

BSE
EXPERIENCE THE NEW

S&P BSE
SENSEX

JULY 2016 UPDATE

**THE WORLD'S FASTEST EXCHANGE
WITH A SPEED OF 6 MICROSECOND'S.**

LIQUIDITY • LOWER COSTS • MARKET MAKERS • TIGHT SPREADS • LARGE PARTICIPANT BASE



THE WORLD'S FASTEST EXCHANGE WITH A SPEED OF
6 MICROSECONDS

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About BSE

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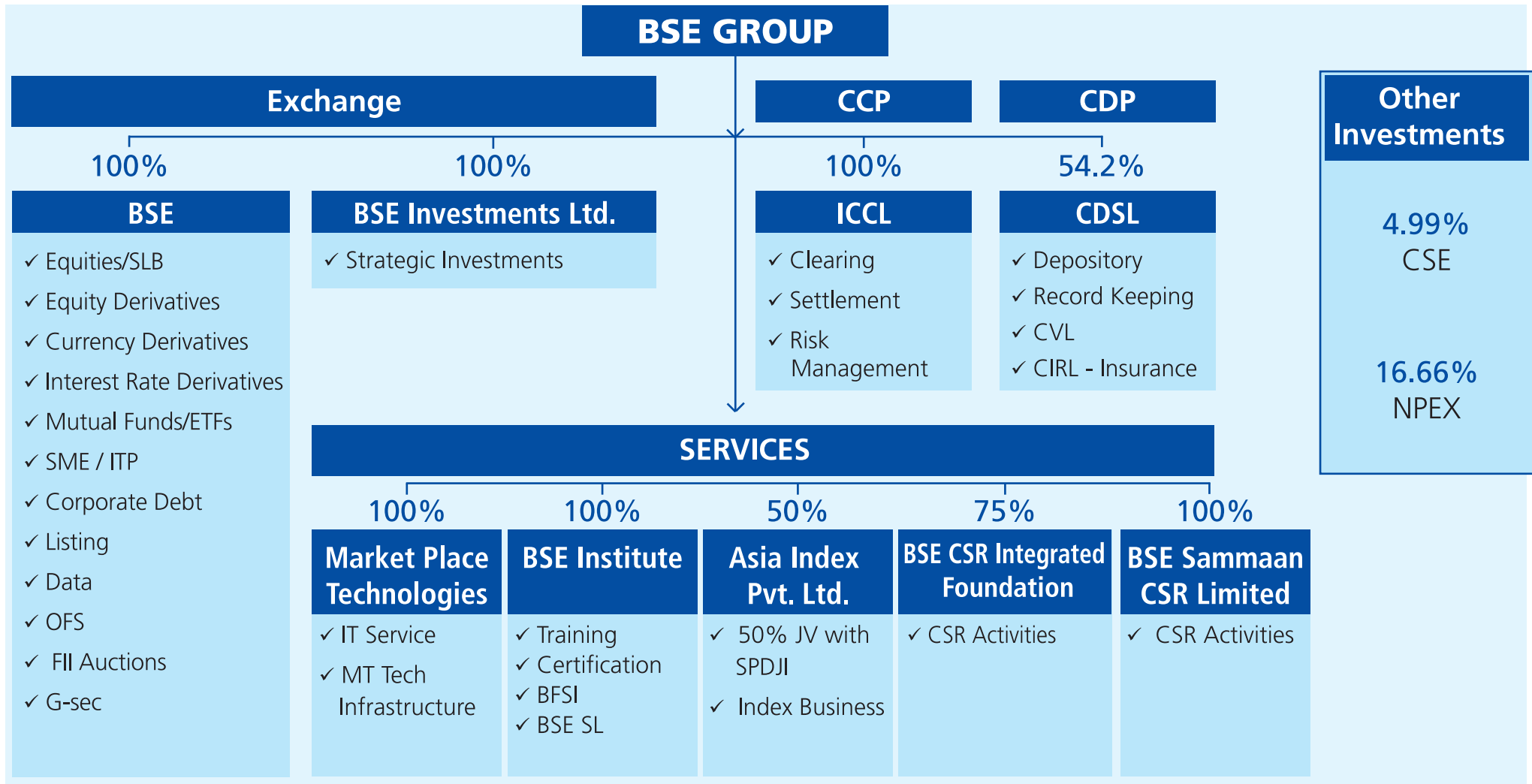
Evolution Of The Exchange



Key Milestones

Date	Milestones
9 th Jun, 2016	BSE announces commencement of trading of Sovereign Gold Bonds
17 th May 2016	BSE signs Memorandum of Understanding with Taipei Exchange for further development of Securities Market and for sharing knowledge and information
28 th Apr 2016	BSE signs Memorandum of Understanding with Korea Exchange (KRX) to launch S&P BSE Sensex based derivatives contracts at KRX
05 th Apr 2016	BSE & CMIE launch world's first high-frequency data on unemployment and consumer sentiments
09 th July 2015	BSE celebrated its 140 th Foundation Day
2 nd Jan 1986	S&P BSE SENSEX , country's first equity index launched (Base Year:1978-79 =100)
31 st Aug 1957	BSE granted permanent recognition under Securities Contracts (Regulation) Act (SCR)
9 th Jul 1875	The Native Share & Stock Broker's Association formed

BSE Group – A Complete Securities Eco-system



Partners in Progress

Highlights



- Alliance with leading global exchanges
 - Deutsche Börse
 - Singapore Exchange

- Key local Indian investors provide credibility and support

- Cross listing of benchmark index S&P BSE SENSEX in BRICS countries



- SGX has invested 4.75% investment in BSE to build Asian gateway of securities and derivatives



- 4.68% investment in BSE as key user and supporter of platform
- Board Presence



- Calculation & maintenance of all BSE Indices
- Index Product sales abroad
- Partnership on Index products



- Board Presence
- Eurex T7 trading architecture
- 4.75% investment in BSE to expand Asia presence and increase footprint in multiple time zones



- 4.75% investment in BSE as key user and supporter of platform

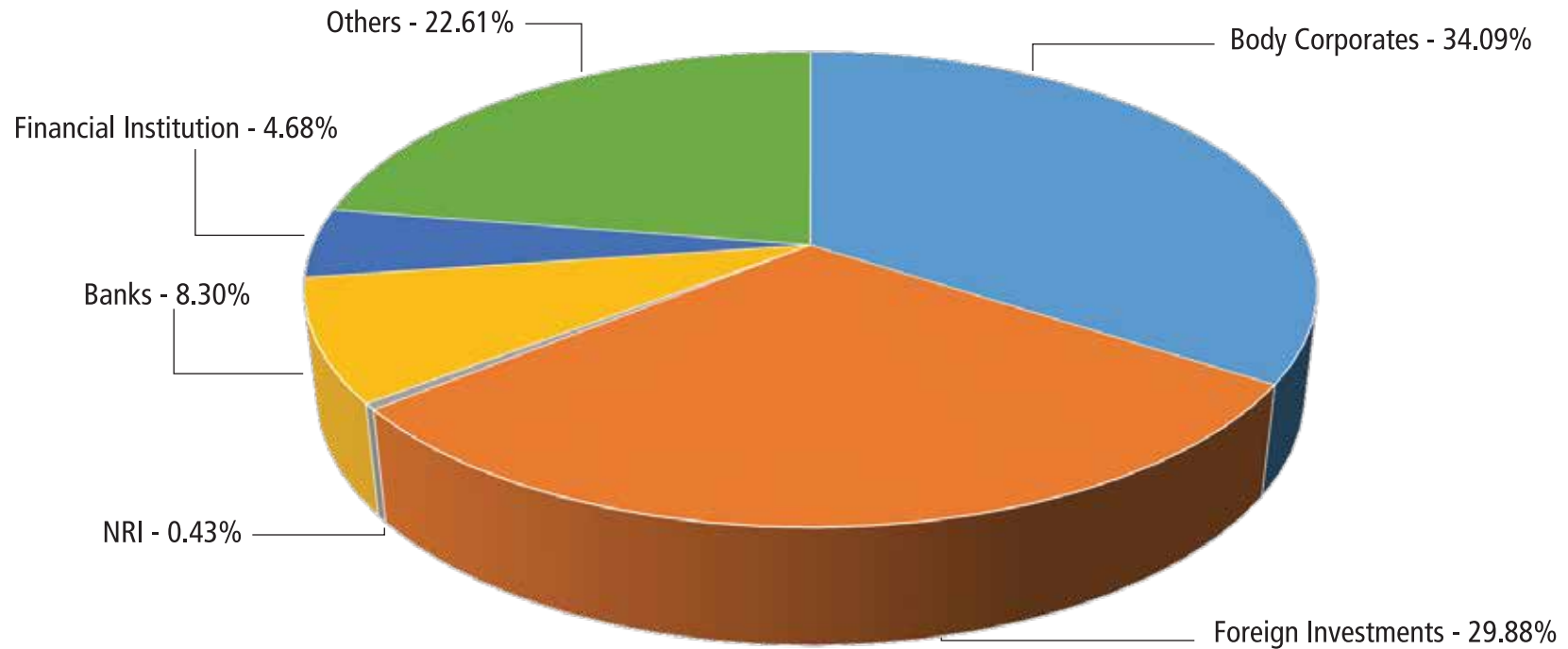


- Listing of Sensex

Shareholding Pattern

Paid up Capital Rs. 10.74 crs. | Face Value per share 1/- each

Categorywise Shareholding Pattern (%)



All 19 nationalized banks are our shareholders

Data as of June 2016

Board of Directors



Mr. Sudhakar Rao
IAS (Retd.)
Chairman, Public Interest Director



Mr. Ashishkumar Chauhan
Managing Director & CEO



**Dr. Krishnaswamy
Kasturirangan**
Former Chairman, ISRO
Public Interest Director



Dr. Sriprakash Kothari
Gordon Y Billard Professor of Accounting
and Finance Massachusetts Institute of Technology,
Sloan School of Management , Shareholder Director



Mr. Dhirendra Swarup
Secretary (Retd), Finance Ministry
Public Interest Director



Ms. Usha Sangwan
MD, Life Corporation of India
Shareholder Director



Mr. Sethurathnam Ravi
FCA, Practising Chartered
Accountant
Public Interest Director



**Justice (Rtd) Mr. Vikramajit
Sen**
Former Supreme Court Judge
and Chief Justice,
High Court of Karnataka
Public Interest Director



