

Financing Decisions – A Study on Selected Pharmaceutical Companies of India

*Mr. S. Venkat Reddy

Assistant Professor

J.B. Institute of Engineering and Technology

venkatreddy9753@gmail.com

** Ms. Gunti Sowmithya

J.B. Institute of Engineering and Technology

Abstract

This research seeks to investigate the financing decisions made by selected firms in the pharmaceutical industry and provide insights into the general financial landscape of the industry. It is focused on the complex financial environment of the sector. Given the vital role that the pharmaceutical sector plays in India's economy, it is imperative that stakeholders like as lawmakers, investors, and industry specialists understand how pharmaceutical companies in the nation manage their financing decisions. This quantitative and qualitative study looks at how a few pharmaceutical companies handle their finances. Decisions on the capital structure, debt-equity ratios, funding sources, and the impact of these choices on the overall financial performance of the firm are all part of the study. The purpose of this research is to identify patterns and trends in the financing methods of pharmaceutical companies by analyzing their financial records in detail. In order to provide a clearer view of the decision-making processes, we will examine the elements that influence funding options, such as company size, growth potential, and industry dynamics.

Introduction— The monetary components of each drug's development strategy should be considered in a coordinated order of decisions. In contrast to popular belief, decision-making is not a static process but rather one that evolves across time, even within the same company.¹ Depending on the company's size, certain decision-making tasks may be handled in-house while others must be outsourced. At least when it comes to major matters affecting the whole organization, decision-making is not something that can be easily outsourced. It is easier to outsource decision-making when it tackles a limited range of concerns; this is especially true in cases when the subject at hand is more related to a project than the building of a portfolio. When it comes to managing drug pipelines, optimum choices are crucial. However, pharmaceutical firms still rely on human judgment rather than rigorous analytical methods.² Examining the many facets of commercial decision-making, this study will zero in on the process as it pertains to cancer drug development. These facets encompass the following: the necessity of decisions,

the timeliness of decisions, project-level decision-making, the ideal portfolio, portfolio analysis tools, patent evaluation, and the significance of the drug portfolio.

Fast and accurate decision-making is essential to the success of any business. Time is of the essence in drug development since various stages of the process need varying amounts of funding, and financial responsibilities follow immediately after each of these stages. It is quite costly to go through Phase III clinical testing, and there have been medications that seemed like great candidates but failed to pass this stage and never reached the market. Reducing financial losses would be a primary goal for the developing organization, thus it makes sense to stop working on an agent that isn't going to pass muster as soon as feasible.

Investment

Spending money on assets that will provide the most return for the business over a certain time frame is the crux of every investment choice. What this means is that the choice is about what to purchase in order to maximize value for the business. The organization must strike a balance between its immediate and distant objectives if it is to achieve this. Paying payments and other immediate expenses need cash on hand, but hoarding cash prevents businesses from investing in long-term growth opportunities. A completely long-term perspective is at the other extreme of the range. Even if a company may optimize its long-term development possibilities by investing all of its money, it will quickly go out of business if it doesn't have enough cash on hand to pay its expenses. So, it is essential for businesses to strike a balance between investing for the long and short term.

Which investments to make is another aspect of the investing choice. The finance department has to figure out what the anticipated return is since most investments don't have a guarantee. While this return isn't a guarantee, it is the average of several returns on an investment.

Three primary requirements must be satisfied by the investments:

- After taking into account the level of risk that the business is willing to take, it needs to maximize the firm's worth.
- Appropriate funding is required (we will address this in more detail later).
- In the absence of an investment opportunity satisfying both conditions, it is necessary to return the funds to the shareholders in order to maximize their value.

