Major Research Report on

Value creation in Mergers and Acquisition in India -An Empirical Study

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CERTIFICATE

This is to certify that the project titled "Value Creation in Mergers and Acquisitions in India-An Empirical Study." is an academic work done by "Dhiraj Gupta" and "Devanshi Gupta" submitted in the partial fulfillment of the requirement for the award of the degree of "Masters in Business Administration" from "University School of Management & Entrepreneurship, Delhi Technological University, Delhi" under my guidance and direction. To the best of my knowledge and belief the data and information presented by him in the project has not been submitted earlier elsewhere.

DECLARATION

This is to certify that we have completed the Project titled "Value Creation in Mergers and Acquisitions in India- An empirical study." in the partial fulfillment of the requirement for the award of the degree of "Masters in Business Administration" from "University School of Management & Entrepreneurship, Delhi Technological University, Delhi." It is also certified that the project of ours is an original work and the same has not been submitted earlier elsewhere.

ACKNOWLEDGEMENT

Words often fails to express one's feelings towards others, still we would like to express our sincere gratitude towards our guide Mr. Anurag Chaturvedi (Assistant Professor, USME, DTU) for his able guidance, continuous support and cooperation throughout our project, without whom the present work would not have been possible. We would also like to extend our sincere & heartfelt obligation towards all our respondents who helped us in the collection of all the necessary data and information that helped us proceed with this research project and make it a successful task. Lastly, we express our gratitude to our families and friends for their unending support and tireless effort that kept us motivated throughout the completion of this project.

EXECUTIVE SUMMARY

Purpose/Scope of Research:

- To Study About INDIAN Mergers and Acquisitions
- To Study valuation of Mergers and Acquisitions
- To Study whether Synergy creates value
- To conduct an event Study and how to calculate abnormal returns
- To Study whether value is created for shareholders empirically in Mergers and acquisition

Technique used for Research:

- Hypothesis Testing Using T-Test
- Expected Return for each Company per day
- Calculation of Abnormal Returns for the sample companies
- Calculation of Cumulative Abnormal Return(CAR)
- Calculation of Cumulative Average Abnormal Return(CAAR)

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Chapter 1: Introduction

In the previous years mergers and acquisitions have become a very notable subject with a ton of consideration for it. For example, this subject was featured in diary papers, on television, web and other media, yet in addition hypothetical and exact research on mergers and acquisitions expanded essentially.

Notable mergers and acquisitions of INDIA that have gotten a ton of consideration in the media are the merger among Vodafone and Thought into Vodafone in the year 2017, the obtaining of Telenor INDIA via Airtel in 2017 and the merger between UltraTech Concrete and Jaypee Concrete in 2017. The feeling about the mergers and acquisitions in the media is that the estimation of the consolidated firm expanded contrasted with the whole of the individual firms. Reasons from the expansion in esteem were the assessed profits by cooperative energy and expanding market power.

Mergers and acquisitions have a great range of sub elements. To name a few, what are the motives, the value creation but also the social consequences of mergers and acquisitions? In this thesis one sub element concerning mergers and acquisitions will be investigated both theoretically as well as empirically, namely the value creation of mergers and acquisitions. The main question that will be answered is therefore:

What is the value creation by mergers and acquisitions for the shareholder?

To answer this question we will initially take a look at the valuation of mergers and acquisitions, the impact of the payment strategy on mergers and acquisitions, value from synergies by mergers and acquisitions and the incentive for the investor of the securing firm and the objective firm.

The first part of the research will deal with a literature review on mergers and acquisitions in general. In the second part of the thesis there is an empirical research about the value creation of mergers and acquisitions. The last part contains a short summary and will also cover the limitations of the research, the main conclusions and some recommendations.

Chapter 2: Literature Review

This chapter will deal with a literature review on mergers and acquisitions in general. Different valuation models for valuing a merger or acquisition will be discussed in subsection 2.1 whereas the influence of the payment method will be discussed in subsection 2.2. The research will cover the differences in value created by the different methods of financing an acquisition. This will be followed by section 2.3 on the synergies created from an merger or acquisition. In subsection 2.4 there will be a study of how the created value will be divided between the shareholders of the acquiring firm and the target company.

2.1 How to value mergers and acquisitions?

As indicated by Bruner (2003) there is one explicit result of measuring performance, to be specific the necessary return by investors. Contrasted with this benchmark there are three potential results, value conservation, value creation and value destroying.

With value conservation the return on investment becomes equal to the required return. This way the net present value is zero. The investor should be contented, because the return required is realised. With value creation the investment return exceeds the required return and will have a positive net present value. The investor should be very satisfied by this result, because this exceeds the expectations and it is tough to realise into the market. With destroying value the returns on investment are not enough to equal the returns required. In the following case the investor is disappointed, because he could have better invested in other opportunities.

According to Chaplinsky, Schill, and Doherty (2000) one of the methods to value a merger or acquisition is **the discounted free cash flow method** is. The present value of cash flows over the life of the company has to be computed to determine the value of a new firm from a merger or acquisition. The time period to use in the calculation is endless, because of that the calculation has to be divided in two parts: forecast period and terminal value.

The forecast period should be equal to the period that the firm enjoys competitive advantages from the transaction. In most cases there is a forecast period used between five to ten years. In the period of forecast, there needs to be a forecast of free cash flows that shall comprise the economic costs and benefits from the transactions. The terminal value is the summation of all of the free cash flows(FCF) following the forecast period. This method assumes that there shall be no opportunities of abnormal growth and that expected returns equal the returns requested.

The formula for free cash flow is given below:

Free cash flow = Net operating profits after taxes (Earnings before interest – marginal corporate tax rate) + Depreciation – Capital expenditures for fixed assets - Δ Net work capital.

To calculate the free cash flow forecast the firm should be punctual by estimating the industry forecast and the company forecast. For the company forecast the firm should calculate the macro economic trends, industry trends, competitive pressure and the firm strategy. The forecast period is usually that period that the firm will estimate whether that merger or acquisition shall create value. To calculate whether there shall be value creation, the formula is: (Return on net assets – weighted average cost of capital).

The total of the formula should be greater than zero for the effect of wealth of the merger or acquisition to occur.

To roughly calculate the terminal value, the firm needs to estimate very punctually, the present value of all the future cash flows. In terminal value are all future cash flows contained as a part after the forecast period, because of which it can be a big part of the overall value of the company. The calculation is especially important with an aggressive investment policy of the firm, because the cash flows over the forecast period can be close to zero. The formula to calculate the terminal value:

Future cash flow at steady state / (Weighted average cost of capital – expected constant annual growth rate).

After the estimations of the incomes the weighted normal expense of capital will be utilized to decide the net present worth. With a positive net present worth the merger or securing will make esteem when the evaluated free incomes are assessed effectively.

Instead of using the discounted free cash flow method Hackbarth and Morellec (2006) developed a model to analyze the behavior of stock returns in mergers and acquisitions. Timing and the terms of the takeover are the most important factors of a takeover and result in value maximization. For the empirical research they used a sample of 1.086 US companies in the time period from 1985 up to 2002. In the model control transactions, exploit synergies or improve efficiency, will create value. The model generates a prediction based on the firm-level betas for the time period of the control transactions. The conclusion of the model is that the beta of the firms don't have a lot of impact on the result of the takeover.

2.2 What is the influence of the methods of payment on the value?

Relative Size

A lot of theories that talk of the payment method for a merger or acquisition. The theory evolved by Maljuf and Myers (1984) says that, when the acquiring firm is overvalued the acquisition is paid by shares and when the company is undervalued by a cash payment. The reason behind this is, the acquiring firm acts in the interest of its shareholders.

Martin (1996) says, the form of mergers and acquisitions can be divided into payments: cash payments and stock payments. Cash payment shall include cash, not-contingent liabilities and newly issued notes. Stock payments include those payments that are made with shares, no matter with or without voting right. Martin concludes in this research that the method of payment in mergers and acquisitions is not influenced by the relative size of the target company. Ruland and Ghosh (1998) got the same outcome from their empirical research as Martin.But Jones, Wang and Zhang(2003) came to different results. In contrast to the results of Martin (1996) and Ruland and Ghosh (1998) , Jones, Wang and Zhang(2003) conclude that there is an impact on the choice of the payment method because of the relative size of the target firm. The conclusion from this empirical research is that when the target size is relatively higher compared to the bidding company the payments are more likely to be share payments. For this research Jones, Wang and Zhang(2003) took a sample of 103 deals in the United Kingdom for the period of 1990-1999.

Faccio and Masulis (2005) find out in their empirical research that the deal and target characteristics have significant impact on the method of payment choice. They made the conclusion that a larger relative size of the target will increase the choice for stock payments. They used a sample of 3.667 mergers and acquisitions in Europe in the time period 1997 up to 2000.

In contrast to these earlier results Di Giuli (2008) concludes with his empirical research that the target firm size and the choice of payment by stock have a negative correlation. In his empirical research he used a sample of 2.602 deals of target and bidding firms in the United States in the time period from 1984 to 2005.

According to Espen (2009) contingent payments include earn outs, swapping stocks, clawbacks and collars. This type of payments say that the target and bidding shares bear the risk that their shares could be overvalued.

In an empirical research done by Betton, Thorburn, and Eckbo (2008) in which they conducted a research for about 13.003 initial merger bids and 2.428 initial tender offers over the period from 1980 to 2005. It was thus found that 37percent of the takeovers is paid by stock, 37percent paid by both stock and cash and the remaining 26 percent of the takeover is

paid by cash only. The initial merger bids and initial tender offers differ in payment methods, because the tender offers use cash or a combination of both cash and stocks. The payment method with merger bids uses mostly a stock offer.

Taxation hypothesis

The taxation hypothesis is another well known theory about the payment method. This theory says that the target shareholders demand a higher takeover premium with a cash offer against takeover with shares. Based upon this hypothesis Ryngaert and Brown (1991) created a model.

Undervalued companies use stock payment for a takeover according to their model. The reason for this is to avoid premium payment, because of their self low value. Overvalued companies make cash offers, because they avoid to pay with undervalued stocks. They proved their model with an empirical research based on US exchange in the time period 1981 to 1986.

Growth and investment opportunities

The other theories about the method of payment are growth and investment opportunities and market misvaluation. The growth and investment theory has an impact on the method of payment. Cash payments could influence the cash availability and reduce the possibility to invest in recently developed profitable projects. The recently developed firm has to finance profitable projects with debt which shall influence the profit of the project. Martin (1996) analyzed the investment effect opportunities on the payment method chosen by mergers and acquisitions. For this research Martin (1996) used Tobin's q (proxy) and concluded that if the investment opportunities of the bidder are higher the choice for stock payments increases or has a greater chance. This is because financing with shares gives the firm more possibilities to invest in profitable projects and does not affect the cash position.

Also Jones, Wang and Zhang(2003) have tested the use of share payments theory investment with more opportunities for a firm. They found out that an increase in the ratio of the bidders market value compared to the book value of the company will make firms choose more for stock or mixed payments as a payment method.

Also Di Giuli (2008) tested in empirical research, use of share payments with more investment opportunities. In this research he used the capital expenditures levels following the merger took place. The study found that there is a positive correlation between capital expenditures and the use of shares as payment methods for mergers and acquisitions. Di Giuli (2008) expected that a ten percent increase in the capital expenditures ,the percentage of shares as payment will increase by five percent. The reason behind this estimation is, the bidder with a lot of investment opportunities needs to use lesser cash and more cash is available to invest in new investment possibilities.

Market misvaluation

The method of payment in mergers and acquisitions is impacted by market misvaluation. The theory says, the firm can use these shares to finance an acquisition or merger when the shares of the firm are overvalued. Because the market value of the shares has a bigger amount as compared to the estimated value that the company paid lesser for the merger or acquisition. Vishny and Shleifer (2001) formed a model based on this theory. In their model they created the possibility to make profitable short term gains out of an acquisition or merger. They think that the only reason for long-term gains is shares of the target firm being undervalued.

Rhodes- Viswanathan and Kropf (2004) constructed a model where the method of payment includes a bigger percentage of stock deals in overvalued markets then in undervalued markets. Rhodes- Viswanathan and Kropf (2004) have the opinion that managers can make faults, because decisions can be correct ex ante but are incorrect ex post. In this model the price of the target is decreased when the market is overvalued and that shall correct the value of the bid. In an overvalued market there is a greater chance that the share offer will be overvalued by the target company and thus there is a bigger possibility to accept the offer.Due to this reason it is more likely that mergers find place in overvalued markets.

2.3 **Does synergy create value?**

Synergy is the extra value created by combining two firms, creating opportunities that would not have been possible if these firms were operating independently. In other words, synergy occurs if the value of the companies together is more than the sum of the individual firms.

As indicated by Damodaran(2005) synergy can be partitioned into operating and financial synergies. Operating synergies impact the tasks of the joined organization and incorporate the upsides of the economies of scale, expanding estimating power and higher development potential. As a rule this appears in higher expected future money flows.Financial synergies then again, appear if the consolidated estimation of the advantages of the individual firms has a greater worth than the estimation of the securities exchange attributed to the benefits. (Goergen and Renneboog, 2003).Chatterjee (1986) imagines that there is another sort of cooperative energy to specific tricky collaboration, other than the working and money related cooperative energy. Conniving collaboration can be begun by cost related assets. The deceitful collaboration has on normal the most elevated an incentive from the various kinds of cooperative energy.As indicated by Damodaran(2005) cooperative energy can be partitioned into working and budgetary collaborations. Working collaborations impact the tasks of the joined organization and incorporate the upsides of the economies of scale, expanding estimating power and higher development potential. As a rule this appears in

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The resource that creates the synergy will determine the type of synergy. Well known synergies are production equipment and management skills with operating synergy, customers with collusive synergy and overhead costs with financial synergies.

2.3.1 **Operating synergies**

Operating synergies gives a company the chance to generate more operating income from the existing assets and the synergy can thus lead to growth (Damodaran, 2005). Operating synergies are divided into four types.

The first type is economies of scale, with this type of synergy the combined company can be more cost efficiently. For example to lower the average cost price. Synergy by economies of scale would mostly be seen in the same business, because there are more advantages in the operating process. (Damodaran, 2005)

The second type of operating synergies is increased market power for the firm. The combined firm has a higher market resulting in less competition. Because of a merger or acquisition with an important rival this will be more beneficial if there are very few firms which are active in the market.

The third type of synergy is the combination of functional strengths in the new company. Companies can fill up each other with the strong points of each company.

The fourth and last synergy is the increasing growth in the markets. The new company will have the possibility to reach a bigger consuming market and can use this market to increase the sales.

According to Damodoran (2005) there are two different opinions about valuing operating synergies. The first opinion is that it is barely possible to estimate the value of . To estimate the value they have to make a lot of assumptions, that the estimated value doesn't have any utility. The other opinion is that the value from synergies has to be estimated to estimate the price to acquire a firm. The value can't be calculated exactly, but with some estimations that it is possible to make a reasonable calculation.

Most important with the valuation is estimation of the form of the synergy and the moment that the synergy will have influence on the financial results. He separates the procedure of valuing in three stages, in particular ascertaining the independent value of the included firms, the joined value of the new firm without synergy and as last advance the consolidated estimation of the new firm with synergy included.

2.3.2 Financial synergies

With financial synergies the benefits can come from increasing cash flows or a decrease in the cost of capital. Also in financial synergies there are different types of synergies, of which the first financial synergy is an increase in debt capacity. The combined firm can have more stable and better predictable cash flows and that will give the company the opportunity to borrow more money than the individual companies could borrow together. The bigger amount they can borrow creates a tax benefit, because they can get more tax back and this will usually lower the cost of capital of the firm.

The second type of financial synergy is the combination of a firm with an overflow of cash and a firm that has projects with high returns. The combined firm has then the possibility to take on projects with the overflow of cash that in the old situation the individual firm could not take due to a lack of cash flow availability. This type of financial synergy is mostly seen when a large firm acquires a small firm or with the acquisition of private businesses.

The last form of financial synergy indicated by Damodaran (2005) is diversification. Private businesses or firms with a closed structure can have potential benefits from diversification. Firms that are publicity traded don't have these potential benefits, because investors already

can simply diversify their portfolio at lower costs.

Valuing synergies

Diversification should have no value with a takeover, because it has no effect on the new company's combined value. But it is a misunderstanding to say that such takeovers have no value, because the acquiring firm pays a premium up to the market price and this transaction will transfer value from the company that is acquiring to the target company. Another option is that there will be negative synergy with diversification, because the acquiring firm has less expertise in the branch and that can result in less efficient processes. (Damodaran, 2005).

Travlos and Holmen, Doukas (2001) confirm the negative synergy and report that with announcements of diversifying acquisitions the market reacts negatively to it. Lang and Stulz

(1994) present proof in their exploration that organizations that are exchanged various organizations can exchange with a markdown somewhere in the range of 5 and 10 percent on singular firm qualities and assign this on a broadening account.

The absence of added value seems weird, because the logical expectation is that two firms from unrelated businesses would create benefits from diversification. If there is not a high correlation between the companies the variance in earnings by the combined firm will be lower than the individual firms. But less variance in earnings will not have any influence on the value, because it is a firm specific risk and these kinds of risks have no effect on expected returns. (Damodaran, 2005).

Companies can reject profitable investments because they have not enough cash available for two reasons. The first reason is that it is difficult to attract cash because the limited access to capital markets. The other reason is that managers know more about future projects than investors do according to Myers and Majluf (1984). Companies have to issue new stocks below the true value and that will destroy profitable investment opportunities.

The value created by a takeover is the value of projects that can be taken by the combined firm that the firm with a cash slack would have rejected as an individual firm. This may explain why strategies focusing on the takeover of smaller, private firms have worked well in practice (Damodaran, 2005)

2.4 What is the value for the shareholders of the target company and the buying company ?

Morellec and Zhdanov (2004) created a model of takeovers based on the stock market valuation of merging firms. Conclusion of the model is that the returns to target shareholders should be higher than the returns to the shareholders of the acquirer. The returns can be negative when there is a lot of competition between firms for the acquisition of the target company. Last conclusion of the model is that competition between companies from different branches affects the returns of the takeover and will speed up the takeover process.

The results of other empirical researches gave the same positive result for the returns of the target shareholders. According to Goergen and Renneboog (2003) there was a positive result of mergers and acquisitions in Europe. They found out that the cumulative abnormal return, including the price run-up, over the period of two months to the announcement period rises up to 23 percent. In their research the share price of the acquiring firm had only an average positive increase of 0,7 percent. The empirical research uses a sample of 187 merger and acquisition deals, the deals are divided into 56 mergers, 41 friendly acquisitions, 61 hostile acquisitions and 29 divestments, with a minimum value of hundred million American dollars.

According to Bruner (2003) the 25 last empirical researches from 1978 to 2003 about the returns to the shareholders of the target give all positive returns for the shareholder. The

results from the researches about the returns of the shareholders of the acquiring firms give contradicting results, twenty-two studies have negative results while thirty-two studies have a positive result.

Research about the result of the shareholders of the combined firm are almost all positive. From twenty-four studies there is only one negative result and the rest of the results positive, most of them are significantly positive. One of the empirical researches is done by Boone and Mulherin (2000), in the research he investigated 1.305 deals from 59 industries in the time period from 1990 up to 1999. The conclusion was that there is wealth creation by mergers and acquisitions with an average return of the combined shareholders of 3,5 percent.

Chapter 3: Research Methodology

This chapter will deal with an event study on mergers and acquisitions. In subsection 3.1 the sample selection and the data sources will be discussed. In subsection 3.2 the used methodology for the research will be discussed and in subsection 3.3 the results of the empirical research will be presented.

3.1 Sample selection and data sources

This empirical research focuses on mergers and acquisitions that took place in the INDIA. . The sample includes 15 acquisitions of mergers from large multinational INDIAN companies in the time period 2011 up to 2020. All the firms have a listing on the stock exchange of the located country and are thus public firms.

The data are collected from the databases of the website http://india.finance.yahoo.com/, websites of the firms involved in the merger or acquisition. Also websites are used for extra information about announcement dates.

| Acquiring/Merged Company | Acquired/Merging Company |
|--------------------------|--------------------------|
| Vodafone | Idea |
| Reliance communication | Aircel |
| IDFC Bank | Gram Vidiyal Bank |
| Reliance communication | MTS |
| Unilever | Blue air |
| Wipro | Health Plan Services |
| Tata Steel | Bhushan steel |
| Sun pharma | Ranbaxy |
| Bank of Baroda | Vijaya and Dena bank |

The 15 Mergers and Acquisitions taken as sample for research are

| Hindalco | Aleris |
|---------------|--------------------------|
| Axis bank | Freecharge |
| Tech mahindra | CJS solution |
| SBI merger | SBI associates |
| Bharti airtel | Telenor |
| Asian paints | ESSESS bathroom products |

For comparing the share price performance of the chosen firms involved in the mergers and acquisitions there is chosen for the index NIFTY 50 in the time period 2011 up to 2020. The NIFTY 50 is a market weighted list of 50 INDIAN firms that are supersector pioneers into INDIA. The NIFTY 50 is a decent benchmark for this observational research, in light of the fact that the outcomes from the mergers and acquisitions are contrasted with the equivalent topographical district, same period and the aftereffects of the supersector pioneers into INDIA.

3.2 **Methodology**

Hypothesis Testing

There will be 41 hypothesis testing for each day i.e 20 days prior to the announcement date and 20 days after the date of announcement and one for the date of announcement.

| DAY | HYPOTHESIS TESTING | |
|-----|--|--|
| 1 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | |
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In the empirical research the abnormal returns of the firms involved in mergers and acquisitions is calculated. Abnormal returns are defined as the return minus a benchmark or normal return. The formula of the abnormal return:

 $AR_{it} = R_{it} - NR_{it}$

To calculate the abnormal returns there are three well known methods to use, with all of these methods can the normal return be calculated. The methods are the mean-adjusted returns, the market adjusted returns and the market model residuals.

For the empirical research the market adjusted returns method is used. The market adjusted returns method compares the returns from every single firm with the returns from the benchmark, in this case the index NIFTY 50. The normal return in this empirical research is thus the RM_{it} NIFTY 50. There is chosen for the market adjusted returns, because the results of the involved firms will be compared to benchmark with a well indication of the results in the time period. By using the mean-adjusted returns the results of the involved firms will be compared to the results of the own firm and that can give a bad indication, because of the different market situation. The formula for calculating the abnormal returns with the market adjusted returns will be:

 $AR_{it} = R_{it} - RM_{it} NIFTY 50.$

To calculate the abnormal return a time period of 40 trading days is used. The time period is the abnormal return 20 days prior to the announcement date and the abnormal return 20 days after the announcement date.

To calculate this, first the return of the firm has to be calculated for every single trading day. After that the return of the index, in this case the NIFTY 50, has to be calculated for every single trading day. With these data the abnormal results of every single trading day can be calculated with the return of the firm of that day minus the return of the index. By summing up all the abnormal returns the cumulative abnormal return (CAR) for each of the 15 firms can be calculated. By the returns of the index and for the firms is used the closing price of the trading day. In the empirical research are dividend payments and stock splitting not included in the closing price.