Mr. Thomas Bendixen
Representative, Deutsche Boerse AG
Shareholder Director






Mr. Sumit Bose
Former Union Finance Secretary
Public Interest Director





**Ms. Rajeshree
Sabnavis**
Fellow Member of ICAI,
Company Secretary
Shareholder Director

Management Team

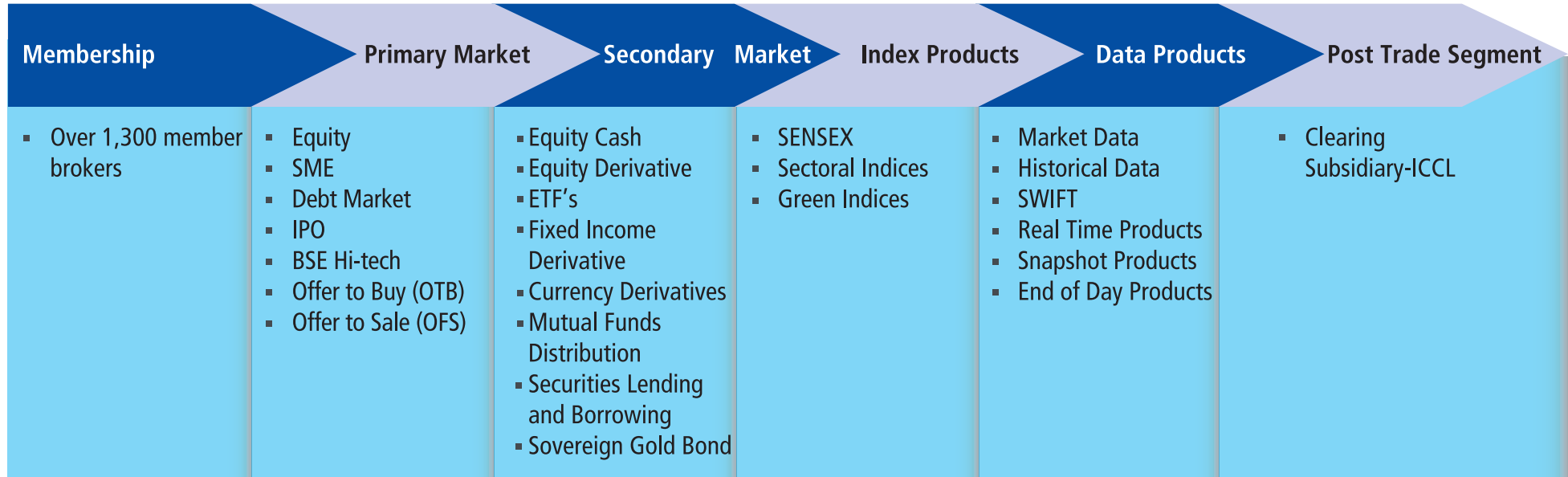
	NAME / TITLE	DESCRIPTION
	<p>Ashishkumar Chauhan Managing Director & Chief Executive Officer</p>	<ul style="list-style-type: none"> ■ Ashishkumar Chauhan one of the founders of India's National Stock Exchange ("NSE") where he worked from 1992 to 2000. At NSE, he was instrumental in setting up the first screen based trading in India, equities market and first commercial satellite communications network for India. He is best known as the father of modern financial derivatives in India. He also created several path breaking frameworks including Nifty index, NSE certifications in financial markets etc. From 2000 to 2009, he worked as the President and Chief Information Officer of Reliance group. ■ He is a part of several committees of World Federation of Exchanges ("WFE"), Government of India ("GOI"), Reserve Bank of India ("RBI"), Securities and Exchange Board of India ("SEBI"), Confederation of Indian Industry ("CII"), Federation of Indian Chambers of Commerce and Industry ("FICCI"), Indian Merchants Chamber ("IMC"), India UK council ("UKIBC") etc. He is also associated with several NGOs and education institutions. His quotes and writings have been published in various newspapers, magazines and journals in India and abroad. ■ He holds a B Tech in Mechanical Engineering from IIT Bombay and a PGDM from IIM Kolkata.
	<p>V Balasubramaniam Chief Business Officer</p>	<ul style="list-style-type: none"> ■ V Bala heads the business development encompassing Equities, Equity Derivatives, Debt, Interest Rate Futures, Currency Derivatives, Mutual Fund Distribution platform & SME platform at BSE and is also in-charge of all the new initiatives planned by BSE including the setting up of Commodities Market and the international exchanges in GIFT City. ■ He is a board member for Futures Industry Association – ASIA, CDSL (Central Depository Services (India) Ltd), BSE Institute Limited, BSE SAMMAN Limited and a Co-Chair of the Capital Markets Working Group of FICCI. He has over two decades of experience in the capital markets industry and has previously worked with Reliance Group and as co-founder of Marketplace Technologies. ■ He has completed his Masters in Commerce from the University of Mumbai and is a Rank holder from the Institute of Cost Accountants of India.
	<p>Nehal Vora Chief Regulatory Officer</p>	<ul style="list-style-type: none"> ■ Nehal Vora heads the regulatory functions of the exchange including membership compliance, surveillance, inspection, investigation, regulatory communication, investor services, listing compliance, regulatory legal and corporate secretarial. He is a Board member of Indian Clearing Corporation Limited (ICCL) and of Central Depository Services Limited (CDSL). His other Board Memberships include that of National Power Exchange Limited, BSE Investments Limited, BSE Sammaan – CSR Exchange. ■ He has more than 19 years of experience in the area of legal and compliance. He has previously worked at the Securities and Exchange Board of India (SEBI) for 10 years and as Director, Law & Compliance at DSP Merrill Lynch Ltd heading Broking and Investment Banking Compliance. ■ Nehal has completed his Bachelors of Commerce from Mumbai University and Master of Management Studies from Narsee Monjee Institute of Management Studies, University of Mumbai.

Management Team (Contd...)

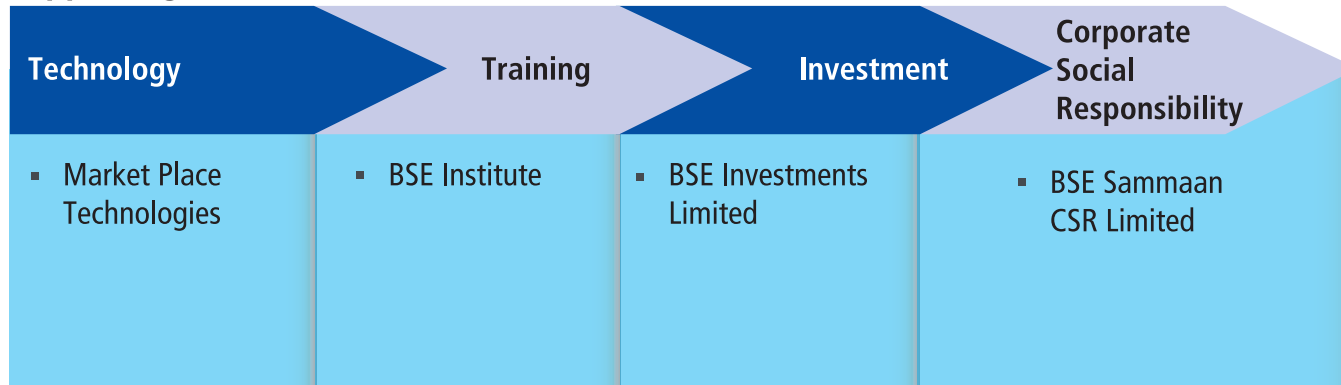
	NAME / TITLE	DESCRIPTION
	Nayan Mehta Chief Financial Officer	<ul style="list-style-type: none"> ■ Nayan Mehta currently heads all finance, accounting, treasury and taxation functions of the Exchange. He represents BSE as the Senior Vice Chairman on the Executive Board of the South Asian Federation of Exchanges. He represents BSE on the Boards of group companies and joint ventures of BSE and as a member of the Qualified Audit Review Committee of SEBI. ■ He has previously worked at Credit Analysis & Research Ltd. as Joint General Manager (Accounts), CFO at Multi Commodity Exchange of India Limited and has also worked at the National Stock Exchange. ■ He holds a Bachelors in Commerce degree from University of Mumbai. He is a qualified Chartered Accountant as well as a qualified Cost and Management Accountant.
	Kersi Tavadia Chief Information Officer	<ul style="list-style-type: none"> ■ Kersi Tavadia has over 30 years of experience in the area of Application Systems/ IT Infrastructure development and management, managing all aspects of IT operations in Financial Services, Capital markets and manufacturing companies. He has played a leading role in transforming BSE into the fastest exchange in the country ■ He is instrumental in promoting, adaption of Open Source technologies and has successfully deployed one of the largest Data Warehouse on Open source platform. ■ He has provided technical leadership & architectural vision in implementation of Mission Critical Applications across the organization including IT Infrastructure, Web portals, web based and non-web based customized solutions. ■ He is amongst the Pioneers to implement single-window Multi-Exchange online trading systems to facilitate trading across multiple asset classes.
	Neeraj Kulshrestha Chief of Business Operations	<ul style="list-style-type: none"> ■ Neeraj Kulshrestha is in charge of Trading, Listing and Membership Operations. ■ He has about 27 year experience in Capital markets, which includes Securities Markets and General Insurance. ■ Prior to BSE he was an Executive Director in Morgan Stanley India for 10 years. He was earlier with National Stock Exchange and has managed various functions like Trading Operations, Inspection and Investigation, Futures and Options Clearing and Trading. He was also the CEO of India Index Services Ltd. and Dotex International Ltd. ■ He has completed his Bachelors in Computer Science from Delhi University and a MBA (Finance) from Indore University.