Funding In order for a business to run, there must be a means of generating revenue. Finding a way to fund them is the responsibility of the finance department. Investments may be financed in two ways: either with the company's own funds or by seeking funding from other sources. There are benefits and drawbacks to each. Taking on debt or selling shares are the two main methods to attract outside investors. Acquiring debt is synonymous with borrowing money. The cost of borrowing money, known as interest, must be repaid alongside the loan. When you sell your stock, you are effectively selling a piece of your business. Example: instead of selling to private investors, a firm may choose to sell to the general public when it

becomes public. In order to become a minor owner of a portion of a corporation, one must sell stocks upon going public. The business is trying to raise capital by marketing itself to the general population. Company funds or outside investors may back any investment. The best method of funding the investment is decided upon throughout the financing choice process.

Statement of the Problem

An important part of India's economic landscape is the pharmaceutical industry, which has a major impact on healthcare innovations and GDP growth. Companies must make smart and knowledgeable financing choices to navigate the difficult financial climate within this industry. The overarching goal of this study is to illuminate the many obstacles that Indian pharmaceutical businesses encounter while trying to get funding. With this research, we hope that politicians, investors, and experts in the pharmaceutical business will be better equipped to make choices that will lead to long-term growth and innovation.

Objectives of the study

- To study about the Financial decisions
- To learn about the potential profits and losses of the chosen pharmaceutical firms
- To examine the relationship between the chosen pharmaceutical firms and nifty-50.

Research Methodology**Techniques for Collecting Data**

All of the information used in this research came from secondary sources. The information used for this study's literature review is derived from secondary sources, or data collected from publicly available sources like journals, textbooks, the internet, etc.

Study Method: Descriptive Study Method

Design of Sampling: Convenience Sampling

Number of Companies Selected: 6 Pharmaceutical firms

Methods for Sampling: Simple Random Sampling

Analysis tool: Correlations with Risk and Return

Limitations of the study

- The study only includes the pharmaceutical companies that were chosen for the study.
- The project is heavily constrained by time constraints.

- The results of the analysis conducted in this project are not guaranteed to be accurate enough to make decisions.
- The project's sample size is also limited.
- The data is limited to the areas of analysis that were chosen for the study.

Review of Literature

Financing Decisions: A Study of Pharmaceutical Companies of India by Sudesh Kumar, Dr. Bimal Anjum, Dr. Suman Nayayar (2012): Academics in India have spent the better part of two decades investigating how businesses get capital, with a special emphasis on investment capital and the various funding mechanisms used by various institutions. To meet the varied financing requirements of their companies, financial managers use a wide range of debt and equity structures, all with an eye on maximizing long-term profit while minimizing risk. The goal of this study is to analyze how a company's investment strategy influenced the changes in its capital structure between 2007 and 2011. Not only does this study want to do an intra-company examination, but it also seeks to demonstrate the importance of the debt-equity balance for ideal investment strategy. The paper also includes an examination of trends based on accurate financial data from four prestigious pharmaceutical companies: Cadila Health Care Ltd., Dabur India Ltd., Cipla, and Aurobindo Pharma Ltd.

Financing Decisions: A study of Selected Pharmaceutical Companies of India by Ashok Panigrahi & Vijay Joshi (March 2019) : Research on business finance operations has been continuous over the last 20 years. Finding out where and how firms get their money for investments has been the main focus of this study. Despite a great deal of research and hundreds of papers after Modigliani and Millers' seminal work, there is still no consensus among finance experts on this essential issue of corporate finance. It is common practice for managers of financial resources to use a hybrid financing strategy, combining debt and equity. Companies' capital structure decisions, in perfect or imperfect markets, have baffled academics and entrepreneurs in India and the West alike. Actually, in order to meet the varied financing requirements of the business in a manner that reduces risk and optimizes profit in the long term, financial managers use a range of debt and equity structures. This study aims to fill that

knowledge gap by analysing the capital structure pattern of a sample of Indian pharmaceutical firms between 2012 and 2016 and drawing conclusions on the impact on investment strategies. The importance of the debt-equity mix for effective investment policymaking is another goal of this study, which aims to do an intracompany analysis.

