

CHAPTER 4

OUTLINE OF SECTORAL & THEMATIC INDICES

OUTLINE OF FEW SECTORAL AND THEMATIC INDICES

One of the major functions of a stock exchange is to provide a means to raise capital through floating securities and then advance trading of those securities to pump in the liquidity. Discussed below are the two major stock exchanges of India viz., Bombay stock exchange – one of the oldest stock exchange and National stock exchange – one of the largest stock exchange in Asia.

4.1 BOMBAY STOCK EXCHANGE

The Bombay stock exchange was acknowledged by the government of India on August 31, 1957, under the Securities Contracts Act, 1956. The BSE Sensitive Index and BSE National Index reflect the price indices of securities traded on the BSE. BSE Sensex was introduced on January 1, 1986, whose base year 1978-79 and consists of 30 highly sensitive scrips. The BSE National Index (BSE100) was introduced in 1988-89 with the base year 1983-84 which covers 100 actively traded scrips quoted on major stock exchanges.

Later on, BSE introduced BSE National Index-200 and Dollex, with the base year 1989-90 which represents values in dollar terms. These indices are useful for foreign institutional investors, foreign corporate bodies as well as investors. Further, BSE-500 was introduced on July 8 1999 which consists of all scrips included in BSE-30, BSE-100, and BSE-200. It represents 23 major industries and 102 sub-sectors of the country. The shareholder base of BSE includes two leading global exchanges – Deutsche Bourse and Singapore Exchange as strategic partners. As of 2013, BSE became a strategic partner of S&P Dow Jones indices, and thus Sensex was renamed as ‘S&P BSE Sensex’.

The Bombay stock exchange offers 21 indices which include stocks, bonds, treasury bills, and other forms of investment. These indices are constructed by grouping companies based on their relevance and together reflect the performance of the sector. These categorizations are presented below in the table:

Table 4.1: Bombay stock exchange indices

Broad market index	S&P BSE SENSEX, S&P BSE SENSEX 50, S&P BSE SENSEX Next 50, S&P BSE 100, S&P BSE Bharat 22 Index, S&P BSE MidCap, S&P BSE SmallCap, S&P BSE 200, S&P BSE 150 MidCap Index, S&P BSE 250 SmallCap Index, S&P BSE 250 LargeMidCap Index, S&P BSE 400 MidSmallCap Index, S&P BSE 500, S&P BSE AllCap, S&P BSE LargeCap, S&P BSE SmallCap Select Index, S&P BSE MidCap Select Index, S&P BSE 100 LargeCap TMC Index.
Sector and industry index	S&P BSE Basic Materials, S&P BSE Consumer Discretionary Goods & Services, S&P BSE Energy, S&P BSE Fast Moving Consumer Goods, S&P BSE Finance, S&P BSE Healthcare, S&P BSE Industrials, S&P BSE Information Technology, S&P BSE Telecom, S&P BSE Utilities, S&P BSE Automobile, S&P BSE Bank index, S&P BSE Capital goods, S&P BSE Consumer durables, S&P BSE Metal, S&P BSE OIL & GAS, S&P BSE Power, S&P BSE Realty, S&P BSE TECK
Thematic index	S&P BSE Diversified Financials Revenue Growth Index, S&P BSE India Infrastructure Index, S&P BSE India Manufacturing Index, S&P BSE CPSE, S&P BSE PSU, S&P BSE Private Banks Index
Strategy index	S&P BSE Momentum Index, S&P BSE Low Volatility Index, S&P BSE Quality Index, S&P BSE Enhanced Value Index, S&P BSE Dividend Stability Index, S&P BSE IPO, S&P BSE SME IPO, S&P BSE DOLLEX 30, S&P BSE DOLLEX 200
Sustainability index	S&P BSE 100 ESG Index, S&P BSE Carbon index, S&P BSE Green index
Volatility index	S&P BSE SENSEX 1-Month Real Vol, S&P BSE SENSEX 2-Month Real Vol, S&P BSE SENSEX 3-Month Real Vol
Composite index	S&P BSE India Bond Index
Government index	S&P BSE India 10 Year Sovereign Bond, S&P BSE India Government Bond Index, S&P BSE India Sovereign Bond Index, S&P BSE India Government Bill Index, S&P BSE India Agency Bond Index, S&P BSE India Provincial Bond Index
Corporate index	S&P BSE India Corporate Bond Index, S&P BSE India Financials Bond Index, S&P BSE India Services Bond Index, S&P BSE India Utilities Bond Index, S&P BSE India Industrials Bond Index

Money market index	S&P BSE Liquid Rate Index
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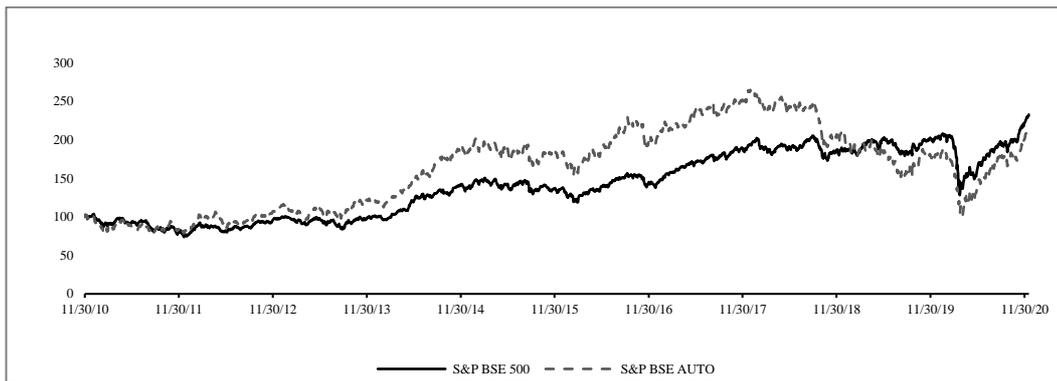
Source: bseindia.com

In the thesis, the sectoral indices of the Bombay stock exchange is considered to understand its interrelationship with the broad market index. To enhance the understanding the detailed discussion on the various indices included is presented below:

1. S&P BSE AUTOMOBILES

As defined by the BSE industrial categorization system, the sector consists of constituents from the BSE 500 that are members of the transportation equipment sector. The index began in 2004 with a collection of 15 companies. The index's performance in contrast to its base index, the BSE500, is as follows:

Figure 4.1: Performance of S&P BSE automobiles sector compared to BSE500



Source: bseindia.com

1 Year Price Return – 16.75%

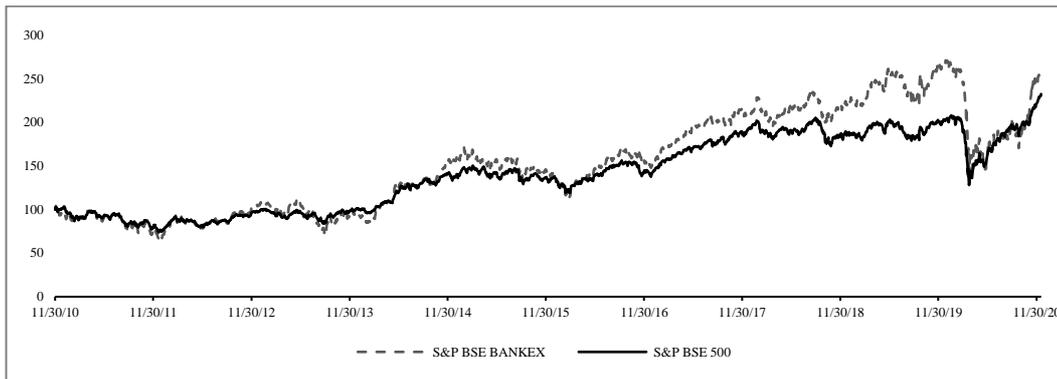
1 Year Total Return – 18.49%

The top 10 companies constituted 89.2% of the weight which are Maruti Suzuki India limited, Mahindra and Mahindra limited, Bajaj auto limited, Hero Motocorp limited, Eicher motors limited, Tata motors limited, Motherson Sumi systems limited, MRF limited Balkrishna industries limited and Ashok Leyland limited.

