

# EMS Thematic



## PLI and Components: Crafting precision in every circuit

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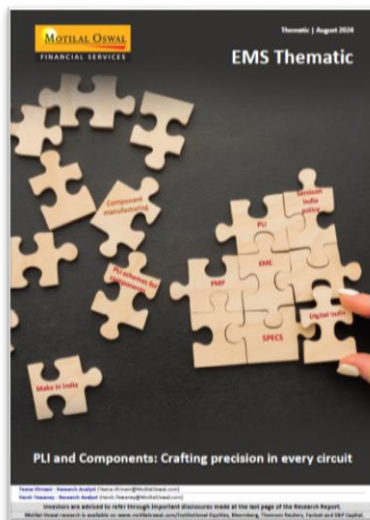
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## PLI and Components: Crafting precision in every circuit

### PLI and component manufacturing

India has successfully established a manufacturing presence in sectors like mobile phones and consumer electronics, and the next objective is to boost value addition. The government has already initiated various measures, such as the Production Linked Incentive (PLI) schemes and the Semicon India program, to promote electronic manufacturing in India. Additionally, the government has reopened the window for the PLI Scheme for White Goods to attract more investments. To further enhance localization and value addition in India, additional initiatives will be necessary to stimulate component manufacturing, an area where the government is already engaged in developing various schemes. Significant announcements are already being made in larger components such as semiconductor chips, display screens, battery chargers, and mechanical parts. This trend offers substantial growth opportunities for companies focusing on PLI and electronic manufacturing. We initiate coverage on Dixon Technologies (BUY) and Amber Enterprises (BUY) as these companies have already achieved market leadership in their key domains and are now concentrating on expanding their presence across different segments and backward integration.

### Electronic industry is benefitting from government measures

The government has implemented several initiatives such as PLI, PMP, SPECS, EMC, and Semicon India to boost investments in the electronics and EMS industries. With these measures, electronics production moved up from \$48b in FY17 to \$101b in FY23. India's electronic manufacturing capacity is projected to reach \$500b (finished goods \$350b and components \$150b) by FY2030 which would imply significant investments in enhancing the component ecosystem too. Currently, country has significant presence and capabilities of assemblers and OEMs in the electronics value chain such as Foxconn, Dixon, Amber, Pegatron, Apple, Samsung, BoAt, Atomberg, particularly in mobile and consumer electronics segments but is heavily reliant on imports for components and design capabilities across all sectors. A progress on component manufacturing is being initiated by few companies which will evolve more in the coming years.

### Initiatives needed from government for developing entire eco-system

Component manufacturing has not shown the same growth as it requires an upfront initial capex and has lower asset turnover ratios with a gestation period of 1-2 years from investment to production. Hence, industry is seeking more initiatives from government to boost component manufacturing in India. Niti Ayog has recommended several measures to boost component manufacturing and India's positioning in the global electronics manufacturing and country's integration into Global Value Chains (GVC). These include 1) fiscal incentives for component manufacturing, 2) Incentives for investing in R&D, 3) tariff simplification, 4) soft infrastructure initiatives, 5) Tech transfer enablement and 6) setting up of industrial infra zones.

### Electronic manufacturing is poised for a long-term growth

Backed by these measures, the domestic EMS industry is likely to grow to INR6.0t in FY27 from INR1.46t in FY22. This is expected to benefit the companies operating in this segment, such as Dixon Technologies, Amber Enterprises, et al. We believe that these companies have already attained a significant scale and market leadership and

### Valuation metrics

| Cos.            | Mcap (INR b) | TP INR | Upside (%) |
|-----------------|--------------|--------|------------|
| Dixon           | 8.8          | 15,000 | 21.0       |
| Amber           | 1.7          | 5,000  | 21.0       |
| Kaynes Tech     | 3.5          | 5000   | -1.5       |
| Syrma SGS Tech. | 0.9          | 540    | 31.1       |
| Cyient DLM      | 0.7          | 880    | 12.1       |
| Avalon Tech     | 0.4          | 560    | 14.5       |

**DIXON TECHNOLOGIES****Financials Snapshot (INR b)**

| Y/E March         | FY25E | FY26E | FY27E |
|-------------------|-------|-------|-------|
| Sales             | 333.8 | 434.8 | 525.3 |
| EBITDA            | 13.1  | 17.5  | 21.7  |
| EBITDA Margin (%) | 3.9   | 4.0   | 4.1   |
| PAT               | 6.6   | 9.7   | 12.8  |
| EPS (INR)         | 111.2 | 162.8 | 213.8 |
| EPS Growth (%)    | 80.8  | 46.4  | 31.3  |
| BV/Share (INR)    | 391.6 | 551.4 | 762.2 |

**Ratios**

|            |      |      |      |
|------------|------|------|------|
| Net D/E    | -0.3 | -0.5 | -0.6 |
| RoE (%)    | 32.9 | 34.5 | 32.5 |
| RoCE (%)   | 37.7 | 38.3 | 35.8 |
| Payout (%) | 2.7  | 1.8  | 1.4  |

**Valuations**

|               |       |      |      |
|---------------|-------|------|------|
| P/E (x)       | 111.2 | 75.9 | 57.8 |
| P/BV (x)      | 31.6  | 22.4 | 16.2 |
| EV/EBITDA (x) | 55.8  | 41.3 | 32.8 |
| Div Yield (%) | 0.0   | 0.0  | 0.0  |

**AMBER ENTERPRISES****Financials Snapshot (INR b)**

| Y/E MARCH         | FY25E | FY26E | FY27E |
|-------------------|-------|-------|-------|
| Sales             | 84.6  | 102.2 | 119.4 |
| EBITDA            | 6.3   | 8.4   | 9.9   |
| EBITDA Margin (%) | 7.4   | 8.2   | 8.3   |
| PAT               | 2.3   | 3.5   | 4.6   |
| EPS (INR)         | 68.1  | 105.1 | 135.7 |
| EPS Growth (%)    | 69.6  | 54.3  | 29.1  |
| BV/Share (INR)    | 680.8 | 785.8 | 921.5 |

**Ratios**

|          |      |      |      |
|----------|------|------|------|
| Net D/E  | 0.4  | 0.3  | 0.1  |
| RoE (%)  | 10.5 | 14.3 | 15.9 |
| RoCE (%) | 9.8  | 12.1 | 13.4 |

**Valuations**

|               |      |      |      |
|---------------|------|------|------|
| P/E (x)       | 60.7 | 39.3 | 30.4 |
| P/BV (x)      | 6.1  | 5.3  | 4.5  |
| EV/EBITDA (x) | 24.0 | 17.8 | 14.7 |

are now poised for backward integration through component manufacturing. To further boost localization and value addition in India, additional initiatives will be necessary to promote component manufacturing in the country, where the government is already working on various schemes.

**Dixon Technologies: Pioneering the future of manufacturing and electronics**

Dixon Technologies (DIXON) has emerged as a fast-growing diversified player in the electronics manufacturing services (EMS) industry. DIXON is a key beneficiary of several production-linked incentive (PLI) schemes for mobile phones, IT hardware, white goods, lighting, and AC components. It has consistently increased its market share in different segments through new technology tie-ups or new client additions. Its recent partnerships with: 1) HKC Corp for manufacturing of displays for mobile phones, TVs, and automotive, and 2) Longcheer Group for mobile phones, along with stake purchase of Ismartu, and sub-licensing arrangement with Google for TVs last year will help the company maintain its market leadership position. We expect DIXON to continue focusing on new segments, backward integration, ODM mix improvement, and operational efficiencies to boost its margins despite the rising revenue contribution from the low-margin mobile segment.

**Dixon Technologies: Financial outlook and view**

We estimate a revenue/PAT CAGR of 44%/51% during FY24-27. We believe that an efficient working capital cycle, a focus on capital allocation, and higher asset turnover ratios should result in an RoE/ RoCE of 33%/36% by FY27E. We initiate coverage on the stock with a BUY rating and a DCF-based TP of INR15,000. Though valuations are on the higher side, strong industry growth drivers, presence in the fast-growing segments, possibility of adding more segments, and best-in-class RoIC will keep valuations higher.

**Amber Enterprises: Moving beyond cyclicity**

Amber Enterprises (Amber) is a leading player in ODM/OEM solutions for the Indian RAC industry. The company is one of the beneficiaries of PLI scheme with an early-mover advantage in PLI-led capex for RAC and AC components. With strategic diversification towards the high-growth electronics market (especially PCB manufacturing) and an increasing scope of work in the mobility segment, we expect Amber to benefit from margin improvement. We expect the company's transition from Amber 1.0 (AC-focused) to Amber 2.0 (electronics) and Amber 3.0 (mobility) to reduce business cyclicity and result in improved asset turnover and return ratios after the initial few years of capex.

**Amber Enterprises: Financial outlook and view**

We estimate a revenue/EBITDA/PAT CAGR of 21%/26%/50% over FY24-27, which is likely to be driven by mid-teens CAGR in the consumer durable segment, high growth in the electronics and mobility segments, and a 100bp margin improvement over FY24-27. We initiate coverage on Amber with a BUY rating and a DCF-based TP of INR5,000, implying 42x P/E on two-year forward EPS (Sep'26E).

**Key risks and concerns**

The sector is poised for high growth in the coming years. Key risks to this growth could arise from slower-than-expected growth in electronic manufacturing, a slowdown in user industries such as consumer durables, mobile phones, and air conditioners, supply chain issues affecting the import of raw materials, changes in the government's priorities for the PLI scheme or semiconductor manufacturing, and a global slowdown that could detrimentally impact exports.



**STORY IN CHARTS**

**Depth of India’s presence across value chain and future initiatives needed**

**Depth of India’s presence in electronics across value chain**

| SEGMENT                          | PRODUCTS                                                                      | HIGH                                                                                                                                                                                               | MEDIUM                                                                                                                                         | LOW                                                                                                                                                         |
|----------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  |                                                                               | FINAL ASSEMBLY/<br>SUB-ASSEMBLY                                                                                                                                                                    | COMPONENT MFG                                                                                                                                  | DESIGN                                                                                                                                                      |
| <b>Mobile</b>                    | <b>Smartphones</b>                                                            | <p>Assembly for mobile has taken off; ~2b cumulative shipments between 2014-22</p> <p>Sub-assembly: Battery pack, Charger largely localized; Camera module, display assembly ~25% localization</p> | <p>Production of mechanical and composites (casing, cable and box content etc)</p> <p>E.g. Tata Electronics for iPhone casing (10-15% BoM)</p> | Minimal to no presence                                                                                                                                      |
| <b>Consumer Electronics</b>      | <b>TV</b>                                                                     | <p>Multiple EMS (e.g. Dixon/Amber)/ OEMs (e.g. Samsung) do finished product assembly/sub-assembly - Display is the largest component, sub-assembled in India for TV</p>                            | Open cells (~60% BoM) are primarily imported                                                                                                   | Design capabilities are with only few players like Dixon                                                                                                    |
|                                  | <b>Air conditioners</b>                                                       |                                                                                                                                                                                                    | Through-hole components, electro-mechanical components are manufactured                                                                        | Home-grown OEMs such as Blue Star, Godrej Appliances have established some design and engineering capabilities                                              |
|                                  | <b>Refrigerator</b>                                                           |                                                                                                                                                                                                    |                                                                                                                                                |                                                                                                                                                             |
| <b>IT hardware</b>               | <b>Laptop</b>                                                                 | >80% of laptops consumed domestically are imported                                                                                                                                                 | Primarily import dependent                                                                                                                     | Minimal presence (VVDN Technologies, CDAC)                                                                                                                  |
|                                  | <b>Server</b>                                                                 |                                                                                                                                                                                                    |                                                                                                                                                |                                                                                                                                                             |
| <b>Telecom</b>                   | <b>4G/5G RAN; Baseband unit (incl CU, DU), Antenna/RRU, xPON FTTH, Others</b> | >40% of total imports are from China                                                                                                                                                               | Primarily import dependent                                                                                                                     | Ongoing design efforts by a consortium led by TCS                                                                                                           |
| <b>Automotive</b>                | <b>Powertrain Body and Convenience Connectivity</b>                           | ~65% import dependent, i.e. Most OEMs import sub-assemblies                                                                                                                                        | Low tech components such as wire harness and connectors are manufactured (~10% BoM)                                                            | Leading home-grown OEMs such as Tata Motors, M&M have established product design and engineering capabilities, but have limited capabilities in electronics |
| <b>Hearables &amp; Wearables</b> | <b>Smart watch, headphone, wristband, glasses, ring, etc</b>                  | Largely Box-assembly (No PCBA today). E.g. Dixon for boAt                                                                                                                                          | Primarily import dependent                                                                                                                     | Minimal to no presence                                                                                                                                      |

Source: ICEA, Company, MOFSL

## STORY IN CHARTS

## Current landscape of component manufacturing in mobile in India

| KEY COMPONENTS                             | CURRENT LANDSCAPE                                                                                                                                                                                                  | OUTLOOK                                                                                                                                                                                                                   |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PCB                                        | ❖ Indian players can <b>manufacture up to 4-layer PCBs</b> , however, most phones require 8+ layer PCBs for which dependent on imports                                                                             | ❖ Import dependence to continue, will require tech transfer in high-quality PCBs (multi-layer, HDI, flex PCBs)                                                                                                            |
| Display (glass, touch controller, display) | ❖ Foreign players (e.g. Samsung, CSOT) started manufacturing <b>LCD displays</b> ; premium smartphones use <b>hi-tech OLED/AMOLED</b>                                                                              | ❖ Samsung sub-assembling mobile displays in India; Vedanta - Twin Star - Innolux (TO) to start manufacturing displays; Optimus & Corning partnership for glass manufacturing; Dixon setting up capex by tying up with HKC |
| Processor memory                           | ❖ 100% imported as <b>no fabs/ATMP</b> in India today                                                                                                                                                              | ❖ Global players TSMC, MediaTek lead the market; <b>4 projects approved</b> (Tata Electronics - PSMC, Tata Electronics for ATMP, Micron and Renesas)                                                                      |
| Passives                                   | ❖ SMT-grade passives for Smartphones are largely imported, small presence of global players (e.g. TDK, Wurth)                                                                                                      | ❖ As local assembly achieves scale, companies could be expected to <b>backward integrate</b> and manufacture these                                                                                                        |
| Camera module                              | ❖ <b>Camera assembly</b> with few players operating at <b>limited scale</b> : high dependence on <b>imports for components</b> (lens, sensor, etc)                                                                 | ❖ Apple-Sunny Opotech, Syska-Biometric-Suyin partnerships, Holitech, Qtech engaged in camera module assembly in India; OEM-ODM-EMS partnerships to drive manufacturing of components in coming years                      |
| Battery module                             | ❖ <b>Battery cells</b> are mostly <b>imported</b> from China/Korea; some domestic players engaged in battery assembly                                                                                              | ❖ <b>CATL in talks to expand in India; Exide entered in agreement with SVOLT energy</b> ; Cells expected to be produced in India in 3-5 years.                                                                            |
| Mechanical composites & others             | ❖ <b>High localization (&gt;80%)</b> in <b>Charger, USB Cable, Gift box</b> <b>Medium localization (~20%)</b> in <b>Die Cut Parts, Mechanics</b> <b>~100% imports</b> for <b>Vibration Motor, Mic and Receiver</b> | ❖ <b>Salcomp (charger) &amp; Luxshare (cables)</b> to expand in India; Jabil & Tata Electronics to manufacture casing                                                                                                     |

Source: NITI Aayog, ICEA, Company, MOFSL

## STORY IN CHARTS

Niti Ayog has recommended various fiscal and non-fiscal interventions to increase component manufacturing and share of electronics manufacturing in India by 2030

1

## Fiscal incentives for components manufacturing

- ❖ Opex support for scaling manufacturing of low complexity/locally produced components (non-SMT grade, casing, glass, etc)
- ❖ Capex support for high-complexity components (Mechanics, capital goods, special components (SMD grade), Lithium-ion cells)
- ❖ Hybrid support for high-complexity components (SMD grade, 8 layer+ PCB, passives, etc)

4

## Tariffs simplification and rationalization of taxes

- ❖ Rationalize tariffs/duties on inputs to improve competitiveness of Finished Goods for exports
- ❖ GST and income tax rationalization

2

## Product/System Design Ecosystem

- ❖ Innovation scheme: To promote SMEs/R&D centres of Indian firms to invest in product design and R&D
- ❖ Scale up scheme: incentive to promote scale for electronics 'designed in India'

5

## Soft infrastructure/Skilling

- ❖ Attract overseas high-level talent for high precision manufacturing and design with top position and attractive pays
- ❖ Expedited visa approvals for training
- ❖ Foster collaboration between academia & industry for advanced manufacturing and high tech skills
- ❖ Supporting industries for skilling and setting up Electronics skills training hubs

3

## Scale up Industrial Infra

- ❖ Develop large-size scaled clusters
- ❖ Provision for localized regulations (e.g. labor laws) and cluster governance
- ❖ Each cluster to provision essential common facilities - waste treatment plans, industry grade utilities and connectivity (around airports)
- ❖ Improve the overall attractiveness of clusters through duty free imports (Free Trade Zones)
- ❖ Worker's housing facilities

6

## Tech Transfer and Business enablement

- ❖ Simplify the process of Tech Transfer and fast-track approvals (PN3) required for components manufacturing
- ❖ Rationalize permits for on-ground operations required across all levels of government
- ❖ Lowering compliance costs and streamlining regulations

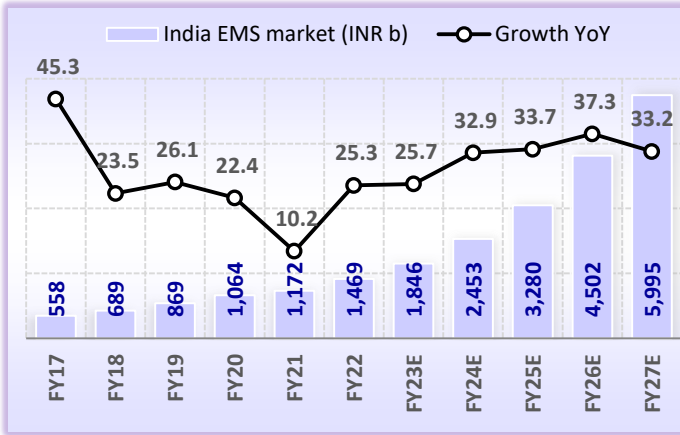
Source: NitiAyog, MOFSL



STORY IN CHARTS

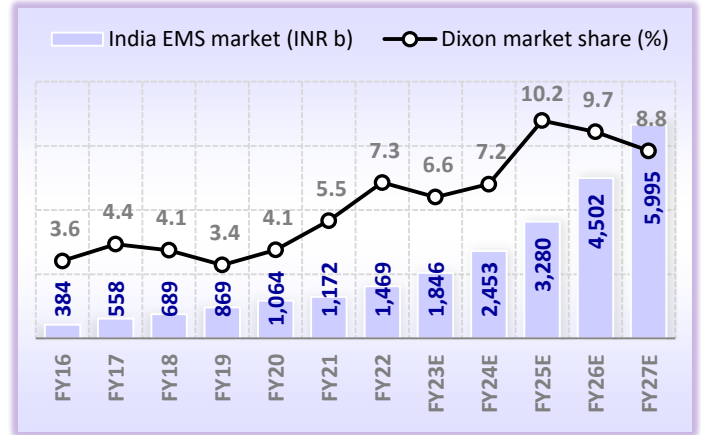
Government initiatives over last few years for electronic manufacturing

Domestic EMS market is expected to grow at a fast 32% CAGR over FY22-27



Source: F&S, MOFSL

Within this market, we expect Dixon to improve its market share with high growth in mobile, IT hardware



Source: F&S, MOFSL

Total PLI investment target for mobile, laptop, PCs, etc. set by the govt. from companies - (INR m)

| PLI Scheme                            | Total expected incentive outlay | Total Incremental investment required by applicant | Base Year | Incremental Investment over base year required by applicant |        |        |        |        |        |
|---------------------------------------|---------------------------------|----------------------------------------------------|-----------|-------------------------------------------------------------|--------|--------|--------|--------|--------|
|                                       |                                 |                                                    |           | Year 1                                                      | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Large-scale electronics manufacturing | INR410b                         | INR10b                                             | FY20      | 2,500                                                       | 2,500  | 2,500  | 2,500  | NA     | NA     |
| IT Hardware 2.0                       | INR169b                         | INR2.5b                                            | FY23      | 250                                                         | 500    | 500    | 500    | 500    | 250    |

PLI For Mobile - expected total incentive is INR410b for all companies

| Segment                                                 | Proposed Incentive rate | Incremental Investment over base year | Incremental sales of manufactured goods over base year |
|---------------------------------------------------------|-------------------------|---------------------------------------|--------------------------------------------------------|
| Mobile Phones<br>(Invoice value of INR15,000 and above) | Year 1: 6%              | Cumulative INR10b over 4 years        | Year 1: INR40b                                         |
|                                                         | Year 2: 6%              | Year 1: 2.5                           | Year 2: INR80b                                         |
|                                                         | Year 3: 5%              | Year 2: 5.0                           | Year 3: INR150b                                        |
|                                                         | Year 4: 5%              | Year 3: 7.5                           | Year 4: INR200b                                        |
|                                                         | Year 5: 4%              | Year 4: 10.0                          | Year 5: INR250b                                        |

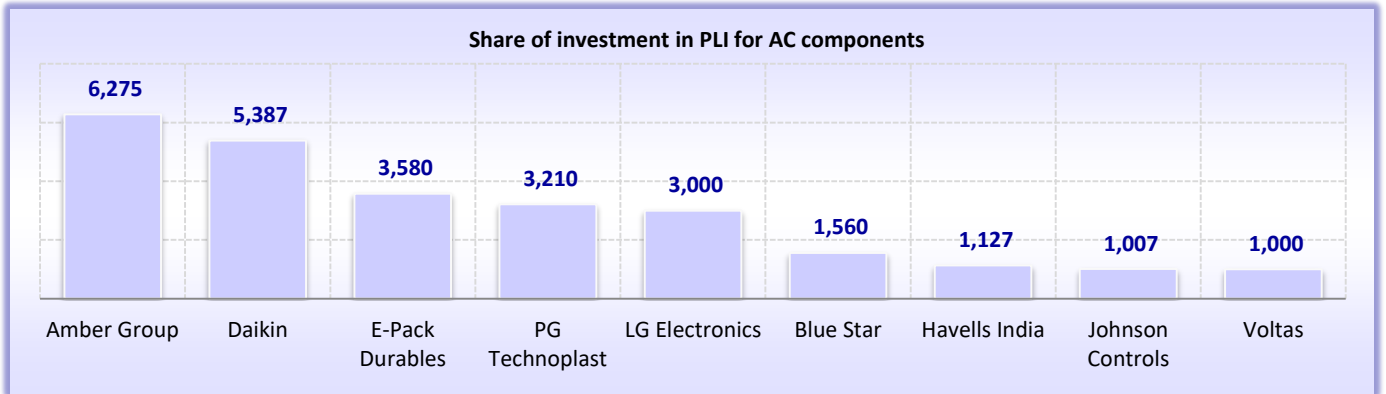
IT hardware PLI 2.0 - expected total incentive is INR170b for all companies

| Category                                                                                                                                                                                                               | Incremental Investment over base year | Incremental sales of manufactured goods over base year |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------|
| Hybrid (Global/Domestic) companies<br>1) Laptops (Invoice value of INR 30,000 and above)<br>2) Tablets (Invoice value of INR 15,000 and above)<br>3) All-in-One PCs<br>4) Servers<br>5) Ultra Small Form Factor (USFF) | Cumulative INR2.5b over 6 years       |                                                        |
|                                                                                                                                                                                                                        | Year 1: INR 0.25b                     | Year 1: INR5b                                          |
|                                                                                                                                                                                                                        | Year 2: INR 0.75b                     | Year 2: INR12.5b                                       |
|                                                                                                                                                                                                                        | Year 3: INR 1.25b                     | Year 3: INR25b                                         |
|                                                                                                                                                                                                                        | Year 4: INR 1.75b                     | Year 4: INR50b                                         |
|                                                                                                                                                                                                                        | Year 5: INR 2.25b                     | Year 5: INR60b                                         |
|                                                                                                                                                                                                                        | Year 6: INR 2.50b                     | Year 6: INR75b                                         |

Source: MEITY, MOFSL

STORY IN CHARTS

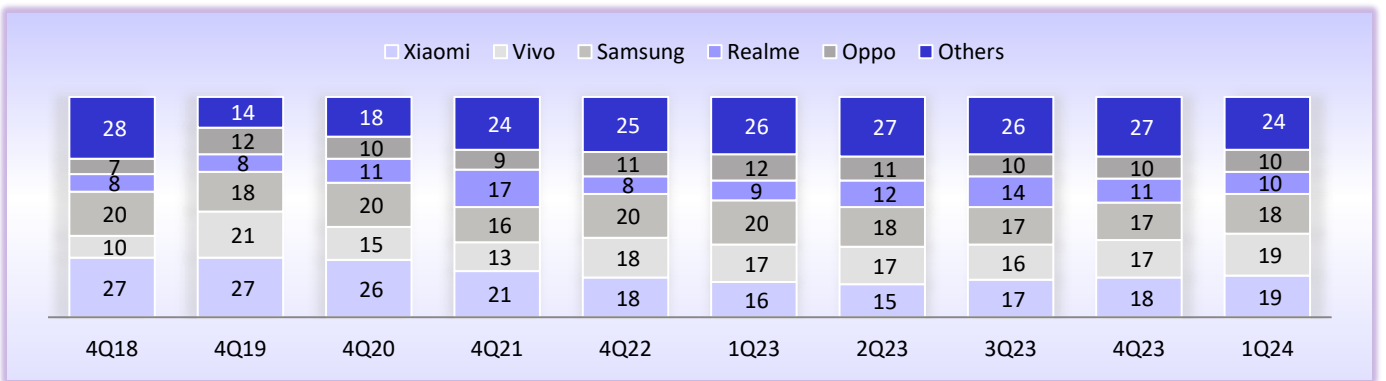
PLI investment committed by the RAC (ODM/OEM) players, where Amber is the highest contributor with INR6.2b



Source: Company, MOFSL

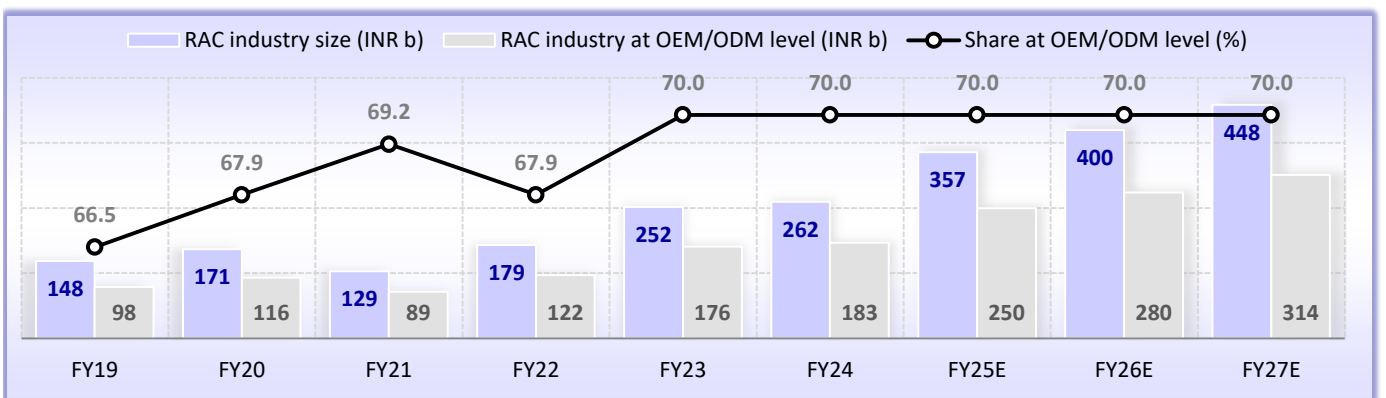
Sectoral growth drivers are strong

India smartphone market share (%)



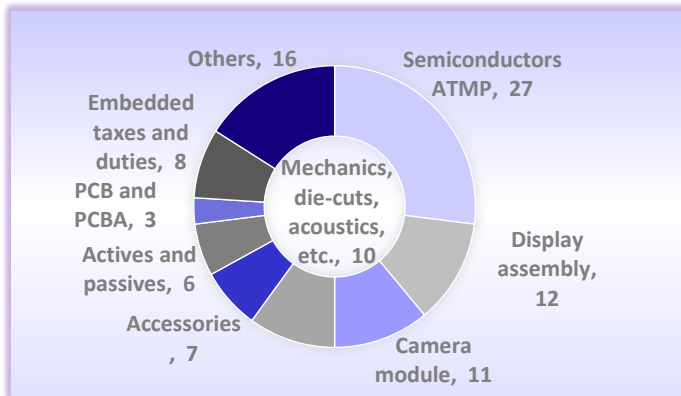
Source: Counterpoint, MOFSL

Share of RAC industry at OEM/ODM level stands around 70%



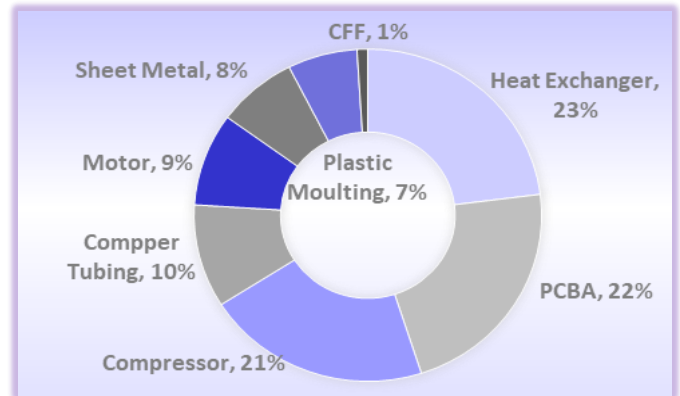
STORY IN CHARTS

BoM of smartphone across various components (%)



Source: Industry, MOFSL

BoM of RAC across various components (%)



Source: Industry, MOFSL

Relative valuations of companies versus sector

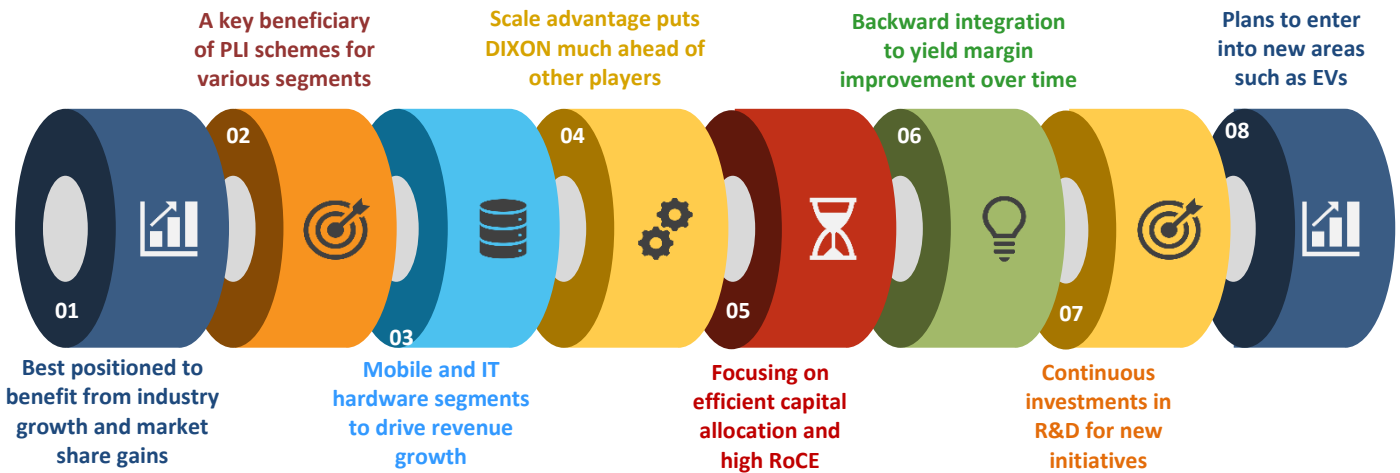
Comparison of growth in key financials of companies versus valuations

| Company                           | Revenue (INR b) |       |       | Rev CAGR (FY24-26) % | EBIDTA Margin (%) |      |      | PAT (INR b) |      |      | PAT CAGR (FY24-26) % | FY26 |     |
|-----------------------------------|-----------------|-------|-------|----------------------|-------------------|------|------|-------------|------|------|----------------------|------|-----|
|                                   | FY24            | FY25  | FY26  |                      | FY24              | FY25 | FY26 | FY24        | FY25 | FY26 |                      | PE   | PEG |
| <b>EMS companies</b>              |                 |       |       |                      |                   |      |      |             |      |      |                      |      |     |
| Dixon                             | 176.9           | 333.8 | 434.8 | 56.8                 | 3.9               | 3.9  | 4.0  | 3.7         | 6.6  | 9.7  | 62.7                 | 75.9 | 1.2 |
| Amber                             | 67.3            | 84.6  | 102.2 | 23.3                 | 7.3               | 7.4  | 8.2  | 1.3         | 2.3  | 3.5  | 63.2                 | 39.3 | 0.6 |
| Avalon                            | 8.7             | 10.3  | 13.4  | 24.3                 | 7.2               | 7.7  | 11.0 | 0.3         | 0.4  | 0.9  | 81.6                 | 34.7 | 0.4 |
| Cyient DLM                        | 11.9            | 15.9  | 21.2  | 33.4                 | 9.3               | 10.7 | 11.8 | 0.6         | 1.2  | 1.7  | 68.6                 | 35.8 | 0.5 |
| Kaynes                            | 18.0            | 30.5  | 47.3  | 61.9                 | 14.1              | 15.2 | 15.8 | 1.8         | 3.5  | 5.8  | 77.7                 | 56.0 | 0.7 |
| Syrma                             | 31.5            | 45.8  | 61.8  | 40.0                 | 6.3               | 6.4  | 7.0  | 1.1         | 1.6  | 2.7  | 58.4                 | 26.8 | 0.5 |
| <b>Consumer durable companies</b> |                 |       |       |                      |                   |      |      |             |      |      |                      |      |     |
| Havells India                     | 185.9           | 211.0 | 242.1 | 14.1                 | 9.9               | 10.8 | 11.3 | 12.7        | 16.2 | 19.7 | 24.4                 | 59.8 | 2.5 |
| Voltas                            | 124.8           | 146.7 | 162.5 | 14.1                 | 3.8               | 7.3  | 8.3  | 2.4         | 8.3  | 10.9 | 113.4                | 46.4 | 0.4 |
| CG Consumer                       | 73.1            | 83.0  | 94.2  | 13.5                 | 9.8               | 10.9 | 11.6 | 4.4         | 5.9  | 7.5  | 30.5                 | 37.8 | 1.2 |
| Orient Electricals                | 27.7            | 31.3  | 35.2  | 12.6                 | 5.2               | 6.6  | 7.6  | 0.8         | 1.0  | 1.5  | 40.9                 | 38.6 | 0.9 |
| Bajaj Electricals                 | 46.2            | 52.4  | 59.5  | 13.5                 | 5.6               | 8.8  | 9.9  | 1.3         | 1.9  | 3.0  | 51.2                 | 36.3 | 0.7 |
| V-Guard Industries                | 48.6            | 55.9  | 63.8  | 14.6                 | 8.8               | 9.9  | 10.5 | 2.6         | 3.5  | 4.4  | 31.2                 | 51.5 | 1.7 |
| Blue Star                         | 96.9            | 116.9 | 137.7 | 19.2                 | 6.9               | 7.4  | 7.7  | 4.1         | 5.6  | 7.1  | 30.9                 | 46.5 | 1.5 |

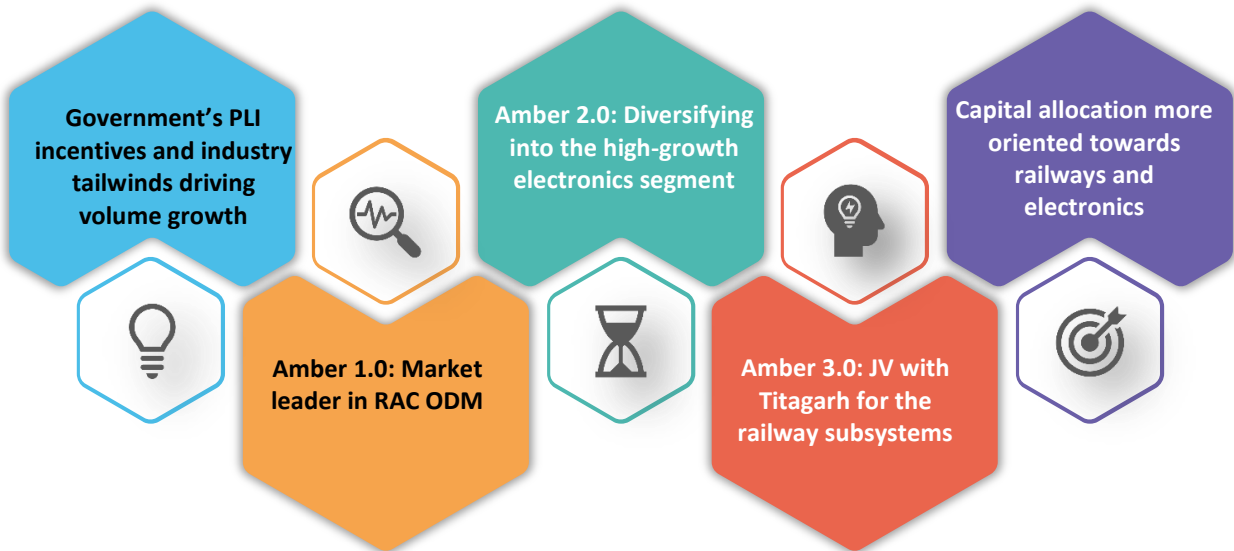
Source: Company, MOFSL, Bloomberg



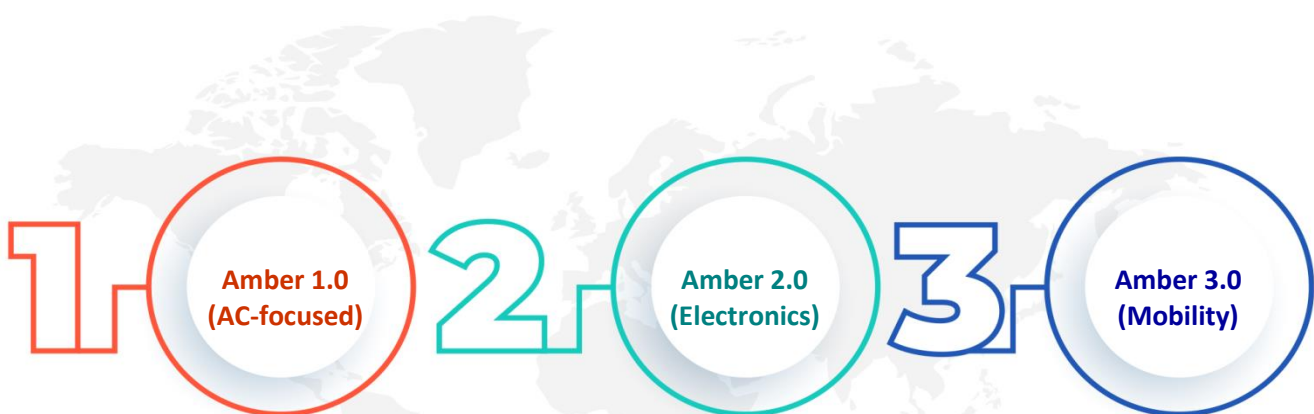
**DIXON: KEY INVESTMENT ARGUMENT**



**AMBER: KEY INVESTMENT ARGUMENT**



**AMBER'S TRANSITION**



*We expect the company's transition to reduce business cyclicality, and result in improved asset turnover and return ratios after the initial few years of capex.*

# COMPANIES COVERED

## DIXON TECHNOLOGIES

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## AMBER ENTERPRISES

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# 01

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Summary

## Dixon Technologies: Pioneering the future of manufacturing and electronics

# 06

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Story on charts

Dixon Technologies has emerged as a fast-growing diversified player in the electronics manufacturing services (EMS) industry. DIXON is a key beneficiary of several production-linked incentive (PLI) schemes for mobile phones, IT hardware, white goods, lighting and AC components. It has consistently increased its market share in different segments with either new technology tie-ups or new client additions.

