

A STUDY ON PORTFOLIO MANAGEMENT PRACTICES AT PUNJAB NATIONAL BANK, HYDERABAD

J. Sumanth

II MBA Student, Malla Reddy Engineering College (Autonomous), Hyderabad. Email Id:
julakantisumanth888@gmail.com

Dr.S. Narender

Professor, Department of MBA, Malla Reddy Engineering College (Autonomous),
Hyderabad. Email Id: narendercommerce@gmail.com

ABSTRACT

This project explores the portfolio management practices at Punjab National Bank (PNB), one of India's largest public sector banks. Portfolio management involves the strategic allocation of financial resources across various investment instruments to maximize returns while minimizing risks. The study examines how PNB manages its investment portfolio, including government securities, corporate bonds, and other financial assets, in line with regulatory guidelines set by the Reserve Bank of India (RBI). It also highlights the bank's approach to risk assessment, diversification, and the use of modern tools for portfolio optimization. Through a blend of active and passive investment strategies, PNB aims to maintain a stable financial position, ensure liquidity, and enhance long-term profitability. The project emphasizes the importance of robust portfolio management in achieving the bank's overall financial objectives and sustaining investor confidence in a dynamic and competitive banking environment.

Key words: portfolio management, government securities, corporate bonds, financial asserts.

INTRODUCTION

A portfolio is a collection of investment products, such as stocks, bonds, mutual funds, shares, cash, and so on, depending on the investor's income, time horizon, and budgetary constraints. The practice of selecting an investing strategy that minimizes risk and maximizes return for each individual is known as portfolio management. The process of managing a person's cash, stocks, and bonds is known as portfolio management. mutual funds so that he can maximize his earnings within the given time

frame. The practice of handling a person's money under the skilled guidance of portfolio managers is known as portfolio management. It explains the administration or management of a securities portfolio with the goal of protecting and boosting the value of the underlying investment.

REVIEW OF LITERATURE

Jiang et al (2024) proposed a new reinforcement learning approach based on representation transfer for portfolio management. Their study leverages representation learning techniques to capture the underlying structure and patterns in financial time series data, enhancing the effectiveness of reinforcement learning algorithms in portfolio optimization.

Wang and Ku (2022) explored risk-sensitive policies for portfolio management, investigating the trade-offs between risk and return in portfolio optimization. Their study focuses on the development of risk-aware investment strategies that balance the objectives of maximizing returns while minimizing portfolio volatility and downside risk.

Gunjan and Bhattacharyya (2023) offered a comprehensive review of portfolio optimization techniques, examining a wide range of mathematical models and optimization algorithms employed in portfolio management.

Soleymani and Paquet (2021) proposed a deep graph convolutional reinforcement learning approach for financial portfolio management, termed Deep Pocket. They leverage deep learning techniques to capture the complex relationships and dependencies among financial assets within a portfolio.

NEED OF THE STUDY

Punjab National Bank (PNB) must address issues like growing non-performing assets (NPAs), market volatility, and regulatory restrictions because they have a big influence on the performance of its portfolio. PNB's portfolio management strategies can be evaluated to find areas for improvement and best practices. In order to reduce risks and guarantee long-term financial stability, effective portfolio management is essential.

This study provides insightful information about how public sector banks, such as PNB, can balance risk and profitability in the face of a quickly changing financial environment. One crucial banking function that affects risk assessment, investment strategies, and overall financial health is portfolio management. Gaining insight into PNB's portfolio management can help one understand its operational effectiveness and financial stability.

SCOPE OF THE STUDY

The five years of company data, or 2020-2021 to 2024-2025, are covered by the study. In order to determine what proportion of funds should be allocated to each of the companies in the portfolio, the study includes the computation of correlations between the various securities. The study concludes with the computation of the weights of each individual security included in the portfolio, as well as the computation of each security's individual standard deviation. These percentages aid in distributing the available investment capital among riskier portfolios.

OBJECTIVES OF THE STUDY

- To understand the behavior of volatility of selected companies viz Gujarat Ambuja cement Ltd (GACL), Laren and Toubro, Ranbaxy Laboratories, Cipla, Karur Vysya, ICICI.
- To examine the pattern of investments and the associated risks and returns.
- To examine security assessment through portfolio return.
- To determine the highest returns by analyzing the returns of different portfolios.
- To examine and choose the best portfolio from the ones that have been chosen.

