# **Analysing the Effect of Monsoon on the Indian Stock** Market

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### **Abstract**

Everyone emphasizes the impact of monsoon on the Indian economy and given our high dependence on monsoon rains, the agricultural sector is the most vulnerable to the changing rain patterns. But what is the actual impact of the monsoons on the stock markets? You will be surprised to know the negative correlation between the two. As per an article in Business Standard, in the last one decade, there is hardly enough correlation to suggest that monsoon can have much bearing on the market sentiments. In fact, as per the data, the BSE-Sensex returns were the highest in the year when rainfall was most deficient with regards to long period average (LPA). However, it is part psychological and part actual. Monsoon seems to be the only respite that Indian companies can look forward to this year (2016), after two continuous bad monsoon years. Falling rupee, high fiscal deficit, flight of foreign funds and poor earnings, these have been the only themes in the India story for many quarters now. However, a good monsoon might bring good tidings, at least for some companies. Good monsoon improves the rural demand for products, increasing the purchasing power and companies such as HUL, Dabur, Godrej Consumer, and ITC benefit a lot. Demand of two wheelers, low cost cars, and tractors also increase during a good monsoon, which is helpful for M&M, Escorts, Eicher, Maruti, and Bajaj Auto. High farm production also lowers raw material costs for companies that make packaged foods, for instance, Britannia, GSK Consumer, ITC, and Nestle. Data shows a close link between rains and fortunes of FMCG companies. Fertilizer and irrigation companies such as Chambal, RCF, Jain Irrigation, etc. get a direct boost due to better rainfall. Once the rains support better agricultural output, the windfall gains are witnessed automatically in the manufacturing and services sector as well. Hence:

Better Monsoon--> Better Crops --> Better Agriculture --> Increase in disposable income --> Better sales for manufacturing and services companies --> Higher Profitability --> Higher Dividends/Higher stock prices --> Better economic performance.

Keywords: monsoon, stock market, chart pattern, national stock exchange, commodities

JEL Classification: C50, C51, C52, G10, G14

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he south west summer monsoon, a four-month period when massive convective thunderstorms dominate India's weather, is the earth's most productive wet season. A product of southeast trade winds originating from a high-pressure mass centered over the southern Indian Ocean, the monsoonal torrents supply over 80% of India's annual rainfall. Attracted by a low-pressure region centered over South Asia, the mass spawns surface winds that ferry humid air into India from the southwest. These inflows ultimately result from a northward shift of the local jet stream, which itself results from rising summer temperatures over and the Indian subcontinent. The void left by the jet stream, which switches from a route just south of the Himalayas to one tracking north of Tibet then attracts warm, humid air. The main factor behind this shift is the high summer temperature difference between Central Asia and the Indian Ocean (Burns, Fleitmann, Matter, Kramers, & Subbary, 2003). This is accompanied by a seasonal excursion of the normally equatorial inter-tropical convergence zone (ITCZ), a low-pressure belt of highly unstable weather, northward towards India (Burroughs, 1999). The southwest monsoon arrives in two branches: the Bay of Bengal branch and the Arabian Sea branch.

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The latter extends towards a low-pressure area over the Thar Desert and is roughly three times stronger than the Bay of Bengal branch. The monsoon typically breaks over Indian territory by around May 25, when it lashes the Andaman and Nicobar Islands in the Bay of Bengal. It strikes the Indian mainland around June 1 near the Malabar Coast of Kerala By June 9, it reaches Mumbai; it appears over Delhi by June 29. The Bay of Bengal branch, which initially tracks the Coromandal Coast northeast from Cape Comorin to Odisha, swerves to the northwest towards the Indo-Gangetic Plain. The Arabian Sea branch moves northeast towards the Himalayas. By the first week of July, the entire country experiences monsoon rain; on an average, South India receives more rainfall than North India. However, Northeast India receives the most precipitation. Monsoon clouds begin retreating from North India by the end of August; it withdraws from Mumbai by October 5. As India further cools during September, the southwest monsoon weakens. It leaves the country by the end of November (Burroughs, 1999; Climate of India, n.d.).

Monsoon rains impact the health of the Indian economy as Indian agriculture employs 600 million people and makes up for 20% of the national GDP, and good monsoons correlate with a booming economy. Weak or failed monsoons (droughts) result in widespread agricultural losses and substantially hinder overall economic growth.

### **Post-Monsoon**

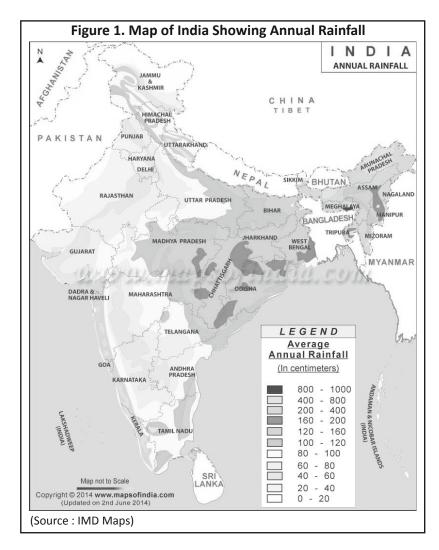
During the post-monsoon months of October to December, a different monsoon cycle, the northeast (or "retreating") monsoon brings dry, cool, and dense air masses to large parts of India. Winds spill across the Himalayas and flow to the southwest across the country, resulting in clear, sunny skies (Caviedes, 2001). Though the Indian Meteorological Department (IMD) and other sources refer to this period as a fourth ("post-monsoon") season, other sources designate only three seasons (O'Hare, 1997). Depending on location, this period lasts from October to November, after the southwest monsoon has peaked. Less and less precipitation falls, and vegetation begins to dry out. In most parts of India, this period marks the transition from wet to dry seasonal conditions. Average daily maximum temperatures range between 28 and 34 °C (82 and 93 °F).

The northeast monsoon, which begins in September lasts through the post-monsoon seasons, and only ends in March. It carries winds that have already lost their moisture out to the ocean. They cross India diagonally from northeast to southwest. However, the large indentation made by the Bay of Bengal into India's eastern coast means that the flows are humidified before reaching Cape Comorin and rest of Tamil Nadu, meaning that the state, and also some parts of Kerala, experience significant precipitation in the post-monsoon and winter periods (see Figure 1).

## **Significance**

The monsoon is the primary delivery mechanism for fresh water in the Indian subcontinent. As such, it affects the environment (and associated flora, fauna, and ecosystems), agriculture, society, hydro-power production, and geography of the subcontinent (like the availability of fresh water in water bodies and the underground water table), with all of these factors cumulatively contributing to the health of the economy of affected countries. The monsoon turns large parts of India from semi-deserts into green grasslands.

- (i) Geographical (Wettest Spots on Earth): Mawsynram and Cherrapunji, both in the Indian state of Meghalaya, alternate as the wettest places on earth given the quantity of their rainfall (Philip, 2003) (though there are other cities with similar claims). They receive more than 11,000 millimeters of rain each from the monsoon.
- (ii) Agricultural: In India, which historically had a primarily agrarian economy, the services sector recently overtook the farm sector in terms of GDP contribution. However, the agriculture sector still contributes 17-20%



of GDP ("How monsoon impacts the Indian economy," 2010) and is the largest employer in the country, with about 60% of the Indians dependent on it for employment and livelihood ("How monsoon impacts the Indian economy," 2010). About 49% of India's land is agricultural; that number rises to 55% if associated wetlands, dryland farming areas, etc. are included. Because more than half of these farmlands are rain-fed, the monsoon is critical to food sufficiency and quality of life.

