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# Strategy

India

April 15, 2024

## The curious case of the Indian cement sector (revisited)

We continue to be baffled by (1) the market’s perennial hopes about meaningfully higher profitability for the cement sector despite large earnings downgrades every year; FY2024 saw an EPS change of +4-(-)68%% from the beginning of FY2024 and (2) the Street’s continued usage of ‘incorrect’ valuation multiples and desire to use ‘high’ multiples in the face of incontrovertible facts about the capex-intensive, commodity nature of the cement business.

### FY2024 has turned out to be no different from previous years

FY2024 was another ‘routine’ year of sharp earnings downgrades for the cement sector, with large EPS cuts in several companies since the start of FY2024 (see Exhibit 1). As such, FY2024 was no different from the previous years (see Exhibit 2). We note that earnings downgrades also have the unintended consequence of ‘inflated’ valuations, based on actual reported earnings versus estimated earnings, becoming the benchmark for target multiples.

### FY2025 starting with renewed hopes

FY2025E consensus estimates show a sharp increase in EPS versus FY2024 estimates (see Exhibit 3). We are not sure about the reasons for the optimism other than conditioned behavior, fed by perennial optimism. It is perhaps time for the Street to adopt a more realistic approach to the sector. The oft-repeated argument about ‘price discipline’ resulting in higher profitability seems rather tedious and is dubious anyway, as hopes of ‘cartel’ pricing (whether or not) should not be a basis for any rational investment thesis, especially in light of the continued large supply-demand imbalance in the sector through FY2026E (see Exhibit 4). We note that our profitability assumptions translate into reasonably healthy CRoCI for the companies (see Exhibit 5).

### Cement is and will be a capex-intensive, commodity business

We see a large disconnect between (1) the Street’s approach and (2) our valuation approach to the valuation of cement stocks, which takes cognizance of the capex-intensive, commodity nature of the business. The Street seems singularly obsessed with earnings growth and is willing to ascribe high P/E multiples for volume-led growth (assuming stable and reasonable profitability). However, the very nature of the business should lead to lower FCF relative to PAT; any incremental volume will require additional capex. The sector’s FCF-to-PAT ratio has been expectedly on the lower side (see Exhibit 6).

### Multiples of cement stocks should be about half on a ‘first-principle’ basis

In our view, the multiples of the cement stocks should be about half of their current multiples on a ‘first-principle’ basis. We note that the sector has a very low asset turnover ratio (around 1X for expansion projects, lower for greenfield projects), which should automatically cap their valuations. However, most cement stocks trade at 2.5-5X FY2025E BV, which is clearly very high in the context of the low-to-mid-teens RoEs of the companies (see Exhibit 7) despite our assumptions of reasonably high profitability and CRoCI.

### Key estimates summary

	2024E	2025E	2026E
<b>Nifty estimates</b>			
Earnings growth (%)	19.9	9.6	12.4
Nifty EPS (Rs)	989	1,087	1,227
Nifty P/E (X)	22.8	20.7	18.4
<b>Macro data</b>			
Real GDP (%)	7.6	6.6	6.5
Avg CPI inflation (%)	5.4	4.5	4.2

Source: CEIC, Companies, Kotak Institutional Equities estimates

### Quick Numbers

+4-(-)68% change in FY2024 consensus EPS estimates during the course of FY2024; 19-70% downgrade in FY2023 consensus EPS estimates during the course of FY2023

Cement sector capacity utilization to remain around 70% through FY2026E and we model 16-17% CRoCI for the industry over FY2024-26E

Cement stocks trade at 2.5-5X FY2025E BV for low-to-mid-teens RoE

[Full sector coverage on KINSITE](#)

Sanjeev Prasad

Anindya Bhowmik

Sunita Baldawa

**Several cement companies saw downgrades in consensus earnings in the past year**

**Exhibit 1: FY2024E consensus EPS movement for cement companies (Rs)**

	FY2024E consensus EPS (Rs)		Change
	Apr-23	Apr-24	(%)
ACC	112	101	(10)
Ambuja Cements	16	16	0
Dalmia Bharat	77	46	(41)
J K Cement	105	109	4
Nuvoco Vistas Corp.	15	5	(68)
Orient Cement	13	9	(29)
Shree Cement	639	642	0
The Ramco Cements	34	20	(40)
UltraTech Cement	256	248	(3)

Source: Bloomberg, FactSet, Kotak Institutional Equities

**Earnings downgrades have been the norm for cement companies over FY2016-23**

**Exhibit 2: Actual versus 1-year prior consensus EPS estimates for cement companies, March fiscal year-ends, 2016-23 (Rs)**

	2016	2017	2018	2019	2020	2021	2022	2023
ACC	(54)	(48)	(19)	(29)	(10)	(1)	4	(55)
Ambuja Cements	(58)	(41)	(11)	(25)	5	25	6	(19)
Dalmia Bharat	(11)	(2)	(70)	(78)	(61)	128	(30)	(53)
J K Cement	(84)	(55)	(32)	(58)	(3)	(5)	(32)	(61)
Nuvoco Vistas Corp.	NA	NA	NA	NA	NA	NA	NA	(36)
Orient Cement	NA	NM	NM	(79)	(29)	27	48	(66)
Shree Cement	(76)	(24)	(34)	(55)	(33)	(11)	(17)	(59)
The Ramco Cements	3	(2)	(36)	(42)	(26)	(14)	(11)	(70)
UltraTech Cement	(21)	(17)	(16)	(24)	58	59	(10)	(27)

Source: Bloomberg, FactSet, Kotak Institutional Equities

**Strong EPS growth projected for FY2025 for cement companies by the Street**

**Exhibit 3: FY2024 and FY2025 consensus EPS for cement companies**

	Consensus EPS estimates		Growth
	FY2024E	FY2025E	(%)
ACC	101	120	19
Ambuja Cements	16	18	11
Dalmia Bharat	46	64	40
J K Cement	109	139	28
Nuvoco Vistas Corp.	5	10	115
Orient Cement	9	12	33
Shree Cement	642	741	15
The Ramco Cements	20	31	52
UltraTech Cement	248	313	26

Source: Bloomberg, FactSet, Kotak Institutional Equities

**Capacity utilization to remain around 70% through FY2026E**

**Exhibit 4: Cement demand supply balance, March fiscal year-ends, 2019-26E (mn tons)**

	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>All-India</b>								
Closing installed capacity (mtpa)	483	501	527	546	574	613	643	682
<b>Incremental installed capacity (mtpa)</b>	<b>16</b>	<b>17</b>	<b>26</b>	<b>19</b>	<b>28</b>	<b>40</b>	<b>30</b>	<b>39</b>
Effective capacity (mtpa)	483	501	527	546	574	613	643	682
<b>Incremental effective capacity (mtpa)</b>	<b>16</b>	<b>17</b>	<b>26</b>	<b>19</b>	<b>28</b>	<b>40</b>	<b>30</b>	<b>39</b>
Capacity growth (%)	3.4	3.6	5.2	3.6	5.2	6.9	4.8	6.1
Cement consumption (mn tons)	333	330	326	355	386	419	444	476
<b>Incremental consumption (mn tons)</b>	<b>39</b>	<b>(3)</b>	<b>(3)</b>	<b>28</b>	<b>31</b>	<b>33</b>	<b>25</b>	<b>31</b>
Consumption growth (%)	13.4	(0.8)	(1)	8.6	8.7	8.6	6.1	7.1
Cement production (mn tons)	337	334	331	359	390	423	449	480
<b>Incremental production (mn tons)</b>	<b>39</b>	<b>(3)</b>	<b>(3)</b>	<b>28</b>	<b>31</b>	<b>33</b>	<b>25</b>	<b>31</b>
Growth (%)	13.3	(0.8)	(1)	8.5	8.6	8.5	6.0	7.0
<b>Capacity utilization (%)</b>	<b>70</b>	<b>67</b>	<b>63</b>	<b>66</b>	<b>68</b>	<b>69</b>	<b>70</b>	<b>70</b>

Source: CMA, Kotak Institutional Equities estimates

**Cement companies make and will make reasonably high CRoCI on our profitability assumptions**

**Exhibit 5: Cash Return on Gross Capital Invested for cement companies, March fiscal year-ends, 2019-26E (%)**

	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Pan-India companies</b>								
ACC	24	19	22	26	14	16	17	19
Ambuja Cements	11	12	14	15	12	13	14	17
Ultratech Cement	12	22	19	17	15	18	19	19
<b>Pan-India average</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>14</b>	<b>15</b>	<b>17</b>	<b>18</b>
<b>Regional companies</b>								
JK Cement	13	17	20	17	14	18	19	19
Nuvoco Vistas Corp.	7	11	10	9	12	10	10	11
Shree Cement	26	29	28	25	20	21	20	19
<b>Regional average</b>	<b>16</b>	<b>19</b>	<b>19</b>	<b>17</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>16</b>
<b>Overall</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>18</b>	<b>14</b>	<b>16</b>	<b>17</b>	<b>17</b>

Source: Companies, Kotak Institutional Equities estimates

**Cement companies have historically reported significantly lower FCF compared to the reported EBITDA/PAT**

**Exhibit 6: EBITDA, PAT, Capex and FCF of cement companies, March fiscal year-ends, 2014-23 (Rs mn)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total 2014-23
<b>ACC</b>											
EBITDA	16,286	15,073	15,372	14,737	19,091	20,392	24,095	24,811	29,981	19,249	199,086
<b>PAT</b>	<b>8,788</b>	<b>8,591</b>	<b>7,447</b>	<b>6,899</b>	<b>9,154</b>	<b>10,006</b>	<b>13,589</b>	<b>15,403</b>	<b>19,179</b>	<b>10,469</b>	<b>109,525</b>
Capex	9,478	15,270	11,681	4,976	5,194	4,951	5,404	7,458	11,754	21,047	97,213
<b>FCF</b>	<b>2,253</b>	<b>(1,053)</b>	<b>3,156</b>	<b>9,077</b>	<b>10,679</b>	<b>6,725</b>	<b>18,243</b>	<b>16,144</b>	<b>18,070</b>	<b>(31,821)</b>	<b>51,473</b>
<b>Ambuja</b>											
EBITDA	16,669	19,284	15,315	16,827	19,278	18,915	21,489	26,466	32,152	32,204	218,598
<b>PAT</b>	<b>12,946</b>	<b>14,964</b>	<b>8,076</b>	<b>9,701</b>	<b>12,131</b>	<b>12,091</b>	<b>15,286</b>	<b>17,901</b>	<b>21,489</b>	<b>27,108</b>	<b>151,690</b>
Capex	7,370	8,202	6,169	3,832	5,428	5,921	11,165	9,855	11,606	21,537	91,083
<b>FCF</b>	<b>4,043</b>	<b>9,077</b>	<b>7,781</b>	<b>13,888</b>	<b>16,418</b>	<b>1,832</b>	<b>21,065</b>	<b>22,051</b>	<b>19,398</b>	<b>(20,333)</b>	<b>95,219</b>
<b>Dalmia Bharat</b>											
EBITDA	3,263	4,546	15,079	19,019	20,360	19,420	21,060	27,700	24,310	23,160	177,917
<b>PAT</b>	<b>(84)</b>	<b>92</b>	<b>1,908</b>	<b>3,448</b>	<b>2,650</b>	<b>3,050</b>	<b>2,680</b>	<b>12,070</b>	<b>8,100</b>	<b>6,290</b>	<b>40,204</b>
Capex	7,059	4,953	4,141	3,366	3,930	9,260	13,450	10,380	17,690	27,090	101,319
<b>FCF</b>	<b>(7,317)</b>	<b>(4,709)</b>	<b>6,877</b>	<b>5,538</b>	<b>5,840</b>	<b>4,510</b>	<b>6,000</b>	<b>22,850</b>	<b>60</b>	<b>(6,770)</b>	<b>32,879</b>
<b>J K Cement</b>											
EBITDA	3,527	4,421	5,453	8,245	7,875	8,345	12,134	15,387	14,823	13,143	93,353
<b>PAT</b>	<b>772</b>	<b>1,436</b>	<b>634</b>	<b>1,777</b>	<b>2,896</b>	<b>2,703</b>	<b>4,964</b>	<b>7,086</b>	<b>6,870</b>	<b>4,263</b>	<b>33,402</b>
Capex	15,576	5,472	3,442	1,256	1,443	6,313	12,428	7,678	15,538	16,114	85,260
<b>FCF</b>	<b>(12,825)</b>	<b>(4,581)</b>	<b>42</b>	<b>1,865</b>	<b>5,027</b>	<b>(1,706)</b>	<b>(982)</b>	<b>6,534</b>	<b>(8,411)</b>	<b>(4,603)</b>	<b>(19,641)</b>
<b>Nuvoco Vistas Corp.</b>											
EBITDA					10,663	9,177	16,804	14,605	15,016	12,104	78,368
<b>PAT</b>					875	(265)	(115)	(259)	321	159	<b>715</b>
Capex					2,687	5,808	5,695	5,473	4,106	4,863	28,631
<b>FCF</b>					<b>3,453</b>	<b>(917)</b>	<b>1,112</b>	<b>5,325</b>	<b>3,016</b>	<b>7,579</b>	<b>19,568</b>
<b>Orient Cement</b>											
EBITDA	65	849	(459)	(1,089)	2,167	3,120	3,829	5,507	5,911	3,645	23,545
<b>PAT</b>	<b>(1,073)</b>	<b>(270)</b>	<b>(1,670)</b>	<b>(3,191)</b>	<b>(443)</b>	<b>476</b>	<b>866</b>	<b>2,142</b>	<b>2,633</b>	<b>1,228</b>	<b>698</b>
Capex	3,297	9,222	3,697	(2,815)	1,470	1,212	766	507	534	1,300	19,190
<b>FCF</b>	<b>(1,628)</b>	<b>(2,401)</b>	<b>(2,632)</b>	<b>1,793</b>	<b>(803)</b>	<b>346</b>	<b>995</b>	<b>5,726</b>	<b>215</b>	<b>(467)</b>	<b>1,144</b>
<b>Shree Cement</b>											
EBITDA	13,126	12,170	14,725	23,567	24,426	26,528	36,745	39,547	36,478	29,423	256,736
<b>PAT</b>	<b>8,563</b>	<b>4,481</b>	<b>4,019</b>	<b>13,390</b>	<b>13,842</b>	<b>11,265</b>	<b>15,702</b>	<b>23,119</b>	<b>23,766</b>	<b>13,281</b>	<b>131,429</b>
Capex	15,829	11,303	7,348	12,947	25,263	18,853	12,941	9,984	19,694	28,053	162,214
<b>FCF</b>	<b>(2,199)</b>	<b>680</b>	<b>2,968</b>	<b>11,836</b>	<b>(43)</b>	<b>1,484</b>	<b>23,586</b>	<b>30,584</b>	<b>8,357</b>	<b>4,971</b>	<b>82,222</b>
<b>The Ramco Cements</b>											
EBITDA	5,639	7,199	10,765	12,077	11,127	10,445	11,475	15,573	12,901	11,856	109,055
<b>PAT</b>	<b>1,377</b>	<b>2,437</b>	<b>5,313</b>	<b>6,542</b>	<b>5,605</b>	<b>5,075</b>	<b>6,044</b>	<b>7,636</b>	<b>8,929</b>	<b>3,420</b>	<b>52,377</b>
Capex	5,875	4,392	4,428	3,048	4,945	12,017	19,195	17,659	18,166	17,658	107,382
<b>FCF</b>	<b>13,290</b>	<b>12,345</b>	<b>17,716</b>	<b>7,203</b>	<b>5,156</b>	<b>(4,917)</b>	<b>(12,919)</b>	<b>(1,390)</b>	<b>(5,378)</b>	<b>(6,668)</b>	<b>24,438</b>
<b>UltraTech Cement</b>											
EBITDA	38,179	41,861	46,195	49,291	61,452	73,469	92,472	115,679	115,144	106,199	739,940
<b>PAT</b>	<b>21,445</b>	<b>20,058</b>	<b>22,898</b>	<b>27,121</b>	<b>25,734</b>	<b>25,169</b>	<b>57,553</b>	<b>55,809</b>	<b>56,623</b>	<b>50,640</b>	<b>363,048</b>
Capex	22,282	63,799	20,534	12,593	180,717	95,482	99,980	18,387	56,134	62,001	631,909
<b>FCF</b>	<b>6,697</b>	<b>(29,640)</b>	<b>17,447</b>	<b>29,738</b>	<b>(145,154)</b>	<b>(49,280)</b>	<b>(24,960)</b>	<b>98,916</b>	<b>22,618</b>	<b>16,924</b>	<b>(56,693)</b>

Source: Companies, Kotak Institutional Equities

**Cement stocks are trading at expensive valuations on P/B basis in the context of low-to-mid-teens RoEs**

**Exhibit 7: Valuation summary of construction material stocks under KIE coverage, March fiscal year-ends, 2024-26E**

Company	EPS growth (%)			P/B (X)			EV/EBITDA (X)			RoE (%)		
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
ACC	66	22	17	3.0	2.7	2.4	15	12	10	12	13	14
Ambuja Cements	(3)	31	10	3.0	2.8	2.6	18	14	12	8	8	9
Dalmia Bharat	21	60	35	2.2	2.1	2.0	13	11	9	5	7	9
Grasim Industries	10	10	6	1.7	1.6	1.5	10	8	7	9	9	9
J K Cement	84	29	16	6.2	5.3	4.5	17	15	13	16	17	17
Nuvoco Vistas Corp.	(75)	217	45	1.3	1.2	1.1	9	8	8	1	4	5
Orient Cement	35	45	15	2.5	2.2	2.0	11	8	7	10	13	14
Shree Cement	76	14	9	4.5	4.1	3.7	20	17	15	12	13	12
The Ramco Cements	23	50	38	2.7	2.6	2.3	16	14	12	5	8	10
UltraTech Cement	37	36	11	4.7	4.1	3.7	22	18	15	12	15	15

Source: Companies, Kotak Institutional Equities estimates

# Electronic Manufacturing Services

India

Sector View: **Cautious**

NIFTY-50: **22,519**

**April 12, 2024**

## India EMS: Large opportunities and multiple tailwinds

We believe that the TAM for the Indian EMS market will reach US\$221 bn (~9% CAGR in FY2023-40E), driven by robust demand for electronic products and an increasing share of local sourcing. Indian EMS service providers are well-positioned to benefit from structural growth drivers, but expensive valuations limit any meaningful plays in the sector. We initiate coverage on Kaynes and Amber with ADD rating, Syrma SGS with REDUCE rating, and AVALON and Cyient DLM with SELL rating. Maintain SELL on Dixon.

### EMS primed for growth

India's growing domestic electronic demand, supported by the government's focus on local manufacturing (lower taxes, production-linked incentive schemes) and potential export opportunities, puts Indian EMS companies on the cusp of robust growth in the medium term. On the back of these tailwinds, we forecast the total addressable market (TAM) for Indian EMS players reaching US\$221 bn by FY2040E (9% CAGR over FY2023-40E) from US\$51 bn as of FY2023.

### Government policy a key enabler of growth

The Indian government has launched Production-Linked Incentive (PLI) schemes for 15 sectors. Five of them are for the Mobile, Telecom, IT Hardware, White Goods and Semiconductor sectors, specifically catering to electronics manufacturing. We see this as a key trigger for EMS companies in India. We see continued government push for PLI to be a key growth enabler for the EMS sector and for companies under our coverage with exposure to the five schemes.

### Vertical integration key to long-term differentiation

Companies that have an exposure to diverse end-markets and focus on backward integration to create sufficient differentiation from peers stand to benefit in the long term. Hence, within the B2C segment, we prefer Amber (over Dixon), an ODM player with a higher degree of vertical integration. Among B2B players, exposure to multiple end-markets that are seeing strong growth is key. In the near term, within the Indian market, Auto, EVs, Industrials and Railway are seeing very strong growth, hence our preference for Kaynes and Syrma that have higher domestic exposure versus names such as Cyient DLM and Avalon that have more global exposure.

### Kaynes and Amber (ADD); Syrma (REDUCE); Avalon and Cyient DLM (SELL)

The valuation rerating of most Indian EMS companies is ahead of the fundamentals and limits optimism despite a significant growth runway. Current valuations are extrapolating recent growth trends to sustain for all companies despite different geographical and product exposures across companies. We initiate coverage on Kaynes and Amber (both ADD), Syrma (REDUCE) and Avalon and Cyient DLM (both SELL). Retain SELL on Dixon Technologies.

### Company data and valuation summary

Company	Mcap (US\$ mn)	Rating	FV (Rs)	Upside/ (downside) (%)
Dixon	5,585	SELL	5,200	-34%
Kaynes	1,931	ADD	2,850	14%
Amber	1,504	ADD	4,000	8%
Syrma	1,036	REDUCE	500	2%
Cyient DLM	673	SELL	570	-19%
Avalon	409	SELL	410	-21%

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Deepak Krishnan

Aditya Mongia

Sai Siddhardha P

## 1

## Executive Summary: Primed for growth, opportunities and risk

We forecast that the total addressable market (TAM) for Indian EMS players will reach US\$221 bn (9% CAGR over FY2023-40E) from US\$51 bn in FY2023, driven by (1) localization of the Indian electronics demand, (2) strong domestic demand, and (3) government policy-related tailwinds, driven by policy initiatives such as the PLI (Production-Linked Incentive) schemes. Companies that have an exposure to diverse end-markets and focus on backward integration to create sufficient differentiation from peers stand to benefit in the long term. Valuations are at a premium across Indian EMS companies, extrapolating recent growth trends to sustain in the medium term for all companies despite different geographical and product exposures. We initiate coverage on Kaynes and Amber with an ADD rating, Syrma with a REDUCE rating, and Avalon and Cyient DLM with a SELL rating. Retain SELL on Dixon Technologies.

### Demand tailwinds

India's growing domestic demand, supported by the government's focus on local manufacturing, including policy support (lower taxes, production-linked incentive schemes), and potential export opportunities put Indian EMS companies on the cusp of robust growth in the medium term. The TAM for Indian EMS players could reach US\$221 bn by FY2040 (9% CAGR over FY2023-40E), driven by:

- ▶ **Domestic demand:** Robust domestic demand, helped by growing population and improving income levels and increasing penetration of electronics in consumer-oriented sectors and industrial-oriented segments such as defense, auto and railways.
- ▶ **Import substitution:** Currently, imports form nearly 30% of the Indian electronic market, driven largely by China. PLI incentives are designed to make domestic manufacturing competitive and require compulsory local sourcing of certain components within a specific time period. This would help in shifting some imports volumes toward domestic manufacturers.
- ▶ **New sectors:** Further, multiple product categories, which have traditionally not been considered as a primary target for electronic manufacturers (e.g., auto), are seeing increased electronic content. EV 2Ws have electronic components worth ~Rs15,000-20,000/unit, seven times higher than ~Rs2,000/unit for ICE 2Ws. Similarly, EV 4Ws consist of electronic components worth ~Rs60,000-70,000 versus ~Rs15,000-20,000 for ICE vehicles, vastly expanding the TAM of EMS players.
- ▶ **Exports a long-term opportunity:** In the past couple of years, companies have increasingly looked at alternate sources to China. Geopolitical tensions and trade barriers have increased the cost of procuring products from China. This could provide an opportunity for Indian EMS players in the medium term.

### Government policy a key enabler of growth

The Indian government has launched Production-Linked Incentive (PLI) schemes for 15 sectors, with varying degree of: 1) current domestic manufacturing capabilities, 2) ability to reduce import dependency and 3) future growth potential. It has a US\$32 bn outlay, with incentives paid over the life of the scheme on the basis of meeting specific revenue and capex targets. Five of these schemes—for Mobile, Telecom, IT Hardware, White Goods and Semiconductor sectors—are specifically beneficial to electronics manufacturing in India and are expected to be the key trigger for Indian EMS companies. Most stocks under our coverage has exposure to multiple schemes. Thus, we see the continued government push on PLI to be a key enabler for the EMS sector.

**Five PLI schemes with a total outlay for US\$19 bn help drive EMS growth across sectors**

Exhibit 1: Details of electronic sector PLI schemes

Electronics Sector PLI Schemes						
Sector	Financial Outlay (Rs bn)	Financial Outlay (US\$ bn)	Investment (Rs bn)	Approved companies	Domestic Companies	Foreign companies
LSEM(Mobile)	410	5	110	32	20	12
IT Hardware	73	1	25	27		
White Goods	62	1	66	57	47	10
Telecom & Networking Products	122	2	33	42	35	7
Semiconductors	760	10		4	3	1

Source: MeitY, Kotak Institutional Equities

**Valuation rerating extrapolates current growth rate to sustain**

Indian EMS companies have demonstrated resilience and have been successful in capturing upcoming opportunities in electronics manufacturing. This has aided in better-than-historical growth over FY2021-23 across most names. The margin and working capital trends have been divergent across names based on geographical exposure, as have product mix and industries served. In the medium term, we prefer companies that have strong competitive positioning in fast-growing areas, greater exposure to high-growth Indian domestic market and are looking for vertical integration. We see Amber looking to diversify its presence across industries. We expect Cyient DLM and Avalon, which have high global exposures, to see moderate growth in the medium term. In our view, Kaynes’ valuations can be justified given the high growth potential and its foray into the semiconductor value chain.

**Select picks will have potential: Initiate on Kaynes and Amber with ADD, Syrma with REDUCE, and Avalon and Cyient DLM with SELL; retain SELL on Dixon**

Our stock pick framework is based on (1) strong presence in fast-growing areas, (2) diversified industry exposure for sustainable growth, (3) improving competitive positioning, (4) healthy cash conversion and better return ratios and (5) reasonable valuations. Given below are our views on Indian EMS companies in brief.

**Kaynes: Ahead of the pack; in the investment phase in near term**

- ▶ Kaynes Technology is a leading EMS player, which is vertically integrating with its foray into OSAT and PCB manufacturing. Kaynes’ EMS segment has had industry-leading growth and margins. However, with the company now foraying into OSAT and PCB manufacturing, we expect a temporary blip in returns and margins in the short term, with a potential for it to be an important player in the semiconductor value chain in the medium term.
- ▶ Kaynes will be in an investment mode in the next couple of years, driven by expansion in 1) the existing EMS business, 2) OSAT and 3) PCB. We expect both OSAT and PCB to have better margins and return profile compared with the traditional EMS vertical. Further, the success of the OSAT business can help Kaynes go beyond the EMS vertical and gain a foothold in the global semiconductor value chain. Hence, in the medium term, we see Kaynes reaching a steady EBITDA margin of 15.5% and RoE of 22% (versus 14% EBITDA and 16% ROE currently). However, in the near term, we diverge from the consensus and see margins remaining weak as Kaynes scales up these new verticals. Further, the return ratios will be impacted by sub-par returns from OSAT and PCB.
- ▶ We initiate coverage on Kaynes with an ADD rating and a DCF-based Fair Value of Rs2,850, implying 58X P/E on consolidated Mar-26E earnings. The DCF-based FV of only the EMS business is Rs2,300 (implies 42X P/E on March 2026E EMS earnings). We forecast Kaynes’ earnings to see a 49% CAGR over FY2023-26E, driven by a 50% CAGR in revenue (45% growth in EMS, aided by OSAT and PCB segments). However, since Kaynes plans to invest to enhance its capabilities in OSAT and PCB in the near term, we expect a near-term margin compression (unlike the consensus), with medium-term margins reaching a steady-state percentage of 15.5% versus ~13% (3-yr avg.) currently. Overall, we are baking in a 49% PAT CAGR as EBITDA growth is aided by stable other income.

**Amber: Moving beyond ACs to components, electronics and railways**

- ▶ Amber is a leader in the RAC ODM market, with a 29.4% market share at the ODM level in FY2023. We see the AC business in the next 2-3 years in a slow growth phase as brands move assembly in-house and players such as Amber shift to components. We see non-AC as the key growth driver, with Amber becoming a complete electronic EMS player and being a key beneficiary of railway capex via Sidwal. We expect non-AC revenue contribution to reach 35% by FY2028 from 25% now, and see 16% revenue CAGR over FY2023-26E.
- ▶ We initiate coverage on Amber with an ADD rating and a DCF-based Fair Value of Rs4,000, implying 38.4X P/E on Mar-26E consolidated earnings. We model (1) RAC industry volumes to move up to 11.6 mn units by FY2026E, driven by an 11% CAGR in industry volumes over FY2023-26E; (2) revenue CAGR for Amber of 16% over FY2023-26E on 12.4% growth in consumer durables, 28% growth in electronics and 25% growth in Sidwal; (3) market share at OEM/ODM level remaining stable as the increase in components offset by a decline in CBUs (completely built units); (4) improvement in margins by 130 bps by FY2026E over FY2023 on normal business environment and operating leverage; and (5) improvement in operational cash flows over FY2023-26E. Our DCF assumes (1) 8% CAGR in industry volumes over FY2023-45E; (2) revenue and EBITDA CAGR of 12%/13% over FY2024-45E; and (3) WACC of 11.2%; and (4) 4% terminal growth rate.

**Syrma: Balanced risk-reward**

- ▶ Syrma SGS is a technology focused engineering and design company engaged in turnkey electronics manufacturing services for various industries. We believe that robust revenue growth (40% CAGR) and improving working capital trends will be the key positive drivers for Syrma. However, the weakening margin profile and growth at the expense of margins keep us on the sidelines. Syrma aspires to attain 25%+ return ratios, which, in our view, seems difficult in the short term, given its moderate margins of 7-8% and working capital cycle of 70 days. We expect Syrma's return ratios to remain below 20%. The higher margin profile, driven by higher value addition-higher box builds/design content, and lower working capital cycle will remain the key factors for Syrma to achieve its targeted return ratios.
- ▶ We initiate coverage on Syrma SGS with a REDUCE rating and a DCF-based Fair Value of Rs500 (2% upside), implying 30X P/E on Mar-26E earnings. Our FV reflects (1) a revenue CAGR of 28% over FY2023-33E; (2) average EBITDA margin of 8% and EBITDA CAGR of 27%; and (4) a WACC of 12.1% and a terminal growth rate of 4%. The CMP factors in robust revenue growth (in line with our expectations) and improving margin trajectory (which we see limited visibility as of now).

**Avalon: Not out of the woods yet**

- ▶ Avalon is a vertically integrated EMS player with end-to-end capabilities in delivering box-build solutions. While most peers have capitalized on the increasing penetration of electronics in autos and industrial sectors, Avalon is yet to do it. It's 3-year (FY2020-23) revenue CAGR was just 14% versus 45%/33% for peers Kaynes/Syrma. Avalon's domestic business has seen a 16% CAGR, which is still below peers and the international business has grown even lower at 11% CAGR. Further, headwinds in the US economy and destocking by key customers have severely impacted Avalon's sales in the last nine months. We are baking in a 12% revenue CAGR for Avalon over FY2023-26E, driven by growth in mobility (13% CAGR) and communications (23% CAGR) segments and a recovery in the clean energy segment (17% CAGR). In the medium term, we expect a 13% revenue CAGR for Avalon over FY2023-45E. However, until there is a pick-up in the US order inflows (4% order book growth in the nine months of FY2024), revenue growth visibility remains limited.
- ▶ We initiate coverage on Avalon Technologies with a SELL rating and a DCF-based FV of Rs400, implying 31X P/E on Mar-26E earnings. Our FV reflects (1) a revenue CAGR of 18% over FY2023-33E; (2) average EBITDA margins of 10.6% (versus 11% over FY2021-23) and an EBITDA CAGR of 19%; and (3) a WACC of 12% and a terminal growth rate of 4%. The CMP factors in a quick turnaround in US operations, driving growth and margins in line with peers, for which we see limited visibility currently.

**Cyient DLM: Niche focus limits growth prospects**

- ▶ Cyient DLM offers EMS solutions for mission-critical applications in highly regulated industries such as aerospace, defense, medical technology and industrials. At the heart of Cyient DLM's competitive positioning is its (1) niche focus on select segments (aerospace, defense, medical electronics and industrial sectors), which typically have higher entry barriers and limited competitive intensity; (2) long-term relationship with select customers (although we believe client concentration remains a key risk); and (3) acquisitions that could help the company gain a foothold in the North American EMS market and design capability, which could aid long-term performance. However, for the last five quarters, the order book growth has largely remained stagnant, with a decreasing book-to-bill ratio, lowering the revenue visibility beyond FY2025.
- ▶ We initiate coverage on Cyient DLM with a SELL rating and a DCF-based Fair Value of Rs550. Our FV implies (1) a revenue CAGR of 26% over FY2023-33E; (2) average EBITDA margin of 10.2% and EBITDA CAGR of 25%; (3) FCF CAGR of 16%; and (4) a WACC of 12% and a terminal growth rate of 4%. The CMP seems to have incorporated the assumption that short-term growth trends (37% CAGR) closer to peers such as Kaynes and Syrma will sustain in the medium term despite a niche focus on select industries, for which we do not see much visibility as of now.

Exhibit 2: Comparison of companies across financial metrics, March fiscal year-ends, 2020-26E (Rs mn, %)

Revenue	2020	2021	2022	2023	2024	2025	2026	3yr CAGR
Kaynes	3,682	4,206	7,063	11,261	16,892	25,143	38,440	51%
Syrma	3,971	4,383	10,197	20,484	30,000	42,000	56,700	40%
Avalon	6,419	6,905	8,407	9,447	8,502	10,203	13,264	12%
Cyient DLM	4,571	6,280	7,205	8,320	11,815	16,308	21,200	37%
Dixon	44,001	64,482	106,971	121,920	182,043	290,165	351,316	42%
Amber	39,628	30,305	42,064	69,271	71,467	89,625	108,071	16%
<b>Total</b>	<b>102,272</b>	<b>116,561</b>	<b>181,907</b>	<b>240,704</b>	<b>320,718</b>	<b>473,443</b>	<b>588,992</b>	<b>35%</b>
Gross margin	2020	2021	2022	2023	2024	2025	2026	
Kaynes	34.4	32.0	30.7	30.7	27.5	27.0	27.5	
Syrma	42.8	35.6	29.5	24.8	22.5	22.8	23.2	
Avalon	35.9	34.0	34.1	35.8	36.0	36.0	36.0	
Cyient DLM	20.2	21.1	24.6	22.5	23.0	23.5	23.5	
Dixon	12.3	10.5	8.6	9.6	9.3	9.3	9.3	
Amber	16.7	17.1	16.1	15.3	16.0	16.5	16.5	
<b>Total</b>	<b>6.1</b>	<b>5.6</b>	<b>5.4</b>	<b>5.7</b>	<b>5.4</b>	<b>5.0</b>	<b>5.7</b>	
EBITDA margin	2020	2021	2022	2023	2024	2025	2026	
Kaynes	11.5	10.0	13.3	14.9	14.0	13.5	14.0	
Syrma	17.0	10.7	9.3	9.2	6.9	7.6	8.0	
Avalon	10.0	9.6	11.6	11.9	7.0	9.8	10.7	
Cyient DLM	3.0	7.3	11.8	10.6	9.4	10.0	10.2	
Dixon	5.1	4.4	3.5	4.2	4.0	4.0	4.1	
Amber	7.8	7.3	6.5	6.0	6.8	7.3	7.3	
PAT margin	2020	2021	2022	2023	2024	2025	2026	
Kaynes	2.5	2.3	5.9	8.5	9.8	7.5	8.1	
Syrma	11.1	7.3	5.6	6.0	4.3	4.8	5.1	
Avalon	1.9	3.3	8.1	5.6	3.3	5.4	6.3	
Cyient DLM	(1.5)	1.9	5.7	3.8	5.4	7.7	7.4	
Dixon	2.7	2.5	1.8	2.1	2.2	2.4	2.5	
Amber	7.8	7.3	6.5	6.0	6.8	7.3	7.3	
Net operating working capital (as days of sales)	2020	2021	2022	2023	2024	2025	2026	
Kaynes	151	165	134	135	121	121	121	
Syrma	71	75	116	90	70	70	70	
Avalon	76	106	127	148	150	125	110	
Cyient DLM	32	43	58	32	95	95	95	
Dixon	6	7	7	7	10	11	11	
Amber	28	42	17	29	29	29	29	
RoAE (in %)	2020	2021	2022	2023	2024	2025	2026	
Kaynes	9	8	24	16	10	7	11	
Syrma	43	19	14	12	8	11	14	
Avalon	26	43	65	17	5	9	13	
Cyient DLM	(26)	31	53	16	7	12	13	
Dixon	26	25	22	22	27	34	31	
Amber	15	6	7	9	8	12	14	
RoACE (in %)	2020	2021	2022	2023	2024	2025	2026	
Kaynes	11	11	17	15	8	6	10	
Syrma	28	11	9	8	6	9	12	
Avalon	13	12	16	11	4	7	10	
Cyient DLM	1	6	11	9	5	9	11	
Dixon	25	24	18	20	25	32	30	
Amber	14	5	5	7	8	10	12	

Source: Company, Kotak Institutional Equities estimates

### Key risks

**Changes in government policy:** Electronics manufacturing has seen a sharp rise in the recent years, driven in part by PLI schemes that help in making domestic sourcing attractive to local and global companies. However, any change in the government policy toward the discontinuation of measures taken to support domestic manufacturing could again lead to a shift to global sourcing and impact the medium-term growth potential of Indian EMS companies.

**Global manufacturers scaling up in India:** Our growth assumptions are based on continued growth of the Indian electronic industry and Indian EMS players gaining market share. If established global players set up operations in India based on attractive growth potential and directly compete with Indian EMS players across verticals, there could be downside risks to our estimates.

**Shortage of skilled talent:** In our assumptions, we expect EMS companies to continue to be able to scale up operations in a very short period and see multifold growth over the medium term. Contract labor forms the backbone of a large EMS set-ups. Hence, the availability of skilled talent for all firms, especially with experience in shop floor execution and managing SMT machines, could potentially also be a differentiator in the medium term.

### Relative valuation table

Exhibit 3: Valuation comparable metric for Indian EMS companies, March fiscal year-ends, 2024-26E

Company	Mkt Cap. (US\$ mn)	Price (LC)	Year end	EV (US\$ mn)	EV/EBITDA (X)			P/E (X)			P/B (X)			RoE (%)		
					2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Global</b>																
Hon Hai Precision Industry	66,966	154.5	Dec	59,165	6.7	5.8	4.9	13.6	11.8	12.0	1.3	1.2	1.2	9.5	10.1	9.4
Pegatron Corp	8,413	101.0	Dec	8,997	8.2	7.1	6.2	15.8	14.1	12.9	1.3	1.3	1.2	8.4	9.0	9.8
Quanta Computer Inc	34,056	282.0	Dec	32,424	14.3	11.2	10.4	21.8	17.6	15.3	5.4	4.9	4.5	24.8	27.7	27.3
Compal Electronics	5,043	36.7	Dec	6,139	8.9	8.1	7.3	14.9	13.0	10.4	1.3	1.2	1.2	8.3	8.8	9.1
Wistron Corp	11,378	125.5	Dec	13,688	8.4	6.8	5.6	19.2	14.7	11.4	2.9	2.6	2.4	16.0	18.1	20.9
Jabil Inc	16,465	136.5	Dec	16,789	7.4	6.9	6.5	16.3	13.0	11.4	8.6	6.0	4.4	43.6	52.8	47.1
<b>India</b>																
Dixon Technologies India Ltd	5,585	7,814.0	Mar	5,600	64.0	39.5	31.4	116.9	66.9	53.4	27.6	19.5	14.2	26.7	34.1	30.8
Amber Enterprises India Ltd	1,504	3,705.0	Mar	1,610	27.5	20.4	16.8	74.0	46.4	35.6	6.0	5.3	4.6	8.5	12.1	13.9
Avalon Technologies Ltd	409	520.0	Mar	389	54.2	31.7	22.1	119.6	52.0	38.0	6.0	5.4	4.7	5.1	10.9	13.2
Kaynes Technology India Ltd	1,931	2,508.8	Mar	1,746	67.8	49.0	32.3	103.8	81.3	51.3	5.8	5.4	4.8	8.9	7.5	10.9
Cyient Dlm Ltd	673	705.0	Mar	630	47.4	32.0	23.9	87.7	44.4	35.6	6.0	5.3	4.6	6.8	11.9	12.9
P G Electroplast	562	1,802.1	Mar	623	20.8	17.3	14.9	37.1	27.5	21.9	4.6	3.8	3.0	14.4	14.4	15.1
Syrma Sgs Technology Ltd	1,036	488.0	Mar	1,010	40.5	26.5	18.9	66.2	43.0	29.7	5.1	4.6	4.0	8.1	11.3	14.4

Notes:

(a) All global companies ending Dec have valuation ratios for CY2023/24/25. All domestic companies ending March have valuation ratios for FY2024/25/26.

Source: Bloomberg, Kotak Institutional Equities, Company

# 2

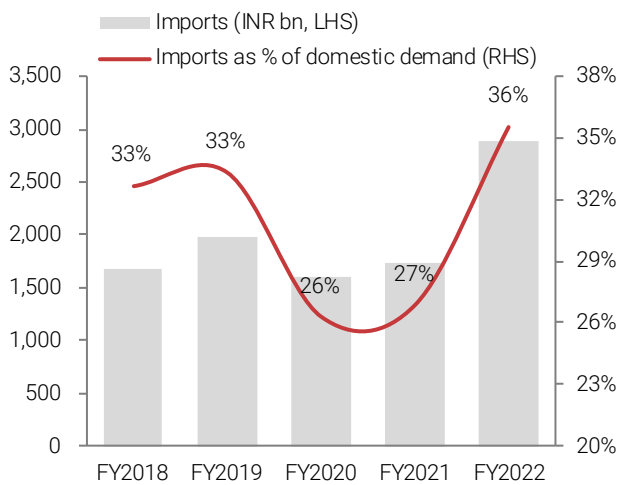
## Sizing the market opportunity in EMS services

We forecast that the total addressable market (TAM) for Indian EMS players will reach US\$221 bn (9% CAGR over FY2023-40E) from US\$51 bn currently, driven by: (1) the localization of the Indian electronics demand, (2) strong domestic demand and (3) government policy-related tailwinds, driven by initiatives such as PLI (Production-Linked Incentive) schemes. Exports, in our view, could be a long-term tailwind for Indian EMS players, with some early success seen in the mobile segment.

### Large and underpenetrated opportunity for EMS players

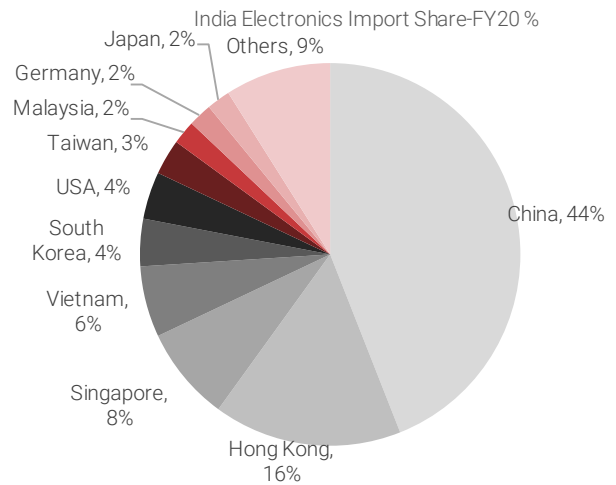
India has historically been dependent on electronic imports to meet its domestic demand. In the last five years, India’s electronic demand grew at a 9% CAGR to US\$120 bn, which was primarily met via imports that saw about 10% CAGR in the same period.

Exhibit 4: India’s electronic imports have been high historically



Source: Ministry of Commerce, Kotak Institutional Equities

Exhibit 5: With nearly 50% of imports coming from China



Source: Ministry of Commerce, Kotak Institutional Equities

**Domestic demand:** There is robust domestic demand, driven by a growing population and improving income levels, along with an increasing penetration of electronics in consumer-oriented sectors and industrial-oriented segments such as defense, auto and railways.

**Import substitution:** Currently, imports form nearly 30% of the Indian market, driven largely by China. PLI incentives are designed to make domestic manufacturing competitive and require compulsory local sourcing of certain components within a specific time period. This should help in shift some of the imports volumes to domestic manufacturers.

### Indian EMS industry to reach US\$221 bn by FY2040E

We expect the TAM for the Indian EMS players to reach US\$221 bn by FY2040 (9% CAGR over FY2023-40E) from US\$51 bn currently, driven primarily by B2C segments such as mobile phones (we see the mobile market reaching US\$71 bn by FY2040E at a 6% CAGR), consumer appliances (US\$66 bn market by FY2040E at a 12% CAGR) and IT (US\$26 bn market by FY2040E at a 10% CAGR).

Among the B2B segments, we see automotive (US\$21 bn market by FY2040E at a 17% CAGR) as the key growth driver, led by increasing penetration of EVs, supported by defense, industrial and medical sectors.

We believe that some of this addressable market will continue to depend on imports or in-house manufacturing by brands in certain segments. Hence, in addition to the TAM, the shares of OEMs/ODMs also remain key.

**We estimate the TAM for Indian EMS market to reach US\$221 bn (9% CAGR over FY2023-40E) driven primarily by B2C segments**

**Exhibit 1: India EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

Indian EMS market TAM by Industry											
in INR Bn	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2035E	2040E
Mobile	1,958	2,248	2,371	2,503	2,644	2,795	2,956	3,128	3,270	4,392	5,900
CEA	701	833	957	1,097	1,258	1,439	1,640	1,862	2,106	3,604	5,490
Television	216	243	273	307	344	387	434	488	548	971	1,605
Washing Machine	85	96	108	122	139	157	178	202	229	413	683
Air Conditioners	122	176	191	225	264	308	356	411	470	784	1,066
Refrigerator	139	154	174	200	233	272	315	363	415	750	1,240
Hearables and Wearables	140	163	211	243	278	315	356	399	444	687	896
Telecom	87	96	106	116	128	141	155	170	187	301	485
Lighting	49	55	61	67	73	81	89	97	107	159	216
Automotive	98	131	144	171	213	257	321	391	476	1,104	1,784
Industrial	45	50	56	63	70	79	88	99	111	195	343
IT	417	434	478	527	581	641	706	779	859	1,385	2,163
Medical	82	90	99	109	120	132	145	159	175	282	455
Defense	236	273	317	347	389	416	457	510	576	928	1,494
<b>Total</b>	<b>3,674</b>	<b>4,210</b>	<b>4,589</b>	<b>5,000</b>	<b>5,476</b>	<b>5,979</b>	<b>6,557</b>	<b>7,195</b>	<b>7,866</b>	<b>12,350</b>	<b>18,331</b>

Source: Kotak Institutional Equities estimates, IDC, ELCOMA, MeitY, Ministry of Finance, Euromonitor, SIAM

**Mobile: Domestic sourcing of low-cost smartphones and exports by global EMS peers for brands such as Apple remain the key growth drivers**

India is one of the largest mobile phone markets in the world, with 1.19 bn subscribers (as of Dec 2023) and 207 mn mobile phones sold annually in India in volume terms (146 mn smartphones and 61 mn feature phones). We estimate that the Indian mobile phone market is Rs3.2 tn (~US\$39 bn) currently and see the shift from feature phones to smartphones as one of the key growth drivers for the domestic market, along with replacement demand, given that the penetration levels are quite high.

Indian EMS players have been active in the mobile segment, largely manufacturing feature phones and low-end smartphones (PLI for Indian companies is sub-Rs15,000 smartphones) for mainly global brands with relatively small market share in the domestic market. However, in the near term, Indian EMS players are looking to sign brands associated with Chinese players such as BBK Electronics (Oppo, Vivo, OnePlus, Realme and iQOO) and Transsion (Tecno, Infinix and itel), gaining a higher share in the domestic market.

Mobile phone manufacturing has been one of the success stories of the PLI scheme, with India being successful in attracting leading global players such as Foxconn, Wistron and Pegatron. India's smartphone production increased from ~US\$2.5 bn in FY2015 to US\$35 bn in FY2023, while exports increased to ~US\$11 bn in FY2023 from US\$1.4 bn imports in FY2015. India accounted for 7% of Apple's global production in 2023 versus 1% in 2021.

Further, other EMS players such as DBG and Flex also manufacture for select brands based out of India. Hence, in addition to the domestic market, mobile phone exports will be a key growth area for Indian mobile EMS market, with both Samsung (own factory with assembly work outsourced to EMS players) and Apple catering to global markets from India.

We estimate that Indian mobile phone EMS TAM will reach Rs5.9 tn by FY2040E from Rs2.3 tn now (6% CAGR driven a 4% price CAGR and a 2% volume CAGR). Given that the global market demand for large brands such as Apple and Samsung also being met via EMS facilities in India, the total addressable market becomes Rs38 tn (US\$458 bn). Currently, about ~7.5% of global demand, i.e., US\$35 bn is being manufactured in India versus current global market size of US\$470 bn.