An Analysis of Financial Performance of Indian Pharmaceutical Companies by Ashok Panigrahi (Oct 2017) : How well a business converts its primary revenue stream into a profit is one measure of its financial health. To compare similar enterprises inside the same firm or to compare whole sectors or companies, you might use this term. It is an all-encompassing indicator of the financial well-being of a company within a certain time frame. For decades, decision-makers in management, planning, economics, and academia have argued about the best way to measure success. Financial analysts generally assess performance based on metrics like as growth, asset utilization, ROI, profitability, liquidity, and production and productivity. By properly linking the elements in the balance sheet and profit and loss statement, the financial performance analysis discovers the financial strengths and weaknesses of the organization. In this light, researchers have looked at pharmaceutical companies' financial results to deduce the importance of financial management to their growth. This research endeavors to analyze the profitability of five well-known Indian pharmaceutical companies using statistical methods including analysis of variance, standard deviation, multiple regression, and coefficient of variation. A boost to profitability will have a positive effect on future efficiency and financial performance.

Financial Performance of Indian Pharmaceutical Companies: Analysis of Leverage and Cost of Capital by Ahmed Mahdi Abdulkareem, (Oct 2020): Examining the operational leverage, financial leverage, combined leverage, and cost of capital of a selection of Indian pharmaceutical companies is the major goal of this study. Plan, Method, and Structure: Five pharmaceutical companies were randomly selected, and their annual reports and financial statements were reviewed. Leverage (both operational and financial), cost of capital, combined leverage, and other measures were all part of the study. An ANOVA test was used to evaluate additional hypotheses. The study spans a full five years, from 2013–14 to 2017–18. We observed that

there is a great deal of variation among the (means) variables with regard to operational, financial, and combined leverage, as well as the cost of capital. All other forms of leverage are separate from the cost of capital. Sun Pharma consistently outperformed Lupin during the study period. Lupin fell short in every area. Real-World Implications: Key considerations when evaluating pharmaceutical companies as an investment are leverage and cost of capital. Profitability and growth of the selected pharmaceutical companies are the main foci of this study. value, originality.

A Study on Financial Performance of Pharmaceutical Company in India by Dr. Aashka Thakkar, Ritik Mehta. Shivani Mahto (Feb 2023):

A key component of risk management is monitoring the company's financial performance, which shows whether the main objective has been accomplished. It is a way to put a price on the rules and procedures that run a business. By properly connecting the balance sheet and profit and loss account, financial performance analysis may ascertain the firm's financial strengths and weaknesses. The organizational framework of a business is of paramount importance to all of its constituents. It is a method for gauging the financial health of a business over a certain period of time. The researchers in this study set out to examine the pharmaceutical industry's financial stability in India using the Z-score methodology. The study found that pharmaceutical companies are in a generally good financial position. Cipla Ltd., Sun Pharmaceutical Ltd., Ajanta Pharmaceutical, IPCA Laboratories, and Dr. Reddy's Laboratories Ltd. were the five pharmaceutical companies that we engaged with for this research.

A Comparative Study on the Financial Performance of the Selected Indian Pharmaceutical Companies by Monalisa Mohanty (2020):

Examining and comparing the selected pharmaceutical businesses' financial situations is the main objective of this study. To get and calculate these data points, we combed through the financial statements of the selected organizations over the five-year span from 2015 to 2019. Despite being stable and with plenty of cash on hand, pharmaceutical companies' profitability and efficiency have been all over the place, according to research. Research relies on more recent papers to analyze the gap in the present literature.

Impact of Capital Structure on the Financial Performance of Firms: A Study of BSE Listed Selected Pharmaceutical Companies by Jibin J Varghese and Sanjay Sahai (2021):

A business's capital structure affects its debt and equity levels. Twenty pharmaceutical businesses listed on the BSE between 2016 and 2020 will have their capital structure and financial performance analyzed. Market capitalization was used to choose the firms, and the average of all the ratios was computed and considered. The data is being examined using the use of multiple regression and correlation analysis. Return on equity (ROE), return on assets (ROA), and net profit margin are profitability measures that are negatively correlated with capital structures, as shown in the research. Return on equity (ROE), return on assets (ROA), and net profit margin are profitability factors that correlate positively with equity ratios.