Despite progress in alternative forms of irrigation, agricultural dependence on the monsoon remains far from insignificant. Therefore, the agricultural calendar of India is governed by the monsoon. Any fluctuations in the time distribution, spatial distribution, or quantity of the monsoon rains leads to floods or droughts, causing the agricultural sector to suffer. This has a cascading effect on the secondary economic sectors, the overall economy, food inflation, and therefore, the general population's quality of life and cost of living.

(iii) Economic: The economic significance of the monsoon is aptly described by President Pranab Mukherjee's remark that the monsoon is the "real Finance Minister of India." A good monsoon results in better agricultural yields, which brings down prices of essential food commodities and reduces imports, thus reducing food inflation overall. Better rains also result in increased hydroelectric production. All of these factors have positive ripple effects throughout the economy of India. The down side, however, is that when monsoon rains are weak, crop production is low, leading to higher food prices with limited supply. As a result, the Indian government is actively

Table 1. Relationship Between Actual Rainfall, Growth of GDP, and Food Inflation

IMD's initial forecast date	Rainfall forecast	Actual rainfall	Growth of agricultural GDP	WPI food inflation
22 Apr 2015	93	NA	NA	NA
24 Apr 2014	95	88	1.1	6.3
26 April 2013	98	106	3.7	9.6
26 April 2012	99	92	1.2	8.6
19 April 2011	98	101	5	10.1

Source: IMD Maps

working with farmers and the nation's meteorological department to produce more drought resistant crops. The Table 1 shows how actual rainfall affects the growth of agricultural GDP.

- (iv) Social: D. Subbarao, the Governor of the Reserve Bank of India, emphasized during a quarterly review of India's monetary policy that the lives of Indians depend on the performance of the monsoon. His own career prospects, his emotional well-being, and the performance of his monetary policy are all "a hostage" to the monsoon, he said, as is the case for most Indians. Additionally, farmers rendered jobless by failed monsoon rains tend to migrate to cities. This crowds city slums and aggravates the infrastructure and sustainability of city life.
- (v) Travel: In the past, Indians usually refrained from traveling during monsoons for practical as well as religious reasons. But with the advent of globalization, such travel is gaining popularity. Places like Kerala and the Western Ghats get a large number of tourists, both local and foreigners, during the monsoon season. Kerala is one of the top destinations for tourists interested in Ayurvedic treatments and massage therapy.
- **(vi) Environmental:** The monsoon is the primary bearer of fresh water to the area. The peninsular /Deccan rivers of India are mostly rain-fed and are non-perennial in nature, depending primarily on the monsoon for water supply. Most of the coastal rivers of Western India are also rain-fed and monsoon-dependent. As such, the flora, fauna, and entire ecosystems of these areas rely heavily on the monsoon.

## **Need and Objectives of the Study**

It is crucial to know the various factors that affect the stock market of India. The data is analyzed and is presented in chart patterns, which would help investors in making investment decisions. The following are the objectives of the study:

- → To analyze the impact of monsoon on the Indian stock market,
- → To perform a comparative analysis of the index over the years,
- → To analyze the trends in various sectors.

#### **Literature Review**

Chakraborty (1997) attempted to establish a relationship between major economic indicators and stock market behaviour. He also analyzed the stock market reactions to changes in the economic climate. Banerjee (1998) reviewed fundamental analysis and technical analysis to analyze the worthiness of individual securities needed to be acquired for portfolio construction. Shukla (2015) said that individual investors can beat the market by using technical and fundamental analysis.

Mukherjee (2007) made a comparative analysis of the Indian stock market with international markets. His

study covered the New York Stock Exchange (NYSE), Hong Kong Stock Exchange (HSE), Tokyo Stock Exchange (TSE), Russian Stock Exchange (RSE), and the Korean Stock Exchange (KSE) from various sociopolitico-economic backgrounds.

### **Research Methodology**

- **Type of Research:** This is an analytical and exploratory research based on real data obtained from the National Stock Exchange (NSE) to analyze the impact of monsoon on the Indian stock market.
- **→ Type of Data :** Primary data was collected from NSE Indices : Nifty 50, Nifty Commodity, Nifty Auto, and Nifty FMCG.

### **Research Design**

Calculations were largely done using Microsoft Excel. Microsoft Word and Excel were mainly used in the data analysis.

### **Analysis and Results**

Table 2. Data Regarding the Rainfall Forecast Across the Years 2011-2016

SI no.	Date of forecast	Forecasted	Actual	Classification
1	12-Apr-2016	106	NA	Above normal
2	22-Apr-2015	93	85	Near normal
3	24-Apr-2014	95	88	Near normal
4	25-Apr-2013	98	106	Above normal
5	26-Apr-2012	99	92	Near normal
6	19-Apr-2011	98	101	Above normal

(Source: IMD)

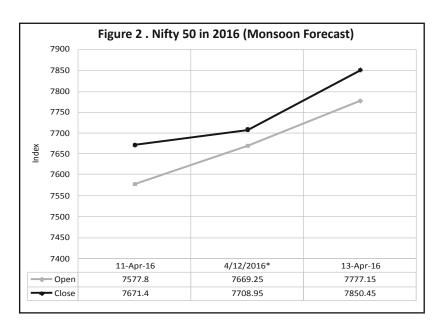
The Table 2 shows that a prediction of rainfall for the year 2016 is : above normal (which has happened after 2013).

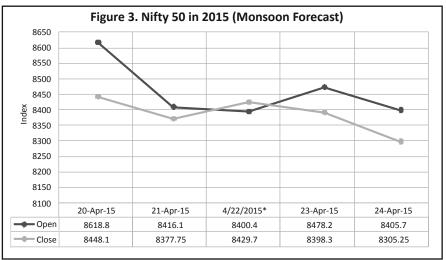
#### (1) Comparison of Monsoon Forecast Over the Years on the Index: Nifty 50

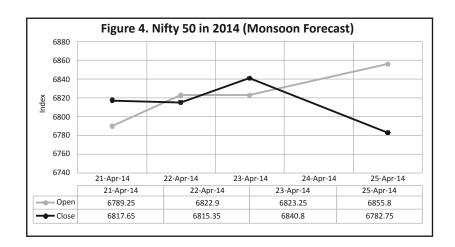
The market moved up on receiving the news that this year (2016), it will be above normal rainfall of 106 on a long period average (henceforth, LPA) (Figure 2). The market moved down on the news that in 2015, it will be below normal rainfall of 93 on a LPA (Figure 3). The market moved down on the news that in 2014, it will be below normal rainfall of 95 on a LPA (Figure 4). The market moved up on the news that in the year 2013, there will be near normal rainfall of 99 on a LPA (Figure 5). The market moved slightly down on the news that in the year 2012, there will be near normal rainfall of 99 on a LPA (Figure 6). The market moved up on the news that in the year 2011, there will be near normal rainfall of 98 on a LPA (Figure 7).

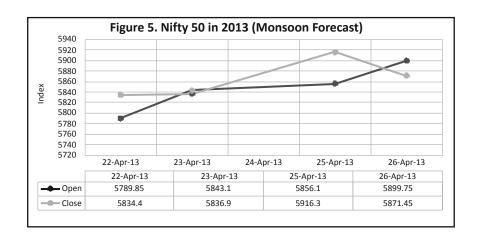
#### (2) Comparison of Monsoon Forecast Over the Years on the Index: Nifty Commodities

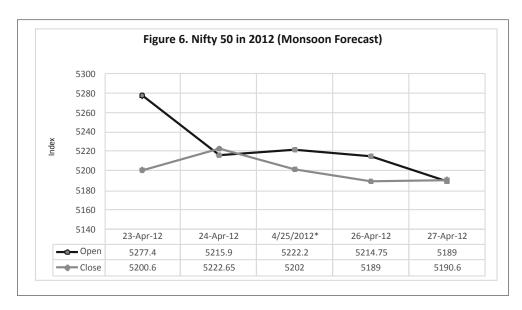
The market moved up on the news that in the year 2016, there will be above normal rainfall of 106 on a LPA (Figure 8). The commodities jumped around 50 points.