SOURCES OF DATA

DATA SOURCES

Secondary Data:

Secondary data was collected from various textbooks, magazines, journals, websites, company reports and published reports and other sources.

Secondary data is the foundation of this investigation.

We used a straightforward sampling strategy to examine the data.

TOOLS & TECHNIQUES USED FOR ANALYSIS

- Standard Deviation
- Correlation
- Average Return Calculation
- Bar Graphs

LIMITATIONS OF THE STUDY

- Analysis is done on a very small number of randomly chosen companies.
- Data was only gathered from secondary sources. The project has no primary data.
- This study does not include key economic factors like inflation, interest rates, or GDP, which could affect investment performance and lead to an incomplete evaluation of the portfolio.
- Excessive Non-Performing Assets (NPAs): PNB has experienced high NPAs, which can reduce profitability and erode portfolio returns.
- Technological Restrictions: Limited resources for in-depth financial modeling and analysis.

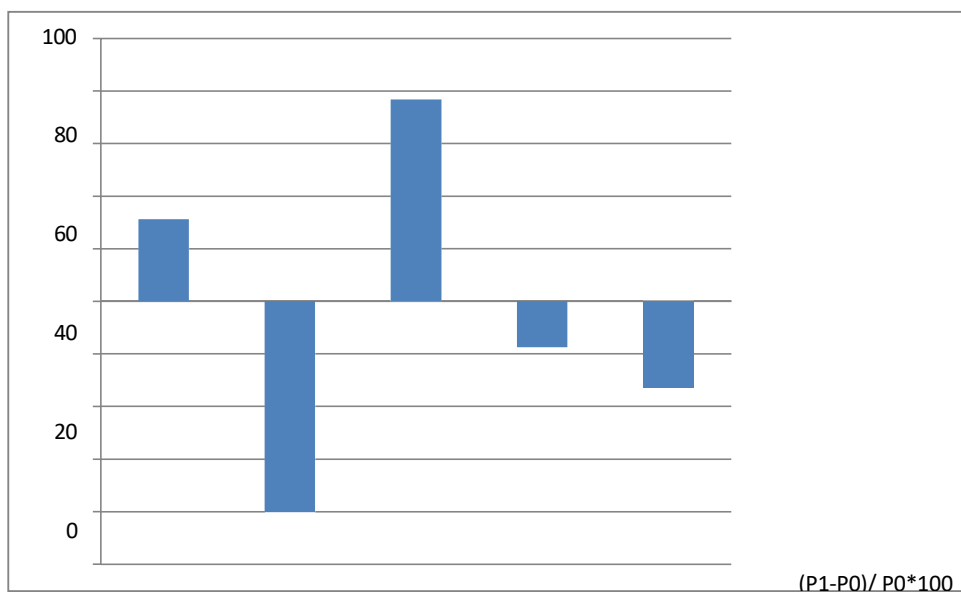
DATA ANALYSIS AND INTERPRETATION

Table No 5.1 The following table shows the Calculation of Return Gujarat Ambuja Cement Ltd (GACL):

$$\text{Average return} = \sum R/N$$

Year	Opening share price (P0)	Closing share price (P1)	(P1-P0)	(P1-P0)/ P0*100
2020-2021	306.10	401.55	95.45	31.18
2021-2022	405.00	79.60	-325.40	-80.35
2022-2023	80.00	141.30	61.30	76.63
2023-2024	144.80	119.35	-25.45	-17.58
2024-2025	120.00	80.60	-39.4	-32.83
TOTAL RETURN				-22.95

Average return = $-22.95/5 = -4.59$



Interpretation:

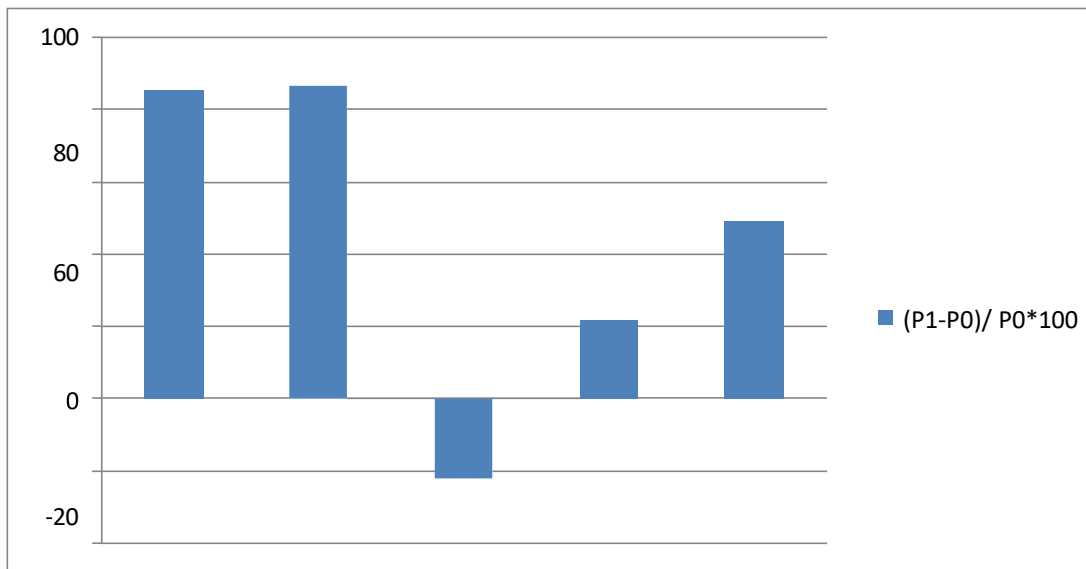
From the above table the returns of Ambuja Cement Ltd in the year 2020-21 is 31.18, in the year 2021-22 is -80.35, in the year 2022-23 is 76.63, in the year 2023-24 is -17.58 and in the year 2024-25 is -32.83.

Table No 5.2 The following table shows the Calculation of Return Larsen and Toubro (LNT):

Year	Opening share price (P0)	Closing share price (P1)	(P1-P0)	(P1-P0)/ P0*100
2020-2021	530.00	982.00	452.00	85.28

2021-2022	988.70	1844.20	855.50	86.53
2022-2023	1845.00	1442.95	-402.05	-21.79
2023-2024	1400.00	1703.20	303.20	21.66
2024-2025	1704	2539.05	835.05	49.01
TOTAL RETURN				220.69

Average return = $220.69/5 = 44.14$



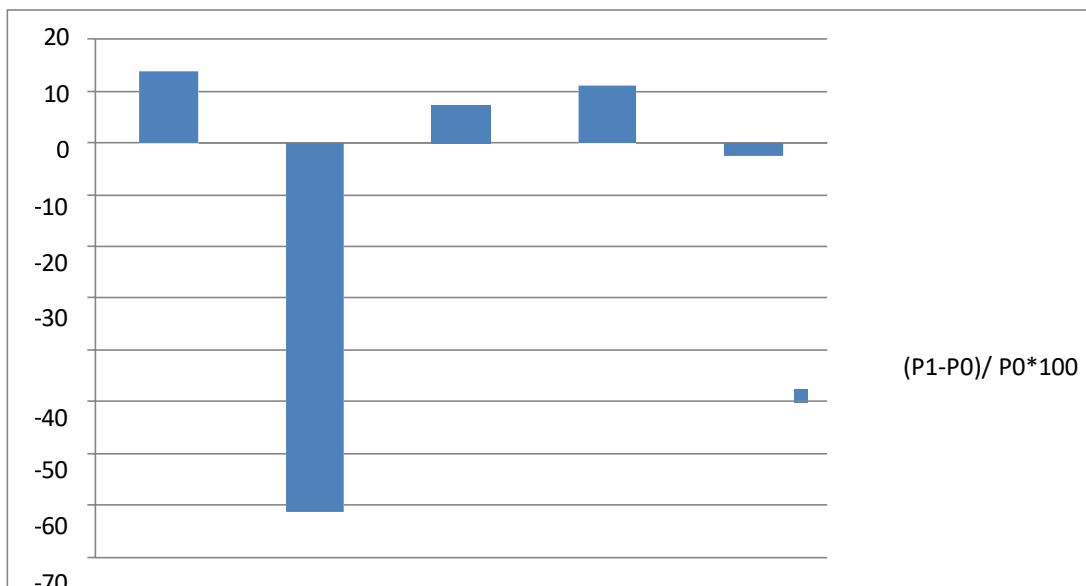
Interpretation:

From the above table the returns of Larson and turbo in the year 2020-21 is 85.28, in the year 2021-22 is 86.53, in the year 2022-23 is -21.79, in the year 2023-24 is 21.66 and in the year 2024-25 is 49.01

Table No 5.3 The following table shows the Calculation of Return Ranbaxy Laboratories:

Year	Opening share price (P0)	Closing share price (P1)	(P1-P0)	(P1-P0)/ P0*100
2020-2021	1100.10	1251.40	151.30	13.75
2021-2022	1252.00	362.35	-889.65	-71.06
2022-2023	364.40	391.85	27.45	7.53
2023-2024	393.00	349.15	-43.85	11.16
2024-2025	350.00	340.95	-9.05	-2.59
TOTAL RETURN				-41.21

Average return = $-41.21/5 = -8.242$



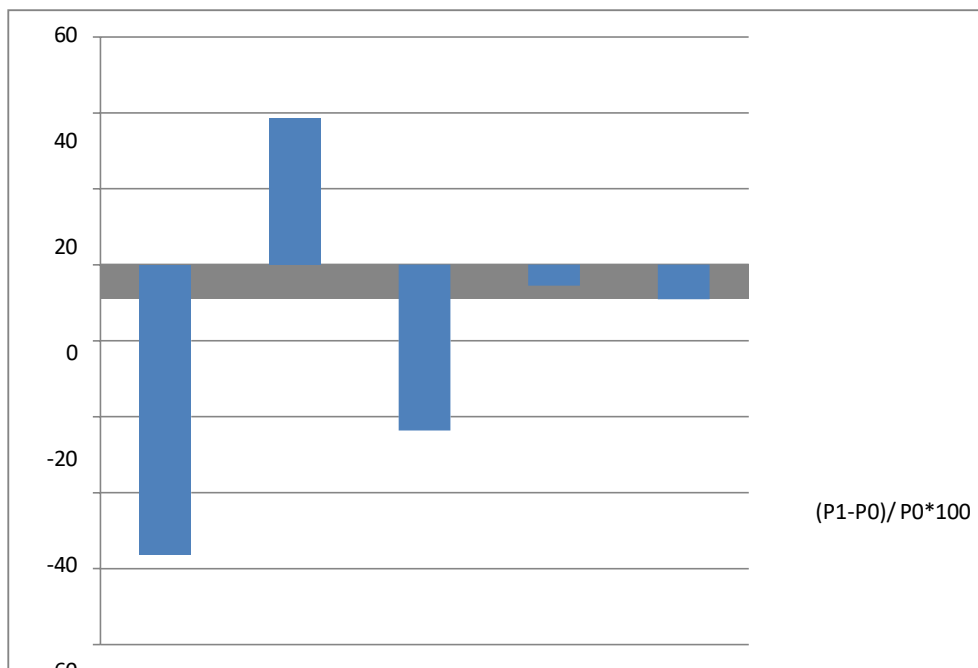
Interpretation:

From the above table the returns of Ranbaxy Laboratories in the year 2020-21 is 13.75, in the year 2021-22 is -71.06, in the year 2022-23 is 7.53, in the year 2023-24 is 11.16 and in the year 2024-25 is -2.59

Table No 5.4 The following table shows the Calculation of Return Cipla:

Year	Opening share price (P0)	Closing share price (P1)	(P1-P0)	(P1-P0)/P0*100
2020-2021	1339.00	317.25	-1021.75	-76.31
2021-2022	320.00	443.40	123.40	38.56
2022-2023	445.00	250.70	-194.30	-43.66
2023-2024	253.40	239.30	-14.10	-5.56
2024-2025	240.00	218.15	-21.85	-9.10
TOTAL RETURN				-96.07

