

**BSE Ltd.****CMP: 607****BSE LIBERAL BUYBACK AND 1,500% DIVIDEND BONANZA...****STRONG BUY****A MUST FOR EVERY PORTFOLIO
AND EVERY INVESTOR**

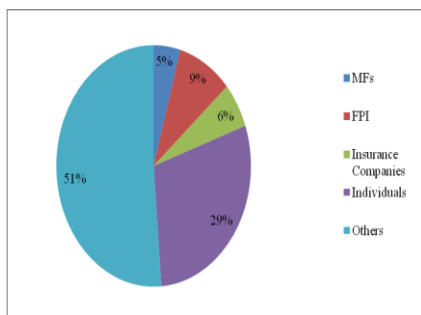
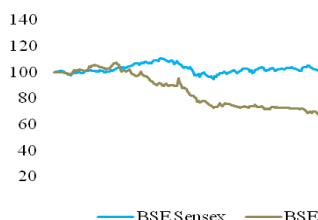
Nifty	11,278
Sensex	37,462
Nifty PE	28.1
Sensex PE	28.4

Stock Data

Sector	Stock Exchange
BSE Code	NA
NSE Code	BSE
FV	2
Market Cap (Rs. Cr)	3,144
Market Cap (US\$ mn)	460
Equity Share Cap.	10.36

Stock Performance (%)**52-week high/low Rs. 878 / 535**

	1M	3M	6M
Absolute (%)	-1.5%	7.4%	-2.1%

Shareholding Pattern (%)**Sensex and stock movement****10th MAY, 2019**

➤ We have been recommending BSE since 2011 - even before the Company was listed on NSE in February 2017. Our investors have made multibagger returns on their investment over 7 years. For our Full IPO Report please visit :

http://trutechwebs.com/cs/nvs/module/upload/nvs/company/reports/report_63_1484636151.pdf

BUMPER TAX FREE DIVIDEND

BSE proposes to reward its shareholders with a bumper dividend of 1,500% (Rs. 30 per share) for FY2019 (Rs. 36 per Share for the Previous Year – FY2018) offering an excellent TAX FREE DIVIDEND YIELD OF 4.9% AND A WHOPPING DIVIDEND PAYOUT OF 97% *...

BSE LIBERAL BUYBACK

BSE proposes to Buyback 67.6 Lacs Equity Shares at the Buyback Offer Price of Rs. 680 per Share, aggregating to Rs, 460 Crs. through Tender Offer against the previous Buyback Size of Rs. 166 Crs. THE PROPOSED BUYBACK IS 3 TIMES LARGER COMPARED TO THE PREVIOUS BUYBACK.

BSE TRANSFORMING INTO A HIGH TECH COMPANY

“BSE continues to grow from traditional stock exchange platform to an agile, high-tech e-commerce platform for distribution of financial products with ability to integrate many more services as well as products. The geographical reach and business growth of StAR Mutual Fund platform reinforces success of our strategy to focus on potential of distribution business and new initiatives to enhance value for stakeholders. Currency derivatives, Commodity derivatives, India International Exchange, Bond Distribution, SME, OFS and IPO have emerged as important market where BSE has acquired a good market share on the back of better technology, excellent services and lower pricing, we have to consolidate our position to acquire good markets in near future.

- **Shri Ashishkumar Chauhan, MD and CEO**

➤ We believe that the process of technology revolution at BSE has born fruit and BSE has transformed into a High Tech Company. BSE has implemented **BIG DATA** capabilities for real time surveillance and fraud detection, **MACHINE LEARNING** and **LANGUAGE PARSING TECHNOLOGY** for rumour verification. BSE has embodied **ARTIFICIAL INTELLIGENCE** as a vital and integral part of the business.

BSE has invested in setting up **HYBRID CLOUD** along with implementation of **NEXT GENERATION CYBER SECURITY OPERATIONS CENTRES** which provides niche and advanced cyber security solutions in a fully integrated manner. **This technological superiority provides BSE with great scalability, convenience, speed, transparency and the automation to launch a fully tested product in a short span of time.**

We believe, BSE with its fully equipped arsenal of **‘Best in Breed Technologies’** should enjoy the valuations of a high end Technology Company. Whenever markets would accord valuations befitting a Technology Company to BSE, it would be a perfect validation of BSE’s technological prowess.

