Equity Analysis Of Pharmaceutical Companies In The Indian Stock Market

Abstract

In the first chapter of the research paper, the research aims have been provided to investigate the performance of equity prices of Indian and international pharma companies operating in India. The background and rationally of the research have been discussed to understand the key research area. The aims and objectives and the research questions of the paper to help the researcher throughout the study has been also mentioned in the first chapter. The overall structure of the research paper has been provided along with the significance of the research.

In the second chapter of the paper, the financial performance of the pharma companies operating in India have been mentioned along with the use of ARIMA model and FCF Theoretical structure to strengthen the capital structure of the companies. the effect of COVID-19 and financial constraints is also discussed in this chapter.

In the 3rd chapter of this paper, the elements that have been utilized by the researcher to implement the overall study strategically and successfully, have been mentioned and discussed. The justification for selecting the deductive paradigm and positivism philosophy is also given. The reason for selecting only the secondary qualitative method is also explained.

In the fourth chapter of the research paper the secondary data that has been collected by the research from the various financial reports such as balance sheets or cash flow statements or the profit and loss statements has been evaluated. It is done to analyze the equity performance and financial performance of this company's differentiation of market capitalization and ratio analysis. The differentiation of the market capitalization helps the research to understand the growth percentage of the selected companies and the way we get manage its operation to capture the market share and perform in the equity and stock market of India. The reason for this change and outperformance of the Indian Pharma companies particularly in the territories of India have also been mentioned.

Table of Contents

List of Figures

List of Tables

CHAPTER 1: INTRODUCTION

1.1 Introduction

The research paper attempts to analyse the equity performance of the farmer political sector and various companies operating in that sector in the Indian stock market at the current times. The pharmaceutical industry in India is anticipated to meet almost 70% of the demand in India for bulk drugs, injectables, and other formulations. In a deregulated economy development in the industry had surged across 300 large units and approximately 8000 to 8500 small and medium-term Companies are included in bulk drugs and particular drug production. In this research paper, the research background and significance of research in the pharmaceutical industry have been mentioned. Along with that the aims and objectives and research questions are also provided in the paper.

The past works of literature are mentioned here to analyse the in-depth understanding of the equity performance in the Indian stock market. The reason for implementing this research is to evaluate the current performance of equity of these pharmaceutical companies in India and to identify its probable risks and advantages. In the pharmaceutical sector in India, the demand for materials is higher than 50% of the universal demand for the implication of vaccines, 40% of the similar far is distributed to the US and 25% is distributed to the UK for tablets. This paper will attempt to investigate the performance of equity prices of some of the selected Indian and international pharmaceutical enterprises that have been operating in Indian territory successfully. In this paper, an evaluation process will be applied using the results of the stock market and the details of revenue for several years.

1.2 Research Background

The pharmaceutical sector in India is the third biggest sector in the world in regard to its volume. As per the Department of pharmaceuticals, “Ministry of Chemicals, and fertilizers”, the overall turnover of the pharmaceutical sector of India between 2008 and 2009 was the US $21.04 billion (Venugopal and Jampala, 2019). While the domiciliary market was valued approximately at US 12.26 billion dollars. the sector holds an overall market share of 14 billion dollars in the US. As per the “foundation of Brand India equity”, the pharmaceutical market of India was probably to rise at a compound per annum growth rate of 14% to 17% between 2012 to 2016.

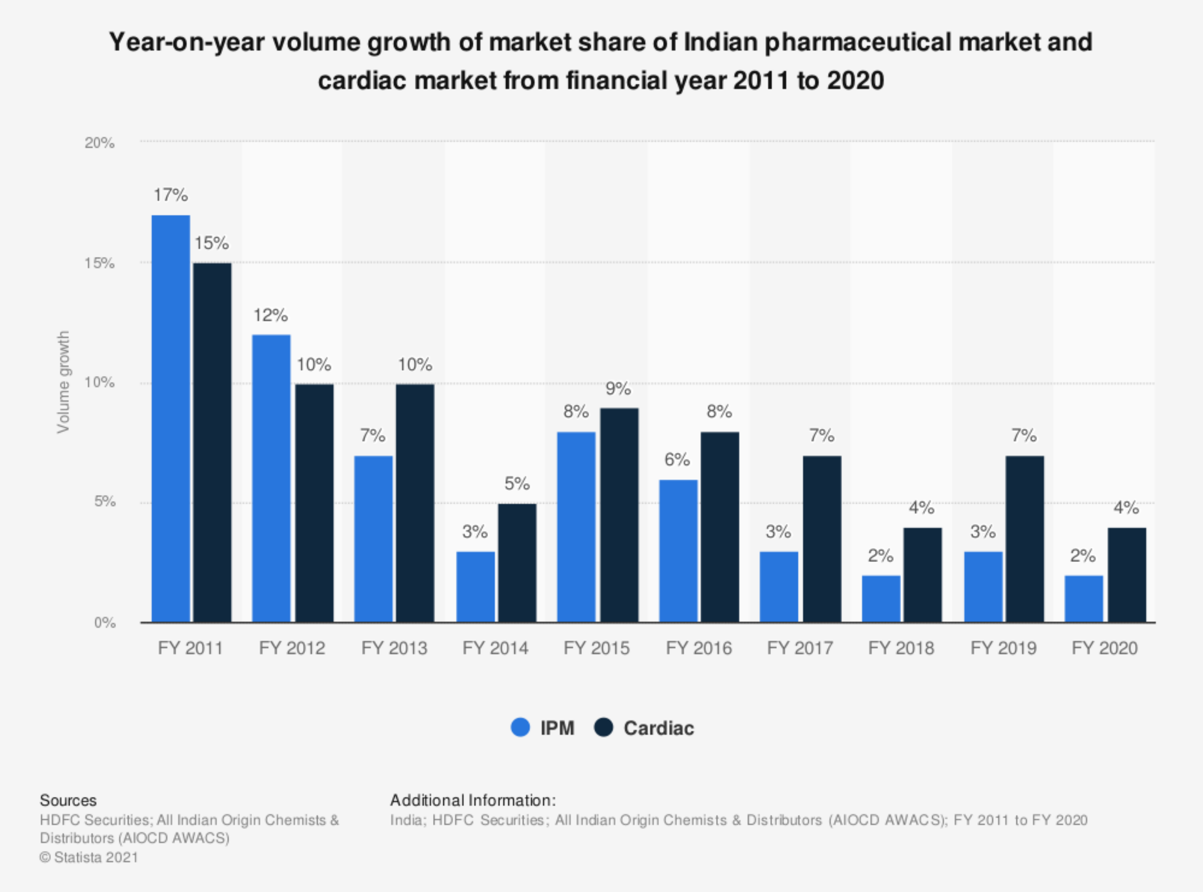

Figure 1.2.1: Per Annum Volume Development Rate of Indian Pharmaceutical Firms

(Source: Venugopal and Jampala, 2019)

India is currently among one of the top five emerging markets of pharma cuticle all over the world exports of products from India and it had increased from the US \$6.23 billion to the US \$8.7 billion from 2006 to 2009, a collaborative per annum rate of growth of 21.25% (Desai and Desai, 2018). The sector creates, supplies and markets authorized drugs for the application as a medicine. For this, it has an all-over prepared R&D office. The organizations in pharmaceutical or allowed to bargain in non-particular or potentially mark suggestions and medicinal types of equipment and gadgets. As per the views of Mathur *et al.* (2021), they are accountable to a selection of laws and authorities of the management in regards to securing, investigating, valuing, and promising well-being and feasibility and motivating medicines.

The pharmaceutical sector of India is one of the second biggest all over the world by its volume and is leading the assembling area of India. The biotic sector of India has implemented a growth rate of 17% and has increased “incomes by Rs.137 billion” in the year 2009 to 2010 (Shaneeb and Sumathy, 2021). Biopharmaceuticals was one of the biggest supporters manufacturing 60%

of the development of business "at Rs.8829 crore" as observed by bio administrators. at the current times, specifically at a few steps in the Covid 19 instances, India stands 12th biggest as a distributor of medical elements within the international boundaries. The pharmaceutical industry of the USA denotes 6.6% of the overall product distribution (Nandy, 2020). Specifically in the year 2021, India has implemented a fool of 586.4,00,00 vaccines for Covid 19.

It comprises brands, business distributions, and exports lower the COVAX platform to 71 countries. On the contrary, India is a country that is developing (Chowdhury *et al.* 2019). At current times, different individuals are attracted to invest in the financial market particularly in equities to have a high degree of returns, and to save tax in a more ethical way. Equities or acting in one of the major roles in the notion of capital to the businesses from the initiation. From the foundation of the sheer notions, a high number of investors are showing their attraction to invest in the stock markets (Ali, 2020). In a sector that is plagued with mistrust and a stock market raising critical to forecast and assert with, in case one looks critical enough, there might be still at general aid for the "day trader and short-period capital investors".

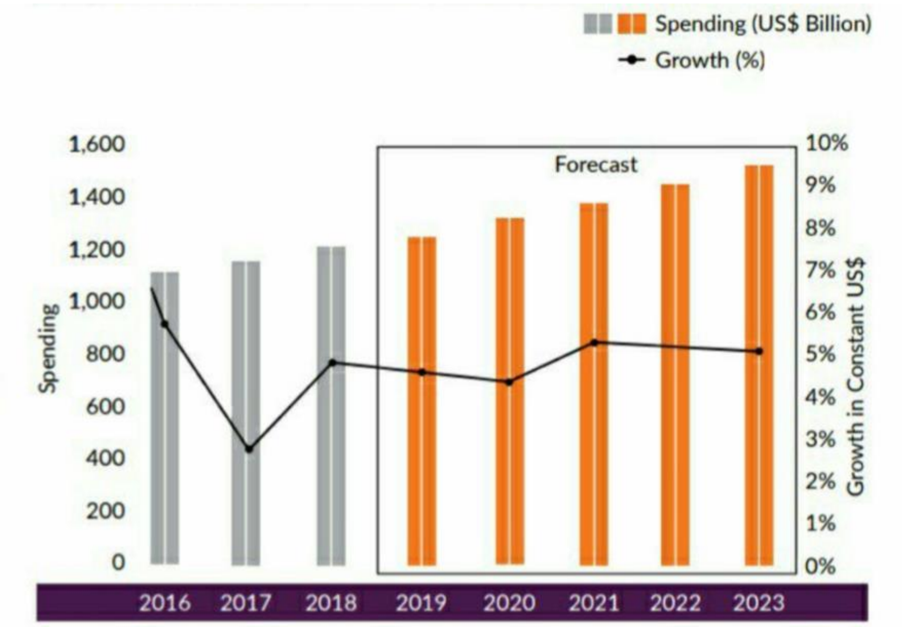

Figure 1.2.2: Universal Medical Spending and Development

(Source: Ali, 2020)

As per the forecast of PWC in the year 2010, India adjoined the teams of the top 10 universal pharmaceuticals market in regards to the sales by 2020 with an overall value obtaining the US

$50 billion. The administration started to motivate the development of drug production by Indian enterprises and companies in the early of the year the 1960s, and with the “Patents Act” in 1970 (Venugopal and Jampala, 2019). However, the economic deregulation in the 1990s by the “former prime minister Narasimha Rao” and later “PM Manmohan Singh” permitted the sector to become what it is at current times. This “Patents Act” Separated configuration patents from the drugs and foods, and even though it kept the patents procedure, these were cut down to an uptime period of 5 to 7 years.

The insufficiency of predict patent security made the market of India undesirable to the international companies that had ruled the market, and while they glided out (Shah and Ajmera, 2019). The Indian enterprises shaped opportunity in both the Indian and universal markets with their skills in reverse arranging new procedures for the production of drugs at lower expenses. Even though few of the bigger companies had taken a few steps for drug creativity, the sector as a whole had been using the business structure till now. The biopharmaceutical sector of India clocked a 17% development with revenues of approximately Rs.137 billion. It was the biggest giver generating more than 60% of the overall growth of India at Rs.88.29 billion forever after bio services at Rs.26.39 billion (Gul *et al.* 2020). The pharma industry of India had made huge strides in both universal and domestic markets.

Yet the development banks were huge for domestic players observing a greater share of the universal area. The stagnation in the basic approvals by USFDA, and the payment issues witnessed in a few market that was developing from the quarter of December 2008 (Ullah *et al.* 2021). Also, it accelerated globalism and huge competition meant stagnant development in universal revenues for the household players. Yet this critical environment, the household players constantly consolidated their moods and our getting prepared for her higher CRAMS business from the universal majors. interested in enriching the business structure of the house and pharma enterprises, some of the universal players had obtained the pharma companies in India involving “Ranbaxy laboratories, matrix laboratories”, and so on (Venugopal and Jampala, 2019). At the same time, researchers also observed universal measures like Pfizer to enter into a deal with the household players such as “Aurobindo Pharma and Claris Life science” for supplying and marketing their products in the developed markets.

On the contrary, the administrative regulations that have generated the licensing of the sector mean that the business organizations were able to create the goods of a huge Indian marketplace with adequate approval from the regulators of drugs. According to the views of Kristianti and

Foeh (2020), in spite of the fact that there was a reduction in the production cost and R&D expenses, the overall performance of the economy of these organizations was tortured most often by an extension of the marketplace, buyers, and authority’s issues. The price of the stock marketplace and the overall performance had taken into account as a parameter of the monetary performance of a company. The recent investigation is concentrating on Indian and international pharmaceutical organizations that operate in India. The past few years have observed patents of multi goods have expired and been lost. This has assisted the basic drug manufacturing organizations of India.