2. S&P BSE BANK

The bank index, which was launched in 2006, is made up of constituents of the S&P BSE 500 that are classed as banks by the BSE industry categorization system. The performance of the index as compared to BSE500 is shown as below:

Figure 4.2: Performance of S&P BSE bank sector compared to BSE500



Source: bseindia.com

1 Year Price Return – 3.61%

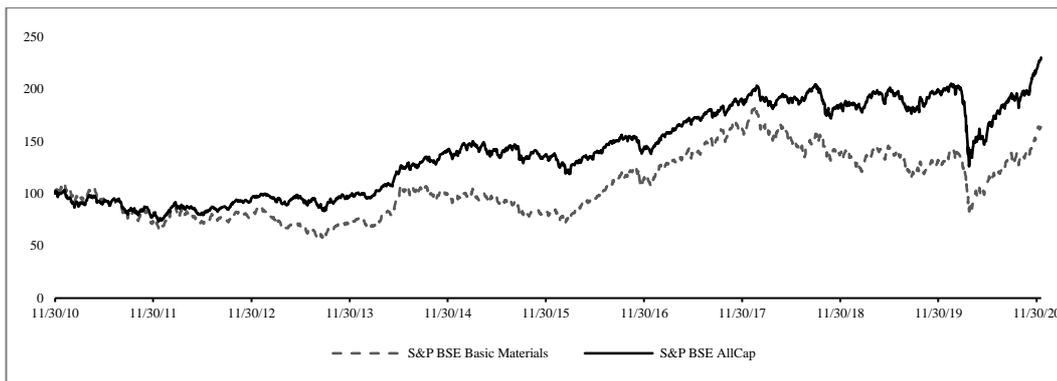
1 Year total Return – 3.60%

The index constitutes 10 companies such as Kotak Mahindra Bank limited, HDFC Bank limited, ICICI bank limited korma Axis Bank limited korma SBI, IndusInd Bank limited, Bandhan Bank limited, City union Bank limited, federal Bank limited and RBL Bank limited.

3. S&P BSE BASIC MATERIALS

The index was launched in 2015 however the first value date of the index is 2005. It provides benchmark for the investors reflecting companies member of basic materials from the S&P BSE all cap. The historical movement of the sector as compared to the S&P BSE AllCap index is as follows:

Figure 4.3: Performance of S&P BSE basic materials sector compared to BSE Allcap



Source: bseindia.com

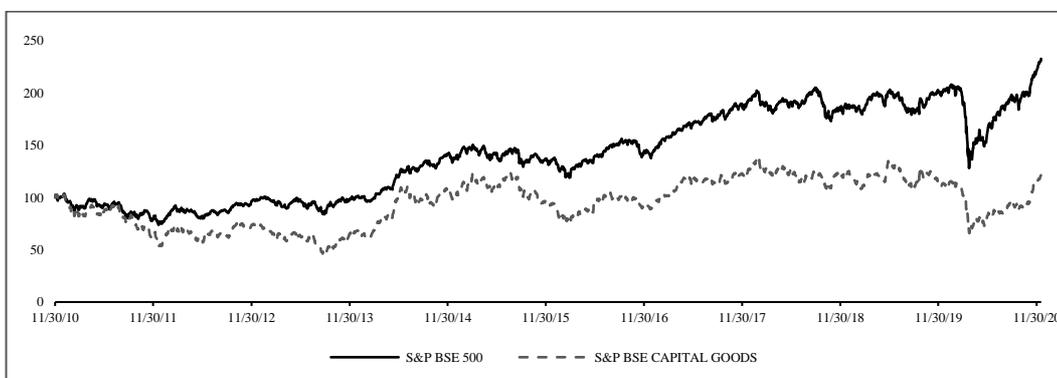
1 Year Price Return – 28.76%
 1 Year total Return – 31.39%

The index constitutes 136 members in which top 10 members way 56.2 % of the index. These members are UltraTech cement limited, Tata Steel limited, JSW Steel limited, Grasim industries limited, Hindalco industries limited, Pidilite industries limited, Shree cement limited, UPA ltd, Vedanta ltd and Ambuja cement limited.

4. S&P BSE CAPITAL GOODS

This index constitutes of the companies included in the capital goods sector as per BSE industry classification system from S&P BSE 500. It was formed in 1999 and has 23 companies included in the index out of which top 10 constituted 86.3% of the weightage. The performance of the index as compared to BSE 500 is as shown below:

Figure 4.4: Performance of S&P BSE capital goods sector compared to BSE500



Source: bseindia.com

1 Year Price Return – 8.70%

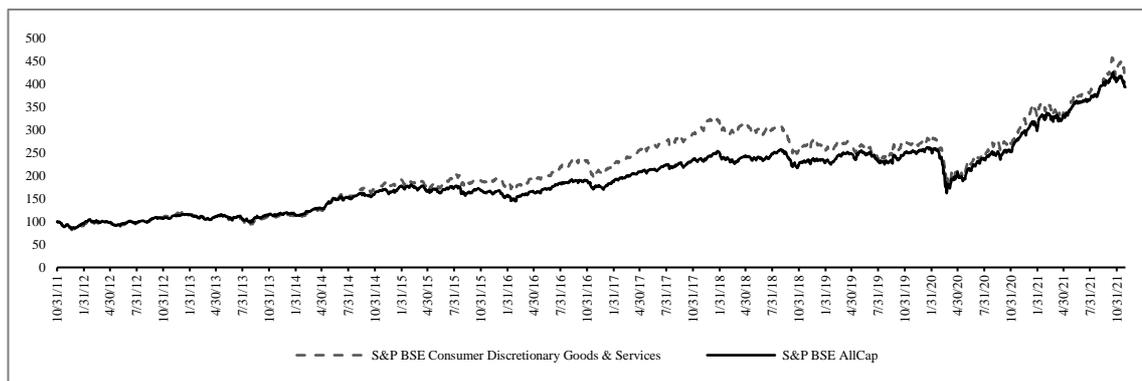
1 Year total Return – 10.52%

These are L&T limited, Adani green energy limited, Havells India limited, Siemens India limited Bharat electronics limited, Bharat forge limited, Honeywell automation India limited, Hindustan aeronautics limited, GMR infrastructure limited and ABB India limited.

