



A REVIEW ON IMPACT OF FINANCIAL LEVERAGE ON FINANCIAL PERFORMANCE OF NSE LISTED PHARMA COMPANIES

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Abstract-

Enriching capital structure and ensuring prudent financial decisions are the main goals of financial management. The business financial management can achieve the ideal capital structure by using the right debt and equity combination. Finding the right mix between owned and owed capital is crucial when deciding on a capital structure. One widely acknowledged problem is financial leverage, sometimes referred to as the "Double-edged Sword." It can increase corporate value, improve financial performance, and maximise benefits to shareholders. Because of this, the effects of financial leverage must be carefully taken into account. Thus, an attempt is made To examine how financial leverage affects the chosen pharmaceutical company's financial performance, firm value, and shareholders' return Businesses in India.

Keywords: Financial Leverage, Debt capital, Equity capital, Working capital, Leverage, Pharma Company.

In an attempt to make a profit, businesses use capital to fund the ongoing production of goods and services. Companies put their money into many different kinds of endeavours in an attempt to create value. Building extensions and labour are the two areas of capital allocation that are most commonly used. When investing capital, a business or an individual seeks to outpace their outlay of funds.

Economists study financial capital in the United States and abroad to see how it influences economic growth. A variety of capital variables are tracked by economists, including income and personal consumption from the Commerce Department's Personal Income and Outlays reports. Capital investment data is included in the quarterly Gross Domestic Product report. A company's capital structure is typically used to assess its financial and business capital. U.S. banks must maintain a certain level of capital as a risk mitigation requirement, as mandated by central banks and banking regulations (also known as economic capital).

I. INTRODUCTION

Capital can refer to anything that adds value or benefits to its owners; examples include a factory and its machinery, intellectual property like patents, or a company's or individual's financial holdings. While money itself can be regarded as capital, capital is most commonly understood to be sums allocated to investments or other profitable ventures. In general, capital is necessary for both funding a company's expansion and its daily operations. Business capital can be obtained from operations of the company or through debt or equity financing. In general, capital can be used to measure wealth and as a tool for direct investment or capital project investments. People's capital and capital assets are included in their net worth. Companies have capital structures made up of debt capital, equity capital, and working capital for continuing costs [1].

How Capital Is Used

II. CAPITAL STRUCTURE

A company's balance sheet can be used to do a metric analysis of a capital structure that is split into assets, liabilities, and equity. The mix defines the structure. One type of cash capital asset with scheduled liabilities that must be repaid over time is debt financing. The balance sheet's equity column also includes cash received from the sale of stock or through equity financing. Debt capital typically has harsh terms for repayment and low rates of return. A few crucial metrics for evaluating business capital are the return on equity, debt to equity, weighted average cost of capital, and debt to capital [2].

Debt Capital

One way a business can get money is by borrowing. Debt is this capital, and it can originate from both public and private sources. For well-established enterprises, this usually means issuing bonds or borrowing from banks and other financial organisations. Funding alternatives for small

businesses that are just getting started include friends and family, credit card firms, federal loan programmes, and online lenders. Similar to individuals, businesses must have an active credit history in order to obtain borrowed money. For borrowed capital, interest must be paid on a regular basis. Interest rates are determined by the kind of capital borrowed and the borrower's credit history.

People should appropriately see debt as a burden, even while corporations see it as an opportunity—that is, if the debt doesn't spiral out of hand. It's the only way for most organisations to obtain a substantial lump payment that will enable them to fund a major expenditure in the future. Nonetheless, businesses and possible investors should both keep an eye on the debt to capital ratio to avoid diving too far. funds by issuing bonds, especially when interest rates are low and borrowing becomes more accessible. In comparison to the prior year, U.S. firms issued 70% more corporate bonds in 2020, according to Moody's Analytics. By then, average yields on corporate bonds had dropped to a multi-year low of about 2.3%.