➤ **BSE posted a Consolidated Topline of Rs. 687 Crs. (Rs. 699 Crs. in FY2018), EBITDA of Rs. 253 Crs. (Rs. 299 Crs.) and PAT of Rs. 194 Crs. (Rs. 215 Crs.).**

BSE having a tiny share capital of Rs. 10.36 Crs. (Rs. 9 Crs. Post the Proposed Buyback), Debt Free status, Net Worth of over Rs. 2,900 Crs., Cash and Financial Assets of over Rs. 2,700 Crs. is currently trading at a modest P/E multiple of little less than 16 times its CMP of 607 per share and P/BV multiple of mere 1.07 times (BVPS Rs. 567) making it the cheapest Investment Opportunity amongst the major Exchanges in India – Indian Energy Exchange Ltd. (FY2019 P/E 29 times), Multi Commodity Exchange of India Ltd. (FY2019 P/E 29 times) and National Stock Exchange of India Ltd. - BSE HAS A POTENTIAL TO PLAY ‘CATCH-UP’ IN TERMS OF VALUATIONS FROM THE PRESENT LEVEL.

The highest P/E multiple is commanded by MCX at 29 times. Only if BSE was to command such a valuation any time in future, the price of BSE Shares should be Rs. 1,115 per Equity Share.

➤ BSE is an unique Exchange with a gamut of business streams ranging from **Equity Cash Segment, Equity Derivatives, Whole Sale Debt Market, Currency Derivatives, BSE StAR MF, SME Exchanges, Interest Rate futures, International Exchange at IFSC, GIFT city – Gandhinagar and Commodity Derivates** being the latest entrant to the BSE’s stable.

BSE has recently entered into a JV to set up Power Exchange with PTC and ICICI Bank and has a JV with EBIX to set up a Insurance distribution – BSE has transformed from a Conventional Stock Exchange to the 1st Universal Exchange.

(*Dividend Payout is calculated based on the Standalone Profit)

I. BSE - THE COMPANY PROFILE AND BUSINESS VERTICALS

➤ **BSE is the Oldest Stock Exchange in Asia with a glorious history of over 140 years as well as the Fastest Stock Exchange in the world. BSE is currently world's Number One Exchange in terms of the number of listed companies (over 5,121 Companies as on 31st March, 2019). BSE is also the Largest Globally with 48 Million Currency Options Traded, Third Largest globally in numbers of Currency Futures traded with over 3.1 Crs. contracts and Ninth Largest in terms of the cumulative Market Capitalization of listed companies of over Rs. 150 Trillion as on date.**

➤ **BSE has established the country's First International Exchange at the International Financial Services Centre (IFSC), GIFT city - Gandhinagar. *India International Exchange is a wholly owned subsidiary of BSE* and it commenced its operations in January, 2017. Currently BSE has 75% of the market share in Derivates trading and 80% Market Share in Debt listing. *INX has "Global Access" connectivity with CME Group (An American Financial Market Company having a Market Capitalization of over USD 63 Billion) to enable Hedgers, Traders and Investors access International Exchanges from GIFT IFSC.***

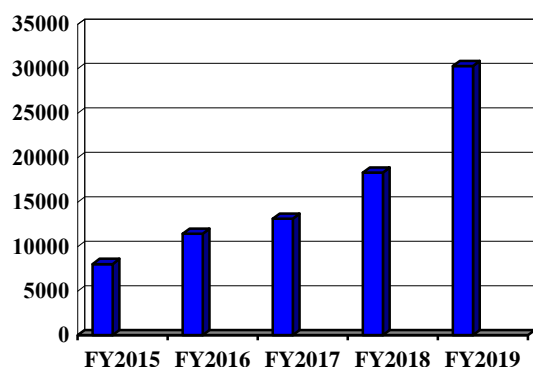
The India International Exchange is a pet project of our Prime Minister Shri Narendra Modi and it aims to emerge as leading international exchange and compete with other international financial centres such as Hong Kong, Singapore Dubai, London and New York.

