

# A STUDY ON THE IMPACT OF THREE ACQUISITIONS IN PHARMACEUTICAL INDUSTRY

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*Abstract:* This study has been undertaken to study three Acquisitions in the Pharmaceutical Industry with specific focus on analysing the financial statements of the acquirers and target companies for 3 years before the mergers and how the financial statements were affected after the merger took place on the new combined entity for 3 subsequent financial years. The mergers being studied are for the period 2008-10 and the data that has been used is for the period 2006-2013, which has been collected from financial reports of the companies and websites such as Money control. . The selected mergers have been studied on their pre and post financial data with specific focus on Loans, Assets and Operating Costs

## 1.1 INTRODUCTION

Mergers and acquisitions (M&A) and corporate restructuring are an integral part in the world of corporate finance. The Wall Street investment bankers orchestrate M&A transactions, resulting in several companies coming together to form larger ones. '1+1=3': this equation defines the spirit of mergers and acquisitions. The key rationale behind buying a company is to create shareholder value over and above that of the sum of the two companies. Two companies together are more valuable than two separate companies. This idea is an attractive prospect to companies during tough times. Strong organisations will acquire other companies to create a more competitive, cost-efficient entity. The companies will come together hoping to capture a greater market share or to attain greater efficiency/profitability. Due to these potential benefits, target companies will often agree to be purchased when they know they cannot survive alone

This Research Paper focuses on studying three Acquisitions in the Pharmaceutical Industry with specific focus on analysing the financial statements of the acquirers and target companies for 3 years before the mergers and how the financial statements were affected after the merger took place on the new combined entity for 3 subsequent financial years. The mergers being studied are for the period 2008-10 and the data that has been used is for the period 2006-2013, which has been collected from financial reports of the companies and websites such as Moneycontrol.

## 1.2 Industry Profile

Indian drug division industry arrangements more than 50 percent of worldwide interest for different immunizations, 40 percent of nonexclusive interest in the US and 25 percent of all prescription in UK. India contributes the second biggest offer of pharmaceutical and biotech workforce on the planet. The pharmaceutical division in India was esteemed at US\$ 33 billion out of 2017. In Jul-Sep 2018, Indian pharmaceutical market became 9.7 percent and remained at Rs 1.26 trillion (US\$ 17.95 billion) for the Moving Annual Total (MAT) finished September. In October 2018, the Indian market developed by 12.2 percent year-on-year.

With 71 percent piece of the pie, nonexclusive medications structure the biggest portion of the Indian pharmaceutical division. Residential API utilization is relied upon to reach US\$ 18.8 billion by FY22. The nation represents the second biggest number of Abbreviated New Drug Applications (ANDAs) and is the world's head in Drug Master Files (DMFs) applications with the US Indian Drugs and Pharmaceuticals division has gotten aggregate FDI worth US\$ 15.83 billion between April 2000 and June 2018.

Indian medications are traded to in excess of 200 nations on the planet, in which USA goes about as the vital market. Nonexclusive medications represent 20 percent of worldwide fares regarding volume, which thusly is building the nation as the biggest supplier of

conventional drugs worldwide and expected to extend significantly further in future. India's pharmaceutical fares remained at US\$ 17.27 billion in FY18 and US\$ 9.29 billion in FY19 (up to September). In 2018-19, there is a desire that these fares can cross US\$ 19 billion. 31 percent of these fares from India went to the US.

The Government of India is intending to set up a US\$ 640 million investment reserve to raise sedate revelation and fortify pharmaceutical foundation. The 'Pharma Vision 2020' by the administration's Department of Pharmaceuticals expects to make India a noteworthy centre for start to finish tranquilize revelation.

### 1.3 Market Size

The therapeutic zone was esteemed at US\$ 33 billion out of 2017. The country's pharmaceutical industry is relied upon to grow at a CAGR of 22.4 percent over 2015– 20 to reach US\$ 55 billion. Indian organizations got 304 Abbreviated New Drug Application (ANDA) endorsements from the US Food and Drug Administration (USFDA) in 2017. India's biotechnology industry including bio-pharmaceuticals, bio-administrations, bio-farming, bio-industry and bioinformatics is normal develop at a normal development rate of around 30 percent a year and reach US\$ 100 billion by 2025.

### 1.4 Investments and Recent Developments

The Union Cabinet has given its gesture for the change of the current Foreign Direct Investment (FDI) strategy in the pharmaceutical part so as to permit FDI up to 100 percent under the programmed course to make of restorative gadgets subject to specific conditions.

The medications and pharmaceuticals segment pulled in combined FDI inflows worth US\$ 15.83 billion between April 2000 and June 2018, as per information discharged by the Department of Industrial Policy and Promotion (DIPP).

A portion of the ongoing advancements/interests in the Indian pharmaceutical segment are as per the following:

- In August 2018, the market developed by 8.7 percent year-on-year with offers of Rs 11,342 crore (US\$ 1.69 billion).
- Amid April-June 2018, pharmaceutical division in India saw private value and funding speculations of US\$ 396 million.
- In 2017, Indian pharmaceutical area saw 46 merger and obtaining (M&A) bargains worth US\$ 1.47 billion
- The fares of Indian pharmaceutical industry to the US will get a lift, as marked medications worth US\$ 55 billion will end up off-patent amid 2017-2019.

### 1.5 Government Initiatives

A portion of the activities taken by the administration to advance the pharmaceutical part in India are as per the following:

- The National Health Protection Scheme is biggest government supported human services program on the planet, which is relied upon to profit 100 million poor families in the nation by giving a front of up to Rs 5 lakh (US\$ 7,723.2) per family every year for optional and tertiary consideration hospitalization. The program was reported in Union Budget 2018-19.
- In March 2018, the Drug Controller General of India (DCGI) declared its arrangements to begin a solitary window office to give assents, endorsements and other data. The move is gone for giving a push to the Make in India activity.
- The Government of India is intending to set up an electronic stage to manage online drug stores under another approach, so as to stop any abuse because of simple accessibility.
- The Government of India divulged 'Pharma Vision 2020' went for making India a worldwide pioneer in start to finish medicate make. Endorsement time for new offices has been decreased to support speculations.
- The administration presented instruments, for example, the Drug Price Control Order and the National Pharmaceutical Pricing Authority to manage the issue of moderateness and accessibility of medications.

## 1.6 Future Prospects

Medication spending in India is relied upon to increment at 9-12 percent CAGR between 2018-22 to US\$ 26-30 billion, driven by expanding shopper spending, fast urbanization, and raising social insurance protection among others. Going ahead, better development in household deals would likewise rely upon the capacity of organizations to adjust their item portfolio towards unending treatments for illnesses, for example, cardiovascular, against diabetes, antidepressants and enemies of malignant growths that are on the ascent.

The Indian government has found a way to decrease costs and cut down human services costs. Quick presentation of conventional medications into the market has stayed in center and is required to profit the Indian pharmaceutical organizations. Likewise, the push on country wellbeing programs, lifesaving medications and preventive antibodies additionally forecasts well for the pharmaceutical organizations.

## 1.7 The acquisitions being studied in this are:-

### 1.7.1 Hospira's acquisition of Orchid in December 2009

#### About Hospira

Hospira, Inc. is a global specialty pharmaceutical and medicine Delivery Company dedicated to Advancing Welfare. It is the world leader in speciality generic injectable pharmaceuticals, Hospira offers one of the broadest portfolios of generic acute-care and oncology injectables, in addition to integrated infusion therapy and medicine management solutions.

#### About Orchid

Orchid Chemicals & Pharmaceuticals Ltd. Is a leading pharma company headquartered in Chennai, India, involved in the development, manufacture and marketing of numerous bulk actives, formulations and nutraceuticals. With exports spanning in more than seventy five countries, Orchid is the largest manufacturer-exporter of cephalosporin bulk actives in India and is ranked amongst the Top 5- cephalosporin producers in the world.

#### About Acquisition

The deal's cost for Hospira was \$400 million. The acquisition covered Orchid's beta-lactam antibiotics manufacturing complex and pharmaceutical research and development (R&D) facility at Irungattukottai close to Chennai. The acquisition also included Orchid's generic injectable product portfolio and pipeline. Beta-lactam antibiotics represent a category of drugs with a large spectrum of anti-bacterial activity.

The two companies had also penned a long-term exclusive agreement. Under this, Orchid supplied active pharmaceutical ingredients (APIs) for the acquired generic injectable pharmaceuticals business of Hospira. The two, it may be recalled, have already a product development and commercialization relationship.

For Hospira, the acquisition gave it an instantaneous presence in India. This could be a platform for its future commercial growth in India. The acquisition fetched Hospira a proven-quality and cost-competitive generic injectable manufacturing site, which has approvals from the U.S. Food and Drug Administration. Further, it also helped Hospira get the associated R&D facility and a talent base of roughly 450 employees dedicated to the development and production of beta-lactam antibiotics. More importantly, the acquisition enabled Hospira to have a full ownership of its primary beta-lactam portfolio and pipeline, which were previously part of a commercialization pact with Orchid.

This acquisition aligns perfectly with Hospira's strategy to improve their margins and cash flow by lowering their cost position for a key product line, and to invest for growth, by expanding their presence globally and reinforcing their leadership position in generic injectables.

The transaction underscored Orchid's ability to develop value added and niche skill sets in the global pharmaceutical value chain and monetize them. The deal would help Orchid fortify its business model with long-term contractual API revenue stream. Further, this would give Orchid financial flexibility to pursue new growth opportunities.

The business being sold was fetching Orchid \$90 million in top line and an EBITA level of \$35-40 million. He estimated the capital investment in the Irungattukottai plant would be around Rs.600 crore and the net depreciated worth at Rs. 450 crore. The proceeds from the sale would help pay off debt and grow new businesses. The company had a long-term debt of Rs.1,200 crore and short-term debt of Rs.550 crore. It had \$150 million exposure to overseas debt. After providing for a taxation of \$20 million for the transaction, Orchid would be left with a cash flow of around \$100 million.

## 2. Abbott's acquisition of Piramal in May 2010

### About Abbott

Abbott is a global, broad-based health care company dedicated to the discovery, development, manufacture and marketing of pharmaceuticals and medical products, including nutritionals, devices and diagnostics. The company employs nearly 90,000 people and markets its products in more than one hundred thirty countries.

### About Piramal

Piramal Healthcare Ltd. Is the leader in pharmaceutical contract manufacturing. The Piramal Group has interests spanning many industry spectrums ranging healthcare, glass manufacturing, original drug discovery, private equity and real estate. Healthcare constitutes approximately 50% of the Group's revenues with pharmaceutical contract manufacturing forming a significant portion.

### About Acquisition

Second-largest deal in Indian pharmaceutical space to make the US firm largest player.

Piramal Healthcare had sold its domestic formulations business to US-based multinational drug Major Abbott, in a deal worth \$3.72 billion (Rs 17,300 crore).

Piramal Healthcare received a down payment of \$2.12 billion (Rs 10,000 crore) after closing of the transaction by the second half of 2010, and \$400 million (Rs 1,850 crore) each for the subsequent four years.

This deal has made Abbott the biggest player in the Rs 60,000-crore domestic market, with a share of over seven per cent. In the process, Abbott overtook Ranbaxy and Cipla, the market leaders for over a decade now.

The Rs 2,000-crore domestic formulations business accounted for more than half of Piramal healthcare's total full-year revenue.

Piramal Healthcare, after paying about 22 per cent of the transaction amount (Rs 3,740 crore) as capital gains tax and other statutory payments, invested the remaining funds in three ways — clear debts worth Rs 1,300 crore, a special dividend to shareholders and investments in the remaining businesses in the healthcare sector and in new and enticing sectors.

The sale of its main business, however, didn't enthuse the shareholders of Piramal Healthcare and its share prices tanked 11.81 per cent on the BSE to close at Rs 502.35. Shares of Abbott's India subsidiary, Abbott India, rose 3.71 per cent to achieve a 52-week high of Rs 1,210 and closed at Rs 1,069.90.

The Piramal Healthcare stock had been on fire over several months and had risen as much as 5 per cent in a weak market, on market speculation that the company was in talks to sell stake.

After the transaction, Piramal Healthcare retained businesses worth Rs 1,700 crore and eleven manufacturing units in India, UK, Canada and US. The businesses that will remain with it will include custom manufacturing, critical care, active pharmaceutical ingredients, vitamins and fine chemicals, diagnostics, diagnostics equipment and drug research through demerged Piramal Life Sciences (PLSL), in which Piramal Healthcare holds 80 per cent stake.

From a common man's point of view, over the counter products like Saridon and Lacto Calamine will continue to be brands of Piramal Healthcare, while popular cough syrup Phensedyl will become part of Abbott.

After the acquisition, over 350 brands and about 5,500 employees and manufacturing units at Baddi in Himachal Pradesh became part of Abbott's Indian operations.

This strategic action advanced Abbott into the leading market position in India and their strong position in branded generics and growing presence in emerging markets is part of their ongoing diversified pharmaceutical strategy, complementing their market-leading proprietary pharmaceutical offerings and pipeline in developed markets.

The deal made Abbott, operating in India for the last 100 years, mainly selling digestive products like Digene and other antibiotics, the largest domestic player, with close to 400 products in the domestic market. Piramal's Healthcare Solutions business became part of Abbott's newly created stand-alone Established Products Division.

### 3. Fresenius Kabi's acquisition of Dabur Pharma in June 2008

#### About Fresenius Kabi

Fresenius Kabi is a global healthcare company that specializes in lifesaving medicines and technologies for infusion, transfusion and clinical nutrition. Their products and services are used to help care for critically and chronically ill patients. Their product portfolio includes a comprehensive range of I.V. generic drugs, infusion therapies and clinical nutrition products as well as the medical devices for administering these products.

#### About Dabur Pharma

Dabur is India's largest Ayurvedic medicine & related products manufacturer. Dabur was founded in 1884 by SK Burman, a physician in West Bengal, to produce and dispense Ayurvedic medicines. Dabur's Ayurvedic Specialities Division has over 260 medicines for treating a variety of ailments and body conditions, from common cold to chronic paralysis.

#### About Acquisition

German major Fresenius Kabi had acquired 73% stake in India's largest anti-cancer drug maker Dabur Pharma for around Rs 872 crore. With this, the Burman family, the promoters of the company and holding 65% stake, exited the pharmaceutical business.

The German company had bought the stake through its Singapore subsidiary Fresenius Kabi Pte at Rs 76.27 per share, i.e. a 10.2% premium over Dabur Pharma's current share price of Rs 69.15 at the BSE.

The deal values Dabur Pharma Company at Rs 1,185 crore. The deal was subject to regulatory and shareholders' approval. The Burman family got Rs 775 crore from the deal. To industry observers, Dabur Pharma's move was to focus on its core competence. Though oncology is a lucrative segment, it required high-level research and development (R&D) to treat the serious diseases that entailed deep investment.

For the third quarter ended December 2007, the company had recorded net profit of Rs 8.26 crore, marginally down from Rs 8.9 crore a year ago. The company's unit in Baddi completed its 10-year tax exemption benefit during the quarter ended December 2007.

## 2.1 REVIEW OF LITERATURE

Following were the major efforts at research in the subject, which have been referred for this study purpose.

**Anup Agraval Jeffrey F. Jaffe (1999)**, they examined past literatures on abnormal returns in the long-run following mergers. Their paper also examines explanations for any findings of underperformance post the happening of mergers. They conclude that the evidence and findings does not support the proposition that underperformance post mergers is specifically due to slow adjustment to merger news. They also completely reject the EPS myopia hypothesis (which they have used in their paper), i.e. the hypothesis that the market initially overvalues acquirers if the acquisition increases EPS, ultimately leading to long-run under-performance. To come to this conclusion they calculated the difference between actual growth in the bidder's EPS following the merger and the estimated growth had the merger not taken place.

**Vardhana Pawaskar (2001)**, he studied what impact mergers have on corporate performance of companies post the merger in India. It compared the pre- and post- merger operating performance of the entities involved in merger between the years 1992 and 1995 to identify their financial characteristics. He studied a total of 36 companies which were involved in mergers in that period of three years. Their study identified the profile of the profits. The regression analysis which was performed by them explained that there was no increase in the post- merger profits. Since they were studying only a sample of firms which have been restructured through mergers, it showed that the merging firms were placed at the lower end in terms of liquidity, tax and growth of the industry, whereas the bidding firms was at a higher level than them. The merged firms overall performed better than industry in terms of profitability.

**Vanitha. S and Selvam. M (2007)**, they analysed the pre and post-merger financial performance of Indian manufacturing sector during 2000-2002 by using a sample of 17 companies out of 58 companies who had undergone a merger in that period (which is 30% of the total mergers). The 17 companies selected were from varied sub-sectors under manufacturing sector such as Food and Beverages, Textiles, Machinery, Chemicals etc. For financial performance analysis, they used Ratio Analysis, Mean, Standard Deviation and 't' test. They further divided the financial analysis on the basis of liquidity, leverage and profitability. They found that the overall financial performance of merged companies pre and post-merger in respect of 13 variables which they had selected for the study were not significantly different from the expectations of the sector.