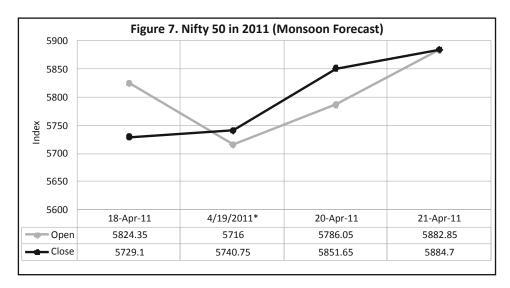


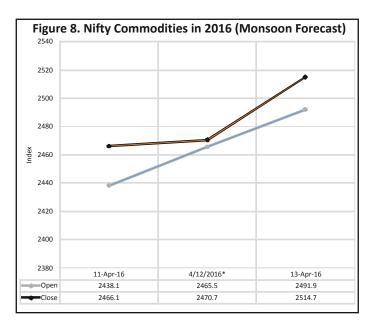


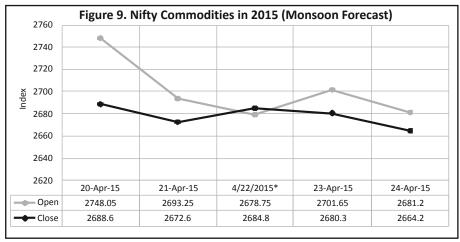


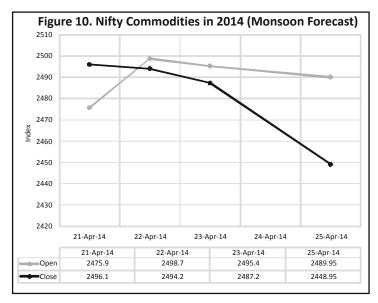


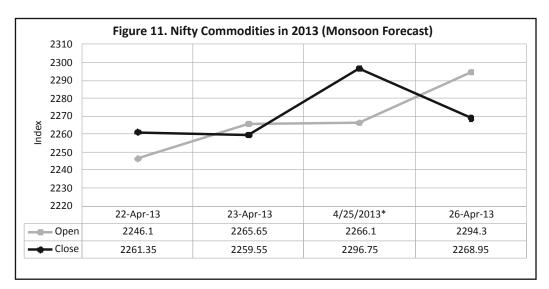


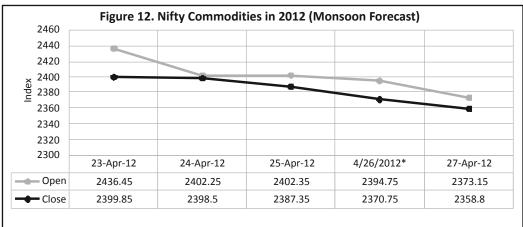


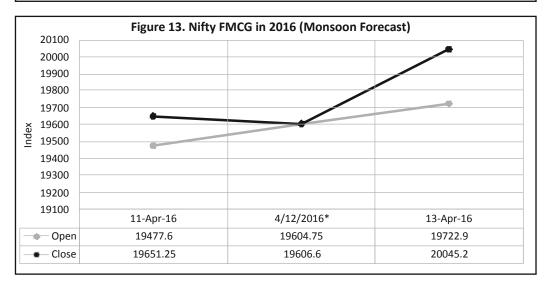




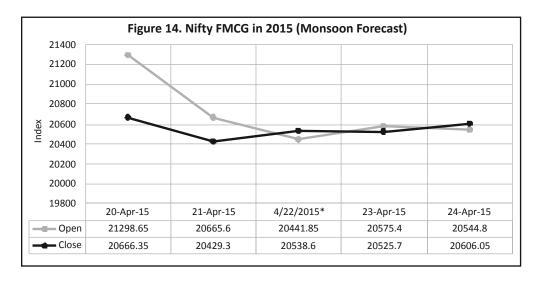








The market moved down on the news that in the year 2015, there will be below normal rainfall of 93 on a LPA (Figure 9). There wasn't much deflection because the year preceding was also below normal. The market moved down on the news that in the year 2014, there will be normal rainfall of 95 on a LPA (Figure 10). The deflection was also high because of the fear due to El-Nino effect.



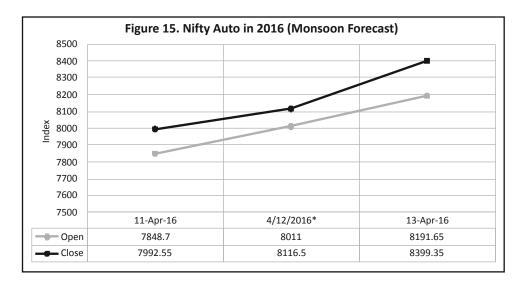
The market moved up on the news that in the year 2013, there will be near normal rainfall of 98 on a LPA (Figure 11). The market moved up on the news that in the year 2012, there will be near normal rainfall of 99 on a LPA (Figure 12).

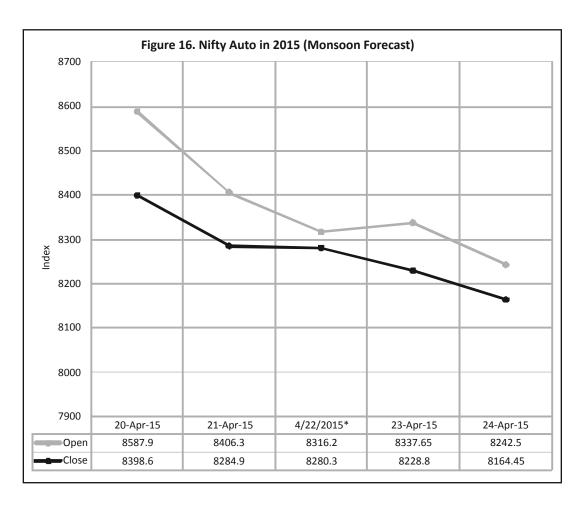
#### (3) Comparison of Monsoon Forecast Over the Years on the Index: Nifty FMCG

The market moved up on the news that in the year 2016, there will be above normal rainfall of 106 on a LPA. High farm production will also lower raw material costs for companies that make packaged foods, for instance, Britannia, GSK Consumer, ITC, and Nestle. The data shows a close link between rains and fortunes of FMCG companies (Figure 13). The market moved down on the news that in the year 2015, there will be below normal rainfall of 93 on a LPA (Figure 14). There wasn't much deflection because the year preceding was also below normal.

### (4) Comparison of Monsoon Forecast Over the Years on the Index: Nifty AUTO

The market moved up on the news that this year (2016), there will be above normal rainfall of 106 on a LPA. In such a scenario, the demand for two wheelers, low cost cars, and tractors increases, will is helpful for M&M,





Escorts, Eicher, Maruti, Bajaj Auto. The stocks of Mahindra & Mahindra rose around 4% on 13th April (Figure 15). The market moved down on the news that in the year 2015, there will be below normal rainfall of 93 on a LPA (Figure 16). There wasn't much deflection because the year preceding was also below normal.