➤ **BSE and EBIX have set up a joint venture - BSE EBIX Insurance Broking Pvt. Ltd. to develop a pioneering insurance distribution network in India with the goal of revolutionizing end-to-end sales and processing of Insurance in the India.**

BSE along with Power Trading Corporation and ICICI Bank have filed a petition with the power market regulator - Central Electricity Regulatory Commission, to set up a New Power Exchange in India. This proposed institutional exchange would leverage on the experience and expertise of its stakeholders in their fields, funding of power projects and associated infrastructure, setting-up and running various exchanges and platforms in India and offer the market participants a credible power trading platform.

BSE MARCHING AHEAD ON ALL BUSINESS FRONTS

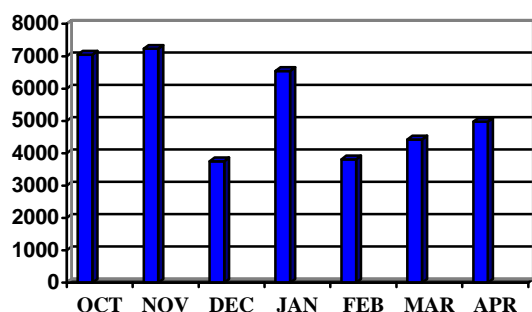
Exhibit 1: Average Daily Turnover
(Rs. in Crs.)
(Currency Futures + Options)



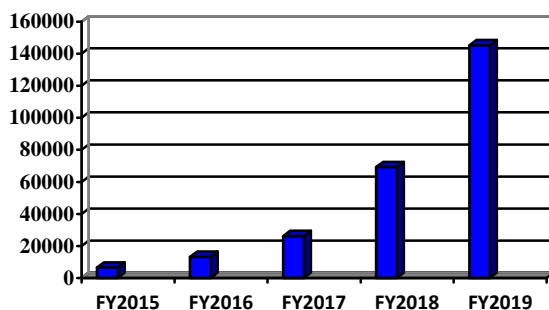
Equity Markets: BSE's average daily turnover in Equity markets in FY2019 stood at Rs. 3,127 Crs and the **Transaction Charges Income** for BSE grew at a **CAGR of 13%** from Rs. 48.5 Crs. in FY2015 to **Rs. 81 Crs. in FY2019.**

Currency Derivatives: The **Average Daily Turnover** grew at a **CAGR of 39%** from **Rs. 8,019 Crs. in FY2015 to Rs. 30,271 Crs. in FY2019** and the **Average Daily Number of Contracts Traded** grew at a **CAGR of 34%** from **1.3 Million to 4.3 Million** during the same period. BSE has **46%** of the market share in currency derivatives segment in India.

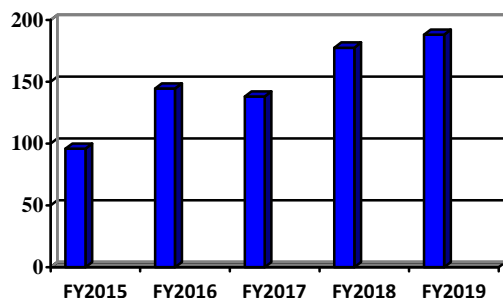
**Exhibit 2: Commodity Derivatives
Turnover** (Rs. in Crs.)



**Exhibit 3: Average Daily No. of Orders
(BSE StAR MF)**



**Exhibit 4: Listing Fees
(Rs. in Crs.)**



Commodity Derivatives: BSE became the **First Universal Exchange in India** to successfully commence its operations in **Commodity Derivates in October 2018**. It has recorded an impressive turnover of over **Rs. 32,800 Crs.** in a span of mere 6 months and has introduced Commodity Future Contracts in **Gold, Silver, Copper, Oman Crude Oil, Guar Gum, Guar Seed and Cotton**. BSE has tied up with renowned entities such as **London Metal Exchange, Dubai Mercantile Exchange, Bombay Metal Exchange, Cotton Association of India, Agriculture Price Commission, Federation of Indian Spices Stakeholders, Gems Jewellery Council, Bullion Federation** and so on, to facilitate the trading in this vertical.

