



भारत इलेक्ट्रॉनिक्स

BHARAT ELECTRONICS

भारत इलेक्ट्रॉनिक्स लिमिटेड

(भारत सरकार का उद्यम, रक्षा मंत्रालय)

पंजीकृत कार्यालय :

आउटर रिंग रोड, नागवारा, बेंगलूर - 560 045, भारत

Bharat Electronics Limited

(Govt. of India Enterprise, Ministry of Defence)

Registered Office : Outer Ring Road,

Nagavara, Bangalore - 560 045, INDIA.

CIN : L32309KA1954GOI000787

टेलीफ़ैक्स/Telefax : +91 (80) 25039266

ई-मेल/E-mail : secretary@bel.co.in

वेब/Web : www.bel-india.com

To,
National Stock Exchange of India Ltd.,
Exchange Plaza, Plot No. C/1,G Block,
Bandra-Kurla Complex, Bandra (E)
Mumbai – 400 051

No. 17565/6/SE/NSEC/SEC
25th September 2018

Dear Sir/Madam,

Sub: Presentations Made at Analysts Meet held on 25th September 2018.

In continuation to our earlier letter dated 3rd September 2018, please find enclosed herewith copy of the presentation made at Analysts Meet held on 25th September 2018. The same is also being put on Company's website as per the provisions of the SEBI (LODR) Regulations, 2015.

Thanking you,

Yours faithfully

For **Bharat Electronics Limited**

S Sreenivas
Company Secretary

Encl: As stated above



Presentation
on
Bharat Electronics Limited

Navratna PSU

- Established in 1954 under MoD
- R&D / Technology driven Company operating in competitive Defence Electronics area
- Manpower: 9726 Employees (as on 31.03.2018)

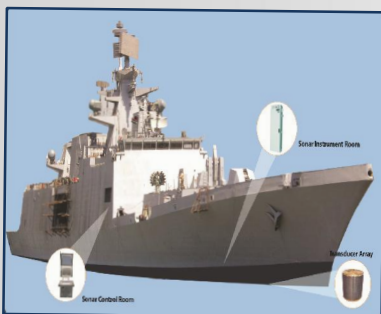
Subsidiary & JVs

- **BEL Optronics Devices Ltd**
 - Night Vision Image Intensifier tubes
- **GE BE Pvt Ltd**
 - Medical Electronics Parts, X-Ray Tubes
- **BEL Thales Systems Ltd**
 - Civil ATM and select Defence Radars

Manufacturing Network



Business Segments



1. Radar
2. Missile System
3. Communication
4. Electronic Warfare & Aviation
5. Network Centric Systems
6. Anti submarine Warfare
7. Electro-Optics
8. Tank Electronics
8. Home Land Security
- 10 Civilian Products

Multi product, Multi technology company – Diverse product range

Research & Development (R&D)

- 47% Engineering Manpower deployed in R&D
- 89% Sales Revenue from Indigenous R&D
- R&D investment: Rs. 988 Crs during 2017-18
- CMMi Level-5 Certification for Software development
- Largest Production Partner of DRDO
- Patents Application Filed – 107, Patents Granted - 07

Central Research Labs (2 Centers)

Blue Sky Research (Futuristic Technologies)
(Radio Frequency & Microwave; Embedded Computing System; Radar Signal Processing; Communication (Software Defined Radio & Wireless); Network Centric Software; Sensor Signal Processing; Very Large Scale Integration, Smart Computing System; Networking; Sensor Data Fusion;

Central Design Group and Product Development & Innovation Center (2 Centers)

Core Technology Module development Groups
(Defence Software; Encryption; Radio Frequency; Microwave; Radar Signal Processing; Power Supply; Control Electronics, Embedded System; Computing Elements; Electro Optics, Communications)

Development & Engineering Groups (20 Centers)

Products & Systems development

R&D Investment

Value in Rs Crores



Expansion & Modernization



600 Crores annual CAPEX

World class Manufacturing & Test facilities

- **Super Components Facility**
- **Test set up for Missile System**
- **Secured Manufacturing Facility for EVM / VVPAT**
- **Antenna Test Range Facility**
- **High Roof hangar for Radar & Antenna Integration**
- **Modern Production setup for Airborne applications**
- **Near Field Test Range and EMI/EMC Test Facilities**
- **Two new factories planned at Devanahalli & Nagpur – land is being acquired**

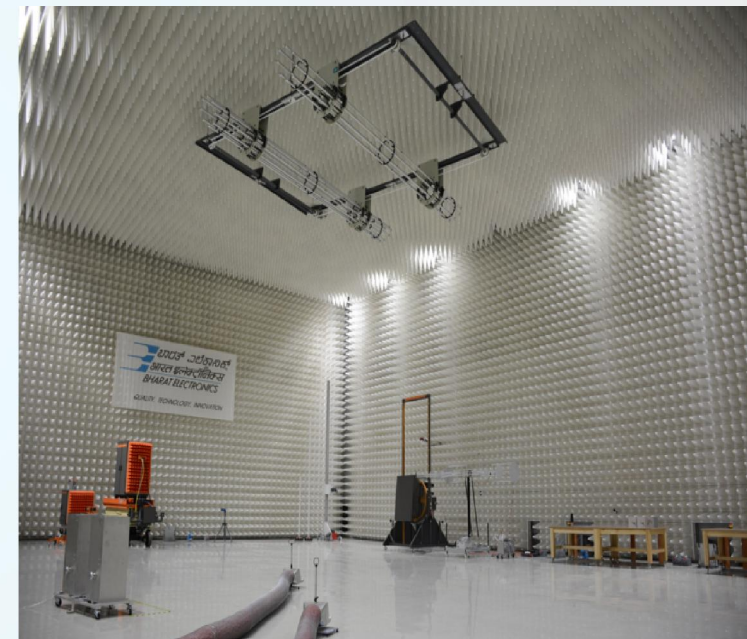
Expansion & Modernization

Value in Rs Crores



Expansion & Modernization

- Advanced EMC Testing Facilities of size 11m x 21m x 30m which can conduct testing of Systems / Platforms weighing up to 70 Tonnes.
- Near Field Antenna Test Range (NFTR) facility for calibration and testing of Radars and communication antennas
- Established High level Shock Testing Facility capable of imparting mechanical shocks up to 120g level for equipment weighing up to 800 kg
- Secured Manufacturing Test facility established for production of EVMs and VVPATs
- State of the art Electronic Artillery Fuze manufacturing



