

THE DIVERSIFICATION EFFECT OF PORTFOLIO PERFORMANCE BY HDFC BANK, HYDERABAD

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ABSTRACT

This study explores portfolio management practices within HDFC Bank, one of India's leading financial institutions. Portfolio management is critical for banks to optimize returns while managing risks effectively. The research delves into HDFC Bank's strategies for asset allocation, risk assessment methodologies, and the role of technology in enhancing portfolio performance. By analyzing these factors, the study aims to provide insights into how HDFC Bank navigates the complexities of portfolio management to achieve its financial objectives. Key findings highlight the importance of diversification, strategic asset allocation, and robust risk management frameworks in sustaining competitive advantage in the banking sector.

Key Words: *Portfolio management, Returns assessment methodologies, Risk Management, Strategic asset allocation.*

1. INTRODUCTION

Portfolio

A portfolio is a collection of assets. The assets may be physical or financial like Shares, Bonds, Debentures, Preference Shares, etc. The individual investor or a fund manager would not like to put this money in the shares of one company that would amount to great risk. He would therefore, follow the age-old maxim that one should not put all the eggs into one basket. By doing so, he can achieve objective to maximize portfolio return and at the same time minimizing the portfolio risk by diversification.

Portfolio management

Portfolio management is the management of various financial assets which comprise the portfolio. Portfolio management is a decision– support system that is designed with a view to meet the multi-faced needs of investors. According to Securities and Exchange Board of India Portfolio Manager is defined as: “Portfolio means the total holdings of securities belonging to any person”. To frame the investment strategy and select an investment mix to achieve the desired investment objectives.

2. NEED AND IMPORTANCE OF THE STUDY

Its present individual best investment plan as per their age, income, budget and ability to take risk and read the fluctuations in the share price of the company. It enables portfolio managers to provide customized investment solutions as per their need and requirements of the clients and test portfolio strategies before taking action.

3. SCOPE OF THE STUDY

To get maximum knowledge of share market, which will help anticipating the future stock market? It gives an idea which is the right time invested or not, whether market will face up's and downs. Scope of investing your money in stock market and getting profit out of that. The results are based on the study conducted during last five years i.e., 2018-19 to 2021-22. Portfolio management has emerged as a separate academic discipline in India. Portfolio theory that deals with the rational investment decision-making process has now become an integral part of financial literature.

4. OBJECTIVE OF THE STUDY

- To identify the portfolio which results in low risk.
- To calculate the returns of various portfolios and identify the highest.
- To analyze and select the best portfolio out of selected portfolios.
- To analyze the effect of diversification of investment.

5. REVIEW OF LITERATURE

Panagiotis xidonas *et. Al* (2021)

found that in the field of portfolio management have been compiled and classified according to the different multicriteria in the methodological approaches that have been used. Except the in-depth presentation of the MCDM contributions in the area of portfolio management, the outmost aim of this paper is to stress the inarguable multiple criterion nature of the majority of the problems that modern financial management faces. **Viviana Fernandez *et. al* (2012)** suggested that analyze the implications for portfolio management of accounting for conditional heteroskedasticity and sudden changes in volatility, based on a sample of weekly data of the Dow Jones Country Titans, the CBT-municipal bond, spot and futures prices of commodities for the period. To that end, we first proceed to utilize the ICSS algorithm to detect long-term volatility shifts, and incorporate that information into PGARCH models fitted to the return's series. **Michael Stamos *et. al* (2005)** stated that the historical data of 29 major market indexes covering global equities, bonds, currencies, and commodities and apply a common set of exponentially weighted volatility estimates to them. The authors find that active volatility management is beneficial for most of these asset classes and for mixed asset portfolios, leading to more consistent wealth accumulation over time. **Iyiola Omisore *et. al* (2001)** it aids an investor to classify, estimate, and control both the kind and the amount of expected risk and return in an attempt to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return. A

methodology section is included which examined applicability of the theory to real time investment decisions relative to assumptions of the MPT. Crina O. Tarasi *et. al* (1998) analyzed that how market segments can be characterized in terms of risk and return. Next, they identify the firm's efficient portfolio and test it against (1) its current portfolio and (2) a hypothetical profit maximization portfolio. Then, using forward- and back-testing, the authors show that the efficient portfolio has consistently lower variability than the existing customer mix and the profit maximization portfolio.

6. RESEARCH METHODOLOGY

The basic principle in the research has been adopted in the overall methodology. The following

methodology has been used for meeting the requirements,

7.Sources of data:

Secondary Data:

Financial modeling projects often rely more heavily on secondary information.