With the CAR the performance of stocks can be analyzed over a longer interval period. Then the cumulative average abnormal return (CAAR) of the 15 CARs that will be computed using the following formula:

$$CAAR = \frac{1}{N} \sum_{i=1}^{N} CAR_i$$

Chapter 4- Empirical results

Cumulative abnormal returns is a metric utilized in an occasion study to assess the effect of an arrangement on a company's stock during the event window. It exhibits the contrasts between the expected return and the genuine return of the company's stock coming about from the acquisition announcement.

The empirical research is based on the sample of 15 companies which were involved in mergers and acquisitions. The market adjusted returns method is used to calculate the abnormal returns and the cumulative abnormal return. To test the significance t-test is used for the cumulative average abnormal returns. Table 4.1 and fig-16(final sheet) in annexure presents the CAAR (cumulative average abnormal returns) of the acquiring firms and the t-test conducted for each trading day. Fig-1to 15 in the annexure presents the abnormal return and cumulative abnormal return for individual mergers and acquisition.

| CAAR | STD. Deviation | STD. Error | CV t-Test VALUE | TABULATED VALUE(95%,1 4) | RESULT |
|---------|-------------------|---------------|--------------------|--------------------------------|-----------|
| 0.0008 | 0.0165 | 0.0043 | 0.1941 | 2.145 | Accept HO |
| 0.0019 | 0.0229 | 0.0059 | 0.3225 | 2.145 | Accept HO |
| 0.0033 | 0.0288 | 0.0074 | 0.4383 | 2.145 | Accept HO |
| 0.0078 | 0.0411 | 0.0106 | 0.7304 | 2.145 | Accept HO |
| 0.0045 | 0.0539 | 0.0139 | 0.3252 | 2.145 | Accept HO |
| 0.0022 | 0.0447 | 0.0115 | 0.1914 | 2.145 | Accept HO |
| -0.0004 | 0.0485 | 0.0125 | -0.0308 | 2.145 | Accept HO |
| 0.0017 | 0.0686 | 0.0177 | 0.0967 | 2.145 | Accept HO |
| 0.0055 | 0.0707 | 0.0183 | 0.3018 | 2.145 | Accept HO |
| 0.0090 | 0.0679 | 0.0175 | 0.5141 | 2.145 | Accept HO |
| 0.0123 | 0.0746 | 0.0193 | 0.6404 | 2.145 | Accept HO |
| 0.0126 | 0.0860 | 0.0222 | 0.5670 | 2.145 | Accept HO |
| 0.0105 | 0.0813 | 0.0210 | 0.5004 | 2.145 | Accept HO |

Table 4.1: CAAR for the acquiring firms

| 0.0128 | 0.0914 | 0.0236 | 0.5447 | 2.145 | Accept HO |
|--------|--------|--------|--------|-------|-----------|
| 0.0178 | 0.0884 | 0.0228 | 0.7796 | 2.145 | Accept HO |
| 0.0201 | 0.0920 | 0.0238 | 0.8473 | 2.145 | Accept HO |
| 0.0230 | 0.1044 | 0.0269 | 0.8518 | 2.145 | Accept HO |
| 0.0213 | 0.1075 | 0.0278 | 0.7676 | 2.145 | Accept HO |
| 0.0283 | 0.1172 | 0.0303 | 0.9342 | 2.145 | Accept HO |
| 0.0255 | 0.1224 | 0.0316 | 0.8070 | 2.145 | Accept HO |
| 0.0249 | 0.1278 | 0.0330 | 0.7541 | 2.145 | Accept HO |
| 0.0273 | 0.1378 | 0.0356 | 0.7682 | 2.145 | Accept HO |
| 0.0361 | 0.1475 | 0.0381 | 0.9468 | 2.145 | Accept HO |
| 0.0428 | 0.1434 | 0.0370 | 1.1562 | 2.145 | Accept HO |
| 0.0382 | 0.1392 | 0.0359 | 1.0623 | 2.145 | Accept HO |
| 0.0374 | 0.1443 | 0.0373 | 1.0029 | 2.145 | Accept HO |
| 0.0442 | 0.1534 | 0.0396 | 1.1151 | 2.145 | Accept HO |
| 0.0524 | 0.1401 | 0.0362 | 1.4499 | 2.145 | Accept HO |
| 0.0539 | 0.1420 | 0.0367 | 1.4698 | 2.145 | Accept HO |
| 0.0587 | 0.1308 | 0.0338 | 1.7375 | 2.145 | Accept HO |
| 0.0541 | 0.1202 | 0.0310 | 1.7447 | 2.145 | Accept HO |
| 0.0560 | 0.1161 | 0.0300 | 1.8668 | 2.145 | Accept HO |
| 0.0512 | 0.1134 | 0.0293 | 1.7488 | 2.145 | Accept HO |
| 0.0565 | 0.1165 | 0.0301 | 1.8781 | 2.145 | Accept HO |
| 0.0639 | 0.1292 | 0.0334 | 1.9168 | 2.145 | Accept HO |
| 0.0680 | 0.1372 | 0.0354 | 1.9184 | 2.145 | Accept HO |
| 0.0812 | 0.1389 | 0.0359 | 2.2647 | 2.145 | Reject H0 |
| 0.0831 | 0.1400 | 0.0361 | 2.2999 | 2.145 | Reject H0 |
| 0.0867 | 0.1518 | 0.0392 | 2.2110 | 2.145 | Reject H0 |

The table shows that we fail to reject null hypothesis for the first 37 days and we fail to accept null hypothesis for the last 3 days for the cumulative average abnormal return. The

tabulated value is 2.145 (14, 0.95) and this fact indicates that acquiring firm's shareholders gain significantly when engaging in a merger or acquisition. Furthermore We will test whether the CAAR significantly differs from 0.

For testing if the result of the CAAR is significant the following t-test is used:

$$t = \frac{CAAR - 0}{Std \ error}$$

To calculate the sample standard deviation the following formula is used:

$$ext{SD} = \sqrt{rac{\sum |x-ar{x}|^2}{n}}$$

At a significance level of 95% with 14 degree of freedom the null hypothesis H0 is accepted for all 20 days prior to the date of announcement of merger or acquisition and it is also accepted on the date of announcement and for next 17 days after the announcement because the calculated value of t is less than the tabulated value of t i.e 2.145(for 95% confidence and 14 degrees of freedom). But the null hypothesis is rejected on the 18,19 and 20th day from the announcement date because the t-value is higher than 2.145.

| Day | Hypothesis Testing | Result |
|-----|--|---|
| 1 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 2 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 3 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 4 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 5 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 6 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 7 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 8 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 9 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 10 | HO: There is no significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |

| | H1 : There is significant value creation(Abnormal Return) by M&A | |
|----|--|---|
| 11 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 12 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 13 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 14 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 15 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 16 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 17 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 18 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 19 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 20 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |

| 21 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
|----|--|---|
| 22 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 23 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 24 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 25 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 26 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 27 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 28 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 29 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 30 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 31 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) | Since CV <tv Null Hypothesis is accepted</tv |

| | by M&A | |
|----|--|---|
| 32 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 33 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 34 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 35 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 36 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 37 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 38 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV <tv Null Hypothesis is accepted</tv |
| 39 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV>TV Null Hypothesis is rejected |
| 40 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV>TV Null Hypothesis is rejected |
| 41 | HO: There is no significant value creation(Abnormal Return) by M&A H1 : There is significant value creation(Abnormal Return) by M&A | Since CV>TV Null Hypothesis is rejected |

The announcement of mergers and acquisitions in the INDIA has a relatively low impact on the wealth of the shareholders of the acquiring firm. In the period of 20 days for and 20 days after the announcement date, the cumulative average abnormal returns are insignificant for first 38 days and are significant for last 3 days. The first 38 days will have no influence, because the shareholders will not sell their shares for the very little drop in value and also because this CAAR is not significantly different from zero but for the last three days we see a significant result.

Only last 3 days i.e 18,19 & 20th day from the date of announcement of the mergers and acquisitions created value for the acquiring shareholders, the rest of the 38 days(from the period taken for study i.e. 20 days prior to announcement, the day of announcement and 17 days after date of announcement) resulted in an insignificant result for the shareholders of the acquiring firm. But the total result is insignificant and that will say that mergers and acquisitions with an insignificant result did not create much value and impact on shareholders.

Table 4.2 displays the cumulative abnormal returns for each company.

Table 4.2

| 1 5 | S.NO | | | |
|-----|-------------|---|-----------------|----------|
| | A | В | С | D |
| 1 | <u>S.NO</u> | Companies merged | CAR | RESULT |
| 2 | 1 | Vodafone idea | 0.3395854212 | Positive |
| 3 | 2 | Rcomm and aircel | 0.3917474856 | Positive |
| 4 | 3 | IDFC and grm vidiyal | -0.04932190808 | Negative |
| 5 | 4 | Rcomm and MTS | -0.1311803608 | Negative |
| 6 | 5 | Unilever and blue air | 0.03076638069 | Positive |
| 7 | 6 | Wipro and health plan services | -0.01357872978 | Negative |
| 8 | 7 | Tata and bhushan steel | 0.1550632093 | Positive |
| 9 | 8 | Sun pharma and ranbaxy | -0.101608207 | Negative |
| 10 | 9 | BOB,Vijaya and dena bank | 0.03963611635 | Positive |
| 11 | 10 | Hindalco and aleris | 0.3367242194 | Positive |
| 12 | 11 | Axis bank and freecharge | -0.002755689295 | Negative |
| 13 | 12 | Tech mahindra and CJS solution | 0.1900614043 | Positive |
| 14 | 13 | SBI merger | -0.06900302538 | Negative |
| 15 | 14 | Bharti airtel and telenor | 0.000149860667 | Positive |
| 16 | 16 | Asian paints and ESSESS bathroom products | 0.09810761107 | Positive |

Table 4.2 shows 6 of the 15, or 40%, of acquisitions led to some level of negative cumulative abnormal returns for the buying company. Negative cumulative abnormal returns demonstrate a negative stock market reaction, and could indicate investor concerns about the "expected value resulting from future synergies or wealth redistribution among stakeholders" (Campa and Hernando, 2004, 47).

Furthermore, Table 4.2 reports that 9, or 60%, of acquiring companies realized positive cumulative abnormal returns following the purchase of another company. This suggests a positive market reaction, and shareholders' positive expectations for the acquisition.

Chapter 5- Findings ,Summary, and Recommendations

This chapter will deal with a findings of the research in subsection 5.1, the summary of the research in subsection 5.2 and recommendations for further research in subsection 5.3

5.1 Findings

Results are insignificant for the 20 days prior to the date of announcement of merger and till 17 days from that date but the results become significant for the next three days i.e. 18,19& 20th day from the announcement date which may indicate the following:

- 1. Investors do not concern or bother about the mergers or acquisition taking place which thus lead to showing insignificant impact.
- 2. The acquired company is a small company and thus it might not have much impact on the acquiring company's shareholder's wealth.
- 3. Investors do not have much information prior to the merger due to which results were not significant but after the announcement investors would have information available with them and they may process that information and form a strategy whether to buy or sell or hold their stocks which might have led to significant results in the last 3 days of the period taken for the study.
- 4. As shown in table 4.2 above 6 of the 15, or 40%, of acquisitions prompted some level cumulative abnormal returns for of negative the acquiring company. Negative cumulative abnormal returns shows a negative stock market reaction, and could likewise indicate investor's concerns about the "expected value resulting from future synergies wealth or redistribution among stakeholders" (Hernand and Campa, 2004)
- 5. Furthermore, Table 4.2 above also reports or 60%, of that 9, companies have obtained positive acquiring cumulative abnormal returns after the purchase or acquisition of another company. This suggests positive market reaction. а and shareholders' positive expectations for the merger or acquisition taking place.

Table 4.3

| Day | Positive | Negative |
|-----|----------|----------|
| -20 | 7 | 8 |
| -19 | 8 | 7 |
| -18 | 8 | 7 |
| -17 | 8 | 7 |
| -16 | 8 | 7 |
| -15 | 8 | 7 |
| -14 | 6 | 9 |
| -13 | 8 | 7 |
| -12 | 8 | 7 |
| -11 | 8 | 7 |
| -10 | 8 | 7 |
| -9 | 9 | 6 |
| -8 | 9 | 6 |
| -7 | 8 | 7 |
| -6 | 8 | 7 |
| -5 | 9 | 6 |
| -4 | 8 | 7 |
| -3 | 8 | 7 |
| -2 | 9 | 6 |
| -1 | 9 | 6 |
| 0 | 8 | 7 |
| 1 | 8 | 7 |
| 2 | 8 | 7 |
| 3 | 8 | 7 |
| 4 | 8 | 7 |
| 5 | 8 | 7 |
| 6 | 8 | 7 |
| 7 | 9 | 6 |
| 8 | 9 | 6 |
| 9 | 9 | 6 |
| 10 | 10 | 5 |

| 11 | 9 | 6 |
|----|----|---|
| 12 | 10 | 5 |
| 13 | 10 | 5 |
| 14 | 10 | 5 |
| 15 | 9 | 6 |
| 16 | 10 | 5 |
| 17 | 10 | 5 |
| 18 | 9 | 6 |
| 19 | 9 | 6 |
| 20 | 9 | 6 |

6.The positive returns watched for declaration and during the pre-occasion window are in a state of harmony with the desire for the Indian Supervisors to realize synergy and synergy theories. Maybe, this might be because of the explanation that organizations get another organization for a strategic reason, for example, to abuse the economies of scale and extension, and influence accessible assets and abilities, consequently making more degree for value creation. Merger and acquisition give a chance to the obtaining organization to join and wisely use elusive assets of both the organizations on a more extensive scale.

7.Looking at Table 4.3, we can see that there are more Positive abnormal returns for the investors than Negative abnormal returns for the investors, which inferences that they are more into the positive side and hence would invest more in the newly formed company after merger or acquisition.

8. This study says that although the final result is insignificant i.e there is no significant value creation for the shareholders but in table 4.3 we can see that there are more positive abnormal returns for investors which means they will buy more of that stock with a view of getting positive value creation. Although the two things seem contradictory, certain studies say that this may happen in the real world and thus it provides scope for further research.

5.2 Summary

The main research question is:

<u>What is the value creation by mergers and acquisitions</u> <u>for the shareholder?</u>

To answer this question the thesis focuses on a theoretical literature study and an empirical research. The literature study focuses on the valuation of mergers and acquisitions, payment methods influence on mergers and acquisitions, the value from synergies by mergers and acquisitions and the value created for the shareholder of both the acquiring and the target firm.

The discounted free cash flow method can be used to value a merger or acquisition according to Schill, Doherty and Chaplinski (2000). For this method the present value of the target company over the life has to be computed and that will be the value for the target company. Hackbarth and Morellec (2006) developed a model to analyze the behaviour of stock returns, the most important factors for value maximizing are timing and the terms of the takeover.

Also the payment method has a lot of influence on the value according to Myers and Maljuf (1984) the acquisition will be paid with shares when the acquisition of an overvalued firm takes place. According to Martin (1996),Ruland and Ghosh (1998) relative sizes of the target company have no influence on the payment method. But Jones, Zhang, and Wang (2003) found another outcome and concluded that the relative size of the target firm influences the payment method.

There are also theories about the payment method, the most important theories are the taxation hypothesis, growth and investment opportunities and market misevaluation. The taxation hypothesis pretends that target shareholders instead of a takeover with shares demand a higher takeover premium with an offer made by cash. The growth and investment opportunities theory is about the influence of cash payments on the growth and investment opportunities for the company, because cash payments can influence the

availability of cash. The theory of market misevaluation pretends that the acquiring firm's shares are overvalued if the firm uses these shares to finance an takeover.

Not only the valuation of a takeover and the payment methods have influence on the value creation by a takeover. Also synergies can create extra value if the total value of the combined firm is more than the sum of the value of the individual firms. Synergies can be of two types: operating synergies and financial synergies according to Domodoran (2005). Operating synergies impact the tasks of the consolidated firm and the worth is the upsides of the joined activities. Financial synergies exist if the consolidated estimation of the benefits of the individual firms has a greater worth than the estimation of the securities exchange attributed to it(Goergen and Renneboog, 2003).

In the literature study the value for shareholders of both the target and the acquiring firm was also reviewed. Zhdanov and Morellec (2004) created a model based on the stock market valuation of merging firms and the finish of the model is that the profits to the objective investors ought to be higher than to the getting investors. The returns can be negative if there are a lot of competitions between firms for acquiring the target company. Other results of empirical research gave the same positive result for the returns of the target shareholders, according to Goergen and Renneboog (2003) there was a positive result of mergers and acquisitions that took place in Europe. Bruner (2003) analysed 25 empirical researches in the period from 1978 to 2003 about the returns of the shareholders. All results of the researches about the returns to the target shareholders were positive, the results of the researches about the return of the acquiring shareholders were contradicting.

In the empirical research the research was focussing on value creation for the shareholder of the acquiring firms using a sample of the 15 firms. The method of the market adjusted return is chosen for the study, because the goal of the research was to compare the results of the company with the results of the market.

The empirical research gave an insignificant result for the shareholders of the acquiring firm i.e there is no significant value creation for the shareholders of the acquiring firm except for the last 3 days of the period of our study. Although there are more positive

abnormal returns than negative abnormal returns ,we see that there is contradiction in between the two results.

5.3 Recommendations for further research

The literature review and the empirical research didn't solve the main research question without raising new questions. The limitations of the research have influence on the result of the empirical research, for example does the research have very different results with a bigger sample, including other companies into the sample or another time period? These are all very interesting questions for a new research.

Another interesting subject is the value creation for the shareholder with adjusted stock prices, including dividend and share splitting results. Also an interesting topic is the influence of the payment method on the returns for the shareholder, in this thesis it is only mentioned in the literature review. It is also a very interesting topic to investigate the returns for the shareholder by the different payment methods available in the mergers and acquisitions.

Chapter 6-Limitations of the research

The empirical research knows some limitations with influence on the result.

- The first reason is the sample of 15 firms, because there is a lot more variance than by a sample of 2000 firms.
- The next important limitations are the kind of companies and the time period. The choice for multinationals and a benchmark of the index NIFTY 50 does not give a complete picture of the value creation in mergers and acquisitions in all cases, because by small firms there, possibly, will be other results out of the research. The time period is also an important limitation, because the economic circumstances influence the number of mergers or acquisitions taking place and the value of them.
- The next limitation is the payment method, excluding private firms, and the fact that the stock prices are not adjusted for dividends and splits. By excluding private firms the results of the empirical research will not give a valid conclusion for the results of all mergers and acquisitions. And the payment method influences the stock price and because of that it will influence the results of the empirical research that is based on the stock prices. And at last, because dividends and splitting shares can have big influences on the stock price and because of that the stock price and because of that the stock price and because of that the stock price and because of the stock price and because of that the stock price can give a wrong signal.

Conclusion

No final conclusion can be drawn from the empirical research as the study shows contradictory results i.e the hypothesis testing shows that mergers and acquisitions do not have a significant impact on the value creation for the shareholders of the acquiring company and also the study shows positive abnormal returns for the investors during the time period of study . The conclusion that can possibly be drawn is that acquiring firms do not gain or lose significantly when engaging in an merger or acquisition.

The results of the value for shareholders of the target firms can be both negative and positive, since the empirical research gave a mixed result. The results of the value creation for shareholders of the acquiring firms are contradicting, there are a lot of studies with positive results for the shareholder, but there are also a lot of studies with negative results for the shareholders. The combined firm value after a merger or acquisition is also positive with

average a positive abnormal return for the shareholder.

Chapter 7-Bibliography/References

Articles

Andrade, G., Mitchell, M., Stafford, E., 2001. New evidence and perspectives on mergers, The Journal of Economic Perspectives 15, 103-120.

Arzac, E., 2004, Valuation for Mergers, Buyouts and Restructuring, Colombia University.

Betton, S., Espen Eckbo, B., Thorburn, K., 2008, Corporate Takeovers, Concordia University, Tuck School of Business and Norwegian School of Economics and Business Administration.

Boone, L., Mulherin, J., 2000, Comparing acquisitions and divestitures, Penn State University, Journal of Corporate Finance 6, 117–139

Brown, D., Ryngaert, M., 1991, The mode of acquisition in takeovers: taxes and asymmetric information, Journal of Finance 46, 653-659.

Bruner, R., 2003, Does M&A Pay?, University of Virginia.

Chaplinsky, S., Doherty, P., Schill, M., 2000, Methods of valuation for mergers and acquisitions, University of Virginia

Chatterjee, S., 1986, Diversification in industry, Purdue University. Damodaran, A., 2005, The value of synergies, Stern School of Business. De Jong, F., 2007, Event studies methodology, University of Tilburg.

Di Giuli A., 2008, The Determinants of the Method of Payment in Mergers, Bocconi University domestic and cross-border takeover bids, University of Manchester Institute of Science and Doukas, J., Holmen, M. Travlos, N., 2001, Diversification, ownership and control of Swedish corporations, Old Dominion University, University of Gothenburg Cardiff and University Business School.

Espen Eckbo, B., 2008, Bidding strategies and takeover premiums: A Review, Tuck School of Business at Dartmouth.

Faccio, M., Masulis, R., 2005, The choice of payment method in European mergers & acquisitions, Vanderbilt University.

Ghosh, A., Ruland, W., 1998, Managerial ownership, the method of payment for acquisitions, and executive job retention, Journal of Finance 53, 785-798.

Goergen , M., Renneboog, L., 2003, Shareholder wealth effects of European , University of Tilburg and ECGI.

Hackbarth, D., Morellec, E., 2006, Stock returns in mergers and acquisitions, Washington University and University of Lausanne.

Maljuf, N., Myers, S., 1984, Corporate financing and investment decisions when firms have information that investors do not have, MIT, NBER and Pontifical Catholic University of Chile.

Martin K., 1996, The method of payment in corporate acquisitions, investment opportunities, and management ownership, Journal of Finance 51, 1227-1246.

Morellec E., Zhdanov, E., 2004, The dynamics of mergers and acquisitions, University of Lausanne and University of Rochester. Rhodes-Kropf M., Viswanathan S., 2004, Market valuation and merger waves, Journal of Finance 59, 2685-2718.