**Electro Magnetic Compatibility (EMC)
Chamber for system level testing**

Exports



- **Dedicated Business Unit & Marketing Group for Exports**
- **Achieved USD 26 Million during 17-18**
- **Export Initiatives:**
 - Strategic alliances with global OEMs (Elbit, IAI, Thales, SAAB) for joint development / co-production
 - Focus on SE Asian Countries for Comn, Sonars and Coastal Security solutions
 - Established Marketing office in Vietnam and will establish more marketing offices in Myanmar, Sri Lanka, Oman, USA and Singapore by Mar 2019

- **Major products exported:**
 - Coastal Surveillance System, CoMPASS, Advanced Composite Communication System, Electro Mechanical parts etc.
- **Major countries:**
 - USA, UK, Russia, Italy, Myanmar, Brazil, Germany, France, Israel, Indonesia, Honduras, Malaysia, Maldives, Mauritius, Namibia, Seychelles, South Africa

Major Orders Executed in 2017-18

Integrated Air Command & Control System



Fire Control System



L70 Gun Upgrade



Akash Weapon System



Major Orders Executed in 2017-18



Weapon Locating Radar



Electronic Fuze



Electronic Voting Machine



Voter Verifiable Paper Audit Trail

Major Orders Executed in 2017-18



Schilka Upgrade



3D Tactical Control Radar



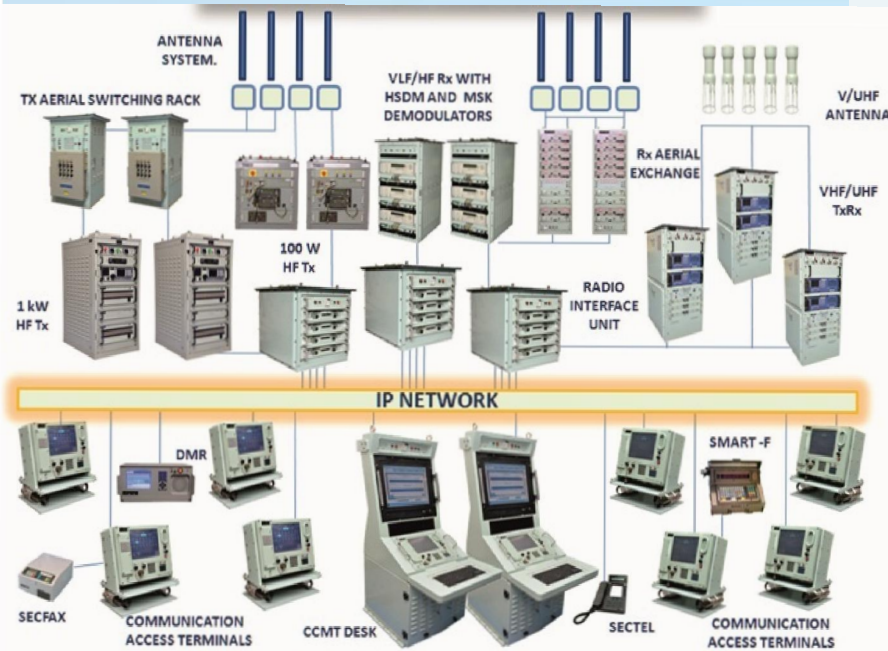
HHTI with LRF



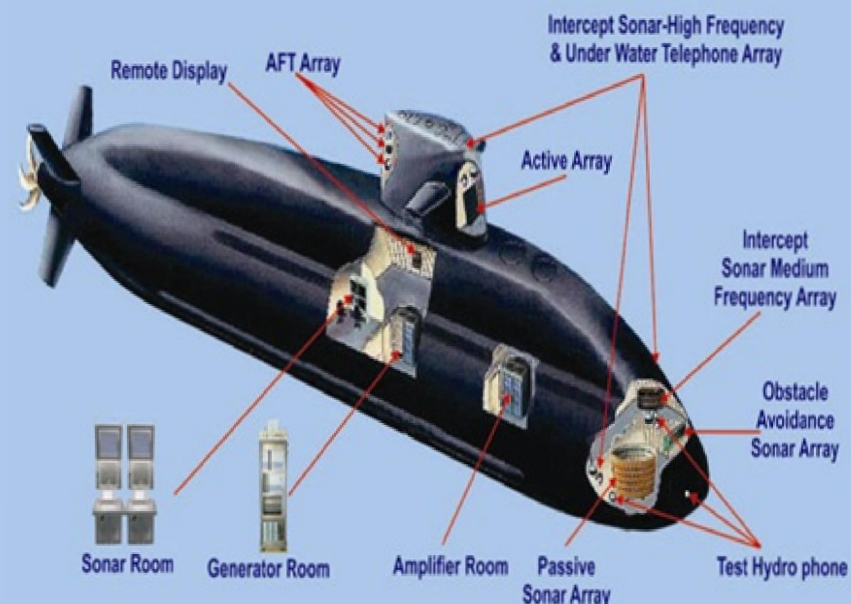
Battle Field Surveillance System

Major Orders Executed in 2017-18

Advanced Composite Communication System



Submarine Sonar Suite (USHUS 2)



Ground Based Mobile ELINT System

Ministry of Defense
ELINT ELECTRONICS
QUALITY TECHNOLOGY INNOVATION

New Products Introduced in 2017-18

- Ground Based Mobile Elint System
- Lynx U2 for SNF and P15
- Radio on the Move for QRSAM
- Advanced Composite Communication System for P15B
- Ship Data Network for P16A
- Multi Purpose Reflex Weapon Sight
- Universal Lab Test Rig for Radar Warning Receiver
- Mine Field Recording System
- Electronic Voting Machine Mk II
- Voter Verifiable Paper Audit Trail Mk II

Major Orders Received during 2017-18

- Voter Verifiable Paper Audit Trail & Electronic Voting Machine
- Commander Thermal Imager Sights for T72 & BMP
- Hull Mounted Sonar for P71
- Low Intensity Conflict EW System
- Surveillance Radar Element
- Strategic Communication System