5. S&P BSE CONSUMER DISCRETIONARY GOODS AND SERVICES

The S&P BSE Consumer Discretionary Goods & Services index is designed to provide investors with a benchmark that reflects companies in the consumer discretionary goods & services sector that are included in the S&P BSE AllCap index. The performance of the index as compared to BSE Allcap is shown as below:

Figure 4.5: Performance of S&P BSE consumer discretionary sector compared to S&P BSE Allcap



Source: bseindia.com

1 Year Price Return – 37.87%

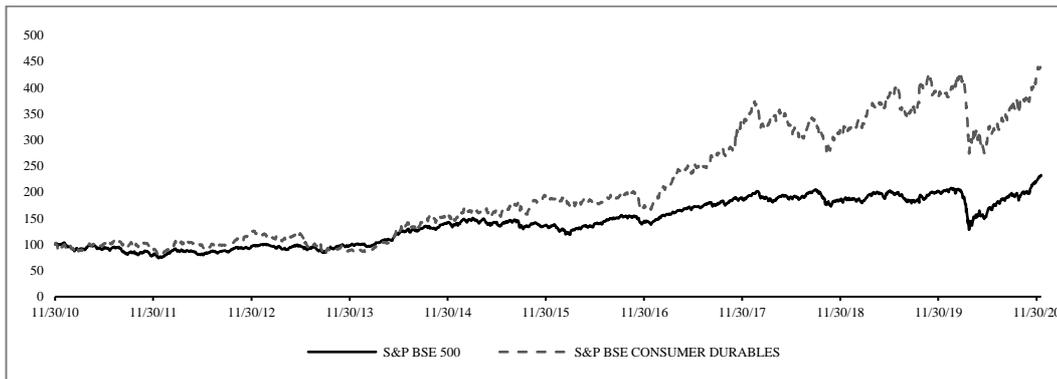
1 Year total Return – 38.89%

This index has 244 constituents, the top ten constituents of the index are Asian paints ltd, Titan co ltd, Maruti Suzuki India ltd, Mahindra & Mahindra ltd, Avenue supermarkets ltd, Bajaj auto ltd, Info edge ltd, Eicher motors ltd, Hero Motocorp ltd, Havells India ltd.

6. S&P BSE CONSUMER DURABLES

S&P BSE Consumer Durable index was launched in August 1999 and constitutes elements of S&P BSE 500 that are classified as members of the consumer durables sector as illustrated by the BSE industry classification system. The historical performance of the sector is depicted in the following diagram:

Figure 4.6: Performance of S&P BSE consumer durables sector compared to BSE 500



Source: bseindia.com

1 Year Price Return – 19.49%

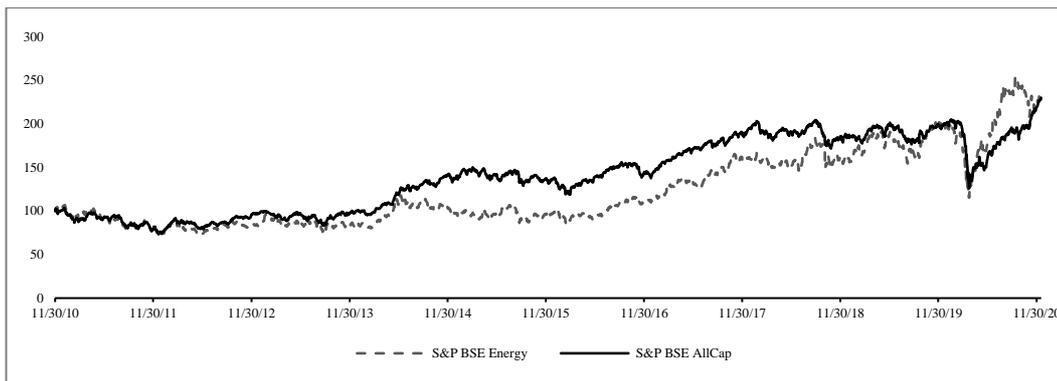
1 Year total Return – 20.15%

The Top 10 constituents which weigh 98.8% by index weight are Titan Co. limited, Voltas Ltd, Crompton greaves Consumer electricals Ltd, Whirlpool of India Ltd, Rajesh Exports Ltd, Blue Star Ltd, Orient Electric Ltd, TTK Prestige Ltd, VIP Industries Ltd, Sheela Foam Limited.

7. S&P BSE ENERGY

The index serves as a benchmark for firms that are designated as members of the energy sector and are included in the S&P BSE AllCap index. The first value of the index was created in 2005 but was launched in 2015. The performance of the sector as compared to BSE Allcap over a period of time is depicted below:

Figure 4.7: Performance of S&P BSE energy sector compared to BSE Allcap



Source: bseindia.com

1 Year Price Returns – 15.78%

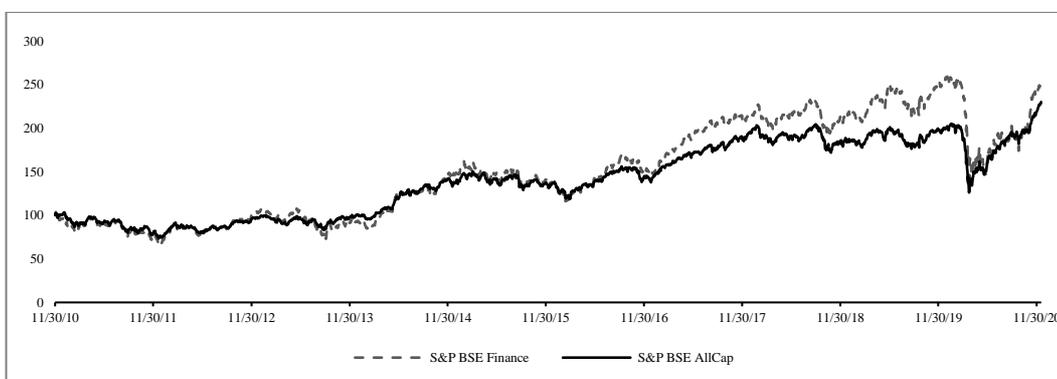
1 Year Total Returns – 18.38%

The total number of constituents of the index is 20 out of which top 10 amount to 98.7% weight of the index. These include Reliance industries limited, Bharat petroleum corporation limited, Oil and Natural gas corporation limited, Coal India limited, Indian oil corporation limited, Petronet LNG limited, Hindustan petroleum corporation limited, Adani Gas limited, Castrol India limited, Gujarat Gas limited.

8. S&P BSE FINANCE

Finance, like energy, is a benchmark that reflects firms in the S&P BSE AllCap that are categorised as financial sector members. The index's first value date was in 2005, and it was launched in 2015. The movement of the index with respect to its base index are shown as below:

Figure 4.8: Performance of S&P BSE finance sector compared to BSE Allcap



Source: bseindia.com

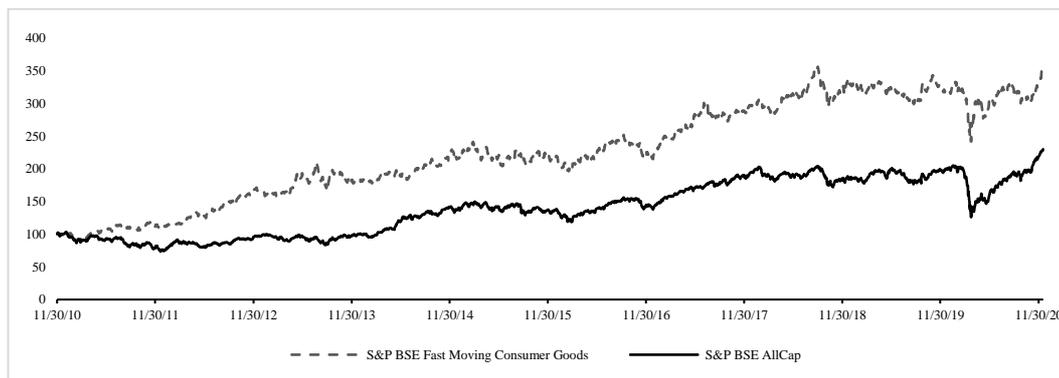
1 Year Price Returns – 0.17%
1 Year Total Returns – 0.24%

The number of constituents of the index is 105 out of which top 10 way 82%. These include HDFC Bank limited, housing development finance corporation, ICICI bank limited, Kotak Mahindra Bank limited, Axis Bank limited, Bajaj finance limited, SBI, Bajaj Finserv limited, IndusInd Bank limited and HDFC Life insurance company limited.