Equity Capital

Getting equity funding can be done in a number of ways. Generally speaking, real estate equity, public equity, and private equity are separated from one another. Business stock is the standard structure for both private and public equity. The only distinction is that public equity is raised by listing the company's shares on a stock exchange, whereas private equity is raised among a limited number of investors. When buying stock, an individual investor provides equity money to a business. Naturally, an organization's first public offering (IPO) results in the biggest announcements in the world of equity capital raising. When the company went public in 2021, its \$5 million value generated a lot of excitement on the Nasdaq market [3].

Working Capital

Working capital is the liquid assets that a company keeps on hand to pay its bills on a daily basis. It is ascertained by means of the two assessments mentioned below:

Current Assets – Current Liabilities

Accounts Payable = Inventory + Accounts Receivable

Working capital is a measure of the short-term liquidity of a company. It represents the ability to settle accounts payable, debts, and other obligations that are due in less than a year. Remember that the calculation of working capital involves deducting current obligations from current assets. A company with a higher debt-to-asset ratio may soon run out of working capital.

Trading Capital

A substantial sum of money is needed for every business to function and turn a profit. The investigation and assessment of a company's capital are centred on the balance sheet analysis. The phrase "trading capital" is used by brokerages and other financial institutions that conduct numerous transactions on a daily basis. Trading capital is the sum of money provided to an individual or corporation to buy and sell various assets. Investors might attempt to raise their trading capital by utilising a variety of trade optimisation strategies. To optimise capital utilisation, these strategies determine the ideal percentage of money to invest in each trade. To be successful, traders must precisely determine the

optimal cash reserves required for their investment strategies. Every expert that trades stocks and other assets for a major brokerage firm like Charles Schwab or Fidelity Investments receives a substantial quantity of trading capital [4].

III. FINANCIAL LEVERAGE

The phrase "leverage," which comes from physics, is often used in financial management. The objective of application, as in physics, is to attain higher benefits with less force—that is, to acquire bigger financial benefits [5] compared to the fixed charges that must be paid. The ability of a business to use fixed cost assets or financing to increase the return to its equity owners is known as "leverage." Therefore, leverage is the usage of cash or fixed assets for which a company must pay fixed costs or a predetermined interest rate, irrespective of the volume of tasks performed or operating profit made.

Leverage comes in multiple tiers. The more leverage used, the higher the risk is in meeting fixed payment obligations, such as loan capital charges and operating fixed costs. A better rate of return for the investors is possible, though, if they take on more risk.

Leverage is defined as the correlation between the net rate of return on capitalization and the net returns on shareholders' equity.

Types of Leverage

Leverage are of three types:

1. Operating leverage
2. Financial leverage
3. Combined leverage

Operating Leverage

Operating leverage is the utilisation of fixed operational costs in a business's operations, such as depreciation, asset insurance, maintenance and repairs, real estate taxes, etc. Interest on loan capital is excluded, though. A higher ratio of fixed operating costs to variable costs results in more operating leverage, and vice versa. Operating leverage is shown by the term "firm's ability to use fixed operating cost to magnify effects of changes in sales on its earnings before interest and taxes".

The company will use three different types of leverage: (i) variable costs, which are expenses that change in direct proportion to changes in the volume of activity; (ii) fixed costs, which are expenses that typically remain the same over a predetermined period of time and within a relevant range; and (iii) semi-fixed or semi-variable costs, which are expenses that are divided between fixed and variable costs. They can be added to the relevant cost group after being split up into fixed and variable components.

Operating leverage arises when a business has fixed expenses that need to be covered by sales income, irrespective of the volume of business produced in a specific time frame. A corporation with fixed costs in its overall cost structure will see a disproportionate influence on its operating profit, or EBIT, from any given change in sales. Operating risk and business risk are connected to one another. With fixed operational costs, the company's operating risk and operating leverage rise. Operating risk is the degree of uncertainty a business confronts in covering its fixed operational costs in the event that EBIT changes.

Financial Leverage

Financial operations that necessitate obtaining cash from sources where a business must pay fixed costs, such as interest and loan fees, are mostly associated with financial leverage. These sources include preferred share capital and long-term debt (bonds, debentures, etc.) [6].

Whether or not the company makes a profit, long-term loan capital must be repaid at the interest rate specified in the contract.