**We expect the Indian domestic mobile EMS market to reach Rs5.9 tn by FY2040E (6% CAGR FY2023-40E)**

**Exhibit 2: India Mobile EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
<b>Mobile phone</b>										
India										
Smartphone shipments (mn units)	145	146	149	152	155	158	161	164	168	204
Feature phone shipments (mn units)	56	61	55	49	44	40	36	32		
Average selling price (Rs)										
Smartphone	18,566	21,165	22,012	22,892	23,808	24,760	25,750	26,780	27,852	41,227
Feature phone	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000		
Total addressable market (Rs bn)										
Smartphone	2,684	3,090	3,278	3,477	3,689	3,913	4,151	4,403	4,671	8,428
Feature phone	113	122	110	99	89	80	72	65		
World										
Smartphone shipments (mn units)	1,206	1,167	1,179	1,190	1,202	1,214	1,226	1,239	1,251	1,382
Average selling price (Rs)										
Smartphone	34,445	33,200	33,532	33,867	34,206	34,548	34,894	35,242	35,595	39,319
Total addressable market (Rs bn)										
Smartphone	41,537	38,741	39,520	40,314	41,124	41,951	42,794	43,654	44,532	54,337
Total TAM for Indian EMS players										
Domestic smartphone (Rs bn)	1,879	2,163	2,295	2,434	2,582	2,739	2,906	3,082	3,270	5,900
Domestic feature phone (Rs bn)	79	85	77	69	62	56	50	45		
<b>Total Domestic EMS TAM (Rs bn)</b>	<b>1,958</b>	<b>2,248</b>	<b>2,371</b>	<b>2,503</b>	<b>2,644</b>	<b>2,795</b>	<b>2,956</b>	<b>3,128</b>	<b>3,270</b>	<b>5,900</b>
<b>Global smartphone EMS TAM (Rs bn)</b>	<b>29,076</b>	<b>27,119</b>	<b>27,664</b>	<b>28,220</b>	<b>28,787</b>	<b>29,366</b>	<b>29,956</b>	<b>30,558</b>	<b>31,172</b>	<b>38,036</b>

Source: Kotak Institutional Equities estimates, IDC

**Consumer electronics: PLI schemes provide strong opportunities across multiple segments**

► **Television: Continuous change in technology and a large number of brands make outsourced manufacturing the preferred option**

The Indian television industry, like the rest of the world, has witnessed a massive change in the last decade with the introduction of panel TVs that resulted in the phasing-out of CRT TVs first, followed by a shift from LCD TVs to LED TVs. The Indian LED TV market size is 10.6 mn units (as of FY2023), with the industry being valued at Rs347 bn. Despite the high penetration (65%+) that televisions enjoy in India, demand for TVs remains robust, driven by: 1) strong replacement demand, 2) increasing penetration for a 2<sup>nd</sup> TV and 3) upgrades to new technology/advanced model.

Indian EMS players have played a key role in the manufacturing of televisions. Given the presence of a large number of brands and continuous changes in technologies, most companies (brands) have preferred outsourcing the manufacturing to EMS players than in-sourcing.

However, given that LED panel makes up 50% of the bill of materials, the level of backward integration by EMS players is limited, with most players focusing on final assembly.

We estimate that the Indian television market will reach Rs2.3 tn by FY2040E from Rs347 bn currently (12% CAGR), with EMS players catering to a Rs1.6 tn market (~70% of the brand market size).

**We expect the Indian TV EMS market to reach Rs1.6 tn by FY2040E (12% CAGR over FY2023-40E)**

**Exhibit 3: India Television EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
India volumes (mn units)	9.8	10.6	11.4	12.3	13.3	14.4	15.6	16.8	18.1	35.9
YoY %	7	8	8	8	8	8	8	8	8	6
Television industry size in Rs bn	309	347	390	438	492	553	621	697	783	2,293
<b>Television EMS industry size in Rs bn</b>	<b>216</b>	<b>243</b>	<b>273</b>	<b>307</b>	<b>344</b>	<b>387</b>	<b>434</b>	<b>488</b>	<b>548</b>	<b>1,605</b>
Realization per unit at market price in Rs	31,540	32,802	34,114	35,478	36,897	38,373	39,908	41,504	43,165	63,894

Source: Euromonitor, IDC, Kotak Institutional Equities estimates

**► Washing machines: Moving from semi-automatic washing machines to complete product offering**

India’s washing machine market has witnessed steady growth over the last decade, driven by increased penetration. However, compared with the global markets, semi-automatic washing machines and top-load fully automatic washing machines dominate the market, while the share of front-load fully automatic washing machines is relatively small given its higher price point. The washing machine market size in India is ~9.1 mn units as of FY2023 and is valued at Rs120 bn.

Indian EMS players have been very active in the washing machine space. The initial focus was on manufacturing semi-automatic washing machines for global brands (given these models were largely sold in India and couldn’t be imported from global factories). Today, Indian EMS players such as Dixon manufacture semi-automatic and fully automatic washing machines for global and domestic brands, with the product being outsourced more and more to EMS players.

We estimate that the Indian washing machine market will reach Rs976 bn by FY2040E from Rs120 bn currently (12% CAGR), with EMS players catering to a Rs683 bn market (~70% of brand market size).

**We expect the Indian washing machine EMS market to reach Rs683 bn by FY2040E (12% CAGR FY2023-40E)**

**Exhibit 4: India washing machine EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
India volumes (mn units)	8.3	9.1	9.8	10.7	11.7	12.7	13.9	15.1	16	33.2
YoY %	9	9	8	9	9	9	9	9	9	6
Washing machine industry size in Rs bn	121	137	154	175	198	224	254	288	327	976
<b>Washing machine EMS industry size in Rs bn</b>	<b>85</b>	<b>96</b>	<b>108</b>	<b>122</b>	<b>139</b>	<b>157</b>	<b>178</b>	<b>202</b>	<b>229</b>	<b>683</b>
Realization per unit at market price in Rs	14500	15080	15683	16311	16963	17641	18347	19081	19844	29374

Source: Euromonitor, Kotak Institutional Equities estimates

**► Air conditioners: Shift toward components from completely built units**

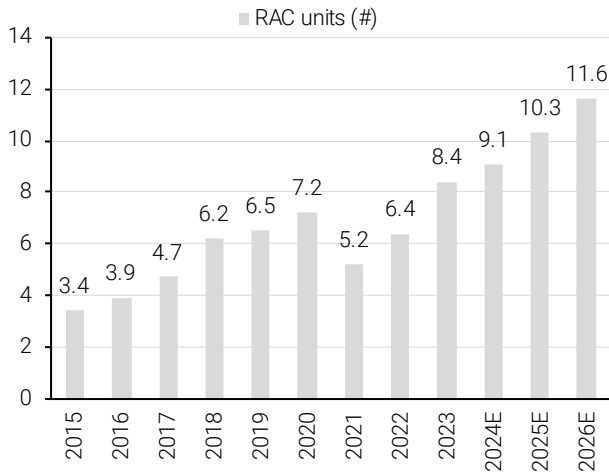
The Indian AC industry has seen a CAGR of 12% from FY2015 to 8.4 mn units in FY2023. Post-Covid, demand growth has started to pick up again since FY2022. Factors such as rising disposable incomes, increasing urbanization and easier financing are a few reasons driving the growth. We expect demand for ACs to grow to 11.6 mn units by FY2026E and the overall RAC industry size to grow to Rs366 bn by FY2026E.

The Indian AC EMS market currently is ~Rs176 bn (70% of overall AC industry) of Rs252 bn as of FY2023. The Indian EMS market is dominated by three players—Amber Enterprises, Epack Durables and PG Electroplast. Given that these players are backward-integrated, the window for PLI is closed and that AC manufacturing is a capital-intensive business with thin margins, we don’t see any other players entering the market.

We see the Indian AC manufacturing TAM increasing from Rs252 bn in FY2023 to Rs1.07 tn in FY2040E, implying an 11% CAGR. However, with multiple brands in-sourcing manufacturing, the biggest risk that we see for Indian EMS players is a loss of addressable market, which is being partially addressed by shifting focus toward components from finished goods.

**Demand growth trend in RAC industry, March fiscal year-ends, 2015-26E (#)**

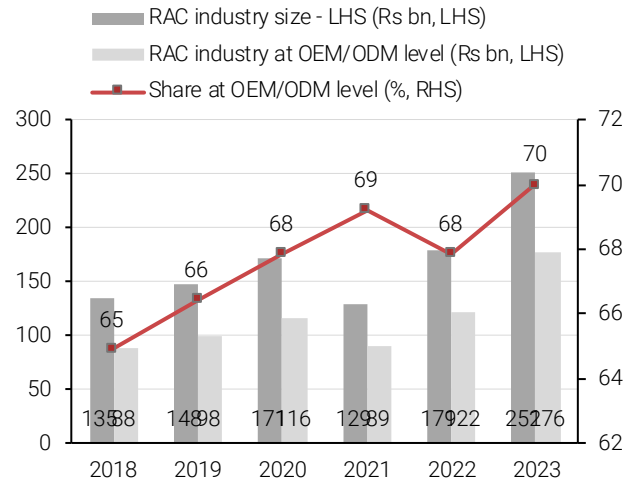
Exhibit 5: AC industry growth was disrupted during Covid period and is now growing back



Source: Euromonitor, Industry, Kotak Institutional Equities estimates

**RAC Industry size and share at OEM/ODM level, March fiscal year-ends, 2018-23 (Rs bn, %)**

Exhibit 6: RAC industry share at OEM/ODM level is around ~70% and with ODM supplying around 30% of units.



Source: Euromonitor, Industry, Kotak Institutional Equities

**We expect the Indian AC EMS market to reach Rs1.07 tn by FY2040E (11% CAGR FY2023-40E)**

Exhibit 7: India air conditioner EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
India volumes (mn units)	6.4	8.4	9.1	10.3	11.6	13.0	14.5	16.1	17.7	35.7
YoY %	23	31	8	14	13	12	11	11	10	6
RAC industry size in Rs bn	179	252	272	317	366	421	488	562	644	1,460
<b>RAC EMS industry size in Rs bn</b>	<b>122</b>	<b>176</b>	<b>191</b>	<b>225</b>	<b>264</b>	<b>308</b>	<b>356</b>	<b>411</b>	<b>470</b>	<b>1,066</b>
Realization per unit at market price in Rs	19,000	21,000	21,000	21,840	22,714	23,622	24,567	25,550	26,572	29,890

Source: Euromonitor, Kotak Institutional Equities estimates

► **Refrigerators: EMS players yet to establish any meaningful presence**

The current Indian refrigerator market size is 14 mn units (Euromonitor) and is valued at Rs220 bn and is largely dominated by foreign brands such as LG, Samsung and Whirlpool. Refrigerator penetration is higher than most white goods, with ~30-35% penetration and products largely manufactured in house, given the bulky nature of the product make is it difficult to import in CBU (completely built unit) form. The Indian refrigerator market is largely dominated by the direct cool variant (~80% share). This is unique to India given the frost-free market dominates globally (~20% share in India).

Indian EMS players have traditionally not focused on this segment, given that it is largely done in-house by brands; however, with Dixon recently commissioning its first facility in Dehradun with 1.2 mn direct-cool capacity, we see EMS players trying to gain share by focusing on: 1) manufacturing for e-commerce players; 2) private brands of retailers; and 3) shift toward outsourcing from new brand and existing players.

We estimate that the Indian refrigerator market will reach Rs1.7 tn by FY2040E from Rs154 bn currently (13% CAGR), with EMS players catering to a Rs1.24 tn market (~70% of brand market size).

**We expect the Indian refrigerator EMS market to reach Rs1.24 tn by FY2040E (13% CAGR FY2023-40E)**

**Exhibit 8: India Refrigerator EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
India volumes (mn units)	13.2	14.1	15.3	17.0	19.0	21.3	23.7	26.3	28.9	58.3
YoY %	4	7	8	11	12	12	11	11	10	6
Refrigerator industry size in Rs bn	198	220	249	286	333	388	450	518	593	1,771
<b>Refrigerator EMS industry size in Rs bn</b>	<b>139</b>	<b>154</b>	<b>174</b>	<b>200</b>	<b>233</b>	<b>272</b>	<b>315</b>	<b>363</b>	<b>415</b>	<b>1,240</b>
Realization per unit at market price in Rs	15,000	15,600	16,224	16,873	17,548	18,250	18,980	19,739	20,529	30,387

Source: Euromonitor, Kotak Institutional Equities estimates

**► Hearables and wearables: EMS players collaborating with leading brands to gain a foothold**

The Indian hearables and wearables market is estimated to be US\$3 bn, as per IDC. Indian hearables and wearables market saw 134.2 mn shipments in 2023, with an average ASP of US\$21 (Rs1,750).

Indian EMS companies Dixon and Amber Enterprises have formed manufacturing JVs with market leaders boAt and Noise, respectively, and offer to manufacture the complete product in house with brands largely focusing on brand building and distribution. The main competition for Indian EMS players in this segment is from Chinese imports.

We see the hearables and wearables market size expanding from Rs233 bn in FY2023 to Rs1.28 tn in FY2040E, implying an 11% CAGR with EMS players catering to a Rs896 bn market (~70% of brand market size).

**We expect the Indian hearables and wearables EMS market to reach Rs890 bn by FY2040E (11% CAGR FY2023-40E)**

**Exhibit 9: India hearables and wearables EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
India volumes (mn units)	97.2	134.2	167.8	192.9	220.4	250.3	282.3	316.4	352.2	711.2
YoY %		38	25	15	14	14	13	12	11	4
Hearables and Wearables industry size in Rs bn	199	233	302	347	397	450	508	569	634	1,280
<b>Hearables and Wearables EMS industry size in Rs bn</b>	<b>140</b>	<b>163</b>	<b>211</b>	<b>243</b>	<b>278</b>	<b>315</b>	<b>356</b>	<b>399</b>	<b>444</b>	<b>896</b>
Realization per unit at market price in Rs	2,050	1,738	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800

Source: Euromonitor, IDC, Kotak Institutional Equities estimates

**► IT Hardware: Local sourcing norms provide an opportunity for EMS players**

The Indian IT Hardware industry market is estimated to be US\$8 bn, as per IDC, with 80% products directly imported from China and ASEAN countries. The Indian government introduced the IT hardware PLI with a proposed outlay of Rs170 bn, with an aim to boost domestic manufacturing of products such as laptops, tables, personal computers and servers.

Indian EMS companies historically haven't been manufacturers of IT hardware products; however, they are hoping to leverage the PLI scheme and become manufacturers of finished goods in the first stage with incremental backward integration as per PLI norms.

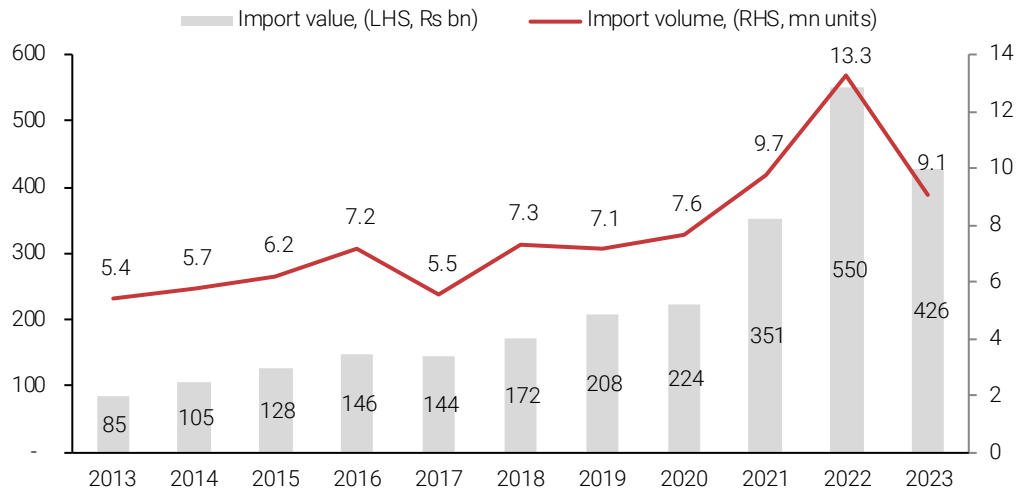
Further, companies such as Kaynes, VVDN and Avalon have been selected as the three vendors qualified by CDAC to manufacture high-performance computing servers Rudra-2.

Globally, companies such as Quanta and Compal from Taiwan have established themselves as EMS companies specializing in the manufacturing of IT hardware products. So far, these companies haven't set up manufacturing presence in India, hence the competition is likely to among major Indian EMS players only.

We see the IT Hardware market size expanding from Rs620 bn in FY2023 to Rs3 tn in FY2040E, implying a 10% CAGR with EMS players catering to a Rs2 tn market (~70% of brand market size).

**Portable computer imports in India stood at ~US\$7 bn in FY2022, of which 77% is from China**

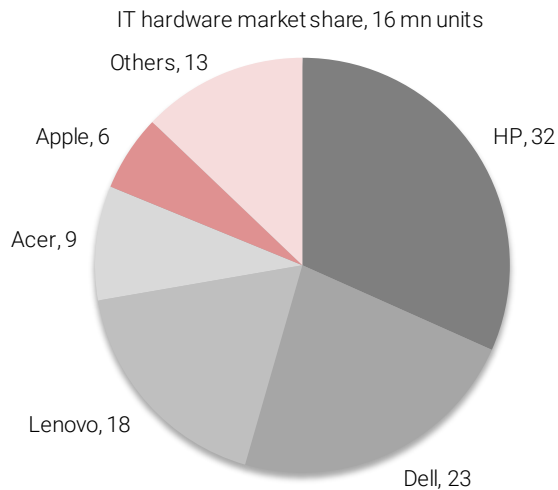
**Exhibit 10: India portable computer imports, march fiscal-year ends, FY2013-23**



Source: Ministry of Commerce, Kotak Institutional Equities

**Lenovo and Acer together account for nearly 25-30% of the Indian IT hardware market**

**Exhibit 11: India IT hardware brands market share, March fiscal year-ends, FY2022**



Source: Kotak Institutional Equities, Frost & Sullivan analysis

**We expect the Indian IT hardware EMS market to reach Rs2.16 tn by FY2040E (10% CAGR FY2023-40E)**

**Exhibit 12: India IT Hardware EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
India volumes (mn units)	14.9	14.9	15.8	16.7	17.7	18.8	19.9	21.1	22.4	38.1
YoY %	0	0	6	6	6	6	6	6	6	6
IT Hardware industry size in Rs bn	596	620	683	753	830	915	1,009	1,113	1,226	3,091
<b>IT Hardware EMS industry size in Rs bn</b>	<b>417</b>	<b>434</b>	<b>478</b>	<b>527</b>	<b>581</b>	<b>641</b>	<b>706</b>	<b>779</b>	<b>859</b>	<b>2,163</b>
Realization per unit at market price in Rs	40,000	41,600	43,264	44,995	46,794	48,666	50,613	52,637	54,743	81,033

Source: IDC, Kotak Institutional Equities estimates

**Automotive: Increasing electronic content per vehicle and shift toward EVs are key growth drivers**

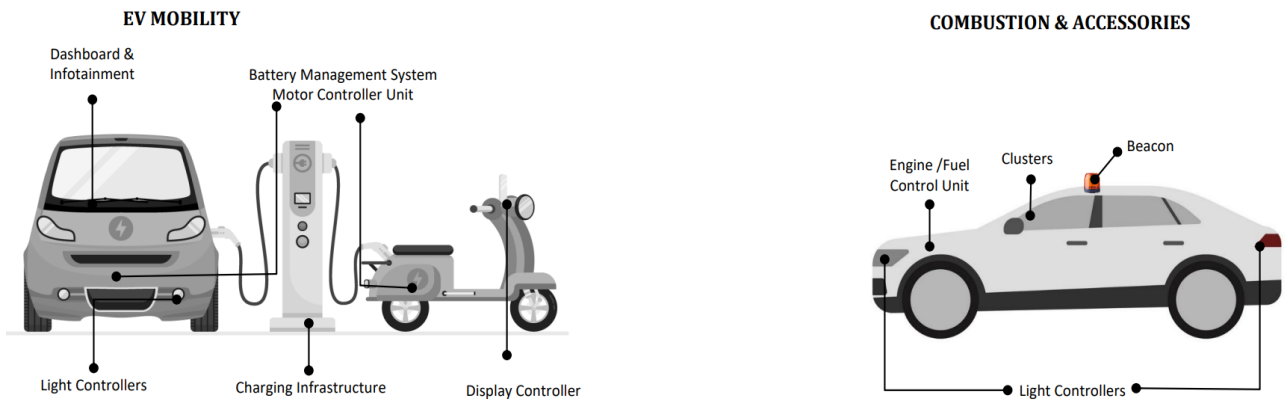
Auto has been one of the biggest drivers of growth for domestic focused B2B EMS players such as Kaynes and Syrma. EMS companies’ exposure to auto segment historically has been as tier-2 suppliers to large auto ancillary companies such as Motherson Sumi and Uno Minda where the companies focused on products such as sensor PCBA, cluster units, light controllers and engine control units.

We see two key changes that are helping in increasing the total addressable market for EMS players in this arena: 1) increasing electronic content in traditional ICE vehicles and 2) the introduction of EV vehicles where companies have started manufacturing additional products such as controllers for the EV battery management systems and EV chargers.

An EV 2W has electronics components worth ~Rs15,000-20,000, seven times more than Rs2,000 for an ICE 2W. Similarly, EV 4Ws consist of electronics components worth ~Rs60,000-70,000 versus ~Rs15,000-20,000 of ICE 4Ws, providing a large TAM for EMS players. Further, EMS companies have become direct suppliers to many new-age EV OEMs, which helps in generating a slightly higher margin in most cases.

We see the TAM from the auto segment for EMS players expanding from Rs131 bn in FY2023 to Rs1.78 tn in FY2040E, implying a 17% CAGR and providing a strong revenue visibility for the coming years.

**Exhibit 13: Increasing electronic content per vehicle and shift toward EVs are the key drivers of the auto segment**



Source: Syrma, Kotak Institutional Equities

**Exhibit 14: Based on the shift toward EVs, we see auto EMS market reaching Rs1.78 tn by FY2040E (17% CAGR FY2023-40E)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E
<b>Two-wheeler</b>																			
ICE Two-wheeler volumes (mn)	13	16	17	18	18	18	16	15	13	10	6	4	3	2	0	0	0	0	0
Electric Two-wheeler volumes (mn)	0	1	1	2	3	4	7	10	13	18	23	25	28	30	33	32	32	33	33
Two-wheeler volumes (mn)	14	16	18	19	21	22	23	25	26	27	29	30	31	32	33	32	32	33	33
Electronic content per vehicle (in Rs)																			
ICE Two-wheeler	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Electric Two-wheeler	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500
EMS TAM (in Rs bn)																			
ICE Two-wheeler TAM (in Rs bn)	27	31	33	35	36	35	33	30	26	19	11	9	6	3	0	0	0	0	0
Electric Two-wheeler TAM (in Rs bn)	4	13	16	26	53	78	123	173	227	309	400	442	486	534	584	557	568	574	574
<b>Total Two-wheeler EMS TAM (in Rs bn)</b>	<b>31</b>	<b>44</b>	<b>49</b>	<b>62</b>	<b>88</b>	<b>113</b>	<b>156</b>	<b>202</b>	<b>252</b>	<b>328</b>	<b>411</b>	<b>450</b>	<b>492</b>	<b>537</b>	<b>584</b>	<b>557</b>	<b>568</b>	<b>574</b>	<b>574</b>
<b>Passenger vehicle</b>																			
ICE PV volumes (mn)	3	4	4	4	4	5	5	5	5	5	5	4	4	4	4	2	2	1	0
Electric PV volumes (mn)	0	0	0	0	0	1	1	1	1	2	3	4	5	6	7	9	11	13	15
Passenger vehicle volumes (mn)	3	4	4	4	4	5	5	6	6	7	7	8	8	9	10	11	12	13	14
Electronic content per vehicle (in Rs)																			
ICE PV	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500
Electric PV	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
EMS TAM (in Rs bn)																			
ICE PV TAM (in Rs bn)	53	67	69	72	77	81	86	90	93	88	82	75	74	72	68	41	33	12	0
Electric PV TAM (in Rs bn)	1	3	8	16	23	33	45	58	84	137	198	269	322	381	448	610	704	855	978
<b>Total PV EMS TAM (in Rs bn)</b>	<b>55</b>	<b>70</b>	<b>76</b>	<b>88</b>	<b>99</b>	<b>114</b>	<b>130</b>	<b>148</b>	<b>177</b>	<b>225</b>	<b>281</b>	<b>344</b>	<b>395</b>	<b>452</b>	<b>517</b>	<b>651</b>	<b>738</b>	<b>867</b>	<b>978</b>
<b>CV vehicle</b>																			
ICE CV volumes (mn)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Electric CV volumes (mn)	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	3	3	3
Commercial vehicle volumes (mn)	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4
Electronic content per vehicle (in Rs)																			
ICE CV	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500
Electric CV	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
EMS TAM (in Rs bn)																			
ICE CV TAM (in Rs bn)	13	17	18	19	20	21	22	23	24	24	23	22	21	21	21	18	15	13	11
Electric CV TAM (in Rs bn)	0	0	1	2	5	8	12	17	23	33	46	61	79	93	110	136	166	192	221
<b>Total CV EMS TAM (in Rs bn)</b>	<b>13</b>	<b>17</b>	<b>19</b>	<b>21</b>	<b>26</b>	<b>30</b>	<b>35</b>	<b>40</b>	<b>47</b>	<b>57</b>	<b>70</b>	<b>84</b>	<b>100</b>	<b>114</b>	<b>130</b>	<b>154</b>	<b>181</b>	<b>205</b>	<b>232</b>
<b>Total EMS TAM(in Rs bn)</b>	<b>98</b>	<b>131</b>	<b>144</b>	<b>171</b>	<b>213</b>	<b>257</b>	<b>321</b>	<b>391</b>	<b>476</b>	<b>611</b>	<b>761</b>	<b>879</b>	<b>988</b>	<b>1,104</b>	<b>1,231</b>	<b>1,362</b>	<b>1,487</b>	<b>1,646</b>	<b>1,784</b>

Source: SIAM, Kotak Institutional Equities estimates

**Defense: Increasing usage of electronics in defense equipment and local sourcing to drive growth**

Electronics in the defense industry is used for: 1) communication (communication products, C4I systems); 2) offense (naval systems, tanks and armored vehicle electronics, avionics); and 3) deterrence purposes (radars, sonars and electro optics).

Further, electronics used for defense purposes usually have the highest level of sophistication and technological superiority, and they also require to be highly reliable even under adverse conditions.

For EMS players, the defense sector typically involves longer approval cycles with a stickier customer base. Indian EMS players cater primarily to Bharat Electronics Limited (BEL) and a few global majors executing Indian defense contracts.

We see Indian defense electronic spending increasing from Rs273 bn as of FY2023 to Rs1.4 tn by FY2040E (11% CAGR). Our assumption is driven by defense spending as a percentage of total capital outlay remaining in the ~20% range, similar to levels seen in FY2023.

**We expect the Indian defense EMS market to reach Rs1.5 tn by FY2040E (11% CAGR FY2023-40E)**

**Exhibit 15: India defense EMS TAM, March fiscal year-ends, 2022-40E (Rs bn)**

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2040E
<b>Indian defence budget</b>										
Capital outlay on defence services in Rs bn	1380	1500	1572	1720	1892	2081	2289	2518	2770	7185
yoy growth %		9%	5%	9%	10%	10%	10%	10%	10%	10%
BEL's revenue in Rs bn	154	177	206	225	253	271	297	332	374	971
BEL's share in defence electronics	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
<b>Total electronic spend on defense in Rs bn</b>	<b>236</b>	<b>273</b>	<b>317</b>	<b>347</b>	<b>389</b>	<b>416</b>	<b>457</b>	<b>510</b>	<b>576</b>	<b>1494</b>
Electronic capex as % of total capex spend	17.1%	18.2%	20.2%	20.2%	20.5%	20.0%	20.0%	20.3%	20.8%	20.8%

Source: Ministry of Finance, Kotak Institutional Equities estimates

**Industrial: Smart metering, railways and automation to be key drivers of growth**

**Exhibit 16: Signaling system and train protection system are some of the key offerings that EMS companies have in the railway segment**



Source: Avalon, Kotak Institutional Equities

► **Smart metering: Strong growth potential, driven by the RDSS scheme for discoms**

Smart meters catering to oil & gas, water and electricity sectors is one of the largest end-markets for Indian EMS companies. Currently, smart metering catering to the Indian electricity industry and American utility industry via players such as Honeywell and CyanConnode are some of the major end-customers for Indian EMS companies.

The Indian government launched the Revamped Distribution Sector Scheme (RDSS) with an outlay of Rs3,038 bn and estimated GBS (Gross Budgetary Support) from the Central Government of Rs976 bn for a duration of five years, i.e., from FY2021-22 to FY2025-26E. The scheme aims to reduce the Aggregate Technical & Commercial (AT&C) losses to pan-India levels of 12-15% and Average Cost of Supply (ACS)-Average Revenue Realized (ARR) gap to zero by 2024-25. The scheme has two major components: Part 'A' – Financial support for Prepaid Smart Metering and System Metering and upgrade of the Distribution Infrastructure and Part 'B' – Training & Capacity Building and other Enabling & Supporting Activities.

Hence, as part of the scheme, 250 mn smart meters need to be installed by FY2025. EMS companies' total addressable market per smart meter is Rs1,000 (versus Rs300 in traditional meters), implying a total addressable market of Rs250 bn over a five-year period.

► **Railways: Signaling and Kavach to be key growth drivers**

In the railways vertical, Indian EMS companies are primarily involved in railway signaling, tracking and braking equipment. Kyosan, Siemens, Hitachi and Faiveley are some of the key end-customers for the companies with India being the primary end-market.

Companies see signaling orders for metros, high-speed rail and mainline as one of the key drivers of order inflow. The railway union budget has an allocation of ~Rs50 bn toward signaling equipment for mainline (electronic content in signaling is ~10% of order value). The second biggest driver of growth would be the Kavach-Automatic train protection system, which is expected to be installed on 34,000 km of broad-gauge rail network by 2028, and Avalon has tie-up with a few of the approved vendors. The total spend on Kavach is expected to be close to Rs340 bn (Rs5 mn per km with total broad-gauge network of 68,000 km).

► **Industrial Automation: Manufacturing plants adoption of latest industry 4.0 solutions (automation) provide strong growth opportunity**

Indian EMS companies are focused on manufacturing: 1) flow measurement equipment (electronic equipment that generally help measure the level of liquid in a plant or industry); 2) room and plant control equipment such as actuators (actuators are typically responsible for moving, controlling, or positioning a mechanism or system, to make the working of automated equipment seamless and easy); and 3) other field control devices such as sensors and valves. These equipment form a key part of the automation equipment offering of industrial players such as ABB and Honeywell.

► **Power electronics: EV charging and home electrification remain key growth drivers**

Power electronic products are integrated into all types of energy conversion applications, and are expected to play a key role in improving the energy efficiency of electronics products. Power units for electrolyzers, solar invertors/chargers. DC converter/battery management systems for home electrification systems and EV chargers are some of the key end-markets served by power electronic equipment.

The domestic Indian industrial EMS market is Rs50 bn currently and we see this growing at a 12% CAGR and reaching a size of Rs343 bn by end-FY2040E

**Telecom and networking devices: PLI scheme and local sourcing requirements help EMS players establish their presence**

The telecom segment includes telecom infrastructure and networking equipment. Telecom OEMs require EMS players that have technical expertise in the manufacturing of large and complex PCBAs and quick ramp-up capabilities.

GPON, IP PBX, modems, servers, routers, antenna boxes, remote radio heads (RRH) and base band units (BBU) used in 5G technologies are some of the products that EMS companies manufacture for telecom and networking players.

Annual Indian telecom and networking device production is expected to be ~Rs480 bn, as per the Government of India ([link](#)) (currently India imports Rs500 bn worth of products annually). The scope of work that EMS players have in telecom devices can be ~10-30% of the product value. Hence, we estimate that the Indian telecom EMS market will be ~Rs96 bn in size and see the market reaching Rs485 bn in size by FY2040E, implying a ~10% CAGR.

**Medical electronics: Partnership with leading manufacturers key to growth**

The Indian medical devices industry is estimated to be US\$11 bn (Rs900 bn), as per the Government of India estimates ([link](#)). The medical devices industry for EMS players typically falls under three main categories.

► **Patient care monitoring equipment:** Patient monitoring involves the use of equipment to continually monitor a patient's vital indicators using a medical monitor and collect medical and other types of health data.

- ▶ **Diagnostic equipment:** Equipment for diagnostic imaging include X-rays, MRI scans, CT scans, ultrasonography, and nuclear imaging, among others.
- ▶ **Personal healthcare devices:** Smart toothbrushes, oximeters and glucometers.

Indian EMS players are typically Tier-1 suppliers to global and domestic manufacturers of these devices. The scope of work that EMS players have in medical device products is ~10% of the product value. Hence, we estimate that the Indian medical EMS market will be ~Rs90 bn in size and see the market reaching Rs455 bn in size by FY2040E, implying a ~10% CAGR.

**Lighting: Moving beyond LED bulbs toward downlighters and commercial lighting products**

The Indian lighting industry has witnessed strong growth in the last decade, driven by a shift from CFL to LED technology. Government schemes such as UJALA and SNLP, along with rising awareness of cost and energy efficiency in LED technology, have led to a rapid adoption of LED bulbs in the country. As a result, the LED lighting market in India has reached a value of Rs240 bn (~US\$3 bn), as per ELCOMA, driven by LED bulbs with Indian lighting EMS industry having a market size of Rs55-60 bn (~20-25% of the market size).

In addition to LED bulbs, Indian EMS companies also participate in the manufacturing of downlighters, tube lights and commercial lighting products. Further, given the scale already achieved in the domestic market, exports could also be a medium-term opportunity for Indian EMS players such as Dixon, who are already looking to export lighting products in FY2025.

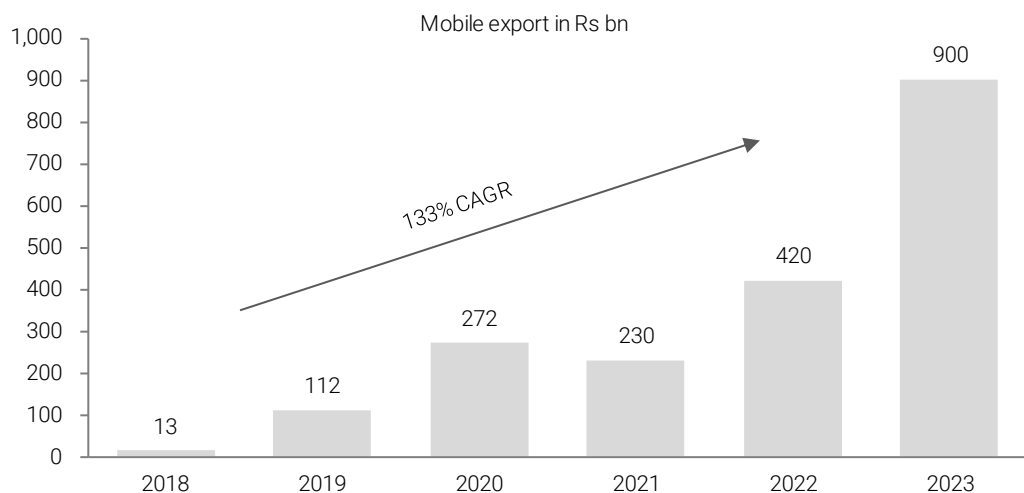
We estimate that the Indian lighting EMS market will be ~Rs216 bn by FY2040E (8% CAGR over FY2023-40E). Exports could provide additional upside to our numbers.

**Exports a long-term opportunity**

The mobile segment has been one of the key areas where exports from India have picked up most in the PLI scheme. Indian mobile exports have seen a 133% CAGR in the last five years to US\$11 bn (from total EMS TAM of US\$326 bn). Today, this is largely being met via global EMS companies such as Foxconn, Pegatron and Wistron. However, exports can prove to be a long-term growth opportunity for Indian EMS companies. Other than mobiles, ACs and lighting are the two segments where India could start exporting in the near term.

**Mobile exports have seen 133% CAGR in the last five years to US\$11 bn (versus total EMS TAM of US\$326 bn)**

Exhibit 17: Indian mobile exports, March fiscal year-ends, 2018-23 (Rs bn)



Source: Ministry of Commerce, Kotak Institutional Equities

# 3

## Government policy a key enabler of growth

The Indian government has launched Production-Linked Incentive (PLI) schemes for 15 sectors, with varying degrees of: 1) current domestic manufacturing capabilities; 2) focus on reducing India’s import dependency; and 3) future growth potential. It has an outlay of US\$32 bn for the 15 sectors, with incentives paid over the life of the scheme, based on revenue and capex targets. Five of these schemes for the sectors mobile, telecom, IT hardware, white goods, semiconductor are specifically catering to electronics manufacturing in India and are expected to be the key triggers for EMS companies. With stocks under coverage having exposure to all five of these schemes, we see continued government push on PLI to be a key enabler for the EMS sector.

### Mobile PLI: Making India an export hub

Mobile phone manufacturing has been one of the success stories of the PLI scheme, with India being successful in attracting leading global players such as Foxconn and Pegatron. India’s smartphone production increased from ~US\$2.5 bn in FY2015 to US\$35 bn in FY2023, while exports increased to ~US\$11 bn in FY2023 from US\$1.4 bn in imports in FY2015. India accounted for 7% of Apple’s global production in 2023 versus 1% in 2021.

**PLI for mobile: The key growth area for Dixon.** In the mobile PLI scheme, Dixon is one of the few companies to have achieved revenue and capex threshold targets. It had already tied up with global players for mobile production and had set up additional facilities in Noida to cater to increased manufacturing requirements and meet the PLI targets. It currently has Motorola and Nokia as its anchor clients and has added Xiaomi, Reliance and another brand as clients. Dixon’s offering to its clients’ centers around a much higher units per hours (UPH) commitment versus the industry average of ~300. The focus is on designing the line in manner that it is well-placed and has high levels of automation. Dixon also has the advantage of working with Samsung on both feature phones and smart phones. The PLI scheme, coupled with increased wallet share with select clients, had resulted in revenues of the mobile EMS segment jumping 12X in three years to ~Rs50 bn in FY2023 from ~Rs4 bn in FY2019. We expect it to see a CAGR of 56% during FY2023-26E.

### Domestic companies such as Dixon are better-placed in terms of reasonable threshold of investment and incremental sales

Exhibit 18: PLI on mobile phone and parts

Segment	Incentive rate	Incremental investment	Incremental sales	Approved companies	Proposed production
Mobile phones (invoice value Rs15,000+)	Year 1: 6%	Rs10 bn (cum. min.)	Year 1: Rs40 bn	FoxConn Hon Hai, Pegatron, Rising Star (Bharat FIH), Samsung, Wistron,	Rs9 tn
	Year 2: 6%	Year 1: Rs2.5 bn	Year 2: Rs80 bn		
	Year 3: 5%	Year 2: Rs5.0 bn	Year 3: Rs150 bn		
	Year 4: 5%	Year 3: Rs7.5 bn	Year 4: Rs200 bn		
	Year 5: 4%	Year 4: Rs10 bn	Year 4: Rs250 bn		
Mobile phones (Domestic companies)	Year 1: 6%	Rs2 bn (cum. min.)	Year 1: Rs5 bn	Bhagwati (Micromax), Lava, Optiemus Electronics, Padget Electronics (Dixon), UTL Neolyncs	Rs1.25 tn
	Year 2: 6%	Year 1: Rs0.5 bn	Year 2: Rs10 bn		
	Year 3: 5%	Year 2: Rs1.0 bn	Year 3: Rs20 bn		
	Year 4: 5%	Year 3: Rs1.5 bn	Year 4: Rs35 bn		
	Year 5: 4%	Year 4: Rs2.0 bn	Year 4: Rs50 bn		
Specified Electronic Components	Year 1: 6%	Rs1 bn (cum. min.)	Year 1: Rs1 bn	Ascent Circuits, AT&S, Neolync, Sahasra, Visicon, Walsin	Rs150 bn
	Year 2: 6%	Year 1: Rs0.25 bn	Year 2: Rs2 bn		
	Year 3: 5%	Year 2: Rs0.5 bn	Year 3: Rs3 bn		
	Year 4: 5%	Year 3: Rs0.75 bn	Year 4: Rs4.5 bn		
	Year 5: 4%	Year 4: Rs1.0 bn	Year 4: Rs6 bn		

Source: MeiTY, Kotak Institutional Equities

### White goods PLI: Establishing the LED and AC value chain in India

Unlike in the case of mobile, which doesn't focus on domestic value addition, the white goods PLI is aimed at domestic manufacturing of key AC and LED components compared with the assembly of finished goods in mobile.

#### PLI scheme for AC components

The PLI scheme for AC components has classified the target segments into three categories: (1) AC components that include high-value and low-value intermediaries for ACs and a combination of both; (2) high-value intermediaries that include compressors, copper tubes and aluminum stocks; and (3) low-value intermediaries including control assembly, display panels, motors, cross-flow fans, valves and brass components, heat exchangers, sheet metal and plastic molding components. At present, there is a huge reliance on imports for high-value intermediaries such as compressors, copper tubes and aluminum stock, with low-value intermediaries gradually being increasingly localized.

#### Details of PLI scheme and incentives for AC components (Rs bn)

Exhibit 19: Total 32 companies have been selected for AC PLI scheme

Segment	Year	PLI rate	Large investment		Normal investment	
			Min. cum. Investment	Min. incr. production	Min. cum. Investment	Min. incr. production
AC components	FY2022		1.5		0.5	
	FY2023	6%	3.0	7.5	1.0	2.5
	FY2024	6%	4.0	15.0	1.5	5.0
	FY2025	5%	5.0	20.0	2.3	7.5
	FY2026	5%	6.0	25.0	3.0	11.3
	FY2027	4%		30.0		15.0
	FY2028					
	<b>Total</b>			<b>6.0</b>	<b>97.5</b>	<b>3.0</b>
High value intermediates	FY2022		0.5		0.5	
	FY2023	6%	1.3	2.5	1.0	2.5
	FY2024	6%	2.0	6.3	1.5	5.0
	FY2025	5%	3.0	10.0	2.0	7.5
	FY2026	5%	4.0	15.0	3.0	10.0
	FY2027	4%		20.0		12.5
	FY2028					
	<b>Total</b>			<b>4.0</b>	<b>53.8</b>	<b>3.0</b>
Low value intermediates	FY2022		0.2		0.1	
	FY2023	6%	0.4	1.0	0.2	0.5
	FY2024	6%	0.6	2.0	0.3	1.0
	FY2025	5%	0.8	3.0	0.4	1.5
	FY2026	5%	1.0	4.0	0.5	2.0
	FY2027	4%		5.0		2.5
	FY2028					
	<b>Total</b>			<b>1.0</b>	<b>15.0</b>	<b>0.5</b>

Notes:

- (a) AC components: Combination of high value intermediates, low value intermediates, and sub-assemblies.
- (b) High value intermediates: Aluminum foil, copper tubes, compressors.
- (c) Low value intermediates: PCB assembly for controllers, BLDC motors, service valves, cross-flow fans, etc.

Source: DPIIT, Kotak Institutional Equities

#### PLI driving localization of AC components

With the government's first list of players short listed for PLI incentives, an investment worth Rs39 bn is expected to be done by companies such as Voltas, Blue Star, Daikin, Johnson Controls and several other prominent ODM players. A second list of players eligible for PLI incentives and additional incentives worth Rs9 bn were finalized in June 2022, especially on the components side, including copper tubes, compressors, motors, heat exchangers, plastic molding, sheet metal components. As per government estimates, these investments will increase the value addition from current levels of 29% to 70-75%.

**First list of 42 companies entails investment of Rs39 bn across a range of AC components from various players in the industry**

**Exhibit 20: Applicants selected under the PLI Scheme for air conditioner components**

Applicants Selected Under the PLI Scheme for White Goods: Air Conditioners		
Applicant	Products to be manufactured	Committed investment (Rs mn)
Daikin Airconditioning India Private Limited	1. Compressor 2. Control Assemblies for IDU or ODU or Remotes 3. Motors 4. Cross Flow Fan (CFF) 5. Heat exchangers 6. Sheet Metal components 7. Plastic Moulding components	5,387
Amber Enterprises India Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components	4,602
PG Technoplast Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Cross Flow Fan (CFF) 3. Heat exchangers 4. Sheet Metal components 5. Plastic Moulding components	3,210
EPAC Durables Solutions Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components 7. Display Panels (LCD/LED)	3,000
Hindalco Industries Limited	1. Copper Tube (plain and/or grooved) 2. Aluminum Stock for Foils or Fins for heat exchanger	5,390
Mettube India Private Limited	Copper Tube (plain and/or grooved)	3,002
IL JIN Electronics India Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF)	1,673
Blue Star Climatch Limited	1. Heat Exchangers 2. Sheet Metal Components	1,560
Havells India Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Heat exchangers 3. Sheet Metal components 4. Plastic Moulding components	1,127
Johnsons Controls Hitachi Air Conditioning India Limited	1. Cross Flow Fan (CFF) 2. Heat exchangers 3. Sheet Metal components 4. Plastic Moulding components	1,007
Voltas Limited	1. Cross Flow Fan (CFF) 2. Heat exchangers 3. Plastic Moulding components	1,000
Napino Auto and Electronics Limited	1. Control Assemblies for IDU or ODU or Remotes	666
Bhagwati Products Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Valves & Brass components 5. Heat exchangers 6. Sheet Metal components 7. Plastic Moulding components	610
Epavo Electricals Private Limited	1. Motors	580
IFB Industries Limited	1. Motors 2. Heat exchangers 3. Sheet Metal components	570
Lucas-Tvs Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors	540
Nidec India Private Limited	1. Motors	519
Dixon Devices Private Limited	1. Control Assemblies for IDU or ODU or Remotes	510
Syrma Technology Private Limited	1. Control Assemblies for IDU or ODU or Remotes	510
VVDN Technologies Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Sheet Metal components 4. Plastic Moulding components	510
Virtuoso Optoelectronics Limited	1. Control Assemblies for IDU or ODU or Remotes Motors 2. Cross Flow Fan (CFF) 3. Valves & Brass Components 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components	505
East India Technologies Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Sheet Metal components 3. Plastic Moulding components	500
Magnum Mi Steel Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Heat exchangers 4. Sheet Metal components	500
Panasonic India Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Heat exchangers 3. Sheet Metal components 4. Plastic Moulding components	500
Sun Home Appliances Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components	500
Tritonvalves Climatch Private Limited	1. Valves & Brass components	500
<b>Total</b>		<b>38,978</b>

Source: PIB, Kotak Institutional Equities

**Exhibit 21: Second list shortlisted six companies for AC components with an investment commitment of Rs9 bn over five years**

Sr No.	Applicant	Products to be manufactured	Gestation period	Committed Investment (Rs mn)
1.	Adani Copper Tubes Limited	Copper Tube (Plain and/or grooved)	Upto March, 2023	4,080
2.	LG Electronics India Private Ltd	Compressors	Upto March, 2023	3,000
		Control Assemblies for IDU or ODU or Remotes		
		Motors		
		Heat exchangers		
3.	Starion India Pvt Ltd	Plastic Moulding components	Upto March, 2023	501
		Control Assemblies for IDU or ODU or Remotes		
		Cross Flow Fan (CFF)		
		Heat exchangers		
		Sheet Metal Components		
4.	Kaynes Technology India Ltd	Plastic Moulding components	Upto March, 2023	500
		Display Panels (LCD/ LED)		
		Control Assemblies for IDU or ODU or Remotes		
5.	Mitsubishi Electric India Pvt Ltd	Cross Flow Fan (CFF)	Upto March, 2023	500
		Heat exchangers		
6.	Swaminathan Enterprises Pvt Ltd	Motors	Upto March, 2023	500
<b>Total</b>				<b>9,081</b>

Source: PIB, Kotak Institutional Equities

- ▶ **Amber is setting up the largest capex under AC PLI:** Amber, along with its subsidiary ILJIN, is the beneficiary of PLI for AC components. Amber will invest Rs4.6 bn and its subsidiary ILJIN will invest Rs1.7 bn across key components for AC such as control assemblies for IDU, ODU or remotes, motors, heat exchangers, sheet metal components and plastic molding components. Hence, despite OEM players planning capex under the PLI scheme, we continue to see a part of the finished goods and majority of components to continue to be sourced from ODM players. We see other AC ODM players such as PG Electroplast and E-pack durables also investing under the PLI schemes and are expected to increase their wallet share over the next couple of years.
- ▶ **Dixon PLI for lighting and AC components will increase backward integration.** Dixon is eligible for PLI incentives on investment worth Rs1 bn in the next five years in LED drivers, LED engines, LED modules, light management system, mechanicals and inductors. This will increase backward integration for the company over time. Dixon also received approval for AC components, and the company has formed a 40:60 JV with Rexxam to manufacture inverter controller boards for air conditioners. Rexxam is a design and technology partner for Daikin and has expertise in PCBA designing. Rexxam wants to make India as a manufacturing hub for its customers for both domestic and export markets. The JV is a beneficiary under the PLI scheme and will make a total investment of Rs510 mn over a period of five years. It already has an existing relationship with Rexxam and with this JV, and the company would be eyeing revenues of Rs3 bn in the first year.
- ▶ **Kaynes and Syrma** have also participated in making AC PCBs for different OEMs under this scheme. However, we expect AC PLI to be a small part of the overall revenue for these companies.

**Details of investment requirement by players**

**Exhibit 22: PLI scheme for LED lighting components, march fiscal year-ends, FY2023**

Applicant	Products to be manufactured	Committed investment (Rs mn)
Syska Led Lights Private Limited	LED Drivers, PCB including Metal Clad PCBs, Mechanicals - housing, Wire Wound inductors, Heat Sinks, Diffusers, LED Light Management Systems	1,500
Uniglobus Electricals & Electronics Private Limited	LED Chip Packaging, LED Drivers, LED Modules, Wire Wound Inductors	1,250
Radhika Opto Electronics Private Limited	LED Drivers, LED Engines, PCB including Metal Clad PCBs, Mechanicals - housing, Wire Wound inductors, Drum Cores, Heat Sinks, Diffusers	1,065
Dixon Technologies Solutions Private Limited	LED Drivers, LED Engines, LED Modules, Mechanicals - housing, Wire Wound Inductors, LED Light management systems	1,000
Stovekraft Limited	LED Chips, PCB including Metal Clad PCBs, Mechanicals - housing, Wire Wound inductors, Diffusers	360
Cosmo Ferrities Limited	Ferrite Cores, LED Transformers	333
Cosmo Films Limited	Metallized film for capacitors	320
Epitome Components Private Limited	Laminate for Printed Circuit Boards (PCBs) and Metal Clad PCBs	310
Surya Roshni Limited	LED Drivers, LED Engines, LED Modules, PCB including Metal Clad PCBs, Mechanicals - housing, Drum Cores, Heat Sinks, Diffusers LED Light Management Systems, LED Transformers	254
Sorin Tech Private Limited	LED Drivers, LED Engines, LED Modules, Mechanicals - housing, Wire Wound Inductors, Drum Cores, Heat Sinks, Diffusers LED Light Management Systems, LED Transformers	131
Skyquad Electronics And Appliances Private Limited	LED Drivers, LED Modules, Mechanicals - Housing	120
R K Lighting Private Limited	LED Drivers, LED Engines, Mechanicals - Housing, Wire Wound Inductors, Heat Sinks, LED Transformers	116
Luker Electric Technologies Private Limited	LED Drivers, Mechanicals - housing, Wire Wound Inductor, Drum Cores, Diffusers	101
Calcom Vision Limited	LED Drivers, LED Engines	100
Orient Electric Limited	LED Drivers	100
Signify Innovations India Limited	LED Drivers, Mechanicals - housing, Diffusers	100
<b>Total</b>		<b>7,160</b>

Source: MeITy, Kotak Institutional Equities

**IT hardware PLI: Waiting for a takeoff**

The IT hardware scheme is designed for products such as laptops, tables, personal computers and servers, with the aim of boosting domestic manufacturing for a fast-growing segment to reduce imports and potentially build exports. The focus here is to incrementally backward-integrate each year.

