

प्रतिष्ठा में / To,  
बीएसई लि. / BSE Ltd.  
फिरोज़ जीजीबॉय टावर्स  
Phiroze Jeejeebhoy Towers  
दलाल स्ट्रीट / Dalal Street  
मुंबई / Mumbai – 400 001

सं .No. **17565/4/SE/MUMC/SEC**  
दिनांक / Date: **30.08.2022**

महोदय / महोदया,  
Dear Sir/Madam,

**विषय: 30 अगस्त 2022 को विश्लेषकों की बैठक में दी गई प्रस्तुति ।**

**Sub: Presentations Made at Analysts Meet held on 30<sup>th</sup> August, 2022.**

हमारे पूर्व के पत्र दिनांक 09 अगस्त 2022 के क्रम में, कृपया 30 अगस्त 2022 को आयोजित विश्लेषकों की बैठक में दी गई प्रस्तुति की प्रतिलिपि का संलग्न पाएं। सेबी (एलओडीआर) विनियम, 2015 के प्रावधानों के अनुसार इसे कंपनी की वेबसाइट पर भी डाला जा रहा है।

In continuation to our earlier letter dated **09<sup>th</sup> August, 2022** please find enclosed herewith copy of the presentation made at Analysts Meet held on **30<sup>th</sup> August, 2022**. The same is also being put on Company's website as per the provisions of the SEBI (LODR) Regulations, 2015.

सूचना व अभिलेख हेतु।  
This is for your information and record.

सधन्यवाद / Thanking you,

भवदीय / Yours faithfully,

कृते भारत इलेक्ट्रॉनिक्स लिमिटेड  
**For Bharat Electronics Limited**

  
एस श्रीनिवास / **S Sreenivas**  
कंपनी सचिव / **Company Secretary**

संलग्न- यथा उपर्युक्त  
Encl: As stated above.

**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

टेलीफैक्स/Telefax : +91 (80) 25039266

ई-मेल/E-mail : secretary@bel.co.in

वेब/Web : www.bel-india.com



Analyst Meet - 2022

Bharat Electronics Limited

30<sup>th</sup> Aug, 2022





## Navratna PSU

- Established in 1954 under Ministry of Defence
- R&D / Technology driven Company operating in Strategic Electronics in Defence & Non Defence segments
- 56<sup>th</sup> among top 100 Companies Worldwide in Defence Revenue (Defence News Top 100, Year 2021)
- 66<sup>th</sup> among top 100 arms-producing and military services companies in the world excluding (SIPRI Report, 2020)
- 8740 employees, of which 4855 are Engineers; more than 55% in R&D (as on June 2022)

## Office Network

- **Marketing Offices (New Delhi):** National Marketing (Def), Civil Marketing (Non-Def) and International Marketing
- **Overseas Offices:** USA (New York), Singapore, Oman, Sri Lanka, Vietnam, Myanmar (Shortly opening offices in Nigeria, Brazil, Kazakhstan & Armenia)
- **Regional/Liaison Offices:** Bengaluru, Delhi, Mumbai, Vizag, Kolkata, Nagpur, Agra
- **Product Support Centers:** Delhi, Kochi, Guwahati, Kolkata, Port Blair, Mumbai, Vizag, Jammu, Chandigarh, Allahabad, Jodhpur, Sullur, Bhatinda, Wadsar & Bagdogra
- **Water Front Support Centers:** Chennai, Port Blair, Kochi, Karwar, Vizag, Kolkata, Mumbai

## Subsidiary & Associate Companies

### Subsidiary Companies:

- BEL Optronics Devices Ltd – Night Vision Image Intensifier Tubes
- BEL Thales Systems Ltd – Civil Air Traffic Management Radars and select Defence Radars

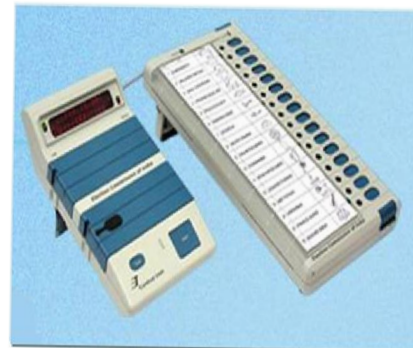
### Associate Companies:

- GE BE Pvt Ltd – Medical Electronics Parts, X-Ray Tubes
- Defence Innovation Organisation (DIO) – To promote Start up in Defence Electronics

## Manufacturing and R&D Facilities

- Nine Manufacturing Units all over India having 25 Strategic Business Units
- Two Central Research Laboratories at Bengaluru and Ghaziabad
- One Product Development and Innovation Centre at Bengaluru

# Business Segments



1 Radar & Fire Control Systems

2 Weapon Systems

3 Communication Systems

4 Electronic Warfare & Avionics

5 Network Centric Systems

6 Anti-Submarine Warfare

7 Electro-Optics

8 Tank Electronics & Gun Upgrade

9 Home Land Security & Smart Cities

10 Non-Defence Products

**Multi product, Multi technology company – Diverse product range**



# Areas of Diversification



- 1 Energy Storage Products
- 2 Unmanned Systems
- 3 Space Electronics & Systems
- 4 Solar Cells/Power Plants
- 5 Seekers & Missiles
- 6 Network & Cyber Security
- 7 Arms & Ammunitions
- 8 Railway / Metro Solutions
- 9 Software Solutions / Services
- 10 Composites
- 11 Medical Electronics & Healthcare Solutions
- 12 Civil Aviation

# Research & Development (R&D)

- 55% Engineering Manpower deployed in R&D
- ~78% Sales Revenue from Indigenous R&D
- R&D investment: Rs. 1045 Crs during 2021-22
- Companies, Institutions, Academia and Experts/Consultants in different areas as Collaborative R&D Partners
- CMMi Level-5 Certification for Software development
- Largest Production Partner of DRDO
- Intellectual Property Rights (IPR) Application Filed – 912, IPRs Granted/Registered – 303, Patents Granted – 30 (Cumulative up to 31<sup>st</sup> July 2022 )

## 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; AI ; Robotics

## Product Development & Innovation Center

### 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 (22 Centers)

Products & Systems development



# Expansion & Modernization

## Plants / Centres: To address Manufacturing needs & R&D

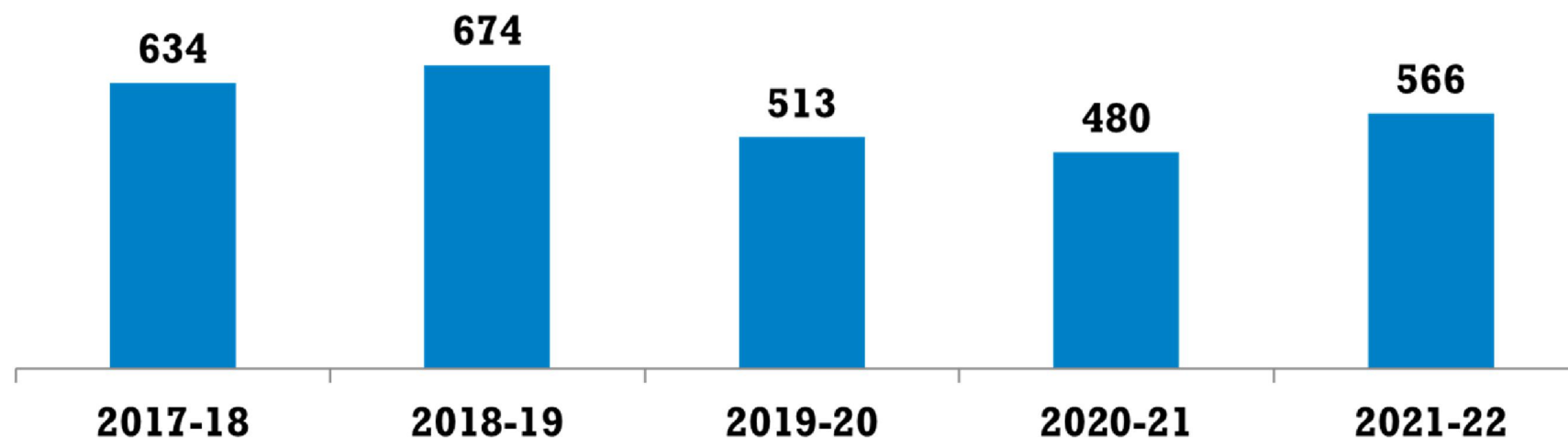
- Nimmaluru, AP : Advance EO Systems Manufacturing
- Palasamudram, AP: Weapon System Integration
- PDIC - Bengaluru: R&D Centre
- Ibrahimpatnam, Hyd: EW Systems Manufacturing

## Investments to address Diversification Initiatives

- Land in Devanahalli (Bengaluru): Space, Unmanned Systems, Solar, etc.
- Land in Nagpur: Explosive handling for Fuzes
- RPSC Centres: Product Support Services

## CAPEX

Rs. Crores





- **Dedicated Marketing Group for Exports**
- **Achieved USD 33.30 Million during the year 2021-22.**
- **Export Order acquired in 2021-22 – 179 MUSD**
- **Total Export Order Book as on 01.08.2022 – 272 MUSD**
- **Export Initiatives:**
  - ✓ Collaborated with partners in Chile, Suriname, Argentina, Peru, Columbia, Panama, Malaysia, Nepal, ASEAN, Bangladesh & USA.
  - ✓ Resource sharing – marketing products and systems of Defence Industries in India through BEL's overseas representative/marketing offices to quickly expand geo-spatial reach (18 Countries)
  - ✓ BEL has planned strategic alliance with Major Indian Platform Manufacturers and is in the process of signing Agreements to create strong support within the country.