Since debt suppliers have precedence over equity shareholders with regard to the company's income and assets, their interest rate is usually lower than the expected return for equity owners. Moreover, interest on debt capital is deductible from taxes.

The rate of return on equity share capital and earnings per share are amplified as a result of these two elements. As a result, the financial leverage shows how variations in EBIT or operating profits impact EPS.

Gitman describes financial leverage as "the ability of a firm to use fixed financial charges to magnify the effects of changes in EBIT on firm's earnings per share". Put another way, financial leverage is the use of capital that has been obtained at a set cost in order to increase the return for stockholders. When a business makes more money from the investments or assets it buys with funds than it pays for the fixed costs of those purchases, it is said to have positive or favourable financial leverage. Consequently, shareholders gain when a business generates a higher rate of return while paying a lower rate of return to the source of long-term funding. The difference between the assets' earnings and the fixed costs of employing the funds is distributed to the equity shareholders. Leverage in finance is hence often referred to as "trading on equity"

Combined Leverage

Operating leverage is measured and illustrates operating risk as the percentage change in EBIT as a function of a percentage change in sales. Financial leverage, or the percentage change in EPS as a function of the percentage change in EBIT, is a measure of financial risk. Total leverage is the result of combining operating and financial leverages, and total risk is the risk resulting from this combination. The firm's capacity to pay fixed costs or a fixed rate of interest obligation is closely correlated with both operating and financial leverage. It determines the percentage effect of a shift in sales on an increase in EPS [7].

IV. PHARMACEUTICAL INDUSTRIES IN INDIA

The Indian government established the Department of Biotechnology in 1986, and it is housed inside the Science and Technology Ministry. Since then, a number of states and the federal government have offered various dispensations to encourage the sector's growth. The Biotechnology Parks Society of India was founded by the science minister of India with the goal of helping ten biotech parks by the year 2010 and providing tax incentives and subsidies to biotech startups and expanding firms [8].

After the Patents Act was passed in 1970, the government started to encourage the growth of Indian companies producing pharmaceuticals in the early 1960s. The government has addressed the problem of educated but

unsuited individuals in its Draft National Biotech Development Strategy. This project included a proposal to create a National Task Force to work with the biotech industry to update undergraduate and graduate programmes in biotechnology and life sciences. It was also declared in the government policy that the Department of Biotechnology aims to award 200 PhD Fellowships per year. These people can be used even more if there is a "Bio-Edu-Grid" that links the resources of the scientific industrial and academic communities, as there is in the United States.

There are several major challenges facing the biotechnology business as it grows. The most significant of these is a paucity of funding, particularly for recently founded companies. The most likely sources of finance are government grants and venture capital, which is still a relatively new industry in India. Obtaining government subsidies is difficult given the high cost and unstable supply of API production in India. In an effort to promote an Atmanirbhar Bharat and reduce India's dependency on China in the wake of the 2017 China-India border standoff, the Council of Scientific and Industrial Research (CSIR) of India launched the "made in India" programme in July 2021 in collaboration with the nation's coal and petroleum industries. The program's goal is to produce 56 active pharmaceutical ingredients (APIs), which are deemed essential for the complete production of pharmaceuticals. China was India's biggest supplier of API in 2016–17, accounting for 66% of the country's raw material deliveries, valued at US\$2.4 billion, or INR 18,000 crore. With a combined value of US\$1.6 billion, the US, Italy, and Singapore were among India's other major suppliers.

The Early History of Medicines

There are two ancient pseudoscientific fields that provide the historical roots of modern pharmacy. Studying alchemists and apothecaries is necessary to fully understand how the pharmaceutical industry evolved today. These researchers, physicians, and spiritualists were searching for anything from the means to provide eternal life to the means to turn metals into gold. The field of medicine developed along with science and technology, bringing early scientific ideas from Asia to Europe and turning them into advancements that improved society. Among the earliest practises to influence the modern pharmaceutical industry was alchemy. Alchemy combines ancient inorganic chemistry, philosophy, and the search for ultimate wisdom and immortality. Alchemy began in Egypt and expanded to three continents before evolving into modern chemistry between 5000 BCE and the middle of the 17th century in Europe. The earliest alchemical practitioners in the West were the Greeks and Egyptians [9].