9. S&P BSE FAST MOVING CONSUMER GOODS (FMCG)

The index tracks companies in the S&P all-cap index that are in the fast-moving consumer goods category. Being launched in 1999 it has 64 companies under it with top 10 weighing 88.6%. The performance of the sector as compared to its base index is shown below:

Figure 4.9: Performance of S&P BSE FMCG sector compared to BSE Allcap



Source: bseindia.com

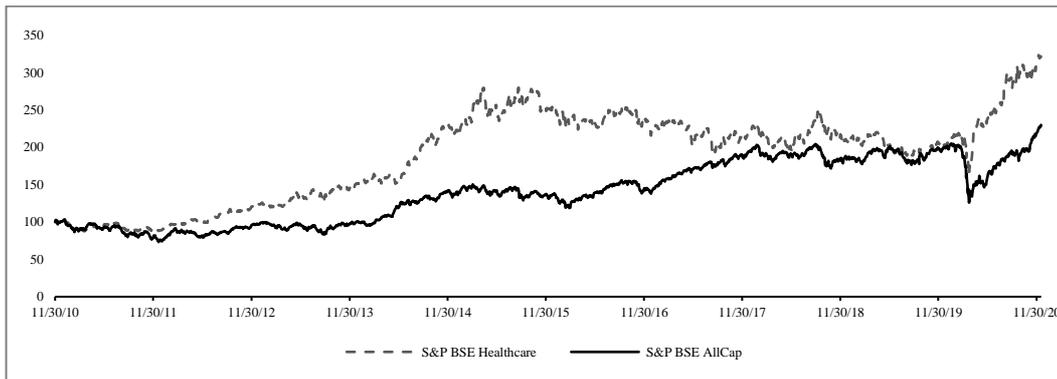
1 Year Price Return – 11.18%
1 Year Total Return – 13.84%

These top companies include Hindustan Unilever limited, ITC limited Nestle India limited, Britannia industries limited, Tata consumer products limited, Dabur India limited, Godrej consumer products limited, Colgate Palmolive India limited, Marico limited, Procter and gamble hygiene and healthcare limited.

10. S&P BSE HEALTHCARE

Healthcare is a benchmark index reflecting companies from BSE all cap classified as members of healthcare sector launched in 1999. The growth of the sector over the years in comparison with the S&P BSE AllCap is given below:

Figure 4.10: Performance of S&P BSE healthcare sector compared to BSE Allcap



Source: bseindia.com

1 Year Price Return – 59.23%

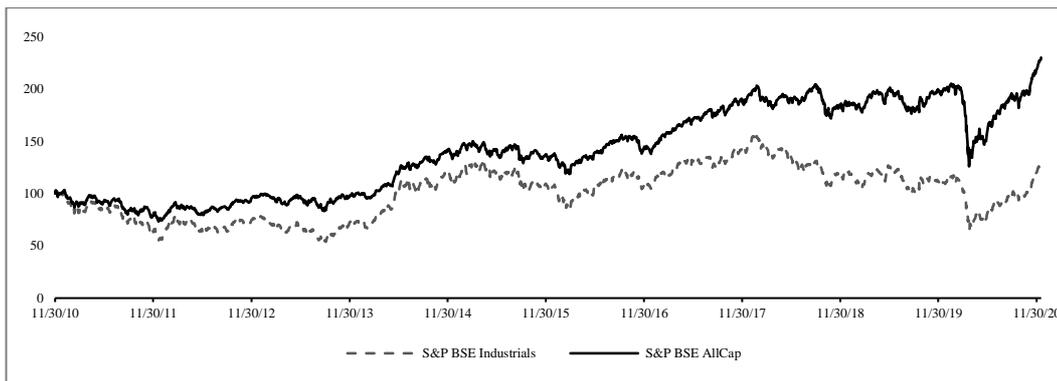
1 Year total Return – 60.38%

The index has 35 companies and the top 10 companies weighing 61.6% are Dr Reddy's lab limited, Sun Pharma industries limited, Divi's laboratories limited, Cipla limited, Aurobindo Pharma limited, Apollo hospitals enterprise limited, Lupin limited Biocon limited, Piramal enterprises limited, and IPCA label limited.

11. S&P BSE INDUSTRIES

The index was formed from S&P BSE All cap consisting companies of industrial sector. It was launched in 2015 but values are back tested up till 2005. The performance of the sector in the last 10 years compared to BSE Allcap is as below:

Figure 4.11: Performance of S&P BSE industries sector compared BSE Allcap



Source: bseindia.com

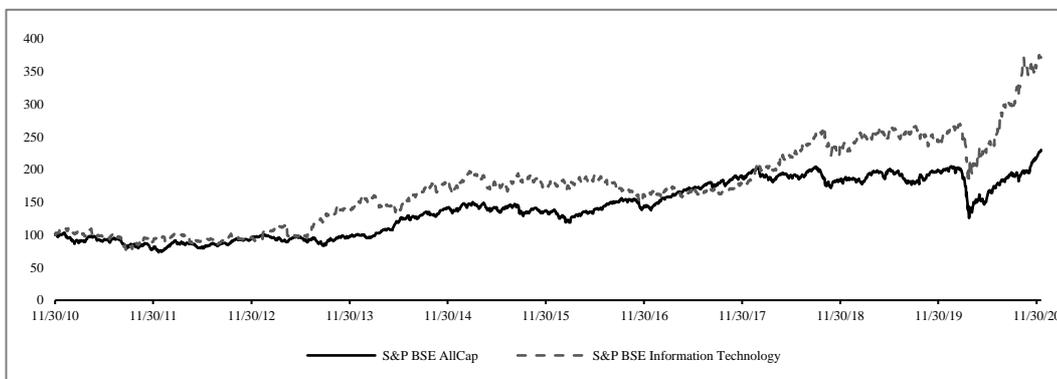
1 Year Price Return – 17.87%
1 Year total Return – 19.51%

The top 10 companies out of 177 where is 53.9%. these are L&T limited Adani green energy limited, Tata motors limited, Adani ports and special economic zone, Havells India limited, Interglobe aviation limited, SRF limited, Siemens India limited, Bharat electronics limited, Ashok Leyland Ltd.

