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Analysis of CAGR of Total Returns of Value Companies with reference to Pharmaceutical Industry in different phases of Financial Market

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ABSTRACT

This research studies the CAGR of various pharmaceutical companies in different phases. Total returns in terms of stock prices at the end of the year, dividend has been taken into consideration for four pharmaceutical companies. It analyses the difference between the demand of pharma companies in different phases and was concluded that regardless of its phase i.e surplus or deficit, the demand for them is consistent or has increased over time. In terms of CAGR Phase 1 has performed better but in terms of actual returns Phase 2 has performed better than Phase 1. Companies having potential should engage in mergers and acquisitions as well as continuously work on their Research and Development and emerge with new products in the market for better returns.

Keywords – *CAGR – Compound Annual Growth Rate, Total Returns*

INTODUCTION

1.1 Background

In order to treat, immunise, or relieve symptoms, the pharmaceutical industry finds, develops, produces, and markets pharmaceutical pharmaceuticals or medications that can be given (or self-administered) to patients. Pharmaceutical companies may trade in medical devices and both brand-name and generic pharmaceuticals. The patenting, testing, safety, efficacy, and marketing of medications are governed by a number of laws and regulations.

Being the largest provider of generic product and third largest producer of pharmaceuticals in the world, India has procured quite a market share in the Pharmaceutical Industry even being relatively inelastic demand it certainly has increased over the years as compared to early 2000s. Hyderabad, Mumbai, Pune, Baddi, Himachal Pradesh, Chennai, Bangalore, Ahmedabad, Vadodara, Ankkleshwar, Vapi, Sikkim and Kolkata are the major pharmaceutical hubs of India.

Pharmaceutical exports include biologicals, Ayush and herbal medicines, bulk medications, intermediates, drug formulations, and surgical items. India holds a significant place in the world pharmaceutical industry. Additionally, the nation is home to a sizable population of scientists and engineers who might lead the sector to new heights.

For the research, four companies from pharmaceutical industry are taken.

1. Sun Pharma 2. Cipla 3. Dr. Reddy 4. Divis Lab

Note

1. **CAGR** – Compounded Annual Growth Rate
2. **DPS –** Dividend Per Share

Total Return

True growth over time can be determined through Total Return. Companies prefer Total Return Index as compared to price index as it gives a much bigger picture. Total return is calculated based on past historical performances. What trend the growth has been following. It can be compared with other companies and it shows how a particular company has been fairing in the industry as compared to other companies during a particular phase in the market. It not only includes the share price at the end but also dividend.

Total Returns = Share price at the end + Dividend Per Share

Dividend Per share can give a better perspective than the regular dividends as it takes into account the number of shares as well.

Share Price at the end plus DPS can give the total returns which an investor has invested.

Compounded Annual Growth Rate (CAGR)

CAGR is annual growth rate of an investment over a certain period of time preferably more than one year. It is known to provide smooth rate of return. Total returns are volatile in nature as the share price of the company can fluctuate greatly. Hence CAGR comes in handy, It does not take volatility into account but rather provide with a smooth rate of return.

CAGR = ((FV/PV) ^ (1/N) -1) *100

1.2 Objectives

- To analyze CAGR of Total Returns of Companies in two different phases 1st being from the 2003-09 the time when Indian economy was flourishing and was in surplus
- To analyze CAGR of 2nd Phase from 2013-2020 where the economy has been in deficit
- To compare the CAGR of the companies in both the phases and determine what difference does it make

1.3 Scope:

- To get a better perspective more companies can be taken into consideration for further research.
- CAGR of Total Returns can be calculated for various other sectors and compared with Pharma Industry to see whether they have the same impact.
- To get better result more aspects can be taken into consideration like company performance in terms of Sales, Revenue, Balance Sheet, Profit & Loss etc.

1.4 Limitations:

- The research has been restricted to only one industry: Pharmaceutical Industry (Sample Space)
- Only four companies are taken into consideration.
- The study has been divided into two phases, phase 1st is from March 2003 – March 2009 and phase 2nd is from March 2013 – March 2020. Not all the past years have been taken.
- Calculating and comparing only total return and CAGR of each company for each year.
- The study is limited only to 1 factor – Total Returns and CAGR of Total Returns, but in order to evaluate the performance of the company and speculate future profits/dividends the investors need to look at the other aspects such as revenue, sales, profits ratios, reviewing of balance sheet and profit and loss as well.