Average return = $-41.21/5 = -8.242$



Interpretation:

From the above table the returns of Cipla. in the year 2018-19 is -76.31, in the year 2019-20 is 38.56, in the year 2020-21 is -43.66, in the year 2021-22 is -5.56 and in the year 2022-23 is -9.10

FINDINGS SUGGESTIONS AND CONCLUSION

FINDINGS:

- Larsen & Toubro (L&T) delivered the highest average return of 44.14%, but with relatively high risk (standard deviation 45.73)
- ICICI Bank showed steady performance, offering a good return of 21.92% with moderate risk, making it a dependable investment.
- Gujarat Ambuja Cement Ltd (GACL), Ranbaxy, Cipla, and Karur Vysya all experienced negative average returns, reflecting weak performance over the five years.
- The portfolio combining GACL and L&T gave the best return at 23.67%, with moderate risk, helped by their strong negative correlation (-0.63).
- The Ranbaxy and Cipla pair had the lowest risk (12.36) due to a very strong negative correlation (-0.80), but the return was negative (-13.18%), which is not attractive for growth-focused investors.

SUGGESTIONS

- ❖ Choose your investments based on financial considerations. Public awareness is not a benefit.
- ❖ Purchase stock that differs from the company's current state and the public's expectations and assessment (contrarian vs. consensus approach).
- ❖ Invest in stocks of companies that could surprise you.
- ❖ Profit from volatility before you achieve a new equilibrium.
- ❖ Do your own research after listening to rumors and advice.
- ❖ Don't rely solely on one investment. It is analogous to "putting all the eggs in one

basket." Long-term risk reduction will result from this.

CONCLUSION

In conclusion, portfolio management at Punjab National Bank (PNB) plays a critical role in optimizing returns while managing associated risks in line with the bank's strategic objectives and regulatory requirements. PNB adopts a systematic approach to investment by diversifying its asset classes, continuously monitoring market trends, and employing both active and passive portfolio strategies. The bank's portfolio includes government securities, corporate bonds, equities, and other financial instruments, balanced to ensure liquidity, safety, and profitability. Moreover, PNB follows strict risk assessment protocols and compliance measures as per the guidelines of the Reserve Bank of India (RBI), ensuring sound financial health and stakeholder confidence. The integration of modern tools such as risk analytics, credit rating systems, and real-time monitoring further enhances decision-making in portfolio management. Overall, PNB's portfolio management reflects a prudent, well-governed, and dynamic financial practice that supports the bank's long-term growth and financial stability.

REFERENCES

Books referred:

- Donald E. Fischer, Ronald J. Jordan, SAPM, 1999, Sixth Edition, Portfolio Analysis, page no: 559-588 & CAPM, page no: 636-648
- Punithavathy Pandian, Security Analysis & Portfolio Management, 2014, Portfolio Markowitz Model, page no: 329-349 & CAPM, page no: 379-387.
- Prasanna Chandra, Investment Analysis & Portfolio Management, 2013, Second edition, Efficient Frontier, page no: 251-259

Research Articles:

1. Jiang et al (2024, June). New reinforcement learning approach based on representation transfer for portfolio management. Knowledge-Based Systems, 293, Article 111697.
2. Wang Ku (2022, March). Risk-sensitive policies for portfolio management. Expert Systems with Applications, 198, Article 116807.
3. Gunjan & Bhattacharyya, S. (2023, May). A brief review of portfolio optimization techniques. Artificial Intelligence Review, 56(5), 3847–3886.
4. Soleymani & Paquet (2021, May 6). Deep graph convolutional reinforcement learning for financial portfolio management (DeepPocket). Initial arXiv release; later in Expert Systems with Applications, 182, Article 115127.

Websites:

- ❖ www.geojit.com
- ❖ www.investopedia.com
- ❖ www.capitalmarket.com
- ❖ www.bse.com
- ❖ www.nse.com
- ❖ www.utvi.com
- ❖ www.mothilaloswal.com



Business magazines:

- ❖ Business world-2015
- ❖ Outlook Money-2015