BSE already has a highest Market Share of 42.6% (21st March, 2019) in Cotton Derivatives.

BSE StAR MF: StAR MF is a **Flagship Mutual Fund Distribution Platform** from BSE having a registered investors base of over **22.2 Millions** and a mammoth **Market Share of 79%**. Total number of Mutual Fund schemes available on StAR MF as on 31st March, 2019 stands at **9,389** schemes across **39 MF AMC**. The **Total number of Mutual Fund Distributor increased by 195% to 23,760 in FY2019** as compared to around 8,000 in FY2018 and the Total number of Average Daily orders processed grew at a **CAGR of 117%** from **6,534 orders in FY2015** to **1,45,214 in FY2019**. Further, the total value of orders processed in the Mutual Fund Segment increased by **36%** to **Rs. 1,60,601 Crs. in FY2019** from **Rs 1,17,824 Crs. in FY2018**. **Strong growth in revenue is likely to continue over next few years aided by growth in distribution network, increase in household savings and improved economic and demographical factors.**

BSE – Services to Corporates: BSE saw a **CAGR of 18%** in **Listing Fees** from **Rs. 96 Crs in FY2015** to **Rs. 188 Crs. in FY2019** and **Book Building and Other Services Fees** grew at a **CAGR of 27%** from **Rs. 9.6 Crs. to Rs. 25 Crs.** during the same period. With effect from 1st April, 2019 BSE has increased its annual listing fees for exclusively listed Companies by **Rs. 50,000** if the listed **Capital is up to Rs. 100 Crs.** and increased by **Rs. 25,000** if the listed **Capital is between Rs. 100 Crs. to Rs. 200Crs.**

Exhibit 5: BSE INX Market Share

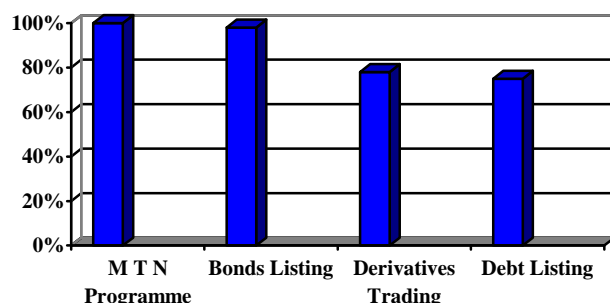
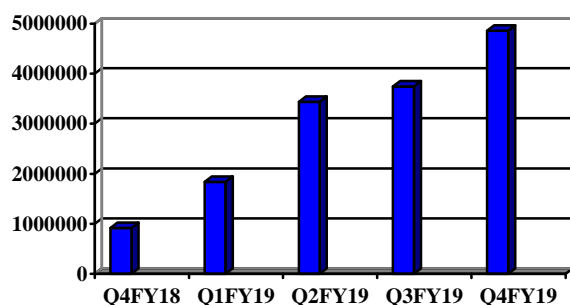


Exhibit 6: No. of Contracts Traded (BSE's INX)



BSE SME: There are over 290 Companies currently listed on the BSE SME platform against approximately 185 Companies listed on NSE Emerge platform. A total of 60 Companies migrated to main board from SME platform in FY2019 against a total of 46 Companies in FY2018.

India International Exchange at GIFT City: Various asset classes and contracts such as **Index Derivates**, **Indian Stock Futures**, **Global Stock Futures**, **Commodity Futures** and **Currency Derivatives** are traded at India International Exchange.

The Average Daily Turnover (ADT) witnessed a phenomenal growth of 615% to USD 766 Million in FY2019 against USD 107 Million in FY2018. The turnover comprises of significant contribution by **Equity Derivatives Segment** as well as **Commodity Derivatives Segment** - The **Equity Derivatives Segment** contributed to 73% of ADT and the **Commodities Derivatives Segment** contributed to 27% of ADT in FY2019. BSE's Market Share in this segment in FY2019 is 71%.