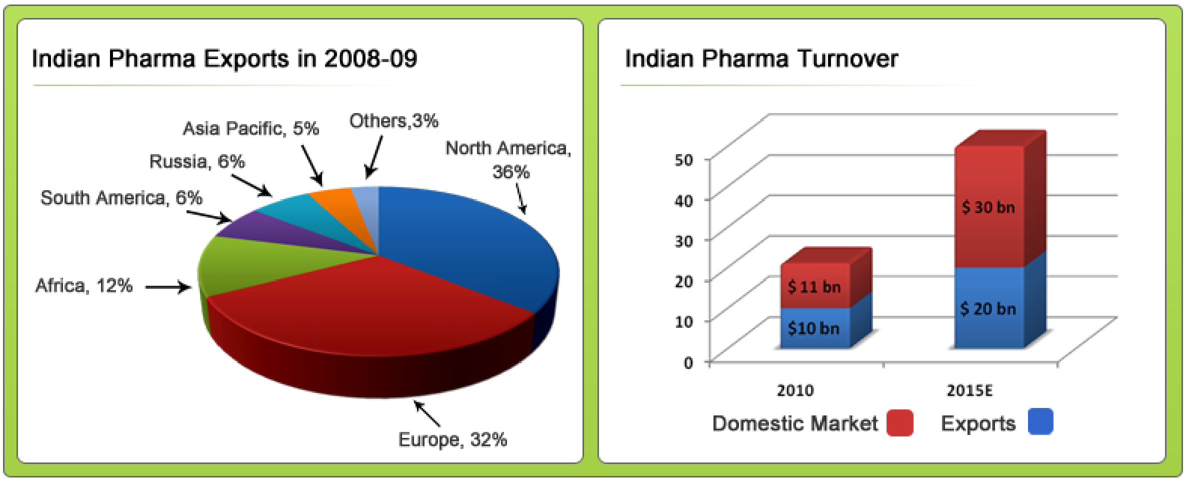

Figure 1.2.3: Growth Shift of Indian Pharmaceutical firms

(Source: Kristianti and Foeh 2020)

The revenue development of the farmer organizations in India should contemplate the profitability of these kinds of organizations and the share price of this organization should also review the transformation (SURESH, 2021). In case the theory is actually true for the real market the movements of the share price of the Indian farmer organizations have been done and differentiated with the multinational organizations present and operating in India. The differentiation is dependent on the market financing of these organizations reviewed by the transformation or shift in the stock price of those enterprises. on the contrary, researchers had also observed the rise in buyback for the association of the shareholders and subsidiaries of the multinational farmer organisations. As a reason, the pharma industry is in extreme action (Islam, 2019). With the accessibility of expertise labour at low expenses, India has become one of the favourable decisions for most international organizations to produce their goods and initiate new molecules.

1.3 Rationale

The early of the year 1990s was a time that could be free as a landmark time in the history of human mankind as it was the actualization of some of the most significant universal environmental which were observed by the UN (Kristianti and Foeh, 2020). It was also one of the years when the whole problem of sustainability as a measure of corporate business implementation and practice become a truth with the inclusion of the biggest players in the industry, civil society, and the UN. Not only that, the years 1990 are observed to be the turning point in the area of governance industry development, sustainability, and rising business practices in the domains of India. As per SURESH (2021), the regulations of the Indian economy together with major universal environmental functions and treaties observed the rising of a new structure and parade of sustainability to be a wider area from which it was earlier.

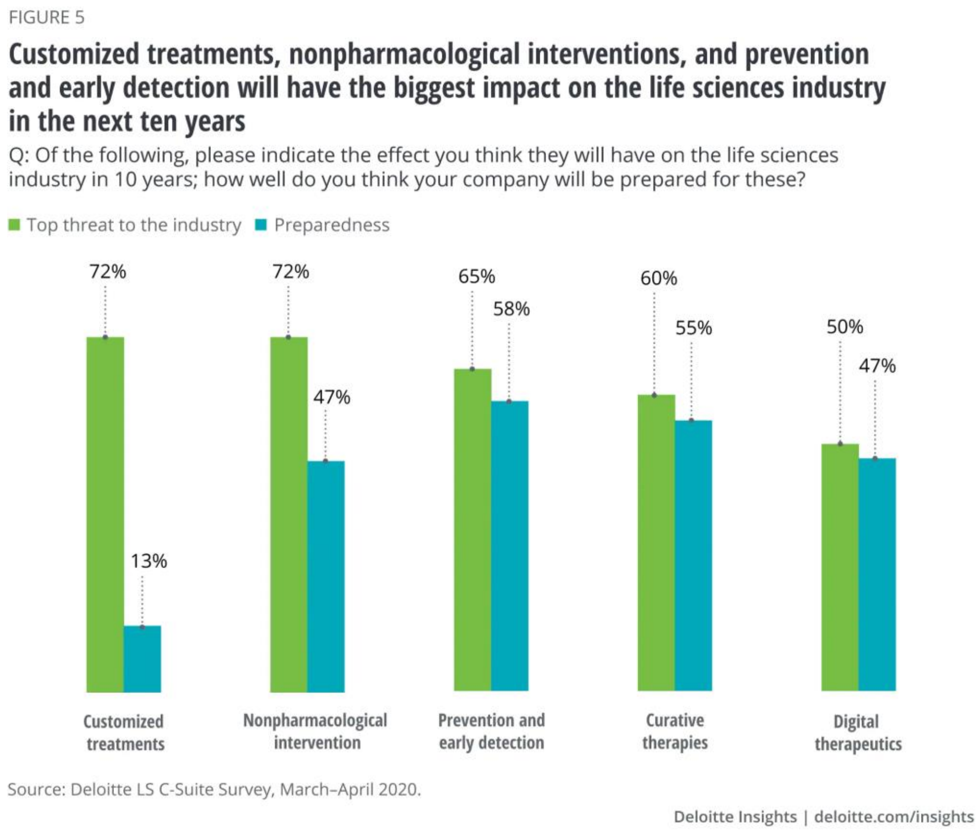

Figure 1.3.1: Impact of innovation on Indian Pharmaceutical firms

(Source: SURESH, 2021)

While the other corporate finance trophy as social accountability was an evidence method even in the past few years, it was mostly limited to CSR-dependent local functions (Islam, 2019). The research topic is extremely important and needs future research as various investigations in the past give evidence to various facts. There is a remarkable positive effect of research and development functions on the financial activity and performance of pharmaceutical companies in India listed with NSE throughout the study time. Standard controlled basic drugs, India distributes over 20% of the universal demand of pharmaceuticals in regards to volume (Mathur *et al.* 2021). In fact, the healthcare and pharmaceutical industry of India was one of the fastest developing in the world and was anticipated to rise by a whopping 754% between the years 2017 to 2060.

Basic drugs have been a powerful area of the pharmaceutical sector of India and the state has been one of the biggest distributors of generic medicines usually. In fact, in the year 2018, the generics involved over 70% of the overall market profit within the industry (Sanyukta Kanwal, 2021). Other areas of identification for the Pharma sector of India have been drugs such as steroids vitamins and drug intermediate are for future formulations, biologicals and so. In the year 1990, the deregulation of the economy in an area of required multinational environmental functions involved a huge notion of features advancement. The development of new universal standards such as CDP, and GRI have acted in a huge role in changing corporate governance.

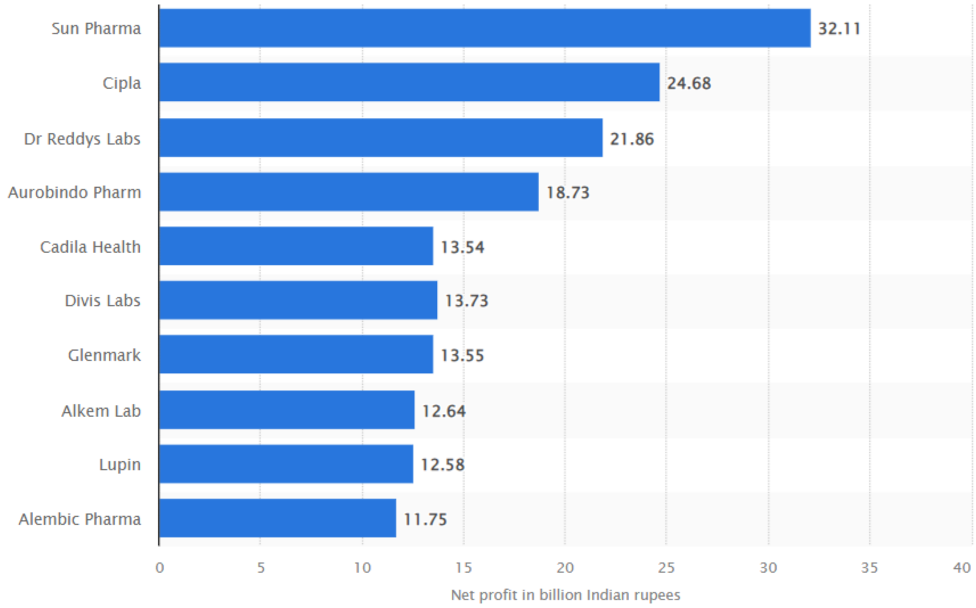

Figure 1.3.2: Net profits of leading pharmaceutical companies in India as of 2021

(Source: Sanyukta Kanwal, 2021)

In the current years g as a revelation benchmark, only a few organizations have seen the requirements to implement sustainability as a primary sector in leading the performance of the pharmaceutical industry. Because of the insufficiency of huge investigation and development areas in India the organizations operating in India hardly have any death obligations in their books (Shaneeb and Sumathy, 2021). They largely sell drugs that are patented at a high scale needs market. This business structure has been inbuilt to capture the need for the funds full stop for India and other international markets Indian farmer political organizations have a broad area of production capacities. Need and significance of the research in this research matter.

1.4 Research Aims and objectives

- Examine the performance of equity price of chosen Indian and international pharma organizations working in India.
- To explain, differentiate, and interpret the performance of equity price of chosen Indian and international pharma organizations working in India.
- To determine the elements accountable for possible contrast in performance of equity price of selected pharma companies.

1.6 Research Questions

- What is the probable risk and returns of the selected companies in equity price and performance?
- What are the five biggest competitors in the pharmaceutical industry of India?
- What is the intended risk included in the equity investment of the pharmaceutical companies?

1.7 Research Structure

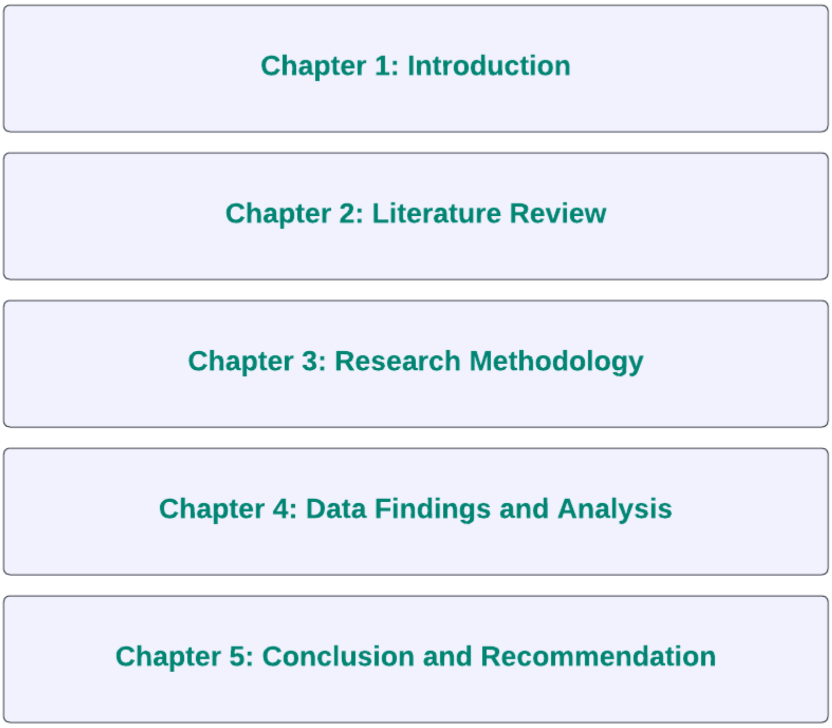

Figure 1.7: Structure of the Research Paper

(Source: Self-made)

1.8 Significance of the research

By reflecting on the discussions made in the research background and rationale of the research it is obvious that the pharmaceutical industry of India is providing positive returns and other forms are also showing negative returns. The risk element of these companies is more probable than Others. The economic development of India is increasing impulsively and has manifested the marketing growth in the selected industry. The production of new drugs and various approaches and methods in vaccines is the primary strength of the industry in India. Hence it needs additional research on the equity performance of companies operating in India and to investigate their performance through various other elements such as ratio analysis and performance analysis.

1.9 Chapter Summary

The first chapter of the research paper provides the aim of the research and the areas in which it tries to attempt and manifest. Together with that, it also gives a research background of the topic and rationale of the research for which the research is implemented. The research aims and objectives have been provided in the first chapter so that the researcher gets its path and direction for future research implementation. The research question helps the researcher to get and collect data relevant to the research topic and the things that need to be proven at the end of the research implementation. The overall structure of the research paper has been provided in this chapter along with the significance of the research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In the second chapter of the research paper, the financial performance of the pharma companies operating in India has been evaluated along with the analysis of the financial performance of these companies. Along with that, the impact of COVID-19 on the returns of stock of the Indian pharmaceutical companies is also evaluated and scrutinized here to analyze the current scenario of this industry on the stock market. The use of the ARIMA model for forecasting the prices of the stock market is also discussed here to help the pharmaceutical companies in using and strengthening their prices. Moreover, the performance of equity prices of these pharmaceutical companies have also been mentioned here and discussed to get an in-depth understanding of the subject matter. The application of a theoretical model for strengthening the capital structure of these pharma companies is also mentioned here.

2.2 Financial Performance of the Indian Pharma companies

As per the survey conducted by the Indian economy in the year 2021 the domestic market of the pharma industry was anticipated to increase thrice in the next 10 years. The pharma cuticle market of India is at US dollars 42 billion in 2021 and probably to reach up to US dollars 65 billion by the end of the year 2024 (IBEF, 2022). This increases the attention of the multinational companies to operate in India and captured the rising market share. The biotechnology sector of India comprises biopharma cuticles Ka mobile services, while a trustee and bio the culture. The biotechnology sector of India was valued at US dollars 70 .2 billion in the year 2020 and is forecast to rise up to US dollars 150 billion by the end of the year 2025.

In the universal pharmaceutical sector, India is a remarkable and rising player. Being the world’s one of the largest suppliers of basic medications and valued for 20% of the overall supply by volume universally and approximately 60% of the universal vaccination demand. This entails the efficiency of this company (IBEF, 2022). Moreover, the Union Cabinet of India has provided it’s not for the revision of the existing FDI policy in the pharma industry in order to permit FDI up to a hundred percent followed by the autonomic route of production of medical devices subject to few conditions. The drug in the pharmaceutical industry of India received a cumulative FDI allowed at US dollar 19.19 billion from April 2000 to December 2021.