2. Literature Review

(Todd Schlanger, Colleen Jaconetti, Peter Westaway, Ankul Daga, 2016), In this research the researchers compare the two approaches - total return approach and income focused approach. Which one of the approaches is preferred by the investors and how does it benefit

them. The paper explains "why the total-return approach to investing has a number of benefits compared to an income-focused approach for any investor wishing to meet spending objectives as effectively as possible." It states that total return approach offers a number of portfolio benefits including diversification, tax efficiency and increasing portfolio longevity.

Srivastava (2016), The researcher focuses on the effects of acquisition of Ranbaxy by Sun Pharma. It states that "Sun Pharma acquired Ranbaxy from $3.2 billion along with its debt assuming $800 million. Big issue to be faced by Sun Pharma is poor financial performance record of Ranbaxy". The mega merger appears to be the demand of the time. By seeing Sun Pharma's capability to handle the balance sheet and providing value to its stakeholders in past acquisition, it can be concluded that the company has moved in right direction. This in turn boosted it stock prices and its ability to provide dividend, increasing the total returns.

Isidore (2017), The researcher has divided total returns into two parts one being fundamental research and the other being speculative research with the help of top 20 stocks based on market capitalisation. "The results revealed that the major component of the total return was the speculative return. As a result of this, the good stocks with good fundamental return have lower total return owing to high negative speculative return. On the other hand, bad stocks with low fundamental return have higher total return due to high positive speculative return. The investors need to be wise in choosing stocks with good fundamentals in order to enjoy the benefits in the long run and not be misguided by the fancy stocks." Even though if a company is performing good with respect to sales and profit the stocks may not which are volatile in nature.

Sharif, Ali, Jan (2015), The researcher wants to know the relationship between dividend policy and stock prices, whether dividend policy affects the stock prices or not. The study recommends "that firms in the sample should regularly pay dividend as it will cause an upward movement in the stock market prices, whereas profit retention by firms will result in a decrease in the value of the stock market prices."

3. Research Methodology:

- The secondary data has been extracted with the help of a software - Capitaline, Annual Reports, NSE, Finance yahoo and Money control site.
- For review of literature articles from journals have been referred and one article of corporate author has been referred.
- The nature of the study is analytical as it examines, evaluates, analyses the quantitative data of two different phases of five companies each from one industry.
- The formula is applied to the secondary data to calculate CAGR of total return for all the companies (5 companies) for the period of 2003-2009 and 2013-2020.

4. Data Analysis and Interpretation

SUN PHARMA

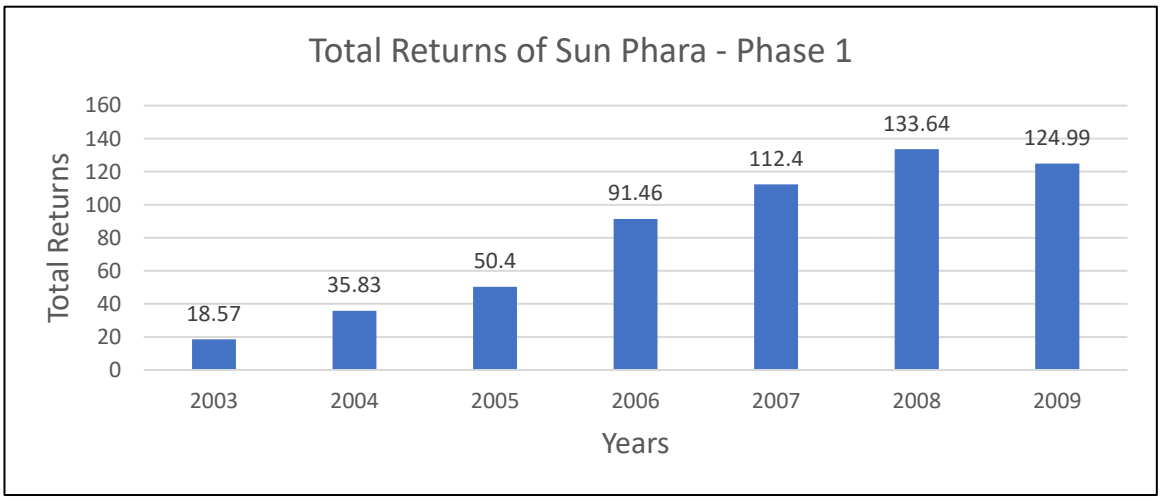
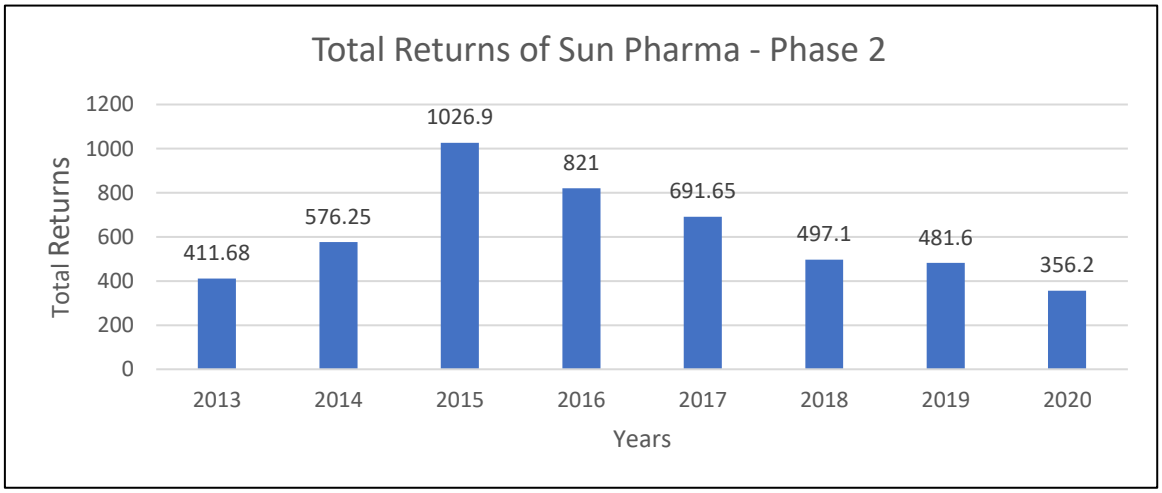