12. S&P BSE INFORMATION TECHNOLOGY

The IT index is constructed from S&P BSE AllCap to provide investors with the benchmark reflecting companies classified under members of IT sector. The performance of the index as compared to BSE AllCap is as shown below:

Figure 4.12: Performance of S&P BSE IT sector compared to BSE Allcap



Source: bseindia.com

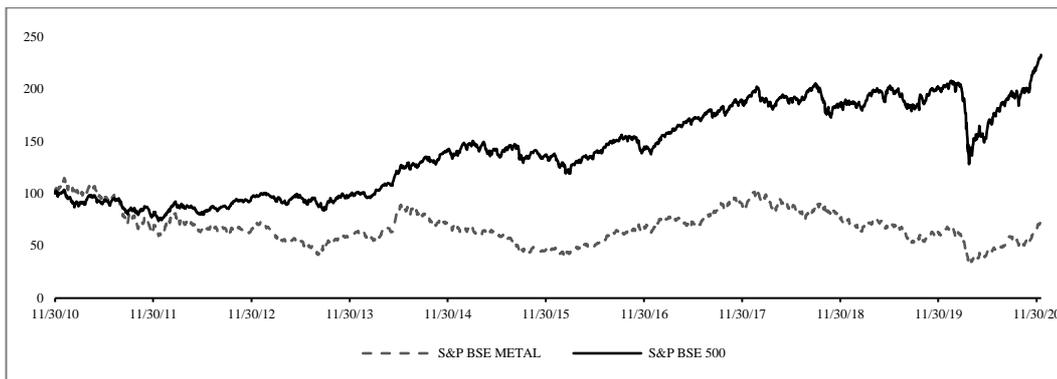
1 Year Price Return – 50.52%
1 Year total Return – 53.75%

Launched in 1999 it comprises of 48 companies a law among which the top 10 has the highest weight age of nine 4.8 %. These are Infosys limited, TCS limited, HCL technologies limited, Tech Mahindra limited, Wipro limited, L&T Infotech limited, Mphasis limited, Oracle financial services software limited, Mindtree limited, Persistent systems limited.

13. S&P BSE METAL

According to the BSE industry classification system, the index covers firms from the BSE 500 that are members of the metal goods and mining sector. The performance of the sector in the last decade as compared to BSE 500 is shown below:

Figure 4.13: Performance of S&P BSE metal sector compared to BSE 500



Source: bseindia.com

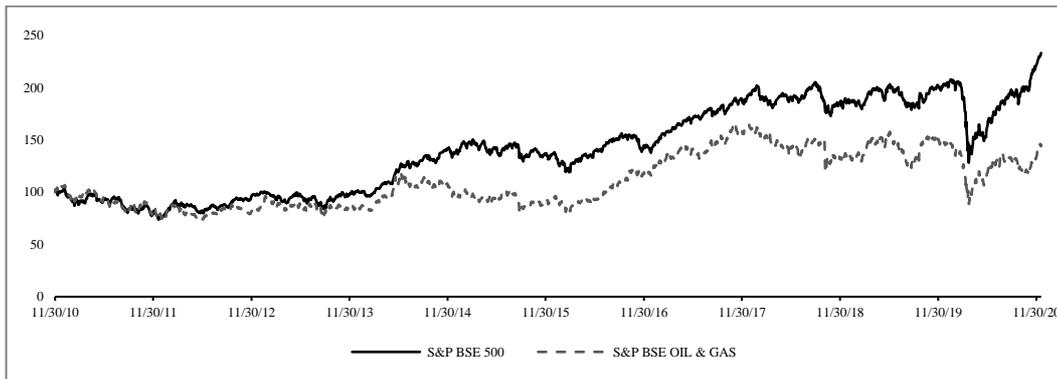
1 Year Price Return – 19.70%
1 Year total Return – 27.45%

It was launched in 2004 with 10 companies included which are Tata Steel limited, JSW limited, Hindalco industries limited, Coal India limited, Vedanta limited, Jindal Steel and power limited, NMDC limited, Hindustan zinc limited, Steel authority of India limited and National aluminium company limited.

14. S&P BSE OIL & GAS

The index is made up of 10 S&P BSE 500 companies that are part of the Oil and Gas sector, as defined by the BSE industrial categorization system. The performance of the sector as compared to the BSE 500 index is as below:

Figure 4.14: Performance of S&P BSE oil & gas sector compared to BSE 500



Source: bseindia.com

1 Year Price Return – (-2.21%)

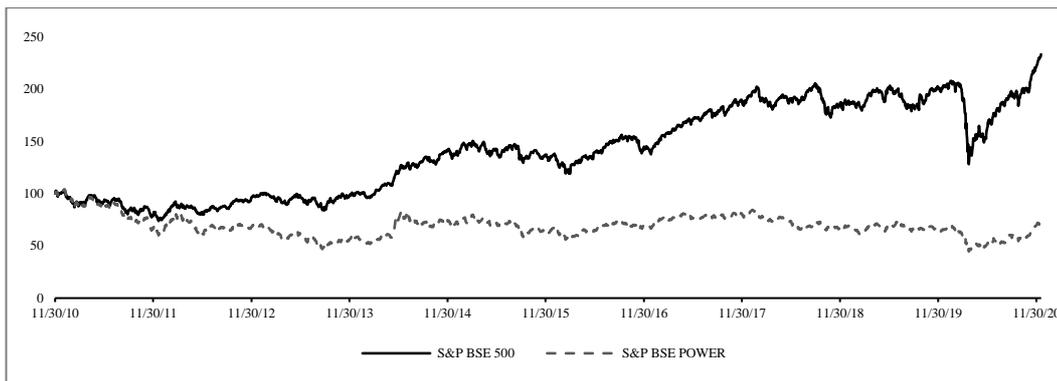
1 Year total Return – 1.77%

It was launched in 2004 including Reliance industries limited, Bharat petroleum corporation Ltd, oil and natural gas corporation Ltd, Indian Oil corporation Ltd, petronet LNG Ltd, GAIL India Ltd, Indraprastha Gas Ltd, Hindustan petroleum corporation Ltd, Gujarat state petronet Ltd, and Gastro India Ltd.

15. S&P BSE POWER

According to the BSE industries classification system, the power index has 14 constituents from the S & P BSE 500 members of the heavy electrical equipment and electrical utilities industry. Although the index was first published in 2007, backdated figures have been compiled since 2005. The figure below shows the performance of the sector of the last 10 years in comparison with its base index:

Figure 4.15: Performance of S&P BSE power sector compared to BSE Allcap



Source: bseindia.com

1 Year Price Return – 9.77%

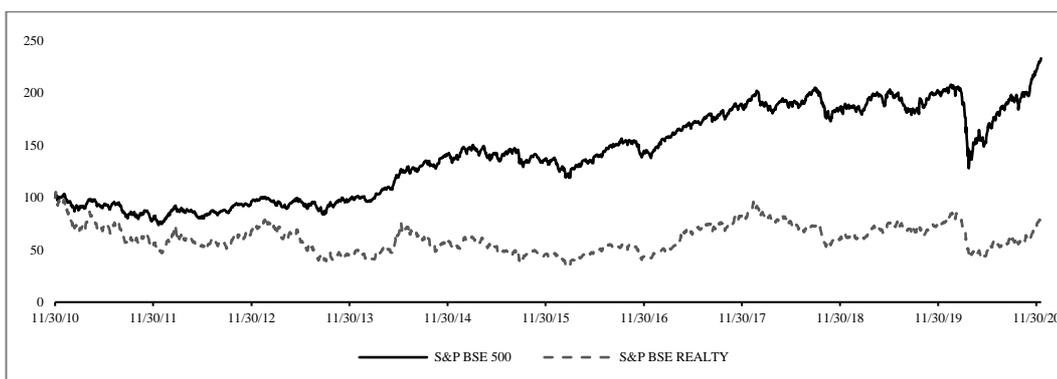
1 Year total Return – 14.21%

The top 10 companies of the sector constitutes 92.8 % of the weightage. These are Power grid corporation of India Ltd, NTPC Ltd, Adani green energy Ltd, Siemens India Ltd, Tata power co limited, Adani transmission Ltd, ABB India Ltd, NHPC Ltd, Torrent Power Ltd, KEC international Ltd.