Lines of Business

Revenue Segments



Supporting Business



BSE Global Ranking

PRODUCT	MEASURE	RANK
CURRENCY OPTIONS	19 Million Contracts Approx.	2 nd
CURRENCY FUTURES	29 Million Contracts Approx.	3 rd
EQUITY CASH SEGMENT	34 Million Trades Approx.	11 th
	1.47 (Amount in USD Trillion) Market Capitalisation	11 th

**Source: World Federation of Exchanges*

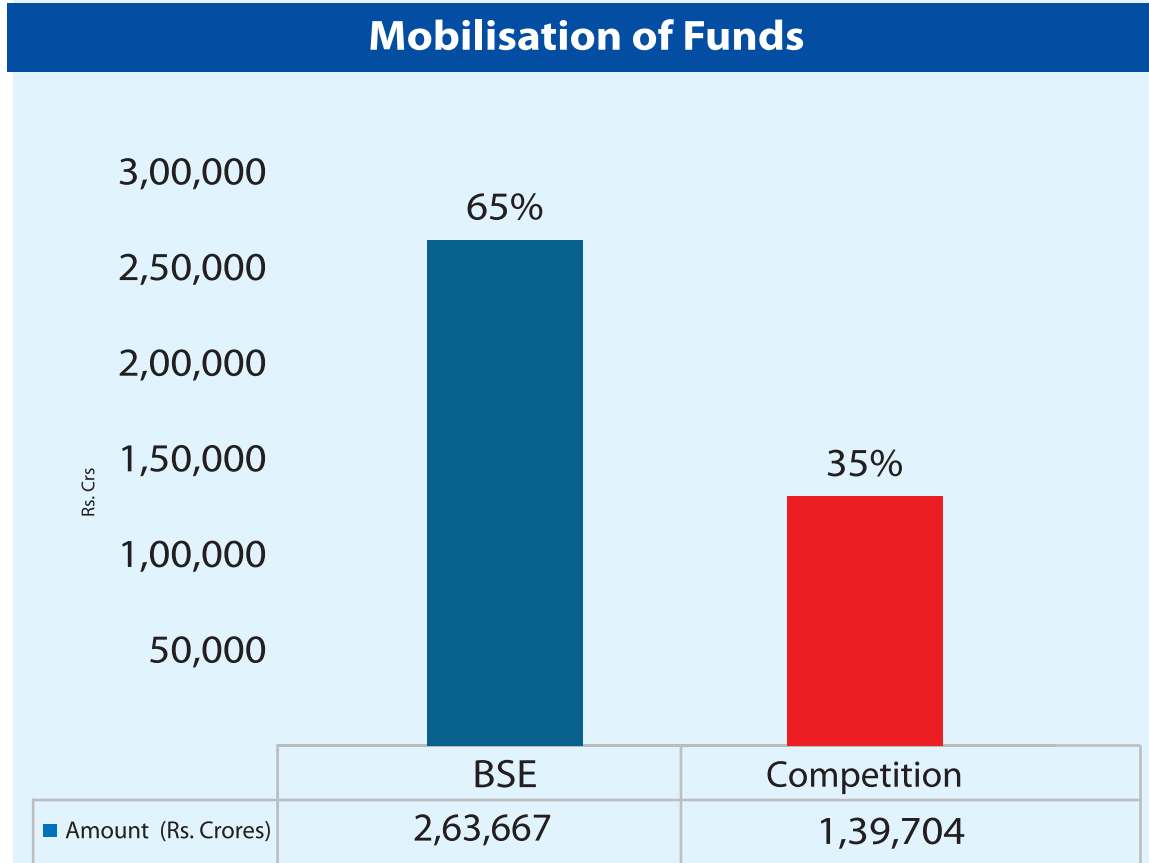
Data as of May 2016



Primary Markets

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Equity and Debt Mobilization of funds



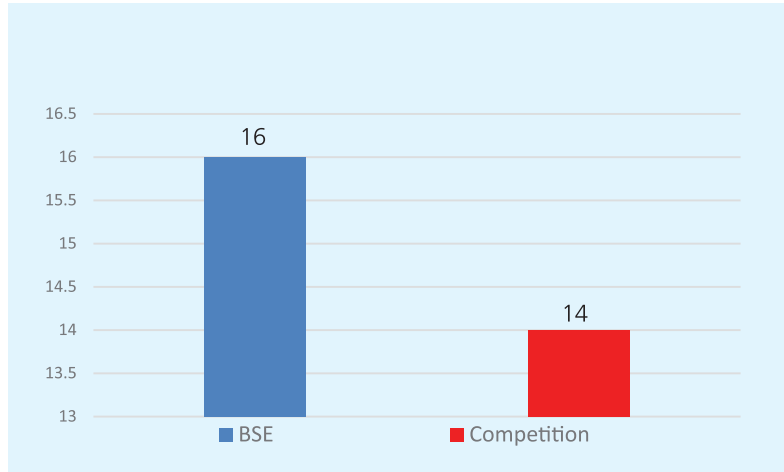
5055
Companies
listed with
Equity

- BSE has enabled collection of Rs 2,63,667 crs (65%) of the total amount raised across the Exchanges from April 2015 to June 2016.

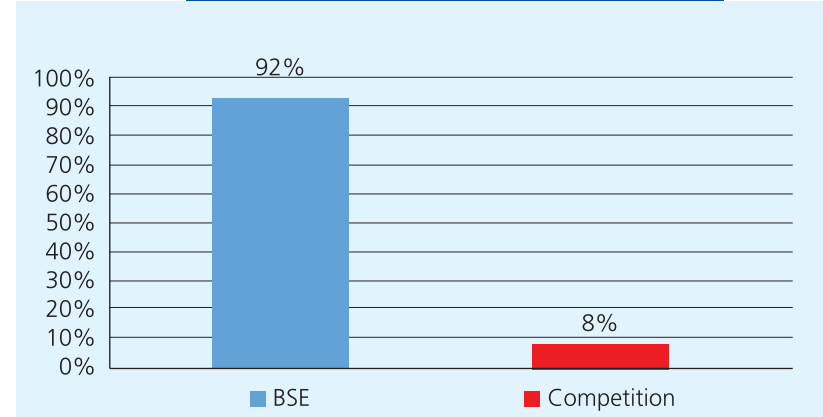
Equity and Debt Market

Designated Exchange for Equity IPO

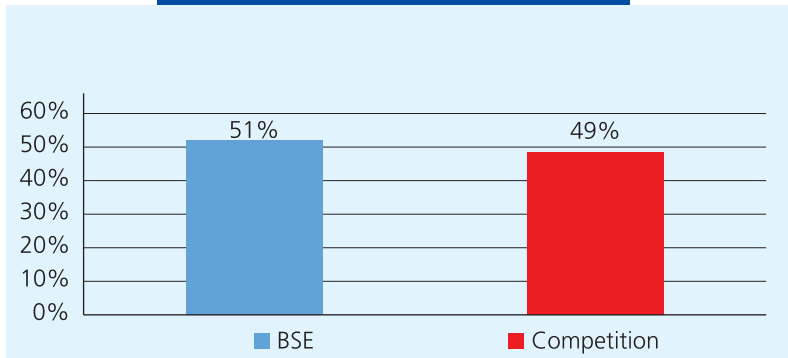
No. of Issues



Market Share % for Debt Public Issue



Market Share % for Equity IPO

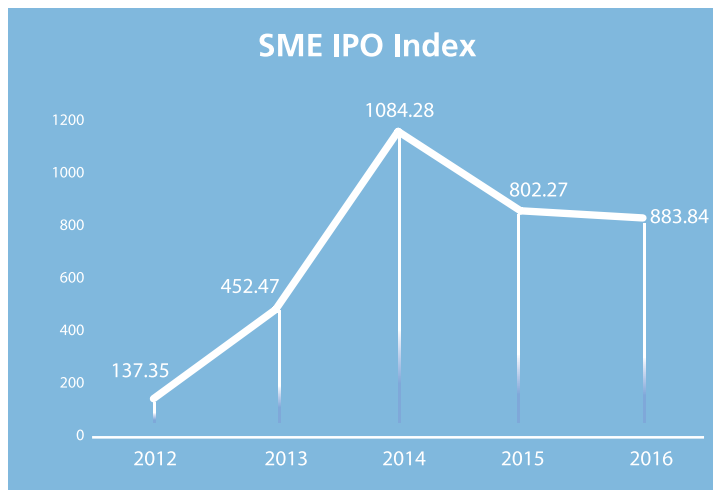
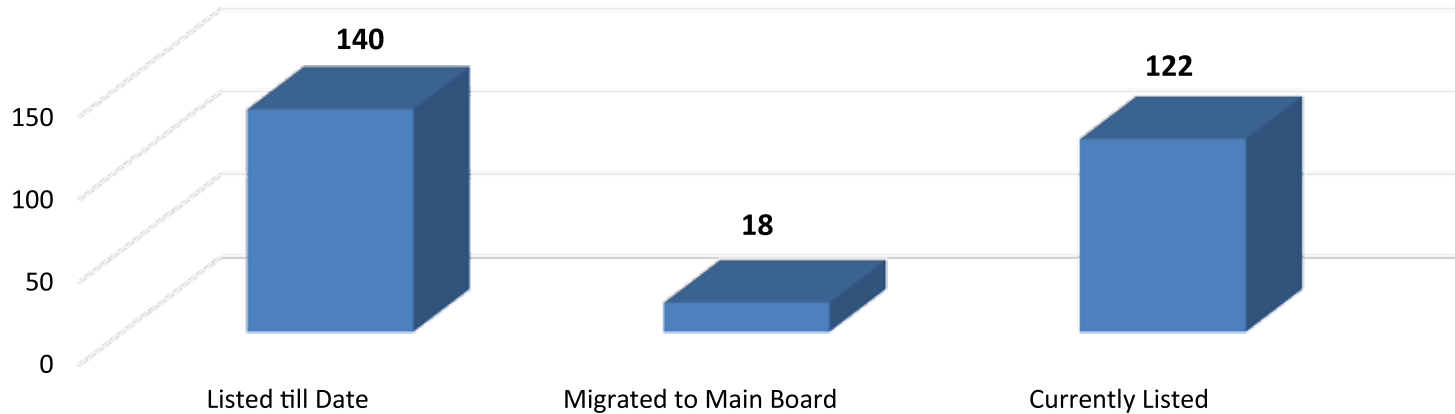


- BSE is the preferred choice for listing Privately Placed Debt Instruments (PPDI). In FY 2015-16, BSE has listed 1760 Instruments vis-a-vis 1339 on other Exchange. In F.Y. 2016-17 till June 2016, BSE Ltd has listed 590 instruments with a market cap of Rs. 81281.92 crores vis a vis 357 instruments on the other Exchange.
- In F.Y 2015-16, 20 Debt Public issues have tapped the market. BSE is the Designated Stock Exchange for 20 issues with 15 issues being listed only on BSE.
- In F.Y 2016-17 till June 2016, 6 Debt Public issues have tapped the market and BSE is the Designated Stock Exchange for all the 6 public issues.