Its recent tie-up with HKC Corp for manufacturing of displays for mobile phone, TVs and automotive, Longcheer Group for mobile phones, stake purchase of Ismartu and sub-licensing arrangement with Google done last year for TVs will help the company maintain its market leadership position. We expect DIXON to continue to keep focusing on new segments, backward integration, ODM mix improvement and operational efficiencies to boost its margin despite a rising revenue contribution of the low-margin mobile segment. We estimate a CAGR of 44%/51% in revenue/PAT during FY24-27. We believe that an efficient working capital cycle, focus on capital allocation and higher asset turnover ratios should result in RoE/RoCE of 33%/36% by FY27E. We initiate coverage with a BUY rating on the stock with a TP of INR15,000 based on DCF. Valuations are on the higher side but strong industry growth drivers, presence in fast growing segments, possibility of adding more segments and best in class RoICs will keep valuations higher.

# 07

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Key risks: Demand slowdown and loss in key client relationships

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Financials and Valuations



# Dixon Technologies

BSE SENSEX 80,437 S&P CNX 25,541



## Stock Info

|                       |              |
|-----------------------|--------------|
| Bloomberg             | DIXON IN     |
| Equity Shares (m)     | 60           |
| M.Cap.(INRb)/(USDb)   | 740.5 / 8.8  |
| 52-Week Range (INR)   | 12879 / 4585 |
| 1, 6, 12 Rel. Per (%) | -1/83/134    |
| 12M Avg Val (INR M)   | 3569         |
| Free float (%)        | 66.8         |

## Financials Snapshot (INR b)

| Y/E March         | FY25E | FY26E | FY27E |
|-------------------|-------|-------|-------|
| Sales             | 333.8 | 434.8 | 525.3 |
| EBITDA            | 13.1  | 17.5  | 21.7  |
| EBITDA Margin (%) | 3.9   | 4.0   | 4.1   |
| PAT               | 6.6   | 9.7   | 12.8  |
| EPS (INR)         | 111.2 | 162.8 | 213.8 |
| EPS Growth (%)    | 80.8  | 46.4  | 31.3  |
| BV/Share (INR)    | 391.6 | 551.4 | 762.2 |

## Ratios

|            |      |      |      |
|------------|------|------|------|
| Net D/E    | -0.3 | -0.5 | -0.6 |
| RoE (%)    | 32.9 | 34.5 | 32.5 |
| RoCE (%)   | 37.7 | 38.3 | 35.8 |
| Payout (%) | 2.7  | 1.8  | 1.4  |

## Valuations

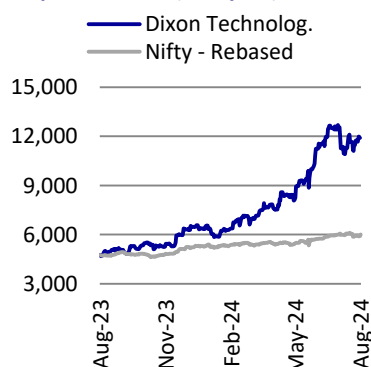
|               |       |      |      |
|---------------|-------|------|------|
| P/E (x)       | 111.2 | 75.9 | 57.8 |
| P/BV (x)      | 31.6  | 22.4 | 16.2 |
| EV/EBITDA (x) | 55.8  | 41.3 | 32.8 |
| Div Yield (%) | 0.0   | 0.0  | 0.0  |

## Shareholding pattern (%)

| As On    | Jun-24 | Mar-24 | Jun-23 |
|----------|--------|--------|--------|
| Promoter | 33.2   | 33.4   | 34.0   |
| DII      | 26.1   | 27.0   | 24.6   |
| FII      | 19.3   | 17.8   | 15.0   |
| Others   | 21.4   | 21.7   | 26.4   |

FII Includes depository receipts

## Stock performance (one-year)



**CMP: INR12,360 TP: INR15,000 (+21%) Buy**

## Pioneering the future of manufacturing and electronics

Dixon Technologies has emerged as a fast-growing diversified player in the electronics manufacturing services (EMS) industry. DIXON is a key beneficiary of several production-linked incentive (PLI) schemes for mobile phones, IT hardware, white goods, lighting and AC components. It has consistently increased its market share in different segments with either new technology tie-ups or new client additions. Its recent tie-up with HKC Corp for manufacturing of displays for mobile phone, TVs and automotive, Longcheer Group for mobile phones, stake purchase of Ismartu and sub-licensing arrangement with Google done last year for TVs will help the company maintain its market leadership position. We expect DIXON to continue to keep focusing on new segments, backward integration, ODM mix improvement and operational efficiencies to boost its margin despite a rising revenue contribution of the low-margin mobile segment. We estimate a CAGR of 44%/51% in revenue/PAT during FY24-27. We believe that an efficient working capital cycle, focus on capital allocation and higher asset turnover ratios should result in RoE/RoCE of 33%/36% by FY27E. We initiate coverage with a BUY rating on the stock with TP of INR15,000 based on DCF. Valuations are on the higher side but strong industry growth drivers, presence in fast growing segments, possibility of adding more segments and best in class RoICs will keep valuations higher.

## Best positioned to benefit from industry growth and market share gains

The Indian EMS sector is estimated to grow from INR1.46t in FY22 to INR6t in FY27 at a CAGR of 32%, as per industry estimates. DIXON held a 7.3% market share in the EMS industry in FY22, and we expect it to grow at a faster CAGR of 37% during FY22-FY27, driven by a sharp ramp-up in mobile segment revenues, telecom and IT hardware, new client additions in consumer electronics, export opportunities in lighting and washing machines, growth in emerging categories like wearables and refrigerators, and PLI approvals for other segments. The company is also planning to enter into newer segments and component manufacturing, benefits of which will be seen in the coming years. We thus believe that growth in these key segments will help DIXON increase its market share in the EMS industry to nearly 9% by FY27E.

## A key beneficiary of PLI schemes for various segments

DIXON is a key beneficiary of PLI schemes for mobile phones, white goods (including lighting and AC), telecom and networking products, and IT hardware 2.0. It has committed a total investment of INR4.7b in mobile phones and IT hardware 2.0 and INR1b in white goods. DIXON has tied up with Motorola, Xiaomi and Longcheer to scale up its mobile volumes under the PLI scheme and has tied up with Acer and Lenovo to achieve a desired revenue threshold for the IT hardware PLI scheme. It is working on a JV with Rexxam for inverter controller boards for ACs for a total investment of INR510m over five years. It is also adding clients in lighting. DIXON's JV with Bharti Enterprise is working on telecom hardware PLI. It has also tied up with Nokia to manufacture telecom equipment.

**Mobile and IT hardware segments to drive revenue growth**

Out of the 150m mobile smartphones sold in India, the outsourcing opportunity is almost 85m to 90m, and DIXON aims to capture 35-40% of this opportunity in a couple of years. The company is already working with Motorola, Xiaomi, Samsung, Realme, Nokia and Intel and plans to add more brands via its majority stake purchase in Ismartu, which operates three brands in India (Intel, Infinix and Techno), and its partnership with Longcheer, which manufactures for Oppo, Vivo, OnePlus and Realme. We expect revenues from mobile phones to increase to INR232b/INR296b in FY25/FY26 from INR92b in FY24. For IT hardware, DIXON is eligible for PLI 2.0 and has already tied up with Acer and Lenovo. We expect IT hardware revenues to grow to INR5b/INR25b in FY25/FY26 from INR1.4b in FY24.

**Scale advantage puts DIXON much ahead of other players**

DIXON has a scale advantage in most segments, which has resulted in leadership position, and competition is still limited to 2-3 large players in most segments. DIXON has achieved economies of scale in its key segments such as consumer electronics and lighting and aims to replicate the same in the mobile segment. As a result, the company has 50-70% wallet share of clients in segments like lighting, LED TV and mobile and has a strong base of sticky customers. With PLI approvals already in place for other segments, the scale benefits will start accruing in other segments too. This would make it easier for any foreign OEM brand to choose DIXON as an EMS partner.

**Focusing on efficient capital allocation and high RoCE**

DIXON operates in the high-volume low-margin (HVLM) segment of the EMS industry, which forms 89.5% of the domestic EMS market. Despite the low margin nature of this segment, DIXON has maintained high RoCE. The company emphasizes efficient capital allocation and a targeted payback period of four years. Efficiency in capital allocation is achieved by reducing the cost of capex, adopting a lease model for new facilities, minimizing working capital, and adding segments with a higher asset turnover. Consequently, even in segments with lower margins, the company achieves healthy RoCE and high asset turnover ratios.

**Backward integration to yield margin improvement over time**

The majority of high-value components for the mobile, TV, and IT hardware segments are currently imported, and transitioning the manufacturing of items like open cell, panel, screen, display, semiconductor, and camera modules entirely to India will require time. For mobiles, DIXON is planning to manufacture display modules (~10% of total cost of smartphone) and has already finalized a technology partner with a planned capex of USD30m (excluding land and building). It is also looking to foray into precision components, mechanicals, die cut, connectors etc. DIXON is also developing capabilities in PCB and battery chargers for mobiles to decrease reliance on imports. Additionally, the company is collaborating with global brands to enhance capabilities in TV and AC control boards, aiming to further reduce dependence on imports in these segments as well.

### Continuous investments in R&D for new initiatives

The company has three state-of-the-art R&D facilities and has 49 trained employees in its R&D team. It is continuously working on new initiatives in the following areas: 1) design solutions & technology advancement for various TV components and also procuring a license for android technology in the LED TV vertical to move forward in ODM solutions; 2) new Advance Environmental Testing Chamber and NABL approved lab would be installed in its Dehradun R&D center for washing machines for research validations; 3) a global level R&D infrastructure for product testing and validation in smart lighting; 4) DIXON is also certified as a member for android product development for mobile phones.

### Plans to enter into new areas such as industrial EMS, EVs

DIXON is exploring opportunities in the EV sector, mainly focusing on manufacturing components such as electronic modules, PCB assembly. Company is exploring entering into industrial EMS too and is in advanced discussion with large semiconductor brands for serving the requirement of PCB assembly.

### Financial outlook

We expect a CAGR of 44%/46%/51% in revenue/EBITDA/PAT over FY24-27. Revenue growth would be mainly driven by EMS (including mobile, IT hardware), consumer electronics and new emerging segments such as refrigerator, wearables and hearables, and telecom networking products. We expect EBITDA margin of 3.9%/4%/4.1% for FY25-27, led by increased backward integration and improving share of high-margin segments. This results in a PAT CAGR of 51% over FY24-27. We expect working capital to remain comfortable at (-1) and expect a capex of INR5b every year over FY25-27. With efficient capital allocation, we expect RoIC to remain strong at 46.8%/56.4%/63.9% for FY25/FY26/FY27 vs. 30% in FY24.

### Valuation and recommendation

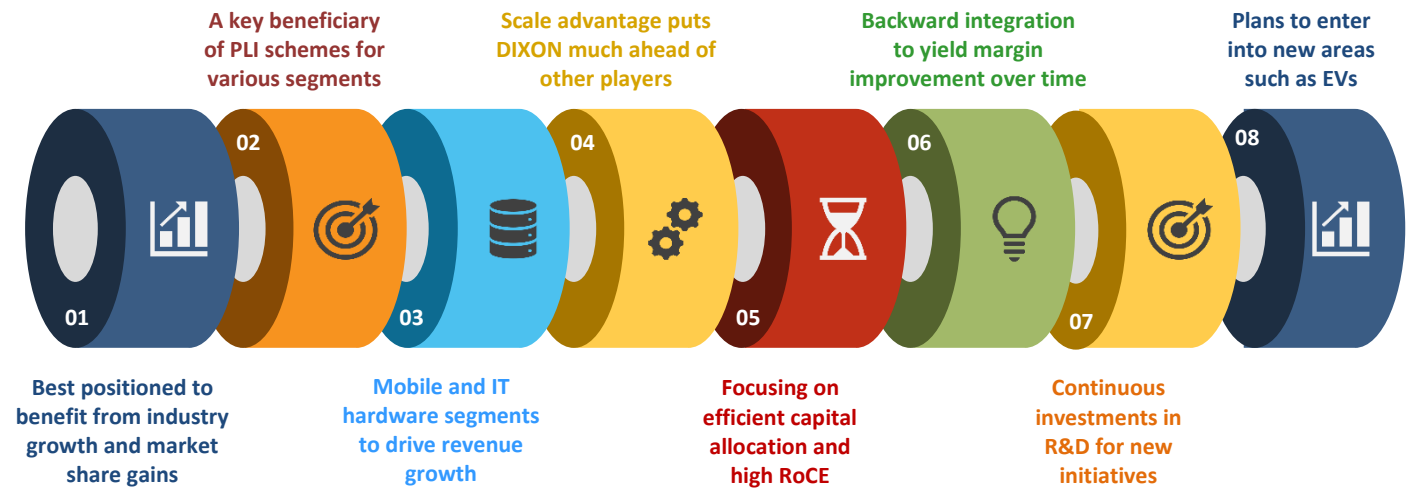
The stock is currently trading at 75.9x/57.8x P/E on FY25/26E earnings. We initiate coverage on DIXON with a **BUY** rating and a DCF-based TP of INR15,000 taking into account 20-year revenue CAGR of 17.8% and EBITDA CAGR of 18.6%, asset turnover of 13-14x over the same period. We bake in WACC of 10.7% and terminal growth rate of 6%. Valuations are on the higher side but strong industry growth drivers, presence in fast growing segments, possibility of adding more segments and best in class RoICs will keep valuations higher.

### Key risks and concerns

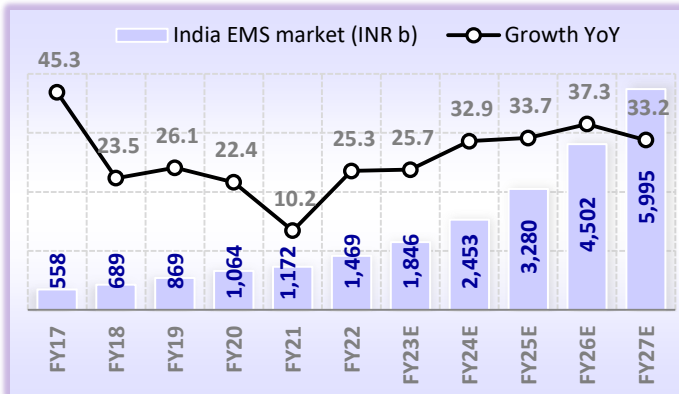
Key risks to our estimates and recommendation would come from lower than expected growth in the market opportunity, loss of relationship with key clients, increased competition, and limited bargaining power with clients.

**STORY IN CHARTS**

**DIXON: KEY INVESTMENT ARGUMENT**

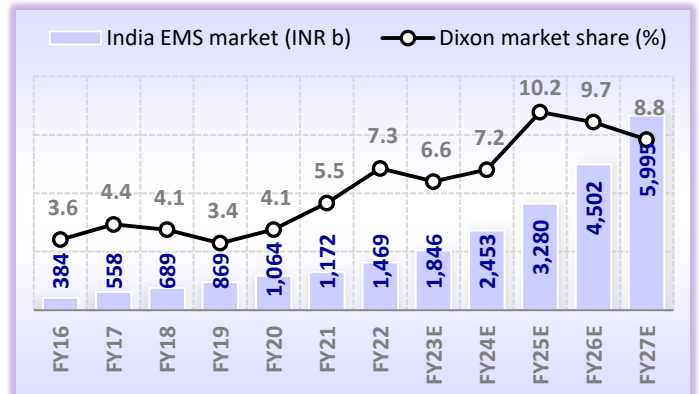


Domestic EMS market is expected to grow at a fast 32% CAGR over FY22-27



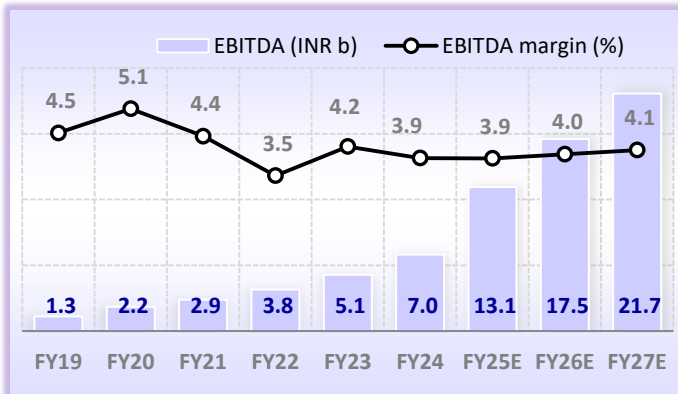
Source: F&S, MOFSL

Within this market, we expect Dixon to improve its market share with high growth in mobile, IT hardware



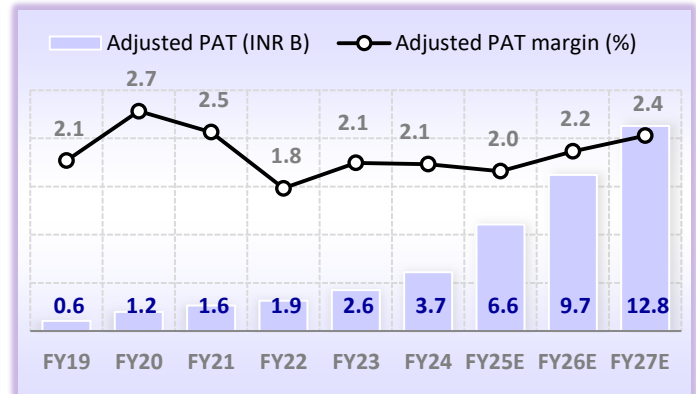
Source: F&S, MOFSL

We expect EBITDA margin to improve to 4.1% by FY27 on improved backward integration



Source: Company, MOFSL

This along with higher other income will also lead to overall PAT margin improvement



Source: Company, MOFSL

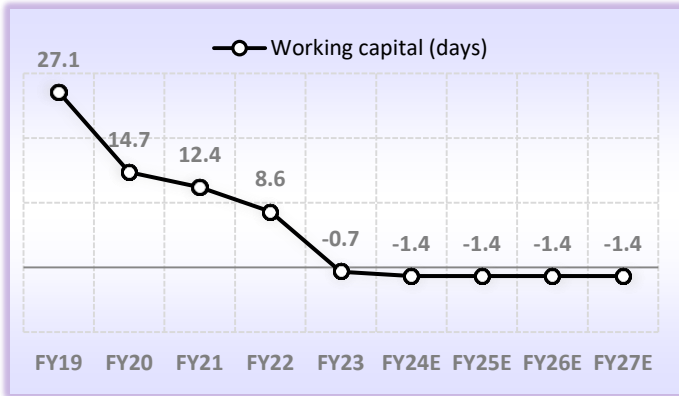
**Segmental Financial outlook across segments for DIXON**

| INR m                                | FY18   | FY19   | FY20   | FY21   | FY22     | FY23     | FY24     | FY25E    | FY26E    | FY27E    |
|--------------------------------------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|
| <b>Consolidated</b>                  |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 28,416 | 29,844 | 44,001 | 64,482 | 1,06,971 | 1,21,920 | 1,76,909 | 3,33,818 | 4,34,814 | 5,25,307 |
| Growth YoY (%)                       | 15.7   | 5.0    | 47.4   | 46.5   | 65.9     | 14.0     | 45.1     | 88.7     | 30.3     | 20.8     |
| EBITDA                               | 1,120  | 1,349  | 2,231  | 2,866  | 3,791    | 5,128    | 6,976    | 13,138   | 17,531   | 21,674   |
| EBITDA margin (%)                    | 3.9    | 4.5    | 5.1    | 4.4    | 3.5      | 4.2      | 3.9      | 3.9      | 4.0      | 4.1      |
| RoCE                                 | 23.4   | 18.5   | 25.9   | 23.8   | 19.1     | 20.4     | 25.6     | 38.1     | 38.6     | 36.0     |
| <b>Consumer Electronics</b>          |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 10,735 | 11,937 | 20,952 | 38,426 | 51,695   | 42,780   | 41,480   | 43,800   | 47,515   | 51,558   |
| Growth YoY (%)                       | 27.1   | 11.2   | 75.5   | 83.4   | 34.5     | -17.2    | -3.0     | 5.6      | 8.5      | 8.5      |
| EBITDA                               | 222    | 252    | 503    | 1,028  | 1,246    | 1,306    | 1,410    | 1,620    | 1,900    | 2,165    |
| EBITDA margin (%)                    | 2.1    | 2.1    | 2.4    | 2.7    | 2.4      | 3.1      | 3.4      | 3.7      | 4.0      | 4.2      |
| <b>Lighting Products</b>             |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 7,742  | 9,194  | 11,397 | 11,037 | 12,841   | 10,546   | 7,870    | 8,670    | 9,550    | 10,521   |
| Growth YoY (%)                       | 40.6   | 18.8   | 24.0   | -3.2   | 16.3     | -17.9    | -25.4    | 10.2     | 10.2     | 10.2     |
| EBITDA                               | 473    | 660    | 977    | 974    | 881      | 904      | 592      | 695      | 804      | 907      |
| EBITDA margin (%)                    | 6.1    | 7.2    | 8.6    | 8.8    | 6.9      | 8.6      | 7.5      | 8.0      | 8.4      | 8.6      |
| <b>Home Appliances</b>               |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 2,503  | 3,744  | 3,963  | 4,311  | 7,088    | 11,435   | 12,050   | 14,868   | 17,530   | 20,596   |
| Growth YoY (%)                       | 33.1   | 49.6   | 5.9    | 8.8    | 64.4     | 61.3     | 5.4      | 23.4     | 17.9     | 17.5     |
| EBITDA                               | 308    | 370    | 461    | 397    | 541      | 1,094    | 1,301    | 1,709    | 2,050    | 2,409    |
| EBITDA margin (%)                    | 12.3   | 9.9    | 11.6   | 9.2    | 7.6      | 9.6      | 10.8     | 11.5     | 11.7     | 11.7     |
| <b>Mobile Phone and EMS</b>          |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 6,698  | 3,549  | 5,369  | 8,395  | 31,383   | 52,243   | 1,09,190 | 2,61,481 | 3,51,719 | 4,30,632 |
| Growth YoY (%)                       | -17.4  | -47.0  | 51.3   | 56.4   | 273.8    | 66.5     | 109.0    | 139.5    | 34.5     | 22.4     |
| EBITDA                               | 65     | 74     | 191    | 394    | 971      | 1,671    | 3,550    | 8,763    | 12,139   | 15,293   |
| EBITDA margin (%)                    | 1.0    | 2.1    | 3.6    | 4.7    | 3.1      | 3.2      | 3.3      | 3.4      | 3.5      | 3.6      |
| <b>Security Surveillance Systems</b> |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 5      | 963    | 2,164  | 2,178  | 3,964    | 4,918    | 6,330    | 0        | 0        | 0        |
| Growth YoY (%)                       |        |        | 124.7  | 0.7    | 82.0     | 24.1     | 28.7     | NA       | NA       | NA       |
| EBITDA                               |        | 8      | 72     | 63     | 151      | 144      | 119      | 0        | 0        | 0        |
| EBITDA margin (%)                    |        | 0.8    | 3.3    | 2.9    | 3.8      | 2.9      | 1.9      | NA       | NA       | NA       |
| <b>Refrigerator</b>                  |        |        |        |        |          |          |          |          |          |          |
| Revenue                              |        |        |        |        |          |          |          | 5,000    | 8,500    | 12,000   |
| Growth YoY (%)                       |        |        |        |        |          |          |          |          | 70.0     | 41.2     |
| EBITDA                               |        |        |        |        |          |          |          | 350      | 638      | 900      |
| EBITDA margin (%)                    |        |        |        |        |          |          |          | 7.0      | 7.5      | 7.5      |

Source: Company, MOFSL

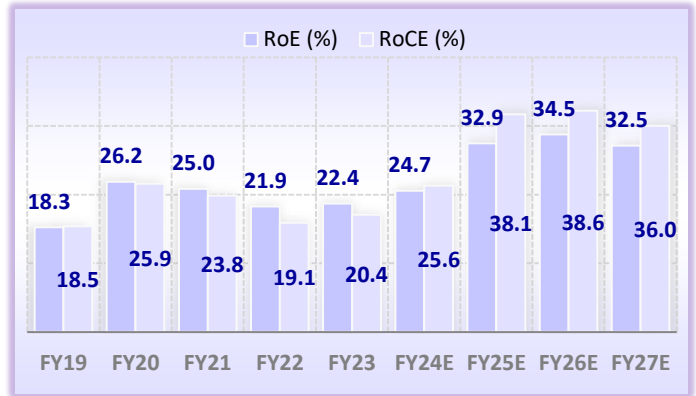


We expect the NWC cycle to remain negative for the company



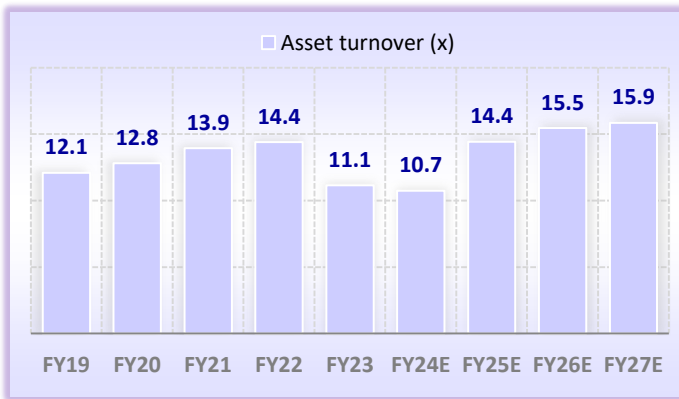
Source: Company, MOFSL

This will result in ROE and RoCE to remain at higher levels in coming years



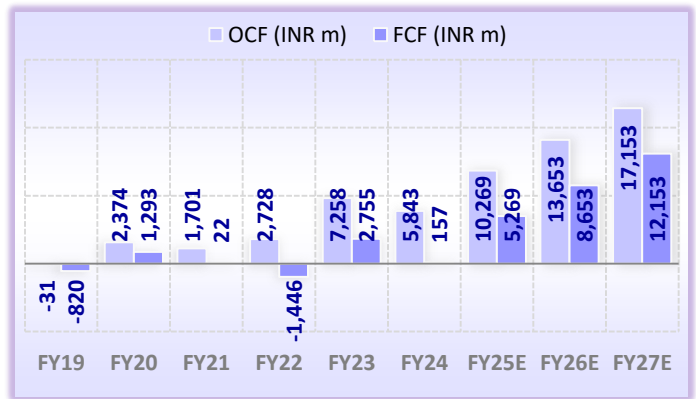
Source: Company, MOFSL

We expect asset turnover to remain high on higher share of mobile segment revenues



Source: Company, MOFSL

We expect FCF to improve from FY25 on OCF improvement with yearly capex of INR5b



Source: Company, MOFSL

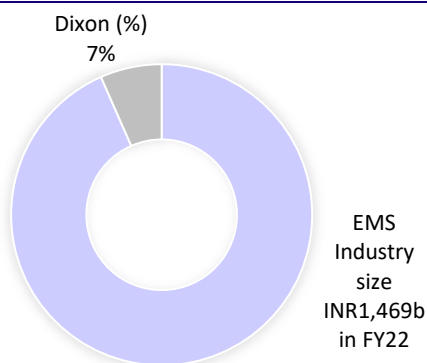
## DIXON: Pioneering the future of manufacturing and electronics

DIXON has become a rapidly expanding diversified player in the EMS industry with a presence across a wide range of segments. The company has achieved a significant scale across its segments, and its ability to control costs sets it apart from competitors. The company has already achieved market leadership in consumer electronics, lighting, home appliances, and mobile phones with its offerings and strong client relationships and is ready to replicate this success in new emerging areas too. We expect the company's backward integration, enhanced ODM mix, and focus on high-margin segments to boost margins to 4.1% by FY27. We expect a CAGR of 44%/51% in revenue/PAT during FY24-FY27. With its efficient working capital cycle, focus on capital allocation, and high asset turnover ratios, we expect RoCE to improve to 39%/36% by FY26/FY27 from 25.4% in FY24.

### 1. Best positioned to benefit from industry and market share growth

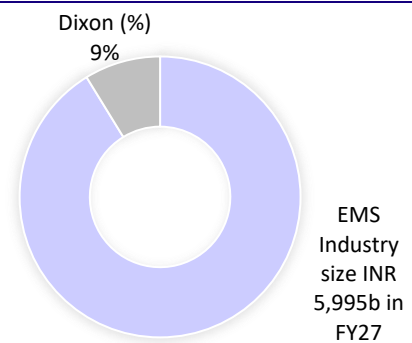
The government has implemented initiatives like PLI, PMP, SPECS, EMC and Semicon India to boost investment in the electronics and EMS industry. The domestic EMS industry is expected to grow from INR1.46t in FY22 to INR6t in FY27 at a CAGR of 32%, as per the F&S report. DIXON held a 7.3% market share in the EMS industry in FY22, and we expect it to grow at a faster CAGR of 37% during FY22-27, driven by a strong ramp-up in mobile segment revenues, telecom and IT hardware, new client additions in consumer electronics, export opportunities in lighting and washing machines, growth in emerging categories like wearables and refrigerators, and PLI approvals for other segments. The company also plans to enter into EV component manufacturing, benefits of which will be seen in the coming years. We believe that growth in these key segments should help DIXON increase its market share in the overall EMS industry to nearly 9% by FY27E.

**Exhibit 1: EMS industry size and market share of DIXON in FY22**



Source: Company, MOFSL

**Exhibit 2: We expect it to improve to 9% in overall EMS industry by FY27**



Source: Company, MOFSL

**Exhibit 3: Diversified segments help DIXON capture a wider market**

| Business division                               | Consumer Electronics                                                                                                                                        | Lighting Products                                                                                                                                                                                               | Home Appliances                                                                                                                                                                                                       | Mobile Phones and EMS                                                                                                                                    | Security Surveillance Systems                                                                                                                                                  |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product offerings</b>                        | LED TV (24" to 98"), Smart TVs, Monitor, IFPD Commercial displays digital signage                                                                           | LED Lamps, LED Batters, LED Downlighters, Drivers, Smart lighting LED panels, Strip and Rope lighting                                                                                                           | Washing machine- Semi automatic (SA), Fully Automatic Top Load (FATL)                                                                                                                                                 | Feature & Smart phones, PCBA                                                                                                                             | Security Camera, DVR                                                                                                                                                           |
| <b>Production capacity (FY23, units m p.a.)</b> | LED TV - 6.0                                                                                                                                                | LED Lamps - 300<br>LED Batters - 50<br>LED Downlighters - 18                                                                                                                                                    | SA - 2.4<br>FATL - 0.6                                                                                                                                                                                                | Smart Phones - 60<br>Feature Phones - 32                                                                                                                 | CCTV - 12.4<br>DVR - 2.4                                                                                                                                                       |
| <b>Growth Strategies</b>                        | - Strengthening ODM & JDM business with existing customers<br>- Further penetration in smart TV segment<br>- Backward Integration and range diversification | - Expansion of product portfolio to include strip and rope lighting and professional products<br>- Strengthening leadership in smart lighting<br>- Growing export business and increase in backward integration | - Acquire more clients for Fully Automatic washing machine<br>- In-house manufacturing to cut down imports from China<br>- Increased R&D investment to utilize technologies for meeting changing consumer preferences | - Focus on addition of more brands<br>- Expansion of manufacturing capacities to cater rising demand<br>- R&D to offer new and industry leading products | - Company is planning to sell its 50% stake in this business to Aditya Infotech and will get 6.5% stake in Aditya Infotech<br>- Offering quality products at competitive rates |
| <b>Customers</b>                                | Xiaomi, Samsung, Hisense, VU, Nokia, Panasonic, TCL, Lloyd, Flipkart, Philips                                                                               | Signify, Panasonic, Wipro, Bajaj, Syska, Orient, Polycab, Luminous, Crompton                                                                                                                                    | Samsung, Bosch, Godrej, Voltas-Beko, Panasonic, Lloyd, Flipkart, Haier, Reliance                                                                                                                                      | Samsung, Motorola, Nokia, ITEL, Jio, Karbonn, Acer                                                                                                       |                                                                                                                                                                                |
| <b>Financial highlights (FY24)</b>              |                                                                                                                                                             |                                                                                                                                                                                                                 |                                                                                                                                                                                                                       |                                                                                                                                                          |                                                                                                                                                                                |
| Revenues (INR m)                                | 41,480                                                                                                                                                      | 7,870                                                                                                                                                                                                           | 12,050                                                                                                                                                                                                                | 1,09,190                                                                                                                                                 | 6,330                                                                                                                                                                          |
| EBITDA (INR m)                                  | 1,410                                                                                                                                                       | 592                                                                                                                                                                                                             | 1,301                                                                                                                                                                                                                 | 3,550                                                                                                                                                    | 119                                                                                                                                                                            |
| EBITDA margin (%)                               | 3.4                                                                                                                                                         | 7.5                                                                                                                                                                                                             | 10.8                                                                                                                                                                                                                  | 3.3                                                                                                                                                      | 1.9                                                                                                                                                                            |
| Revenue salience (%)                            | 23                                                                                                                                                          | 4                                                                                                                                                                                                               | 7                                                                                                                                                                                                                     | 62                                                                                                                                                       | 4                                                                                                                                                                              |
| EBITDA salience (%)                             | 20                                                                                                                                                          | 8                                                                                                                                                                                                               | 19                                                                                                                                                                                                                    | 51                                                                                                                                                       | 2                                                                                                                                                                              |
| RoCE (%)                                        | 54                                                                                                                                                          | 23                                                                                                                                                                                                              | 34                                                                                                                                                                                                                    | 59                                                                                                                                                       | 20                                                                                                                                                                             |
| Market share                                    | 35% market share via capacity                                                                                                                               | 50% in mfg. share in LED lamps                                                                                                                                                                                  | 30% mfg. share                                                                                                                                                                                                        | 15% mfg. share                                                                                                                                           | 25% mfg. share                                                                                                                                                                 |

Source: Company, MOFSL

**2. Key beneficiary of PLI schemes for mobile, lighting, AC components and IT hardware**

DIXON benefits from PLI for lighting, mobile, IT hardware 2.0, and air conditioners. The mobile & EMS segment accounts for a larger chunk of revenue under PLI schemes, with anchor clients such as Xiaomi, Samsung, Motorola, Ismartu, etc. in mobile phones and Acer and Lenovo in IT hardware. The company had also formed a JV with Rexam for AC controller boards. DIXON aims to enter component manufacturing, particularly for lighting and ACs.