16. S&P BSE REALTY

The realty sector launched in 2007, comprises of 10 companies from BSE 500 index. The performance of the sector in comparison with the BSE 500 index is as below:

Figure 4.16: Performance of S&P BSE realty sector compared to BSE 500



Source: bseindia.com

1 Year Price Return – 9.11%

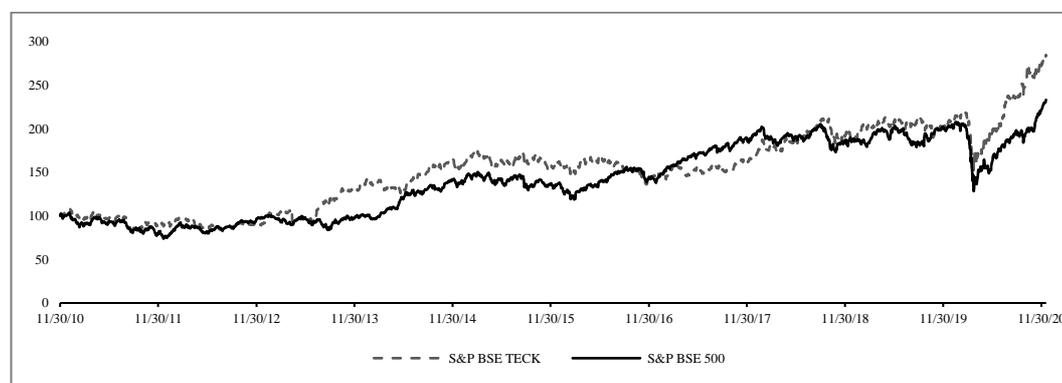
1 Year total Return – 9.65%

The companies include are DLF Ltd, Godrej properties limited, phoenix Mills limited, Oberoi realty limited, prestige estates projects limited, brigade enterprises limited, India bulls real estates limited, Sunteck realty limited, Shobha limited and Mahindra life space developers limited.

17. S&P BSE TECK

This index includes 27 members of S&P BSE 500 index which are classified as members of media and publishing, information technology and telecommunication sectors as per BSE industry classification system. the index was launched in 2001. The performance of the index compared to its base index is shown as below:

Figure 4.17: Performance of S&P BSE Teck sector compared to BSE 500



Source: bseindia.com

1 Year Price Return – 38.28%

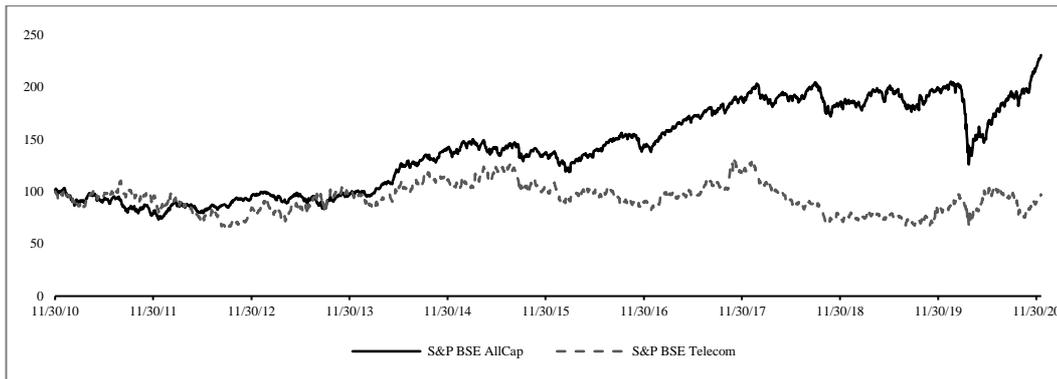
1 Year total Return – 40.92%

The top 10 constituents of the index way 94.8 percent. They are Infosys limited, TCS limited, Bharti Airtel limited, HCL technologies limited, Tech Mahindra limited, Wipro limited, Bhartiya infratel limited, Zee entertainment enterprises limited, L&T Infotech limited, Mphasis limited.

18. S&P BSE TELECOM

The index serves as a benchmark for 13 telecom-related firms that are represented in the S&P BSE Allcap index. The index was launched in 2015 but back tested and obtained values from 2005. The performance of the sector as compared to its base index is shown in the figure below:

Figure 4.18: Performance of S&P BSE telecom sector compared to BSE Allcap



Source: bseindia.com

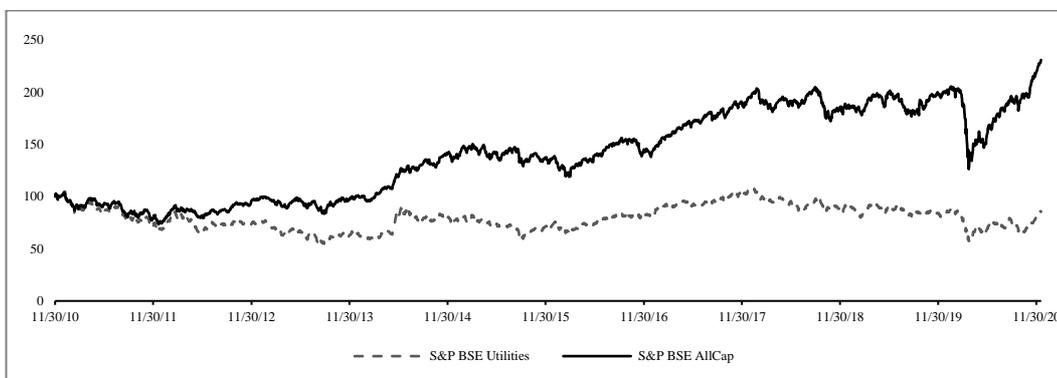
1 Year Price Return – 17.26%
1 Year total Return – 18.36%

The top 10 members of the index has a weight age of 99.5% and these are Bharti Airtel limited, Bharti infratel limited, Vodafone Idea limited, Tata communications limited, Sterlite technologies limited, HFCL limited, Reliance communications limited, Tejas networks limited, Vindhya telelinks limited, GTPL Hathway limited.

19. S & P BSE UTILITIES

It is benchmark index reflecting 27 companies included in BSE all cap which are classified members of utilities sector. It was launched in 2015 but data was back tested from 2005. The movement of the sector as compared to its base index is depicted in the graph below:

Figure 4.19: Performance of S&P BSE utilities sector compared to BSE Allcap



Source: bseindia.com

1 Year Price Return – 2.09%

1 Year total Return – 6.78%

Companies such as Power grid corporation of India limited, NTPC limited, GAIL India limited, Indraprastha Gas limited, Tata Power company limited, Adani transmission limited, Gujarat state Petronet limited, Mahanagar Gas limited, NHPC limited, Torrent Power limited are the top 10 constituents who contribute 88.7% of the total weightage of the index.

4.2 NATIONAL STOCK EXCHANGE

The Pherwani Committee, which was established in 1991, suggested the establishment of a standard stock exchange for the improvement and development of the country's market system. In November 1992, the government of India established the National Stock Exchange (NSE) as a public limited company controlled by the Industrial Development Bank of India (IDBI) and other all-India financial institutions in Mumbai. Nifty50, introduced in April 1996 is the price index of securities traded on the National stock exchange comprising of 50 scrips selected according to their market capitalization.