Data as of June 2016

SME Platform

Companies on BSE-SME Platform

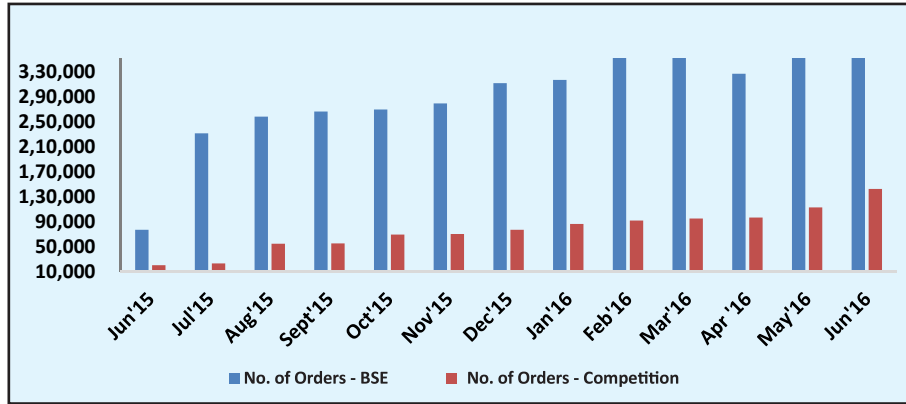


- BSE is the first stock exchange in India to receive approval from SEBI on 26th September 2011 to launch SME Platform. SME IPO Index was launched on 14th December, 2012 aimed at tracking the companies listed on SME platform with a Base value of 100. As on 30th June, 2016 its value was 883.84.
- The Platform facilitates capital raising by small and medium enterprises including start-up companies which are in their early stages of growth. It also provides easier entry and exit options for informed investors like angel investors, VCFs and PEs etc. and equity financing which lowers the debt burden leading to lower financing cost and healthier balance sheet.
- Total Market Capitalization of 122 companies –Rs 7,014 Crs.
- 18 companies Migrated to main Board – Rs 3,136 Crs.

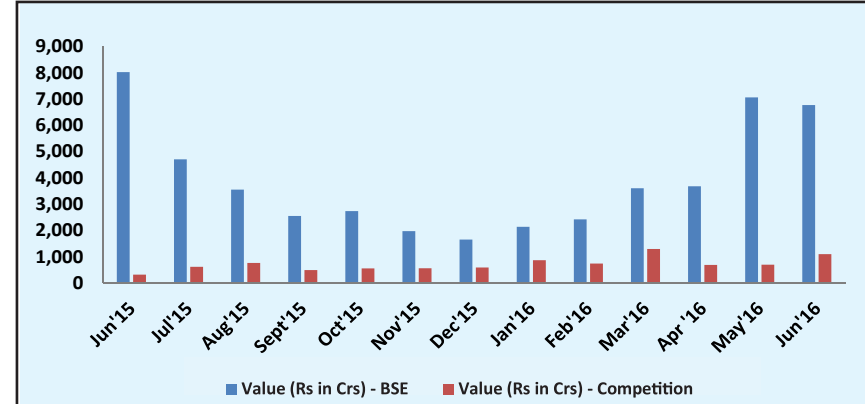
Data as of June 2016

Mutual Fund Distribution Platform-StAR MF

Avg Market Share in No. of Orders



Avg Market Share in Value



PLATFORM FEATURES

- Completely digital- Demat and Non Demat /Mutual Fund transactions , while facilitating the benefits of Physical mode
- 24x7 order acceptance
- Investors can choose the mode of payment option any pay via NEFT / RTGS /PG-Direct / PG-Nodal / OTM / Cheques , AFTER order placement
- 6 day order holding facility
- SMS / Email based order authentication

CONNECTIVITY & USPs

- Multi-mode of platform access
- Unique overnight investments framework
- Completely digital and REAL Time Investors registration / onboarding
- Widely accepted by NDs / Custodians / Brokers / IFA Platform / New age Digital Distributors / IFAs,

PLATFORM STATISTICS

- Over 33 Lakh orders aggregating to Rs 44,235 Crs has been transitioned on BSE StAR MF Platform during FY 15-16
- Market Share 85% in FY'15-16 , Over 400000 SIPs/XSIPs registered , Market Share 90% in FY 16-17.
- Largest number of transaction executed in our platform

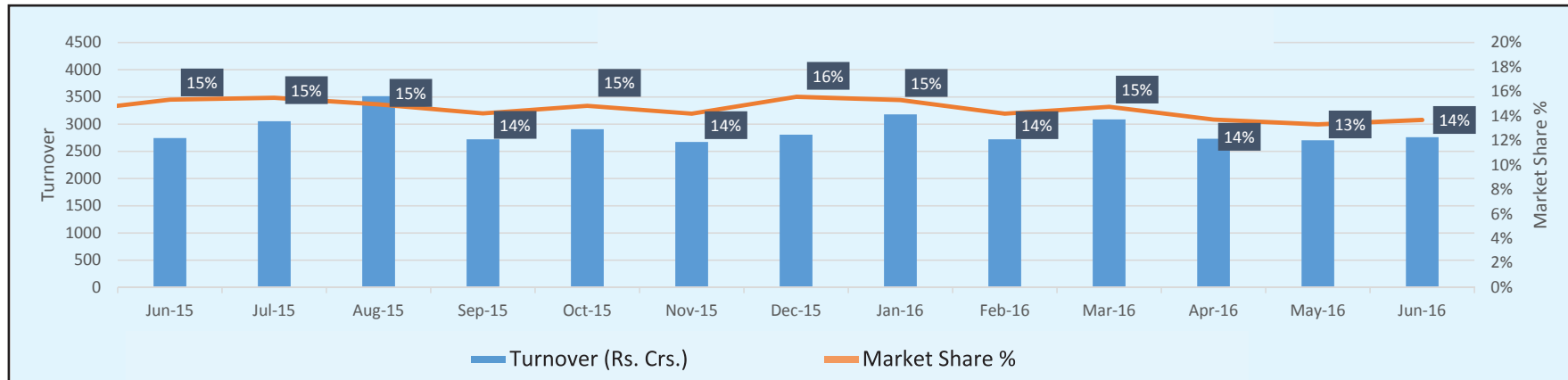


Secondary Markets

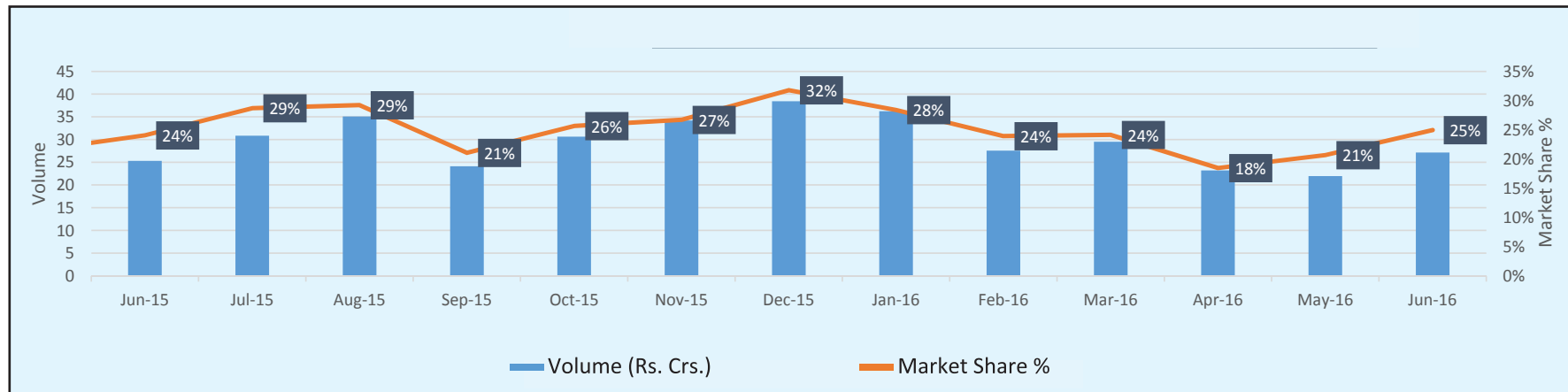
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Equity Cash Market

Equity Turnover (Rs.Crs) and Market Share (%)



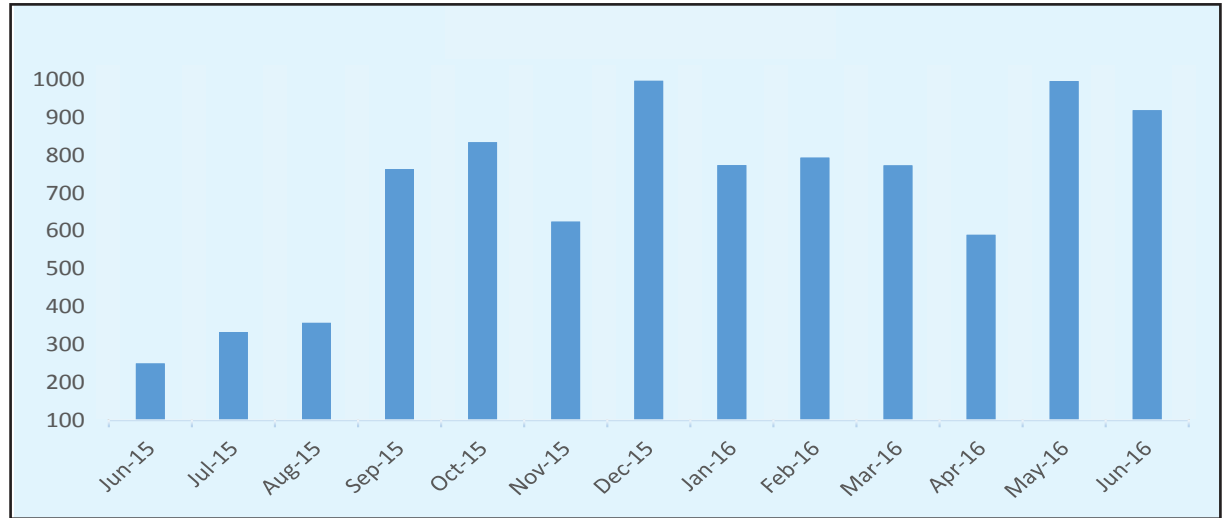
Market Share based on Equity Volume (No. Of Shares Traded)



Data as of June 2016

Equity Traded Funds

Turnover (Rs Crs.)



