CHAPTER 3
REVIEW OF LITERATURE

3.1 INTRODUCTION OF LITERATURE REVIEW
3.2 MEANING OF LITERATURE
3.3 LITERATURE SURVEY FOR THE EXISTING WORK
3.1 INTRODUCTION OF LITERATURE REVIEW
The review of the past studies in research means to note the observation, search and many more things done in the past regarding the question in the hand. It is base of natural and social sciences. It provides introduction regarding the researches worked out in the past. It provides details regarding the tool used, procedures adopted, conclusion and observation made. It also guides how to the introduction and data should be collected and from where and how it could be. All this information can be had from this type of study. The study of the past researches is useful to define the sphere of our research. It saves time, energy and helps indirectly towards a particular goal.

3.2 MEANING OF LITERATURE
Study of the related literature implies locating, reading and evaluating reports of research as well as reports of causal observation and opinion that are related to the individual planned research project.

According to Walter R. Borg, “the literature in any field forms the foundation upon which all future work will be built”.

3.3 LITERATURE SURVEY FOR THE EXISTING WORK
Reviewing of the literature in the area of research is a preliminary step before attempting to plan the study. A thorough knowledge of the research topic can be guided only by reviewing any part research work and other literature related with the topic.

This research work has also been carried out by reviewing the literature relevant to the topic:

Shinde (1995)
Winds of liberalization blowing hard over Indian corporate sector, which undergoes a process of restructuring to gain competitive strength. But to achieve this goal, unrestricted mergers and takeovers may prove counterproductive, the author cautions.
Vardhana Pawaskar (2001)
The impact of mergers on corporate performance. It compares the pre and post-merger performance. Operating performance of the corporate involved in merger to identify their financial characteristics. Also the effect on merger induced monopoly profits is identified by looking at the persistence profit of the profits. Taking a sample of 36 cases of merger between 1992 and 1995, it is seen that there are no significant differences in the financial characteristics of the two firms involved in merger. The mergers seem to lead to financial synergies and a one-time growth. The analysis of the regression to norm shows that there is no increase in the post-merger profits. The competitive process is not impeded with merger even when no strong anti-trust laws are present.

David Ernst and Tammy Halevy (2001)
Corporate alliances are the talk of the day. They mitigate risk as well as provide growth options. In the long-term they prove to be highly successful. It has been observed that alliances receive better response than mergers and acquisitions in fast moving and highly tailored way to access capabilities such as specific products or technologies. They also make the units more likely to invest substantial management resources in thinking about the strategy and choosing the right partner. The key to success is carefully analysing the deal and where it, fits in the unit’s overall strategy.

Robert Bruner (2001)
Mergers have become the order of the day. Nevertheless if they do not process the ingredients of an exquisitely choreographed operation they are bound to fail. The CEOs and CFOs have to weigh the pros and cons of a merger and then proceed. All said and done, it is not a child’s play to leverage the synergies expected from a merger.

Vedpurishwar Prabhu (2002)
During the licensing era, several units had indulged in unrelated diversifications depending on the availability of the licenses. The units thrived in spite of their inefficiencies because the total capacity in the industry was restricted due to licensing. The policy of decontrol and liberalization coupled with globalization of the economy has exposed the corporate sector to severe domestic and global
competition. This unavoidable fever, however, has just been gripping the Indian units for apparently right reasons.

**R. Bhatnagar (2002)**
As the Indian economy proceeds with its globalization process the Indian corporate and financial sector are left with no choice, but to consolidate to stand up to the global competition. In fact, consolidation through mergers and acquisitions has become the trend across the globe.

**Sankaran (2002)**
He has made a study on “Performance Evaluation of Pharmaceutical Companies in India”. A set of 10 companies comprising which of 5 Indian companies and 5 Multi-National Corporations have been selected for the analysis. The financial performance has been analysed with the help of liquidity, profitability and solvency. He applied ET-HBSAI model for assessing corporate excellence, Atlman model to predict bankruptcy, and average return on net worth have been used to assess the performance.

**Arindam Ghosh and Brataati Das (2003)**
A transaction involving two or more units in the exchange of securities and only one unit survives is called merger. Mergers and Acquisitions result in several advantages in the merged unit and the merging unit. There are three types of merger. The reasons of merger are mainly to reduce the competition, economies of scale and tax advantage.

**Vedpuriswar (2003)**
Like vertical integration and diversification, a large merger or an acquisition is a strategic move since it can make or break a unit. A merger involves unique challenges such as the valuation of the unit being acquired and integration of the pre-merger units. Valuation is a subjective matter, involving several assumptions. Integration of the pre-merger units is a demanding task and has to be manages skilfully.
In this competitive business world, M & A has become one of the requirements for a unit to survive with a profit. There are many reasons for going for M & A like acquiring market, technology; maximizing profit etc. the wave of mergers and acquisitions has even spread in India. The actual M & A wave in Indian context has started after 1994. Many good and reputed Indian units have gone for M & A in domestic as well as in international market. M & A pose a very big question “will unit do well after mergers and acquisitions activity?”

Due to the imminent implementation of WTO guidelines with effect from July 2005, it was become mandatory for business organization to strengthen their R & D base. Consequently, the size of the business organization matters most, mergers and acquisitions have, therefore, become order of the day, and an attempt has been made in the paper to provide a theoretical framework of M & A, various examples of mergers and acquisitions in the world market and finally the economic advantage of M & A have been outlined.