- ▶ **IT PLI second-biggest growth driver for Dixon:** Dixon is one of the beneficiaries under the PLI for IT Hardware. It already has Acer and Lenovo as its key anchor clients, helping it target nearly 25% of the Indian IT hardware market. Dixon plans to achieve Rs480 bn in revenue in the next six years from the IT hardware PLI scheme, which implies a share of nearly 17% of the overall market or 2/3rd of all laptops for Lenovo and Acer by 2030.
- ▶ **Syrma and Kaynes:** Syrma and Kaynes are the other beneficiaries under the IT PLI scheme. Further, Kaynes has been selected as one of three vendors qualified by CDAC to manufacture high-performance computing servers Rudra-2, both of which will drive IT revenue growth for Kaynes.

Exhibit 23: Investment threshold and cap on sales for revised PLI 2.0 scheme for IT Hardware, march fiscal year-ends, FY2023 (Rs mn)

Incremental Capital Expenditure wrt base year FY2023			
Year	Global/Domestic	Domestic	Domestic (small)
1	500	250	40
2	1,500	750	80
3	2,500	1,250	120
4	3,500	1,750	150
5	4,500	2,250	180
6	5,000	2,500	200

Incremental Sales wrt base year FY2023			
Year	Global/Domestic	Domestic	Domestic (small)
1	10,000	5,000	500
2	25,000	12,500	1,000
3	50,000	25,000	2,000
4	100,000	50,000	3,000
5	120,000	60,000	4,000
6	150,000	75,000	5,000

Source: MeitY, Kotak Institutional Equities

Exhibit 24: Details of incentives and requirements for the same

Items for localization		
S. No.	Components/Sub-assemblies	% Incentive
1.	Assembly of IT Hardware – Laptop / Tablets/ AIOs (Year-1/Year-2/Year-3/ Year 4/Year 5/Year 6)	3/2/1/1/1/0
2.	Assembly of IT Hardware – Server / USFF (Year-1/Year-2/Year-3/Year 4/Year 5/Year 6)	3/2/2/1/1/0
3.	PCBA of IT Hardware (Target Segment)	1.20
4.	Add on Controllers assembled in India – (For Servers)	0.41
5.	Bare PCB	0.57
6.	Memory Modules assembled in India	0.95
7.	Memory Modules assembled in India – (For Servers)	1.89
8.	Solid State Drive (SSD) assembled in India	0.95
9.	Display panel – Assembled in India (Not for Servers/USFF)	1.49
10.	Power Adapter / SMPS	0.41
11.	Power Adapter / SMPS – (For Servers)	0.54
12.	Battery	0.41
13.	Cabinets / Chassis / Enclosures	1.49
14.	Memory Modules additional incentive for ATMP in India (over and above incentive for item 6)	+0.25
15.	Memory Modules additional incentive for ICs manufactured in India (over and above incentive for item 6)	+0.25
16.	Memory Modules additional incentive for ATMP in India (over and above incentive for item 7) (For Servers)	+0.50
17.	Memory Modules additional incentive for ICs manufactured in India (over and above incentive for item 7) – (For Servers)	+0.50
18.	Solid State Drive (SSD) additional incentive for ATMP in India (over and above incentive for item 8)	+0.25
19.	Solid State Drive (SSD) additional incentive for ICs manufactured in India (over and above incentive for item 8)	+0.25
20.	Display Panel – Additional incentive for ICs manufactured in India (over and above incentive for item 9)	+0.60
21.	System on Chip (SoC) Processors designed in India (IP ownership/Co-ownership in India) including but not limited to SHAKTI and VEGA (IC manufactured outside India) for Laptop, Tablet, AIO and Server/USFF)	+3.24/3.78
22.	System on Chip (SoC) Processors designed in India - Additional incentive for ATMP/ICs manufactured in India (over and above incentive for item 21) for Laptop, Tablet, AIO and Server/USFF)	+1.49/1.62

**Note:** Battery localization is not part of localization schedule for All-in-One PCs, USSF and Servers.

Source: MeitY, Kotak Institutional Equities

**Semiconductor PLI: Still in early days**

Indian semiconductor demand is currently entirely through imports. The PLI scheme with US\$10 bn outlay is focused on creating a comprehensive semiconductor and display ecosystem in India.

The semiconductor segment requires huge capital outlay, and hence the incentive is not linked to production but to capex. The government is incentivizing up to 50% of the capital cost of the project.

In addition to the capital incentives, the government plans to support companies by giving them preference in the procurement of electronic products under the public procurement system.

**Kaynes: OSAT foray a potential game changer but fraught with risks**

Kaynes’ foray into the OSAT segment could help it become an integral part of the semiconductor value chain. We expect Kaynes to start generating revenue from the OSAT segment from 2HFY25 and see the company reaching Rs29 bn by FY2031 (six years after the start of production). In this segment, Kaynes would be competing with players that are well-established in the global semiconductor value chain. While global players enjoy 20%+ EBITDA in this segment, we are baking in only 17% margins in the steady state for Kaynes. The key risk, in our view, is the ability of Kaynes to further invest in this business over the medium term after the PLI incentive scheme without compromising on its return ratios.

**Exhibit 25: Semiconductor PLI focuses on the entire spectrum from design to fabrication**

Sr No	Scheme	Capital Threshold	Revenue Threshold	Fiscal incentive	No of beneficiaries
1	Scheme for setting up semiconductor fabs in India	Rs 200bn	Rs 75bn in any of last 3 years	50% of project cost	At least 2 applicants
2	Scheme for setting up display fabs in India	Rs 100bn	Rs 75bn in any of last 3 years	50% of project cost	At least 2 applicants
3	Scheme for setting up of compound semiconductors/silicon photonics/sensor fabs/Semiconductor Assembly, Testing, Marking, and Packaging (ATMP) / Outsourced Semiconductor Assembly and Test (OSAT) Facility in India			50% of project cost	
4	Design linked incentive(DLI) scheme				

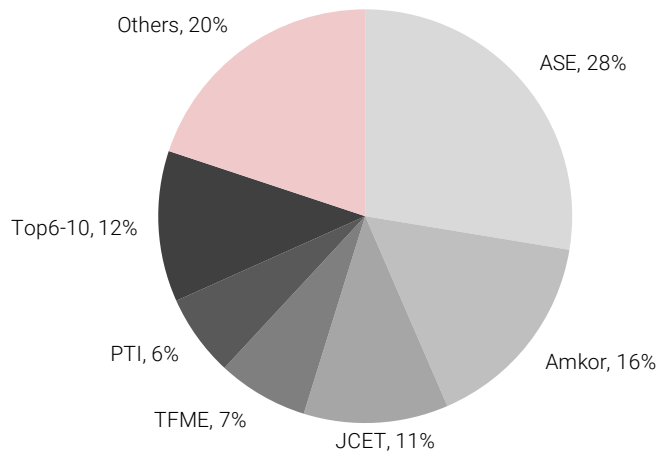
Source: Ministry of Electronics and Information Technology, Kotak Institutional Equities

**OSAT is a US\$45 bn market with 80% share controlled by top-10 players**

Semiconductor packaging is a downstream activity undertaken to protect the semiconductor from impurities and increasing its ability to withstand moisture and other materials. OSAT companies are third-parties that provide packaging to silicon devices that are manufactured by foundries and provide testing devices before shipping to the market. They usually work in partnership with a semiconductor foundry and semiconductor design firm.

Currently, the global OSAT market size is about ~US\$45 bn, with the top-10 firms accounting for nearly 80% share. As per IDC, among the top-10 OSAT vendors, six are from Taiwan, three from China and one from the US. The vendors in Taiwan are ASE, PTI, KYEC, Chipbond, ChipMOS and Sigurd; vendors in China are JCET, TFME and Hua Tian; and the US vendors is Amkor. The majority of these companies have production facilities in Taiwan, China, Malaysia, Vietnam and Korea. Globally, OSAT manufacturers enjoy EBITDA margins in the range of 20-25%, with value addition ranging from 10% to 40%. Beyond the top-20 companies, there is a long tail of companies that make up the rest 20% of the market.

**Exhibit 26: Market share of top OSAT companies in 2022, December fiscal year-ends, (%)**



Source: IDC, Company, Kotak Institutional Equities

**Up to 75% capital subsidy being offered to set up OSAT facilities**

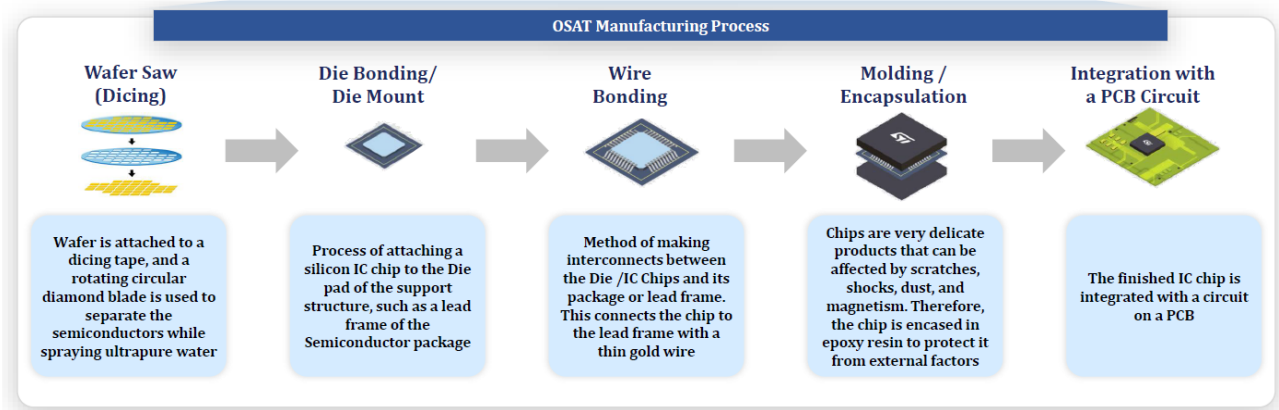
The Indian government, with a focus on self-reliance in electronics, has launched the Semiconductor PLI Scheme, with a total outlay of Rs760 bn (US\$10 bn) for the development of semiconductor and display manufacturing ecosystem in India. Under this scheme, the government is offering fiscal support of 50% on capital expenditure on pari-passu basis for setting up semiconductor ATMP/OSAT facilities in India. In addition to this, multiple state governments are offering up to 25% fiscal support on capital expenditure to set up OSAT facilities. Hence, a 75% capital subsidy is being provided to companies to set up OSAT facilities. Players such as Kaynes are already participating in this scheme.

**Exhibit 27: Incentives offered for OSAT facilities under the semiconductor PLI**

Description	Companies / Joint Ventures proposing to set up Semiconductor Assembly, Testing, Marking, and Packaging (ATMP) / Outsourced Semiconductor Assembly and Test (OSAT) Facility in India
Operational Experience	The applicant Companies / Joint Ventures should have the following experience: A. Own and operate a commercial Semiconductor Packaging Unit OR B. Own or possess licensed technologies for the proposed semiconductor packaging unit and demonstrate the roadmap to advanced packaging technologies through licensing or development
Capital Investment Threshold	Minimum Capital Investment of Rs 500 million
Fiscal support from Government of India	50 % of Capital Expenditure

Source: Ministry of Electronics and Information Technology, Kotak Institutional Equities

Exhibit 28: OSAT manufacturing process



Source: Kaynes Technology India Ltd, Kotak Institutional Equities estimates

**Most global OSAT players enjoy 20%+ EBITDA margins**

**Exhibit 29: Financials of select global OSAT players, December fiscal year-ends, 2018-22 (US\$ mn)**

	2018	2019	2020	2021	2022
<b>Revenue</b>					
ASE Technology Holding Co	12,316	13,374	16,200	20,408	22,517
Amkor Technology	4,316	4,053	5,051	6,138	7,092
JCET	3,609	3,406	3,839	4,730	5,021
Siliconware Precision	2,901	2,880	3,466	3,861	4,390
<b>EBITDA</b>					
ASE Technology Holding Co	2,288	2,395	2,926	4,150	4,515
Amkor Technology	830	799	1,021	1,392	1,591
JCET	448	591	788	1,046	1,045
Siliconware Precision	811	773	942	1,253	1,377
<b>EBITDA margin (%)</b>					
ASE Technology Holding Co	19	18	18	20	20
Amkor Technology	19	20	20	23	22
JCET	12	17	21	22	21
Siliconware Precision	28	27	27	32	31
<b>PAT</b>					
ASE Technology Holding Co	838	545	937	2,288	2,084
Amkor Technology	127	121	338	643	766
JCET	(142)	13	189	459	480
Siliconware Precision	260	246	390	634	762
<b>PAT margin (%)</b>					
ASE Technology Holding Co	7	4	6	11	9
Amkor Technology	3	3	7	10	11
JCET	(4)	0	5	10	10
Siliconware Precision	9	9	11	16	17
<b>RoE (%)</b>					
ASE Technology Holding Co	13	8	13	27	22
Amkor Technology	7	6	16	24	23
JCET	(9)	1	10	17	14
Siliconware Precision	11	10	15	20	24
<b>RoCE (%)</b>					
ASE Technology Holding Co	8	5	7	15	14
Amkor Technology	6	5	11	17	17
JCET	(1)	3	7	12	11
Siliconware Precision	8	8	12	18	21
<b>RoIC (%)</b>					
ASE Technology Holding Co	8	4	7	11	13
Amkor Technology	6	5	11	17	17
JCET	(1)	3	7	10	10
Siliconware Precision	8	8	11	16	19

Source: Company, Kotak Institutional Equities

# 4

## Global EMS industry: In a constant hunt for low-cost locations

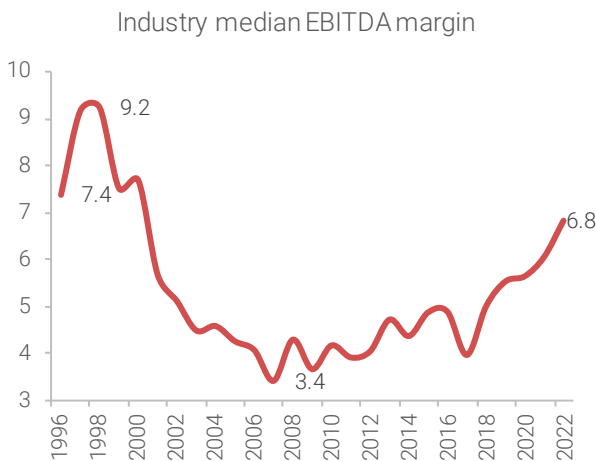
When we analyze global EMS companies, we see that the Indian industry is at the same juncture as the US industry was in 1995-2000. US EMS companies during this phase saw a revenue CAGR of 72%, with average EBITDA margins of 10% and mid-teens average RoCEs. We see the peak P/E multiples during this time was closer to 60X 1-yr forward earnings. However, competition from Asian peers led to slow revenue growth, decline in margins and returns, and a significant de-rating in multiples over the next decade. Hence, the ability to sustain margins and returns beyond a short period of time could be a challenge for Indian EMS players as the business continues to shift toward the lowest cost location.

In the past 20 years, the global EMS industry has seen multiple changes. The biggest impact came in early-2000s when the North American industry saw revenue growth slowdown and a decline in gross margins. One of the major factors that drove the gross margin lower was the rise of Hon Hai (Foxconn), which saw a revenue CAGR of 46% in 2002-07 and a 17% CAGR in the 10-year period through 2015. Hon Hai was quick to vertically integrate (acquisition of Sharp Corp. in 2016) and scale up, disrupting the high-volume low-margin EMS market (consumer, IT and communications, where product cycles are often short and volumes are large).

(Note: North American EMS players include Jabil, Flex, Sanmina and Celestica)

### North American EMS players saw revenue slowdown in 2000s, driven by a shift in volumes toward Asian peers

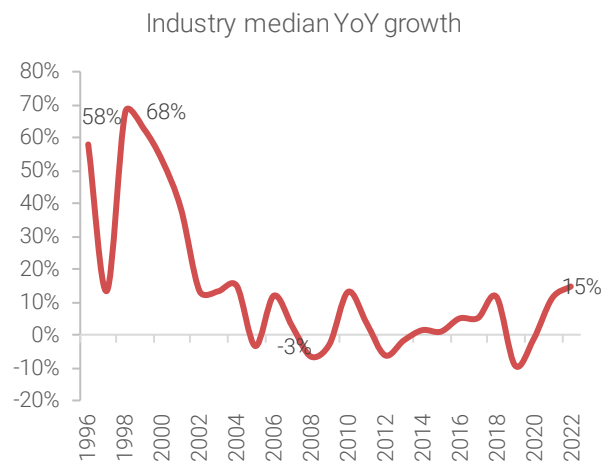
Exhibit 30: Median revenue growth for North American EMS peers, December fiscal year-ends, 1996-22 (%)



Source: Companies, Bloomberg

### Weak revenue growth and higher competitive intensity were the key drivers for EBITDA margin decline in the next 10 years

Exhibit 31: Median EBITDA margin for North American EMS peers, December fiscal year-ends, 1996-2002 (%)



Source: Companies, Bloomberg

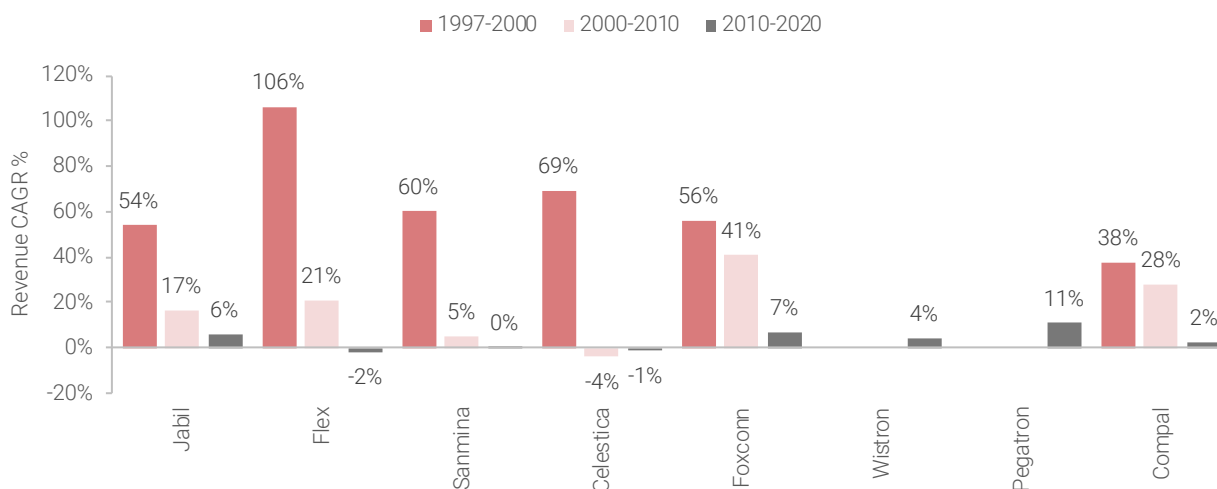
Cost pressures from Hon Hai led many of the North American companies to shift capacities to low-cost regions, especially for high-volume products such as smartphones. The regional manufacturing shift was more pronounced for the high-volume low-margin EMS market, with the high-margin low-volume business generally being done in North America.

Due to the pressure on the high-volume part of the business, North American EMS players shifted their business toward higher-margin verticals such as auto, industrial, medical, aerospace and defense. Companies such as Flex and Samina have changed their business mix the toward the high-margin business.

When we analyze the profitability of North American EMS players, we find that US-based EMS companies had their best growth period during 1996-2000 (a revenue CAGR of 72%), with average EBITDA margins of 10% and average RoCE in mid-teens. We observe that the peak P/E multiples during this time was 60X 1-year forward earnings (seen in 2000).

**We see North American EMS companies had the best growth during the 1997-2000 period after which Asian companies such as Foxconn gained share**

**Exhibit 32: Revenue CAGR for global EMS peers, December fiscal year-ends, 1996-2020 (%)**



Source: Companies, Bloomberg

**72% revenue CAGR; 10% EBITDA margins and mid-teens RoCE helped drive steady re-rating of North American EMS companies**

**Exhibit 33: Financial trends for select global EMS companies, December fiscal year-ends, 1997-2010 (%)**

Company	Revenue CAGR %		Avg EBITDA margin %		ROCE %	
	1997-2000	2001-2010	1997-2000	2001-2010	1997-2000	2001-2010
Jabil	54%	17%	9%	5%	16%	3%
Flex	106%	21%	6%	3%	9%	
Sanmina	60%	5%	14%	4%	10%	5%
Celestica	69%	-4%	9%	4%	7%	2%
Foxconn	56%	41%	17%	7%	27%	19%
Compal	38%	28%	10%	5%	20%	14%

Source: Bloomberg, Companies

**Strong growth and improving margins led to P/E multiples reaching peak valuation during in year 2000, post which weak margin and slower growth lead to P/E de-rating across the sector**

**Exhibit 34: 1-year forward P/E ratio for select global EMS companies, December fiscal year-ends, 1996-2005 (X)**

Company	Avg 1-yr fwd P/E									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Jabil		22	18	33	62	45	29	23	21	25
Flex		11	18	18	60	47	37	35	36	36
Sanmina	13	17	14	22						
Foxconn	7	16	17	20	26	18	13	11	11	11
Compal	5	10	15	17	17	11	9	14	14	11
<b>Median</b>	<b>7</b>	<b>16</b>	<b>15</b>	<b>20</b>	<b>43</b>	<b>31</b>	<b>21</b>	<b>19</b>	<b>18</b>	<b>18</b>

Source: Companies, Bloomberg

Given that the EMS industry remains very competitive globally, with gross margins typically in the 5-15% range and operating margins in the 3-7% range, we see EMS companies undertaking acquisitions to increase their offerings and driving higher EMS supplier power.

The Indian companies seem to be in the same situation as American companies during 1995-2000, aided by favorable government policies and strong domestic demand. However, the ability to sustain margins and returns beyond a short period of time could be a challenge for these companies as the EMS business continues to shift toward the lowest-cost location.

# 5

## Significant growth opportunities but risk-reward not favorable at most

In this deep-dive, we compare companies across capabilities and various operating and financial metrics. We prefer companies with (1) strong capabilities and having significant presence in areas benefitting from an uptick in spends; (2) optimal industry exposure to demonstrate sustained healthy growth; (3) improving growth outlook and profitability; (4) better return ratios; (5) healthy cash conversion; and (6) valuations. In our assessment, Dixon, with its exposure to the mobile and IT hardware segments, has the highest addressable market. In the B2B segments, we see auto, industrial and railways as the key domestic growth drivers. We prefer Kaynes—given its best-in-class metrics among B2B players and vertical integration into OSAT that can help the player become a part of the global semiconductor value chain.

### Vertically integrated players-based play to benefit in the long term

Exhibit 35: Positioning of various EMS players and their end-market exposure

Major EMS Players operating in India											
	Mobile	CEA	Telecom	Lighting	Automotive	Industrial	IT	Medical	Aerospace & Defence	Clean Energy	Company focus
Avalon											B2B
Dixon Technologies India Ltd.											B2C
Amber Enterprises India Ltd											B2B/B2C
Elin Electronics Ltd											B2C
SyrmaSGS											B2B/B2C
KaynesTechnology India Ltd											B2B
Bharat FIH Ltd											B2C
SFO Technologies Pvt Limited											B2B
VVDN Technologies Pvt Ltd											B2B
PG Electroplast											B2C
EPAC Durables											B2C
Pegatron											B2C
Jabil											B2B/B2C
Flex Industries											B2C
Sanmina-SCI											B2B
Cyient DLM											B2B

Source: Company, Kotak Institutional Equities estimates

The Indian EMS industry is classified into two main categories:

### B2C players: Stronger near-term growth but vertical integration key differentiator in the medium term

B2C players such as Dixon, Amber Enterprises and PG Electroplast generally have a higher addressable market due to their exposure to end-markets such as consumer appliances and mobile. Under the B2C market, the companies generally follow two models: 1) **OEM**—the company is a pure contract manufacturer bearing negligible working capital and margin risk and 2) **ODM**—the company would be responsible for design, procurement and manufacturing; this generates higher margins than an OEM player. Overall, a B2C player has lower margins, higher asset turns and high returns than a B2B player due to its asset-light model. However, within the B2C segment, ODM players with a higher degree of vertical integration generally have a higher barrier to entry, and hence we prefer Amber over Dixon.

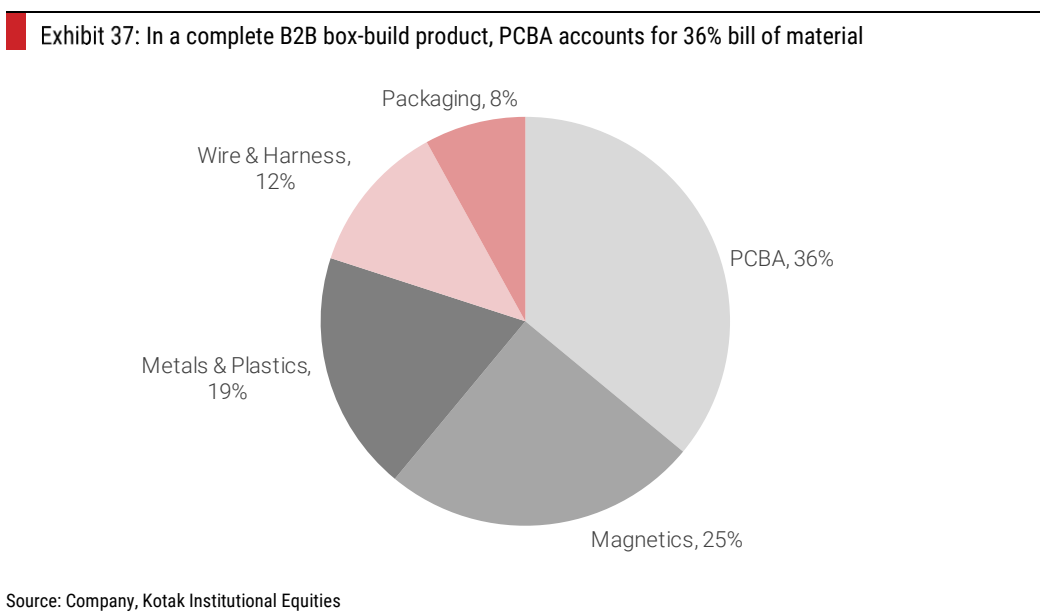
### B2B players: Exposure to diverse high-growth markets key

In contrast to B2C players, the B2B players have a lower addressable market due to their exposure to segments such as industrial, auto, medical and defense. Under the B2B market, companies generally follow two models: 1) **PCBA**—assembly of components using bare PCBs using SMT machines; and 2) **Box-build**—supplying the entire finished product, including PCBA, plastics, magnetics and wires to the end-customer. Overall, B2B players generally have high margins, low asset turns and lower returns than B2C players, given their higher degree of backward integration. B2B players generally have long-term relationships with clients, certifications that limit entry and lower product changes. Among B2B players, the exposure to multiple end-markets that are seeing stronger growth is key. In the near term, we see that in the Indian market, auto, EVs, industrial and railways are seeing strong growth, and we prefer Kaynes and Syrma that have higher domestic exposures.

**Exhibit 36: Key business models for EMS companies**

Categorization EMS companies		
Industry	B2C	B2B
Business Model	OEM/ODM	PCBA/Box Build
Addressable Market	High	Medium
Working capital	Low	High
Margin	Low	High
Asset Turn	High	Low
Return Ratio	Higher in B2C	Lower in B2B
Key players	Amber, Dixon,PG Electoplast	Kaynes, Syrma, Avalon, Cyient DLM

Source: Company, Kotak Institutional Equities



**Revenue: Players with diversified exposures to see the strongest growth**

With a higher addressable TAM, the B2C players have a long runway for growth.

In the near term, we see Kaynes—with its exposure to autos, EVs, industrials and railways and an order book that is 10X/2.3X FY2020/FY2022 levels—should see 45% growth in the EMS business, aided by its entry into OSAT and PCB. We see growth across the industry to be 30%+ over the next three years despite a strong base, driven by the localization of electronics manufacturing in India. Order book growth for most companies have been very strong and gives us good near-term visibility.

**Kaynes should see the strongest growth driven by its EMS segment aided by OSAT and PCB**

**Exhibit 38: Comparison of revenue growth across companies, March fiscal year-ends, 2020-26E (Rs mn)**

Revenue	2020	2021	2022	2023	2024	2025	2026	3yr CAGR
Kaynes	3,682	4,206	7,063	11,261	16,892	25,143	38,440	51%
Syrma	3,971	4,383	10,197	20,484	30,000	42,000	56,700	40%
Avalon	6,419	6,905	8,407	9,447	8,502	10,203	13,264	12%
Cyient DLM	4,571	6,280	7,205	8,320	11,815	16,308	21,200	37%
Dixon	44,001	64,482	106,971	121,920	182,043	290,165	351,316	42%
Amber	39,628	30,305	42,064	69,271	71,467	89,625	108,071	16%
<b>Total</b>	<b>102,272</b>	<b>116,561</b>	<b>181,907</b>	<b>240,704</b>	<b>320,718</b>	<b>473,443</b>	<b>588,992</b>	<b>35%</b>

Source: Company, Kotak Institutional Equities estimates

### Vertical integration drives higher margins

B2B players with a higher degree of backward integration enjoy the highest gross margins. In our view, Avalon and Kaynes will continue to enjoy superior gross margins, with Dixon having the highest exposure to the OEM B2C business that has the lowest margins.

Both B2B and B2C players follow a model of contract employees and hence operating leverage beyond a certain scope is limited. Kaynes generates the highest EBITDA margins, driven by operating leverage and a high degree of vertical integration.

In the near term, Kaynes may see some margin impact as it invests in new segments (PCB and OSAT). However, over the medium term, margins should expand as new segments have higher margins than the existing EMS business.

### Vertical integration and higher value addition help B2B players enjoy higher margins versus B2C players

Exhibit 39: Comparison of margins across companies, March fiscal year-ends, 2020-26E (%)

Gross margin	2020	2021	2022	2023	2024	2025	2026
Kaynes	34.4	32.0	30.7	30.7	27.5	27.0	27.5
Syrma	42.8	35.6	29.5	24.8	22.5	22.8	23.2
Avalon	35.9	34.0	34.1	35.8	36.0	36.0	36.0
Cyient DLM	20.2	21.1	24.6	22.5	23.0	23.5	23.5
Dixon	12.3	10.5	8.6	9.6	9.3	9.3	9.3
Amber	16.7	17.1	16.1	15.3	16.0	16.5	16.5
<b>Total</b>	<b>6.1</b>	<b>5.6</b>	<b>5.4</b>	<b>5.7</b>	<b>5.4</b>	<b>5.0</b>	<b>5.7</b>

EBITDA margin	2020	2021	2022	2023	2024	2025	2026
Kaynes	11.5	10.0	13.3	14.9	14.0	13.5	14.0
Syrma	17.0	10.7	9.3	9.2	6.9	7.6	8.0
Avalon	10.0	9.6	11.6	11.9	7.0	9.8	10.7
Cyient DLM	3.0	7.3	11.8	10.6	9.4	10.0	10.2
Dixon	5.1	4.4	3.5	4.2	4.0	4.0	4.1
Amber	7.8	7.3	6.5	6.0	6.8	7.3	7.3

PAT margin	2020	2021	2022	2023	2024	2025	2026
Kaynes	2.5	2.3	5.9	8.5	9.8	7.5	8.1
Syrma	11.1	7.3	5.6	6.0	4.3	4.8	5.1
Avalon	1.9	3.3	8.1	5.6	3.3	5.4	6.3
Cyient DLM	(1.5)	1.9	5.7	3.8	5.4	7.7	7.4
Dixon	2.7	2.5	1.8	2.1	2.2	2.4	2.5
Amber	7.8	7.3	6.5	6.0	6.8	7.3	7.3

Source: Company, Kotak Institutional Equities estimates

### Working capital cycle: B2C-exposed players have the strongest cash conversion cycle

We expect companies with a higher degree of exposure to OEM verticals within B2C EMS to have the lowest working capital requirement. Dixon, with strong growth driven by its exposure to OEMs where it generates low margins and carries no major working capital, has the best working capital cycle.

B2B players with exposure to defense, aerospace and industrials have higher margins, which are negated by higher working capital. A reduction in inventory days holds the key for most players. We currently expect Kaynes to have a higher working capital cycle than most peers.

### Dixon with its B2C OEM exposure should continue to have the lowest working capital cycle

Exhibit 40: Operating working capital as days of sales for EMS players, March fiscal year-ends, 2020-26E

Net operating working capital (as days of sales)	2020	2021	2022	2023	2024	2025	2026
Kaynes	151	165	134	135	121	121	121
Syrma	71	75	116	90	70	70	70
Avalon	76	106	127	148	150	125	110
Cyient DLM	32	43	58	32	95	95	95
Dixon	6	7	7	7	10	11	11
Amber	28	42	17	29	29	29	29

Source: Company, Kotak Institutional Equities estimates

### Return ratios

We expect companies with a higher degree of exposure to OEM verticals within B2C EMS to have the highest return ratio. Dixon, with strong growth driven by its exposure to the mobile segment and aided by stable margins and a lower working capital, should continue to enjoy industry-leading return ratios in our view.

In the long term, B2B players can generate return ratios closer to 20%, but managing working capital holds the key for them. The current numbers are subdued, given the recent capital raise by most players and due to expansion. For Kaynes, we are expecting a decrease in ROCE in the next two years, primarily driven by investments in the OSAT business, which would be generating no margins in the initial phase. Further, FY2024 numbers have been impacted by the recent Rs14 bn capital raise undertaken for the OSAT business.

Exhibit 41: B2C-oriented EMS companies have better return profiles; B2B players’ return ratios to gradually improve

RoACE (in %)	2020	2021	2022	2023	2024	2025	2026
Kaynes	11	11	17	15	8	6	10
Syrma	28	11	9	8	6	9	12
Avalon	13	12	16	11	4	7	10
Cyient DLM	1	6	11	9	5	9	11
Dixon	25	24	18	20	25	32	30
Amber	14	5	5	7	8	10	12

Source: Companies, Kotak Institutional Equities

### Valuation methodology: High growth but high working capital-intensive business

Given the high growth but high working capital intensity across most companies, we prefer valuing the EMS sector using a DCF-based approach versus a multiple (P/E or EV/EBITDA)-based approach.

India’s growing domestic electronic demand, supported by the government’s focus on local manufacturing (lower taxes, PLI schemes) and potential export opportunities, puts Indian EMS companies at the cusp of robust growth in the medium term. Further, the order book across most companies have seen a multi-fold increase in the last 2-3 years. Hence, we expect EMS companies to report 36% PAT growth over FY2023-26E at the aggregate level.

However, this high growth in earnings in most cases does not translate into strong FCF generation due to high working capital intensity in the business. When we analyze EBITDA, PAT, capex and FCF of EMS companies under our coverage universe over FY2021-23, as can be seen, they have reported a much lower FCF relative to PAT/EBITDA, given their higher working capital intensity across most business with moderate capex requirements as well. Further, given that these companies will be in a strong growth phase in the next couple of years, we expect this trend to continue. Last, we highlight the FCF-to-PAT generation prospects across various EMS models.

- ▶ **B2C OEM model:** In this model, we expect the companies to have the strongest FCF-to-PAT ratio, given that a large part of inventory sourcing is handled by the brand and the EMS company’s primary area of focus is the assembly of the final product within the shortest duration. (Dixon’s mobile and television segment generally fall in this category). However, the margin in this business is at the lowest level (~4% EBITDA margin) and the risk of disruption from competition is higher given the low value addition.
- ▶ **B2B ODM model:** This model is expected to have a moderate FCF-to-PAT ratio, given that the EMS player is responsible for inventory sourcing and assembly of final product with some value addition. (Dixon’s lighting and washing machine business and Amber’s AC business would typically fall under this category; the higher capital intensity is offset by relatively higher EBITDA margins of ~7-10%).
- ▶ **B2B PCBA model:** In the B2B EMS model, sectors such as consumer and automobile have relatively lower working capital requirement, which gets partially offset by lower margins. Companies that do bare PCB assembly for the consumer segment have a better FCF-to-PAT ratio. B2B EMS players are generally responsible for inventory sourcing and have moderate value addition.

- **B2B box-build:** Sectors such as industrial, healthcare and defense within the B2B EMS segments have relatively higher working capital and higher margins as well. Further, companies that manufacture complete box-build (PCBA + cable harness + plastic + sheet metal) in house typically have higher working capital intensity with double-digit EBITDA margins, helping generate a better FCF-to-PAT ratio.

**EMS companies have historically reported significantly lower FCF than reported EBITDA/PAT due to higher working capital intensity**

Exhibit 42: EBITDA, PAT, capex and FCF of EMS companies, March fiscal year-ends, 2021-45E (Rs mn)

	2021	2022	2023	2024E	2025E	2026E	2027E	Total 2024E-33E	Total 2034E-45E
<b>Dixon</b>									
EBITDA	2,866	3,791	5,128	7,267	11,650	14,436	17,381	218,527	1,263,254
PAT	1,598	1,904	2,551	3,967	6,935	8,686	10,829	145,240	895,407
OCF	1,701	2,728	7,258	4,148	8,949	11,676	14,321	169,066	987,866
Capex	1,680	4,173	4,502	5,000	4,000	4,000	4,000	46,037	229,790
FCF	22	(1,445)	2,755	(852)	4,949	7,676	10,321	123,030	758,076
FCF/PAT (X)	0.0	(0.8)	1.1	(0.2)	0.7	0.9	1.0	0.8	0.8
<b>Amber</b>									
EBITDA	2,203	2,754	4,179	4,860	6,543	7,889	9,230	134,819	546,100
PAT	816	1,092	1,572	1,688	2,689	3,511	4,364	64,810	261,829
OCF	2,210	2,496	3,206	4,690	5,421	6,404	7,540	84,379	383,225
Capex	1,711	4,077	6,535	4,000	4,000	4,000	3,800	46,117	139,856
FCF	499	(1,582)	(3,329)	690	1,421	2,404	3,740	38,262	243,369
FCF/PAT (X)	0.6	(1.4)	(2.1)	0.4	0.5	0.7	0.9	0.6	0.9
<b>Kaynes</b>									
EBITDA	421	937	1,683	2,365	3,397	5,369	7,737	149,733	898,828
PAT	97	417	952	1,658	1,882	3,129	4,563	96,074	634,182
OCF	256	211	(419)	1,048	915	1,099	2,577	70,583	598,084
Capex	250	422	581	2,600	7,250	1,250	3,000	49,378	142,797
FCF	6	(211)	(1,001)	(1,552)	(6,335)	(151)	(423)	21,205	455,287
FCF/PAT (X)	0.1	(0.5)	(1.1)	(0.9)	(3.4)	(0.0)	(0.1)	0.2	0.7
<b>Syrma SGS</b>									
EBITDA	468	944	1,878	2,070	3,192	4,536	5,994	97,093	487,956
PAT	320	567	1,231	1,299	2,000	2,896	3,823	62,096	317,171
OCF	239	145	(703)	1,365	510	991	1,369	35,089	282,673
Capex	57	817	1,110	4,295	800	2,100	2,604	34,467	233,219
FCF	182	(671)	(1,813)	(2,930)	(290)	(1,109)	(1,235)	623	49,455
FCF/PAT (X)	0.6	(1.2)	(1.5)	(2.3)	(0.1)	(0.4)	(0.3)	0.0	0.2
<b>Cyient DLM</b>									
EBITDA	459	850	878	1,105	1,631	2,162	2,765	42,539	202,410
PAT	118	408	313	638	1,259	1,572	1,983	29,402	138,909
OCF	349	485	521	(1,180)	324	543	762	14,359	117,336
Capex	274	84	76	182	145	108	815	9,626	92,531
FCF	75	401	445	(1,362)	178	434	(53)	4,734	24,805
FCF/PAT (X)	0.6	1.0	1.4	(2.1)	0.1	0.3	(0.0)	0.2	0.2
<b>Avalon</b>									
EBITDA	661	975	1,128	596	1,000	1,419	1,899	28,874	139,052
PAT	231	682	525	284	552	834	1,202	17,418	79,019
OCF	55	139	(133)	995	1,022	885	995	15,475	90,803
Capex	325	425	553	706	888	1,097	1,333	10,920	57,816
FCF	(270)	(286)	(686)	289	134	(212)	(337)	4,555	32,986
FCF/PAT (X)	(1.2)	(0.4)	(1.3)	1.0	0.2	(0.3)	(0.3)	0.3	0.4

Source: Company, Kotak Institutional Equities estimates

# Kaynes Technology (KAYNES)

Electronic Manufacturing Services

ADD

CMP(₹): 2,503

Fair Value(₹): 2,850

Sector View: **Cautious**

NIFTY-50: 22,519

April 12, 2024

## Ahead of the pack; in an investment phase over the near term

Kaynes Technology is a leading EMS player, which is vertically integrating, with its foray into OSAT and PCB manufacturing. We expect Kaynes to have a robust 49% earnings CAGR over FY2023-26E, driven by its EMS segment. Kaynes trades at a premium to other EMS players, which we believe is justified, driven by industry-leading performance and strong growth prospects. We initiate with an ADD rating and a FV of Rs2,850 (14% upside).

### Initiate with an ADD rating; Fair Value of Rs2,850

We initiate coverage on Kaynes with an ADD rating and DCF-based FV of Rs2,850. Our FV implies (1) a revenue CAGR of 31% over FY2023-33E, (2) average EBITDA margin at 15% and EBITDA CAGR of 31% and (4) WACC of 12% and terminal growth of 4%. The DCF-based FV of Rs2,850 implies 32X EV/EBITDA FY2026E and 58X March 2026E P/E. The DCF-based FV of only the EMS business is Rs2,300 (implies 42X on March 2026E EMS earnings).

### Robust growth prospects across multiple end-markets

Kaynes' competitive strength in the EMS vertical is its (1) strong revenue growth prospects, driven by exposure to multiple high-growth end-markets such as autos, industrial and railways (Kaynes has seen industry-leading growth, which we expect to continue) and (2) industry-leading margins, driven by a focus on the right mix among sectors and higher levels of backward integration. We see Kaynes in an investment mode over the next couple of years, led by expansion in OSAT and PCB. The success of the OSAT business can help Kaynes go beyond the EMS vertical and gain a foothold in the global semiconductor value chain. However, for Kaynes to generate 13% RoCE (ex- subsidy), OSAT margins would need to improve to 25% with working capital days (as days of sales) in line with global majors, which remains the key thing to look out for.

### Financials: We expect 49% earnings CAGR over FY2023-26E

We expect Kaynes' revenue to increase at a CAGR of 51% over FY2023-26E, led by 45% CAGR in EMS, aided by initial OSAT and PCB revenues. At end-9MFY24, Kaynes has an order backlog of Rs38 bn, which is 11.0X/2.5X the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth. However, in the near term, Kaynes would be investing to enhance its capabilities in OSAT and PCB. During the initial years, these segments would be making inferior margins until operations reach a steady state. Hence, we expect near-term margin compression for Kaynes, with medium-term margins reaching at a steady state percentage of 15.5% versus ~13.0% (three-year average) currently. Overall, we are baking in PAT CAGR of 49%.

### Risk: Failure to scale up OSAT business and deteriorating working capital

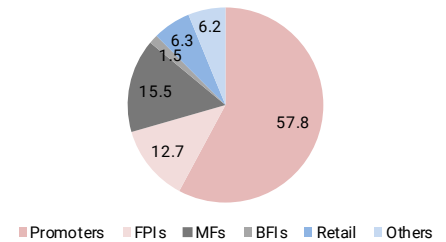
We expect Kaynes to gradually scale up its OSAT business in phases. Failure to do so could significantly impact its financials. Any further deterioration in working capital could impact return ratios, offsetting the benefits of its high margins.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	2,503/2,850/ADD
52-week range (Rs) (high-low)	3,249-935
Mcap (bn) (Rs/US\$)	160/1.9
ADTV-3M (mn) (Rs/US\$)	649/7.8

##### Shareholding pattern (%)



##### Price performance (%)

	1M	3M	12M
Absolute	(12)	(9)	161
Rel. to Nifty	(13)	(13)	134
Rel. to MSCI India	(14)	(16)	123

##### Forecasts/Valuations

	2024	2025E	2026E
EPS (Rs)	24.2	30.8	48.9
EPS growth (%)	62.4	27.5	58.6
P/E (X)	103.5	81.2	51.2
P/B (X)	5.8	5.4	4.8
EV/EBITDA (X)	58.8	42.8	28.2
RoE (%)	8.9	7.5	10.9
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	18	26	38
EBITDA (Rs bn)	2	4	5
Net profits (Rs bn)	2	2	3

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Deepak Krishnan

Aditya Mongia

Sai Siddhardha P



## Financial overview: Expect 49% PAT CAGR over FY2023-26E

We expect Kaynes' EPS to grow 49% over FY2023-26E

Exhibit 1: Key financial metrics of Kaynes Technology (consolidated), March fiscal year-end, 2020-27E

	Net sales (Rs bn)	EBITDA (Rs bn)	PAT (Rs bn)	EPS (Rs)	EV/EBITDA (X)	P/E (X)	P/B (X)	RoCE (%)	RoE (%)
2020	3,682	423	93.5	1.5	381.9	1,715.1	141.9	11.4	9.1
2021	4,206	421	97.4	1.5	384.1	1,646.4	105.1	10.9	8.1
2022	7,063	937	416.7	6.5	172.8	384.8	72.0	17.5	24.4
2023	11,261	1,683	952.0	14.9	93.2	168.5	15.2	15.4	16.4
2024E	17,567	2,459	1,545.6	24.2	58.9	103.8	5.8	9.1	8.9
2025E	26,123	3,534	1,971.3	30.8	42.9	81.3	5.4	6.8	7.5
2026E	38,440	5,369	3,125.9	48.9	28.2	51.3	4.8	10.1	10.9
2027E	53,077	7,737	4,560.9	71.4	19.7	35.2	4.2	13.3	14.0

Source: Company, Kotak Institutional Equities estimates

Exhibit 2: Summary financials of Kaynes Technology India Ltd (consolidated), March fiscal year-ends, 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Income statement</b>								
Net revenues	3,682	4,206	7,063	11,261	17,567	26,123	38,440	53,077
Total operating expenses	(3,259)	(3,786)	(6,126)	(9,578)	(15,108)	(22,589)	(33,072)	(45,341)
<b>EBITDA</b>	<b>423</b>	<b>421</b>	<b>937</b>	<b>1,683</b>	<b>2,459</b>	<b>3,534</b>	<b>5,369</b>	<b>7,737</b>
Depreciation & Amortization	(84)	(101)	(132)	(187)	(245)	(1,057)	(1,357)	(1,762)
<b>EBIT</b>	<b>340</b>	<b>320</b>	<b>805</b>	<b>1,496</b>	<b>2,214</b>	<b>2,476</b>	<b>4,011</b>	<b>5,974</b>
Other income	19	40	41	114	329	339	333	271
Interest expense	(246)	(252)	(256)	(349)	(544)	(204)	(204)	(204)
<b>PBT</b>	<b>113</b>	<b>109</b>	<b>590</b>	<b>1,260</b>	<b>1,999</b>	<b>2,611</b>	<b>4,140</b>	<b>6,041</b>
Tax expense	19	11	174	308	454	640	1,014	1,480
<b>Net profit</b>	<b>94</b>	<b>97</b>	<b>417</b>	<b>952</b>	<b>1,546</b>	<b>1,971</b>	<b>3,126</b>	<b>4,561</b>
<b>Reported PAT</b>	<b>94</b>	<b>97</b>	<b>417</b>	<b>952</b>	<b>1,546</b>	<b>1,971</b>	<b>3,126</b>	<b>4,561</b>
<b>Recurring EPS</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>15</b>	<b>24</b>	<b>31</b>	<b>49</b>	<b>71</b>
<b>Balance sheet</b>								
<b>Shareholders' funds</b>	<b>1,027</b>	<b>1,387</b>	<b>2,026</b>	<b>9,590</b>	<b>25,136</b>	<b>27,107</b>	<b>30,233</b>	<b>34,794</b>
Share capital	68	79	465	581	582	582	582	582
Reserves & surplus	959	1,308	1,560	9,009	24,555	26,526	29,652	34,213
Debt	1,438	1,395	1,695	1,359	1,359	1,359	1,359	1,359
Deferred tax liabilities	79	52	68	77	77	77	77	77
Minority interest and other liabilities	123	105	216	218	218	5,968	9,718	13,468
<b>Total sources of funds</b>	<b>2,667</b>	<b>2,939</b>	<b>4,005</b>	<b>11,244</b>	<b>26,790</b>	<b>34,511</b>	<b>41,387</b>	<b>49,698</b>
Net fixed assets	638	659	864	1,587	3,942	15,884	19,527	24,514
Net working capital (ex-cash)	1,668	1,795	2,429	4,505	5,778	8,089	11,416	15,369
Investments	238	342	496	293	293	293	293	293
Cash and bank balances and current investments	123	143	216	4,860	16,777	10,245	10,152	9,522
<b>Total application of funds</b>	<b>2,667</b>	<b>2,939</b>	<b>4,005</b>	<b>11,244</b>	<b>26,790</b>	<b>34,511</b>	<b>41,387</b>	<b>49,698</b>
<b>Free cash flow</b>								
Operating profit before wcap. changes	427	196	722	1,713	2,788	3,872	5,702	8,007
Change in working capital / other adjustments	44	(112)	(734)	(1,629)	(1,274)	(2,311)	(3,327)	(3,953)
Direct tax paid	(19)	172	224	(503)	(454)	(640)	(1,014)	(1,480)
<b>Net cashflow from operating activities</b>	<b>452</b>	<b>256</b>	<b>211</b>	<b>(419)</b>	<b>1,060</b>	<b>922</b>	<b>1,361</b>	<b>2,574</b>
Capex	(312)	(250)	(422)	(581)	(2,600)	(13,000)	(5,000)	(6,750)
<b>Free cash flow (CFO + net capex)</b>	<b>140</b>	<b>6</b>	<b>(211)</b>	<b>(1,001)</b>	<b>(1,540)</b>	<b>(12,078)</b>	<b>(3,639)</b>	<b>(4,176)</b>
<b>Growth (%)</b>								
Revenue growth		14.2	67.9	59.4	56.0	48.7	47.2	38.1
EBITDA growth		(0.6)	122.6	79.7	46.1	43.7	51.9	44.1
Recurring PAT growth		4.2	327.8	128.5	62.4	27.5	58.6	45.9
<b>Key ratios</b>								
EBITDA margin (%)	11.5	10.0	13.3	14.9	14.0	13.5	14.0	14.6
Net debt/equity (X)	1.3	0.9	0.7	(0.4)	(0.6)	(0.3)	(0.3)	(0.2)
Net debt/EBITDA (X)	3.1	3.0	1.6	(2.1)	(6.3)	(2.5)	(1.6)	(1.1)
Book value per share (Rs)	18	24	35	165	433	467	520	599
RoAE (%)	9.1	8.1	24.4	16.4	8.9	7.5	10.9	14.0
RoACE (%)	11.4	10.9	17.5	15.4	9.1	6.8	10.1	13.3
RoAIC (%)	13.0	12.6	20.9	26.0	23.0	11.4	11.2	12.9

Source: Company, Kotak Institutional Equities estimates

# 2

## Valuation: Initiate with ADD rating and Fair Value of Rs2,850

We initiate coverage on Kaynes Technologies with an ADD rating and DCF-based Fair Value of Rs2,850, implying 58X P/E on consolidated March 2026 earnings. Kaynes Technology is an end-to-end integrated electronics manufacturing player, having capabilities across the entire spectrum of electronics system design and manufacturing services (ESDM). We forecast Kaynes' earnings to increase at a CAGR of 49% over FY2023-26E, driven by a revenue CAGR of 51% (45% growth in EMS vertical, aided by OSAT and PCB segments). However, in the near term, Kaynes would be investing to enhance its capabilities in OSAT and PCB. Hence, we expect near-term margin compression for Kaynes, with medium-term margins reaching at a steady state percentage of 15.5% versus ~13.0% (three-year average) currently.