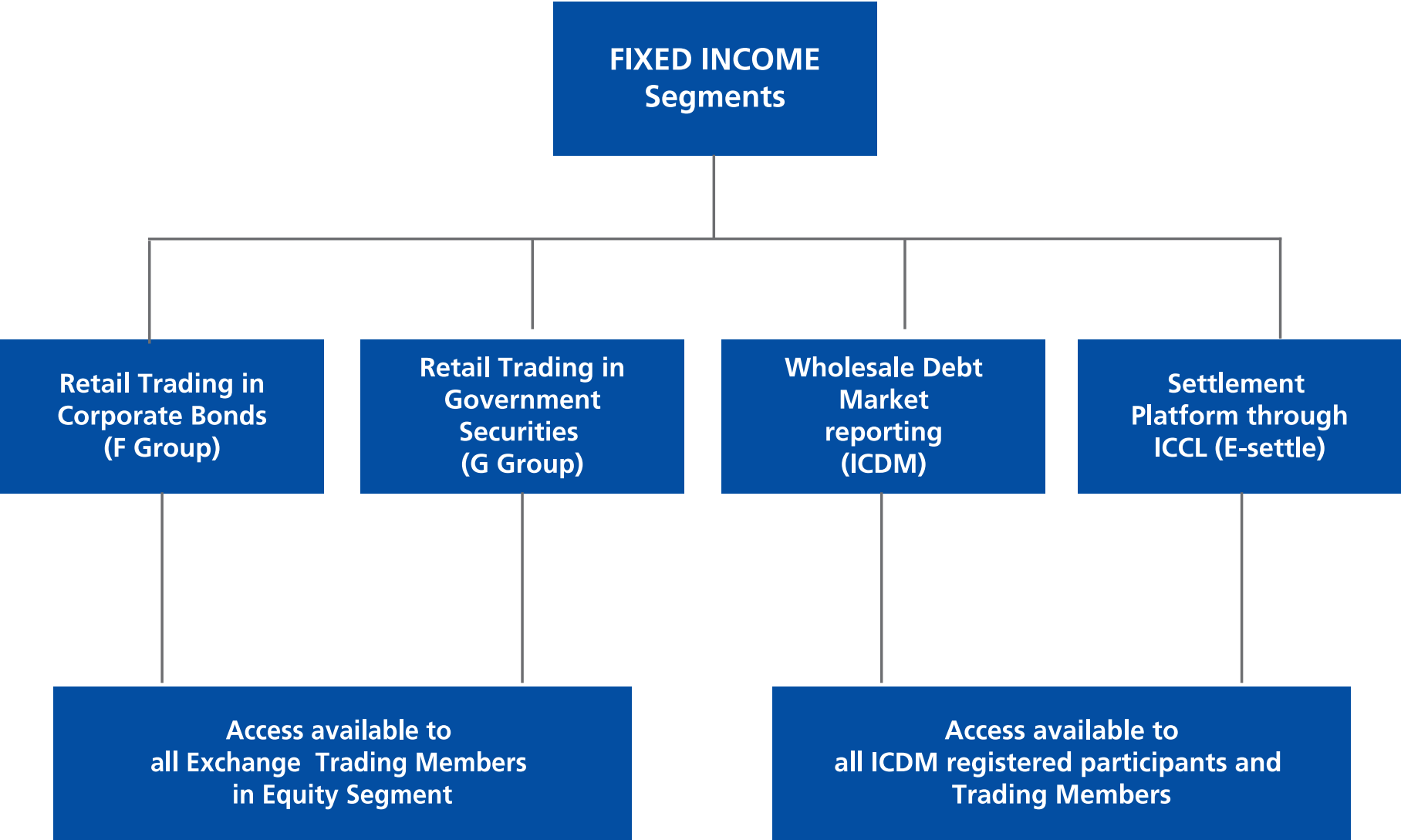
Exchange Transaction Fee for ETF

Turnover Slab	BSE	Competition	Cost Saving @ BSE
Up to 1250 Crs	275	325	15.38%
>1250 Crs < 2500 Crs	275	320	14.06%
>2500 Crs < 5000 Crs	275	315	12.70%
>5000 Crs < 10000 Crs	275	310	11.29%
>10000 Crs < 15000 Crs	275	305	9.84%
>15000 Crs	275	300	8.33%

- Exchange traded fund is a security that tracks an index, a commodity or a sector like an index fund or a sectoral fund but trades like a stock on an exchange
- It is similar to a close ended mutual fund listed on stock exchanges
- BSE in its effort to bring greater participation for retail investors in the Indian landscape has tied up with market makers for ETF's
- 46 ETF listings on BSE as on May 2016*

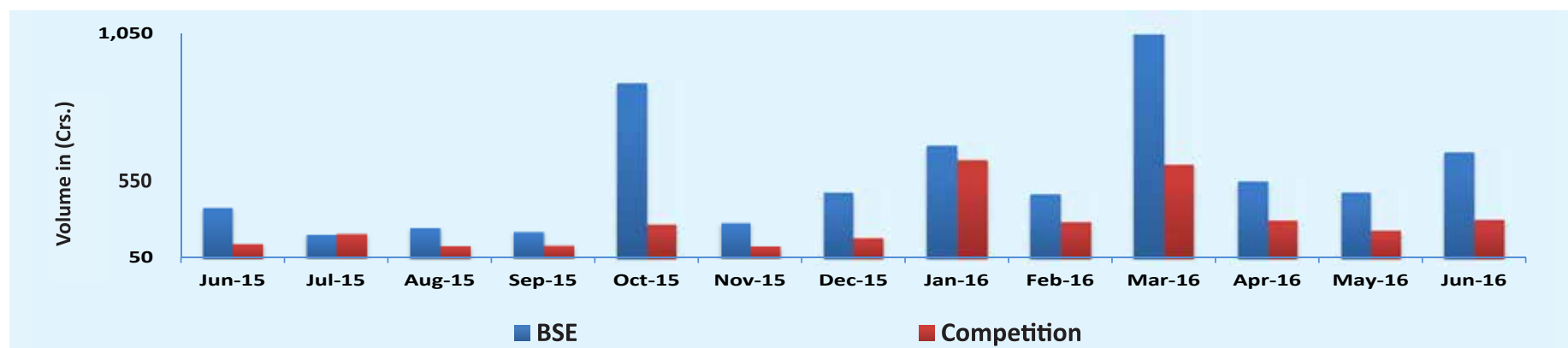
Data as of June 2016

Fixed Income Segments Overview



Fixed Income Segments

Retail Trading - Avg Market-Share



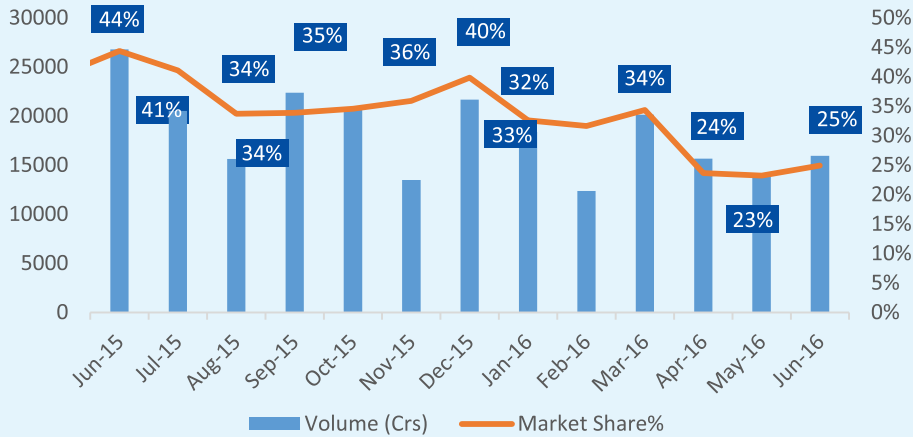
Retail Trading In Corporate Bonds (F Group)	FY-15-16	April '16	May'16	Jun'16
Turnover (Rs Crs)	4,608	392	340	523
Number of Member / Participants	1361	1362	1363	1367
Wholesale Segment Reporting Of Corporate Bonds (ICDM)				
Turnover (Rs Crs)	2,07,652	14,841	17,335	18,540
Number of Member / Participants	1338	1358	1376	1389
Wholesale Segment Reporting Of Government Bonds (WDM)				
Turnover (Rs Crs)	2,27,125	15,649	13,800	15,936
Number of Member / Participants	130	130	134	134
Settlement Of Corporate Bonds and CP/CD (E- Settle)				
Settlement Of Corporate Bonds (Rs Crs)	57,874	5,109	4726	7164
Settlement of CPs/CDs (Rs Crs)	4,63,134	34,677	35,971	35,711
Number of Member /Participants	1338	1358	1376	1389

- BSE has maintained the dominant market share in Retail trading of Corporate Bonds. BSE Market share was 63.7% in FY 14-15 and 62% in FY15-16. Market share for June 2016 was 70%
- Market Share reporting volumes in Wholesale Debt Market of Government Bonds in June 2016 was 24.92%. In FY 15-16 volume in this segment was Rs. 2,27,125 Crs with a market share of 35%
- Settlement volumes of Corporate bonds for FY 15-16 is Rs. 57,874 Crs , for June '16 Rs 7165 Crs

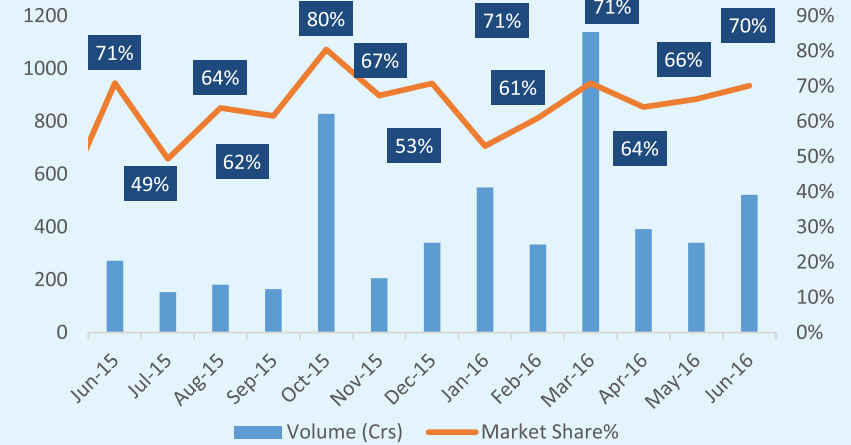
Data as of June 2016

Fixed Income Segments (cont..)