- **Major products exported:**

- ✓ Coastal Radar System, Communication Equipment's, Data Link, Radar Finger Printing System, TR Modules, Low Band Receiver LRUs, Mechanical Parts (Contract Manufacturing Services), Solar Hybrid Power Plants at Radar Station Locations, EOS, Cable Looms, Radar Spares, Sub Assemblies of Missile Systems, Shelter spares, PCB Assemblies, etc.

- **Major countries:**

- ✓ USA, France, China, Germany, Switzerland, ASEAN, Mauritius, Armenia, Srilanka, Sweden, Israel, etc



# Major Orders Executed in 2021-22



**Long Range Surface to Air Missile System**

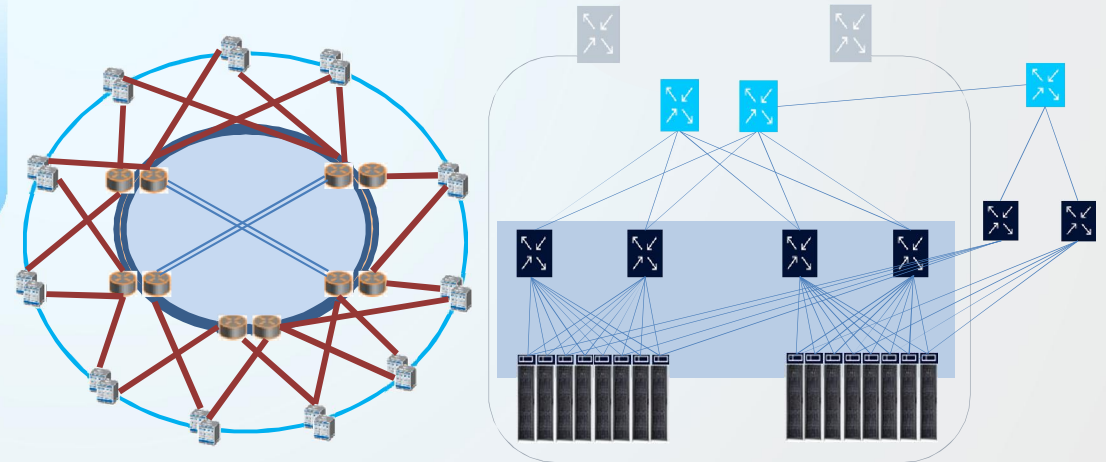


**Akash Missile System**

# Major Orders Executed in 2021-22



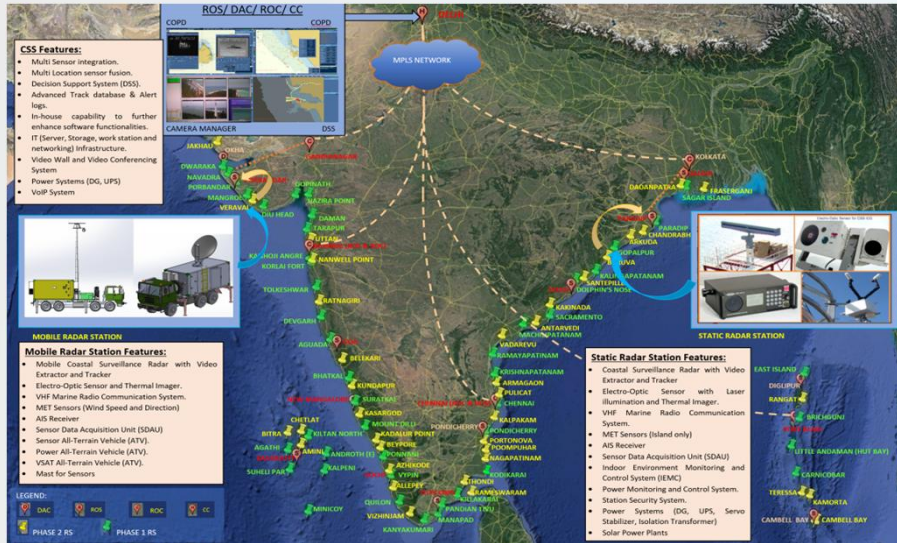
## Integrated Air Command & Control System



## Air Force Network (AFNET)



# Major Orders Executed in 2021-22

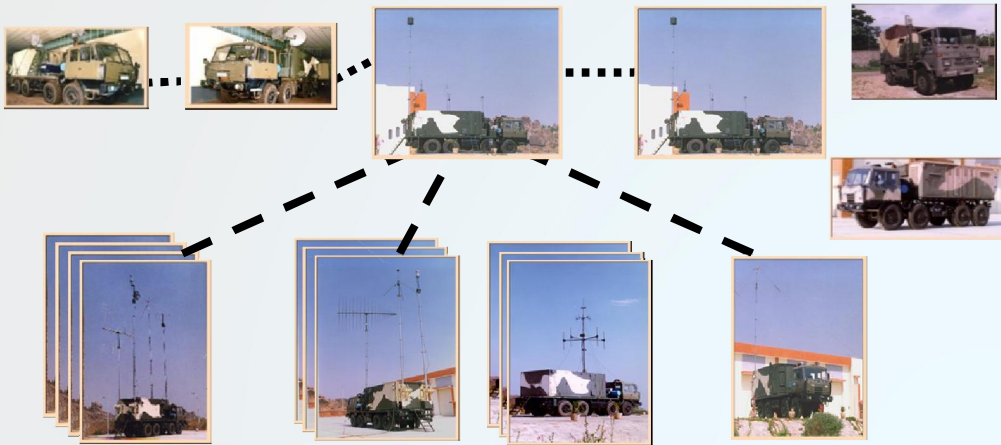


**CSS Phase II**



**INTEGRATED PERIMETER SECURITY SYSTEM (IPSS)**

# Major Orders Executed in 2021-22



**Samyukta Upgrade (EW System)**



**SHAKTI (EW System)**



## New Products/Sub-Systems Introduced in 2021-22

- Laser Fence System.
- IR Jammer for Active Tank Protection System.
- Gimbal for Tethered UAV
- Drainage Intrusion Detection System
- Solid State Power Controller Cards (28V 16 & 32 channel)
- Tactical server commercial and rugged versions
- X-Band 12W HPA MMIC for UTTAM, D4 and other systems
- C-Band Digital Phase Shifter, SPDT Switch, LNA, Driver Amplifier for QRSAM
- S-Band 150W Power Amplifier for SBR
- C-Band PLO form-fit replacement for imported DRO module for Ku band Seekers in ASTRA, AKASH-1S, QRSAM, VLSRSAM

## Major Orders Received during 2021-22

- Avionics Package for LCA
- Advanced EW Suite for Fighter Aircraft
- Instrumented Electronic Warfare Range (IEWR)
- CDR TI cum Day Light Sights
- Electronic Voting Machines
- RWR & MAWS for C-295 Aircraft
- Dhanush Electronic Upgrade

**Orders Received during 2021-22 is Rs 19000 Cr approx**

**The current Order Book is around Rs 55450 Cr, Orders received during the year 2022-23 is around Rs 1600 Cr (as on 31<sup>st</sup> July 2022)**



## Major Projects planned during 2022-23

- LRSAM (Long Range Surface to Air Missile) System
- Akash Missile System (7 Sqdn)
- Integrated Air Command & Control System
- Electronic Voting Machines
- AFNET
- Thermal Imagers
- Kerala Fibre Optic Network (K-FON)
- Naval Equipments
- Smart City Business
- Various Radars

**Solar:** MoU with NHPC for Solar Infrastructure Creation

**MGLD:** Teaming Agreement (TA) with JSR Dynamics for Miniature Ground Launched Decoy

**Ammunition:** Joint Development Agreement (JDA) with IIT-M for 125mm Ammunition and 80mm Rocket.

**Digital Agriculture:** MoU with University of Agriculture Sciences (UAS), Bangalore

**Fuel Cell:** MoU with SFC, Germany for Fuel Cell based power solutions.

**EV Charging Infra:** MoU with CESL/EESL & NHAI for EV Charging Infra at mutually agreed locations.



**Railways:** Teaming Agreement (TA) signed with DMRC for Indigenous Auto Train Supervision System (i-ATS), Centralized Train Control (CTC), Train Management System (TMS), Super SCADA system

**Solar:** Setting up of Solar Power plant using Solar Modules made up of Bifacial solar cell technology

**COEs:** Creation of Centres of Excellence (COE) at PDIC

**CFRP:** Partnered with IIT-M for Carbon Fiber Reinforced Polymer (CFRP) structure development for Naval Application

**Cyber Security:** MoU with SBI for Cyber security & IT

**ATM System:** MoU with AAI for Air Traffic Management System with Advance Surface Movement Guidance & Control System (ASMGCS)

## Business Initiatives

**Combat Vehicles:** MoU with AVNL (Earlier HVF, Avadi) for Co-operation in Combat Armoured Defence Mobility Vehicle

**DIRCM EW System:** TCA with Elbit System for Directed Infrared Counter Measure System (DIRCM) EW System for Air Platforms

**Inertial Navigation System (INS):** MoU & MToT with SAFRAN, France for Co-Operation for Land Navigation System and Terrestrial Inertial Sensor Module(TISM)