### Our DCF-based valuation implies a 14% upside

We value Kaynes Technologies using a three-stage DCF model with explicit forecasts over FY2023-35E, followed by a fade period over FY2035-45E and assume terminal growth after that. In the explicit forecast period, we build in (1) a revenue CAGR of 31% and (2) average EBITDA margin at 15% (versus 12.7% over FY2021-23) and EBITDA CAGR of 31%. We forecast gradual moderation in FCF growth to 7% by FY2045E. We assume a WACC of 12% and a terminal growth rate of 4%. The DCF-based FV of Rs2,850 implies 32X EV/EBITDA FY2026E and 58X March 2026E P/E. The DCF-based FV of only the EMS business is Rs2,300 (implies 42X on March 20206E EMS Earnings).

### We arrive at a valuation of Rs2,850/share for Kaynes Technology

Exhibit 3: DCF valuation of Kaynes Technology (consolidated), March fiscal year-ends, 2023-45E (Rs mn)

(March fiscal year-ends, Rs mn)	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2045E
<b>Free cash flow calculation</b>														
Revenue	11,261	17,567	26,123	38,440	53,077	71,826	96,534	125,558	152,286	179,805	213,367	249,722	288,417	690,522
yoy growth (%)	59.4	56.0	48.7	47.2	38.1	35.3	34.4	30.1	21.3	18.1	18.7	17.0	15.5	4.0
EBIT (excl. other income)	1,496	2,214	2,476	4,011	5,974	8,368	11,872	16,390	20,031	23,711	28,323	33,317	38,626	92,478
EBIT margin (%)	13.3	12.6	9.5	10.4	11.3	11.7	12.3	13.1	13.2	13.2	13.3	13.3	13.4	13.4
Effective tax rate (%)	24.5	22.7	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	25
NOPAT	1,130	1,712	1,870	3,028	4,510	6,318	8,964	12,374	15,124	17,902	21,384	25,154	29,163	69,821
Change in working capital (excl. cash)	(1,629)	(1,274)	(2,311)	(3,327)	(3,953)	(5,064)	(6,673)	(7,839)	(7,219)	(7,432)	(9,064)	(9,819)	(10,451)	(6,549)
Depreciation	187	245	1,057	1,357	1,762	2,192	3,008	3,434	3,952	4,502	5,084	5,696	6,335	15,166
Capex	(581)	(2,600)	(13,000)	(5,000)	(6,750)	(7,152)	(13,604)	(7,100)	(8,628)	(9,171)	(9,706)	(10,205)	(10,635)	(15,166)
Govt capital grant	0	0	5,750	3,750	3,750	3,750	7,250	3,000	3,750	3,750	3,750	3,750	3,750	0
<b>FCFF</b>	<b>(893)</b>	<b>(1,917)</b>	<b>(6,634)</b>	<b>(191)</b>	<b>(680)</b>	<b>44</b>	<b>(1,056)</b>	<b>3,869</b>	<b>6,978</b>	<b>9,550</b>	<b>11,448</b>	<b>14,577</b>	<b>18,162</b>	<b>63,273</b>

Post tax cost of debt (%)	7.6
Risk free rate (%)	7.0
Risk premium (%)	4.9
Beta	1.3
Cost of equity	13.3
1HFY24 debt	2,592
1HFY24 equity	10,173
<b>WACC (%)</b>	<b>12.1</b>

Terminal growth rate (%)	WACC %				
	11.1	11.6	12.1	12.6	13.1
3.0	3,290	2,970	2,680	2,440	2,220
3.5	3,410	3,060	2,760	2,500	2,270
4.0	3,550	3,170	<b>2,850</b>	2,580	2,330
4.5	3,700	3,300	2,960	2,660	2,400
5.0	3,890	3,440	3,070	2,750	2,480

<b>DCF valuation</b>			
PV of cash flows	65,934	75,846	91,676
PV of Terminal value	73,226	82,105	92,060
<b>EV</b>			
Less: Net debt	1,359	1,359	1,359
Implied Equity value	137,801	156,591	182,376
<b>Implied target price (Rs/share)</b>	<b>2,156</b>	<b>2,450</b>	<b>2,850</b>
<b>March 2026E-based Fair value (Rs/share)</b>	<b>2,850</b>		

Source: Company, Kotak Institutional Equities estimates

### Revenue: EMS growth aided by OSAT and PCB foray

We expect Kaynes' revenue to increase at a CAGR of 51% over FY2023-26E, led by a CAGR of 45% in the EMS, aided by initial OSAT and PCB revenues. At end-9MFY24, Kaynes has an order backlog of Rs38 bn, which is 11X/2.5X the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth.

**EMS—auto, industrial and railways are key near-term growth drivers:** Kaynes has seen the strongest growth among its peer set—45% revenue CAGR over the past three years (FY2020-23), driven by exposure

to fast-growing domestic end-markets such as auto, industrial and railways. In line with the robust revenue growth, we see Kaynes' order booking also grow at a similar pace. At end-9MFY24, Kaynes has an order backlog of Rs35 bn, which is 11.0X/2.5X the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth. We expect Kaynes' EMS revenue to see 45% growth over the next three years, led by continued momentum in the same key verticals.

#### **Automotive—passenger vehicles and new client additions to drive growth**

Kaynes' automotive vertical is a prominent supplier to multiple OEMs where the company provides electronics for lighting, passive start, electronic control units, sensors, infotainment systems and door switches. The company is among the top-5 automotive light manufacturers. The auto segment's share within Kaynes' revenue has increased to 38% in FY2023 from 20% in FY2020, driven by a pickup in new customers.

Currently, Kaynes caters to ~4% (Rs4.3 bn revenue, as of FY2023) of the total addressable market of Rs115 bn for the ICE auto segment. We expect the ICE auto EMS market to increase at a CAGR of 5% over FY2023-26E and reaching Rs133 bn by FY2026E, driven primarily by the passenger vehicle segment as two-wheeler volumes gradually shift toward EVs from ICE. We expect the momentum seen over the past couple of years to sustain and see the auto segment's revenue increasing at a CAGR of 37% over FY2023-26E, with market share for Kaynes doubling to ~7.5%. The EV revenue is part of the industrial segment for Kaynes.

#### **Industrial (including EV)—EVs to be key growth driver**

Kaynes' industrial segment is expected to see a healthy pickup with EV vehicles. Kaynes has started manufacturing components related to EVs, starting with controllers of the EV battery management systems. Smart meters and industrial machinery also form a sizeable part of the industrial business, which continue to see strong growth momentum. We see the industrial segment as a key growth driver for Kaynes, led primarily by the EV segment.

Currently, Kaynes caters to ~5% (Rs3 bn of revenue, as of FY2023) of the total addressable market of Rs56 bn for the industrial segment (Rs6 bn TAM for the EV segment and Rs50 bn TAM for the industrial segment). We see the industrial market of Kaynes increasing at a CAGR of 40% over FY2023-26E, driven by 70% growth in EVs and 12% growth in the industrial EMS market.

The industrial sector forms 27% of revenues in FY2023, which we expect will reach 42% by FY2026, implying a CAGR of 65%+ over FY2023-26E, led primarily by the EV segment.

#### **Railways—signaling and Kavach systems to be key growth drivers**

Railways has been contributing around 12% of the revenues for Kaynes, driven by its relationship with global OEMs such as Siemens and Hitachi. Kaynes sees signaling orders for metros, high-speed rail and the mainline as one of the key drivers of order inflow. The Railway Union Budget has an allocation of ~Rs50 bn toward signaling equipment for the mainline (electronic content in signaling is ~10% of the order value). The second-biggest growth driver would be the Kavach Automatic Train Protection System, which is expected to be installed on 34,000 km of the broad-gauge rail network by 2028; Avalon has tied up with a few approved vendors. The total spend on Kavach is expected to be close to Rs340 bn (Rs5 mn per km, with total broad-gauge network of 68,000 km).

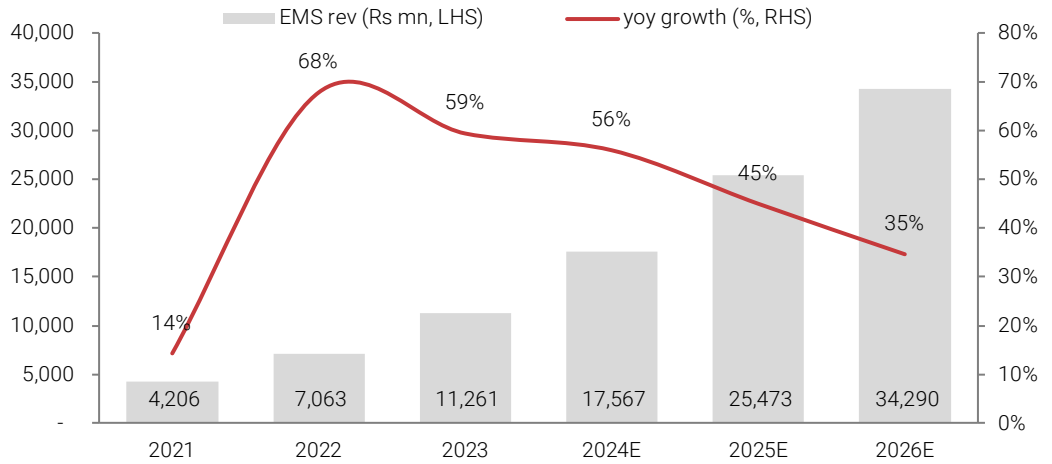
We bake in a revenue CAGR of 24% over FY2023-26E for the railway segment, led by railway and anti-collision system orders.

**OSAT—phase-1 to start production in 4QFY25:** Kaynes has plans to set up OSAT facilities in two stages. Under the phase-1 plan, the company would be setting up 12 lines, undertaking a total investment of Rs29 bn, with 50% capex subsidy from the central government, in line with the PLI policy and 25% capex subsidy from the state government. We estimate Kaynes to start generating revenue from the OSAT segment 4QFY25 onward. Kaynes' ability to have back-to-back tie-ups with foundries that would provide the wafers and end-markets for these semiconductor chips holds the key, in our view. With a gross asset turn of 1X in this business, we see Kaynes reaching Rs29 bn by FY2031 (six years after the start of production).

**PCB—initial production begins in FY2025:** Kaynes plans to set up a Rs14 bn PCB plant in Mysuru, which is driven by its focus to vertically integrate and enhance its offering to key customers and improve its margin profile. With the HDI PCB plant being set up in India, it will help the company not only cater to its captive needs, but also opens up an opportunity to add another product line for exports. We expect its PCB segment’s revenue to increase at a CAGR of 24% over FY2025-35E, with margins stabilizing at 20%.

**We are baking in 51% revenue CAGR over the next three years—45% in EMS; with OSAT and PCB aiding growth**

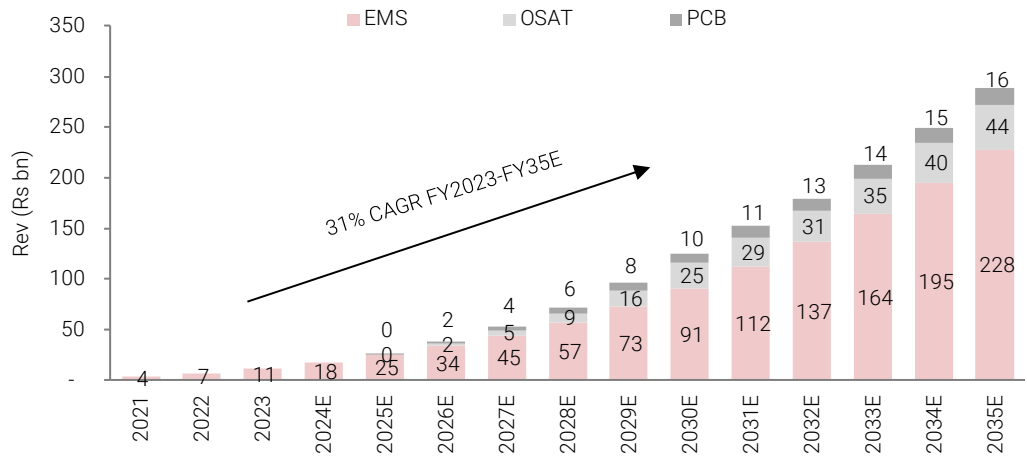
**Exhibit 4: Kaynes’ EMS revenue (Rs mn) and revenue growth (%) trends, March fiscal year-ends, 2021-26E**



Source: Company, Kotak Institutional Equities estimates

**Over FY2023-35E, we expect Kaynes’ revenue to see a CAGR of 31% (with OSAT contributing ~20% of sales)**

**Exhibit 5: Kaynes’ segmental revenue, March fiscal year-ends, 2021-35E (Rs bn)**



Source: Company, Kotak Institutional Equities estimates

**Margins: Near-term pain with potential upside over the medium term**

Over the near term, Kaynes would be investing to enhance its capabilities in OSAT and PCB. During the initial years, these segments would be making inferior margins until operations reach a steady state. Hence, we expect near-term margin compression for Kaynes, with medium-term margins reaching at a steady state percentage of 15.5% versus ~13.0% (three-year average) currently. We are different from consensus, as we expect margins to weaken over the shorter term.

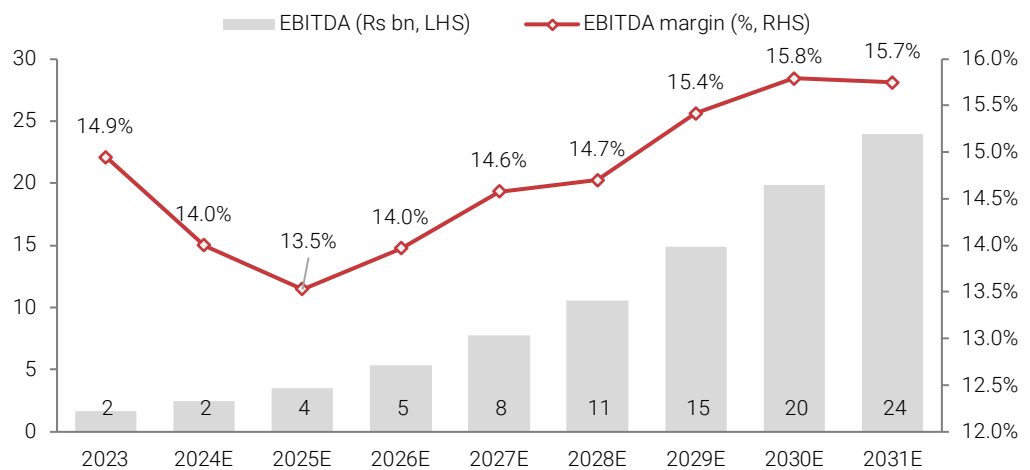
**EMS segment:** Within EMS, the auto, industrial (including EVs) and railways segments contributed around 80% of sales in FY2023 and will continue to be the key drivers of sales as well. Kaynes’ EMS EBITDA margins have improved from 10% in FY2021 to 14.9% in FY2023, driven by 1) its focus on the right mix among sectors (high mix, flexible volume), 2) increased focus on backward integration (box build) and 3) operating leverage. We expect EBITDA margins for Kaynes’ EMS segment to be around 15%, driven by a stable business mix. Increased competitive intensity leading to a margin decline would be the key risk of Kaynes in this vertical. We are not baking in any margin improvement in our estimates due to in-house PCB manufacturing.

**PCB segment:** In this vertical, Kaynes plans to manufacture advanced high-density interconnect (HDI) PCBs, which have been the key driving factor behind the reducing size and weight of consumer electronic products. Among the players present in the Indian market, AT&S—an Austrian PCB manufacturer (key supplier to Apple)—would be the player Kaynes is looking to emulate. When we look at both AT&S and Ascent Circuits, their margins have varied from high single digits to the high teens (operations were significantly impacted during the Covid years). We bake in steady state margins for the PCB segment to be around 20%, in line with AT&S.

**OSAT segment:** Globally, the OSAT market is largely dominated by the top-20 players, which have capabilities to undertake a wide variety of packaging technologies and generate EBITDA margins in the range of 20-30%. The OSAT market also has a long tail of around 100+ players, which compete for the bottom 20% of the market. Kaynes initially would be competing with these players to gain a foothold into the global semiconductor value chain. The company is in a capex mode and will be undertaking investments over the next couple of years. Hence, we bake in that Kaynes will reach steady state margins only by FY2031 at around 17%, which is at a substantial discount to global players. Over time, Kaynes plans to move from basic QFN packaging to more complex packaging technology such as BGA, which would help the company move its margins and returns, in line with global peers.

**We expect margins to surpass current levels once OSAT and PCB operations stabilize**

Exhibit 6: Kaynes’ EBITDA (Rs bn) and EBITDA margin % trends, March fiscal year-ends, 2023-31E



Source: Company, Kotak Institutional Equities

**Balance sheet: In capex mode for the next couple of years**

**Working capital:** Kaynes is working with its distributors to establish local supply warehouses in Mysuru or Bangalore (near plant locations) to reduce the lead time and improve on-time supplies. Furthermore, the problem of lot sizes would go away over the medium term, as the scale of the company increases. Hence, we expect these steps to lead to about 10-15 days reduction in working capital days.

**We expect a 14-day reduction in working capital, driven by normalizing inventory levels**

**Exhibit 7: Operating working capital as days of sales, March fiscal year-end, FY2020-26E**

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	150	142	117	134	120	120	120
Receivable as days of sales	93	106	102	74	74	74	74
Payable as days of sales	91	83	85	72	72	72	72
NWC as days of sales	151	165	134	135	121	121	121

Source: Company, Kotak Institutional Equities estimates

**Capex: In an investment mode**

We expect Kaynes to undertake capex worth Rs21 bn over the next three years, with a large part of investments undertaken for newer businesses such as OSAT and PCB.

- ▶ **EMS:** A large part of the proceeds from the IPO is being used to operationalize a greenfield facility in Chamarajanagar for the EMS vertical, with a total outlay of Rs1.4 bn and Rs1 bn being spent on existing facility expansion, which should help the company triple its capacity.
- ▶ **OSAT:** Kaynes will be setting up two facilities for OSAT with a total capital outlay of Rs54 bn with 50% capital subsidy from the central government under PLI and 25% capital subsidy from the respective state governments.
- ▶ **PCB:** Kaynes will set up an advanced HDI PCB plant in Mysuru, with a total capital outlay of Rs14 bn.

**Exhibit 8: Kaynes has multiple expansions planned for the EMS, OSAT and PCB segments**

Locations	Comments	Expected completion
Manesar, Haryana	120k sq. ft built-up space taken	Planned operationalization under progress
Chamarajanagar, Karnataka	Work going on at full swing	Phase 1 to be operationalized in FY2024
Pune, Maharashtra	Leased place	To be operationalized in FY2024
Mysore Unit 1 & 2, Manesar, Bangalore, Chennai	Upgrading existing facilities	
	OSAT Phase 1	To be operationalized in 2HFY25
Karnataka	PCB	To be operationalized in 2HFY25
Karnataka	OSAT Phase 2	

Source: Company, Kotak Institutional Equities

**Leverage: Capital raise through QIP and government subsidy are key drivers of funding**

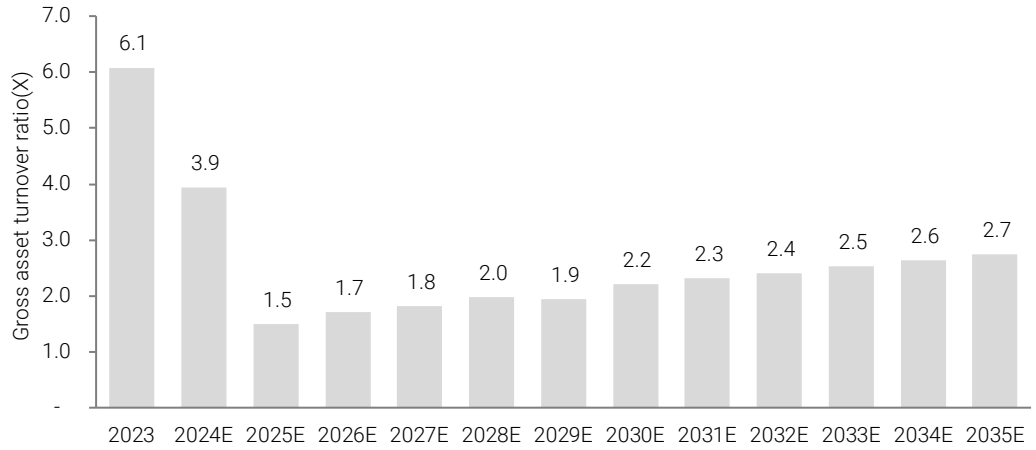
Kaynes has recently raised Rs14 bn through QIP in December 2023. Furthermore, the company will receive 50% capex subsidy from the central government, in line with the PLI policy and 25% capex subsidy from the state government. Hence, despite the company undertaking capex, we do not see leverage to be a concern for Kaynes.

**Asset turnover**

The EMS business generally offers a gross asset turn of 7X. However, the PCB business has an asset turn of 1.5X and the OSAT business has an asset turn of 1X. Hence, we see asset turns for Kaynes Technologies being closer to the 1-2X range over the next couple of years.

**We expect gross asset turnover ratio to see a sharp decline for Kaynes over the next couple of years**

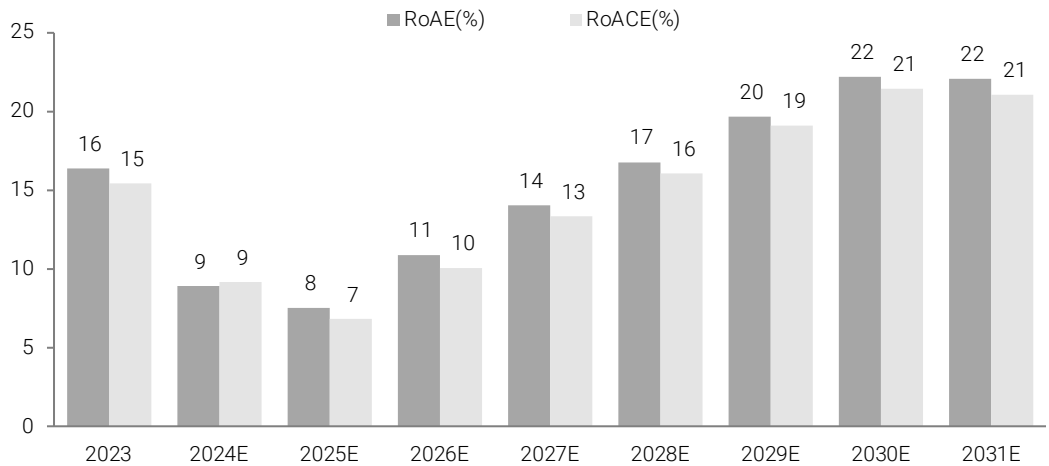
**Exhibit 9: Kaynes’ gross asset turnover ratio, March fiscal year-ends, 2023-35E**



Source: Company, Kotak Institutional Equities estimates

**Near-term return ratios to be impacted as Kaynes invests in new segments, with no margins in the short term**

**Exhibit 10: RoAE and RoACE profiles of Kaynes, March fiscal year-end, FY2023-31E (%)**



Source: Company, Kotak Institutional Equities

### Relative valuation

Kaynes trades at 51X March 2026E EPS, at a significant premium to peers. We expect Kaynes to report a 51% revenue CAGR over the next three years, driven by a 45% growth in EMS, which is further supported by OSAT and PCB revenues. However, unlike consensus, we are baking in near compression in margins over the next three years, driven by incremental investments in newer segments and an initial inferior margin profile for the newer segments. Over the medium term, we expect these segments to be margin and return accretive and hence, believe Kaynes' higher multiple is justified over the short term.

**Exhibit 11: Valuation comparable metric for Kaynes Technologies, March fiscal year-ends, 2024-26E**

Company	Mkt Cap. (US\$ mn)	Price (LC)	Year end	EV (US\$ mn)	EV/EBITDA (X)			P/E (X)			P/B (X)			RoE (%)		
					2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Global</b>																
Hon Hai Precision Industry	66,966	154.5	Dec	59,165	6.7	5.8	4.9	13.6	11.8	12.0	1.3	1.2	1.2	9.5	10.1	9.4
Pegatron Corp	8,413	101.0	Dec	8,997	8.2	7.1	6.2	15.8	14.1	12.9	1.3	1.3	1.2	8.4	9.0	9.8
Quanta Computer Inc	34,056	282.0	Dec	32,424	14.3	11.2	10.4	21.8	17.6	15.3	5.4	4.9	4.5	24.8	27.7	27.3
Compal Electronics	5,043	36.7	Dec	6,139	8.9	8.1	7.3	14.9	13.0	10.4	1.3	1.2	1.2	8.3	8.8	9.1
Wistron Corp	11,378	125.5	Dec	13,688	8.4	6.8	5.6	19.2	14.7	11.4	2.9	2.6	2.4	16.0	18.1	20.9
Jabil Inc	16,465	136.5	Dec	16,789	7.4	6.9	6.5	16.3	13.0	11.4	8.6	6.0	4.4	43.6	52.8	47.1
<b>India</b>																
Dixon Technologies India Ltd	5,585	7,814.0	Mar	5,600	64.0	39.5	31.4	116.9	66.9	53.4	27.6	19.5	14.2	26.7	34.1	30.8
Amber Enterprises India Ltd	1,504	3,705.0	Mar	1,610	27.5	20.4	16.8	74.0	46.4	35.6	6.0	5.3	4.6	8.5	12.1	13.9
Avalon Technologies Ltd	409	520.0	Mar	389	54.2	31.7	22.1	119.6	52.0	38.0	6.0	5.4	4.7	5.1	10.9	13.2
Kaynes Technology India Ltd	1,931	2,508.8	Mar	1,746	67.8	49.0	32.3	103.8	81.3	51.3	5.8	5.4	4.8	8.9	7.5	10.9
Cyient Dlm Ltd	673	705.0	Mar	630	47.4	32.0	23.9	87.7	44.4	35.6	6.0	5.3	4.6	6.8	11.9	12.9
P G Electroplast	562	1,802.1	Mar	623	20.8	17.3	14.9	37.1	27.5	21.9	4.6	3.8	3.0	14.4	14.4	15.1
Syrma Sgs Technology Ltd	1,036	488.0	Mar	1,010	40.5	26.5	18.9	66.2	43.0	29.7	5.1	4.6	4.0	8.1	11.3	14.4

Notes:

(a) All global companies ending Dec have valuation ratios for CY2023/24/25. All domestic companies ending March have valuation ratios for FY2024/25/26.

Source: Bloomberg, Kotak Institutional Equities, company

# 3

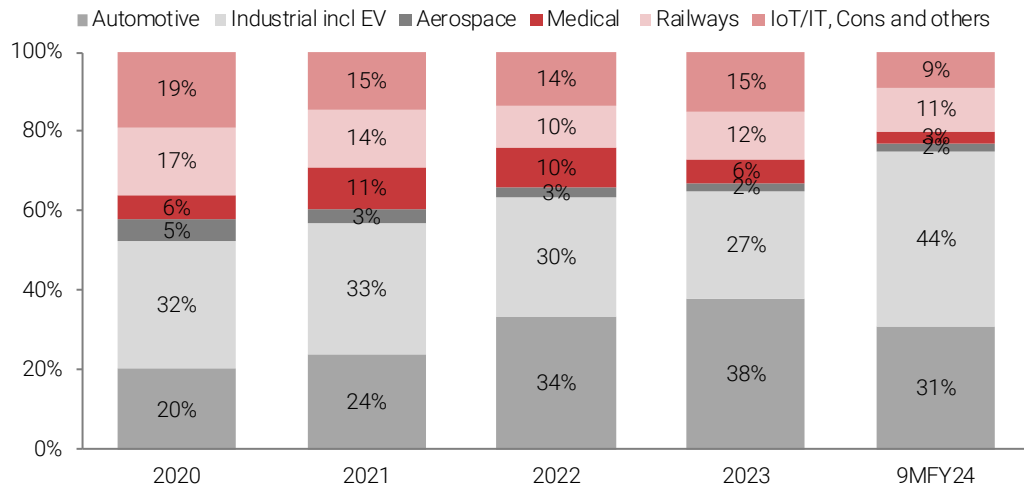
## EMS: Robust prospects across multiple end-segments

At the heart of Kayne’s competitive positioning in the EMS vertical is its (1) strong revenue growth prospects, driven by exposure to multiple end-markets such as autos, industrial, railways, healthcare, IT and medical; (2) industry-leading margins, driven by a focus on the right mix among sectors (high mix, flexible volume); and (3) higher levels of backward integration (box build). We expect Kaynes’ EMS revenue to see 45% growth over the next three years, led by continued momentum due to the auto, industrial and railways segments. At end-9MFY24, Kaynes has an order backlog of Rs38 bn, which is 11.0X/2.5X the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth.

Kayne’s has seen the strongest growth among its peer set—45% revenue CAGR over the past three years (FY2020-23), driven by exposure to fast-growing domestic end-markets such as auto, industrial and railways. In line with the robust revenue growth, we see Kaynes’ order booking also grow at a similar pace. At end-9MFY24, the company has an order backlog of Rs38 bn, which is 11.0X/2.5X the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth. We expect Kaynes’ EMS revenue to see 45% growth over the next three years, driven by continued momentum in the same key verticals. With Kaynes being a beneficiary of the IT PLI scheme, any upside from this segment could further aid our topline estimates.

### Auto, industrial and railways have been drivers for Kaynes (contributes 83% of sales, as of FY2023)

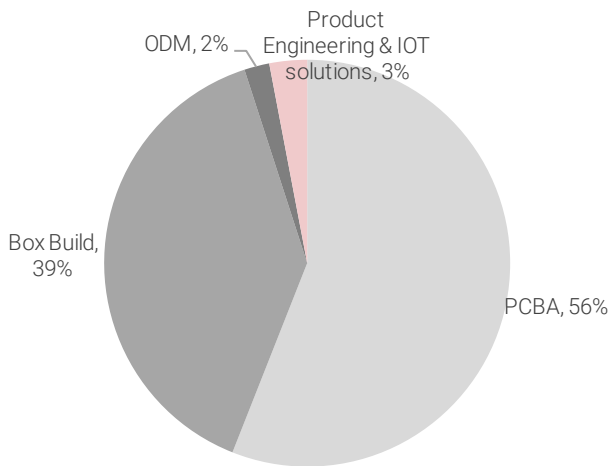
Exhibit 12: Kaynes’ revenue split by end-user industry, March fiscal year-end, FY2020-9MFY24 (%)



Source: Company, Kotak Institutional Equities

**PCBA and box build contribute 95% of topline (as of 9MFY24)**

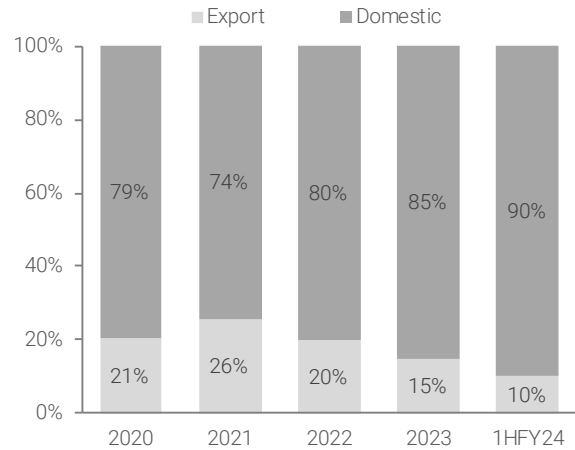
Exhibit 13: Kaynes’ revenue split by segments, March fiscal year-end, FY2023 (%)



Source: Company, Kotak Institutional Equities

**Pickup in India domestic business has shifted 90% sales toward the domestic market**

Exhibit 14: Kaynes’ revenue split by geography, March fiscal year-end, FY2020-1HFY24 (%)



Source: Company, Kotak Institutional Equities

We see Kaynes’ EMS revenue increasing at a CAGR of 45% over the next three years, driven by the auto, industrial and railways segment.

**Automotive—passenger vehicles and new client additions to drive growth**

Kaynes’ automotive vertical is a prominent supplier to multiple OEMs where the company provides electronics for lighting, passive start, electronic control units, sensors, infotainment systems and door switches. The company is among the top-5 automotive light manufacturers. The auto segment’s share within Kaynes’ revenue has increased to 38% in FY2023 from 20% in FY2020, driven by a pickup in new customers.

Currently, Kaynes caters to ~4% (Rs4.3 bn revenue, as of FY2023) of the total addressable market of Rs115 bn for the ICE auto segment. We expect the ICE auto EMS market to increase at a CAGR of 5% over FY2023-26E and reaching Rs133 bn by FY2026E, driven primarily by the passenger vehicle segment as two-wheeler volumes gradually shift toward EVs from ICE. We expect the momentum seen over the past couple of years to sustain and see the auto segment’s revenue increasing at a CAGR of 37% over FY2023-26E, with market share for Kaynes doubling to ~7.5%. The EV revenue is part of the industrial segment for Kaynes.

**Industrial (including EV)—EVs to be key growth driver**

Kaynes’ industrial segment is expected to see a healthy pickup with EV vehicles. Kaynes has started manufacturing components related to EVs, starting with controllers of the EV battery management systems. Smart meters and industrial machinery also form a sizeable part of the industrial business, which continue to see strong growth momentum. We see the industrial segment as a key growth driver for Kaynes, led primarily by the EV segment.

Currently, Kaynes caters to ~5% (Rs3 bn of revenue, as of FY2023) of the total addressable market of Rs56 bn for the industrial segment (Rs6 bn TAM for the EV segment and Rs50 bn TAM for the industrial segment). We see the industrial market of Kaynes increasing at a CAGR of 40% over FY2023-26E, driven by 70% growth in EVs and 12% growth in the industrial EMS market.

The industrial sector forms 27% of revenue in FY2023, which we expect to reach 42% by FY2026E, implying a CAGR of 65%+ over FY2023-26E, driven primarily by the EV segment.

**Railways—signaling and Kavach systems to be key growth drivers**

Railways has been contributing around 12% of the revenues for Kaynes, driven by its relationship with global OEMs such as Siemens and Hitachi. Kaynes sees signaling orders for metros, high-speed rail and the mainline as one of the key drivers of order inflow. The Railway Union Budget has an allocation of ~Rs50 bn toward signaling equipment for the mainline (electronic content in signaling is ~10% of the order value). The second-biggest growth driver would be the Kavach Automatic Train Protection System, which is expected to be installed on 34,000 km of the broad-gauge rail network by 2028; Avalon has tied up with a few approved vendors. The total spend on Kavach is expected to be close to Rs340 bn (Rs5 mn per km, with total broad-gauge network of 68,000 km).

We bake in a revenue CAGR of 24% over FY2023-26E for the railway segment, led by railway and anti-collision system orders.

**IT & consumer IT and AC PLI to be key growth drivers**

Kaynes is a beneficiary of IT hardware PLI and AC PLI. Along with Avalon, VVDN and Kaynes have been qualified by CDAC to manufacture high-performance computing servers—Rudra-2.

Currently, Kaynes has a negligible share of the Rs434 bn IT hardware EMS market. CDAC partnership, tie-ups for AC and IT PLI should help drive a revenue CAGR of 40% over FY2023-26E, in our view, from a very low base.

**Medical and aerospace—new client additions and wallet share gains to drive growth**

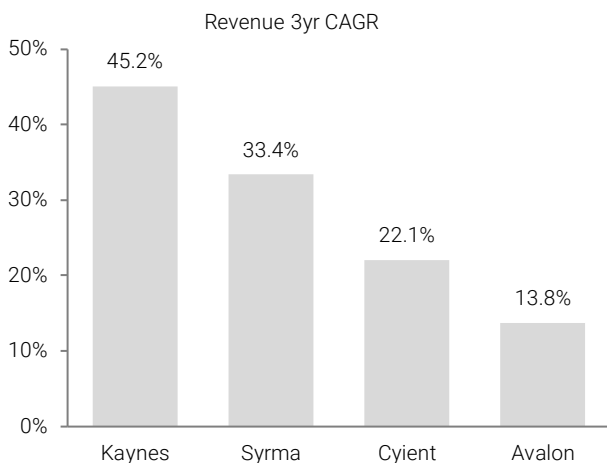
In the medical segment, Kaynes manufactures electronic systems for multiple products such as ventilators, respirators, controller units for dental chairs, protein analyzers and clinical chemistry analyzers for companies such as Agappe Diagnostics Limited and Health ARX Technologies Private Limited.

Similarly, in the aerospace vertical, Kaynes is focused on electronics for navigation and sensors, airborne radio communication systems, thermal imaging systems and line replaceable unit for power supplies.

We expect steady business growth for these segments, driven by new client additions and wallet share gains. Tie-ups with global majors such as Honeywell in the aerospace domain remains key to watch out for. Currently, Kaynes has a negligible share in the medical and aerospace & defense segments, hence we expect the segment to see strong growth, aided by a high addressable market and a low base.

**Kaynes has seen a healthy 45% revenue CAGR over FY2020-23, driven by auto, industrial and railways segments**

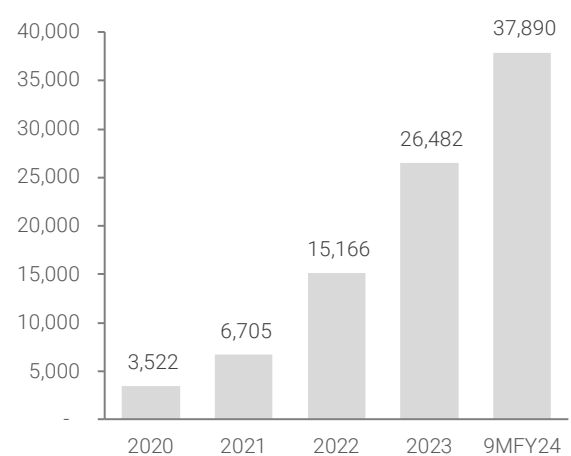
Exhibit 15: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2020-23



Source: Companies, Kotak Institutional Equities

**However, with 9MFY24 order book at 11X FY2020 levels, near-term revenue visibility remains strong**

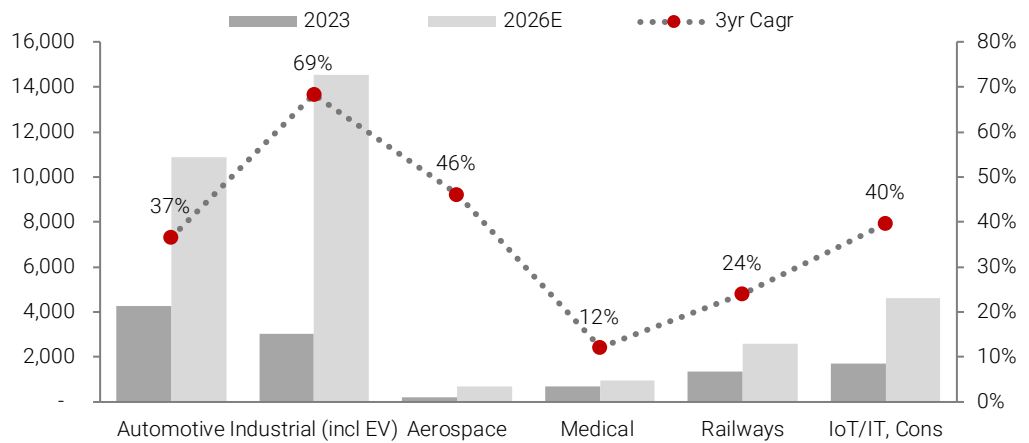
Exhibit 16: Kaynes' order book in (Rs mn), March fiscal year-ends, 2020-9MFY24



Source: Companies, Kotak Institutional Equities

**We expect a 45% EMS revenue CAGR, driven by industrial (69% CAGR) and auto segments (37% CAGR)**

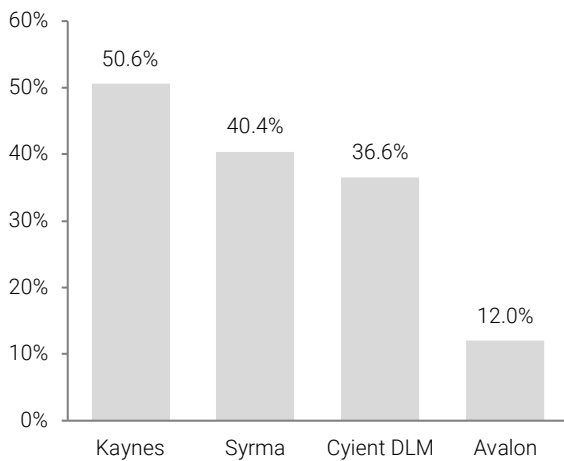
**Exhibit 17: Kaynes' revenue (Rs mn) and revenue CAGR trends, March fiscal year-ends, 2023-26E**



Source: Company, Kotak Institutional Equities estimates

**We see strong near-term growth for Kaynes, led by auto, railway and industrial segments**

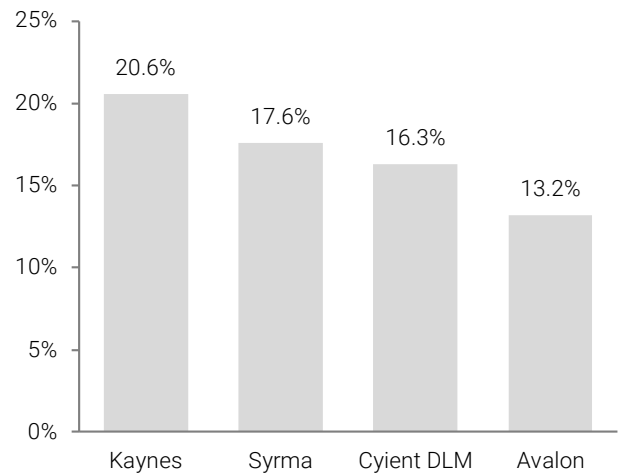
**Exhibit 18: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2023-26E**



Source: Company, Kotak Institutional Equities estimates

**We expect Kaynes' medium-term growth to be industry-leading**

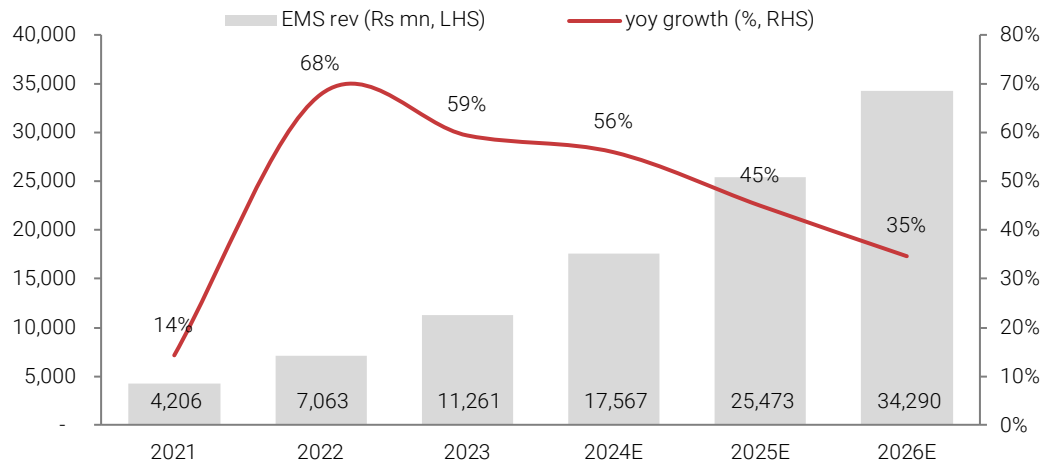
**Exhibit 19: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2023-45E**



Source: Company, Kotak Institutional Equities estimates

**Overall, we are baking in 45% EMS revenue CAGR over the next three years, with OSAT and PCB having a potential to provide a further revenue upside in the near term**

**Exhibit 20: Keynes' EMS revenue (Rs mn) and revenue growth % trends, March fiscal year-ends, 2021-26E**

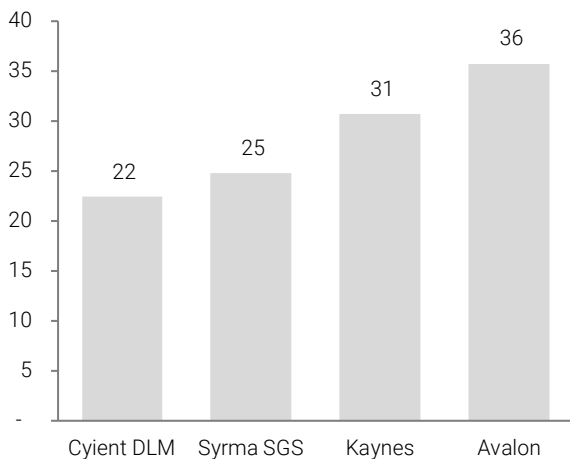


Source: Company, Kotak Institutional Equities estimates

**Margins:** Within EMS, the auto, industrial (including EVs) and railways segments contributed around 80% of sales in FY2023 and will continue to be the key drivers of sales as well. Keynes' EMS EBITDA margins have improved from 10% in FY2021 to 14.9% in FY2023, driven by 1) its focus on the right mix among sectors (high mix, flexible volume), 2) increased focus on backward integration (box build) and 3) operating leverage. We expect EBITDA margins for Keynes' EMS segment to be around 15%, driven by a stable business mix. Increased competitive intensity leading to a margin decline would be the key risk of Keynes in this vertical. We are not baking in any margin improvement in our estimates due to in-house PCB manufacturing.