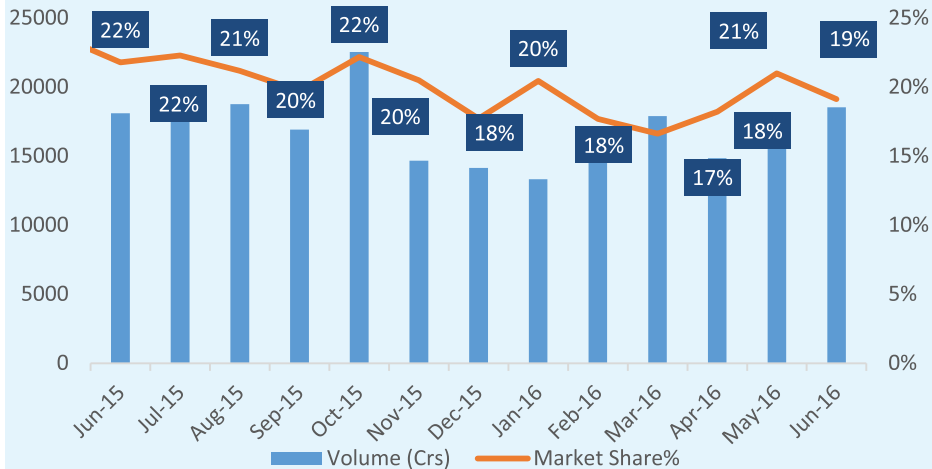
G-Sec Reporting



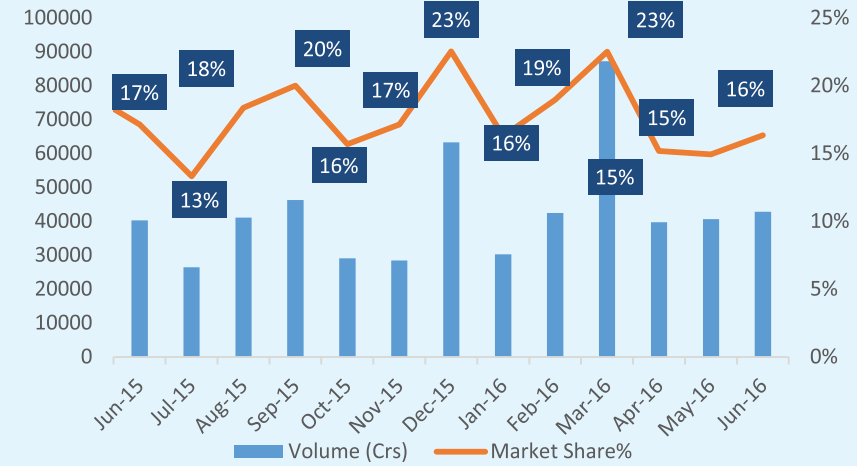
F Group



ICDM Corporate Bond Reporting

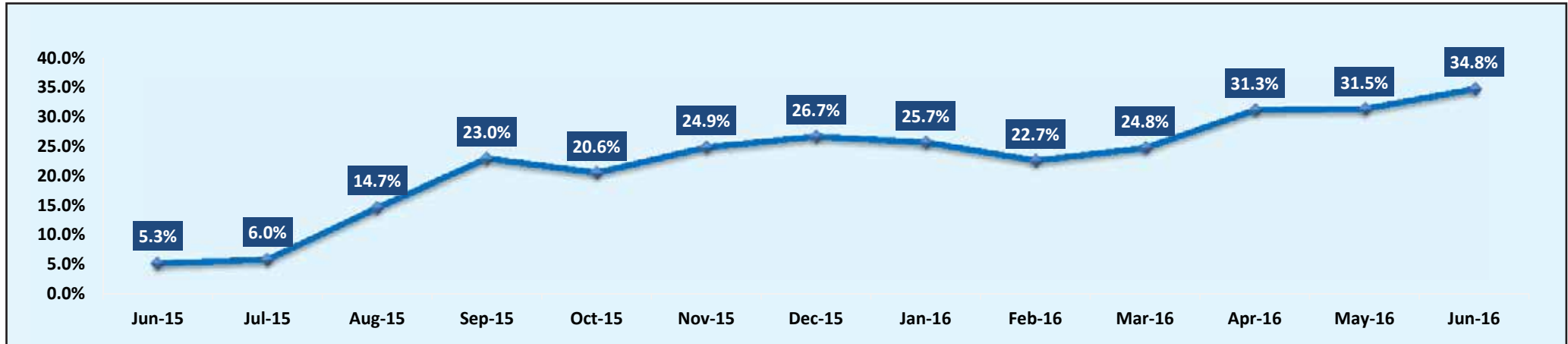


ICCL Settlement



Interest Rate Derivatives

Avg Market Share %



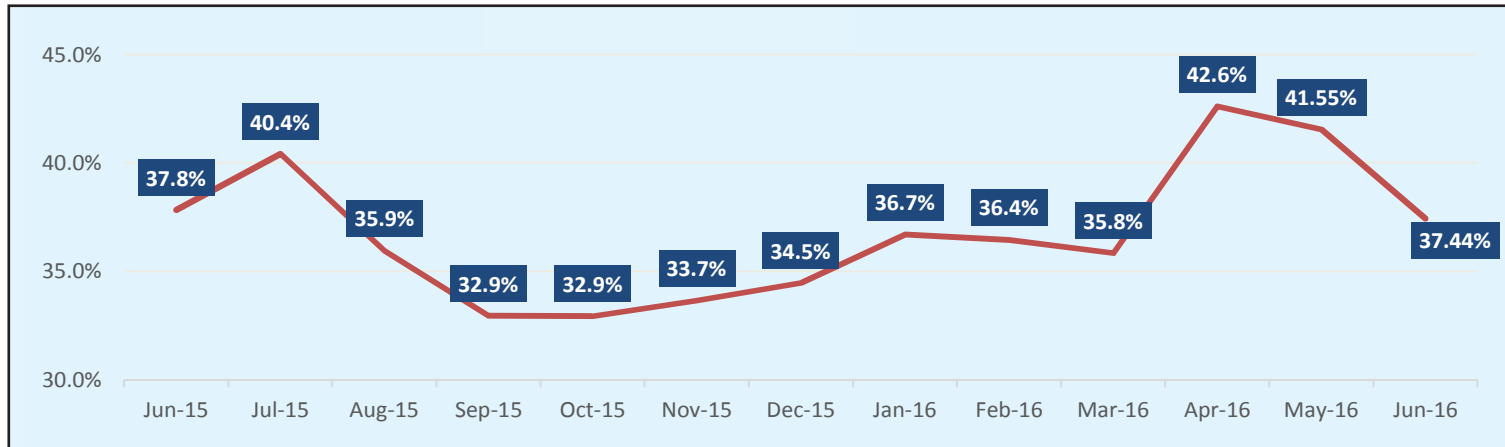
Competitive Advantage

Interest Rate Derivatives			
	BSE	NSE	MSEI
Exchange Transaction Fees (Rs. / Per Cr)	8	10	10
Cost Saving @ BSE up to	20%		

Data as of June 2016

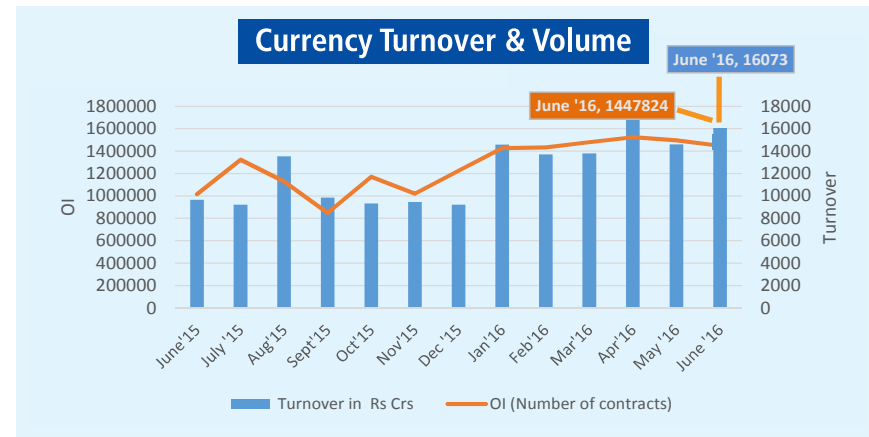
Currency Derivatives

Avg Market Share %



Competitive Advantage

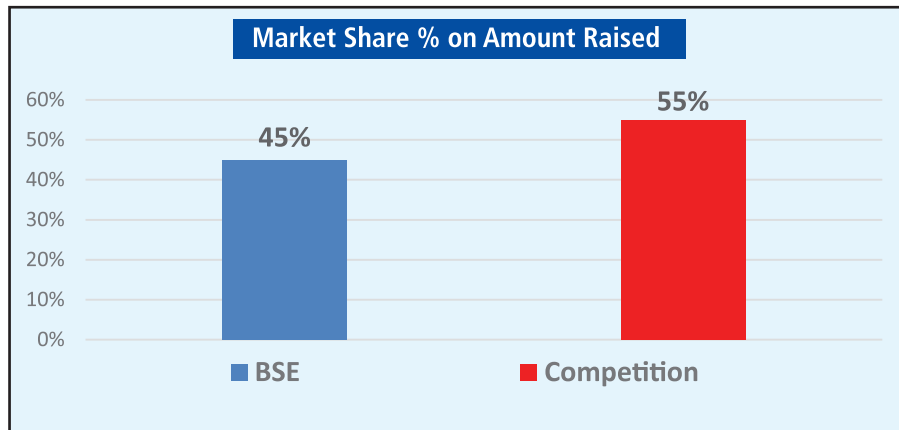
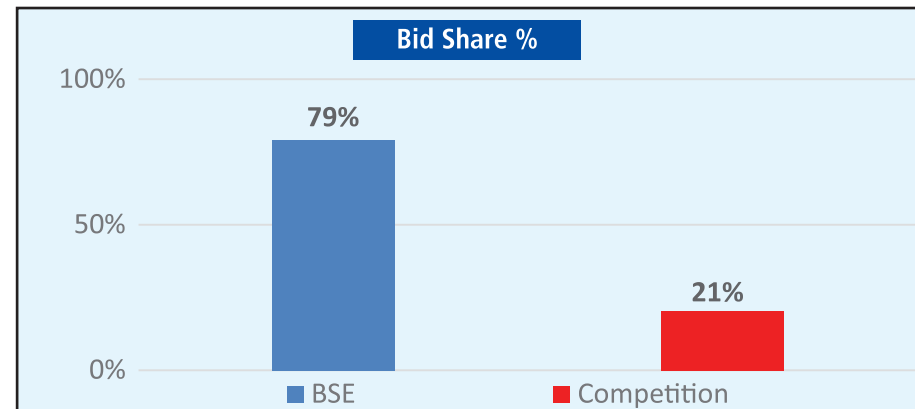
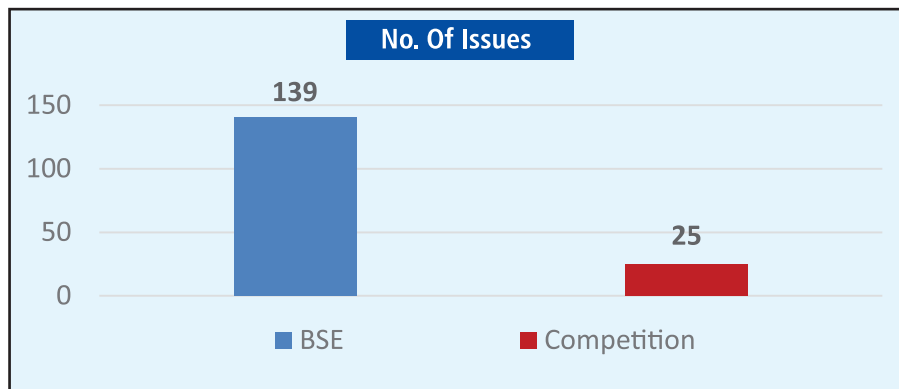
Currency Futures	BSE	NSE	MSEI
Exchange Transaction Charges (Rs / Per Cr)	10	110	105
Exchange Transaction Charges for 1 Million Dollar (1000 Lots) in Rs.	130	1,430	1,365
Cost Saving @ Bse up to	90.91%		
Currency Option	BSE	NSE	MSEI
Exchange Transaction Charges (Rs. / Per Cr.)	10	4000	1000
Cost Saving @ BSE up to	99.75%		