#### (5) Market Performance During the Monsoon Period Over the Years on the Index: Nifty 50

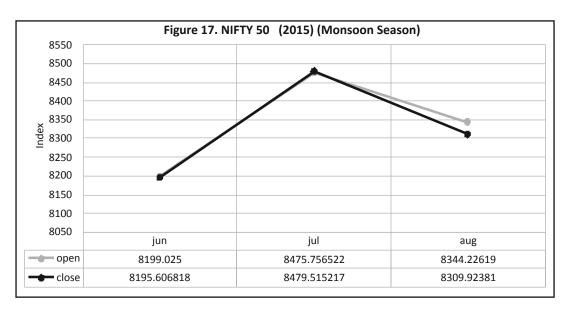
The market moved down on the news that in the year 2015, there will be below normal rainfall of 93 on a LPA and the actual was way below normal, around 85 on LPA (Figure 17) (see Appendix 5).

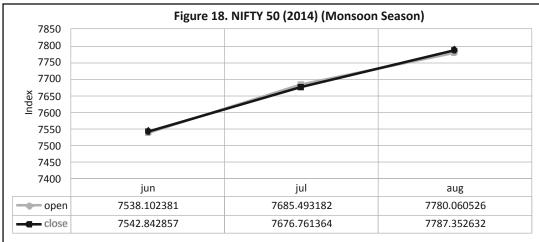
The market moved down on the news that in the year 2014, there will be below normal rainfall of 95 on a LPA, but the actual was around 88 on LPA (see Appendix 4). The deflection was low on a longer period because the El-Nino effect news had already been absorbed into the market (Figure 18).

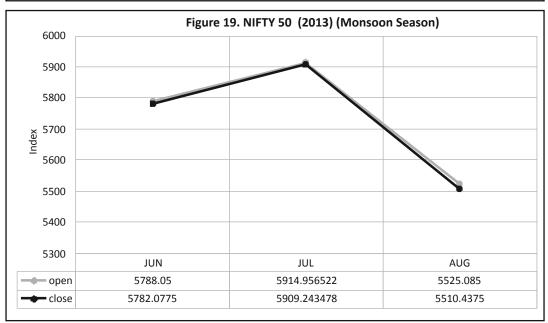
The market moved up on the news that in the year 2013, there will be near normal rainfall of 98 on a LPA, but the actual was 106 on LPA (Figure 19). Most of the crops were destroyed due to repeated floods and the effect was the downfall of the market (Appendix 3).

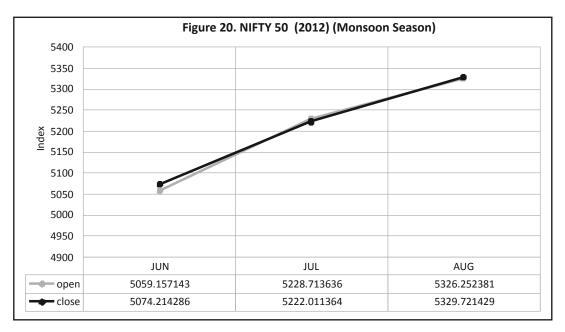
The market moved up on the news that in the year 2012, there will be near normal rainfall of 99 on a LPA, but the actual rainfall was 92 on LPA, that was way below the forecasted value (Figure 20). However, the monsoon didn't have any effect on the index (see Appendix 2).

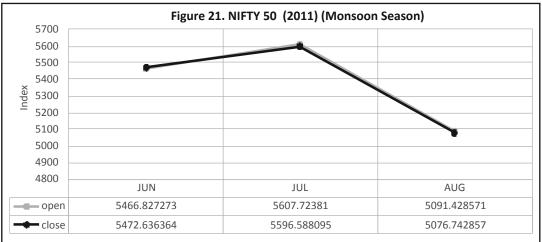
The market moved up on the news that in the year 2011, there will be near normal rainfall of 98 on a LPA, but the actual was 101 on LPA (see Appendix 1) (Figure 21). Most of the crops were destroyed due to repeated floods.











The impact of the monsoon on the Indian economy can hardly be over-emphasized. Given our high dependence on monsoon rains, the agricultural sector is the most vulnerable to the changing rain patterns. As per an article in Business Standard, in the last one decade, there is hardly enough correlation to suggest that the monsoon can have much bearing on the market sentiments. In fact, as per the data, the BSE-Sensex returns were the highest in the year when the rainfall was most deficient with regards to long period average.

## **Findings**

In the shorter run, we can see that:

- → Nifty 50 acts according to the monsoon forecast.
- → Nifty Commodity acts according to the monsoon forecast.
- → Nifty Auto acts according to the monsoon forecast.
- → Nifty FMCG acts according to the monsoon forecast.

In the short run, investing or trading in:

- + Commodities such as sugar, wheat will give good returns.
- → Mahindra & Mahindra, Escorts etc. for the auto sector would be quite profitable.
- → FMCG companies like HUL, Dabur etc. would provide really good returns.
- → It is a golden rule of the stock market that the "Market already knows all news in advance!" This is why a longer monsoon period does not affect the market to a large extent.
- → Investing in options is quite a good solution for tackling the issue of the monsoon. One can easily hedge one's risk by option spread.
- → The Indian economy is still quite susceptible to the monsoon as agri-based goods and services are still considered the backbone of the country's GDP.
- → To reduce the dependence on the monsoon, the Indian government has already launched many irrigation projects, but the planning should be done keeping in mind the environmental impact of the same.

## **Implications and Conclusion**

India is still an agrarian economy, with a large population dependent on agriculture. In India, 60% of the area under agriculture is completely rain dependent. All the agri based products depend on rain for raw material production like basmati rice, wheat, pulses, etc. Most of the modern day e-tailors, retailers, and FMCG companies need these products either for direct selling or for other product manufacturing e.g. wheat for breads, pulses, oil, etc. If there is low production, then naturally, prices rise and this affects the bottom line of companies (reduced profits due to increased cost). Now a simple fact is that if you have money only then you will spend it. If there is low rain, then it means low free income to spend with the farmers. This in turn means less sale of consumer durables, food staples, agri machines, cement etc. So those companies have low sales and hence low profit.

Now the remaining and currently the strongest sector in the Indian stock market is banking. It is a common known fact that the main business of banks is to accept deposits and give loans. Agriculture is a priority lending sector and any valid proposal has to be cleared (lend money) by banks as per RBI directives. Banks lend both to corporates and to farmers. Thus, low rain leads to low income due to which some borrowers do not pay back the money (interest &/ or principle amount). This increases the NPAs (non-performing assets) of banks and reduces Net Income (NI = money received from loans given - money to be paid in deposits). The lower production of food grains results in a rise in the prices of commodities, which impacts the public spending or investments, government savings, as well as foreign exchange reserves of the country. As a result, the share market or equity market performance will also be affected by abnormal monsoon. Thus, taking into consideration all these factors, the stock market corrects itself. However, during the results season, it can be seen that a better than expected result is rewarded by the market.

## Limitations of the Study and Scope for Further Research

The study is limited by various factors: There are some data missing in NSE for the commodities market. There may be many more reasons affecting the project and all of them could not have been analyzed from the data provided.

This research was limited to a few aspects. The results of the study could also be affected by other parameters as the monsoon is not equally distributed throughout India. While some regions are flooded, others face draught like situation. Even in a state like Bihar, in the same year, one part is highly flooded while the other is affected by

draught. Particularly, if future research considers the impact of monsoon in different areas on different commodities and its aftermath, it would provide much better insights into the same. Thus, there is scope for extending the study.