**Blockchain:** MoU with INERY for Co-operation in Blockchain Technology



## 'Make in India' Initiatives

- 1100 items uploaded on MoD's Indigenization portal (Srijan).
- EoIs for 81 items published under Make-II (BEL Projects), of which 54 items are in various stages of indigenization.
- 193 items (BEL items) declared in Positive Indigenization Lists (PIL) of DPSUs



## Outlook for the Future

- BEL's current year turnover is around Rs.3700 Cr & Order acquired during 2022-23 is around Rs. 1600 Cr (as on 31<sup>st</sup> July 2022)
- BEL to focus on R&D, both in-house and collaborative Mode, for increased value addition and intellectual property creation
- Enhanced Partnerships with DRDO labs, research and academic institutions, Startups as well as with niche technology companies & consultants
- Thrust on Exports by expanding geo-spatial reach & partnerships

## Outlook for the Future

- Thrust on diversification initiative like Medical Electronics, Energy Storage Products including e-Charging Stations, Unmanned Systems, Space Electronics, Satellite Launch Vehicles, Solar Cells/Modules, Seekers and Missiles, Network & Cyber Security, Arms & Ammunitions to drive BEL's growth
- Focus on increasing revenue share in Services Business through new Business Models like OPEX, GOCO, Leasing, Product Support Services, etc



*Thank You*



**ANALYST MEET**

**30.08.2022**

## Financial Highlights FY 2021-22



- **Turnover has increased to Rs. 15044 Cr from Rs. 13818 Cr, a growth of 8.87%.**
- **Profit Before Tax (PBT) has increased to Rs. 3158 Cr from Rs. 2935 Cr, an increase of 7.60%.**
- **Profit After Tax (PAT) has increased to Rs. 2349 Cr from Rs. 2065 Cr, an increase of 13.73 %.**
- **Earning Per Share (EPS) has increased to Rs. 9.64 from Rs. 8.48.**
- **Total dividend payout of Rs. 4.50 per share in 2021-22, against Rs. 4 per share for 2020-21. The total dividend outlay for 2021-22 is Rs. 1096.47 Cr**

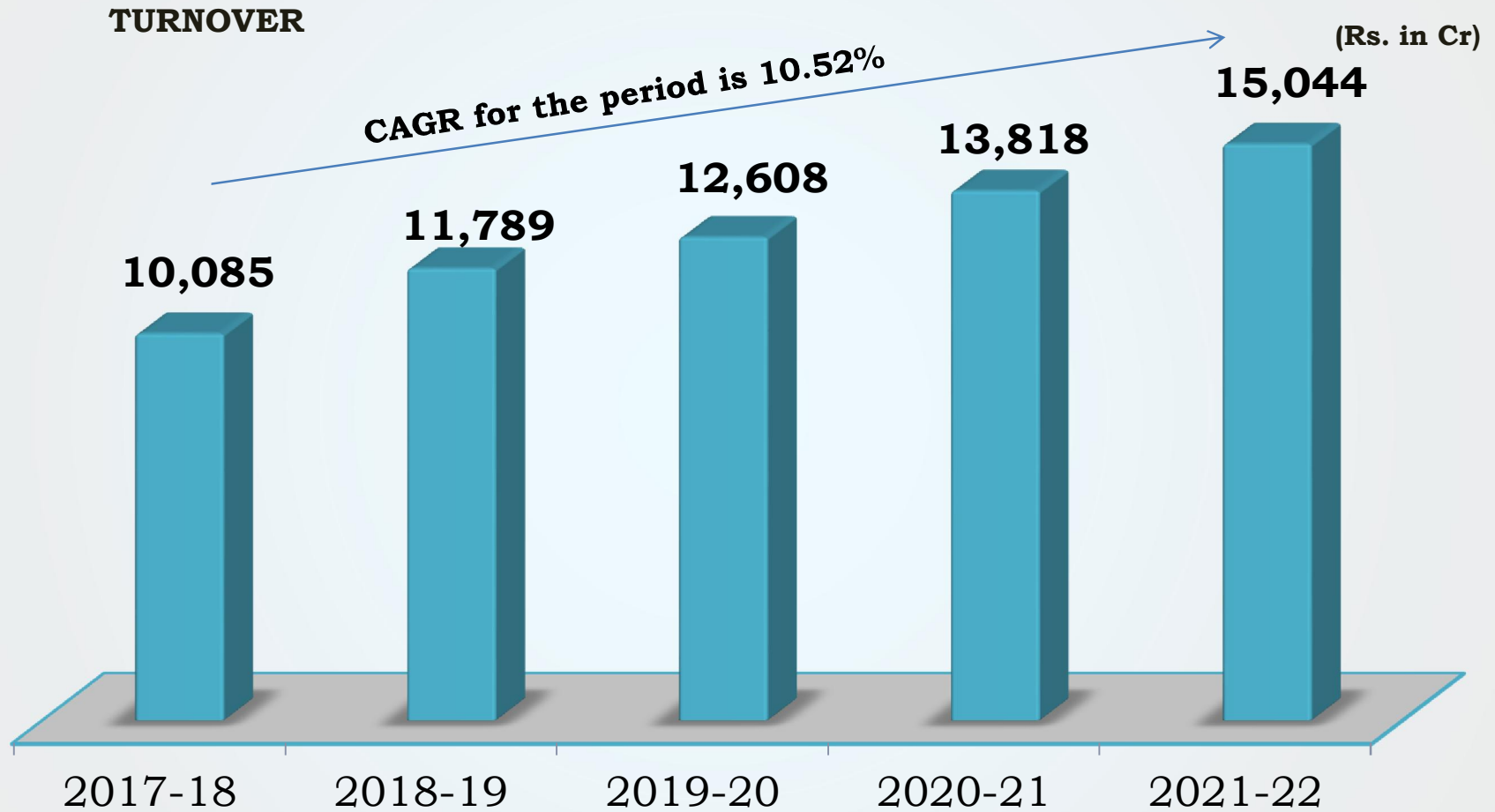


## Financial Highlights FY 2021-22

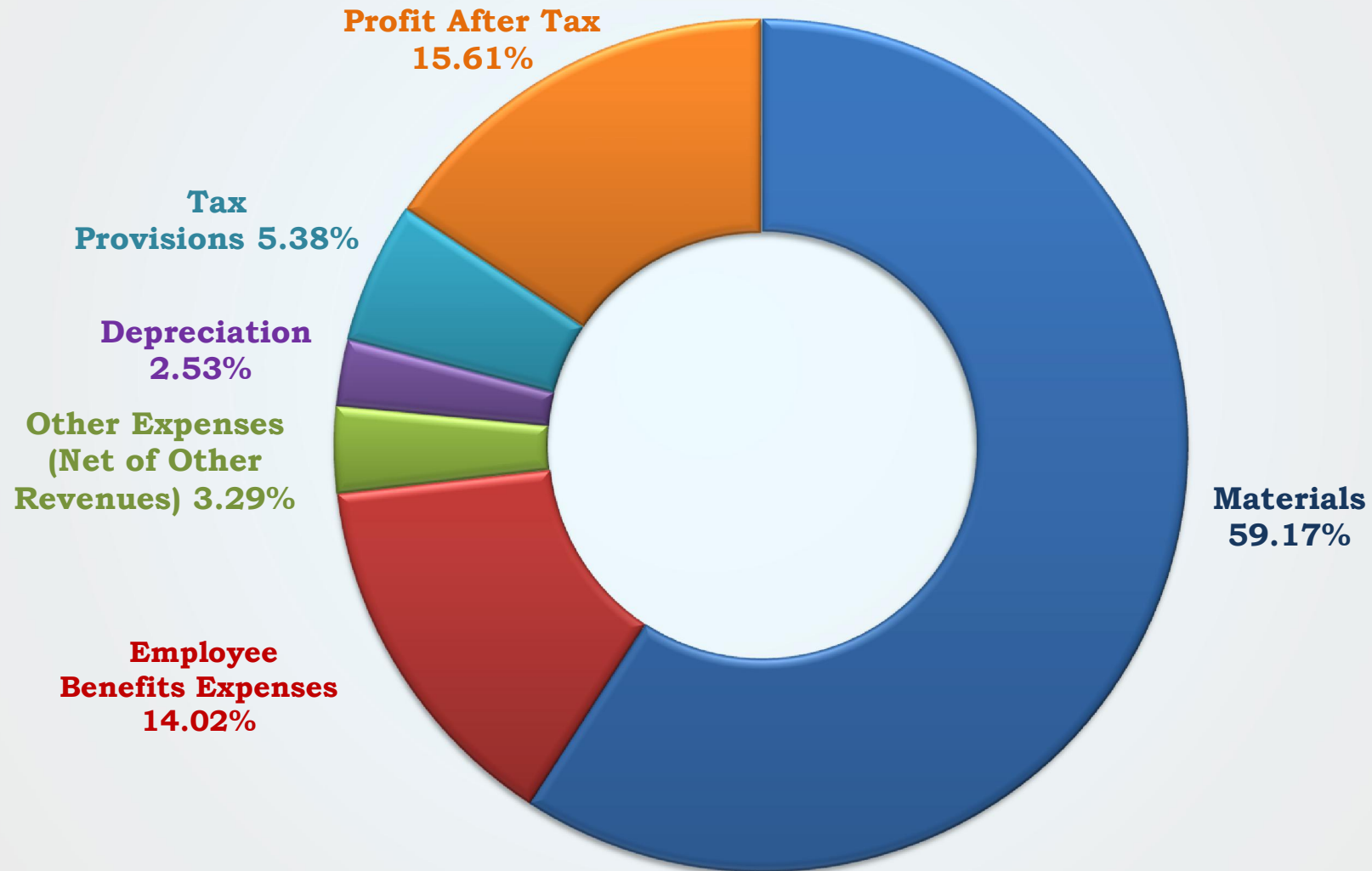


- **Cash & Bank Balances has increased to Rs. 7499 Cr from Rs. 5009 Cr.**
- **Net Worth has increased to Rs. 11984 Cr. from Rs. 10808 Cr.**
- **Book Value Per Share has increased to Rs. 49.18 from Rs. 44.36.**
- **Capital Expenditure amounting to Rs. 565 Cr in 2021-22.**
- **Market Capitalization as on 29.08.2022 is Rs. 75,200 Cr.**