Figure no. 1.1



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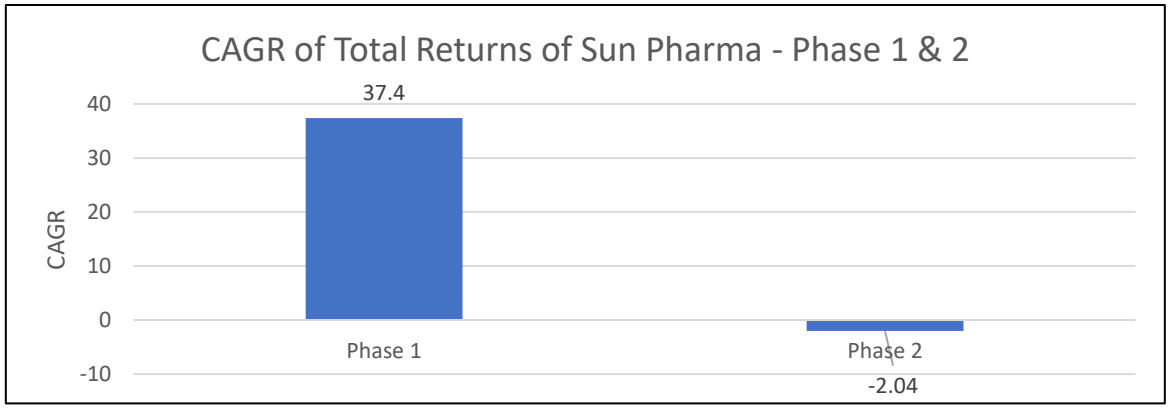


Figure no. 1.3

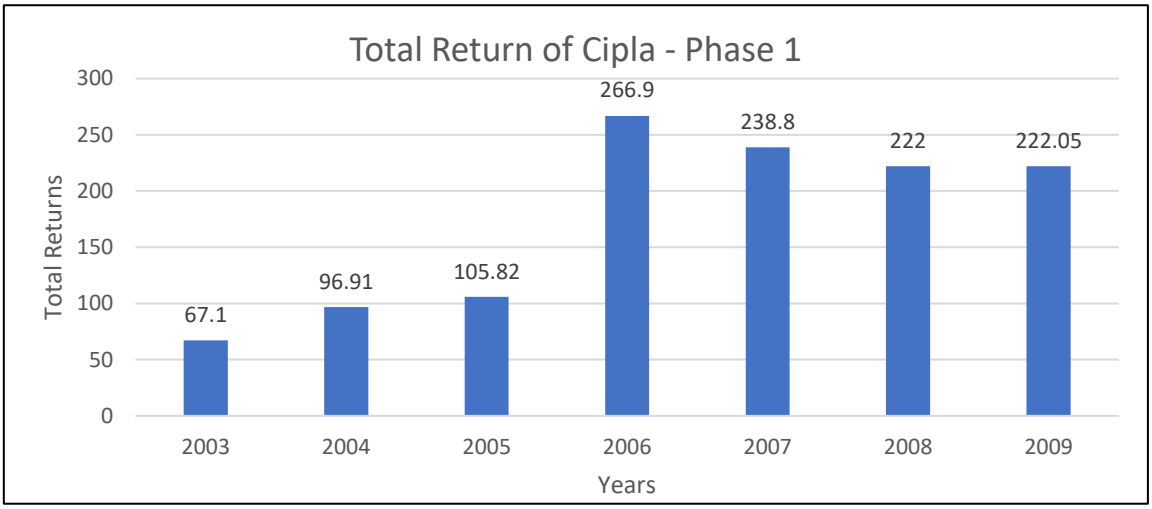
In the first phase over the years the Total returns had an increasing trend from 2003-08, it only dipped a little in 2009 after the boom period ended. The returns in 2003 were ₹ 18.57