Chapter 8-Annexure

Fig-1 Vodafone and Idea merger

| fx | Vodafone | idea ltd | | | | | | | | | | | | | |
|---------|--------------------------|----------|---------------------------------|--------------------------|-----------|-----------------------------|-----------------|-------------|---------------------------------|---------------------------|--------------|------------------------------|----|-----------|----------------|
| | A | B | с | D | ε | F | ٥ | н | | J | к | L | M. | N | 0 |
| | Vodafone idea Itd | | | NIfty | | | | | | | | | | Intercept | 0.008489635529 |
| | | | | | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 1.204478483 |
| | 01-08-2018 | | -0.01562428547 | 01-08-2018 | | 0.009026474695 | | 1.204478483 | -0.02649648002 - | | 0.3395854212 | | | R-square | 0.1124063795 |
| | 02-08-2018 | | -0.01449349385 | 02-08-2018 | | -0.01021935075 | | | -0.00218450576 | | | -0.08380202069 | | St. error | 0.02606745927 |
| | 03-08-2018 | | 0.005464761502 | | | -0.00230963107 | | | 0.008246662434 | | | 0.3163585047 | | | |
| | 06-08-2018 | | -0.00181827502 | 06-08-2018 | | -0.00020633129 | | | -0.00156975341 | | | -0.06021888808 | | | |
| | 07-08-2018 | | -0.006322229971 | | | -0.00528820960 | | | 0.000047304706- | | | 0.001814703399 | | | |
| | 08-08-2018 | | -0.01774714295 | 08-08-2018 | | -0.00180459780 | | | -0.01557354372 | | | -0.5974323605 | | | |
| 2 | 09-08-2018 | | 0.03584592168 | 09-08-2018 | | 0.003604707118 | | | 0.03150412952 | | | 1.208561571 | | | |
| 0 | 10-08-2018 | | 0.03618914642 | 10-08-2018 | | 0.006494507188 | | | 0.02836665225 | | | 1.088201652 | | | |
| | 13-08-2018 | | 0.009615875284 | | | -0.00693916100 | | | 0.0179739454 | | | 0.6895165816 | | | |
| 2 | 14-08-2018 | | 0.02766943514 | 14-08-2018 | | 0.004396115959 | | | 0.02237440806 | | | 0.8583271514 | | | |
| | 16-08-2018 | | -0.00589421689 | 16-08-2018 | | -0.00747117668 | | | 0.003104654675 | | | 0.1191007779 | | | |
| 4 | 17-08-2018 20-08-2018 | | -0.04681584546 | 17-08-2018 20-08-2018 | | -0.0070119246 | | | -0.03837013315 | | | -1.471955236 | | | |
| | | | 0.009449134874 | | | -0.00165501387 | | | 0.01144256347 | | | 0.4389596759 | | | |
| 6 7 | 21-08-2018 | | 0.001894034576 | | | -0.00102307310 | | | 0.003126304117 | | | 0.1199312939 | | | |
| 8 | 23-08-2018 | | 0.01246629013 | 23-08-2018 | | 0.002219414905 | | | 0.009793052635 | | | 0.3756811331 | | | |
| | 24-08-2018 27-08-2018 | | 0.01459057969 | 24-08-2018 | | -0.01153357652 | | | 0.02848252444 | | | 1.092646742 | | | |
| 9 | 27-08-2018 | | | 27-08-2018 28-08-2018 | | -0.00396558333 | | | 0.01064760615 | | | 0.4084635194 | | | |
| 20 | | | 0.03128148314 | | | 0.00398566529 | | | 0.02648083506 | 0.1173962269 | | 1.015857924 | | | |
| | 29-08-2018 30-08-2018 | | -0.00601836449 | | | 0.00129316251 | | | -0.00757595091 | 0.1098202759 | | -0.2906286661 | | | |
| 3 | 31-08-2018 | | 0.01013224001 | 30-08-2018 | | -0.00031676726 | | | 0.01051377937 | 0.1203340553 | | 0.4033296555 | | | |
| 4 | 03-09-2018 | | -0.03330236245 | 31-08-2018 03-09-2018 | | 0.008474100679 | | | -0.04350923438 | | | -1.669101462 | | | |
| .* 5 | 04-09-2018 | | 0.03340081311 0.03131686644 | 04-09-2018 | | 0.005386144458 | | | 0.02691331801 | 0.1037381389 | | 1.032448837 | | | |
| 6 | 05-09-2018 | | 0.02900079093 | 05-09-2018 | | -0.00519636990 | | | 0.02676738751 | 0.1305055264 | | 1.026850651 | | | |
| 7 | 06-09-2018 | | -0.00746131432 | | | -0.00519636990 | | | 0.03525970668 | | | -0.07810746964 | | | |
| 8 | 07-09-2018 | | -0.00746131432 | 07-09-2018 | | 0.01320149325 | | | | | | | | | |
| 9 | 10-09-2018 | | 0.03354967477 | 10-09-2018 | | 0.01334219269 | | | -0.03370459479 0.01747929075 | 0.130024575 | | -1.29297583 0.6705406375 | | | |
| 10 | 11-09-2018 | 27.8572 | 0.03354967477 | 11-09-2018 | | -0.00724720534 | | | 0.008729102896 | | | 0.334865888 | | | |
| 30 | | | -0.00323462479 | | | | | | | | | | | | |
| 12 | 12-09-2018 14-09-2018 | | -0.00323462479 | 12-09-2018 14-09-2018 | | -0.01261810477 0.0120805959 | | | 0.01196361089 | 0.1681965796 | | 0.4589480996 | | | |
| 3 | 17-09-2018 | | -0.02830162439 0.03135118853 | 17-09-2018 | | 0.0120805959 0.008764152533 | | | -0.04285244221 0.02079495538 | 0.1253441374 0.1461390928 | | -1 643905598 0.7977361803 | | | |
| 14 | 18-09-2018 | | 0.03135118853 | 18-09-2018 | | 0.008764152533 | | | 0.02079495538 | | | 0.2360474368 | | | |
| 4 5 | 19-09-2018 | | 0.01092953621 | | | 0.003965516474 | | | | | | | | | |
| 15 | 21-09-2018 | | 0.006601009309 | 21-09-2018 | | 0.008188924088 | | | -0.00326237355 0.05899604636 | 0.1490298761 | | -0.1251511903 2.263206619 | | | |
| 17 | 24-09-2018 | | 0.07829203898 | 24-09-2018 | | -0.00904002276 | | | 0.05162937499 | 0.2596552975 | | 1.980606336 | | | |
| 8 | 25-09-2018 | | -0.02292232656 | 25-09-2018 | | 0.001234869457 | | | -0.02440970025 | 0.2352455972 | | -0.9364050406 | | | |
| 9 | 26-09-2018 | | 0.07662518362 | 26-09-2018 | | 0.006945994325 | | | 0.06825888291 | 0.2352455972 | | 2.6185476 | | | |
| 0 | 27-09-2018 | | -0.001299232070 | | | 0.004309063213 | | | -0.006489406 | 0.2970150741 | | -0.2489466247 | | | |
| 1. | 28-09-2018 | | -0.00129923207 | 28-09-2018 | | -0.00707193663 | | | 0.003360708965 | | | 0.1289235338 | | | |
| 12 | 01-10-2018 | | 0.05585430883 | 01-10-2018 | | 0.01381898556 | | | 0.03920963805 | 0.3395854212 | | 1.504160327 | | | |
| 13 | 03-10-2018 | 22.129 | 0.000004000003 | 03-10-2018 | 10858.25 | | 0.01004407077 | | 0.03920903605 | 0.000004212 | | 1.304100327 | | | |
| 3 | 0.0-10-2010 | 22.125 | | 30-10-20/10 | 10000.25 | | | | | | | | | | - |

Fig-2 Reliance communication and aircel

| x | Reliand | e communio | cation | | | | | | | | | | | | |
|---|---------------|------------|----------------|--------------------------|-----------|----------------|-----------------|-------------|-----------------------------------|---------------------------|--------------|--------------------------------|------|-----------|---------------|
| T | A | B | c | D | E | F | 9 | н | 1.0 | J | ĸ | L | м | N | 0 |
| | Reliance comm | | | NIFTY | | | | | | | | | | Intercept | 0.00979368714 |
| 1 | | Adj Close | Returns | Date | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 2.500744606 |
| | 23-03-2017 | | -0.02069857697 | 23-03-2017 24-03-2017 | | | -0.00595807619 | 2.500744606 | -0.01474050078 | | 0.3917474856 | | | R-square | 0.3288310882 |
| | 27-03-2017 | | 0.0131061599 | | | 0.006942908946 | | | -0.00425628220: 0.008767514956 | | | -0.2346697585 0.4833961938 | | St. error | 0.0181373272 |
| | 28-03-2017 | | 0.006553079946 | | | -0.00470264004 | | | 0.01831318166 | | | 1.009695718 | | | |
| | 29-03-2017 | | -0.00261437908 | | | | -0.01176010172 | | 0.005549926784 | | | 0 3059947427 | | | |
| | 30-03-2017 | | -0.00130548302 | | 9173 75 | | | | -0.00130548302 | | | -0.0719776961 | | | |
| | 31-03-2017 | | -0.01668806162 | 31-03-2017 | | -0.00693884399 | | | 0.000664215077 | | | 0.036621442 | | | |
| | 03-04-2017 | | -0.01668806162 | | | | -0.00736850755 | | -0.0379746297 | | | -2.093727989 | | | |
| | 05-04-2017 | | 0.01618929016 | | | | | | 0.01532528391 | | | 0.8449582288 | | | |
| | 06-04-2017 | | 0.01618929016 | 05-04-2017 | | 0.000345499597 | 0.000864006255 | | 0.01532528391 0.005625391532 | | | 0.8449582288 | | | |
| | 07-04-2017 | | 0.02292993631 | 07-04-2017 | | | 0.01730454477 | | 0.005625391532 | | | 0.3101554851 | | | |
| | 10-04-2017 | | -0.00398406374 | | | -0.00601385731 | | | 0.04207724488 | | | 2.319925329 0.6095196576 | | | |
| | 11-04-2017 | | 0.02309782609 | 11-04-2017 | | 0.003645372116 | | | 0.01398168143 | | | 0.6095196576 | | | |
| | 12-04-2017 | | 0.02937062937 | 12-04-2017 | | 0.005753595314 | | | 0.01498235692 | | | 0.8260509786 | | | |
| | 13-04-2017 | | 0.02937062937 | | | | 0.003146692085 | | 0.01498235692 | 0.1202399043 | | 2.325312036 | | | |
| | 17-04-2017 | | 0.005882352941 | | | | 0.009379354355 | | -0.00349700141- | | | -0.1928068765 | | | |
| | 18-04-2017 | | 0.005882352941 | | | | 0.000453257384 | | 0.008448819767 | | | 0.4658249615 | | | |
| | 19-04-2017 | | -0.00295857988 | | | | 0.00900513304 | | 0.006046553163 | | | 0.333376196 | | | |
| | 20-04-2017 | | -0.00147710487 | | | | 0.004661782388 | | -0.00613888726; | | | -0.3384670287 | | | |
| | 21-04-2017 | | -0.01598837209 | 21-04-2017 | | -0.01069109726 | | | 0.01074733172 | 0.1358467202 | | 0.5925532231 | | | |
| | 24-04-2017 | | -0.00145137881 | | | 0.00952549803 | | | 0.02236945902 | 0.1582161793 | | 1.233336227 | | | |
| | 25-04-2017 | | 0.004373177843 | | | -0.00483861482 | | | 0.01647331775 | 0.174689497 | | 0.9082549777 | | | |
| | 26-04-2017 | | -0.01436781609 | | | | 0.002596535346 | | -0.01696435144 | 0.1577251456 | | -0.9353280782 | | | |
| | 27-04-2017 | | 0.01162790698 | 27-04-2017 | | 0.004094990891 | | | 0.001387380593 | 0.1591125262 | | 0.07649311135 | | | |
| | 28-04-2017 | | 0.02228826152 | 28-04-2017 | | | 0.002617863800 | | 0.02490612532 | 0.1840186515 | | 1.373197108 | | | |
| | 02-05-2017 | | 0.02279635258 | 02-05-2017 | | | 0.000496821559 | | 0.02229953102 | 0.2063181825 | | 1.229482752 | | | |
| | 03-05-2017 | | 0.02652106084 | 03-05-2017 | | -0.00512291798 | | | 0.03933217035 | 0.2456503529 | | 2.168575877 | | | |
| | 04-05-2017 | | 0.02889245586 | 04-05-2017 | | 0.005034204603 | | | 0.005500952031 | 0.2544513149 | | 0.4052402954 | | | |
| | 05-05-2017 | | -0.04006163328 | | | | -0.00771913479 | | -0.03234249849 | 0.2221088164 | | -1.783200912 | | | |
| | 08-05-2017 | | -0.00153846153 | | | | -0.00771913479: | | -0.03234249849 | 0.2221088164 | | -0.04338626379 | | | |
| | 09-05-2017 | | -0.00153846153 | | | -0.00030053075 | | | 0.005917454968 | 0.2213219056 | | -0.04338626379 0.3262583779 | | | |
| | 10-05-2017 | | 0.004552352049 | | | | -0.02404434319 | | 0.008559955584 | | | 0.4719524254 | | | |
| | 11-05-2017 | | 0.01540832049 | 11-05-2017 | | | 0.005719240609 | | 0.009689079884 | 0.245488396 | | 0.5342065979 | | | |
| | 12-05-2017 | 32.95 | | 12-05-2017 | | -0.00471128803 | | | 0.02584422814 | 0.245488396 | | 1.424919327 | | | |
| | 15-05-2017 | | 0.0140625 | | | -0.00702777995 | | | 0.02584422814 | 0.2713326241 0.2857920422 | | 0.7972187884 | | | |
| | 16-05-2017 | | 0.004694835681 | | | | -0.00354408337 | | 0.008238919053 | 0.2940309612 | | 0.4542521035 | | | |
| | 17-05-2017 | | 0.02898550725 | 17-05-2017 | | 0.01021268473 | | | 0.008238919053 | 0.2940309612 | | 0.4542521035 | | | |
| | 18-05-2017 | | 0.02696550725 | 18-05-2017 | | | 0.000411136535 | | 0.01595547558 | 0.3134326278 | | 0.8797037931 | | | |
| | 19-05-2017 | | 0.02516778523 | 19-05-2017 | | | -0.00274232052: | | 0.02791010576 | 0.3413427336 | | 1.538821315 | | | |
| | 22-05-2017 | | 0.02516778523 | 22-05-2017 | | 0.005550731663 | | | 0.05040475202 | | | 2.779061729 | | | |
| | 23-05-2017 | 29.0 | | 23-05-2017 | 9386 15 | | 0.01300090227 | | 0.00040415202 | 0.331/4/4656 | | 2.775001729 | | | |
| | 2.3-03-2017 | 20 | | 25-35-2017 | 3366.15 | | | | | | | | | | |
| | + = | FINAL | SHEET - | 0.CAA | R + 1 | Vodafone | Idea 🔻 | 2 R com | m and airce | al 🕶 3 | IDEC and | gram vidiy | al 🔻 | 4 R com | m and MTS |

Fig-3 IDFC and gram vidiyal

| fx | | | | | | | | | | | | | | | | |
|---------|--------------------------|-----------|----------------|------------|-----------|----------------|--------------------------------------|--------------|----------------------------------|----------------|----------------|-------------------------------|---|-----------|----------------|--|
| | A | 8 | с | D | E | F | 0 | н | 1 | J | K | L | м | N | 0 | |
| | IDFC first bank | | | NIFTY | | | | | | | | | | Intercept | -0.00123304770 | |
| 2 | Date | Adj Close | Returns | Date | Adj Close | Returns | Expected return | Beta | Abnormal return | CAR | CAR | T-TEST | | Slope | 0.8082351789 | |
| | 13-06-2016 | 45.26753 | -0.00423711756 | 13-06-2016 | 8110.6 | 0.00021581358 | 6 0.000174428132 | 0.8082351789 | -0.00441154569 | -0.00441154569 | -0.04932190808 | -0.2207202994 | | R-square | 0.08063291751 | |
| | 14-06-2016 | 45.46015 | | 14-06-2016 | | | -0.00962700615 | | 0.009627006158 | | | 0.4816623987 | | St. error | 0.0199870411 | |
| | 15-06-2016 | | 0.004255147122 | | | | 5 0.006537762065 | | -0.00228261494 | | | -0.1142047455 | | | | |
| | 16-06-2016 | | 0.002132331633 | | | | -0.00291333456 | | 0.005045666193 | | | 0.2524468813 | | | | |
| | 17-06-2016 | | 0.002136888188 | | | | -0.00670054776 | | 0.008837435947 | 0.01681594766 | | 0.4421582916 | | | | |
| | 20-06-2016 | | 0.01298694002 | 20-06-2016 | | | 1 0.001828875574 | | | 0.02797401211 | | 0.5582649474 | | | | |
| | 21-06-2016 | | 0.005440589946 | | | | 4 0.001596037142 | | 0.003844552805 | | | 0.1923522739 | | | | |
| 2 | 22-06-2016 | | 0.01211462157 | 22-06-2016 | | | -0.00652318775 | | 0.01863780933 | | | 0.9324946716 | | | | |
| | 23-06-2016 | | 0.01113587188 | | | | 0.01817095261 | | -0.00703508072 | | | -0.3519821015 | | | | |
| 2 | 24-06-2016 | | -0.00332961506 | | | | | | -0.00272054560 | | | -0.1361154755 | | | | |
| 3. 1 | 27-06-2016 | | 0.01008962894 | 27-06-2016 | | | | | 0.01338607218 | | | 0.6697375623 | | | | |
| 5 | 28-06-2016 | | -0.00557402787 | | | | K-0.00750208543 | | 0.001928057558 | | | 0.09646538215 | | | _ | |
| | 29-06-2016 | | -0.00774339611 | | | | -0.00816743944; | | 0.000424043322 | | | 0.02121591287 | | | - | |
| | 30-06-2016 01-07-2016 | | -0.00330758907 | 30-06-2016 | | | e -0.00394007795 | | 0.000632488887 | | | 0.03164494857 | | | | |
| | 04-07-2016 | | -0.02157500155 | | | | H-0.00408911558: 1 0.003369282741 | | -0.01748588596 | | | -0.87486116 | | | | |
| | 05-07-2016 | | 0.008704989105 | 05-07-2016 | | | 1 0.003369282741 H -0.00018902344 | | 0.005335706364 | | | 0.2669582925 | | | | |
| | 07-07-2016 | | -0.03059068911 | | | | 6 0.00142746265 | | -0.03040166566 -0.00353264113 | | | -1.521068852 -0.1767465789 | | | | |
| | 08-07-2016 | | -0.00210517848 | 08-07-2016 | | | -0.01381117283 | | 0.002364683915 | | | 0.1183108547 | | | | |
| | 11-07-2016 | | -0.07596138506 | 11-07-2016 | | | 0.00504136224 | | -0.07092002282 | | | -3.548300244 | | | | |
| | 12-07-2016 | | 0.02362191367 | 12-07-2016 | | | 9 0 000147046719 | | 0.02347486695 | | | 1.174504362 | | | | |
| | 13-07-2016 | | -0.0193050433 | 13-07-2016 | | | -0.00429360194 | | -0.01501144135 | | | -0.7510587124 | | | | |
| | 14-07-2016 | | 0.003876014227 | | | | 9 0.002233164378 | | 0.001642849848 | | | 0.08219575075 | | | | |
| | 15-07-2016 | | -0.00864548485 | | | | 2 0.003106149042 | | -0.01175163389 | | | -0.5879626622 | | | | |
| | 18-07-2016 | | 0.02270473018 | 18-07-2016 | | | -0.00188114841: | | 0.02458587859 | | | 1.230090961 | | | | |
| | 19-07-2016 | | -0.01170727124 | 19-07-2016 | | | -0.003519460661 | | -0.00818781057 | | | -0.4096559632 | | | | |
| | 20-07-2016 | | 0.01787490909 | | | | 3 0.005294780464 | | 0.01258012862 | | | 0.629414257 | | | | |
| | 21-07-2016 | | 0.000994049058 | | | | -0.00294292535 | | 0.003936974416 | | | 0.1969763506 | | | | |
| | 22-07-2016 | | -0.01081606772 | | | | -0.008839845591 | | -0.00197622211 | | | -0.09887517158 | | | | |
| | 25-07-2016 | | -0.03050525774 | 25-07-2016 | | | 7 0.004233740526 | | -0.03473899826 | | | -1.738076091 | | | | |
| | 26-07-2016 | 50.76043 | 0.02742405557 | 26-07-2016 | 8590.65 | -0.00291905568 | H-0.00235928349 | | 0.02978333906 | -0.03323048415 | | 1.490132477 | | | | |
| | 27-07-2016 | 49.40553 | 0.01289679224 | 27-07-2016 | 8615.8 | -0.00582716961 | -0.00470972347: | | 0.01760651572 | -0.01562396843 | | 0.8808965584 | | | | |
| | 28-07-2016 | 48.77647 | -0.02325572547 | 28-07-2016 | 8666.3 | 0.00321815129 | 9 0.002601023091 | | -0.02585674856 | -0.04148071699 | | -1.293675659 | | | | |
| | 29-07-2016 | 49.93781 | 0.019762908 | 29-07-2016 | 8638.5 | 0.00022578460 | 1 0.000182487057 | | 0.01958042094 | -0.02190029605 | | 0.9796558102 | | | | |
| | 01-08-2016 | 48.97002 | 0.002973075601 | 01-08-2016 | 8636.55 | 0.00158299412 | 0.001279431536 | | 0.001693644065 | -0.02020665199 | | 0.08473710825 | | | | |
| | 02-08-2016 | 48.82486 | 0.04559581786 | 02-08-2016 | 8622.9 | 0.00913415683 | 1 0.00738254688 | | 0.03821327098 | 0.01800661899 | | 1 911902357 | | | | |
| | 03-08-2016 | 46.69573 | -0.01530611492 | 03-08-2016 | 8544.85 | -0.00073090011 | 1-0.00059073918 | | -0.01471537573 | 0.00329124326 | i . | -0.7362458333 | | | | |
| | 04-08-2016 | 47.42157 | -0.02487554312 | 04-08-2016 | 8551.1 | -0.01520761475 | -0.01229132923 | | -0.01258421389 | -0.00929297062 | | -0.6296186528 | | | | |
| | 05-08-2016 | 48.6313 | -0.01470587639 | 05-08-2016 | 8683.15 | -0.00323715612 | -0.00261638345 | | -0.01208949294 | -0.02138246356 | | -0.604866567 | | | | |
| | 08-08-2016 | | -0.02485672802 | 08-08-2016 | | | 4 0.003082716495 | | -0.02793944451 | -0.04932190808 | | -1.397877974 | | | | |
| | 09-08-2016 | 50.61527 | | 09-08-2016 | 8678.25 | | | | | | | | | | | |