A Study on Financial Performance of Selected Pharmaceutical Companies in India by Vasu V, (2017):

Among the world's largest, the Indian pharmaceutical market is worth \$13.1 billion and has a current volume of \$3 billion. It accounts for around 20% of global production. India produces the vast bulk of the generic medications used globally. Twenty percent of all pharmaceutical exports are Indian generics. The profitability of selected Indian pharmaceutical companies from 2013 to 2017 is the major emphasis of this study. It is critical to look into these businesses in this regard. Using the measures of mean, standard deviation, coefficient of variation, and compound yearly growth rate, the study found that Lupin's profitability condition is satisfactory in comparison to other firms.

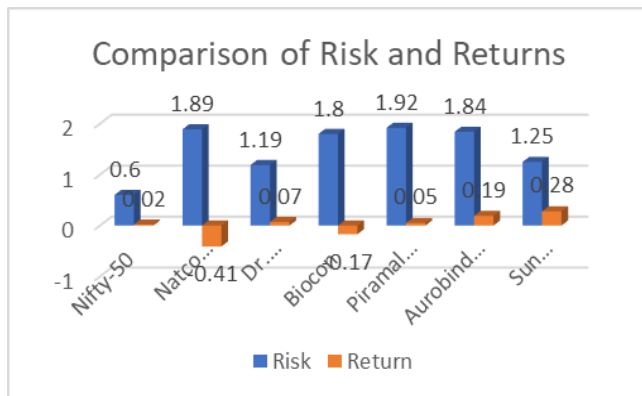
Data Analysis

Selected companies for the analysis is

- Natco Pharma
- Dr. Reddy's Laboratories
- Biocon
- Piramal Pharma
- Aurobindo Pharma
- Sun Pharma

Risk and Return of Selected Pharma Companies with Bench Marking Indices (Nifty -50)

Selected Companies	Risk	Return
Nifty-50	0.60	0.02
Natco Pharma	1.89	-0.41
Dr. Reddy's Laboratories	1.19	0.07
Biocon	1.80	-0.17
Piramal Pharma	1.92	0.05
Aurobindo Pharma	1.84	0.19
Sun Pharma	1.25	0.28



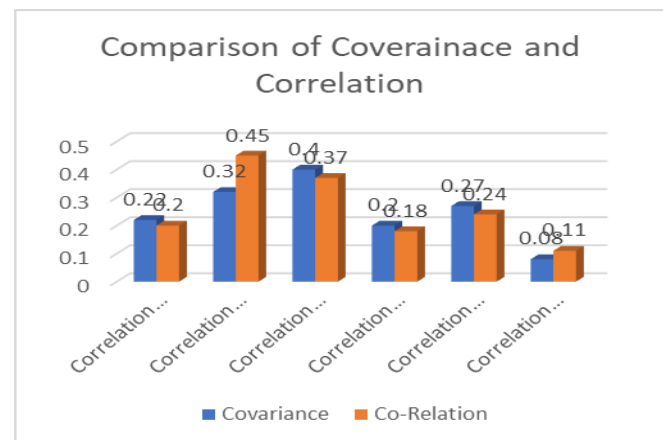
Findings

- Average Returns of Nifty – 50 for the period of three months i.e, November, December 2023 & January 2024, is 0.02 and Standard deviation as 0.60
- Average Return of Natco Pharma Ltd for the period of three months i.e. November, December 2023 & January 2024 is -0.41 and Standard deviation as 1.89
- Average Return of Dr. Reddy Laboratories for the period of three months i.e. November, December 2023 & January 2024 is 0.07 and Standard deviation as 1.19
- Average Returns of Biocon Limited for the period of three months i.e. November, December 2023 & January 2024 is -0.17 and Standard deviation 1.80
- Average Returns of Piramal Pharma for the period of three months i.e. November, December 2023 and January 2024 is 0.05 and standard deviation 1.92
- Average Returns of Aurobindo Pharma for the period of three months i.e. November, December 2023 and January 2024 is 0.19 and standard deviation is 1.84