which included Share price plus dividend per share and by 2009 the returns were ₹125 per share. The CAGR was therefore on the positive side as the company had grown significantly over the years.

In the second phase Sun Pharma continued its trend of increasing total returns from Rs 411.68 in 2013 to ₹ 576.25 in 2014. It had been a crucial year (2014) for Sun Pharma as it made its biggest acquisition of Ranbaxy Laboratories Ltd. which in turn made Sun Pharma largest pharmaceutical company in India and 5th largest generic company. Over the years in second phase Total Returns have shown a decline in growth one of the reasons could be if its reputation is impacted in the market negatively, stiff competition or failure to innovate or diversify its business or delay in launching a new drug The share price dipped because of a worldwide pandemic that was hit in the month of March especially in India.

Comparing the CAGR of Phase 1 With Phase 2 shows that Company did flourish in Phase 1 but it can't ignored that the demand for medicines never goes away thus it remains inelastic regardless of its price

CIPLA



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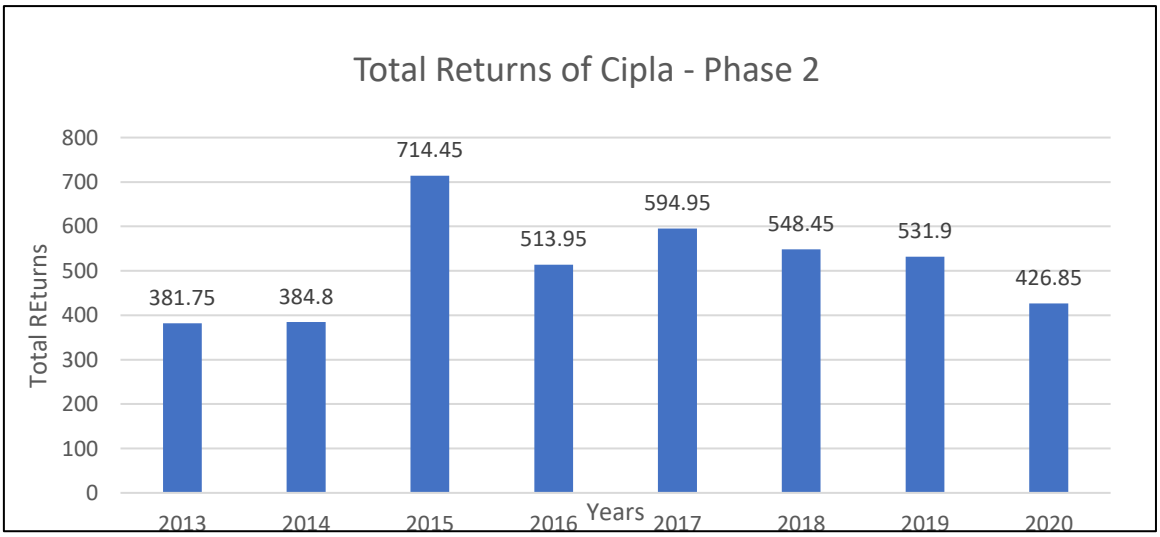

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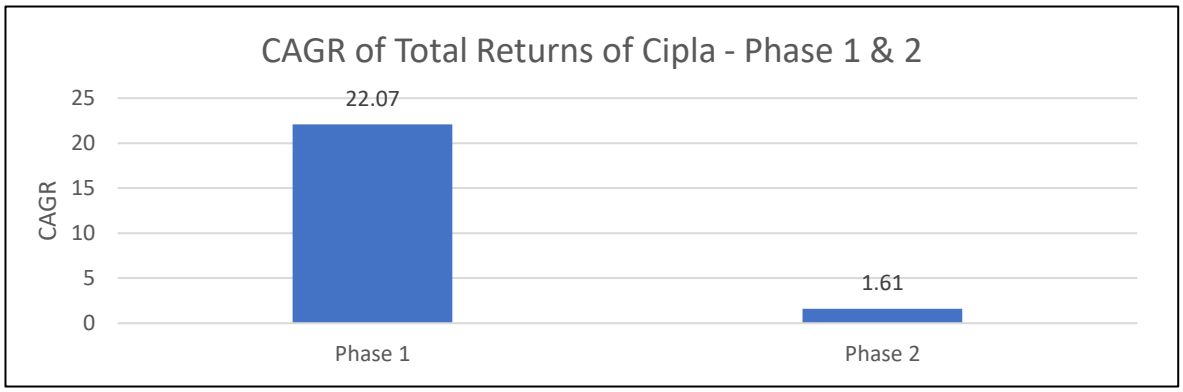