Fig-4 Reliance communication and MTS

| | Relian | e communi | ctaion | | | | | | | | | | | | |
|---|---------------|-----------|------------------|--------------------------|-----------|------------------------------------|-----------------|-------------|-----------------|----------------|---------------|----------------|---|-----------|----------------|
| 1 | A | В | с | D | ε | F | G | н | 1.1 | J. | K | L | м | N | 0 |
| ĺ | Reliance comm | inictaion | | NIFTY | | | | | | | | | | Intercept | -0.00327950902 |
| | Date | Adj Close | Returns | Date | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 2.129999577 |
| | 30-9-2015 | 67.85 | 0.01737871108 | 30-9-2015 | 7948. | 9 -0.00025154385 | 0.00053578829 | 2.129999577 | -0.01684292278 | 0.01684292278 | -0.1311803608 | -0.5779598169 | | R-square | 0.2144515263 |
| | 1-10-2015 | | -0.04362880886 | 1-10-2015 | | 9 -0.02074070425 | | | 0.000548882400 | 0.01629404038 | | 0.01883473408 | | St. error | 0.0291420308 |
| | 5-10-2015 | | 0.004871259569 | 5-10-2015 | | 3 -0.00412123293 | | | 0.01364948398 | | | 0.4683779271 | | | |
| | 6-10-2015 | | -0.05335968379 | 6-10-2015 | | 9 -0.00299606231 | | | -0.04697807233 | | | -1.612038387 | | | |
| | 7-10-2015 | | -0.00393700787 | 7-10-2015 | | 4 0.00591068166 | | | -0.01652675732 | | | -0.5671106943 | | | |
| | 8-10-2015 | | 0.01195219124 | 8-10-2015 | | 5 -0.00736901229 | | | | 0.03850120175 | | 0.948739108 | | | |
| | 9-10-2015 | | 8 0.005340453939 | | | 7 0.00566088707 | | | -0.00671723313 | | | -0.2304998298 | | | |
| | 12-10-2015 | | 0.03727506427 | 12-10-2015 | | 6 0.00146340863 | | | -0.04039212404 | | | -1.386043557 | | | |
| | 13-10-2015 | | 0.004519044545 | | | 7 0.00293540867 | | | -0.00173337469 | | | -0.05948022987 | | | |
| | 14-10-2015 | | -0.00832266325 | | | 9 -0.00875359125 | | | | -0.07702145112 | | 0.3542128746 | | | |
| | 15-10-2015 | | -0.04171779141 | 15-10-2015 | | 5 -0.00711931683 | | | -0.02655364956 | | | -0.9111804783 | | | |
| | 16-10-2015 | | -0.00791235544 | 16-10-2015 | | 5 -0.00445918755 | | | 0.001585712162 | | | 0.05441323473 | | | |
| | 19-10-2015 | | 0.01986343886 | 19-10-2015 | | 5 0.00162195203 | | | 0.01640868172 | | | 0.5630589656 | | | |
| | 20-10-2015 | | -0.00922509225 | 20-10-2015 | | 5 0.00120581213 | | | -0.01179347159 | | | -0.4046894216 | | | |
| | 21-10-2015 | | 0.02328508496 | 21-10-2015 | | 7 -0.00527397549 | 0.006999035805 | | 0.03451865052 | | | 1.184497085 | | | |
| | 23-10-2015 | | 0.006970849176 | 23-10-2015 26-10-2015 | | 5 0.00422490027 | | | -0.00202818662 | | | -0.06959661264 | | | |
| | 26-10-2015 | | 0.02003878474 | | | 5 0.00335847635 9 0.00755091051 | | | 0.01288523153 | | | 0.4421528347 | | | |
| | 28-10-2015 | | 0.01833660773 | 28-10-2015 | | 2 0.00732887478 | | | | | | | | | |
| | 29-10-2015 | | 0.01833660773 | 29-10-2015 | | 5 0.00569689305 | | | 0.002726107549 | | | 0.09354555857 | | | |
| | 30-10-2015 | | -0.0593379138 | 30-10-2015 | | 8 0.00186316887 | | | -0.06330646272 | | | -2.17234218 | | | |
| | 2-11-2015 | | -0.01839362354 | 2-11-2015 | | 8 -0.00122818117 | | | -0.06330646272 | | | -2.1/234218 | | | |
| | 3-11-2015 | | -0.00427350427 | 3-11-2015 | | 7 0.00254968781 | | | -0.00970433824 | | | -0.3330014409 | | | |
| | 4-11-2015 | | 0.04530950862 | 4-11-2015 | | 2 0.01065307431 | | | 0.02261846485 | | | 0 7761458015 | | | |
| | 5-11-2015 | | 0.00706940874 | 5-11-2015 | | 5 0.00014457588 | | | 0.005761462156 | | | 0 2320175352 | | | |
| | 6-11-2015 | | 0.006468305304 | | | 3 0.00493986254 | | | -0.00405359982 | | | -0.1390980556 | | | |
| | 9-11-2015 | | 0.1019244476 | 9-11-2015 | | 2 0.01694000655 | | | 0.06584224083 | | | 2 259356641 | | | |
| | 10-11-2015 | | 0.0572720422 | 10-11-2015 | | 5 0.00271828400 | | | 0.05148209843 | | | 1.766592685 | | | |
| | 13-11-2015 | | -0.00822122571 | 13-11-2015 | | 5 -0.00568109035 | | | 0.00387949435 | | | 0.1331236789 | | | |
| | 16-11-2015 | | 0.0159453303 | 16-11-2015 | | 6 -0.00394893812 | | | 0.02435656683 | | | 0.8357882468 | | | |
| | 17-11-2015 | | 0.01229823213 | 17-11-2015 | | 5 0.01367728084 | | | -0.01683437027 | | | -0.5776663399 | | | |
| | 18-11-2015 | | 0.00838414634 | 18-11-2015 | | 8 -0.0141468235 | | | 0.02174858172 | | | 0.7462960242 | | | |
| | 19-11-2015 | | -0.0060606060606 | 19-11-2015 | | 5 -0.00175649617 | | | -0.00231926995 | | | -0.07958504931 | | | |
| | 20-11-2015 | | 0.01382488479 | 20-11-2015 | | 5 0.00093002516 | | | 0.01184393159 | | | 0.4064209414 | | | |
| | 23-11-2015 | | -0.08503162333 | 23-11-2015 | | 5 0 00225369017 | | | -0.08983198246 | | | -3.082557392 | | | |
| | 24-11-2015 | | -0.04560697518 | 24-11-2015 | | 6 -0 00662117253 | | | -0.0315038805 | | | -1.08104616 | | | |
| | 26-11-2015 | | 0.006072874494 | | | 8 -0.00741561433 | | | 0.02186812989 | | | 0.7503982836 | | | |
| | 27-11-2015 | | -0.02242744063 | 27-11-2015 | | 7 0.00093884880 | | | -0.0244271882 | | | -0.8382115977 | | | |
| | 30-11-2015 | | -0.01622323167 | 30-11-2015 | | 5 -0.00247017561 | | | -0.01096175865 | | | -0.376149443 | | | |
| | 01-12-2015 | | -0.01784576163 | 01-12-2015 | | 9 0.00296922970 | | | -0.02417021964 | | | -0.8293937992 | | | |
| | 02-12-2015 | 78.45 | | 02-12-2015 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

Fig-5 Unilever and blue air

| fx | Unileve | er | | | | | | | | | | | | | |
|----|------------|-----------|-----------------|------------|-----------|----------------|-----------------|------------|-----------------|----------------|---------------|----------------|---|-----------|---------------|
| | A | 8 | с | D | E | F | G | н | 1. C | J | ĸ | L | м | N | 0 |
| | Unilever | | | NIFTY | | | | | | | | | | Intercept | 0.00076898234 |
| | | Adj Close | | Date | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 0.7430073872 |
| | 18-07-2016 | | 0.02993894954 | 18-07-2016 | | | -0.00172996198 | 0.74327795 | 0.03166891153 | | 0.03076638069 | 2.991744944 | | R-square | 0.1931089928 |
| | 19-07-2016 | | -0.01295612402 | 19-07-2016 | | | -0.00323660436! | | -0.00971951965 | | | -0.9181977648 | | St. error | 0.0105854316 |
| | 20-07-2016 | | -0.00346134894 | | | | 0.004869243101 | | -0.00833059204 | | | -0.7869865248 | | | |
| | 21-07-2016 | | 0.007584172778 | | | | -0.00270640474 | | 0.01029057753 | | | 0.9721452933 | | | |
| | 22-07-2016 | | -0.00413477666 | 22-07-2016 | | | -0.00812939412 | | 0.003994617458 | | | 0.3773693507 | | | |
| | 25-07-2016 | | 0.004708150754 | | | 0.005238253217 | | | 0.000814672641 | | | 0.0769616838 | | | |
| | 26-07-2016 | | -0.00127228370 | | | | -0.002169669724 | | 0.000897386018 | | | 0.08477557183 | | | |
| | 27-07-2016 | | -0.00610307983- | | | | -0.00433120668: | | -0.00177187315; | | | -0.1673878983 | | | |
| | 28-07-2016 | | -0.01425388446 | 28-07-2016 | | | 0.002391980901 | | -0.01664586536 | | | -1.572525898 | | | |
| | 29-07-2016 | | -0.00264858628 | 29-07-2016 | | | 0.000167820715 | | -0.00281640699 | 0.008381907967 | | -0.2660644457 | | | |
| | 01-08-2016 | | -0.00258803147 | | | 0.00158299412 | | | -0.00376463610 | | | -0.3556431363 | | | |
| | 02-08-2016 | | 0.01488293438 | 02-08-2016 | | | 0.006789217364 | | 0.008093717012 | | | 0.7646090686 | | | |
| | 03-08-2016 | | -0.00462931490 | | | -0.00073090011 | | | -0.00408605296 | | | -0.3860072135 | | | |
| | 04-08-2016 | | -0.00804976715 | | | -0.01520761475 | | | 0.003253717563 | | | 0.3073769384 | | | |
| | 05-08-2016 | | -0.00430326451 | | | | -0.00240610676 | | -0.00189715774 | | | -0.1792234661 | | | |
| | 08-08-2016 | | -0.00508435577 | 08-08-2016 | | | 0.002834960982 | | -0.00791931675 | | | -0.7481335705 | | | |
| | 09-08-2016 | | 0.01005456146 | 09-08-2016 | | | 0.008923357194 | | 0.001131204264 | | | 0.106864255 | | | |
| | 10-08-2016 | | -0.01143587751 | 10-08-2016 | | | -0.00145763673: | | -0.00997824077; | 0.00678485752 | | -0.942639009 | | | |
| | 11-08-2016 | | 0.01020298198 | 11-08-2016 | | | -0.00433450875 | | 0.01453749073 | | | 1.373348887 | | | |
| 2 | 16-08-2016 | | 0.01423564479 | 16-08-2016 | | | 0.001594452963 | | 0.01264119182 | | | 1.194206554 | | | |
| | 17-08-2016 | | 0.006946742989 | | | | -0.00421632895 | | 0.01116307195 | | | 1.054569369 | | | |
| | 18-08-2016 | | -0.004117976825 | | | | 0.000544579374 | | -0.00466255620 | | | -0.4404691628 | | | |
| | 19-08-2016 | | -0.02085899842 | 19-08-2016 | | 0.004374706663 | | | -0.02411062142 | | | -2.277717365 | | | |
| | 22-08-2016 | | 0.009059298032 | | | | -0.00029704943: | | 0.009356347464 | | | 0.8838890845 | | | |
| | 23-08-2016 | | 0.002501644736 | | | | -0.00152087438 | | 0.004022519124 | | | 0.380005206 | | | |
| | 24-08-2016 | | 0.009442263569 | | | | 0.005026006016 | | 0.004416257552 | | | 0.4172014624 | | | |
| | 25-08-2016 | | 0.006965175748 | | | | 0.001703741794 | | 0.005261433953 | | | 0.4970448199 | | | |
| | 26-08-2016 | | -0.000773374374 | | | | -0.00301371491 | | 0.002240340537 | | | 0.2116437588 | | | |
| | 29-08-2016 | | -0.02119372568 | 29-08-2016 | | -0.01565582347 | | | -0.00955709730 | | | -0.9028538133 | | | |
| | 30-08-2016 | | 0.008451038899 | | | | -0.00354034533 | | 0.01199138424 | | | 1.132819583 | | | |
| | 31-08-2016 | | -0.00945133760 | 31-08-2016 | | | 0.000978370684 | | -0.01042970829 | | | -0.9852889007 | | | |
| | 01-09-2016 | | 0.005484571049 | | | | -0.00295298090 | | 0.008437551957 | | | 0.7970909698 | | | |
| | 02-09-2016 | | -0.01823297478 | 02-09-2016 | | -0.01491110366 | | | -0.007149880220 | | | -0.6754453179 | | | |
| | 06-09-2016 | | 0.005198148441 | | | | 0.002087824292 | | 0.003110324149 | | | 0.2938306401 | | | |
| | 07-09-2016 | | -0.01949453661 | 07-09-2016 | | | -0.00286850077: | | -0.01662603583 | | | -1.570652613 | | | |
| | 08-09-2016 | | 0.02322705901 | 08-09-2016 | | | 0.007192444552 | | 0.01603461446 | | | 1.514781355 | | | |
| | 09-09-2016 | | 0.01252104591 | 09-09-2016 | | 0.01733672954 | | | -0.000364962871 | | | -0.03447784586 | | | |
| | 12-09-2016 | | 0.01100790466 | 12-09-2016 | | | -0.000936912130 | | 0.01194481679 | | | 1.128420382 | | | |
| | 14-09-2016 | | -0.00607224970: | | | | -0.00135604409 | | -0.00471620560 | | | -0.4455373929 | | | |
| | 15-09-2016 | | 0.000001609337 | | | | -0.00000935191 | | 0.000010961247 | 0.03076638069 | | 0.001035503157 | | | |
| | 16-09-2016 | 869.9233 | #DIV/01 | 16-09-2016 | 8742.66 | | | | | | | | | | |

Fig-6 Wipro and health plan services

| x | Wipro | | | | | | | | | | | | | | | |
|---|------------|-----------|----------------------------------|------------|-----------|----------------------------------|-----------------|--------------|-----------------|---------------|-----|-------------------------------|---|-----------|---------------|---|
| | A | B | с | D | E | F | G | н | 1.1 | J | К. | L | м | N | 0 | |
| | Wipro | | | NIFTY | | | | | | | | | | Intercept | -0.0003399392 | |
| | | Adj Close | | | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 0.592130011 | |
| | 1/13/2016 | | 0.002293737689 | | | | 0.002005182149 | 0.5903381569 | 0.000288555540 | | | | | R-square | 0.376798340 | |
| | 1/14/2016 | | 0.003957819166 | | | 0.01331038748 | | | -0.00389981044 | | | -0.3729272349 | | St. error | 0.0104572959 | n |
| | 1/15/2016 | | -0.00739858175 | | | 0.01180791729 | | | -0.01436924589 | | | -1.374088102 | | | | |
| | 1/18/2016 | | 0.00950084008 | 1/18/2016 | | -0.01131121303 | | | 0.01617828073 | | | 1.547080706 | | | | |
| | 1/19/2016 | | -0.00101236243 | 1/19/2016 | | 0.01721095043 | | | -0.01117264319 | | | -1.068406526 | | | | |
| | 1/20/2016 | | -0.01497991564 | 1/20/2016 | | 0.004466248901 | | | -0.01761651278 | | | -1.684614545 | | | | |
| | 1/21/2016 | | 0.0012704473 | 1/21/2016 | | -0.01962290079 | | | 0.01285459439 | | | 1.2292465 | | | | |
| | 1/22/2016 | | -0.01879682464 | 1/22/2016 | | -0.00184235121 | | | -0.01770921442 | | | -1.693479326 | | | | |
| | 1/25/2016 | | -0.00995126922 | | | -0.00021511881 | | | -0.00982427637 | | | -0.9394662316 | | | | |
| | 1/27/2016 | | 0.009682564914 | | | 0.001764392934 | | | 0.008640976441 | | | 0.82631079 | | | | |
| | 1/28/2016 | | -0.02762881631 -0.00941527532 | 1/28/2016 | | -0.01836439238 0.001005829843 | | | -0.01678761476 | | | -1.605349501 -0.9571360653 | | | | |
| | 02-01-2016 | | -0.00941527532 | | | 0.001005829843 | | | -0.01000905506 | | | | | | | |
| | 02-01-2016 | | 0.01694244841 | 02-01-2016 | | 0.01346647799 | | | -0.00636541831 | | | -0.6087059574 0.9012553903 | | | | |
| | 02-02-2016 | | 0.01694244841 | | | -0.00569962182 | | | | | | -0.04529010907 | | | | |
| | 02-03-2016 | | 0.003670902576 | | | -0.01136318116 | | | -0.00047361207: | 0.05046127991 | | 0.9925148996 | | | | |
| | 02-04-2016 | | 0.0236721816 | 02-04-2016 | | 0.01136318116 | | | 0.0103/9022 | | | 1.485377386 | | | | |
| | 02-08-2016 | | 0.01631579244 | 02-05-2016 | | 0.0137672666 | | | 0.009112699499 | | | 0.8714202582 | | | | |
| | 02-08-2016 | | 0.009508119485 | 02-08-2016 | | 0.01220163876 | | | 0.009112699499 | | | 0.2637915144 | | | | |
| | 02-10-2016 | | 0.02706852769 | 02-09-2016 | | 0.03430877178 | | | 0.002758545923 | | | 0.651674262 | | | | |
| | 02-11-2016 | | -0.000195749010 | | | -0.00065893610 | | | 0.000193246115 | | | 0.01847954928 | | | | |
| | 02-12-2016 | | -0.01606856897 | 02-12-2016 | | -0.02540852582 | | | -0.00106894667 | | | -0.10222018 | | | | |
| | 2/15/2016 | | -0.00161546510 | 2/15/2016 | | 0.01627354308 | | | -0.01122235854 | | | -1 073160656 | | | | |
| | 2/16/2016 | | -0.00066294314 | 2/16/2016 | | -0.00846879418 | | | 0.004336509204 | | | 0.4146874338 | | | | |
| | 2/17/2016 | | -0.02651374584 | 2/17/2016 | | -0.01158271631 | | | -0.01967602644 | | | -1.88155969 | | | | |
| | 2/18/2016 | | -0.01104953817 | 2/18/2016 | | -0.00263495475 | | | -0.00949402383 | | | -0.9078851666 | | | | |
| | 2/19/2016 | | 0.008475069029 | | | -0.00328976923 | | | 0.01041714533 | | | 0.9961605206 | | | | |
| | 2/22/2016 | | 0.005186021324 | | | 0.0175819848 | | | -0.00519329517- | | | -0.4966193193 | | | | |
| | 2/23/2016 | | 0.01123689633 | 2/23/2016 | | 0.01294399248 | | | 0.003595563664 | | | 0.343633023 | | | | |
| | 2/24/2016 | | 0.000184540350 | | | 0.006900410295 | | | -0.00388903514 | | | -0.3718968249 | | | | |
| | 2/25/2016 | | 0.006313988231 | | | -0.00841423948 | | | 0.01128123486 | | | 1.078790823 | | | | |
| | 2/26/2016 | | 0.01970340972 | 2/26/2016 | | 0.006111305916 | | | 0.01609567265 | | | 1.539181142 | | | | |
| | 2/29/2016 | | -0.02838760068 | 2/29/2016 | | -0.03257272614 | | | -0.00915867756 | | | -0.8758170036 | | | | |
| | 03-01-2016 | | -0.00759661061 | | | -0.01988777082 | | | 0.004143899353 | | | 0.3962687285 | | | | |
| | 03-02-2016 | | -0.00580797380 | 03-02-2016 | | -0.01427979025 | | | 0.002621931255 | | | 0.2507274613 | | | | |
| | 03-03-2016 | | 0.0107126156 | 03-03-2016 | | -0.00130254430 | | | 0.0114815572 | | | 1.097947051 | | | | |
| | 03-04-2016 | | -0.00831344890 | 03-04-2016 | | 0.000006679758 | | | -0.00831739222 | | | -0.7953673965 | | | | |
| | 03-08-2016 | | 0.006134506318 | | | -0.00617382299 | | | 0.009779149603 | | | 0.9351508928 | | | | |
| | 03-09-2016 | | 0.004289528859 | | | 0.006097927506 | | | 0.000689689573 | | | 0.06595295569 | | | | |
| | 03-10-2016 | | -0.00584276664 | | | -0.00320231152 | | | -0.00395231996 | | | -0.3779485635 | | | | |
| | 03-11-2016 | 196 4138 | | 03-11-2016 | | | | | | | | | | | | |
| | 20 11 LOTO | | | 00 11 2010 | 1010.2 | | | | | | | | | | | |