**Pramod Mantravadi and Vidyadhar Reddy (2007)**, in their paper they aimed to study what was the impact of mergers on the operating performance of acquiring entities in different Industries, by examining some pre-merger and post-merger financial ratios, with the sample of firms chosen from all mergers involving traded companies and public limited companies in India between 1991 and 2003, i.e. the post reform period. Their results suggest that there are certain minor variations with respect to impact on operating performance following mergers in different Industries in India

**N. M. Leepsa & Chandra Sekhar Mishra (2009)**, in their research paper they have intended to study the trend in mergers and acquisitions (M&A) particularly with reference to manufacturing companies in India. Their study is an attempt to understand and find out if there is any difference in post-merger performance compared with pre-merger in terms of financial ratios with specific focus to profitability, liquidity and solvency. The statistical tools used by N.M. Leepsa and Chandra Sekhar Mishra are descriptive statistics, paired sample t-test. Their study shows that liquidity and profitability positions of the entity have increased but the data is not statistically significant.

**Dr. Neena Sinha, Dr.K.P.Kaushik & Ms. Timcy Chaudhury (2010)**, they have examined the impact of mergers and acquisitions on the financial efficiency of the 17 selected financial institutions in India. In their analysis they have focussed on profitability, liquidity, solvency and efficiency of the entities pre and post-merger for 3 years each. Their analysis consists of two stages. Firstly, they have used the ratio analysis approach; they calculated the change in the position of the companies with financial data for the period 2000-2008 where the mergers took place between 2003-2005. Secondly, they examined changes in the efficiency of the entities during the pre and post-merger periods by using econometric tools such as non-parametric Wilcoxon signed rank test. The result of this study indicates that M&A cases of financial sector in India show a significant correlation between financial performance and the M&A deal based on the ratios studied by them and the test done, in the long run, and the acquiring firms were able to generate value, thus implying that the mergers prove to be successful in the long run for the acquirer company.

**Kanahalli & Jayaram (2014)**, they in their study attempted to determine the success of merger and its impact on post-merger financial performance of acquirer companies in India by selecting two Tata groups companies. Their study depended on secondary data from financial statements which were collected from various books, articles, magazines, annual reports and money control websites. To evaluate the data collected they used financial ratios, paired "t" test in the study with special emphasis on profitability and liquidity performance of the company that revealed no significant difference between pre and post-merger financial performance of the selected companies.

**Mital Menapara, and Dr. Vijay Pithadia., (2011)**, They examined the impact of mergers and acquisitions on financial Performance of Indian Corporate Sectors and also examined and evaluated the impact of merger and acquisitions on Return on Investment, Profitability and Liquidity position of selected companies. They performed ratio analysis and T-test on the data collected by them from

annual reports and other sources. It is evident from their analysis that both the hypothesis are not fully accepted. The conclusion emerging with respect to financial evaluation is that the merging companies were acquired by companies with reputed and good background. Therefore, it was possible for the merged firms to be successfully in due course of time post the acquisition. However one limitation of this study is that the sample size is too small and these hypothesis should be tested with a bigger sample size before coming to a final conclusion.

**Azhagaiah (2014)**, he highlighted the impact of merger and acquisitions on operating performance of Indian manufacturing firms. A sample size of 39 manufacturing companies was considered in this study which had under gone merger in 2006-07. To attain the objectives of the study, they collected secondary data from capital market data base for a period five years pre and post-merger each, i.e. for a total period of 10 years. To test the impact of Mergers and Acquisitions, various statistical and econometric tools such as Factor analysis, correlation matrix, multiple regression and Chow test were applied to the study. After performing all the tests Azhagaiah concluded that there exists a significant positive effect on operating performance of Indian manufacturing firms under the study.

**Agarwal & Singh (2015)**, they conducted a case study on effect of the merger of Kingfisher Airlines and Air Deccan. They focussed on the financial performance of Kingfisher Red, which was new merged company. The objective of their study was to analyse the pre-merger financial performance of both Kingfisher Airlines and Air Deccan and then compare it with the post-merger financial performance of the newly formed merged entity Kingfisher Red. Their study used accounting ratios in terms of profitability, liquidity, earning per share, leverage to evaluate the data and draw insights from it. Data used by them spans over a period of 5 years (2006-2010). To analyse the data financial ratios had been calculated and mean and standard deviation were used for Pre and Post-merger period. Paired sample t-test (2 tailed with 95% significance level) had been used for the testing of hypotheses. The statistical techniques found no improvement and benefit in acquiring firm after merger, as well as no significant result was shown in return on equity and earnings per share

## RESEARCH DESIGN

The design section outline the plan, scope and method that how the study is conducted. This includes Universe of the study, sample of the study, Data and Sources of Data, study's variables and analytical framework. The details are as follows:

### 3.1 TITLE OF THE PROJECT

A Study of the Impact of Three Acquisitions in Pharmaceutical industry.

### 3.2 STATEMENT OF THE PROBLEM

This topic has been chosen by me to see and understand if these acquisitions led to any change in the financial statement of the acquirer company post the acquisition.

### 3.3 SCOPE OF THE STUDY

The scope of researching three acquisitions in Pharmaceutical industry is that how Mergers & Acquisitions lead to value creation of companies, how industry specialization is obtained by the companies which are acquiring. Economic benefits of this research are:-

- Increased Market Share
- Economies of large scale operations

The nation is likewise rising as a centre point of pharmaceutical innovative work. India's developing economy combined with its changing "epidemiological profile" with cardiovascular issues and other perpetual sicknesses, make it a solid possibility to end up a future powerhouse of R&D and assembling in pharma. There are expanding open doors for research work in pharmaceuticals, and numerous subjects to chip away at for a PhD, identified with the pharmaceutical business, as additionally in different fields of life sciences and biotechnology.

The value of M&A during the period of 1988-2001 exceeded 500\$ billion which led to a 10-firm share of global sales, from 20% in 1985 to 48% in 2002. Pharmaceutical industry is research-intensive industry with an average R&D to sales ratio of 18%, compared to 4%. The analysis of post-merger performance tests for effects on growth in inputs (employment and R&D investment) and accounting performance (growth in sales, operating profit and market value) for up to four years after the event.

### 3.4 OBJECTIVES OF THE STUDY

The Objective of this study is to:-

Analyse the impact of these acquisitions pre and post the happening of the acquisition.

Whether the acquisition was successful or not.

Which amongst the three acquisitions was the best?

Whether the acquiring company is able to attain Industry Specialization

### 3.5 HYPOTHESES

Null Hypothesis

H0: There is no impact of three acquisitions in Pharmaceutical industry

Alternative Hypothesis

H1: There is an impact of three acquisitions in Pharmaceutical industry

### 3.6 METHODOLOGY

The data that has been used has been collected and compiled from various sources such as money control website, annual reports and magazines. The selected mergers have been studied on their pre and post financial data with specific focus on Loans, Assets and Operating Costs. To have a deeper understanding of the mergers, following ratios have also been studied:

- Profitability Ratios such as Operating Profit Margin and Net Profit Margin
- Liquidity Ratios such as Current Ratio and Debt-Equity Ratio
- Accretive Dilutive analysis – which compares the average EPS Pre Acquisition with that of Post-Acquisition data

### 3.7 DATA COLLECTION METHODS

#### Primary Data

Primary data is a data that were gathering and assemble specifically for the research project. The data are collected through observation, interview and also discussions with various experts who are currently working in Pharma Industry and have deep insights into Mergers & Acquisitions. This type of data is used in collecting information for our studies.

#### Secondary Data

Secondary information is an information that have been recently gathered and amass for some task examine done by other hand. Such information are less expensive and more rapidly to be gotten to than essential information and furthermore might be accessible when essential information can't be gotten to by any means. To convey obsolete is gather all data from article, diary, and web where at that point will be examined. With the optional information makes essential information gathering increasingly explicit though we can ready to recognize the holes and insufficiencies and what extra data should be gathered and improves the comprehension of the issue. Auxiliary information likewise gives a premise to correlation for the information that were gathered by the specialist.



### 3.8 TOOLS FOR ANALYSIS

- MS excel
- E-Views
- Tabulation
- Accretive Dilutive Analysis
- Break-Even Analysis

Researcher will utilize organization in this examination. Classification alludes to the in efficient course of action of information in a table or other rundown organization of data accumulated. Checking the quantity of reaction through an inquiry and separate them into a recurrence circulation is a straightforward organization or peripheral classification, which help the scientist to keep the most essential from of data. Amid the information organized, an important classifications and character images will used to speak to for gathering or reactions. The principles used to translate; classifications and recording the information are called codes. This coding procedure can be utilized a completely offices by a PC or a manual work as hand arrangement.

Other than that, specialist can likewise utilize cross classification. Where, analyst question including relationship among different not exactly inside factor. The outcomes were consolidated of recurrence table showing one variable in lines and another variable in sections. The motivation behind arrangement and cross classification is to permit the assessment and examination of contrasts among gathering. E-Views programming will be utilized to decide if the information is stationary or not. It is basic that the information is accurately classified while utilizing exceed expectations and convert the information in E-sees in Stationary structure on the off chance that it isn't stationary by utilizing Unit Root Test. Gradual addition and Dilution allude to a straightforward test that decides the effect an obtaining or merger has on the purchasing association's Earnings per Share (EPS). Gradual addition Dilution investigation helps the acquirer (purchaser) weight the results of the merger, joining all components and complexities. Upon a merger or securing, the gaining (purchasing) organization would basically "breakeven." as it were, there would be no effect on the acquirer's EPS and the organization's EPS would be the equivalent when the arrangement is made.

### 3.9 LIMITATIONS OF THE STUDY

- Small sample might not give the correct overall picture of the study
- The results and performance of the employees can be based due to other factors which are not employee engagement
- Time oblige

Time oblige is essential for analyst to finish this investigation in the given time frame. This is on the grounds that the specialist must to finish in a couple of month time frame. The period has been given are deficient in light of the fact that the scientist must gap the occasions with other duty, for example, an examination plan and complete different assignments.

- Cost limitation

The principle issue for analyst in finishing this examination is money related expense. The monetary cost will be the central point that will back off to do these examinations since specialist needs to give a ton of cash so as to get the data and materials, for example, from the web, printing and transportation.

- Absence of data and assets

Absence of data and assets gotten by specialist will be issue to achieve this examination. This is on the grounds that specialist needs to discover the data through the web as an elective reference for the examination. Though, necessities to discover more diaries, investigate articles and books as extra data. Scientist additionally confronting challenges in acquires reference materials from the library.

## ANALYSIS AND OBSERVATIONS

## 1. Hospira's acquisition of Orchid in December 2009

Loans

Table 4.1

Hospira Pre Acquisition (Rs Crore)			
Year	2007	2008	2009
Loans	2184.4	1834	1707.3
Growth Rate		-16.04%	-6.91%
CAGR	-11.59%		

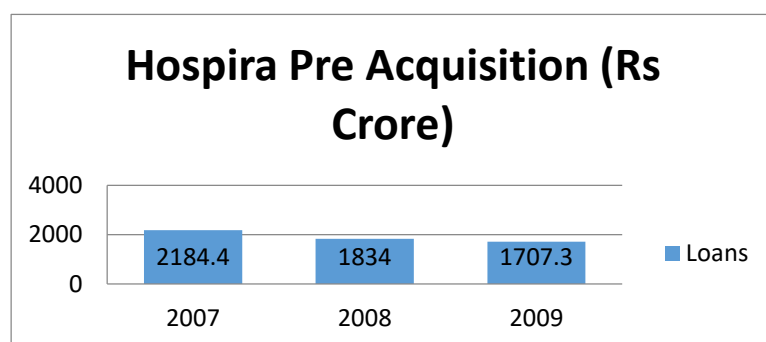


Table 4.2

Orchid Pre Acquisition (Rs Crore)			
Year	2007	2008	2009
Loans	1,631.92	1,953.44	2,596.75
Growth Rate		19.70%	32.93%
CAGR	26.14%		

Figure 4.2

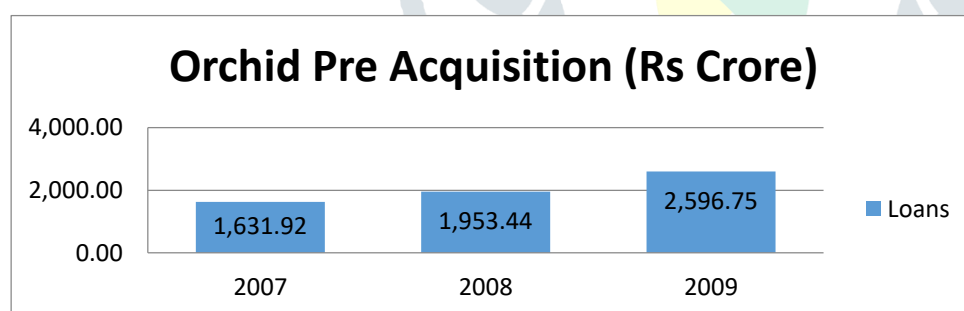
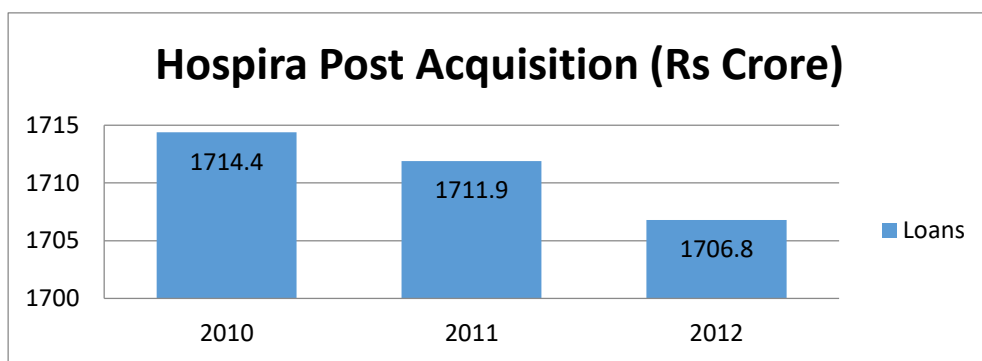


Table 4.3

Hospira Post Acquisition (Rs Crore)			
Year	2010	2011	2012
Loans	1714.4	1711.9	1706.8
Growth Rate	0.42%	-0.15%	-0.30%
CAGR	-0.22%		

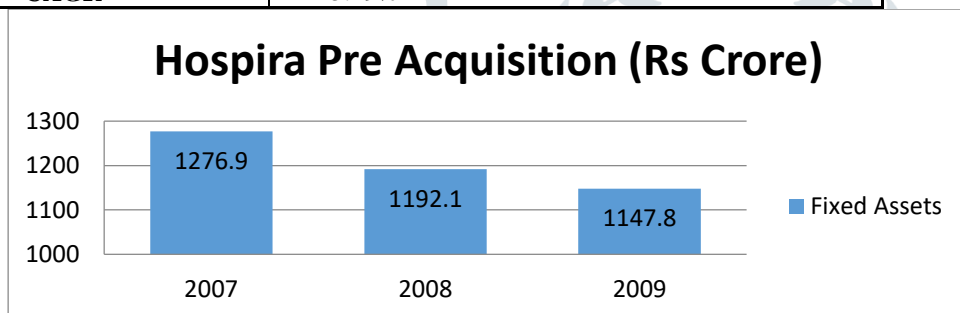


Looking at the Loan figures of Hospira Pre Acquisition we can see that their loans were on a decreasing trend from 2007 – 2009 with a CAGR of -11.59%. In 2009 orchid was acquired by Hospira which had a Pre-Acquisition CAGR on loan of 26.14%. However when Orchid was acquired by Hospira the Loans figure of Hospira post-Acquisition should have increased but they managed to maintain that figure at around the same figure for three consecutive years.