# Performance



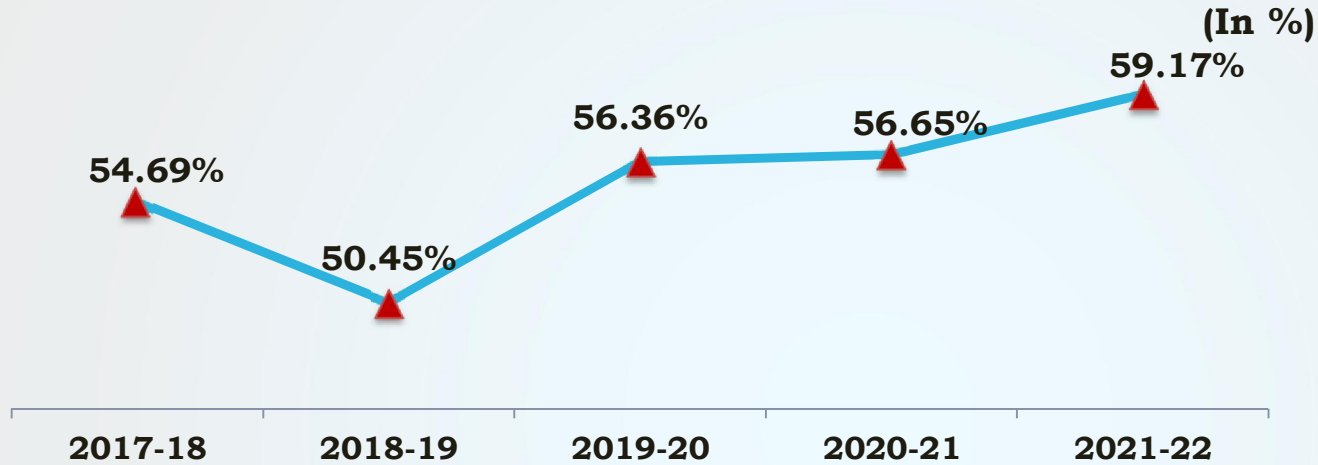
# During FY 2021-22 HOW A RUPEE EARNED IS DISTRIBUTED