The pharmaceutical sector of India has made huge strides in both universal and domestic markets. Yet the development banks were huge for the domestic players serving a huge share of the universal pie. The stagnation in the basic approvals by USFDA, the issues of payment witnessed in some of the developing markets from the quarter end of 2008, and hasn't the generality and huge competition together meant stagnant development in universal revenues for the regional and domiciliary players (Farhan *et al.* 2019). Yet in spite of the critical environment, the domiciliary players constantly consolidated their business structures of the pharmaceutical companies, and some of the universal players had obtained these Indian pharmaceutical enterprises.

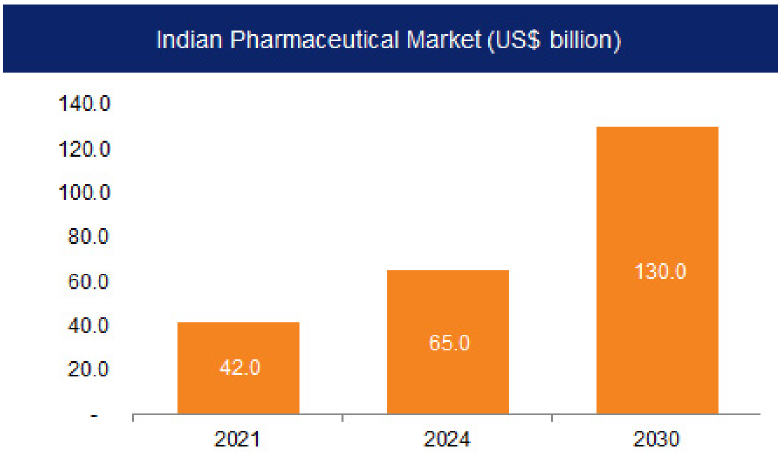

Figure 2.2.1: Forecast of Pharma Sector In India

(Source: Farhan *et al.* 2019)

The consolidation has initiated in the universal pharma sector with some of the huge merger proposals (Ansari and Mustafa, 2018). Some of the successive drugs were anticipated to expire in the future 3 to 5 years and at the same time, the reduction in the research pipeline has become a primary concern for the multinational players. In order to maintain the essence, some of the top multinational organizations were looking forward to purchasing the basic players or having partnerships with the basic players in the market of drugs in the developed markets. As per Festa *et al.* (2020), with a lot of cash in hand and interesting valuation, the multinational companies were also obtaining the majority stake in its appearance in market subsidiaries in periodic, Indian in specific.

Various researchers had applied a financial statement evaluation of the income statement and the ratio and balance sheet to anticipate future earnings. The key motivation of the investigation was to recognize the mispriced securities (Patel, 2018). However, these researchers explained that the data in the earnings anticipation signals was assisting in creating the abnormal returns of a stock. On the other hand, the value stocks remarkably outperformed the development stocks. Various researchers had advised the investors to purchase shares of a rising company in the developed industry. Purchasing shares by diverging the group company working in a different yet equally fast rapid sector of the economy.

2.3 Financial analysis of the Pharma companies

Investment is the selection of an individual to put or lent capital in a property, secure that salaries, and also higher probability of returns over a few periods of time (Panigrahi, 2019). Financial investments are critical in nature, permitting different transformations to occur at each moment. It is the procedure by which any as it can be bought or installed. In general terms, a sector offerings capital funds from origins known as investors which were safe at the time of investing are called investments. Individuals often take into consideration savings as a type of investment. Even though the savings and the term investment or fully contrasting to each other in order to their inclusion with the capital approach (Chatterjee, 2020). Saving is another method of accumulating wealth or securing the wealth whereas investment is observed to be a manner of obtaining returns.

Most of the time, a savings account is created by the consumers in a bank to put the capital in that account so that it can be used any time it needs. technical evaluation is done on different contacts in the market of stock in regard to the elements impacting the supply and demand. The indicators of the stock market highlight to us different turning points (Kumar *et al.* 2020). The stock market is open for fluctuating at different stages as various fluctuations and contrast and noted and it is the work of probable investors to diminish its impact on the revenue and market of the company.

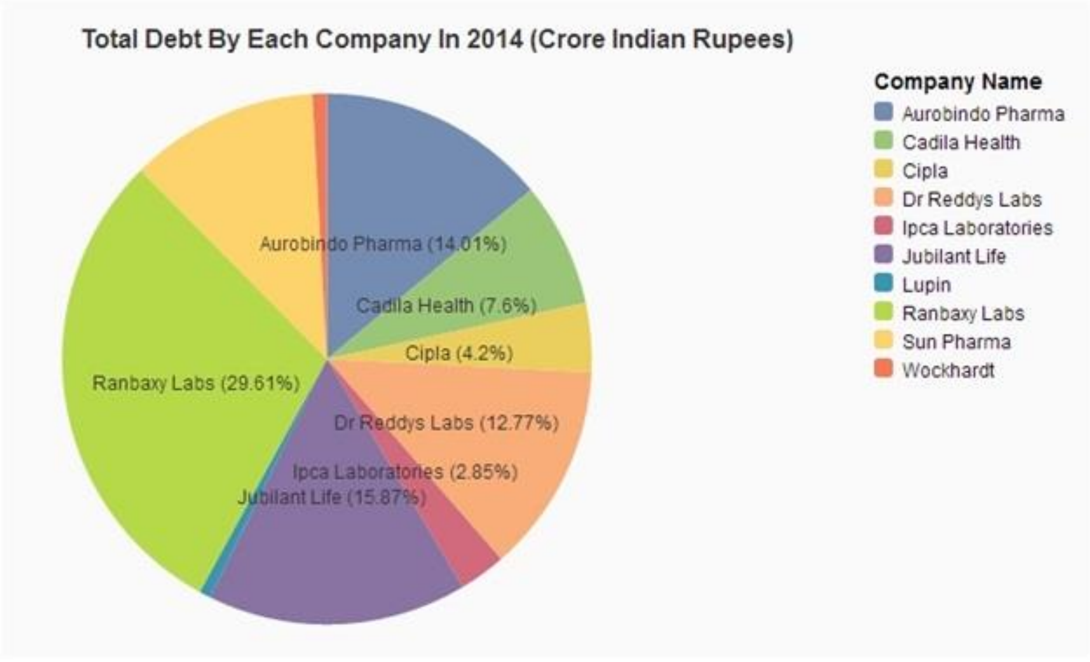

Figure 2.3.1: Debt Share of Pharma Companies

(Source: Kumar *et al.* 2020)

Similarly, in different discussions regarding the analysis of financial ratios for the evolution of performance, it is observed that a huge number of values are present in the financial statement of a company. As per the views of Mittal and Sharma (2021), investment evolution is significant to identifying manners to the ministries and increasing the returns. The economic evolution as a part assists in analyzing the GDP, rate of inflation, and foreign reserves. MACD, ROC, and RSI were a few of the technical approaches applied to evaluate the periodic closing price and BSE. According to Varma *et al.* (2020), mixed approaches were acquired from the investigations. The results of these investigations recommend that investing in the recent period for the purpose of long-term needs fundamental evolution together with technical analysis.

Various researchers had investigated that in the past two decades, anticipating the stock has become one of the significant fields and areas of research. In the current inconsistency and in spite of the surprising rally in the financial market, the technical analyst constantly forecasts particular target degrees of stock and indices (Azam *et al.* 2022). Yet on the contrary, in the research discovering of the various researchers evaluated that technical evaluation adds value to the generally applied allocation rules that invest a static proportion of the wealth in the stocks.

2.4 Effect of COVID-19 on the stock returns of Indian Pharma enterprises

The stock market shows the current condition of the economy and it responds to the major encounters. Past works of literature have demonstrated the same periodically, for instance, the way news impacts the stock market or the way the stock market reacted to the FMD outburst in Korea. The stock market of China has also manifested remarkable negative impacts and returns in reference to the day to day development of both over and confirmed cases of the outburst of COVID-19 (Shankar and Dubey, 2021). Various outbreaks in the past have directed a reduction in investment from equity and mutual funds and this reduction in investment increased the risk to the economy.

It also observed the maximum decline mission of stock within a month. It was backed up by an investigation that revealed that the stocks manifested remarkable cumulative returns to be abnormal on and after the outburst. As per the views of Jain *et al.* (2020), during the time of crisis, the pharma companies are in huge demand for distributing the necessary medications and equipment. Not only that, yet also they have to lavish on research and development to initiate vaccines for mediating and controlling the disease. The revenue margin of these industries and companies will rise in the future quarters, the investors observe this and the share price of these companies may rise because of the bulk buying.

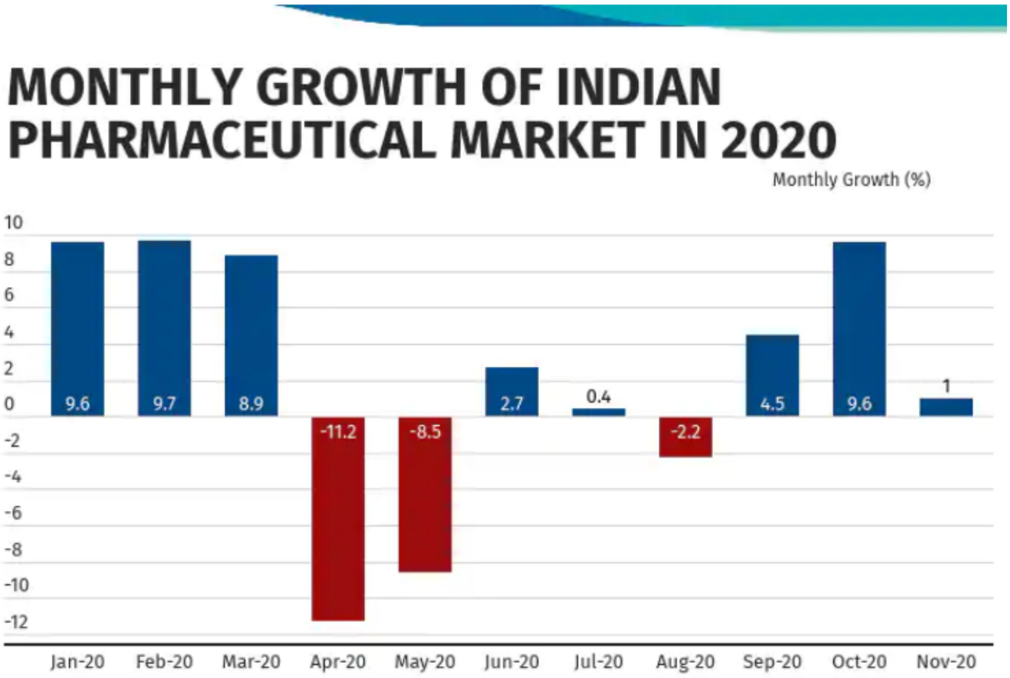

Figure 2.4.1: Development of the pharma market

(Source: Jain *et al.* 2020)

Yet, as the pharma companies operating in India hold approximately 70% of the generic ingredients of pharmaceutical sectors for the medication, and as the factories and manufacturing units are closed in China because of the outbreak, the pharma industry of India is already under huge distress (Afeef *et al.* 2018). The existing literature is mentioned that contagious diseases adversely impact the prices of stock of various sectors, yet the question is if they also affect the stock of the pharma sectors also. Although other sectors such as tourism or retailing experienced a huge negative impact from the outburst, the biotechnology and pharma sectors had a positive leash observed a shock from the effect of the crisis.

1.5 Anticipation of Stock market prices

There are different types of research works available in the domain of anticipation applying the analysis of time series. Some of the remarkable talks and also mention in different studies. And investigation deals with the impacts of SVM regression, a model of neural network approach, in forecasting the price of the shares to investigate the feasibility of the regression of SVM in anticipating the price of the stock. According to the views of Kowtal (2021), data said in reference to a stock exchange can be applied to examine the validity of the regression. The investigation depicts the regression as an optimal and significant approach to anticipating the price of the stock. Again, an examination concentrated on investigating and forecasting the price of technologies, takes into account the past open, close, increased, and decreased prices by applying various neutral categorize functions (Chowdhury *et al.* 2019).

On the contrary, an investigation scrutinizes the connective predictive value of ARIMA, ECM, and VAR structures in forecasting inflation. In doing so, a CPI was combined into Da data. The study investigates the performance of anticipating capability of the structures. It was manifested that various models performed well in divergent periods (Sharma and Modgil, 2019). While ARIMA is helpful to be a standard model, VAR is for forecasting for the short-term period and ECM is appropriate for forecasting for the long-term period. Furthermore, in other investigations, the researchers observe some of the methods, which could be applied for forecasting a stock market such as non-linear regression, hidden Markov structure, and so on. The investigations concluded the fact that the neutral networks manifested better outcomes as differentiated from other techniques.

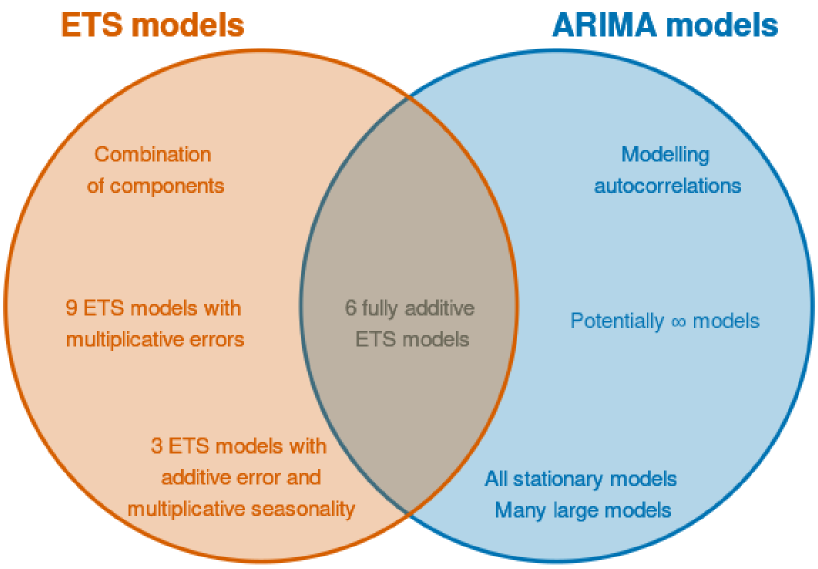

Figure 1.5.1: ARIMA Structure for forecasting share price

(Source: Sharma and Modgil, 2019)

An investigation of 10 chosen pharmaceutical organizations of India listed with BSE was also implemented with the assistance of fundamental evolution by applying a ratio analysis approach (Harris and Roark, 2019). The investigation recommended the ARIMA structure for obtaining the values of share price in the future. The approach revealed better anticipating outcomes as it can control the data of time series extremely remarkably, which is appropriate for anticipating the stock and share index in the future. Again, an investigation concentrated on anticipating the price of a stock with the assistance of ARIMA with systematic models was performed to observe cases there exist are frequentists. According to the views of Dufour *et al.* (2018), the research performed in the past was not sufficient to give the appropriate structure to determine or forecast the prices of stock of the farmer organizations of India with the help of ARIMA.