**Keynes' gross margin is superior to most peers (ex-Avalon, which is vertically integrated)**

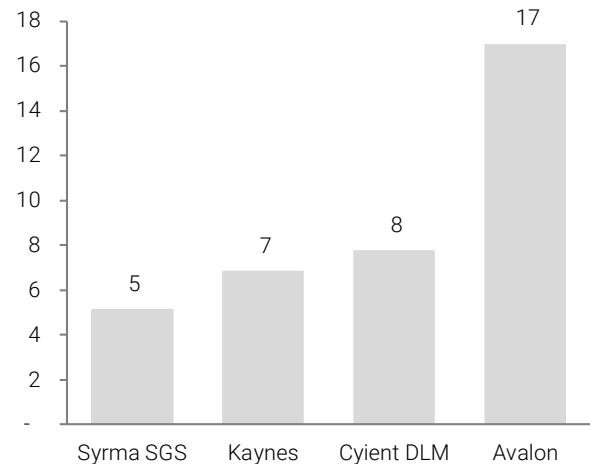
**Exhibit 21: Comparison of gross margins for B2B EMS players, March fiscal year-ends, 2023 (%)**



Source: Company, Kotak Institutional Equities

**A mix of operating leverage and contract workforce ensure lower employee costs**

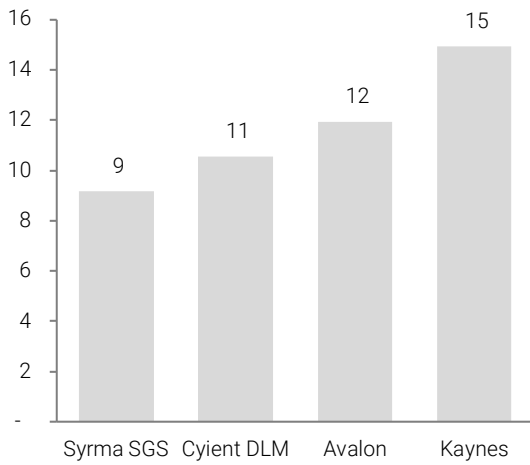
**Exhibit 22: Comparison of employee costs as (%) of sales for B2B EMS players, March fiscal year-ends, 2023**



Source: Company, Kotak Institutional Equities

**As a result, Kaynes has a superior margin profile among its peer EMS set...**

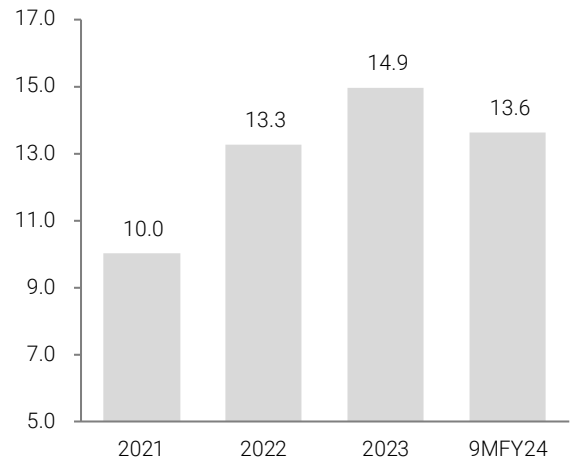
**Exhibit 23: Comparison of EBITDA margins for B2B EMS players, March fiscal year-ends, 2023 (%)**



Source: Company, Kotak Institutional Equities

**... which has typically improved over the past couple of years (1H is seasonally weaker than 2H)**

**Exhibit 24: Kaynes' EBITDA margin trends, March fiscal year-ends, 2021-9MFY24 (%)**



Source: Company, Kotak Institutional Equities

# 4

## OSAT: Potential game changer, but fraught with risks

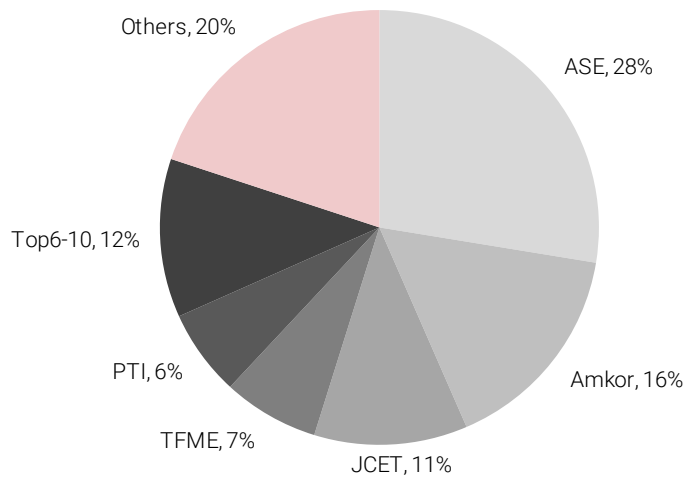
Kaynes’ foray into the OSAT segment could help it become an integral part of the semiconductor value chain. We expect the company to start generating revenue from the OSAT segment 4QFY25 onward and see it reaching Rs29 bn by FY2031 (six years after the start of production). In this segment, Kaynes would be competing with global players, which are well-established in the global semiconductor value chain. While global players enjoy 20%+ EBITDA margins in this segment, we are baking in only 17% margins in the steady state for Kaynes, driven by higher investments during the initial phase. In our view, the key risk is the company’s ability to further invest in this business over the medium term, after the PLI incentive scheme, without compromising on its return ratios. We see Kaynes generating 26% RoCE from its OSAT business, with 75% capital subsidy. For the company to generate 13% RoCE (ex-subsidy), OSAT margins would need to improve to 25%, with working capital days (as days of sales) in line with global majors.

### OSAT—a US\$45 bn market, with 80% share controlled by top-10 players

Semiconductor packaging is a downstream activity undertaken to protect the semiconductor from impurities and increasing its ability to withstand moisture and other materials. OSAT companies are third-parties that provide packaging to silicon devices, which are manufactured by foundries, and offer testing devices before shipping the products to the market. They usually work in partnership with a semiconductor foundry and semiconductor design firm.

Currently, the global OSAT market size is about ~US\$45 bn, with the top-10 firms accounting for a market share of nearly 80%. According to IDC, among the top-10 OSAT vendors, there are six in Taiwan, three in China and one in the US. Vendors in Taiwan include ASE, PTI, KYEC, Chipbond, ChipMOS and Sigurd; vendors in China include JCET, TFME and Hua Tian; US vendors are represented by Amkor. Majority of these companies have production facilities in Taiwan, China, Malaysia, Vietnam and Korea. Globally, OSAT manufacturers enjoy 20-25% EBITDA margins, with value addition ranging from 10% to 40%. Beyond the top-20 companies, there is a long tail of companies that make up the rest 20% of the market.

Exhibit 25: Market share of top OSAT companies in 2022, December fiscal year-ends, (%)



Source: IDC, Company, Kotak Institutional Equities

**Up to 75% capital subsidy being offered to set up OSAT facilities**

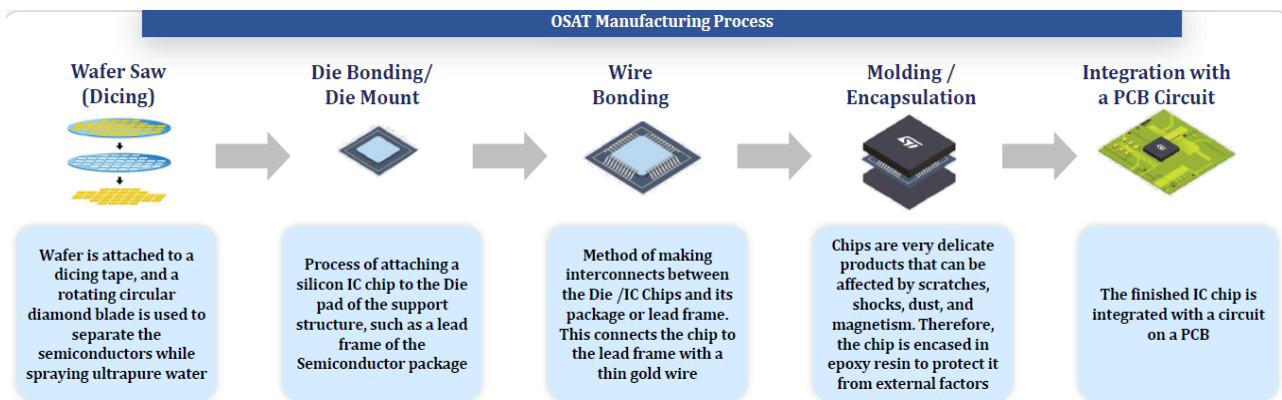
The Indian government, with a focus on self-reliance in electronics, has launched the Semiconductor PLI scheme (production-linked incentive), with a total outlay of Rs760 bn (US\$10 bn) for the development of semiconductor and display manufacturing ecosystem in India. Under this scheme, the government is offering fiscal support of 50% of capital expenditure on pari-passu basis under the scheme to set up semiconductor ATMP/OSAT facilities in India. In addition to this, multiple state governments are offering up to 25% fiscal support on capital expenditure to set up OSAT facilities, which the company expects could come with a year’s lag. Hence, a 75% capital subsidy is being provided to companies to set up OSAT facilities, which have seen players such as Kaynes participate in this scheme.

**Exhibit 26: Incentives offered for OSAT facilities under the semiconductor PLI**

Description	Companies/joint ventures proposing to set up semiconductor assembly, testing, marking and packaging (ATMP)/outsourced semiconductor assembly and test (OSAT) facilities in India
Operational experience	The applicant companies/joint ventures should have the following experience: A. Own and operate a commercial semiconductor packaging unit or B. Own or possess licensed technologies for the proposed semiconductor packaging unit and demonstrate the roadmap to advanced packaging technologies through licensing or development
Capital investment threshold	Minimum capital investment of Rs500 mn
Fiscal support from Government of India	50 % of capital expenditure

Source: Company, Kotak Institutional Equities

**Exhibit 27: OSAT manufacturing process**



Source: Company, Kotak Institutional Equities estimates

Kaynes has plans to set up OSAT facilities in two phases. Under the phase-1 plan, the company would be setting up 12 lines, undertaking a total investment of Rs29 bn, with 50% capex subsidy from the central government, in line with the PLI policy and 25% capex subsidy from the state government. Kaynes has recently raised Rs14 bn through a QIP. We believe the company is adequately capitalized to undertake these investments.

Kaynes has signed two key partnerships with Globetronics Technology Bhd, which will offer the company access to a range of packaging technologies and key export market such Europe, the US and Japan. Ponni Tech would help execute the project. The company plans to set up 12 lines—starting with 4 lines and incremental lines based on demand.

**Exhibit 28: Kaynes would be procuring raw material from multiple global suppliers**

Raw material	Country
Silicon wafer	Fabs in Taiwan, Germany, etc.
Lead frame/substrate	Singapore, Malaysia, Hong Kong, China
Backgrind/dicing tape	Japan
Silver epoxy	Japan
Gold wire, copper wire	Japan
Mold compound	Japan
Plating chemicals	Singapore

Source: Company, Kotak Institutional Equities

**Exhibit 29: Globetronics and Ponni are key partnerships that would drive the OSAT business for Kaynes**

Partnership	Capability
Technology partner	Globetronics Technology Bhd.
Execution partner	Ponni Tech
GTM partner	UST Global
Package design	Infinipack Technologies Pvt Ltd

Source: Companies, Kotak Institutional Equities

**Kaynes would initially focus on a QFN packaging solution, which is considered to be a low-end packaging solution**

**Exhibit 30: Kaynes' product offerings in OSAT**

Packaging technologies	QFN packaging	FCBGA	Global SOT packaging
Product offerings	QFN/QFN Stack Die	BGA/BGA Stack Die/SIP/FC BGA	SOT
Potential target applications	Programmable modules, microcomputers and communication equipment	Telecommunication equipment, mobiles, laptops, desktops servers Automotive industry for ADAS and infotainment functions	Consumer electronics products
Potential target geographies	North America, APAC, Europe	North America, Europe, Asia Pacific & EMEA, South America	North America, Europe, Asia Pacific and LAMEA
Note	QFN-Quad flat no lead	BGA-ball grid array	

Source: Kotak Institutional Equities, company

**Most global OSAT players enjoy 20%+ EBITDA margins****Exhibit 31: Financials of select global OSAT players, December fiscal year-ends, 2018-22 (US\$ mn)**

	2018	2019	2020	2021	2022
<b>Revenue</b>					
ASE Technology Holding Co	12,316	13,374	16,200	20,408	22,517
Amkor Technology	4,316	4,053	5,051	6,138	7,092
JCET	3,609	3,406	3,839	4,730	5,021
Siliconware Precision	2,901	2,880	3,466	3,861	4,390
<b>EBITDA</b>					
ASE Technology Holding Co	2,288	2,395	2,926	4,150	4,515
Amkor Technology	830	799	1,021	1,392	1,591
JCET	448	591	788	1,046	1,045
Siliconware Precision	811	773	942	1,253	1,377
<b>EBITDA margin (%)</b>					
ASE Technology Holding Co	19	18	18	20	20
Amkor Technology	19	20	20	23	22
JCET	12	17	21	22	21
Siliconware Precision	28	27	27	32	31
<b>PAT</b>					
ASE Technology Holding Co	838	545	937	2,288	2,084
Amkor Technology	127	121	338	643	766
JCET	(142)	13	189	459	480
Siliconware Precision	260	246	390	634	762
<b>PAT margin (%)</b>					
ASE Technology Holding Co	7	4	6	11	9
Amkor Technology	3	3	7	10	11
JCET	(4)	0	5	10	10
Siliconware Precision	9	9	11	16	17
<b>RoE (%)</b>					
ASE Technology Holding Co	13	8	13	27	22
Amkor Technology	7	6	16	24	23
JCET	(9)	1	10	17	14
Siliconware Precision	11	10	15	20	24
<b>RoCE (%)</b>					
ASE Technology Holding Co	8	5	7	15	14
Amkor Technology	6	5	11	17	17
JCET	(1)	3	7	12	11
Siliconware Precision	8	8	12	18	21
<b>RoIC (%)</b>					
ASE Technology Holding Co	8	4	7	11	13
Amkor Technology	6	5	11	17	17
JCET	(1)	3	7	10	10
Siliconware Precision	8	8	11	16	19

Source: Bloomberg, Kotak Institutional Equities

We estimate Kaynes to start generating revenue from the OSAT segment 4QFY25 onward. Kaynes' ability to have back-to-back tie-ups with foundries that would provide the wafers and end-markets for these semiconductor chips hold the key, in our view.

With a gross asset turn of 1X in this business, we see Kaynes reaching Rs29 bn by FY2031 (six years after the start of production). In this segment, Kaynes would be competing with global players, which are well-established in the global semiconductor value chain. While global players enjoy 20%+ EBITDA margins in this segment, we are baking in only 17% margins in the steady state for Kaynes, as its ability to gain a foothold in the global market would require some investments from the company.

We forecast Kaynes generating 26% RoCE from its OSAT business, with a 75% capital subsidy, assuming 1X asset turns, 17% EBITDA margins and 75 days net working capital (as days of sales).

Kaynes would be only generating 7% RoCE from the OSAT business, ex-subsidy, should its margins and working capital remain at the current level. Margins and net working capital are moving in line with global peers—25% EBITDA margins, with 50 days net working capital (as days of sales) would be key for RoCE to be at least 13%. Over time, Kaynes plans to move from basic QFN packaging to more complex packaging technology such as BGA, which would help the company move its margins and returns in line with global peers.

With this business having a very high capital requirement and lower asset turns, we see Kaynes' return ratios declining over the near term. However, better margins and working capital terms should aid margins over the medium term.

In our view, the key risk is Kaynes' ability to further invest in this business over the medium term, after the PLI incentive scheme, without compromising on its return ratios and ability to fund future investments with internal accruals or partnerships.

### Kaynes' OSAT revenue and margin estimates for phase-1 facility

Exhibit 32: OSAT revenue and margin trends, March fiscal year-ends, 2025-31E (Rs mn)

(Rs mn)	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue	250	1,750	4,500	9,000	16,000	25,000	29,000
yoy growth %			157%	100%	78%	56%	16%
EBITDA	(13)	105	450	1,080	2,400	4,250	4,930
EBITDA margin%	-5%	6%	10%	12%	15%	17%	17%

Source: Company, Kotak Institutional Equities estimates

### We expect Kaynes to generate 26% RoCE, with 75% subsidy for the OSAT business

Exhibit 33: OSAT segment's RoCE calculation, March fiscal year-ends, 2031E (Rs bn)

Metric	Unit	Quantum	Comment
Capex	Rs bn	29.0	
Subsidy	Rs bn	21.8	75%
Debt	Rs bn	4.4	60% of net capex
Equity	Rs bn	2.9	
Revenues (after 7 years of commissioning)	Rs bn	29.0	1X asset cover
EBITDA	Rs bn	4.9	17% margin
Interest cost	Rs bn	0.4	10% interest cost
Depreciation	Rs bn	0.5	15 years on adjusted gross asset (after subsidy)
PBT	Rs bn	4.0	
PAT	Rs bn	3.0	25% tax rate
<b>RoCE</b>		<b>26%</b>	

Source: Company, Kotak Institutional Equities estimates

**For Kaynes to generate 13% RoCE (ex-subsidy), OSAT margins would need to improve to 25% with working capital days (as days of sales) in line with global majors**

**Exhibit 34: OSAT segment's RoCE calculation, March fiscal year-ends, 2031E (Rs bn)**

Metric	Unit	Quantum	Comment
Capex	Rs bn	29.0	
Subsidy	Rs bn	—	0%
Debt	Rs bn	20.3	70% of net capex
Equity	Rs bn	8.7	
Revenues (after 7 years of commissioning)	Rs bn	29.0	1X asset cover
EBITDA	Rs bn	7.3	25% margin
Interest cost	Rs bn	2.0	10% interest cost
Depreciation	Rs bn	1.9	15 years on adjusted gross asset (after subsidy)
PBT	Rs bn	3.3	
PAT	Rs bn	2.5	25% tax rate
<b>RoCE</b>		<b>13%</b>	

Source: Company, Kotak Institutional Equities estimates

# 5

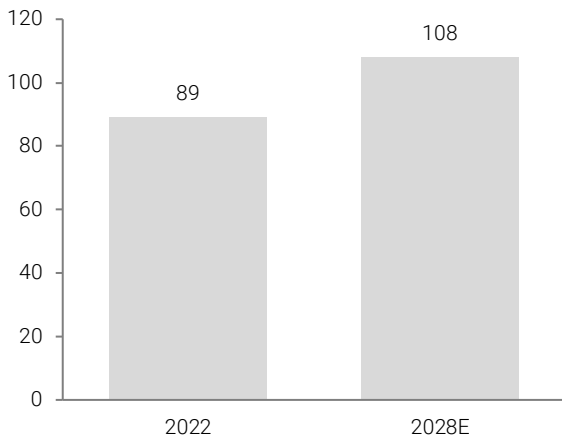
## Backward integration into PCBs to aid margins, open up export opportunities

Kaynes plans to set up a Rs14 bn PCB plant in Mysuru, driven by its focus to vertically integrate and enhance its offering to key clients along with improving its margin profile. The HDI PCB plant being set up in India will help the company not only cater to its captive needs, but also open up an opportunity to add another product line for exports. We expect Kaynes' PCB segment revenue to report a CAGR of 24% over FY2025-35E, with margins stabilizing at 20%. We see the RoCE from the PCB business being around 20%, with capital subsidy from the government.

PCB is an integral part of all electronic circuits and generally accounts for 8-10% of the raw material of an EMS player. The Indian PCB market, at Rs200 bn, is ~3% of the global PCB market, with about 30% of Indian PCB production exported. The Indian market has multiple small players that manufacture traditional PCBs; however, India still continues to import high-end PCBs from global markets. With PCBs required in increased applications across mobile, industrial electronics and consumer goods, Kaynes plans to backward integrate by setting up a Rs14 bn PCB plant in Mysuru, India.

### Global PCB market is expected to reach US\$108 bn by end-FY2028E (3% CAGR)

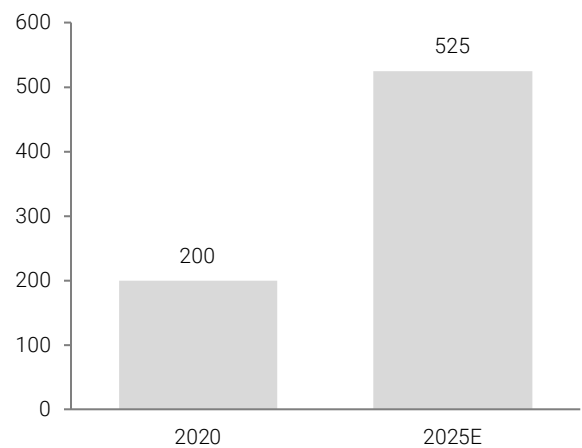
Exhibit 35: Global PCB market size, March fiscal year-ends, 2022-28E (US\$ bn)



Source: Frost & Sullivan Analysis, Kotak Institutional Equities

### While India's share in the global PCB market is only ~3%, it is expected to increase at CAGR of 17% by FY2025

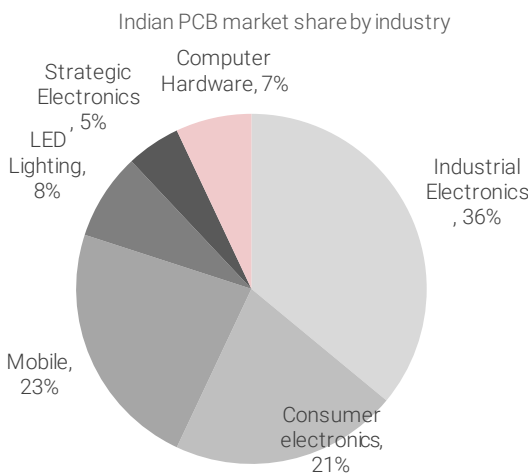
Exhibit 36: Indian PCB market size, March fiscal year-ends, 2020-25E (Rs bn)



Source: Company, Kotak Institutional Equities

### Industrial electronics, CEA and mobile account for 80% of nearly all PCBs in India

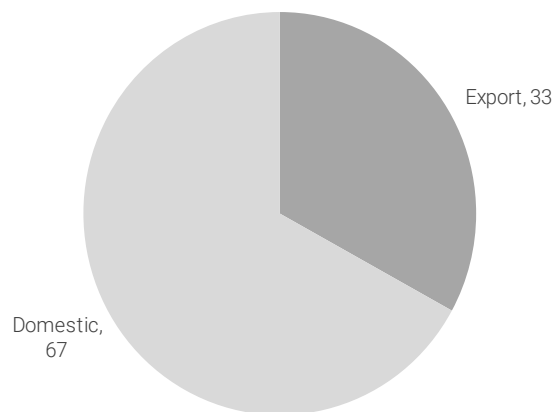
Exhibit 37: PCB market share by industry, March fiscal year-ends, 2023 (%)



Source: Frost & Sullivan Analysis, Kotak Institutional Equities

### Currently, 33% of India's PCB production is exported

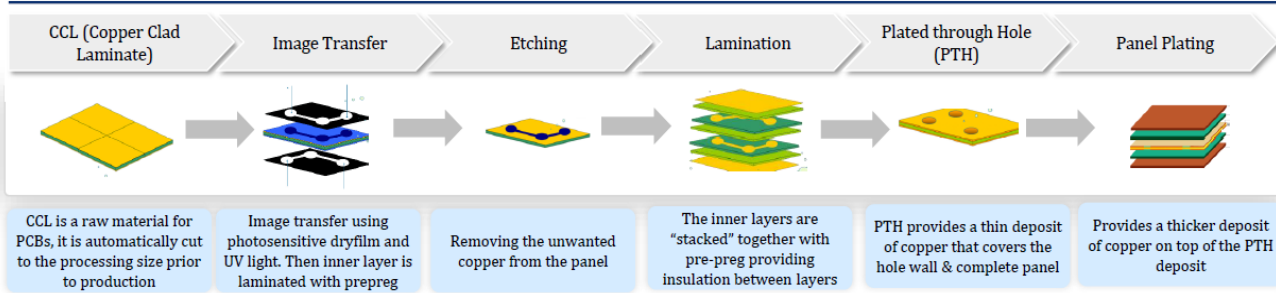
Exhibit 38: PCB industry by end-market, March fiscal year-ends, 2023 (%)



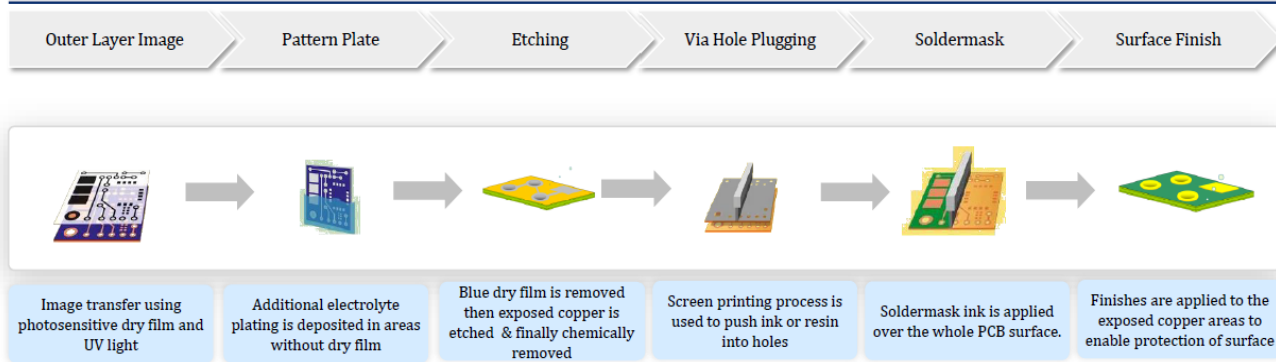
Source: Frost & Sullivan Analysis, Kotak Institutional Equities

**Exhibit 39: PCB manufacturing process**

**Inner Layer Manufacturing Process**



**Outer Layer Manufacturing Process**



Source: Company, Kotak Institutional Equities

Kaynes has indicated that the company would not be manufacturing the conventional PCBs, but would focus on advanced HDI PCBs, which have been the key driving factor behind reducing the size and weight of consumer electronic products. The company would be partnering with global companies under transfer of technology (TOT) agreements. Overall, Kaynes expects to spend Rs14 bn across multiple phases to set up PCB manufacturing, with the local state government providing a 25% capex subsidy. A part of the Rs14 bn raised in the December 2023 QIP would be going toward the PCB project.

Among the players present in the Indian market, AT&S—an Austrian PCB manufacturer (key supplier to Apple)—would be the player Kaynes is looking to emulate. AT&S’s Indian manufacturing facility is largely used for global exports. However, Kaynes expects to consume around ~50% of the PCBs for captive consumption and the remaining production is targeted for the domestic/global markets. PCBs account for 8-10% of raw materials for Kaynes. The company expects in-sourcing of PCB will help improve margins by 100 bps overall.

Overall, we expect commercial production to start in 2HFY25 and expect Kayne’s PCB revenue to increase at a CAGR of 24% over FY2026-35E. Gross asset turns in this business are expected to be closer to 1.5X, significantly lower than the traditional EMS business.

**Margins:** Kaynes, in its PCB vertical, plans to manufacture advanced HDI PCBs, which have been the key driving factor behind reducing the size and weight of consumer electronic products. Among the players present in the Indian market, AT&S—an Austrian PCB manufacturer (key supplier to Apple)—would be the player Kaynes is looking to emulate. When we look at both AT&S and Ascent Circuits, their margins have varied from high single digits to the high teens (operations were significantly impacted during the Covid years). We bake in steady state margins for the PCB segment to be around 20%, in line with AT&S.

**Return ratios:** We see RoCE from this business being closer to 20% in a steady state scenario, with 25% capital subsidy from the state government—full-capacity operational with an asset turn of 1.5X and steady margins of 20% and net working capital days (as days of sales being around 80 days). If we remove the impact of the subsidy, the business will be reporting RoCE of ~14.5%.

**Exhibit 40: Kaynes is focusing on advanced HDI PCBs**

Proposed Products	Description
DS	Standard Double Side PCB
ML4	4 Layer PCB
ML6	6 Layer PCB
ML8	8 Layer PCB
ML10	10 Layer PCB
HDI 6	6 Layer Standard HDI PCB
HDI 8	8 Layer Standard HDI PCB
HDI 10	10 Layer Standard HDI PCB
1-n-1	Simple advanced HDI PCB
2-n-2	Complex advanced HDI PCB

Source: Company, Kotak Institutional Equities

**EBITDA margins of PCB players are in the mid-teens range in a steady operating environment**

**Exhibit 41: Financials of select Indian PCB manufacturers, March fiscal year-ends, 2019-23 (Rs mn)**

	2019	2020	2021	2022	2023
<b>Revenue</b>					
AT&S	5,303	4,978	5,177	6,904	7,988
Ascent circuits	1,572	1,303	1,502	2,261	2,785
Circuit Systems	377	372	401	539	
Meena circuits	577	446	458	639	
India circuits	458	467	505	685	769
<b>EBITDA</b>					
AT&S	831	186	436	475	862
Ascent circuits	81	81	202	301	527
Circuit Systems	72	49	61	75	
Meena circuits	38	22	16	5	
India circuits	69	74	76	87	98
<b>EBITDA margin (%)</b>					
AT&S	16	4	8	7	11
Ascent circuits	5	6	13	13	19
Circuit Systems	19	13	15	14	
Meena circuits	7	5	3	1	
India circuits	15	16	15	13	13
<b>PAT</b>					
AT&S	370	(431)	(121)	66	269
Ascent circuits	40	37	94	159	305
Circuit Systems	3	(37)	(4)	4	
Meena circuits	15	0	3	(2)	
India circuits	19	20	20	30	38
<b>PAT margin (%)</b>					
AT&S	7	(9)	(2)	1	3
Ascent circuits	3	3	6	7	11
Circuit Systems	1	(10)	(1)	1	
Meena circuits	3	0	1	(0)	
India circuits	4	4	4	4	5

Source: Company, Kotak Institutional Equities

**We expect Kaynes' PCB segment revenue to see a CAGR of 24% over FY2026-35E, with margins stabilizing at 20%**

Exhibit 42: PCB segment financials, March fiscal year-ends, 2025-35E (Rs mn)

(Rs mn)	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
Revenue	400	2,400	4,000	5,600	8,000	9,800	11,200	12,600	14,000	15,260	16,328
EBITDA	(20)	120	600	896	1,600	1,960	2,240	2,520	2,800	3,052	3,266
EBITDA margin (%)	(5)	5	15	16	20	20	20	20	20	20	20

Source: Kotak Institutional Equities estimates

# 6

## Key risks: Failure to scale up OSAT business and deteriorating working capital cycle are key risks to our thesis

**Delay in government grants:** Kaynes has undertaken the building of two OSAT facilities, with the help of a 50% capex subsidy from the central government and a 25% capex subsidy from the state government. Its PCB facility also includes grants from the state government. Any delay in receiving government grants or any change in government policy regarding the grant of subsidy could lead to a significant increase in Kaynes' capital requirement and could impact the viability of these projects.

**Delay in project commissioning:** Kaynes' future revenue growth highly depends on the success of the OSAT and PCB projects. Any delay in commissioning timelines for these projects could significantly alter our out-year revenue estimates.

**Ability to continue to invest in OSAT post-subsidy scheme:** One of the key reasons Kaynes and multiple peer companies are ready to participate in the OSAT PLI scheme is the attractive incentives offered by the government (50% of capex subsidy by central government and 25% by state government). However, after the incentive period, the ability of Kaynes to undertake further investments in OSAT without compromising on its return ratios remains key.

**Technical know-how:** Kaynes has hired a number of senior members to head new verticals such as OSAT and PCB. Similarly, it has partnered with multiple companies to gain access to technology relevant to semiconductor packaging and testing. Continued ability to hire the right talent and partner with relevant firms with technology capabilities would be key to ensure that these new ventures become successful.

**Deterioration in working capital:** Kaynes is focused on improving the working capital cycle by better managing inventory levels through alternate sourcing, scale benefits and newer businesses such as OSAT, where global players have a lower working capital cycle. However, any deterioration in working capital would negate the positive impacts of higher margins and lower its return ratios.

## 7

**Financials: Expect 49% PAT CAGR during FY2023-26E**

We expect Kaynes' revenue to increase at a CAGR of 51% over FY2023-26E, led by a 45% CAGR in EMS, aided by initial OSAT and PCB revenues. At end-9MFY24, Kaynes has an order backlog of Rs38 bn, which is 11.0X/2.5X the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth. However, Kaynes would be investing to enhance its capabilities in OSAT and PCB over the near term. During the initial years these segments would be making inferior margins until operations reach a steady state. Hence, we expect near-term margin compression for Kaynes, with medium-term margins reaching at a steady state percentage of 15.5% versus ~13.0% (three-year average) currently. Overall, we are baking in a 49% PAT CAGR, as EBITDA growth is aided by stable other income.

**Revenue: EMS growth aided by OSAT and PCB foray****EMS: Auto, industrial and railways key near-term growth drivers**

Kaynes has seen the strongest growth among its peer set—45% revenue CAGR over the past three years (FY2020-23), driven by exposure to fast-growing domestic end-markets such as auto, industrial and railways. In line with the robust revenue growth, we see Kaynes' order booking also growing at a similar pace. At end-9MFY24, Kaynes has an order backlog of Rs38 bn, which is 11.0X/2.35 the FY2020/FY2022 order backlog, providing strong near-term visibility for revenue growth. We expect Kaynes' EMS revenue to see 45% growth over the next three years in the EMS vertical, driven by continued momentum in the same key verticals.

**Automotive—passenger vehicles and new client additions to drive growth**

Kaynes' automotive vertical is a prominent supplier to multiple OEMs where the company provides electronics for lighting, passive start, electronic control units, sensors, infotainment systems and door switches. The company is among the top-5 automotive light manufacturers. The auto segment's share within Kaynes' revenue has increased to 38% in FY2023 from 20% in FY2020, driven by a pickup in new customers.

Currently, Kaynes caters to ~4% (Rs4.3 bn revenue, as of FY2023) of the total addressable market of Rs115 bn for the ICE auto segment. We expect the ICE auto EMS market to increase at a CAGR of 5% over FY2023-26E and reaching Rs133 bn by FY2026E, driven primarily by the passenger vehicle segment as two-wheeler volumes gradually shift toward EVs from ICE. We expect the momentum seen over the past couple of years to sustain and see the auto segment's revenue increasing at a CAGR of 37% over FY2023-26E, with market share for Kaynes doubling to ~7.5%. The EV revenue is part of the industrial segment for Kaynes.

**Industrial (including EV)—EVs to be key growth driver**

Kaynes' industrial segment is expected to see a healthy pickup with EV vehicles. Kaynes has started manufacturing components related to EVs, starting with controllers of the EV battery management systems. Smart meters and industrial machinery also form a sizeable part of the industrial business, which continue to see strong growth momentum. We see the industrial segment as a key growth driver for Kaynes, led primarily by the EV segment.

Currently, Kaynes caters to ~5% (Rs3 bn of revenue, as of FY2023) of the total addressable market of Rs56 bn for the industrial segment (Rs6 bn TAM for the EV segment and Rs50 bn TAM for the industrial segment). We see the industrial market of Kaynes increasing at a CAGR of 40% over FY2023-26E, driven by 70% growth in EVs and 12% growth in the industrial EMS market.

The industrial sector forms 27% of revenue in FY2023, which we expect to reach 42% by FY2026E, implying a CAGR of 65%+ over FY2023-26E, driven primarily by the EV segment.

### Railways—signaling and Kavach systems to be key growth drivers

Railways has been contributing around 12% of the revenues for Kaynes, driven by its relationship with global OEMs such as Siemens and Hitachi. Kaynes sees signaling orders for metros, high-speed rail and the mainline as one of the key drivers of order inflow. The Railway Union Budget has an allocation of ~Rs50 bn toward signaling equipment for the mainline (electronic content in signaling is ~10% of the order value). The second-biggest growth driver would be the Kavach Automatic Train Protection System, which is expected to be installed on 34,000 km of the broad-gauge rail network by 2028; Avalon has tied up with a few approved vendors. The total spend on Kavach is expected to be close to Rs340 bn (Rs5 mn per km, with total broad-gauge network of 68,000 km). We bake in a revenue CAGR of 24% over FY2023-26E for the railway segment, led by railway and anti-collision system orders.

### OSAT: Phase-1 to start production in 4QFY25

Kaynes has plans to set up OSAT facilities in two phases. Under the phase-1 plan, the company would be setting up 12 lines, undertaking a total investment of Rs29 bn, with 50% capex subsidy from the central government, in line with the PLI policy and 25% capex subsidy from the state government. We estimate Kaynes to start generating revenue from the OSAT segment 4QFY25 onward. Kaynes' ability to have back-to-back tie-ups with foundries that would provide the wafers and end-markets for these semiconductor chips holds the key, in our view. With a gross asset turn of 1X in this business, we see Kaynes reaching Rs29 bn by FY2031 (six years after the start of production).

### PCB: Initial production begins in FY2025

Kaynes plans to set up a Rs14 bn PCB plant in Mysuru, which is driven by its focus to vertically integrate and enhance its offering to key customers and improve its margin profile. With the HDI PCB plant being set up in India, it will help the company not only cater to its captive needs, but also opens up an opportunity to add another product line for exports. We expect its PCB segment's revenue to increase at a CAGR of 24% over FY2025-35E, with margins stabilizing at 20%.

### Margins: Near-term pain, with potential upside over the medium term

Over the near term, Kaynes would be investing to enhance its capabilities in OSAT and PCB. During the initial years, these segments would be making inferior margins until operations reach a steady state. Hence, we expect near-term margin compression for Kaynes, with medium-term margins reaching at a steady state percentage of 15.5% versus ~13.0% (three-year average) currently.

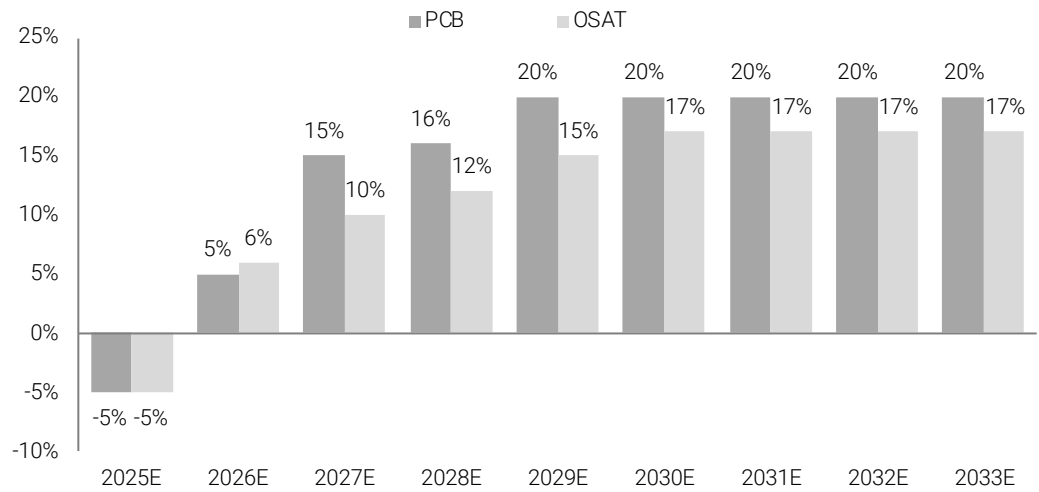
**EMS segment:** Within EMS, the auto, industrial (including EVs) and railways segments contributed around 80% of sales in FY2023 and will continue to be the key drivers of sales as well. Kaynes' EMS EBITDA margins have improved from 10% in FY2021 to 14.9% in FY2023, driven by 1) its focus on the right mix among sectors (high mix, flexible volume), 2) increased focus on backward integration (box build) and 3) operating leverage. We expect EBITDA margins for Kaynes' EMS segment to be around 15%, driven by a stable business mix. Increased competitive intensity leading to a margin decline would be the key risk of Kaynes in this vertical. We are not baking in any margin improvement in our estimates due to in-house PCB manufacturing.

**PCB segment:** In this vertical, Kaynes plans to manufacture advanced high-density interconnect (HDI) PCBs, which have been the key driving factor behind the reducing size and weight of consumer electronic products. Among the players present in the Indian market, AT&S—an Austrian PCB manufacturer (key supplier to Apple)—would be the player Kaynes is looking to emulate. When we look at both AT&S and Ascent Circuits, their margins have varied from high-single digits to the high teens (operations were significantly impacted during the Covid years). We bake in steady state margins for the PCB segment to be around 20%, in line with AT&S.

**OSAT segment:** Globally, the OSAT market is largely dominated by the top-20 players, which have capabilities to undertake a wide variety of packaging technologies and generate EBITDA margins in the range of 20-30%. The OSAT market also has a long tail of around 100+ players, which compete for the bottom 20% of the market. Kaynes initially would be competing with these players to gain a foothold into the global semiconductor value chain. The company is in a capex mode and will be undertaking investments over the next couple of years. Hence, we bake in that Kaynes will reach steady state margins only by FY2031 at around 17%, which is at a substantial discount to global players, driven by higher investments in initial years.

**We expect PCB and OSAT margins to stabilize to normal levels by year 5 of operations**

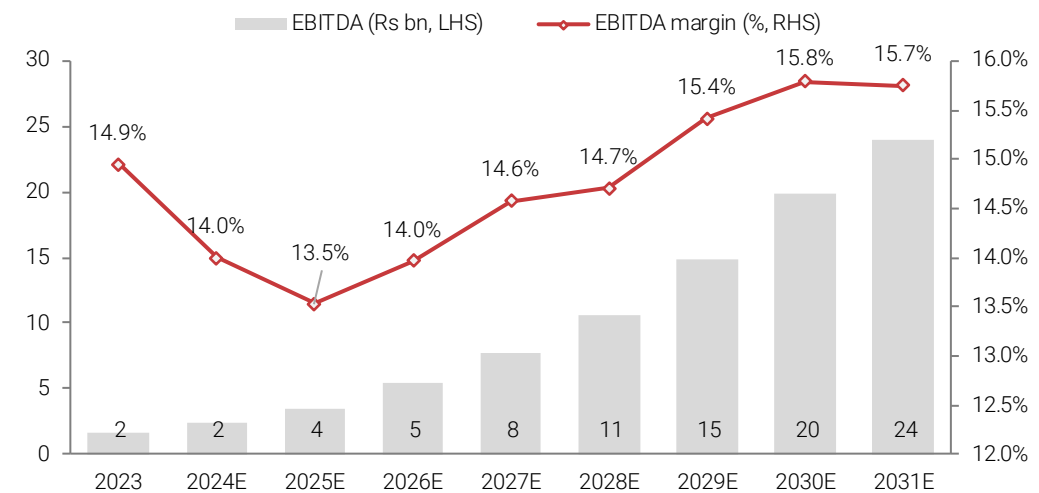
**Exhibit 43: Segmental EBITDA margin profile of Kaynes, March fiscal year-end, FY2025-33E (%)**



Source: Company, Kotak Institutional Equities estimates

**We expect margins to surpass current levels, once OSAT and PCB operations stabilize**

**Exhibit 44: Kaynes' EBITDA (Rs bn) and EBITDA margin % trends, March fiscal year-ends, 2023-31E**



Source: Company, Kotak Institutional Equities

Exhibit 45: P&L of Kaynes Technology India Ltd (consolidated), March fiscal year-ends 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E	CAGR 2023-26E (%)
<b>Net sales</b>	<b>3,682</b>	<b>4,206</b>	<b>7,063</b>	<b>11,261</b>	<b>17,567</b>	<b>26,123</b>	<b>38,440</b>	<b>53,077</b>	<b>50.6</b>
Cost of material	(2,417)	(2,861)	(4,894)	(7,801)	(12,736)	(19,070)	(27,869)	(36,782)	
Employee expense	(475)	(459)	(602)	(771)	(1,019)	(1,567)	(2,306)	(3,609)	
Other expenses	(367)	(465)	(629)	(1,006)	(1,353)	(1,952)	(2,896)	(4,949)	
<b>Total expenses</b>	<b>(3,259)</b>	<b>(3,786)</b>	<b>(6,126)</b>	<b>(9,578)</b>	<b>(15,108)</b>	<b>(22,589)</b>	<b>(33,072)</b>	<b>(45,341)</b>	
<b>EBITDA</b>	<b>423</b>	<b>421</b>	<b>937</b>	<b>1,683</b>	<b>2,459</b>	<b>3,534</b>	<b>5,369</b>	<b>7,737</b>	<b>47.2</b>
<b>EBITDA (incl. other income)</b>	<b>443</b>	<b>461</b>	<b>978</b>	<b>1,797</b>	<b>2,788</b>	<b>3,872</b>	<b>5,702</b>	<b>8,007</b>	
Depreciation	(84)	(101)	(132)	(187)	(245)	(1,057)	(1,357)	(1,762)	<b>93.5</b>
<b>EBIT</b>	<b>340</b>	<b>320</b>	<b>805</b>	<b>1,496</b>	<b>2,214</b>	<b>2,476</b>	<b>4,011</b>	<b>5,974</b>	
Other income	19	40	41	114	329	339	333	271	
Interest	(246)	(252)	(256)	(349)	(544)	(204)	(204)	(204)	<b>(16.4)</b>
<b>Profit before tax</b>	<b>113</b>	<b>109</b>	<b>590</b>	<b>1,260</b>	<b>1,999</b>	<b>2,611</b>	<b>4,140</b>	<b>6,041</b>	<b>48.7</b>
Tax expense	19	11	174	308	454	640	1,014	1,480	
<b>Adjusted PAT</b>	<b>94</b>	<b>97</b>	<b>417</b>	<b>952</b>	<b>1,546</b>	<b>1,971</b>	<b>3,126</b>	<b>4,561</b>	<b>48.6</b>
<b>Reported PAT</b>	<b>94</b>	<b>97</b>	<b>417</b>	<b>952</b>	<b>1,546</b>	<b>1,971</b>	<b>3,126</b>	<b>4,561</b>	
<b>Adjusted EPS (Rs)</b>	<b>1.5</b>	<b>1.5</b>	<b>6.5</b>	<b>14.9</b>	<b>24.2</b>	<b>30.8</b>	<b>48.9</b>	<b>71.4</b>	<b>48.6</b>
<b>Key ratios</b>									
Raw material expense/sales	65.6	68.0	69.3	69.3	72.5	73.0	72.5	69.3	
Employee expense/sales	12.9	10.9	8.5	6.8	5.8	6.0	6.0	6.8	
Other expenses/sales	10.0	11.1	8.9	8.9	7.7	7.5	7.5	9.3	
<b>EBITDA margin (%)</b>	<b>11.5</b>	<b>10.0</b>	<b>13.3</b>	<b>14.9</b>	<b>14.0</b>	<b>13.5</b>	<b>14.0</b>	<b>14.6</b>	
Effective tax rate (%)	17.1	10.5	29.4	24.5	22.7	24.5	24.5	24.5	
Adjusted PAT margin (%)	2.5	2.3	5.9	8.5	8.8	7.5	8.1	8.6	
<b>Yoy growth (%)</b>									
Net sales		14.2	67.9	59.4	56.0	48.7	47.2	38.1	
EBITDA		(0.6)	122.6	79.7	46.1	43.7	51.9	44.1	
Adjusted PAT		4.2	327.8	128.5	62.4	27.5	58.6	45.9	

Source: Company, Kotak Institutional Equities estimates

### Balance sheet: In capex mode for the next couple of years

#### Working capital: Managing inventory levels key

Kaynes' working capital (NWC as a percentage of sales) is one of the highest among peers. This has been driven largely by elevated inventory levels at the company, led by: 1) global supply chain disruptions in the electronics industry, leading to higher inventory (common across players); 2) the company stocking up owing to a large order base; and 3) minimum order quantity requirement, leading the company to order a lot size higher than their immediate requirement.

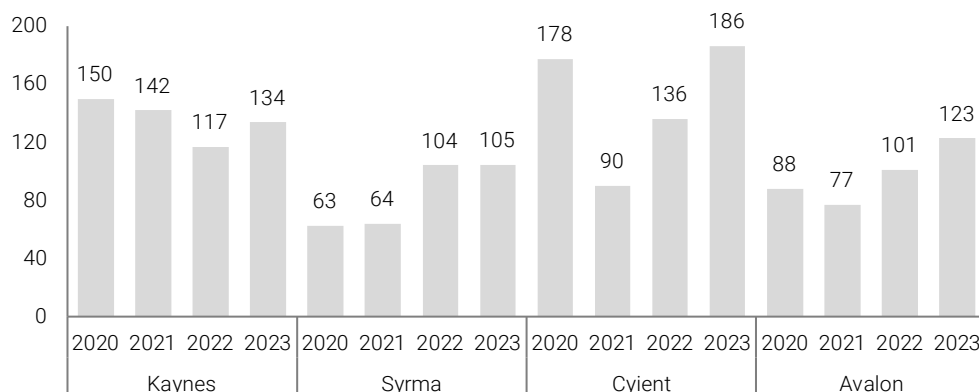
The sectors that Kaynes focuses on such as auto, industrial and railways typically have a medium level of working capital requirement, with no advances. Hence, the company's working capital cycle looks higher than peers such as Syrma and Cyient, as of FY2023.

Kaynes is working with its distributors to establish local supply warehouses in Mysuru or Bangalore (near plant locations) to reduce lead time and improve on-time supplies. The problem of lot sizes would go away over the medium term, as the scale of the company increases. Hence, we expect these steps will lead to a reduction of about 10-15 days in working capital.

If we look at global OSAT players, i.e., ASE and Amkor, they have annual working capital cycles of around 65 days and PCB players such as AT&S have negative working capital cycles recently. However, we at this stage, do not bake in any improvement in Kaynes’ working capital cycle due to the OSAT business over the medium term.

**Kaynes is one of the companies with inventory days on the higher side among its peer set**

**Exhibit 46: Inventory as days of sales for B2B EMS players, March fiscal year-end, FY2020-23**



Source: Company, Kotak Institutional Equities

**We expect a 14-day reduction in working capital, driven by normalizing inventory levels**

**Exhibit 47: Operating working capital as days of sales, March fiscal year-end, FY2020-26E**

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	150	142	117	134	120	120	120
Receivable as days of sales	93	106	102	74	74	74	74
Payable as days of sales	91	83	85	72	72	72	72
NWC as days of sales	151	165	134	135	121	121	121

Source: Company, Kotak Institutional Equities estimates

**Capex: In an investment mode**

We expect Kaynes to undertake capex worth Rs21 bn over the next three years, with a large part of investments undertaken for newer businesses such as OSAT and PCB.

- ▶ **EMS:** A large part of the proceeds from the IPO is being used to operationalize a greenfield facility in Chamarajanagar for the EMS vertical, with a total outlay of Rs1.4 bn and Rs1 bn being spent on existing facility expansion, which should help the company triple its capacity.
- ▶ **OSAT:** Kaynes will be setting up two facilities for OSAT with a total capital outlay of Rs54 bn with 50% capital subsidy from the central government under PLI and 25% capital subsidy from the respective state governments.
- ▶ **PCB:** Kaynes will set up an advanced HDI PCB plant in Mysuru, with a total capital outlay of Rs14 bn.