Fig-7 Tata and Bhushan steel

| fx | | | | | | | | | | | | | | | | |
|----|------------------|-----------|-----------------|------------|-----------|-----------------|-------------------|-------------|-----------------|---------------|--------------|---------------|---|-----------|----------------|--|
| | A | 8 | с | D | E | F | G | н | | J | K | L | м | N | 0 | |
| | TATA steel limit | d | | NIFTY | | | | | | | | | | Intercept | 0.003315539813 | |
| | | Adj Close | Returns | Date | Adj Close | Returns | Expected return I | Beta | Abnormal return | CAR | CAR | T-TEST | | Slope | 2.951707551 | |
| | 19-04-2018 | 595,4927 | 0.02598151281 | 19-04-2018 | 10565.3 | 0.000118325831 | 0.000267648604 | 2.261962589 | 0.02571386421 | 0.02571386421 | 0.1550632093 | 1.626707184 | | R-square | 0.5327146663 | |
| | 20-04-2018 | 580.4127 | -0.00065944014 | 20-04-2018 | 10564.05 | -0.00195092917 | -0.0044129288 | | 0.003753488656 | 0.02946735286 | | 0.2374527186 | | St. error | 0.01580730968 | |
| | 23-04-2018 | 580.7957 | 0.01514514079 | 23-04-2018 | 10584.7 | -0.00279338819 | -0.00631853959 | | 0.02146368038 | 0.05093103325 | | 1.357832599 | | | | |
| | 24-04-2018 | 572.1307 | 0.01936184709 | 24-04-2018 | 10614.35 | 0.004143587609 | 0.009372640157 | | 0.009989206933 | 0.06092024018 | | 0.6319359295 | | | | |
| | 25-04-2018 | 561.2636 | 0.01383624896 | 25-04-2018 | 10570.55 | -0.00445007440 | -0.01006590182 | | 0.02390215078 | 0.08482239095 | | 1.512094801 | | | | |
| | 26-04-2018 | 553.6038 | -0.01966760656 | 26-04-2018 | 10617.8 | -0.00696763091 | -0.01576052046 | | -0.0039070861 | 0.08091530485 | | -0.2471695804 | | | | |
| | 27-04-2018 | 564.7103 | -0.00865649863; | 27-04-2018 | 10692.3 | -0.00438108451 | -0.009909849270 | | 0.001253350644 | 0.0821686555 | | 0.07928930788 | | | | |
| | 30-04-2018 | 569.6414 | 0.03559621446 | 30-04-2018 | 10739.35 | 0.001987301795 | 0.004495202313 | | 0.03110101215 | 0.1132696676 | | 1.967508247 | | | | |
| | 02-05-2018 | 550.0613 | -0.01870339138 | 02-05-2018 | 10718.05 | 0.003595623452 | 0.008133165734 | | 0.02683655711 | 0.08643311053 | | -1.697730838 | | | | |
| | 03-05-2018 | 560.5454 | 0.00809286436 | 03-05-2018 | 10679.65 | 0 005782497116 | 0.01307979215 | | 0.00498692778 | 0.08144618275 | | -0.315482387 | | | | |
| | 04-05-2018 | 556.0454 | -0.02632234679 | 04-05-2018 | 10618.25 | -0.00907563809- | -0.02052875384 | | 0.00579359294 | 0.0756525898 | | -0.3665135351 | | | | |
| | 07-05-2018 | 571.0775 | 0.000167781209 | 07-05-2018 | 10715.5 | -0.00021459627 | -0.00048540875 | | 0.000653189964 | 0.07630577976 | | 0.04132201985 | | | | |
| | 08-05-2018 | 570.9817 | -0.01127425897 | 08-05-2018 | 10717.8 | -0.00222497370 | -0.00503280727 | | -0.0062414517 | 0.07006432806 | | -0.394845918 | | | | |
| | 09-05-2018 | 577.4925 | 0.01514760526 | 09-05-2018 | 10741.7 | 0.002346837368 | 0.00530845833 | | 0.009839146927 | 0.07990347499 | | 0.6224428526 | | | | |
| | 10-05-2018 | 568.8754 | -0.02157259982 | 10-05-2018 | 10716.55 | -0.00832369407 | -0.0188278846 | | 0.00274471522 | 0.07715875976 | | -0.1736358229 | | | | |
| | 11-05-2018 | 581.4181 | -0.00507900426 | 11-05-2018 | 10806.5 | -0.00000925360- | -0.00002093130(| | 0.00505807295 | 0.07210068681 | | -0.3199831634 | | | | |
| | 14-05-2018 | 584.3862 | -0.02492213709 | 14-05-2018 | 10806.6 | 0.000439739489 | 0.000994674273 | | 0.02591681137 | 0.04618387544 | | -1.639546001 | | | | |
| | 15-05-2018 | 599.3226 | 0.007565450197 | 15-05-2018 | 10801.85 | 0.005655845304 | 0.01279331049 | | 0.00522786029 | 0.04095601515 | | -0.3307242281 | | | | |
| | 16-05-2018 | 594.8225 | 0.0179420038 | 16-05-2018 | 10741.1 | 0.005466782742 | 0.01236565805 | | 0.005576345755 | 0.04653236091 | | 0.3527700709 | | | | |
| | 17-05-2018 | 584.3383 | 0.03195805047 | 17-05-2018 | 10682.7 | 0.008144275414 | 0.0184220463 | | 0.01353600416 | 0.06006836507 | | 0.8563129616 | | | | |
| | 18-05-2018 | 566.2423 | 0.02495679285 | 18-05-2018 | 10596.4 | 0.007578422889 | 0.01714210906 | | 0.007814683784 | 0.06788304885 | | 0.4943715246 | | | | |
| | 21-05-2018 | 552.4548 | 0.000346573754 | 21-05-2018 | 10516.7 | -0.00189812749 | -0.004293493384 | | 0.004640067143 | 0.072523116 | | 0.2935393332 | | | | |
| | 22-05-2018 | 552.2634 | 0.06804928553 | 22-05-2018 | 10536.7 | 0.01019620626 | 0.02306343712 | | 0.04498584841 | 0.1175089644 | | 2.84588898 | | | | |
| | 23-05-2018 | 517.0767 | -0.01486701439 | 23-05-2018 | 10430.35 | -0.00794190520 | -0.01796429245 | | 0.003097278062 | 0.1206062425 | | 0.195939608 | | | | |
| | 24-05-2018 | 524.8801 | -0.03528360227 | 24-05-2018 | 10513.85 | -0.00860902486 | -0.01947329216 | | -0.0158103101 | 0.1047959324 | | -1.000189813 | | | | |
| | 25-05-2018 | 544.0771 | -0.01456694725 | 25-05-2018 | 10605.15 | -0.00781202490 | -0.01767050808 | | 0.003103560835 | 0.1078994932 | | 0.196337068 | | | | |
| | 28-05-2018 | 552.1198 | 0.002259495846 | 28-05-2018 | 10688.65 | 0.005205345471 | 0.01177429672 | | 0.00951480087- | 0.09838469233 | | -0.6019241142 | | | | |
| | 29-05-2018 | 550.8751 | -0.00441248283 | 29-05-2018 | 10633.3 | 0.001785318931 | 0.004038324633 | | 0.00845080746 | 0.08993388486 | | -0.5346138996 | | | | |
| | 30-05-2018 | 553.3166 | 0.003903466906 | 30-05-2018 | | -0.01134484894 | | | 0.0295700908 | 0.1195039757 | | 1.870659297 | | | | |
| | 31-05-2018 | | 0.02675482358 | 31-05-2018 | 10736.15 | 0.003734971298 | 0.008448365348 | | 0.01830645823 | 0.1378104339 | | 1.158100816 | | | | |
| | 01-06-2018 | 536.8004 | -0.00971485970 | 01-06-2018 | 10696.2 | 0.006369666463 | 0.01440794724 | | 0.02412280695 | 0.1136876269 | | -1.526053924 | | | | |
| | 04-06-2018 | | -0.0104001126 | 04-06-2018 | | 0.003337062158 | | | 0.01794842236 | | | -1.135450797 | | | | |
| | 05-06-2018 | | -0.01319556539 | 05-06-2018 | | -0.00856368715 | | | 0.006175174591 | 0.1019143792 | | 0.390653104 | | | | |
| | 06-06-2018 | | -0.03711982454 | 06-06-2018 | | -0.00777277855 | | | 0.01953809022 | 0.08237628894 | | -1.236016161 | | | | |
| | 07-06-2018 | 576.4871 | 0.002664207113 | 07-06-2018 | 10768.35 | 0.000065009542 | 0.000147049153 | | 0.00251715796 | 0.0848934469 | | 0.1592401245 | _ | | | |
| | 08-06-2018 | | 0.02013096661 | 08-06-2018 | | -0.00178919898 | | | 0.02417806778 | 0.1090715147 | | 1.529549827 | _ | | | |
| | 11-06-2018 | | 0.01491372745 | 11-06-2018 | | -0.005155471117 | | | 0.02657521025 | 0.1356467249 | | 1.681197547 | | _ | | |
| | 12-06-2018 | | 0.02184653109 | 12-06-2018 | | -0.00127570993 | | | | 0.1603788642 | | 1.564601424 | | | | |
| | 13-06-2018 | | -0.00342384991 | | | 0.004501274513 | | | | 0.1467732997 | | -0.8607134768 | | | | |
| | 14-06-2018 | | 0.006272111083 | 14-06-2018 | | -0.00089205653 | -0.00201779851- | | 0.008289909597 | 0.1550632093 | | 0.5244351991 | | | | |
| | 15-06-2018 | 541.9228 | | 15-06-2018 | 10817.7 | | | | | | | | | | | |

Fig-8 Sun pharma and Ranbaxy

| | A | В | с | D | E | F | G | н | 1. | J | К. | L | м | N | 0 |
|--------|------------|-----------|---------------------------------|------------|-----------|----------------|-----------------|-------------|-----------------|-----------------|--------------|----------------|---|-----------|---------------|
| 1 | Sun pharma | | | NIFTY | | | | | | | | | | Intercept | -0.0056984297 |
| | | Adj Close | Returns | Date | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 0.9363273614 |
| 8 | 23-02-2015 | | -0.00197702994 | | | | -0.00097981784: | 1.200735933 | -0.00099721210 | | -0.101608207 | -0.04634564125 | | R-square | 0.1669868602 |
| ă. | 24-02-2015 | | 0.02211619378 | 24-02-2015 | | | 0.000705328351 | | | 0.02182431003 | | 1.060635019 | | St. error | 0.02151684767 |
| 5 | 25-02-2015 | | 0.02893609813 | 25-02-2015 | | | 0.01153191002 | | | 0.03922849814 | | 0.8088632859 | | | |
| 6 | 26-02-2015 | | -0.01501885767 | 26-02-2015 | | -0.0181749316 | | | 0.006804435781 | | | 0.3162375774 | | | |
| 7 | 27-02-2015 | | -0.05004319406 | 27-02-2015 | | -0.01252128283 | | | -0.03500843983 | | | -1.62702457 | | | |
| 1 | 02-03-2015 | | -0.01892797972 | 02-03-2015 | | | -0.00527209330: | | | -0.002631392320 | | -0.6346601802 | | | |
| P., | 03-03-2015 | | -0.06285397131 | 03-03-2015 | | | 0.009904475093 | | | -0.07538983873 | | -3.381464029 | | | |
| 0 | 04-03-2015 | | -0.03123913448 | 04-03-2015 | | -0.00168946323 | | | -0.02921053527 | -0.104600374 | | -1.357565742 | | | |
| 1 | 05-03-2015 | | -0.00216149146 | 05-03-2015 | | 0.02066976904 | | | -0.02698042588 | -0.1315807999 | | -1.253920941 | | | |
| 13 | 10-03-2015 | | 0.01595639191 | | | | 0.006160765402 | | 0.009795626509 | | | 0.4552537928 | | | |
| 4 | 11-03-2015 | | 0.01465568186 | 10-03-2015 | | | 0.001669998654 | | 0.0129856832 | -0.1087994902 | | 0.6035123454 | | | |
| 15 | 12-03-2015 | | -0.02538231429 0.02426846571 | 12-03-2015 | | -0.00866567912 | | | -0.01497712198 | -0.1237766122 | | -0.6960648796 | | | |
| 5 | 12-03-2015 | | | 12-03-2015 | | 0.01483044723 | | | 0.006461014824 | | | 0.3002770166 | | | |
| 7 | 16-03-2015 | | -0.01772110059 | 16-03-2015 | | -0.0103343918 | 0.002030631302 | | -0.0197517319 | -0.1370673292 | | -0.917965875 | | | |
| / В | 17-03-2015 | | -0.01156504685 | | | | -0.01240887558 | | 0.000843828734 | | | 0.0392171171 | | | |
| 9 | 18-03-2015 | | -0.00248998688 | | | | 0.0051/016358/ | | -0.00766015047 | -0.143883651 | | -0.3560070969 | | | |
| 9 | 19-03-2015 | | 0.02055232521 | 19-03-2015 | | 0.005935300232 | | | 0.01162130096 | -0.1541120079 | | 0.540102395 | | | |
| 1 | 20-03-2015 | | 0.002343227742 | | | | 0.0028084434 | | -0.00046521565 | | | -0.02162099506 | | | |
| 2 | 23-03-2015 | | -0.01243841229 | 23-03-2015 | | 0.000930591891 | | | -0.01355580741 | -0.15651181 | | -0.6300089874 | | | |
| 3 | 24-03-2015 | | -0.01416214325 | | | | 0.001710149293 | | -0.01587229254 | | | -0.7376681187 | | | |
| 4 | 25-03-2015 | | 0.02369344143 | 25-03-2015 | | 0.02261407431 | | | -0.00346009018 | | | -0.1608084158 | | | |
| 5 | 26-03-2015 | | 0.01631721118 | | | | 0.000107961727 | | 0.01620924946 | | | 0.7533282619 | | | |
| 5 | 27-03-2015 | | 0.000395870252 | | | | -0.02133592223 | | 0.02173179248 | -0.1379031508 | | 1 009989605 | | | |
| 7 | 30-03-2015 | | -0.01279433062 | 30-03-2015 | | | 0.000183836616 | | -0.01297816724 | -0.150881318 | | -0.6031630394 | | | |
| 8 | 31-03-2015 | | -0.05295289859 | 31-03-2015 | | -0.0110933178 | | | -0.03963275328 | -0.1905140713 | | -1.841940506 | | | |
| 9 | 01-04-2015 | | -0.07538721732 | 01-04-2015 | | -0.00850471714 | | | -0.06517529784 | | | -3.029035612 | | | |
| 0 | 06-04-2015 | | 0.01497345679 | 06-04-2015 | | | -0.00005545932; | | 0.01502891612 | | | 0.6984720229 | | | |
| 1 | 07-04-2015 | | 0.001390908855 | | | | -0.00745430712 | | 0.008845215978 | | | 0.4110832643 | | | |
| 2 | 08-04-2015 | | 0.03323038217 | 08-04-2015 | | | -0.00874053360- | | | -0.1898443213 | | 1.950607097 | | | |
| 3 | 09-04-2015 | | -0.00562617097 | 09-04-2015 | | | 0.00028034288 | | -0.00534582808 | | | -0.2484484794 | | | |
| 4 | 10-04-2015 | 1088.84 | -0.02710826418 | 10-04-2015 | 8780.35 | -0.00607312655 | -0.00729222128- | | -0.0198160429 | -0.2150061923 | | -0.9209547423 | | | |
| 5 | 13-04-2015 | 1119.179 | 0.03011713292 | 13-04-2015 | 8834 | 0.01462092412 | 0.01755586896 | | 0.01256126396 | -0.2024449283 | | 0.5837873722 | | | |
| 15 | 15-04-2015 | | 0.02697751622 | 15-04-2015 | | 0.01170113874 | | | 0.01292753847 | -0.1895173899 | | 0.6008100568 | | | |
| 7 | 16-04-2015 | 1057.918 | 0.04837360668 | 16-04-2015 | 8606 | 0.01869059315 | 0.02244246681 | | 0.02593113987 | -0.16358625 | | 1.205155154 | | | |
| 8 | 17-04-2015 | 1009.104 | -0.00579613334 | 17-04-2015 | 8448.1 | 0.008397242696 | 0.01008287105 | | -0.0158790044 | -0.1794652544 | | -0.7379800536 | | | |
| 9 | 20-04-2015 | 1014.987 | 0.09619830319 | 20-04-2015 | 8377.75 | -0.00616273414 | -0.00739981633: | | 0.1035981195 | -0.07586713485 | | 4.814744294 | | | |
| 1 | 21-04-2015 | 925.9155 | -0.01611905578 | 21-04-2015 | 8429.7 | 0.003738851911 | 0.004489373838 | | -0.02060842962 | -0.09647556448 | | -0.9577810811 | | | |
| 1 | 22-04-2015 | 941.0849 | 0.02738851466 | 22-04-2015 | 8398.3 | 0.01120375666 | 0.01345275321 | | 0.01393576145 | -0.08253980303 | | 0.6476674308 | | | |
| 2 | 23-04-2015 | 915.9971 | -0.00569976814 | 23-04-2015 | 8305.25 | 0.01113370182 | 0.01336863584 | | -0.01906840398 | -0.101608207 | | -0.8862080672 | | | |
| 3 | 24-04-2015 | 921.248 | | 24-04-2015 | 8213.8 | | | | | | | | | | |

Fig-9 BOB, Vijaya and Dena bank

| ĸ | 1 | | | | | | | | | | | | | | |
|---|----------------|-----------|----------------|------------|-----------|-----------------|-----------------|-----------|-------------------|----------------|---------------|----------------|---|-----------|---------------|
| | A | 8 | с | D | E | F | G | н | 1.1 | J | ĸ | L | м | N | 0 |
| | Bank of baroda | | | NIFTY | | | | | | | | | | Intercept | -0.0025496652 |
| | | Adj Close | Returns | | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 2.41145968 |
| | 27-02-2019 | | 0.009900990099 | | | | 0.003000045431 | 2.2881971 | 95 0.006900944668 | | 0.03963611635 | | | R-square | 0.395237898 |
| | 28-02-2019 | | -0.06567992599 | 28-02-2019 | | -0.00653564689 | | | -0.05072507711 | | | -2.615987589 | | St. error | 0.0193904119 |
| | 01-03-2019 | | -0.03953798312 | 01-03-2019 | | -0.01128105247 | | | -0.01372471049 | | | -0.7078091222 | | | |
| | 05-03-2019 | | 0.004014272971 | | | -0.00593051660 | | | 0.01758446443 | | | 0.906863889 | | | |
| | 06-03-2019 | | -0.02690972222 | 06-03-2019 | | -0.00047023927 | | | -0.02583372202 | | | -1.332293612 | | | |
| | 07-03-2019 | | 0.01408450704 | 07-03-2019 | | | 0.004727594474 | | 0.009356912569 | | | 0.482553572 | | | |
| | 08-03-2019 | | -0.02111158983 | 08-03-2019 | | -0.01187763307 | | | 0.006066776844 | | | 0.3128750873 | | | |
| | 11-03-2019 | | 0.006068487213 | | | -0.01178193466 | | | 0.03302787706 | | | 1.703309712 | | | |
| | 12-03-2019 | | -0.00173085244 | | | | -0.00817090792 | | 0.00644005548 | | | 0.3321257683 | | | |
| | 13-03-2019 | | -0.00858000858 | 13-03-2019 | | | -0.00031267102 | | -0.00826733755 | | | -0.42636214 | | | |
| | 14-03-2019 | | -0.01354210749 | 14-03-2019 | | -0.00731610198 | | | 0.003198576559 | | | 0.1649566064 | | | |
| | 15-03-2019 | | -0.01990875156 | 15-03-2019 | | -0.003084050183 | | | -0.01285183658 | | | -0.6627933736 | | | |
| | 18-03-2019 | | -0.03094855305 | 18-03-2019 | | -0.00608719780 | | | -0.0170198441 | -0.04584692025 | | -0.8777453575 | | | |
| | 19-03-2019 | 124.4 | -0.00638977635 | 19-03-2019 | 11532.4 | 0.000985153262 | 0.002254224933 | | -0.00864400129 | -0.05449092154 | | -0.4457873972 | | | |
| | 20-03-2019 | | 0.04246461282 | 20-03-2019 | 11521.05 | 0.005599245869 | 0.01281217869 | | 0.02965243413 | -0.02483848741 | | 1.529231774 | | | |
| | 22-03-2019 | 120.1 | 0.01607445008 | 22-03-2019 | 11456.9 | 0.009040667591 | 0.02068683023 | | -0.00461238014 | -0.02945086755 | | -0.2378691151 | | | |
| | 25-03-2019 | 118.2 | -0.02152317881 | 25-03-2019 | | -0.01123375351 | | | 0.004181864468 | -0.02526900308 | | 0.2156666124 | | | |
| | 26-03-2019 | 120.8 | -0.00617030028 | 26-03-2019 | 11483.25 | 0.003337687472 | 0.007637287112 | | -0.0138075874 | -0.03907659048 | | -0.7120832403 | | | |
| | 27-03-2019 | 121.55 | -0.06571867794 | 27-03-2019 | 11445.05 | -0.01079948142 | -0.02471134309 | | -0.04100733485 | -0.08008392533 | | -2.114825351 | | | |
| | 28-03-2019 | 130.1 | -0.01959306707 | 28-03-2019 | 11570 | -0.00849676283 | -0.01944226888 | | -0.00015079818 | -0.08023472352 | | -0.00777694602 | | | |
| | 01-04-2019 | 132.7 | -0.00375375375 | 01-04-2019 | 11669.15 | -0.00376071440 | -0.00860525616 | | 0.004851502406 | -0.07538322111 | | 0.2502010998 | | | |
| | 02-04-2019 | 133.2 | 0.008708822416 | 02-04-2019 | 11713.2 | 0.005947294518 | 0.01360858264 | | -0.00489976021 | -0.08028298133 | | -0.252689846 | | | |
| | 03-04-2019 | 132.05 | 0.006478658537 | 03-04-2019 | 11643.95 | 0.003961889981 | 0.009065585543 | | -0.00258692700 | -0.08286990834 | | -0.1334126891 | | | |
| | 04-04-2019 | 131.2 | 0.004594180704 | 04-04-2019 | 11598 | -0.00582464351 | -0.01332793295 | | 0.01792211366 | -0.06494779468 | | 0.9242770946 | | | |
| | 05-04-2019 | 130.6 | 0.004615384615 | 05-04-2019 | 11665.95 | 0.005295359559 | 0.01211682689 | | -0.00750144227! | -0.07244923696 | | -0.3868634807 | | | |
| | 08-04-2019 | 130 | -0.01552442257 | 08-04-2019 | 11604.5 | -0.005778811595 | -0.01322306048 | | -0.00230136208: | -0.07475059904 | | -0.1186855691 | | | |
| | 09-04-2019 | 132.05 | 0.01811873554 | 09-04-2019 | 11671.95 | 0.007566275045 | 0.01731312934 | | 0.000805606207 | -0.07394499283 | | 0.04154662665 | | | |
| | 10-04-2019 | 129.7 | 0.00777000777 | 10-04-2019 | 11584.3 | -0.00106926970 | -0.00244669994 | | 0.01021670771 | -0.06372828512 | | 0.526894824 | | | |
| | 11-04-2019 | 128.7 | -0.01868089973 | 11-04-2019 | 11596.7 | -0.00401513297 | -0.00918741600 | | -0.00949348372 | -0.07322176885 | | -0.4895968035 | | | |
| | 12-04-2019 | 131.15 | 0.003059273423 | 12-04-2019 | 11643.45 | -0.004011855932 | -0.00917991749 | | 0.01223919092 | -0.06098257793 | | 0.631198085 | | | |
| | 15-04-2019 | 130.75 | -0.00114591291 | 15-04-2019 | 11690.35 | -0.00821233292 | -0.01879143716 | | 0.01764552425 | -0.04333705369 | | 0.9100128588 | | | |
| | 16-04-2019 | 130.9 | 0.03437376531 | 16-04-2019 | 11787.15 | 0.00292270778 | 0.006687731746 | | 0.02768603356 | -0.01565102012 | | 1.4278208 | | | |
| | 18-04-2019 | 126.55 | 0.02221324717 | 18-04-2019 | 11752.8 | 0.01365739643 | 0.0312508162 | | -0.00903756902 | -0.02468858915 | | -0.4660844252 | | | |
| | 22-04-2019 | 123.8 | 0.005686433794 | 22-04-2019 | 11594.45 | 0.001598140973 | 0.003656861693 | | 0.002029572101 | -0.02265901705 | | 0.1046688488 | | | |
| | 23-04-2019 | 123.1 | -0.01598721023 | 23-04-2019 | 11575.95 | -0.01280897822 | -0.02930946805 | | 0.01332225781 | -0.00933675923 | | 0.6870538812 | | | |
| | 24-04-2019 | 125.1 | 0.02540983607 | 24-04-2019 | 11726.15 | 0.007245443145 | 0.01657900268 | | 0.008830833384 | -0.00050592584 | | 0.4554226794 | | | |
| | 25-04-2019 | 122 | -0.01014198783 | 25-04-2019 | 11641.8 | -0.00960045599 | -0.02196773647 | | 0.01182574864 | 0.01131982279 | | 0.6098760896 | | | 1 |
| | 26-04-2019 | | 0.05657951136 | 26-04-2019 | | | 0.001266010544 | | 0.05531350082 | | | 2.852621226 | | | - |
| | 30-04-2019 | | 0.006471095772 | | | | 0.004566733992 | | 0.00190436178 | | | 0.09821151719 | | | |
| | 02-05-2019 | | -0.02645947081 | 02-05-2019 | | | 0.002442098225 | | -0.02890156904 | | | -1.49050825 | | | |
| | 03-05-2019 | 119.05 | | 03-05-2019 | 11712.25 | | | | | | | | | | |
| | 20 00 1010 | 113.05 | | 00 00 2010 | | | | | | | | | | | |