NSE introduced Nifty Junior Index (Mid Cap Index) in January 1997 to measure the performance of stocks in the range of mid-cap. At the same time, Dollar Denominated Nifty (Defty) was also introduced for foreign institutional investors and corporates to measure returns on their equity investments in India. Later on, in the following year, NSE collaborated with Credit Rating Information Services of India Limited (CRISIL) and the US-based Standard & Poor's Financial Information Services (S&P) to establish an alliance and launch an equity Index business in India. Therefore, the indices are now called CNX Nifty, CNX Mid Cap, and CNX Defty. Foreign investors NYSE Euronext and Goldman Sachs have a stake in NSE. The various indices of NSE and its constituents are shown in the below table:

Table 4.2: National stock exchange indices

Broad market index	Nifty 50, Nifty 50 Next, Nifty 100, Nifty 200, Nifty 500, Nifty 500 Multicap, Nifty Midcap 150, Nifty Nifty Midcap 50, Nifty Midcap 100, Nifty Smallcap 50, Nifty Smallcap 100, Nifty Smallcap 250, Nifty LargeMidcap 250, Nifty Midsmallcap 400
Sectoral index	Nifty Auto index, Nifty Bank index, Nifty financial services, Nifty FMCG Index, Nifty Healthcare index, Nifty IT index, Nifty media index, Nifty metal index, Nifty Oil & Gas index, Nifty Pharma index, Nifty Private bank index, Nifty Public bank index, Nifty realty index
Thematic index	Nifty ESG and enhanced ESG sector index, Nifty commodities index, Nifty CPSE index, Nifty corporate group, Nifty energy index, Nifty India consumption index, Nifty infrastructure index, Nifty services sector index, Nifty50 Shariah index, Nifty MNC index and Nifty PSE index
Strategy index	Low volatility index, midcap index, multi-factor index, momentum index, arbitrage index, equity savings index and growth stock index amongst the rest
Fixed income index	Government bonds, corporate sector and money market bonds
Hybrid index	Corporate debt and short term duration debt index
Customised index	Tracks the investor's portfolio of stocks including sector indices, individual business group indices, portfolios and industry indices

Source: nseindia.com

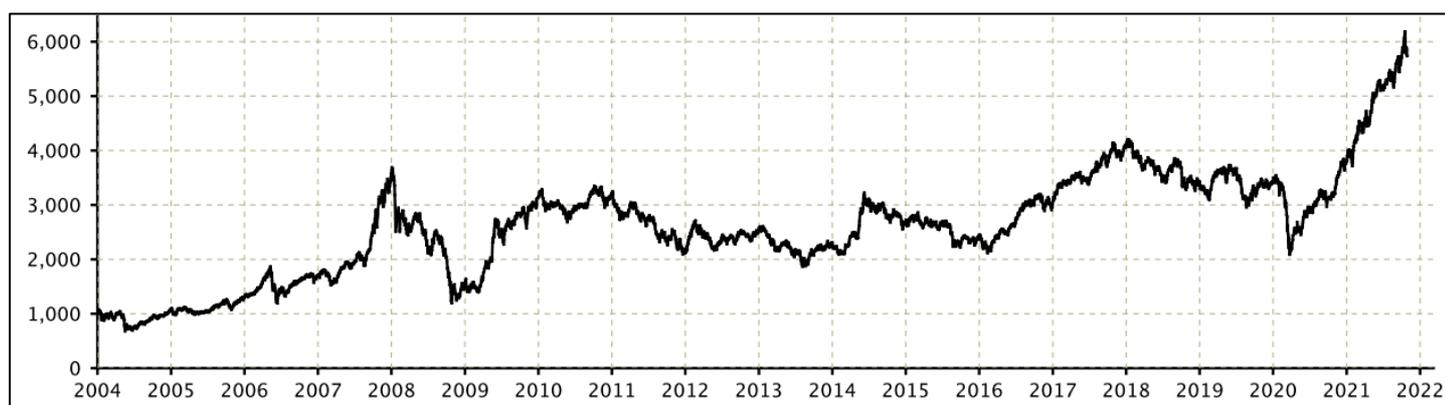
In this thesis, few sectors are selected from the sectoral indices while others from the thematic indices according to their importance. The detailed description of the selected sectoral indices for the studies are presented below:

1. NIFTY COMMODITIES INDEX

The index represents a diversified portfolio of companies representing sectors like Oil, petroleum products, coma, cement, power, chemical, sugar, metals and mining. It comprises of 30 companies listed on NSE launched in 2011 but base year dated back to 2004. The index is highly correlated with the Nifty50 and the one year price return was 5.07% while the total return was 6.89%.

The top weighted sector of the index are cement and cement products, metals, Oil and Gas, Power, fertilizers and pesticides and chemicals. Whereas the top weighted companies are UltraTech Cement Ltd, Reliance Industries Ltd, Tata steel Ltd, NTPC Ltd, Adani green energy Ltd, JSW steel Ltd, Grasim Industries Ltd, Hindalco Industries Ltd, Oil & Natural Gas Corporation Ltd, and Shree Cement Ltd. The movements of the index over the past 10 years is as follows:

Figure 4.20: Performance of India Commodities index



Source: nseindia.com

2. NIFTY INDIA CONSUMPTION INDEX

The index displays the conduct of sectors like consumer non-durables, healthcare, auto, telecom services, pharmaceuticals, hotels, media textiles and entertainment etc representing the domestic consumption sector. It was launched in 2011 but the base year dates back to 2006. The index includes 30 companies listed on the NSE and is highly positively correlated with the Nifty50 index. It's one year price index is 19.29% and total returns is 20.51%.

The major sectors represented in the index are consumer goods, automobile, telecom, healthcare services, media & entertainment, services, textiles and pharma. Whereas, the top 10 companies of the sector according to their weightage in the index are ITC Ltd, Hindustan Uni liver Ltd, Asian Paints Ltd, Bharti Airtel Ltd, Maruti Suzuki India Ltd, Mahindra & Mahindra Ltd, Nestle India Ltd, Titan Company Ltd, Bajaj auto Ltd, and Britannia Industries Ltd. The performance of the sector is as follows:

Figure 4.21: Performance of India Consumption index



Source: nseindia.com

3. NIFTY FINANCIAL SERVICES INDEX

The financial services index indicates the behaviour as well as performance of the financial market consisting of banks and financial institutions, housing finance insurance companies and other financial services companies. The index was launched in 2004 including 20 companies and shares a high positive correlation with the market. It's one year price return is 4.47% and total return is 4.74%.

Top 10 company names according to their weightage in the index are HDFC bank ltd, Housing Development Finance Corporation, ICICI bank ltd, Kotak Mahindra bank ltd, Axis bank ltd. Bajaj Finance ltd, State bank of India, Bajaj Finserv ltd, HDFC Life Insurance company ltd, and SBI Life Insurance company ltd. The movement of the index over the period of 8 years is depicted below:

Figure 4.22: Performance of the financial services index



Source: nseindia.com

4. NIFTY INFRASTRUCTURE INDEX

The importance of infrastructure development is clearly been recognised for unleashing high and sustained growth. The government as well as private sectors are working towards huge investment in these infrastructure. Launched in 2007, the index comprises of 30 companies belonging to telecom, power, port, air, roads, railways, shipping and other utility services listed on NSE. It is highly positively correlated with the market index and its one year price return is 3.05 % as well as total price return is 4.97%. The sector represents oil and gas, cements and cement products, construction, telecom power, auto services, healthcare services, industrial manufacturing.