**Exhibit 48: Kaynes has multiple expansions planned for EMS, OSAT and PCB segments**

Locations	Comments	Expected completion
Manesar, Haryana	120k sq. ft built-up space taken	Planned operationalization under progress
Chamarajanagar, Karnataka	Work going on at full swing	Phase 1 to be operationalized in FY2024
Pune, Maharashtra	Leased place	To be operationalized in FY2024
Mysore Unit 1 & 2, Manesar, Bangalore, Chennai	Upgrading existing facilities	
	OSAT Phase 1	To be operationalized in 2HFY25
Karnataka	PCB	To be operationalized in 2HFY25
Karnataka	OSAT Phase 2	

Source: Company, Kotak Institutional Equities

**Leverage: Capital raise through QIP and government subsidy are key drivers of funding**

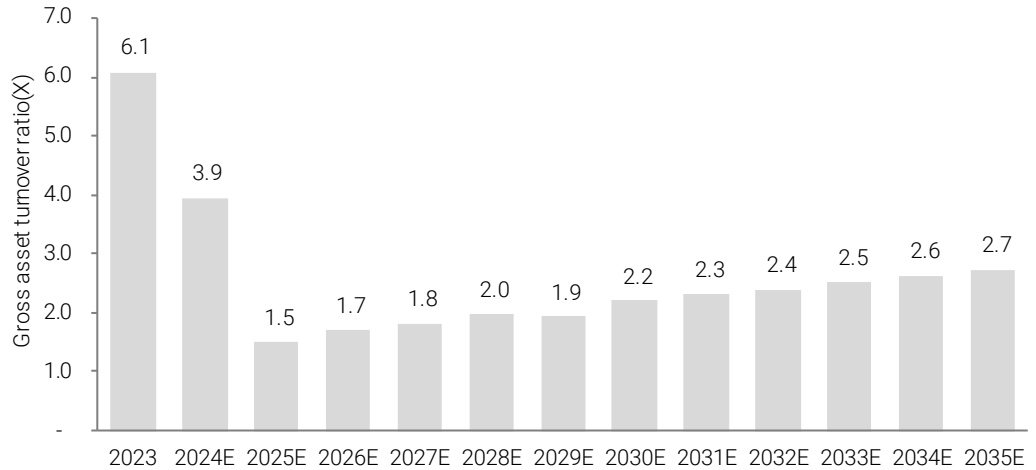
Kaynes has recently raised Rs14 bn through QIP in December 2023. Furthermore, the company will receive 50% capex subsidy from the central government, in line with the PLI policy and 25% capex subsidy from the state government. Hence, despite the company undertaking capex, we do not see leverage to be a concern for Kaynes.

**Asset turnover**

The EMS business generally offers a gross asset turn of 7X. However, the PCB business has an asset turn of 1.5X and the OSAT business has an asset turn of 1X. Hence, we see asset turns for Kaynes Technologies being closer to the 1-2X range over the next couple of years.

**We see gross asset turnover ratio seeing a sharp decline for Kaynes over the next couple of years**

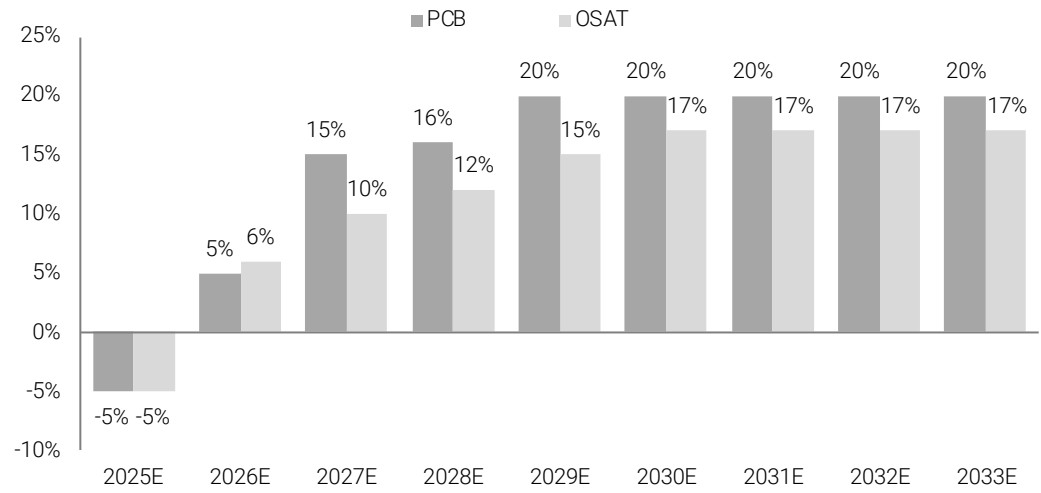
**Exhibit 49: Kaynes’ gross asset turnover ratio, March fiscal year-ends, 2023-35E (X)**



Source: Company, Kotak Institutional Equities estimates

**Return ratios are likely to be impacted over the near term, as the company invests in new segments with no margins over the short term**

**Exhibit 50: RoAE and RoACE profile of Kaynes, March fiscal year-end, FY2023-31E (%)**



Source: Company, Kotak Institutional Equities

Exhibit 51: Balance sheet of Kaynes Technology India Ltd (consolidated), March fiscal year-ends 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Shareholders funds</b>	<b>1,027</b>	<b>1,387</b>	<b>2,026</b>	<b>9,590</b>	<b>25,136</b>	<b>27,107</b>	<b>30,233</b>	<b>34,794</b>
Equity share capital	68	79	465	581	582	582	582	582
Reserves and surplus	959	1,308	1,560	9,009	24,555	26,526	29,652	34,213
Loan funds	1,438	1,395	1,695	1,359	1,359	1,359	1,359	1,359
Deferred tax liabilities	79	52	68	77	77	77	77	77
Deferred income	—	—	—	—	—	5,750	9,500	13,250
Minority Interest and other liabilities	123	105	216	218	218	218	218	218
<b>Total sources of funds</b>	<b>2,667</b>	<b>2,939</b>	<b>4,005</b>	<b>11,244</b>	<b>26,790</b>	<b>34,511</b>	<b>41,387</b>	<b>49,698</b>
Net block	502	571	640	1,123	3,478	15,420	19,063	24,050
CWIP	136	89	225	464	464	464	464	464
<b>Net fixed assets</b>	<b>638</b>	<b>659</b>	<b>864</b>	<b>1,587</b>	<b>3,942</b>	<b>15,884</b>	<b>19,527</b>	<b>24,514</b>
Investments + Goodwill	238	342	496	293	293	293	293	293
Cash and bank balances	123	143	216	4,860	16,777	10,245	10,152	9,522
<b>Current assets</b>	<b>2,782</b>	<b>3,049</b>	<b>4,648</b>	<b>7,448</b>	<b>10,363</b>	<b>14,901</b>	<b>21,434</b>	<b>29,198</b>
Inventories	1,511	1,639	2,264	4,132	5,776	8,588	12,638	17,450
Sundry debtors	936	1,217	1,977	2,271	3,542	5,267	7,751	10,702
Loans and advances	58	20	20	109	109	109	109	109
Other current assets	276	173	387	936	936	936	936	936
<b>Current liabilities</b>	<b>1,114</b>	<b>1,255</b>	<b>2,219</b>	<b>2,943</b>	<b>4,585</b>	<b>6,812</b>	<b>10,018</b>	<b>13,829</b>
Trade payables	921	954	1,641	2,229	3,477	5,170	7,608	10,505
Other current liabilities	191	294	568	703	1,096	1,630	2,399	3,313
Provisions	3	7	10	11	11	11	11	11
<b>Net current assets (excl. cash)</b>	<b>1,668</b>	<b>1,795</b>	<b>2,429</b>	<b>4,505</b>	<b>5,778</b>	<b>8,089</b>	<b>11,416</b>	<b>15,369</b>
<b>Total application of funds</b>	<b>2,667</b>	<b>2,939</b>	<b>4,005</b>	<b>11,244</b>	<b>26,790</b>	<b>34,511</b>	<b>41,387</b>	<b>49,698</b>

**Key ratios**

Debt / equity (X)	1.4	1.0	0.8	0.1	0.1	0.1	0.0	0.0
Net debt / equity (incl. acceptances) (X)	1.3	0.9	0.7	(0.4)	(0.6)	(0.3)	(0.3)	(0.2)
Gross FATR (X)	3.5	3.6	4.7	6.1	3.9	1.5	1.7	1.8
BVPS (Rs)	18	24	35	165	433	467	520	599
RoAE (%)	9.1	8.1	24.4	16.4	8.9	7.5	10.9	14.0
RoACE (%)	11.4	10.9	17.5	15.4	9.1	6.8	10.1	13.3

**Working capital as days of sales**

<b>Current assets</b>	<b>276</b>	<b>265</b>	<b>240</b>	<b>240</b>	<b>215</b>	<b>208</b>	<b>203</b>	<b>201</b>
Inventories	150	142	117	134	120	120	120	120
Sundry debtors	93	106	102	74	74	74	74	74
Loans and advances	6	2	1	4	2	2	1	1
Other current assets	27	15	20	29	19	13	9	6
<b>Current liabilities</b>	<b>110</b>	<b>107</b>	<b>107</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>
Trade payables	91	83	85	72	72	72	72	72
Other current liabilities	18	24	21	23	23	23	23	23
Provisions	0	1	1	0	0	0	0	0
<b>Net current assets (excl. cash) as days</b>	<b>166</b>	<b>157</b>	<b>134</b>	<b>145</b>	<b>119</b>	<b>113</b>	<b>108</b>	<b>105</b>

Source: Company, Kotak Institutional Equities estimates

**Cash flow:** We see improving working capital as a key driver to help generate Rs3.1 bn OCF over FY2023-26E. However, with a capex of Rs20 bn, we do not see any FCF generation for the next couple of years. Most of this capex will be funded by government grants and equity raised through QIP.

Exhibit 52: Cash flow statement of Kaynes Technology India Ltd (consolidated), March fiscal year-ends 2020-2027E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Cash flow from operating activities</b>								
Net profit before tax	113	109	590	1,260	1,999	2,611	4,140	6,041
Add: Depreciation	84	101	132	187	245	1,057	1,357	1,762
Add: Net interest	228	–	–	(100)	544	204	204	204
Others	2	(14)	(0)	365	–	–	–	–
<b>Op. Profit before Working Capital Changes</b>	<b>427</b>	<b>196</b>	<b>722</b>	<b>1,713</b>	<b>2,788</b>	<b>3,872</b>	<b>5,702</b>	<b>8,007</b>
Changes in Working capital	44	(112)	(734)	(1,629)	(1,274)	(2,311)	(3,327)	(3,953)
Taxes	(19)	172	224	(503)	(454)	(640)	(1,014)	(1,480)
<b>Cash flow from operating activities</b>	<b>452</b>	<b>256</b>	<b>211</b>	<b>(419)</b>	<b>1,060</b>	<b>922</b>	<b>1,361</b>	<b>2,574</b>
<b>Cash flow from investing activities</b>								
Capex	(312)	(250)	(422)	(581)	(2,600)	(13,000)	(5,000)	(6,750)
Investments	205	2	(33)	(4,450)	–	–	–	–
Others	8	7	11	98	–	–	–	–
<b>Cash flow from investing activities</b>	<b>(99)</b>	<b>(241)</b>	<b>(445)</b>	<b>(4,933)</b>	<b>(2,600)</b>	<b>(13,000)</b>	<b>(5,000)</b>	<b>(6,750)</b>
<b>Cash flow from financing activities</b>								
Debt	(118)	(44)	301	(336)	–	–	–	–
Equity	–	11	4	6,600	14,000	–	–	–
Interest	(236)	(218)	(256)	(349)	(544)	(204)	(204)	(204)
Dividend	–	–	–	–	–	–	–	–
Others	0	259	224	(371)	–	5,750	3,750	3,750
<b>Cash flow from financing activities</b>	<b>(354)</b>	<b>8</b>	<b>272</b>	<b>5,543</b>	<b>13,456</b>	<b>5,546</b>	<b>3,546</b>	<b>3,546</b>
<b>FCF</b>	<b>140</b>	<b>6</b>	<b>(211)</b>	<b>(1,001)</b>	<b>(1,540)</b>	<b>(12,078)</b>	<b>(3,639)</b>	<b>(4,176)</b>
<b>Total cash flow</b>	<b>(1)</b>	<b>23</b>	<b>38</b>	<b>191</b>	<b>11,917</b>	<b>(6,532)</b>	<b>(93)</b>	<b>(630)</b>
Opening cash	8	7	31	69	259	12,176	5,645	5,551
Other bank balances	0	(0)	(0)	(0)	–	–	–	–
Closing cash	7	31	69	259	12,176	5,645	5,551	4,922

Source: Company, Kotak Institutional Equities estimates

# A1

## Appendix 1: Company profile

Kaynes Technology is an end-to-end and IoT solutions enabled integrated electronics manufacturing player, having capabilities across the entire spectrum of electronics system design and manufacturing services (ESDM). The company has experience in providing conceptual design, process engineering, integrated manufacturing and life-cycle support for major players in the automotive, industrial, aerospace & defense, outer-space, nuclear, medical, railways, telecom, internet of things (IoT), information technology, consumer electronics and other sectors across geographies such as North America, Europe, Southeast Asia and others, with ~20% revenue from exports.

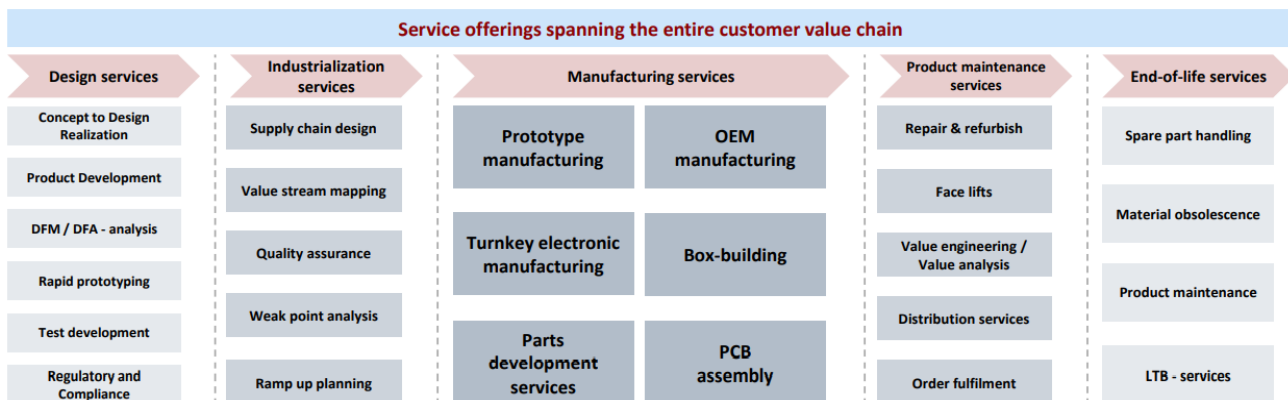
Kaynes provides services classified as follows:

- ▶ **OEM turnkey solutions—box build (OEM-box build)**, where the company undertakes “build to print” of complex box builds, sub-systems and products across different verticals.
- ▶ **OEM turnkey solutions—printed circuit board assemblies (PCBA)**, where the company undertakes PCB assemblies, cable harness, plastic injection and more, ranging from prototyping to mass manufacturing.
- ▶ **ODM**, where the company offers services in smart metering technology, smart street lighting, brushless DC technology, charging technology, inverter technology and providing IoT solutions for making smart consumer appliances and IoT-connected devices.
- ▶ **Product engineering and IoT solutions**, where the company offers conceptual design and product engineering services in the industrial and consumer segments.

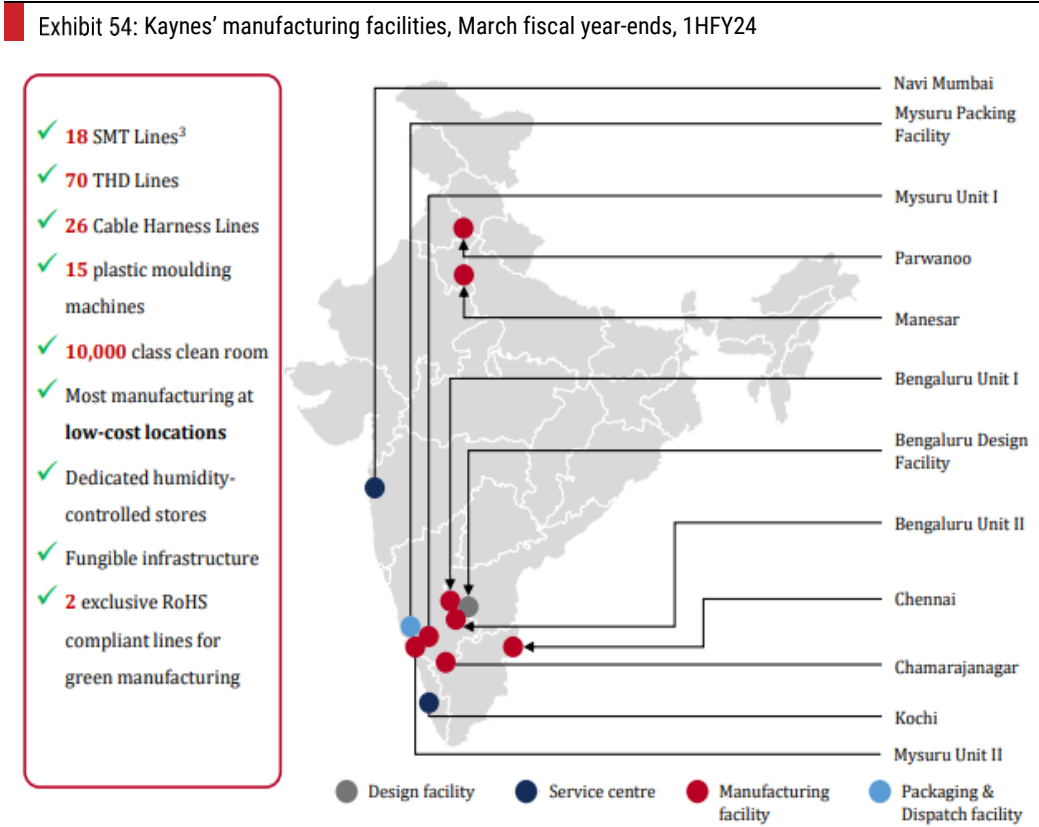
Where the PCBA segment contributed ~62% revenues, while the box build segment contributed ~30% revenues for FY2023, with the other two segments making up the rest at ~8%.

The company’s infrastructure includes 8 manufacturing plants, 2 service centers and a design facility across 7 Indian cities covering 250,000 sq. ft, with 10 global certifications—this makes the company the most certified ESDM company in India, according to an F&S report. These facilities are strategically located near customers’ vicinities, allowing the company to service their requirements efficiently and cost effectively.

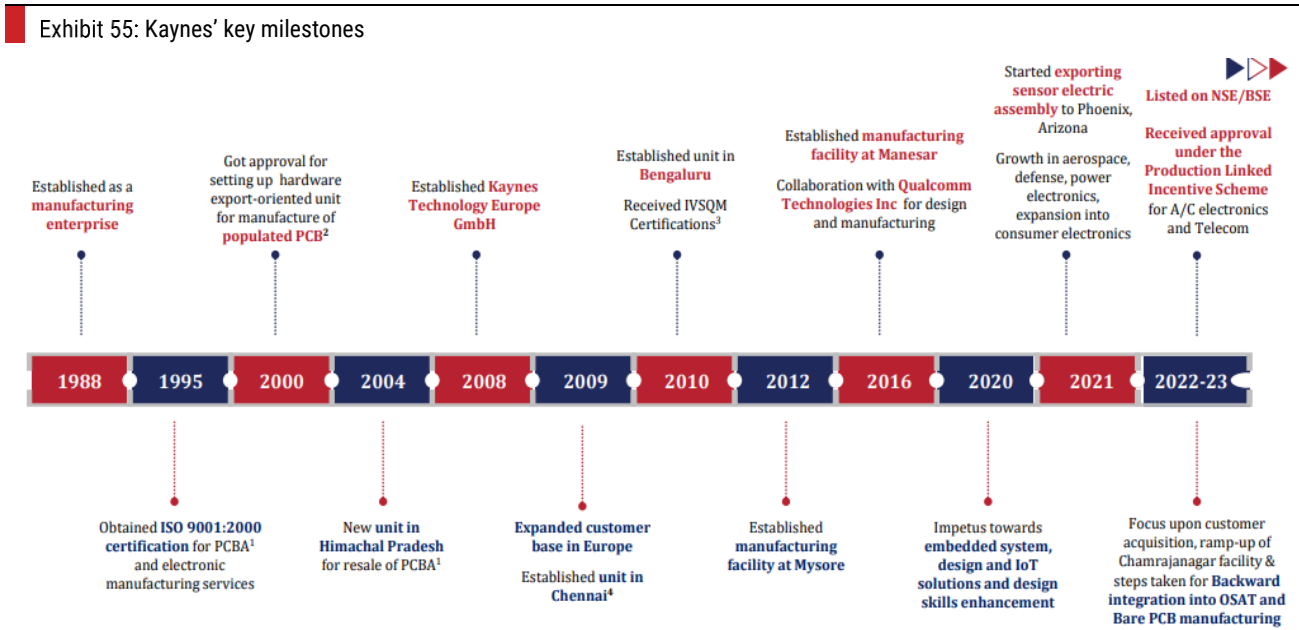
Exhibit 53: Kaynes’ service offerings spanning across the entire customer value chain



Source: Company, Kotak Institutional Equities



Source: Company, Kotak Institutional Equities



Source: Company, Kotak Institutional Equities

# A2

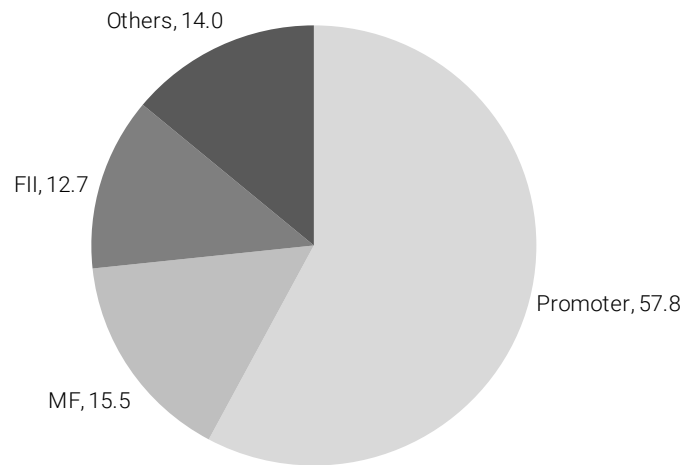
## Appendix 2: Key management personnel

**Exhibit 56: Brief background of Kaynes’ Board of Directors**

Name	Position	Remarks
Ramesh Kunhikannan	Managing Director	Ramesh Kunhikannan, aged 58 years, is Promoter and Managing Director of Kaynes. He has been associated with the company since incorporation. Ramesh holds a bachelor’s degree in Electrical Engineering from the National Institute of Engineering, Mysore. He has over 33 years of experience in the electronic manufacturing services industry. He oversees the management function of the company and along with the senior management is responsible for the implementation of strategy in respect of such management function.
Savitha Rajesh	Chairperson and Whole-time Director	Savitha Rajesh, aged 50 years, is Promoter, Chairperson and Whole-time Director of Kaynes. She has been associated with the company since incorporation. Savitha holds a bachelor’s degree in commerce from the University of Madras. She has over 25 years of experience in the electronics manufacturing services industry. She is responsible for the overall implementation of the manufacturing process and controls, compliant with different standards across the company.
Jairam Parvasthu Sampath	Whole-time Director and Chief Financial Officer	Jairam Parvasthu Sampath, aged 57 years, is the Whole-time Director and Chief Financial Officer of Kaynes. He has been associated with the company since 2011. Sampath holds a bachelor of technology degree in Mechanical Engineering from the Indian Institute of Technology, Madras, and a post graduate diploma in management from the Indian Institute of Management, Ahmedabad. He has been leading the finance function of Kaynes in recent years. He has over 30 years of experience in manufacturing, operations, sales and marketing. He was Vice President of TVS Group and Chief Marketing Officer of iPath Technologies Private Limited, prior to Kaynes. He was also associated with Hindustan Motors Limited, TVS Electronics Limited and Sundaram-Clayton Limited.
Anup Kumar Bhat	Independent Director	Anup Kumar Bhat, aged 65 years, is an Independent Director of Kaynes. He has been associated with the company since 2022. Anup holds a bachelor’s degree in Metallurgical Engineering from the Banaras Hindu University. He has several years of experience and was previously associated with Ashok Leyland as Senior Vice President (subsidiary support).
Heinz Franz Motizi	Independent Director	Heinz Franz Motizi is an Independent Director of Kaynes. He has been associated with the company since 2023. Mr Motizi has a degree in HTBL Electrical Engineering from Stadtwerke Judenburg. He has 42 years of professional experience, including 40 years at AT&S Austria Technologie & Systemtechnik AG, Leoben, Austria.
Koshy Alexander	Independent Director	Koshy Alexander, aged 62 years, is an Independent Director of Kaynes. He has been associated with the company since 2022. Alexander holds a bachelor’s degree in Law from the Bangalore University and a post graduate degree in Commerce from the Bangalore University. He is also an associate member of the Institute of Chartered Accountants of India. He has approximately 34 years of experience in finance. He was previously associated with Bharat Electronics Limited as Director (Finance).
Murali SG	Independent Director	Murali SG, aged 72 years, is an Independent Director of Kaynes. He has been associated with the company since 2022. Murali holds a bachelor’s degree in Commerce from the University of Madras. He is also an associate member of the Institute of Chartered Accountants of India. He has over 45 years of experience in finance. He was Group CFO of TVS Motor Company. He was also associated with Voltas and Unilever Group.
Poornima Ranganath	Independent Director	Poornima Ranganath, aged 52 years, is an Independent Director of Kaynes. She has been associated with the company since 2022. Poornima is a law graduate from the National Law School of India University, Bangalore. She has several years of experience. She is Managing Partner of Law Assist, a full-service law firm advising clients on corporate laws, contract negotiations and human resource laws, with a special focus on foreign companies operating in India.

Source: Company Data, Kotak Institutional Equities

## A3

**Appendix 3: Shareholding pattern****Exhibit 57: Shareholding pattern of Kaynes Technology India Ltd for the period ending December 2023 (%)**

Source: BSE, Kotak Institutional Equities

# Amber Enterprises (AMBER)

Electronic Manufacturing Services

ADD

CMP(₹): 3,694

Fair Value(₹): 4,000

Sector View: Cautious

NIFTY-50: 22,519

April 12, 2024

## Moving beyond ACs

Amber Enterprises is a leader in the RAC ODM market, with a market share of 29.4%. We see the AC business in a transition phase over the next 2-3 years, as brands move assembly in-house and ODM players shift toward components. We expect growth over the medium term to be driven by the AC components, electronics and railway segments, as Amber moves beyond completely built ACs. However, continuous investment in capex and working capital will restrict sharp improvement in margins and return ratios. We initiate coverage with ADD and Fair Value of Rs4,000.

### Initiate coverage with ADD rating and DCF-based Fair Value of Rs4,000

We initiate coverage on Amber Enterprises with an ADD rating and Fair Value of Rs4,000, based on DCF (implying 38.4X P/E on March 2026 consolidated earnings). Key assumptions for DCF are (1) an 8% volume CAGR in the overall RAC market from FY2023-45E, (2) revenue and EBITDA CAGR of 12%/13% over FY2023-45E for Amber, (3) 4% terminal growth rate and (4) WACC of 11.2%.

### Moving beyond ACs toward components, electronics and railways

Amber is a leader in the room AC (RAC) original design manufacturing (ODM) market, with a 29.4% market share at the ODM level in FY2023. We expect the AC business to be in a slow growth phase in the next 2-3 years, as brands move assembly in-house and players such as Amber shift to components. We see non-AC as a key growth driver, with Amber becoming a complete Electronics Manufacturing Services (EMS) player and a key beneficiary of railway capex through Sidwal. We expect the non-AC revenue contribution to reach 35% by FY2028 versus 25% currently and see 16% revenue growth in FY2023-26E.

### Financials: We expect earnings CAGR of 29% over FY2023-26E

We expect Amber's revenue/EBITDA/PAT to rise at a CAGR of 16%/24%/29% during FY2023-26E. We estimate the EBITDA margin to expand 130 bps and reach 7.3% by FY2026E, driven by operating leverage, stable commodity prices and improved revenue share from high-margin segments. We expect capex of Rs12 bn over FY2023-26E to limit FCF improvement to Rs4.5 bn over the same period, despite healthy OCF of Rs16.5 bn over FY2023-26E. Higher contribution from the electronics and components business should drive an improvement in return ratios over the next three years. We expect RoAE/RoACE to improve to 13.9%/11.6% by FY2026E versus 8.6%/7.0% in FY2023.

### In a transition phase; electronics and railways to be key growth drivers

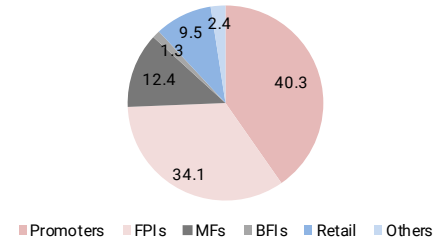
We initiate coverage on Amber Enterprises with an ADD rating and a Fair Value of Rs4,000. We expect the next 2-3 years to be challenging for Amber as brands move assembly in-house. The company continues to expand its presence in electronics and railways, which will be key medium-term drivers for the company. Continuous investment in backward integration and margins stabilizing as the mix shifts toward electronics will offset some gains of the operating leverage. Hence, return ratios would depend more on how players are minimizing capital employed and sweating assets better.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	3,694/4,000/ADD
52-week range (Rs) (high-low)	4,615-1,805
Mcap (bn) (Rs/US\$)	124/1.5
ADTV-3M (mn) (Rs/US\$)	862/10.3

##### Shareholding pattern (%)



##### Price performance (%)

	1M	3M	12M
Absolute	2	1	97
Rel. to Nifty	1	(3)	70
Rel. to MSCI India	(0)	(6)	59

##### Forecasts/Valuations

	2024	2025E	2026E
EPS (Rs)	50.1	79.8	104.2
EPS growth (%)	7.4	59.3	30.6
P/E (X)	73.8	46.3	35.5
P/B (X)	6.0	5.3	4.6
EV/EBITDA (X)	27.4	20.4	16.7
RoE (%)	8.5	12.1	13.9
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	71	90	108
EBITDA (Rs bn)	5	7	8
Net profits (Rs bn)	2	3	4

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Deepak Krishnan

Aditya Mongia

Sai Siddhardha P

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## Financial overview: Return ratios to improve with scale

### Forecasts and valuation ratios of Amber (consolidated), March fiscal year-ends, 2020-27E

Exhibit 1: We expect Amber's EPS to grow 30% over FY2023-26E

	Net sales (Rs mn)	EBITDA (Rs mn)	PAT (Rs mn)	EPS (Rs)	EPS growth (%)	EV/EBITDA (X)	P/E (X)	P/B (X)	RoCE (%)	RoE (%)
2020	39,628	3,093	1,584	50.4	69.1	41.2	73.6	10.3	14.1	15.0
2021	30,305	2,203	816	24.2	(51.9)	57.2	153.0	7.8	5.0	6.0
2022	42,064	2,754	1,092	32.4	33.8	47.1	114.4	7.2	5.1	6.5
2023	69,271	4,179	1,572	46.6	44.0	31.8	79.4	6.5	6.9	8.6
2024E	71,467	4,860	1,688	50.1	7.4	27.5	74.0	6.0	7.6	8.5
2025E	89,625	6,543	2,689	79.8	59.3	20.4	46.4	5.3	10.1	12.1
2026E	108,071	7,889	3,511	104.2	30.6	16.8	35.6	4.6	11.6	13.9
2027E	126,439	9,230	4,364	129.5	24.3	14.1	28.6	4.0	12.4	14.9

Source: Company, Kotak Institutional Equities estimates

Exhibit 2: Summary financials of Amber (consolidated), March fiscal year-ends, 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Income statement</b>								
Net revenues	39,628	30,305	42,064	69,271	71,467	89,625	108,071	126,439
Total operating expenses	(36,535)	(28,102)	(39,310)	(65,092)	(66,607)	(83,082)	(100,182)	(117,209)
EBITDA	3,093	2,203	2,754	4,179	4,860	6,543	7,889	9,230
Depreciation & Amortization	(848)	(923)	(1,079)	(1,391)	(1,502)	(1,897)	(2,177)	(2,457)
EBIT	2,245	1,280	1,675	2,788	3,358	4,645	5,712	6,773
Other income	82	331	332	527	560	374	303	389
Interest expense	(419)	(410)	(464)	(1,118)	(1,612)	(1,368)	(1,258)	(1,258)
PBT	1,907	1,201	1,543	2,197	2,305	3,652	4,757	5,904
Tax expense	(266)	(369)	(429)	(559)	(590)	(935)	(1,218)	(1,511)
Net profit	1,641	833	1,113	1,638	1,715	2,717	3,539	4,392
Minority interest	(57)	(17)	(21)	(66)	(27)	(28)	(28)	(28)
PAT	1,584	816	1,092	1,572	1,688	2,689	3,511	4,364
Reported PAT	1,584	816	1,092	1,572	1,688	2,689	3,511	4,364
Recurring EPS	50	24	32	47	50	80	104	129
<b>Balance sheet</b>								
Shareholders' funds	11,284	16,041	17,342	19,088	20,803	23,520	27,059	31,451
Debt	3,829	3,987	10,318	13,437	12,437	11,437	11,437	11,437
Deferred tax liabilities	1,225	1,253	983	2,639	2,639	2,639	2,639	2,639
Minority interest	348	365	387	452	452	452	452	452
Total sources of funds	16,686	21,647	29,030	35,617	36,332	38,049	41,588	45,980
Net fixed assets	11,176	11,873	14,882	18,021	20,519	22,621	24,444	25,787
Net working capital (ex-cash)	3,760	5,310	4,783	5,949	6,089	6,650	7,221	7,789
Investments	547	1,565	2,282	1,354	1,354	1,354	1,354	1,354
Goodwill	-	-	1,457	4,698	4,698	4,698	4,698	4,698
Cash and bank balances and current investments	1,203	2,899	5,626	5,594	3,672	2,725	3,871	6,353
Total application of funds	16,686	21,647	29,030	35,617	36,332	38,049	41,588	45,980
<b>Free cash flow</b>								
Operating profit before wcap. changes	3,326	2,369	3,008	4,327	5,420	6,917	8,192	9,619
Change in working capital / other adjustments	44	(80)	26	(582)	(139)	(562)	(570)	(568)
Net cashflow from operating activities	2,882	2,210	2,496	3,206	4,690	5,421	6,404	7,540
Capex	(1,411)	(1,711)	(4,077)	(6,535)	(4,000)	(4,000)	(4,000)	(3,800)
Free cash flow (CFO + net capex)	1,471	499	(1,582)	(3,329)	690	1,421	2,404	3,740
<b>Growth (%)</b>								
Revenue growth	44.0	(23.5)	38.8	64.7	3.2	25.4	20.6	17.0
EBITDA growth	45.3	(28.8)	25.0	51.8	16.3	34.6	20.6	17.0
Recurring PAT growth	73.2	(49.3)	33.7	47.1	4.7	58.4	30.3	24.1
<b>Key ratios</b>								
EBITDA margin (%)	7.8	7.3	6.5	6.0	6.8	7.3	7.3	7.3
Net debt/equity (X)	0.2	0.1	0.3	0.4	0.4	0.4	0.3	0.2
Net debt/EBITDA (X)	0.8	0.5	1.7	1.9	1.8	1.3	1.0	0.6
Book value per share (Rs)	359	476	515	566	617	698	803	933
RoAE (%)	15.0	6.0	6.5	8.6	8.5	12.1	13.9	14.9
RoACE (%)	14.1	5.0	5.1	6.9	7.6	10.1	11.6	12.4

Source: Company, Kotak Institutional Equities estimates

# 2

## Valuation: Initiate with ADD rating and Fair Value of Rs4,000

We initiate coverage on Amber Enterprises with an ADD rating and DCF-based Fair Value of Rs4,000, implying 38.4X P/E on March 26 consolidated earnings. We model (1) RAC industry volumes to move up to 11.6 mn units by FY2026E, driven by a CAGR of 11% in industry volumes over FY2023-26E; (2) revenue CAGR for Amber of 16% over FY2023-26E on 12.4% growth in consumer durables, 28% growth in electronics and 25% growth in Sidwal; (3) market share at OEM/ODM level to remain stable, as the increase in components are offset by a decline in completely built units (CBUs); (4) improvement in margins by 130 bps by FY2026E over FY2023 on a normal business environment and operating leverage; and (5) improvement in operational cash flows over FY2023-26E. Our DCF assumes (1) an 8% CAGR in industry volumes over FY2023-45E, (2) revenue and EBITDA CAGR of 12% and 13%, respectively, over FY2024-45E, (3) WACC of 11.2% and (4) a 4% terminal growth rate.

### We arrive at a DCF-based Fair Value of Rs4,000

We factor in industry volume CAGR of 8% during FY2023-45E in our DCF assumptions, based on improved penetration of AC and rising disposable income. We expect Amber's revenue and EBITDA CAGR of 12% and 13%, respectively, over FY2024-45E. This will be driven by strong growth—(1) 11% growth in the AC business, driven by the components segment and (2) 15% growth in the non-AC segment, driven by the Electronics and Sidwal businesses. Over the medium term, we expect a gradual reduction in overall EBITDA margins, led by higher contribution from the electronics segment, which only has ~7% margins (lower than the AC business).

**We arrive at a valuation of Rs 4,000/share for Amber Enterprises Ltd**

**Exhibit 3: Amber Enterprises' DCF model (Rs mn), March fiscal year-ends, 2019-45E**

	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2045E
India volumes (mn units)	6.5	7.2	5.2	6.4	8.4	9.1	10.3	11.6	13.0	14.5	16.1	17.7	44.8
YoY %	5	11	(28)	23	31	8	14	13	12	11	11	10	4.0
RAC industry size at market prices	148,200	171,360	128,960	179,200	252,000	272,160	316,733	366,405	421,372	488,310	562,399	643,718	1,834,247
RAC industry size at OEM/ODM level	98,480	116,280	89,260	121,600	176,400	190,512	224,880	263,812	307,601	356,466	410,551	469,914	1,339,000
Realization per unit (Rs)	15,151	16,150	17,165	19,000	21,000	21,000	21,840	22,714	23,622	24,567	25,550	26,572	29,890
Proportion at OEM/ODM level (%)	66.5	67.9	69.2	67.9	70.0	70.0	71.0	72.0	73.0	73.0	73.0	73.0	73.0
Amber's market share in volumes	16.2	20.8	20.2	21.1	23.4	22.4	21.9	21.4	20.4	19.9	19.9	19.9	19.9
Amber's market share at OEM/ODM market prices	22.0	26.2	24.9	26.6	29.4	27.2	27.3	27.8	27.5	27.3	27.7	28.2	36.1
Amber's AC volumes	2.1	3.0	2.1	2.7	3.9	4.1	4.5	5.0	5.3	5.8	6.4	7.0	17.8
YoY %	10.5	42.9	(30.0)	28.6	45.5	3.4	11.0	10.2	6.9	8.7	10.7	10.1	4.0
RAC realization per unit	8,125	7,794	7,719	7,315	7,580	6,822	6,959	7,237	7,526	7,677	7,831	7,987	8,476
YoY %													
<b>Amber total RAC revenues</b>	<b>21,670</b>	<b>30,490</b>	<b>22,220</b>	<b>32,290</b>	<b>51,940</b>	<b>49,390</b>	<b>57,286</b>	<b>65,848</b>	<b>76,308</b>	<b>97,251</b>	<b>113,728</b>	<b>132,338</b>	<b>483,928</b>
Amber AC revenues	17,062	23,382	16,210	19,750	29,786	27,714	31,368	35,958	39,967	44,311	50,053	56,188	151,046
YoY %		37	(31)	22	51	(7)	13	15	11	11	13	12	4
Amber's AC component revenues	4,608	7,108	6,010	12,540	22,154	24,180	29,985	37,427	44,582	52,940	63,675	76,150	332,882
YoY %		54	(15)	109	77	9	24	25	19	19	20	20	6
<b>Amber's non-AC revenues</b>	<b>5,850</b>	<b>9,138</b>	<b>8,085</b>	<b>9,774</b>	<b>17,331</b>	<b>24,380</b>	<b>34,827</b>	<b>42,947</b>	<b>52,026</b>	<b>62,345</b>	<b>74,125</b>	<b>87,371</b>	<b>373,140</b>
YoY %		56	(12)	21	77	41	43	23	21	20	19	18	4
<b>Amber's total revenues</b>	<b>27,520</b>	<b>39,628</b>	<b>30,305</b>	<b>42,064</b>	<b>69,271</b>	<b>73,770</b>	<b>92,114</b>	<b>108,795</b>	<b>128,334</b>	<b>159,596</b>	<b>187,853</b>	<b>219,709</b>	<b>857,068</b>
YoY%		44.0	(23.5)	38.8	64.7	6.5	24.9	18.1	18.0	24.4	17.7	17.0	4.8
AC and component revenue share (%)	78.7	76.9	73.3	76.8	75.0	67.0	62.2	60.5	59.5	60.9	60.5	60.2	56.5
Non-AC revenue share (%)	21.3	23.1	26.7	23.2	25.0	33.0	37.8	39.5	40.5	39.1	39.5	39.8	43.5
<b>Consolidated revenue</b>	<b>39,628</b>	<b>30,305</b>	<b>42,064</b>	<b>69,271</b>	<b>71,467</b>	<b>89,625</b>	<b>108,071</b>	<b>126,439</b>	<b>159,596</b>	<b>187,853</b>	<b>219,709</b>	<b>857,068</b>	<b>857,068</b>
YoY%		(23.5)	38.8	64.7	3.2	25.4	20.6	17.0	26.2	17.7	17.0	17.0	4.8
EBITDA	3,093	2,203	2,754	4,179	4,860	6,543	7,889	9,230	11,651	13,713	16,039	18,313	62,566
EBITDA %	7.8	7.3	6.5	6.0	6.8	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
<b>Consolidated EBIT</b>	<b>2,245</b>	<b>1,280</b>	<b>1,675</b>	<b>2,788</b>	<b>3,358</b>	<b>4,645</b>	<b>5,712</b>	<b>6,773</b>	<b>8,924</b>	<b>10,693</b>	<b>12,715</b>	<b>15,319</b>	<b>52,319</b>
<b>EBIT margin (%)</b>	<b>5.7</b>	<b>4.2</b>	<b>4.0</b>	<b>4.0</b>	<b>4.7</b>	<b>5.2</b>	<b>5.3</b>	<b>5.4</b>	<b>5.6</b>	<b>5.7</b>	<b>5.8</b>	<b>5.8</b>	<b>6.1</b>
EBIT*(1-Tax)	1,670	952	1,246	2,074	2,498	3,456	4,250	5,039	6,639	7,956	9,460	11,024	38,925
Depreciation	848	923	1,079	1,391	1,502	1,897	2,177	2,457	2,727	3,020	3,324	3,724	10,247
Inc/Dec in Working Capital	44	(80)	26	(582)	(139)	(1,578)	(1,603)	(1,596)	(2,896)	(2,458)	(2,771)	(3,393)	(3,393)
Capex	(1,411)	(1,711)	(4,077)	(6,535)	(4,000)	(4,000)	(4,000)	(3,800)	(4,318)	(4,519)	(4,626)	(4,626)	(12,045)
<b>FCF</b>	<b>1,151</b>	<b>85</b>	<b>(1,726)</b>	<b>(3,651)</b>	<b>(139)</b>	<b>(225)</b>	<b>824</b>	<b>2,100</b>	<b>2,153</b>	<b>3,999</b>	<b>5,387</b>	<b>5,387</b>	<b>33,734</b>
Post tax cost of debt (%)	7.1												
Risk free rate (%)	7.0												
Risk premium (%)	4.9												
Beta	1.5												
Cost of equity	14.2												
FY2023 debt	13,437												
FY2023 equity	19,088												
<b>WACC (%)</b>	<b>11.2</b>												
Terminal growth rate (%)	4.0												
Sum of discounted free cash flow	77,309												
Terminal cash flow	4,468												
Terminal value	64,300	0.45											
Enterprise value	141,609												
Net debt/(cash) - March 2023	7,843												
Valuation of investments	1,319												
<b>Equity value</b>	<b>135,085</b>												
<b>Equity value per share (Rs)</b>	<b>4,000</b>												
<b>Fair value</b>	<b>4,000</b>												

Source: Company, Kotak Institutional Equities estimates

**AC components; Electronics and Sidwal to be key revenue drivers**

**We expect revenues to increase at a CAGR of 16% during FY2023-26E**

We bake in revenue CAGR of 16% over FY2023-26E for Amber, based on (1) the market share in the RAC ODM market remaining stable at ~27.8%, driven by growth in components, (2) 28% revenue CAGR in electronics, driven by the hearables & wearables segment and (3) 25% revenue growth for Sidwal (mobility segment), driven by a strong order book.

- ▶ **Consumer durable segment.** The consumer durable segment consists of (1) AC, (2) AC components and (3) non-AC components. We expect the shift of business within AC toward components for Amber with a decline in completely built units as OEMs put up their own capacity under the PLI Scheme. Furthermore, we expect steady growth in non-AC components, led by the motors business. Overall, our AC ODM market share remains stable at ~27.8% in FY2026E and drives the 12.4% growth in the consumer durable segment.
- ▶ **Electronic segment.** We see 28% revenue growth in the electronic segment over FY2023-33E, driven by the wearable and hearable segment. As of FY2023, hearables & wearables contributed ~30% of EMS sales for Amber, driven largely by Boat and Noise (who have a combined market share of 40% in the Indian wearables market, according to Q3 IDC reports). Amber has formed a 50:50 JV with Noise for undertaking the business of manufacturing, assembling and designing of wearables and other

smart electronics products. The announcement of the new acquisition of Ascent Circuits can help the company backward integrate and differentiate itself from peers.

- ▶ **Sidwal.** Sidwal's order book has grown to 6X level over the 4.5 years since Amber's acquisition of Sidwal. Given the near-term industry tailwinds and Amber's focus on increasing its own wallet share, we see Sidwal's order book increasing at a CAGR of 40% over FY2023-26E. We expect growth momentum to continue for the next couple of years beyond that as well. Sidwal's order book execution cycle typically varies between 12-month to 24-month periods; hence, 40% of the order book CAGR should lead to a 25% revenue CAGR. Sidwal's historically margins have been in the 21-23% range over the past couple of years.

This results in a revenue CAGR of 16% over FY2023-26E. The share of consumer durable revenue is expected to decline from 78% in FY2023 to 71% in FY2026 in our estimates.

#### **We expect absolute EBITDA to increase at a CAGR of 28% over FY2023-26E**

We build in a 130 bps improvement in margins by FY2026E over FY2023, driven by a normalized operating environment and operating leverage. Amber's margins over the past couple of years have been impacted by a weak summer season and higher commodity prices. We build in EBITDA margin of 6.8%/7.3%/7.3% for FY2024/25/26E to bake in net impact of (1) flat realizations, (2) higher contribution from components, (3) decline in commodity prices, (4) increased share of revenues from the higher margin Sidwal business and (5) unfavorable mix, as electronics' contribution increases.

#### **We assume working capital and leverage to remain comfortable**

**Comfortable leverage:** We expect the company to remain focused on maintaining cash flows and balance sheet strength. We expect operational cash flows and internal accruals to meet requirements of incremental capex and working capital funding and hence, incremental debt is not required. We expect net D/E and net debt/EBITDA of 0.1X and 0.4X, respectively, by FY2026E, as compared with FY2023.

**Working capital cycle to remain similar to FY2023:** Working capital cycle of Amber had moved up in FY2021 to 131 days on Covid-led restrictions, which impacted net sales and even resulted in high inventory and debtor days. It has corrected in FY2023 to 86 days on improved collections, better inventory management, along with improved sales. We expect working capital cycle of around 86 days over FY2023-26E.

#### **Operational cash flows to remain strong while free cash flow to start improving from FY2024**

Operational cash flows for Amber Enterprises have remained fairly strong over FY2016-23 and were sufficient to meet a significant proportion of capex requirements during the same period. However, FCF generation was almost nil during the same period on continuous investment in capex and acquiring companies for increasing backward integration. With most PLI investment undertaken by the company, we expect some improvement in FCF generation.

Working capital for ODM players in AC tends to remain higher than other EMS companies due to higher inventory and procurement required for design and manufacturing. We expect Amber to generate operational cash flows of Rs16.5 bn over FY2023-26E, which will take care of the capex requirements of Rs12 bn over the same period. We expect Amber to start generating FCF from FY2024E.

#### **Return ratios to reach mid-teens range**

Return ratios of Amber were impacted in the past three years on Covid-led disruption, weak summer, sharp volatility in commodity prices impacting margins and incremental capex done by the company. The ODM nature of the business also results in working capital investment of 12-13% of sales. With the capex phase now behind the company, higher contribution from the electronics and components business should drive an improvement in return ratios over the next three years. We expect RoAE/RoACE to improve to 13.9%/11.6% by FY2026E.

With these assumptions, we arrive at a DCF-based Fair Value of Rs4,000.

Amber's performance is subject to the following risks associated with (1) a slowdown in the RAC industry, (2) changes in BEE norms, (3) loss of market share to smaller players, (4) increased competitive intensity in newer segments and (5) higher commodity prices.

### Relative valuations

We compared valuations of Amber Enterprises with AC ODM peers such as PG Electroplast and EMS player Dixon Technologies. It trades at a premium to PG Electroplast due to its size and positioning in the RAC ODM market. Discount versus Dixon Technologies is due to the diverse profile of Dixon versus Amber and better return ratios of Dixon.

Amber’s valuation is higher than global peers in the similar RAC segment, as the domestic industry is on the cusp of a higher growth trajectory, driven by various schemes of government and expected improvement in AC penetration levels in the country over the next few years.

