal of Advances and Scholarly Researches in Allied Education*, 16(6), 3207-3213.

- Ristanti, E. D., & Ismiyanti, F. (2021). Determinants of profitability of 10 big banks in Indonesia with EAGLES analysis. *JBMP: Jurnal Bisnis, Manajemen dan Perbankan*, 7(1), 193-202. <https://doi.org/10.21070/jbmp.v7i1.1283>
- Santhoshi Kumari, & Prasad, M. S. V. (2017). Evaluating the financial performance of select Indian banks using EAGLES model. *The IUP Journal of Accounting Research & Audit Practices*, 16(2).
- Sathavara, J. A., & Sathavara, R. C. (2021). Financial performance analysis of private sector banks in India: An EAGLE model approach. *International Journal of Commerce and Management Studies*, 6(3), 1-11.
- Srivastava, A., & Kumar, A. (2024). Is bigger always better? Evaluating the financial performance of Punjab National Bank in the post-merger era. *European Economic Letters*, 14(1s), 71-77. <https://doi.org/10.52783/eel.v14i1s.1347>
- Srivastava, A., Kumar, A., Mishra, A., & Mishra, A. (2025). An Eagle's eye view on financial fitness of Indian commercial banks. *Economic Sciences*, 21(02S), 252-264. <https://doi.org/10.69889/zx714564>
- Suresh, G., & Krishnan, P. A. (2020). Evaluating the performance of Indian banks: EAGLES model approach. *Finance India*, 34(3), 999-1024.
- Vaidya, R. (2023). Evaluating Nepalese commercial banks' performance from the eyes of EAGLES rating. *Khwopa Journal*, 5(1), 37-45.
- Annual report (2011-12 to 2024-25). PNB.
- RBI Database on Indian Economy and Statistical Tables Relating to Banks in India