### References

- Burns, S. J., Fleitmann, D., Matter, A., Kramers, J., & Subbary, A. A. (2003). Indian ocean climate and an absolute chronology over Dansgaard/Oeschger Events 9 to 13. Science, 301(5638), 1365-1367. doi:10.1126/ science. 1086227
- Burroughs, W. J. (1999). *The climate revealed* (1st ed). Cambridge, UK: Cambridge University Press.
- Caviedes, C. N. (2001). *El Niño in history: Storming through the ages* (1st ed.). Florida: University Press of Florida.
- Chakrabarti, G. & Sen. C. (2007). November effect: An example of calendar anomaly in Indian stock market. Retrieved from http://ssrn.com/abstract=1121606
- Climate of India. (n.d.). In Wikipedia. Retrieved September 25, 2016, from https://en.wikipedia.org/wiki/Climate of India
- How monsoon impacts the Indian economy. (2010, June 2). Rediff.com. Retrieved from http://business.rediff.com/slideshow/2010/jun/02/slide-show-1-how-monsoon-impacts-indian-economy.htm.
- Indian Meteorological Department. (n.d.). Maps of India. Retrieved from www.mapsofIndia.com
- O'Hare, G. (1997). The Indian Monsoon, Part Two: The Rains. Geography, 82(4), p. 335
- Philip, A. J. (2003, August 23). Cherrapunji no longer wettest. Challenge comes from nearby village. *The Tribune*. Retrieved from http://www.tribuneindia.com/2003/20030824/main8.htm

APPENDIX
Appendix 1. Nifty 50 Data from 1.6.2011 to 30.8.2011

Date	Open	High	Low	Close	Shares Traded	Turnover (₹ Cr)
1-Jun-11	5561.05	5597.35	5559.45	5592	98629277	4670.86
2-Jun-11	5529.9	5568.2	5521.95	5550.35	110949186	4709.42
3-Jun-11	5565.7	5604.95	5507.2	5516.75	101017578	4757.1
6-Jun-11	5504.3	5542.65	5479.85	5532.05	77137320	3486.68
7-Jun-11	5509.15	5570.1	5507.8	5556.15	81858402	3830.7
8-Jun-11	5535.25	5556.6	5514.9	5526.85	92928675	3869.33
9-Jun-11	5523.55	5540.1	5502.05	5521.05	87033655	3859.17
10-Jun-11	5518.05	5521.45	5457.45	5485.8	84190282	3995.15
13-Jun-11	5469.85	5496.7	5436.95	5482.8	80104906	3807.22
14-Jun-11	5485.6	5520.15	5484.2	5500.5	97840485	4714.26
15-Jun-11	5494.45	5499.35	5438.95	5447.5	95878889	4562.47
16-Jun-11	5419.65	5447.5	5389.8	5396.75	128063494	5341.03
17-Jun-11	5412.5	5421.15	5355.85	5366.4	97876272	4480.59
20-Jun-11	5372.2	5377.4	5195.9	5257.9	135334880	5956.17
21-Jun-11	5280.8	5322.45	5257	5275.85	107191673	4765.02
22-Jun-11	5304.65	5310.5	5262.5	5278.3	95769497	4151.39
23-Jun-11	5269.1	5330.6	5252.25	5320	89001344	3756.75
24-Jun-11	5343.4	5477.85	5343.4	5471.25	140100077	6791.8
27-Jun-11	5441.2	5552.65	5434.25	5526.6	143402407	6707.54
28-Jun-11	5548.85	5558.3	5496.35	5545.3	114413706	5127.85
29-Jun-11	5566.5	5608.65	5566.5	5600.45	124593981	5463.96
30-Jun-11	5614.5	5657.9	5606.1	5647.4	179224275	8133.27
1-Jul-11	5705.75	5705.8	5609.75	5627.2	141092473	5590.28
4-Jul-11	5679.55	5679.65	5633.1	5650.5	103528865	4266.62
5-Jul-11	5659.85	5659.85	5612.3	5632.1	100776400	4938.19
6-Jul-11	5622.7	5655.4	5610.75	5625.45	86109914	4239.98
7-Jul-11	5633.35	5737.15	5632.95	5728.95	112220298	5439.55
8-Jul-11	5734.65	5740.4	5651.05	5660.65	129276449	5659.53
11-Jul-11	5648.05	5652.9	5601.7	5616.1	78899703	3579.63
12-Jul-11	5556.9	5580.25	5496.95	5526.15	104907108	5294.13
13-Jul-11	5542.05	5596.15	5541.4	5585.45	106019573	4702.05
14-Jul-11	5569	5653.95	5541.7	5599.8	123015471	5390.44
15-Jul-11	5602.95	5631.7	5562.75	5581.1	80426784	3668.42
18-Jul-11	5581.75	5596.6	5550.95	5567.05	73604991	3305.34
19-Jul-11	5569.85	5627.65	5557.2	5613.55	86555649	3983.28
20-Jul-11	5642.05	5645.4	5555.1	5567.05	87093214	3825.45
21-Jul-11	5554.6	5578.9	5532.7	5541.6	76327640	3681.07
22-Jul-11	5576.95	5642.2	5567.1	5633.95	106781617	5040.43
25-Jul-11	5633.8	5700.55	5616.7	5680.3	142008190	5622.44

26-Jul-11	5688.45	5702.25	5560.15	5574.85	134108563	6270.33
27-Jul-11	5588.55	5591.7	5521.5	5546.8	122321153	5358.36
28-Jul-11	5492.4	5512.1	5475.65	5487.75	164522151	6883.18
29-Jul-11	5479	5520.3	5453.95	5482	156128914	5901.53
1-Aug-11	5527.5	5551.9	5486.45	5516.8	98962726	4048.98
2-Aug-11	5493.2	5496.3	5433.65	5456.55	110372244	4236.41
3-Aug-11	5402	5422.6	5378.85	5404.8	133223864	5339.25
4-Aug-11	5412.4	5434.5	5323.15	5331.8	118482440	4820.07
5-Aug-11	5204.35	5229.65	5116.45	5211.25	196016865	7543.44
8-Aug-11	5083.85	5204.2	5054.05	5118.5	188307028	7326.93
9-Aug-11	4947.9	5167	4946.45	5072.85	233869015	9385.01
10-Aug-11	5196.55	5197.95	5123.35	5161	158404456	6289.41
11-Aug-11	5128	5184.95	5121	5138.3	113043482	4723.01
12-Aug-11	5194.4	5194.45	5053.35	5072.95	128834807	5909.91
16-Aug-11	5125.75	5132.2	5015.4	5035.8	130896704	5081.61
17-Aug-11	5030.3	5112.15	5017.25	5056.6	143342008	5472.63
18-Aug-11	5077.95	5078.6	4932.15	4944.15	139816131	5686.22
19-Aug-11	4859.3	4893.6	4796.1	4845.65	166702431	7317.33
22-Aug-11	4843.7	4910.05	4808.75	4898.8	123813921	5186.04
23-Aug-11	4925.15	4965.8	4863.8	4948.9	130010440	5519.36
24-Aug-11	4934.35	4962.4	4875.3	4888.9	129410652	5241.5
25-Aug-11	4914.65	4915.85	4825.05	4839.6	184913414	7921.11
26-Aug-11	4839.25	4872	4720	4747.8	149717732	5850.84
29-Aug-11	4806.2	4934.4	4806.05	4919.6	145125304	5576.71
30-Aug-11	4973.25	5016.25	4927.55	5001	181539730	7051.77

Appendix 2. Nifty 50 Data from 1.6.2012 to 31.8.2012

Date	Open	High	Low	Close	Shares Traded	Turnover (₹ Cr)
1-Jun-12	4910.85	4925	4831.75	4841.6	138767416	4989.22
4-Jun-12	4797.3	4858.3	4770.35	4848.15	152339865	5143.54
5-Jun-12	4869.45	4898.95	4847.7	4863.3	141476962	5016.41
6-Jun-12	4886.65	5010.45	4886.15	4997.1	185340406	7188.42
7-Jun-12	5035.35	5059.65	5007.75	5049.65	150558164	6077.37
8-Jun-12	5044.25	5084.45	4994.8	5068.35	138389395	5249.81
11-Jun-12	5096.7	5124.45	5040.7	5054.1	125615102	4813.82
12-Jun-12	5015.5	5128.9	5015.15	5115.9	135478015	5205.9
13-Jun-12	5117.55	5144.9	5095.45	5121.45	125668126	5287.08
14-Jun-12	5105.1	5130	5047.6	5054.75	118353366	4751.86
15-Jun-12	5069.55	5146.2	5069.15	5139.05	155437144	5944
18-Jun-12	5174	5190.2	5041.7	5064.25	153461067	6005.83
19-Jun-12	5050.8	5113.6	5048.1	5103.85	149416155	5336.22
20-Jun-12	5114.55	5141.7	5100.7	5120.55	160505645	5313.6