Major Orders Likely to be Received during the year

- Akash Missile System
- BMP Upgrade
- Commander Thermal Imager Sights for T90
- Samyukta Upgrade
- Instrumented EW Range
- Coastal Surveillance System

Orders Received in current year is Rs. 14000 Cr, including LRSAM Rs. 9236 Cr

Scenario 2018-19 & Make in India

Major Projects planned during 2018-19

- Integrated Air Command Control System
- Tropo Upgrade
- Weapon Locating Radar
- Low Level Transportable Radar
- Low Intensity Conflict EW System
- Commander Thermal Imager Sights
- Ground Based Mobile ELINT
- Electronic Fuzes
- Schilka Upgrade
- L70 Gun Upgrade
- Ship Borne EW System - Varuna
- Electronic Voting Machines & VVPAT
- Homeland Security

Business Initiatives

- Acquiring land at High tech Defence & Aerospace Park at Devanahalli for pursuing business in areas like Satellite Integration, Space Electronics, Unmanned Systems, etc
- Engagement with potential Strategic Partners (identified by MoD) in the areas of aircrafts, tanks and submarines
- Dedicated Business vertical to address Cyber Security, Unmanned Systems and Composites
- Thrust on exports, offset and contract manufacturing
- Expanding Global presence with new overseas offices
- Progress on diversification initiatives of BEL in the areas of Homeland Security & Smart City Business, Ammunition Fuzes and RF Seekers have been satisfactory. BEL is having revenue inflow in these areas

'Make in India' Initiatives

- 89% of Sales Revenue from Indigenous technology
- BEL is focusing more on core areas and R&D to retain IP, all non-core areas are being outsourced to Indian Industries including MSMEs
- Outsourcing and Vendor Development Policy has been released
- “Make in India” Display Cells established in all Units of BEL
- Nodal officers for Outsourcing & Vendor development nominated
- Complied with Public Procurement Policy
- BEL's Test facilities are being provided to Private vendors



Outlook for the Future

- BEL to continue indigenisation efforts in line with 'Make in India' initiative
- Radars, Missile Systems, Communication & Network Centric Systems, Tank Electronics, Gun Upgrades, Electro-Optic Systems and Electronic Warfare & Avionics Systems to drive BEL's growth
- Establishment of state of art new factories at Machilipatnam for Electro Optics and Anantapur for future Missile programs
- Company pursuing business opportunities in Space Electronics, Solar Energy, Homeland Security, Smart Cards and Telecom
- Strategies and action plans in place to face competition, maintain technological edge and retain leadership position in strategic electronics

Thank You



ANALYSTS MEET

25.09.2018

Financial Highlights 2017-18

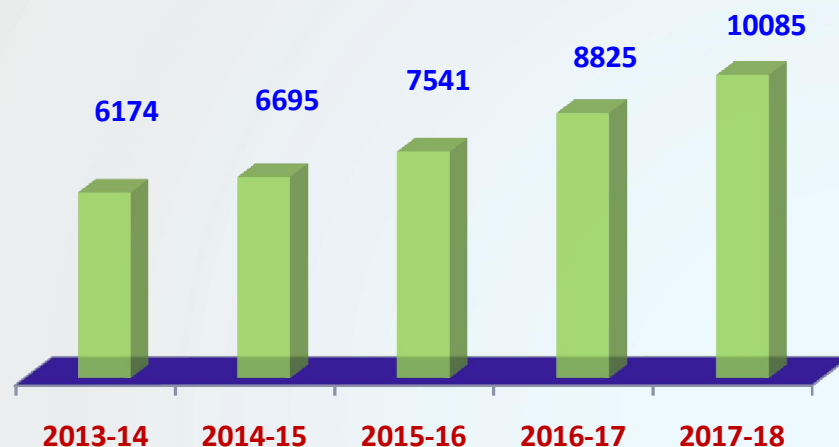
- Turnover registered a growth of 14.28% from ₹ 8824.70 Crores in 2016-17 to ₹ 10084.84 Crores in 2017-18.
- Value of Production has increased from ₹ 8715.27 Crores in 2016-17 to ₹ 9627.67 Crores in 2016-17. An increase of 10.47%.
- Operating Profit rose by 11.37% from ₹ 1,570.19 Crores in 2016-17 to ₹ 1,748.73 Crores in 2017-18.
- Net Worth has increased from ₹ 7508.54 Crores in 2016-17 to ₹ 7761.01 Crores in 2017-18.
- Turnover per employee has increased from ₹ 0.91 Crores in 2016-17 to ₹ 1.04 Crores in 2017-18

Financial Highlights 2017-18

- Earning Per Share was ₹ 5.70 in 2017-18.
- Book Value per Share was ₹ 31.85 in 2017-18.
- Profit Before Tax (PBT) was ₹ 1947.84 Crores in 2017-18.
- Bonus Share issued at 1:10 in October, 2017
- Buy Back of 2.04 Crores of equity shares of ₹ 1 each fully paid-up at price of ₹ 182.5 per Share aggregating to ₹ 372.26 Crores.

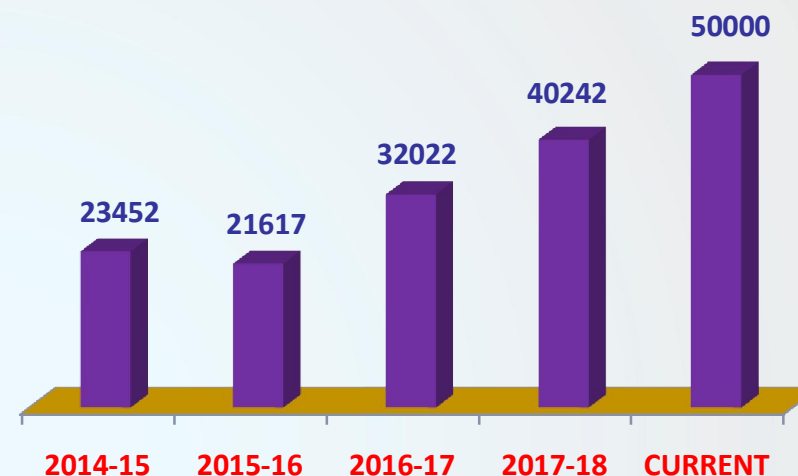
GROSS TURNOVER

(₹ in Crores)