David Johnson (2005)
In the present pace of M & A announcements, ‘Change in Control’ (CIC) programs paly a very crucial role in determining executive compensation packages. Proper redesigning of such programs in the light of changing compensation strategies becomes essential to avoid unexpected tax consequences. The recent regulations laid down under the Internal Revenue Code, pertaining to Golden Parachutes, are a step in the process of redesigning the CIC program to the benefit of the unit and its executives.

In their article entitled “Working Capital and Profitability – A study on their relationship with reference to selected companies in Indian Pharmaceutical Industry” was studied for the period for 1990-91 to 2001-02. They have assessed the influence of working capital on its profitability. The authors have found out no definite relationship between liquidity and profitability. The study has revealed the
favourable influence of inventory management on profitability in the Indian Pharmaceutical Industry during the period of study.

**Darling Selvi (2005)**

He has conducted a study of the topic “Financial Performance Analysis of TTK Pharma Company” and which is an analytical study on the financial statements through ratio analysis and trend analysis for the period from 1999-00 to 2003-04. In this study net profit ratio, Current ratio, Liquid ratio, inventory to working capital ratio, debt-equity ratio, ratio of current assets to proprietors fund and ratio of current liability to proprietors fund have been analysed. It can be concluded from the study that the income generating capacity of TTK Pharma Ltd., is good except during the year 2000-01 in which the company has incurred heavy loss and hence it was not able to fulfil its obligations to its owners and outsiders which was the main reason for the maintenance of low profitability ratios. Further in the investment pattern also heavy amount had been invested in fixed assets and so it was the hindrance for the running of working capital. The heavy blocking of inventory shows lower sales than production and the company’s cash position is good and is able to pay interest. The leverages show a negative result of high risk for the investors.

**Beena S. (2006)**

The corporate sector all over the world is restructuring its operations through different types of consolidation strategies in order to face various challenges posed by the new pattern of globalisation, which again led to the greater integration of national and international markets. The intensity of such operations is increasing with the deregulation of various government policies as a facilitator of the new economic regime. The Indian corporate sector too experienced such a boom in mergers and acquisitions led restructuring strategies especially after liberalisation mainly due to the pressure recorded by such strategies on the domestic firms. Finance, Drugs and Pharmaceutical, Telecommunication, Textiles, Electrical machinery, Tea etc. are the major sectors in which it has been occurred. The present study is an attempt to bring out the effectiveness of such strategies in realizing the desired objectives in the case of Drugs and Pharmaceutical sector, which is undergoing a paradigm shift in policies as well as which is well known for its social sensitiveness. Moreover, the occurrence of mergers and acquisitions deserves special
attention in this industry due to the inelastic demand for drugs due to the existence of a third party (i.e. doctor) in deciding the demand for a particular drug. Thus the actual consumers (i.e. patients) are obliged to obey the decisions of the doctor. Under this condition the consolidation strategies adopted by the firms can again lead to increased market concentration and raising the power of supply side factors and thus the price level. In order to understand the dynamics of consolidation strategies in this sector, we have made a database on consolidation strategies using various secondary sources during the post liberalisation period.

**Raveendra Chittoor (2007)**

This paper is an attempt to strengthen and deepen the existing theories of competitive strategies of TMNCs through an exploratory study of international firms from the Indian pharmaceutical industry. Strategic group analysis of a proprietary data set of strategic variables from forty firms revealed significant variation in competitive strategies of firms from the same geographical, economic and industry context. Although these distinct international competitive strategies exhibit different value creation potential, they lead to similar levels of performance in terms of return on assets, thus indicating the equal finality of different paths to multinationality. Two broad types of competitive strategies underline the taxonomy of strategic groups. One is the strategy of exploitation of a firm’s idiosyncratic capabilities in foreign markets with similar environments, which supports the extant theoretical assertions. The other is the strategy of exploration aimed at acquisition of new, all-round capabilities by taking advantage of external liberalization, such that a few of the TMNCs are able to complete with established MNCs even in the developed markets. The latter finding provides theoretical support for emergence of globally competitive TMNCs despite severe challenges.

**Patricia M. Danzona, Andrew Epsteinb and Sean Nicholson (2007)**

We examine the determinants and effects of M & A activity in the pharmaceutical/ biotechnology industry using SDC data on 383 firms from 1988 to 2001. For large firms, mergers are a response to expected excess capacity due to patent expirations and gaps in a firm’s product pipeline. For small firms, mergers are primarily an exit strategy in response to financial trouble (low Tobin’s q; few marketed products, low cash-sales ratios). In estimating effects of mergers, we use a propensity score to
control for selection based on observed characteristics. Controlling for merger propensity, large firms that merged experienced a similar change in enterprise value, sales, employees and R & D and had slower growth in operating profit, compared with similar firms that did not merge. Thus mergers may be a response to trouble, but they are not a solution.