**Fixed Assets**

**Table 4.4**

Hospira Pre Acquisition (Rs Crore)			
Year	2007	2008	2009
Fixed Assets	1276.9	1192.1	1147.8
Growth Rate		-6.64%	-3.72%
CAGR	-5.19%		



**Table 4.5**

Orchid Pre Acquisition (Rs Crore)			
Year	2007	2008	2009
Fixed Assets	982.42	1,413.81	1,866.34
Growth Rate		43.91%	32.01%
CAGR	37.83%		

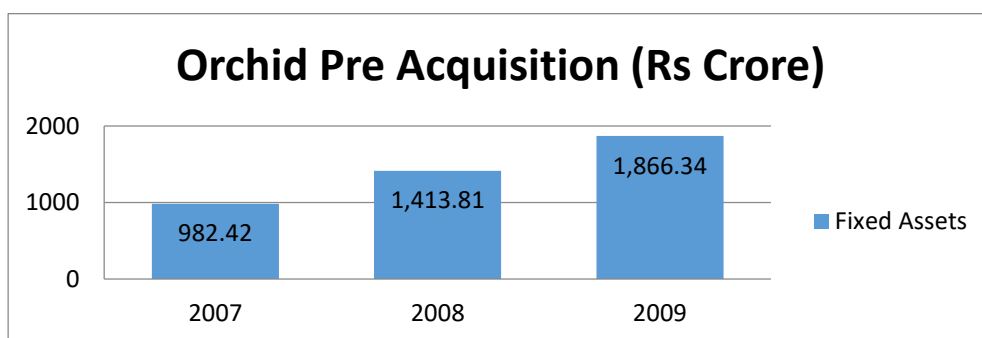
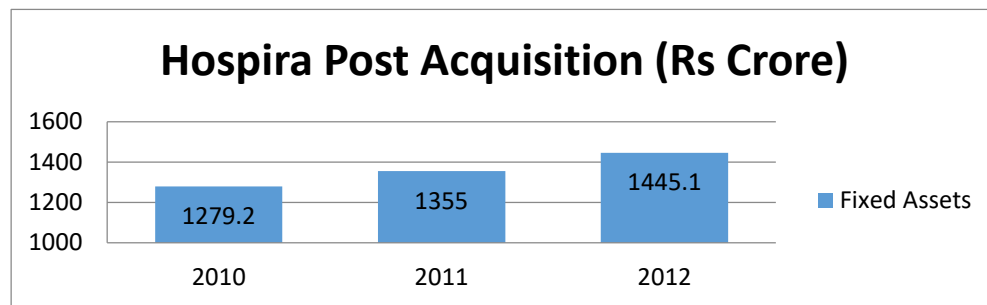


Table 4.6

Hospira Post Acquisition (Rs Crore)			
Year	2010	2011	2012
Fixed Assets	1279.2	1355	1445.1
Growth Rate	11.45%	5.93%	6.65%
CAGR	6.29%		



The Fixed Assets of Hospira in the pre-acquisition period were as high as 1150 crores but were on a decreasing trend whereas the fixed assets of Orchid were increasing at a very fast pace. Post-Acquisition the fixed assets of Hospira did increase but not at a pace at which the growth would have happened post-acquisition thus they were able to manage synergies with this deal.

#### Operating Costs

Table 4.7

Hospira Pre Acquisition (Rs Crore)			
Year	2007	2008	2009
Operating costs	3133.6	3111.7	3376.4
Growth Rate		-0.70%	8.51%
CAGR	3.80%		

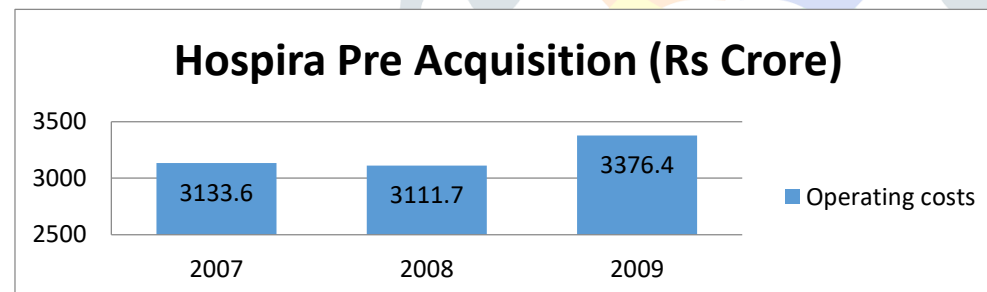


Table 4.8

Orchid Pre Acquisition (Rs Crore)			
Year	2007	2008	2009
Operating costs	720.08	964.54	1127.09
Growth Rate		33.95%	16.85%
CAGR	25.11%		

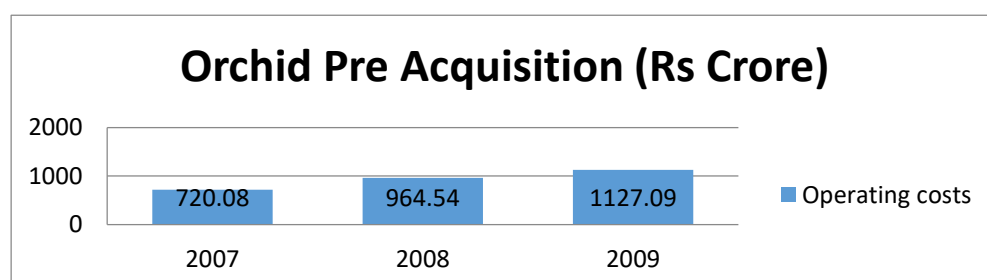
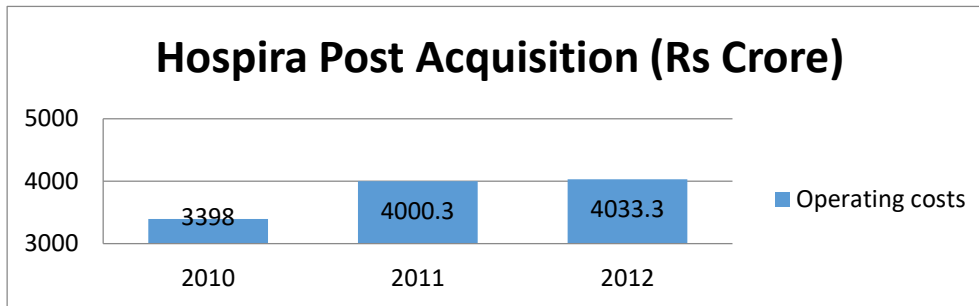


Table 4.9

Hospira Post Acquisition (Rs Crore)			
Year	2010	2011	2012
Operating costs	3398	4000.3	4033.3
Growth Rate	0.64%	17.73%	0.82%
CAGR	8.95%		



Now coming to the P & L item of operating cost to see if the actual expenditure of working changed significantly or not, we can see that the operating costs of Hospira were increasing at a small growth rate of 3.80% whereas for orchid was increasing at over 25%. Post-Acquisition the synergies were not met as the operating costs of hospira started growing at a fast pace.

#### Operating Profit Margin

Table 4.10

Hospira Pre Acquisition			
Year	2007	2008	2009
Operating profit margin	9.88	14.27	12.96
Growth Rate		44.43%	-9.18%
CAGR	14.53%		

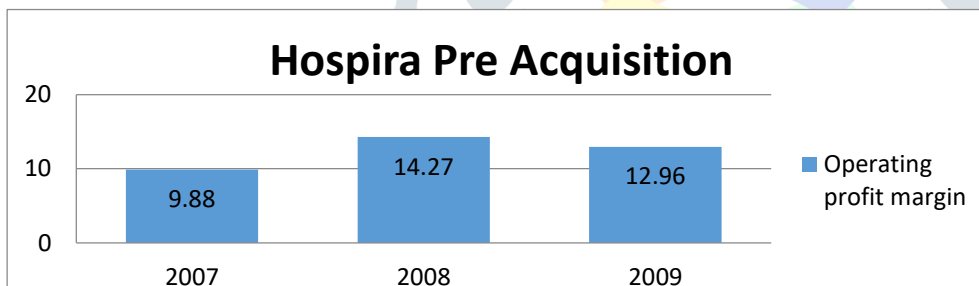


Table 4.11

Orchid Pre Acquisition			
Year	2007	2008	2009
Operating profit margin	23.59	25.8	9.93
Growth Rate		9.37%	-61.51%
CAGR	-35.12%		

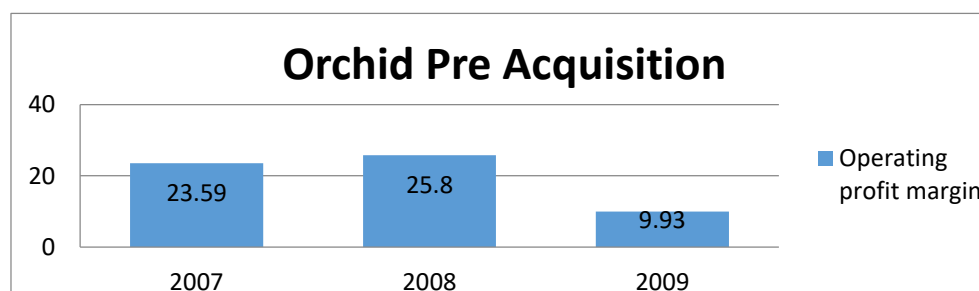
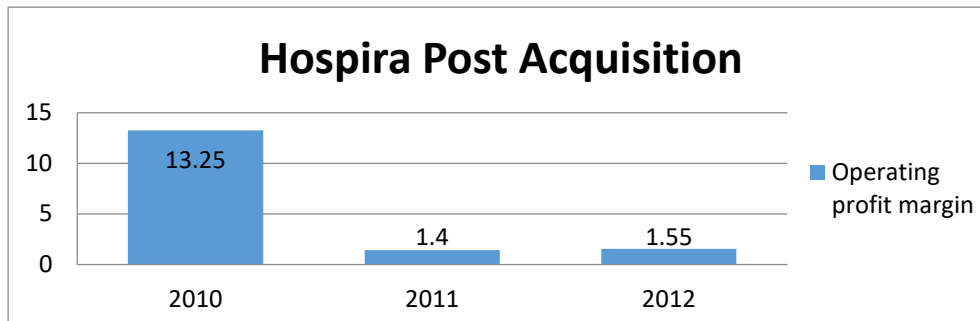


Table 4.12

Hospira Post Acquisition			
Year	2010	2011	2012
Operating profit margin	13.25	1.4	1.55
Growth Rate	2.24%	-89.43%	10.71%
CAGR	-65.80%		



Now coming at ratios, we will first check the operating profit margin where we can see that pre-acquisition it was increasing for Hospira and was at around 12 whereas that of Orchid was reducing at a very fast pace. Post-acquisition the Operating profit remained stable for the first few months but then had a drastic fall from 13 to 1 in a single go, thus showing that they were not able to control their operating expenditures post-acquisition.

#### Net Profit Margin

Table 4.13

Hospira Pre Acquisition			
Year	2007	2008	2009
Net profit margin	3.98	8.84	10.41
Growth Rate		122.11%	17.76%
CAGR	61.73%		

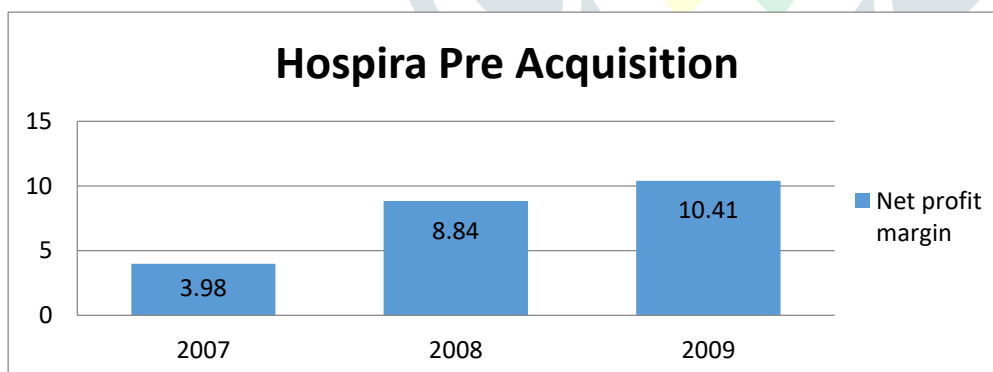


Table 4.14

Orchid Pre Acquisition			
Year	2007	2008	2009
Net profit margin	11.21	15.8	-3.57
Growth Rate		40.95%	-122.59%
CAGR	-43.57%		

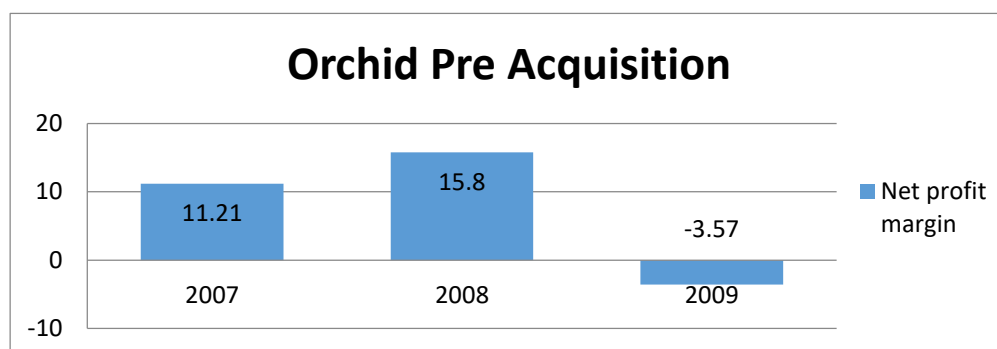
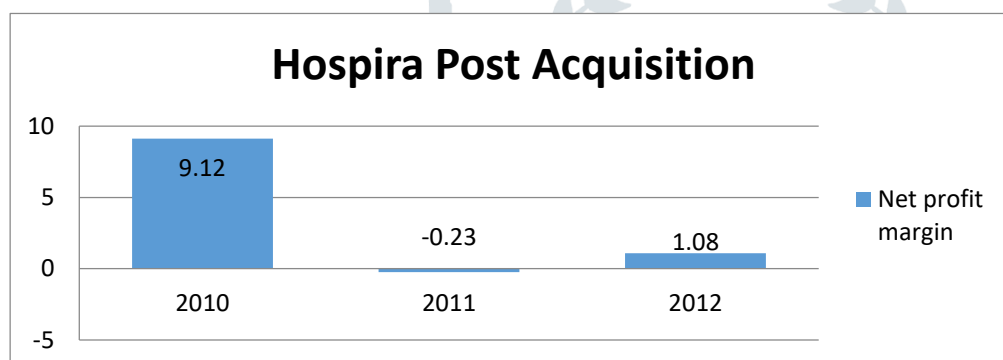


Table 4.15

Hospira Post Acquisition			
Year	2010	2011	2012
Net profit margin	9.12	-0.23	1.08
Growth Rate	-12.39%	-102.52%	569.57%
CAGR	-65.59%		



Now looking at Net Profit Margin which also includes non-operating costs rose from 4 to 10 whereas that of Orchid fell from 11 to -4 which is a huge fall. Post-Acquisition the net profit margin of Hospira came down as low as 1 in the year 2012 showing that they were not able to maintain the profitability of their company.

#### Current Ratio

Table 4.16

Hospira Pre Acquisition			
Year	2007	2008	2009
Current ratio	2.32	2.05	2.87
Growth Rate		-11.64%	40.00%
CAGR	11.22%		

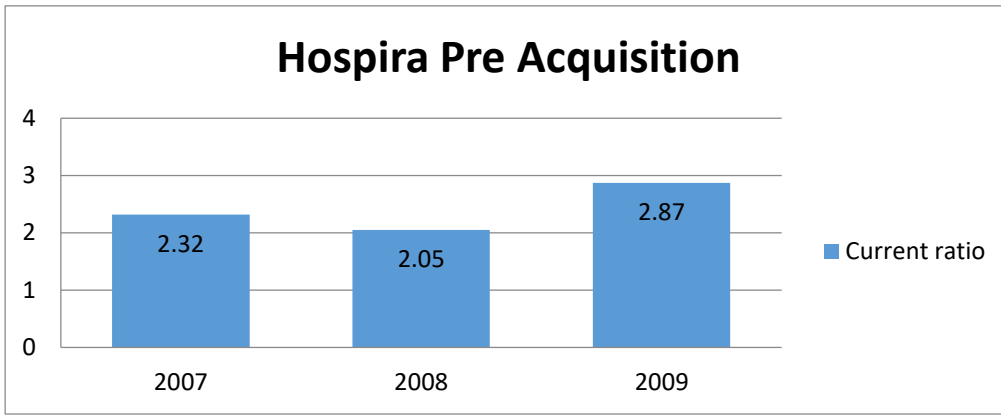


Table 4.17

Orchid Pre Acquisition			
Year	2007	2008	2009
Current ratio	1.3	1.13	1.18
Growth Rate		-13.08%	4.42%
CAGR	-4.73%		

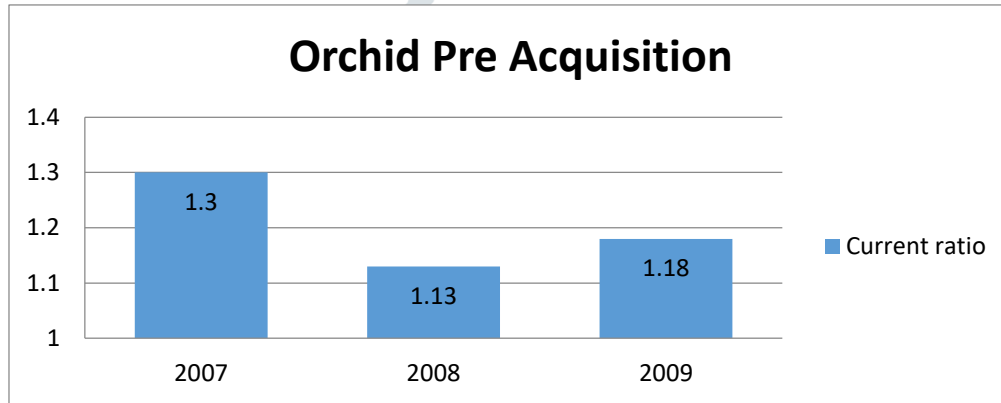
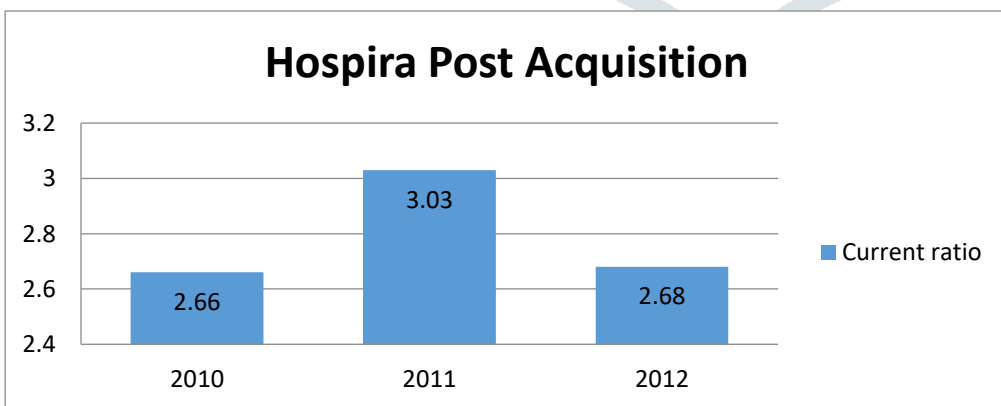


Table 4.18

Hospira Post Acquisition			
Year	2010	2011	2012
Current ratio	2.66	3.03	2.68
Growth Rate	-7.32%	13.91%	-11.55%
CAGR	0.38%		



After profitability we will look at the current ratio which explains if the current assets are sufficient to meet the current liabilities of the company. In the Pre-Acquisition period Hospira had a ratio around 2 and that of Orchid was just above 1. Whereas in the Post-Acquisition period the ratio for Hospira remained constant at around 2.5-3 thus showing they were able to maintain their ability to pay off their liabilities.