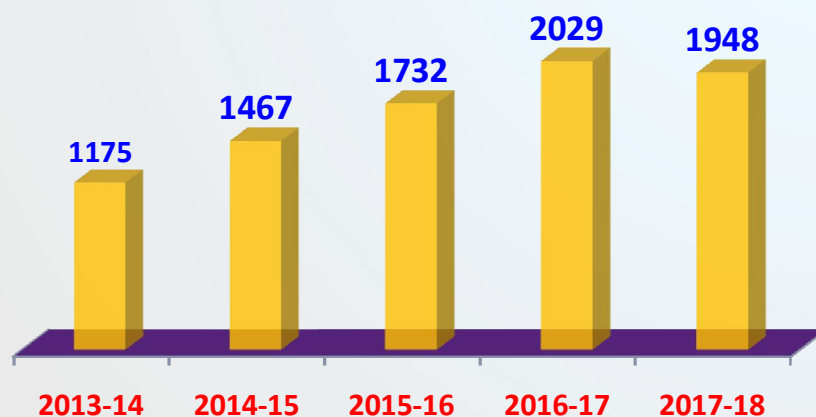
ORDERS ON HAND (as on 31st March)

(₹ in Crores)



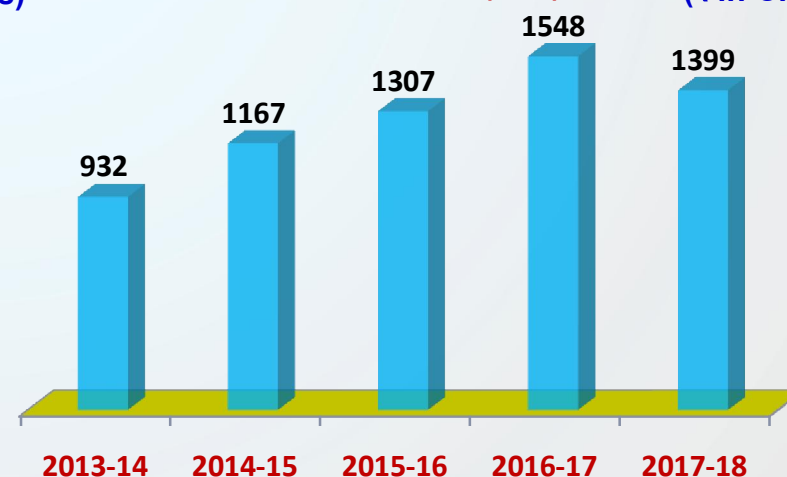
PROFIT BEFORE TAX (PBT)

(₹ in Crores)



PROFIT AFTER TAX (PAT)

(₹ in Crores)