Demirbag Mehmet, Ng Chang-Keong and Tatoglu Ekrem (2007)

This study provides new evidence on the nature of value creation in M & A activity based on a sample of giant pharmaceutical M & As and independent non-M & A rival firms. Relying on multiple indicators of performance, their post-M & A performance was compared with their pre-M & A performance as well as with the performance of other major pharmaceutical firms that have not been involved in M & A activity. Based on three measures of operating M & A performance, it has been noted in general that no value creation was realized in the sample M & As in terms of research productivity, return on investment, and profit margin. The sample M & As had lower research productivity than that of both pre-M & A and independent non-M & A rival firms. In a similar vein, with regard to return on investment, M & As was not better than their pre-M & A firms, but performed relatively better than their non-M & A rivals. As far as the profit margin is concerned, the sample M & As, however, appeared to have better performance than pre-M & A firms and almost on par with the non-M & A rivals.


In today’s globalised economy, mergers and acquisitions are being increasingly used the world over, for improving competitiveness of companies through gaining greater market share, broadening the portfolio to reduce business risk, for entering new markets and geographies and capitalising on economies of scale etc. This research study was aimed to study the impact of mergers on the operating performance of acquiring corporate in different industries, by examining some pre-merger and post-merger financial ratios, with the sample of firms chosen as all mergers involving public limited and traded companies in India between 1991 to 2003. The results suggest that there are minor variations in terms of impact on operating performance following mergers, in different industries in India. In particular, mergers seem to have had a slightly positive impact on profitability of firms in the banking and
finance industry, the pharmaceuticals, textiles and electrical equipment sectors saw a marginal negative impact on operating performance (in terms of profitability and returns on investment). For the Chemicals and Agri-products sectors, mergers had caused a significant decline, both in terms of profitability margins and returns on investment and assets.

**Shuchi Gautam (2009)**

This paper is an attempt to study the phenomena of mergers and acquisitions deals in pharmaceutical companies. The Indian Pharmaceutical Industry today is in the front rank of India’s science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. It ranks very high in the third world, in terms of technology, quality and range of medicines manufactured. From simple headache pills to sophisticated antibiotics and complex cardiac compounds, almost every type of medicine is now made indigenously. Playing a key role in promoting and sustaining development in the vital field of medicines, Indian Pharma Industry boasts of quality producers and many units approved by regulatory authorities in USA and UK. International companies associated with this sector have stimulated, assisted and spearheaded this dynamic development in the past 53 years and helped to put India on the pharmaceutical map of the world. This paper also focuses on the trend of mergers and acquisitions deals in the pharmaceutical industry in the past 10 years. This paper also studies the motive behind the mergers and acquisitions deals and the reason of failures of mergers and acquisitions deals in pharmaceutical companies.

**Murugesan Selvam, Manivannan Babu, Gunasekaran Indhumathi, Bennet Ebenezer (2009)**

Mergers and acquisitions become the major force in the changing environment. The policy of liberalization, decontrol and globalization of the economy has exposed the corporate sector to domestic and global competition. It is true that there is little scope for companies to learn from their past experience. Therefore, to determine the success of a merger, it is to be ascertained if there is financial gain from mergers. It is very important to study the liquidity performance of those companies to test whether those companies have sufficient liquid assets to meet its current obligations. The present study is limited to a sample of companies which underwent merger in the
same industry during the period of 2002-2005 listed in one of the Indian stock exchange namely Bombay Stock Exchange. It is proposed to compare the liquidity performance of the thirteen sample acquirer and target companies before and after the period of mergers by using ratio analysis and t-test during the study period of three years. The study found that the shareholders of the acquirer companies increased their liquidity performance after the merger event.

Pulak Mishra and Tamal Chandra (2010)
In the context of policy reforms in the 1990s in general and three important amendments made to the Indian Patent Act (1970) in 1999, 2002 and 2005 in particular, the present paper makes an attempt to examine the impact of M & A on financial performance of Indian Pharmaceutical Companies. It is found that the profitability of a firm depends directly on its size, selling efforts and exports and imports intensities but inversely on their market share and demand for the products. However, M & A do not have any significant impact on profitability of the firms in the long run possibly due to the resultant X-inefficiency and entry of new firms into the market. In addition, in-house R & D and foreign technology purchase also do not have any significant impact on profitability of the firms.

M. Jayasree and Raavi Radhika (2010)
Merger can be defined as a process, which involves a transaction that combines two firms into one firm. An acquisition on the other hand is the purchase of one firm by the other. Growth is essential ingredient of success. Growth can be of two kinds, organic and inorganic. Fast pace growth is possible through inorganic route, which includes mergers and acquisitions. The corporate giants in U.K. and U.S.A. could reach the present status only through mergers and acquisitions. In fact M & A are important features of western capitalism. There are several causes for M & A in the global pharmaceutical industry. Among them is the absence of proper research and development facilities, gradual expiry of patents and competition within specific pharmaceutical generics. The high profile product recalls have also played a major role in the continuing M & A in the industry. In Indian pharmaceutical industry there are a number of companies that have entered into M & A agreements in the context of global scenario. These companies would be selling off the non-core business divisions like over-the-counter. The sheer number of companies acquiring parts of
other companies has shown that Indian pharmaceutical industry is ready to be a
dominant force in this scenario. India led M & A touched $ 40 billion in January-
June 2010. Indian transactions accounted for a Sixth of the total Asian deals of
$ 242.1 billion from 5078 deals, arise of 21%. The present paper studies the reasons
for M & A in the select companies and also how M & A have helped the select
companies in reaching their critical mass.