These ancient nations, like the Egyptians, accomplished a number of technological breakthroughs that were unimaginable even in later times. Regrettably, in 290 CE, the Roman Emperor Diocletian destroyed most of their labour. To prevent Egypt from amassing riches by transmutation that would enable an effective rebellion within the empire, Diocletian ordered the eradication of all alchemical writings. The Emerald Tablet is one important book that has survived and eventually became the main alchemical text. This work addresses the conversion of various metals into gold, herbal remedies, and other myths surrounding the main components. Greek and Egyptian alchemists believed that the four elements—earth, wind, fire, and water—formed and comprised everything in the natural

world. Even though we now understand that this is far from scientific, the classical classification of elements had become a stepping stone into contemporary chemistry, which in turn had a tremendous impact on the pharmaceutical industry. Concurrent with the discovery of the Emerald Tablet, the Chinese were practicing a unique kind of alchemy. Interest in alchemy and the creation and testing of medicinal elixirs led to the establishment of the first Arab medical schools and some of the earliest pharmaceutical specialists in the 12th century.

The mediaeval understanding of the elements, which was predicated on the idea that the Philosopher's Stone could change one substance into another, gave rise to three fundamental conceptions of contemporary chemistry. The notions behind the elements' locations on the periodic table, the idea that simple elements can be joined to make more complex chemical compounds, and the idea that matter cannot be created or destroyed were some of these conceptions. Compounding would, of course, become essential to the functioning of the pharmaceutical and chemical sectors together. However, alchemists were limited because many of them were motivated by money, had strong spiritual convictions, and sought power or scientific knowledge. Alchemy's ability to produce therapeutic compounds has made a more specialist industry necessary. The chemist was prepared to make an appearance. Robin Walsh explores the origins of the pharmaceutical industry in this first part of a new series on the subject. The beginnings of the pharmaceutical industry are found in the apothecaries and pharmacies that offered traditional therapies. Robin Walsh explores the origins of the pharmaceutical industry in this first installment of a new series on the subject. The origins of the pharmaceutical industry can be traced back to the apothecaries and pharmacies that provided conventional medicines in the past. The pharmaceutical business may have originated in apothecaries and pharmacies that offered traditional therapies as early as the Middle Ages, but the modern pharmaceutical industry truly began in the second half of the 19th century. It wasn't until the late 18th century that the ideals of rationality and experimentation were combined with the innovations brought about by the scientific revolution of the 17th century and the industrial revolution to improve human health.

Merck, a German company, might have been the first to do this. In Darmstadt, Heinrich Emanuel Merck established a pharmacy in 1668, but it wasn't until he began manufacturing and marketing alkaloids in 1827 that the business began to evolve into an industrial and scientific endeavour. Like GSK, which was founded in 1715, Beecham only entered the industrial production of medicine in the middle of the 19th century. It started in 1842 with the production of patented medications and established the first factory in the world solely for the production of pharmaceuticals in 1859 [10].

V. RELATION BETWEEN PHARMA AND BIOTECH

In the 2009–10 fiscal year, sales in India's biopharmaceutical sector increased by 17% over the previous year to reach Rs. 137 billion (\$1.8 billion). Bio-pharma was the primary driver of the industry's growth, accounting for 60% of its Rs. 8,829 crore total revenue. Bio-Agri ranked first with Rs. 1,936 crore, followed by bio-services at Rs. 2,639 crore. Due to their proficiency in reverse-engineering novel procedures for the manufacturing

of low-cost pharmaceuticals, Indian enterprises have carved out a unique place for themselves in the domestic and international markets.

India maintains a clear separation between pharmaceuticals and biotechnology, with the latter accounting for a significantly smaller portion of the country's GDP than the former. With respect to the overall number of biotech patents in 2003, India ranked thirteenth globally and third in the Asia-Pacific region, accounting for 2% of the \$41 billion global biotech market. The biotech sector in India saw a 37% increase in revenue to \$1.1 billion in 2004–05. Biopharmaceuticals is a dominant player in the Indian biotech industry, contributing 76% of total revenues in 2004–05 and enjoying a 30% rise in sales in the previous year. Vaccines accounted for 47% of Biopharmaceuticals' sales revenue, placing them at the top.