Secondary data sources:

- Financial statements
- Research articles and reports
- Economic and industry reports

PERIOD OF THE STUDY: The study covered period of 5 years i.e. from 2018-19 to 2022-23

TOOLS & TECHNIQUES: Portfolio risk , portfolio return , variance , standard deviation , covariance , correlation-coefficient

8.LIMITATIONS OF THE STUDY

Risk Of Over Diversification

Sometimes portfolio managers invest funds among large categories of assets whose control becomes impossible. In his efforts to diversify the risk it goes beyond the limit to manage efficiently. Loss arising in such situations is quite high and can bring serious repercussions.

No Downside Protection

Portfolio management only reduces the risk through diversification but does not provide full protection. At times of market crash, the concept of portfolio management becomes obsolete.

Faulty Forecasting

Portfolio management uses historical data for evaluating the returns of securities for investment purposes. Sometimes the historical data collected is incorrect or unreliable which leads to wrong forecasts.

9. DATA ANALYSIS AND INTERPRETATION:

Analysis of data, also known as data analytics, is a process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains. Data mining is a particular data analysis technique that focuses on modeling and knowledge discovery for predictive rather than purely descriptive purposes, while business intelligence covers data analysis that relies heavily on aggregation, focusing on business information. In statistical applications data analysis can be divided into descriptive statistics, exploratory data analysis

(EDA), and confirmatory data analysis (CDA). EDA focuses on discovering new features in the data and CDA on confirming or falsifying existing hypotheses. Predictive analytics focuses on application of statistical models for predictive forecasting or classification, while text analytics applies statistical, linguistic, and structural techniques to extract and classify

information from textual sources, a species of unstructured data. All are varieties of data analysis.

Data integration is a precursor to data analysis, and data analysis is closely linked to data visualization and data dissemination. The term data analysis is sometimes used as a synonym for data modeling.

1. Calculation of Gross Profit:

The Facts and figures have been downloaded from hdfc published balance sheet from <http://www.moneycontrol.com/financials/hdfc/bank/balance-sheet/HDF01>. Formula : $\text{GROSS PROFIT} = \text{TOTAL REVENUE} - \text{TOTAL EXPENDITURE}$.

Year	2019	2020	2021	2022	2023
Gross Profit	2347.20	2703.08	2939.92	3121.73	3343.17

every year based on this table we have generate the graph. The graph is showing the graphical representation of every year Gross profit of the company.

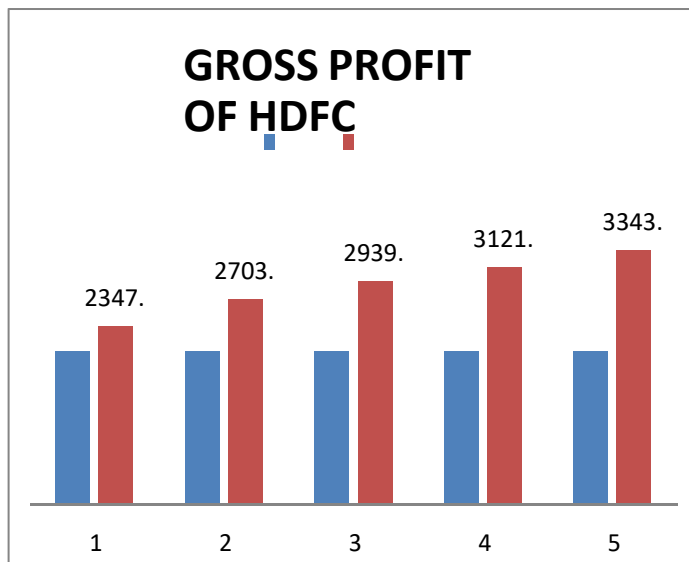
Interpretation: The total Gross profit table is showing the gradual increase from 2023 but a down fall is recorded in 2020. 2019 gross profit is remarkable good and now at present the company is regarded as good company now onwards.

2. Calculation of Net block:

The Facts and figures have been downloaded from hdfc published balance sheet from <http://www.moneycontrol.com/financials/hdfc/bank/balance-sheet/HDF01>.

Formula: $\text{NET BLOCK} = \text{TOTAL REVENUE} - \text{COST OF GOOD SOLD} - \text{TOTAL}$

$\text{OPERATING EXPENCES} - \text{INTEREST EXPENSE} - \text{TAX}$.