**Exhibit 4: DIXON's committed investment of INR6,210m for PLI schemes across segments**

| Company                               | Committed Investment (INR m) | Products to be manufactured                                                                                  |
|---------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------|
| Padget Electronics                    | 2,000                        | ❖ Mobile phones (under INR 15,000 per unit)                                                                  |
| Padget Electronics                    | 2,500                        | ❖ Laptop, Tablets, PCs, Server                                                                               |
| Dixon Technologies (India) Ltd        | 200                          | ❖ Laptop, Tablets, PCs, Server                                                                               |
| Dixon Devices Pvt. Ltd.               | 510                          | ❖ Control Assemblies for IDU or ODU or Remotes                                                               |
| Dixon Technologies Solution Pvt. Ltd. | 1,000                        | ❖ LED Driver, LED engine, LED module, Mechanicals housing, Wire wound inductors, Led light management system |

Source: Company, MOFSL

**PLI for Mobile & EMS division – the key growth area for DIXON**

- For mobile, it has committed an investment of INR2,000m under the large-scale electronics manufacturing scheme and has committed INR2,500m for laptops, tablets, PCs and servers under the IT hardware 2.0 scheme. In the mobile PLI scheme, it is one of the few companies to have achieved revenue and capex threshold targets, and it has already received incentives of ~INR170m in FY24.
- In the mobile segment, DIXON already caters to major clients like Motorola, Samsung, Xiaomi, Nokia, Intel, Compal, Jio, etc. Recently, it has announced the acquisition of a majority stake in Ismartu, which is the manufacturing arm of Transsion Holdings. Transsion's brand portfolio comprises leading mobile phone brands (including Tecno, Intel and Infinix), feature phone and smartphones. DIXON has also entered into a partnership with Longcheer for the production of smartphones, which should help DIXON gain a foothold with the BBK group (Oppo, Vivo, One Plus, Realme).
- The company is already working on IT hardware and has existing clients like Acer and Lenovo. Additionally, DIXON has finalized business with Lenovo for the manufacturing of tablets and notebooks and in discussions with ASUS, which will increase its share in tablets and notebooks further. Mass production for Lenovo will commence from 3QFY25. Two new customers for notebooks are in the process of signing agreements which will get added by Q1FY26. Hence, company will be catering to top 4 customers out of top 5 in the country. It will also commence new facility in 8-10 months.

**Exhibit 5: Total PLI investment target for mobile, laptop, PCs, etc. set by the govt. from companies - (INR m)**

| PLI Scheme                            | Total expected incentive outlay | Total Incremental investment required by applicant | Base Year | Incremental Investment over base year required by applicant |        |        |        |        |        |
|---------------------------------------|---------------------------------|----------------------------------------------------|-----------|-------------------------------------------------------------|--------|--------|--------|--------|--------|
|                                       |                                 |                                                    |           | Year 1                                                      | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Large-scale electronics manufacturing | INR410b                         | INR10b                                             | FY20      | 2,500                                                       | 2,500  | 2,500  | 2,500  | NA     | NA     |
| IT Hardware 2.0                       | INR169b                         | INR2.5b                                            | FY23      | 250                                                         | 500    | 500    | 500    | 500    | 250    |

**Exhibit 6: PLI For Mobile - expected total incentive is INR410b for all companies**

| Segment                                                 | Proposed Incentive rate | Incremental Investment over base year | Incremental sales of manufactured goods over base year |
|---------------------------------------------------------|-------------------------|---------------------------------------|--------------------------------------------------------|
| Mobile Phones<br>(Invoice value of INR15,000 and above) | Year 1: 6%              | Cumulative INR10b over 4 years        | Year 1: INR40b                                         |
|                                                         | Year 2: 6%              | Year 1: 2.5                           | Year 2: INR80b                                         |
|                                                         | Year 3: 5%              | Year 2: 5.0                           | Year 3: INR150b                                        |
|                                                         | Year 4: 5%              | Year 3: 7.5                           | Year 4: INR200b                                        |
|                                                         | Year 5: 4%              | Year 4: 10.0                          | Year 5: INR250b                                        |

Players approved under the mobile PLI scheme are FoxConn Hon Hai, Pegatron, Rising Star (Bharat FIH), Samsung and Wistron for the category of INR15,000 and above and Bhagwati (Micromax), Lava, Optiemus Electronics and Padget Electronics (DIXON) for the categories below INR15,000.

#### Exhibit 7: IT hardware PLI 2.0 - expected total incentive is INR170b for all companies

| Category                                           | Incremental Investment over base year | Incremental sales of manufactured goods over base year |
|----------------------------------------------------|---------------------------------------|--------------------------------------------------------|
|                                                    | Cumulative INR2.5b over 6 years       |                                                        |
| Hybrid (Global/Domestic) companies                 | Year 1: INR 0.25b                     | Year 1: INR5b                                          |
| 1) Laptops (Invoice value of INR 30,000 and above) | Year 2: INR 0.75b                     | Year 2: INR12.5b                                       |
| 2) Tablets (Invoice value of INR 15,000 and above) | Year 3: INR 1.25b                     | Year 3: INR25b                                         |
| 3) All-in-One PCs                                  | Year 4: INR 1.75b                     | Year 4: INR50b                                         |
| 4) Servers                                         | Year 5: INR 2.25b                     | Year 5: INR60b                                         |
| 5) Ultra Small Form Factor (USFF)                  | Year 6: INR 2.50b                     | Year 6: INR75b                                         |

Source: MEITY, MOFSL

#### List of approved companies for IT hardware 2.0 PLI scheme:

1) Dell International Services India Private Limited; 2) Rising Stars Hi-Tech Private Limited; 3) HP India Sales Private Limited; 4) Flextronics Technologies (India) Pvt Ltd; 5) **Padget Electronics Pvt Ltd (DIXON's subsidiary)**; 6) Sojo Manufacturing Services AP PVT Ltd; 7) VVDN Technologies Private Limited; 8) Goodworth Electronics Private Limited; 9) Neolync Tele Communications Private Limited; 10) Syrma SGS Technology Ltd. 11) Bhagwati Products Ltd; 12) Netweb Technologies India Limited; 13) Genus electrotech Limited; 14) Sahasra Electronic Solutions Limited; 15) Hangshine Technosoft Private Limited; 16) Riot Labz Private Limited; 17) Smile Electronics Ltd; 18) Mega Networks Private Limited; 19) Plumage Solutions Private Limited; 20) HLBS Tech Pvt Ltd; 21) Panache Digilife Limited; 22) RDP Workstations Private Limited; 23) Kaynes Electronics Manufacturing Pvt Ltd; 24) INP Technologies Pvt Ltd; 25) Optiemus Telecommunication Private Limited; 26) ITI Limited; 27) Sancraft Industries Pvt Ltd

#### PLI for Lighting and AC components will increase backward integration for DIXON

- In the PLI scheme for white goods for the manufacturing of components and sub-assemblies of ACs and LED lights, 48 beneficiaries were selected, including 32 for AC manufacturing and 16 for LED lights manufacturing, with committed investments of INR48b and INR7.2b, respectively. With PLI approval for investment worth INR1b over the next five years in LED drivers, LED engines, LED modules, light management system, mechanics and inductors, the company has commenced investment and expects to increase backward integration.
- DIXON has also secured approval for AC components and established a JV with Rexam for inverter controller boards, with a total investment of INR510m over five years, benefiting from PLI.

#### Future growth strategy beyond PLI

For growth beyond the PLI scheme tenure, DIXON is building a base for sustaining a higher growth trajectory. This will be achieved by (1) foraying into design manufacturing and increasing the share of ODM, (2) building R&D base for collaborative technology into newer areas, (3) focus on training, skill and



automation as it has already tied up with Siemens for automation of systems, (4) strengthening manufacturing by increased backward integration as it is already setting up a component facility for various segments under PLI along with displays for mobile, (5) building a scale in emerging segments, (6) focus on entering into areas which have higher asset turnover ratios, (7) extreme focus on capital allocation and management of current assets to maintain higher RoCE.

### 3. Key high-growth segments

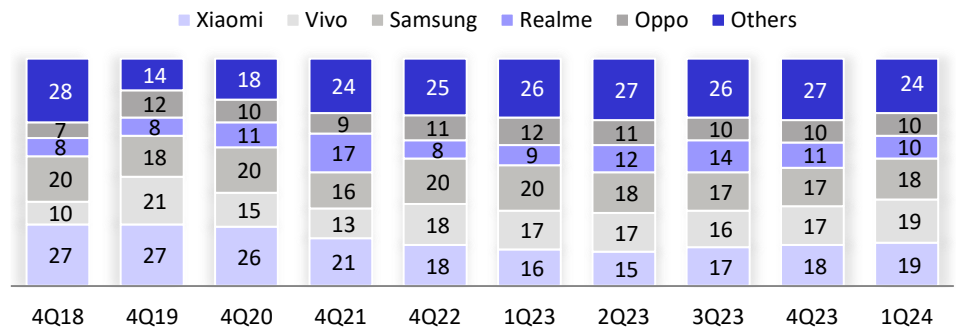
**DIXON's Mobile & EMS and emerging business divisions** will remain high-growth segments going forward and its **Consumer Electronics** division will witness margin improvement. In each segment in last few years, the management has entered into various strategic partnerships, increased wallet share with existing clients and added new clients in all business. We expect the mobile segment to benefit from new client additions and the company's efficient capital allocation; consumer electronics to benefit from backward integration and improved ODM mix; and emerging segments to grow from improved volumes and operational efficiencies.

#### Mobile and EMS

##### Growth recovering in Indian smartphone market

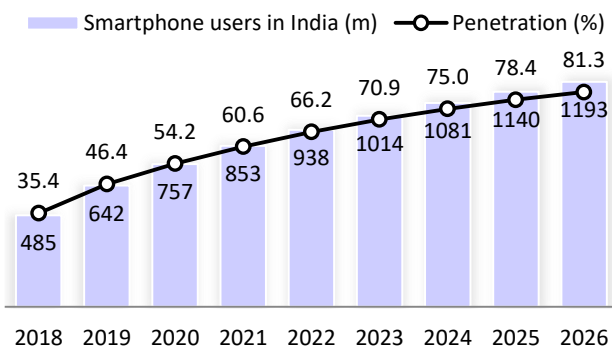
Growth in the Indian smartphone market has started recovering in 1QCY24 after remaining largely flat in FY22 and FY23. The smartphone market has seen changes, particularly after Covid years, in customer preferences toward premium products. With several government initiatives (i.e., PLI), the export of mobile phones from India has increased significantly, mainly led by Apple and Samsung, and domestic EMS companies have also seen a shift in customer's priorities.

**Exhibit 8: India smartphone market share (CY ending quarters) (%)**



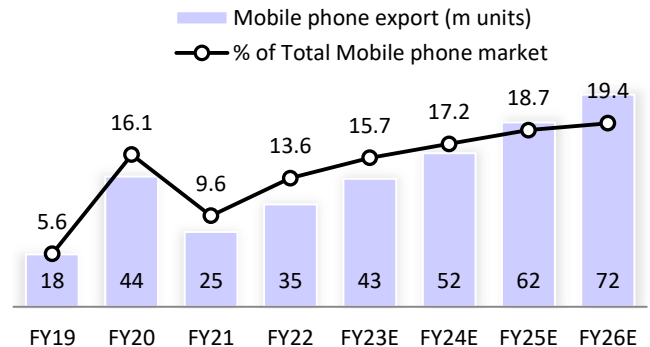
Source: Counterpoint, MOFSL

**Exhibit 9: Number of smartphone users in India on a rise**



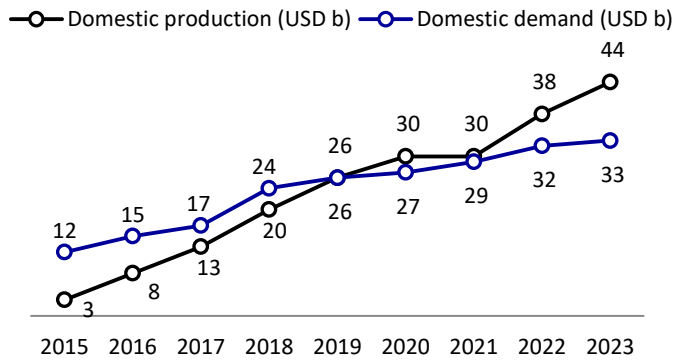
Source: Statista, MOFSL

**Exhibit 10: Mobile phone exports from India**



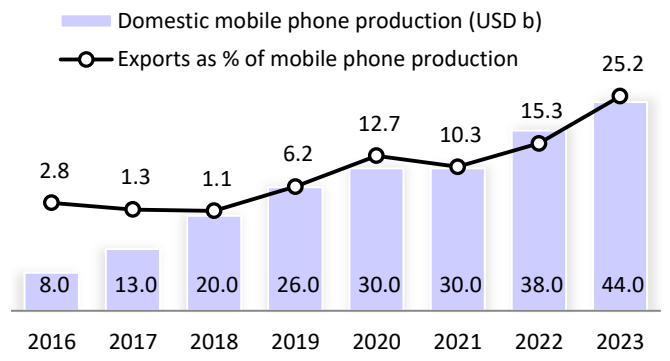
Source: Bharat FIH, MOFSL

**Exhibit 11: Domestic production outpaced domestic demand post Covid**



Source: Statista, MOFSL

**Exhibit 12: Exports as % of domestic mobile phone production on a rise**



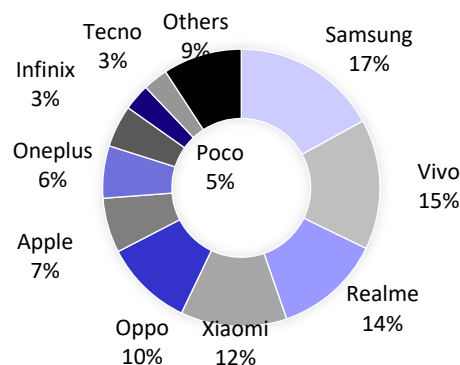
Source: Bharat FIH, MOFSL

**Share of mobile segment revenue to grow sharply for DIXON**

Over the last one year, DIXON’s mobile segment has seen additions of various customers such as Xiaomi, Jio, Compal, acquisition of Ismartu and arrangement with Longcheer, which will boost its mobile segment revenue from FY25. It now has a diversified list of clients in the mobile segment, including Xiaomi, Samsung, Motorola, Nokia, Intel, Jio, and Karbonn. The company’s acquisition of Ismartu will add brands such as Intel, Tecno and Infinix to its portfolio. Its recent partnership with Longcheer will help DIXON expand scope of work toward other entities (Oppo, Vivo, One Plus, Realme and iQOO). With these, DIXON would be able to cater to all major clients in the Indian mobile phone market as Xiaomi, Vivo, Samsung, Realme and Oppo together held a market share of 68% of overall shipments from India in 2023. DIXON has also been able to achieve PLI-led capex and revenue threshold limits on timely execution. Currently, the company has an order book of 28m mobiles, comprising volumes from Motorola, Xiaomi, Oppo (Realme), Ismartu and potential new brands.

While we expect feature phone revenues for DIXON to remain stable, smartphone revenues will see a sharp jump. We factor in improved volumes from Motorola, higher wallet share from Xiaomi and commencement of volumes from Realme, Compal, Intel, and potential new brands. We expect mobile segment revenues to grow from INR92b in FY24 to INR233b/INR296b in FY25/FY26.

**Exhibit 13: Market share of major brands in Indian smart phone market indicates that DIXON caters to all major customers in India Smartphone market (Market share in 2023 %)**



Source: IDC, MOFSL

### Ismartu acquisition to add incremental revenues in smart and feature phones

- Ismartu India is the manufacturing arm of Transsion Holdings, a global leader in mobile phone manufacturing. Transsion Holdings ranks among the top-five smartphone makers worldwide. Ismartu India has established itself as a key player in India's electronics manufacturing sector, having a turnover of around INR62b in FY23. It operates under brand names of Itel, Infinix and Tecno, and has three manufacturing facilities in Noida. It is among the market leaders in feature phone categories in India. DIXON will pay INR2.4b in the first tranche for a 50.1% stake and has an option to increase the stake by 1.6-5.9% in the second tranche in FY27 for an aggregate consideration at a valuation of 20 times of profit after tax of Ismartu for FY26.
- After the CCI approval, we expect Ismartu's financials to be consolidated for nine months during FY25.

### Partnership with Longcheer can add more brands to DIXON's portfolio

- DIXON's subsidiary, Padget Electronics, has entered into an agreement with Longcheer Mobile India for undertaking manufacturing and sale of smartphones for large global brands with Longcheer's design and technology.
- Longcheer has strong capabilities in product-level solution design, hardware innovation design, system-level software platform development, lean production, supply chain integration and quality control capabilities. The company offers integrated smart product services to leading global consumer electronics brands across multiple countries and regions. It has approximately 28% share of ODM at a worldwide level. Its key clients include Xiaomi, Samsung, Huawei, Lenovo, Honor, Oppo, Vivo and China Telecom.
- This tie-up is already helping DIXON bag a contract from Realme and the company is already scaling up production of Realme smartphones to 450k per month. We expect this tie-up to open up further opportunities for DIXON to target a larger wallet share from existing clients as well as tap new clients such as Oppo, Vivo, Oneplus and Realme.
- With this, DIXON's addressable market opens up across wider brands of Longcheer, which together form nearly 44-45% of the Indian smartphone market.

**Exhibit 14: Market share trend of major brands in Indian smart phone market (%)**

| Brands  | 2022 | 2023 |
|---------|------|------|
| Samsung | 18.1 | 17.0 |
| Vivo    | 14.1 | 15.2 |
| Realme  | 14.5 | 12.5 |
| Xiaomi  | 17.8 | 12.4 |
| Oppo    | 11.9 | 10.3 |
| Apple   | 4.6  | 6.4  |
| Oneplus | 4.1  | 6.1  |
| POCO    | 3.2  | 4.9  |
| Infinix | 2.3  | 3.1  |
| Tecno   | 2.4  | 2.9  |
| Others  | 7.0  | 9.2  |

Source: IDC, MOFSL

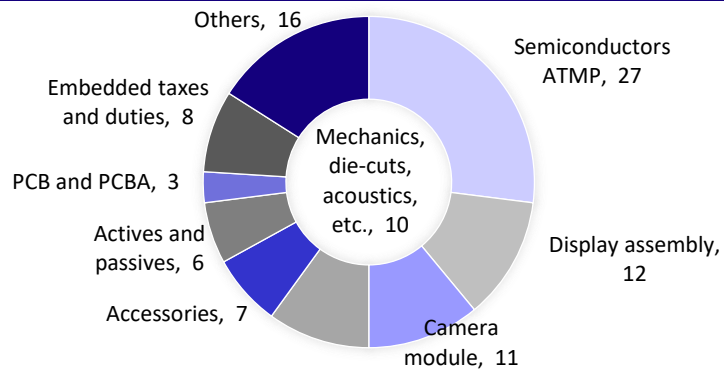
**Wallet share and market share to improve**

DIXON's growth trajectory will be driven by new client acquisitions domestically, despite overall market growth being largely flat. DIXON's mobile volumes from the Motorola plant have shown improvement, with 15-20% of total volumes earmarked for exports. With the addition of new clients in mobile such as Xiaomi, Ismartu, Compal and Oppo, we expect its overall market share in mobile segment to move up. We also foresee volume increases for Nokia and Intel across feature phones. Efforts are underway to enhance capabilities across various components and systems, display facility supported by the establishment of an R&D team and a lab of 70 engineers for 4G and 5G smartphone development. DIXON's immediate priority is to scale up volumes through these new partnerships. We expect volume market share to move up to 22% for smartphones by FY27 from 5% in FY24 and 29% for feature phone by FY27E. Overall, we expect DIXON's volume market share to move up to 27% in mobile market by FY27E.

**Expanding scope of work via backward Integration**

- Out of the entire bill of material for manufacturing a smartphone, nearly 50% of the total cost is spent on semiconductor, display assembly and camera module, which are currently imported. DIXON is building capabilities across PCBA, mechanics and battery chargers. The company also plans to manufacture display module (~10% of total cost of smartphone) and has already finalized a technology partner with a planned capex of USD30m (excluding land and building). It is also looking to foray into precision components and mechanicals.
- For display modules, DIXON has entered into a term sheet with HKC Corp. to form a Joint Venture for manufacturing of liquid crystal modules (LCM), thin film transistor liquid crystal display modules (TFT-LCD modules), assembly of end products like, smartphones, TVs, monitors and auto displays, and also selling HKC branded end products in India. This venture will give a boost to the company's aim of setting up an electronic component ecosystem and deepening value addition.

**Exhibit 15: BoM of smartphone across various components (%)**



Source: Company, MOFSL

**Exhibit 16: India vs China localization of sub-assemblies of mobile phone indicates vast scope of indigenization which is required in key items of a mobile phone (%)**

| Description        | India | China |
|--------------------|-------|-------|
| PCBA               | 96    | 100   |
| Display assembly   | 25    | 75    |
| Camera module      | 25    | 95    |
| Mechanics          | 20    | 100   |
| Battery pack       | 95    | 100   |
| Charger adapter    | 95    | 100   |
| Connectors         | 5     | 100   |
| Die cuts parts     | 15    | 100   |
| Gift box           | 100   | 100   |
| USB cable          | 80    | 100   |
| Wired headset      | 60    | 100   |
| Active             | 0     | 20    |
| Passive            | 0     | 60    |
| Memory and storage | 0     | 20    |

Source: ICEA, MOFSL

**Mobile segment demonstrates high return ratios due to increased asset utilization**

In the mobile segment, DIXON fulfils orders through both job work and margin-based contracts. While DIXON earns 3% margins on EMS basis for both 2G and 4G phones, it undertakes certain contracts, where mobile volumes are not consolidated and the company opts for per-unit realizations at lower rates than normal feature phone, but achieves 30% margins. The company targets RoCE of 25-30% on both types of contracts. The company has incurred PLI scheme-driven capex of INR2.3-2.5b, potentially generating revenues of INR75-80b and achieving asset turns of more than 30x. This strategy yields significantly higher RoCE despite the segment's low margins.

**Overall mobile segment outlook**

DIXON has evolved its mobile business over the years as the segment contributed 62% to overall revenues in FY24 and reported a CAGR of 98% over FY19-24. The company has a diversified list of clients including Motorola, Xiaomi, Samsung, Oppo, Jio, Nokia, ITEL and now the arrangement to acquire share in Ismartu and JV with Longcheer will further open doors for increased EMS opportunities in mobile segment for DIXON for both domestic and international markets. As per the management, new customer additions are margin-accretive to the segment, and blended realization per smartphone is ~INR8,000-9,000 per unit (net of GST). We expect mobile segment revenues to grow to INR233b/INR296b/INR342b in FY25/FY26/FY27.



### IT hardware 2.0

- In Oct'23, the government placed restrictions on specific IT hardware imports with the latest revision in guidelines, according to which importers can import hardware with only authorization specifying quantity and value. DGFT clarified that certain IT hardware like desktop computers can be imported without restrictions. However, laptops, tablets, all-in-one PCs, and ultra-small form factor computers still require import authorization.
- DIXON, through its subsidiary Padget Electronics, stands as a beneficiary under the IT Hardware PLI 2.0 scheme, with a committed investment of INR2.5b. Currently, DIXON has Acer as its anchor client in this business. Recently, the company finalized business with Lenovo for the manufacturing of tablets; NPI phase for tablets is completed and the company plans to start mass production in Sept'24. Additionally, DIXON is in discussions with ASUS, which will increase its share in tablets and notebooks. Revenues for this segment declined by 9% in FY24 to INR1.4b. We expect revenues to grow sharply to INR5b/INR25b/INR50b in FY25/26/27.

**Exhibit 17: Market share trend of key players in IT hardware in India (%)**

| Company      | 2023 Shipments | 2023 market share | 2022 Shipments | 2022 market share |
|--------------|----------------|-------------------|----------------|-------------------|
| HP Inc.      | 4,385          | 31.5%             | 4,499          | 30.2%             |
| Lenovo       | 2,317          | 16.7%             | 2,818          | 18.9%             |
| Dell         | 2,154          | 15.5%             | 2,854          | 19.2%             |
| Acer         | 1,705          | 12.3%             | 1,469          | 9.9%              |
| Asus         | 1,100          | 7.9%              | 1,013          | 6.8%              |
| Others       | 2,254          | 16.2%             | 2,240          | 15.0%             |
| <b>Total</b> | <b>13,915</b>  | <b>100%</b>       | <b>14,893</b>  | <b>100%</b>       |

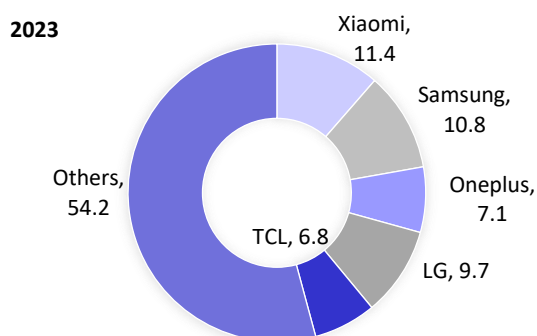
Source: IDC, MOFSL

### Consumer Electronics

#### Industry overview and outlook

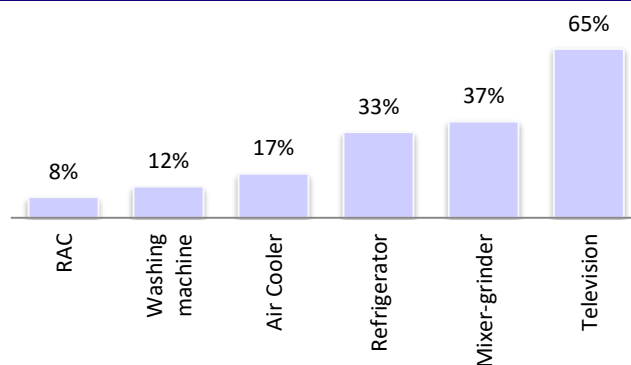
- TV penetration in India is ~65%, the highest among consumer electronics. However, growth in this industry over the last two years was impacted by a decline in demand as well as a sharp correction in open cell prices. Going ahead, the ODM industry in television is moving toward premiumization and value addition, which will drive growth as well as margin improvement.
- The share of smart TVs in total TV shipments in India reached 93% in 2023 from 67% in FY20. Within smart TVs, key players Samsung, Xiaomi, Oneplus, LG and TCL form nearly 46% of total market.

**Exhibit 18: Smart TV market share in India (%)**



Source: Company, MOFSL

**Exhibit 19: TV penetration in consumer durables (%)**

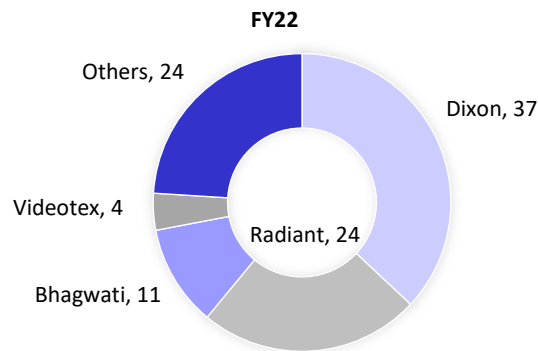


Source: Company, MOFSL

**DIXON’s position in the TV segment**

DIXON with an annual capacity of 6.5m units takes care of nearly 30% of India’s demand. Xiaomi, Samsung, Oneplus, LG and TCL are the major players in the smart TV market with a combined market share of 46%. Xiaomi and Samsung lead the pack with a market share of 11.4% and 10.8%, respectively, as of 2023. DIXON’s key clients are Xiaomi, Samsung, Hisense, VU, Nokia, Panasonic, TCL and Lloyd. The management plans to increase its wallet share with existing as well as other clients by improving its product offerings. Additionally, DIXON secured ODM sub-licensing rights with Google for Android and Google TV platforms in FY23, a significant advancement as prevalence of these platforms is 60-65% in the Indian market. These initiatives will improve margins in the consumer electronics division. Beyond TV manufacturing, DIXON is also expanding its product range to include commercial displays and interactive boards, automotive boards and industrial displays, which are margin-accretive segments.

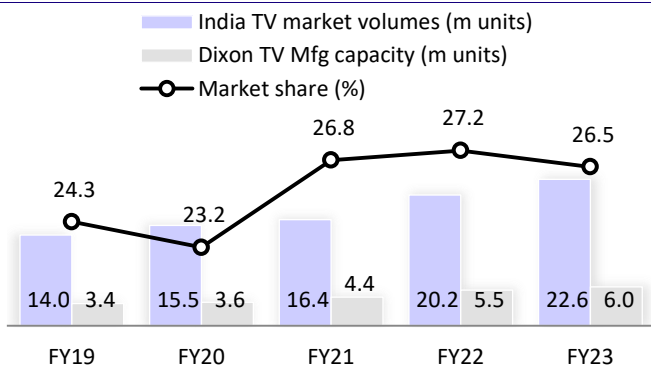
**Exhibit 20: DIXON market share in TV segment among key ODM players (%)**



Source: Company, MOFSL

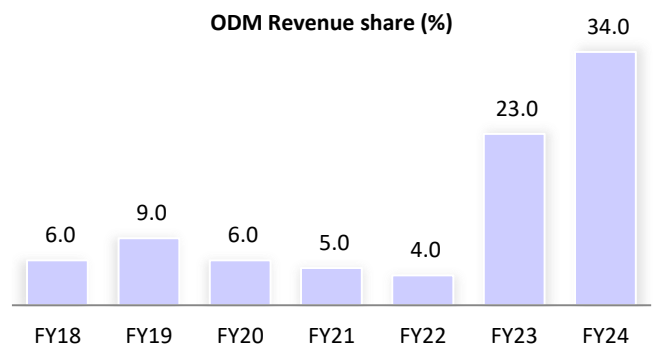
As per the management, an outsourcing opportunity in TV is 50-55%, which is not growing further. So, DIXON is focusing on backward integration with injection moulding and mechanicals, and it has also started manufacturing LED boards, which is margin accretive for DIXON. Partnership with Samsung for Tizen operating system is expected to roll out in 1QFY25 and manufacturing of digital signage solutions has commenced, alongside interactive flat display panels. A state-of-the-art R&D center has been established in Noida to drive further developments in this segment.

**Exhibit 21: DIXON manufacturing capacity and market share trend over last few years**



Source: Company, MOFSL

**Exhibit 22: ODM contribution in consumer electronics for Dixon has been moving up (%)**

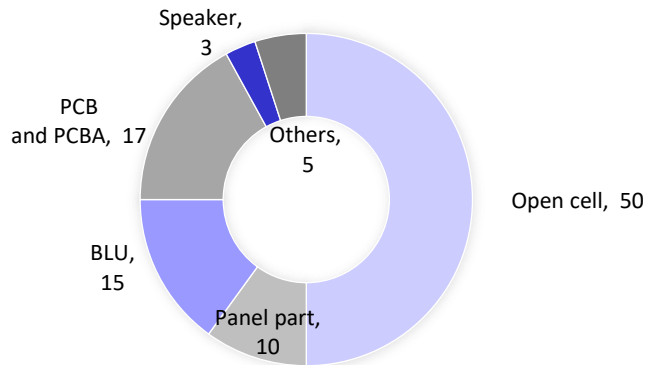


Source: Company, MOFSL

**Expanding scope of work via backward Integration**

In the bill of materials for LED TVs, about 60% of the total cost is allocated to open cell and panel components, which are presently imported. DIXON does not intend to enter open cell and panel manufacturing soon. However, it aims to reduce costs in other areas, such as injection moulding units and PCBA. To achieve this, the company has brought the injection moulding process in-house, expanded SMT lines for PCBs, and established an LED bar assembly line for TVs. Its ODM share in consumer electronics was 34% in FY23 (6% in FY18).

**Exhibit 23: BoM for LED TV across components (%)**



Source: Company, MOFSL

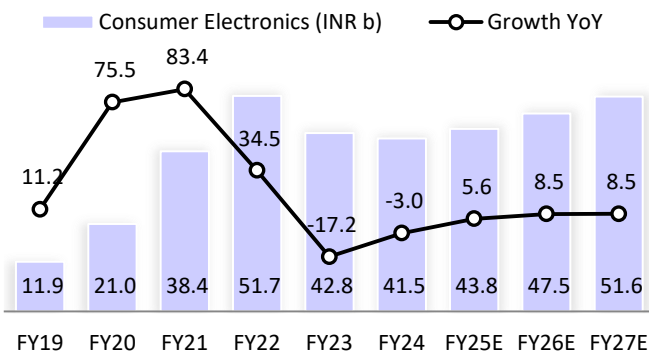
**AC PCB and components**

AC PCB and components are also part of the consumer electronics division. DIXON and Rexxam has formed a 40:60 joint venture to manufacture inverter controller boards for AC. Rexxam, a design and technology partner for Daikin, brings expertise in PCBA design. Currently, the market for these boards is dominated by imports or Chinese players with a base in India. The JV achieved a revenue of INR2.6b in FY24 with healthy operating margins and ROCE. The management plans to increase exports under this business by FY25.

**Future growth & outlook**

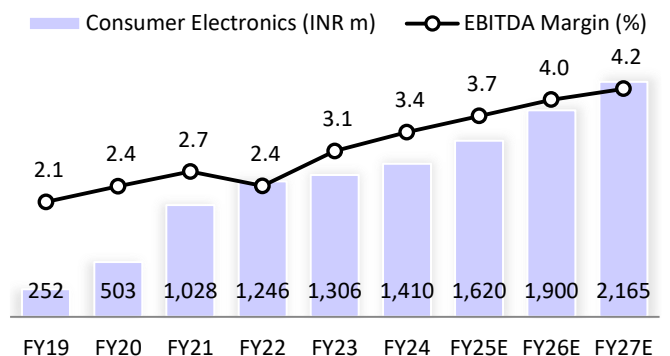
The consumer electronics segment’s revenues posted a CAGR of 28% during FY19-FY24, contributing ~23% of total revenues in FY24. We expect consumer electronics revenues/EBITDA to clock a CAGR of 7.5%/15% during FY24-FY27, led by strong wallet share with existing clients, addition of new clients and increased ODM share.

**Exhibit 24: Consumer Electronics Revenues**



Source: Company, MOFSL

**Exhibit 25: Consumer Electronics EBITDA**



Source: Company, MOFSL

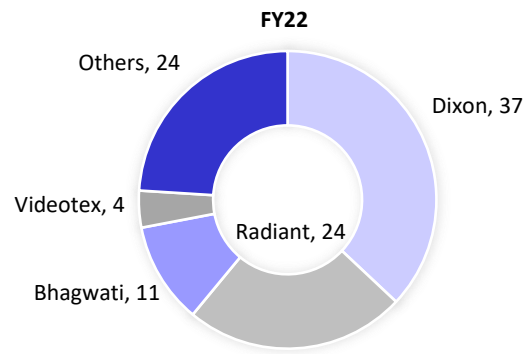
### Emerging Business

- **Telecom & networking products:** In this segment, DIXON opened a new operational facility in Noida in Dec'22, which is now stable and scaling up production for various telecom products. Notably, mass production is underway for Telecom GPON-20, WiFi-5, and WiFi-6 routers, along with android set-top boxes, with a focus on fulfilling orders from Airtel and other major mobile service providers. The company has secured substantial orders from Airtel for 5G fixed wireless devices, currently in the NPI and trial phase, sourced from a leading global ODM solution provider in the FWA category. Additionally, the company has received large orders from India's largest telco for set-top boxes and 5G CPE devices, slated for product launches in 4QFY24. Revenues for this segment surged 120% in FY24 to INR6.8b. We expect a revenue CAGR of 40% over FY24-27.
- **Wearables and hearables:** The company clocked strong volumes of TWS and has a healthy order book. The majority of TWS production for BOAT is done by DIXON. Further, it will be adding smartwatches to its portfolio in the next couple of months. The company started doing SMT PCB in-house and plans to start manufacturing of battery packs, which will further increase its backward integration. Revenues for this segment jumped 149% in FY24 to INR7.5b and we expect a 30% revenue CAGR over FY24-27.
- **Refrigerator:** DIXON created a capacity of 1.2m direct cool refrigerators (~10% of domestic requirement) under various product categories of 190L-235L and commercial production has commenced in 4QFY24. Additionally, the company has started developing two-door frost-free models and will introduce glass door models too. We expect the segment to achieve revenues of INR5b/INR8.5b in FY25/FY26, with EBITDAM in range of 7-7.5%.