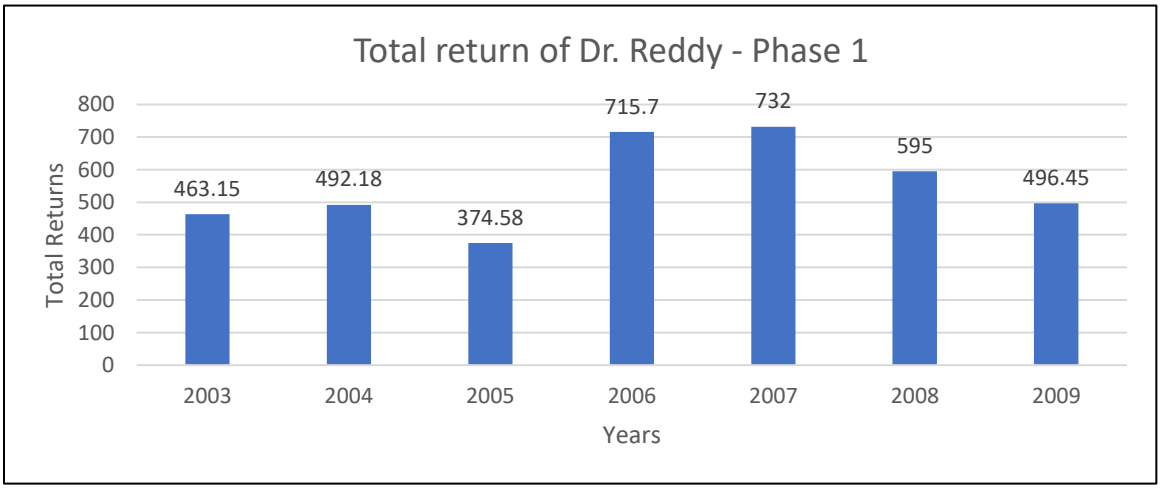
Figure no. 2.3

Over the years in the Phase 1 Cipla has expanded its market share and continues to do so in Phase 2 as well. The Total Returns in 2003 was 67.1 which gradually increased over the years however the dividend per share was decreased. In the initial years of 1st phase Cipla had a good growth and its total returns then became steady. It expanded its business geographically over timeIn 2006 the company received approval for AIDS drugs approval and has developed more products.

In Phase 2 the company enjoyed its growth till 2015 with its highest returns of 714.45 after which it dipped mainly because it received a warning letter from USFDA. Specifically, FDA inspectors noted that the quality control unit at the central India facility lacked authority to review production records in order to check for and investigate errors. Additionally, a failure related to a leakage was documented 35 times but no investigation was initiated to identify problems. But it bounced back its image and has since seen slight fluctuations over the next few years

Comparing the CAGR both of the phases have seen positive CAGR but Phase 1 significantly.

DR REDDY'S LABORATORIES



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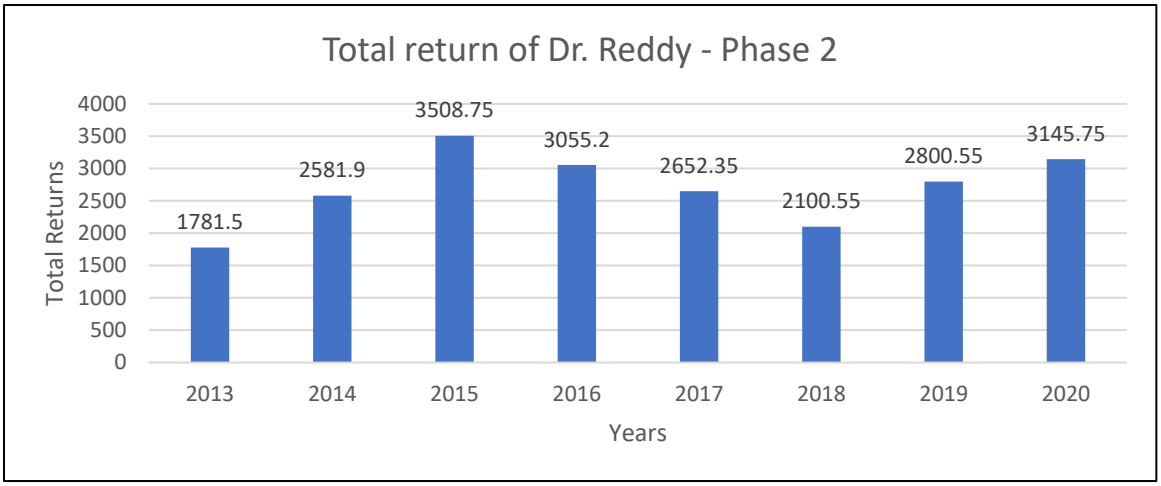