## Debt Equity Ratio

Table 4.19

Hospira Pre Acquisition			
Year	2007	2008	2009
Debt equity ratio	1.25	1.03	0.65
Growth Rate		-17.60%	-36.89%
CAGR	-27.89%		

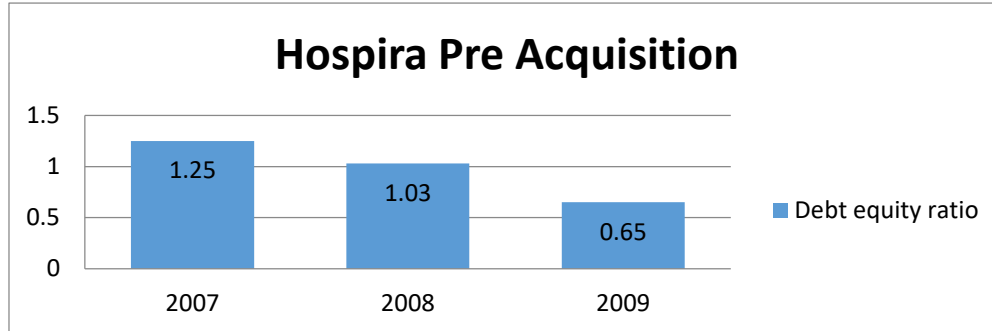


Table 4.20

Orchid Pre Acquisition			
Year	2007	2008	2009
Debt equity ratio	3.26	2.84	4.43
Growth Rate		-12.88%	55.99%
CAGR	16.57%		

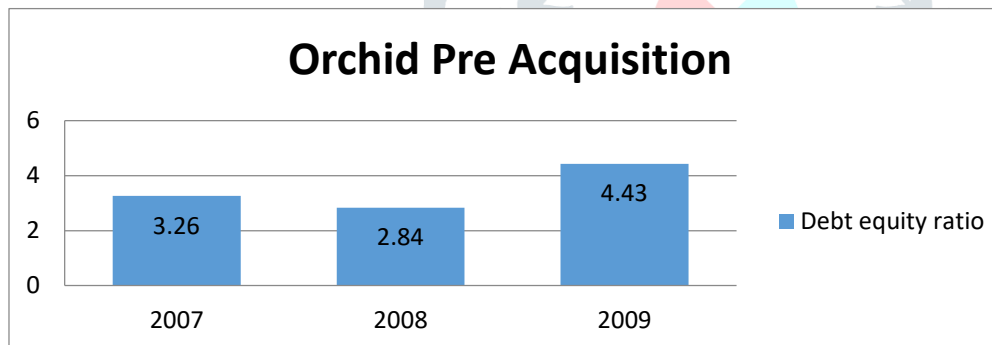
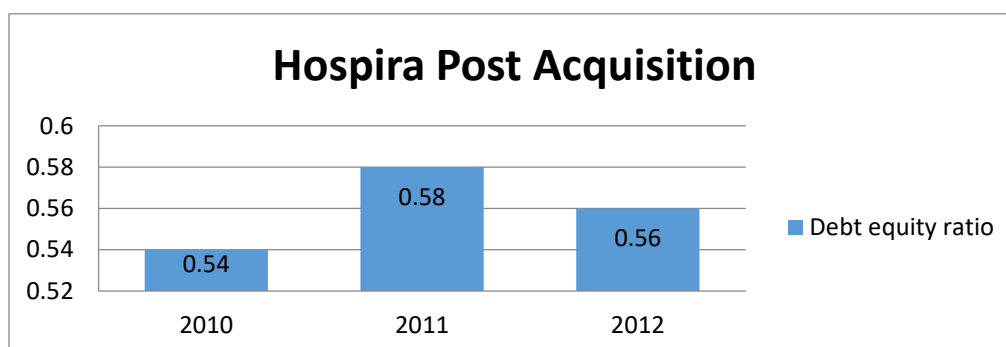


Table 4.21

Hospira Post Acquisition			
Year	2010	2011	2012
Debt equity ratio	0.54	0.58	0.56
Growth Rate	-16.92%	7.41%	-3.45%
CAGR	1.84%		



The Debt Equity ratio explains the proportion of debt in relation to the shareholders funds. This ratio of Hospira Pre Acquisition was decreasing at a pace of 25% and that of Orchid was increasing at around 15%. Post-Acquisition Hospira was able to maintain their Debt Equity Ratio at about the same level which overall is a low figure thus we can say that the Debt portion of Hospira post-acquisition in comparison to equity remained stable but was a low number.

### Accretive Dilutive

Table 4.22

Hospira Pre Acquisition			
Year	2007	2008	2009
EPS	1.46	0.24	2.56
Average	1.26		

Hospira Post Acquisition			
Year	2010	2011	2012
EPS	1.34	0.83	0.2

Accretive Dilutive Analysis compares the average EPS pre-acquisition with year on year data post-acquisition. Here we can see that average EPS pre-acquisition was 1.26 and it increased to 1.34 in the next year and then started declining to 0.83 and then went as low as 0.2. Falling EPS, which we can see here is a *prima-facie* evidence that the acquisition is not a successful one.

## 2. Abbott's acquisition of Piramal in May 2010

### Loans

Table 4.23

Abbott Pre Acquisition (Rs Crore)			
Year	2008	2009	2010
Loans	0.76	0	0
Growth Rate		-100.00%	0.00%
CAGR	-100.00%		

### Abbott Pre Acquisition (Rs Crore)

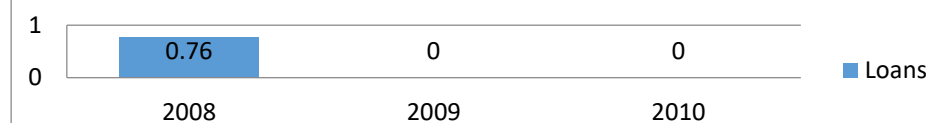


Table 4.24

Piramal Pre Acquisition (Rs Crore)			
Year	2008	2009	2010
Loans	504.29	976.86	660.96
Growth Rate		93.71%	32.34%
CAGR	14.48%		

### Piramal Pre Acquisition (Rs Crore)

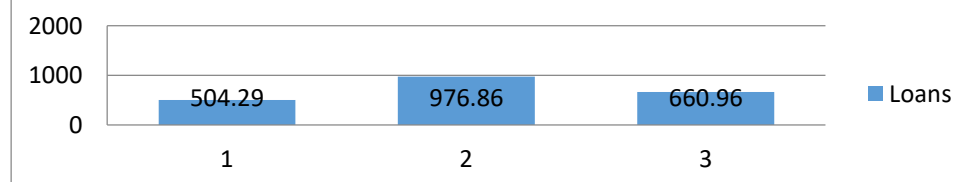


Table 4.25

Abbott Post Acquisition (Rs Crore)			
Year	2011	2012	2013
Loans	0	0	0
Growth Rate	0.00%	0.00%	0.00%
CAGR	0.00%		

Looking at the Loan figures of Abbott's Pre Acquisition we can see that their loans were negligible in 2008 and 0 in 2009-2010. In 2010 Piramal was acquired by Abbott which had a Pre-Acquisition CAGR on loan of 14.48%. However when Piramal was acquired by Abbott the Loans figure of Abbott Post-Acquisition should have increased but they managed to maintain that figure at 0 only.

#### Fixed Assets

Table 4.26

Abbott Pre Acquisition (Rs Crore)			
Year	2008	2009	2010
Fixed Assets	47.93	48.79	49.71
Growth Rate		1.79%	1.89%
CAGR	1.84%		

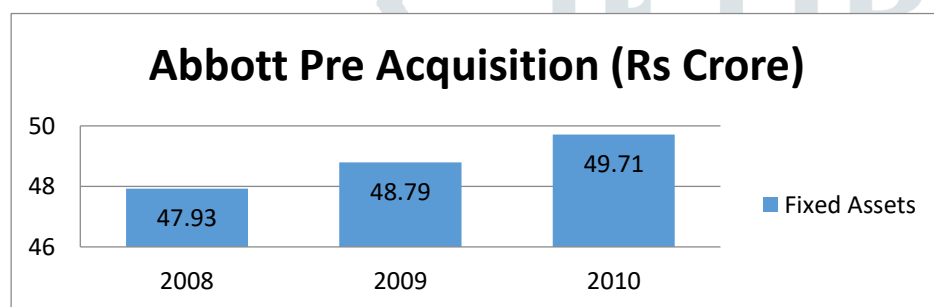


Table 4.27

Piramal Pre Acquisition (Rs Crore)			
Year	2008	2009	2010
Fixed Assets	808.23	1,018.72	1,073.89
Growth Rate		26.04%	5.42%
CAGR	15.27%		

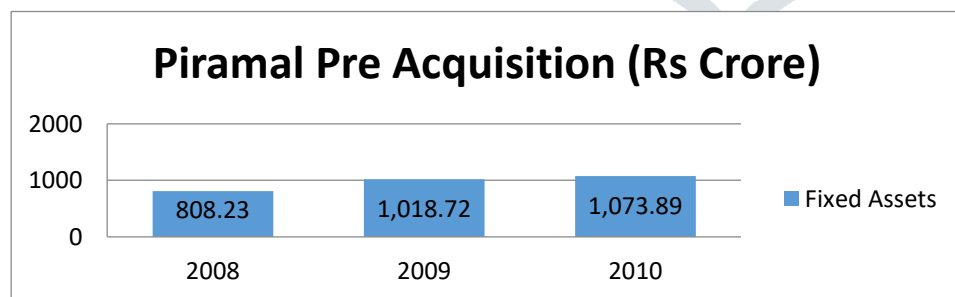
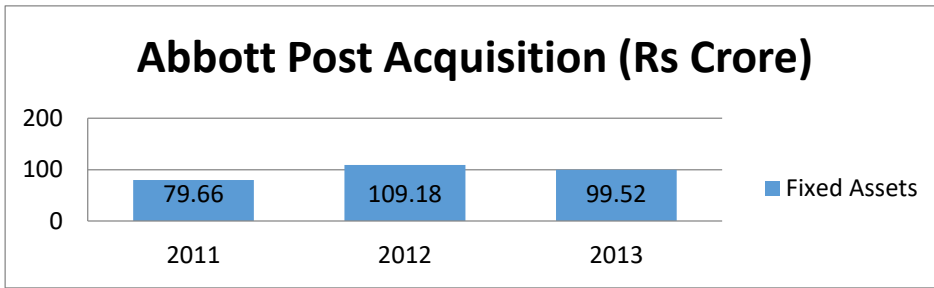


Table 4.28

Abbott Post Acquisition (Rs Crore)			
Year	2011	2012	2013
Fixed Assets	79.66	109.18	99.52
Growth Rate	60.25%	37.06%	8.85%
CAGR	11.77%		

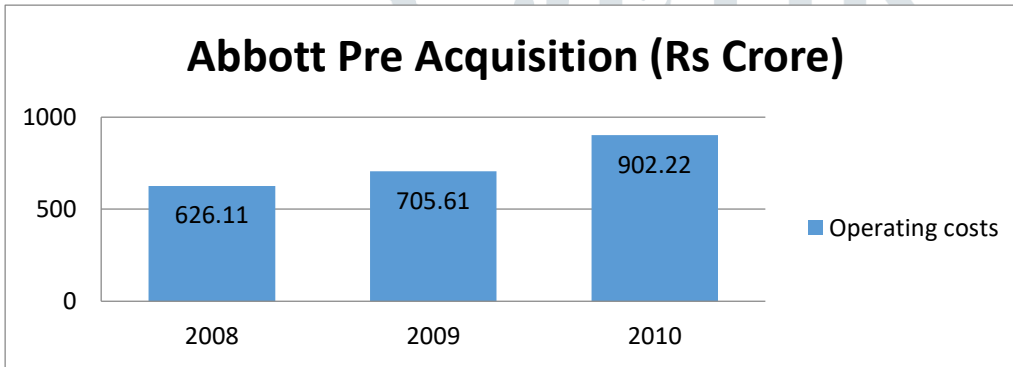


The Fixed Assets of Abbott in the pre-acquisition period were as high as 50 crores and were stagnant whereas the fixed assets of Piramal were increasing at a pace of 15%. Post-Acquisition the fixed assets of Abbott increased at over 11% thus they were not able to manage synergies with this deal as they could not benefit from using overlapping assets.

**Operating Costs**

**Table 4.29**

Abbott Pre Acquisition (Rs Crore)			
Year	2008	2009	2010
Operating costs	626.11	705.61	902.22
Growth Rate		12.70%	27.86%
CAGR	20.04%		



**Table 4.30**

Piramal Pre Acquisition (Rs Crore)			
Year	2008	2009	2010
Operating costs	1587.69	1898.21	2154.18
Growth Rate		19.56%	13.48%
CAGR	16.48%		

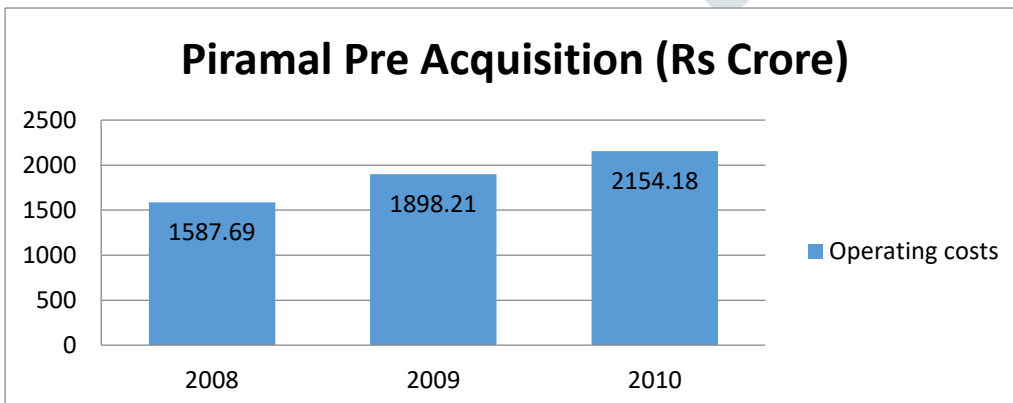
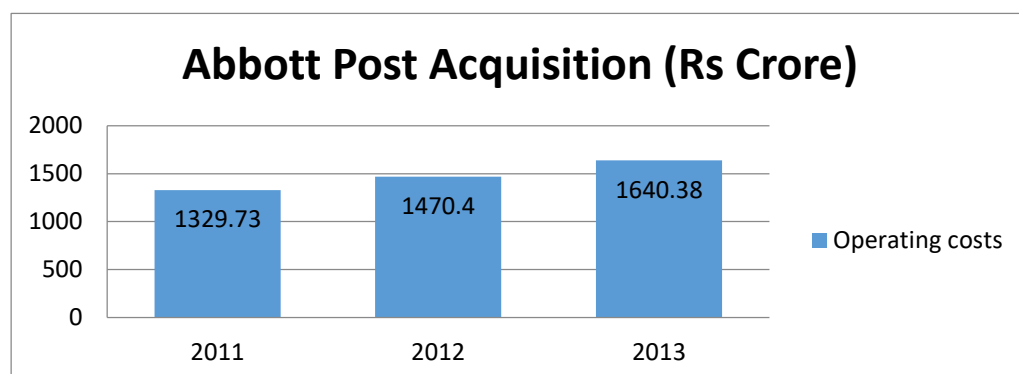


Table 4.31

Abbott Post Acquisition (Rs Crore)			
Year	2011	2012	2013
Operating costs	1329.73	1470.4	1640.38
Growth Rate	47.38%	10.58%	11.56%
CAGR	11.07%		



Now coming to the P & L item of operating cost to see if the actual expenditure of working changed significantly or not, we can see that the operating costs of Abbott were increasing at a growth rate of 20% and were 900 crore whereas for Piramal was increasing at over 15%. Post-Acquisition the synergies were met as the operating costs of Abbott though were still growing but the CAGR came down drastically.