### 4 DIXON has scale advantage across segments vs. competitors

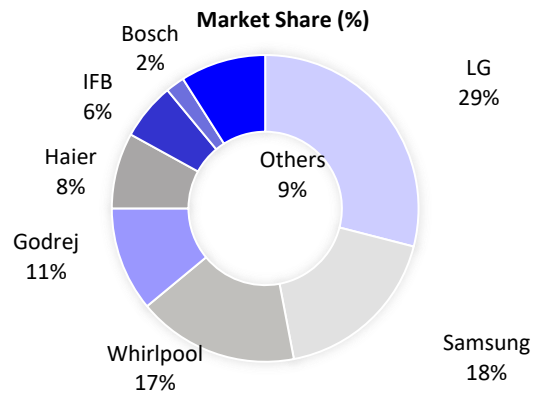
DIXON has a scale advantage in most segments, which has resulted in leadership position, and competition is still limited in most segments, with just two or three large players, along with smaller players. DIXON has achieved economies of scale across its key segments such as consumer electronics and lighting, and expects to replicate the same in the mobile segment. As a result, the company has a 50-70% wallet share of clients in segments like lighting and LED TV and a strong base of sticky customers. With PLI approvals already in place for other segments, the scale benefits will start accruing in other segments too. This would make it easier for any foreign OEM brand to choose DIXON as an EMS partner.

**Exhibit 26: Television market share by EMS companies in India (% , FY22)**



Source: Company, MOFSL

**Exhibit 27: Washing machine market share of key players in FY22 (%)**



Source: Company, MOFSL



### 5. Efficient capital allocation key priority despite low-margin business

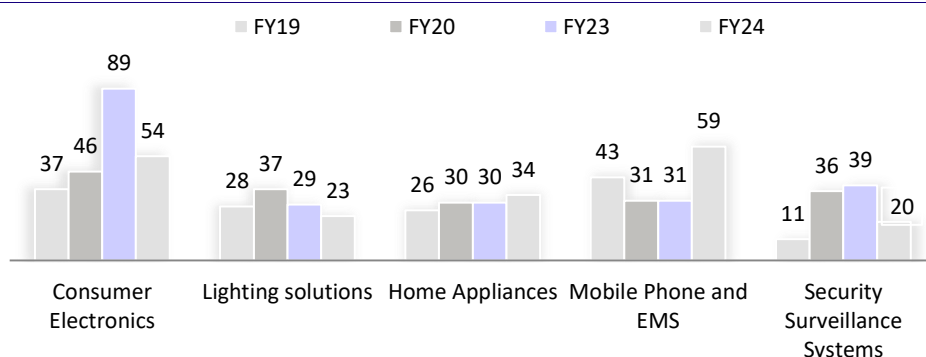
DIXON operates in the high-volume low-margin (HVLM) segment of the EMS industry, which forms 89.5% of the domestic EMS market. Despite the low margin nature of this segment, DIXON has maintained high RoCE. The company emphasizes efficient capital allocation, resulting in a significant reduction in working capital in recent years. Investments are guided by a payback period target of four years and a targeted pre-tax RoCE of over 30%. This strategy has led to high RoCE and asset turnover ratios in the consumer electronics and mobile division. Efficiency in capital allocation is achieved by reducing the cost of capex, adopting a lease model for new facilities, minimizing working capital, and adding segments with a higher asset turnover. Consequently, even in segments with lower margins, the company achieves healthy RoCE and high asset turnover ratios.

#### Exhibit 28: Mobile and consumer electronics enjoy high asset turnover ratios resulting in high RoCE for these businesses

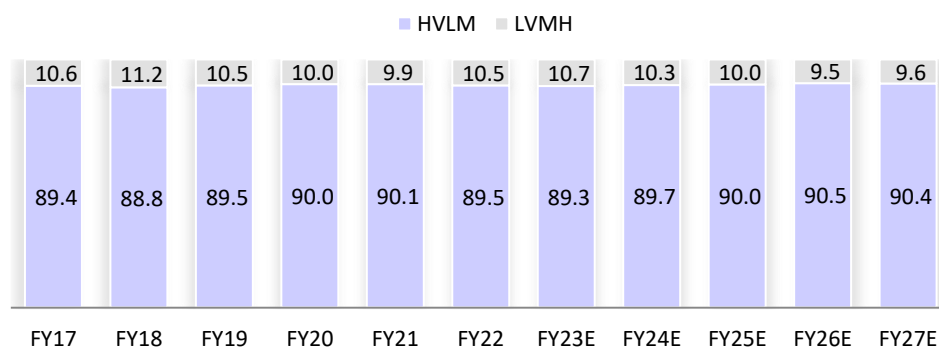
|                                  | Mobile phone (existing) | Consumer Electronics |
|----------------------------------|-------------------------|----------------------|
| Capacity (m units)               | 8.4                     | 1.0                  |
| Capex (INR m)                    | 2,000                   | 300                  |
| Capacity utilization (%)         | 71                      | 60                   |
| Production (m units)             | 6.0                     | 0.6                  |
| Realization (INR)                | 10,500                  | 11,000               |
| Revenue (INR m)                  | 62,622                  | 6,600                |
| EBITDA (INR m)                   | 1,879                   | 198                  |
| EBITDA (%)                       | 3.0                     | 3.0                  |
| EBIT (INR m)                     | 1,745                   | 178                  |
| Post tax EBIT (INR m)            | 1,309                   | 134                  |
| Working capital @ 5 days (INR m) | 858                     | 90                   |
| RoCE (%)                         | 45.8                    | 34.2                 |
| Asset turnover ratio (x)         | 31.3                    | 22.0                 |

Source: Company, MOFSL

#### Exhibit 29: Segmental RoCE has remained strong across divisions with much higher RoCE for mobile and consumer electronics segment (%)



Source: Company, MOFSL

**Exhibit 30: India EMS market segmentation by HVLM vs. LVHM (%)**

Source: Company, MOFSL

## 6. Exports

An export opportunity is also gradually opening up for DIXON mainly for mobile, Lighting, Washing machine and Telecom products. In Mobiles segment, DIXON manufactures 100% of demand for Motorola's India business and ~15% volumes of what Motorola does globally. Management expects its share in total Motorola business to reach 18-20%, leading to ~22% of total volume manufactured by DIXON to be exported with almost 28-30% going to US market. Management expects export volumes for Motorola to reach ~2m in FY25 from current levels of ~1.5m in FY24. Additionally, recent tie-ups with Ismartu and Longcheer may also enhance current level of export opportunity for Mobile business. In Lighting, company is executing order for a new customer in UAE and working on a large RFQ for its own anchor customer in for US markets. Additionally, it has expanded its export business with new customer coming in from Germany and UK. In Washing machine segment, DIXON will soon be starting exports for a large Japanese customer- "Sharp" for fully automatic washing machine and further is in discussions with other brands for exports.

## 7. Backward Integration

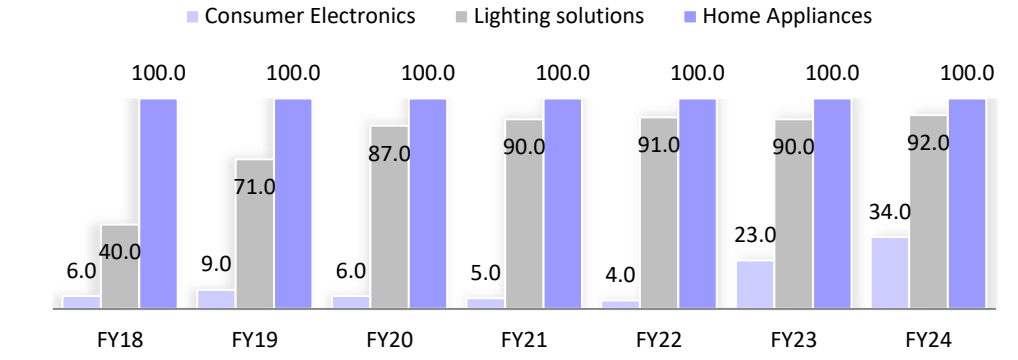
The majority of high-value components for mobile, TV, and washing machine segments are currently imported, and transitioning the manufacturing of items like open cell, panel, screen, display, semiconductor, and camera modules entirely to India will require time. Nevertheless, DIXON is actively developing capabilities in displays, PCB, mechanics, and battery chargers for mobiles to decrease reliance on imports. Additionally, the company is collaborating with global brands to enhance capabilities in TV and AC control boards, aiming to reduce dependence on imports in these segments as well.

## 8. DIXON is scaling up R&D presence across segments

The company has three R&D centers for products spread across different segments. It provides 100% ODM solutions in lighting and washing machine to its clients and focuses on increasing ODM across different segments. DIXON expects to replicate the journey in lighting and washing machine to other segments like consumer electronics and mobile phones through increased R&D investments. In FY18, its ODM share in lighting was 40% and it moved up to 90% now with margins at 7.5% in FY24. Similarly, in consumer electronics, its ODM share has moved up from 6% in FY18 to 23% now and the company plans to scale it up to 30% as client additions will

accelerate after the sub-licensing agreement with Google for ODM-based solutions for android-based TVs. However, we believe that the company would be required to invest more in R&D in the long term in order to build more capabilities across newer technologies. Global players have been continuously investing in R&D.

**Exhibit 31: ODM share in revenue across segments (%)**



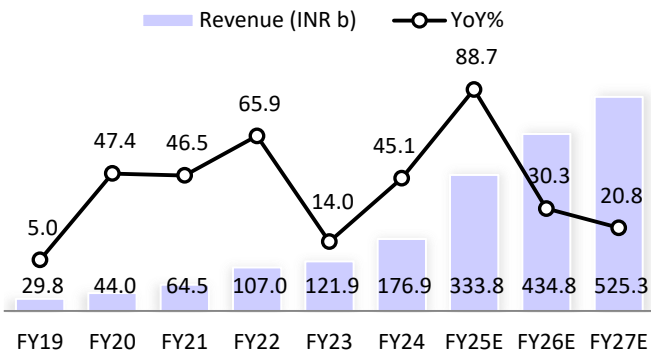
Source: Company, MOFSL

## Financial Outlook

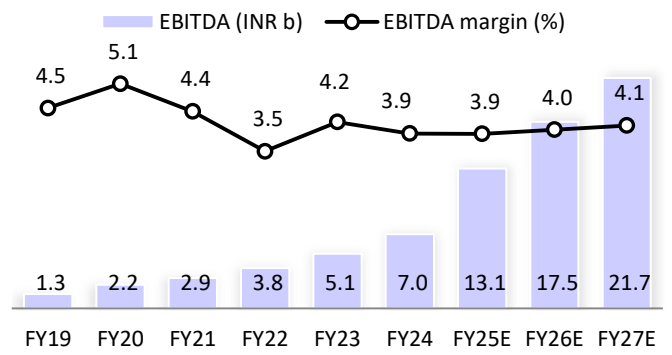
### Exhibit 32: Segmental Financial outlook across segments for DIXON

| INR m                                | FY18   | FY19   | FY20   | FY21   | FY22     | FY23     | FY24     | FY25E    | FY26E    | FY27E    |
|--------------------------------------|--------|--------|--------|--------|----------|----------|----------|----------|----------|----------|
| <b>Consolidated</b>                  |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 28,416 | 29,844 | 44,001 | 64,482 | 1,06,971 | 1,21,920 | 1,76,909 | 3,33,818 | 4,34,814 | 5,25,307 |
| Growth YoY (%)                       | 15.7   | 5.0    | 47.4   | 46.5   | 65.9     | 14.0     | 45.1     | 88.7     | 30.3     | 20.8     |
| EBITDA                               | 1,120  | 1,349  | 2,231  | 2,866  | 3,791    | 5,128    | 6,976    | 13,138   | 17,531   | 21,674   |
| EBITDA margin (%)                    | 3.9    | 4.5    | 5.1    | 4.4    | 3.5      | 4.2      | 3.9      | 3.9      | 4.0      | 4.1      |
| RoCE                                 | 23.4   | 18.5   | 25.9   | 23.8   | 19.1     | 20.4     | 25.6     | 38.1     | 38.6     | 36.0     |
| <b>Consumer Electronics</b>          |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 10,735 | 11,937 | 20,952 | 38,426 | 51,695   | 42,780   | 41,480   | 43,800   | 47,515   | 51,558   |
| Growth YoY (%)                       | 27.1   | 11.2   | 75.5   | 83.4   | 34.5     | -17.2    | -3.0     | 5.6      | 8.5      | 8.5      |
| EBITDA                               | 222    | 252    | 503    | 1,028  | 1,246    | 1,306    | 1,410    | 1,620    | 1,900    | 2,165    |
| EBITDA margin (%)                    | 2.1    | 2.1    | 2.4    | 2.7    | 2.4      | 3.1      | 3.4      | 3.7      | 4.0      | 4.2      |
| <b>Lighting Products</b>             |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 7,742  | 9,194  | 11,397 | 11,037 | 12,841   | 10,546   | 7,870    | 8,670    | 9,550    | 10,521   |
| Growth YoY (%)                       | 40.6   | 18.8   | 24.0   | -3.2   | 16.3     | -17.9    | -25.4    | 10.2     | 10.2     | 10.2     |
| EBITDA                               | 473    | 660    | 977    | 974    | 881      | 904      | 592      | 695      | 804      | 907      |
| EBITDA margin (%)                    | 6.1    | 7.2    | 8.6    | 8.8    | 6.9      | 8.6      | 7.5      | 8.0      | 8.4      | 8.6      |
| <b>Home Appliances</b>               |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 2,503  | 3,744  | 3,963  | 4,311  | 7,088    | 11,435   | 12,050   | 14,868   | 17,530   | 20,596   |
| Growth YoY (%)                       | 33.1   | 49.6   | 5.9    | 8.8    | 64.4     | 61.3     | 5.4      | 23.4     | 17.9     | 17.5     |
| EBITDA                               | 308    | 370    | 461    | 397    | 541      | 1,094    | 1,301    | 1,709    | 2,050    | 2,409    |
| EBITDA margin (%)                    | 12.3   | 9.9    | 11.6   | 9.2    | 7.6      | 9.6      | 10.8     | 11.5     | 11.7     | 11.7     |
| <b>Mobile Phone and EMS</b>          |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 6,698  | 3,549  | 5,369  | 8,395  | 31,383   | 52,243   | 1,09,190 | 2,61,481 | 3,51,719 | 4,30,632 |
| Growth YoY (%)                       | -17.4  | -47.0  | 51.3   | 56.4   | 273.8    | 66.5     | 109.0    | 139.5    | 34.5     | 22.4     |
| EBITDA                               | 65     | 74     | 191    | 394    | 971      | 1,671    | 3,550    | 8,763    | 12,139   | 15,293   |
| EBITDA margin (%)                    | 1.0    | 2.1    | 3.6    | 4.7    | 3.1      | 3.2      | 3.3      | 3.4      | 3.5      | 3.6      |
| <b>Security Surveillance Systems</b> |        |        |        |        |          |          |          |          |          |          |
| Revenue                              | 5      | 963    | 2,164  | 2,178  | 3,964    | 4,918    | 6,330    | 0        | 0        | 0        |
| Growth YoY (%)                       |        |        | 124.7  | 0.7    | 82.0     | 24.1     | 28.7     | NA       | NA       | NA       |
| EBITDA                               |        | 8      | 72     | 63     | 151      | 144      | 119      | 0        | 0        | 0        |
| EBITDA margin (%)                    |        | 0.8    | 3.3    | 2.9    | 3.8      | 2.9      | 1.9      | NA       | NA       | NA       |
| <b>Refrigerator</b>                  |        |        |        |        |          |          |          |          |          |          |
| Revenue                              |        |        |        |        |          |          |          | 5,000    | 8,500    | 12,000   |
| Growth YoY (%)                       |        |        |        |        |          |          |          |          | 70.0     | 41.2     |
| EBITDA                               |        |        |        |        |          |          |          | 350      | 638      | 900      |
| EBITDA margin (%)                    |        |        |        |        |          |          |          | 7.0      | 7.5      | 7.5      |

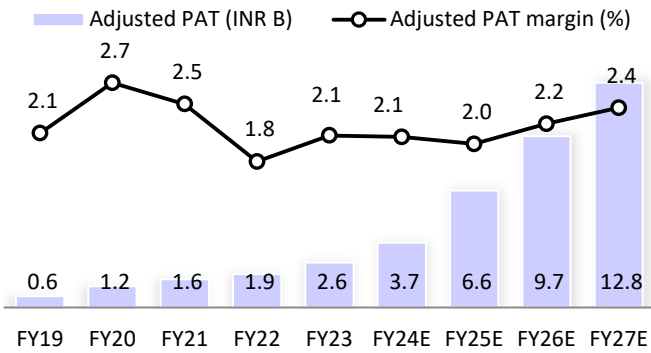
**Exhibit 33: We expect revenue to grow at a CAGR of 44% over FY24-27 led by mobile and new segments (INR m)**



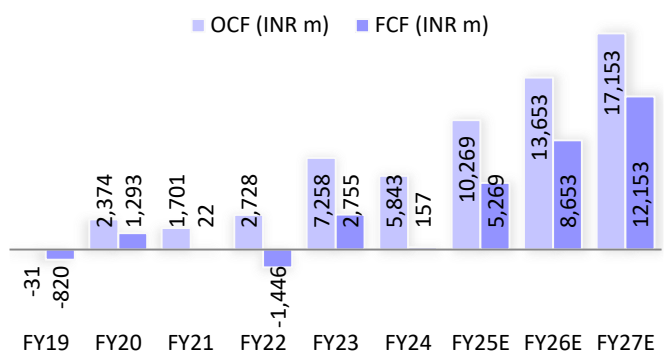
**Exhibit 34: We expect EBITDA CAGR of 46% over FY24-27 on focus towards margin improvement (INR m)**



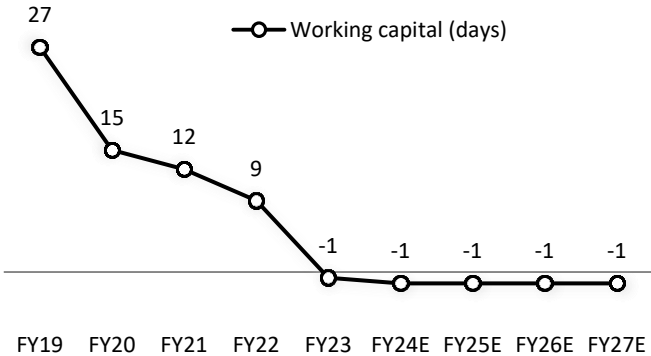
**Exhibit 35: We expect PAT CAGR of 51% over FY24-27 led by strong revenue and EBITDA growth (INR m)**



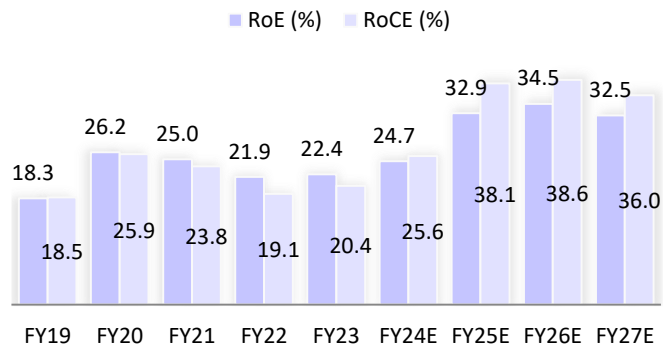
**Exhibit 36: We expect OCF and FCF to remain strong as working capital cycle is lean for DIXON (INR m)**



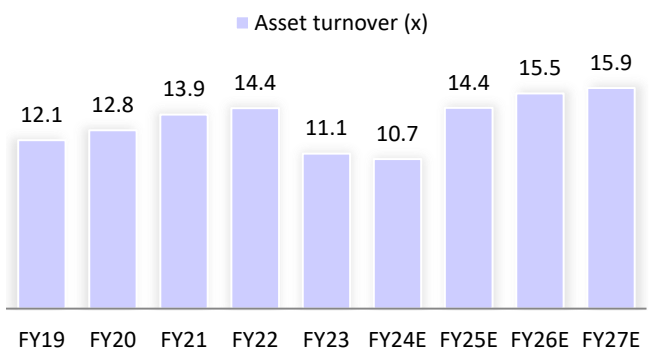
**Exhibit 37: We expect NWC cycle to remain lean for DIXON (days)**



**Exhibit 38: We expect RoE/RoCE to improve on continued focus on capital allocation and improved asset turnover (%)**

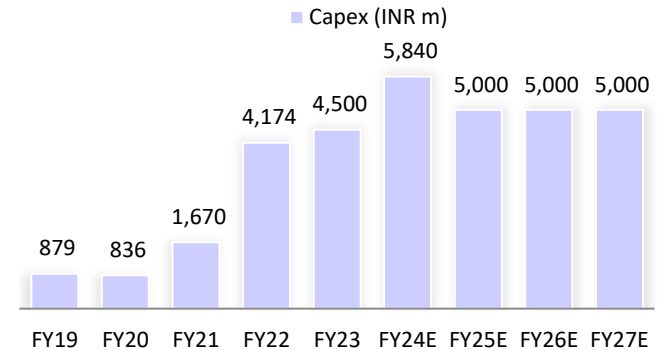


**Exhibit 39: Asset turnover to improve on higher share of revenues from mobile and EMS segment (x)**



Source: Company, MOFSL

**Exhibit 40: We expect company to keep investing in capex for mobile segment and backward integration (INR m)**



Source: Company, MOFSL

## Valuation and recommendation

The stock is currently trading at 75.9x/57.8x P/E on FY25/26E earnings. We initiate coverage on DIXON with a **BUY** rating and a DCF-based TP of INR15,000 taking into account 20-year revenue CAGR of 17.8% and EBITDA CAGR of 18.6%, asset turnover of 13-14x over the same period. We bake in WACC of 10.7% and terminal growth rate of 6%.

**Exhibit 41: Bear /Base/ Bull case scenario**

|                     | Bear case                                     | Base case                                    | Bull case                                     | Rationale                                   |
|---------------------|-----------------------------------------------|----------------------------------------------|-----------------------------------------------|---------------------------------------------|
| <b>Assumptions</b>  | Higher WACC 11.1%,<br>Terminal growth rate 3% | WACC of 10.7% and<br>Terminal growth rate 6% | Lower WACC 10.3%<br>Terminal growth rate 6.5% | ❖ We take sensitivity in<br>DCF assumptions |
| <b>Target price</b> | <b>10,677</b>                                 | <b>15,000</b>                                | <b>18,186</b>                                 |                                             |



## Key risks: Demand slowdown and loss in key client relationships

### DIXON's performance is subject to the following risks associated:

- **Slower industry growth.** Any slowdown in growth of the EMS industry and spending by OEMs, particularly in mobile, TV and consumer durables, can impact revenue growth of the company.
- **Lower wallet share from key clients.** Any loss of relationship with anchor clients can impact financials of the company. DIXON is dependent on a few key/anchor clients in each of its segments. However, DIXON has diversified over last few years across segments and across clients to tide over this risk.
- **Increased competition.** Many players have started entering segments like mobile, TV, washing machine, lighting and competition will increase over time in most EMS segments. Increased competition could result in significant price competition or lower margins or loss of market share. However, DIXON has over time increased its wallet share and has achieved scale benefits. Hence, company is better placed than other players.
- **Limited bargaining power with clients.** DIXON has large exposure to HVLM segments and operates at thin margins with limited bargaining power with clients. In order to hedge against the margin risk, it focuses on efficient capital allocation, which improves its RoCE despite lower margins.
- **Backward integration requires capex.** DIXON is focusing on investments across R&D, technology and backward integration in order to improve ODM share in different segments. This can impact the company's return profile in the near term.
- **Supply chain issues.** There is still dependence on imports of certain high-value items in its key segments such as open cell and displays in consumer electronics, PCB, displays, battery etc. in mobile, and chips in other segments. Supply chain issues related to chip unavailability and raw material shortage impacted margins in FY22. Any recurrence of these issues can lead to margin pressure.

**SWOT analysis**

- ❖ Present in high-growth segments of electronics manufacturing
- ❖ Enjoys high market share in existing segments
- ❖ Advantage of scale in existing segments and replicating the same in newer segments
- ❖ Continuously adding capabilities to widen offerings and segments
- ❖ Continued investment in building R&D, technology tie-ups and backward integration

**S**  
STRENGTH



- ❖ Upfront capex required to enter new segments or for backward integration
- ❖ Limited bargaining power with clients
- ❖ Focus on high-volume low-margin segments

**W**  
WEAKNESS



- ❖ 'Make in India' and various PLI schemes provide a strong addressable market opportunity for DIXON in the EMS segment
- ❖ DIXON can capitalize on new growth areas based on its existing experience in scaling up segments
- ❖ Export opportunity across various segments

**O**  
OPPORTUNITY



- ❖ Increased competition
- ❖ Slowdown in industry growth
- ❖ Loss of business from anchor clients
- ❖ Chip availability and supply chain issues

**T**  
THREATS



## Management Team



### Mr. Sunil Vachani - Executive Chairman

Mr. Sunil Vachani is the promoter of the company and has been associated with DIXON since inception. He holds a degree of Associate of Applied Arts in business administration from the American College in London. He is responsible for the company's growth and business development. Mr. Vachani has over 28 years of experience in the EMS industry. He has held positions like Chairman of the Electronics and Computer Software Export Promotion Council of India and Co-Chair of the CII ICTE committee. He is currently the vice president of CEAMA.



### Mr. Atul B Lall - Vice Chairman & Managing Director

Mr. Atul B Lall has been associated with the company since inception. He holds a master's degree in management studies from the Birla Institute of Technology and Science, Pilani. He is responsible for the company's overall business operations. He has nearly three decades of experience in the EMS industry. He has served as a member of the Technical Evaluation Committee for Electronics Manufacturing Services under M-SIPS constituted by the DeitY and served as a representative of ELCINA on the Committee for Reliability of Electronic and Electrical Components and Equipment (LITD. 02) of the BIS.



### Mr. Saurabh Gupta - Chief Financial Officer (CFO)

Mr. Saurabh Gupta has an experience of over 15 years in the field of finance and strategy. He was last associated with cinema chain PVR as Vice President until Aug'17. He also worked with reputed companies like Gumberg India, Unitech, and McKinsey. He holds a bachelor's degree in Commerce from Delhi University and MBA (Executive program) from MDI, Gurgaon. He is an associate of ICAI.



### Mr. Abhijit Kotnis - President & COO - Consumer Electronics

Mr. Abhijit Kotnis has over 28 years of experience across manufacturing, technology, business development and sourcing fields. He holds an MBA in Marketing & Operations and BE in Electronics & Telecommunications from Marathwada University, Aurangabad. He has also completed his Post Graduate Program in Management (MEP) from IIM, Ahmedabad. Prior to joining DIXON, Mr. Kotnis was associated with Videocon Group for close to three decades in various roles and his last position was CMO/CTO.



### Mr. Kamlesh Kumar Mishra - President - Mobile

Mr. Kamlesh Kumar Mishra is responsible for overseeing operations of mobile, CCTV and DVR divisions and working of executives in production, marketing, finance and quality. He holds a Bachelor's degree in Electronics and Telecomm from the Government College of Engineering, Aurangabad. In the past, he worked with Samsung India Electronics, Kushang and Videocon International. He has a total experience of close to three decades in lean manufacturing, plant engineering, manufacturing, shop floor operational excellence, production planning & control, productivity management, sub-contracting management, new product & part development and team management.



### **Mr. Rajeev Lonial - President & COO - Home Appliances**

Mr. Rajeev Lonial is responsible for the washing machine vertical, along with backward integration and the overall manufacturing efficiency, quality, service and cost efficiency management of resources in the home appliances vertical. He holds a Post Graduate Diploma in Plastic Processing Technology from the Central Institute of Plastic Engineering & Tools. In the past, he worked with Dipty Lal Judge Mal, Noble Moulds, Evershine Moulding, Ever Shine Plastic Industries, Essen Fabrication & Engineering and Shree Keshav Lab. He has more than 30 years of experience in the field of plastics moulding.



### **Mr. Pankaj Sharma - President & COO - Security & Surveillance**

Mr. Pankaj Sharma is the President and COO - Security Surveillance, responsible for overseeing operation of the verticals and working of executives in production, marketing, finance and quality. He holds a Bachelor's Degree in Arts from University of Delhi. In the past, he worked with Bigesto Foods, Satkar Exports, Bestavision Electronics, Samsung Co. Ltd, Jain Tube Company and Shirllon Co. Ltd. He has close to three decades of experience in factory operations, manufacturing, supply chain, global sourcing, and business development.



### **Mr. Nirupam Sahay - President & COO - Lighting business**

Mr. Nirupam Sahay is President & COO - Lighting Solutions. He has a career spanning over 28 years in sales, marketing, operations and general management/P&L management across the industries of paints, consumer durables, financial services and lighting. He previously worked with Surya Roshni, Philips Lighting (now called Signify), and Philips Lighting Indian Subcontinent. He graduated in Economics Honours from St. Stephen's College, Delhi, completed his MBA from Narsee Monjee Institute of Management Studies (NMIMS), Mumbai, and completed an Advanced Management Program at the Warton School.



### **Mr. Sukhvinder Kumar - Business Head - Telecommunications**

Mr. Sukhvinder Kumar is Business Head - Telecommunications. He has a vast experience of over 27 years in the field of electronics as well as managing various business operations. Mr. Kumar has completed his engineering degree in electronics and attained an advance management program certificate from IIM Bangalore.



### **Mr. Ashish Kumar - Chief Legal Counsel & Group CS**

Mr. Ashish Kumar is Chief Legal Counsel and Group CS of the company. He leads the secretarial, compliance, legal, HR and CSR function of the company. He is a commerce graduate from the University of Delhi and has completed the Executive Program in Business Management from IIM, Calcutta. He is also a fellow member of ICSI and LLB degree holder. Prior to joining DIXON, he was associated with various organizations like DLF Universal, Damas International, Tecom Investments FZ LLC and Narayana Hrudayalaya. He has more than 19 years of experience in national and international regulatory and compliance.

## Financials and valuations

| Consolidated - Income Statement     |               |               |                 |                 |                 | (INR m)         |                 |                 |
|-------------------------------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Y/E Mar                             | FY20          | FY21          | FY22            | FY23            | FY24            | FY25E           | FY26E           | FY27E           |
| <b>Total Income from Operations</b> | <b>44,001</b> | <b>64,482</b> | <b>1,06,971</b> | <b>1,21,920</b> | <b>1,76,909</b> | <b>3,33,818</b> | <b>4,34,814</b> | <b>5,25,307</b> |
| Change (%)                          | 47.4          | 46.5          | 65.9            | 14.0            | 45.1            | 88.7            | 30.3            | 20.8            |
| Raw Materials                       | 38,602        | 57,697        | 97,792          | 1,10,207        | 1,60,390        | 3,02,647        | 3,94,212        | 4,76,255        |
| <b>Gross Profit</b>                 | <b>5,399</b>  | <b>6,785</b>  | <b>9,178</b>    | <b>11,713</b>   | <b>16,520</b>   | <b>31,171</b>   | <b>40,602</b>   | <b>49,052</b>   |
| Employee Cost                       | 1,180         | 1,371         | 1,978           | 2,517           | 3,327           | 6,891           | 8,976           | 10,843          |
| Other Expenses                      | 1,989         | 2,548         | 3,409           | 4,069           | 6,217           | 11,143          | 14,096          | 16,535          |
| <b>Total Expenditure</b>            | <b>41,771</b> | <b>61,616</b> | <b>1,03,180</b> | <b>1,16,793</b> | <b>1,69,933</b> | <b>3,20,680</b> | <b>4,17,283</b> | <b>5,03,633</b> |
| % of Sales                          | 94.9          | 95.6          | 96.5            | 95.8            | 96.1            | 96.1            | 96.0            | 95.9            |
| <b>EBITDA</b>                       | <b>2,231</b>  | <b>2,866</b>  | <b>3,791</b>    | <b>5,128</b>    | <b>6,976</b>    | <b>13,138</b>   | <b>17,531</b>   | <b>21,674</b>   |
| Margin (%)                          | 5.1           | 4.4           | 3.5             | 4.2             | 3.9             | 3.9             | 4.0             | 4.1             |
| Depreciation                        | 365           | 437           | 840             | 1,146           | 1,619           | 2,285           | 2,744           | 3,207           |
| <b>EBIT</b>                         | <b>1,865</b>  | <b>2,429</b>  | <b>2,952</b>    | <b>3,981</b>    | <b>5,357</b>    | <b>10,853</b>   | <b>14,787</b>   | <b>18,467</b>   |
| Int. and Finance Charges            | 350           | 274           | 442             | 606             | 747             | 745             | 794             | 823             |
| Other Income                        | 52            | 16            | 38              | 56              | 226             | 304             | 737             | 1,377           |
| <b>PBT bef. EO Exp.</b>             | <b>1,568</b>  | <b>2,170</b>  | <b>2,548</b>    | <b>3,432</b>    | <b>4,836</b>    | <b>10,411</b>   | <b>14,729</b>   | <b>19,021</b>   |
| <b>PBT after EO Exp.</b>            | <b>1,568</b>  | <b>2,170</b>  | <b>2,548</b>    | <b>3,432</b>    | <b>4,836</b>    | <b>10,411</b>   | <b>14,729</b>   | <b>19,021</b>   |
| Total Tax                           | 363           | 572           | 644             | 897             | 1,189           | 2,744           | 3,857           | 4,965           |
| Tax Rate (%)                        | 23.1          | 26.4          | 25.3            | 26.1            | 24.6            | 26.4            | 26.2            | 26.1            |
| Profit share of associates/JV       | 0.0           | 0.0           | -0.6            | 16.2            | 102.4           | 307.2           | 337.9           | 371.7           |
| Minority Interest                   | 0             | 0             | 2               | -4              | 72              | 1,325           | 1,475           | 1,645           |
| <b>Reported PAT</b>                 | <b>1,205</b>  | <b>1,598</b>  | <b>1,902</b>    | <b>2,555</b>    | <b>3,677</b>    | <b>6,649</b>    | <b>9,734</b>    | <b>12,783</b>   |
| <b>Adjusted PAT</b>                 | <b>1,205</b>  | <b>1,598</b>  | <b>1,902</b>    | <b>2,555</b>    | <b>3,677</b>    | <b>6,649</b>    | <b>9,734</b>    | <b>12,783</b>   |
| Change (%)                          | 90.2          | 32.6          | 19.0            | 34.4            | 43.9            | 80.8            | 46.4            | 31.3            |
| Margin (%)                          | 2.7           | 2.5           | 1.8             | 2.1             | 2.1             | 2.0             | 2.2             | 2.4             |

| Consolidated - Balance Sheet          |               |               |               |               |               | (INR m)       |                 |                 |
|---------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|
| Y/E Mar                               | FY20          | FY21          | FY22          | FY23          | FY24          | FY25E         | FY26E           | FY27E           |
| Equity Share Capital                  | 116           | 117           | 119           | 119           | 120           | 120           | 120             | 120             |
| Total Reserves                        | 5,298         | 7,256         | 9,849         | 12,730        | 16,829        | 23,299        | 32,854          | 45,458          |
| <b>Net Worth</b>                      | <b>5,413</b>  | <b>7,373</b>  | <b>9,968</b>  | <b>12,849</b> | <b>16,949</b> | <b>23,419</b> | <b>32,974</b>   | <b>45,578</b>   |
| Minority Interest                     | 0             | 0             | 6             | -3            | 276           | 1,601         | 3,077           | 4,722           |
| Total Loans                           | 828           | 1,513         | 4,580         | 1,826         | 1,550         | 1,705         | 1,705           | 1,705           |
| Deferred Tax Liabilities              | 148           | 184           | 201           | 224           | 240           | 240           | 240             | 240             |
| <b>Capital Employed</b>               | <b>6,389</b>  | <b>9,070</b>  | <b>14,754</b> | <b>14,897</b> | <b>19,015</b> | <b>26,965</b> | <b>37,995</b>   | <b>52,244</b>   |
| Gross Block                           | 3,982         | 5,269         | 9,586         | 12,291        | 20,633        | 25,633        | 30,633          | 35,633          |
| Less: Accum. Deprn.                   | 825           | 1,170         | 1,815         | 2,641         | 3,958         | 5,947         | 8,367           | 11,216          |
| <b>Net Fixed Assets</b>               | <b>3,157</b>  | <b>4,099</b>  | <b>7,771</b>  | <b>9,649</b>  | <b>16,675</b> | <b>19,685</b> | <b>22,266</b>   | <b>24,416</b>   |
| Goodwill on Consolidation             | 82            | 82            | 303           | 303           | 303           | 303           | 303             | 303             |
| Capital WIP                           | 96            | 724           | 224           | 1,197         | 683           | 683           | 683             | 683             |
| <b>Total Investments</b>              | <b>0</b>      | <b>953</b>    | <b>1,410</b>  | <b>442</b>    | <b>200</b>    | <b>200</b>    | <b>200</b>      | <b>200</b>      |
| <b>Curr. Assets, Loans &amp; Adv.</b> | <b>13,635</b> | <b>22,600</b> | <b>33,064</b> | <b>35,203</b> | <b>52,034</b> | <b>98,972</b> | <b>1,34,618</b> | <b>1,71,165</b> |
| Inventory                             | 4,978         | 7,433         | 11,557        | 9,579         | 16,950        | 31,984        | 41,661          | 50,331          |
| Account Receivables                   | 5,151         | 10,891        | 13,564        | 17,155        | 23,179        | 43,737        | 56,970          | 68,826          |
| Cash and Bank Balance                 | 1,002         | 689           | 1,823         | 2,292         | 2,087         | 7,647         | 16,510          | 28,986          |
| Loans and Advances                    | 0             | 25            | 4             | 0             | 20            | 38            | 49              | 59              |
| Other Current Asset                   | 2,504         | 3,563         | 6,116         | 6,178         | 9,799         | 15,566        | 19,428          | 22,962          |
| <b>Curr. Liability &amp; Prov.</b>    | <b>10,580</b> | <b>19,387</b> | <b>28,017</b> | <b>31,898</b> | <b>50,881</b> | <b>92,879</b> | <b>1,20,075</b> | <b>1,44,524</b> |
| Account Payables                      | 9,391         | 17,097        | 23,137        | 24,519        | 40,652        | 76,708        | 99,916          | 1,20,711        |
| Other Current Liabilities             | 1,081         | 2,146         | 4,664         | 7,121         | 9,952         | 15,647        | 19,478          | 22,991          |
| Provisions                            | 109           | 144           | 216           | 258           | 277           | 523           | 681             | 823             |
| <b>Net Current Assets</b>             | <b>3,054</b>  | <b>3,213</b>  | <b>5,047</b>  | <b>3,306</b>  | <b>1,153</b>  | <b>6,093</b>  | <b>14,543</b>   | <b>26,641</b>   |
| <b>Appl. of Funds</b>                 | <b>6,389</b>  | <b>9,070</b>  | <b>14,754</b> | <b>14,897</b> | <b>19,015</b> | <b>26,965</b> | <b>37,996</b>   | <b>52,244</b>   |