Big-molecule and biologic medications are typically more costly than small-molecule medications, and venture investors are hesitant to back biotech businesses without a viable product on the market.

By 2021, the pharmaceutical sector in India is projected to be worth US\$42 billion. With 20% of global pharmaceutical exports, India is the world's largest supplier of generic drugs in terms of volume. Additionally, it supplies more than half of the vaccines produced globally, making it the leading supplier of vaccines globally in terms of volume. Due in significant part to its enormous pool of highly skilled domestic labour and its large, industry-compliant production facilities, India's exports meet the regulations and needs of the highly regulated markets in the US, UK, EU, and Canada. The Department of Pharmaceuticals and the Ministry of Chemicals and Fertilisers have released figures indicating that the domestic pharmaceutical business had a turnover of Rs 129,015 crore (US\$18.12 billion) in 2018. To reach US\$17.28 billion in FY18 and US\$19.14 billion in FY2019, export earnings grew by 9.4% annually. Cheap generic drugs make up the majority of India's pharmaceutical exports as of 2021. These pharmaceuticals are made in this country. Imported medications are protected by patents. China, which supplies 60% of the volume, and Germany, which imports APIs worth US\$1.6 billion, are significant API importers in addition to the US, Italy, and Singapore. The government has launched a US\$2 billion incentive programme that will run from 2021–2022 to 2027–2028 in order to promote an *atmanirbhar Bharat* through improving R&D, Made in India product development and high-value production capabilities, import substitution, and domestic manufacture of active pharmaceutical ingredients (API). The Department of Pharmaceuticals announced in 2019 that medications intended for export and local usage would need to have 10% and 75% local active ingredients, respectively, and that a bill of materials would need to be submitted for verification in an effort to promote Made in India. Between 2018 and 2021, India was the third-ranked country in the world for pharmaceutical and medicine exports in terms of monetary value.

VI. IMPORTANCE OF FINANCIAL PERFORMANCE OF PHARMACEUTICAL INDUSTRY

The development, implementation, and progress of advanced medicines are required in many different industries, and the Indian Pharmaceutical Industry has become a major player in these areas. Thanks to the advantages of having a well-organized sector,

pharmaceutical enterprises in India are growing at a rate of \$4.5 billion, with additional growth of 9% – 10% annually (Emkay research). India is currently among the top five rising pharmaceutical markets. It is imperative that stakeholders, including customers, shareholders, the government, and investors, are informed about the state of this quickly growing industry. Financial research can help any organisation increase productivity, obtain a competitive advantage, and acquire insight into the firm's profitability and stability. The pharma industry is a crucial part of socioeconomic growth. Prof. Altman, Md. Tofael Hossain Majumder, and Mohammed Mizanur Rahman (2011) devised the Multivariate Discriminate Analysis (MDA) and the Ratio (Profitability, Liquidity, Solvency, Asset Utilisation, and Activity) Analysis to evaluate the financial performance of this industry. Evaluating the ROE and ROI scenario of this industry is essential to determining its prospects in the future.

VII. REVIEW LITERATURE

According to Chowdhury [2007], there are issues surrounding working capital management that are arguably the most important ones in all of financial management. The reason for this is that working capital consistently contributes to a company's vigour and vigour. This study aims to critically assess working capital management as it is applied in the chosen pharmaceutical industry companies. In order to accomplish this, the study also looks at cash management policies and practices, as well as the concepts, practices, and methods of inventory, payables, and receivables management. However, the study doesn't look at how politics and the economy affect working capital management. The analysis leads us to the conclusion that because the pharmaceutical business is highly competitive, pharmaceutical companies operating in Bangladesh are able to effectively manage their investment criteria and liquidity preferences. In our nation, the pharmaceutical industry is a lucrative business. The industry's businesses are fiercely competitive and have become more adept at effectively managing their resources. Overall working capital policies have been shown to have a considerable impact on sector profitability, and working capital ratios can help to explain why different firms perform differently. The financial performance of pharmaceutical companies and contemporary consent management have been proven to positively correlate in the mathematical model. Thus, it is clear that working capital is essential to this industry's overall profitability.