### Operating Profit Margin

Table 4.32

Abbott Pre Acquisition			
Year	2008	2009	2010
Operating profit margin	13.57	14.8	9.09
Growth Rate		9.06%	-
CAGR	-18.16%		

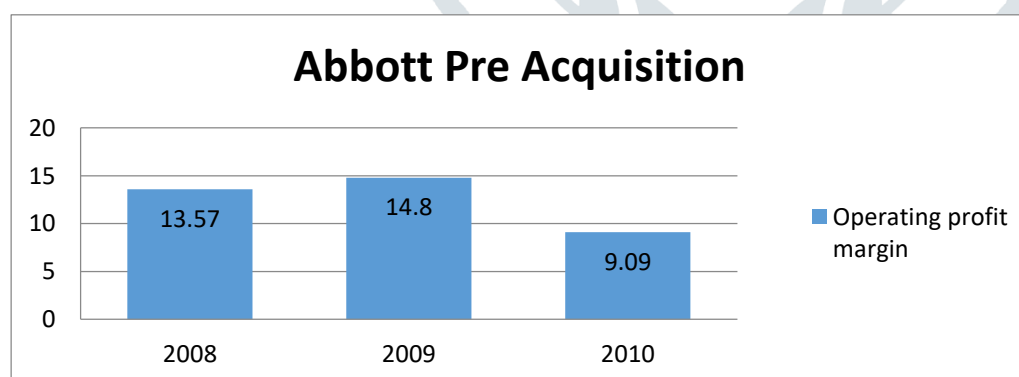


Table 4.33

Piramal Pre Acquisition			
Year	2008	2009	2010
Operating profit margin	21.11	21.33	23.88
Growth Rate		1.04%	11.95%
CAGR	6.36%		

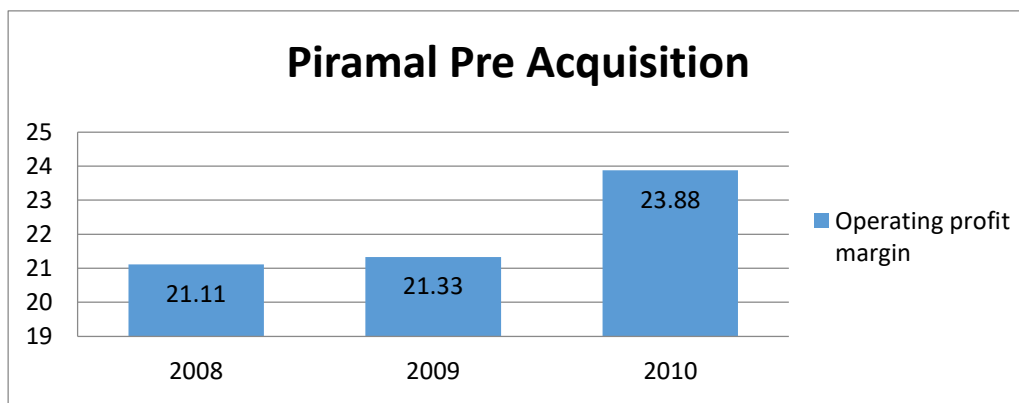
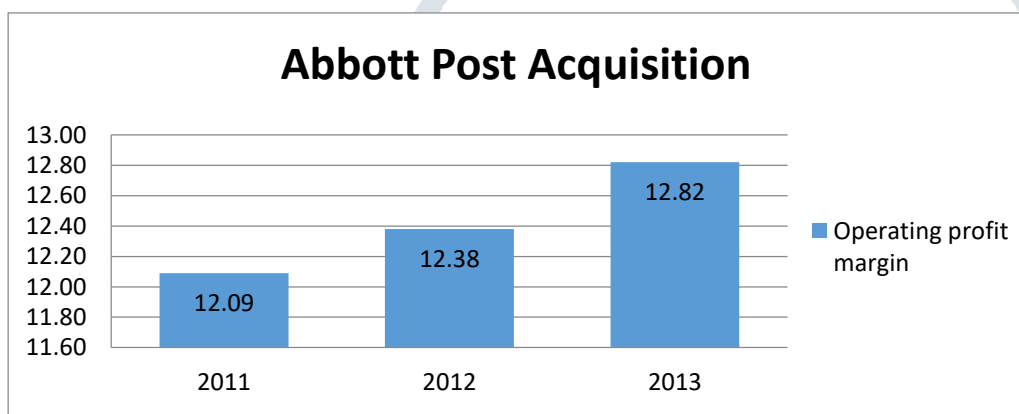


Table 4.34

Abbott Post Acquisition			
Year	2011	2012	2013
Operating profit margin	12.09	12.38	12.82
Growth Rate	33.00%	2.40%	3.55%
CAGR	2.97%		



Now coming at ratios, we will first check the operating profit margin where we can see that pre-acquisition it was decreasing for Abbott and was at around 9, whereas that of Piramal was increasing at a moderate pace. Post-acquisition the Operating profit ratio increased to 12 immediately after acquisition and then remained stable thereafter at around 12 only, thus showing that they were able to increase and maintain their profitability post-acquisition.

**Net Profit Margin**

Table 4.35

Abbott Pre Acquisition			
Year	2008	2009	2010
Net profit margin	9.04	9.76	5.88
Growth Rate		7.96%	39.75%
CAGR	-19.35%		

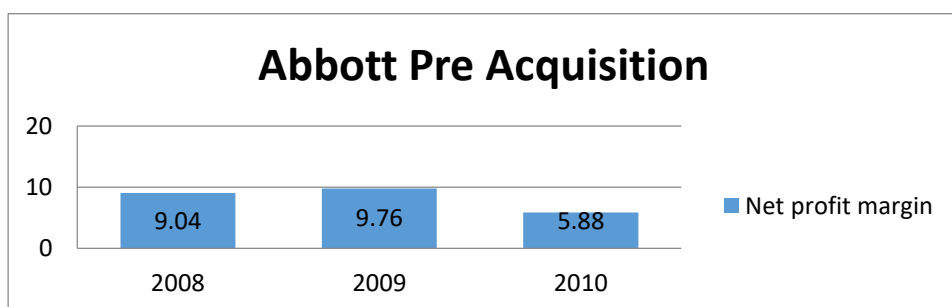


Table 4.36

Piramal Pre Acquisition			
Year	2008	2009	2010
Net profit margin	15.72	11.85	16.69
Growth Rate		-	40.84%
CAGR	3.04%		

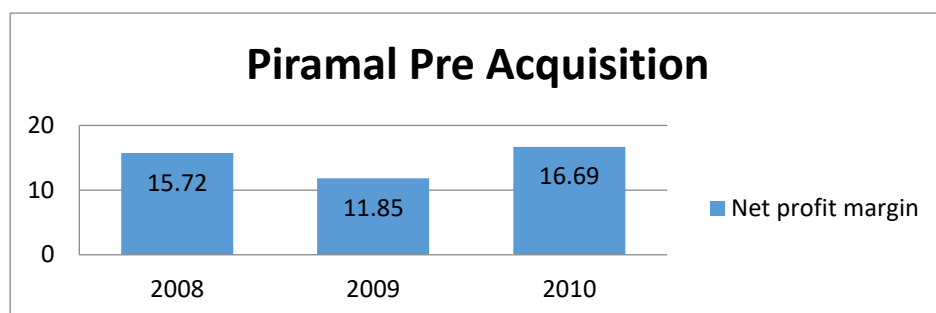
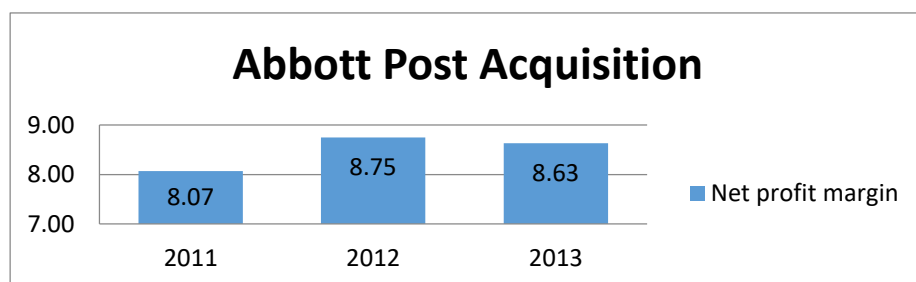


Table 4.37

Abbott Post Acquisition			
Year	2011	2012	2013
Net profit margin	8.07	8.75	8.63
Growth Rate	37.24%	8.43%	-
CAGR	3.41%		

Now looking at Net Profit Margin which also includes non-operating costs fell from 9 to 6 whereas that of Piramal remained constant at around 15-16. Post-Acquisition the net profit margin of Abbott rose back to 8-9 and remained constant thereafter thus showing that they were able to maintain the profitability of their company.

#### Current Ratio

Table 4.38

Abbott Pre Acquisition			
Year	2008	2009	2010
Current ratio	2.4	3.06	2.72
Growth Rate		27.50%	-11.11%
CAGR	6.46%		

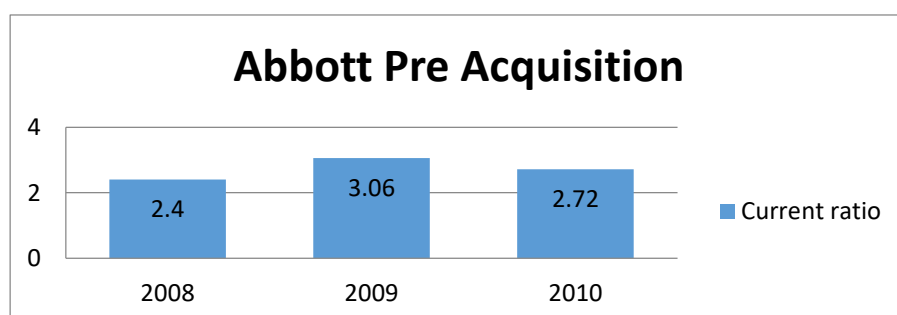


Table 4.39

Piramal Pre Acquisition			
Year	2008	2009	2010
Current ratio	1.85	2.79	2.56
Growth Rate		50.81%	-
CAGR	17.63%		

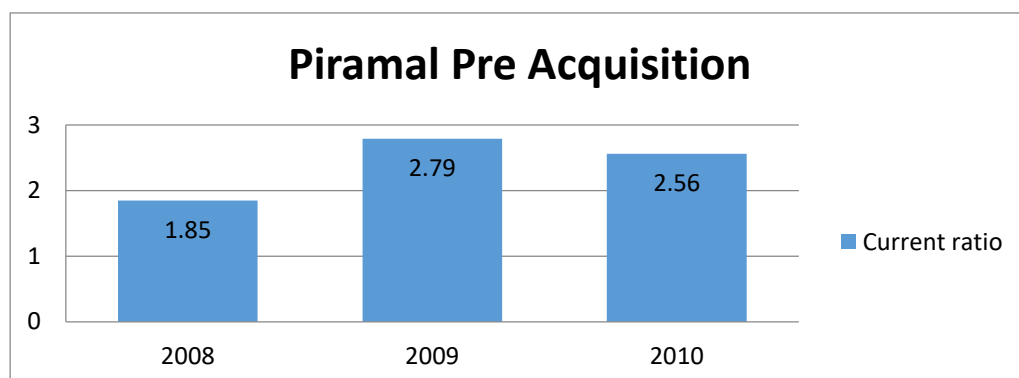
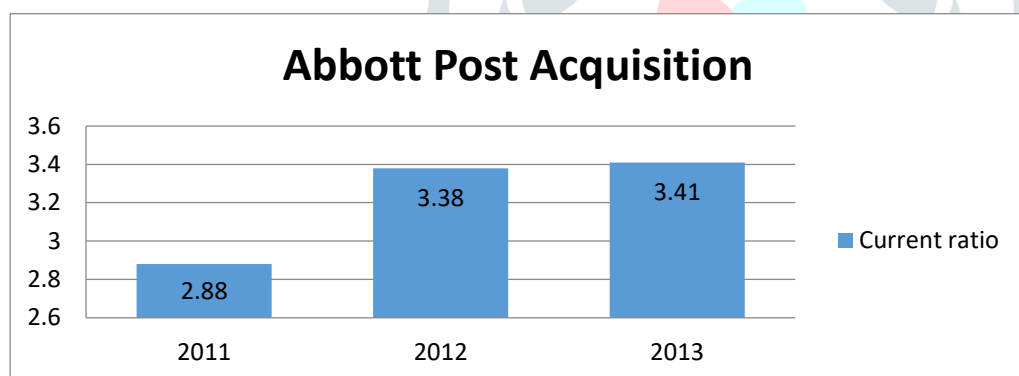


Table 4.40

Abbott Post Acquisition			
Year	2011	2012	2013
Current ratio	2.88	3.38	3.41
Growth Rate	5.88%	17.36%	0.89%
CAGR	8.81%		



After profitability we will look at the current ratio which explains if the current assets are sufficient to meet the current liabilities of the company. In the Pre-Acquisition period Abbott had a ratio around 2.5 and that of Piramal was around 2. Whereas in the Post-Acquisition period the ratio for Abbott remained constant at around 2.5-3 thus showing they were able to maintain their ability to pay off their liabilities.

#### Debt Equity Ratio

Table 4.41

Abbott Pre Acquisition			
Year	2008	2009	2010
Debt equity ratio	0	0	0
Growth Rate		0.00%	0.00%
CAGR	0.00%		



Piramal Pre Acquisition			
Year	2008	2009	2010
Debt equity ratio	0.5	0.82	0.44
Growth Rate		64.00%	-46.34%
CAGR	-6.19%		

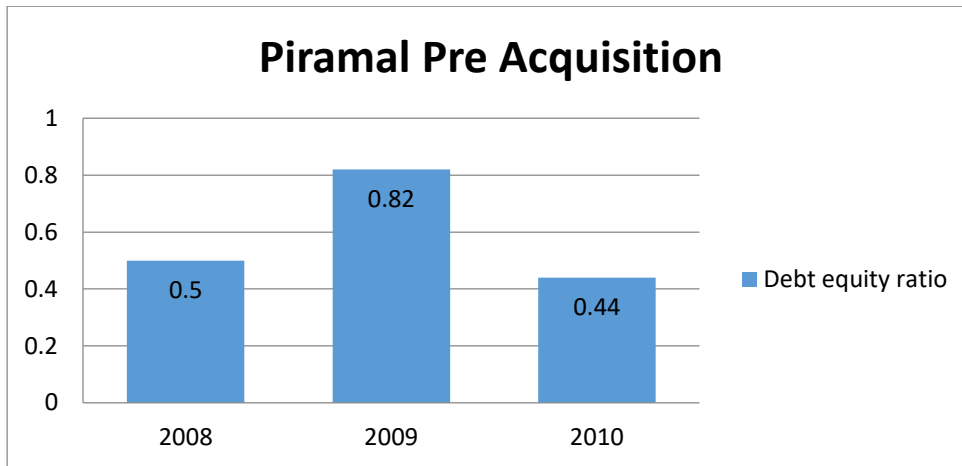


Table 4.42

Abbott Post Acquisition			
Year	2011	2012	2013
Debt equity ratio	0	0	0
Growth Rate	0.00%	0.00%	0.00%
CAGR	0.00%		

The Debt Equity ratio explains the proportion of debt in relation to the shareholders' funds. This ratio of Abbott Pre Acquisition was 0 and that of Piramal was decreasing at around 6%. Post-Acquisition Abbott was able to maintain their Debt Equity Ratio at 0 thus we can say that the Debt portion of Abbott post acquisition in comparison to equity remained 0 and did not increase.

#### Accretive Dilutive

Table 4.43

Abbott Pre Acquisition			
Year	2008	2009	2010
EPS	45.96	56.68	44.56
Average	49.067		

Abbott Post Acquisition			
Year	2011	2012	2013
EPS	56.66	68.1	93.39

Accretive Dilutive Analysis compares the average EPS pre-acquisition with year on year data post-acquisition. Here we can see that average EPS pre-acquisition was 49.067 and it increased to 56.66 in the next year and then increased further to 0.83 and then went to 93.39. Rising EPS, which we can see here is a *prima-facie* evidence that the acquisition is a successful one.