Data as of June 2016

Offer For Sale (OFS)

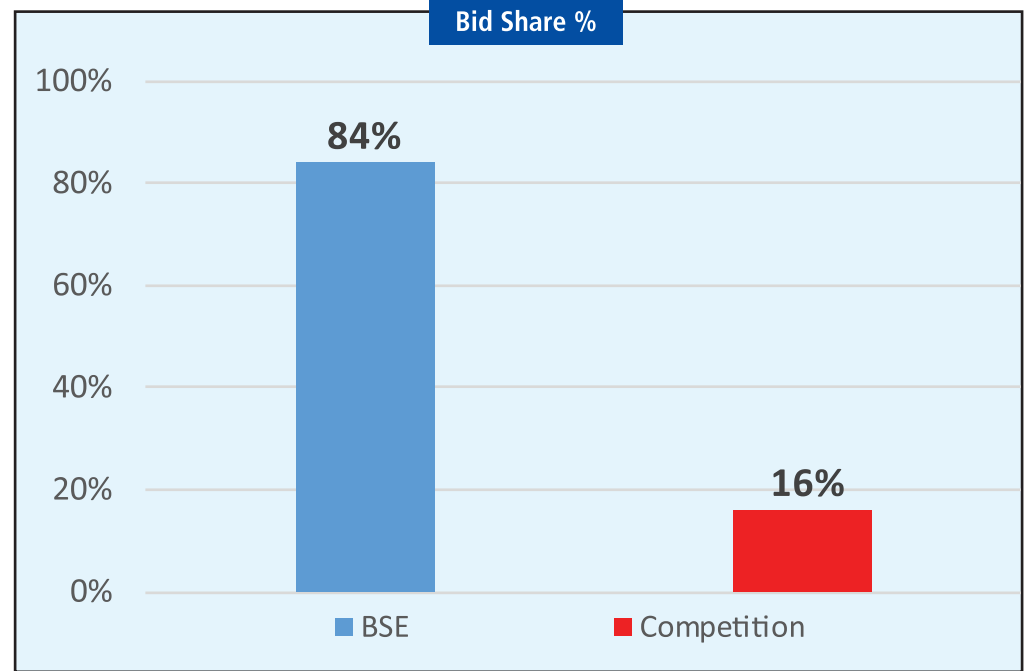
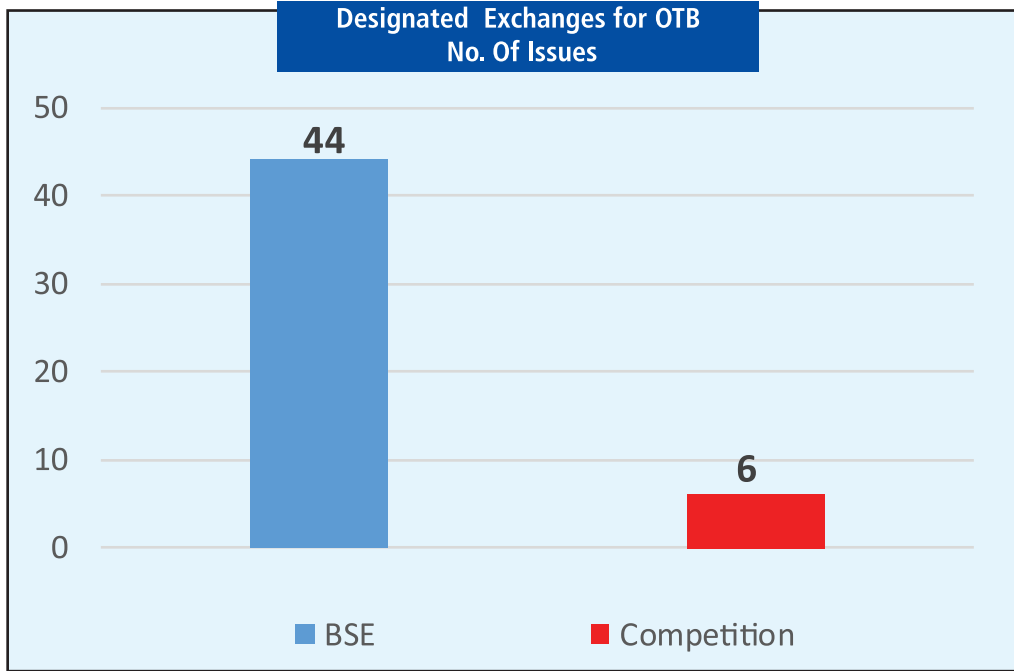
- BSE launched the Offer For Sale (OFS) module on iBBS (Internet Based Book Building System) platform on 24th February, 2012.
- Since then ,164 companies have completed OFS issues of which BSE was appointed the Designated Stock Exchange in 139 issues. Over 700 members have participated in OFS via BSE platform.
- The process has helped the Government to raise over Rs. 84,084 Crs through divestment of holdings in PSUs.



94 OFS issues were conducted Exclusively on BSE platform

Offer to Buy (OTB) – Acquisition Window

OTB Avg Bid Share Details on Designated Stock Exchanges



- An Offer to Buy is a new mechanism to facilitate tendering of shares by the shareholders and settlement of the same, through the stock exchange in the form of a separate window (the "Acquisition Window").
- BSE launched the Offer to Buy (OTB) module on iBBS (Internet based book building System) platform on 1st July, 2015.
- Till date, 50 companies have completed their OTB issues of which BSE was appointed the Designated Stock Exchange in 44 OTB issues.

39 issues were conducted exclusively on BSE platform

BSE Hi-Tech

BSE Hi-Tech is a platform that enables a young fast growing company to list on an exchange with much easier criteria and gain access to capital from a larger base of sophisticated investors.



THE COMPANY ADVANTAGE

- Increased visibility with brand creation, research coverage and media coverage
- Access to funds through well-established platform and mechanism
- High credibility amongst all stakeholders
- Listing entails robust corporate governance and internal controls and systems
- Sophisticated investors enabling better valuations
- Companies can attract global investors as FPIs
- Merger & acquisitions made easier and swifter with company's stock used as currency
- Compensating employees without affecting cash flows through ESOPs becomes a powerful tool to attract and retain

THE INVESTOR ADVANTAGE

- A credible exit route for early investors
- VC/PE investors can churn their portfolio
- The platform will offer a new asset class to investors
- Listing leads to better and timely disclosures and thus also protects the interest of the investors

BOLT PLUS ON WEB (BoW)



One Window with Multiple Utilities			
Exchanges	Products	Users	Connectivity
<ul style="list-style-type: none"> BSE NSE MCX NCDEX 	<ul style="list-style-type: none"> Equity – F&O – Currency – IRF - OFS – Mutual Fund – SLB – Debt – ITP Equity – F&O – Currency Commodities Commodities 	<ul style="list-style-type: none"> Dealers Investors Admin for HO Multiple Mini Admin for Regions & Branches RMS 	<ul style="list-style-type: none"> Leased Line Internet

User friendly features

- Dual Market Depth Display
- AMO – After Market Orders
- Time base Square up for Intraday transactions and One click square up on M2M Alert.
- Corporate Information Analysis
- Top Gainers / Top Losers Top Gainers / Top Losers - Most Active by VOLUME / VALUE
- User define short keys - predefine Key Mapping Styles for ODIN-NOW
- NEWS Plus with RSS feeds and Twitter
- Web links for 100 + Visual Operational Help Video's
- Member Branding through EXE

Application for Desktop and Mobile

- Web links for 100 + Visual Operational Help Video's
- Tip of the Day prompt on login – notifying what all can be done
- Member Branding through EXE
- Trade commencement in one day
- No Extra hardware like TAP-IML server required.