In April 2019 INX has signed a Memorandum of Understanding with **Moscow Exchange (MOEX)** with an aim of connecting the investors community and companies in both countries and allowing a capital formation platform on a larger scale - **BSE and India INX are the First Indian Exchanges to enter into the MoU with Moscow Exchange.**

BSE's India INX has launched **"Global Access"** with connectivity to **CME Group**. Participants at **GIFT IFSC - Global Access** will be provided a unified single - window interface for trading on **CME Group of Exchanges**. **Global Access** offers a competitive and sustainable value proposition to access global markets in a cost efficient way.

"BSE continues to grow from traditional stock exchange platform to an agile, high-tech e-commerce platform for distribution of financial products with ability to integrate many more services as well as products. The geographical reach and business growth of StAR Mutual Fund platform reinforces success of our strategy to focus on potential of distribution business and new initiatives to enhance value for stakeholders. Currency derivatives, Commodity derivatives, India International Exchange, Bond Distribution, SME, OFS and IPO have emerged as important market where BSE has acquired a good market share on the back of better technology, excellent services and lower pricing, we have to consolidate our position to acquire good markets in near future."

-Shri Ashishkumar Chauhan, MD and CEO

II. BSE – TOP TEN SHAREHOLDERS AS ON 31st MARCH, 2019

<i>Sr. No.</i>	<i>Key Shareholders</i>	<i>Total No. of Shares</i>	<i>Shareholding (%)</i>
1	Deutsche Boerse AG	25,49,443	4.92%
2	LIC	25,25,500	4.88%
3	Siddharth Balachandran	18,63,703	3.60%
4	IDFC Group	14,78,800	2.86%
5	State Bank of India	12,54,535	2.42%
6	Jupiter India Fund	10,66,853	2.06%
7	Acacia Banyan Partners Limited	10,07,772	1.95%
8	Caldwell India Holding Inc.	7,73,319	1.49%
9	GKFF Ventures	7,34,937	1.42%
10	ICICI Prudential Mutual Fund	6,56,573	1.27%

BSE Equity Share Capital is well placed amongst little over 1,74,000 shareholders as on 31st March, 2019.

III. BSE – ROBUST DIVIDEND HISTORY AT A GLANCE

➤ BSE allotted 10,000 Equity Shares at Re. 1 each at par to all the members in 2006-07 – at the time of demutualization and Corporatization. Subsequently BSE declared a liberal bonus of 12 Equity shares for every 1 held in the year 2009. Thus all members had 1,30,000 Equity Shares in their portfolio with a original investment of mere Rs. 10,000.

➤ Since 2007 BSE member shareholders received a whopping dividend income of Rs. 1,14,15,000³ alone in last 13 years since Corporatization of the Exchange.

Year	Face Value	No. of Shares	Dividend (Rs.)	Dividend (%)	Amount (Rs.)
2007	1	10,000			
2008	1	10,000	30	3,000%	3,00,000
2009	1	1,30,000 ¹	4	400%	5,20,000
2010	1	1,30,000	4	400%	5,20,000
2011	1	1,30,000	4	400%	5,20,000
2012	1	1,30,000	6	600%	7,80,000
2013	1	1,30,000	4	400%	5,20,000
2014	1	1,30,000	4	400%	5,20,000
2015	1	1,30,000	5	500%	6,50,000
2016	2	65,000 ²	15	750%	9,75,000
2017	2	65,000	28	1,400%	18,20,000
2018	2	65,000	36	1,800%	23,40,000
2019 ³	2	65,000	30	1,500%	19,50,000
		Total	170		1,14,15,000

1: Bonus was issued by BSE in the ratio of 12 Equity Shares for every 1 Equity Share held in March 2009

2: The Face Value was consolidated from Re. 1 per Equity Shares into Rs. 2 per Equity Shares.

3: BSE has proposed a final dividend of Rs. 25 per Share in FY2019 (Record Date: 28th June, 2019).