### 3. Fresenius Kabi’s acquisition of Dabur Pharma in June 2008

Loans

Table 4.44

Fresenius Kabi Pre Acquisition (Rs Crore)			
Year	2006	2007	2008
Loans	52.68	146.03	194.58
Growth Rate		177.20%	33.25%
CAGR	92.19%		

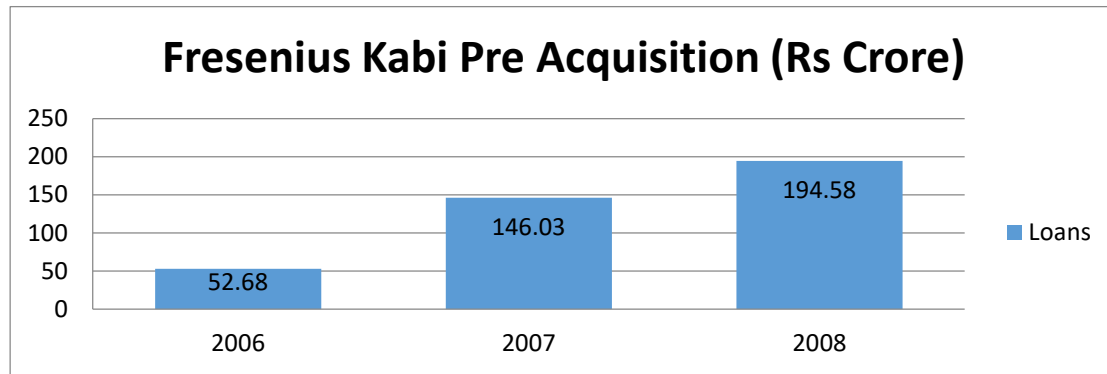


Table 4.45

Dabur Pre Acquisition (Rs Crore)			
Year	2006	2007	2008
Loans	20.48	3.8	5.46
Growth Rate		-81.45%	43.68%
CAGR	-48.37%		

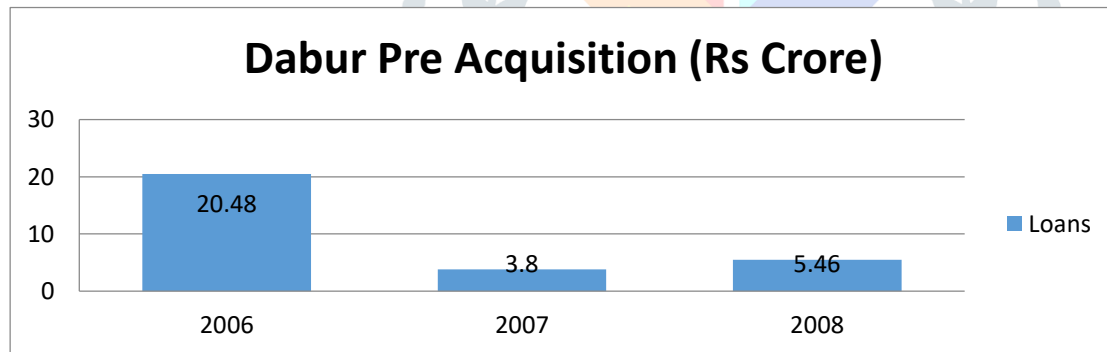
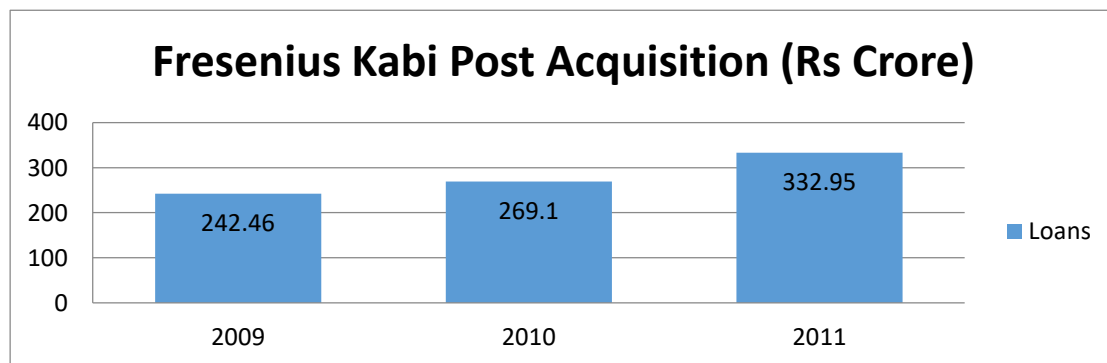


Table 4.46

Fresenius Kabi Post Acquisition (Rs Crore)			
Year	2009	2010	2011
Loans	242.46	269.1	332.95
Growth Rate	24.61%	10.99%	23.73%
CAGR	17.18%		



Looking at the Loan figures of Fresenius Kabi's Pre Acquisition we can see that their loans were increasing with a CAGR of over 90%. In 2008 Dabur was acquired by Fresenius Kabi which had a Pre-Acquisition loan of 5-6 crores. After Dabur was acquired by Fresenius Kabi the Loans figure of Fresenius Kabi Post Acquisition increased at 17% which is a high number thus they were not able to manage their loans efficiently.

#### Fixed Assets

Table 4.47

Fresenius Kabi Pre Acquisition (Rs Crore)			
Year	2006	2007	2008
Fixed Assets	70.84	69.98	74.27
Growth Rate		-1.21%	6.13%
CAGR	2.39%		

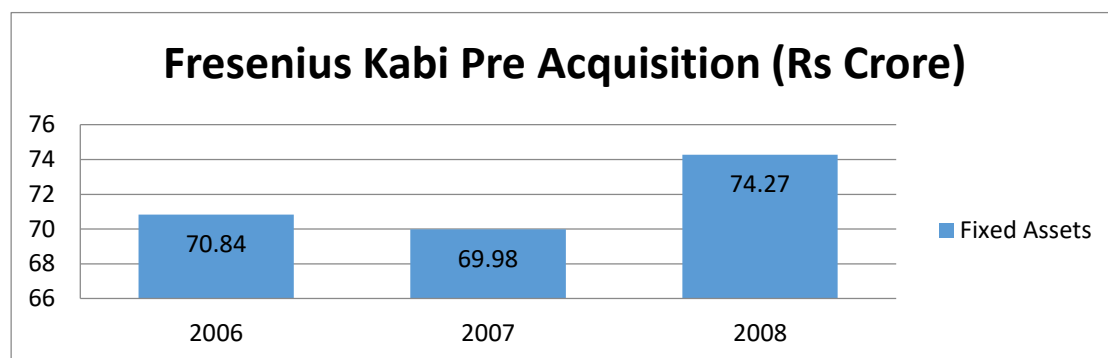


Table 4.48

Dabur Pre Acquisition (Rs Crore)			
Year	2006	2007	2008
Fixed Assets	285.77	239.04	294.43
Growth Rate		-16.35%	23.17%
CAGR	1.50%		

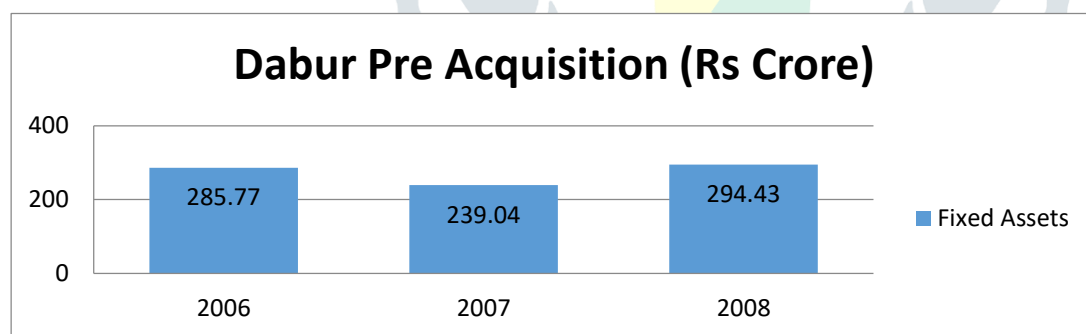
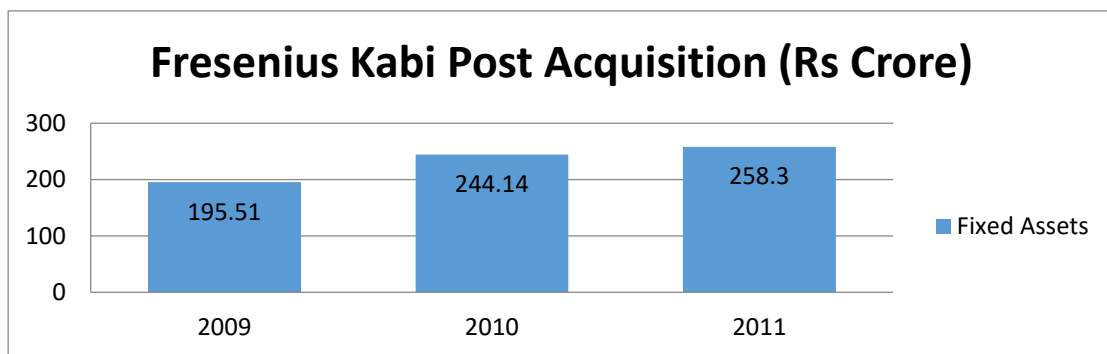


Table 4.49

Fresenius Kabi Post Acquisition (Rs Crore)			
Year	2009	2010	2011
Fixed Assets	195.51	244.14	258.3
Growth Rate	163.24%	24.87%	5.80%
CAGR	14.94%		



The Fixed Assets of Fresenius Kabi in the pre-acquisition period were 75 crores and were stagnant whereas the fixed assets of Dabur were stagnant at around 250 crores. Post-Acquisition the fixed assets of Fresenius Kabi increased at 15% thus they were not able to manage synergies with this deal as they could not benefit from using overlapping assets.

#### Operating Costs

Table 4.50

Fresenius Kabi Pre Acquisition (Rs Crore)			
Year	2006	2007	2008
Operating costs	223.6	274.03	218.69
Growth Rate		22.55%	20.19%
CAGR	-1.10%		

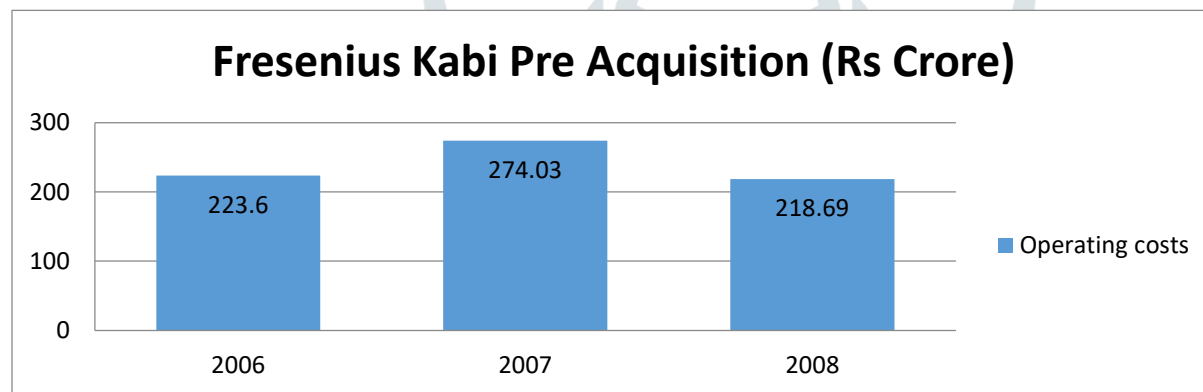


Table 4.51

Dabur Pre Acquisition (Rs Crore)			
Year	2006	2007	2008
Operating costs	1130.46	1471.39	1738.75
Growth Rate		30.16%	18.17%
CAGR	24.02%		

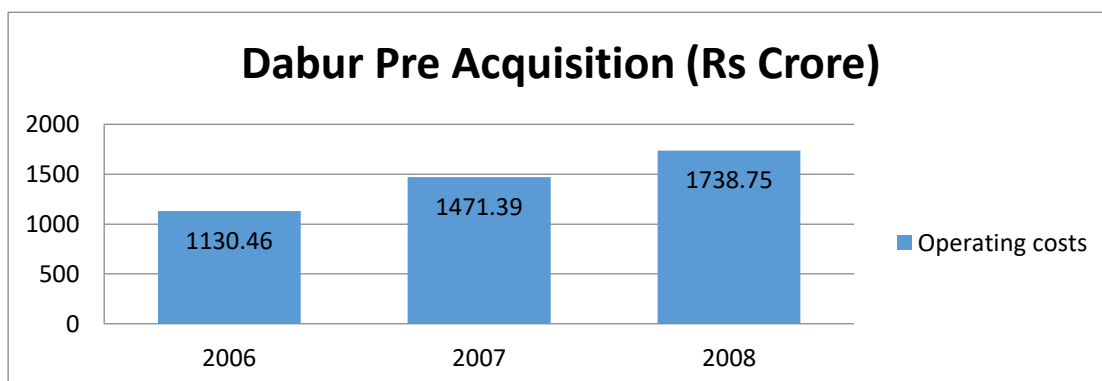
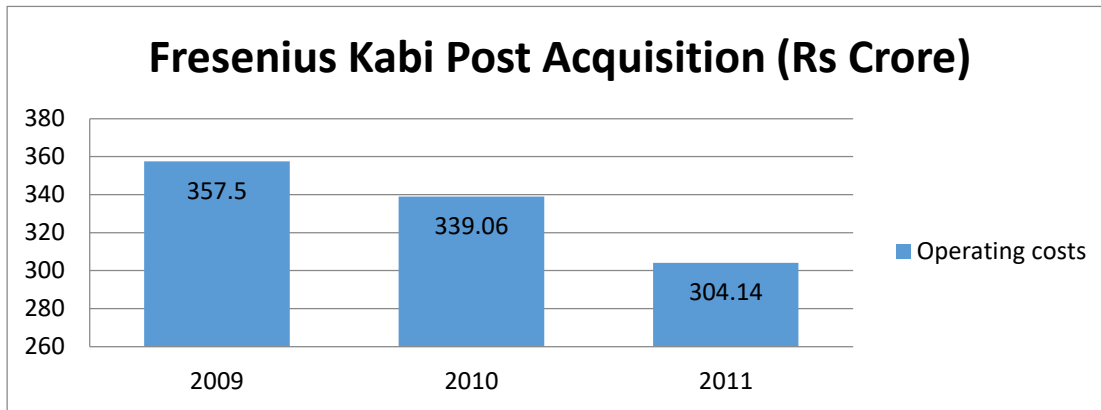


Table 4.52

Fresenius Kabi Post Acquisition (Rs Crore)			
Year	2009	2010	2011
Operating costs	357.5	339.06	304.14
Growth Rate	63.47%	-5.16%	-10.30%
CAGR	-7.76%		



Now coming to the P & L item of operating cost to see if the actual expenditure of working changed significantly or not, we can see that the operating costs of Fresenius Kabi were stagnant at 220 crores whereas for Dabur was increasing at over 24%. Post-Acquisition the synergies were met as the operating costs of Abbott though were higher but the CAGR came down drastically.

#### Operating Profit Margin

Table 4.53

Fresenius Kabi Pre Acquisition			
Year	2006	2007	2008
Operating profit margin	30.525	-21.954	-13.383
Growth Rate	-	28.08%	39.04%
CAGR	-33.79%		

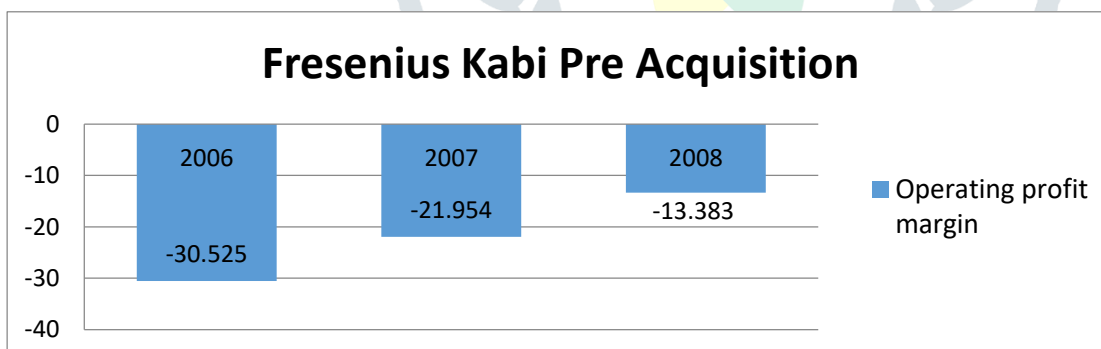


Table 4.54

Dabur Pre Acquisition			
Year	2006	2007	2008
Operating profit margin	16.2	16.4	17.81
Growth Rate		1.23%	8.60%
CAGR	4.85%		

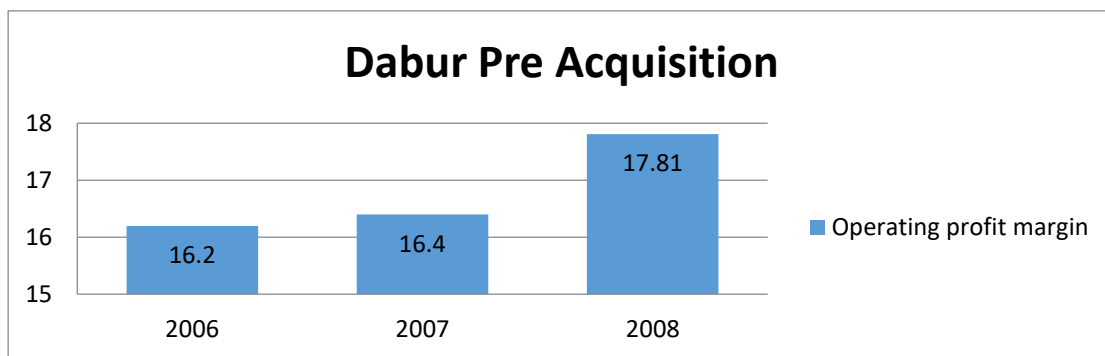
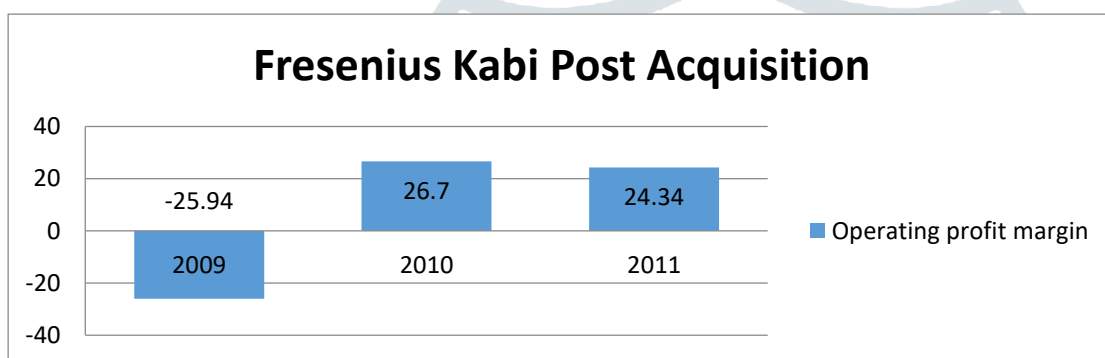


Table 4.55

Fresenius Kabi Post Acquisition			
Year	2009	2010	2011
Operating profit margin	-25.94	26.7	24.34
Growth Rate	-93.83%	202.93%	-
CAGR	39%		



Now coming at ratios, we will first check the operating profit margin where we can see that pre-acquisition it was increasing for Fresenius Kabi from -30 to -13, whereas that of Dabur was increasing at a moderate pace. Post-acquisition the Operating profit ratio fell to -25 immediately after acquisition and then climbed enormously to 25, thus showing that they were able to increase and maintain their profitability post acquisition.