## Financials and valuations

## Ratios

| Y/E Mar                       | FY20        | FY21        | FY22        | FY23        | FY24        | FY25E        | FY26E        | FY27E        |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| <b>Basic (INR)</b>            |             |             |             |             |             |              |              |              |
| <b>EPS</b>                    | <b>20.6</b> | <b>27.3</b> | <b>32.0</b> | <b>42.9</b> | <b>61.5</b> | <b>111.2</b> | <b>162.8</b> | <b>213.8</b> |
| Cash EPS                      | 26.8        | 34.7        | 46.2        | 62.1        | 88.6        | 149.4        | 208.7        | 267.4        |
| BV/Share                      | 92.4        | 125.9       | 168.0       | 215.7       | 283.4       | 391.6        | 551.4        | 762.2        |
| DPS                           | 1.2         | 1.0         | 2.0         | 3.0         | 3.0         | 3.0          | 3.0          | 3.0          |
| Payout (%)                    | 5.7         | 3.7         | 6.3         | 7.0         | 4.9         | 2.7          | 1.8          | 1.4          |
| <b>Valuation (x)</b>          |             |             |             |             |             |              |              |              |
| P/E                           | 578.4       | 436.1       | 371.3       | 277.4       | 193.5       | 111.2        | 75.9         | 57.8         |
| Cash P/E                      | 443.8       | 342.5       | 257.6       | 191.5       | 134.4       | 82.7         | 59.2         | 46.2         |
| P/BV                          | 128.8       | 94.5        | 70.8        | 55.2        | 42.0        | 31.6         | 22.4         | 16.2         |
| EV/Sales                      | 15.8        | 10.8        | 6.6         | 5.8         | 4.0         | 2.2          | 1.7          | 1.4          |
| EV/EBITDA                     | 312.4       | 243.5       | 187.0       | 138.1       | 101.9       | 55.8         | 41.3         | 32.8         |
| Dividend Yield (%)            | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          |
| FCF per share                 | 22.1        | 0.4         | -24.4       | 46.3        | 2.6         | 88.1         | 144.7        | 203.2        |
| <b>Return Ratios (%)</b>      |             |             |             |             |             |              |              |              |
| RoE                           | 26.2        | 25.0        | 21.9        | 22.4        | 24.7        | 32.9         | 34.5         | 32.5         |
| RoCE                          | 25.9        | 23.8        | 19.1        | 20.4        | 25.4        | 37.7         | 38.3         | 35.8         |
| RoIC                          | 28.8        | 29.8        | 24.5        | 26.4        | 29.9        | 46.4         | 55.9         | 63.5         |
| <b>Working Capital Ratios</b> |             |             |             |             |             |              |              |              |
| Fixed Asset Turnover (x)      | 11.0        | 12.2        | 11.2        | 9.9         | 8.6         | 13.0         | 14.2         | 14.7         |
| Asset Turnover (x)            | 6.9         | 7.1         | 7.3         | 8.2         | 9.3         | 12.4         | 11.4         | 10.1         |
| Inventory (Days)              | 41          | 42          | 39          | 29          | 35          | 35           | 35           | 35           |
| Debtor (Days)                 | 43          | 62          | 46          | 51          | 48          | 48           | 48           | 48           |
| Creditor (Days)               | 78          | 97          | 79          | 73          | 84          | 84           | 84           | 84           |
| <b>Leverage Ratio (x)</b>     |             |             |             |             |             |              |              |              |
| Current Ratio                 | 1.3         | 1.2         | 1.2         | 1.1         | 1.0         | 1.1          | 1.1          | 1.2          |
| Interest Cover Ratio          | 5.3         | 8.9         | 6.7         | 6.6         | 7.2         | 14.6         | 18.6         | 22.4         |
| Net Debt/Equity               | 0.0         | 0.0         | 0.1         | -0.1        | 0.0         | -0.3         | -0.5         | -0.6         |

## Consolidated - Cashflow Statement

(INR m)

| Y/E Mar                          | FY20          | FY21          | FY22          | FY23          | FY24          | FY25E         | FY26E         | FY27E         |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| OP/(Loss) before Tax             | 1,568         | 2,170         | 2,546         | 3,452         | 4,867         | 9,393         | 13,591        | 17,748        |
| Depreciation                     | 365           | 437           | 840           | 1,146         | 1,619         | 2,285         | 2,744         | 3,207         |
| Interest & Finance Charges       | 350           | 274           | 442           | 606           | 747           | 745           | 794           | 823           |
| Direct Taxes Paid                | -429          | -549          | -540          | -820          | -1,218        | -2,744        | -3,857        | -4,965        |
| (Inc)/Dec in WC                  | 423           | -743          | -641          | 2,764         | -88           | 589           | 379           | 340           |
| <b>CF from Operations</b>        | <b>2,277</b>  | <b>1,590</b>  | <b>2,646</b>  | <b>7,148</b>  | <b>5,927</b>  | <b>10,269</b> | <b>13,653</b> | <b>17,153</b> |
| Others                           | 97            | 111           | 81            | 109           | -83           | 0             | 0             | 0             |
| <b>CF from Operating incl EO</b> | <b>2,374</b>  | <b>1,701</b>  | <b>2,728</b>  | <b>7,258</b>  | <b>5,843</b>  | <b>10,269</b> | <b>13,653</b> | <b>17,153</b> |
| (Inc)/Dec in FA                  | -1,081        | -1,680        | -4,174        | -4,502        | -5,686        | -5,000        | -5,000        | -5,000        |
| <b>Free Cash Flow</b>            | <b>1,293</b>  | <b>22</b>     | <b>-1,446</b> | <b>2,755</b>  | <b>157</b>    | <b>5,269</b>  | <b>8,653</b>  | <b>12,153</b> |
| (Pur)/Sale of Investments        | -118          | -978          | -446          | 992           | 346           | 0             | 0             | 0             |
| Others                           | 28            | 8             | -25           | -45           | 31            | -50           | -55           | -61           |
| <b>CF from Investments</b>       | <b>-1,171</b> | <b>-2,649</b> | <b>-4,645</b> | <b>-3,556</b> | <b>-5,309</b> | <b>-5,050</b> | <b>-5,055</b> | <b>-5,061</b> |
| Issue of Shares                  | 457           | 269           | 642           | 336           | 469           | 0             | 0             | 0             |
| Inc/(Dec) in Debt                | -570          | 688           | 3,026         | -2,776        | -276          | 155           | 0             | 0             |
| Interest Paid                    | -378          | -322          | -567          | -737          | -494          | -745          | -794          | -823          |
| Dividend Paid                    | -83           | 0             | -59           | -119          | -179          | -179          | -179          | -179          |
| Others                           | 6             | 0             | 0             | 0             | -220          | 1,325         | 1,475         | 1,645         |
| <b>CF from Fin. Activity</b>     | <b>-568</b>   | <b>635</b>    | <b>3,043</b>  | <b>-3,296</b> | <b>-700</b>   | <b>555</b>    | <b>501</b>    | <b>643</b>    |
| <b>Inc/Dec of Cash</b>           | <b>634</b>    | <b>-313</b>   | <b>1,126</b>  | <b>406</b>    | <b>-166</b>   | <b>5,775</b>  | <b>9,099</b>  | <b>12,735</b> |
| Opening Balance                  | 367           | 1,002         | 689           | 1,823         | 2,292         | 2,086         | 7,647         | 16,510        |
| Other Bank Balances              | 0             | 0             | 8             | 63            | -40           | -214          | -235          | -259          |
| <b>Closing Balance</b>           | <b>1,002</b>  | <b>689</b>    | <b>1,823</b>  | <b>2,292</b>  | <b>2,086</b>  | <b>7,647</b>  | <b>16,510</b> | <b>28,986</b> |



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Financial outlook

## Amber Enterprises: Moving beyond cyclicality!

Amber Enterprises (Amber) is a leading player in ODM/OEM solutions for the Indian RAC industry. The company is one of the beneficiaries of PLI scheme with an early-mover advantage in PLI-led capex for RAC and AC components. With strategic diversification towards the high-growth electronics market (especially PCB manufacturing) and increasing scope of work in the mobility segment, we expect Amber to benefit from margin improvement. We expect the company's transition from Amber 1.0 (AC-focused) to Amber 2.0 (electronics) and Amber 3.0 (mobility) to reduce business cyclicality, and result in improved asset turnover and return ratios after the initial few years of capex. We expect a revenue/ EBITDA/PAT CAGR of 21%/26%/51% over FY24-27, which is likely to be driven by mid-teens CAGR in the consumer durable segment, high growth in the electronics and mobility segments, along with a 92bp margin improvement over FY24-27. We initiate coverage on Amber with a BUY rating and a DCF-based TP of INR5,000, implying 42x P/E on two-year forward EPS (Sep'26).

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Key risks: Slowdown in the  
industry, input price volatility

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# Amber Enterprises

BSE SENSEX  
80,437

S&P CNX  
24,541

**CMP: INR4,130**

**TP: INR5,000 (+21%)**

**Buy**



## Stock Info

|                       |             |
|-----------------------|-------------|
| Bloomberg             | AMBER IN    |
| Equity Shares (m)     | 34          |
| M.Cap.(INRb)/(USD\$b) | 139.8 / 1.7 |
| 52-Week Range (INR)   | 4888 / 2573 |
| 1, 6, 12 Rel. Per (%) | -9/-7/33    |
| 12M Avg Val (INR M)   | 698         |
| Free float (%)        | 60.1        |

## Financials Snapshot (INR b)

| Y/E MARCH         | FY25E | FY26E | FY27E |
|-------------------|-------|-------|-------|
| Sales             | 84.6  | 102.2 | 119.4 |
| EBITDA            | 6.3   | 8.4   | 9.9   |
| EBITDA Margin (%) | 7.4   | 8.2   | 8.3   |
| PAT               | 2.3   | 3.5   | 4.6   |
| EPS (INR)         | 68.1  | 105.1 | 135.7 |
| EPS Growth (%)    | 69.6  | 54.3  | 29.1  |
| BV/Share (INR)    | 680.8 | 785.8 | 921.5 |

## Ratios

|          |      |      |      |
|----------|------|------|------|
| Net D/E  | 0.4  | 0.3  | 0.1  |
| RoE (%)  | 10.5 | 14.3 | 15.9 |
| RoCE (%) | 9.8  | 12.1 | 13.4 |

## Valuations

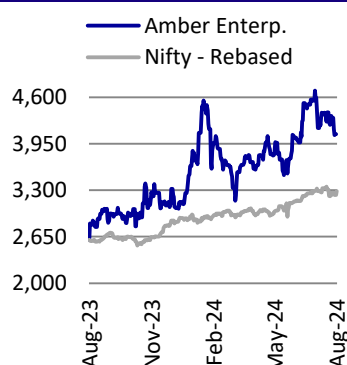
|               |      |      |      |
|---------------|------|------|------|
| P/E (x)       | 60.7 | 39.3 | 30.4 |
| P/BV (x)      | 6.1  | 5.3  | 4.5  |
| EV/EBITDA (x) | 24.0 | 17.8 | 14.7 |

## Shareholding pattern (%)

| As On    | Jun-24 | Mar-24 | Jun-23 |
|----------|--------|--------|--------|
| Promoter | 39.9   | 40.3   | 40.3   |
| DII      | 15.7   | 15.8   | 12.7   |
| FII      | 28.4   | 26.0   | 24.2   |
| Others   | 16.0   | 17.9   | 22.8   |

FII Includes depository receipts

## Stock performance (one-year)



## Moving beyond cyclicality!

Amber Enterprises (Amber) is a leading player in ODM/OEM solutions for the Indian RAC industry. The company is one of the beneficiaries of PLI scheme with an early-mover advantage in PLI-led capex for RAC and AC components. With strategic diversification towards the high-growth electronics market (especially PCB manufacturing) and increasing scope of work in the mobility segment, we expect Amber to benefit from margin improvement. We expect the company's transition from Amber 1.0 (AC-focused) to Amber 2.0 (electronics) and Amber 3.0 (mobility) to reduce business cyclicality, and result in improved asset turnover and return ratios after the initial few years of capex. We expect a revenue/ EBITDA/PAT CAGR of 21%/26%/50% over FY24-27, which is likely to be driven by mid-teens CAGR in the consumer durable segment, high growth in the electronics and mobility segments, along with a 100bp margin improvement over FY24-27. We initiate coverage on Amber with a BUY rating and a DCF-based TP of INR5,000, implying 42x P/E on two-year forward EPS (Sep'26).

## Key investment argument

### Government's PLI incentives and industry tailwinds driving volume growth

We expect domestic RAC industry volumes to report a CAGR of 14% over FY24-27, mainly fueled by improved penetration and higher per capita income. AC penetration in India currently stands at nearly 8% vs. 100% for China and 90%/42% for the US/Global average. To cater to the improved demand of RAC and RAC components, several OEM/ODM players announced capex under the government's PLI scheme for white goods. Since the announcement of PLI scheme, the value addition in domestic RAC industry has moved up from 25% to 45% and we expect it to further move up to 60-70% by FY27, with indigenization of other AC components. Though we have witnessed insourcing from various OEM players, after the PLI-led capex, ODM players are catering to the growing RAC market by higher RAC components. With large capacities already coming from various players under the PLI scheme, we expect growth to be driven primarily by volumes while pricing gains will be limited.

### Amber 1.0: Market leader in RAC ODM

Amber is a leading player in RAC ODM market with a 27% market share. It is one of the key beneficiaries of the PLI scheme for white goods and has up-fronted capex in the last two years on RAC and RAC components. Additionally, Amber has focused on backward integration into components. Amber is the only player that caters to 70% of BoM for RAC and non-RAC components in the industry through its various entities – ILJIN and EVER (PCBA), PICL, PR, and Pravartaka (motors, cross flow fans, injection molding, etc.). Amber's strategy to expand across the component business is helping the company maintain its market share even with reduced share of outsourcing from AC OEM players from 48-50% earlier to 30-35% currently for the ODM players. The company expects

to maintain its market share with its component offerings even if the share of outsourcing reduces further to 25% from OEM players. It has also formed a JV with Resojet to manufacture fully automatic top- and front-load washing machines, which is undergoing client approvals. We expect the overall consumer durables (RAC+ Components + Motor + Other segments) revenue to report a 17% CAGR over FY24-27.

### **Amber 2.0: Diversifying into the high-growth electronics segment**

Amber is transitioning from a cyclical and low-margin business to a non-cyclical and high-margin business by increasing its presence across the RAC components and electronics industries. The company is expanding its presence from PCB assembly to manufacturing bare board PCB through acquisition of Ascent circuits, thereby catering to a wide range of market segments such as aerospace & defense, railways, industrial, telecom, automobile, healthcare, hearable & wearable, and consumer durables. Amber has also signed an MoU with Korea Circuits through Ascent Circuits to manufacture Flex, HDI, and Semiconductor substrate PCBs, thereby fortifying PCB manufacturing in India. We expect the electronics division's revenue to reflect the acquisition of Ascent Circuits from FY25 and expect its revenue to grow at a CAGR of 33% over FY24-27. Management targets to achieve a 7.5-8.0% EBITDA margin and expects around 45% growth in FY25 in the electronics segment.

### **Amber 3.0: JV with Titagarh for the railway subsystems**

Amber entered into a JV with Titagarh Rail systems to provide comprehensive integrated solutions to rolling stock manufacturers for railway subsystems in India & overseas. This JV will invest EUR20m into Titagarh Firema SPA, Italy which in turn will give a preferred supplier status and right of first refusal for all their products to Sidwal (Amber acquired Sidwal in 2019 to expand its offerings in mobility AC solutions), Titagarh Rail and their JVs. The strategic partnership in Firema will facilitate Sidwal's entry into the European market/global play. This will also provide Sidwal with a preferred access to Firema's own demand. Domestically, this JV not only increases technical capabilities of Amber to address a larger portion of Bill of material (BoM) of a train coach but also enables its entry into subsystems for the fast-growing railway segment in India (particularly for upcoming Vande Bharat as well as metro trains). Sidwal now addresses INR11m per passenger car, expanding the addressable market. Sidwal has an order book of INR20b. We thus expect the mobility segment to grow at a much faster rate for Amber after its initial capex for expanding across subsystems is done. Order inflows in this segment were impacted in 1QFY25 by delayed ordering. We assume revenue for the mobility segment to report a CAGR 30% over FY24-27 with FY25 to be a weak year.

### **Capital allocation more oriented towards railways and electronics**

Amber has already up fronted the capex for RAC components under the PLI scheme across its five plants during last two years. We expect a capex of INR4.0b in FY25 and INR3.5b for the next two years to take into account the capex for Sidwal and the electronics division. We expect the capex to be split at 60:40 ratio for railways and electronics. With incremental opportunities across both railways and electronics, we expect asset turnover ratios for Amber to improve from FY26 onwards along with margin improvement on better revenue mix. This will drive RoCE improvement for the company.

**Financial outlook**

We expect Amber's revenue to report a 21% CAGR over FY24-27 driven by 17%/33%/30% CAGR in consumer durables/electronics/mobility segments. We expect its gross margin to range around 18.3% and EBITDA margin to be 7.4%/8.2%/8.3% for FY25/FY26/FY27E, 100bp higher than the FY24 level, as we factor in improved revenue mix in favor of higher margin segments. We expect 50% PAT CAGR over the same period driven by improved revenue as well as margins. We model a capex of INR4b in FY25 and INR3.5b each for next two years as Amber is continuously investing across components, electronics, and railways to widen its scope of offerings. With improvement in margins and stable working capital, we project an OCF of INR2.2b/INR6.6b/INR7.9b for FY25/FY26/FY27. However, FCF may remain weak at INR(1.8b)/INR3.1b/INR4.3b due to higher capex over the next 2-3 years. We thus expect its RoE/RoCE to start moving up over the next 2-3 years.

**Valuation and recommendation**

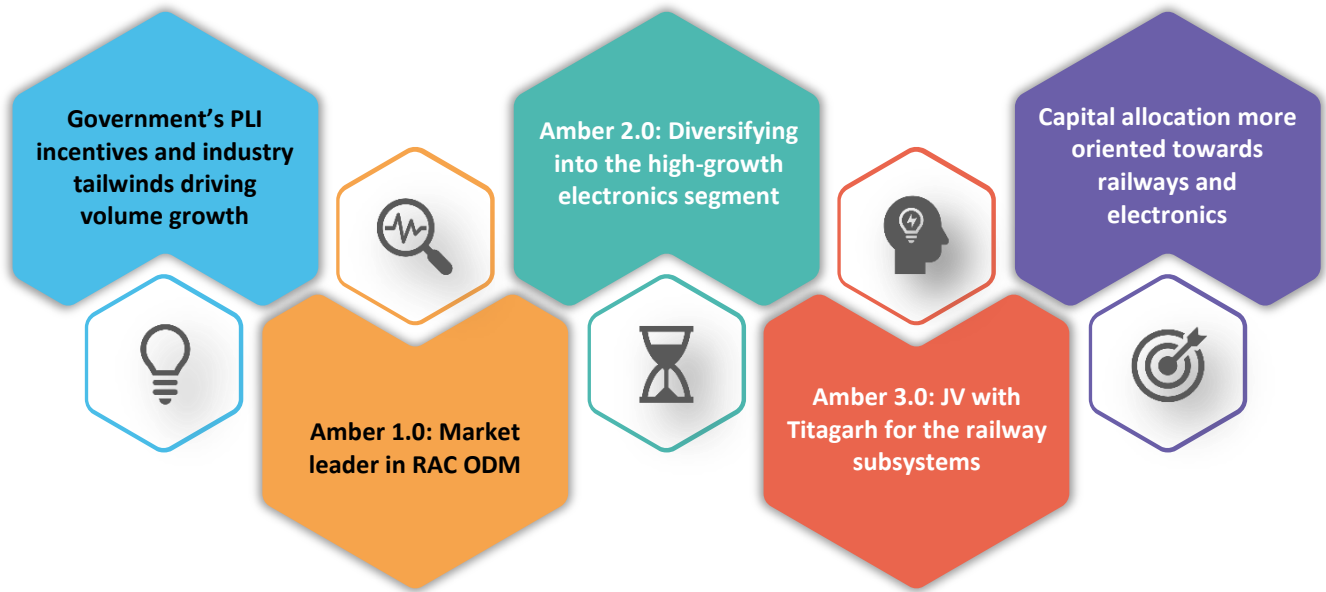
The stock is currently trading at 60.7x/39.3x/30.4x P/E on FY25/26/27E earnings. We initiate coverage on Amber with a BUY rating and a DCF-based TP of INR5,000 implying 42x P/E on a two-year forward EPS (Sep'26). Our assumptions take into account 20-year revenue CAGR of 12% and EBITDA CAGR of 13%, asset turnover of 3.5-4x over the same period. We bake in WACC of 10.6% and terminal growth rate of 5%.

**Key risks and concerns**

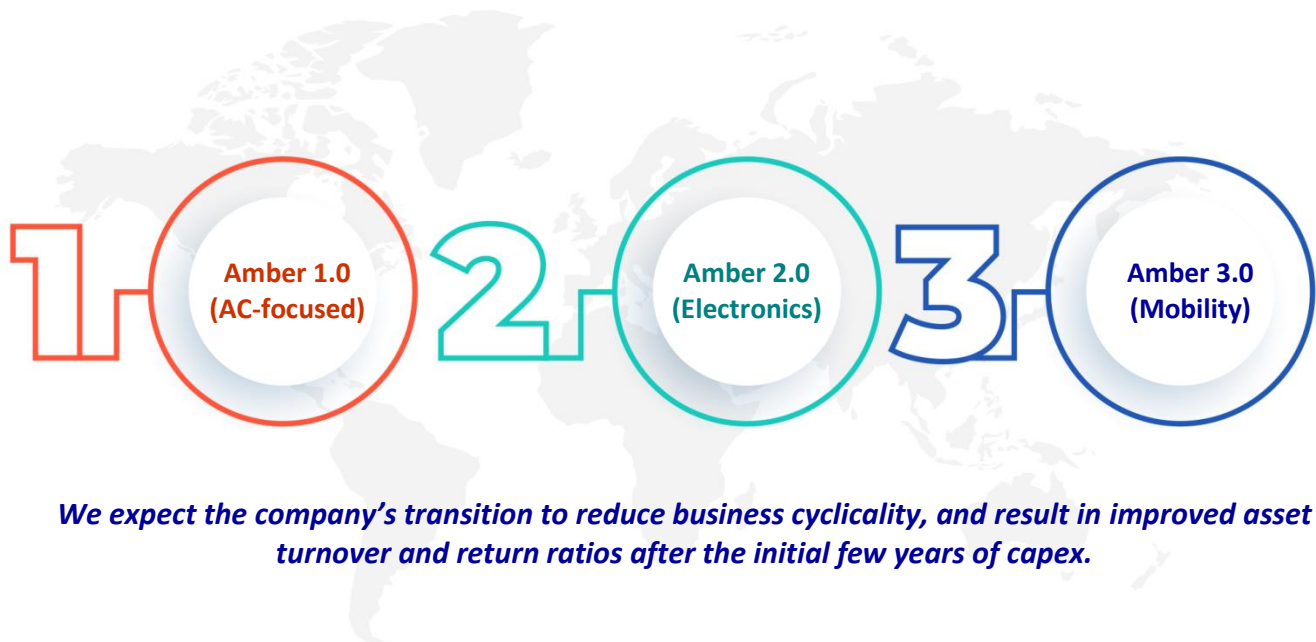
Lower-than-expected demand growth in the RAC industry, change in BEE norms making products costlier, and increased competition across RAC, mobility, and electronics segments.

**STORY IN CHARTS**

**AMBER: KEY INVESTMENT ARGUMENT**

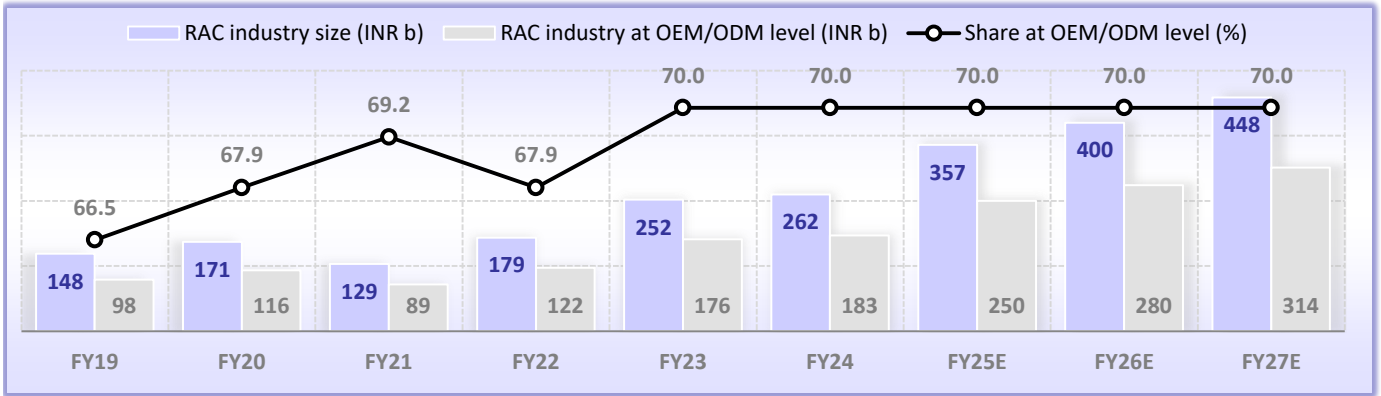


**AMBER'S TRANSITION**

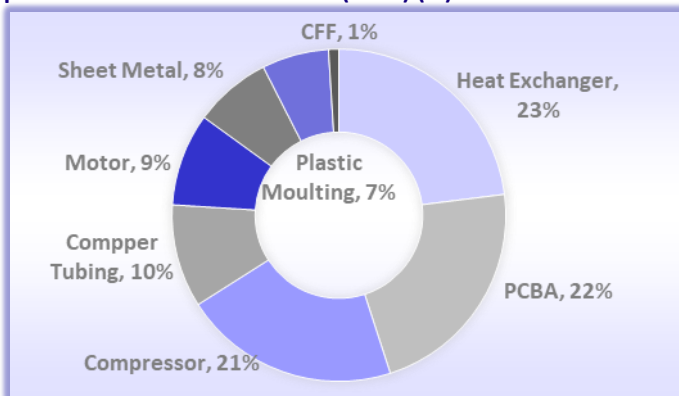


*We expect the company's transition to reduce business cyclicality, and result in improved asset turnover and return ratios after the initial few years of capex.*

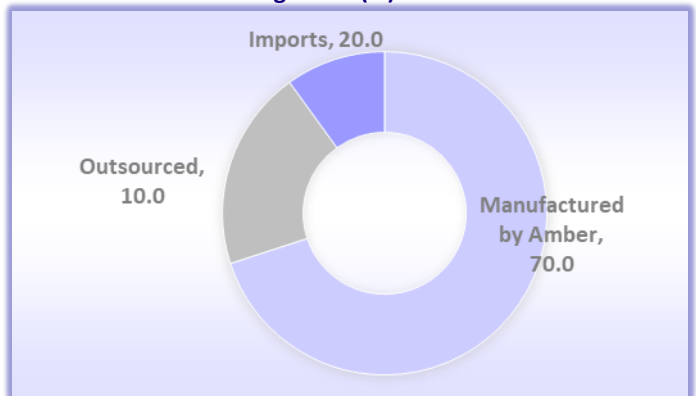
Share of RAC industry at OEM/ODM level stands around 70%



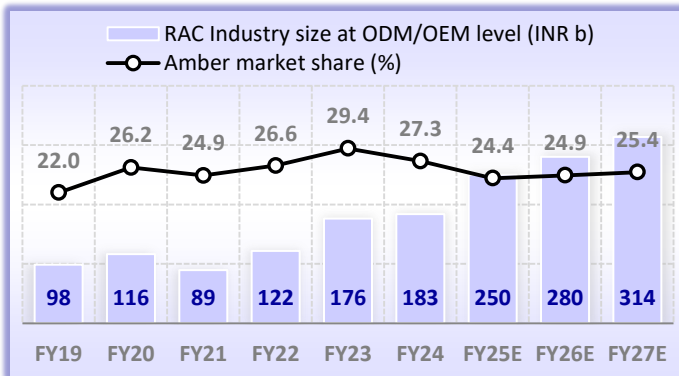
Heat exchanger, PCBA and compressor form major portion of RAC Bill of material (BoM) (%)



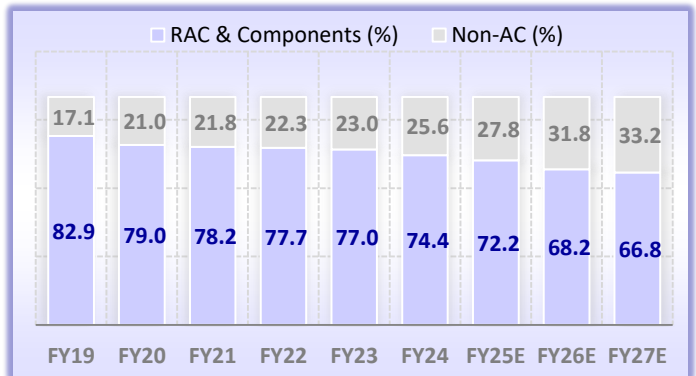
Amber can cater to nearly 70% of BoM through higher share of backward integration (%)



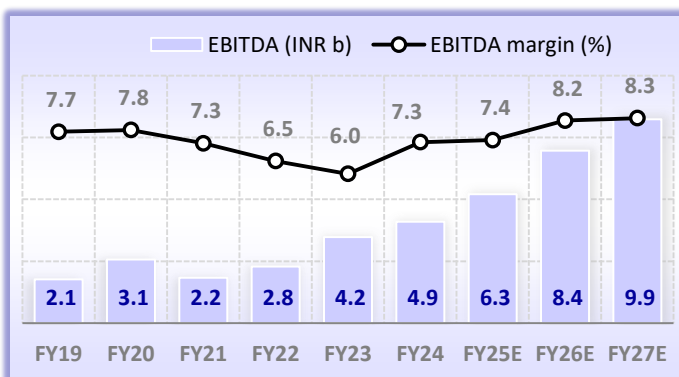
We expect Amber's market share to stabilize around 24-25% in RAC and RAC related components



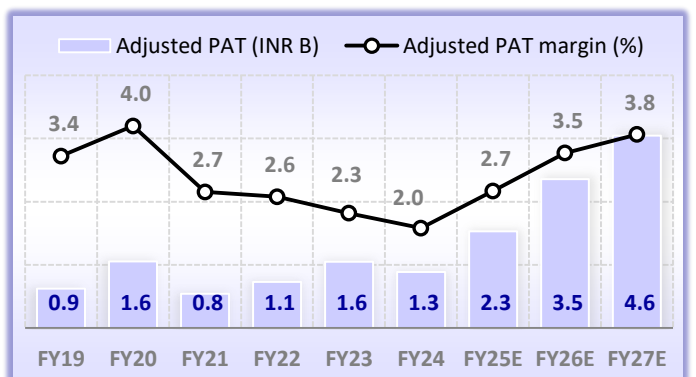
With increased focus in other segments, we expect revenue share from non-AC to improve (%)



We expect EBITDA margin improvement to be led by improved product mix

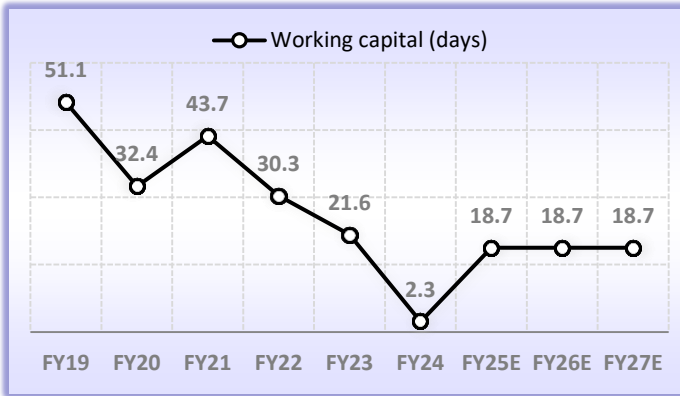


This will also lead to overall PAT margin improvement over FY25-27

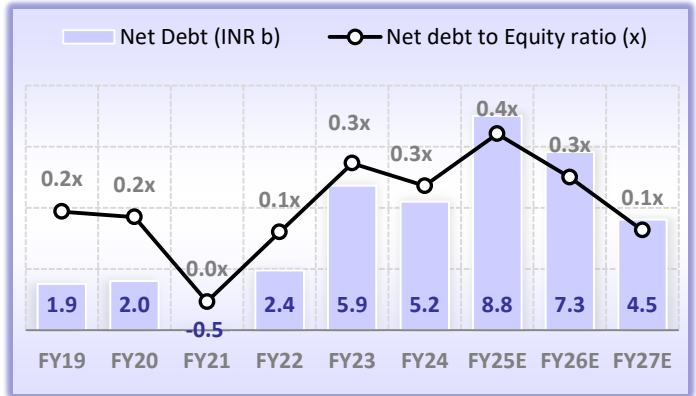




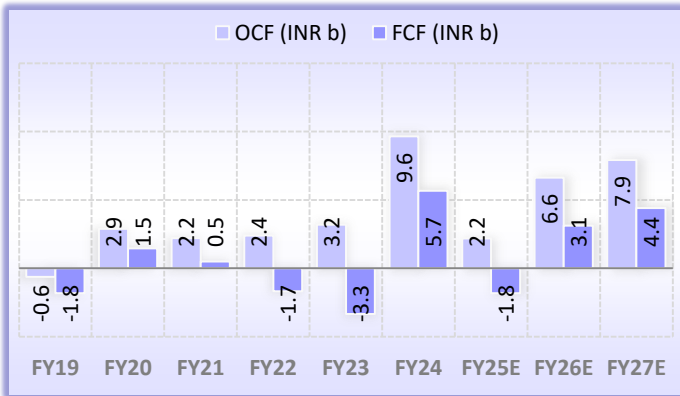
We expect the NWC cycle to remain comfortable at around 19 days



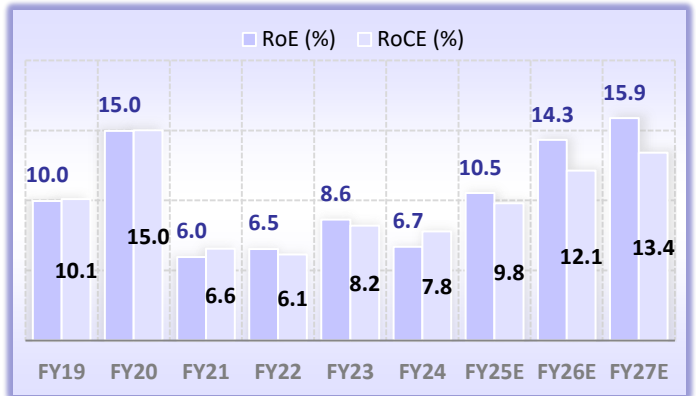
We expect net debt to remain high over next two years due to higher capex



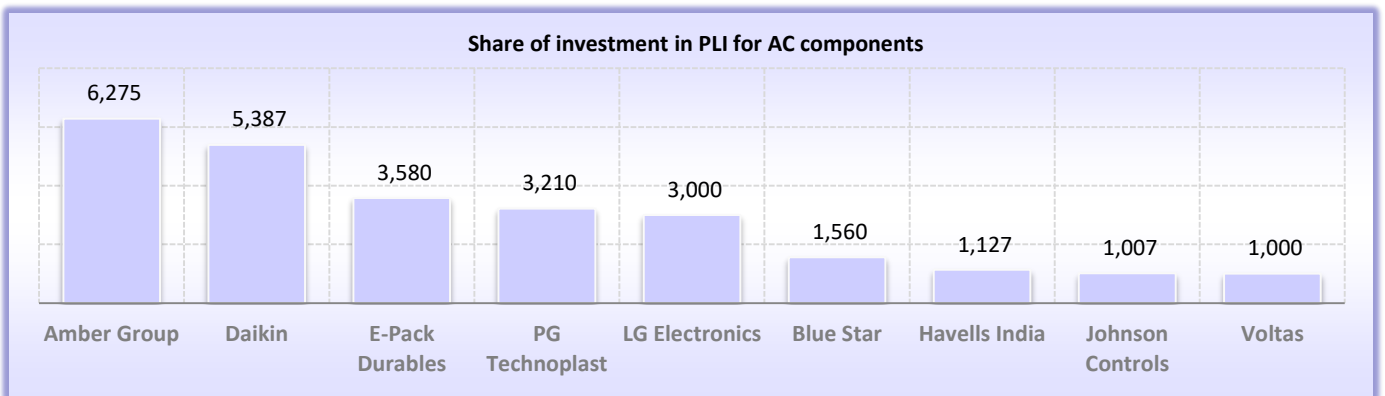
We expect FCF to gradually improve once capex starts reducing



This will result in ROE and RoCE to improve to double digit levels by FY26/27 (%)



PLI investment committed by the RAC (ODM/OEM) players, where Amber is the highest contributor with INR6.2b (INR m)



Source: Company, MOFSL

## Amber 1.0 – RAC industry: Potential J-curve

The domestic RAC industry has witnessed a lot of initiatives over the past few years from the government side, such as the ban on fully-assembled AC imports with refrigerants, the PMP scheme, and PLI for AC components. These initiatives have opened up opportunities for domestic players. Driven by these measures, value addition in the domestic AC industry has already improved to ~48% from 25% at the time of PLI scheme. This is targeted to grow to 75% by FY27. We highlight below the key opportunities emerging from the RAC industry and how Amber is positioned in the ODM market.