IV. BSE - CONSOLIDATED FINANCIAL PERFORMANCE AT A GLANCE

Particulars (Rs. in Crs.)	FY2015	FY2016	FY2017	FY2018	FY2019
Total Income	625	658	618	699	687
EBITDA	305	300	260	298	254
PAT (Excl. CDSL Gain)	130	123	179	215	194
PAT (Incl. CDSL Gain)	NA	NA	221	711	199
EPS (Excl. CDSL Gain)	12.1	23.0	35.2	39.7	38.5
Face Value	1	2 ¹	2 ¹	2 ¹	2 ¹
Equity Share Capital	10.7	10.7	10.8	10.7	10.4
Networth	2,461	2,449	2,662	3,081	2,936
BVPS	230	458	495	579	567
<u>RATIOS</u>					
EBITDA (%)	49%	46%	42%	43%	37%
PAT (%) (Excl. CDSL Gain)	21%	19%	29%	31%	28%
Average Daily Turnover (Equity)	3,518	2,996	4,025	4,402	3,127
Transaction Charges Income (Equity)	49	53	117	144	81
Average Daily Turnover (Currency Derivatives)	8,019	11,421	13,106	18,332	30,271
Transaction Charges Income (Currency Derivatives)	0.2	1.6	4.5	8.2	7.5
Total Number of Daily orders (Mutual Funds)	6,534	13,280	26,143	69,229	1,45,214
Listing Fees	96	145	138	178	188
Securities Listed (Main Board)	5,624	5,911	5,834	5,629	5,121
No. of Companies Listed (SME)	89	131	178	235	295

1: The Face Value was consolidated from Re. 1 per Equity Shares into Rs. 2 per Equity Shares.

Critical Analysis

- **The PAT** (excl. CDSL gain) grew from Rs. 130 Crs. in FY2015 to **Rs. 194 Crs. in FY2019**. BSE is lagging behind in market share in Equity Cash Segment, though it is emerging as **market leader** in many new segments such as **StAR MF** (Market Share 79%), **Currency Derivatives** (Market Share 46%), **BSE SME**, **India International Exchange** (Market Share of over 75%), **we strongly believe that BSE will bounce back to gain its due share in the Equity Cash Segment in times to come with innovative measures.**
- **The Total Turnover at India International Exchange has increased substantially over last 5 quarters from USD 15,132 Million in Q4FY2018 to over 62,950 Million in Q4FY2019. INX recorded the highest Turnover in a day of around USD 2.2 Billion (over Rs. 15,000 Crs. on 26th March, 2019)**
- **StAR MF platform processed close to 3.6 Crs. orders in FY2019 against 1.7 Crs., thereby registering a growth of whopping 111%. BSE is currently tied up with 39 AMC and has over 9,375 schemes available as on 31st March, 2019.**
- **The Company is a Debt Free Company with Net Worth of Rs. 2,936 Crs., and Cash and Financial Assets of over Rs. 2,700 Crs.**
- **BSE has historically rewarded its shareholders with a very liberal dividends year after year. BSE proposes to reward its shareholders with a bumper dividend of 1,500% (Rs. 30 per share) for FY2019 (Rs. 36 per Share for the Previous Year – FY2018) offering an excellent tax free dividend yield of 4.9% at the CMP of Rs. 607 per Share.**
- **BSE also proposes to reward its Shareholders through Buyback of 67.6 Lacs Equity Shares at the Buyback Offer Price of Rs. 680 per Share, aggregating to Rs. 460 Crs. through Tender Offer System against the previous Buyback Size of Rs. 166 Crs. The proposed Buyback is 3 times larger compared to the Previous Buyback**

V. BSE – PEER COMPARISON AT A GLANCE

Particulars (Rs. in Crs.)	BSE (FY2019)	NSE (FY2019E)	MCX (FY2019)	IEX (FY2019)
Total Income	687	3,027	399	294
EBITDA	254	2,142	237	243
PAT	194	1,333	146	165
EPS	38.5	26.9	28.8	5.5
Face Value	2	1	10	1
Equity Share Capital	10.4	49.5	51	30.2
Networth	2,936	7,254	1,251	370
BVPS	567	147	245	12.2
Ratios				
EBITDA (%)	37%	71%	59%	83%
PAT (%)	28%	44%	37%	56%
Valuation Ratios				
CMP	607	925 ¹	846	157
P/E	15.8x	34x	29x	29x
P/BV	1.1x	6.2x	3.5x	12.9x
Market Capitalization / Sales	4.6x	15.1x	10.8x	16.1x

1: As NSE is unlisted we have assumed a price of Rs. 925 per share for calculating all the valuation ratios.