Fig-10 Hindalco and aleris

| € fx | Hindalo | o industr: | ion 1td | | | | | | | | | | | | | |
|---------|-----------------|------------|----------------|------------|-----------|-----------------|-----------------|--------------|-----------------|---------------|--------------|-----------------|---|-----------|----------------|--|
| - | AIndate | o industr. | | D | E | F | Q | н | | J | ĸ | L | м | N | 0 | |
| | Hindalco indust | ies Itri | | NIFTY | - | | 5 | | | | | - | | Intercept | 0.005442149975 | |
| | | Adi Close | Returns | | Adi Close | Returns | Expected return | Beta | Abnormal return | CAR | CAR | T-TEST | | Slope | 1.332168373 | |
| | 24-02-2020 | 179.05 | 0.02636858699 | 24-02-2020 | 11829.4 | 0.002669966689 | 0.002415717423 | 0.9047743677 | 0.02395286956 | 0.02395286956 | 0.3367242194 | 0.7524244271 | | R-square | 0.7697264355 | |
| | 25-02-2020 | 174.45 | 0.02678045909 | 25-02-2020 | 11797.9 | 0.01022391574 | 0.009250336901 | | 0.01753012219 | 0.04148299176 | | 0.5506685582 | | St. error | 0.03183425299 | |
| | 26-02-2020 | 169.9 | 0.009207009207 | 26-02-2020 | 11678.5 | 0.003885397952 | 0.003515408476 | | 0.005691600731 | 0.04717459249 | | 0.1787885751 | | | | |
| | 27-02-2020 | 168.35 | 0.0798588839 | 27-02-2020 | 11633.3 | 0.03852523043 | 0.03485664101 | | 0.04500224289 | 0.09217683538 | | 1.413642183 | | | | |
| | 28-02-2020 | 155.9 | 0.04106844741 | 28-02-2020 | 11201.75 | 0.006197929532 | 0.005607727774 | | 0.03546071964 | 0.127637555 | | 1.113917127 | | | | |
| | 02-03-2020 | 149.75 | -0.05994978029 | 02-03-2020 | 11132.75 | -0.01508851397 | -0.01365170069 | | -0.0462980796 | 0.08133947542 | | -1.454347919 | | | | |
| | 03-03-2020 | 159.3 | -0.00809464508 | 03-03-2020 | 11303.3 | 0.004648475691 | 0.004205821654 | | -0.01230046674 | | | -0.3863909337 | | | | |
| | 04-03-2020 | 160.6 | 0.03279742765 | 04-03-2020 | 11251 | -0.00159730233- | -0.00144519820 | | 0.03424262586 | 0.1032816346 | | 1.075653507 | | | | |
| | 05-03-2020 | 155.5 | 0.03597601599 | 05-03-2020 | 11269 | 0.02543803375 | 0.0230156809 | | 0.01296033509 | 0.1162419696 | | 0.4071191836 | | | | |
| | 06-03-2020 | 150.1 | 0.04635761589 | 06-03-2020 | 10989.45 | 0.05147611097 | 0.04657426575 | | -0.00021664986 | 0.1160253198 | | -0.00680555817! | | | | |
| | 09-03-2020 | 143.45 | 0.04100145138 | 09-03-2020 | 10451.45 | -0.00066453759 | -0.00060125658 | | 0.04160270796 | 0.1576280277 | | 1.306853595 | | | | |
| | 11-03-2020 | 137.8 | 0.146422629 | 11-03-2020 | 10458.4 | 0.09053560163 | 0.08191429172 | | 0.06450833723 | 0.222136365 | | 2.026381372 | | | | |
| | 12-03-2020 | 120.2 | -0.05688505296 | 12-03-2020 | 9590.15 | -0.03666927837 | -0.03317742315 | | -0.02370762981 | 0.1984287352 | | -0.7447207831 | | | | |
| | 13-03-2020 | 127.45 | 0.1020319931 | 13-03-2020 | 9955.2 | 0.08239285015 | 0.0745469389 | | 0.02748505418 | 0.2259137893 | | 0.8633799007 | | | | |
| | 16-03-2020 | 115.65 | 0.002166377816 | 16-03-2020 | 9197.4 | 0.02568849287 | 0.02324228989 | | -0.02107591208 | 0.2048378773 | | -0.6620514101 | | | | |
| | 17-03-2020 | 115.4 | 0.05677655678 | 17-03-2020 | 8967.05 | 0.05883360098 | 0.05323113413 | | 0.003545422648 | 0.2083832999 | | 0.111371316 | | | | |
| | 18-03-2020 | 109.2 | 0.09473684211 | 18-03-2020 | 8468.8 | 0.02485039542 | 0.0224840008 | | 0.07225284131 | 0.2806361412 | | 2 269657194 | | | | |
| | 19-03-2020 | 99.75 | -0.05450236967 | 19-03-2020 | 8263.45 | -0.05511437376 | -0.04986607267 | | -0.00463629699 | 0.2759998442 | | -0.1456386302 | | | | |
| | 20-03-2020 | 105.5 | 0.2002275313 | 20-03-2020 | 8745.45 | 0.1491672415 | 0.1349626967 | | 0.06526483463 | 0.3412646788 | | 2.050145001 | | | | |
| | 23-03-2020 | 87.9 | -0.00957746478 | 23-03-2020 | 7610.25 | -0.02445824601 | -0.02212919406 | | 0.01255172928 | 0.3538164081 | | 0.3942837698 | | | | |
| | 24-03-2020 | 88.75 | -0.06134320465 | 24-03-2020 | 7801.05 | -0.06213144022 | -0.05621493454 | | -0.005128270118 | 0.348688138 | | -0.1610928367 | | | | |
| | 25-03-2020 | 94.55 | 0 | 25-03-2020 | 8317.85 | -0.03744741913 | -0.03388146496 | | 0.03388146496 | 0.382569603 | | 1.064308466 | | | | |
| | 26-03-2020 | 94.55 | 0.0327689787 | 26-03-2020 | 8641.45 | -0.00217083802- | -0.00196411860 | | 0.0347330973 | 0.4173027003 | | 1.091060541 | | | | |
| | 27-03-2020 | 91.55 | 0.03096846847 | 27-03-2020 | 8660.25 | 0.04578498026 | 0.04142507656 | | -0.01045660809 | 0.4068460922 | | -0.328470346 | | | | |
| | 30-03-2020 | 88.8 | -0.07210031348 | 30-03-2020 | 8281.1 | -0.03682940304 | -0.03332229985 | | -0.03877801363 | 0.3680680785 | | -1.218122305 | | | | |
| | 31-03-2020 | 95.7 | 0.0441898527 | 31-03-2020 | 8597.75 | 0.04167171485 | 0.03770349945 | | 0.006486353249 | 0.3745544318 | | 0.2037539016 | | | | |
| | 01-04-2020 | 91.65 | 0.03209459459 | 01-04-2020 | 8253.8 | 0.02102971375 | 0.01902714596 | | 0.01306744863 | 0.3876218804 | | 0.4104839099 | | | | |
| | 03-04-2020 | 88.8 | -0.1457431457 | 03-04-2020 | 8083.8 | -0.08057141557 | -0.07289895158 | | -0.07284419416 | 0.3147776863 | | -2.288233187 | | | | |
| | 07-04-2020 | 103.95 | 0.03073872087 | 07-04-2020 | 8792.2 | 0.004966423775 | 0.004493492931 | | 0.02624522794 | 0.3410229142 | | 0.8244336047 | | | | |
| | 08-04-2020 | 100.85 | -0.06229660623 | 08-04-2020 | 8748.75 | -0.03985447601 | -0.03605930834 | | -0.02623729789 | 0.3147856163 | | -0.8241845004 | | | | |
| | 09-04-2020 | 107.55 | -0.05492091388 | 09-04-2020 | 9111.9 | 0.01312563585 | 0.01187573888 | | -0.06679665276 | 0.2479889636 | | -2.098263553 | | | | |
| | 13-04-2020 | 113.8 | -0.0112945265 | 13-04-2020 | 8993.85 | 0.007680414104 | 0.006949041814 | | -0.01824356831 | 0.2297453952 | | -0.5730798307 | | | | |
| | 15-04-2020 | 115.1 | -0.04520945666 | 15-04-2020 | 8925.3 | -0.00750600480- | -0.00679124075 | | -0.03841821591 | 0.1913271793 | | -1.206820085 | | | | |
| | 16-04-2020 | 120.55 | -0.02899718083 | 16-04-2020 | 8992.8 | -0.02956268379 | -0.02674755853 | | -0.00224962229 | 0.189077557 | | -0.07066672173 | | | | |
| | 17-04-2020 | 124.15 | 0.06612279948 | 17-04-2020 | 9266.75 | 0.000529051971 | 0.000478672662 | | 0.06564412682 | 0.2547216839 | | 2.062059595 | | | | |
| | 20-04-2020 | 116.45 | 0.0873015873 | 20-04-2020 | 9261.85 | 0.03121990325 | 0.02824696822 | | 0.05905461908 | 0.3137763029 | | 1.855065332 | | | | |
| | 21-04-2020 | 107.1 | -0.01108033241 | 21-04-2020 | 8981.45 | -0.02240592993 | -0.02027231108 | | 0.009191978671 | 0.3229682816 | | 0.2887449149 | | | | |
| | 22-04-2020 | 108.3 | -0.02651685393 | 22-04-2020 | 9187.3 | -0.01359258742 | -0.01229822469 | | -0.01421862924 | 0.3087496524 | | -0.4466456068 | | | | |
| | 23-04-2020 | 111.25 | 0.07332368548 | 23-04-2020 | 9313.9 | 0.01742331556 | 0.01576416932 | | 0.05755951616 | | | 1.808100105 | | | | |
| | 24-04-2020 | 103.65 | -0.04205175601 | 24-04-2020 | 9154.4 | -0.01377891255 | -0.01246680689 | | -0.02958494911 | 0.3367242194 | | -0.9293432809 | | | | |
| | 27-04-2020 | 108.2 | | 27-04-2020 | 9282.3 | | | | | | | | | | | |

Fig-11 Axis bank and freecharge

| x | AXIS ba | ink | | | | | | | | | | | | | | |
|---|--------------------------|-----------|-----------------------------------|--------------------------|-----------|-----------------------------------|-------------------|------------|--------------------------------------|---------------|--|-------------------------------|---|-----------|----------------|--|
| | A | 0 | c | D | 6 | F | G | н | 1.1 | J | ĸ | L | м | N | 0 | |
| | AXIS bank | | | NIFTY | | | | | | | | | | Intercept | -0.00006889223 | |
| | | Adj Close | | | Adj Close | | Expected return t | | Abnormal return | | CAR | T-TEST | | Slope | 1.156159899 | |
| | 07-09-2017 | | 0.005263005351 | 07-09-2017 | | -0.00049321576 | | 1.15615989 | 9 0.005833241642 0 | | 2-0.0027556892 | | | R-square | 0.07267387477 | |
| | 08-09-2017 | | 0.000202518856 | 08-09-2017 | | -0.00712069198 | | | 0.008435177381 | | | 0.3416175997 | | St. error | 0.02469187005 | |
| | 11-09-2017 | | -0.00523670647: | 11-09-2017 | | -0.00861979282 | | | 0.004729152335 | | | 0.1915266978 | | | | |
| | 12-09-2017 | | -0.00560779673; | 12-09-2017 | | 0.001364182036 | | | -0.00718500929 | | | -0.2909868423 | | | | |
| | 13-09-2017 | | -0.03934577435 | 13-09-2017 | | -0.00072373247 | | | -0.03850902389 - | | | -1.559583126 | | | | |
| | 14-09-2017 | | 0.006974649173 | 14-09-2017 | | 0.000118983877 | | | 0.006837084784- | | | 0.2768961917 | | | | |
| | 15-09-2017 | | -0.01601376142 | 15-09-2017 | | -0.00666791423 | | | -0.00830458637: | | | -0.3363287735 | | | | |
| | 18-09-2017 | | 0.007297193004 | 18-09-2017 | | 0.000546930047 | | | 0.006664854416 | | | 0.2699210064 | | | | |
| | 19-09-2017 | | 0.002502671039 | 19-09-2017 | | 0.000631092134 | | | 0.00177302762 - | | | 0.07180612954 | | | | |
| | 20-09-2017 | | 0.01346221691 | 20-09-2017 | | 0.001901816853 | | | 0.01126341253 - | | | 0.456158748 | | | | |
| | 21-09-2017 | | 0.0143478988 | 21-09-2017 | | 0.01580627032 | | | -0.00392667710 | | | -0.159027125 | | | | |
| | 22-09-2017 25-09-2017 | | 0.007175533854 | 22-09-2017 | | 0.009298462411 | | | -0.00357497551 - | | | -0.1447835058 | | | | |
| | | | -0.02002151316 | 25-09-2017 | | 0.000111431899 | | | -0.02015034625 - | | | -0.8160721001 | | | | |
| | 26-09-2017 | | 0.01115940768 | 26-09-2017 | | 0.01394345582 | | | -0.00496145679 | | | -0.2009348335 | | | | |
| | 27-09-2017 | | -0.01074642796 | 27-09-2017 | | -0.00339852287 | | | -0.00681719210:- | | | -0.2760905549 | | | | |
| | 28-9-2017 | | 0.005204727065 | 28-9-2017 | | -0.00200743722 | | | 0.007525645483 - | | | 0.3047823217 | | | | |
| | 29-9-2017 | | -0.000981104986 | 29-9-2017 | | -0.00719103402 | | | 0.007332880191- | | | 0.2969754893 | | | | |
| | 3-10-2017 | | 0.007313152949 | 3-10-2017 | | -0.00558755005 | | | 0.01377325425 - | | | 0.55780523 | | | | |
| | 4-10-2017 | | 0.009477238626 | 4-10-2017 | | 0.00264948881 | | | 0.006414005909- | | | 0.2597618526 | | | | |
| | 5-10-2017 | | -0.00427151426 | 5-10-2017 | | -0.009118510576 | | | 0.006270942003- | | | 0.2539678845 | | | | |
| | 6-10-2017 9-10-2017 | | -0.00513869957 | 6-10-2017 | | -0.00090601927 | | | -0.00409119642 | | | -0.1656900191 | | | | |
| | 10-10-2017 | | -0.01671357161 -0.00232658028: | 9-10-2017 | | -0.00281522818 0.003219894239 | | | -0.01345871767 - | | | -0.5450667626 | | | | |
| | 11-10-2017 | | | 11-10-2017 | | -0.01105344479 | | | -0.00604959288 - | | | -0.245003431 | | | | |
| | 12-10-2017 | | -0.0178061267 -0.00821606476 | 12-10-2017 | | | | | -0.00502657708;- | | | -0.2035721503 | | | | |
| | 12-10-2017 | | | 12-10-2017 | | -0.00698798617: | | | -0.00013683537(- | | | -0.00554171781 | | | | |
| | | | 0.01748839966 | | | -0.00619694355 | | | 0.0246530573 - | | | 0.998428116 | | | | |
| | 16-10-2017 | | 0.01403065206 | 16-10-2017 | | -0.00035175314 | | | 0.01443733495 0 | | | 0.5846999404 | | | | |
| | 17-10-2017 | | 0.1047363587 | 17-10-2017 | | 0.002311266937 | | | 0.1020641646 | | | 4.133512947 | | | | |
| | 18-10-2017 | | 0.009124723478 | 18-10-2017 | | 0.006337129369 | | | 0.001797988625 | | | 0.07281702929 | | | | |
| | 19-10-2017 | | 0.02300241727 | 19-10-2017 | | -0.00376048739 | | | 0.02735014199 | 0.1349631792 | | 1.107657781 | | | | |
| | 23-10-2017 24-10-2017 | | -0.00442522575 | 23-10-2017 24-10-2017 | | -0.00223850622 | | | | 0.1331260246 | | -0.07440321944 | | | | |
| | | | | | | -0.00851355223 | | | -0.03466016474 | | | -1.403707563 | | | | |
| | 25-10-2017 26-10-2017 | | -0.02333267797 | 25-10-2017 26-10-2017 | | -0.00468396527- | | | -0.01791726515 | | | -0.7256341909 | | | | |
| | | | -0.00339550668; | | | 0.002010064855 | | | -0.00571946306; | | | -0.2316334506 | | | | |
| | 27-10-2017 30-10-2017 | | 0.004028964023 | 27-10-2017 30-10-2017 | | -0.00391753870: 0.002743026327 | | | 0.008558265178 | | | 0.3466025521 | | | | |
| | 31-10-2017 | | -0.07483505776 | 31-10-2017 | | 0.01007614578 | | | -0.07800643481 0 | | | -3 159195097 | | | | |
| | 31-10-2017 01-11-2017 | | -0.02233231538 0.005543472126 | 31-10-2017 01-11-2017 | | 0.00160210288 | | | -0.01068267969 - 0.003691185021 - | | | -0.4326395556 0.1494898934 | | | | |
| | 02-11-2017 | | 0.005543472126 | 01-11-2017 02-11-2017 | | 0.00160210288 | | | | | | | | | | |
| | 03-11-2017 | | 0.01047716812 | 03-11-2017 | | -0.002/45/5460-0.000066974109 | | | -0.01154489197 - 0.01039973534 - | | | -0.4675584287 0.4211805473 | | | | |
| | 05-11-2017 | 539.4301 | 0.01047716812 #DIV/0 | 03-11-2017 06-11-2017 | 10452.5 | 0.000066974109 #DIV/0! | 0.000077432779 | | 0.01039973534 - | 0.00275568929 | Contract (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | 0.4211805473 | | | | |
| | 06-11-2017 | 533.837 | #DIA\0 | 00-11-2017 | 10451.8 | #D14/01 | | | | | | | | | | |

Fig-12 Tech mahindra and CJS solution

| fx | Tech ma | hindra | | | | | | | | | | | | | | |
|-------|---------------|-----------|---------------------------------|-----------|-----------|--------------------------------|-------------------|-------------|----------------------------------|---------------|--------------|----------------|---|-----------|----------------|----|
| | A | В | с | D | E | F | G | н | 1 | J | K | L | м | N | 0 | 11 |
| | Tech mahindra | | | NIFTY | | | | | | | | | | Intercept | 0.004751535108 | |
| | | Adj Close | Returns | | Adj Close | | Expected return I | | Abnormal return | | CAR | T-TEST | | Slope | 1.003333518 | |
| 3. | 3/22/2017 | | -0.01399980843 | | | -0.00614661633 | | 1.003333518 | -0.00783270223 | | 0.1900614043 | -0.5993042761 | | R-square | 0.1300828936 | |
| 1 | 3/23/2017 | | 0.01687227414 | | | -0.00238252086 | | | 0.01926273718 | | | 1.473851605 | | St. error | 0.01306965852 | |
| 5 | 3/24/2017 | | 0.01141208378 | | | 0.006942908946 | | | 0.004446030522 | | | 0.3401795476 | | | | |
| | 3/27/2017 | | 0.02874693109 | | | -0.00610935302- | | | 0.03487664975 | | | 2.668520352 | | | | |
| | 3/28/2017 | | -0.00556451786 | | | -0.00470264004 | | | -0.00084620148 | | | -0.06474549344 | | | | |
| 5 | 3/29/2017 | | -0.00639654287 | | | -0.00326474996 | -0.00327563306 | | -0.00312090980 | | | -0.2387904629 | | | | |
| ł., . | 3/30/2017 | | 0.004464893916 | | 9173.75 | 0 | 0 | | 0.004464893916 | 0.05125049783 | | 0.3416228442 | | | | |
| 0 | 3/31/2017 | 423.5263 | 0.01335245224 | 3/31/2017 | 9173.75 | -0.00693884399 | -0.00696197475 | | 0.020314427 | 0.07156492483 | | 1.554319646 | | | | |
| 1 | 4/3/2017 | 417.9457 | 0.01375981783 | 4/3/2017 | 9237.85 | -0.00294652542 | -0.00295634771 | | 0.01671616555 | 0.08828109037 | | 1.279005532 | | | | |
| 2 | 4/5/2017 | 412 2729 | 0.000112074254 | 4/5/2017 | 9265.15 | 0.000345499597 | 0.000346651326 | | -0.00023457707; | 0.0880465133 | | -0.01794821741 | | | | |
| 3 | 4/6/2017 | 412 2267 | 0.008348299397 | 4/6/2017 | 9261.95 | 0.006919756912 | 0.006942824046 | | 0.001405475351 | 0.08945198865 | | 0.1075372665 | | | | |
| 4 | 4/7/2017 | 408.8138 | 0.000338655079 | 4/7/2017 | 9198.3 | 0.001835222105 | 0.001841339851 | | -0.00150268477; | 0.08794930388 | | -0.11497506 | | | | |
| 5 | 4/10/2017 | 408.6754 | -0.00482931564 | 4/10/2017 | 9181.45 | -0.00601385731 | -0.00603390461- | | 0.001204588974 | 0.08915389286 | | 0.09216682836 | | | | |
| 6 | 4/11/2017 | 410.6586 | 0.01725116821 | 4/11/2017 | 9237 | 0.003645372116 | 0.003657524029 | | 0.01359364418 | 0.102747537 | | 1.040091764 | | | | |
| 7 | 4/12/2017 | 403.6944 | 0.01790909444 | 4/12/2017 | 9203.45 | 0.005753595314 | 0.005772775027 | | 0.01213631941 | 0.1148838564 | | 0.9285873379 | | | | |
| 3 | 4/13/2017 | 396.5918 | 0.01895956579 | 4/13/2017 | 9150.8 | 0.001258302058 | 0.001262496631 | | 0.01769706916 | 0.1325809256 | | 1.354057501 | | | | |
| 5 | 4/17/2017 | 389,2125 | 0.00728107286 | 4/17/2017 | 9139.3 | 0 003750624646 | 0.003763127421 | | 0.003517945439 | 0.136098871 | | 0.2691688871 | | | | |
| 0 | 4/18/2017 | 386 3991 | 0.01110305739 | 4/18/2017 | 9105.15 | 0.000181248970 | 0.000181853166 | | 0.01092120422 | 0.1470200753 | | 0.8356151163 | | | | |
| 1 | 4/19/2017 | | -0.01474444086 | | | -0.00360098069 | | | -0.01113145624 | 0.135888619 | | -0.8517021482 | | | | |
| 2 | 4/20/2017 | 387 875 | -0.01671913366 | 4/20/2017 | 9136.4 | 0.00186415773 | 0.001870371933 | | -0.0185895056 | 0.1172991134 | | -1.422340574 | | | | |
| 3 | 4/21/2017 | | -0.00372752756 | | | -0.01069109726 | | | 0.006999208666 | | | 0.5355311048 | | | | |
| 4 | 4/24/2017 | 395 9461 | -0.02031272114 | 4/24/2017 | 9217.95 | -0.00952549803- | -0.00955725145 | | -0.01075546969 | 0.1135428524 | | -0.8229342543 | | | | |
| 5 | 4/25/2017 | | 0.02599229076 | | | -0.00483861482 | | | 0.03084703519 | 0.1443898876 | | 2 360202077 | | | | |
| ő | 4/26/2017 | | 0 004941581173 | | | 0.001038304887 | | | 0.003899815078 | | | 0 2983869144 | | | | |
| 7 | 4/27/2017 | | 0.01918718753 | | | 0.004094990891 | | | 0.01507854592 | 0.1633682486 | | 1.153706189 | | | | |
| 8 | 4/28/2017 | | -0.00286979271 | | | -0.00104683373 | | | -0.00181946934 | 0.1615487792 | | -0.1392132276 | | | | |
| 9 | 5/2/2017 | | -0.00404905656 | | | 0.000198669451 | | | -0.00424838828 | 0.157300391 | | -0.3250573285 | | | | |
| 0 | 5/3/2017 | | 0.00178952237 | 5/3/2017 | | -0.00512291798 | | | 0.006929517689 | 0.1642299087 | | 0.5301968325 | | | | |
| 1 | 5/4/2017 | | 0.01476991229 | | | 0.008034204603 | | | 0.006708925524 | | | 0.5133206437 | | | | |
| 2 | 5/5/2017 | | -0.01935159193 | | | -0.00308673455 | | | -0.01625456769 | 0.1546842665 | | -1.243687252 | | | | |
| 3 | 5/8/2017 | | -0.01184917666 | | | -0.00030053075 | | | -0.01154764408 | 0.1431366224 | | -0.8835459675 | | | | |
| 4 | 5/9/2017 | | -0.00975826868 | | | -0.00961487355 | | | -0.001154764408 | | | -0.00851925668 | | | | |
| 5 | 5/10/2017 | | -0.01000575035 | | | -0.0096148/355 | | | -0.00839784406 | 0.1346274346 | | -0.00851925668 | | | | |
| 6 | 5/10/2017 | | -0.01000575035 | | | -0.00160256410: 0.002287015073 | | | | 0.1346274346 | | -0.6425450255 | | | | |
| 7 | 5/12/2017 | | -0.016958/2529 | | | -0.00228/0150/3 | | | -0.01925336417 0.003936321168 | 0.1153740704 | | -1.4/313444/ | | | | |
| | 5/12/2017 | | -0.00079067202 | | | | | | | | | | | | | |
| | 5/15/2017 | | -0.00259160839 0.02994071793 | | | -0.00702777996 | | | 0.004459598801 | 0.1237699904 | | 0.3412176986 | | | | |
| | | | | | | | | | 0.03136265347 | 0.1551326438 | | 2.399653627 | | | | |
| | 5/17/2017 | | 0.02024643209 | | | 0.01021268473 | | | 0.0099997032 | 0.165132347 | | 0.7651082226 | | | | |
| | 5/18/2017 | | 0.01477820834 | | | 0.000164405647 | | | 0.01461325465 | 0.1797456017 | | 1.118105314 | | | | |
| 2 | 5/19/2017 | | 0.009215545488 | | | -0.00109660159 | -0.00110025713(| | 0.01031580262 | 0.1900614043 | | 0.7892939673 | | | | |
| 3 | 5/22/2017 | 380.3573 | | 5/22/2017 | 9438.25 | | | | | | | | | | | |