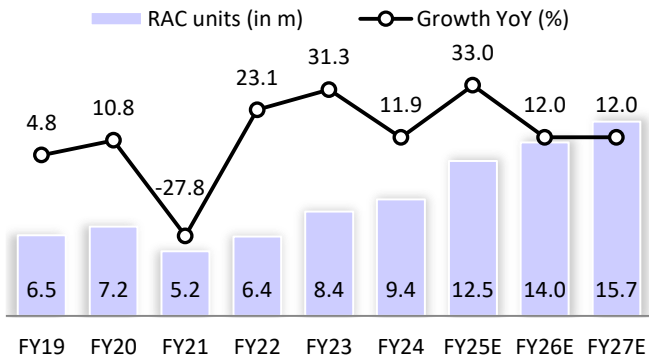
The volumes of the domestic RAC industry stood at ~9.4m units with an industry size of INR262b in FY24. We expect the AC industry to report a 19% volume CAGR and 20% value CAGR over the next three years, reaching 15.7m units and INR448b by FY27, respectively. The growth will be propelled by improved penetration and per capita income. The government's PLI scheme as well as the ban on imports of refrigerant-filled AC has helped the industry reduce import dependence at both OEM and ODM levels. The domestic AC industry is dominated by 6-7 OEM players (Voltas, Havells (Lloyd), Daikin, LG, Hitachi, and Blue Star) that are catering to the demand from insourcing and outsourcing to three ODM players (Amber, PG Electroplast, and EPACK Durable). Within the ODM market, Amber is a key beneficiary of the PLI scheme and has a market share of 27.3%. We expect it to benefit from the increased offerings across components despite higher insourcing from OEM players.

### RAC industry growth and outlook

The split ACs accounted for 89% of the total AC industry volumes, while the rest comprised window ACs. By FY28, split AC penetration is estimated to rise to 92%, driven by heightened demand.

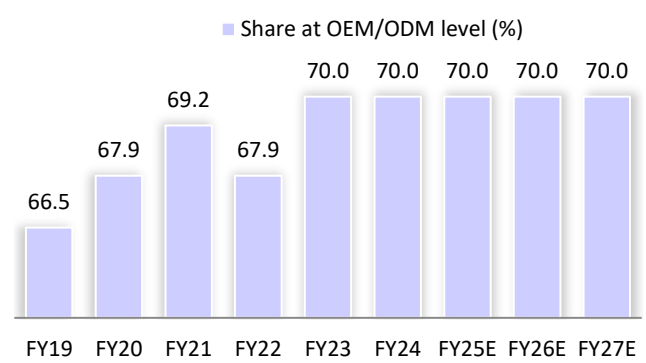
The ODM companies supplied 6.1m units (WAC + Split IDU + Split ODU Kits + Split ODU) to the RAC brands in FY23, of which 5.1m units were manufactured domestically and the rest were imported as kits and gas charging was done in India. This translated into an INR58-60b ODM/OEM market in FY23 – INR48-50b for domestically-manufactured units and rest for the gas-charged units. The Indian RAC ODM market is likely to witness a 13.3% volume CAGR to reach 11.4m units by FY28.

**Exhibit 1: RAC industry volumes are likely to post a CAGR of 12% over the next five years (m, %)**



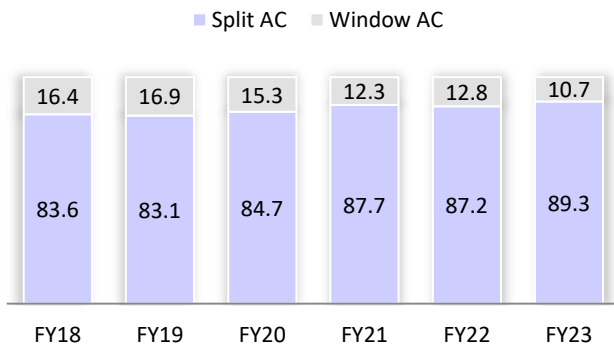
Source: Company, MOFSL

**Exhibit 2: Share of RAC industry at OEM and ODM levels stands at 70% (%)**



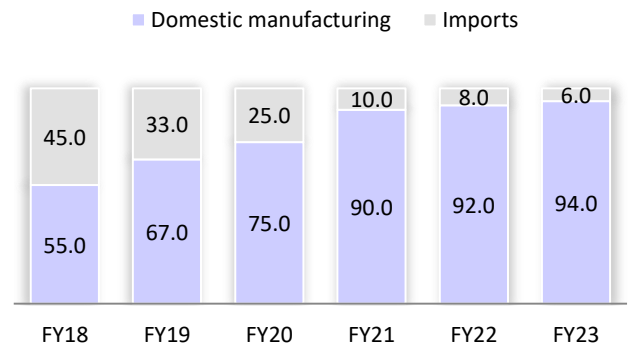
Source: Company, MOFSL

**Exhibit 3: Split AC penetration growing YoY (%)**



Source: Company, MOFSL

**Exhibit 4: Import dependency reduced YoY (%)**

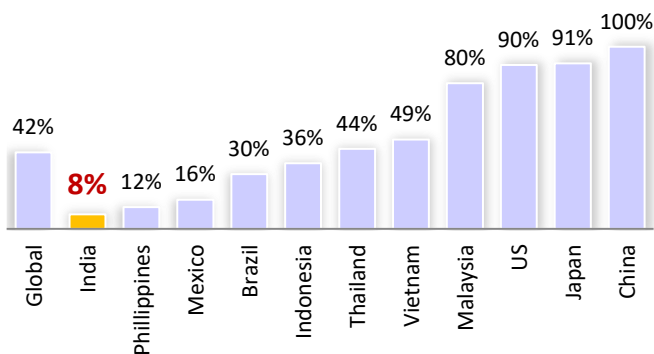


Source: Company, MOFSL

**Penetration level of ACs is much lower in India vs. other nations**

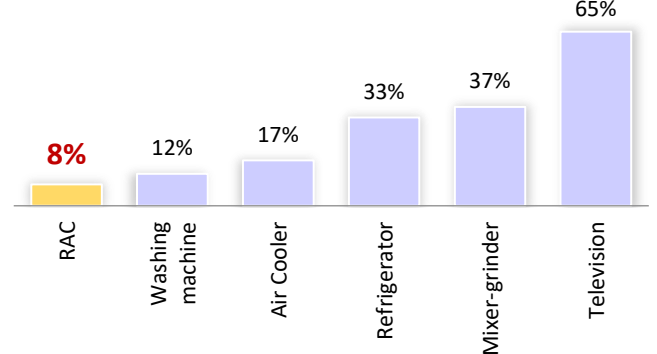
The penetration level of RACs is extremely low at 8% in India when compared to various developed economies. The level is only one-fifth of the global average (RAC) penetration. This indicates that there is a tremendous potential of growth in the domestic RAC market in the long term. Further, RAC penetration is the lowest among consumer durables vs. washing machines (12%), refrigerators (33%), and televisions (65%).

**Exhibit 5: RAC penetration in India is the lowest among other countries...**



Source: Company, MOFSL

**Exhibit 6: ...and it is also the lowest among other consumer durable categories**



Source: Company, MOFSL

**Government measures and PLI benefits**

In a recent move, the application window for the PLI Scheme for White Goods (ACs and LED Lights) is being reopened for 90 days from 15th July, 24 to 12th Oct, 2024. This is based on the appetite of the Industry to invest more under the Scheme, which is an outcome of the growing market and confidence generated due to manufacturing of key components of ACs and LED Lights in India under the PLIWG Scheme.

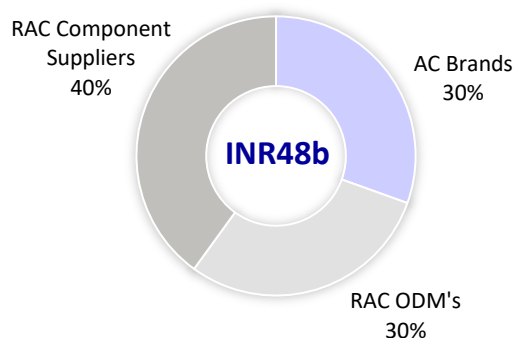
The government’s PLI scheme for White goods is intended to increase domestic manufacturing across high-value and low-value intermediaries. The govt. has envisaged significant investments and shortlisted key players, e.g., Voltas, Blue Star, Daikin, Johnson Controls, as well as other prominent ODM companies such as Amber, PG Electroplast, and EPACK Durable (including players focusing on component manufacturing) for PLI incentives. The govt. plans to spend INR48b over the next five years. Among ODM players, Amber, along with its subsidiary ILJIN, plans for a total capex of INR6.3b for PLI (the highest contribution into the scheme by any ODM), followed by EPACK Durable (INR3.5b) and PG Electroplast (INR3.2b). The import dependence is higher for key components of high-value intermediaries such as compressors, copper tubes, and aluminum stock, while production of low-value intermediaries such as control assemblies, display panels, motors, cross-flow fans, valves, brass components, heat exchangers, sheet metal, and plastic molding components has started ramping up domestically.

For high-value intermediaries such as compressors, increased investments are seen from GMCC, Highly, and Daikin, while other players will start adding up more.

- Voltas has revived its manufacturing plans in India through partnerships with firms from Japan or Korea, with investments worth INR13b for compressors and other AC components.
- Daikin has commenced its facility for AC (1.5m units) and compressors (3m units) in Sricity in FY24.

For copper tubes and aluminum stock, domestic players like Adani Copper Tubes, Hindalco, and Mettube are already incurring capex. For low-value intermediaries, Amber, EPACK Durable, and PG Electroplast dominate the investments followed by OEM players.

**Exhibit 7: A larger share of PLI investments is coming from RAC ODMs and RAC component suppliers**



Source: Company, MOFSL

**Exhibit 8: Committed investments by industry players in White Goods PLI Scheme**

| Applicant                                                                                           | Products to be manufactured    |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | Committed Investment (INR m) |
|-----------------------------------------------------------------------------------------------------|--------------------------------|------------|-------|----------------|----------------|-------------------------|-----------------------|---------------------------|--------------------------|------------------------------------|------------------------------------------------------|------------------------------|
|                                                                                                     | Control assembly for IDU & ODU | Compressor | Motor | Heat Exchanger | Cross Flow Fan | Display Panel (LCD/LED) | Sheet Metal Component | Plastic Molding Component | Valves & Brass Component | Copper Tube (plain and/or grooved) | Aluminum Stocks for Foils & Fins for Heat exchangers |                              |
| <b>List of brands selected under PLI Scheme for White Goods (Air Conditioners)</b>                  |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      |                              |
| Daikin Airconditioning India Pvt Ltd                                                                | ✓                              | ✓          | ✓     | ✓              | ✓              |                         | ✓                     | ✓                         |                          |                                    |                                                      | 5,387                        |
| LG Electronics India Pvt Ltd                                                                        | ✓                              | ✓          | ✓     | ✓              |                |                         |                       | ✓                         |                          |                                    |                                                      | 3,000                        |
| Blue Star Climatech Ltd                                                                             |                                |            |       | ✓              |                |                         | ✓                     |                           |                          |                                    |                                                      | 1,560                        |
| Havells India Ltd                                                                                   | ✓                              |            |       | ✓              |                |                         | ✓                     | ✓                         |                          |                                    |                                                      | 1,127                        |
| Johnson Controls Hitachi AC India Ltd                                                               |                                |            |       | ✓              | ✓              |                         | ✓                     | ✓                         |                          |                                    |                                                      | 1,007                        |
| Voltas Ltd                                                                                          |                                |            |       | ✓              | ✓              |                         |                       | ✓                         |                          |                                    |                                                      | 1,000                        |
| IFB Industries Ltd                                                                                  |                                |            | ✓     | ✓              |                |                         | ✓                     |                           |                          |                                    |                                                      | 570                          |
| Panasonic India Pvt Ltd                                                                             | ✓                              |            |       | ✓              |                |                         | ✓                     | ✓                         |                          |                                    |                                                      | 500                          |
| Mitsubishi Electric India Pvt Ltd                                                                   | ✓                              |            |       | ✓              | ✓              |                         |                       |                           |                          |                                    |                                                      | 500                          |
| <b>Total</b>                                                                                        |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | <b>14,651</b>                |
| <b>List of RAC ODMs selected under PLI Scheme for White Goods (Air Conditioners)</b>                |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      |                              |
| Amber Enterprises India Ltd (+)                                                                     | ✓                              |            | ✓     | ✓              | ✓              |                         | ✓                     | ✓                         |                          |                                    |                                                      | 6,275                        |
| IL Jin Electronics India Pvt Ltd                                                                    |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      |                              |
| EPACK Durable Solutions Pvt Ltd (+)                                                                 | ✓                              |            | ✓     | ✓              | ✓              | ✓                       | ✓                     | ✓                         |                          |                                    |                                                      | 3,580                        |
| Epavo Electricals Pvt Ltd                                                                           |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      |                              |
| PG Technoplast Pvt Ltd                                                                              | ✓                              |            |       | ✓              | ✓              |                         | ✓                     | ✓                         |                          |                                    |                                                      | 3,210                        |
| Bhagwati Products Ltd                                                                               | ✓                              |            | ✓     | ✓              | ✓              |                         | ✓                     | ✓                         | ✓                        |                                    |                                                      | 610                          |
| Virtuoso Optoelectronics Ltd                                                                        | ✓                              |            |       | ✓              | ✓              |                         | ✓                     | ✓                         | ✓                        |                                    |                                                      | 505                          |
| <b>Total</b>                                                                                        |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | <b>14,180</b>                |
| <b>List of RAC Component suppliers selected under PLI Scheme for White Goods (Air Conditioners)</b> |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      |                              |
| Hindalco Industries Ltd                                                                             | □                              |            |       |                |                |                         |                       |                           | ✓                        | ✓                                  |                                                      | 5,390                        |
| Adani Copper Tubes Ltd                                                                              |                                |            |       |                |                |                         |                       |                           | ✓                        |                                    |                                                      | 4,080                        |
| Mettube India Pvt Ltd                                                                               |                                |            |       |                |                |                         |                       |                           | ✓                        |                                    |                                                      | 3,002                        |
| Napino Auto and Electronics Ltd                                                                     | ✓                              |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | 666                          |
| Lucas-TVS Ltd                                                                                       | ✓                              |            | ✓     |                |                |                         |                       |                           |                          |                                    |                                                      | 540                          |
| Nidec India Pvt Ltd                                                                                 |                                |            | ✓     |                |                |                         |                       |                           |                          |                                    |                                                      | 519                          |
| Dixon Devices Pvt Ltd                                                                               | ✓                              |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | 510                          |
| Syrma Technology Pvt Ltd                                                                            | ✓                              |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | 510                          |
| VVDN Technologies Pvt Ltd                                                                           | ✓                              |            | ✓     |                |                |                         | ✓                     | ✓                         |                          |                                    |                                                      | 510                          |
| East India Technologies Pvt Ltd                                                                     | ✓                              |            |       |                |                |                         | ✓                     | ✓                         |                          |                                    |                                                      | 500                          |
| Magnum MI Steel Pvt Ltd                                                                             | ✓                              |            | ✓     | ✓              |                |                         | ✓                     |                           |                          |                                    |                                                      | 500                          |
| Sun Home Appliances Pvt Ltd                                                                         | ✓                              |            | ✓     | ✓              | ✓              |                         | ✓                     | ✓                         |                          |                                    |                                                      | 500                          |
| Triton Valves Climatech Pvt Ltd                                                                     |                                |            |       |                |                |                         |                       |                           | ✓                        |                                    |                                                      | 500                          |
| Starion India Pvt Ltd                                                                               | ✓                              |            |       | ✓              | ✓              |                         | ✓                     | ✓                         |                          |                                    |                                                      | 501                          |
| Kaynes Technology India Ltd                                                                         | ✓                              |            |       |                |                | ✓                       |                       | ✓                         |                          |                                    |                                                      | 500                          |
| Swaminathan Enterprises Pvt Ltd                                                                     |                                |            | ✓     |                |                |                         |                       |                           |                          |                                    |                                                      | 500                          |
| <b>Total</b>                                                                                        |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | <b>19,228</b>                |
| <b>Grand Total</b>                                                                                  |                                |            |       |                |                |                         |                       |                           |                          |                                    |                                                      | <b>48,059</b>                |

Source: Company, MOFSL

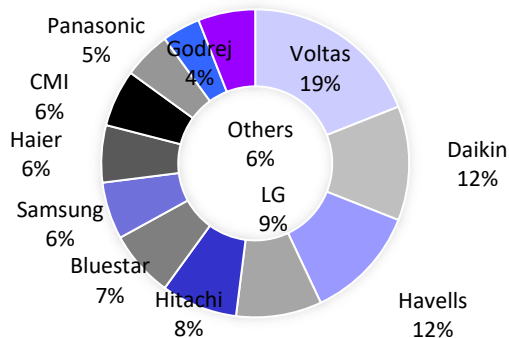
**Competition to remain intense in the RAC industry, thus curbing realization growth**

The RAC industry appears to be witnessing a phase of intense competition owing to rapid capacity expansion. The Indian RAC market is a fairly organized market with participation of prominent global and Indian brands with a wide range of products. Voltas, Havells (Lloyd), Daikin, LG, Hitachi, and Blue Star are the top 6 brands, accounting for 67% of RAC sales in FY23. Additionally, many OEMs have applied for the PLI scheme for AC components and are increasing their in-house capacities. A significant portion of their targeted capex is allocated to compressors. With higher

capex and insourcing from AC OEMs, we expect realization growth to be limited in RAC industry. However, in this type of market, players like Amber are capturing higher wallet share through increased offerings on components. Hence, we expect the AC revenue growth momentum to sustain for Amber despite weak realization growth.

**Exhibit 9: RAC industry’s market share in FY23 (%)**

Indian RAC market domestic volume split by competition in FY23



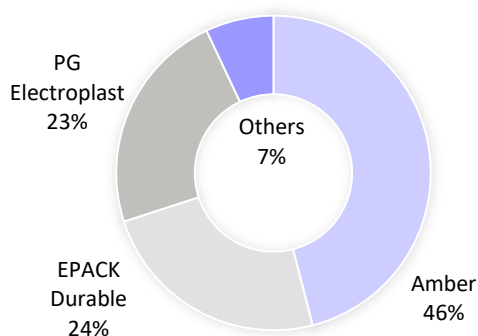
Source: Company, MOFSL

**Exhibit 10: Capex/Capacity trend across players**

| Player          | INR m | FY18   | FY19  | FY20  | FY21 | FY22  | FY23  | FY24  | Near term capex plans                                                                                                                                                                                                                                                                            |
|-----------------|-------|--------|-------|-------|------|-------|-------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Amber           |       | 848    | 1,038 | 1,080 |      | 4,150 | 6,980 | 2,620 | ❖ Capex of INR 2-2.25b in Sidwal for product facility expansion between FY25-26                                                                                                                                                                                                                  |
| PG Electroplast |       |        | 360   | 580   | 430  | 1,882 | 1,546 | 2,700 | ❖ Capex of INR 2.7b was done in FY24                                                                                                                                                                                                                                                             |
| EPACK           |       |        |       |       | 126  | 2,356 | 2,022 | 1,501 |                                                                                                                                                                                                                                                                                                  |
| Voltas          |       | 346    | 818   | 905   | 208  | 482   | 1,799 | 2,931 | ❖ Voltas is doubling production capacity for AC and commercial refrigeration categories in Chennai and Waghodia, alongwith development of components ecosystem in consumer durable sector. It is committing total capex outflow of INR4,500-5,000m which will be incurred over next 18-24 months |
| Blue Star       |       |        |       |       |      |       |       | 3,500 | ❖ Management is planning a capex in range of INR2.5-3.5b in coming two to three years                                                                                                                                                                                                            |
| Havells (Lloyd) |       | 15,559 | 2,701 | 321   | 910  | 784   | 4,044 |       | ❖ Management planned a total capex of INR 6b in FY24                                                                                                                                                                                                                                             |

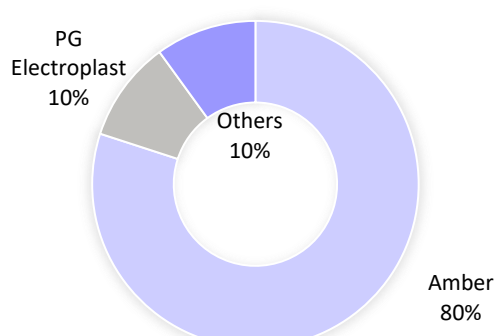
Source: Company, MOFSL

**Exhibit 11: Amber dominates volume market share of ODM companies in FY23 for domestically manufactured units (%)**



Source: Company, MOFSL

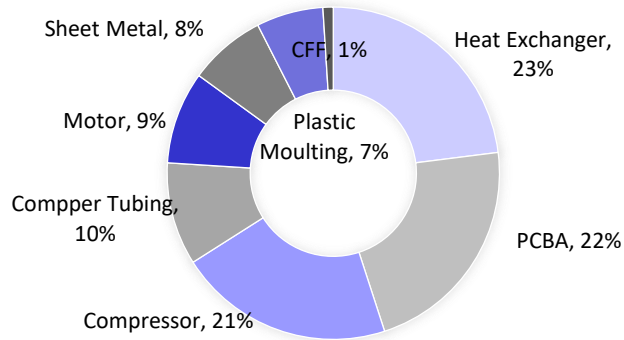
**Exhibit 12: Amber also dominates volume market share of imported and gas charged units in FY23 (%)**



Source: Company, MOFSL



**Exhibit 13: Heat exchanges, PCBA, and compressors form a larger proportion of RAC BoM breakup (%)**

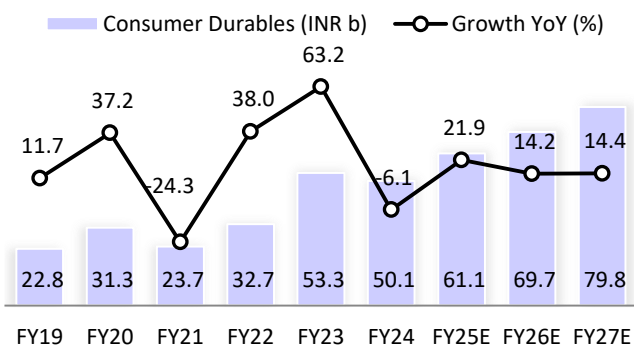


Source: Company, MOFSL

**Key strategies of Amber to grow the consumer durable (RAC) division  
Higher capex towards components as the industry witnesses higher insourcing**

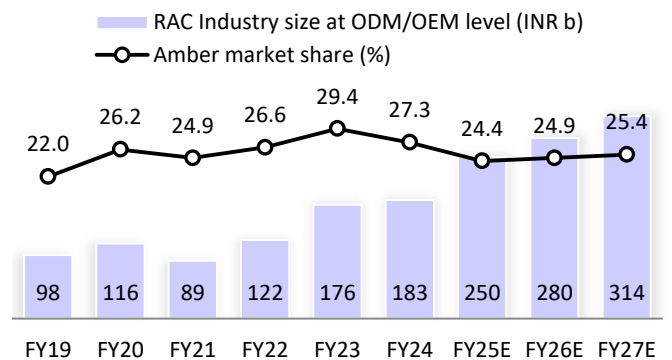
With significant capex planned by RAC players under the PLI scheme, the industry has experienced increased insourcing vs. outsourcing seen earlier. Most of the players already shifted to in-house manufacturing with two more major brands expected to start in 1Q-2Q of FY25. Amber, being a major player in the AC PLI scheme, shifted its focus towards supplying components to RAC customers with the goal of retaining a 29-30% business share. Amber supplies critical components to almost all of its major customers, with a capability of providing 70% of BoM of components (only player in the RAC ODM industry with a 70% BoM capability). Management expects that demand for components will be higher than RAC in future and hence, it has moved to supplying components to its existing customers, with a plan to add more customers in the other consumer durables division.

**Exhibit 14: We expect the consumer durable segment revenue to post 17% CAGR over FY25-27**



Source: Company, MOFSL

**Exhibit 15: We expect Amber to maintain an ODM market share of ~24-25%**



Source: Company, MOFSL

**Amber’s backward integration, capex, and strategically located manufacturing facilities**

Amber has incurred a capex of INR14.9b over FY22-24, mainly towards backward integration of RAC and components under the PLI scheme. Amber has 28 state-of-the-art manufacturing facilities spread across strategic locations pan-India in proximity to the customers. These facilities ensure a quicker turnaround time. In

FY18, the company had 10 manufacturing facilities. Later, between FY18 and 1QFY23, it added 13 more facilities and in FY23, Amber expanded with five new manufacturing facilities for capacity expansion and backward integration.

**Exhibit 16: Manufacturing facilities added in FY23 and FY24 under PLI-led capex**

| Manufacturing facility    | Production commencement | Product manufactured                                                                 |
|---------------------------|-------------------------|--------------------------------------------------------------------------------------|
| Pravartaka, Greater Noida | Jan, 2024               | Injection moulding components                                                        |
| ILJIN, Noida              | Jun, 2023               | Wearable and hearable products                                                       |
| Sri City (Andhra Pradesh) | Jan, 2023               | AC with backward integration of Sheet metal components, Moulding and Heat Exchangers |
| Supa (Maharashtra)        | Dec, 2022               | Heat exchangers, Press shop, Weld shop, TPP, IDU & ODU line and Moulding shop        |
| Rudrapur (Uttarakhand)    | Jan, 2023               | Sheet metal components, Copper system tubing                                         |
| Thiruvallur (Chennai)     | Nov, 2022               | PCBA for AC & other Consumer durable products                                        |
| Kanchipuram, (Tamil Nadu) | Oct, 2022               | Injection moulding components                                                        |

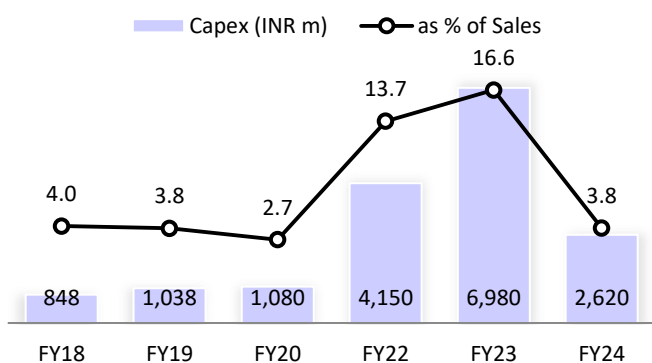
Source: Company, MOFSL

**Exhibit 17: Manufacturing facilities**

| Business segment                                       | Location                                                                                                 |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Consumer Durables – 23 Facilities</b>               |                                                                                                          |
| RAC & Non-RAC Components                               | Dehradun, Jhajjar, Pune, Greater Noida, Rudrapur, Rajpura, Shahjanpur, Chennai, Sri City, Kadi & Manesar |
| RAC FG                                                 | Dehradun, Jhajjar, Pune & Sri City                                                                       |
| Motors                                                 | Faridabad                                                                                                |
| Tooling                                                | Noida                                                                                                    |
| <b>Electronics – 4 facilities</b>                      |                                                                                                          |
| PCBA's                                                 | Greater Noida, Pune & Chennai                                                                            |
| Telecom                                                | Greater Noida & Chennai                                                                                  |
| Wearables & Hearables                                  | Noida                                                                                                    |
| <b>Railway Sub-systems &amp; Mobility – 1 facility</b> |                                                                                                          |
| Railway Subsystems                                     | Faridabad                                                                                                |

Source: Company, MOFSL

**Exhibit 18: Amber’s capex has been dominated by PLI-led capex over the last two years**



Source: Company, MOFSL

**Exhibit 19: Amber’s near-term capex plan includes large investments for railways and electronics**

| Segment                                | FY24 capex (INR m)             | Management comments                                                                                                                                                                                                                                                                                      |
|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electronics                            | INR100-150m                    | ❖ Capex would be for Noise JV in FY25<br>❖ Sidwal will be setting up a new Greenfield facility in Faridabad for capacity expansion of its existing product portfolio and two more facilities through the SPV route (one for interiors and the other for couplers, gear, pantograph and other subsystems) |
| Railway Subsystems & Mobility division | INR2,000-2,250m over FY25-FY26 |                                                                                                                                                                                                                                                                                                          |

Source: Company, MOFSL

### Acquisitions and strategic tie-ups to expand the consumer durables segment

Amber has been able to widen its client base as well as sectors through a range of acquisitions done so far. With recent announcements of acquiring stakes in Resojet and Ascent circuits, the company will be able to expand further in segments such as washing machine, PCB manufacturing, etc. Company is already present in non-room air conditioner components such as telecom components, smart meter components, IT server components, refrigerator components, microwave, washing machine, water purifier and automobile components and is adding more clients in front load and top load washing machine. This will further support the growth of the consumer durable segment, which currently forms a larger share of revenue from the RAC segment.

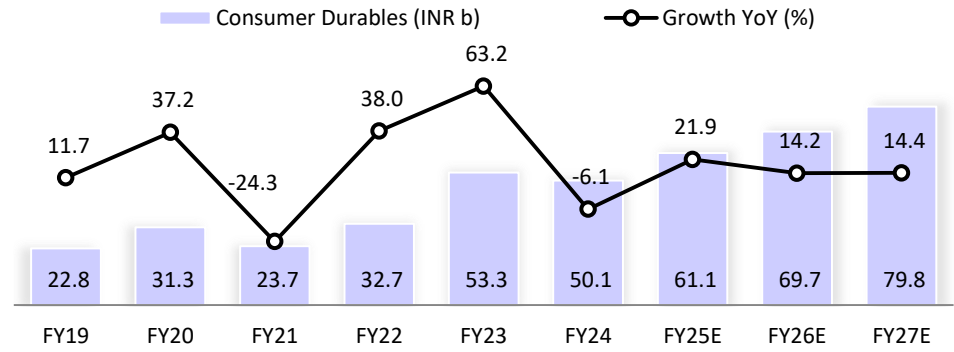
**Exhibit 20: Amber – acquisitions done over past few years to expand presence**

| Date      | Acquirer company                                | Acquiree company                                                  | Industry of acquisition        | Acquiree company financials                                                                                                                            | Stake acquired | Amount Invested (INR m) | Implied valuation (INR m) | Implied valuation About acquire company (trailing EV/Sales) |                                                                                                                                                                                                                                                                                  |
|-----------|-------------------------------------------------|-------------------------------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------|---------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21-Mar-24 | Amber Enterprises                               | Resojet Private Limited                                           | Consumer durable               | Company incorporated on 18 <sup>th</sup> Apr'22. No turnover in F23                                                                                    | 50%            | 350                     | 700                       | NA                                                          | ❖ Business of manufacturing the fully automatic top-loading and front-loading washing machine(s) and its components                                                                                                                                                              |
| 22-Feb-24 | Shivaliks Mercantile Pvt. Ltd (Sidwal's JV-SPV) | Titagarh Firema SpA (an associate company of Titagarh Rail)       | Mobility Application           | Total turnover: FY23 – EUR50.28m<br>FY22 – EUR72.28m<br>FY21 – EUR67.79m<br>Total income: FY23 – EUR(19.56)m<br>FY22 – EUR(9.77)m<br>FY21 – EUR(7.97)m | 35%            | EUR20.21m               | 58                        | 1.15x                                                       | ❖ Titagarh Firema SpA, a company based in Italy, is engaged in designing & manufacturing high-tech rail vehicles, viz. passenger vehicles in the category of subways, trains, intercity trains, and freight vehicles in Italy.                                                   |
| 02-Feb-24 | IL JIN Electronics (India) Private Limited      | Ascent Circuits Private Limited                                   | EMS                            | F23 Revenue: INR 2,790m                                                                                                                                | 60%            | 3,110                   | 5,183                     | 1.86x                                                       | ❖ South India based home-grown leading player engaged in the manufacturing of PCB                                                                                                                                                                                                |
| 01-Feb-22 | Amber Enterprises                               | Pravartaka Tooling Services Private Limited                       | Components (Injection molding) |                                                                                                                                                        | 60%            |                         |                           |                                                             | ❖ Pravartaka is one of the leading injection molding tool market and injection molding components maker for consumer durable, automotive, and electronics industries.                                                                                                            |
| 02-Dec-21 | Amber Enterprises                               | AmberPR Technoplast India Pvt Ltd (erstwhile Pasio India Pvt Ltd) | CFF and its plastic parts      |                                                                                                                                                        | 73%            |                         |                           |                                                             | ❖ Engaged in the businesses of (i) CFF and its plastic parts, (ii) fans and fan guard for ODU of RAC, (iii) plastic parts for water dispenser and refrigeration applications (other than the automobile industry) and (iv) plastic parts for seats of trucks, tractors and buses |

Source: Company, MOFSL

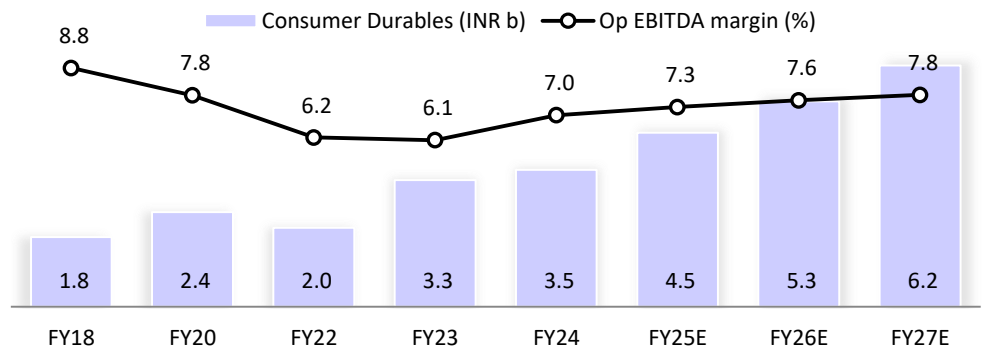
We thus expect the consumer durable division (comprising RAC & Components)’s revenue to report a CAGR of 17% over FY24-27 with EBITDA margin improving to 7.8% by FY27E from 7.0% in FY24.