#### Net Profit Margin

Table 4.56

Fresenius Kabi Pre Acquisition			
Year	2006	2007	2008
Net profit margin	-31.252	-24.024	-16.796
Growth Rate		23.13%	30.09%
CAGR	-26.69%		

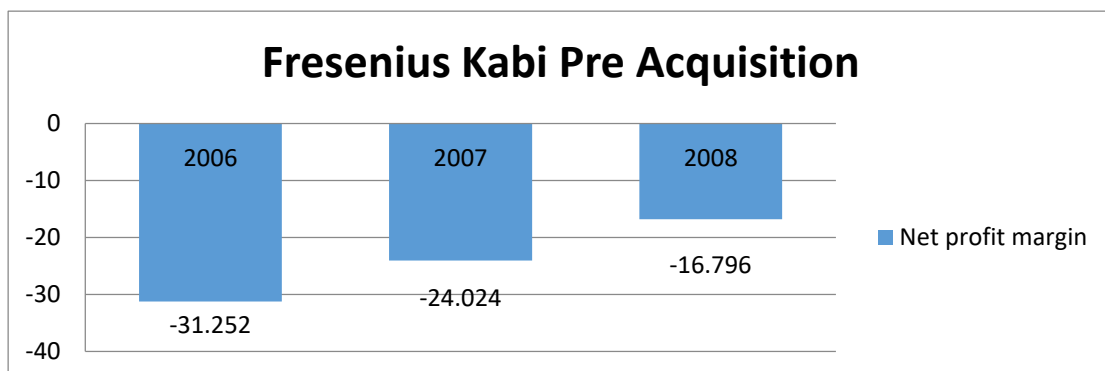


Table 4.57

Dabur Pre Acquisition			
Year	2006	2007	2008
Net profit margin	14.06	14.43	15.08
Growth Rate		2.63%	4.50%
CAGR	3.56%		

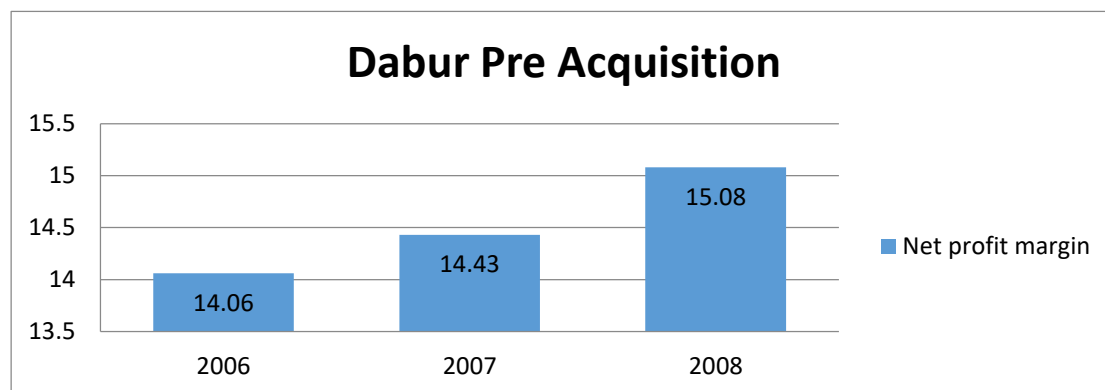
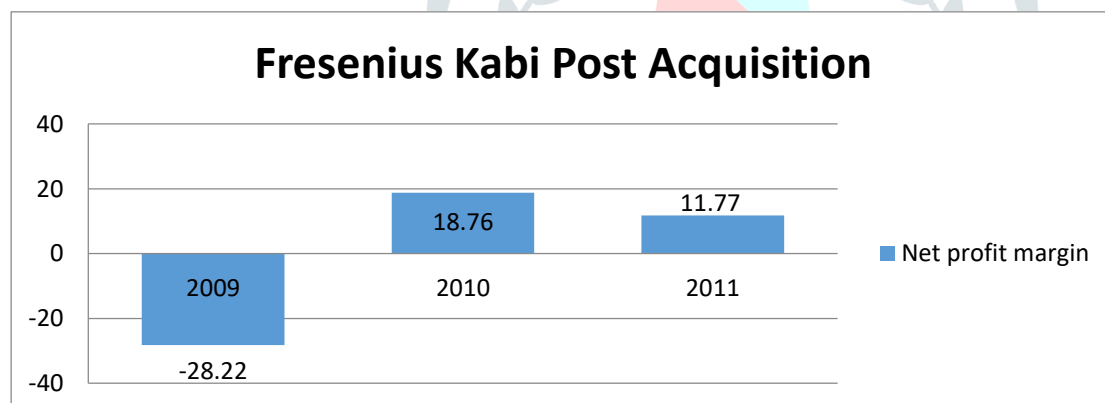


Table 4.58

Fresenius Kabi Post Acquisition			
Year	2009	2010	2011
Net profit margin	-28.22	18.76	11.77
Growth Rate	-	166.48%	37.26%
CAGR	-35.42%		



Now looking at Net Profit Margin which also includes non-operating costs, rose from -31 to -16 whereas that of Dabur remained constant at around 14-15. Post-Acquisition the net profit margin of Fresenius Kabi fell down back to -28 and then went up to 18 and then 11 thus showing that they were able to maintain the profitability of their company post one year of acquisition.

#### Current Ratio

Table 4.59

Fresenius Kabi Pre Acquisition			
Year	2006	2007	2008
Current ratio	0.38	0.614	0.848
Growth Rate		61.58%	38.11%
CAGR	49.38%		

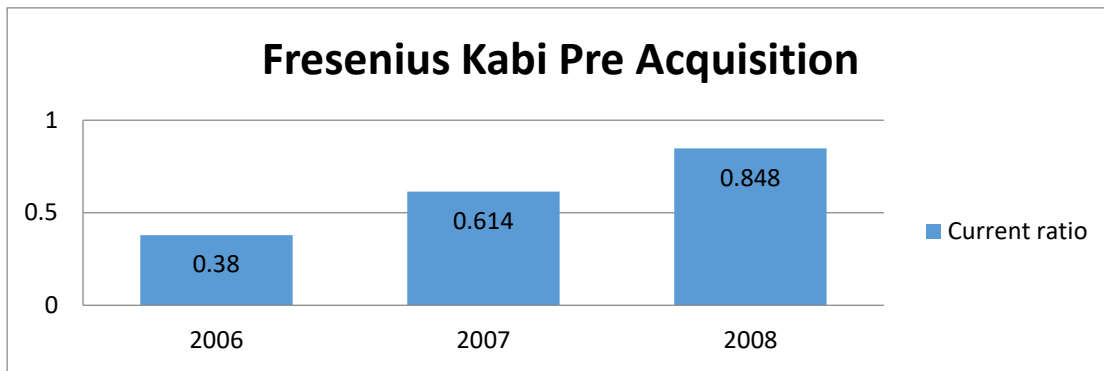


Table 4.60

Dabur Pre Acquisition			
Year	2006	2007	2008
Current ratio	0.89	1.06	0.93
Growth Rate		19.10%	-12.26%
CAGR	2.22%		

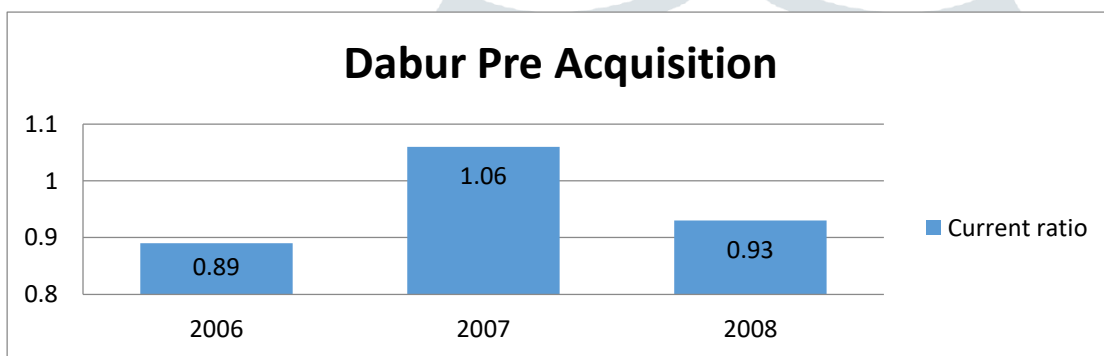
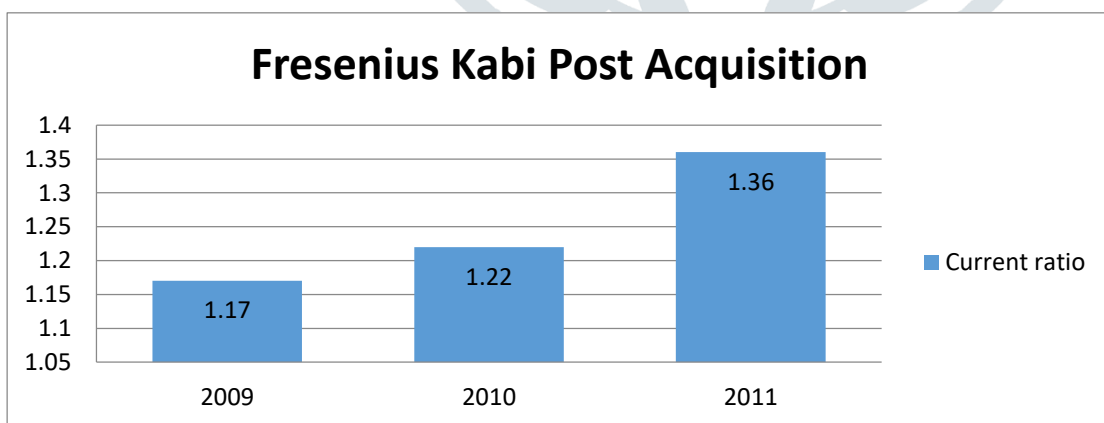


Table 4.61

Fresenius Kabi Post Acquisition			
Year	2009	2010	2011
Current ratio	1.17	1.22	1.36
Growth Rate	37.97%	4.27%	11.48%
CAGR	7.81%		



After profitability we will look at the current ratio which explains if the current assets are sufficient to meet the current liabilities of the company. In the Pre-Acquisition period Fresenius Kabi had a ratio around 0.5 and that of Dabur was around 1. Whereas in the Post-Acquisition period the ratio for Fresenius Kabi increased from 0.8 to 1.36 in three years thus showing they were able to increase their ability to pay off their liabilities.



## Debt Equity Ratio

Table 4.62

Fresenius Kabi Pre Acquisition			
Year	2006	2007	2008
Debt equity ratio	0.647	0.868	0.762
Growth Rate		34.16%	-
CAGR	8.52%		

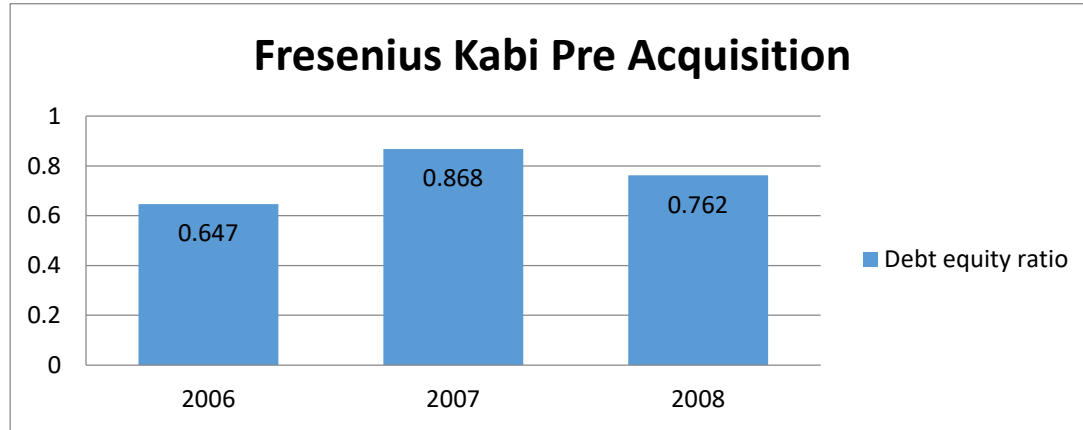


Table 4.63

Dabur Pre Acquisition			
Year	2006	2007	2008
Debt equity ratio	0.05	0.05	0.03
Growth Rate		0.00%	40.00%
CAGR	-22.54%		

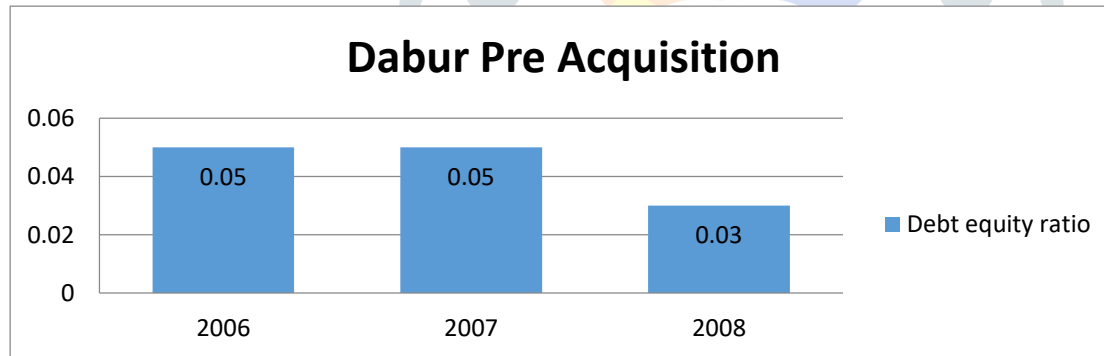
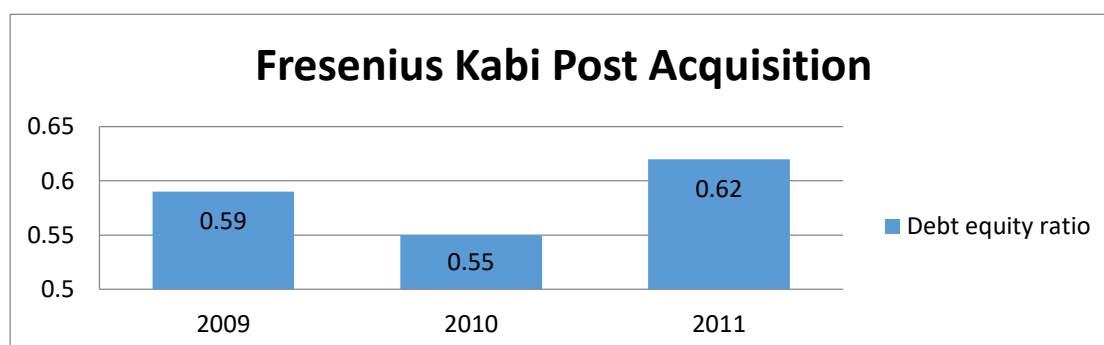


Table 4.64

Fresenius Kabi Post Acquisition			
Year	2009	2010	2011
Debt equity ratio	0.59	0.55	0.62
Growth Rate	-	-	12.73%
CAGR	2.51%		



The Debt Equity ratio explains the proportion of debt in relation to the shareholders' funds. This ratio of Fresenius Kabi Pre Acquisition was around 0.75 and that of Dabur was constant at around 0.05. Post-Acquisition Fresenius Kabi's Debt Equity Ratio came down to around 0.6 thus we can say that the Debt portion of Fresenius Kabi post acquisition did not increase which is a good sign post acquisition.