Fig-13 SBI merger

| ĥ | SBI | | | | | | | | | | | | | | |
|-----|------------|-----------|----------------|------------|-----------|----------------|-----------------|--------------|-----------------|----------------|----------------|---------------|---|-----------|----------------|
| ï | A | 8 | с | D | 6 | F | G | н | | J | К | L. | м | N | 0 |
| | SBI | | | NIFTY | | | | | | | | | | Intercept | -0.00172507563 |
| | Date | Adj Close | Returns | Date | Adj Close | Returns | Expected return | Beta | Abnormal return | CAR | CAR | T-TEST | | Slope | 0.9608753743 |
| | 3/3/2017 | 262 6745 | -0.01778773256 | 3/3/2017 | 8897.55 | -0.00735207983 | -0.00706443246 | 0.9608753743 | -0.0107233001 | -0.0107233001 | -0.06900302538 | -0.8724369368 | | R-square | 0.1519667962 |
| | 3/6/2017 | 267.4315 | 0.007655243146 | 3/6/2017 | 8963.45 | 0.001849802725 | 0.001777429886 | | 0.005877813261 | 0.00484548683 | | 0.4782129895 | | St. error | 0.01229120369 |
| | 3/7/2017 | 265.3998 | -0.00778073956 | 3/7/2017 | 8946.9 | 0.002532411506 | 0.002433331853 | | -0.01021407142 | 0.01505955826 | | -0.8310066026 | | | |
| | 3/8/2017 | 267.481 | -0.01225992518 | 3/8/2017 | 8924.3 | -0.00030245323 | -0.00029061986; | | -0.01196930532 | 0.02702886358 | | -0.9738106718 | | | |
| | 3/9/2017 | 270.801 | 0.004410786175 | 3/9/2017 | 8927 | -0.00084503416 | -0.000811972515 | | 0.005222758694 | 0.02180610488 | | 0.4249184072 | | | |
| | 3/10/2017 | 269.6118 | -0 00946623735 | 3/10/2017 | 8934.55 | -0.01677671399 | -0.01612033133 | | 0.006654093975 | 0.01515201091 | | 0.5413704095 | | | |
| | 3/14/2017 | 272.1884 | -0.00973534940 | 3/14/2017 | 9087 | 0.000242162733 | 0.000232688207 | | -0.00996803761 | 0.02512004852 | | -0.810989539 | | | |
| | 3/15/2017 | 274.8643 | -0.00698165585 | 3/15/2017 | | -0.00752701093 | | | 0.000250863592 | 0.02486918493 | | 0.02041001017 | | | |
| | 3/16/2017 | 276.7968 | 0.01878554795 | 3/16/2017 | 9153.7 | -0.00069322765 | -0.00066610538- | | 0.01945165333 | 0.00541753159 | | 1.582566999 | | | |
| | 3/17/2017 | 271.6929 | 0.000912523043 | | 9160.05 | 0.003637618675 | 0.003495298205 | | -0.00258277516 | 0.00800030676 | | -0.2101319958 | | | |
| | 3/20/2017 | 271.4452 | 0.005691175288 | 3/20/2017 | 9126.85 | 0.000586526338 | 0.000563578715 | | 0.005127596573 | 0.00287271018 | | 0.4171761125 | | | |
| 1 | 3/21/2017 | 269.9091 | 0.01813110023 | 3/21/2017 | 9121.5 | 0.01008255403 | 0.009688077873 | | 0.008443022362 | 0.005570312175 | | 0.6869158282 | | | |
| 5 | 3/22/2017 | 265.1025 | -0.00372462922 | 3/22/2017 | 9030.45 | -0.00614661633 | -0.00590613227 | | 0.002181503043 | 0.007751815217 | | 0.1774848988 | | | |
| 6 | 3/23/2017 | 266.0936 | -0.02893308892 | 3/23/2017 | 9086.3 | -0.00238252086 | -0.00228930562- | | -0.0266437833 | 0.01889196808 | | -2.167711477 | | | |
| 7 | 3/24/2017 | 274.0219 | -0.01055658965 | 3/24/2017 | 9108 | 0.006942908946 | 0.006671270232 | | -0.01722785989 | 0.03611982797 | | -1.401641395 | | | |
| 3 | 3/27/2017 | 276.9455 | -0 00939365465 | 3/27/2017 | 9045.2 | -0.00610935302 | -0.00587032687: | | -0.00352332777 | 0.03964315575 | | -0.2866544129 | | | |
| 9 | 3/28/2017 | 279.5717 | -0.02201425289 | 3/28/2017 | 9100.8 | -0.00470264004 | -0.00451865100 | | -0.01749560188 | 0.05713875763 | | -1.423424615 | | | |
| 0 | 3/29/2017 | 285.8648 | -0 00893318055 | 3/29/2017 | 9143.8 | -0.00326474996 | -0.00313701784: | | -0.00579616271 | 0.06293492034 | | -0.4715699828 | | | |
| 1 | 3/30/2017 | 288.4415 | -0.00800941223 | 3/30/2017 | 9173.75 | 0 | 0 | | -0.00800941223 | 0.07094433258 | | -0.6516377435 | | | |
| 2 | 3/31/2017 | 290.7704 | 0.000852945691 | 3/31/2017 | | | -0.00666736432 | | 0.007520310012 | 0.06342402257 | | 0.6118448772 | | | |
| 3 | 4/3/2017 | 290.5226 | -0.01412491304 | 4/3/2017 | 9237.85 | -0.00294652542 | -0.00283124371 | | -0.01129366933 | 0.07471769189 | | -0.9188416051 | | | |
| 4 | 4/5/2017 | | 0.01536633781 | 4/5/2017 | | | 0.000331982055 | | 0.01503435575 | 0.05968333614 | | 1.223180099 | | | |
| 5 | 4/6/2017 | 290.2253 | 0.01174631993 | 4/6/2017 | 9261.95 | 0.006919756912 | 0.006649024012 | | 0.005097295916 | 0.05458604023 | | 0.4147108814 | | | |
| 5 | 4/7/2017 | | 0.000345589135 | | | | 0.001763419727 | | -0.00141783059 | 0.05600387082 | | -0.1153532744 | | | |
| 7 | 4/10/2017 | 286.7567 | -0.01748745805 | 4/10/2017 | 9181.45 | -0.00601385731 | -0.00577856739 | | -0.01170889066 | 0.06771276148 | | -0.952623596 | | | |
| 8 | 4/11/2017 | 291.8606 | 0.01499254911 | 4/11/2017 | 9237 | 0.003645372116 | 0.003502748296 | | 0.01148980081 | 0.05622296066 | | 0.934798666 | | | |
| 2 | 4/12/2017 | 287.5495 | -0.00480208488 | | 9203.45 | 0.005753595314 | 0.005528488051 | | -0.01033057293 | -0.0665535336 | | -0.8404850489 | | | |
| 0 | 4/13/2017 | 288.937 | 0.005691575897 | 4/13/2017 | 9150.8 | 0.001258302058 | 0.001209071461 | | 0.004482504436 | 0.06207102916 | | 0.3646920634 | | | |
| 1 | 4/17/2017 | 287.3018 | -0.00137783274 | | 9139.3 | 0.003750624646 | 0.003603882861 | | -0.00498171560- | 0.06705274477 | | -0.4053073832 | | | |
| 2 | 4/18/2017 | 287.6982 | 0.02200322411 | 4/18/2017 | 9105.15 | 0.000181248970 | 0.000174157672 | | 0.02182906644 | 0.04522367833 | | 1.775990943 | | | |
| 3 | 4/19/2017 | | -0.00263350428 | | 9103.5 | -0.00360098069 | -0.00346009367 | | 0.000826589388 | 0.04439708894 | | 0.06725048327 | | | |
| 1 | 4/20/2017 | | 0.009213332246 | | | | 0.001791223256 | | 0.00742210899 | | | 0.6038553406 | | | |
| 5 | 4/21/2017 | | -0.0134592042 | 4/21/2017 | | -0.01069109726 | | | -0.003186392111 | 0.04016137207 | | -0.2592416658 | | | |
| 6 | 4/24/2017 | 283.4863 | 0 | | | | -0.00915281648 | | 0.009152816488 | 0.03100855558 | | 0.7446639661 | | | |
| 7. | 4/25/2017 | 283.4863 | -0.00139635138 | 4/25/2017 | 9306.6 | -0.00483861482 | -0.00464930582 | | 0.003252954445 | -0.02775560114 | | 0.2646571099 | | | |
| | 4/26/2017 | | 0.01560019762 | 4/26/2017 | | | 0.000997681596 | | 0.01460251603 | -0.01315308511 | | 1.188046053 | | | |
| 9 | 4/27/2017 | | -0.02657467393 | 4/27/2017 | 9342.15 | 0.004094990891 | 0.003934775905 | | -0.03050944983 | 0.04366253494 | | -2.482218227 | | | |
| 0 : | 4/28/2017 | | 0.005029468063 | | | | -0.00100587675 | | 0.006035344816 | 0.03762719013 | | 0.4910295987 | | | |
| | 05-02-2017 | | -0.00517613518 | | | | 0.000190896583 | | -0.00536703176 | | | -0.4366563196 | | | |
| 2 | 05-03-2017 | | -0.03093128922 | 05-03-2017 | | | -0.00492248573 | | -0.02600880349 | 0.06900302538 | | -2.116050156 | | | |
| 3 | 05-04-2017 | 296.3698 | | 05-04-2017 | 9359.9 | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | |

Fig-14 Bharti airtel and Telenor

| fx | Bharti | airtel | | | | | | | | | | | | | | |
|----|---------------|------------|-----------------|------------|-----------|----------------|-----------------|--------------|-----------------|----------------|----------------|----------------|---|-----------|----------------|--|
| | A | 8 | с | D | E | F | G | н | 1 | J | ĸ | L | м | N | 0 | |
| Ŀ, | Bharti airtel | | | NIFTY | | | | | | | | | | Intercept | 0.000003746516 | |
| | | Adj Close | Returns | | Adj Close | Returns | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 0.7192222927 | |
| | 4/13/2018 | 341.417297 | 0.003319567638 | | | -0.00453537353 | -0.00326194175 | 0.7192222927 | 0.006581509393 | 0.00658150939 | 0.000149860667 | 0.3203404626 | | R-square | 0.03739748533 | |
| | 4/16/2018 | | -0.01413379993 | 4/16/2018 | | -0.00192914766 | | | -0.01274631392 | | | -0.6203987345 | | St. error | 0.02054535771 | |
| | 4/17/2018 | | -0.00572553080 | | | | 0.001537354562 | | -0.00726288536 | -0.0134276899 | | -0.3535049363 | | | | |
| | 4/18/2018 | | -0.02807695465 | | | | -0.00266169362- | | -0.02541526102 | -0.03884295092 | | -1.237031809 | | | | |
| | 4/19/2018 | | -0.01654260544 | 4/19/2018 | | | 0.000085102575 | | -0.01662770801 | -0.05547065893 | | -0.8093170362 | | | | |
| | 4/20/2018 | | -0.002108721116 | | | -0.00195092917 | | | -0.00070556936- | -0.0561762283 | | -0.03434203357 | | | | |
| | 4/23/2018 | | -0.00836978178 | | | -0.00279338819 | | | -0.00636071472 | -0.06253694302 | | -0.3095937686 | | | | |
| 8 | 4/24/2018 | | -0.03239193176 | 4/24/2018 | | 0.004143587609 | | | -0.03537209234 | -0.09790903537 | | -1.721658627 | | | | |
| | 4/25/2018 | | 0.02602478125 | 4/25/2018 | | | -0.00320059271 | | 0.02922537396 | | | 1.422480658 | | | | |
| | 4/26/2018 | | 0.001103149316 | | | | -0.005011275475 | | 0.006114424795 | -0.06256923661 | | 0.2976061493 | | | | |
| | 4/27/2018 | | -0.00195463429 | | | -0.00438108451 | | | 0.001196339353 | | | 0.05822918103 | | | | |
| | 4/30/2018 | | 0.002693194198 | | | 0.001987301795 | 0.001429311753 | | 0.001263882445 | -0.06010901481 | | 0.06151669212 | | | | |
| | 05-02-2018 | | 0.01001582242 | | | | 0.002586052543 | | 0.007429769874 | | | 0.3616276717 | | | | |
| | 05-03-2018 | | 0.01928154149 | | | | 0.004158900833 | | 0.01512264066 | -0.03755660428 | | 0.7360612002 | | | | |
| | 05-04-2018 | | -0.00376861195 | | | -0.00907563809 | | | 0.002758789287 | | | 0.1342779876 | | | | |
| | 05-07-2018 | | -0.00722710761 | | | -0.00021459627 | | | -0.00707276519 | -0.04187058018 | | -0.3442512557 | | | | |
| | 05-08-2018 | | -0.00323131446 | | | -0.00222497370 | | | -0.00163106377 | | | -0.07938843421 | | | | |
| | 05-09-2018 | | -0.02341554547 | | | | 0.001687897753 | | -0.02510344322 | -0.06860508718 | | -1.221854765 | | | | |
| | 05-10-2018 | | 0.06595818334 | | | -0.00832369407 | | | 0.07194476967 | 0.00333968249 | i | 3.501753081 | | | | |
| | 05-11-2018 | | 0.009005046695 | | | -0.00000925360 | | | 0.009011702094 | | | 0.4386247356 | | | | |
| | 5/14/2018 | | 0.00314226719 | | | | 0.000316270443 | | 0.002825996747 | | | 0.1375491625 | | | | |
| | 5/15/2018 | | 0.01758361539 | 5/15/2018 | | 0.005655845304 | | | 0.01351580537 | 0.0286931867 | | 0.6578520343 | | | | |
| | 5/16/2018 | | 0.02108317727 | 5/16/2018 | | 0.005466782742 | | | 0.01715134526 | 0.04584453196 | | 0.8348039248 | | | | |
| | 5/17/2018 | 332.110901 | 0.01729443946 | 5/17/2018 | | 0.008144275414 | 0.005857544436 | | 0.01143689503 | 0.05728142699 | | 0.5566656559 | | | | |
| | 5/18/2018 | | 0.003751211257 | 5/18/2018 | | 0.007578422889 | | | -0.00169935942 | 0.05558206756 | | -0.08271257441 | | | | |
| | 5/21/2018 | | -0.00511369927 | 5/21/2018 | | -0.00189812749 | -0.00136517561 | | -0.00374852366 | 0.0518335439 | | -0.1824511266 | | | | |
| | 5/22/2018 | 326.916565 | 0.01415436479 | 5/22/2018 | 10536.7 | 0.01019620626 | 0.007333338845 | | 0.006821025949 | 0.05865456985 | | 0.331998403 | | | | |
| | 5/23/2018 | | -0.04060386763 | 5/23/2018 | | -0.00794190520 | | | -0.03489187237 | 0.02376269748 | | -1.698284978 | | | | |
| | 5/24/2018 | 335.996613 | -0.01339469967 | 5/24/2018 | 10513.85 | -0.00860902486 | -0.00619180259 | | -0.00720289706 | 0.01655980041 | | -0.350585138 | | | | |
| | 5/25/2018 | | 0.004795992432 | | | -0.00781202490 | | | 0.01041457489 | 0.0269743753 | | 0.5069064769 | | | | |
| | 5/28/2018 | | -0.01054786533 | 5/28/2018 | | | 0.003743800504 | | -0.01429166583 | | | -0.6956153322 | | | | |
| | 5/29/2018 | | 0.008914582057 | | | 0.001785318931 | | | 0.007630540882 | 0.02031325036 | | 0.371399758 | | | | |
| | 5/30/2018 | | 0.005888752586 | | | -0.01134484894 | -0.00815946826 | | 0.01404822085 | 0.03436147121 | | 0.6837661846 | | | | |
| | 5/31/2018 | | -0.02632382176 | 5/31/2018 | | 0.003734971298 | | | -0.02901009638 | 0.00535137483 | 1 | -1.412002496 | | | | |
| | 06-01-2018 | | 0.03061966836 | 06-01-2018 | | 0.006369666463 | | | 0.02603846224 | 0.03138983707 | | 1.267364755 | | | | |
| | 06-04-2018 | | 0.02196178801 | 06-04-2018 | | 0.003337062158 | | | 0.01956169852 | | | 0.9521225568 | | | | |
| | 06-05-2018 | | -0.04068514489 | | | | -0.00615919471 | | -0.03452595018 | 0.01642558541 | | -1.680474522 | | | | |
| | 06-06-2018 | | -0.00052737050 | | | | -0.00559035561 | | 0.005062985113 | 0.02148857053 | | 0.2464296404 | | | | |
| | 06-07-2018 | | 0.006357866453 | | | | 0.000046756312 | | 0.006311110141 | 0.02779968067 | | 0.307179375 | | | | |
| | 06-08-2018 | | -0.0289366518 | | | -0.00178919898 | -0.00128683179 | | -0.02764982 | 0.00014986066 | | -1.345794042 | | | | |
| | 06-11-2018 | 351.264862 | | 06-11-2018 | 10786.95 | | | | | | | | | | | |

| Fig-15 Asian paints and ESS-ESS | bathroom products |
|---------------------------------|-------------------|
|---------------------------------|-------------------|