**Exhibit 21: Consumer durables’ revenue growth would be largely driven by RAC & non-RAC components in near term**



Source: Company; MOFSL

**Exhibit 22: We expect consumer durables’ operating EBITDA to reach 7.8% by FY27**



Source: Company; MOFSL

## Amber 2.0 – Focusing on the high-growth electronics business

**Amber's electronics division has undergone significant expansion, diversifying its portfolio beyond consumer durables through strategic acquisitions such as Ascent. This strategy enabled its entry into telecom, hearable & wearable, and EV space applications.**

Amber, through its subsidiaries, is a market leader in manufacturing PCBAs for the consumer durable sector, providing 25% of total market demand. It has a proven track record and extensive experience in providing solutions for home appliances, RAC market, and the telecom sector. In FY23, it expanded its customer base in electronics division and ventured into manufacturing cutting-edge applications such as smart wearables and hearables. Additionally, it introduced new products for telecom equipment like ONT and RRH. With the electronics market evolving towards smarter products, the demand for PCBAs is expected to surge, thus strengthening the division's position further.

### Key strategies to grow the electronics division

#### JV with Noise for hearables and wearables

During 2QFY24, Amber entered into a JV with Nexxbase Marketing Private Limited, having its brand 'Noise', to undertake the manufacturing, assembling, and designing of wearables and other smart electronic products. The company is setting up a plant in Noida for manufacturing the wearables and electronics products. The plant is set to commence from 1QFY25. ILJIN was already present in wearables. In FY23, ILJIN's revenue stood at INR8,804m, reporting a CAGR of 21% over FY18-23.

#### Entry into PCB manufacturing via Ascent acquisition and MoU with Korea Circuit

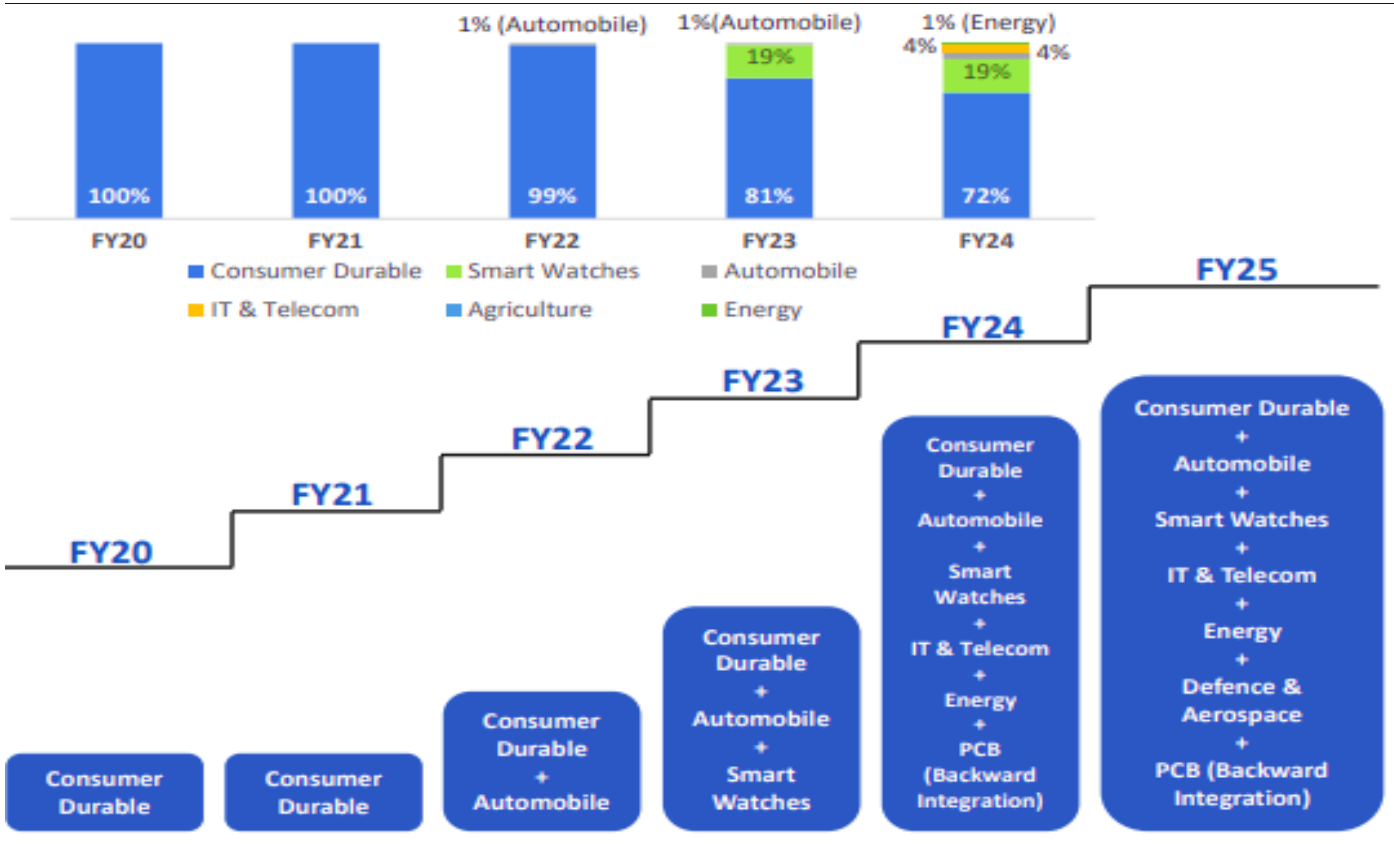
Amber is expanding its presence from PCB assembly to manufacturing bare board PCB through acquisition of Ascent Circuits, thereby catering to a wide range of market segments such as aerospace & defense, railways, industrials, telecom, automobile, healthcare, hearables & wearables, and consumer durables. Amber's growth strategy extends beyond revenue diversification, with plans for backward integration into component manufacturing, particularly in the electronics PCBA space. It has also signed an MoU with Korea Circuits through Ascent Circuits to manufacture Flex, HDI, and Semiconductor substrate PCBs, thereby fortifying PCB manufacturing in India. Ascent Circuits generates high double-digit margin, has NWC days of 100, and enjoys mid-teens RoE/RoCE. The integration of Ascent Circuits will result in improved margins for Amber. We thus expect the electronics division revenue to clock a CAGR of 33% over FY24-27, with EBITDA margin improving to 8.2% by FY27E from 5.6% in FY24.

**Outlook for the electronics business**

Amber aims to achieve a more balanced revenue mix in the electronics business, with increased penetration in smart watches, automobiles, IT & Telecom, Agriculture, and Energy segments (28% contribution in FY24) vs. Consumer Durable (72% contribution in FY24). By FY25, the company is also targeting to enter into the defense & aerospace segment.

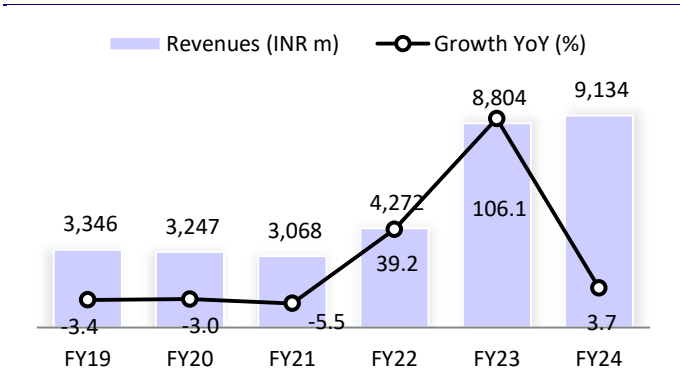
Going forward, we expect growth in the electronics business to emerge from increased focus on: 1) margin-accretive sectors – aerospace & defense, railways, industrials, telecom, automobiles, healthcare, hearables & wearables, and consumer durables, 2) improved penetration in EV electronics and telecom hardware, and 3) increased backward integration in the PCB business.

**Exhibit 23: Electronics segment’s diversification across the margin-accretive businesses**



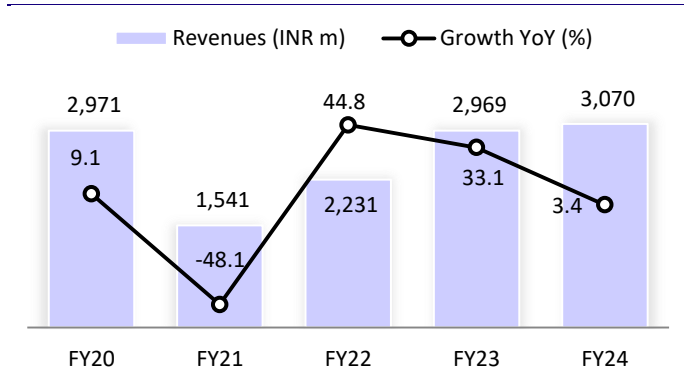
Source: Company, MOFSL

**Exhibit 24: ILJIN – revenue trend**



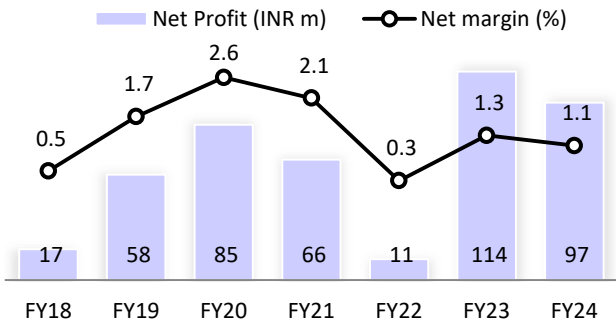
Source: Company; MOFSL

**Exhibit 25: EVER – revenue trend**

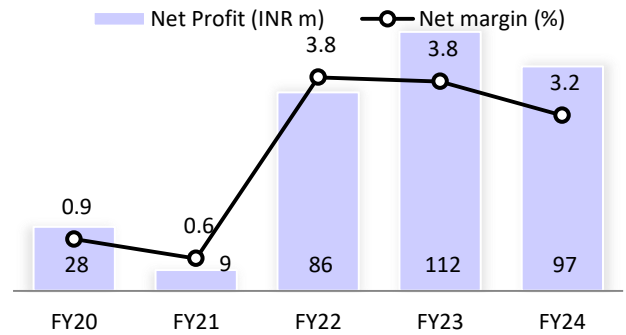


Source: Company; MOFSL

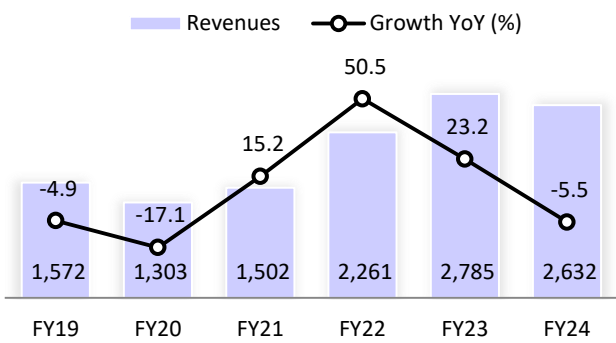
**Exhibit 26: ILJIN – profit margin is weak currently**



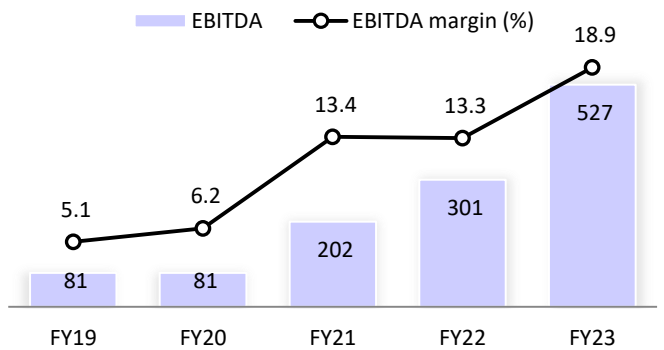
**Exhibit 27: EVER – profit margin is around 3.2%**



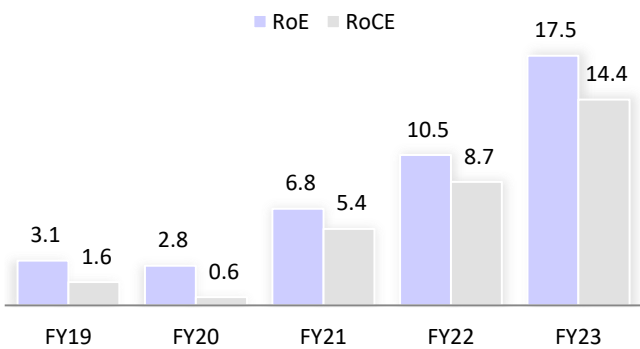
**Exhibit 28: Ascent – revenue clocked a 11% CAGR over FY19-24**



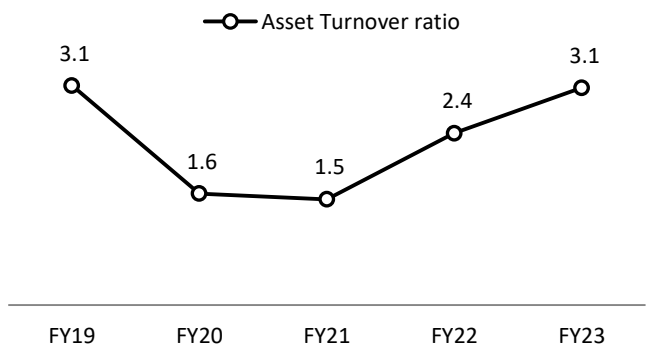
**Exhibit 29: Ascent – EBITDA margin in mid-teens and hence, can provide a margin boost to Amber**



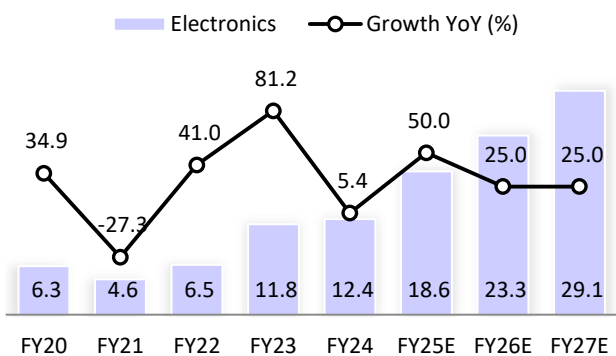
**Exhibit 30: Ascent RoE/RoCE improved in last two years (%)**



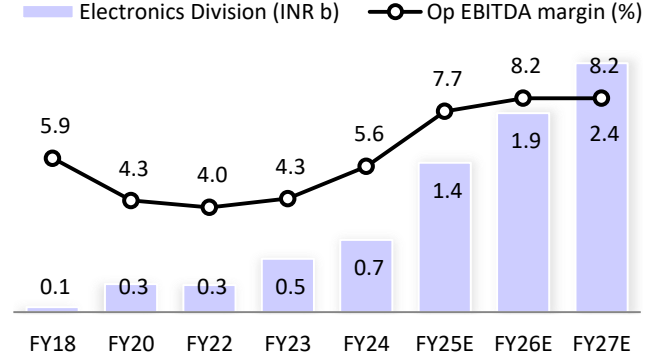
**Exhibit 31: Ascent – Asset turnover ratio improving (x)**



**Exhibit 32: Electronics segment revenue to improve (INRb)**



**Exhibit 33: Electronics segment EBITDA improving**



Source: Company; MOFSL

Source: Company; MOFSL



## Amber 3.0 – Anticipating growth from the Railways and Mobility businesses

Amber acquired Sidwal in 2019 to expand its offerings in mobility AC solutions. Sidwal is the largest supplier of roof-mounted package unit ACs. It caters to the segments like Railways, Bus, Metro, Defense, and Telecom & IT. Its key clients include Indian Railways, BEML, Siemens, DMRC, CAF, et al. The company offers a diverse range of mobility products, including roof-mounted ACs for Mainline Coaches, AC & refrigeration solutions for railways, roof-mounted loco drivers' cab AC, metros, and other HVAC products.

### Key strategies to grow the mobility division

#### Targeting wider offerings in railways

Sidwal is now targeting to capture a larger wallet share in the railways segment. It is aiming to garner 18-20% of the overall cost of a coach with its entry into newer areas. According to industry sources, nearly 35% of the overall costing of Vande Bharat coaches comes from ancillaries such as turnkey systems, seats, gangways, vacuum evacuation systems, and miscellaneous items. Besides, as per Indian Railways plan, the awarding is yet to happen for 100 aluminum train-sets with distributed power system and 100 aluminum train-sets with concentrated power system. These will also be followed by more tenders for Vande Bharat trains. Currently, due to changes in government strategies in Indian Railways, certain metro and Vande Bharat related projects are delayed thereby impacting performance of this segment for Amber.

**Exhibit 34: BoM breakup for a Vande Bharat train with key players present in each category**

| Component                                                                                                                                                                     | Basic unit rate (INR m) | Quantity | Total (INR m) | Key players                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|---------------|-------------------------------------------------------------|
| Propulsion system including traction converters, brake chopper resistors, traction motor, transformers, auxiliary converters, pantographs, RMPU's, lighting, assembled bogies | 500.0                   | 1        | 500           | ❖ Medha, Alstom, Siemens, BHEL, Titagarh, CG Power          |
| Complete shell kit per coach                                                                                                                                                  | 3.5                     | 16       | 56            | ❖ DTL, Pennar, Airflow, Universal, Chennai Radha, EC Blades |
| Turnkey furnishing                                                                                                                                                            | 5.0                     | 16       | 80            | ❖ BFG, MSL, HFL, Kineco, Airflow                            |
| Seat - Economy class                                                                                                                                                          | 5.0                     | 14       | 70            | ❖ Ster, Tata, Airflow, Advanced Silicones                   |
| Seat - Executive class                                                                                                                                                        | 6.0                     | 2        | 12            | ❖ Ster, Tata, Airflow, Advanced Silicones                   |
| Vacuum evacuation system                                                                                                                                                      | 2.5                     | 16       | 40            | ❖ EVAC, Glova, Oasis                                        |
| Brake system                                                                                                                                                                  | 5.0                     | 16       | 80            | ❖ Knorr Bremse, Wabtec                                      |
| Nose Cone                                                                                                                                                                     | 1.0                     | 2        | 2             | ❖ BFG, MSL, HFL, Kineco, Airflow                            |
| Gangway                                                                                                                                                                       | 2.0                     | 2        | 4             | ❖ Hubner, Dellner                                           |
| Misc- Mechanical                                                                                                                                                              | 2.0                     | 16       | 32            | ❖ Several players                                           |
| Misc - Electrical                                                                                                                                                             | 2.5                     | 16       | 40            | ❖ Several players                                           |
| <b>Total</b>                                                                                                                                                                  |                         |          | <b>916</b>    |                                                             |

Source: Company, MOFSL

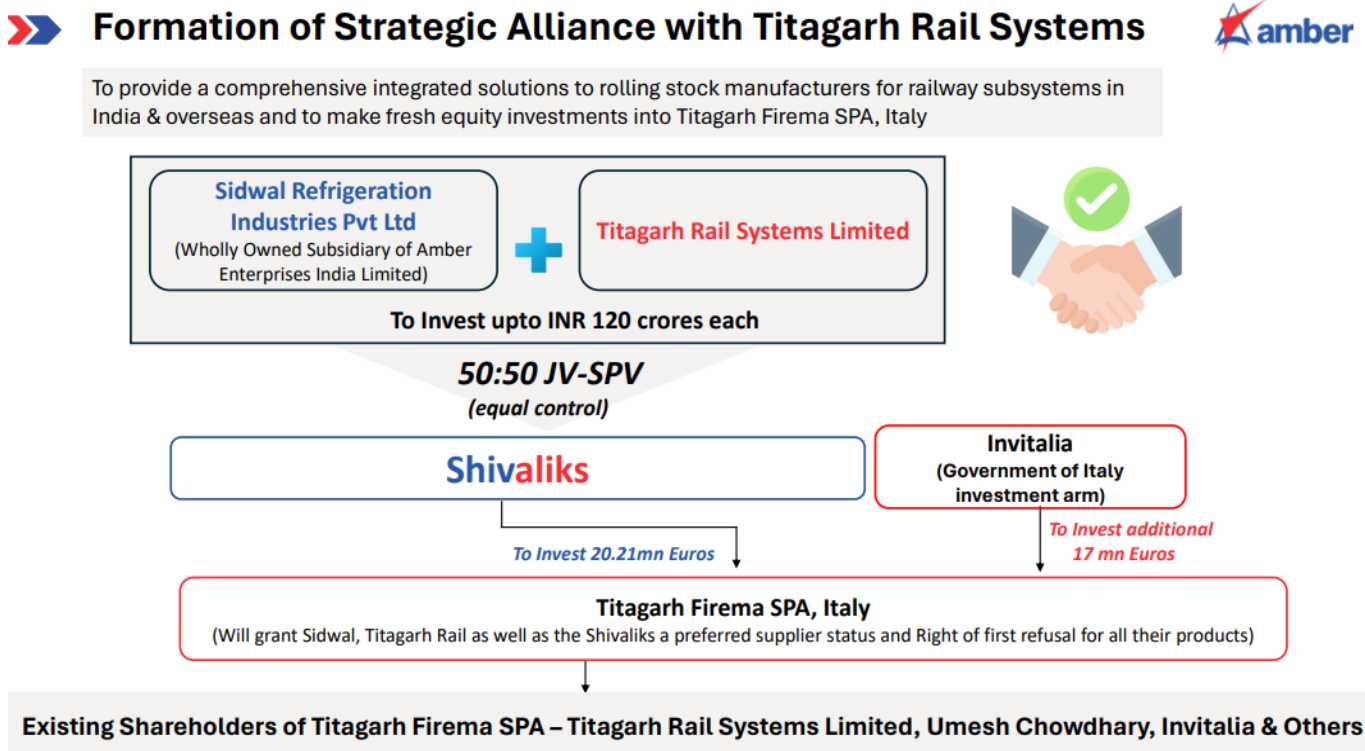
**Technology tie ups by Sidwal for automatic door systems**

Sidwal inked Technology License Agreements for Inter-Car Gangways Systems and Door Systems with Ultimate Group and Rail Systems Limited. Ultimate Group is a global leader in railway vehicle systems and operates multiple facilities worldwide. SIDWAL also partnered for Automatic Door Systems, targeting transit.

**JV with Titagarh Rail systems**

Amber entered into a JV with Titagarh Rail systems to provide comprehensive integrated solutions to rolling stock manufacturers for railway subsystems in India & overseas. This JV will invest EUR20m into Titagarh Firema SPA, Italy which in turn will give a preferred supplier status and right of first refusal for all their products to Sidwal, Titagarh Rail and their JVs. The strategic partnership in Firema will facilitate Sidwal’s entry into the European market/global play. This will also provide Sidwal with a preferred access to Firema’s own demand. Domestically, this JV not only increases technical capabilities of Amber to address a larger portion of BoM of a train coach but also enables its entry into subsystems for the fast-growing railway segment in India (particularly for upcoming Vande Bharat as well as metro trains). The alliance with Titagarh aims to boost Sidwal's wallet share per coach to INR20m, covering 30% of BoM in the next two to three years, and expanding offerings to interiors, gangways, seats, and more. SIDWAL is set to supply components for projects such as Vande Bharat Express and metro coaches, serving customers like BEML, Alstom, CRRC, and Titagarh.

Exhibit 35: Titagarh and Sidwal tie-up



Source: Company, MOFSL

**Key developments for the railway division in FY24**

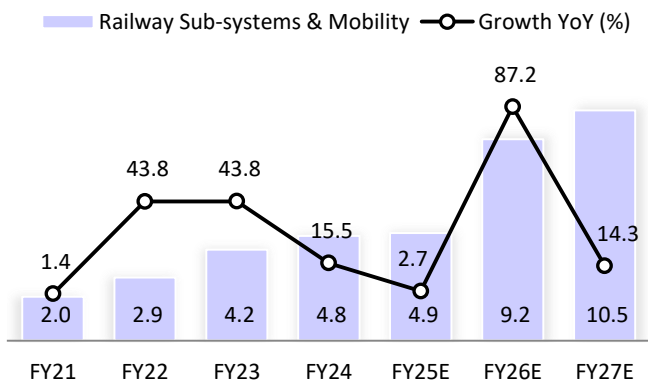
- In FY24, the division received its first order for doors and gangways from three new customers. The order value was INR5.15b, with total order book at INR20b in FY24. Sidwal plans to assemble new products in Phase 1 and commence complete manufacturing from 1QFY26 for new customer orders.
- The company’s defense portfolio is gaining momentum, with double-digit growth in the order book in FY24 (to INR500-600m from INR200-225m earlier). It plans to expand its product portfolio for specialized terrain vehicles and slip-on AC units.
- For the new product business, the company expects higher growth and margins, with clearances and approvals anticipated in FY26, and production expected to commence by 4QFY26. According to management, Sidwal now addresses INR11m per passenger car, thereby expanding its addressable market.
- Management projects FY25 to be a year of execution and customer approvals for new products, with real ramp-up starting from 2HFY26. This coincides with the rolling out of new Vande Bharat trains (sleeper class with 24 coaches in each train). Management anticipates healthy growth outlook for Sidwal, with expectations of increased train rollouts from FY26, and FY27 projected as the peak year for trains. We expect FY25 to remain weak due to delays in certain orders from Indian Railways.
- The company expect margins to remain in the 20% range, with HVAC margins being consistent, doors and gangways at 18%, and couplers at 18-19%.

**Capex for the mobility segment**

Sidwal plans to incur a capex of INR2.0-2.25b over the next two years, particularly, for expanding in railways subsystems across a greenfield facility in Faridabad and two facilities in an SPV.

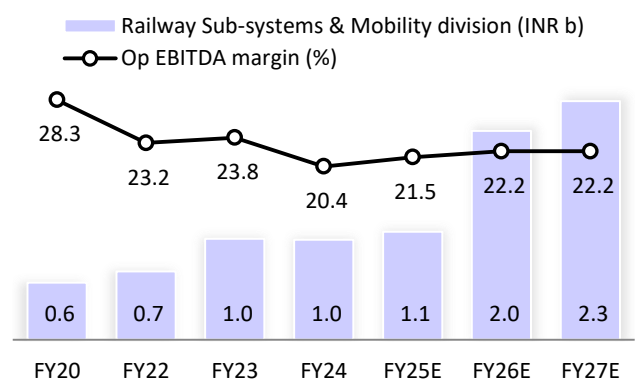
We thus expect the mobility segment to start growing post FY25 for Amber after its initial capex for expanding across subsystems. We expect revenue for mobility segment to record a CAGR of 30% over FY24-27, respectively.

**Exhibit 36: Railway & Mobility segment revenue**



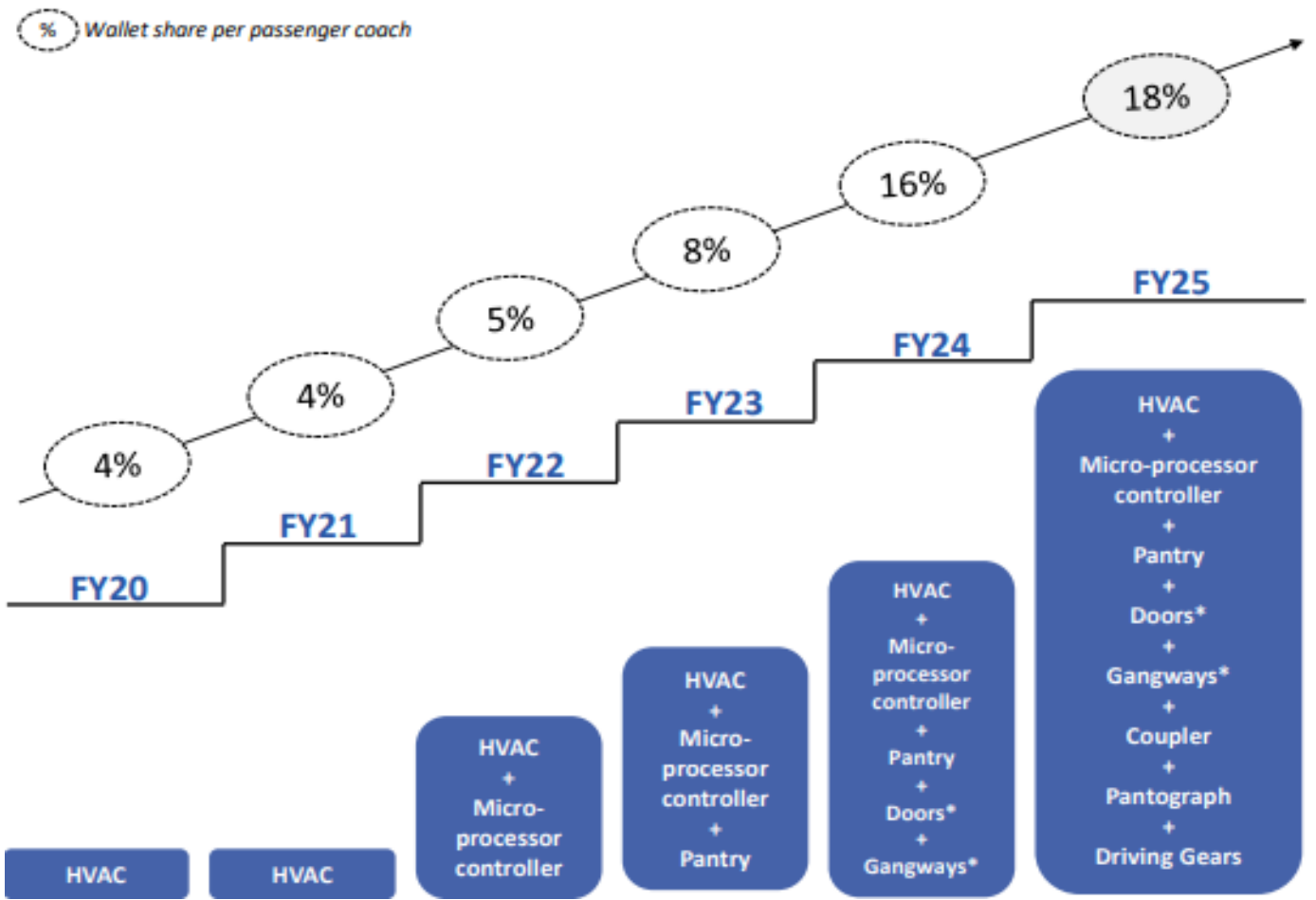
Source: Company; MOFSL

**Exhibit 37: Railway & Mobility segment operating EBITDA**



Source: Company; MOFSL

**Exhibit 38: Sidwal's share strategically increasing across the railway business**



Source: Company, MOFSL

## Financial outlook

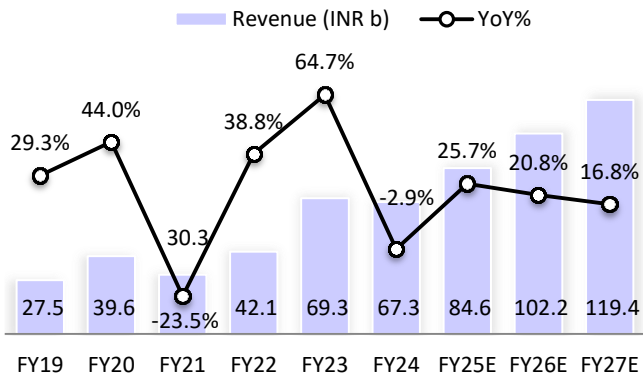
We expect Amber's revenue/EBITDA/adj. PAT to clock a CAGR of 21%/25%/51% over FY24-27. We project its revenue mix to start improving for the other segments, such as electronics and mobility, over the next few years as the company enters into newer segments. We will continue to monitor the continuous investments from Amber to expand the electronic segment as well as railways. Over the last two years, Amber invested in capex to build the component ecosystem for RAC division. It will be investing in electronics and railways divisions. We expect margins in the near term to remain weak due to large capacity additions by OEM and ODM players in the AC segment. However, with improving non-AC component volumes and Sidwal's revenue, we expect a gradual uptick in margins. We expect the return ratios to be affected in the near term due to incremental capex, but anticipate its RoE/RoCE to improve from FY26 onwards.