According to Debasish's [2014] presentation, the pharmaceutical sector in India ranks fourteenth in terms of value and sixth in terms of volume worldwide. Since the GATT (now WTO) was signed, the Indian pharmaceutical business has seen a number of significant changes. In this industry, national and international mergers, acquisitions, and takeovers have become a regular occurrence. In the current competitive and demanding landscape, effective working capital management is a crucial part of the overall plan to generate wealth for shareholders. Therefore, it is crucial to establish effective working capital management techniques in order to help Indian pharmaceutical companies achieve their goal of maximising shareholder wealth. With this context in mind, the current study aims to examine the working capital management of ten chosen Indian pharmaceutical companies from 1996–1997 to 2010–

2011. Appropriate statistical tools and procedures have been used in the right areas to meet the study's purpose.

The relationship between the elements of working capital and the profitability of pharmaceutical sector enterprises was given by Chaudhary [2019]. In order to measure working capital management, we use profitability (return on assets) as the dependent variable and the inventory conversion period (ICP), average collection period (ACP), average payment period (APP), and cash conversion cycle (CCC) as the independent variables. The secondary data source "Cipla Ltd., covering the period from 2012–2013 to 2016–2017" is where the data were obtained. According to the correlation result, profitability has a strong positive association with total assets and an insignificant positive relationship with APP. Despite this, there was a strong negative correlation between profitability and ICP, ACP, and CCC. The findings indicate that working capital management significantly affects the profitability of the companies in the pharmaceutical business as a whole. Through the correlation test, we can observe the relationship between ROA and all other research variables that have an impact on Cipla Ltd.'s profitability. We find that there is a moderately negative correlation and an insignificant relationship between total assets and profitability, and that there is a high degree of negative relationship—albeit statistically insignificant—between APP and leverage. Despite this, CCC showed a substantial moderate degree of positive relationship with profitability, whereas ICP and ACP showed a significant low degree of positive relationship. We may also draw the conclusion that these companies effectively handle working capital components like cash, marketable securities, receivables, and inventory management. Their association with additional proxies of profitability should also be investigated.

The report on working capital management of Cipla Pharmaceutical Limited's financial performance was provided by Abhishek [2022]. Accounting ratios aided in the examination of a company's financial status. A firm's financial health can be assessed with the use of financial analysis. Ratio analysis is a useful tool for evaluating the effectiveness of working capital management. Accounting ratios are meant to show the changes over a period of years. For a variety of stakeholders, including management, financiers, shareholders, creditors, etc., ratios are an effective tool. Accounting ratios are used to assess Cipla Pharmaceutical's financial performance. Determining the company's financial status requires an understanding of working capital management. According to the study's objectives, it explains that while the company's financial position is satisfactory, it is generally advised that it increase its debt-to-equity ratio in the upcoming years. Additionally, the study notes that assets have a positive impact on the profitability and liquidity position of the company over time. The corporation is in a better financial position since its current assets exceed its current obligations. The company's operating capital appears to have grown progressively over time and is wisely invested. For the business to remain effective, it is advised that the existing asset level be maintained.

VIII. CONCLUSION

Financial leverage is an essential component of every organization's capital structure decision and financial management. A suitable amount of equity and borrowed

cash will improve profitability. The effects of financial leverage hinder a company's ability to succeed, hence attention must be paid to them and their elimination. Industrial growth has a major impact on a country's economic progress. India's manufacturing sectors are poised to rise to the occasion and face new difficulties in the form of foreign competition, technological adoption, increased profitability, and the need to raise the necessary capital. It must be productively efficient, quickly pay equity holders' earnings, and significantly contribute to the growth of the national economy. This study enables decision-makers to construct a robust capital structure by assisting them in making appropriate decisions about financial management techniques. An analysis of the "Impact of Financial Leverage on Financial Performance, Firm Value, and Shareholders" was the goal of the research work.

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