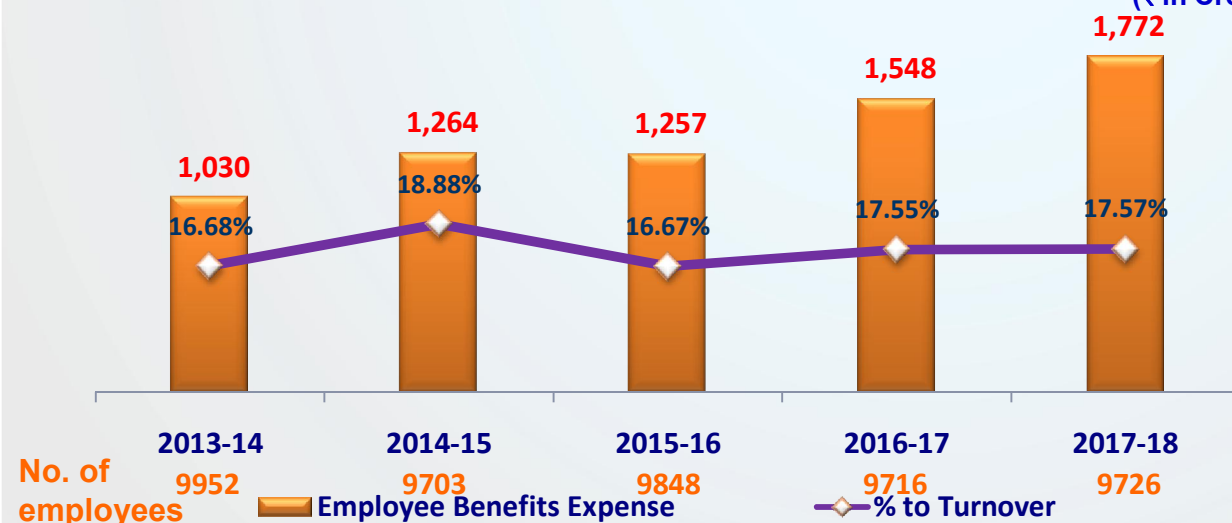


MATERIAL CONSUMPTION TO VOP

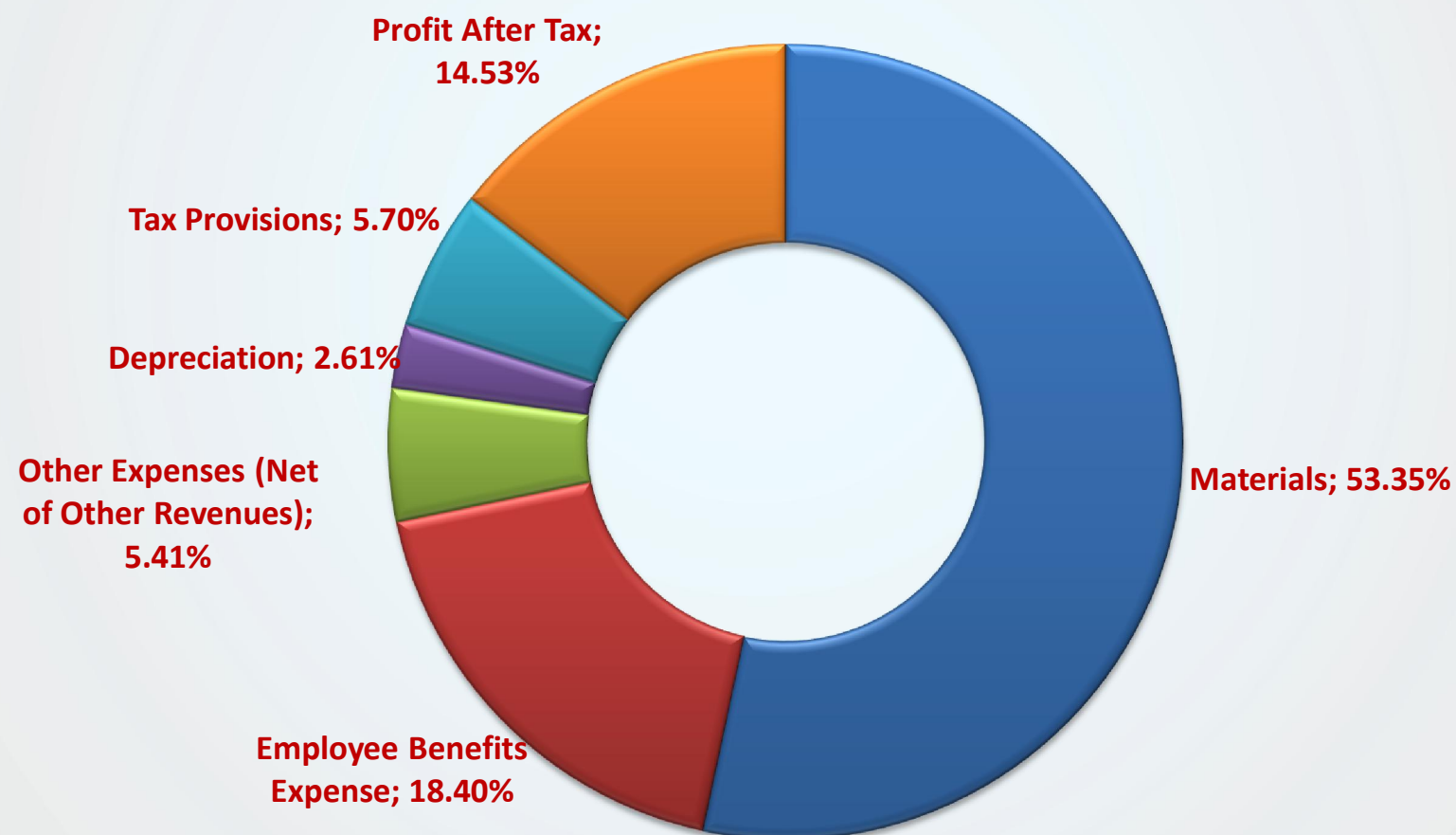
(In %)



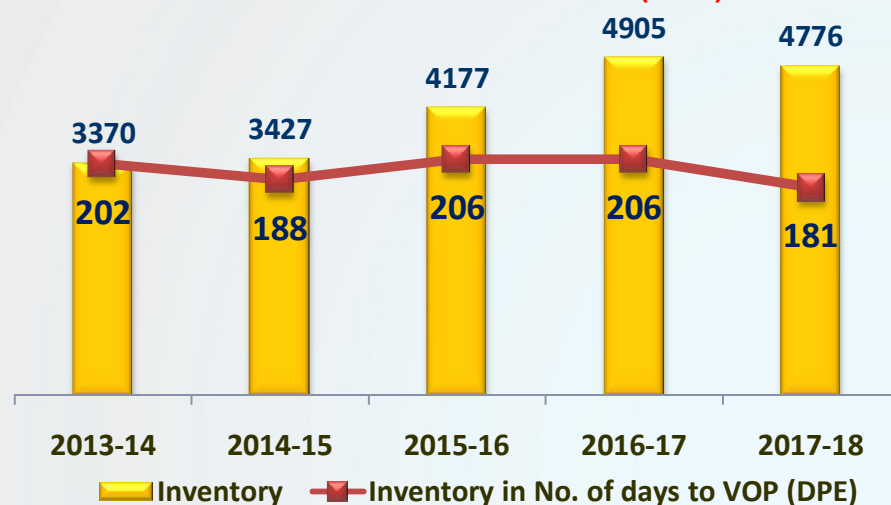
EMPLOYEE BENEFITS EXPENSE TO TURNOVER (₹ in Crores)



2017-18 HOW A RUPEE EARNED IS DISTRIBUTED

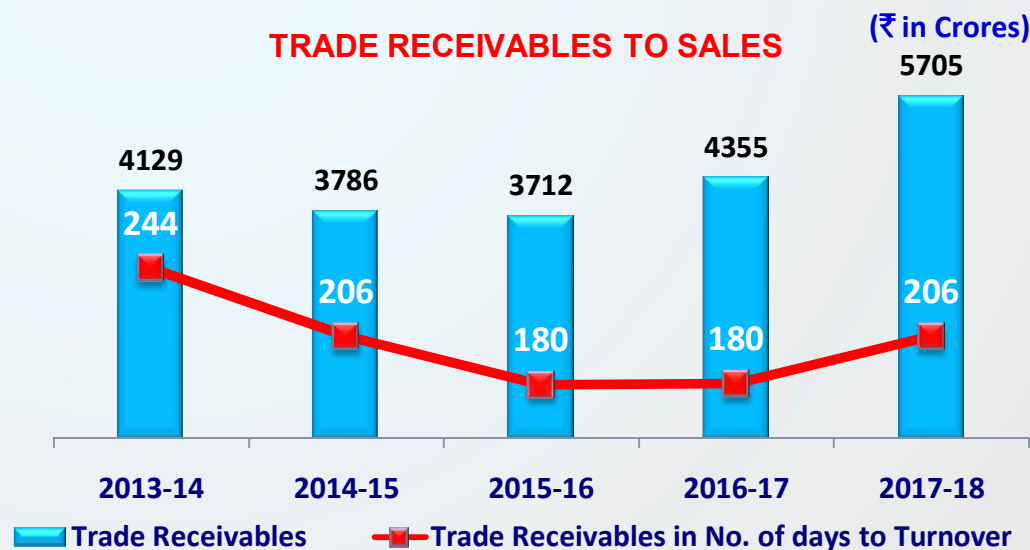


INVENTORY TO VOP (DPE) (₹ in Crores)