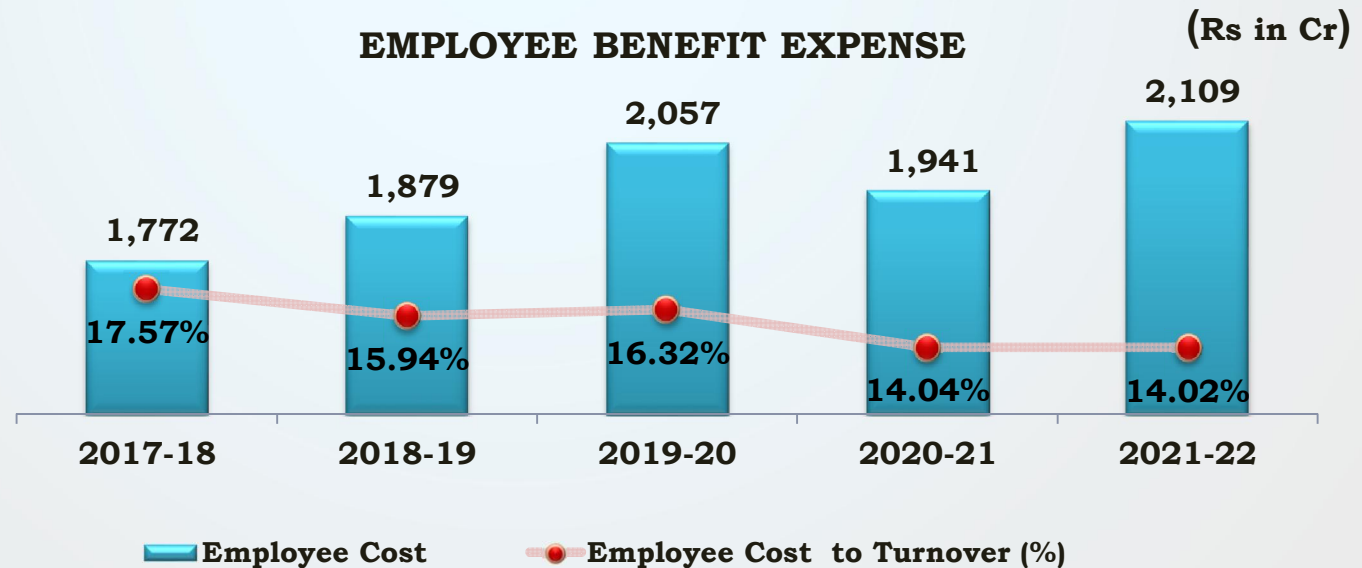


# Expense Ratios

## MATERIAL CONSUMPTION

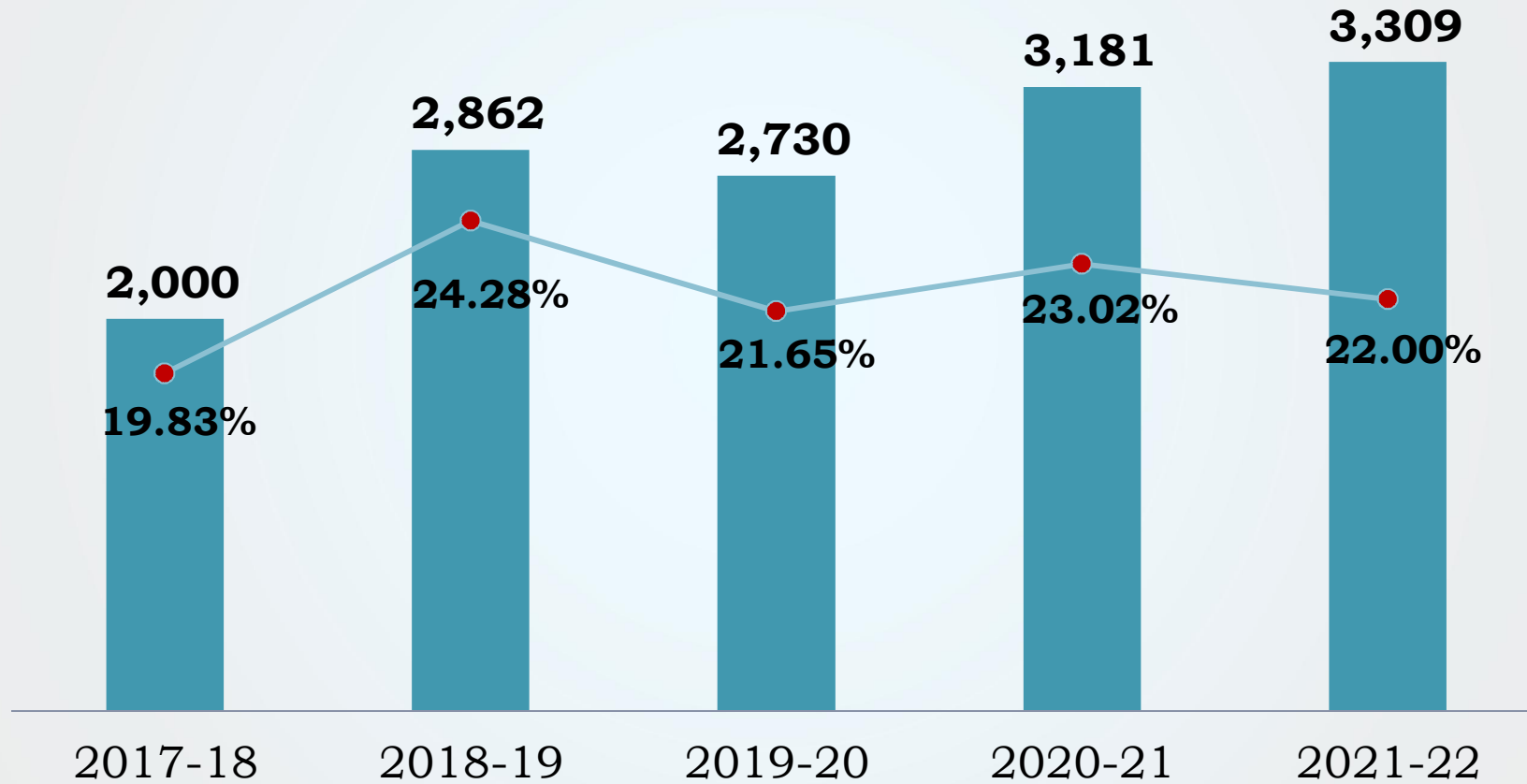


## EMPLOYEE BENEFIT EXPENSE



### EBITDA and EBITDA Margin trend (%)

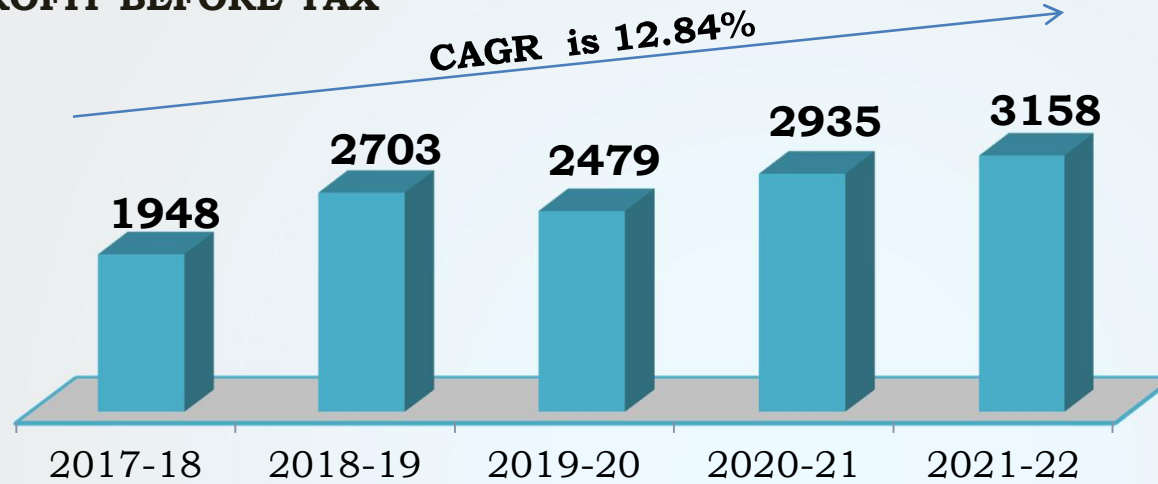
(Rs. In Cr)



# Profitability

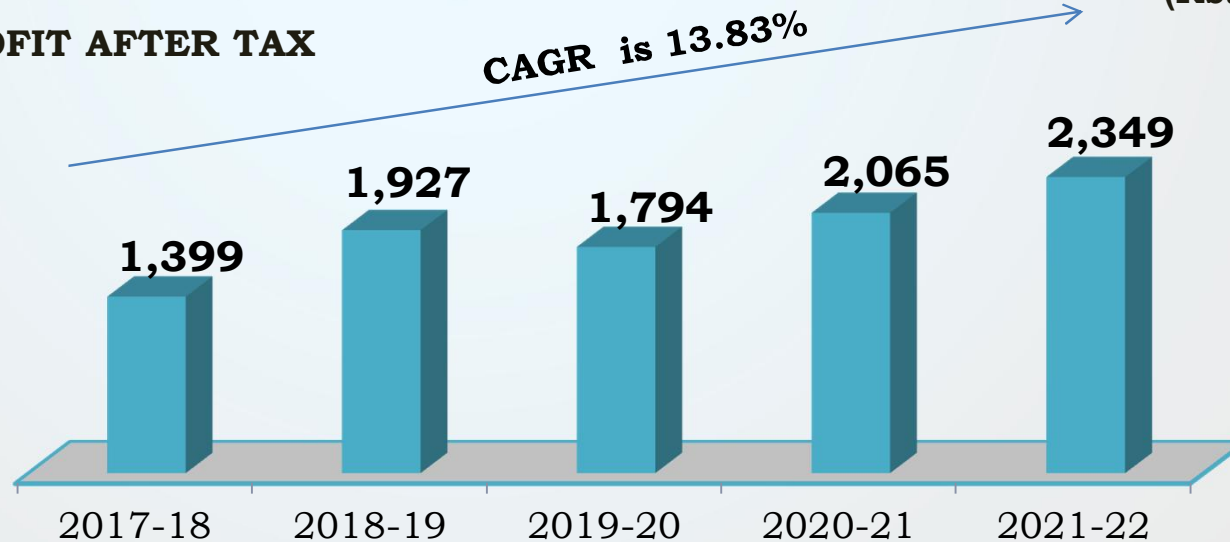
## PROFIT BEFORE TAX

(Rs. in Cr)



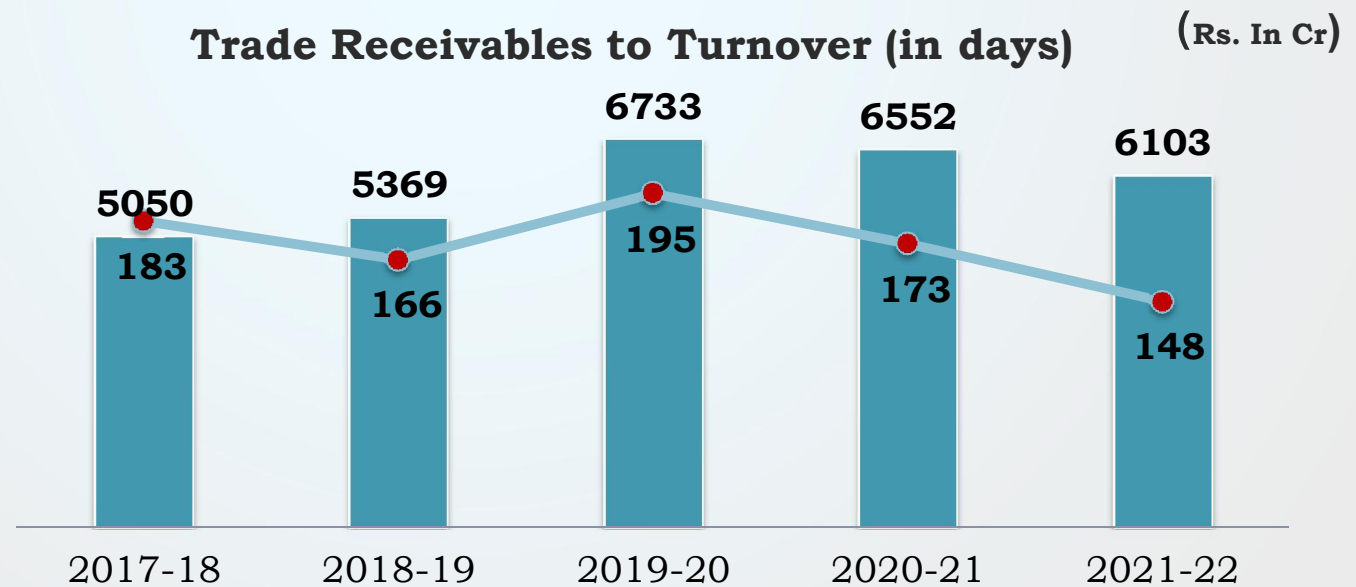
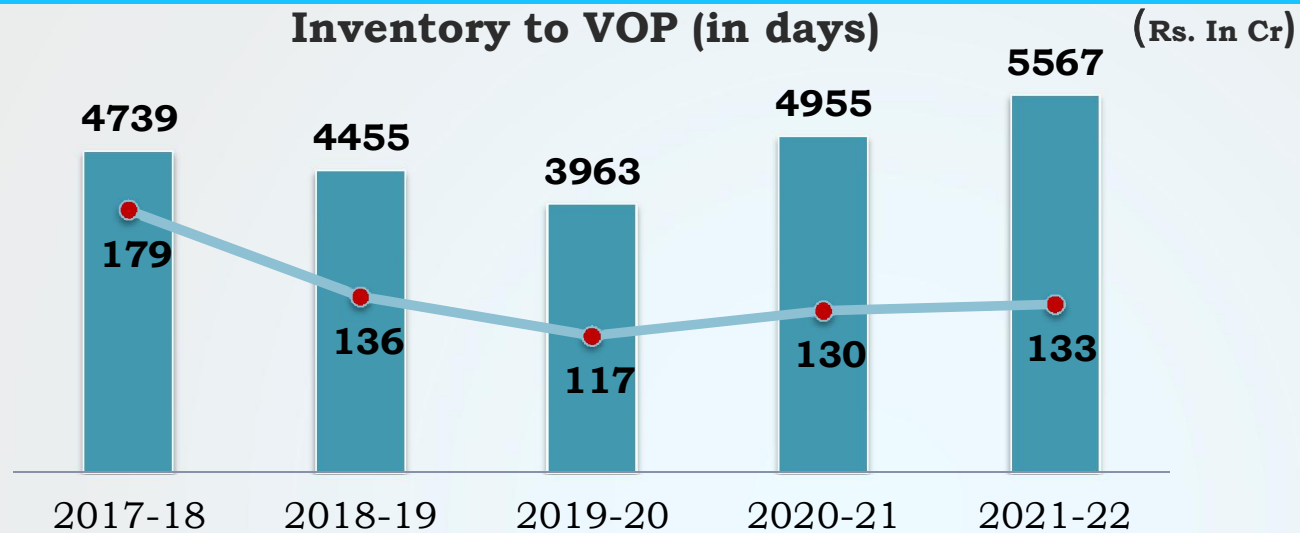
## PROFIT AFTER TAX

(Rs. in Cr)