1.6 Financial Constraints and Restricted infrastructure of India

At a cross-sector degree, the gross expenditure of India on research and development as a percentage of GDP has been approximately 0.7% in the past 20 years. While the average absolute spending has risen, the percentage has kept constant as the GDP has raised. this is extremely far from the investment degrees of research and development witnessed in other developed or developing countries. It is to be noted that the administration has a leading contribution to the expenditure on research and development. From the year 2017 to 18, the central administration spent approximately 45.4%, whereas, the regional government spent 6.4% (Indian Pharma Report, 2021). 12 biggest scientific agencies are valued for 99.8% of the expenditure on research and development by the central administration.

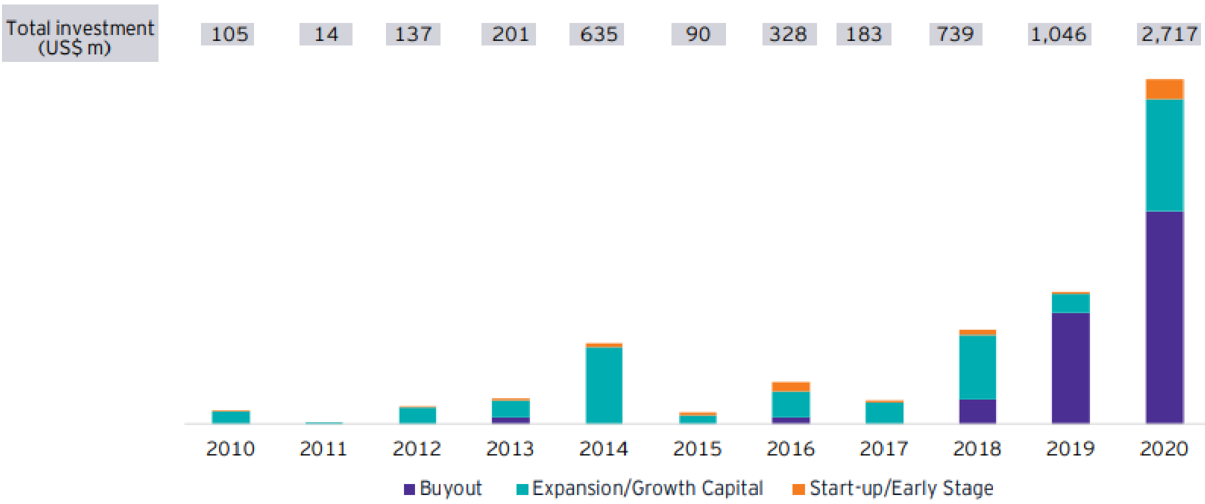

Figure 1.6.1: Investment of PE/VE in Pharma from 2010 to 2020

(Source: Indian Pharma Report, 2021)

This clearly points out the requirement for rising not only the spending of public, yet also private capitalizing that acts in a very crucial role in leading innovation of a state. According to the EAC-PM, India should focus to reach the expenditure of research and development of at least 2% of the overall GDP by the year 2022. Specifically, in the pharma industry, the process of research and development is extremely sustained and risky. The expenses of the advancement of a novel drug have been anticipated to be approximately US dollars 2 to 3 billion, and the meantime for the advancement of the drugs is approximately 10 to 12 years (Indian Pharma Report, 2021). It is critical even for the biggest pharma companies operating in India to fund various innovation research and development of the goods independently in the absence of any funding support.

In the past few years, one of the top pharma companies operating in India has raised its investment in research and development, yet the investment as a percentage of revenue key is under half of the investment level which was registered by the universal companies. A considerable amount of their investment also goes into basic drug research, leaving inadequate funds for NCE and research of NBE. In addition to the hydrate aligned with the investment of research and development in innovative research, the factors of the market such as price controls and patent security also act as a barrier (Rao *et al.* 2019). Moreover, the potential of research is restricted by insufficient grants and funds provided by the government body specifically for the projects of early research with entrepreneurs and in academia. The process to apply for and obtain grants from government bodies is extremely critical.

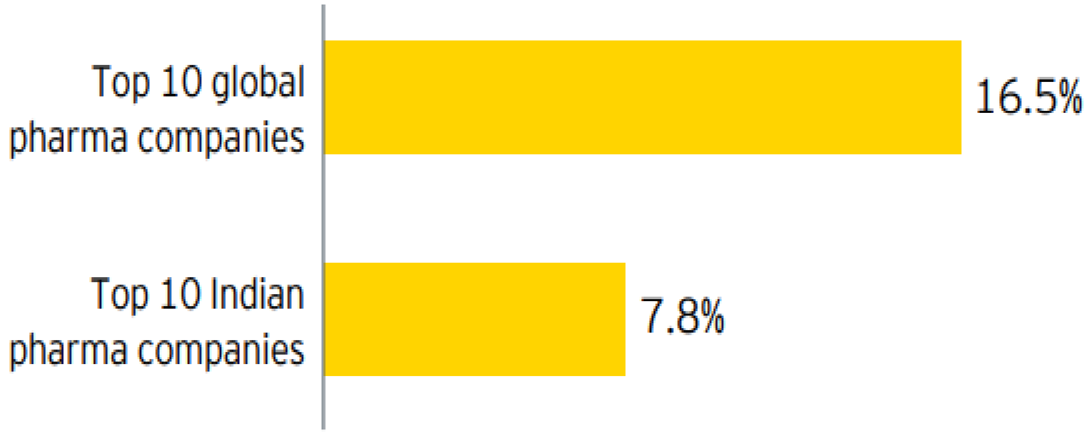

Figure 1.6.2: "R&D expenditure as % of revenue (average of 2015-19)"

(Source: Indian Pharma Report, 2021)

1.7 Application of Theoretical Model for capital Structuring of Pharma Companies

For analyzing the risks and capability of the assets of the pharma company to earn a general and standard amount of profit, "*Cash Flow Theory"* is the most applicable (Rao *et al.* 2019). The visualization of capital value and cost of capital can describe various observed structures of capital and shows that the issue of equity is rather a security brake in organizations with a non-corner optimal structure of capital. The "cash flow theory of the structure of capital" in various research papers can describe some of the observations, which withstand the trade of theory or the theory of speaking order (Afeef *et al.* 2018). Nonetheless, various research papers need some improvement to have better application and advantage of the cash flow theory in the context of the pharma companies.

It is assumed from the different results found in other research that the structure or the framework does not observe the option nature of all types of capital, even though the theory shifts towards the options framework of a company, in spite of the dissolved general cash flow structure of the capital model (Ansari and Mustafa, 2018). The theory of cash flow of capital structure suffers from assertive, inflexible nature, and incapability to account properly for development and risk. Application of dynamic cash flow structure in pharma companies gives generalized formulas for WACC and COE and permits the management to account for development while at the time of evaluating the COC and evaluating the preceding theories of cash flow for capital structure (Azam *et al.* 2022). In addition to risk evaluation, particularly CFD, free of debatable assumptions, assists in deciding the general connection among COC.

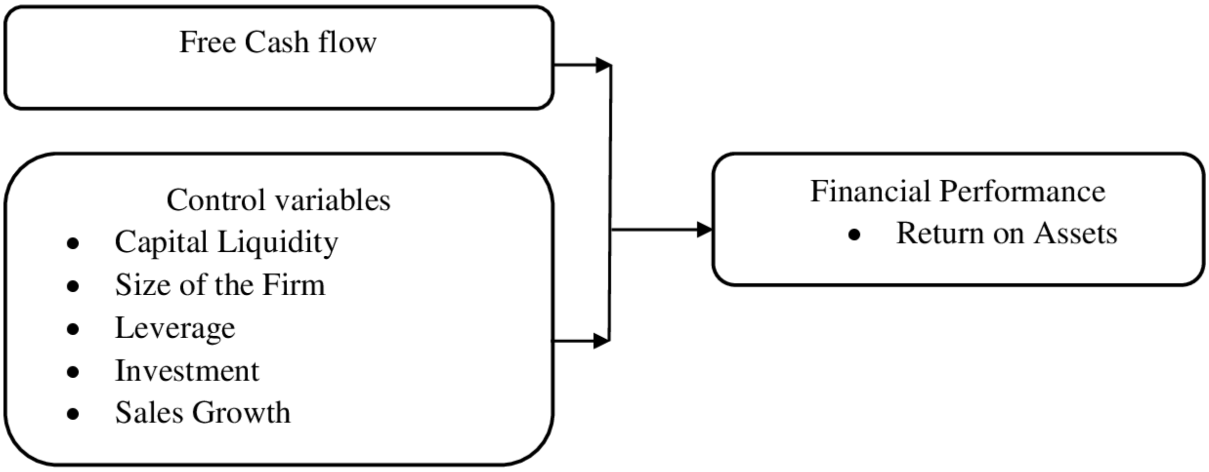

Figure 1.7.1: Impact of FCF Theory on Financial Performance of companies

(Source: Azam *et al.* 2022)

The results of the various investigation and research papers give a connection between the primary groups of theories of capital structure such as static trade-off, FCF, and so on in spite of some remaining issues, which are inbuilt to FCF theories in general. Various research papers are initiated on the CF theory, which permits "time-varying COC" and leverage. After initiating the mathematical equipment applied in the papers the investigations are made through the English literature (Chowdhury *et al.* 2019). The most significant restricting element of the CF theory of capital model is the fact that the more risky equity the high rate of return. Yet debt is anticipated to be riskless or at least possess a rate of return that is leverage independent.

The CF theory can be used by the pharma companies operating in India as it can be partly connected with the value of capital and assets (Dufour *et al.* 2018). At the time the acid starts to diminish their earning capability, the theory is not generally observable in the type of sales decrease. Yet it becomes observable even at the lower level of leverage in other types which helps the organizations to be aware of the situation. The most alarming issue is that there are two derived variables in the visualization that does not generally fulfill the theoretical circumstances of CAPM (Festa *et al.* 2020). In fact, the SD and regularity assumptions could be good for the theoretical evidence and they could also grasp in practice because of the central restriction theorem.

Apart from the classical cash flow theory, the options theory can also give some of the advantages of debt even higher the value of assets to the pharma companies. This is due to the fact that there is still a probability that something is remaining for the shareholders (Harris and Roark, 2019). The more attractive implication of the results of various investigations using the theory is the volume of the text shield. With the reference to the past works of literature, the researchers can even give evidence to the fact that high development expectations direct the text shield overflow the risk that increases the higher leverage.

1.8 Conclusion

The second chapter entails the financial performance of these pharma companies operating in India in the past years along with analyzing their performances with the help of past works in the literature. The total dip share of one of the biggest pharma companies has also been mentioned in this chapter along with the impact of COVID-19 on the stock returns of the pharma companies. Although there are fewer works on the effect of COVID-19 and the way it increased or decrease the stock returns of these companies, some of the facts have been given in this chapter. The use of the ARIMA model has also been mentioned in this chapter along with the financial constraints and restricted infrastructure of India for research and development expenditure and the issues of government grants. Moreover, the application of a theoretical model for the capital structuring of these companies has also been mentioned in this chapter.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Research methodology involves a particular approach that is applied to exemplify procedures, recognize, and sort out topics that are interlinked to the information. More specially, this chapter of the paper target highlighting specific research thoroughly to assist the researcher in finding answers a line with the overall study. A few research designs in that endless study elements are aligned and interpreted in this area of the research paper. The methodology chapter focuses on generalizing a hypothesis more related to this topic. A particular strategy for the research is thoroughly explained in this study. The procedure of sample selection is one of the easiest with the questionnaire. Thus, the establishment of the questionnaire is also highlighted in this chapter. The method of data interpretation is also described here while calculating the efficiency and accuracy of the information that has been gathered.

3.2 Research Philosophy

The researcher used a ***Positivism philosophy of research in this area*** to execute the study more effectively and strategically. According to the views of Abutabenjeh and Jaradat (2018), the "research philosophy" is one of the vast areas and is parallel with assumptions, acknowledgment, and the inclusion of the study. It also copes with the particular manner of initiating understanding. This area needs to be approved as various researchers may have different assumptions in reference to the source of the truth and understanding and this research philosophy helps them to assess their assumptions. In other words, research philosophy is a premise for the manner in which a piece of data in reference to a phenomenon should be massed, analyzed, and applied. There are 4 major types of research philosophy that a scholar or a researcher can apply in case of arranging the research "***pragmatism, positivism, realism, and interpretivism***".

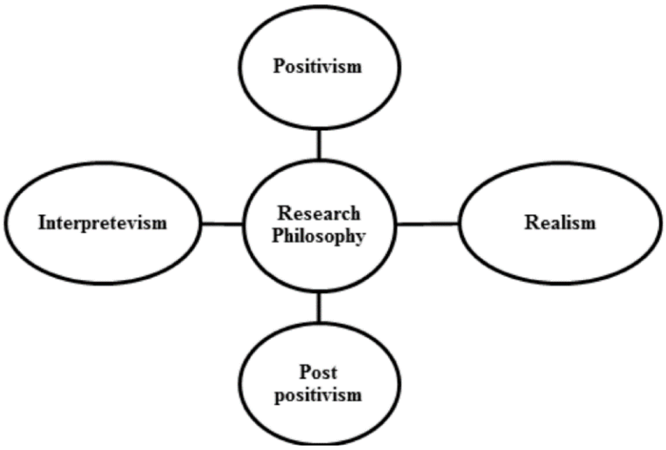

Figure 3.2: Types of Research Philosophy

(Source: Abutabenjeh and Jaradat, 2018)

Justification

This examination tries to understand the dominant role of equity and financial performance among people to make strategic and justified decisions for investment and capital use. The data collection has been executed in a more planned manner for economic advancement to get a complete understanding of the interconnection of these elements. The main reason for the selection of the Positivism philosophy of research is its high measures (Bloomfield and Fisher, 2019). There is a large number of samples that have been applied in this research to be investigated. Moreover, a researcher or a scholar can apply both qualitative and quantitative information to evaluate the implications of research matters with the assistance of this research philosophy.