**Amalendu Bhunia (2010)**

With the delicensing of pharmaceutical industry and complemented by scientific
talent and research capabilities and Intellectual Property Protection Regime, Indian
pharmaceutical industry in all set to take on new challenges in the international
market. Indian pharmaceutical industry has played a key role in promoting and
sustaining development in the vital field of medicines. Financial analysts often assess
firm’s production and productivity performance, profitability performance, liquidity
performance, working capital performance, fixed assets performance, fund flow
performance and social performance. The financial performance analysis identifies
the financial strengths and weaknesses of the firm by properly establishing
relationships between the items of the balance sheet and profit and loss account.
Thus, the present paper is of crucial importance to measure the firm’s liquidity,
profitability and other indicators that the business is conducted in a rational and
normal way, ensuring enough returns to the shareholders to maintain at least its
market value. In this context researcher has undertaken an analysis of financial
performance of pharmaceutical companies to understand how management of
finance plays a crucial role in the growth. The present study covers two public sector
drug & pharmaceutical enterprises listed on BSE. The study has been undertaken for
the period of twelve years from 1997-98 to 2008-09. In order to analyse financial
performance in terms of liquidity, solvency, profitability and financial efficiency,
various accounting ratios have been used. Statistical measures i.e., linear multiple
regression analysis and test of hypothesis t-test has been used.

**Jayasubramanian P. (2010)**

She has made an attempt on “A study on the financial performance of selected
Pharmaceutical companies in India” and he suggested that the financial performances
of the companies under study were satisfactory. The companies having large capital
and making higher sales are yielding more profit than the other companies. He further suggested that the company has to perform and it has to invest more capital and also do more sales.

Neelam Rani, Surendra Yadav and P. K. Jain (2011)
Indian pharmaceutical industry has carved out a unique place on the global map, not only as a manufacturer of generic drugs but also of new formulations, with growing emphasis on research and development and new drug discovery. The present paper examines the short-run abnormal returns to India based mergers and acquisitions focusing on the pharmaceutical industry during 2001-2007 by using event study methodology. Short-term effects are of interests for immediate trading opportunities they create. We find that acquisitions of foreign companies significantly create short-term wealth on the announcement day to the shareholders of acquiring companies. Cumulative abnormal return (CAR) for Indian companies’ acquisitions activities aimed at foreign-based targets is positive over event window. It seems market perceives the deals of acquisitions of foreign targets by Indian pharmaceutical companies as efficiency enhancing.

Vivekkumar Shrivastava (2011)
In the recent research it has been confirmed that 80% of the drugs supplied to Africa for Human Immunodeficiency Virus (HIV) and Malaria have been supplied from India through Indian Pharmaceutical companies. Hence, in its true sense India has become the ‘pharmacy of the world’. India ranks among the top 15 drug manufacturing countries of the world and is rated very high in the world in terms of technology, quality and range of medicines being manufactured. New drugs discovery and development has not reached its full potential in India. However, the number of compounds in the Indian pharmaceutical company’s pipeline and in the advanced stage of development is increasing. Indian pharmaceutical companies have not got a break through in commercializing a New Chemical Entity (NCE). Till date, there has been no drug discovery by an Indian pharmaceutical company that has hit the market.
Ramachandran Azhagaiah and T. Sathishkumar (2011)

Mergers and acquisitions (M&A) become the major force in the changing environment. The policy of liberalization, decontrol and globalization of the economy has exposed the corporate sector to domestic and global competition. It is true that there is little scope for firms to learn from their past experience. Therefore, to determine the success of a merger, it is to be studied if there is financial gain from mergers. The present study is carried out with a sample of 20 firms listed in one of the leading Indian stock exchanges namely Bombay Stock Exchange out of 52 manufacturing firms which have undergone M & A in the same industry during 2007. It was aimed at to compare the liquidity performance of the sample acquirer firms using ratio analysis and t-test during the study period of three years before and after the period of mergers. Some measures of corporate performance such as current ratio, quick ratio, working capital ratio, net profit ratio, operating profit ratio, return on investment ratio, net worth ratio, debtors turnover ratio, fixed assets turnover ratio, total assets turnover ratio, working capital turnover ratio, debt equity ratio, interest coverage ratio and total borrowing and equity to EBITD are used. The study proves that merging firms which were merged with reputed and good management appear to have been financially benefitted in short run period in India.

Vishnumurthy Vummaaneni and Lotika Chawla (2011)

Indian pharmaceutical industry is estimated to be worth $ 4.5 billion, growing at about 8 to 9% annually. It ranks very high amongst all the third world countries, in terms of technology, quality and the vast range of medicines that are manufactured. Globally, India ranks third in terms of manufacturing pharma products by volume. The Indian pharmaceutical industry is expected to grow at a rate of 9.9% till 2010 and after that 9.5% till 2015. The Indian pharmaceutical market is expected to touch US $ 74 billion sales by 2020 from US $ 11 billion. Mergers and Acquisitions are now a day play a key role in Indian pharma. Recent M & A transactions include Abbott/ Piramal Health care, Daiichi Sankyo/ Ranbaxy, MylanInc. / Matrix Labs etc. the main reasons behind these transactions include lack of R & D productivity, Expiring patents, Generic Competitions, High profile product recalls etc. Going forward this trend would slow down as valuations are cyclical in nature. The consolidation trend will continue with Indian pharmaceutical players playing a major role.
Amalendu Bhunia, Somnath Mukhuti and Gautam Roy (2011)