## Turnover Ratios



## Liquidity Ratio

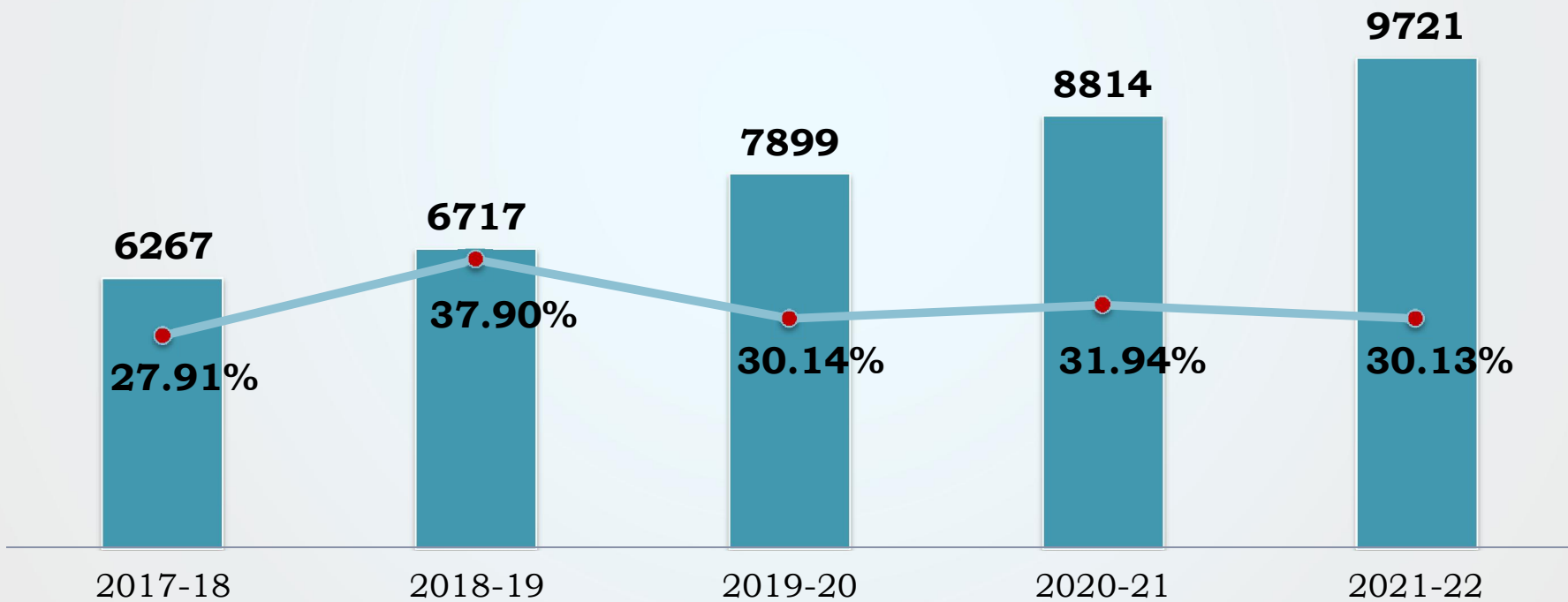
**Current Ratio = Current Assets/Current Liabilities**



## Return Ratios

(Rs. in Cr)

■ Avg. Capital Employed    ● Return on Capital Employed (%)



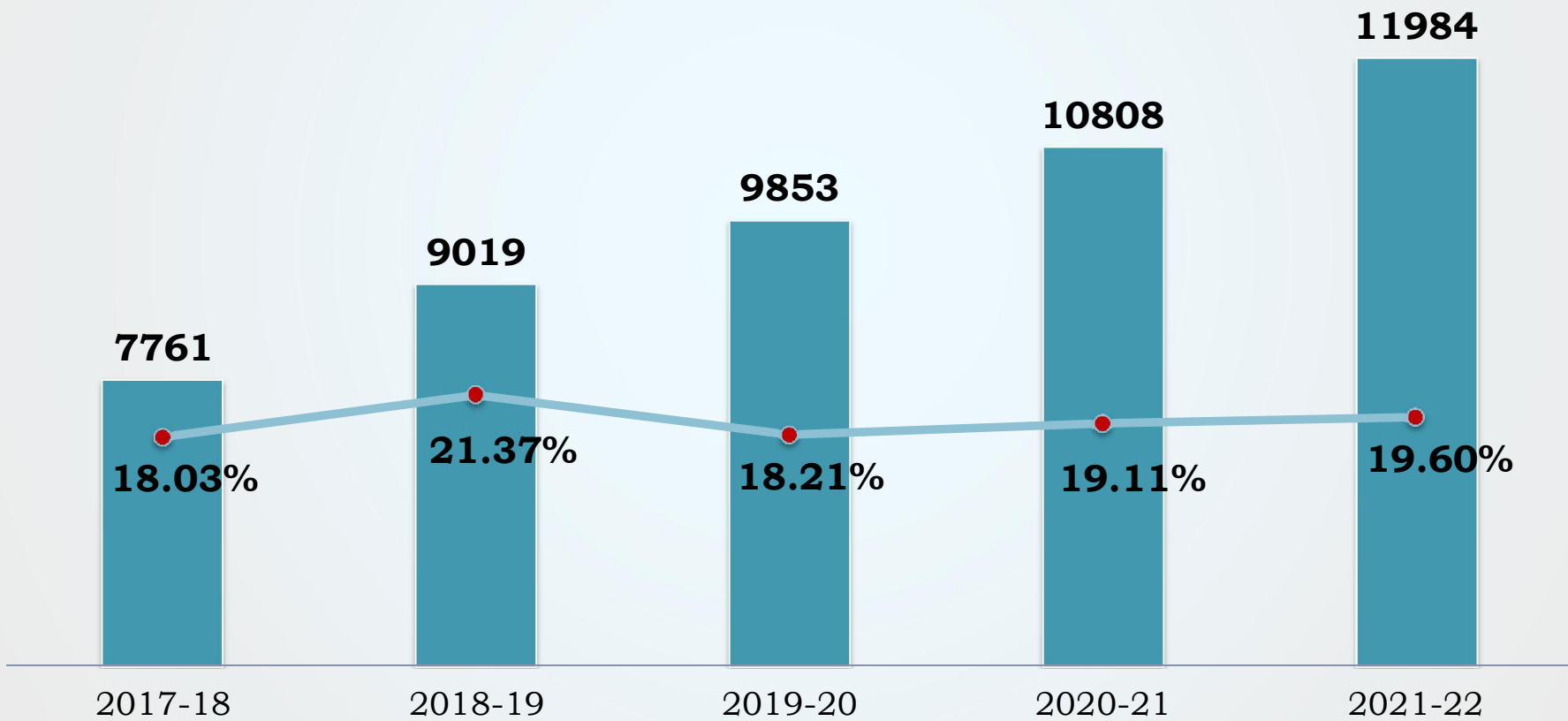
**ROCE = EBIT / Average Capital Employed**



# Return Ratios

(Rs. in Cr)

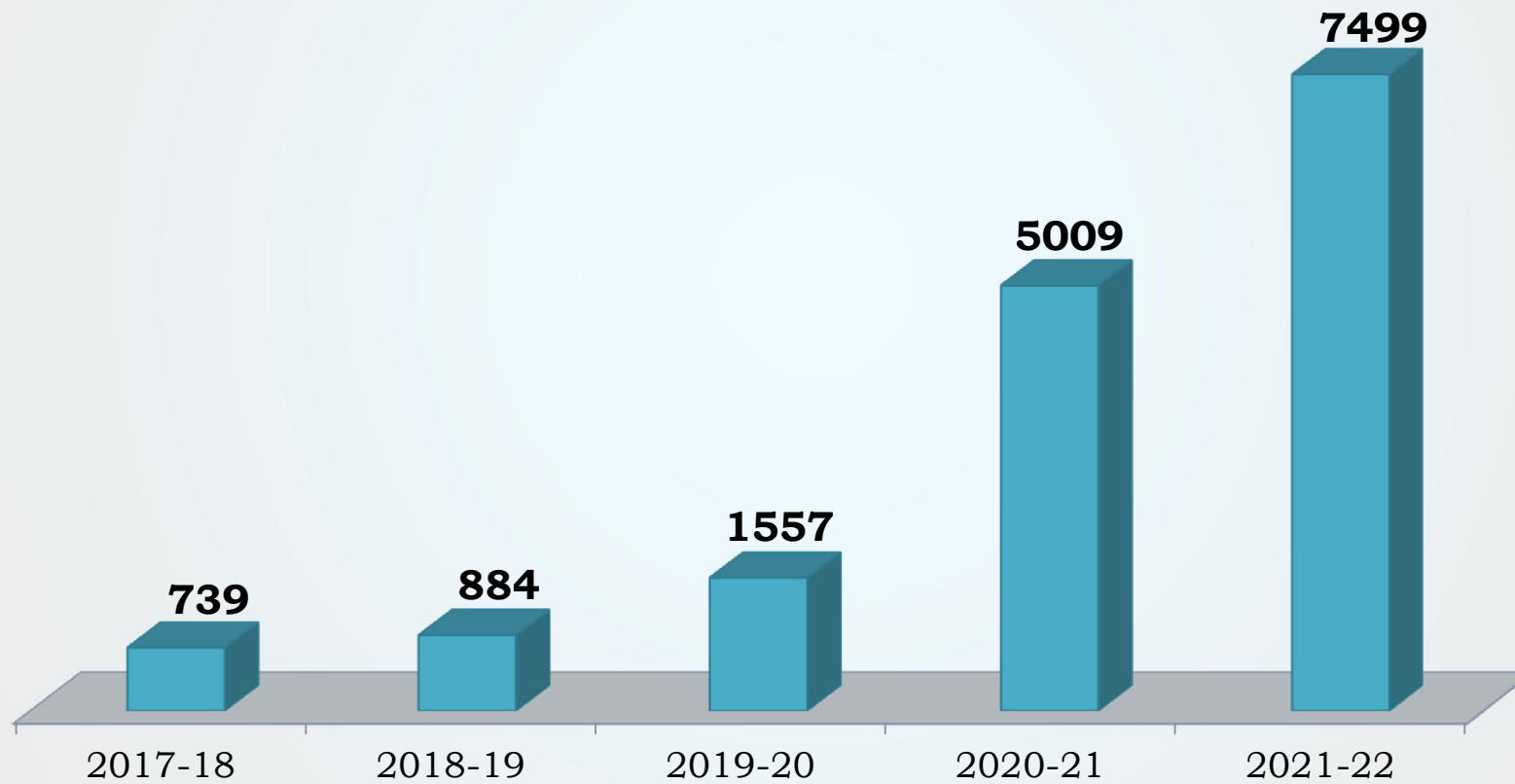
■ Net Worth      ● Return on Equity (%)