GRAPH:1

In this table we have analyze for the Total Gross profit for FY 2019,2020,2021,2022,2023. In this table we have depicted the total Gross profit of the company in different columns against

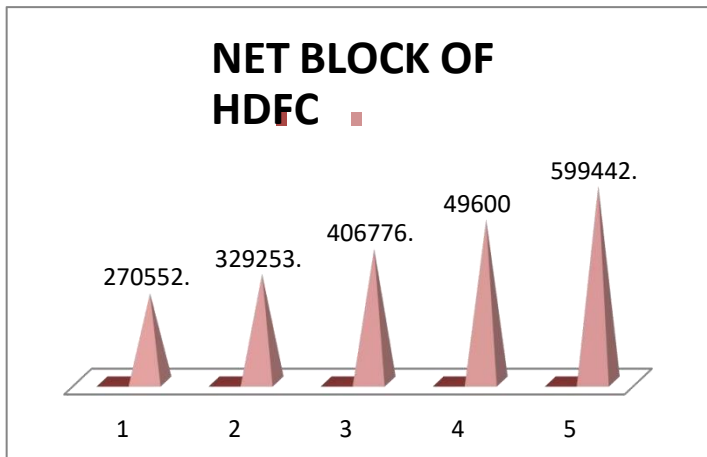
Years	2019	2020	2021	2022	2023
Net Block	2347.20	2703.08	2939.92	3121.73	3343.17

Table

Table 3:

Years	2019	2020	2021	2022	2023
Equity share capital	505.64	501.3	479.81	475.88	469.34

Graph:3



Graph:2

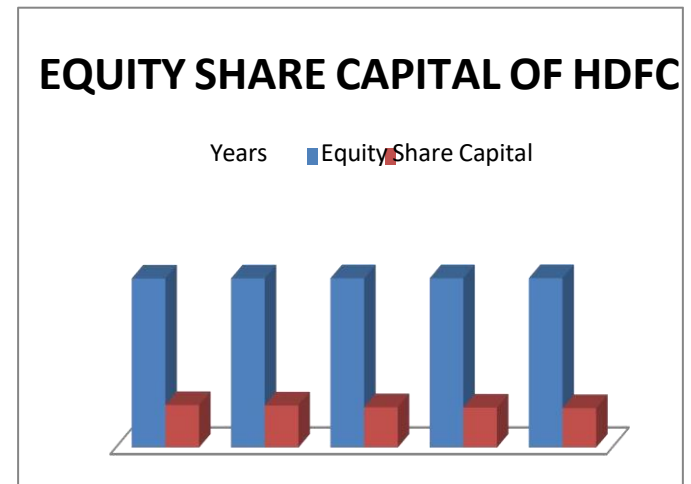
Analysis: The above table shows Net Block. In this table we have analyze for the net block FY 2019, 2020,2021,2022,2023. In this table we have depicted the net block of the company in different columns against every year based on this table we have generate the graph. The graph is showing the graphical representation which is equal for every year of the company.

Interpretation: The net block table is showing the graph which is increase in every year but a down fall in the last years. The total net block is recommendable good at present on words.

3. Calculation of Equity share capital:

The Facts and figures have been downloaded from hdfc published balance sheet from. <http://www.moneycontrol.com/financials/hdfcbank/balance-sheet/HDF01>.

Formula: EQUITY SHARE CAPITAL =CAPITAL STOCK +RETAIN EARNINGS



Analysis: The above table shows equity share capital analysis. In this table we have analyze from FY 2019, 2020,2021,2022,2023. In this table we have depicted the equity share capital block of the company in different columns against every year based on this table we have generate the graph. The graph is showing the graphical representation of equity share capitalof the company.

Interpretation: The equity share capital table is showing the graph which is equal in all the years . The total equity share capital is recommendable good and more profitable forthe company.

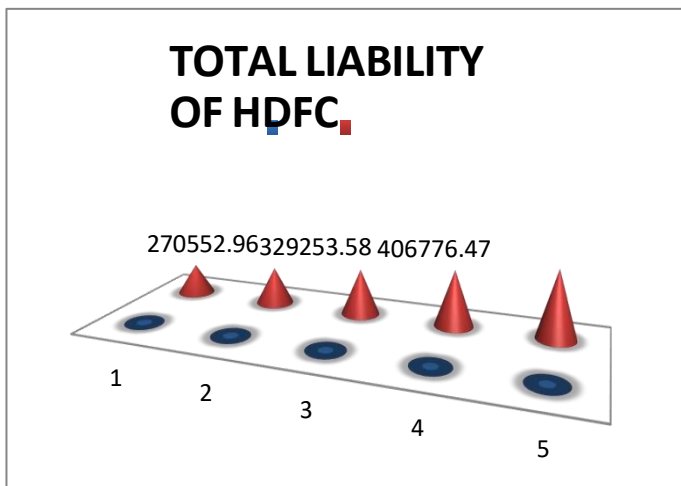
4. Calculation of Total Liability:

The Facts and figures have been downloaded from hdfc published balance sheet from <http://www.moneycontrol.com/financials/hdfcbank/balance-sheet/HDF01>.

Formula: $\text{TOTAL LIABILITY} = \text{BILLS PAYABLE} - \text{LONG TERM DEBTS} - \text{EQUITY SHARE CAPITAL} + \text{GENERAL RESERVE}$.