The present study aims to identify the financial strengths and weaknesses of the Indian public sector pharmaceutical enterprises by properly establishing relationships between the items of the balance sheet and profit and loss account. The study covers two public sector drug and pharmaceutical enterprises listed on BSE. The study has been undertaken for the period of twelve years from 1997-98 to 2008-09 and the necessary data have been obtained from CMIE database. The liquidity position was strong in case of both the selected companies thereby reflecting the ability of the companies to pay short-term obligations on due dates and they relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors. Financial stability of both the selected companies has showed a downward trend and consequently the financial stability of selected pharmaceutical companies has been decreasing at an intense rate. The study exclusively depends on the public sectors published financial data and it does not compare with private sector pharmaceutical enterprises. This is a major limitation of the research. The study is of crucial importance to measure the firm’s liquidity, solvency, profitability, stability and other indicators that the business is conducted in a rational and normal way; ensuring enough returns to the shareholders to maintain at least its market value. The study will help investors to identify the nature of Indian pharmaceutical industry and will also help to take decision regarding investment.

Asma Salman and Romella Qamar (2011)

Financial analysis is useful for every business entity to enhance their performance, competitive strength and access their financial stability and profitability of the firm. This paper investigates the financial analysis of the two Multinational companies, GlaxoSmithKline (GSK) and Sanofi Aventis (SA) and an attempt to compare their financial performance by using ratio analysis. Data is drawn from pharmaceutical industry in Pakistan from financial year 2005 to 2009. Analysis of variance (ANOVA) and statistical hypothesis test (t-Test) with independent sample characteristics was analysed through Statistical Package for the Social Sciences (SPSS). The results comparison with this method between two pharmaceutical companies is presented. It is revealed that the performance of both companies in the observed period has improved. The current method reflects that GlaxoSmithKline is leading Sanofi Aventis.

M & A turned out to be significant form of corporate restructuring in post globalization period in Indian industries. The phenomenon is considered to be the most important strategy for gaining competitive advantage for firms. This study attempts to find out the determinants of M & A in Indian pharmaceutical industry. We use the PROWESS database provided by the Centre for Monitoring Indian Economy for the period of 2001-2010. The results of the logic analysis suggest that large and multinational affiliated firms are investing more in M & A activities. Similarly, firms reporting excess capacity and high R & D investments are relying heavily on M & A to restructure and consolidate their position in the industry.

Pratap Singh (2012)

M & As have been found to be beneficial in the sense that Indian companies grew in size, and attain better market share which is substantiated by empirical analysis. Throughout the period of study, turnover increased after the companies experienced an M & A. M & As did not have any impact on return on net worth for the period of study. The nature and pattern of M & As strategies adopted by the Indian companies reveal mostly horizontal and vertical types. This gives strength to the argument that Indian companies are focusing on their core areas and expanding mostly in related areas of strength which is helpful in realization of synergistic benefits. Further, it has been observed that M & As in India are strategic in nature that motives range from growth and expansion to high quality of human resources, strong brand presence and global identity and leadership. To remain ahead of competitors, business leaders need to have a global vision, be pro-active, able to take calculated risk and initiate and manage acquisition and consolidation process smoothly.

Sudeshkumar, Bimal Anjum and Suman Nayyar (2012)

Since, last two decades of Indian economy, there is a continue research on company financing activities, particularly aimed at understanding how companies finance their investments and what source they used to finance. In practice, it is observed that finance managers use different combinations of debt and equity to meet the various financial requirements of the company at least cost and risk and for the long term benefit of the company. Therefore, this study is aimed to make analyse of capital structures pattern of various companies for the period of 2007-2011 and analyse the
effect of changes in capital structure on its investment pattern over the period of time. This study also attempts to make an intra-company analysis with the objective to determine the importance of debt-equity mix for the effective investment policy. Similarly, to study the financing decisions, this paper include the trend analysis of detail financial information of four most reputed pharmaceutical companies, that are Dabur India Ltd, Cipla, Aurobindo Pharma Ltd., Cadila Health Care Ltd. for the period of five year i.e. 2007-2011.

Govind M. Dhinaiya (2012)
This paper is an attempt to evaluate the Performance Analysis of Mergers and Acquisitions of different companies. Theories of mergers assumed that the performance of companies increase after mergers and acquisitions due to gaining market share, synergy creation, diversification, cross selling, resource transfer etc. The objective of this study was to analyse operating performance of companies who involved in mergers and acquisitions using various ratios. The analysis was done using the data of two years before & after mergers & acquisitions with help of paired sample t-test. The results suggest that three were minor variations in the performance after M & A but it was not statistically significant.