21-Jun-12	5097.35	5170.4	5093.45	5165	142992948	5558.56
22-Jun-12	5101.75	5159.8	5094	5146.05	159747192	5500.44
25-Jun-12	5158.5	5194.6	5105.65	5114.65	123503010	4894.04
26-Jun-12	5107.45	5134.55	5095.5	5120.8	99404566	4119.69
27-Jun-12	5149.45	5160.1	5129.25	5141.9	112269218	4238.62
28-Jun-12	5148.95	5159.05	5125.3	5149.15	143073791	5597.52
29-Jun-12	5191.25	5286.25	5189	5278.9	226523598	8461.24
2-Jul-12	5283.85	5302.15	5263.35	5278.6	126161441	4991.57
3-Jul-12	5298.85	5317	5265.95	5287.95	133117055	5161.82
4-Jul-12	5310.4	5317.65	5273.3	5302.55	155995887	5750.1
5-Jul-12	5297.05	5333.65	5288.85	5327.3	118915392	4709.79
6-Jul-12	5324.7	5327.2	5287.75	5316.95	113300726	4760.51
9-Jul-12	5283.7	5300.6	5257.75	5275.15	101169926	4189.25
10-Jul-12	5286.6	5348.55	5284.55	5345.35	123947633	5024.13
11-Jul-12	5315.25	5336.45	5300.25	5306.3	113530679	5086.98
12-Jul-12	5240	5261.75	5217.7	5235.25	131190833	6193.59
13-Jul-12	5242.75	5267.15	5216.85	5227.25	99045088	4451.9
16-Jul-12	5232.35	5246.85	5190.45	5197.25	106313144	4283.22
17-Jul-12	5228.05	5236.7	5181.7	5192.85	111768115	4719.2
18-Jul-12	5199.1	5222.85	5169.05	5216.3	109647297	4759.52
19-Jul-12	5249.85	5257.75	5233.15	5242.7	109769282	5494.99
20-Jul-12	5233.55	5238.7	5197.5	5205.1	89729408	4527.89
23-Jul-12	5163.25	5164.2	5108.1	5117.95	104770324	4394.24
24-Jul-12	5128.8	5144	5103.25	5128.2	116516931	4567.2
25-Jul-12	5118.4	5121.6	5076.6	5109.6	130965621	4654.17
26-Jul-12	5126.3	5126.3	5032.4	5043	180131639	6920.23
27-Jul-12	5124.3	5149.95	5077.5	5099.85	131948378	5828.12
30-Jul-12	5129.75	5206.6	5129.75	5199.8	117523733	5278.7
31-Jul-12	5214.85	5234.55	5154.05	5229	147059808	6254.67
1-Aug-12	5220.7	5246.35	5212.65	5240.5	113815730	4408.19
2-Aug-12	5233.1	5236.9	5209.95	5227.75	92972386	3699.59
3-Aug-12	5195.6	5220.2	5164.65	5215.7	112918653	4213.76
6-Aug-12	5260.85	5293.2	5260.85	5282.55	103148076	4271.5
7-Aug-12	5295.4	5350.1	5281.65	5336.7	130431591	5226.33
8-Aug-12	5345.25	5377.6	5331.05	5338	165954895	6069.12
9-Aug-12	5348.3	5368.2	5312.1	5322.95	181419777	6763.23
10-Aug-12	5308.2	5330.1	5294.1	5320.4	130090985	6540.77
13-Aug-12	5316.35	5352.45	5309.05	5347.9	107578773	4678.33
14-Aug-12	5343.25	5387.05	5328.8	5380.35	109794400	4742.47
16-Aug-12	5385.95	5390.65	5356.65	5362.95	133996943	5285.5
17-Aug-12	5368.6	5399.95	5341.7	5366.3	134985473	5262.34
21-Aug-12	5368.7	5425.15	5368.7	5421	124343357	4986.5
22-Aug-12	5395.75	5433.35	5394.8	5412.85	103103501	4156.18

23-Aug-12	5426.15	5448.6	5393.85	5415.35	127995889	5462.34
24-Aug-12	5392.6	5399.65	5371	5386.7	114346965	4520.37
27-Aug-12	5387.85	5399.15	5346.65	5350.25	89987572	3882.41
28-Aug-12	5348.05	5359.25	5312.6	5334.6	123683723	4771
29-Aug-12	5343.85	5345.5	5282.7	5287.8	157470632	4581.21
30-Aug-12	5268.6	5342.8	5255.05	5315.05	226494000	8374.69
31-Aug-12	5298.2	5303.25	5238.9	5258.5	167393902	6600.58

Appendix 3. Nifty 50 Data from 3.6.2013 to 30.8.2013

Date	Open	High	Low	Close	Shares Traded	Turnover (₹ Cr)
3-Jun-13	5997.35	6011	5916.35	5939.3	112123535	5702.24
4-Jun-13	5941.1	5981.6	5910.25	5919.45	114450873	4990.51
5-Jun-13	5908.3	5935.2	5883.7	5923.85	110223279	4691.39
6-Jun-13	5895	5956.55	5869.5	5921.4	114174694	4961.54
7-Jun-13	5900.05	5972.7	5871.3	5881	118346364	4888.65
10-Jun-13	5907.9	5931.65	5857.4	5878	100130739	4304.75
11-Jun-13	5848.75	5868.05	5780.35	5788.8	180902123	6695.57
12-Jun-13	5771.75	5792.9	5738.6	5760.2	140394424	5894.04
13-Jun-13	5709.35	5729.85	5683.1	5699.1	142041404	5462.45
14-Jun-13	5748.95	5819.4	5739.4	5808.4	124410018	5121.33
17-Jun-13	5820.4	5854.9	5770.25	5850.05	107160887	4560.84
18-Jun-13	5841.9	5863.4	5804.3	5813.6	117541145	4591.91
19-Jun-13	5805.75	5828.4	5777.9	5822.25	115539008	4643.17
20-Jun-13	5754.15	5755	5645.65	5655.9	198400131	7148
21-Jun-13	5639.9	5686.15	5616.85	5667.65	182410583	6697.18
24-Jun-13	5638.05	5640	5566.25	5590.25	193488581	6308.88
25-Jun-13	5606.95	5666.25	5570.25	5609.1	196571543	6792.49
26-Jun-13	5627.95	5635.25	5579.35	5588.7	160095940	5939.3
27-Jun-13	5647.95	5699.35	5630.95	5682.35	239029425	9184.29
28-Jun-13	5749.5	5852.95	5749.5	5842.2	214402430	8753.33
1-Jul-13	5834.1	5904.35	5822.2	5898.85	144794030	5405.72
2-Jul-13	5885.5	5898.8	5852.3	5857.55	145721790	5163.09
3-Jul-13	5811.95	5815	5760.4	5770.9	160523863	5219.24
4-Jul-13	5794.75	5848.2	5786.05	5836.95	151929179	5429.87
5-Jul-13	5889.95	5900.45	5858.45	5867.9	123586417	4303.93
8-Jul-13	5833.15	5833.85	5775.55	5811.55	127624733	4823.52
9-Jul-13	5834.6	5864.95	5834.6	5859	110427867	4661.55
10-Jul-13	5869.9	5879.35	5802.85	5816.7	117516350	4820.53
11-Jul-13	5894.5	5948.85	5887.95	5935.1	120195681	4882.29
12-Jul-13	6000.5	6019	5951.15	6009	127707078	6591.27
15-Jul-13	5991.2	6038.2	5980.95	6030.8	116275729	4641.97
16-Jul-13	5930.8	5966.05	5910.95	5955.25	151162819	5915.8