### Amber Enterprises trades at a discount to AC OEMs, while it trades at a premium to global players on higher growth expected in domestic markets

Exhibit 4: Valuation comparable metric for Amber Enterprises, March fiscal year-ends, 2024E-26E

Company	Mkt Cap. (US\$ mn)	Price (LC)	Year end	EV (US\$ mn)	EV/EBITDA (X)			P/E (X)			P/B (X)			RoE (%)		
					2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Global</b>																
Hon Hai Precision Industry	66,966	154.5	Dec	59,165	6.7	5.8	4.9	13.6	11.8	12.0	1.3	1.2	1.2	9.5	10.1	9.4
Pegatron Corp	8,413	101.0	Dec	8,997	8.2	7.1	6.2	15.8	14.1	12.9	1.3	1.3	1.2	8.4	9.0	9.8
Quanta Computer Inc	34,056	282.0	Dec	32,424	14.3	11.2	10.4	21.8	17.6	15.3	5.4	4.9	4.5	24.8	27.7	27.3
Compal Electronics	5,043	36.7	Dec	6,139	8.9	8.1	7.3	14.9	13.0	10.4	1.3	1.2	1.2	8.3	8.8	9.1
Wistron Corp	11,378	125.5	Dec	13,688	8.4	6.8	5.6	19.2	14.7	11.4	2.9	2.6	2.4	16.0	18.1	20.9
Jabil Inc	16,465	136.5	Dec	16,789	7.4	6.9	6.5	16.3	13.0	11.4	8.6	6.0	4.4	43.6	52.8	47.1
<b>India</b>																
Dixon Technologies India Ltd	5,585	7,814.0	Mar	5,600	64.0	39.5	31.4	116.9	66.9	53.4	27.6	19.5	14.2	26.7	34.1	30.8
Amber Enterprises India Ltd	1,504	3,705.0	Mar	1,610	27.5	20.4	16.8	74.0	46.4	35.6	6.0	5.3	4.6	8.5	12.1	13.9
Avalon Technologies Ltd	409	520.0	Mar	389	54.2	31.7	22.1	119.6	52.0	38.0	6.0	5.4	4.7	5.1	10.9	13.2
Kaynes Technology India Ltd	1,931	2,508.8	Mar	1,746	67.8	49.0	32.3	103.8	81.3	51.3	5.8	5.4	4.8	8.9	7.5	10.9
Cyient Dlm Ltd	673	705.0	Mar	630	47.4	32.0	23.9	87.7	44.4	35.6	6.0	5.3	4.6	6.8	11.9	12.9
P G Electroplast	562	1,802.1	Mar	623	20.8	17.3	14.9	37.1	27.5	21.9	4.6	3.8	3.0	14.4	14.4	15.1
Syrma Sgs Technology Ltd	1,036	488.0	Mar	1,010	40.5	26.5	18.9	66.2	43.0	29.7	5.1	4.6	4.0	8.1	11.3	14.4

Source: Bloomberg, Companies, Kotak Institutional Equities estimates

# 3

## RAC and AC component industries to benefit from PLI scheme

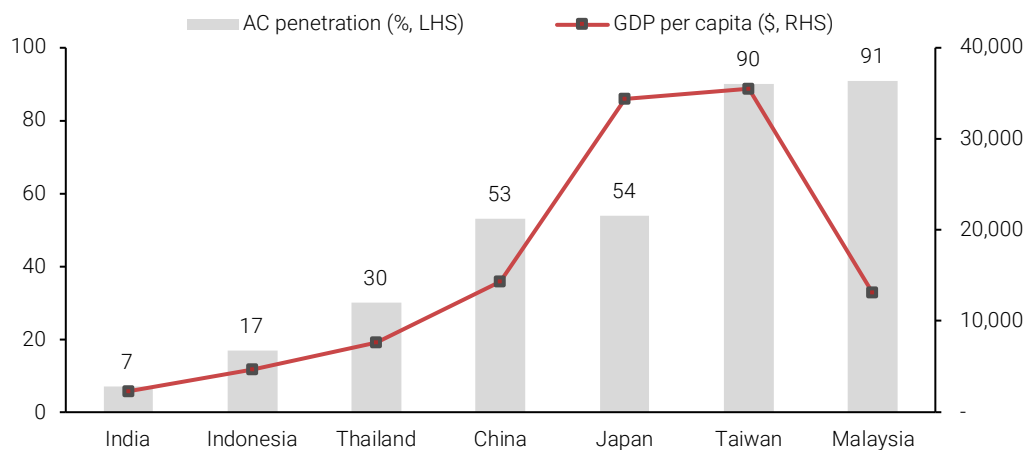
The government has taken several initiatives to increase domestic manufacturing for AC and AC components and reduce dependence on imports from China. These measures included a ban on the import of refrigerant filled AC, PMP scheme followed by PLI for AC components. PLI approvals worth Rs48 bn across two schemes had seen interest from several AC OEMs and ODM players. We expect dependence on imports for high-value intermediaries such as compressors, copper tube and aluminum to remain high, while we expect it to reduce for other components. We expect a gradual increase in domestic value addition from this scheme, but may fall short of the 75% target that the government is aiming for. Increase in the addressable market will be positive for ODM players to increase domestic manufacturing and exports too. However, with several PLI-led investments getting commissioned over the next 2-3 years, we expect ODM with backward integration capabilities to become suppliers of components to brands from being assemblers earlier.

### Penetration level of AC is much lower in India as compared with other countries

Penetration level of AC is much lower at 7% in India as compared with other countries and even with other consumer durable categories. With improvement in per capita income for the country, we expect penetration levels to further improve from current levels—the way it has happened in other countries. As GDP per capita starts increasing, AC will be considered as a necessary item than a luxury item and its penetration level is likely to start improving, thereby resulting in demand improvement. Replacement demand led by changing energy rating norms, wide range and a high installed base of window RACs will also lead to increased demand and expansion of domestic manufacturing capacities.

### AC penetration levels are very low in India and have a scope of further improvement as India's per capita income grows

Exhibit 5: Penetration level of AC and GDP per capita comparison in different countries (%), as of calendar year 2022



Source: Company, Kotak Institutional Equities estimates

### Well-positioned to benefit from industry growth

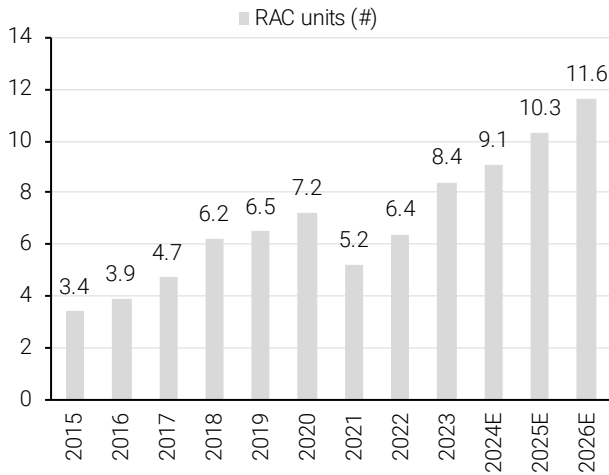
The Indian AC industry has reported a CAGR of 12% during FY2015-23 to 8.4 mn in FY2023. Post-Covid, demand growth has started picking up again since FY2022. Factors such as rising disposable income, increasing urbanization and easier financing are few reasons driving the growth. Longer summers in the country have also led to creation of new demand for RACs not only in the larger cities, but also in Tier II/III cities where heightened economic activity has resulted in greater affordability. Additionally, new product features and technological advancement in the RAC market has added to the increase in replacement demand of the product.

We expect the RAC industry to reach 11.6mn units by FY2026E from 8.4 mn units in FY2023, driven by rising penetration levels of AC and increase in disposable income driving the demand for ACs. We expect industry realizations to inch up at a CAGR of 3% over FY2023-26E (after a 10% increase in FY2023 to take into account revised BEE norms that came into effect from July 2022).

Out of the overall industry size of Rs252 bn, the RAC industry at the OEM/ODM level stood at 70% at Rs176 bn; Amber’s share at the RAC level stood at 29.4% in FY2023. With the PLI scheme of the government and several other initiatives taken to reduce imports, we expect value addition to increase domestically, thereby increasing the share at the OEM/ODM level gradually from 68% in FY2022 to 70% by FY2026E. This will be driven by the reduction in imports and corresponding manufacturing coming to OEM/ODM players.

**AC industry growth was disrupted during the Covid period and is now growing again**

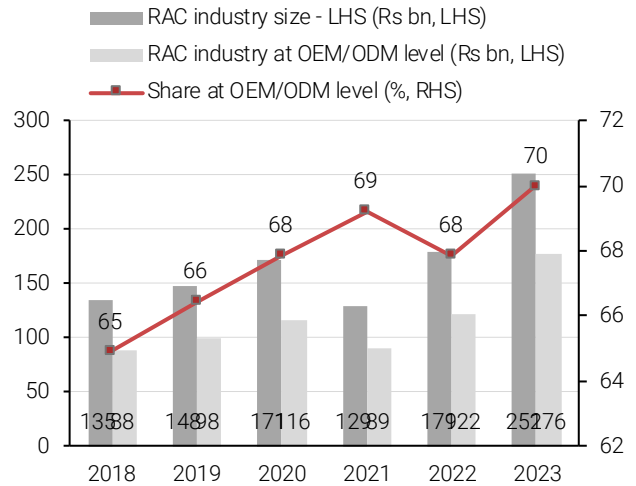
**Exhibit 6: Demand growth trend in RAC industry, March fiscal year-ends, 2015-26E (#)**



Source: Company, Industry, Kotak Institutional Equities estimates

**RAC industry share at OEM/ODM level is around ~70%, with ODM supplying around 30% of units.**

**Exhibit 7: RAC industry size and share at OEM/ODM level, March fiscal year-ends, 2018-23 (Rs bn, %)**



Source: Company, Industry, Kotak Institutional Equities

**Government measures and PLI benefits to increase opportunity for EMS/ODM players**

The Indian AC market is moving toward self-sufficiency, with various government measures such as a ban on the import of refrigerant-filled ACs, PMP scheme and PLI for AC components. These initiatives have already resulted in reducing the import of various components and refrigerant-filled AC units. Imports of fully built AC units are down from 45% of the overall market in FY2018 to 6% of the market in FY2023. For ACs, 75-80% of the components (compressor, copper tubing, motors and PCBAs) are currently imported and with the PLI scheme focused on localization of components, we expect Amber Enterprises to benefit from these measures.

**Basic customs duty was imposed on AC components under the Phased Manufacturing Plan**

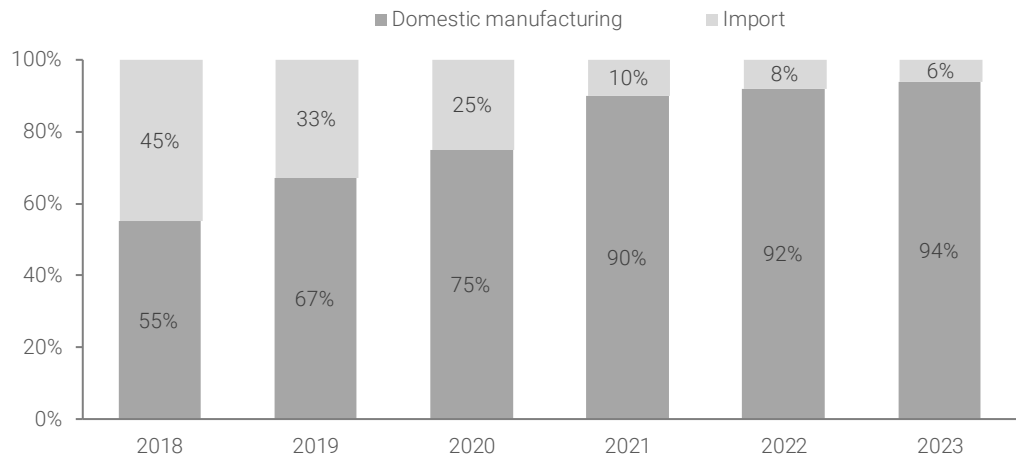
**Exhibit 8: Roadmap for basic customs duty on AC components under the Phased Manufacturing Program**

Item	Current BCD (%)	Proposed phasing of BCD (%)				
		Y1	Y2	Y3	Y4	Y5
AC ODU/IDU	20.0	20.0	22.5	25.0	27.5	30.0
Compressor	12.5	12.5	15.0	17.5	20.0	20.0
PCB controller	10.0	10.0	12.5	15.0	17.5	20.0
Motor-ODU/IDU	10.0	10.0	12.5	15.0	17.5	20.0
Service valve	7.5	10.0	12.5	15.0	17.5	20.0
Cross flow fan	10.0	10.0	12.5	15.0	17.5	20.0
Evaporator	10.0	10.0	15.0	20.0	20.0	20.0
Sheet metal/ metal parts	10.0	10.0	20.0	20.0	20.0	20.0
Plastic parts of IDU	10.0	10.0	20.0	20.0	20.0	20.0
Evaporator	10.0	10.0	20.0	20.0	20.0	20.0

Source: DPIIT, Kotak Institutional Equities

**Imports of ACs have become negligible in the past couple of years**

**Exhibit 9: Import data on completely built units, March fiscal year-ends, 2018-23 (%)**



Source: Ministry of Commerce, Kotak Institutional Equities

**PLI scheme for AC components**

PLI scheme for AC components has classified the target segments in three categories, i.e., (1) AC components, which include high-value and low-value intermediates for AC and a combination of both, (2) high-value intermediaries, which include compressor, copper tube and aluminum stock and (3) low-value intermediaries, including control assembly, display panel, motor, cross-flow fans, valves & brass components, heat exchangers, sheet metal and plastic molding components. At present, there is a huge reliance on imports for high-value intermediaries such as compressor, copper tubes and aluminum stock. Low value intermediaries are increasingly being manufactured locally .

**Total 32 companies have been selected under AC PLI scheme**

**Exhibit 10: Details of PLI scheme and incentives for AC components (Rs bn)**

Segment	Year	PLI rate	Large investment		Normal investment	
			Min. cum. Investment	Min. incr. production	Min. cum. Investment	Min. incr. production
AC components	FY2022			1.5		0.5
	FY2023	6%	3.0	7.5	1.0	2.5
	FY2024	6%	4.0	15.0	1.5	5.0
	FY2025	5%	5.0	20.0	2.3	7.5
	FY2026	5%	6.0	25.0	3.0	11.3
	FY2027	4%		30.0		15.0
	FY2028					
	<b>Total</b>			<b>6.0</b>	<b>97.5</b>	<b>3.0</b>
High value intermediates	FY2022			0.5		0.5
	FY2023	6%	1.3	2.5	1.0	2.5
	FY2024	6%	2.0	6.3	1.5	5.0
	FY2025	5%	3.0	10.0	2.0	7.5
	FY2026	5%	4.0	15.0	3.0	10.0
	FY2027	4%		20.0		12.5
	FY2028					
	<b>Total</b>			<b>4.0</b>	<b>53.8</b>	<b>3.0</b>
Low value intermediates	FY2022			0.2		0.1
	FY2023	6%	0.4	1.0	0.2	0.5
	FY2024	6%	0.6	2.0	0.3	1.0
	FY2025	5%	0.8	3.0	0.4	1.5
	FY2026	5%	1.0	4.0	0.5	2.0
	FY2027	4%		5.0		2.5
	FY2028					
	<b>Total</b>			<b>1.0</b>	<b>15.0</b>	<b>0.5</b>

Notes:

- (a) AC components: Combination of high-value intermediates, low-value intermediates and sub-assemblies.
- (b) High-value intermediates: Aluminum foil, copper tubes and compressors.
- (c) Low-value intermediates: PCB assembly for controllers, BLDC motors, service valves, cross-flow fans and more.

Source: DPIIT, Kotak Institutional Equities

**PLI driving localization of AC components**

With the government’s first list of players shortlisted for PLI incentives, an investment of Rs39 bn is expected to be done by companies such as Voltas, Blue Star, Daikin, Johnson Controls and several other prominent ODM players. The second list of players eligible for PLI incentives would be undertaking additional investment of Rs9 bn. They are focused on manufacturing components such as copper tubes, compressors, motors, heat exchangers, plastic molding and sheet metal components. According to government’s estimates, these investments will increase the value addition from current levels of 29% to 70-75%.

**First list of 42 companies entails investment of Rs39 bn across range of AC components from various players in the industry**

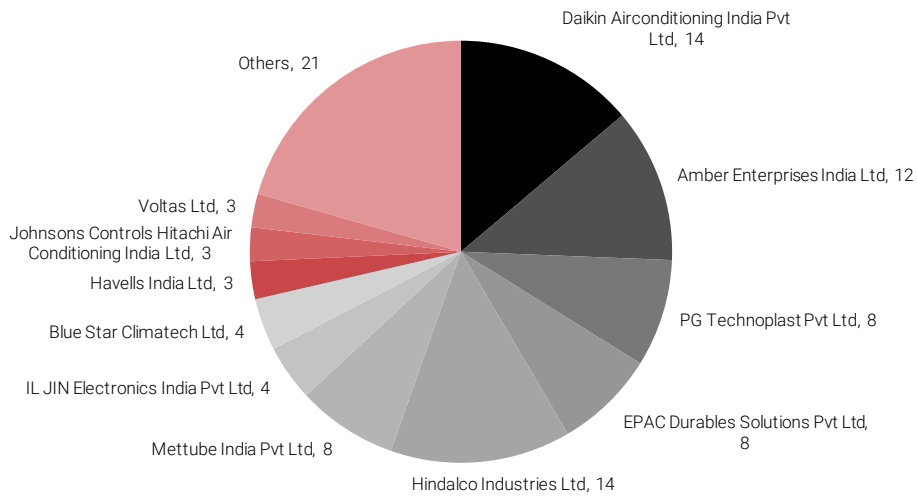
**Exhibit 11: Applicants selected under the PLI scheme for air conditioner components**

Applicants Selected Under the PLI Scheme for White Goods: Air Conditioners		
Applicant	Products to be manufactured	Committed investment (Rs mn)
Daikin Airconditioning India Private Limited	1. Compressor 2. Control Assemblies for IDU or ODU or Remotes 3. Motors 4. Cross Flow Fan (CFF) 5. Heat exchangers 6. Sheet Metal components 7. Plastic Moulding components	5,387
Amber Enterprises India Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components	4,602
PG Technoplast Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Cross Flow Fan (CFF) 3. Heat exchangers 4. Sheet Metal components 5. Plastic Moulding components	3,210
EPAC Durables Solutions Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components 7. Display Panels (LCD/LED)	3,000
Hindalco Industries Limited	1. Copper Tube (plain and/or grooved) 2. Aluminum Stock for Foils or Fins for heat exchanger	5,390
Mettube India Private Limited	Copper Tube (plain and/or grooved)	3,002
IL JIN Electronics India Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF)	1,673
Blue Star Climatech Limited	1. Heat Exchangers 2. Sheet Metal Components	1,560
Havells India Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Heat exchangers 3. Sheet Metal components 4. Plastic Moulding components	1,127
Johnsons Controls Hitachi Air Conditioning India Limited	1. Cross Flow Fan (CFF) 2. Heat exchangers 3. Sheet Metal components 4. Plastic Moulding components	1,007
Voltas Limited	1. Cross Flow Fan (CFF) 2. Heat exchangers 3. Plastic Moulding components	1,000
Napino Auto and Electronics Limited	1. Control Assemblies for IDU or ODU or Remotes	666
Bhagwati Products Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Valves & Brass components 5. Heat exchangers 6. Sheet Metal components 7. Plastic Moulding components	610
Epavo Electricals Private Limited	1. Motors	580
IFB Industries Limited	1. Motors 2. Heat exchangers 3. Sheet Metal components	570
Lucas-Tvs Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors	540
Nidec India Private Limited	1. Motors	519
Dixon Devices Private Limited	1. Control Assemblies for IDU or ODU or Remotes	510
Syrma Technology Private Limited	1. Control Assemblies for IDU or ODU or Remotes	510
VVDN Technologies Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Sheet Metal components 4. Plastic Moulding components	510
Virtuoso Optoelectronics Limited	1. Control Assemblies for IDU or ODU or Remotes Motors 2. Cross Flow Fan (CFF) 3. Valves & Brass Components 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components	505
East India Technologies Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Sheet Metal components 3. Plastic Moulding components	500
Magnum Mi Steel Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Heat exchangers 4. Sheet Metal components	500
Panasonic India Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Heat exchangers 3. Sheet Metal components 4. Plastic Moulding components	500
Sun Home Appliances Private Limited	1. Control Assemblies for IDU or ODU or Remotes 2. Motors 3. Cross Flow Fan (CFF) 4. Heat exchangers 5. Sheet Metal components 6. Plastic Moulding components	500
Tritonvalves Climatech Private Limited	1. Valves & Brass components	500
<b>Total</b>		<b>38,978</b>

Source: PIB, Kotak Institutional Equities

**Amber along with subsidiary ILJIN has the highest commitment share at 16%**

**Exhibit 12: Significant share of the investment is expected to come from ODM players**



Source: PIB, Kotak Institutional Equities

**Second list shortlisted 6 companies for AC components, with an investment commitment of Rs9 bn over 5 years**

**Exhibit 13: Applicants selected under PLI Scheme 2 for AC components**

Sr No.	Applicant	Products to be manufactured	Gestation period	Committed Investment (Rs mn)
1.	Adani Copper Tubes Limited	Copper Tube (Plain and/or grooved)	Upto March, 2023	4,080
2.	LG Electronics India Private Ltd	Compressors Control Assemblies for IDU or ODU or Remotes Motors Heat exchangers Plastic Moulding components	Upto March, 2023	3,000
3.	Starion India Pvt Ltd	Control Assemblies for IDU or ODU or Remotes Cross Flow Fan (CFF) Heat exchangers Sheet Metal Components Plastic Moulding components	Upto March, 2023	501
4.	Kaynes Technology India Ltd	Control Assemblies for IDU or ODU or Remotes Plastic Moulding components Display Panels (LCD/ LED)	Upto March, 2023	500
5.	Mitsubishi Electric India Pvt Ltd	Control Assemblies for IDU or ODU or Remotes Cross Flow Fan (CFF) Heat exchangers	Upto March, 2023	500
6.	Swaminathan Enterprises Pvt Ltd	Motors	Upto March, 2023	500
<b>Total</b>				<b>9,081</b>

Source: PIB, Kotak Institutional Equities

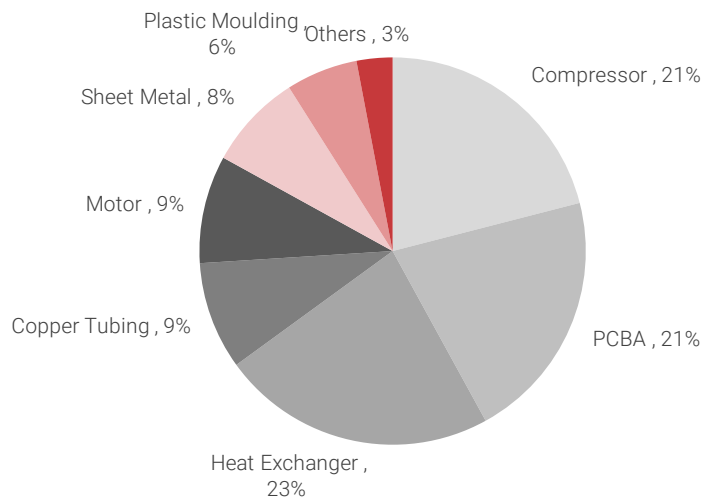
**Our assessment suggests value addition can go to nearly 50-55% over next five years**

We see that nearly 30-35% of the bill of material costs related to compressors and copper tubes would still have to be imported to meet domestic requirements, while manufacturing for other cost items will gradually scale up in India. We present our assessment of an increase in production of AC components based on our discussion with the industry experts as follows:

**Compressors.** Compressors form nearly 20% of BoM for an AC and there is large dependence on imports for compressors. Within compressors also, nearly 85% of the cost is imported, which includes large value items of pump assembly. Players have not expanded much on compressors, given the high capex requirement of nearly Rs2-2.5 bn for 1 mn unit capacity. India would have a requirement of nearly 1.2X of capacity of AC for compressors to take care for primary and secondary replacement-led demand. For the 8mn unit market, requirement of compressors would be 10 mn. GMCC’s 2 mn compressor capacity got commissioned during FY2023 and its output will start ramping up by FY2024. Highly has a compressor capacity of nearly 2 mn.

**Compressor forms nearly ~21% of BoM of AC unit**

Exhibit 14: Share of cost of compressor in overall BoM (%)



Source: Kotak Institutional Equities estimates

New announcements for investment in compressors are:

- ▶ Daikin Industries. Under the PLI, the government has approved the Rs5.3 bn proposal from Daikin Industries, the world’s leading AC company to manufacture compressors, heat exchangers, sheet metal components and plastic molding components. Investment amount for Daikin is further enhanced to Rs8 bn. Out of the total targeted capex, a significant proportion is expected to be for compressors.
- ▶ LG Electronics. Under the PLI, the government has approved the Rs3 bn proposal from LG Electronics to manufacture compressors, control assemblies, motors, heat exchangers and plastic molding components. Out of the total targeted capex, a significant proportion is expected to be for compressors.
- ▶ Panasonic is also awaiting the approval of the Committee of Experts for an investment of Rs2.5 bn in compressors.
- ▶ GMCC, the world’s largest compressor manufacturer owned by China’s Midea Group, is setting up a compressor plant near Pune at an investment of around Rs7 bn.

Thus, we believe that compressor requirements will go to nearly 12 mn units by FY2025E, if the RAC industry reaches 10 mn units; these can only be partly met by incremental capacities, and dependence on imports will remain for compressors.

**Aluminum and copper tubes.** Dependence on imports for aluminum and copper tubes is still quite high owing to the quality and cost differential between India and China. Approximately 5 kg of copper and aluminum is needed for 1 unit of production, translating into a requirement of nearly 40,000 tons for the 8 mn AC market (8mn is Indian AC market size in volume terms as of FY2023). Hindalco is already making an investment of Rs5.4 bn for copper tubes and aluminum stock (25,000 tons) required for heat exchangers. Mettube India has committed for an investment of Rs3 bn (for nearly 15,000 tons) and Adani Copper Tubes Ltd for Rs4 bn. So far, players are still finding imports from Vietnam, Korea and Thailand to be cheaper than domestic procurement, despite anti-dumping duty on imports. Once these committed capacities commission and start operating at scale, import dependence will start reducing for aluminum and copper tubes.

**PCB and PCBA.** We expect significant localization of PCBA to happen over the coming years, with likes of AC ODM's Amber, PG Electroplast and East India Technologies (EPAC Durable group) along with specialized EMS companies such as Dixon, Kaynes, Syrma and VVDN (with Blue Star), all indicating investments under the PLI for local PCB assembly. Amber already caters to 20% of Indian PCBA demand in 1HFY24.

**Plastic molding, heat exchanger and sheet metal.** Plastic molding, heat exchangers and sheet metal were already manufactured in India and many players have got approvals for heat exchangers and sheet metal in both the lists on PLI investments released by the government. We expect these to be fully indigenized in India.

**Motors.** The government has received investment proposals for investment in motors from LG Electronics, Swaminathan Enterprises, Daikin, Amber & ILJIN, Epack Durables, Bhagwati Products, Epavo Electricals, IFB Industries, Lucas TVS, Nidec India, VVDN Technologies, Virtuso Optoelectronics, Magnum and Sun Home Appliances. Thus, over the next few years, the import requirement of motors is gradually expected to reduce.

**Cross-flow fan.** Earlier 70-80% of the requirement of cross-flow fans was met through imports and now with incremental investments on the same, most requirements can be met by manufacturing in India.

#### **Comparison of Indian players with global players in terms of scale of operations**

We believe that the government's PLI scheme for AC components has opened up avenues for domestic players to enhance their manufacturing bases in India and reduce import dependence on China. Exports currently form a small proportion of ODM players and with an increase in scale and operational efficiency, we expect exports to start moving up. However, we believe that domestic players still would lack the scale to compete with Chinese players in global markets, at least for the next 5-10 years. Comparison of Chinese players such as Gree Electric Appliances, Haier Smart home Co. Ltd and Hi-Sense Home Appliances Group indicates that Indian players would still need time to reach the scale of Chinese players.

#### **Outsourcing strategies of OEMs and e-commerce players**

A closer look at the PLI list for white goods indicates that most large OEMs, except Daikin, are expanding across heat exchangers and sheet metal components and committed investment is in the range of Rs1-1.5 bn over the PLI period. ODM players such as Amber, Epack and PG Electroplast have committed much larger investments in the range of Rs3-5 bn across the entire range of components such as control assemblies, motors, cross-flow fans, heat exchangers, sheet metal components and plastic molding components. Thus, OEMs or brand owners will continue to rely on the ODM players across the entire component supply chain.

RAC brands have an advantage in outsourcing, as brands can focus on areas of innovation and branding and marketing. They save on logistics and warehousing costs, along with lower spends on R&D. The scale offered by ODM players helps them lower the turnaround time and hence, save on working capital. ODM players also allow distinct advantages of faster product development, design support and manufacturing.

### **New market entrants find ODM an attractive option to achieve a faster market penetration**

Many RAC brands have increased presence on the online platform. Many RAC brands run different sales strategies to target potential buyers in physical stores and through online platforms. Online sales from these brands are increasing at a fast pace due to relatively cheaper prices, part of the differential is owing to a smaller value chain and much lower dealer/distributor margins. This channel is growing very fast on a low-cost model and provides a good opportunity for ODM players. Some top durable retailers of the country, namely Croma, Reliance Digital, Next and eZone, have started offering in-house brands of WMs, ACs, microwave ovens and more, which have found wide acceptance with consumers.

### **Amber Enterprises: Moving toward components**

Amber Enterprises is a leader in the RAC ODM market with a market share of 29.4% in the overall RAC industry in FY2023. The company through an organic and inorganic route has overtime backward integrated and can now manufacture 70% of ACs in-house. We expect Amber to retain its leadership position in the ODM market, as competitors are still much smaller. However, with AC PLI leading to the commissioning of large capacities in the RAC market, we see ODM players as being more of component suppliers rather than finished good assemblers and see Amber with its backward-integrated facilities solidifying its market leadership position. For Amber's consumer durable segment, we expect a revenue CAGR of 17% over FY2023-26E.

Over the years, Amber added capabilities across components through organic and inorganic means and has strengthened its wallet share with its clients. With PLI investments fructifying, we expect the company to benefit from industry growth. However, Amber historically has been more of a supplier of completely built units, while gradually manufacturing components in-house. We expect components to become a bigger part of the overall mix, with assembly of ACs being done in-house by brands.

### **Industry to shift toward components sourcing from ODM players, which should aid margins**

With multiple brands participating in the PLI scheme, only certain brands are looking to near-full integration (refer to Exhibit 23). Hence, the impact of PLI would lead to more assembly of finished goods and part manufacturing of components by brands, in our view. ODM players will remain an important part of the overall value chain as they increasingly supply more components, which have inherent higher margins; however, realizations are lower than fully built units. Amber's AC revenue in FY2023 was 42%, driven by components; we expect the share of components in the overall AC revenues to increase to 52% by FY2028E, driven by addition of new components such as cross-flow fans as well as lower share of completely built units.

### **Market will be dominated by three players on the ODM side over the next few years**

We expect the AC ODM market to be dominated mostly by 3 players—Amber Enterprises, Epack Durables and PG Electroplast. Entry of new players in the ODM market will be difficult now as the PLI window is closed and AC ODM is a capital-intensive business with thin margins and huge seasonality. However, despite it being a 3-player market on the ODM side, pricing power would depend more on the brand owners. Hence, improvement in the return ratios would depend more on how players are minimizing capital employed and sweating assets better. With growing capacities of Epack Durables and PG Electroplast, further market share gains for Amber will be driven more by increasing content per AC.

### **Return ratios to improve from hereon, driven by lower capex and normalized business environment**

Amber has been in a capex mode over the past couple years, further performance in FY2021 and FY2022 was impacted due to the impact of lockdowns during the peak summer AC season. Hence, with the capex phase largely behind now and normalized business environment, we expect return ratios to improve from hereon. However, given the seasonal nature of the business (lower asset turns during off-season) and the ODM nature of the business will keep working capital requirements higher at around 12.5-13% of revenues, hence the RoCE profile of Amber would be lower as compared with other EMS players.

**Differentiated strategy of Amber versus peers**

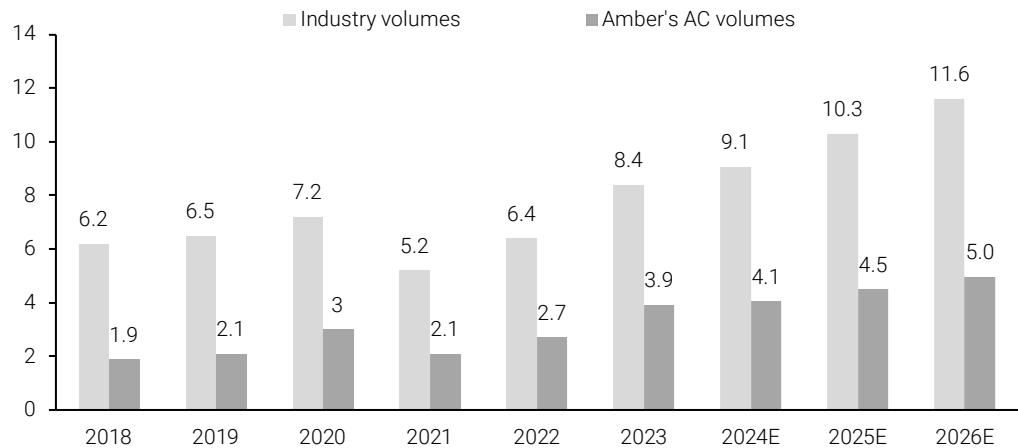
Amber supplies AC units and AC components to its clients. With most brands setting up own capacities to assemble ACs in-house, we expect growth to be driven by AC components from hereon. However, we expect smaller brands, e-commerce players and brands to continue to source finished goods from Amber as well. Amber has also entered the commercial ACs market, but we expect it to be a small part of the overall mix. Similarly, the impact of exports (Amber is currently focusing on the Middle East and the US) will be gradual, given longer approval cycles and can become meaningful only overtime (Indian AC manufacturers continue to be 10% more expensive than Chinese peers after adjusting for higher duties).

► **AC segment growth is supported by high degree of backward integration**

Amber has developed capabilities to provide end-to-end solutions to customers through ODM. In addition to designing and manufacturing of complete window ACs (WACs), indoor units (IDUs) and outdoor units (ODUs), the company offers customers manufacturing solutions ranging from critical components such as heat exchangers, multi-flow condensers and motors to non-critical components such as sheet metal and injection molding. This backward integration enables control over the manufacturing process and reduces dependence on external suppliers. Apart from compressors, the company has capability to manufacture most critical components required for RAC manufacturing.

**We expect Amber's finished good AC volumes to see a CAGR of 10% over FY2023-26E; Amber's volume disclosures include ODUs and IDUs separately, hence market share is a calculated number**

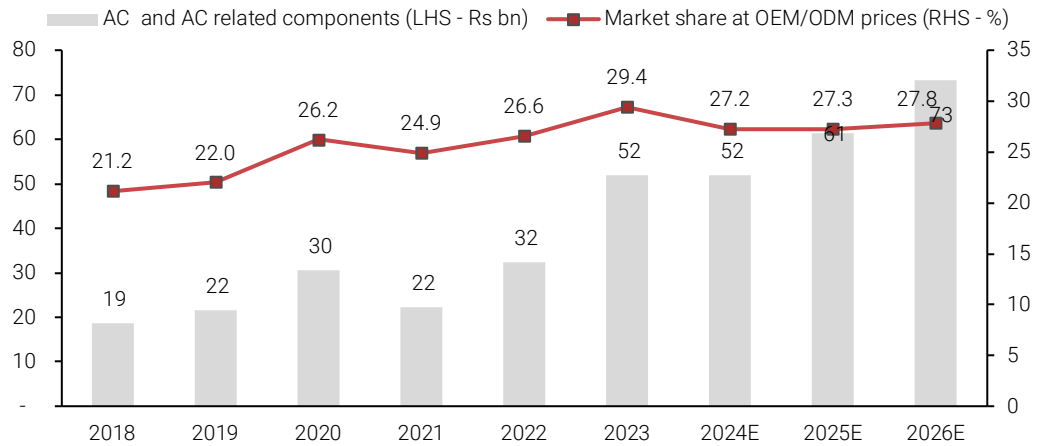
Exhibit 15: AC-related volumes sold by Amber and industry, March fiscal year-ends, 2018-26E (mn units)



Source: Company, Kotak Institutional Equities estimates

**RAC segment's growth to be led by growth in AC industry, improved market share on incremental capex and improvement in component revenues**

**Exhibit 16: Trend in RAC and RAC-led components revenues, March fiscal year-ends (Rs bn)**



Source: Company, Kotak Institutional Equities estimates

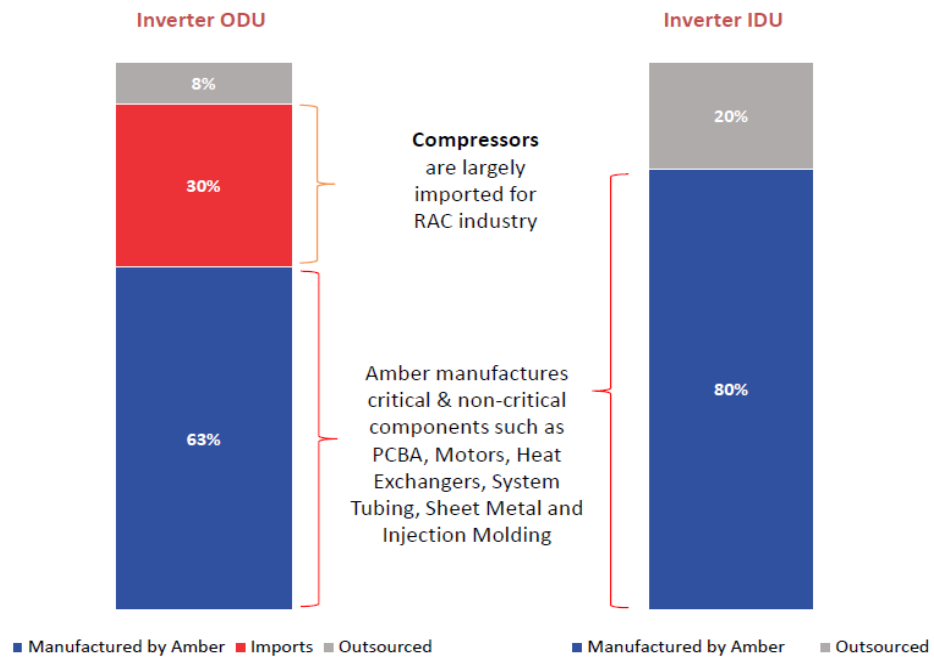
**Exhibit 17: Amber has been continuously adding capacities across locations, which has further improved its backward integration**



Consumer Durables – 23 Facilities	
RAC & Non-RAC Components	Location: Dehradun, Jhajar, Pune, Greater Noida, Rudrapur, Rajpura, Shahjanpur, Chennai, Sri City, Kadi & Manesar
RAC FG	Location: Dehradun, Jhajar, Pune & Sri City
Motors	Location: Faridabad
Tooling	Location: Noida
Electronics – 4 Facilities	
PCBA's	Location: Greater Noida, Pune & Chennai
Telecom	Location: Greater Noida & Chennai
Wearables & Hearables	Location: Noida
Railway Sub-systems & Mobility – 1 Facility	
Railway Subsystems	Location: Faridabad

Source: Company, Kotak Institutional Equities

**Exhibit 18: Amber has backward integration across ODU and IDUs**



Source: Company, Kotak Institutional Equities

► **Higher share of ODM business**

Amber has been able to increase the share of ODM business in overall RAC revenues to almost 90% now. The ODM business allows the company to have full control over designing and manufacturing. This has resulted in it maintaining better margins than other EMS players. However, due to volatile commodity prices despite the rising share of the ODM business, margins were impacted in FY2022 on delays in pass-through of costs. With the moderation seen in commodity prices now, we expect margins to improve from current levels on the rising share of the ODM business.

► **Catering to motor demand through PICL (motor subsidiary)**

PICL is the largest induction motor manufacturer for the Indian HVAC industry. It has around 200+ models and serves a marquee customer base across the domestic and export markets. We expect PICL to benefit from the export opportunity from motors. It is already exporting motors to the Middle East and plans to export to the US too. The company has been able to add new products to cater to the domestic and export markets. It is targeting to grow revenues in the motor division by 35% in FY2023. In the motors business, Amber competes with players such as GE Motors, Nidec and CG Power; it is also adding products for fan motors, e-rickshaw motors and chimney motors. Demand for BLDC motors and new motors will drive growth in the overall revenues for this segment.

**Strong client base and wallet share along with locational advantage**

Amber has a strong client base across the entire RAC industry. It serves almost all top-10 RAC brands of India such as Voltas, Daikin, Hitachi, LG, Panasonic, Whirlpool, Godrej, Reliance, Croma, Blue Star, Flipkart, Amazon, Carrier and IFB. The relationship with these clients is very sticky, as the company has been working with these clients for many years and has expanded the scope of offerings to them. Brands also do not change vendors very often unless there is a quality issue and hence, Amber with its quality products, has been able to enjoy very good wallet share ranging from 30% to 70% with its key clients.

The company has multiple manufacturing facilities across various states in India, strategically located close to customers enabling faster turnaround. This also enables it to deliver higher quality products at a much more efficient and faster pace to its client base across RAC and other divisions in the industry. It has recently commissioned its facility in South India closer to the Samsung plant and will be supplying components to Samsung. Earlier, LG and Voltas used to be the biggest clients for Amber and now Samsung will be surpassing these two. Overall, Amber's facilities are spread across 24 manufacturing plants spread across 8 states.

**Amber has 28 manufacturing locations, which gives it locational advantage of being near to the client's facilities**

Exhibit 19: Manufacturing locations of Amber across India



Source: Company, Kotak Institutional Equities

**Competitors are ramping up capacities**

Amber faces competition from three sides: (1) peers in the same industry, (2) OEM manufacturers themselves, who are increasing in-house capacity and (3) global brands setting up base in India.

► **Peers in the same industry**

Amber had a market share of 26.6%/29.4% in the entire ODM market in FY2022/FY2023, while the nearest competitor Epack Durables, which is also one of the key players in the AC ODM market with a reputed client base, had a market share of 8.7% in FY2022. PG Electroplast is also expanding capacity and expects to gain market share in the RAC ODM market by FY2024/25E.

**Epac Durables and Epac Components** has a capacity of nearly 2.4 mn units and has a base of reputed clients such as Blue Star, Voltas, Havells, Daikin, Haier Appliances and Godrej. Epac Durables is undertaking a capex and intends to increase its capacity to 3 mn by FY2025. The company has also undertaken backward-integration initiatives such as manufacturing of thermocol molds, heat exchangers, copper tubing, sheet metals and plastic moldings, which have resulted in some cost advantages. Epac’s revenue stood at Rs15 bn in FY2023 as compared with Rs69.3 bn for Amber in FY2023. However, Epac has a larger dependence on two clients—Voltas and Blue Star.

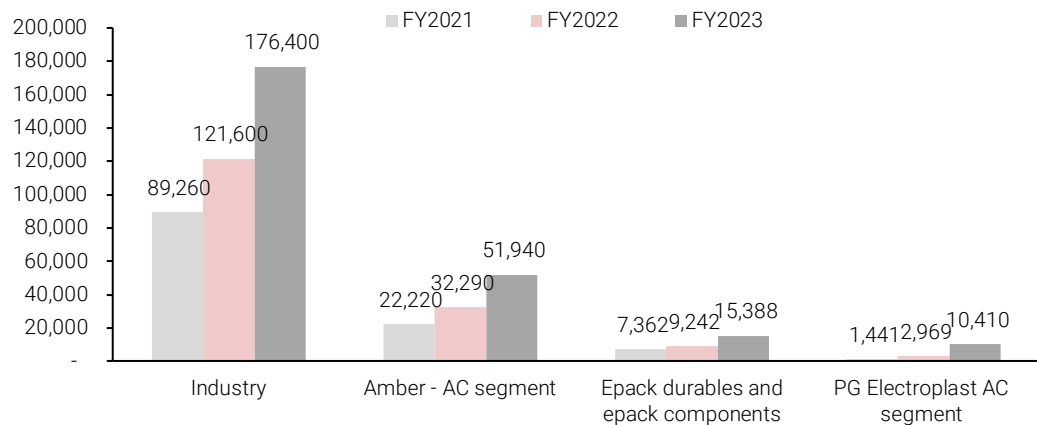
**PG Electroplast** is one of the leading ODM players in the RAC segment, with key clientele spread across players such as Carrier Midea, Voltas, LG India, Whirlpool, Reliance Digital, Onida and Godrej. PG Electroplast has an integrated AC manufacturing unit in western India with in-house manufacturing of plastic molded components, painted & unpainted sheet metal components, heat exchangers for IDUs & ODUs, integrated copper tubing shop and cross-flow fans. In Greater Noida, PGTL is currently making plastic molded components and cross-flow fans and began its operations in December 2021.

PG Electroplast has grown its AC segment revenues from Rs785 mn in 2020 to Rs10.4 bn in 2023. It is further expanding its capacity in IDU/ODU. PG Electroplast is expanding capacity at its new plant in Supa, with 1.5 mn IDU and 1 mn ODU for ACs; it is also qualified for PLI incentives worth Rs1.98 bn over a period of five years based on Rs3.21 bn of committed capital investment until FY2027. Furthermore, the company is looking to expand capacity in Rajasthan.

Both the players are scaling up faster and will make it difficult for Amber to gain market share sharply from current levels. However, Amber enjoys locational advantage, with significant capacity available in northern and southern markets of India, which form 70% of the total AC industry demand. The company intends to stay ahead of peers owing to a huge differential in market share between Amber and the No. 2 and No. 3 players.

**Amber Enterprises has a much better scale in revenues in the RAC ODM industry as compared with peers**

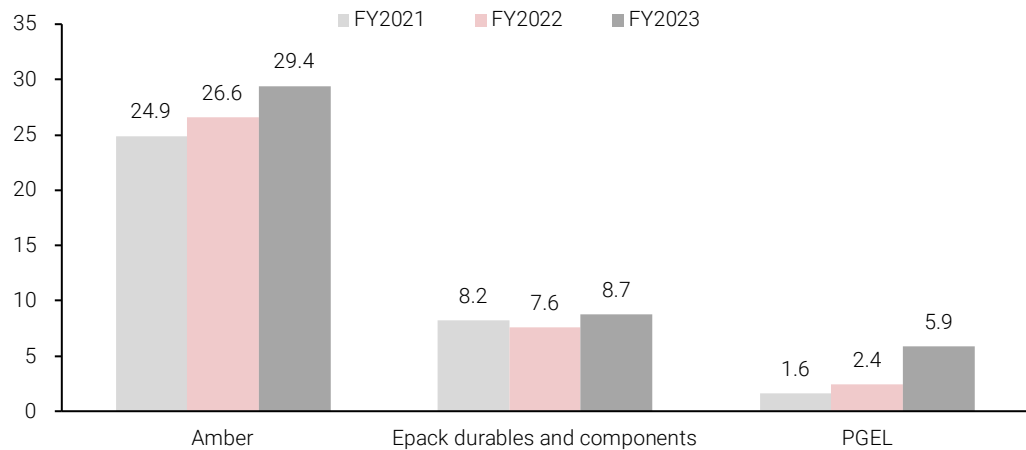
Exhibit 20: Size of RAC ODM industry and revenues of players, March fiscal year-ends, 2021-23 (Rs mn)



Source: Companies, Kotak Institutional Equities

**Market share differential is still quite high between the No.1, No.2 and No.3 players**

**Exhibit 21: Comparison of market share of players, March fiscal year-ends, FY2021-23 (%)**

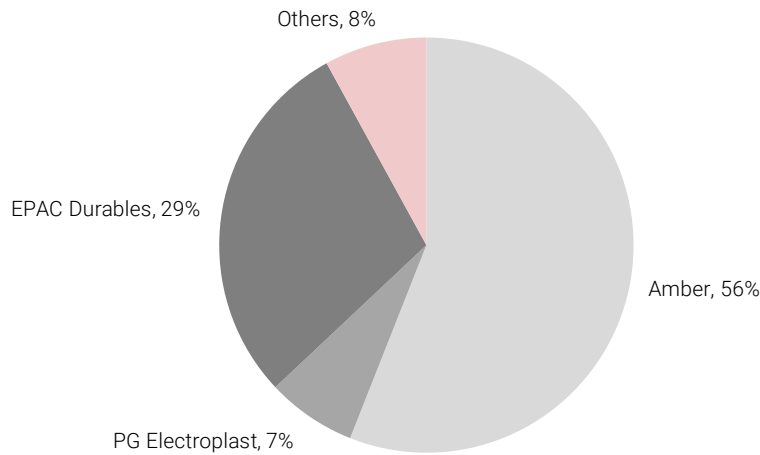


Source: Companies, Kotak Institutional Equities estimates

**Amber accounts for more than 50% of the ODM market**

**Exhibit 22: Market share data by ODM manufacturers, March fiscal year-ends, 2023**

Domestically manufactured units by ODM companies (FY23)



Source: Company, Kotak Institutional Equities

**► Competition from OEMs**

Many OEMs are expanding in-house capacities and have also applied for the PLI scheme related to AC components. Out of the targeted capex for PLI, a significant proportion from these OEMs is going for compressors. Amber is undertaking a capex of Rs4.6 bn under the scheme and its subsidiary ILJIN is undertaking a capex of Rs1.7 bn for components. In comparison with OEMs, out of Daikin’s committed investment of Rs5.3 bn under the PLI scheme, only Rs1.0-1.3 bn will go for components, while the remaining is expected to go for compressors. The expected investment from other players in components is also quite small—Blue Star: Rs1.56 bn, Johnson Control Hitachi AC: Rs1 bn, Voltas: Rs1 bn and Panasonic: Rs500 mn. Along with this, many OEMs did not participate in the PLI such as Fujitsu, Toshiba, Whirlpool, Onida, Amazon, Flipkart, Croma and Godrej, where the company would continue to get business from them.