With the de-licensing of pharmaceutical industry and complemented by scientific talent and research capabilities and Intellectual Property Protection Regime, Indian pharmaceutical industry in all set to take on new challenges in the international market. Indian pharmaceutical industry has played a key role in promoting and sustaining development in the vital field of medicines. Financial analysts often assess firm's production and productivity performance, profitability performance, liquidity performance, working capital performance, fixed assets performance, fund flow performance and social performance. The financial performance analysis identifies the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. Thus, the present paper is of crucial importance to measure the firm’s liquidity, profitability, and other indicators that the business is conducted in a rational and normal way; ensuring enough returns to the shareholders to maintain at least its market value. In this context researcher has undertaken an analysis of financial
performance of pharmaceutical companies to understand how management of finance plays a crucial role in the growth. The present study covers two public sector drug & pharmaceutical enterprises listed on BSE. The study has been undertaken for the period of twelve years from 1998-99 to 2009-10. In order to analyse financial performance in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios have been used. Statistical measures i.e., linear multiple regression analysis and test of hypothesis t- test has been used.

**Ratish Kakkad (2012)**

Indian domestic pharmaceutical market has seen growth at a CAGR of about 12% in the last 5 years. About 67 Million Indians are expected to reach the age of 67 years by 2011. People of this age group spend around 3 to 4 times more on drugs than people in younger age groups. This indicates substantial growth of Indian pharmaceutical industry. Thus stupendous growth of the pharmaceutical companies in India over the last fifteen years can be attributed to the liberal government of India & economic policy. Conducting financial performance analysis of an organization is an extremely complex task. The process is tedious but the rewards are outstanding. Ratio analysis is one tool that can be used to help to assess an organization’s successfulness in both the short and long run. Thus the present study is conducted to examine the financial health of the Pharmaceutical Companies in India. Tools applied to judge the soundness are ratio analysis and t-test. The subject company chosen is Dr. Reddy’s Laboratories Ltd. and Lupin Ltd.

**Divya Christopher and Arishma (2013)**

The onset of the New Year has refurbished the buzz of mergers and acquisitions in the pharmaceutical and healthcare sectors both in the Indian and the global market. Merger is a component of corporate strategy and finance that includes the formulation of single new company by the collaboration of two different firms of same size. This action allows the mutual ownership and operation of the two firms rather than an independent functioning. The issue of a new company stock is prevalent. Acquisition is the process of taking over of one company by another company and establishing itself as a rightful new owner of the company. A particular increase in the trend in observed in the pharma companies primarily in the time period of 2008-2012 as a responsive measure by the large firms to excess capacities
attributed to patent expiration and drawbacks in the company’s pipeline. For the small pharmaceutical companies, mergers act as strategic decision taken to escape financial troubles, enhance the marketing of products and to avoid low cash sales ratio. Speculation on the inbound and outbound deals is therefore gaining momentum and is acting as route for the growth an establishment of the firm in the global market. Increasing global interests in the pharmaceutical and biotechnology sector and ultimately cheap availability of land, labour and capital in the emerging/developing countries has given a tremendous boost to mergers and acquisitions. M & A propagates the global trend towards consolidation this paper explores the impact of mergers and acquisitions on the different pharmaceutical companies which are segmented into three parts. The first segment deals with statistical evaluation of data by application of t-test. This test was used to evaluate the difference in the profitability of pharmaceutical companies observed before and post-mergers and acquisitions by applying t-test to the earnings per share values of the company. The profitability of the company’s viz. EPS was observed to have no impact post the mergers and acquisitions. The second segment involves application of ANOVA test. Two ways classification model of ANOVA was applied to test significant association between the profit after tax (PAT) and the pharmaceutical companies subjected to mergers and acquisitions. Therefore, a relationship was observed between the increase in PAT and M & A. the last segment consists of the analysis of the benefits and the controversies associated with the mergers and acquisitions of pharmaceutical companies globally and in India via case studies. Example Merck- Schering Plough in 2009, Watson – Actavis in 2012, Mylan Inc. Matrix laboratories in 2006 etc.

K. Jayakumar (2013)
The present study demonstrates the effectiveness of strategies in pharmaceuticals for realizing the desired objectives. The impact of acquisitions on the operating performance, of these firms, with respect to the pre-acquisition and post-acquisition financial ratios is presented.

Manoj Kumara. N. V, Satyanarayana (2013)
Mergers and acquisitions are concerning the determinations of the synergetic effect through which firms are undertaking their domestic and global strategies. The study made an effort to find the nature and the impact of integration activities on the firm
involved in such activities are vague sometimes ambiguous also. The study is tried to explore the potentialities and capabilities of the firm by looking pre and post-mergers and acquisitions performance. The present study is examines the comparative difference between pre and post-mergers and acquisitions in terms of financial analysis all the sample of ten major companies were taken from a list of mergers and acquisitions in india-2010. The results indicated a significant positive value creation to the acquired firms. The implication of the results will provide new evidences for the future and leads to greater value creation.

Shi Yuqian and Gu Wenlin (2014)
The pharmaceutical industry is an important part of our national economy, combined with traditional industries and modern industries. However, China’s pharmaceutical industry profitability has declined in recent years. There is a certain gap compared with other manufacturing industry. This paper selected 129 listed companies in the pharmaceutical industry as the research object. Establish the multiple linear regression models based on the factors that affect profitability. These factors include research and development ability, development capacity, solvency, operational capacity, marketing capabilities, cost management, capital structure, cash flow management and level of risk. According to the models, analyse the current development of China’s pharmaceutical industry and put forward some advices.