### Exhibit 39: Segmental revenue and EBITDA

| Y/E March (INR m)                       | FY22          | FY23          | FY24          | FY25E         | FY26E           | FY27E           |
|-----------------------------------------|---------------|---------------|---------------|---------------|-----------------|-----------------|
| <b>Segmental revenue</b>                |               |               |               |               |                 |                 |
| Consumer Durables Division              | 32,680        | 53,339        | 50,083        | 61,074        | 69,730          | 79,762          |
| <i>Growth YoY (%)</i>                   | 38.0          | 63.2          | -6.1          | 21.9          | 14.2            | 14.4            |
| Electronics Division                    | 6,500         | 11,776        | 12,410        | 18,615        | 23,269          | 29,086          |
| <i>Growth YoY (%)</i>                   | 41.0          | 81.2          | 5.4           | 50.0          | 25.0            | 25.0            |
| Railway Sub-systems & Mobility division | 2,890         | 4,156         | 4,800         | 4,928         | 9,227           | 10,542          |
| <i>Growth YoY (%)</i>                   | 43.8          | 43.8          | 15.5          | 2.7           | 87.2            | 14.3            |
| <b>Total Revenues</b>                   | <b>42,070</b> | <b>69,271</b> | <b>67,293</b> | <b>84,618</b> | <b>1,02,226</b> | <b>1,19,390</b> |
| <i>Growth YoY (%)</i>                   | 38.8          | 64.7          | -2.9          | 25.7          | 20.8            | 16.8            |
| <b>Operating EBITDA</b>                 |               |               |               |               |                 |                 |
| Consumer Durables Division              | 2,030         | 3,260         | 3,520         | 4,476         | 5,284           | 6,204           |
| <i>Margin (%)</i>                       | 6.2           | 6.1           | 7.0           | 7.3           | 7.6             | 7.8             |
| Electronics Division                    | 260           | 510           | 690           | 1,426         | 1,899           | 2,373           |
| <i>Margin (%)</i>                       | 4.0           | 4.3           | 5.6           | 7.7           | 8.2             | 8.2             |
| Railway Sub-systems & Mobility division | 670           | 990           | 980           | 1,060         | 2,050           | 2,342           |
| <i>Margin (%)</i>                       | 23.2          | 23.8          | 20.4          | 21.5          | 22.2            | 22.2            |
| <b>Total Operating EBITDA</b>           | <b>2,960</b>  | <b>4,760</b>  | <b>5,190</b>  | <b>6,962</b>  | <b>9,233</b>    | <b>10,920</b>   |
| <i>Margin (%)</i>                       | 7.0           | 6.9           | 7.7           | 8.2           | 9.0             | 9.1             |
| Other adjustments                       | 206           | 581           | 271           | 702           | 867             | 1,031           |
| <b>EBITDA</b>                           | <b>2,754</b>  | <b>4,179</b>  | <b>4,919</b>  | <b>6,260</b>  | <b>8,366</b>    | <b>9,889</b>    |
| <i>Margin (%)</i>                       | 6.5           | 6.0           | 7.3           | 7.4           | 8.2             | 8.3             |

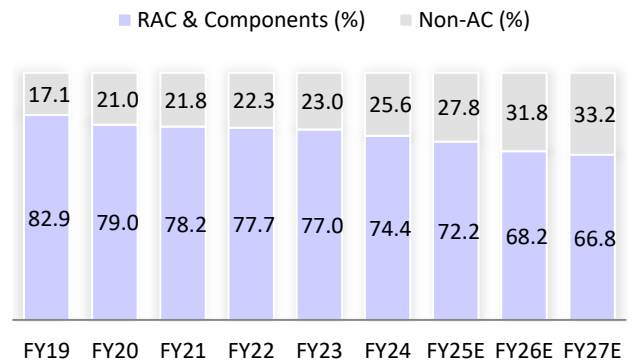
Source: Company, MOFSL

**Exhibit 40: We expect Amber’s revenue to post a CAGR of 21% over FY24-27**



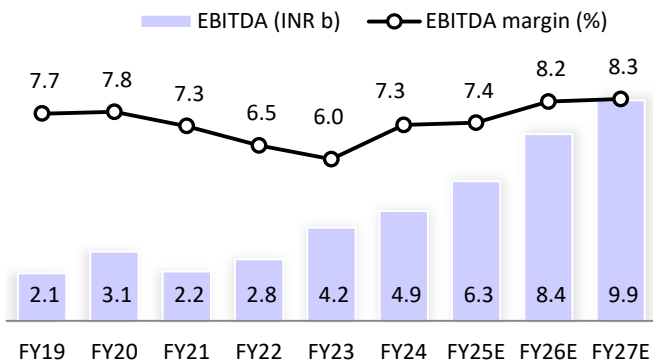
Source: Company; MOFSL

**Exhibit 41: We expect the share of non-AC revenue to move up from the current levels**

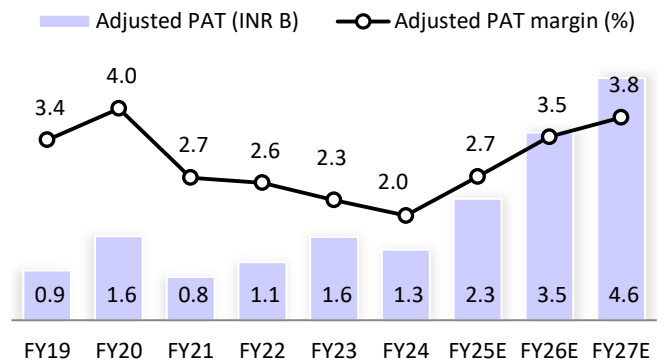


Source: Company; MOFSL

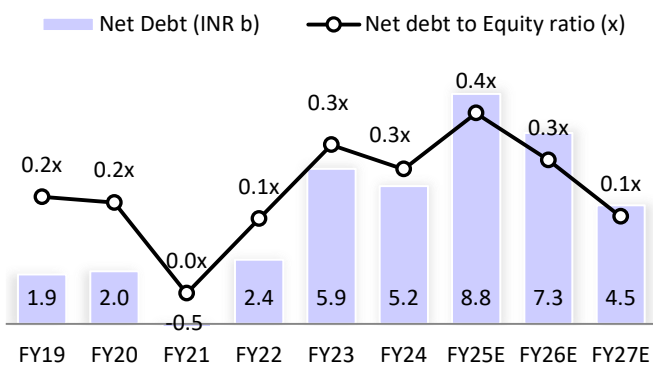
**Exhibit 42: Amber’s EBITDA margin to inch up on improved revenue from higher-margin segments**



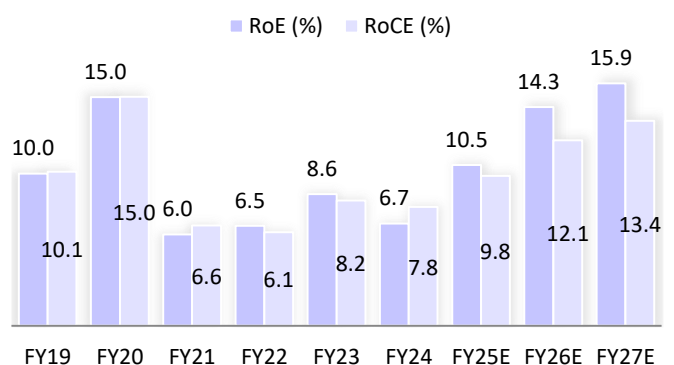
**Exhibit 43: We expect its PAT to clock a CAGR of 51% over FY24-27**



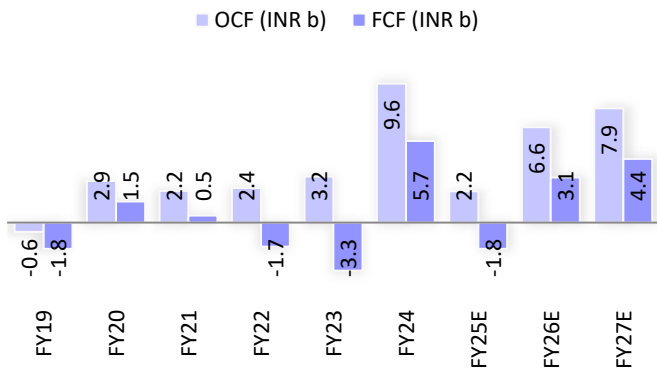
**Exhibit 44: We expect net debt to remain high over the next two years on increased capex**



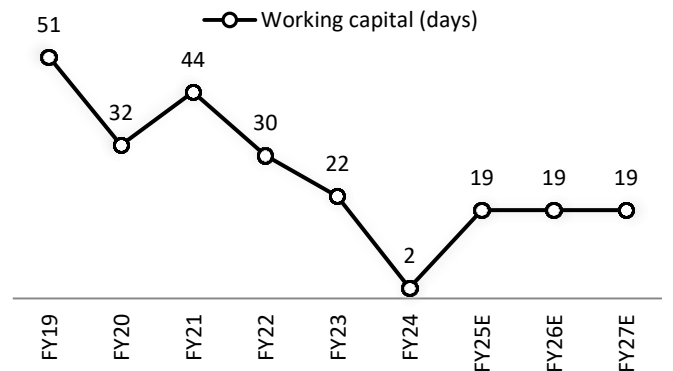
**Exhibit 45: We expect RoE & RoCE to reach double-digit levels from FY26 onwards**



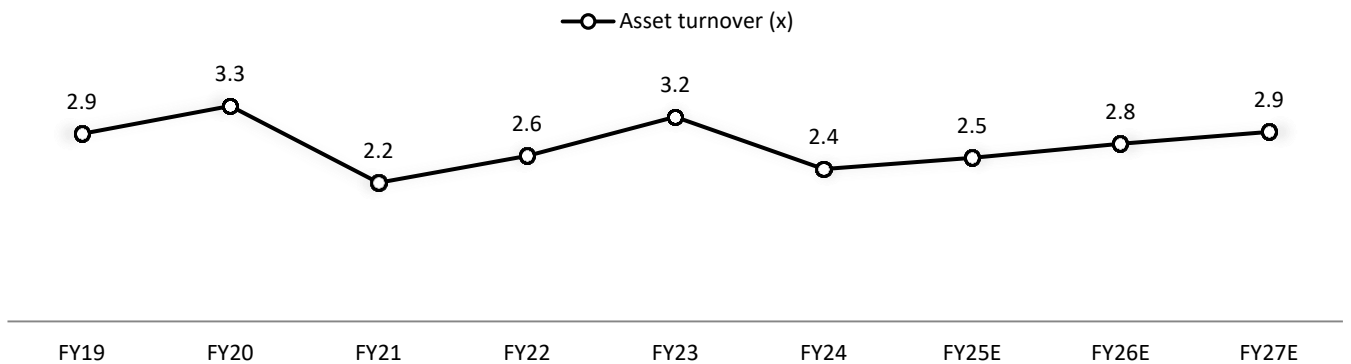
**Exhibit 46: We expect FCF to improve from FY25 as capex moderates**



**Exhibit 47: NWC cycle has remained comfortable for the company and we expect similar trend in future**



**Exhibit 48: With improved product mix, we expect asset turnover ratio to improve**



Source: Company; MOFSL



## Valuation and recommendation

The stock is currently trading at 60.7x/39.3x P/E on FY25/26E earnings. We initiate coverage on Amber with a **BUY** rating and a DCF-based TP of INR5,000 implying 42x P/E on a two-year forward EPS (Sep'26). Our assumptions take into account 20-year revenue CAGR of 12% and EBITDA CAGR of 13%, asset turnover of 3.5-4x over the same period. We bake in WACC of 10.6% and terminal growth rate of 5%.

### Exhibit 49: Bear /Base/ Bull case scenario

|                     | Bear case                                   | Base case                                    | Bull case                                   | Rationale                                |
|---------------------|---------------------------------------------|----------------------------------------------|---------------------------------------------|------------------------------------------|
| <b>Assumptions</b>  | Higher WACC 11%,<br>Terminal growth rate 3% | WACC of 10.6% and<br>Terminal growth rate 5% | Lower WACC 10.2%<br>Terminal growth rate 6% | ❖ We take sensitivity in DCF assumptions |
| <b>Target price</b> | <b>3,850</b>                                | <b>5,000</b>                                 | <b>6,400</b>                                |                                          |

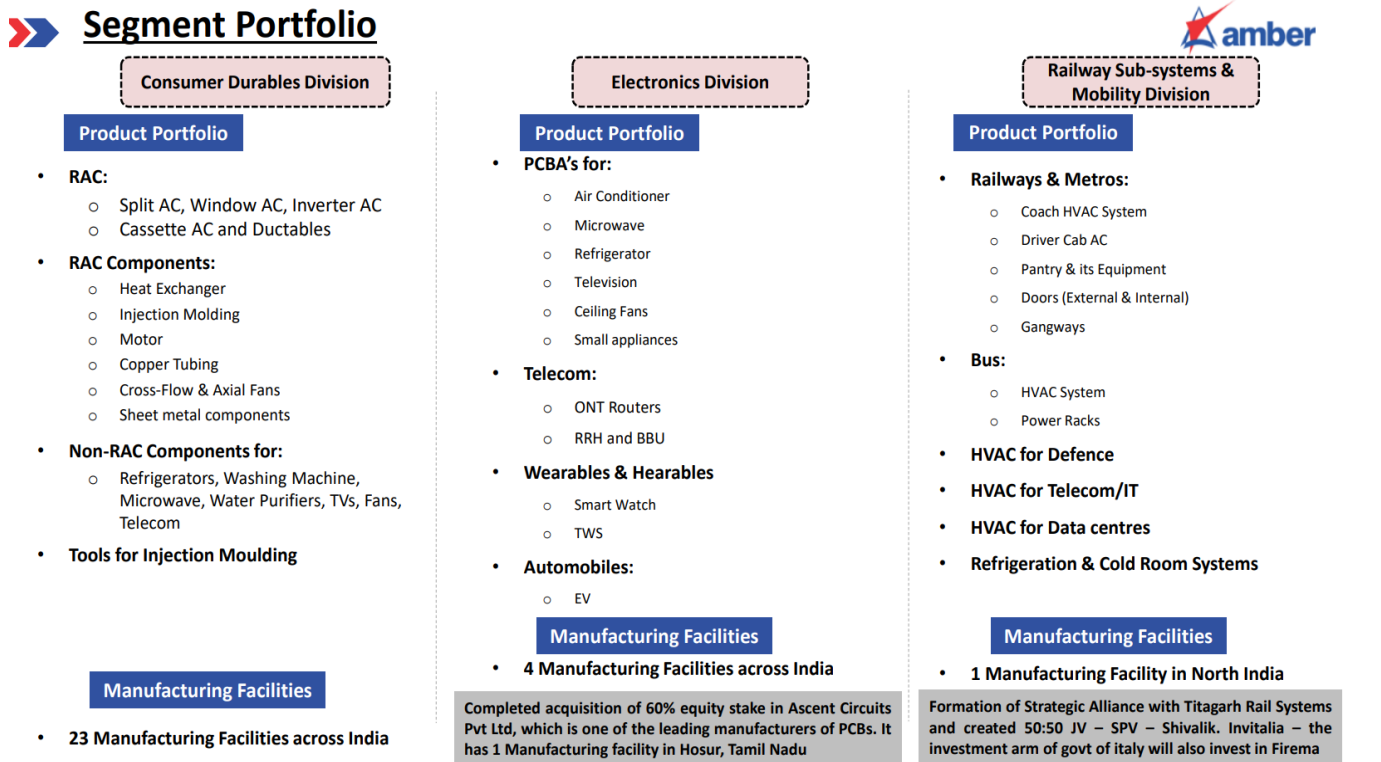
## Company profile

Established in 1990, Amber is a leading backward-integrated player in India's RAC industry, commanding a significant market share. The company operates across components and FG segments in the HVAC industry, offering a diverse product portfolio, which includes RACs, critical components, and mobility applications for various sectors such as railways, metros, buses, and defense. With 27 modern manufacturing facilities strategically located across India, Amber ensures quick turnaround time for its customers. Its strong backward integration and robust R&D capabilities position it favorably in the ODM sector. Amber has continuously added capabilities across segments via either capex or inorganic acquisitions over the years to capture the larger value chain.

### Segment and product portfolios

Over time, Amber has broadened its business scope through backward integration and acquisitions, extending its product range across multiple segments. Its RAC division contributed 72% of revenue in 2018, which decreased to 38% by 3QF24. This decline mirrors the company's expansion into electronics, railway subsystems, and the mobility divisions.

#### Exhibit 50: Segment portfolio



Source: Company, MOFSL

Exhibit 51: Product portfolio

## Product Portfolio

| Consumer Durables Division                                              | Electronics Division                                                                                                                                                                                                                                                                                                                              | Railway Sub-systems & Mobility Division                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>RAC ODU / IDU<br>Window AC                                          | <br>Smart watch and Bluetooth speaker<br>TWS<br>RRH & BBU                                                                                                                                                                                                                                                                                         | <br>Coach ACs<br>Saloon AC<br>Cabin AC                                                                                                                                                                                                                       |
| <br>Heat Exchanger<br>Sheet Metal                                       | <br>ONR/Routers<br>Microwave PCBA                                                                                                                                                                                                                                                                                                                 | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 8px;">Railway &amp; Metro</div> <br/>Doors                             <br/>Gangway                         </div> |
| <br>Motors<br>Compressor Muffler<br>Cross Flow Fan                      | <br>ODU Inverter Control Box<br>IDU Inverter Control Box<br>WAC Main & Display CTL                                                                                                                                                                                                                                                                | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 8px;">Bus AC</div> <br/>Roof Mounting                             <br/>Power Packs                         </div>  |
| <b>Through acquisition of Ascent</b>                                    |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                              |
| <br>Single sided PCB<br>Double sided PCB<br>Multi-Layered PCB<br>RF PCB | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 8px;">MCU &amp; Inverters</div> <br/>Controller for Railway                             <br/>Controller for Metro                             <br/>Electronic Thermostat                         </div> |                                                                                                                                                                                                                                                              |

Source: Company, MOFSL

**Key business segments:**

**RAC & Components:** Amber specializes in designing and manufacturing Room Air Conditioner (RAC) systems, including Indoor Units (IDU), Window ACs (WDU), and Outdoor Units (ODU) for Split ACs ranging from 0.75 ton to 2.0 ton. The company’s product range includes various energy ratings and refrigerant types, offering fixed speed and Inverter AC models. In FY23, Amber expanded its customer base and product portfolio by introducing commercial ductable and cassette ACs, thus enhancing its ability to meet diverse customer needs in the commercial RAC segment. Amber's manufacturing expertise extends to functional components for ACs such as heat exchangers, motors, controllers, fans, and condensers, as well as sheet metal components, copper tubing components, and injection molding parts. Additionally, the company manufactures components for consumer durable goods and automobiles, covering multiple product categories. Currently, Amber covers 70% of the total value chain of IDU and ODU for Inverter SACs.

**Electronics (ILJIN, EVER & Ascent):** Amber, through its subsidiaries, is a market leader in manufacturing PCBAs for the consumer durable sector, with a proven track record and extensive experience in home appliances, RAC, and Telecom sectors. In FY23, it expanded its customer base in this division and ventured into manufacturing Smart Wearables and Hearables products. Additionally, it introduced new products for telecom equipment such as ONT and RRH. With the electronics market moving towards smarter products, the demand for PCBAs is expected to improve, further solidifying the division's position.

**Railway Subsystems & Mobility division:** Amber acquired Sidwal in 2019 to expand its offerings in mobility AC solutions. Sidwal is the largest supplier of roof-mounted package unit ACs. It caters to the segments like Railways, Bus, Metro, Defense, and Telecom & IT. Its key clients include Indian Railways, BEML, Siemens, DMRC, CAF, et al. The company offers a diverse range of mobility products, including roof-mounted ACs for Mainline Coaches, AC & refrigeration solutions for railways, roof-mounted loco drivers' cab AC, metros, and other HVAC products. Additionally, the company has carried out new product innovations across industries and provided Air Conditioning solutions to Metro Line Coaches. It has also secured significant contracts for metro AC projects.

## Key risks: Slowdown in the industry, input price volatility

Amber's performance is subject to the following risks associated with:

- **Shifting of in-house production by OEMs:** The OEM players are shifting towards in-house production and assembly in the RAC industry, which could adversely affect ODM players (like Amber).
- **Competitive intensity:** The RAC industry faces intense competition owing to rapid capacity expansion by all players led by PLI incentives, which could lead to demand-supply mismatch. This could eventually result in loss of market share for Amber.
- **Seasonal variations:** Demand for ACs is highly seasonal, with peak demand visible during the summer months. The manufacturers and retailers may face challenges in managing inventories and cash flows during off-peak seasons.
- **Market demand fluctuations:** Changes in consumer preferences, economic conditions, and/or technological advancements can lead to fluctuations in demand for RAC units, PCBA, and railway subsystems. The fluctuations pose a risk of overstocking or understocking, thereby adversely impacting profitability.
- **Volatility in raw material prices:** Persistent high commodity prices present enduring obstacles for the company's ODM business, necessitating careful management of raw material procurement risks.
- **Environmental concerns:** Growing awareness of environmental issues may lead to a shift in consumer preferences towards more energy-efficient and environmentally friendly air conditioning solutions. Companies that fail to adapt to these changing preferences may face declining sales.

**SWOT analysis**

- ❖ Market leader in AC ODM business
- ❖ Enjoys high wallet share with key clients
- ❖ Expanded presence into high growth electronic segment for PCB manufacturing
- ❖ Expanded offerings in high margin railways segment
- ❖ Continued investment in building R&D, foreign player tie-ups and backward integration

**S**  
STRENGTH



- ❖ Limitations on improving realization in AC ODM segment
- ❖ Limited bargaining power with clients
- ❖ Large upfront capex is currently required for scaling up capacities across segments

**W**  
WEAKNESS



- ❖ 'Make in India' and various PLI schemes provide a strong addressable market opportunity for Amber in the RAC segment
- ❖ Amber can capitalize on new growth areas based on its existing experience in scaling up segments
- ❖ Export opportunity across various segments

**O**  
OPPORTUNITY



- ❖ Increased competition
- ❖ Slowdown in industry growth
- ❖ Loss of business from anchor clients
- ❖ Chip availability and supply chain issues

**T**  
THREATS





## Management Team



### Mr. Jasbir Singh (Chairman & CEO)

Mr. Jasbir Singh has more than 19 years of experience in the RAC manufacturing sector. He has been serving the Board of Amber since 1<sup>st</sup> Oct'04. He was appointed as the Chairman and CEO of the Company w.e.f. 25<sup>th</sup> Aug'17. He is also the member of the Audit Committee and Corporate Social Responsibility Committee of Amber. He holds a Bachelor's degree in Production Engineering (Industrial Production) from Karnataka University and Master's degree in Business Administration from the University of Hull, UK.



### Mr. Daljit Singh (Managing Director)

Mr. Daljit Singh is serving the Board of Amber since 1<sup>st</sup> Jan'08 and appointed as the Managing Director w.e.f. 25<sup>th</sup> Aug'17. He is also the member of the Stakeholder Relationship Committee and Corporate Social Responsibility Committee of Amber. He has 17 years' experience in finance services and 10 years of experience in the RAC manufacturing sector. He holds a Bachelor's degree in Electronic Engineering from Nagpur University and Master's degree in Information Technology from the Rochester Institute of Technology.



### Mr. Sanjay Arora (CEO – Electronics division)

Mr. Sanjay Arora is the CEO of Electronics Division of Amber. He has been associated with the company since 23<sup>rd</sup> Jul'12 and has more than 37 years of experience in the manufacturing industry. He is responsible for the Electronics Division of Amber (currently comprising ILJIN Electronics and EVER Electronics). He is also responsible for innovation, security, and legal matters of the company. He holds a degree in Electrical Engineering with specialization in Electronics and Television Technology from the YMCA Institute of Engineering, Faridabad.



### Mr. Udaiveer Singh (CEO – Mobility Division)

Mr. Udaiveer Singh has been associated with the company since 15<sup>th</sup> Dec'03 and has over 26 years of experience in the manufacturing industry. He is also serving as the Managing Director of Sidwal Refrigeration Industries Private Limited, a wholly owned subsidiary of Amber. He is responsible for the planning and operations of the RAC manufacturing facilities of Amber. He holds a Diploma in Mechanical Engineering from the Board of Technical Education U.P.



### Mr. Sachin Gupta (CEO – RAC & CAC Division)

Mr. Sachin Gupta has been associated with the company since 1<sup>st</sup> Nov'14 and has over 17 years of experience in the manufacturing industry. He is responsible for business development in Amber. He holds a Bachelor's degree in Electrical Engineering from Punjab Technical University and a Master's degree in Business Administration from All India Institute of Management Studies, Chennai.



### Mr. Sudhir Goyal (Chief Financial Officer)

Mr. Sudhir Goyal has been associated with the company since 23<sup>rd</sup> Oct'12 and has over 17 years of experience in the finance function within the manufacturing sector. He is the head of the finance & accounts department of Amber. He holds a Bachelor's degree in Commerce (Hons.) from the University of Delhi. He is an associate member of the Institute of Chartered Accountants of India.



## Financials and valuations

## Consolidated - Income Statement

(INR m)

| Y/E Mar                             | FY20          | FY21          | FY22          | FY23          | FY24          | FY25E         | FY26E           | FY27E           |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|
| <b>Total Income from Operations</b> | <b>39,628</b> | <b>30,305</b> | <b>42,064</b> | <b>69,271</b> | <b>67,293</b> | <b>84,618</b> | <b>1,02,226</b> | <b>1,19,390</b> |
| Change (%)                          | 44.0          | -23.5         | 38.8          | 64.7          | -2.9          | 25.7          | 20.8            | 16.8            |
| Raw Materials                       | 33,017        | 25,135        | 35,297        | 58,678        | 54,999        | 69,159        | 83,551          | 97,579          |
| <b>Gross Profit</b>                 | <b>6,611</b>  | <b>5,170</b>  | <b>6,767</b>  | <b>10,593</b> | <b>12,293</b> | <b>15,458</b> | <b>18,675</b>   | <b>21,811</b>   |
| Employee Cost                       | 1,063         | 1,021         | 1,500         | 2,116         | 2,572         | 2,508         | 3,029           | 3,538           |
| Other Expenses                      | 2,455         | 1,947         | 2,514         | 4,298         | 4,802         | 6,691         | 7,280           | 8,383           |
| <b>Total Expenditure</b>            | <b>36,535</b> | <b>28,102</b> | <b>39,310</b> | <b>65,092</b> | <b>62,374</b> | <b>78,358</b> | <b>93,860</b>   | <b>1,09,501</b> |
| % of Sales                          | 92.2          | 92.7          | 93.5          | 94.0          | 92.7          | 92.6          | 91.8            | 91.7            |
| <b>EBITDA</b>                       | <b>3,093</b>  | <b>2,203</b>  | <b>2,754</b>  | <b>4,179</b>  | <b>4,919</b>  | <b>6,260</b>  | <b>8,366</b>    | <b>9,889</b>    |
| Margin (%)                          | 7.8           | 7.3           | 6.5           | 6.0           | 7.3           | 7.4           | 8.2             | 8.3             |
| Depreciation                        | 848           | 923           | 1,079         | 1,391         | 1,865         | 2,162         | 2,405           | 2,632           |
| <b>EBIT</b>                         | <b>2,245</b>  | <b>1,280</b>  | <b>1,675</b>  | <b>2,788</b>  | <b>3,054</b>  | <b>4,098</b>  | <b>5,961</b>    | <b>7,257</b>    |
| Int. and Finance Charges            | 419           | 410           | 464           | 1,118         | 1,670         | 1,584         | 1,505           | 1,512           |
| Other Income                        | 82            | 331           | 332           | 527           | 553           | 667           | 409             | 518             |
| <b>PBT bef. EO Exp.</b>             | <b>1,907</b>  | <b>1,201</b>  | <b>1,543</b>  | <b>2,197</b>  | <b>1,937</b>  | <b>3,181</b>  | <b>4,865</b>    | <b>6,263</b>    |
| EO Items                            | 0             | 0             | 0             | 0             | 0             | 0             | 0               | 0               |
| <b>PBT after EO Exp.</b>            | <b>1,907</b>  | <b>1,201</b>  | <b>1,543</b>  | <b>2,197</b>  | <b>1,937</b>  | <b>3,181</b>  | <b>4,865</b>    | <b>6,263</b>    |
| Total Tax                           | 266           | 369           | 429           | 559           | 519           | 814           | 1,245           | 1,603           |
| Tax Rate (%)                        | 13.9          | 30.7          | 27.8          | 25.4          | 26.8          | 25.6          | 25.6            | 25.6            |
| Minority Interest                   | 57            | 17            | 21            | 66            | 66            | 72            | 80              | 88              |
| <b>Reported PAT</b>                 | <b>1,584</b>  | <b>816</b>    | <b>1,092</b>  | <b>1,572</b>  | <b>1,352</b>  | <b>2,294</b>  | <b>3,540</b>    | <b>4,572</b>    |
| <b>Adjusted PAT</b>                 | <b>1,584</b>  | <b>816</b>    | <b>1,092</b>  | <b>1,572</b>  | <b>1,352</b>  | <b>2,294</b>  | <b>3,540</b>    | <b>4,572</b>    |
| Change (%)                          | 69.1          | -48.5         | 33.8          | 44.0          | -14.0         | 69.6          | 54.3            | 29.1            |
| Margin (%)                          | 4.0           | 2.7           | 2.6           | 2.3           | 2.0           | 2.7           | 3.5             | 3.8             |

## Consolidated - Balance Sheet

(INR m)

| Y/E Mar                             | FY20          | FY21          | FY22          | FY23          | FY24          | FY25E         | FY26E         | FY27E         |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Equity Share Capital                | 314           | 337           | 337           | 337           | 337           | 337           | 337           | 337           |
| Total Reserves                      | 10,970        | 15,704        | 17,005        | 18,751        | 20,307        | 22,601        | 26,140        | 30,712        |
| <b>Net Worth</b>                    | <b>11,284</b> | <b>16,041</b> | <b>17,342</b> | <b>19,088</b> | <b>20,644</b> | <b>22,938</b> | <b>26,477</b> | <b>31,049</b> |
| Minority Interest                   | 348           | 365           | 387           | 452           | 518           | 591           | 670           | 758           |
| Total Loans                         | 3,205         | 3,495         | 10,318        | 13,437        | 14,332        | 14,332        | 14,332        | 14,332        |
| Deferred Tax Liabilities            | 678           | 769           | 954           | 947           | 1,348         | 1,348         | 1,348         | 1,348         |
| <b>Capital Employed</b>             | <b>15,515</b> | <b>20,670</b> | <b>29,001</b> | <b>33,924</b> | <b>36,841</b> | <b>39,208</b> | <b>42,827</b> | <b>47,487</b> |
| Gross Block                         | 13,465        | 14,683        | 18,037        | 25,621        | 31,309        | 35,309        | 38,809        | 42,309        |
| Less: Accum. Deprn.                 | 3,630         | 4,466         | 5,335         | 6,556         | 8,333         | 10,398        | 12,696        | 15,210        |
| <b>Net Fixed Assets</b>             | <b>9,836</b>  | <b>10,218</b> | <b>12,702</b> | <b>19,065</b> | <b>22,977</b> | <b>24,911</b> | <b>26,114</b> | <b>27,099</b> |
| Goodwill on Consolidation           | 1,223         | 1,223         | 1,457         | 1,425         | 3,609         | 3,609         | 3,609         | 3,609         |
| Capital WIP                         | 118           | 433           | 1,282         | 503           | 908           | 908           | 908           | 908           |
| <b>Total Investments</b>            | <b>0</b>      | <b>1,081</b>  | <b>2,254</b>  | <b>1,934</b>  | <b>2,173</b>  | <b>2,173</b>  | <b>2,173</b>  | <b>2,173</b>  |
| <b>Curr. Assets, Loans&amp;Adv.</b> | <b>17,813</b> | <b>22,892</b> | <b>31,401</b> | <b>39,475</b> | <b>36,236</b> | <b>44,427</b> | <b>53,913</b> | <b>64,504</b> |
| Inventory                           | 6,557         | 7,163         | 8,408         | 10,913        | 8,408         | 13,331        | 16,104        | 18,808        |
| Account Receivables                 | 8,542         | 10,690        | 13,149        | 17,631        | 15,693        | 20,865        | 25,206        | 29,439        |
| Cash and Bank Balance               | 1,203         | 2,899         | 5,626         | 5,594         | 6,913         | 3,395         | 4,882         | 7,643         |
| Loans and Advances                  | 293           | 321           | 18            | 39            | 49            | 48            | 58            | 68            |
| Other Current Asset                 | 1,218         | 1,818         | 4,200         | 5,297         | 5,173         | 6,788         | 7,663         | 8,546         |
| <b>Curr. Liability &amp; Prov.</b>  | <b>13,474</b> | <b>15,175</b> | <b>20,095</b> | <b>28,478</b> | <b>29,060</b> | <b>36,820</b> | <b>43,889</b> | <b>50,806</b> |
| Account Payables                    | 11,058        | 13,169        | 17,021        | 23,039        | 21,671        | 28,143        | 33,999        | 39,708        |
| Other Current Liabilities           | 2,288         | 1,864         | 2,888         | 5,216         | 7,090         | 8,404         | 9,560         | 10,713        |
| Provisions                          | 128           | 141           | 186           | 223           | 300           | 273           | 330           | 385           |
| <b>Net Current Assets</b>           | <b>4,339</b>  | <b>7,717</b>  | <b>11,306</b> | <b>10,997</b> | <b>7,175</b>  | <b>7,607</b>  | <b>10,024</b> | <b>13,698</b> |
| <b>Appl. of Funds</b>               | <b>15,515</b> | <b>20,670</b> | <b>29,001</b> | <b>33,924</b> | <b>36,841</b> | <b>39,208</b> | <b>42,827</b> | <b>47,486</b> |

## Financials and valuations

### Ratios

| Y/E Mar                       | FY20        | FY21        | FY22        | FY23        | FY24        | FY25E       | FY26E        | FY27E        |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| <b>Basic (INR)</b>            |             |             |             |             |             |             |              |              |
| <b>EPS</b>                    | <b>50.4</b> | <b>24.2</b> | <b>32.4</b> | <b>46.7</b> | <b>40.1</b> | <b>68.1</b> | <b>105.1</b> | <b>135.7</b> |
| Cash EPS                      | 77.3        | 51.6        | 64.4        | 87.9        | 95.5        | 132.3       | 176.4        | 213.8        |
| BV/Share                      | 358.8       | 476.1       | 514.7       | 566.5       | 612.7       | 680.8       | 785.8        | 921.5        |
| DPS                           | 3.2         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          |
| Payout (%)                    | 6.4         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          |
| <b>Valuation (x)</b>          |             |             |             |             |             |             |              |              |
| P/E                           | 80.8        | 168.1       | 125.6       | 87.2        | 101.4       | 60.7        | 39.3         | 30.4         |
| Cash P/E                      | 52.6        | 78.9        | 63.2        | 46.3        | 42.6        | 31.2        | 23.4         | 19.3         |
| P/BV                          | 11.3        | 8.5         | 7.9         | 7.2         | 6.6         | 6.1         | 5.3          | 4.5          |
| EV/Sales                      | 3.3         | 4.5         | 3.4         | 2.1         | 2.1         | 1.8         | 1.5          | 1.2          |
| EV/EBITDA                     | 42.0        | 62.5        | 51.5        | 34.7        | 29.4        | 24.0        | 17.8         | 14.7         |
| Dividend Yield (%)            | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0          | 0.0          |
| FCF per share                 | 46.8        | 14.8        | -49.6       | -98.8       | 168.3       | -53.8       | 92.8         | 131.3        |
| <b>Return Ratios (%)</b>      |             |             |             |             |             |             |              |              |
| RoE                           | 15.0        | 6.0         | 6.5         | 8.6         | 6.8         | 10.5        | 14.3         | 15.9         |
| RoCE                          | 15.0        | 6.6         | 6.1         | 8.2         | 7.8         | 9.8         | 12.1         | 13.4         |
| RoIC                          | 14.7        | 5.8         | 6.7         | 9.1         | 8.5         | 10.2        | 13.1         | 15.1         |
| <b>Working Capital Ratios</b> |             |             |             |             |             |             |              |              |
| Fixed Asset Turnover (x)      | 2.9         | 2.1         | 2.3         | 2.7         | 2.1         | 2.4         | 2.6          | 2.8          |
| Asset Turnover (x)            | 2.6         | 1.5         | 1.5         | 2.0         | 1.8         | 2.2         | 2.4          | 2.5          |
| Inventory (Days)              | 60          | 86          | 73          | 58          | 46          | 58          | 58           | 58           |
| Debtor (Days)                 | 79          | 129         | 114         | 93          | 85          | 90          | 90           | 90           |
| Creditor (Days)               | 102         | 159         | 148         | 121         | 118         | 121         | 121          | 121          |
| <b>Leverage Ratio (x)</b>     |             |             |             |             |             |             |              |              |
| Current Ratio                 | 1.3         | 1.5         | 1.6         | 1.4         | 1.2         | 1.2         | 1.2          | 1.3          |
| Interest Cover Ratio          | 5.4         | 3.1         | 3.6         | 2.5         | 1.8         | 2.6         | 4.0          | 4.8          |
| Net Debt/Equity               | 0.2         | 0.0         | 0.1         | 0.3         | 0.3         | 0.4         | 0.3          | 0.1          |

### Consolidated - Cashflow Statement

| Y/E Mar                          | FY20          | FY21          | FY22          | FY23          | FY24           | FY25E         | FY26E         | FY27E         |
|----------------------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|
| <b>(INR m)</b>                   |               |               |               |               |                |               |               |               |
| OP/(Loss) before Tax             | 1,907         | 1,201         | 1,543         | 2,197         | 1,913          | 3,181         | 4,865         | 6,263         |
| Depreciation                     | 848           | 923           | 1,079         | 1,391         | 1,865          | 2,162         | 2,405         | 2,632         |
| Interest & Finance Charges       | 419           | 406           | 464           | 1,118         | 1,670          | 1,584         | 1,505         | 1,512         |
| Direct Taxes Paid                | -488          | -79           | -539          | -539          | -461           | -814          | -1,245        | -1,603        |
| (Inc)/Dec in WC                  | 44            | -80           | -62           | -582          | 5,032          | -3,926        | -904          | -881          |
| <b>CF from Operations</b>        | <b>2,731</b>  | <b>2,371</b>  | <b>2,485</b>  | <b>3,585</b>  | <b>10,019</b>  | <b>2,187</b>  | <b>6,625</b>  | <b>7,923</b>  |
| Others                           | 151           | -162          | -77           | -379          | -371           | 0             | 0             | 0             |
| <b>CF from Operating incl EO</b> | <b>2,882</b>  | <b>2,210</b>  | <b>2,407</b>  | <b>3,206</b>  | <b>9,648</b>   | <b>2,187</b>  | <b>6,625</b>  | <b>7,923</b>  |
| (Inc)/Dec in FA                  | -1,411        | -1,711        | -4,077        | -6,535        | -3,977         | -4,000        | -3,500        | -3,500        |
| <b>Free Cash Flow</b>            | <b>1,471</b>  | <b>499</b>    | <b>-1,670</b> | <b>-3,329</b> | <b>5,671</b>   | <b>-1,813</b> | <b>3,125</b>  | <b>4,423</b>  |
| (Pur)/Sale of Investments        | -1,672        | -1,568        | -1,542        | 210           | 788            | 0             | 0             | 0             |
| Others                           | -183          | -1,531        | -1,277        | 1,437         | -7,156         | -23           | -27           | -32           |
| <b>CF from Investments</b>       | <b>-3,266</b> | <b>-4,810</b> | <b>-6,896</b> | <b>-4,888</b> | <b>-10,345</b> | <b>-4,023</b> | <b>-3,527</b> | <b>-3,532</b> |
| Issue of Shares                  | 0             | 3,936         | 0             | 0             | 0              | 0             | 0             | 0             |
| Inc/(Dec) in Debt                | 1,209         | 161           | 6,031         | 3,120         | 589            | 0             | 0             | 0             |
| Interest Paid                    | -430          | -372          | -430          | -1,097        | -1,567         | -1,584        | -1,505        | -1,512        |
| Dividend Paid                    | -121          | 0             | 0             | 0             | 0              | 0             | 0             | 0             |
| Others                           | -23           | -24           | -46           | -96           | -238           | 0             | 0             | 0             |
| <b>CF from Fin. Activity</b>     | <b>634</b>    | <b>3,700</b>  | <b>5,555</b>  | <b>1,928</b>  | <b>-1,216</b>  | <b>-1,584</b> | <b>-1,505</b> | <b>-1,512</b> |
| <b>Inc/Dec of Cash</b>           | <b>250</b>    | <b>1,099</b>  | <b>1,066</b>  | <b>246</b>    | <b>-1,913</b>  | <b>-3,420</b> | <b>1,593</b>  | <b>2,879</b>  |
| Opening Balance                  | 450           | 700           | 1,920         | 2,986         | 3,232          | 6,913         | 3,395         | 4,882         |
| Other Bank Balances              | 503           | 1,100         | 2,640         | 2,363         | 5,594          | -97           | -107          | -118          |
| <b>Closing Balance</b>           | <b>1,203</b>  | <b>2,899</b>  | <b>5,626</b>  | <b>5,594</b>  | <b>6,913</b>   | <b>3,395</b>  | <b>4,882</b>  | <b>7,643</b>  |

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