17-Jul-13	5972.25	5989.8	5926.75	5973.3	191516153	8349.59
18-Jul-13	5984.7	6051.1	5974.55	6038.05	171728134	7774.83
19-Jul-13	6057.2	6066.85	6020.25	6029.2	163311714	7987.75
22-Jul-13	6009.75	6064.15	6004.25	6031.8	115168337	5117.19
23-Jul-13	6064.3	6093.35	6061.3	6077.8	126469251	5459.62
24-Jul-13	6032.2	6047.25	5962.6	5990.5	151931749	6413.64
25-Jul-13	5970.4	5990.65	5896.4	5907.5	237081135	8762.77
26-Jul-13	5937.95	5944.5	5869.5	5886.2	174535664	6419.86
29-Jul-13	5869.95	5886	5825.8	5831.65	173430612	4812.3
30-Jul-13	5836.05	5861.3	5747.6	5755.05	181489174	6006.91
31-Jul-13	5738.35	5752.1	5675.75	5742	235469131	8717.16
1-Aug-13	5776.9	5808.5	5676.85	5727.85	216762208	7164.04
2-Aug-13	5750.05	5761.85	5649	5677.9	222494469	6350.26
5-Aug-13	5682.4	5721	5661.5	5685.4	197167952	5575.21
6-Aug-13	5664.9	5664.9	5521.8	5542.25	216227972	6424.42
7-Aug-13	5549.3	5561.45	5486.85	5519.1	245010773	7725.23
8-Aug-13	5510.05	5577.6	5510.05	5565.65	204918722	6968.85
12-Aug-13	5606.7	5644.1	5557.1	5612.4	195708484	7063.92
13-Aug-13	5600.25	5704.75	5578.9	5699.3	222997337	7073.34
14-Aug-13	5715.4	5754.55	5690.2	5742.3	223656483	6970.2
16-Aug-13	5705.45	5716.6	5496.05	5507.85	248094094	8807.27
19-Aug-13	5497.55	5499.65	5360.65	5414.75	219672819	6713.03
20-Aug-13	5353.45	5417.8	5306.35	5401.45	261052792	7982.22
21-Aug-13	5494.45	5504.1	5268.45	5302.55	255004311	8509.29
22-Aug-13	5282.8	5418.95	5254.05	5408.45	284468531	9075.86
23-Aug-13	5428.75	5478.8	5377.8	5471.75	251511910	7763.2
26-Aug-13	5499.4	5528.7	5454.45	5476.5	241996358	6465.02
27-Aug-13	5426.5	5427.4	5274.25	5287.45	306037010	8236.84
28-Aug-13	5233.45	5317.7	5118.85	5285	335993745	10705.51
29-Aug-13	5316.5	5428.9	5303	5409.05	326499273	10580.48
30-Aug-13	5407.45	5493.3	5360.2	5471.8	336401705	11431.52

# Appendix 4. Nifty 50 Data from 2.6.2014 to 28.8.2014

Date	Open	High	Low	Close	Shares Traded	Turnover (₹ Cr)
2-Jun-14	7264.05	7368.6	7239.5	7362.5	169891181	7833.43
3-Jun-14	7375.35	7424.95	7342.15	7415.85	234680218	10354.94
4-Jun-14	7417.55	7433.3	7391.35	7402.25	204592241	8913.89
5-Jun-14	7399.75	7484.7	7360.5	7474.1	250660653	11574.51
6-Jun-14	7521.5	7592.7	7497.65	7583.4	248397596	12322.96
9-Jun-14	7621.65	7673.7	7580.25	7654.6	231879926	10866.56
10-Jun-14	7679.05	7683.2	7579.3	7656.4	188669182	9475.21
11-Jun-14	7672.4	7700.05	7589.05	7626.85	186182446	10472.71

12-Jun-14	7641.3	7658	7593.8	7649.9	148207144	8187.49
13-Jun-14	7668.2	7678.5	7525.35	7542.1	174522339	11254.75
16-Jun-14	7534.8	7548.6	7487.55	7533.55	155377979	8449.27
17-Jun-14	7525.05	7637.6	7509.25	7631.7	157961787	8704.2
18-Jun-14	7636.05	7663	7515.5	7558.2	165078941	8963.97
19-Jun-14	7580.05	7606.45	7502.55	7540.7	148852437	8115.36
20-Jun-14	7543.3	7560.55	7497.3	7511.45	124132217	6801.49
23-Jun-14	7514	7534.8	7441.6	7493.35	127404790	6543.64
24-Jun-14	7515.2	7593.35	7515.2	7580.2	137002483	7146.44
25-Jun-14	7588.55	7589.25	7557.05	7569.25	114968325	6198.93
26-Jun-14	7554.1	7570.2	7481.3	7493.2	171676960	9190.64
27-Jun-14	7514.2	7538.75	7482.3	7508.8	126673395	6688.8
30-Jun-14	7534.05	7623.65	7531.6	7611.35	152303166	7887.37
1-Jul-14	7629	7649.5	7618.15	7634.7	139431498	6983.63
2-Jul-14	7683.05	7732.4	7677.3	7725.15	136324329	7363.75
3-Jul-14	7734.35	7754.65	7706.8	7714.8	133755275	7320.09
4-Jul-14	7718.1	7758	7661.3	7751.6	113070488	5863.82
7-Jul-14	7780.4	7792	7755.1	7787.15	173926355	8925.04
8-Jul-14	7804.05	7808.85	7595.9	7623.2	180646306	9002.25
9-Jul-14	7637.95	7650.1	7551.65	7585	168348843	8176.28
10-Jul-14	7589.5	7731.05	7479.05	7567.75	258385778	11431.68
11-Jul-14	7584.1	7625.85	7447.2	7459.6	187592951	8983.29
14-Jul-14	7469	7478.45	7422.15	7454.15	135231220	6659.48
15-Jul-14	7491.3	7534.9	7459.15	7526.65	122068670	6124.15
16-Jul-14	7564.15	7640.1	7532.45	7624.4	167973291	8186.24
17-Jul-14	7612.7	7655.65	7612.7	7640.45	141612002	6753.11
18-Jul-14	7630.25	7685	7595.5	7663.9	134603073	6903.7
21-Jul-14	7701.65	7722.1	7674	7684.2	105401279	5794.45
22-Jul-14	7708.2	7773.85	7704.8	7767.85	120081148	6494.69
23-Jul-14	7794.9	7809.2	7752.9	7795.75	122119113	7062.52
24-Jul-14	7796.25	7835.65	7771.65	7830.6	117608370	6271.45
25-Jul-14	7828.2	7840.95	7748.6	7790.45	153936037	7827.61
28-Jul-14	7792.9	7799.9	7722.65	7748.7	116534670	6107.78
30-Jul-14	7746.2	7798.7	7707.6	7791.4	178110084	10175.5
31-Jul-14	7784.65	7791.85	7711.15	7721.3	208857257	11718.26
1-Aug-14	7662.5	7716.7	7593.9	7602.6	181070405	9796.7
4-Aug-14	7639.55	7694.8	7622.05	7683.65	137040004	7495.07
5-Aug-14	7706.65	7752.45	7638.05	7746.55	128238762	6772.55
6-Aug-14	7726.15	7740.95	7658.95	7672.05	116361342	6905.9
7-Aug-14	7651.15	7708.95	7630.4	7649.25	116792296	6030.02
8-Aug-14	7588.7	7592.45	7540.1	7568.55	118429659	6283.56
11-Aug-14	7619.85	7635.55	7598.6	7625.95	106972573	5535.13
12-Aug-14	7688.8	7735.75	7654.8	7727.05	120611660	6181.17