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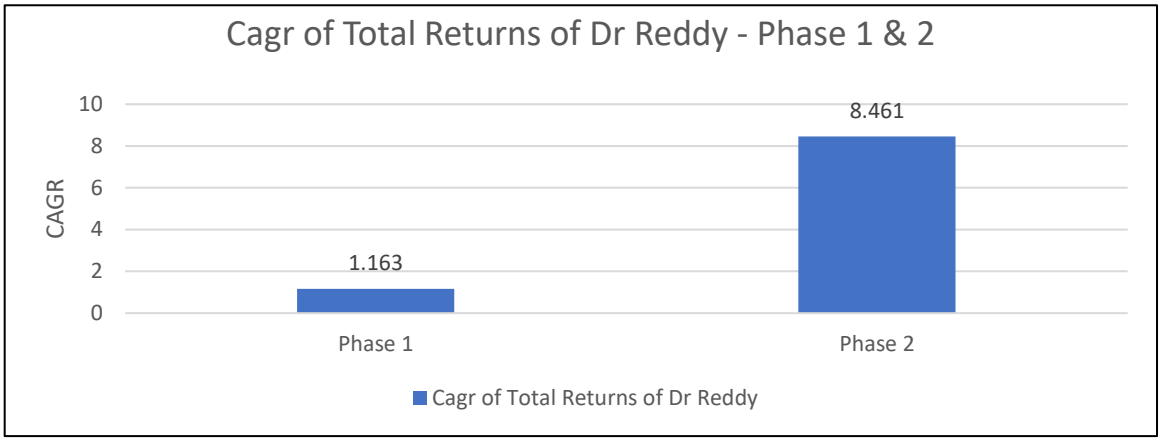


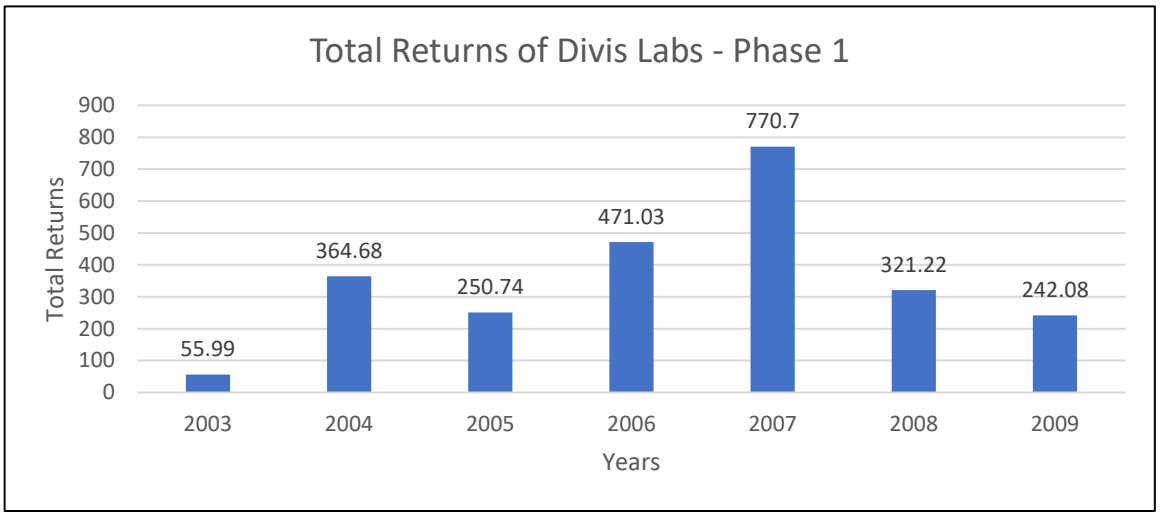
Figure No. 3.3

In Phase 1 from 2003-2007 it had growth in total returns which dipped a little in 2008 and 2009. Its dividend per share was constant from till 2006 at ₹ 5 per share which dipped to ₹ 3.75 in 2007 and increased in 2009 to ₹ 6.25 per share. Its Total Returns have seen an upward growth from ₹ 463.15 per share to ₹ s732 in 2007 it dipped in next 2 years as it under performed in terms of its consolidated revenues, operating income and profit after tax yet the company declared a good dividend in 2009

In the 2nd Phase from 2013-2020 which was more of a deficit phase the company has seen growth in its total returns – the share price had fluctuations but dividend per share has seen a consistent growth. Compared to 2013, 2020 had a good growth in total return.