3.3 Research Approach

In this study, the "***deductive research paradigm***" has been preferred to probe the hypothesis and test the pre-existing theories based on the contingency problems and position of the equity analysis of pharma companies in India. Specific research for a particular time alludes to the approach of research that assists the researcher to implement the whole study (Blumenberg and Barros, 2018). The researchers, in some areas, are identical in investigating for specific answers to the research questions in regards to research paradigms such as the ***deductive*** and ***inductive approaches of research***. However, an inductive approach alludes to a methodical procedure by which qualitative data is evaluated. On the contrary, the "deductive approach of research" helps the researcher to scrutinize the hypotheses that are affiliated with the study and have a visible picture of the past works on theories that are related to the topic.

Justification

As per the views of Frew *et al.* (2018), various reasons are there for selecting the current paradigm of research. The most prominent and important reason is that the investigation is the same for the researcher to initiate and authenticate links among research variables and different notions. The findings of the particular research are immense to a specific point in this approach of research. It has been preferred to save time at the time of the implementation of this research. An inductive approach is not chosen in this context because the conclusions collected by the researchers are incorrect frequently and therefore the observations go invalid. Therefore the choice of this process includes risk and the researcher has to give enough time in the context of selecting the paradigm to have better results and conclude in a proper way (Kamal, 2019). Thus, in regards to this paper, the "deductive research paradigm" is often preferred to have an exact idea of the research topic. Results in regards to the test of the hypothesis can evenly be analyzed by the researcher with the help of this paradigm.

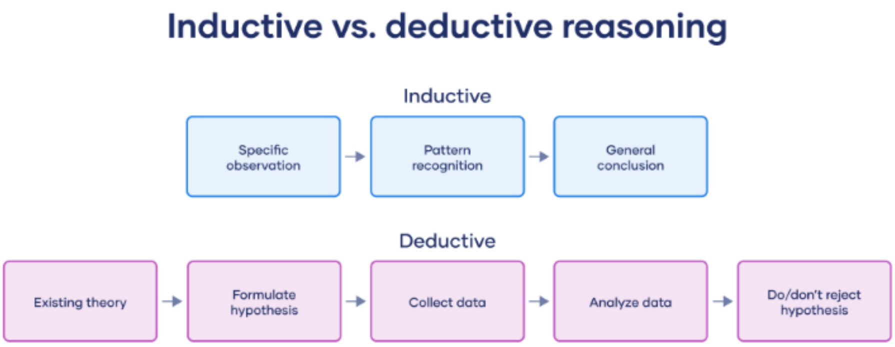

Figure 3.3: Deductive & Inductive Research Paradigm

(Source: Kamal, 2019)

3.4 Research Design

Research design accepts the overall strategy that assists the researchers to implement the study in a balanced way. As per the views of Kaushik and Walsh, (2019), the research problems are completely acknowledged by the researchers with the help of this design for research. In the current study, both the "qualitative and quantitative methods" to research have been applied by the researcher. However, a specific design of the investigation is important in carrying out the whole study in a balanced way. For this research purpose, the researcher has preferred a “descriptive research design” to make sure that the “quantitative methods” to research are applied strategically in the area of organizing the study.

Justification

The research design is favored in this area as the researcher strongly implements the mixed methods to analyze and scrutinize the information and data that are related to the study (Maggio *et al.* 2022). The researcher can acquire the data to clarify conditions and phenomena that are somehow related to the subject matter with a “***descriptive research design***”. In this area, the researcher can provide answers to specific research questions with the help of this design. The researchers are adequate to observe the phenomena in the truancy of any hurdles as this design is trailed efficiently by the researchers. Moreover, the descriptive design of research benefits a person to execute a survey by gathering primary qualitative data (Mohajan, 2018). One of the most exceptional causes for choosing this design is that it can provide an additional advantage to the researcher in the context of all-inclusive methods of quantitative and qualitative for collecting data.

Figure 3.4: Advantages of the Descriptive Research Design

(Source: Mohajan, 2018).

3.5 Research Sampling

The researched sampling used in this paper has been simplified with the secondary quantitative data and the choice of the sample fulfills the optimal and remarkable role in the area of planning a performance analysis (Mortensen and Hughes, 2018). The sampling of research indicates the selection of approaches of a class from which the information in regards to the mentioned subject of the research or gathered. In this recent investigation, a non-random sampling approach and design have been chosen by the researcher. A non-random method of sampling is one in which all the factors of the universe do not have a similar probability of being selected.

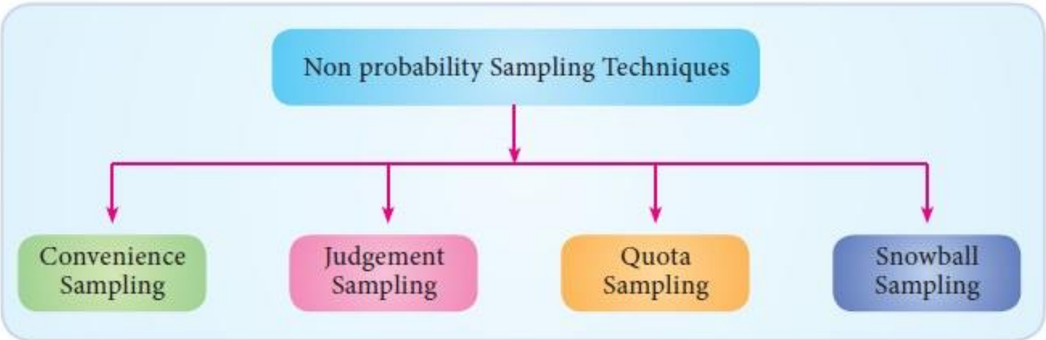

Figure 3.5: Methods of Non-Random sampling

(Source: Mortensen and Hughes, 2018)

This is due to the fact that the researcher chooses a sample based on the convenience of the research rather than on a probability basis (Newman and Gough, 2020). In this context also, the non-random method of sampling has been chosen as the researcher needs to analyze only the equity performance and financial performance of the pharma companies operating in the market and the performance of these companies in the stock market of India. As a reason, the researcher had gathered data in reference to the ratios and capitalization of the market for six particular companies. In this paper, 3 Indian and 3 multinational firms operating in the Indian pharma sector have been chosen by the researcher. These companies are

- Alembic pharma Ltd.
- Ajanta Ltd.
- CIPLA Ltd.
- GlaxoSmithKline Ltd.
- Pfizer Ltd.
- Abbott Ltd.

3.6 Data collection method

In this context, only the ***quantitative method of data collection*** has been used by the researcher. There are various methods of gathering and analyzing data have been mentioned and discussed in the research methodology chapter of this paper (Roy and Uekusa, 2020). The advancement of the research methods is somehow connected with the design of the particular research. Few of the methods and approaches were indicated in the method of research that has is the researcher to have an optimal evaluation of the investigation. Different tools for collecting data are used in a research method.

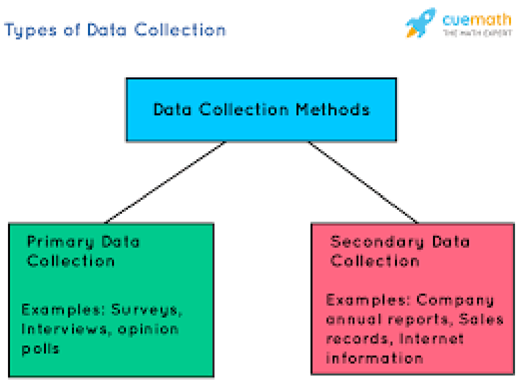

Figure 3.6: Data collection methods in Research

(Source: Roy and Uekusa, 2020)

There are two types of research methods available for collecting the data such as qualitative and quantitative (Snyder, 2019). The qualitative method of data collection is stated as the market research approach that concentrates on gathering data for the specific research topic. In this paper, the researcher tried to investigate the financial statements of the selected companies to analyze the equity performance and financial performance of these companies in the stock market of India. The balance sheet, profit, loss statement, and the market capitalization value have been differentiated from the past years till now to analyze their efficiency to capture the market share and the way it uses and increases its earnings per share.

3.7 Data analysis method

As per the views of Song (2019), the advancement of information that is gathered needs evaluated measures and tools for scrutiny and performance. In this research paper, the data gathered from the financial statements and reports of the companies will be evaluated using ratio analysis. Ratio analysis is one of the applicable quantitative methods for obtaining the perception of liquidity, operational effectiveness, and profitability of a company by analyzing the financial statements such as profit and loss statements add the balance sheets. The ratio evolution is the basis of the foundation for the evolution of equity. With the help of this analysis method the researcher can get insight into the past performance of the company and can differentiate it from the values of the current time. As per Sovacool *et al.* (2018), it may help the researcher in further gaining knowledge about the equity performance of these companies in the stock market of India.

3.8 Reliability and Validity

As per the views of Tualaulelei and McFall- McCaffery (2019), the reliability and validity of research are extremely important to indicate the authenticity of the conclusions drawn and give appropriate recommendations for future study, and to address the key research area. For the implementation of this research paper, the researcher has used a specific pattern to record the validity of the scrutiny as a work of the research paper requires to be initiated. The data was gathered from authentic and reliable sources to keep the data mentioned in the paper valid. The reliability of the research indicates that it acts in a significant role in the analysis of the data. Ratio analysis is assumed to be a valid tool for making the analysis reliable.

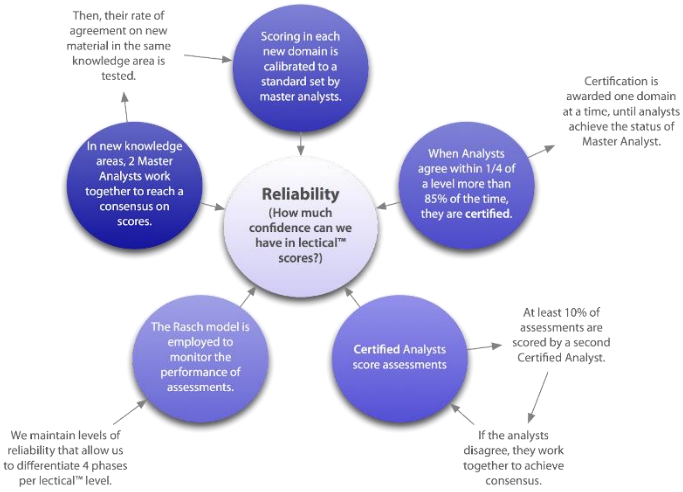

Figure 3.8: Reliability Elements of a Research

(Source: Tualaulelei and McFall- McCaffery 2019)

The particular measures have been arranged to implement the research study and a responsible for initiating and specifying the reliability so that adequate analyses can be done. The scrutiny is done to evaluate the regularity of the internal barometers and factors together with the comprehensive connection. On the contrary, validity is extremely important and is used to easily compute the reliability of the research (Abutabenjeh and Jaradat, 2018). The researcher had collected all the data from the authentic websites and annual reports published by the company to make the data authentic and valuable so that the analysis can be performed very optimally to see the performance of these companies from the past years till now.

3.9 Ethical Consideration

According to the regulations of the “Copyright Designs and Patents Act 1988”, a researcher is accountable for plagiarism and other regulatory and legal bindings (Bloomfield and Fisher, 2019). Hence in this area, the copyright law has been followed extremely critically and strictly to paraphrase the data from the past works of research. The research topic follows all the guidelines and regulatory compliances. Throughout the execution of this research, no living or nonliving objects have been hampered by the researcher or any parties that are related to the paper. The data gathered for analysis purposes will be secured and not be used for any other illegal measures. The data has been used using adequate transparency. The maximum level of objectivity has been used and managed throughout the analysis.

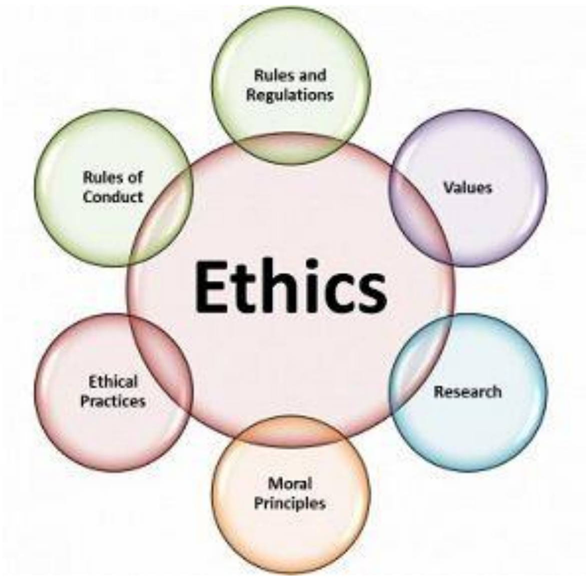

Figure 3.9: Ethical Consideration in Research

(Source: Bloomfield and Fisher, 2019)

3.10 Research Limitation

Like every research, this research paper also suffers from some limitations for which the future research may be implemented to cover those gas. As per the views of Frew *et al.* (2018), the research limitations at as the key basis for implementing future research on a similar research topic. Although the research had attempted to apply every possible and probable measure that could assist the researcher to have more reliable and valid information regarding the efficiency performance and operations in the stock market of India by the farmer companies operating in India sum of the limitations.

The researcher, in this context, has only taken into account the secondary data analysis and data collection methods to analyze the performance of the farmer companies operating in India. The pharma companies have been selected which operate in India and not taken the overall international performance of these companies. The use of primary data collection methods and data analysis methods such as surveys or interviews could have been performed (Roy and Uekusa, 2020). A survey or interview with the workers working in these pharma companies may have given the researcher a more accurate and independent understanding of their performance and the ways they manage operations and efficiency in the stock market of India.