**Return on Equity = PAT / Net Worth**

## CASH & BANK BALANCES

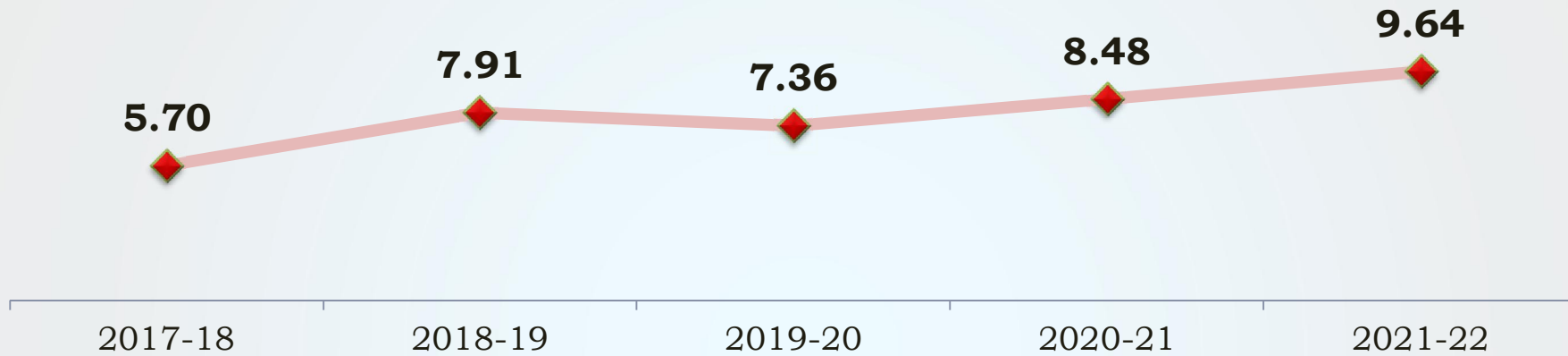
(Rs. in Cr)



## EPS & Dividend Distribution

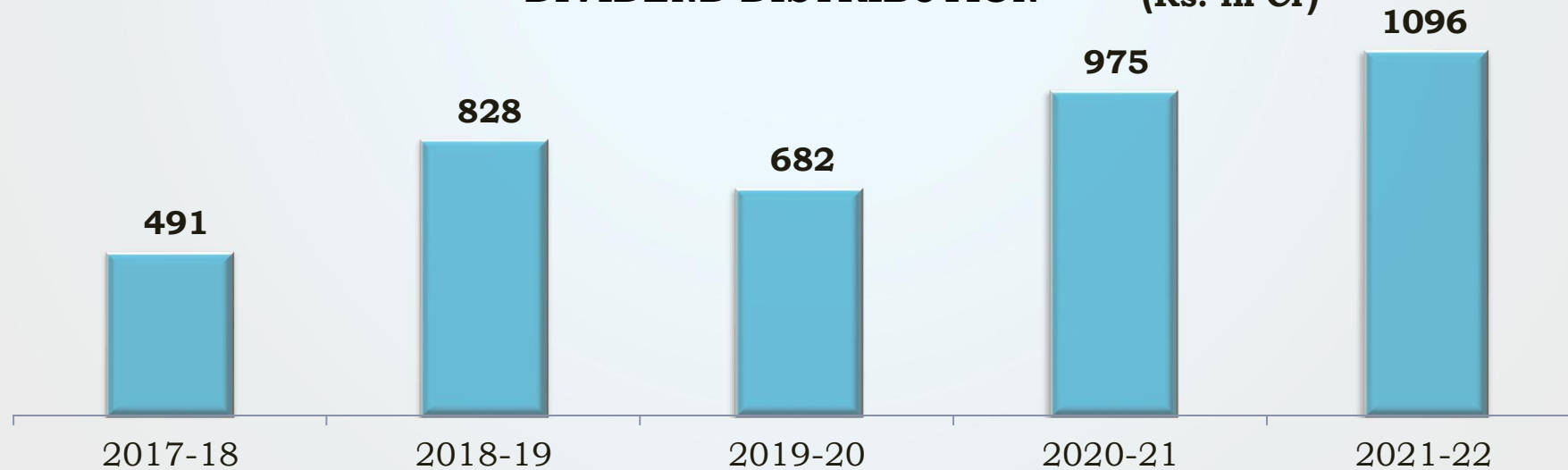
### EARNING PER SHARE (EPS)

(in Rs.)

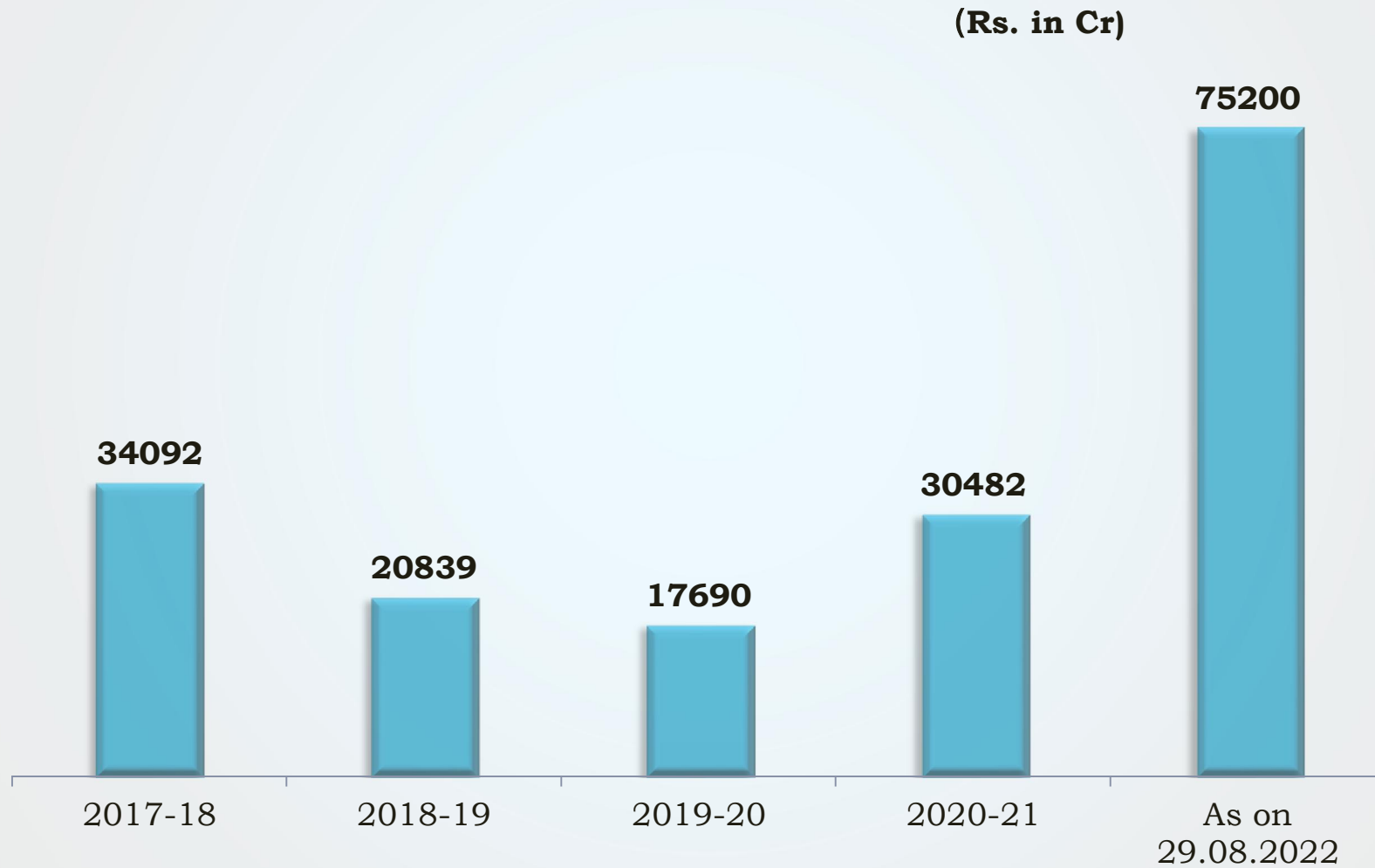


### DIVIDEND DISTRIBUTION

(Rs. in Cr)