- At the CMP of Rs. 607 the Stock is trading at a **P/E multiple of 15.8 times** its FY2019 EPS of Rs. 38.5. and **P/BV multiple of mere 1.1 times**. We believe that BSE is attractively valued and is currently available at a huge discount to other listed Exchanges such as MCX (P/E : 29x and P/BV : 3.5x), NSE (P/E : 34x and P/BV : 6.2x) and IEX (P/E : 29x and P/BV : 16.1x).
- It is interesting to note that **BSE offers its shareholders highest dividend payout at whopping 1,500% as against 1,475% by NSE (FY2018) and mere 200% by MCX (FY2019)**. Even when we compare dividend yield amongst all the peers, ***BSE offers an excellent tax free dividend yield of 4.9%*** as against **1.6%** by NSE and **2.3%** by MCX.
- **BSE has the smallest Share Capital of Rs. 10.36 Crs.** (Post the proposed Buyback Rs. 9 Crs.) **with huge Net Worth of Rs. 2,936 Crs.** - next only to NSE.
- **Market Capitalization / Sales multiple is 4.6 times** and compared to its peers which is at 15.1 times in case of NSE, 10.8 times of MCX and 16.1 times of IEX.

VI. VALUATION & RECOMMENDATION

- **BSE had touched an all time high of Rs. 1,000 per share on 6th November, 2017** (little over Rs. 5,350 Crs. in Market Capitalization) subsequently the stock saw corrections of around 60% and **touched a low of 535 on 7th February, 2019** (Rs. 2,766 Crs. Market Capitalization) thereafter the stock recovered to its current levels. **BSE at CMP of Rs. 607 is trading at a P/E Multiple of 15.8 times its FY2018 EPS of Rs. 38.5. - A MUST ACCUMULATE FOR ALL INVESTORS.**

It would be interesting to note that **MCX and IEX** two of its listed peers are trading at a P/E multiple of 29 times, ***INDICATING BSE HAS A STRONG POTENTIAL FOR P/E EXPANSION AND CAPITAL APPRECIATION FROM THE PRESENT LEVEL.***

- *The highest P/E multiple is commanded by MCX at 29 times and the highest P/BV multiple is commanded by IEX at 16.1 times. Only if BSE was to command such a valuation as its peers any time in future, the price of BSE Shares at 29 P/E multiple should be over Rs. 1,115 per share and at a 16.1 P/BV multiple BSE should have a price of over Rs. 9,100 per share.*
- **BSE** has historically been a hefty dividend paying company with an exceptional track record. With a **mammoth Proposed Dividend Payout of 1,500%** and a **Proposed Buyback to a tune of whopping 460 Crs. for FY2019** it again proves that **BSE is A MUST INVESTMENT FOR ALL KINDS OF INVESTORS WITH ALL TIME HORIZONS.**
- **With tremendous growth in the embedded value, technological superiority, huge net cash reserve, high dividend yield, introduction of more asset class, GDP growing at a rate of approximately 7.5%, commencement of trading in Commodity Derivatives from October 2018, StAR MF growing at exceptional pace, introduction of more global commodities for trading would benefit BSE in years to come.**
- **A peer Comparison of the financial and stock market performance with its peers like MCX, IEX and NSE, we believe BSE has huge potential to reward its investors with strong performance and bumper dividends in years to come.**

We believe the Equity shares of BSE offers an excellent investment opportunity for all kinds of investors from Retail to HNI and Institutional to FPI and one can invest for all time horizons from Short to Long term to reap the benefits of rich dividends in years to come.

Disclosures and Disclaimers:

This note has been prepared and issued by NVS Wealth Managers Pvt. Ltd. "SEBI registered Investment Advisers".