Table 4:

Years	2019	2020	2021	2022	2023
Total	33790	40033	49169	59050	70884
Liability	9.51	1.89	9.5	3.08	5.56



Analysis: The above table shows total Liability analysis. In this table we have analyze for the Total Liability FY 2019, 2020, 2021, 2022, 2023.

In this table we have depicted the total Liability block of the company in different columns and every year based on this table we have generate the graph. if total liability decrease then the company was going on profit.

Interpretation: The total Liability table is showing the graph increase in 2023 but a down

fall in all the years. The total Liability is recommendable good and more than other year.

5. Calculation of total assets:

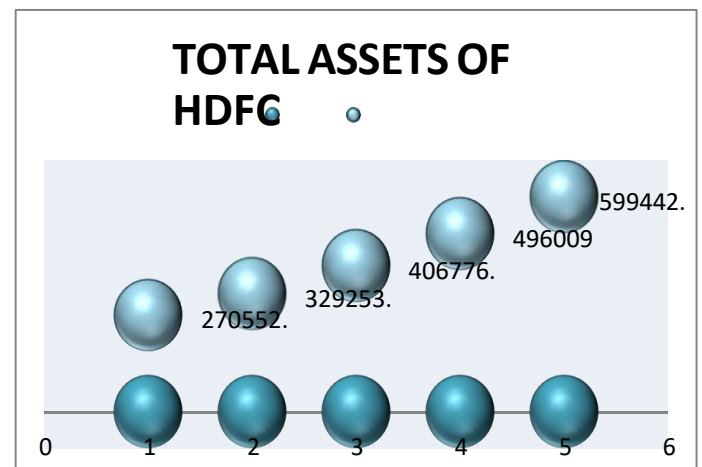
The Facts and figures have been downloaded from hdfc published balance sheet from <http://www.moneycontrol.com/financials/hdfcbank/balance-sheet/HDF01>.

Formula : $\text{TOTAL ASSETS} = \text{CURRENT ASSETS} + \text{FIXED ASSETS} - \text{FICTITIOUS ASSET}$

TABLE :5

Years	2019	2020	2021	2022	2023
Total	33790	4003	4916	59050	70884
Assets	9.49	31.9	99.5	3.08	5.56

GRAPH:5



Analysis: The above table shows total assets analysis. In this table we have analyze for the 2019, 2020, 2021, 2022, 2023. In this table we have depicted the total assets block of the company in different columns against every year. Based on this table we have generate the graph.

The graph is showing the graphical

Interoretation: The total assets table is showing the graph increase in 2023 but a reducing in all years. The total assets is recommendable good and more then others.

10. FINDINGS:

- Individual returns on the selected stocks including Maruti, ACC, HDFC, Reliance are 28.63%, 31.62%, 23.46%, 31.60% respectively.
- Individual risks on the selected stocks including Maruti, ACC, HDFC, Reliance are 89.43%, 46.19%, 56.71%, 68.95% respectively.
- Correlation between all the companies is positive which means all the combinations of portfolios are at good position to gain in future.
- Portfolios Returns of followed by ACC & HDFC (35%) and Maruti & ACC (33.08%) stood on the top while Portfolio Retuns of Maruti & HDFC (21.2%) and HDFC & Reliance (24.10) stood at the bottom.
- Portfolios Risk of Maruti (89. 3%) followed by Reliance & Maruti (67%) and Reliance are very high while Portfolio Risks of ACC & TCS (22.61%) , Maruti & ACC (37.68%) stood at the bottom.

11. SUGGESTIONS:

- Comparing the individual risks, Maruti are risky securities compared to the other securities like Reliance, ACC and HDFC and it suggested that the investors should be careful while investing in these securities.
- The investors who require minimum return with low risk can invest in HDFC and ACC.

representation of every year assets of the company.

- It is recommended that the investors who require high risk with high return should invest in ACC.
- All the investors who invest in the securities are ultimately benefited by investing in selected scripts of Industries.
- Investors are advised to invest in Portfolios of Reliance & ACC (37.43%) followed by ACC & HDFC (35%) and Maruti & ACC (33.08%) which have given the maximum returns.
- Low Risk investors are advised to keep away from Maruti (risk of 89. 3%) and prefer the Portfolios of ACC (22.61%) , Maruti (37.68%) which have the least risk.
- Never invest in the so called promoter quota of lesser known company.
- Never invest in a company about which you do not have appropriate knowledge.

12. CONCLUSION:

Portfolio management is a process of encompassing many activities of investment assets and securities. It is a dynamic and flexible concept and involves regular and systematic analysis, judgment, and action. A combination of securities held together will give a beneficial result if they grouped in a manner to secure higher returns after taking into consideration the risk elements. The main objective of the Portfolio management is to help the investors to make wise choice between alternate investments without a post trading shares. Any portfolio management must specify the objectives like Maximum returns, Optimum Returns, Capital appreciation, Safety etc., in the same prospectus.

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13. WEBSITES

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