▪ Bolt + on Web (BoW) – FREE OF COST FOR ALL MEMBERS



Information Products

BSE
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Information Products offered

Market Data

- Equity Level 1 – Real-time & 1 minute Snapshots
- Equity Level 2 – Real-time
- Indices – Real-time & 1 minute Snapshots
- Derivatives (Equity , Index , Currency & Interest Rate Derivatives) – Real-time

Corporate Data

- Corporate Announcement
- Financial Results
- Shareholding Pattern
- Corporate Action through SWIFT

End of day or Historical

- Quotation files
- Annual report
- Daily Bulletin
- Sector Classification
- Trade and Order book data



Technology Initiatives

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New Trading Architecture – BOLT PLUS

Bolt Plus Live

- Products available for trading
 - Currency Derivatives – 29th November 2013
 - Interest Rates Futures - 28th January 2014
 - Equity Derivatives - 10th February 2014
 - Equity – 7th April 2014

Member Access

- API based access
 - Through existing IML API
 - Advanced High performance APIs (ETI, MDI/EMDI,EOBI)

Peripheral Systems connecting to BOLT Plus

- Reference Data, Risk Management, Surveillance, Clearing & Settlement, Data Warehouse

Performance Testing & Benchmarking

- Latency : < 6 μ s (Gateway in to Gateway out)
- Network latency for Colo users – 10 μ s
- Throughput Capacity: 5 lacs order per second
- Scalability: Horizontally scalable by adding partitions

Technology Programme - Co-location Facilities

Fastest Co-location

- BSE is the fastest Exchange in the world with a speed of 6 microseconds.
- Co-location service to BSE members is provided and managed entirely by a third party data centre service provider - NTT Netmagic IT Services Pvt Ltd, a subsidiary of NTT Communications.
- Netmagic provides the fastest Co-location service in India with round trip network latency of less than 10 microseconds.
- At Netmagic Co-location, BSE response for an order has round trip latency of about 16 microseconds (including 10 microseconds of Co-location network latency).\
- Market access across Equity, Equity Derivatives and Currency Derivatives segments.
- Extension of Precision Time Protocol (PTP) from BSE's Grandmaster clock to the Co-location enables members to synchronize with the Exchange clock.
- Equitable distribution of market data to all members by usage of same length cables for all members.
- Full order book multicast (EOBI) is provided to Co-location members at no cost.
- State-of-the-art Data Centre services from NTT – Netmagic.

Co-location : NTT Netmagic Data Centre

Co-location is entirely managed by a third party service provider - NTT Netmagic. Key technical highlights are:

- 10 Gbps Fibre optic cable connection with BSE trading system with full redundancy
- 24 X 7 operations support
- 24 X 7 High security zone
- Uninterrupted Power Supply with DG back up
- ITIL and ISO 27001 compliant
- FM200 Fire suppression facility
- Market Data feed from Thomson Reuters Electron network
- 99.999% uptime

Technology Programme - Software and Hardware

For services opted by member, BSE bears the cost on behalf of the member for;

- The software license cost for ALGO trading and market access
- The infrastructure cost on Co-location rack space
- The ALGO trading servers at Co-location
- The internet connectivity between Co-location and member's office

ALGO Trading

Algo Trading software is available from following vendors for quoting and market making in Eq. Derivatives including auto hedging capabilities across Exchanges and Segments:

- Greeksoft Technologies Pvt. Ltd.
- uTrade Solutions Pvt. Ltd.
- Omnesys Technologies Pvt. Ltd.
- Symphony Fintech Solutions Pvt. Ltd.
- Resolute Softech

Cost Comparison

Service	BSE	Other Exchange
Colocation Network Bandwidth (NTT Netmagic)	10 Gbps fiber optic network	10 Gbps fiber optic network
Roundtrip Latency (in μ sec): Exchange Response Time	6	500 #
Roundtrip Latency (in μ sec): Colo Network*	10	500 #
Roundtrip Latency (in μ sec): Exchange Response Time + Colo Network Latency	16	1000 #
10G Switch at Member Rack	Not Mandatory	Mandatory
10G NIC Card from Exchange per member	2 Solarflare Cards (SFN7322F)	NIL
Additional cost to member for 10G migration	NIL	INR 10 – 20 Lakhs
Full Racks	Free	One Time Cost : Rs. 1 Lakh plus AMC : Rs.12 Lakhs
Half Racks	Free	One Time Cost : Rs. 50,000 plus AMC : Rs.6 Lakhs
Quarter Racks	Free	Not Available
Servers	Free	Not Available
Algo software	Free	Not Available
Interactive connectivity cost	Free	Annual Cost per connection Rs.10 Lakhs for 400 messages/sec
Market data connectivity cost	Free (including EOBI feed)	TBT feed Annual Cost per feed Full Rack : Rs.1.00 Lakh / Half Rack: Rs.0.50 Lakh

*10G network with Solarflare card SFN7322F with onload # Based on market feedback

Sponsored Market Access

Implementation of 'Sponsored Market Access' (SMA) at Co-location

- SMA is a software distribution model in which applications are hosted by a service provider and made available to customers over a network.
- Free of cost rack space is allocated by BSE to the SMA Service providers to install their algo trading application server in Netmagic Co-location. The members can connect to this SMA algo server at Co-location via Internet.
- The algo strategy parameters can be triggered from the member front-end application and sent to the SMA algo server at Co-location.
- The corresponding algos will generate orders to be sent to BSE trading system through Co-location network.
- The algo orders will be sent to the BSE Trading system via the high speed Co-location gateway for minimum latency.
- Members can execute orders over high speed Co-location network without installation of any infrastructure at Co-location by the members.

Advantages

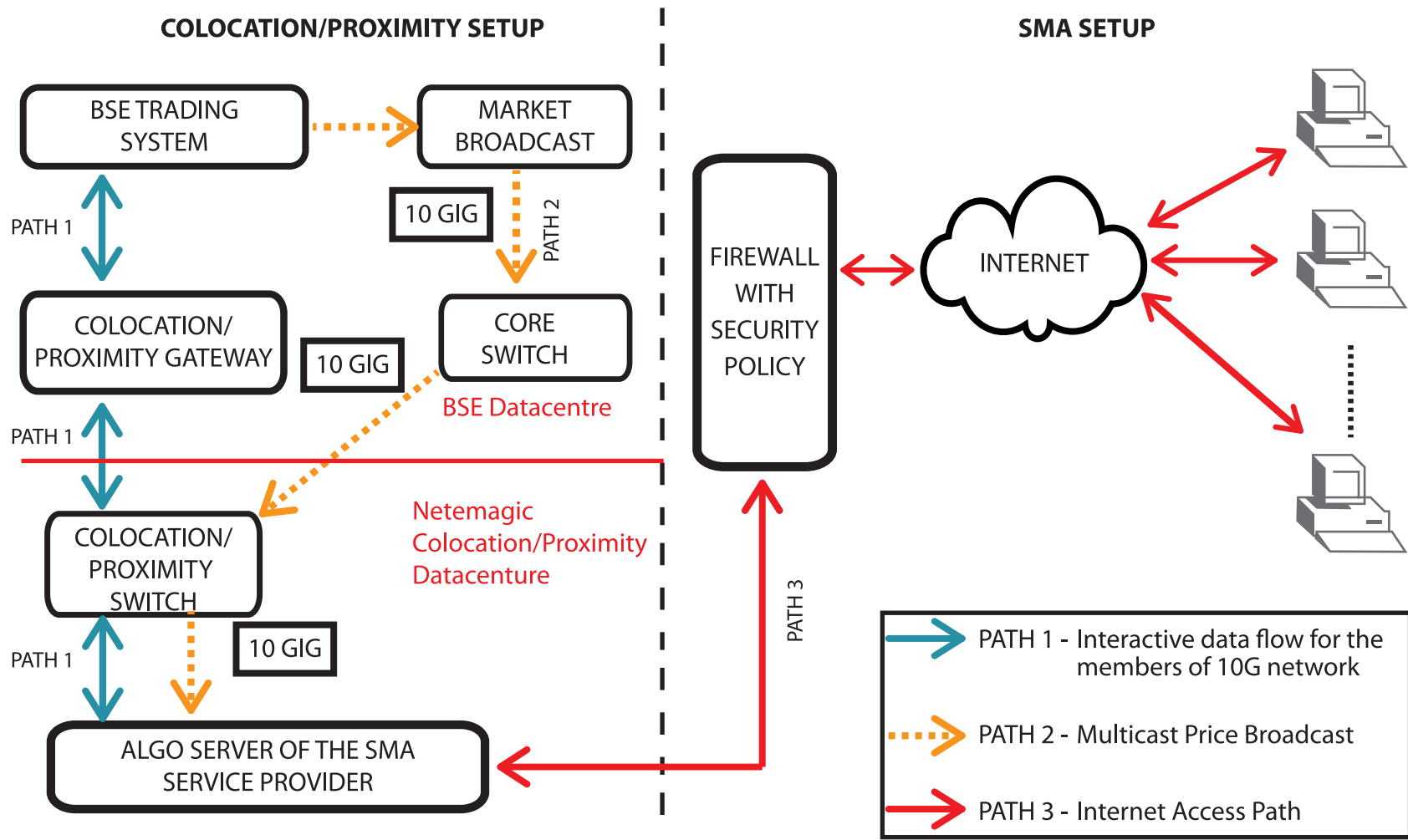
For Members

- Zero capital expenditure on infrastructure at Co-location.
- The algo orders will be generated at Co-location and sent to the BSE Trading system via the high speed 10G Colocation network for minimum latency.

For Vendors

- Free of cost rack space is allocated by BSE to SMA service providers to install their algo trading application server in Netmagic Co-location.
- Vendor can service multiple clients with a centralized algo server installed at Co-location. Hence, vendor's cost of maintenance is low.

Sponsored Market Access- New Facility at Co-location



Contract Symbols

Bloomberg Ticker	Category	Type
SENSEX Index CT	S&P BSE SENSEX Index futures	Futures contract
BSE100 Index CT	S&P BSE 100 index futures	Futures contract
SENSEX Index OMON	S&P BSE SENSEX Index options	Options contract
BSE100 Index OMON	S&P BSE 100 Index Options	Options contract
LUSA Currency OMON	S&P BSE Currency Options	Options Contract
LUSA Curncy	Currency USDINR Futures	Futures Contract
LERA Curncy	Currency EURINR Futures	Futures Contract
LGBA Curncy	Currency GBPINR Futures	Futures Contract
LJPA Curncy	Currency JPYINR Futures	Futures Contract
TBBA Comdty	T-Bill	Futures Contract
IISA Comdty	Gov Bond 8.4%	Futures Contract
IIPA Comdty	Gov Bond 7.72%	Futures Contract

Thompson Reuters Symbols	Category	Type
0#BIF	S&P BSE SENSEX Equity Index	Futures contract
0#BHI	S&P BSE 100 Index futures	Futures contract
0#BIF*.BO	S&P BSE SENSEX Equity Index	Options contract
0#BHI*.BO	S&P BSE 100 Index Options	Options contract
0#BIR	Currency USD/INR	Futures contract
0#BEU	Currency EUR/INR	Futures contract
0#BGB	Currency GBP/INR	Futures contract
0#BJP	Currency JPY/INR	Futures contract
0#BSE91	Treasury Bill	Futures contract
0#B883	10 Yr G-Sec	Futures contract
0#B716	10 Yr G-Sec	Futures contract

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