Comparing the CAGR of both phases both had a positive effect regardless of one being a surplus period and one being in deficit period.

DIVIS LABORATORIES



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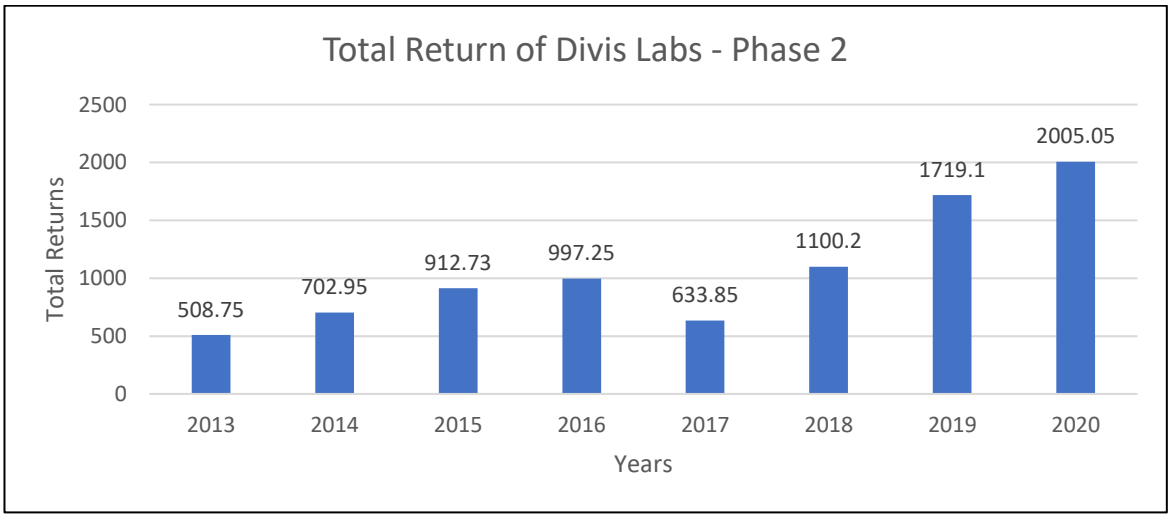

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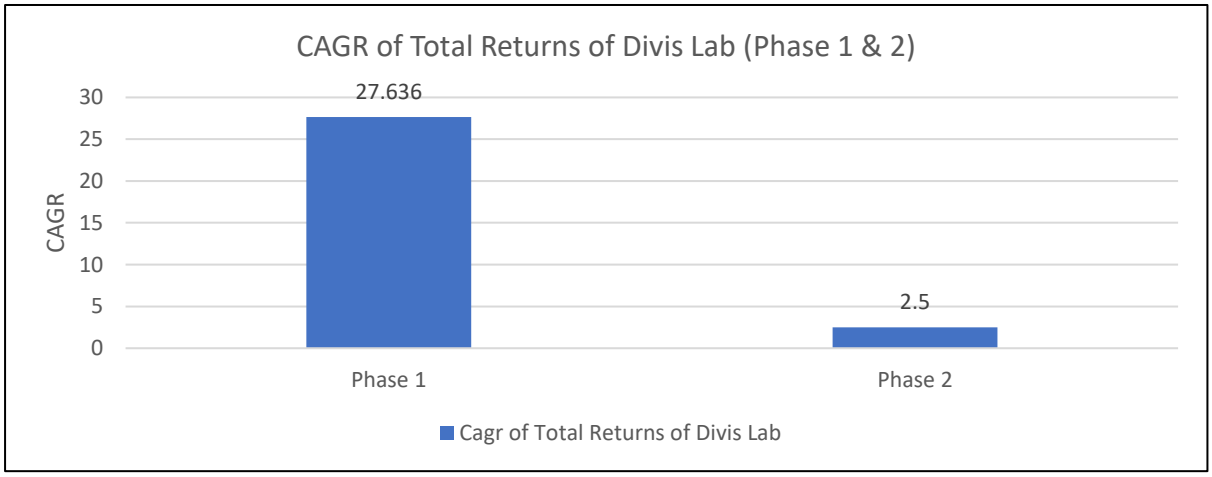

Figure No. 4.3

Divis Laboratories highest returns were in 2007(Rs 770.7 per share). Although the returns dipped a little in 2008 and 2009 to 321.22 and 242.08 respectively it had seen an increase in dividend per share. It has performed better in terms of turnover and profit from 2007.