Prateek Agarwal and Rahul Mittal (2014)
The purpose of this paper is to explore various horizons of Mergers and Acquisitions related to the Indian Petrochemical sector in particular. This includes various aspects of Mergers and Acquisitions providing the basic terminologies involved. To highlight the impact of M & A on the companies a case study on Reliance Industries Ltd. and IPCL has been taken into account. It compares the position of the company during the pre and post-merger period with the help of financial parameters like the ratio analysis which include Return on Total Assets, Return on Capital Employed, Return on Equity, Gross Profit Margin, Net Profit Margin and Debt-Equity Ratio. This study also takes into account the independent t-test for testing the statistical significance and this test is applied not only for the ratio analysis but also to test the effect of Mergers and Acquisitions on the performance of RIL. All these calculations are completely based on the data available from the company financial data.
Bimal Jaisawal and Namita Srivastava (2014)

The Indian pharmaceutical industry is expanding worldwide. For some years now, it has been benefiting from the particular dynamics of the Asian economies as both purchasers and producers. An annual growth rate is impressive. India is currently recognized as a high quality, low-cost skilled producer of pharmaceuticals. It is seen not only as a manufacturing base for APIs and formulations, but also as an emerging hub for biotechnology, bioinformatics, contract research, clinical data management and clinical trials. Up until 2015, India expects pharmaceutical sales to rise by 8% p.a. to just under EUR 20 bn, compared with an increase of 6% in the world as a whole.

Financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. Through a careful analysis of its financial performance, the organization can identify opportunities to improve performance of the department, unit or organizational level. In this context, an attempt has been made an analysis of financial performance of pharmaceutical companies as well as to determine the factors affecting the financial performance and growth.

M. Parveen & O. M. Haja Mohideen (2014)

Every enterprise whenever big, medium or small needs finance to carry on its operations and to achieve its target. This study is to provide an insight into concept of financial performance using five power analysis consists of Inventory turnover ratio, Debtors turnover ratio, Creditors turnover ratio, Total asset turnover ratio and Gross profit margin. The primary objective is to determine the financial performance of Cipla pharmaceutical company using five power analyses. The secondary objectives are to examine the relationship between Inventory turnover, Debtors turnover, Creditors turnover and Total asset turnover with Gross profit margin. Descriptive analysis is used to help researcher to describe the relevant aspect of financial performance and Quantitative analysis to measure the degree of association between different variables under consideration and researcher used regression analysis to examine the relationship of in dependent variable with dependent variable. The sample of the study is Cipla pharmaceutical limited. By using the analysis it was found that the Debtors Turnover Ratio and Gross Profit Margin have
the highest standard deviation. Debtors Turnover Ratio enables funds for the transaction because the Cipla pharmaceutical company collects their debts quickly from their customer. Cipla pharmaceutical company has quite satisfactory because collection period is very short. Assets turnover ratio has high negative relationship with profitability. This study is concluding that the Cipla pharmaceutical limited is quite satisfied in their financial performance.

**V. Vijayalakshmia and M. Srividya (2014)**
The Indian Pharmaceutical sector is highly fragmented with more than 20,000 registered units. It has expended drastically in the last two decades. The pharmaceutical and chemical industry in India is an extremely fragmented market with severe price competition and government price control. The Pharmaceutical Industry in India meets around 705 of the country’s demand for bulk drugs, drug intermediates, pharmaceutical formulation, chemicals, tablets, orals and injectable. There are approximately 250 large units and about 8000 small-scale units, which form the core of the Pharmaceutical Industry in India (including 5 central public sector units) Looking ahead, the worldwide pharma market is estimated to more than double to $1.3 billion by the year 2020. The Indian Pharmaceutical Industry is developing drastically every year. Hence an attempt has been made to analyse the profitability position of the industry with the help of mean, standard deviation, coefficient of variation, multiple regression, and analysis of variance. The increase in profitability will not only yield greater efficiency but also improve financial performance in future.

**Dana-Maria Boldeanu and Irina-Bogdana Pugna (2014)**
The paper provides an overview of current situation of the global pharmaceutical industry, with focus placed on the EU pharmaceutical market, including also the Romanian pharmaceutical market evolution synthetized into a SWOT analysis. As main goal the paper identifies several financial performance influence factors at the level of a number of companies from pharmaceutical sector, in order to generate a particular econometric model. The findings of the paper focus on the prediction of Return on Equity (ROE) ratio as the main performance measurement considered significant for the industry our and a large number of factors which contribute to its changes. Thereof, the paper investigates the relationship between various influence
indicators or factors resulting from the financial situation of a company and the performance thereof and generates conclusions for the decisions makers at the level of the companies.