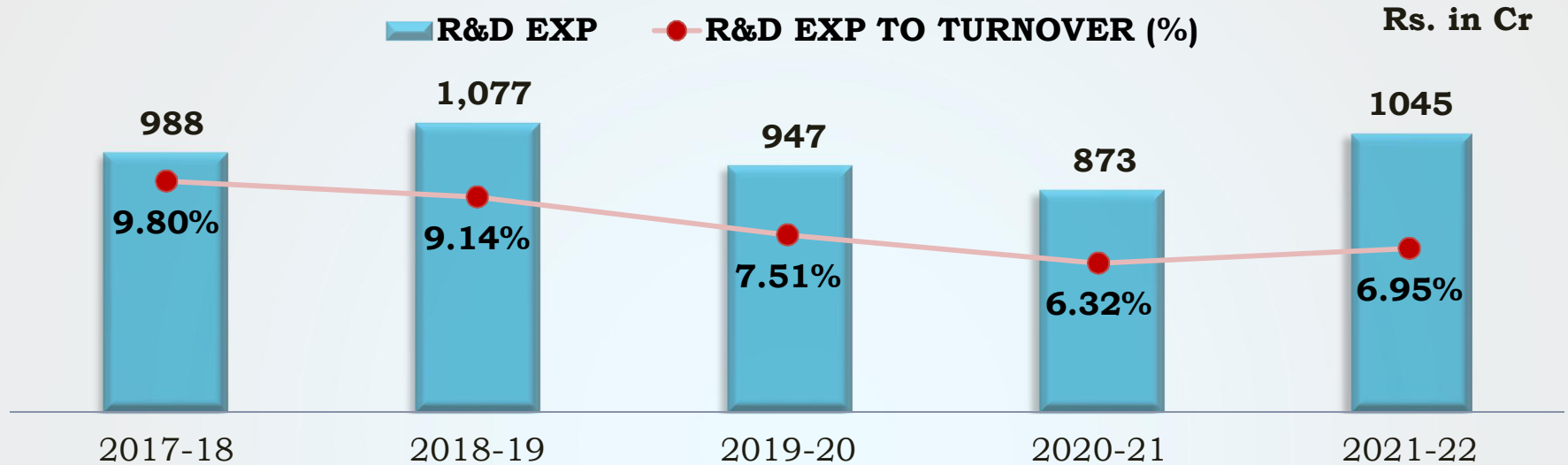


# Market Capitalization





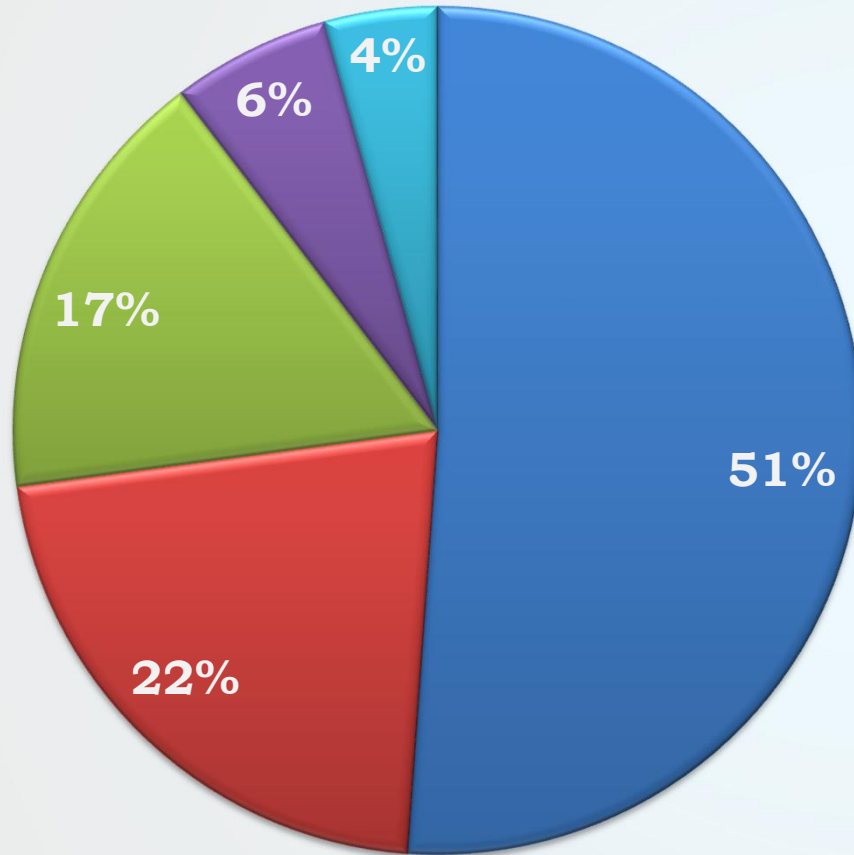
# R&D Expenses & CAPEX



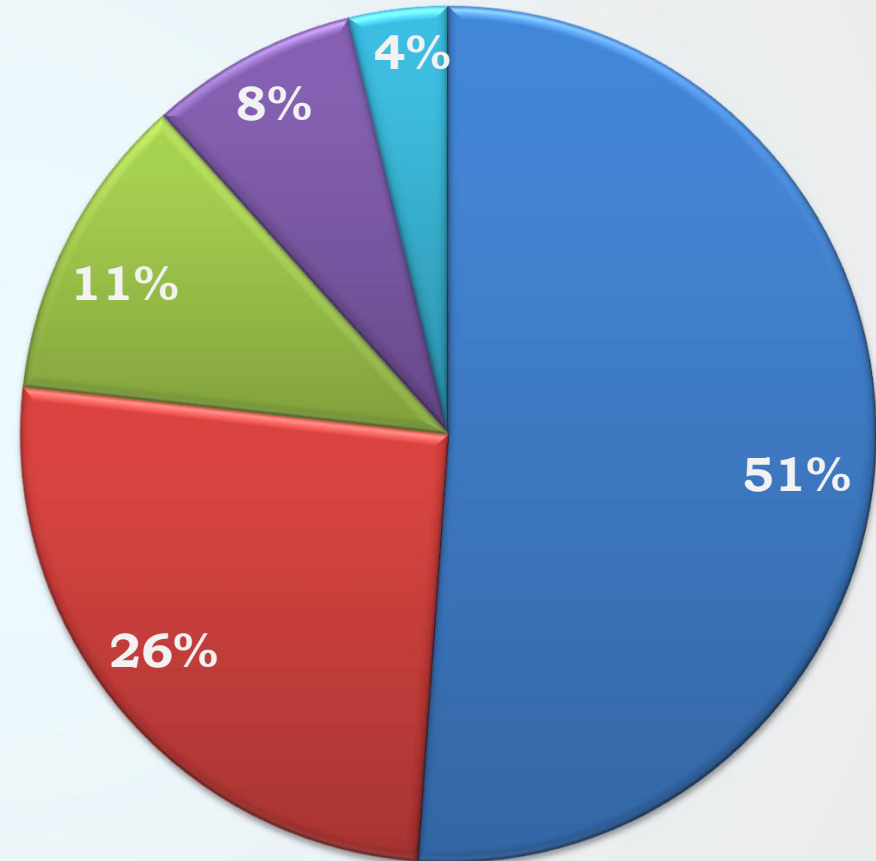
# SHARE HOLDING PATTERN FOR LAST 2 YEARS



### 31.03.2022



### 31.03.2021



■ GoI   ■ Mutual Funds   ■ Foreign Portfolio Investors   ■ Others   ■ Insurance Co's

# Order Book Position



## Future Outlook

**Revenue Growth**  $\approx$  **15%**

**EBITDA Margin**  $\approx$  **21% - 23%**

**Order Inflow**  $\approx$  **Rs. 20,000 Cr**

**R&D Investment**  $\approx$  **Rs. 1,000 Cr**

**CAPEX**  $\approx$  **Rs. 750 Cr**

**Defense : Non Defense Business**  $\approx$  **80 : 20**



**BEL is venturing into new business areas :**

- **Energy Storage Products**
- **Space Electronics & Systems**
- **Arms & Ammunitions**
- **Civil Aviation**
- **Health Care Solutions**
- **Railway/Metro Projects**
- **Power Supply to Security Forces**

## Major Orders Received during 2021-22



Sl. No.	Project / Product	Unit / SBU	Rs. in Cr.
1	Avionics Package for LCA	EWA	1,868
2	Advanced Electronic Warfare (EW) suite for fighter aircraft – D29	EWA	1,689
3	Instrumented Electronic Warfare Range (IEWR)	HYD	940
4	CDR TI cum Day Light Sights for T-90 Tanks	MC	911
5	EVM (BU + CU)	EM	755

## Major Orders Executed during 2021-22



Sl. No.	Project / Product	Unit / SBU	Rs. in Cr.
1	Long Range Surface-to-Air Missile (LRSAM)	ADSN	2,439
2	Akash Missile System (7 Sqdn)	MS	2,212
3	Integrated Air Command and Control System (IACCS)	GAD NCS	823
4	AFNET	GAD SCCS	698
5	CSS Phase II	NS2, SC & US	405

## Major Orders Planned for Execution in 2022-23



Sl. No.	Project / Product	Unit / SBU	Rs. in Cr.
1	Long Range Surface-to-Air Missile (LRSAM)	ADSN	2,639
2	Akash Missile System (7 Sqdn)	MS	2,085
3	Integrated Air Command and Control System (IACCS)	GAD NCS	802
4	VVPAT	MILCOM, SC&US, MR, KOT, GAD NCS, PK	704
5	EVM BU & CU M3	EM	604



*Thank You*