The top 10 companies according to their weightage in the sector are reliance Industries ltd, Larsen & Turbo ltd, Bharti Airtel ltd, UltraTech Cement ltd, Power Grid Corporation of India ltd, NTPC ltd, Grasim Industries ltd, Adani Ports and Special Economic Zone ltd, Eicher Motors ltd, and Oil & Natural Gas Corporation ltd. The trajectory of infrastructure index in the past decade is as follows:

Figure 4.23: Performance of the Infrastructure index



Source: nseindia.com

5. NIFTY INDIA MANUFACTURING INDEX

The India Manufacturing Index aims to track the performance of companies selected from the Nifty 100, Nifty Midcap 150, and Nifty Smallcap 50 index universes based on 6 month average free-float market capitalization within the eligible basic industries that broadly represent the manufacturing sector. The weight of a stock in the India Manufacturing index is determined by its free-float market capitalization, with a maximum weight of 5% for each firm. Certain manufacturing sectors are also given a minimum weight of 20% in the index. It's one year price return is 61.03% and total return is 62.87%.

This index represents sectors such as industrial manufacturing, pharma, automobiles, metals, oil & gas, consumer goods, chemicals, textiles, fertilizers and pesticides. The top 10 companies according to their highest weightage in the index are – Tata steel ltd, Sun Pharmaceutical industries ltd, Reliance industries ltd, JSW steel ltd, Maruti Suzuki India ltd, Hindalco industries ltd, Divi’s laboratories ltd, Dr Reddy’s laboratories ltd, Mahindra & Mahindra ltd, and Vedanta Ltd.

Figure 4.24: Performance of the India manufacturing index



Source: nseindia.com

6. NIFTY MEDIA INDEX

Nifty media index demonstrates the performance of media and entertainment sector including printing and publishing. It was launched in 2011 , while the base year was 2005. The index includes 10 companies with one year price return of 18.08% and total return of 17.2%. The index is moderately correlated with Nifty50. The companies included in the index are Zee Entertainment Enterprises ltd, Sun TV Network ltd, PVR ltd, TV18 Broadcast ltd, Inox leisure ltd, Dish TV India ltd, TV Today Network ltd, Jagan Prakashan ltd, D.B.Corp ltd, Hathway Cables & Datacom ltd. The performance of the stocks included in the sector is depicted below:

Figure 4.25: Performance of the media index

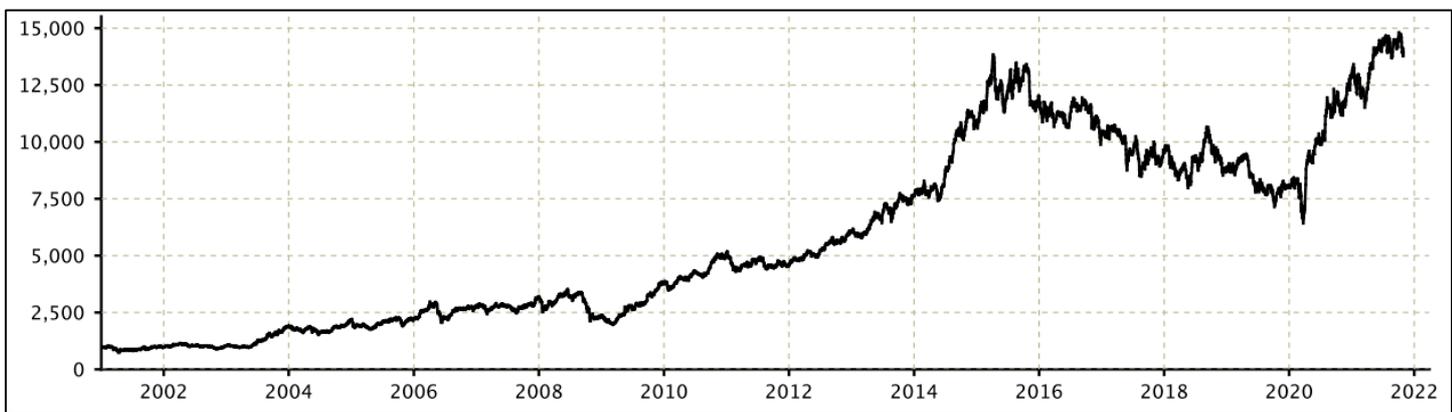


Source: nseindia.com

7. NIFTY PHARMACEUTICAL INDEX

Since the pharmaceutical industry is one of the most important in the economy, this index was designed to track the performance of the ten companies that make up the index. It was launched in 2005 while the base year was 2001. The index's one year price return is 60.64% and total return is 61.76%. It is also moderately (positively) correlated to the market index. The companies included in the index are Sun Pharmaceutical Industries Ltd, Dr. Reddy's Laboratories Ltd, Divi's Laboratories Ltd, Cipla Ltd, Aurobindo Pharma Ltd, Lupin Ltd, Biocon Ltd, Torrent Pharmaceuticals Ltd, Cadila Healthcare Ltd, and Alkem Laboratories Ltd. The movement of the index in the last 8 years is shown below:

Figure 4.26: Performance of the pharmaceutical index



Source: nseindia.com

8. NIFTY PRIVATE BANK INDEX

The index manifests the performance of 10 private banks which are listed on the NSE. The index was launched in 2016 however the base year was 2005. In addition, the index is highly correlated with the market index. One year price return of the index was -2.90% while total return was around -2.87%. The private banks included in the index are HDFC bank Ltd, ICICI bank Ltd, Kotak Mahindra bank Ltd, Axis bank Ltd, IndusInd bank Ltd, Bandhan bank Ltd, Federal bank Ltd, City Union bank Ltd, RBL bank Ltd, and IDFC First bank Ltd. The performance of the private banks over the last 10 years is shown below:

Figure 4.27: Performance of the private bank index



Source: nseindia.com

9. NIFTY PUBLIC SECTOR UNIT BANK INDEX

Nifty public sector unit (PSU) Bank index launched in 2017 incorporates the performances of 12 PSU banks that are traded on the NSE. The index is highly (positively) correlated with the market index. It's one year price return is -30.57% and total return is -30.5%. The top 10 banks with highest weightage are State bank of India, Bank of Baroda, Canara bank. Punjab National bank. Union bank of India, Bank of India, Indian bank, UCO bank. Indian Overseas bank, and Central bank of India. The performance of the private banks in the last ten years is shown below:

Figure 4.28: Performance of the public sector unit bank index



Source: nseindia.com

10. NIFTY SERVICE SECTOR INDEX

This index is very important considering the structural growth of the economy that we have seen in the past few decades. It is one of the key drivers of the Indian economy. Therefore, the construction of a separate

service sector index was mandatory to gauge the performance of sector in the economy. The base year of the index was 1999, it comprises of 30 companies from Computer software, IT education & training, banks, telecommunication services, financial institutions, power, media, courier, shipping etc. The index is highly positively correlated to the market index. It's one year price return is 6.62 % and total return is 7.62 %.

The sector represents financial services, IT, telecom, power, services, oil and gas, media and entertainment. While, the top 10 companies as per the highest weightage in the index are HDFC bank, Infosys ltd, Housing Development Finance Corporation. ICICI bank ltd, Tata Consultancy Services ltd, Kotak Mahindra bank ltd, Axis bank ltd, Bajaj Finance ltd, Bharti Airtel ltd, and State Bank of India.

Figure 4.29: Performance of the service sector



Source:nseindia.com

Conclusion –

Overall this chapter provides a basic overview on the various sectors included in the study, their constituents and performance in contrast to its base index. Further, it also includes the one year price return as well as total return of the sector. Top ten companies based on the weightage of their constituencies are also mentioned.