3.11 Chapter Summary

The third chapter of the research paper indicates the type of elements that have been used by the researcher to initiate and finish the study with proper reliability and validity. In this chapter, the researcher used the deductive paradigm of research and positivism philosophy of research to initiate and implement the research and to help the researcher get on the right path. It is applied by the researcher to make the variables and other concepts valid and connected. Whereas, the researcher had applied the positivism philosophy of rese3qarch as it helps to implement the research structurally.

On the contrary, the reason for selecting only a secondary quantitative method for this research implementation is also mentioned and discussed by the researcher with proper justification. The use of the non-random sampling method and the data collection method that has been used by the researcher have been discussed here thoroughly. On the contrary comprehensive discussion of the data analysis method and the reliability and validity of the research along with the ethical conservation is also justified here in this chapter by the researcher.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

In this chapter of the research paper, the data has been evaluated to analyze the performance of the pharma companies operating in India and to evaluate its future trends in the financial market. This chapter basically gives the findings that have been collected through scrutinizing the data collected from the sources. In this chapter, only secondary data and this is have been performed and the data has been collected from the government websites and annual reports and balance sheets, and other financial statements of the selected companies to evaluate the financial performance and analyze the performance of the ratio in the past few years. The equity performance of the selected companies has been evaluated here along with the market cap for the past few years and the change that it had occurred in these years. Apart from that, the asset turnover ratio and EPS along with the debt to equity ratio have been also evaluated. The gross margin of these companies from 2015 to 2021 has been analyzed year to understand the performance of these companies.

4.2 Secondary analysis

In secondary data analysis, the researcher performed equity performance evolution and financial ratio evolution to understand the performance of the chosen companies operating in India over the past few years and the way these are using their capabilities to increase the reach and returns in the financial market. Evaluation of the equity performance of the pharma companies helps to understand the performance of these companies in the stock market (Guizani, 2018). In a few of the cases, the differentiation has been done taking into consideration all the six companies irrespective of the foundation location. On the other hand, the factors of the companies have been differentiated for the ratio purpose as per Indian and multinational territories.

4.2.1 Evaluation of Equity Performance

As per the views of Farhan *et al.* (2019), the worth of a company that is traded or transformed in the stock market, is computed by multiplying the overall number of the shares by the current price of a share is called market capitalization. Market capitalization helps a company to analyze the value of a share and investments having stocks or large caps or taken into a contract are more conservative than investment companies having low or made stocks. The equity performance of the selected companies has been evaluated here in the table given below. It has been manifested that the market capitalization of the selected companies increased at a rate that differentiates these companies clearly between the Indian and international pharma companies (Business standard, 2022).

The development in market capitalization of the companies operating in India is somehow similar to its peers. It is seen from the table that was about Ltd has registered a growth of 189% from 2015 to 2021, the GlaxoSmithKline limited company, on the contrary, had shown a growth of only 10% from 2015 to 2021. Whereas Ajanta Ltd has registered a growth rate of 74%, Alembic Pharma Ltd has registered a growth of only 7.65% (Business standard, 2022). The market capitalization of these companies can help the investors to have an indication of the worth of the company and can even be applied to differentiate the size of other companies (Panigrahi *et al.* 2018). This means irrespective of the establishment location, all the selected companies operating in India have a mixed rate of growth based on their operations and performance.

Company	**Alembic pharma Ltd.**	**Ajanta Ltd.**	**CIPLA Ltd.**	**GlaxoSmitkline Ltd.**	**Pfizer Ltd.**	**Abbott Ltd.**
Market Cap	$ Billion	$ Billion	$ Billion	$ Billion	$ Billion	$ Billion
2021	2.11	234.42	10.23	109.10	331.43	5.55
2015	1.96	134.55	7.84	99.05	199.32	1.92
% Change in Growth from 2015 to 2021	7.65%	74%	30%	10%	66%	189%

Table 1: Differentiation of Market Cap among the selected Pharma companies from 2015 to 2021

(Source: Self made)

The table given above shows the contrast in the manner Indian companies have outperformed versus the multinational pharma companies have done. As per the views of Srivastava and Shastri (2020), an observation of the "earnings per share" or EPS can assist a researcher in discovering the remarkable contrast in the transformation in the market price and the resultant transformation in the market capitalization of the selected companies. The Indian company Alembic Ltd has registered a huge growth from 2015 to 2021 for EPS value which is 15.20 to 60.67. Whereas, Cipla company has registered a slight growth from 14.71 in the year 2015 to 30.61 in 2021 (Business standard, 2022). Among the evaluated Indian companies, Ajanta Pharma Ltd has manifested the maximum development in EPS that has directly resulted in a 74% increase in market capitalization.

	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Alembic Ltd.	15.20	37.03	22.84	22.38	32.42	51.42	60.67
Ajanta Ltd.	34.84	47.10	56.79	48.59	44.51	50.55	77.59
CIPLA Ltd.	14.71	18.21	12.13	18.25	23.45	28.76	30.61

Table 2: Value of EPS among the chosen Indian Pharma companies from 2015 to 2021

(Source: Self made)

According to the views of Shah (2020), the EPS manifest the level of money that a company makes for each and every stare share of the stock and is a broadly applied metric for analyzing or forecasting the corporate value of a company. The EPS of the company has increased from 2015 to 2021 following a growth rate. The GlaxoSmithKline company registered an EPS of 5.27 in the year 2015 whereas it is 2.41 in 2021 which means the company has fewer EPS and needs to improve further. All the data have been collected from the financial reports of these companies to have better valid results and analysis of the performance of these companies (López- Toro *et al.* 2021). On the other hand, among the evaluated international companies, Abbott Ltd has manifested the maximum development in the EPS that has zero lead denoted to the 189% rise in the market capitalization.

In $B	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**

GlaxoSmitkline Ltd.	5.27	0.5	0.8	1.95	2.36	2.93	2.41
Pfizer Ltd.	1.13	1.18	3.57	1.9	2.88	1.65	3.92
Abbott Ltd.	2.92	0.94	0.27	1.33	2.06	2.5	3.94

Table 3: Value of EPS among the chosen Multinational Pharma companies from 2015 to 2021

(Source: Self made)

It is extremely known that the pharmaceutical companies of India concentrate on generic goods development which has a potential market in India and the chances for export of these goods are immense (Modi and Chaudhary, 2019). Also, the financial performance of this organization stands out as differentiated from other universal peers. The international pharmaceutical companies working in India concentrate on high-profit margin products along with patents that offer advanced margins. It clearly indicates that the pharma companies of India have the increased potential and opportunities for better performance and having a high share in the Indian market as these products are also cost-friendly (Venugopal and Jampala, 2019).

4.2.2 Evaluation of Profitability performance

The financial performance of a firm can be evaluated through the analysis of DuPont, which computes the return on the company equities will take into consideration the profitability, efficiency, and capital leverage (IBEF, 2022). The collaboration of these three ratios manifests the overall performance of an organization or a firm. The indicators of financial performance are also taken into consideration in this research and the use ratio analysis has been performed to evaluate the operations and efficiency of the company in generating profit from its functions. The tissues that have been used and analyzed here for the past few years starting from 2015 to 2021 are

- Gross margin ratio
- Net profit margin ratio
- Asset turnover ratio
- Debt to equity ratio

In %	2015	2016	2017	2018	2019	2020	2021
GlaxoSmitkline Ltd.	63.06	66.68	65.74	66.77	64.8	65.68	65.99
Pfizer Ltd.	80.25	76.67	78.63	77.99	80.31	79.63	62.08
Abbott Ltd.	57.13	56.39	54.70	58.45	58.53	56.65	56.97

Table 4: Value of Gross margin among the chosen Multinational Pharma companies from 2015 to 2021

(Source: Self made)

The differentiation of this ratio should show the phenomenon development in the price of a share of the pharma companies operating in India. The gross margin is equal to the net sales subtracted from the cost of goods sold (Money Control, 2022). In basic terms, it is the value of capital that a company returns after obtaining the direct cost aligned with manufacturing the goods that it sells and the services that the company provides. A gross margin higher than 40% means the company can have the probability to obtain .40 for every 100 which is extremely remarkable for the company.

The data given in the table above shows the gross margin of the three multinational companies selected in this paper from 2015 to 2021. From the data, it is seen that GlaxoSmithKline Ltd company had a maximum percentage of gross margin in the year 2021 which is 65.99% whereas P Pfizer Ltd had registered a negative or lower gross margin percentage in 2021 as compared to 2015. On the other hand, Abbott Ltd had also decreased its percentage gross margin from 2015 to 2021 (Business standard, 2022). It means that among the multinational companies selected in this case, only GlaxoSmithKline Ltd had registered a growth in the gross profit percentage that to also an extremely low rate of percentage.

Rs. Cr	2015	2016	2017	2018	2019	2020	2021
Alembic Ltd.	1995.99	2940.87	2981.61	2940.19	3533.84	4019.53	4934.86
Ajanta Ltd.	1340.27	1544.65	1753.68	1762.36	1731.36	2167.07	2674.10
CIPLA Ltd.	9831.88	11873.46	10637.08	11004.44	11968.44	12220.22	13610.02

Table 5: Value of Gross Margin among the chosen Indian Pharma companies from 2015 to 2021

(Source: Self made)

As per the views of Venugopal and Jampala (2019), a high gross margin is always admirable as it means the firm can obtain more profits out of its sales. However, the gross margin can be contrasting for each sector. The developed companies may have a higher gross margin than the retail companies, yet the retailers make up for the decreased gross margins with high sales volumes. By reflecting on the table provided below for the gross margin of the pharma companies of India it is observed that The Cipla pharma company has registered the maximum gross value in the year 2021 which is Rs.1 3610.02 crore (Money Control, 2022). On the contrary, Ajanta Ltd had the least gross margin in 2021, Rs. 2 674.10 crores.

In %	2015	2016	2017	2018	2019	2020	2021
GlaxoSmitkline Ltd.	34.84	3.08	5.08	11.75	13.76	16.86	12.86
Pfizer Ltd.	14.25	13.66	40.55	27.32	39.18	21.99	27.04
Abbott Ltd.	21.68	6.71	1.74	7.74	11.56	12.99	16.42

Table 6: Value of Net profit margin among the chosen Multinational Pharma companies from 2015 to 2021

(Source: Self made)

The net profit margin is computed by dividing the net income by the overall sales of the firm (Modi and Chaudhary, 2019). The net profit margin of the multinational companies operating in the territories of India has been provided in the table above. By reflecting on the data given in the table, it is observed that the maximum percentage of the net profit margin of the companies is 7.04 which is for Pfizer Ltd (Money Control, 2022). Whereas, Pfizer had shown the least percentage of net profit margin in 2015 which is 14.25. On the contrary, GlaxoSmithKline Ltd had registered a reduction in the percentage net profit margin from 2015 to 2021 which is a huge difference that 34.84 to 12.86. Along with GlaxoSmithKline, Abbott Ltd had also registered a reduction in the percentage net profit margin from the year 2015 to 2021 from 21.68% to 16.42% (Money Control, 2022).

Rs. Cr.	2015	2016	2017	2018	2019	2020	2021
Alembic Ltd.	14.19	23.33	14.56	14.33	16.69	23.45	23.26
Ajanta Ltd.	22.59	26.71	27.70	23.42	22.10	20.08	24.85
CIPLA Ltd.	11.05	10.11	7.24	9.36	9.22	9.02	12.53

Table 7: Value of Net profit margin among the chosen Indian Pharma companies from 2015 to 2021

(Source: Self made)

As per the views of net profit margin is extremely beneficial and remarkable for the business operators and management along with the investors to calculate the value of net income which is obtained as a percentage of the profit obtained. It assists the investors to evaluate the management of the company in is it is obtaining enough revenue from its sales and whether the cost of operation and overhead costs are limited or not.

By evaluating the values obtained for a net profit margin of the Indian pharma companies it is observed that all the companies have shown a rise in the net profit from 2015 to 2021. Even though the profit is lesser or higher, the performance is better than that of multinational companies. Unlike the multinational companies, the Indian pharma companies have increased their net profit remarkably from the past. None of the Indian companies have decreased is net profit like the multinational companies had occurred. The maximum net profit margin is registered for Ajanta limited company which is Rs.24.85 crore (Money Control, 2022).

In %	2015	2016	2017	2018	2019	2020	2021
GlaxoSmitkline Ltd.	0.44	0.47	0.53	0.53	0.42	0.42	0.43
Pfizer Ltd.	0.29	0.30	0.30	0.25	0.24	0.27	0.44
Abbott Ltd.	0.49	0.39	0.35	0.45	0.47	0.47	0.57

Table 8: Asset Turnover Ratio among the chosen Multinational Pharma companies from 2015 to 2021

(Source: Self made)

The table provided above and below shows the asset turnover ratio of the selected multinational and Indian pharma companies from the past years to the present. According to the views of Matej Mikulic (2022), this ratio assists a researcher or the management of a company in evaluating the efficiency of the company in applying its assets to earn revenue. The acid turnover ratio for the multinational companies was higher than 0.57 for the about limited company. Whereas, GlaxoSmithKline limited company has registered a decrease in the asset turnover ratio from 2015 to 2021 from 0.44 to 0.43 (Money Control, 2022). Although the reduction is extremely low, it indicates the insufficiency of the company to use its assets for earning revenue.

In %	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Alembic Ltd.	2.77	3.19	2.98	2.79	2.82	2.59	2.62
Ajanta Ltd.	2.77	2.64	2.39	1.65	1.21	1.26	1.35
CIPLA Ltd.	1.81	2.38	2.33	2.10	2.08	1.97	2.02

Table 9: Asset Turnover Ratio among the chosen Indian Pharma companies from 2015 to 2021

(Source: Self made)

By scrutinizing the asset turnover ratio of the domestic pharma companies operating in India, it is observed that the maximum as a turnover ratio is obtained for Alembic limited company which is 2.62 in the year 2021. By differentiating the values of the asset turnover ratio of the Indian and multinational companies it is obvious that the Indian companies have better performance for asset turnover ratio. It means the companies can have better utilization of their assets to obtain revenue from this (Macro trends, 2022). In spite of this fact, Ajanta company has registered a huge reduction in the asset turnover ratio from 2015 to 2021 from 2.77 to 1.35 and needs to enhance in the future. Although Alembic company has the maximum ratio value in 2021, it has also reduced its value for ratio from 2015 to 2021.