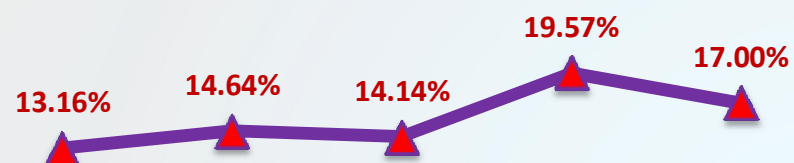
VoP = Net turnover – Changes in Inventories of FG, WIP & Scrap

TRADE RECEIVABLES TO SALES (₹ in Crores)



RETURN ON CAPITAL EMPLOYED

(in %)

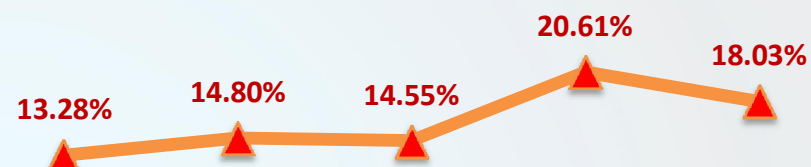


2013-14 2014-15 2015-16 2016-17 2017-18

Return on Capital Employed = PAT / Capital Employed

RETURN ON EQUITY

(in %)

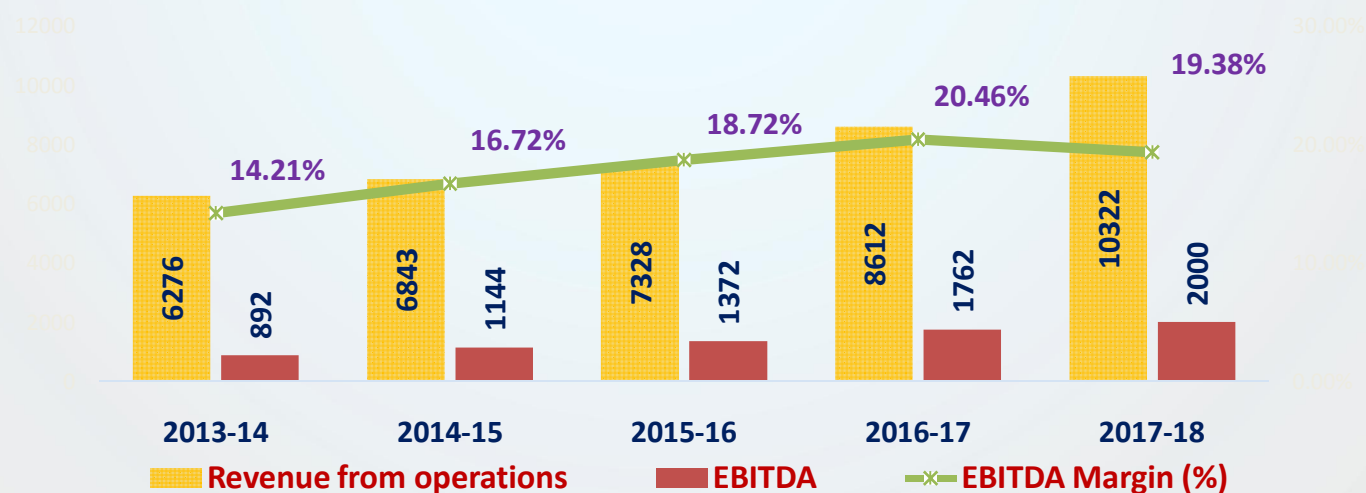


2013-14 2014-15 2015-16 2016-17 2017-18

Return on Equity = Profit After Tax / Net Worth

EBITDA and EBITDA Margin trend

(₹ In Crore)



EARNING PER SHARE (EPS) (in ₹)



2013-14 2014-15 2015-16 2016-17 2017-18

EPS normalised for the previous periods due to split in Face Value of Shares

CASH EARNING PER SHARE (in ₹)