| fx | Asian F | aints | | | | | | | | | | | | | | |
|----|--------------|----------|-----------------|------------|-----------|-----------------|-----------------|--------------|-----------------|----------------|---------------|----------------|---|-----------|----------------|--|
| | A | 8 | с | D | E | F | G | н | 0.0 | J | ĸ | L | м | N | 0 | |
| | Asian Paints | | | NIFTY | | | | | | | | | | Intercept | 0.002452690277 | |
| | | | | | Adj Close | | Expected return | | Abnormal return | | CAR | T-TEST | | Slope | 0.8325219226 | |
| | 04-10-2014 | | -0.00404654564; | | 6796.4 | 0.002966220504 | 0.002469443597 | 0.8325219226 | -0.00651598923 | 0.00651598923 | 0.09810761107 | -0.3529291852 | | R-square | 0.1455808412 | |
| | 04-11-2014 | | 0.0172124147 | 04-11-2014 | 6776.3 | 0.006416063923 | 0.005341513872 | | 0.01187090083 | 0.005354911589 | | 0.6429702694 | | St. error | 0.01846259678 | |
| | 4/15/2014 | 507.3373 | -0.00074805437 | 4/15/2014 | | | 0.007208629893 | | -0.00795668427 | -0.00260177268 | Ę. | -0.4309623595 | | | | |
| | 4/16/2014 | 507.7171 | -0.01627575747 | 4/16/2014 | 6675.3 | -0.01535534118 | -0.01278365816 | | -0.00349209930 | -0.00609387199 | | -0.1891445363 | | | | |
| | 4/17/2014 | 516.1173 | 0.008438477252 | | 6779.4 | -0.00561043761 | -0.00467081230 | | 0.01310928956 | 0.00701541757 | 1 | 0.7100458141 | | | | |
| | 4/21/2014 | | 0.005219970586 | 4/21/2014 | 6817.65 | 0.000337473497 | 0.000280954084 | | 0.004939016501 | 0.01195443407 | | 0.267514725 | | | | |
| | 4/22/2014 | 509.1408 | 0.01284021722 | 4/22/2014 | 6815.35 | -0.00372032510 | -0.00309725221: | | 0.01593746943 | 0.0278919035 | | 0.8632301088 | | | | |
| | 4/23/2014 | 502.6862 | 0.02844894307 | 4/23/2014 | 6840.8 | 0.008558475545 | 0.007125118514 | | 0.02132382456 | 0.04921572806 | | 1.154974287 | | | | |
| | 4/25/2014 | | 0.02876854876 | 4/25/2014 | 6782.75 | 0.003179885376 | 0.002647324287 | | 0.02612122447 | 0.07533695253 | | 1.414818554 | | | | |
| | 4/28/2014 | 475.1126 | 0.005928490142 | 4/28/2014 | 6761.25 | 0.006850080042 | 0.005702841806 | | 0.000225648335 | 0.07556260087 | | 0.01222191755 | | | | |
| | 4/29/2014 | 472 3125 | -0.01494602055 | 4/29/2014 | 6715.25 | 0.002814945344 | 0.002343503709 | | -0.01728952426 | 0.05827307661 | | -0.9364622143 | | | | |
| | 4/30/2014 | 479.4788 | -0.01231804065 | 4/30/2014 | 6696.4 | 0.000238991456 | 0.000198965626 | | -0.01251700628 | 0.04575607033 | | -0.6779656418 | | | | |
| | 05-02-2014 | 485.4587 | -0.01378702854 | 05-02-2014 | 6694.8 | -0.00067917036 | -0.000565424211 | | -0.01322160432 | 0.03253446601 | | -0.7161291815 | | | | |
| | 05-05-2014 | 492 2453 | 0.007479261796 | 05-05-2014 | 6699.35 | -0.002375173113 | -0.00197738368 | | 0.009456645481 | 0.04199111149 | | 0.5122056011 | | | | |
| | 05-06-2014 | 488.591 | 0.01799674718 | 05-06-2014 | 6715.3 | 0.009432473262 | 0.007852740775 | | 0.01014400641 | 0.0521351179 | | 0.5494355171 | | | | |
| | 05-07-2014 | 479.9534 | 0.002478032112 | 05-07-2014 | 6652.55 | -0.00109612078- | -0.00091254458 | | 0.003390576694 | 0.0555256946 | | 0.18364571 | | | | |
| | 05-08-2014 | 478.767 | -0.03214029192 | 05-08-2014 | 6659.85 | -0.02900653175 | -0.02414857358 | | -0.00799171833 | 0.04753397626 | | -0.4328599292 | | | | |
| | 05-09-2014 | 494.6657 | -0.0316799824 | 05-09-2014 | 6858.8 | -0.0221620273 | -0.01845037358 | | -0.01322960882 | 0.03430436744 | | -0.7165627337 | | | | |
| | 05-12-2014 | 510.8494 | -0.00397882509 | 05-12-2014 | 7014.25 | -0.01329347635 | -0.01106711049 | | 0.007088285395 | 0.04139265283 | | 0.3839267834 | | | | |
| | 5/13/2014 | 512.8901 | -0.02971799039 | 5/13/2014 | 7108.75 | 0 | 0 | | -0.02971799039 | 0.01167466245 | | -1.609632206 | | | | |
| | 5/14/2014 | 528.599 | 0.05264132623 | 5/14/2014 | 7108.75 | -0.00202157753 | -0.00168300761 | | 0.05432433384 | 0.06599899629 | | 2.942399408 | | | | |
| | 5/15/2014 | 502.1644 | -0.01388591057 | 5/15/2014 | 7123.15 | -0.01108565875 | -0.00922905393 | | -0.00465685663 | 0.06134213966 | | -0.2522319415 | | | | |
| | 5/16/2014 | 509.2356 | 0.01715764262 | 5/16/2014 | 7203 | -0.00833614417 | -0.00694002277: | | 0.02409766539 | 0.08543980505 | | 1.305215386 | | | | |
| | 5/19/2014 | 500.6457 | -0.00274151332 | 5/19/2014 | 7263.55 | -0.00164249879 | -0.00136741625 | | -0.00137409706 | 0.08406570799 | | -0.07442599109 | | | | |
| | 5/20/2014 | 502.022 | -0.0318505289 | 5/20/2014 | 7275.5 | 0.003115994981 | 0.002594134133 | | -0.03444466303 | 0.04962104495 | | -1.865645632 | | | | |
| | 5/21/2014 | 518.5377 | 0.01580525069 | 5/21/2014 | 7252.9 | -0.003229619043 | -0.00268872865 | | 0.01849397935 | 0.0681150243 | | 1.001699792 | | | | |
| | 5/22/2014 | 510.4696 | -0.005087511711 | 5/22/2014 | 7276.4 | -0.01231149299 | -0.01024958781 | | 0.005162076102 | 0.0732771004 | | 0.2795964275 | | | | |
| | 5/23/2014 | 513.0799 | 0.03237220297 | 5/23/2014 | 7367.1 | 0.001093891195 | 0.000910688400 | | 0.03146151457 | 0.104738615 | | 1.704067686 | | | | |
| | 5/26/2014 | 496.9912 | -0.000286442115 | 5/26/2014 | 7359.05 | 0.005609456136 | 0.004669995206 | | -0.00495643732 | 0.09978217765 | | -0.2684582987 | | | | |
| | 5/27/2014 | 497.1336 | 0.02655820425 | 5/27/2014 | 7318 | -0.001589434693 | -0.00132323922 | | 0.02788144348 | 0.1276636211 | | 1.510158284 | | | | |
| | 5/28/2014 | 484 2722 | 0.007603337287 | 5/28/2014 | 7329.65 | 0.01299123092 | 0.01081548454 | | -0.00321214725 | 0.1244514739 | | -0.173981336 | | | | |
| | 5/29/2014 | 480.6179 | -0.00246261761 | 5/29/2014 | 7235.65 | 0.000788387194 | 0.000656349623 | | -0.003118967233 | 0.1213325066 | | -0.1689343742 | | | | |
| | 5/30/2014 | 481.8044 | -0.00441294375 | 5/30/2014 | 7229.95 | -0.01800339559 | -0.01498822151 | | 0.01057527775 | 0.1319077844 | | 0.5727947091 | | | | |
| | 06-02-2014 | 483.94 | 0.001473217307 | 06-02-2014 | 7362.5 | -0.00719405058 | -0.00598920482 | | 0.007462422127 | 0.1393702065 | | 0.4041913614 | | | | |
| | 06-03-2014 | 483.2281 | 0.000196426161 | 06-03-2014 | 7415.85 | 0.001837279206 | 0.001529575217 | | -0.00133314905 | 0.1380370575 | | -0.0722081011 | | | | |
| | 06-04-2014 | 483.1332 | -0.00215644145 | 06-04-2014 | 7402.25 | -0.00961319757 | -0.00800319772 | | 0.005846756275 | 0.1438838137 | | 0.3166811443 | | | | |
| | 06-05-2014 | 484.1773 | 0.009399404214 | 06-05-2014 | 7474.1 | -0.0144130601 | -0.01199918851 | | 0.02139859272 | 0.1652824065 | | 1.159023997 | | | | |
| | 06-06-2014 | 479.6687 | -0.04307901687 | 06-06-2014 | 7583.4 | -0.00930159642 | -0.00774378293 | | -0.03533523393 | 0.1299471725 | | -1.913882123 | | | | |
| | 06-09-2014 | 501.2626 | -0.01519808314 | 06-09-2014 | 7654.6 | -0.00023509743 | -0.00019572376 | | -0.01500235937 | 0.1149448132 | | -0.8125812174 | | | | |
| | 06-10-2014 | 508.9984 | -0.01361162105 | 06-10-2014 | 7656.4 | 0.003874469801 | 0.003225581047 | | -0.0168372021 | 0.09810761107 | | -0.9119628346 | | | | |
| | 06-11-2014 | 516.0223 | | 06-11-2014 | 7626.85 | | | | | | | | | | | |

Fig-16 Final sheet

| - | A | D | С | D | E | - P | G | n | 1 | 1 | ĸ | . L | M | N | 0 | r | Q | R | s | 1 | U | V | W |
|---|------------|---------|----------|---------|------------|-----------|------------|----------|------------|-------------|-------------|--------------|-----------|----------------|-----------------------------|---------|--------------|-----------|--------------|------------|-----------------|----------|---------|
| | Vodafone i | Rcomm a | IDFC and | Rcomm a | Unilever a | Wipro and | Tata and t | Sun phan | BOB, Vijay | Hindalco ar | Axis bank a | Tech mahir ! | SBI merge | Bharti airte / | Asian pain <mark>t (</mark> | CAAR | Std deviatic | STD error | t-test value | V(0.95,14) | Result | positive | negativ |
| | -0.0265 | -0.0147 | -0.0044 | -0.0168 | 0.0317 | 0.0003 | 0.0257 | -0.0010 | 0.0069 | 0.0240 | 0.0058 | -0.0078 | -0.0107 | 0.0066 | -0.0065 | 8000.0 | 0.0165 | 0.0043 | 0.1941 | 2.145 | not significant | 7 | 7 1 |
| | -0.0287 | -0.0190 | 0.0052 | -0.0163 | 0.0219 | -0.0036 | 0.0295 | 0.0218 | -0.0438 | 0.0415 | 0.0143 | 0.0114 | -0.0048 | -0.0062 | 0.0054 | 0.0019 | 0.0229 | 0.0059 | 0.3225 | | not significant | 8 | 1 |
| | -0.0204 | -0.0102 | 0.0029 | -0.0026 | 0.0136 | -0.0180 | 0.0509 | 0.0392 | -0.0575 | 0.0472 | 0.0190 | 0.0159 | -0.0151 | -0.0134 | -0.0026 | 0.0033 | 0.0288 | 0.0074 | 0.4383 | | not significant | 8 | 1 1 |
| | -0.0220 | 0.0081 | 0.0080 | -0.0496 | 0.0239 | -0.0018 | 0.0609 | 0.0460 | -0.0400 | 0.0922 | 0.0118 | 0.0508 | -0.0270 | -0.0388 | -0.0061 | 0.0078 | 0.0411 | 0.0106 | 0.7304 | | not significant | 8 | |
| | -0.0220 | 0.0136 | 0.0168 | -0.0661 | 0.0279 | -0.0130 | 0.0848 | 0.0110 | -0.0658 | 0.1276 | -0.0267 | 0.0499 | -0.0218 | -0.0555 | 0.0070 | 0.0045 | 0.0539 | 0.0139 | 0.3252 | | not significant | 8 | |
| | -0.0375 | 0.0123 | 0.0280 | -0.0385 | 0.0287 | -0.0306 | 0.0809 | -0.0026 | -0.0564 | 0.0813 | -0.0199 | 0.0468 | -0.0152 | -0.0562 | 0.0120 | 0.0022 | 0.0447 | 0.0115 | 0.1914 | | not significant | 8 | |
| | -0.0060 | 0.0130 | 0.0318 | -0.0452 | 0.0296 | -0.0177 | 0.0822 | -0.0754 | -0.0504 | 0.0690 | -0.0282 | 0.0513 | -0.0251 | -0.0625 | 0.0279 | -0.0004 | 0.0485 | 0.0125 | -0.0308 | | not significant | 6 | |
| | 0.0223 | -0.0250 | 0.0505 | -0.0856 | 0.0278 | -0.0354 | 0.1133 | -0.1046 | -0.0173 | 0.1033 | -0.0215 | 0.0716 | -0.0249 | -0.0979 | 0.0492 | 0.0017 | 0.0686 | 0.0177 | 0.0967 | | not significant | 8 | |
| | 0.0403 | -0.0097 | 0.0434 | -0.0873 | 0.0112 | | 0.0864 | -0.1316 | -0.0109 | 0.1162 | -0.0197 | 0.0883 | -0.0054 | -0.0687 | 0.0753 | 0.0055 | 0.0707 | 0.0183 | 0.3018 | | not significant | 8 | |
| | 0.0627 | -0.0040 | 0.0407 | -0.0770 | 0.0084 | -0.0366 | 0.0814 | -0.1218 | -0.0192 | 0.1160 | -0.0085 | 0.0880.0 | -0.0080 | -0.0626 | 0.0756 | 0.0090 | 0.0679 | 0.0175 | 0.5141 | | not significant | 8 | |
| | 0.0658 | 0.0380 | 0.0541 | -0.1036 | 0.0046 | -0.0534 | 0.0757 | -0.1088 | -0.0160 | 0.1576 | -0.0124 | 0.0895 | -0.0029 | -0.0614 | 0.0583 | 0.0123 | 0.0746 | 0.0193 | 0.6404 | | not significant | 8 | |
| | 0.0274 | 0.0491 | 0.0560 | -0.1020 | 0.0127 | -0.0634 | 0.0763 | -0.1238 | -0.0288 | 0.2221 | -0.0160 | 0.0879 | 0.0056 | -0.0601 | 0.0458 | 0.0126 | 0.0860 | 0.0222 | 0.5670 | | not significant | 9 | |
| | 0.0389 | 0.0631 | 0.0564 | -0.0856 | 0.0086 | -0.0698 | 0.0701 | -0.1173 | -0.0458 | 0.1984 | -0.0361 | 0.0892 | 0.0078 | -0.0527 | 0.0325 | 0.0105 | 0.0813 | 0.0210 | 0.5004 | | not significant | 9 | |
| | 0.0420 | 0.0781 | 0.0571 | -0.0974 | 0.0119 | -0.0604 | 0.0799 | -0.1371 | -0.0545 | 0.2259 | -0.0411 | 0.1027 | -0.0189 | -0.0376 | 0.0420 | 0.0128 | 0.0914 | 0.0236 | 0.5447 | | not significant | 8 | 1 |
| | 0.0518 | 0.1202 | 0.0396 | -0.0629 | 0.0100 | -0.0608 | 0.0772 | -0.1362 | -0.0248 | 0.2048 | -0.0479 | 0.1149 | -0.0361 | -0.0348 | 0.0521 | 0.0178 | 0.0884 | 0.0228 | 0.7796 | | not significant | 8 | 1 |
| | 0.0803 | 0.1167 | 0.0449 | -0.0649 | 0.0021 | -0.0505 | 0.0721 | -0.1439 | -0.0295 | 0.2084 | -0.0404 | 0.1326 | -0.0396 | -0.0419 | 0.0555 | 0.0201 | 0.0920 | 0.0238 | 0.8473 | | not significant | 9 | 1 1 |
| | 0.0909 | 0.1252 | 0.0145 | -0.0520 | 0.0032 | -0.0349 | 0.0462 | -0.1541 | -0.0253 | 0.2806 | -0.0330 | 0.1361 | -0.0571 | -0.0435 | 0.0475 | 0.0230 | 0.1044 | 0.0269 | 0.8518 | | not significant | 8 | 1 |
| | 0.1174 | 0.1312 | 0.0110 | -0.0732 | -0.0068 | -0.0258 | 0.0410 | -0.1425 | -0.0391 | 0.2760 | -0.0193 | 0.1470 | -0.0629 | -0.0686 | 0.0343 | 0.0213 | 0.1075 | 0.0278 | 0.7676 | | not significant | 8 | 1 |
| | 0.1098 | 0.1251 | 0.0134 | -0.0705 | 0.0078 | -0.0231 | 0.0465 | -0.1430 | -0.0801 | 0.3413 | -0.0128 | 0.1359 | -0.0709 | 0.0033 | 0.0414 | 0.0283 | 0.1172 | 0.0303 | 0.9342 | | not significant | 9 | 9 1 |
| | 0.1203 | 0.1358 | -0.0576 | -0.0687 | 0.0204 | -0.0162 | 0.0601 | -0.1565 | -0.0802 | 0.3538 | -0.0066 | 0.1173 | -0.0634 | 0.0124 | 0.0117 | 0.0255 | 0.1224 | 0.0316 | 0.8070 | | not significant | 9 | |
| | 0.0768 | 0.1582 | -0.0341 | -0.1320 | 0.0316 | -0.0160 | 0.0679 | -0.1724 | -0.0754 | 0.3487 | -0.0107 | 0.1243 | -0.0747 | 0.0152 | 0.0660 | 0.0249 | 0.1278 | 0.0330 | 0.7541 | | not significant | 8 | |
| | 0.1037 | 0.1747 | -0.0491 | -0.1478 | 0.0269 | -0.0171 | 0.0725 | -0.1758 | -0.0803 | 0.3826 | -0.0241 | 0.1135 | -0.0597 | 0.0287 | 0.0613 | 0.0273 | 0.1378 | 0.0356 | 0.7682 | | not significant | 8 | |
| | 0.1305 | 0.1577 | -0.0475 | -0.1575 | 0.0028 | -0.0283 | 0.1175 | -0.1596 | -0.0829 | 0.4173 | -0.0302 | 0.1444 | -0.0546 | 0.0458 | 0.0854 | 0.0361 | 0.1475 | 0.0381 | 0.9468 | | not significant | 8 | 1 1 |
| | 0.1658 | 0.1591 | -0.0592 | -0.1349 | 0.0121 | -0.0240 | 0.1206 | -0.1379 | -0.0649 | 0.4068 | -0.0352 | 0.1483 | -0.0560 | 0.0573 | 0.0841 | 0.0428 | 0.1434 | 0.0370 | 1.1562 | | not significant | 8 | 1 1 |
| | 0.1637 | 0.1840 | -0.0346 | -0.1281 | 0.0162 | -0.0437 | 0.1048 | -0.1509 | -0.0724 | 0.3681 | -0.0353 | 0.1634 | -0.0677 | 0.0556 | 0.0496 | 0.0382 | 0.1392 | 0.0359 | 1.0623 | | not significant | 8 | 1 1 |
| | 0.1300 | 0.2063 | -0.0428 | -0.1322 | 0.0206 | -0.0532 | 0.1079 | -0.1905 | -0.0748 | 0.3746 | -0.0107 | 0.1615 | -0.0562 | 0.0518 | 0.0681 | 0.0374 | 0.1443 | 0.0373 | 1.0029 | | not significant | 8 | 1 |
| | 0.1475 | 0.2457 | -0.0302 | -0.0663 | 0.0258 | -0.0428 | 0.0984 | -0.2557 | -0.0739 | 0.3876 | 0.0038 | 0.1573 | -0.0666 | 0.0587 | 0.0733 | 0.0442 | 0.1534 | 0.0396 | 1.1151 | | not significant | 9 | 9 (|
| | 0.1562 | 0.2545 | -0.0263 | -0.0148 | 0.0281 | -0.0480 | 0.0899 | -0.2407 | -0.0637 | 0.3148 | 0.1058 | 0.1642 | -0.0621 | 0.0238 | 0.1047 | 0.0524 | 0.1401 | 0.0362 | 1.4499 | | not significant | 9 | 1 1 |
| | 0.1682 | 0.2221 | -0.0283 | -0.0109 | 0.0185 | -0.0444 | 0.1195 | -0.2318 | -0.0732 | 0.3410 | 0.1076 | 0.1709 | -0.0671 | 0.0166 | 0.0998 | 0.0539 | 0.1420 | 0.0367 | 1.4698 | | not significant | 9 | 9 (|
| | 0.1253 | 0.2213 | -0.0630 | 0.0134 | 0.0305 | -0.0482 | 0.1378 | -0.1898 | -0.0610 | 0.3148 | 0.1350 | 0.1547 | -0.0452 | 0.0270 | 0.1277 | 0.0587 | 0.1308 | 0.0338 | 1.7375 | | not significant | 10 | 1 1 |
| | 0.1461 | 0.2272 | -0.0332 | -0.0034 | 0.0201 | -0.0370 | 0.1137 | -0.1952 | -0.0433 | 0.2480 | 0.1331 | 0.1431 | -0.0444 | 0.0127 | 0.1245 | 0.0541 | 0.1202 | 0.0310 | 1.7447 | | not significant | 9 | 1 1 |
| | 0.1523 | 0.2358 | -0.0156 | 0.0183 | 0.0285 | -0.0209 | 0.0957 | -0.2150 | -0.0157 | 0.2297 | 0.0985 | 0.1430 | -0.0370 | 0.0203 | 0.1213 | 0.0560 | 0.1161 | 0.0300 | 1.8668 | | not significant | 10 | 1 1 |
| | 0.1490 | 0.2455 | -0.0415 | 0.0160 | 0.0214 | -0.0300 | 0.1019 | -0.2024 | -0.0247 | 0.1913 | 0.0805 | 0.1346 | -0.0402 | 0.0344 | 0.1319 | 0.0512 | 0.1134 | 0.0293 | 1.7488 | | not significant | 10 | 1 1 |
| | 0.2080 | 0.2713 | -0.0219 | 0.0278 | 0.0245 | -0.0259 | 0.0824 | -0.1895 | -0.0227 | 0.1891 | 0.0748 | 0.1154 | -0.0310 | 0.0054 | 0.1394 | 0.0565 | 0.1165 | 0.0301 | 1.8781 | | not significant | 10 | 1 |
| | 0.2597 | 0.2858 | -0.0202 | -0.0620 | 0.0079 | -0.0233 | 0.0849 | -0.1636 | -0.0093 | 0.2547 | 0.0834 | 0.1193 | -0.0278 | 0.0314 | 0.1380 | 0.0639 | 0.1292 | 0.0334 | 1.9168 | | not significant | 9 | 1 1 |
| | 0.2352 | 0.2940 | 0.0180 | -0.0935 | 0.0239 | -0.0118 | 0.1091 | -0.1795 | -0.0005 | 0.3138 | 0.0054 | 0.1238 | -0.0132 | 0.0510 | 0.1439 | 0.0680 | 0.1372 | 0.0354 | 1.9184 | | not significant | 10 | 1 1 |
| | 0.3035 | 0.2975 | 0.0033 | -0.0716 | 0.0235 | -0.0201 | 0.1356 | -0.0759 | 0.0113 | 0.3230 | -0.0053 | 0.1551 | -0.0437 | 0.0164 | 0.1653 | 0.0812 | 0.1389 | 0.0359 | 2.2647 | | significant | 10 | 1 1 |
| | 0.2970 | 0.3134 | -0.0093 | -0.0960 | 0.0355 | -0.0103 | 0.1604 | -0.0965 | 0.0666 | 0.3087 | -0.0016 | 0.1651 | -0.0376 | 0.0215 | 0.1299 | 0.0831 | 0.1400 | 0.0361 | 2.2999 | | significant | 9 | 9 |
| | 0.3004 | 0.3413 | -0.0214 | -0.1070 | 0.0308 | -0.0096 | 0.1468 | -0.0825 | 0.0685 | 0.3663 | -0.0132 | 0.1797 | -0.0430 | 0.0278 | 0.1149 | 0.0867 | 0.1518 | 0.0392 | 2.2110 | | significant | 9 | 9 (|
| | | | | | | | | | | | | | | | | | | | | | 22.22 | | |

Chapter 9: Plagiarism Report

Value creation in Mergers and Acquisition in India

ORIGINALITY REPORT

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