In %	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**

GlaxoSmitkline Ltd.	1.87	3.78	4.89	7.09	1.66	1.3	1.13
Pfizer Ltd.	0.59	0.70	0.60	0.65	0.82	0.62	0.49
Abbott Ltd.	0.42	1.06	0.89	0.63	0.57	0.56	0.50

Table 10: Debt to Equity Ratio among the chosen Multinational Pharma companies from 2015 to 2021

(Source: Self made)

The debt to equity ratio investigates how much external capitalizing is needed for a business. As per the views of López- Toro *et al.* (2021), a high value of the equity ratio means there is a high need for funds for the company. Maturing business or the lower areas of business generally does not require more external funds to be utilized. by reflecting on the data obtained for the debt to equity ratio of the multinational companies, it is seen that all the three selected companies do show good performance as the value of these ratios is not more than two or 2.5 and is extremely lower (Money Control, 2022). The least value of the ratio is opting for Pfizer Ltd which is 0.49 and the maximum is for GlaxoSmithKline Ltd which is 1.13.

In %	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Alembic Ltd.	0.21	0.08	0.00	0.16	0.34	0.45	0.25
Ajanta Ltd.	1.21	0.08	0.00	0.16	0.00	0.01	0.01
CIPLA Ltd.	0.11	0.11	0.06	0.02	0.01	0.00	0.00

Table 11: Debt to Equity Ratio among the chosen Indian Pharma companies from 2015 to 2021

(Source: Self made)

Even though the multinational companies do show a good performance for debt to equity ratio, the Indian companies are far better than that. This ratio is helpful to differentiate the total liabilities of the company from the equity of the shareholders and can be applied to analyze the level of leverage that a company is applying (). The values mean that the multinational companies need additional funding for the company operations whereas the Indian pharma companies do not need it as the values of did you eat today she's extremely good for the Indian companies basically for Cipla Ltd which is 0.00 (Money Control, 2022).

4.3 Discussions

The findings of the research obtained for the six selected companies operating in the pharmaceutical sector of India show various facts that can be advantageous for the researcher to analyze the performance of these companies on the Indian stock market (Companies Market Cap, 2022). The values of the net profit margin obtained from the financial statements of these companies give evidence to the fact that the pharmaceutical companies founded in multinational territories are extremely going down. Whereas, the pharmaceutical companies of India are growing steadily and showing their better performances than the multinational companies (López- Toro *et al.* 2021). The performance of the pharma cuticle sector from a sustainability outlook is generally taken into consideration as low with very extreme compliance with the official standards of environmental reporting such as GRI, CDP, and so on.

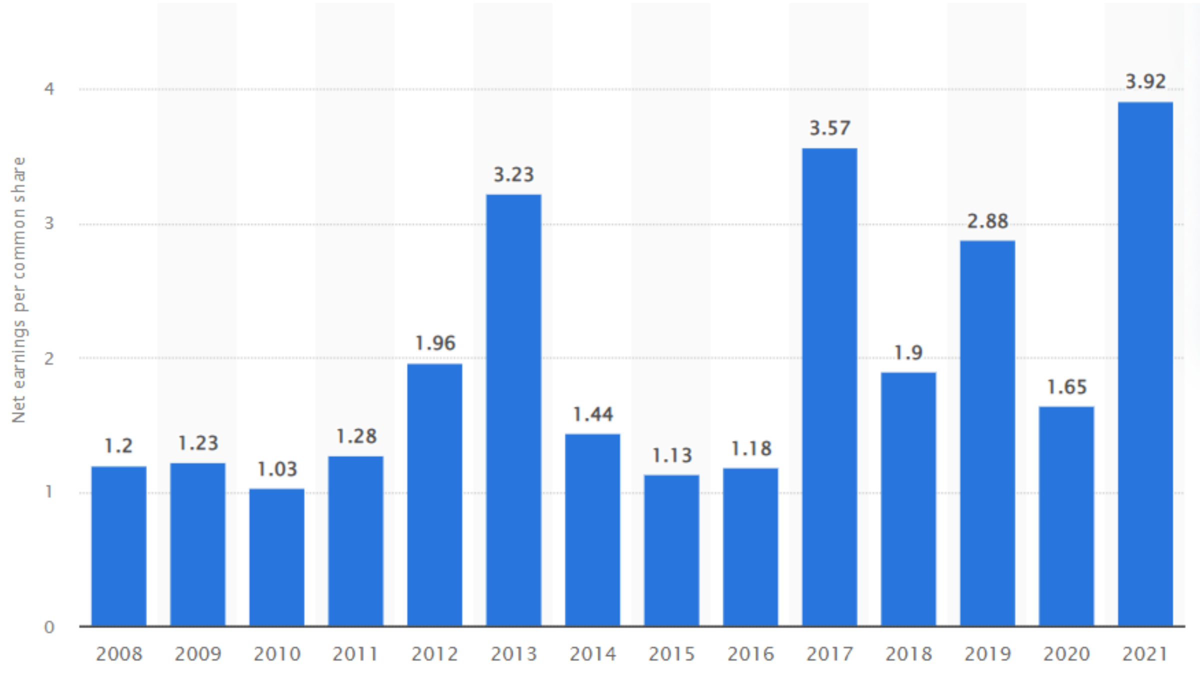

Figure 4.3.1: "Earnings per Pfizer share from 2008 to 2021"

(Source: Matej Mikulic, 2022)

In differentiation to the performance of equity price for the six companies selected in the context, it is attractive to note that three of the multinational companies manifest an extremely high standard of reporting and regulation for environmental, social, and economic areas of their performance (Companies Market Cap, 2022). In other words, the concept of the triple bottom line is well implemented in these companies through the help of citizenship reporting, accountable business, and goods safety along with the social responsibility of the suppliers. The pharmaceutical companies operating in India chosen in this examination show little or no effort for sustainability reports as an inner function of the business and their operations (Srivastava and Shastri, 2020). Despite the fact, the Indian companies show their better performance and this statement can be evident with the values opting for the ratio such as debt to equity ratio and a turnover ratio.

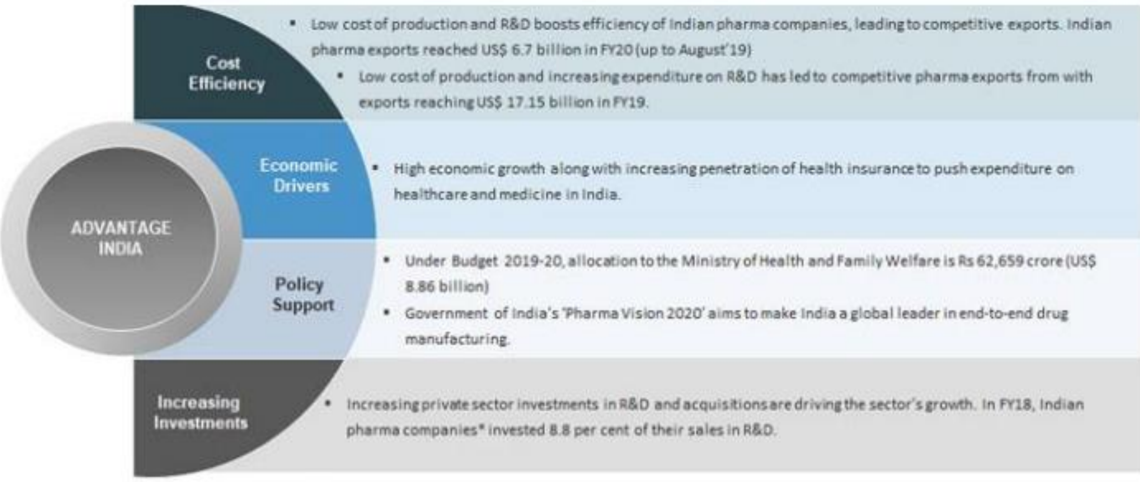

Figure 4.3.2: Benefits of the Pharmaceutical Sector for operating in India

(Source: Srivastava and Shastri, 2020)

In most of the cases, the multinational companies recorded a good value of the ratio in 2015 whereas it is now decreasing in the current times. On the contrary, the Indian company shows exactly the opposite condition in which it had lower values of the ratio is 2015 and now it is growing steadily. The reason for this steady growth can be various factors such as cost-efficiency. Also, the expense of manufacturing and the research and development increases the efficiency of the Indian farmer organizations and helps them to lead in the competitive exports. The exports of Indian drugs and pharma have obtained US$ 5.78 billion from 2021 April to 2021 June (Farhan *et al.* 2019). As a benefit of this fact, the multinational pharma companies are now trying to realign with their Indian operations and the Indian companies to have a better performance.

In addition to this, the high economic development together with the rising penetration of the health insurance in India to push the expenditure on medicinal and health care system of India is also one of the reasons for this increase and better performance of the pharma companies. In June 2021, the finance minister of India announced an additional outlay of Rs. 197,000 crore that will be used over the five years on the PLI scheme of the pharmaceutical sector in three primary areas to help them further improve and have better performance (IBEF, 2022). In addition to that, the influence of FDI in the drugs and pharmaceuticals industry of India has attended the US $1.206 billion from April to December 2021.

Figure 4.3.3: Insights of the Pharmaceutical sector of India

(Source: IBEF, 2022)

Cipla limited is one of the third largest drug producers by market capitalization and the swift biggest specialty generic firm all over India (Companies Market Cap, 2022). On the contrary, Pfizer is one of the third-largest manufacturers of Pharma and drug medicines all over the world and these two companies have been chosen in this paper to be differentiated based on their equity performance and financial performance. In this context, the financial statements played the role of a mirror that reflected the financial position and efficiency of the company along with its weaknesses (Business standard, 2022). The secondary data was collected through different areas at concentration and attempted to analyze the financial position and the ratio performance of these companies from the past and the way it is currently using their capabilities to have high returns.

4.4 Chapter Summary

In this chapter the analysis of the equity performance and financial performance in the capital market has been evaluated for the selected companies in the territories of India. Also, the way it is managing its operations and increasing its efficiency through performance is also scrutinized. In the secondary analysis, the data collected by the researcher from various financial reports such as balance sheets or profit and loss statements of these companies.

It is evident that the Indian former companies are performing better than the multinational companies as the main focus of the Indian companies are lying on generic medicines whereas is the multinational companies concentrate on high profitability and use the patents. The second chapter also gives evasions to the fact that the multinational company needs additional capital for operations with the help of the debt to equity ratio whereas the Indian Pharma companies are managing it efficiently. This chapter is extremely remarkable to understand and acknowledge the equity performance of the selected form of companies in the Indian stock market

Chapter 5: Conclusion and recommendation

5.1 Conclusion

Equity performance refers to the stock market. It may consist of individual stock or a group of stock. It is an indicator to track an overall financial report throughout the year. The financial performances are tracked by the index of equity performance. It provides a clear report of a financial development and financial loss of an organization of a certain time. Generally, it is applicable for very large companies or organizations. It is very important to track the record of financial reports to understand the market value of an organization. It is used to measure the performance. Performances of any organization can be measured by classified the total income by equity of shareholders. In this study it will be discussed about the equity performance of pharmaceutical companies to track the market performance of the organization globally.

There are several pharmaceutical companies in India and other countries such as Cipla, Pfizer and so on. Pharmaceutical industry is the most demanding industry in the world as human beings fully depend on medicine in every situation. The Indian pharmaceutical Industry meets about 60% of world demand regarding medicine, injections and other medical kits. After the Covid situation India stands as the twelfth largest company of the world in terms of medical items exporter. This indicates that the overall financial performance has increased. There are some factors, trends and challenges that affect the overall equity performance of pharmaceutical companies. The pharmaceutical Industries in India and foreign is nowadays changing their direction to overall development regarding medicine and other medical items to improve and modernize the overall industry. There are some trends which are followed by the pharmaceutical industries in this present situation.

Pharmaceutical companies are increasing their presence in the global market. It is very important to develop industries to spread the business globally. There are many countries that are developing their research in business strategy. Such as Japan, the US and so on. Global reach can help the industries to build a healthy relationship with the other country that is very important to an industry to spread and grow their business. As a result, it will give more cost-efficiency and a smarter solution to a problem. Reaching the global market is also helps to improve the overall supply chain management. As said by Adriano and Adriano (2019) it will make the trial more developed and the manufacturing procedure also take less time as a result of a well-managed supply chain. Hence, the pharmaceutical industries are increasing their presence in the global market to reach all over the country and develop their business and make their research smarter.

There are several challenges faced by the pharmaceutical Industries in India. After the Covid-19 pharmaceuticals industries faced more challenges in India. The virus spread globally and its outbreak has a great impact on India. It leads to uncertainty to the doctors and patient as well as. Everybody was beyond the knowledge of suitable medicine for this disease. Hence the demand for prescribed medicine had decreased drastically. This was a great financial loss for the pharmaceutical industry in India but after the vaccination launched in the market the situation is starting to improve (Nandy and Sussan, 2019).

Growing competition between the several pharmaceutical industries all over the world is another challenge for India. This competition affects the business of some large pharmaceutical industries of India. On the other hand, there are some industries that are trying to develop generic pharmaceuticals which are a positive indication for the certain industry. Most of the Indian consumer prefers lower prices on medicine. The total economy of India is comparatively lower than other developed countries. Hence, the consumer of India looks for something more affordable as well as medicine. As said by Rahman *et al*. (2020) these generic pharmaceutical industries get the opportunity to develop their business in terms of the Indian market. In addition, it may be quite risky to the larger Industries.

Pharmaceutical fraud is very familiar to the phenomena. The pharmaceutical industries face a major risk regarding this. This fraud was increased during the Covid-19 situation. Pharmaceutical fraud refers to fake vaccines, fake medicine, and other fake medical items. It hampers the patient as it is quite difficult to recognize the fake items to the layman. General people fail to differentiate between the original and fake products and they tend to buy fake products. This is affecting the pharmaceutical industries business and also leads to loss of the trust of human beings. On the other hand, the fake medicine also harms the patient, some of these have long term side effects that cannot be recovered (Zhang, *et al*. 2021). There are some laws to prevent it but the government should be more aware about this incident.