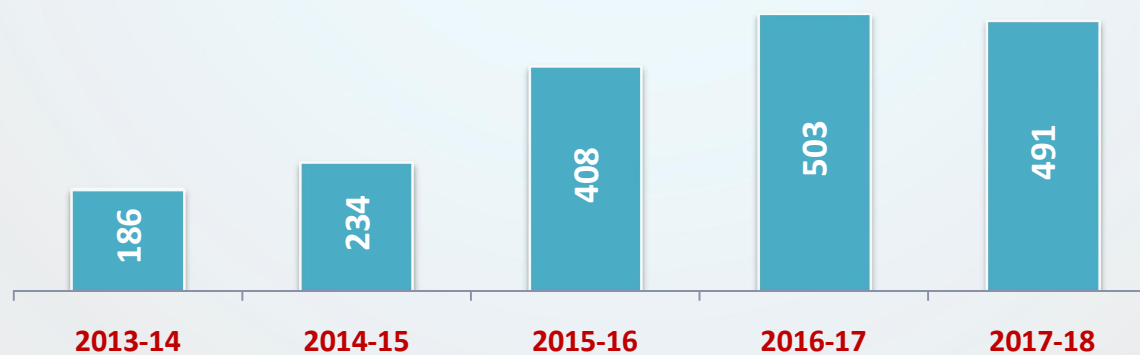


2013-14 2014-15 2015-16 2016-17 2017-18

Cash Earning Per Share = (PAT + Depreciation) / No. of Shares

DIVIDEND DISTRIBUTION

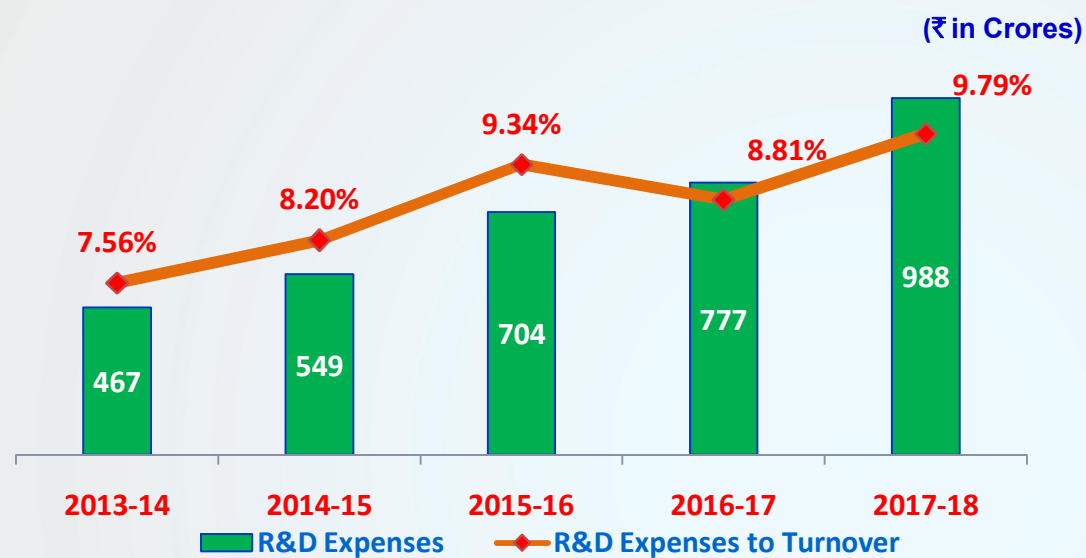
(₹ in Crores)



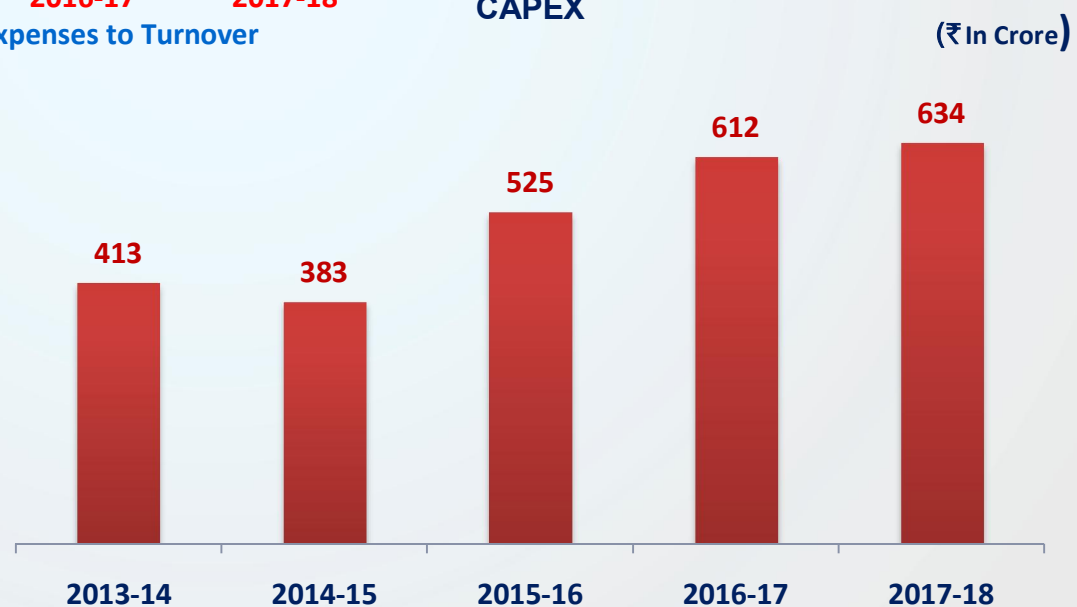
2013-14 2014-15 2015-16 2016-17 2017-18

Note: Excludes Dividend Tax

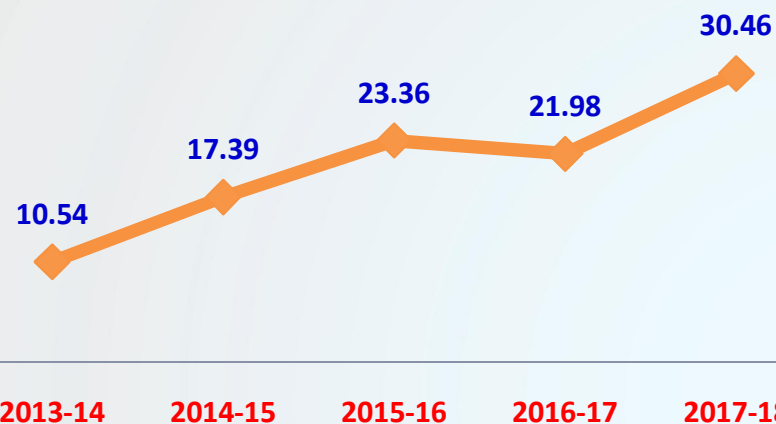
R&D EXPENSES TO TURNOVER



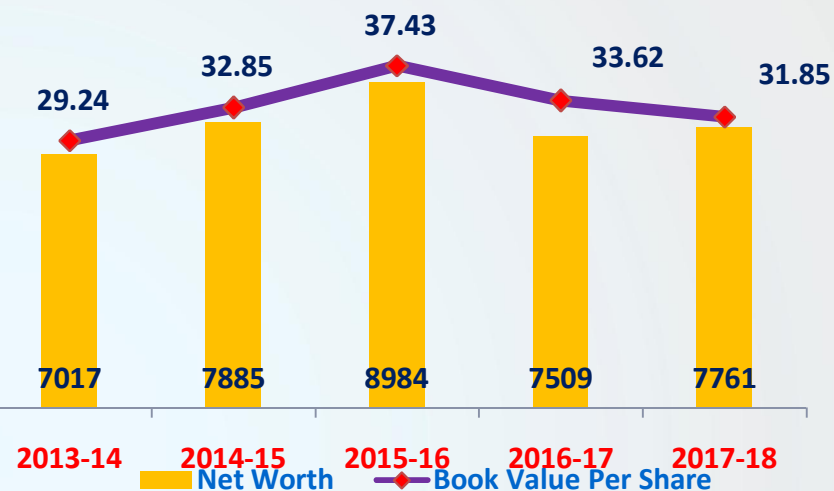
CAPEX



PRICE EARNING RATIO (in %)