NVS Wealth Managers (NVS) is a subsidiary of NVS Brokerage Pvt. Ltd. (Stock Broking member of Bombay Stock Exchange, registered with SEBI). This report is prepared and distributed by NVS for information purposes only and neither the information contained herein nor any opinion expressed should be construed or deemed to be construed as solicitation or as offering advice for the purposes of the purchase or sale of any security, investment or derivatives. The information and opinions contained in the note were considered by NVS to be valid when published. The note also contains information provided to NVS by third parties. The source of such information will usually be disclosed in the note. Whilst NVS has taken all reasonable steps to ensure that this information is correct, NVS does not offer any warranty as to the accuracy or completeness of such information. Any person placing reliance on the note to undertake trading does so entirely at his or her own risk and NVS does not accept any liability as a result. Securities markets may be subject to rapid and unexpected price movements and past performance is not necessarily an indication to future performance.

This note does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this note. Investors must undertake independent analysis with their own legal, tax and financial advisors and reach their own conclusion regarding the appropriateness of investing in any securities or investment strategies discussed or recommended in this note and should understand that statements regarding future prospects may not be realized. In no circumstances it is to be used or considered as an offer to sell or a solicitation of any offer to buy or sell or a recommendation to buy or sell the Securities mentioned in it. The information contained in the note may have been taken from trade and statistical services and other sources, which we believe are reliable. NVS or any of its group/associate/affiliate companies do not guarantee that such information is accurate or complete and it should not be relied upon as such.

Any opinions expressed reflect judgments at this date and are subject to change without notice.

Important: These disclosures and disclaimers must be read in conjunction with the note of which it forms part. Receipt and use of the note is subject to all aspects of these disclosures and disclaimers. Additional information about the issuers and securities discussed in this note is available on request.

Certifications: The executive(s) who prepared this note hereby certifies that the views expressed in this note accurately reflect the executive's personal views about all of the subject issuers and/or securities, that the executive/entity/associate have no known material conflict of interest, might have financial interest and no part of the executive's compensation was, is or will be, directly or indirectly, related to the specific views or recommendations contained in this note. The executive has not served as an officer, director or employee of the subject company.

Independence: NVS has not had an investment banking relationship with, and has not received any compensation for investment banking services from, the subject issuers in the past twelve (12) months, and NVS does not anticipate receiving or intend to seek compensation for investment banking services from the subject issuers in the next three (3) months. The executive/ entity or its associates have not received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months. The executive/ entity has not managed or co-managed public offering of securities for the subject company in the past twelve months.

The executive or its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the note. The subject company is not and was not a client during twelve months preceding the date of distribution of the note.

The executive or NVS is not a market maker in the securities mentioned in this note, although it or its affiliates may hold either long or short positions in such securities. NVS or the executives do not hold more than 1% of the shares of the company (ies) covered in this note at the end of the month immediately preceding the date of publication of the note. However NVS, associate companies and their clients might be holding this stock in their personal capacities.

NVS Wealth Managers

Suitability and Risks: This note is for informational purposes only and is not tailored to the specific investment objectives, financial situation or particular requirements of any individual recipient hereof. Certain securities may give rise to substantial risks and may not be suitable for certain investors. Each investor must make its own determination as to the appropriateness of any securities referred to in this note based upon the legal, tax and accounting considerations applicable to such investor and its own investment objectives or strategy, its financial situation and its investing experience.

The value of any security may be positively or adversely affected by changes in foreign exchange or interest rates, as well as by other financial, economic or political factors. Past performance is not necessarily indicative of future performance or results.

Sources, Completeness and Accuracy: The material herein is based upon information obtained from sources that NVS and the executive believe to be reliable, but neither NVS nor the executive represents or guarantees that the information contained herein is accurate or complete and it should not be relied upon as such. Information published herein are as on the date appearing on this material and are subject to change without notice. Furthermore, NVS is under no obligation to update or keep the information current.

Copyright: The copyright in this note belongs exclusively to NVS. All rights are reserved. Any unauthorized use or disclosure is prohibited. No reprinting or reproduction, in whole or in part, is permitted without NVS's prior consent, except that a recipient may reprint it for internal circulation only and only if it is reprinted in its entirety.

Caution: Risk of loss in trading can be substantial. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

Contact Details:

Corporate Office Address: 702, Embassy Centre, Nariman Point, Mumbai – 400 021 • Tel.: +91 22 61539100

Fax: +91 22 61539134 • Email: research@nvswwealthmanagers.com • Website: www.nvswwealthmanagers.com