13-Aug-14	7717.3	7757.1	7695.7	7739.55	154083920	8030.41
14-Aug-14	7756.15	7796.7	7739.1	7791.7	127328105	6745.33
18-Aug-14	7785.25	7880.5	7779.2	7874.25	126742201	6892.25
19-Aug-14	7901	7918.55	7881.15	7897.5	140615189	7928.8
20-Aug-14	7915.8	7922.7	7864.05	7875.3	117321408	6234.79
21-Aug-14	7875.35	7919.65	7855.95	7891.1	115221672	7502.01
22-Aug-14	7904.55	7929.05	7900.05	7913.2	104074858	7088.03
25-Aug-14	7931.75	7968.25	7897.95	7906.3	118465594	6152.32
26-Aug-14	7874.5	7915.45	7862.45	7904.75	142829732	6735.18
27-Aug-14	7933.9	7946.85	7916.55	7936.05	119961224	6261.16
28-Aug-14	7942.25	7967.8	7939.2	7954.35	189698796	10417.14

Appendix 5. Nifty 50 Data from 1.6.2015 to 31.8.2015

Date	Open	High	Low	Close	Shares Traded	Turnover (₹ Cr)
1-Jun-15	8417.25	8467.15	8405.4	8433.4	125990614	7254.01
2-Jun-15	8442.8	8445.35	8226.05	8236.45	151337661	8083.17
3-Jun-15	8232.45	8236.7	8094.15	8135.1	176661646	7920.26
4-Jun-15	8155.15	8160.05	8056.75	8130.65	159470840	7560.49
5-Jun-15	8119.15	8191	8100.15	8114.7	167055308	7588.4
8-Jun-15	8124.35	8131	8030.55	8044.15	140075743	6230.61
9-Jun-15	8026.5	8057.15	8005.15	8022.4	140217686	6442.05
10-Jun-15	8024.15	8152.25	8023.8	8124.45	141030200	6790.27
11-Jun-15	8157.3	8163.05	7958.25	7965.35	171348959	7868.44
12-Jun-15	7959.85	7995.6	7940.3	7982.9	140839875	6737.25
15-Jun-15	7986.6	8057.7	7944.85	8013.9	137116389	6129.12
16-Jun-15	8004.2	8061.85	7952.35	8047.3	127809460	5923.8
17-Jun-15	8084.2	8136.85	8048.95	8091.55	157205716	7878.66
18-Jun-15	8113.7	8186.9	8101.8	8174.6	149266110	7767.77
19-Jun-15	8201.15	8250.8	8195.65	8224.95	151575997	7722.05
22-Jun-15	8259.3	8369.45	8257.4	8353.1	126542473	6163.02
23-Jun-15	8377.45	8398.45	8334.95	8381.55	135844708	6437.33
24-Jun-15	8399.4	8421.35	8338.9	8360.85	134062733	7175.22
25-Jun-15	8336.25	8423.15	8329.5	8398	207421340	9911.16
26-Jun-15	8393.95	8408.55	8339.7	8381.1	113959476	5848.78
29-Jun-15	8247.05	8329.45	8195.65	8318.4	136106699	6604.12
30-Jun-15	8316.35	8378	8298.95	8368.5	163366250	8425.52
1-Jul-15	8376.25	8481.6	8370.15	8453.05	135887471	6938.05
2-Jul-15	8471.95	8479.25	8433.2	8444.9	115472141	6065.26
3-Jul-15	8440.1	8497.75	8424.15	8484.9	91142979	4983.21
6-Jul-15	8386.15	8533.15	8386.15	8522.15	104578132	5517.86
7-Jul-15	8525.5	8561.35	8483.85	8510.8	126038231	6054.41
8-Jul-15	8439.2	8457.5	8341.4	8363.05	193886999	8876.81

9-Jul-15	8364.85	8400.3	8323	8328.55	135358659	6610.4
10-Jul-15	8365.7	8377.1	8315.4	8360.55	158883926	8128.47
13-Jul-15	8397.25	8471.65	8355.4	8459.65	121380175	6506.28
14-Jul-15	8470.6	8480.25	8424.1	8454.1	104893796	5454.41
15-Jul-15	8463.4	8531.4	8462.95	8523.8	108835522	5805.53
16-Jul-15	8546.15	8616.1	8542.9	8608.05	119637042	6544.15
17-Jul-15	8623.65	8642.95	8593.15	8609.85	108190401	5713.13
20-Jul-15	8623.9	8624.1	8559	8603.45	93439295	5107.62
21-Jul-15	8601.5	8646.75	8517.9	8529.45	169151098	10699.52
22-Jul-15	8512.25	8643.9	8498.65	8633.5	141018383	7427.34
23-Jul-15	8643.95	8654.75	8573.8	8589.8	136962516	7747.81
24-Jul-15	8588.15	8589.15	8513.5	8521.55	131344832	6942.22
27-Jul-15	8492.1	8492.2	8351.55	8361	140828066	7353.09
28-Jul-15	8371.1	8397.4	8321.75	8337	179983810	8403.15
29-Jul-15	8365.6	8381.5	8338.45	8375.05	145399010	7232.34
30-Jul-15	8417	8458.9	8408.3	8421.8	221939186	10007.3
31-Jul-15	8456.1	8548.95	8448	8532.85	209629301	9522.19
3-Aug-15	8510.65	8563.95	8508.1	8543.05	161485758	7738.1
4-Aug-15	8564.1	8565.15	8448.25	8516.9	193226091	9003.82
5-Aug-15	8547.45	8591.85	8545.85	8567.95	136948290	6434.82
6-Aug-15	8585.8	8606.3	8551.5	8588.65	139116393	6595.25
7-Aug-15	8580.8	8595.95	8552.7	8564.6	148073594	6528.28
10-Aug-15	8577	8621.55	8497.8	8525.6	127194886	5780.49
11-Aug-15	8548.45	8556.25	8441.3	8462.35	159192694	7049.29
12-Aug-15	8445.7	8446.95	8337.95	8349.45	195904304	8630.35
13-Aug-15	8384.45	8429.5	8339.75	8355.85	195079107	7840.58
14-Aug-15	8402.35	8530.1	8381.2	8518.55	160680260	7090.58
17-Aug-15	8530.5	8530.6	8428.05	8477.3	180083830	6543.01
18-Aug-15	8505.85	8525.75	8433.6	8466.55	157991554	6501.24
19-Aug-15	8468.05	8520.45	8425.95	8495.15	134512114	6338.67
20-Aug-15	8471.05	8501.35	8359.75	8372.75	189841783	9193.19
21-Aug-15	8305.4	8322.2	8225.05	8299.95	207542070	9606.33
24-Aug-15	8055.95	8060.05	7769.4	7809	322096413	13856.66
25-Aug-15	7895.4	7925.4	7667.25	7880.7	308255265	13420.76
26-Aug-15	7865.25	7930.05	7777.1	7791.85	223261362	10207.56
27-Aug-15	7921.6	7963.6	7862.3	7948.95	314422773	14282.73
28-Aug-15	8053.7	8091.8	7961.65	8001.95	201572450	8641.87
31-Aug-15	8009.25	8043.6	7947.95	7971.3	204254629	9547.7