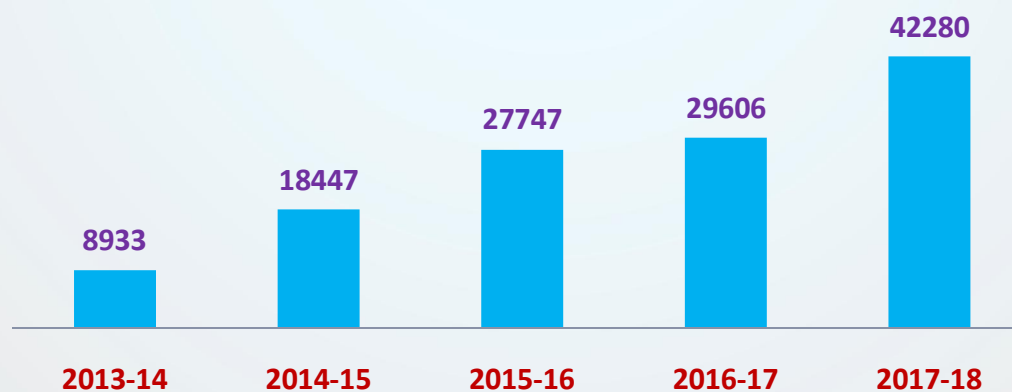


BOOK VALUE PER SHARE (₹ in Crores)



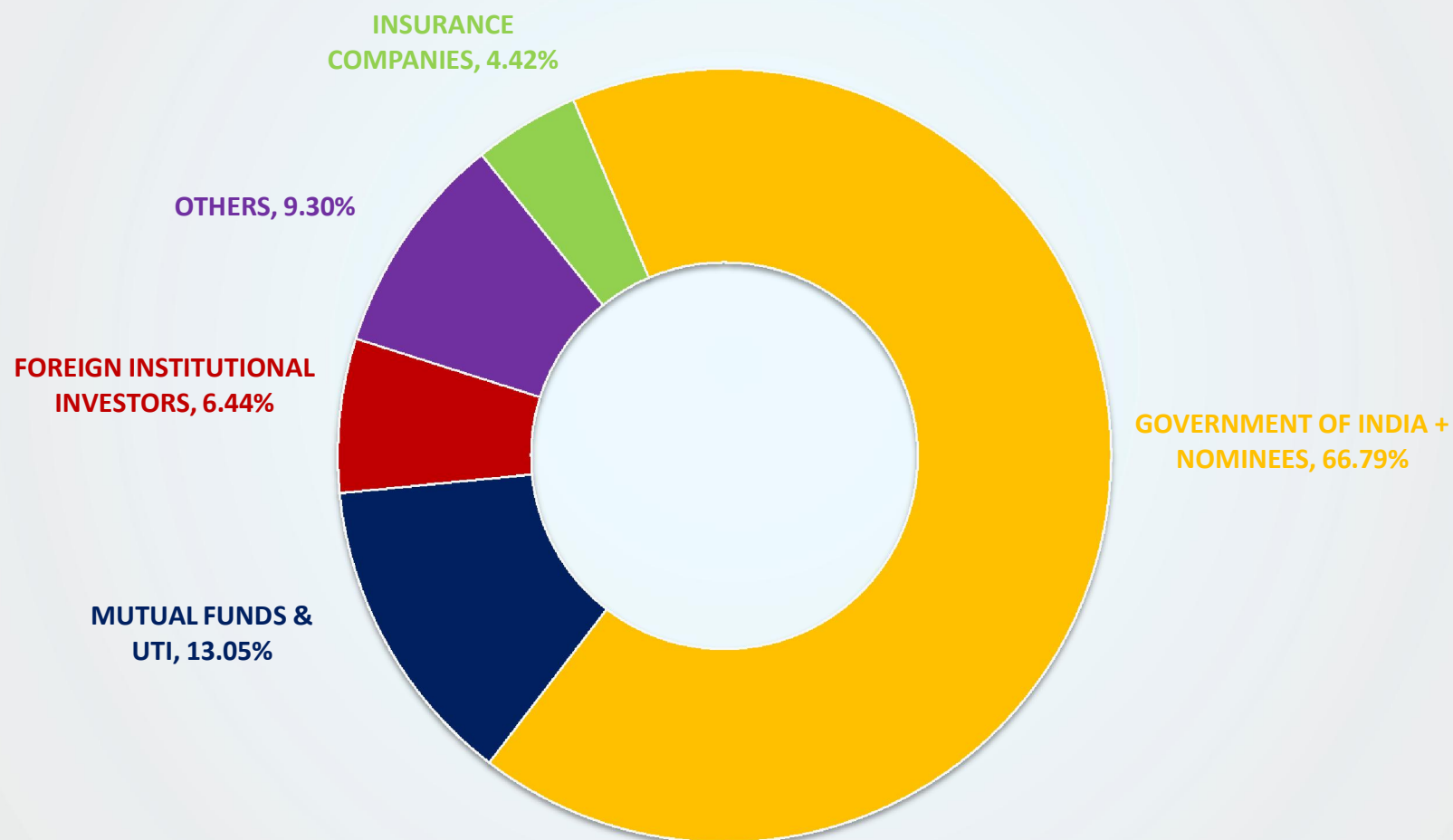
Book Value normalised for the previous periods due to split in Face Value of Shares

MARKET CAPITALISATION (₹ In Crore)



Based on the closing rate on 20.09.18 for 2018-19 and average market closing price for previous years of NSE

SHARE HOLDING PATTERN AS ON 31.03.18



Others includes: Corporate Bodies (3.37%), NRI's (.31%) , Banks & FI's (.34%)

QUARTERLY PERFORMANCE

Financial Highlights for 1st Quarter 2018-19

(₹ in Crores)

Particulars	2018-19	2017-18
Total Income from Operation (Net)	2077.84	1772.83
Net Profit for the period before tax (PBT)	250.21	179.27
Net Profit for the period after tax (PAT)	179.73	125.32
Earning Per Share (EPS in ₹) (Previous year normalised for Issue of Bonus Shares)	0.74	0.51

Thank You