- Average Returns of Sunpharma for the period of three months (i.e November, December 2023 & January 2024) is 0.28 and SD as 1.25

Comparison of Covariance and Correlation

Correlation	Covariance	Co-Relation
Correlation Between Natco Pharma and Nifty – 50	0.22	0.20
Correlation Between Dr. Reddy's and Nifty – 50	0.32	0.45
Correlation Between Biocon and Nifty – 50	0.40	0.37
Correlation Between Piramal Pharma and Nifty – 50	0.20	0.18
Correlation Between Aurobindo Pharma and Nifty – 50	0.27	0.24
Correlation Between Sun Pharma and Nifty – 50	0.08	0.11



Findings

- Correlation between the Natco Pharma and Nifty – 50 shows Positive Correlation (i.e. 0.20)
- Correlation between the Dr. Reddy's Laboratories and Nifty – 50 shows Positive Correlation (i.e. 0.45)
- Correlation between the Biocon Limited and Nifty-50 shows positive correlation (i.e. 0.37)
- Correlation between Piramal and Nifty – 50 shows positive correlation (i.e. 0.18)
- Correlations of Aurobindo Pharma and Nifty-50 shows positive (i.e. 0.24)
- Correlations between the Sun pharma and Nifty-50 shows positive (i.e. 0.11).

Suggestions

- Stock and debt financing, venture capital, government grants, partnerships, and other forms of funding should all be seriously examined. Diversification of sources may lead to financial stability and less risk.
- Consider forming strategic collaborations with other firms in the pharmaceutical, biotech, or academic sectors. Government grants, tax incentives, and subsidies are a common source of funding for pharmaceutical R&D, and working together may help spread out costs, pool resources, and alleviate financial pressure.
- The development of new medicines and other forms of innovation may get funding from national governments.
- It is important to do thorough cost-benefit analyses alongside research and development initiatives. Prioritize investments with high return potential and that are in sync with market needs. To save costs, you may want to consider outsourcing some of your R&D to specialized firms.
- Since there are a lot of unknowns and dangers involved with drug development, it is crucial to do your research before considering loan financing. Set up the company's debt in a way that works with its cash flow and ability to repay the loan.
- Maintain regular, transparent communication with investors. Make sure everyone is up-to-date on the most recent news pertaining to

current studies, clinical trials, and other significant achievements. Open and honest dialogue is a certain way to win over and keep investors' confidence.

- Secure your intellectual property by filing for patents and making use of other legal protections. Gaining investors' and partners' attention could be easier with a strong portfolio of intellectual property.
- Be ready to handle regulatory roadblocks, market fluctuations, and clinical trial delays. You may not be able to make it through unforeseen financial difficulties if you don't have a savings cushion or other emergency fund.

Conclusion

Pharma firms must make prudent financial decisions in order to conquer challenges such as medicine development, legislation, and market volatility. By using a variety of financing techniques, drug enterprises may increase their likelihood of success and secure their financial sustainability. Being forthright and honest with investors, taking advantage of government incentives, investing fully in R&D, and forming strategic partnerships are all crucial considerations. Being able to respond to changing market conditions, manage risks, and keep expenses in check are all crucial. In order to adapt to the ever-changing industry, companies must constantly monitor the market, do thorough financial analyses, and explore new sources of finance to support their innovation and growth initiatives. Prioritizing intellectual property protection, having a backup plan, and successfully managing the pipeline are crucial to establishing a pharmaceutical company that can endure adversities and remain competitive. There is a delicate balancing act required in the pharmaceutical sector to achieve both short-term financial goals and long-term growth objectives. Companies should prioritize sound financial management, stay abreast of industry news and trends, and make educated decisions if they want to succeed in medication development and improve healthcare.

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