The second Phase has seen much more growth in Total Returns in terms of share price as well as dividend per share. It has seen a consistent growth from 2013 at 508.75 till 2016 at 997.25 per share which slipped in 2017 to ₹ 633.85 mainly because USFDA issued an import alert on company's Vishakapatnam unit. It however came back on track the next year and the market cap reached 5 billion dollars and hence seen growth ever since. Expanding its portfolio. Total returns are highest in 2020 with ₹ 2005.05 per share. The demand for products is highest mainly because the pandemic struck. The demand for medicines and vaccine research has favoured the share market.

The CAGR was positive for both the phases with Phase 1 being slightly greater than Phase 2. The demand for pharma companies have increased over the years.

Analysis and Interpretation of CAGR of Total Returns of Phase 1 and Phase 2 of all the companies.

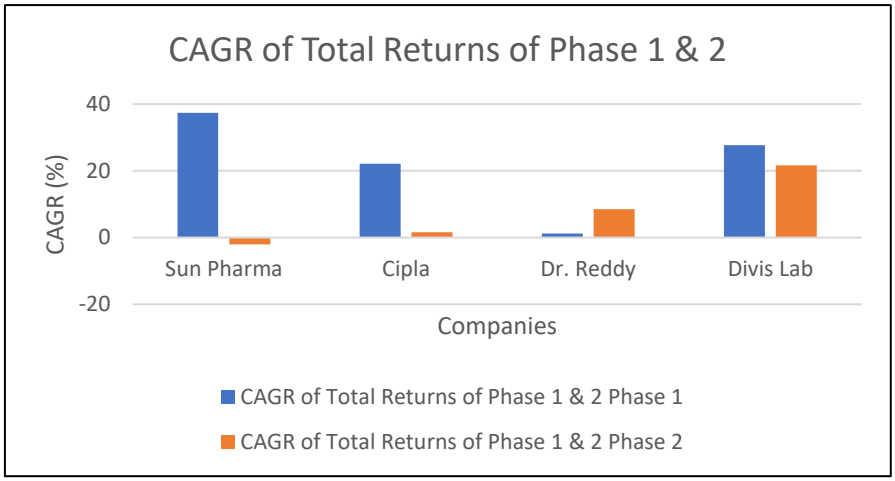

Figure no. 5.1

The CAGR of all the companies is on the positive side. After the boom period ended there was only deficit, there were occasional positive aspects which were short term. Phase 2 is from 2013-2020 of the recent years when the economy was still in deficit.

CAGR of Sun Pharma is 37.407 % in Phase 1 as compared to -.2.046 in Phase 2, Sun Pharma has certainly performed better in Phase 1 with Total returns rising significantly. However, it is to be noted that Stock prices were much higher in Phase 2 as compared to Phase 1 although dividend per share declined in Phase 2.

CAGR of Cipla is 22.073% in Phase 1 as compared to 1.608% in Phase 2, even Cipla has a more significantly positive CAGR in Phase 1. It has slightly same patter as Sun Pharma where the stock prices of Cipla are more in Phase 2

Dr Reddy on the other hand performed much better in Phase 2 than Phase 1. CAGR of Phase 1 was 1.163% where CAGR of Phase 2 was 8.461%. Phase 2 was much beneficial to the company in terms of stock prices and DPS as well.

CAGR of Divis Lab was 27.636% in Phase 1 and was 21.643% in Phase 2. Both the phase has good CAGR but in terms of Total Returns the performance was much better in Phase 2

5. CONCLUSION & RECOMMENDATIONS

- The research examines all companies had a positive CAGR in Phase 1 i.e the boom period as compared to Phase 2. All but one underperformed a little. In phase 1 though having a positive outcome. As long the demands are met with supply the market is satisfied. This study does tell us that even though a company is performing better in terms of sales, revenue, growth it can give us bad performance in stocks.
- Most of the companies have good CAGR in Phase 1 than Phase 2 but their returns are much better in Phase 2 than Phase 1. One thing can be concluded is that there is much demand for Pharmaceuticals in the market be it a boom phase or deficit phase.
- It is recommended to the companies to take control of the events that can be controlled like proper inspection of its sites and avoid warning letters from regulatory bodies by performing and giving out good quality products.
- To participate in mergers and acquisitions of companies having potential. Keep up with the Research and development and new products which help perform better in terms of sales, revenue, profit, dividend and in turn the share prices which will boost the Total Returns.

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