Cyber security threats are another challenge to the pharmaceutical industries. The rate of cyber-attacks is growing gradually because the data of the customers is becoming valuable. Industries is suffering from cyber threats that have a great impact on it. This increases the cost. Nowadays industries use the internet-technology to complete the manufacturing process. Hence. The chance of cyber-attacks regarding manufacturing have increased. As said by Endri *et al*. (2020) in such a situation the industries have to invest more in the cyber security section to reduce the chance of any kind of cyber-attack. The industries should generate more developed cyber security to prevent the cybercrime and maintain some cyber security policy to save the worker and the technology also.

5.2 Linking with objectives

In this present scenario the pharmaceuticals industries are focusing on developing the vaccine. Especially after the Covid pandemics, the corona virus vaccine has been discovered. Corona virus vaccine is the most demanding vaccine at present. As said by Angel *et al. (2018)* there are several vaccines launched by pharmaceutical companies but it is hard to destroy the virus completely. It has been seen that the Pfizer-BioNtech vaccine is the first effective roll-out. On the other hand, in the market there is no vaccine that can prevent the corona virus completely. Hence the pharmaceutical industries are more concerned about developing the vaccine that will be more effective compared to the previous one.

The pharmaceutical Industry of the world or researching on it to develop the vaccine and booster to prevent the virus completely. On the other hand, launching a latest vaccine will increase the overall performance of the company as it is a very sensitive issue for a human being. Corona virus affects the human being in many ways hence; the human being wants to get relief from it (Tajudeen, 2021). On the other hand, this public demand for vaccines leads to the pharmaceutical company focusing on it.

Digital transformation of an industry is a most essential trend to the pharmaceutical company. It refers to innovation of overall technology. Innovative technology leads to the development of the production of medicine and other medical products. On the other hand, it is also important for a pharmaceutical company developing the supply chain to control and develop the overall business strategies, and take place in the global market as the highest shareholders in the stock market. A developed and innovative technology also helps to develop the overall strategies. Apart from this, digital transformation and improved technology helps to improve the patient supporting system. This digital transformation will help to gather all information and data to execute the overall business strategy. As said by Desai and Desai (2018) it will help in machine learning. A digital transformation also helps to decrease the production time as well as wastage.

In this world all the company focuses on digitalization technology. Hence it is important for pharmaceutical Industries to be more attentive to this transformation. This transformation will also help in logistic support and a well-managed cost process. It will develop the overall business strategy to get a smarter way of business by helping the supply chain management also. In terms of medicine and medical products, a developed technology will help to maintain a smart manufacturing process by shortening the time (PHAM, 2020).

Dissimilar is very popular in the medical industry. It has been growing since 2018. Market share is also developing with the growth of dissimilar products. Biosimilar is a biological medicine which is equal to the already existing biological medicine. Biological medicine is costly and cannot be affordable for all patients. Acceptance of dissimilar products is growing to the market due to its affordable price. There are many patients from several countries such as America who have to pay their own medicine costs for their health issues. Hence it is quite difficult for some patients to pay the cost of biological medicine and they skip the doses. As said by Venugopal et al. (2018) this is very unhealthy for that certain patient. It prevents good outcomes in terms of health improvement.

Biosimilar will be a great substitute for existing biological medicine. It will help the comparatively poor people to afford the price. Hence it is very important to present a situation to focus on launching biosimilar products that the patient from all economical levels can afford. It is important to improve the patients' health and reach all over the world medicine market.

Innovation of breakout therapies is another trend of the pharmaceutical Industry. Day by day the medicine production cost is growing and the industries have to be concerned about the market price of medicine. It is quite difficult for the industry to balance the production cost and the market price. On the other hand, the industries are focused on investing more on innovation of breakout therapies. Nowadays, the industries are mainly focusing on gene therapy and oncology. Innovation of gene therapy can invent new ways to treat the complex disease. Nowadays cancer treatments are developing (Olorogun et al. 2020). Around 700 of cancer drugs are in late-stage development, and over one-third of trials using the bio-markers to satisfy the patient. Pharmaceutical industries are also researching innovative products and they are waiting for market authorization. The most important challenge faced by the pharmaceutical industries of India is disruption of supply chain management. Pandemic had a great impact on the supply chain management of industries. The pharmaceutical industry logistics was affected by the pandemic. On the other hand, poor supply chain management leads to decrease in the cultivation of an industry. That affects the overall business of the industries. Supply chain controls the overall department of an industry so poor transparency in it may cause cybercrime also. Hence, the bad management of supply chain leads to affect by many aspects to the industries. Well planned supply chain leads to reducing all the problems faced by industries and preventing errors (Malik and Kanwal, 2018). It is a risk for the pharmaceutical industries also if it is not well developed. It may cause variant disruption for the industries.

There are some barriers that affect the pharmaceutical industries in their business process.

Barriers refer to those factors that can prevent the new industries into the market in terms of developing the business. In the time a newcomer wants to do business they face many obstacles from the market in terms of financial aspects, law, rules and regulation and so on. These factors prevent the newcomers from starting off their business in a market. On the other hand, there are some enablers that help industries to start the business in a market in terms of positive aspects. Hence, there are both positive and negative factors present also in the case of pharmaceutical industries.

Industries face difficulties in the market when they want to start the business. It is hard to build a reputation in the market. In the case of pharmaceutical industries, they produce medicine and medical related products that are very sensitive (Rana and Asad, 2018). Hence it becomes harder to make the reputation as everybody believes in an already established company in the market. It is quite difficult for the industry to have a perfect infrastructure as well as. On the other hand, it is also difficult to establish a good will in the market for an emerging company because the competition and making a good distribution network is becoming very tough in the market.

Pharmaceutical industries need approval of prerequisite regulatory requirements. This process is quite costly. Drugs or medicine are sensitive products as life depends on it. Hence different types of approval are essential before distributing the product in the market. This process is expensive to emerging industries that want to spread their business in the market. There is a large investment needed to start off a pharmaceutical business. It is another barrier because investing a large amount is not possible in some cases. On the other hand, to make a good infrastructure a large amount of financial support is required. In addition, the industries should carry out research and development thoroughly regarding the certain field. Apart from this the pharmaceutical industry's other duty is to remember that they cannot do anything to increase the revenue they should maintain the ethics and morality. Patent is another barrier to a pharmaceutical company. It is a legal rule to maintain the safeguards (Pal and Nandy 2019). It also prevents the new company from entering the market. Hence it is the important legal barriers to the pharmaceutical industries to start off a business.

There are various enablers that help the pharmaceutical industries in the market in terms of developing the business. Enablers refer to some positive factors that help to reach the goal. There are some enablers such as diversity, stakeholder involvement, and good communication route, proper knowledge of economic, environmental and social needs. There are various pharmaceutical industries in the global market, they are already established. Hence, diversity is the best factor to compete with those industries. If a company focuses on manufacturing the products that are different from others by quality, by price then it will be a chance to get acceptance from the consumers (Kounnou and Kyrkilis 2020). Apart from this, a good communication route is another enabler to the industries because it helps to reach the consumers more easily and it also helps make business easier. Communication is such a vital thing to develop a business strategy.

Another enabler of pharmaceutical industries to start off a business is researching. It is very important to carry out thorough research to understand the environment of a certain emerging market. It is very important to understand the economical states and sociological states also because the needs of consumers may differ from place to place. This research helps to set the product price, products demand. The pharmaceutical industry manufactures medical products hence it is vital to understand the certain scenario from different aspects. On the other hand, understanding the current scenario is also a key factor to success. Apart from this, another enabler of pharmaceutical industries is involving the stalk holder with their business. It may help the industry in terms of financial support also. As said by Fenyves et al. (2019) Stakeholders often share their views to an organization and also lead to provide required resources also. It is a very important enabler to include the stakeholders into the business. An industry should understand the role of stakeholders regarding their business policy.

5.3 Recommendation

There many changes occurred after the attack Covid-19. It has a great impact on business industries as well as the pharmaceutical industry. Hence, the industries are focusing on those areas that need to change or be more developed in terms of increasing the overall financial performance.

After the pandemic, the demands of digital platforms have increased. People prefer to buy medicine through the digital platform, hence, the industries started to adopt the digital transformation. Pharmaceutical research on to improve the digital platforms to reach more consumers. Not only just buying medicine, digital transformation will help by different aspects such as health checkup, digital therapeutics, clinical trials and so on. Covid-19 situation increased the rate of online marketing. As per Yang and Yulianto, (2021) there some internal changes occurred to the pharmaceutical industries. They are improving their machine learning and technology by the digital transformation.

After the pandemic it was mandatory for all companies to upgrade their system to help the employee working from home. It reduced the risk of virus transmission. On the other hand, since the pandemic occurs there are different types of covid proto that have to maintain the industries, so it is important to change the digital tools and upgrade the overall system hence, if this type of situation occurs next time it will be easy to handle. It is also important to make their business model stronger. Another reason is to offer stakeholders that help to communicate directly with the consumers (Jamei, 2020.).

During the pandemics the pharmaceutical industries were unable to reach the targeted goal. There was an uncertainty regarding the business marketing due to lockdown, social distance and so on. This uncertainty pushed the industries to adopt new ways of marketing. Hence the pharmaceutical industries adopt the reactive marketing strategies after the pandemic to run their sales strategies.

Since the Covid-19 pandemic occurs, the pharmaceutical industries have started adopting the omnichannel strategies it helps the industry to fulfill the requirements of customers seamlessly. This is the strategy integrated with another channel and helps to serve the customer effortlessly (Dinova. and Herawati 2019).

After the pandemic there are lots of changes occurring across the world. In terms of lifestyle, business strategy, work strategy and so on. Hence, the changes of circumstances forced the industries to accelerate the management and of supply chain to generate the easy way out of the market. On the other hand, the simplification of supply chain management is also needed to generate an independent business without depending on another country.

The pharmaceutical industry focuses on changing the healthcare model. The industries adopted more improved practices to work with it. Covid-19 outbreaks forced to the industries to upgrade their health care models. On the other hand, all the staff and workforce should provide training to upgrade their knowledge and skills to change the whole process by improving the overall technology regarding the pharmaceutical industries.

Covid-19 changes the entire workforce of an industry. As the situation changes since the pandemic, there is a need to improve all the technology to access the digital platforms. The uses of virtual platforms have increased because of covid-19. Hence, the marketing sector of the industries needs to communicate with the consumers via video call or online platforms. On the other hand, the virtual medium will also allow the healthcare professional to communicate with patients in remote areas also. Hence, this is so important to build a strong work to continue the business in a Covid situation.

After the invention of covid-19 vaccine, it helped the world to improve the world economy level. As said by Zhang *et al*. (2021) the pharmaceutical industry played an important role in developing this economical position. On the other hand, pharmaceutical industries focus on inventing new drugs and vaccines to secure the people from future disasters like Covid-19.

Hence, the industries also need to develop their skill to fight the situation if it repeats in future. It is very challenging to fight with this type of disaster that suddenly arrived, that the pharmaceutical professionals promise to upgrade their skills to be ready to fight in such a situation.

5.4 Future scope

In this study it is discussed about the different aspects of the pharmaceutical industry such as, trends in pharmaceutical business. It described the present trends that are following the pharmaceutical industries to upgrade their business management by maintaining all norms. The latest trends they are following to generate the products in terms of medical in a modern way. In this chapter it has also described the challenges that facing certain industries. In this division it has seen certain pharmaceutical industries facing different challenges such as fraud cases, competition and so on. On the other hand, in this study it was also discussed about enablers and berries to the pharmaceutical industry in terms of starting off a business. It is very important to know descriptively about the present scenario of the circumstances in terms of developing the overall performance. Apart from this, in this chapter it has also described about the changes that the industries adopted after the Coved situation. It is important to adopt some changes to cope with the present scenario and run the business in the market and fulfil the market demand. On the other hand, it is also described about the equity price performance. In this description it has been also mentioned about the factors that affect the equity price performance. This is also discussed by two theories related to equity price performance. On the other hand, it is a literature gap fund in the entire study. Equity price performance refers to increasing the percentage rates of a value of a company in terms of stock price performance. It can be calculated by subtracting the initial price from the average stock price by the beginning price. It is also determined by calculating the total return to the shareholders. It can be said that equity price performance is a financial performance of a certain company by both negative and positive aspects. As said by Nababan *et al*. (2021) there are some factors which affect the equity price performance in various ways. In this study it will be discussed about some factors that affect the equity performance.

Trends sometimes affect the equity price performance. It can affect the performance in both negative and positive ways. Popularity of a company depends on trends and sometimes it behaves totally opposite from the trends. Though the stock market goes with the trends, it is very uncertain to predict the future.

Liquidity refers to the amount of given interest by the investors to attract a stock. It is also an important factor that affects the equity price performance.

News is another factor which affects the investors mind. The news political situation, negotiation between the companies, different kinds of product breakthroughs affects the stock market. The market and economy are interconnected globally hence; news of other countries may affect the stock market of another country (Srinivas, 2019).

Market sentiment leads to the psychological state of a participant of the stock market. It impacts the participants both individually and as a whole. For example, it can be said that if a person is sure about the stock growth of the future but single news that keeps stock artificially high or low can affect the sentiment of investors.

Rate of interest is one of the most vital factors which affect the equity price performance. At the time the rate of interest grew high, the business and the consumers started to cut back their investment to a certain market and it led to a drop in the price of the stock market. On the other hand, when the interest rate reduces the investors also increase and the stock price rises high.

Unemployment is a factor that leads to affecting the stock. Interest rate depends on unemployment. As said by Beneda *et al*. (2019) the interest rate is reduced when unemployment rises. On the other hand, in case of future employment the interest rates will grow. It occurs because unemployment leads to limited investment as well as demand for the product may be reduced caused by unemployment. In that situation the demand for certain products may decrease and as a result stock market price may drop. That leads to affect the overall equity price performance.

Trade wars also affect the equity performance of an industry. Trade war leads to damage to the overall economy of the world. It may damage different aspects, such as damage to total infrastructure, high debt, inflation and uncertainty. Those are affecting the overall economy of the world as well as the stock market (Al Omari, 2020.). That also affects the overall equity performance of a certain industry.

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