#### Accretive Dilutive Analysis

Table 4.65

Fresenius Kabi Pre Acquisition			
Year	2006	2007	2008
EPS	1.19	1.61	9.53
Average	4.11		

Fresenius Kabi Post Acquisition			
Year	2009	2010	2011
EPS	-4.91	5.07	3.11

Accretive Dilutive Analysis compares the average EPS pre-acquisition with year on year data post acquisition. Here we can see that average EPS pre-acquisition was 4.11 and it fell down to -4.91 in the first year post acquisition and then went above the previous average to 5.07. Thus showing that it took more than one year to reap the benefits of acquisition, here rising EPS post one year is a *prima-facie* evidence that the acquisition is a successful one but took time to show results.

#### 5.1 Findings

- Hospira Pre Acquisition we can see that their loans were on a decreasing trend from 2007 – 2009 with a CAGR of -11.59%.
- In 2009 orchid was acquired by Hospira which had a Pre-Acquisition CAGR on loan of 26.14%.
- The Fixed Assets of Hospira in the pre-acquisition period were as high as 1150 crores but were on a decreasing trend whereas the fixed assets of Orchid were increasing at a very fast pace.
- Post-Acquisition the fixed assets of Hospira did increase but not at a pace at which the growth would have happened post-acquisition thus they were able to manage synergies with this deal.
- The operating costs of Hospira were increasing at a small growth rate of 3.80% whereas for orchid was increasing at over 25%.
- Post-Acquisition the synergies were not met as the operating costs of hospira started growing at a fast pace.
- The operating profit margin during the pre-acquisition was increasing for Hospira and was at around 12 whereas that of Orchid was reducing at a very fast pace.
- Post-acquisition the Operating profit remained stable for the first few months but then had a drastic fall from 13 to 1 in a single go.
- Net Profit Margin which also includes non-operating costs rose from 4 to 10 whereas that of Orchid fell from 11 to -4 which is a huge fall
- In the Pre-Acquisition period Hospira had a ratio around 2 and that of Orchid was just above 1. Whereas in the Post-Acquisition period the ratio for Hospira remained constant at around 2.5-3 thus showing they were able to maintain their ability to pay off their liabilities.
- This ratio of Hospira Pre Acquisition was decreasing at a pace of 25% and that of Orchid was increasing at around 15%.
- Abbott's Pre Acquisition we can see that their loans were negligible in 2008 and 0 in 2009-2010. In 2010 Piramal was acquired by Abbott which had a Pre-Acquisition CAGR on loan of 14.48%.
- The Fixed Assets of Abbott in the pre-acquisition period were as high as 50 crores and were stagnant whereas the fixed assets of Piramal were increasing at a pace of 15%
- Operating costs of Abbott were increasing at a growth rate of 20% and were 900 crore whereas for Piramal was increasing at over 15%.
- Average EPS pre-acquisition was 49.067 and it increased to 56.66 in the next year and then increased further to 0.83 and then went to 93.39. Rising EPS, which we can see here is a *prima-facie* evidence that the acquisition is a successful one.
- Fresenius Kabi's Pre Acquisition we can see that their loans were increasing with a CAGR of over 90%.

- Fixed assets of Fresenius Kabi increased at 15% thus they were not able to manage synergies with this deal as they could not benefit from using overlapping assets.
- In the Pre-Acquisition period Fresenius Kabi had a ratio around 0.5 and that of Dabur was around 1. Whereas in the Post-Acquisition period the ratio for Fresenius Kabi increased from 0.8 to 1.36 in three years.
- Average EPS pre-acquisition was 4.11 and it fell down to -4.91 in the first year post acquisition and then went above the previous average to 5.07

## 5.2 Suggestions

- Hospira was able to achieve synergies in the balance sheet items studied but could not match that success in other places.
- By looking at the Accretive Dilutive Analysis we can see that the liquidity ratios however remained constant post the acquisition which shows that the acquisition was not successful.
- Abbott was not able to achieve synergies in the balance sheet items studied but did get success in other places.
- When we studied them on profitability ratios we saw that they maintained their profitability post the acquisition and thus the ratios increased and then remained positive post acquisition
- The liquidity ratios also increased gradually at a pace which took the current ration over 1:1 mark which is good for the company and shows that the acquisition was successful.

## CONCLUSION

### Hospira's acquisition of Orchid in December 2009

From the above analysis we can conclude that though Hospira was able to achieve synergies in the balance sheet items studied but could not match that success in other places. When we studied them on profitability ratios we saw that they could not even maintain their profitability post the acquisition and thus the ratios were decreasing. The liquidity ratios however remained constant post the acquisition which shows that the acquisition was not successful. This is also confirmed by Accretive Dilutive Analysis as the EPS post acquisition started declining.

### Abbott's acquisition of Piramal in May 2010

From the above analysis we can conclude that though Abbott was not able to achieve synergies in the balance sheet items studied but did get success in other places. When we studied them on profitability ratios we saw that they maintained their profitability post the acquisition and thus the ratios increased and then remained positive post acquisition. The liquidity ratios also increased gradually at a slow pace which shows that the acquisition was successful. This is also confirmed by Accretive Dilutive Analysis as the EPS post acquisition kept on increasing over the years.

### Fresenius Kabi's acquisition of Dabur Pharma in June 2008

From the above analysis we can conclude that though Fresenius Kabi was not able to achieve synergies in the balance sheet items studied but did get success in other places. When we studied them on profitability ratios we saw that they were able to turn the tables and take their profitability to a positive figure from negative figure pre acquisition, however this took them a year to achieve post acquisition. The liquidity ratios also increased gradually at a pace which took the current ration over 1:1 mark which is good for the company and shows that the acquisition was successful. This is also confirmed by Accretive Dilutive Analysis as the EPS post acquisition did increase after one year of acquisition.

Thus, from the above analysis we can easily conclude that Abbott's acquisition of Piramal and Fresenius Kabi's Acquisition of Dabur were successful as the parameters on which they have been judged above show a positive impact on the financial statements of the acquirer company post acquisition, whereas Hospira's acquisition of Orchid did not turn out to be successful as it did not result in positive financial changes for Hospira post acquisition.

Finally if one was to rank these three acquisitions on the basis of the positive impact they had on the acquirers post acquisition financial statements then we can easily say that Hospira's Acquisition will be ranked 3 as was not a positive acquisition. Now comparing the two successful acquisitions we can say that Abbott's acquisition was better than that of Fresenius Kabi's because Abbott's acquisition showed positive results in the first year post acquisition itself whereas Fresenius Kabi's acquisition took more than a year to show positive results in their financial statements.

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## Annexures

## Secondary data

Balance Sheet of Orchid Pharma	in Rs. Cr. ....					Balance Sheet of Orchid Pharma	in Rs. Cr. ....				
	Mar '07	Mar '06	Mar '05	Mar '04	Mar '03		Mar '07	Mar '06	Mar '05	Mar '04	Mar '03
	12 mths	12 mths	12 mths	12 mths	12 mths		12 mths	12 mths	12 mths	12 mths	12 mths
<b>Sources Of Funds</b>						<b>Sources Of Funds</b>					
Total Share Capital	65.82	64.62	34.13	32.38	32.38	Total Share Capital	65.82	64.62	34.13	32.38	32.38
Equity Share Capital	65.82	64.62	34.13	32.38	32.38	Equity Share Capital	65.82	64.62	34.13	32.38	32.38
Share Application Money	0.01	0	0.25	0	0	Share Application Money	0.01	0	0.25	0	0
Reserves	435.43	720.41	437.14	386.32	369.9	Reserves	435.43	720.41	437.14	386.32	369.9
<b>Networth</b>	<b>501.26</b>	<b>785.03</b>	<b>471.52</b>	<b>418.7</b>	<b>402.28</b>	<b>Networth</b>	<b>501.26</b>	<b>785.03</b>	<b>471.52</b>	<b>418.7</b>	<b>402.28</b>
Secured Loans	689.67	826.56	821.63	710.19	572.09	Secured Loans	689.67	826.56	821.63	710.19	572.09
Unsecured Loans	942.25	201.69	165	50	25	Unsecured Loans	942.25	201.69	165	50	25
<b>Total Debt</b>	<b>1,631.92</b>	<b>1,028.25</b>	<b>986.63</b>	<b>760.19</b>	<b>597.09</b>	<b>Total Debt</b>	<b>1,631.92</b>	<b>1,028.25</b>	<b>986.63</b>	<b>760.19</b>	<b>597.09</b>
<b>Total Liabilities</b>	<b>2,133.18</b>	<b>1,813.28</b>	<b>1,458.15</b>	<b>1,178.89</b>	<b>999.37</b>	<b>Total Liabilities</b>	<b>2,133.18</b>	<b>1,813.28</b>	<b>1,458.15</b>	<b>1,178.89</b>	<b>999.37</b>

Profit & Loss account of Orchid Pharma									
	Mar-12	Mar-11	Mar-10	Mar-09	Mar-08	Mar-07	Mar-06	Mar-05	Mar-04
	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths
<b>INCOME</b>									
Revenue From Operations [Gross]	1,702.46	1,651.80	1,240.78	1,203.21	1,250.18	906.54	853.91	653.05	712.34
Less: Excise/Service Tax/Other Levies	14.29	17.46	8.71	11.77	11.27	21.26	15.31	11.63	19.51
<b>Revenue From Operations [Net]</b>	<b>1,688.16</b>	<b>1,634.34</b>	<b>1,232.08</b>	<b>1,191.44</b>	<b>1,238.92</b>	<b>885.28</b>	<b>838.6</b>	<b>641.42</b>	<b>692.83</b>
Other Operating Revenues	48.17	29.01	0	0					
<b>Total Operating Revenues</b>	<b>1,736.33</b>	<b>1,663.35</b>	<b>1,232.08</b>	<b>1,191.44</b>	<b>1,238.92</b>	<b>885.28</b>	<b>838.6</b>	<b>641.42</b>	<b>692.83</b>
Other Income	55.81	48.8	-34.17	53.99	45.3	43.7	49.77	35.44	-5.87
<b>Total Revenue</b>	<b>1,792.14</b>	<b>1,712.14</b>	<b>1,197.91</b>	<b>1,245.43</b>	<b>1,284.21</b>	<b>928.99</b>	<b>888.37</b>	<b>676.86</b>	<b>686.97</b>
<b>EXPENSES</b>									
Cost Of Materials Consumed	802.42	876.2	565.87	640.34	532.27	507.23	427.34	424.89	418.78
Purchase Of Stock-In Trade	45.46	34.14	33.45	33.68	26.1	21.68	19.06	17.76	30.54
Operating And Direct Expenses	0	0	43.79	40.42	40.73	28.57	27.81	14.77	6.7
Changes In Inventories Of FG,WIP And Stock-In Trade	-62.02	-122.38	269.45	-64.78	-19.34	-139.74	-17.85	-95.81	-50.5
Employee Benefit Expenses	154.65	141.38	162.34	126.32	106.98	83.99	70.26	56.68	48.42
Finance Costs	179.05	115.77	241.23	155.19	81.13	98.31	87.3	73.06	61.42
Depreciation And Amortisation Expenses	149.06	128.45	151.1	129.97	97.67	82.47	82.98	61.89	56.84
Other Expenses	439.91	385.47	266.31	221.16	180.14	135.9	100.85	94.71	81.8

Balance Sheet of Piramal Enterprises	in									
	Rs. Cr.									
	Mar 13	Mar-12	Mar-11	Mar-10	Mar-09	Mar 08	Mar-07	Mar-06	Mar-05	Mar-04
	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths
<b>EQUITIES AND LIABILITIES</b>										
<b>SHAREHOLDER'S FUNDS</b>										
Equity Share Capital	34.51	34.51	33.58	41.8	41.8	41.8	41.8	41.8	38	38
Preference Share Capital						0	38.37	53.37	53.37	15
<b>Total Share Capital</b>	<b>34.51</b>	<b>34.51</b>	<b>33.58</b>	<b>41.8</b>	<b>41.8</b>	<b>41.8</b>	<b>80.17</b>	<b>95.17</b>	<b>91.37</b>	<b>53</b>
Reserves and Surplus	10,521.40	11,106.27	11,664.93	1,458.83	1,147.22	974.67	976.22	874.29	454.3	352.96
<b>Total Reserves and Surplus</b>	<b>10,521.40</b>	<b>11,106.27</b>	<b>11,664.93</b>	<b>1,458.83</b>	<b>1,147.22</b>	<b>974.67</b>	<b>976.22</b>	<b>874.29</b>	<b>454.3</b>	<b>352.96</b>
<b>Total Shareholders Funds</b>	<b>10,555.91</b>	<b>11,140.78</b>	<b>11,698.51</b>	<b>1,500.63</b>	<b>1,189.02</b>	<b>1,016.47</b>	<b>1,056.39</b>	<b>969.46</b>	<b>545.67</b>	<b>405.96</b>
<b>NON-CURRENT LIABILITIES</b>										
Long Term Borrowings	733.33	216.67	239.2	604.43	878.85	0	0	0	0	38.37
Deferred Tax Liabilities [Net]	0	100.53	92.33	130.48	118.02					
Other Long Term Liabilities	76.31	132.84	188.98	0	0	353.12	239.12	98.15	177.55	287.39

INCOME						INCOME					
Revenue From Operations [Gross]	1,409.00	1,116.77	802.32	2,711.74	2,386.95	Revenue From Operations [Gross]	2,001.26	1,708.70	1,521.59	1,395.14	1,440.47
Less: Excise/Service Tax/Other Levies	28.63	20.52	12.58	57.24	65.04	Less: Excise/Service Tax/Other Levies	83.55	99.04	97.74	65.5	67.13
<b>Revenue From Operations [Net]</b>	<b>1,380.37</b>	<b>1,096.25</b>	<b>789.74</b>	<b>2,654.50</b>	<b>2,321.91</b>	<b>Revenue From Operations [Net]</b>	<b>1,917.71</b>	<b>1,609.66</b>	<b>1,423.85</b>	<b>1,329.64</b>	<b>1,373.34</b>
Other Operating Revenues	22.82	57.23	24.7	0	0	<b>Total Operating Revenues</b>	<b>1,917.71</b>	<b>1,609.66</b>	<b>1,423.85</b>	<b>1,329.64</b>	<b>1,373.34</b>
<b>Total Operating Revenues</b>	<b>1,403.19</b>	<b>1,153.48</b>	<b>814.44</b>	<b>2,654.50</b>	<b>2,321.91</b>	Other Income	74.83	57.62	51.48	41.39	39.86
Other Income	376.01	534.43	472.29	133.66	71.57	<b>Total Revenue</b>	<b>1,992.54</b>	<b>1,667.28</b>	<b>1,475.33</b>	<b>1,371.03</b>	<b>1,413.20</b>
<b>Total Revenue</b>	<b>1,779.20</b>	<b>1,687.91</b>	<b>1,286.73</b>	<b>2,788.16</b>	<b>2,393.48</b>	<b>EXPENSES</b>					
<b>EXPENSES</b>						Cost Of Materials Consumed	619.84	458.28	341.71	333.5	358.48
Cost Of Materials Consumed	633.33	538.95	354.52	675.87	667.56	Purchase Of Stock-In Trade	230.52	264.23	234.17	321.65	268.17
Purchase Of Stock-In Trade	79.26	80.96	80.78	513.62	350.6	Operating And Direct Expenses	32.58	49.27	45.26	33.83	21.24
Operating And Direct Expenses	0	0	0	33.81	37.28	Changes In Inventories Of FG,WIP And Stock-In Trade	4.13	-18.57	74.11	-64.55	-11.54
Changes In Inventories Of FG,WIP And Stock-In Trade	-2.04	-12.51	-37.76	-21.44	-12.35	Employee Benefit Expenses	239.51	188.62	157.68	143.89	148.53
Employee Benefit Expenses	159.49	151.75	144.92	303.74	255.16	Finance Costs	72.09	39.84	26.22	25.53	38.32
Finance Costs	419.97	199.9	80.06	156.36	180.69	Depreciation And Amortisation Expenses	70.48	70.5	57.72	47.42	41.09
Depreciation And Amortisation Expenses	77.82	76.39	58.99	92.22	83.81	Other Expenses	390.63	392.67	341.02	405.69	362.89
Other Expenses	659.25	531.25	398.66	556.36	516.15	<b>Total Expenses</b>	<b>1,659.78</b>	<b>1,444.84</b>	<b>1,277.89</b>	<b>1,246.96</b>	<b>1,227.18</b>