**Amit kr nag (2014)**

Management of cash comprises of a series of activities aimed at efficient handling the inflow and outflow of cash. Proficient management of the inflow and outflow of cash plays a crucial role in the overall performance of a firm. Excess cash will remain idle without any contribution towards profit whereas shortage of cash will disrupt the firm’s manufacturing process. Normally it is believed that profit is the sole criteria for judging business success. To some extent it is true but now cash is also considered as something more fundamental for the survival of any business. ‘Cash is King’ and therefore management of cash is indispensible. Adequate availability of cash is essential to meet the business needs. Since, it is necessary in daily business operations and is productive, the cash owned by an enterprise at any time should be carefully regulated. Cash is not an end in itself, but is a means to achieve the end. To quote Brigham, “Cash is a non-earning asset, so excessive cash balance simply lowers the total assets turnover, thereby reducing both the rate of return on net worth and the value of the stock”. A company’s competitive ability to some extent is dependent on the availability of cash balances since it the means to invest in people, technology and other assets. The steady and healthy circulation of cash throughout the entire business operation is the business solvency. Like any other asset of a company, cash is a tool for profit. Thereby, the emphasis is laid on the right amount of cash at the right time, at the right place and at the right cost. Management of cash is mainly diverting the cash from where it is to where it is needed to be. A company needs to have adequate cash balance in order to manage its working capital requirements. Effective management of cash is the necessity of all business houses since improper management of cash causes their failure. Therefore, effective management of cash involves an attempt to minimize investment in cash without impairing to the liquidity of the firm which in turn means a proper balancing between the two conflicting objectives of the liquidity and profitability. The ultimate goal of cash management is to maintain the minimum cash balance, which provides the firm with sufficient liquidity needed to meet its financial obligations.
Surech Chandra Das, Pooja Pattanayak and Bhagyashree Pattnaik (2014)
Foreign multinational companies along with Indian pharma companies are partnering together to tap opportunities in the fast growing emerging economies (BRIC nations) and the larger established markets in the West and Far East (Japan). Acquisitions, alliances and partnerships are some of the tools used to penetrate and capture a larger share of the potential opportunity in these markets. These developments bode well for the pharma industry and society as a whole who stand to benefit from such alliances and partnerships through reduced costs and streamlined supply chains. The paper describes the recent mergers and acquisitions which has happened in Indian Pharmaceutical industry. The paper describes the case of acquisition of Matrix Lab by Mylan Laboratories. The paper narrates the rationale and benefits of this acquisition.

In India, pharmacy sector is one the most promising & growing industry. This study attempts basically to measure the financial performance of the Pharmaceutical Industry taking top companies like Cipla ltd., Aurobindo Pharma ltd. for the study, for the period 2009-2010 to 2013-2014. In order to achieve our goals in this paper we have measured the ratios of short term solvency ratio, long term solvency ratio, profitability ratio. From the study it is found that Cipla ltd. shows high profitability than Aurobindo Pharma ltd., higher level of consistency is noticed in Cipla ltd.

Frederick Nsiah and Prince Aidoo (2015)
This paper examines the profitability, liquidity and solvency and profitability of failure of listed pharmaceutical companies on the Ghana Stock Exchange. The findings from the activities ratios indicated efficiency of Arytons management in utilizing the asset of the firms in day-to-day basis is declining in recent years whiles that of Starwin is improving even though Aryton Drug Ltd. is generally more efficient than Starwin Ltd. The average cash conversing cycles of Aryton and Starwin were found to be 196 and 282 respectively which are relatively higher than the bench mark in Germany, UK and US of 145 days, 127 days and 142 days respectively. The liquidity ratio metric indicated that Aryton Drug Ltd. manages it liquidity and is very good position to meet it long term obligation as well as oppose to Starwin Ltd. which has very limited cash to cover its short term debt and is less
solvent. Starwin’s is more geared which has exposed the firm to higher interest expense. The study also discovered from the DuPont analysis that operating income-to-revenue and revenue-to-total assets ratios significantly influence ROE positively. Measurement of Profitability, proxy by ROE and ROA, shows that Aryton generates more returns on it asset and on equity than Starwin Ltd., although lower than instrial bench marks in UK and US of 54.9% and 32.5% respectively, however Starwin Ltd. is seen to be posting good returns in recent years which is almost at par with Aryton’s. Starwin’s COGS growth rate has been generally greater than its revenue growth rate which is not the case for Aryton Ltd. A test of financial soundness and stability with Altman’s Z-score revealed that Aryton is not financially distress but Starwin is in financial distress and likely to be bankrupt in the near future, exposing investors to serious risk. Thus Starwin Ltd. should consider takeover offer or merger for reorganization of the firm.

**Hiral Desai (2015)**

In this paper an attempt has been made to know the solvency position of selected pharmaceutical companies in India. The study covers top four pharmaceutical companies namely Lupin, Dr. Reddy’s Lab, Cadila Healthcare & Cipla. The purpose of this study is to analyse the financial performance in terms of solvency of the selected companies. To achieve these objectives, data has been collected for five years from 2010-2011 to 2014-2015 from secondary sources and for getting results various kind of accounting technique like ratio and statistical tools like average, Standard Deviation and Co-efficient of variation have been applied.
The research work represents in this thesis on “A Study on Impact of Mergers and Acquisitions on Financial Performance of Selected Pharmaceutical Companies in India” submitted for the award of Ph. D. degree in the Department of Business Studies, has not been previously submitted to Sardar Patel University or any other university for any other degree.

From the above studies it is observed that most of the research has been done on mergers and acquisitions of banking sector and financial performance of pharmaceutical industry. Thus, it realise that no research work was conducted on this topic. Hence, the researcher has undertaken study on impact of pre and post – mergers and acquisitions on financial performance of selected pharmaceutical companies during the period under study.