Out of 17 manufacturing companies in India, which manufacture ACs, 11 are main OEMs and 4-5 are B2B players such as Amber. The company supplies to almost all 11 brands, so even if brands shift their strategy to in-sourcing, they would still source supply of critical components such as cross-flow fans or motors, inverter PCB boards and heat exchangers from Amber. Thus, we expect Amber to continue to benefit from outsourcing of components from OEMs.

**Very few brands have undertaken full backward integration; hence, they will continue to rely on ODM for components**

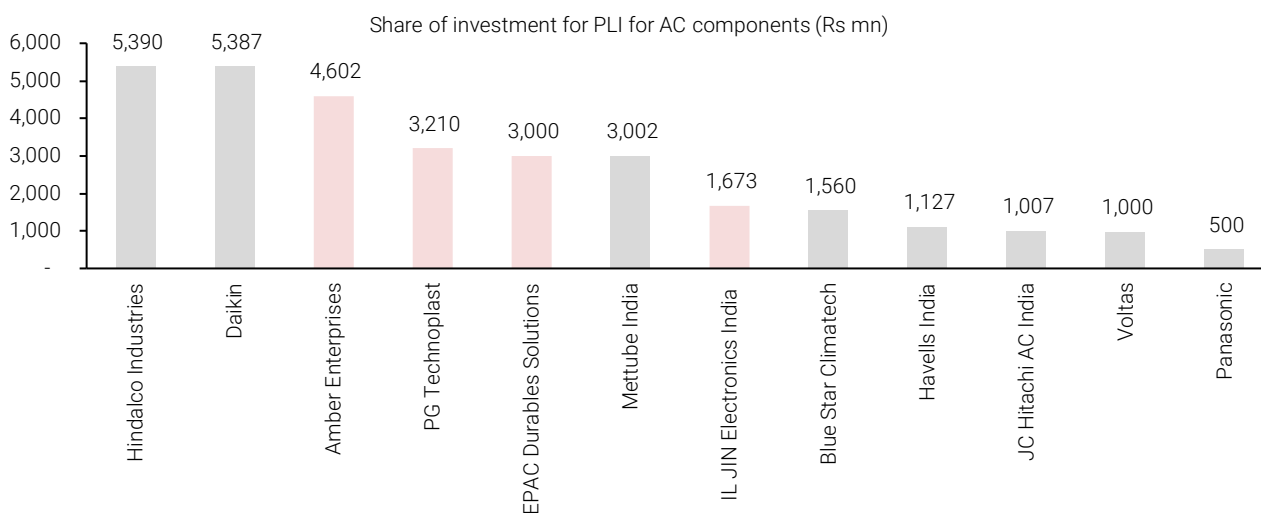
**Exhibit 23: Level of backward integration by select AC brands, March fiscal year-ends, 2023**

Level of Backward Integration	Description	ODM Opportunity	Brands
Fully Integrated	All components in house; final assembly of IDU and ODU in house	NA	
Near-fully integrated	Substantial components in house; Final assembly of IDU and ODU in house	Low-cross flow fan or PCB assembly	Havells, Haier, Hitachi
Partial Integration	Most components outsourced; few components and assembly in house	Sheet metal ,IDU Facia,IM components	LG,Blue Star, Panasonic
HE & Assembly	Heat exchanger and final assembly in house	Components, ODU&IDU,ODU kits,CBU	Voltas,Daikin,Godrej
Assembly	All components outsourced; only assembly	ODU&IDU,ODU kits,CBU	Samsung
No Manufacturing	Entirely outsourced	Completely built units	Mitsubishi, O General,Amstrad,Ondia, Reliance,Croma etc

Source: Company, Kotak Institutional Equities

**Share of investment in PLI scheme for AC components is much higher from ODM players and OEMs are either focused on compressors or have smaller investments**

**Exhibit 24: Share of investment from key players for AC PLI scheme (Rs mn)**



Source: PIB, Kotak Institutional Equities

**► Competition from global players setting up base in India**

The real threat would come if global players plan to set up their own manufacturing facilities in India. However, any new global player will find it difficult to replicate the moat that Amber has in terms of locational presence and well-spread client base and offerings. Amber’s relative advantage in comparison with global players stands in terms of (1) 24 manufacturing locations spread across the country in the vicinity of clients, (2) very high wallet share with existing clients, (3) wide range of component offerings and (4) the time required for any new player in empanelling Japanese and Korean OEMs and then further, to build wallet share. A few examples of global players being in India include Midea and Haier, which have been there in India from the past 14 years and 17 years, respectively, in the OEM space; Amber has still been able to increase its market share.

**Ability to capitalize on refrigerant ban**

After the ban imposed by the Government of India (GoI) on import of refrigerant-filled ACs in October 2020, Amber Enterprises was able to add eight new customers for its refrigerant filling business. Full manufacturing has already started, with gas charging for a few clients. It is in further discussions with more players and expects to finalize a few more clients for the same. Brands such as Mitsubishi Heavy, Mitsubishi Electric and Fujitsu were fully dependent on the import of refrigerant-filled ACs and now are in the process of finalizing discussions with key ODM players.

**Continuous capacity expansion plan to meet incremental demand**

During FY2023, Amber expanded manufacturing capacity across 5 locations—(1) Sri City (Andhra Pradesh), (2) Supa (Maharashtra), (3) Rudrapur (Uttarakhand) and (4) Thiruvallur (Chennai) for Pravartaka and (5) Kanchipuram (Tamil Nadu) for ILJIN. These expansions catered to final assembly and components. In FY2024, the company has set up a new facility in Noida for manufacturing wearables and hearables. We bake in capex of Rs3 bn/3.3 bn/3.8 bn for FY2024/FY2025/FY2026E, including the capex required for the PLI-led scheme across AC units and components along with the non-AC businesses.

# 4

## Electronics: Becoming a complete EMS player

Amber Enterprises acquired ILJIN and EVER in 2018 to backward integrate and undertake assembly of inverter PCBs in-house. Over the past five years, electronics revenue has grown 10x for Amber, with the company now catering to 20% of Indian AC PCB demand. The company's strategy is to diversify and become a complete EMS player, providing solutions across multiple industries. Electronics is a key part of Amber's diversification strategy; we expect electronics' revenue contribution to reach 23% by FY2028E versus 16% currently. With the acquisition of Ascent Circuits, Amber is backward integrating and trying to differentiate itself from competitors (similar strategy was applied by Amber in its AC business).

### EMS industry in India at an inflection point

**We estimate the TAM for Indian EMS market to reach US\$201 bn (8% CAGR over FY2023-40E), driven primarily by B2C segments**

Exhibit 25: India EMS market TAM, March fiscal year-ends, 2022-45E (Rs bn)

Indian EMS market TAM by Industry											
in INR Bn	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2035E	2040E
Mobile	1,958	2,248	2,327	2,411	2,498	2,590	2,687	2,789	2,854	3,479	4,241
CEA	701	833	957	1,097	1,258	1,439	1,640	1,862	2,106	3,604	5,490
Television	216	243	273	307	344	387	434	488	548	971	1,605
Washing Machine	85	96	108	122	139	157	178	202	229	413	683
Air Conditioners	122	176	191	225	264	308	356	411	470	784	1,066
Refrigerator	139	154	174	200	233	272	315	363	415	750	1,240
Hearables and Wearables	140	163	211	243	278	315	356	399	444	687	896
Telecom	87	96	106	116	128	141	155	170	187	301	485
Lighting	49	55	61	67	73	81	89	97	107	159	216
Automotive	98	131	144	171	213	257	321	391	476	1,104	1,784
Industrial	45	50	56	63	70	79	88	99	111	195	343
IT	417	434	478	527	581	641	706	779	859	1,385	2,163
Medical	82	90	99	109	120	132	145	159	175	282	455
Defense	236	273	317	347	389	416	457	510	576	928	1,494
<b>Total</b>	<b>3,674</b>	<b>4,210</b>	<b>4,544</b>	<b>4,907</b>	<b>5,330</b>	<b>5,774</b>	<b>6,288</b>	<b>6,856</b>	<b>7,451</b>	<b>11,437</b>	<b>16,672</b>

Source: Company, Kotak Institutional Equities

### ILJIN and EVER established across multiple segments

In FY2018, when Amber acquired ILJIN and EVER, the companies were primarily focused on manufacturing refrigerators and AC PCBs for a single customer (LG), with a combined revenue of Rs 1bn. In FY2023, the electronics segment has grown 10X times to Rs11 bn, driven by the addition of new segments—microwaves, TVs, ACs, ceiling fans and small appliances—and the addition of multiple customers. Furthermore, the company has forayed into the telecom, hearables & wearables and automobile segments, which in our view, will not only help reduce sector concentration risks, but can also help the company establish itself as a strong EMS player.

### Hearables & wearables to be key near-term growth driver

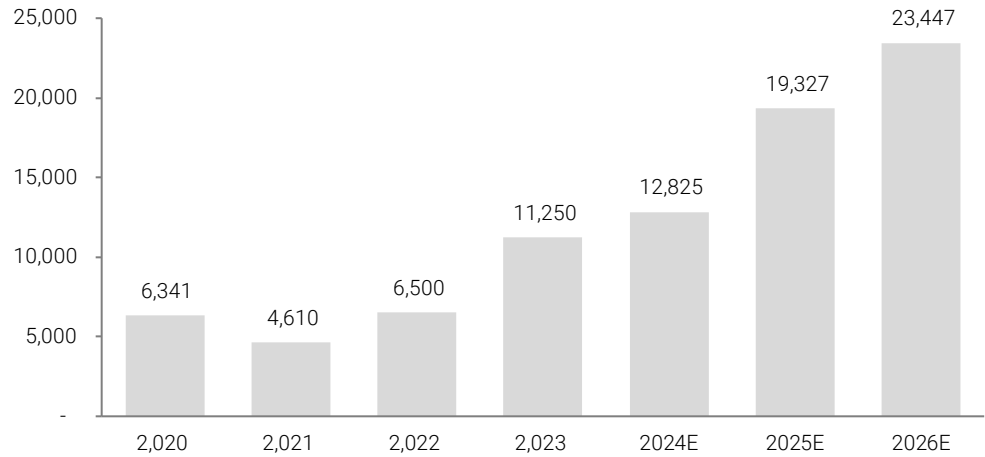
Amber's first entry into the hearables & wearables segment was in FY2022, when the company started manufacturing products for boAt. As of FY2023, hearables & wearables contributed ~30% of EMS sales for Amber, largely driven by boAt and Noise (who have a combined market share of 40% in the Indian wearables market, according to Q3 IDC reports). Amber has formed a 50:50 JV with Noise for undertaking the business of manufacturing, assembling and designing of wearables and other smart electronics products. We see further acceleration in the hearables & wearables topline and expect the segment to report a CAGR of 28% over FY2023-26E.

### Auto and defense segments provide longer-term opportunity

Amber has established itself across multiple segments—the major areas that remain white spaces for the company include the autos, defense and industrial sectors, which typically have a longer approval cycle and requirements of certifications to get into these verticals. The company has made some initial in-roads in auto (signed a four-wheeler company) and given the shift toward EVs, where the electronic content goes up 8-11 times versus a traditional ICE vehicle. Auto could be a medium-term play for Amber based on their ability to sign few major auto OEMs. Furthermore, within the industrial segment, smart metering is another focus area (smart metering the electronic content goes up to 3 times to Rs1,350 versus a traditional meter).

**After growing 10X in the past five years, we expect a CAGR of 28% in electronics revenue over FY2023-26E**

**Exhibit 26: Electronics segmental revenue, March fiscal year-ends, 2020-26E (Rs mn)**



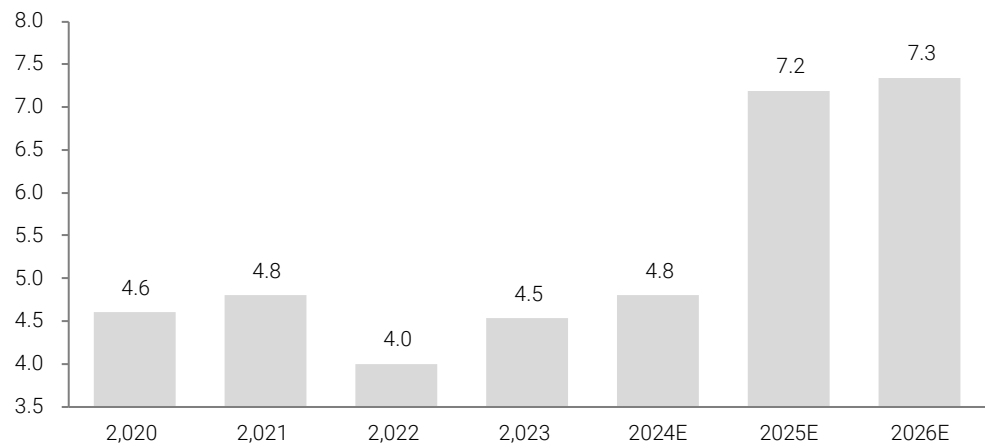
Source: Company, Kotak Institutional Equities estimates

**Margins have a potential to further improve from hereon**

Electronics’ margins for Amber have improved from 3.0% in FY2018 to 4.5% in FY2023. With the company’s near-term focus on expanding its presence in consumer durables and allied spaces (hearables & wearables) and AS incorporating the impact of Ascent Circuits acquisitions (~20% EBITDA margin business), we expect margins to improve to 7.3% in FY2026E.

**We expect electronics segment’s margins to increase to ~7%+, driven by the Ascent Circuits acquisition (~20% EBITDA margin business)**

**Exhibit 27: Electronics segmental EBITDA margins, March fiscal year-ends, 2020-26E (%)**



Source: Company, Kotak Institutional Equities estimates

**Competitive intensity across EMS industry remains high**

Amber’s entry into multiple segments means that it would be competing with established names in the EMS segment such as Kaynes, Syrma and Dixon. Furthermore, peers such as Kaynes, Syrma, Dixon, VVDN, East India Technologies (an Epack Durable Group company) and Starion have all indicated participation in the AC PLI segments to manufacture AC PCB. Hence, establishing scale and tie-ups with OEMs would be key for Amber to have a decent market share across segments.

### Backward integration picking up with Ascent acquisition

Amber has indicated that the company will look at backward integrating into components or PCBs, in line with its strategy adopted in the AC segment. Similar to peers, Amber would also forward integrate into box build solutions. We believe that forward integration into box-build could play out over the short term, given Amber’s experience in manufacturing ACs. With Amber acquiring Ascent Circuits (60% stake for Rs3.11 bn), we see Amber backward integrating and taking a lead over peers. We do not bake in any impact of the recent announcement by Amber that it would be forming a 50% JV with Resojet (a Radiant Group Company) to manufacture fully automatic top- and front-load washing machines.

### Ascent Circuits is one of the top PCB manufacturers in India that will help Amber backward integrate and have more complete offerings

Exhibit 28: Select financial metrics of Indian PCB manufacturers, March fiscal year-ends, 2019-23 (Rs mn)

	2019	2020	2021	2022	2023
<b>Revenue</b>					
AT&S	5,303	4,978	5,177	6,904	7,988
Ascent circuits	1,572	1,303	1,502	2,261	2,785
Circuit Systems	377	372	401	539	
Meena circuits	577	446	458	639	
India circuits	458	467	505	685	769
<b>EBITDA</b>					
AT&S	831	186	436	475	862
Ascent circuits	81	81	202	301	527
Circuit Systems	72	49	61	75	
Meena circuits	38	22	16	5	
India circuits	69	74	76	87	98
<b>EBITDA margin (%)</b>					
AT&S	16	4	8	7	11
Ascent circuits	5	6	13	13	19
Circuit Systems	19	13	15	14	
Meena circuits	7	5	3	1	
India circuits	15	16	15	13	13
<b>PAT</b>					
AT&S	370	(431)	(121)	66	269
Ascent circuits	40	37	94	159	305
Circuit Systems	3	(37)	(4)	4	
Meena circuits	15	0	3	(2)	
India circuits	19	20	20	30	38
<b>PAT margin (%)</b>					
AT&S	7	(9)	(2)	1	3
Ascent circuits	3	3	6	7	11
Circuit Systems	1	(10)	(1)	1	
Meena circuits	3	0	1	(0)	
India circuits	4	4	4	4	5

Source: Company, Kotak Institutional Equities

### Electronics segment to aid return ratios

The AC business is a seasonal business, with peak manufacturing happening just for about 4-6 months in a year, thus reducing Amber’s ability to utilize its facilities to the fullest. However, in the electronics segment, given the diverse segments that Amber caters to and superior asset turns, the return ratio potential that Amber can generate would be north of 20%—in line with peers, thus aiding Amber’s overall return profile.

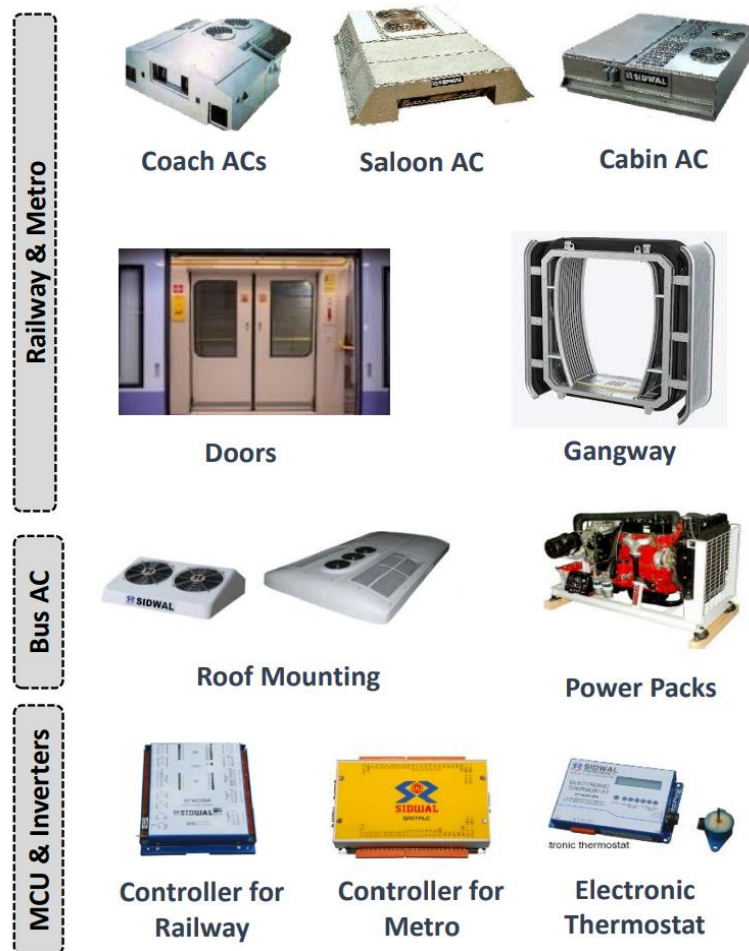
# 5

## Sidwal—expanding beyond ACs to become a complete solutions provider

Amber Enterprises acquired Sidwal in FY2019 to complete its offering for mobility AC solutions. Sidwal’s order book has grown to ~6X over the 4.5 years, since Amber’s acquisition of Sidwal. We further expect Sidwal’s order book and revenue to increase at a CAGR of 40% and 25%, respectively, over FY2023-26E, driven by two key factors: (1) Industry tailwinds—increased domestic trainset manufacturing (Vande Bharat trainset, metro coaches) and favorable norms for CV vehicles (compulsory ACs in trucks) and (2) self-help actions—Amber’s contribution per car increasing from 4% to 20%, driven by transfer of technology (TOT) partnerships for gangways, pantry and doors, with Canadian and Taiwanese companies.

### Product portfolio of Sidwal is spread across railways, buses, defense, telecom and refrigeration

Exhibit 29: Sidwal’s product portfolio



Source: Company, Kotak Institutional Equities

### Sidwal—a key beneficiary of increased railway capex and industry tailwinds in the CV sector

One of the key reasons for Amber to acquire Sidwal was that the company was the preeminent player in the railway AC segment (50% share in rail and 80% share in defense in March 2019), with tie-ups with most major Indian railway locomotive manufacturing facilities. Amber has further increased its client penetration with all major global railway OEMs as well such as Bombardier, Alstom and Siemens, given the recent focus on increasing domestic manufacturing of trainsets. The following three measures would lead to substantially large opportunities for Sidwal: (1) 3,000 Vande Bharat trains to be manufactured in the next five years, (2) 600 metro coaches currently manufactured in India and (3) increasing the conversion of traditional rail coaches to AC coaches.

Though CV (trucks and buses) historically has been a smaller part of the overall order book and revenue mix for Sidwal, the recent notification by the Ministry of Road Transport and Highways making it mandatory for trucks to have AC cabins could open up a decent medium-term opportunity for the company. However, we recognize that players such as Subros have a dominant position in this segment.

**Expanding beyond ACs to become a complete railway solutions player**

Sidwal’s historical focus has been mobility AC solutions for the railway, buses, defense, IT and data center segments. However, the contribution of an AC to an overall railway car is ~3-4% of the bill of material. Railways is expected to see a sharp increase in domestic manufacturing of trainsets considering (1) 3,000 Vande Bharat trains are to be manufactured over the next five years and (2) 600 metro coaches are currently manufactured in India. Sidwal has increased its focus beyond just ACs. The company has forged tie-ups with global companies and would enter into manufacturing of gangways, pantry and doors through a technology transfer arrangement, which should help the company address around 10% of a total rail car. Given that Sidwal already has existing relationships with all major railway car manufacturers such as its customers Bombardier, Alstom and Siemens, we see this as an incremental step to further increase its wallet share.

**Sidwal could be a key beneficiary of a pick-up in railway capex, in our view**

Exhibit 30: Market sizing the railway segment for Sidwal, March fiscal year-ends, 2025-30E (Rs mn)

Sidwal	2025E	2026E	2027E	2028E	2029E	2030E
Vande Bharat(16 car)	500	500	500	500	500	500
Cost per car (in Rs mn)	60	60	60	60	60	60
Amber’s TAM per car	20	20	20	20	20	20
Amber’s market share	25%	25%	25%	25%	25%	25%
Amber Order potential	40,000	40,000	40,000	40,000	40,000	40,000
Metro	650	650	650	650	650	650
Cost per car (in Rs mn)						
Amber’s TAM per car	17	17	17	17	17	17
Amber’s market share	25%	25%	25%	25%	25%	25%
Amber order potential	2,763	2,763	2,763	2,763	2,763	2,763
Total	42,763	42,763	42,763	42,763	42,763	42,763
Sidwal order inflow in our estimate	10,040	12,048	14,337	16,918	19,794	22,961

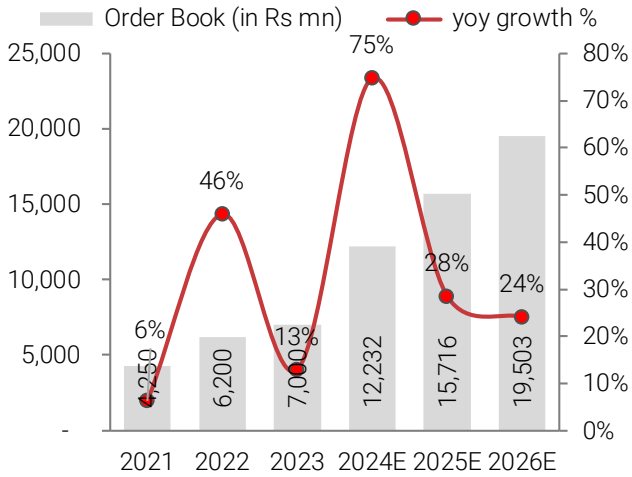
Source: Company, Kotak Institutional Equities estimates

**Order book and revenue expected to increase at CAGR of 40% and 25%, respectively, over FY2023-26E**

Sidwal’s order book has grown to the 6X level over the 4.5 years, since Amber’s acquisition of Sidwal. Given the near-term industry tailwinds and Amber’s focus on increasing its own wallet share, we see Sidwal’s order book increasing at a CAGR of 40% over FY2023-26E. We expect growth momentum to continue for the next couple of years beyond that as well. Sidwal’s order book execution cycle typically varies from 12 to 24 months; hence, 40% of the order book CAGR should lead to a 25% revenue CAGR. Sidwal’s EBITDA margins have been in the 21-23% range over the past couple of years; with the new business having similar margins as the existing RAC business, we expect margins to remain rangebound over the medium term.

**We expect Sidwal's order book to report CAGR of 40% over FY2023-26E...**

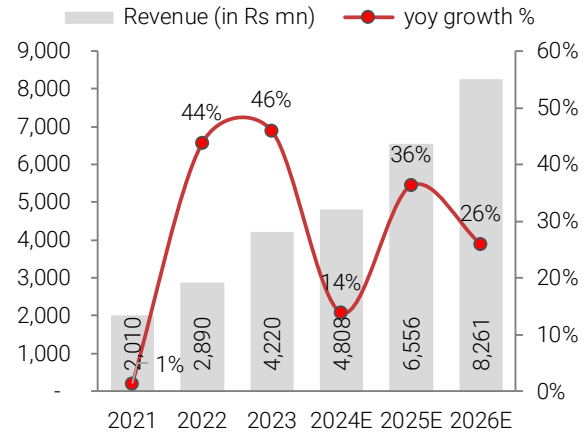
Exhibit 31: Sidwal's order book (Rs mn) and order book growth (%) trends, March fiscal year-ends, 2021-26E



Source: Company, Kotak Institutional Equities estimates

**... which should translate into 25% revenue CAGR over FY2023-26E**

Exhibit 32: Sidwal's revenue (Rs mn) and revenue growth (%) trends, March fiscal year-ends, 2021-26E



Source: Company, Kotak Institutional Equities estimates

# 6

## **Key risks: Large focus on single segment, slowdown in industry**

Amber's performance is subject to the following risks associated with (1) slowdown in the RAC industry, (2) changes in BEE norms, (3) loss of market share to smaller players, (4) increased competitive intensity in newer segments and (5) higher commodity prices.

### **Slowdown in RAC industry**

Amber's business largely depends on the RAC industry's growth and any slowdown in the RAC market can have an impact on its overall volumes. While EMS and Railways will be two key growth drivers for Amber, the overall revenue will continue to be driven by RAC over the short term.

### **Changes in the BEE norms**

The RAC industry gets affected by the revision in regulation and energy-efficiency standards by the BEE regulation, which results in the company investing more in defining its product line. This results in moving up the prices for AC units with higher energy efficient features and may pose challenges in adoption for many Indian households. Cost of the product has also been impacted by the transition to expensive R410A or R32 refrigerant from the ozone depleting R22 refrigerant.

### **Loss of market share to smaller players**

Risk to the business can also come from loss of market share to smaller players. Although Amber currently enjoys a very high market share of 29.4% in the overall RAC market and the second-nearest ODM competitor has a market share of ~9% in the RAC market, competitors are gradually gaining scale and expanding capacities. This poses a challenge to market share of Amber Enterprises.

### **Increased competitive intensity in newer segments**

Amber's new focus is the EMS segment, where multiple companies already have a strong presence, hence higher competitive intensity could impact the growth and margin profile of the electronics vertical.

### **Higher commodity prices**

Higher commodity prices can continue to impact Amber's ODM business, where risks of sourcing raw material are with the company. In the past one year, there has been a delay in passing on cost pressures to end users, which had impacted margins adversely for Amber.

## 7

**Financial outlook: We expect 29% PAT CAGR over FY2023-26E**

We forecast Amber's growth, driven by three key factors—(1) within the consumer durable segment, a 12.4% revenue growth, driven by the shift toward AC components as OEMs start assembling in-house, as part of PLI; (2) 28% growth in the electronics segment, driven by the hearables & wearables segment; and (3) 25% growth in Sidwal, led by a healthy order backlog. We expect increased normalized operating environment and operating leverage to support margins (160 bps over FY2023-26E). We expect leverage to remain comfortable, despite incremental PLI-led investments over FY2023-26E. Operational cash flows and internal accruals will be sufficient to fund incremental capex required for growth.

**AC components, electronics and Sidwal to be key revenue drivers****We expect revenues to increase at a CAGR of 16% during FY2023-26E**

We bake in revenue CAGR of 16% over FY2023-26E for Amber based on (1) growth in components and stable market share of Amber in the RAC ODM market at ~27.8% in FY2026E, (2) 28% revenue CAGR in electronics, driven by the hearables & wearables segment and (3) 25% revenue for Sidwal, driven by the following:

- ▶ **Consumer durable segment.** The consumer durable segment consists of ACs, AC components and non-AC components. We expect the shift of business within AC toward components for Amber with the decline in completely built units, driven by brands assembling ACs in house. Furthermore, we expect steady growth in non-AC components, led by the motors business. Overall, our AC ODM market share remains stable at ~27.8% in FY2026E, and we expect a 12.4% growth in the consumer durable segment.
- ▶ **Electronic segment** We forecast a 28% revenue growth for the electronic segment over FY2023-FY2026E, driven by the hearables & wearables segment. As of FY2023, hearables & wearables contributed ~30% of EMS sales for Amber, led largely by boAt and Noise (which have a combined market share of 40% in the Indian wearables market, according to Q3 IDC reports). Amber formed a 50:50 JV with Noise to undertake the business of manufacturing, assembling and designing wearables and other smart electronics products. Furthermore, the new acquisition of Ascent Circuits can help the company backward integrate and differentiate itself from peers.
- ▶ **Sidwal:** The order book has grown to 6X level over 4.5 years, since Amber's acquisition of Sidwal. Given the near-term industry tailwinds and Amber's focus on increasing its own wallet share, we see Sidwal's order book increasing at a CAGR of 40% over FY2023-26E. We expect growth momentum to continue for the next couple of years beyond that as well. Sidwal's order book execution cycle typically varies from 12 months to 24 months, hence a 40% order book CAGR should lead to a 25% revenue CAGR. Sidwal's margins have been in the 21-23% range over the past couple of years (FY2019-23).

This results in a 16% revenue CAGR over FY2023-26E. Share of AC revenue is expected to decline from 78% in FY2023 to 71% in FY2026 in our estimates.

**We expect revenues to increase at a CAGR of 16% over FY2023-26E, driven by growth in the components, electronics and Sidwal segments**

Exhibit 33: Segmental financials of Amber (consolidated), March fiscal year-ends, 2022-26E (Rs mn)

Revenue	2022	2023	2024E	2025E	2026E
Consumer Durable	32,674	53,801	53,834	63,742	76,362
Electronics	6,500	11,250	12,825	19,327	23,447
Sidwal	2,890	4,220	4,808	6,556	8,261
<b>Total</b>	<b>42,064</b>	<b>69,271</b>	<b>71,467</b>	<b>89,625</b>	<b>108,071</b>
<b>EBITDA</b>					
Consumer Durable	1,874	3,260	3,425	4,191	5,042
Electronics	260	510	616	1,391	1,720
Sidwal	673	990	1,058	1,442	1,817
<b>Total</b>	<b>2,807</b>	<b>4,760</b>	<b>5,098</b>	<b>7,024</b>	<b>8,580</b>
<b>EBITDA margin (%)</b>					
Consumer Durable	5.7	6.1	6.4	6.6	6.6
Electronics	4.0	4.5	4.8	7.2	7.3
Sidwal	23.3	23.5	22.0	22.0	22.0
<b>Total</b>	<b>8.6</b>	<b>8.8</b>	<b>9.5</b>	<b>11.0</b>	<b>11.2</b>

Source: Company, Kotak Institutional Equities estimates

**We build in a 130 bps improvement in margins by FY2026E over FY2023, driven by normalized operating environment and operating leverage.**

Amber's margins over the past couple of years have been impacted by a weak summer and higher commodity prices. We build in EBITDA margins of 6.8%/7.3%/7.3% for FY2024/25/26E to bake in net impact of (1) flat realizations, (2) higher contribution from components, (3) decline in commodity prices and (4) increased share of revenues from the Sidwal business and (5)unfavorable mix, as electronics' contribution increases.

**We expect revenues and profits to increase at a CAGR of 16% and 29%, respectively, over FY2023-26E**

Exhibit 34: Consolidated income statement of Amber Enterprises, March fiscal year-ends, 2018-27E (Rs mn)

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	CAGR 2023-26E (%)
Net sales	21,715	27,520	39,628	30,305	42,064	69,271	71,467	89,625	108,071	126,439	16.0
Raw material cost	(18,123)	(23,132)	(33,017)	(25,135)	(35,297)	(58,678)	(60,032)	(74,837)	(90,239)	(105,576)	
Power and fuel cost	-	-	-	-	-	-	-	-	-	-	
Employee expense	(498)	(588)	(1,063)	(1,021)	(1,500)	(2,116)	(2,215)	(2,778)	(3,350)	(3,920)	
Other expenses	(1,259)	(1,672)	(2,455)	(1,947)	(2,514)	(4,298)	(4,359)	(5,467)	(6,592)	(7,713)	
Selling and admin and misc expenses	-	-	-	-	-	-	-	-	-	-	
Total expenses	(19,880)	(25,391)	(36,535)	(28,102)	(39,310)	(65,092)	(66,607)	(83,082)	(100,182)	(117,209)	
EBITDA	1,835	2,129	3,093	2,203	2,754	4,179	4,860	6,543	7,889	9,230	23.6
Other income	87	99	82	331	332	527	560	374	303	389	
EBITDA (incl. other income)	1,923	2,228	3,174	2,534	3,086	4,706	5,420	6,917	8,192	9,619	
Depreciation	(490)	(623)	(848)	(923)	(1,079)	(1,391)	(1,502)	(1,897)	(2,177)	(2,457)	16.1
EBIT	1,432	1,605	2,327	1,611	2,007	3,315	3,918	5,020	6,015	7,162	
Interest	(538)	(246)	(419)	(410)	(464)	(1,118)	(1,612)	(1,368)	(1,258)	(1,258)	4.0
Profit before tax	894	1,359	1,907	1,201	1,543	2,197	2,305	3,652	4,757	5,904	29.4
Tax expense	(271)	(412)	(266)	(369)	(429)	(559)	(590)	(935)	(1,218)	(1,511)	
Adjusted PAT	623	948	1,641	833	1,113	1,638	1,715	2,717	3,539	4,392	29.3
Minority interest	-	(11)	(57)	(17)	(21)	(66)	(27)	(28)	(28)	(28)	
PAT	623	937	1,584	816	1,092	1,572	1,688	2,689	3,511	4,364	
Exceptional items	-	-	-	-	-	-	-	-	-	-	
Reported PAT	623	937	1,584	816	1,092	1,572	1,688	2,689	3,511	4,364	
Adjusted EPS (Rs)	19.8	29.8	50.4	24.2	32.4	46.6	50.1	79.8	104.2	129.5	30.7

Source: Company, Kotak Institutional Equities estimates

## Balance sheet: Leverage remains under check

### Comfortable leverage

We expect the company to remain focused on maintaining cash flows and balance sheet strength. We expect operational cash flows and internal accruals to meet requirements of incremental capex and working capital funding and hence, incremental debt is not required. We expect net D/E and net debt/EBITDA of 0.1X and 0.4X, respectively, by FY2026E, as compared with FY2023.

### Working capital cycle to remain similar to FY2023

Amber's working capital cycle had moved up in FY2021 to 131 days on Covid-led restrictions, which impacted net sales and even resulted in higher inventory and debtor days. It has corrected in FY2023 to 86 days on improved collections and better inventory management along with improved sales. We expect working capital as days of sales to be 86 days for FY2023-FY2026E.

### Capex to moderate, as we move away from a large capex phase

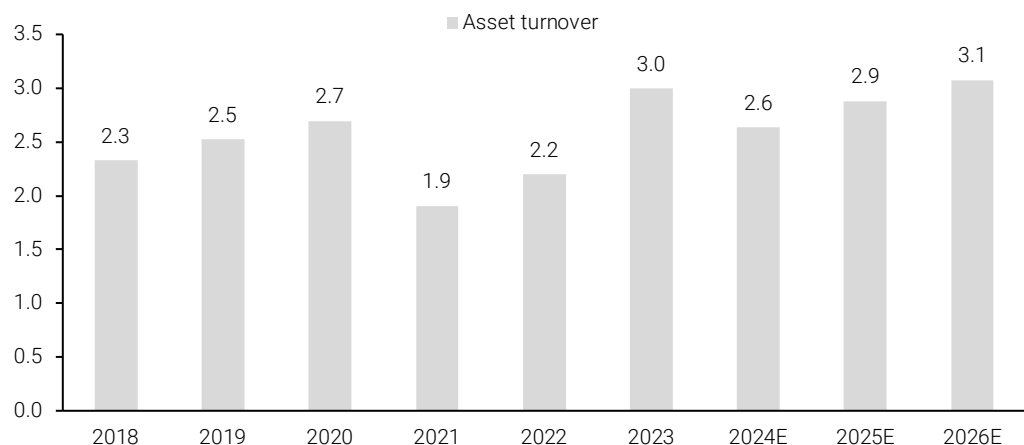
Amber has been in a capex phase over the past couple of years, driven by the Sri City Plant in Andhra Pradesh (owned facility), wherein the company will manufacture complete FG IDU + ODU with a backward-integrated AC manufacturing facility. The company also undertook expansions at Kadi (Ahmedabad), Supa (Pune) and Chennai (Kanchipuram). With the investment in AC-related expansion complete, we expect Rs12bn capex over FY2023-26E more focused on electronics, Sidwal and AC components.

### Asset turnover ratio to improve from current levels

Seasonality impact on the RAC industry also impacts Amber's business, resulting in lower asset turnover ratios as compared with EMS players operating in other industries. Along with this, higher capex over the past few years for expanding capacities and acquisitions has also impacted asset turnover ratios. We expect asset turnover ratios to improve from current levels, as incremental capex done for components will result in improved revenues. The company is also expanding across non-RAC components, which will also reduce the seasonality impact.

### Asset turnover ratio to improve from current levels, as significant investment is for components

Exhibit 35: Gross asset turnover ratio for Amber Enterprises, March fiscal year-ends, 2018-2026E (X)



Source: Company, Kotak Institutional Equities estimates

**We expect leverage to remain comfortable, despite higher capex**

**Exhibit 36: Consolidated balance sheet of Amber Enterprises, March fiscal year-ends, 2018-27E (Rs mn)**

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
Shareholders funds	8,928	9,862	11,284	16,041	17,342	19,088	20,803	23,520	27,059	31,451
Equity share capital	315	315	315	337	337	337	337	337	337	337
Reserves and surplus	8,613	9,547	10,970	15,705	17,005	18,751	20,466	23,183	26,722	31,114
Total Debt	1,140	2,513	3,829	3,987	10,318	13,437	12,437	11,437	11,437	11,437
Deferred tax liabilities	751	948	1,225	1,253	983	2,639	2,639	2,639	2,639	2,639
Minority Interest	—	190	348	365	387	452	452	452	452	452
<b>Total sources of funds</b>	<b>10,819</b>	<b>13,513</b>	<b>16,686</b>	<b>21,647</b>	<b>29,030</b>	<b>35,617</b>	<b>36,332</b>	<b>38,049</b>	<b>41,588</b>	<b>45,980</b>
Net block	7,100	8,095	11,058	11,440	13,599	16,166	18,664	20,767	22,590	23,932
CWIP	298	337	118	433	1,282	1,855	1,855	1,855	1,855	1,855
<b>Net fixed assets</b>	<b>7,398</b>	<b>8,431</b>	<b>11,176</b>	<b>11,873</b>	<b>14,882</b>	<b>18,021</b>	<b>20,519</b>	<b>22,621</b>	<b>24,444</b>	<b>25,787</b>
Goodwill	—	—	—	—	1,457	4,698	4,698	4,698	4,698	4,698
Investments	462	510	547	1,565	2,282	1,354	1,354	1,354	1,354	1,354
Cash and bank balances	1,338	447	1,203	2,899	5,626	5,594	3,672	2,725	3,871	6,353
Current assets	8,487	14,829	16,610	19,992	24,878	32,766	33,681	41,254	48,946	56,606
Inventories	3,957	5,606	6,557	7,163	8,409	10,913	11,259	14,119	17,025	19,919
Sundry debtors	3,786	7,872	8,542	10,690	13,149	17,631	18,190	22,811	27,506	32,181
Short term loans and advances	560	904	1,032	683	1,347	343	354	444	536	627
Other current assets	186	448	480	1,457	1,973	3,879	3,879	3,879	3,879	3,879
Current liabilities	(6,866)	(10,705)	(12,850)	(14,682)	(20,095)	(26,817)	(27,593)	(34,604)	(41,726)	(48,817)
Trade payables	(6,500)	(10,317)	(12,099)	(14,391)	(19,541)	(23,039)	(23,769)	(29,808)	(35,943)	(42,052)
Other current liabilities	(293)	(304)	(713)	(137)	(367)	(2,194)	(2,264)	(2,839)	(3,423)	(4,005)
Provisions	(74)	(85)	(38)	(155)	(186)	(1,512)	(1,560)	(1,957)	(2,359)	(2,760)
<b>Net current assets (excl. cash)</b>	<b>1,621</b>	<b>4,124</b>	<b>3,760</b>	<b>5,310</b>	<b>4,783</b>	<b>5,949</b>	<b>6,089</b>	<b>6,650</b>	<b>7,221</b>	<b>7,789</b>
<b>Total application of funds</b>	<b>10,819</b>	<b>13,513</b>	<b>16,686</b>	<b>21,647</b>	<b>29,030</b>	<b>35,617</b>	<b>36,332</b>	<b>38,049</b>	<b>41,588</b>	<b>45,980</b>

**Key ratios**

Debt / equity (X)	0.1	0.3	0.3	0.2	0.6	0.7	0.6	0.5	0.4	0.4
Net debt / equity (incl. acceptances) (X)	(0.0)	0.2	0.2	0.1	0.3	0.4	0.4	0.4	0.3	0.2
Gross FATR (X)	2.3	2.5	2.7	1.9	2.2	3.0	2.6	2.9	3.1	3.2
BVPS (Rs)	284	314	359	476	515	566	617	698	803	933
RoAE (%)	9.9	10.0	15.0	6.0	6.5	8.6	8.5	12.1	13.9	14.9
RoACE (%)	10.6	9.4	14.1	5.0	5.1	6.9	7.6	10.1	11.6	12.4

**Working capital as days of sales**

Current assets	143	197	153	241	216	173	173	173	173	173
Inventories	67	74	60	86	73	58	58	58	58	58
Sundry debtors	64	104	79	129	114	93	93	93	93	93
Loans and advances	9	12	10	8	12	2	2	2	2	2
Other current assets	3	6	4	18	17	20	20	20	20	20
Current liabilities	115	142	118	177	174	141	141	141	141	141
Trade payables	109	137	111	173	170	121	121	121	121	121
Other current liabilities	5	4	7	2	3	12	12	12	12	12
Provisions	1	1	0	2	2	8	8	8	8	8
<b>Net current assets (excl. cash) as days of sales</b>	<b>27</b>	<b>55</b>	<b>35</b>	<b>64</b>	<b>42</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>

Source: Company, Kotak Institutional Equities estimates

**Strong OCF to take care of capital expenditure**

Operational cash flows for Amber Enterprises have remained fairly strong over FY2016-23 and were sufficient to meet a significant proportion of capex requirements during the same period. However, FCF generation was almost nil during the same period on continuous investment in capex and acquiring companies for increasing backward integration. With most PLI investment undertaken by Amber, we expect some improvement in FCF generation.

Working capital for ODM players in AC tends to remain higher than other EMS companies due to higher inventory and procurement required for design and manufacturing. We expect Amber to generate operational cash flows of Rs16 bn over FY2023-26E, which will take care of the capex requirements of Rs12 bn over the same period. We expect Amber to start generating FCF from FY2024E.

**We expect FCF to improve from FY2024 for Amber's consolidated cash flow statement, March fiscal year-ends, 2018-2027E (Rs mn)**

**Exhibit 37: Consolidated cash flow statement of Amber, March fiscal year-ends, 2018-27E (Rs mn)**

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Cash flow from operating activities</b>										
Net profit before tax	894	1,359	1,907	1,201	1,543	2,197	2,305	3,652	4,757	5,904
Add: Depreciation	490	623	848	923	1,079	1,391	1,502	1,897	2,177	2,457
Add: Net interest	518	232	398	278	160	740	1,612	1,368	1,258	1,258
Others	21	(68)	173	(33)	227	(1)	—	—	—	—
Op. Profit before Working Capital Changes	1,923	2,146	3,326	2,369	3,008	4,327	5,420	6,917	8,192	9,619
<b>Working capital</b>	<b>(484)</b>	<b>(2,477)</b>	<b>44</b>	<b>(80)</b>	<b>26</b>	<b>(582)</b>	<b>(139)</b>	<b>(562)</b>	<b>(570)</b>	<b>(568)</b>
Taxes	(168)	(299)	(488)	(79)	(539)	(539)	(590)	(935)	(1,218)	(1,511)
<b>Cash flow from operating activities</b>	<b>1,270</b>	<b>(631)</b>	<b>2,882</b>	<b>2,210</b>	<b>2,496</b>	<b>3,206</b>	<b>4,690</b>	<b>5,421</b>	<b>6,404</b>	<b>7,540</b>
<b>Cash flow from investing activities</b>										
Capex	(1,008)	(1,182)	(1,411)	(1,711)	(4,077)	(6,535)	(4,000)	(4,000)	(4,000)	(3,800)
Investments	(57)	—	0	(1,081)	(2,635)	210	—	—	—	—
Others	(455)	75	(1,794)	(2,019)	(1,729)	1,437	—	—	—	—
<b>Cash flow from investing activities</b>	<b>(1,520)</b>	<b>(1,107)</b>	<b>(3,205)</b>	<b>(4,810)</b>	<b>(8,441)</b>	<b>(4,888)</b>	<b>(4,000)</b>	<b>(4,000)</b>	<b>(4,000)</b>	<b>(3,800)</b>
<b>Cash flow from financing activities</b>										
Debt	(2,810)	1,177	1,209	161	5,985	3,025	(1,000)	(1,000)	—	—
Equity	4,747	—	—	4,000	—	—	—	—	—	—
Interest	(561)	(245)	(414)	(387)	(430)	(1,097)	(1,612)	(1,368)	(1,258)	(1,258)
Dividend	—	—	—	—	—	—	—	—	—	—
Others	(99)	—	—	(64)	—	—	—	—	—	—
<b>Cash flow from financing activities</b>	<b>1,278</b>	<b>932</b>	<b>795</b>	<b>3,710</b>	<b>5,555</b>	<b>1,928</b>	<b>(2,612)</b>	<b>(2,368)</b>	<b>(1,258)</b>	<b>(1,258)</b>
<b>Free cash flow</b>	<b>263</b>	<b>(1,812)</b>	<b>1,471</b>	<b>499</b>	<b>(1,582)</b>	<b>(3,329)</b>	<b>690</b>	<b>1,421</b>	<b>2,404</b>	<b>3,740</b>
<b>Total cash flow</b>	<b>1,028</b>	<b>(805)</b>	<b>472</b>	<b>1,109</b>	<b>(391)</b>	<b>246</b>	<b>(1,922)</b>	<b>(947)</b>	<b>1,146</b>	<b>2,482</b>
Opening cash	352	1,338	447	1,203	2,899	5,626	5,594	3,672	2,725	3,871
FX changes	(42)	(86)	444	597	3,117	(277)	-	-	-	-
Closing cash	1,339	447	1,202	2,899	5,626	5,594	3,672	2,725	3,871	6,353

Source: Company, Kotak Institutional Equities estimates

# A1

## Appendix 1: Company profile

Amber Enterprises India Ltd is a prominent solutions provider for the HVAC Industry in India. It has a dominant presence in RAC complete units and major RAC components, with 28 manufacturing facilities spread across 12 locations in India, focusing on different product segments.

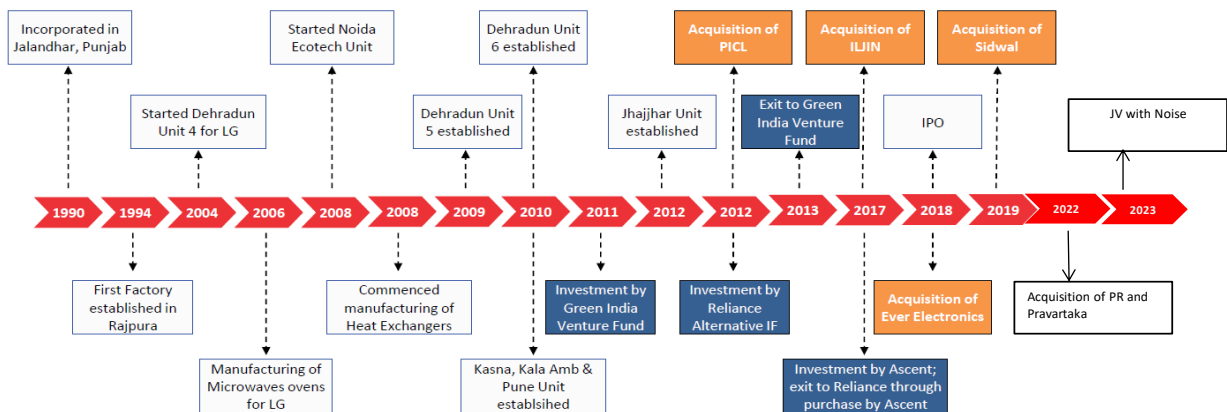
### Company background

Amber is the leading EMS player in the RAC market, with a high degree of backward integration and automation in manufacturing of heat exchangers, injection molding, sheet metal components, system tubing, motors, cross-flow fans, PCBA, motors, sheet metal components, injection molds, plastic extrusion sheets and vacuum formed components in the consumer durables, electronics and automotive sectors.

The company has a well-diversified revenue mix with RAC (43%), components (30%), electronics (16%), mobility applications (6%) and motors (4%). Amber’s RAC market was ~29.4%, as of FY2023, in value terms, where it supplies RAC units and components to all top-10 players. Amber also enjoys its significant presence in the railway HVAC industry through its subsidiary Sidwal and is increasingly focusing on the EMS industry.

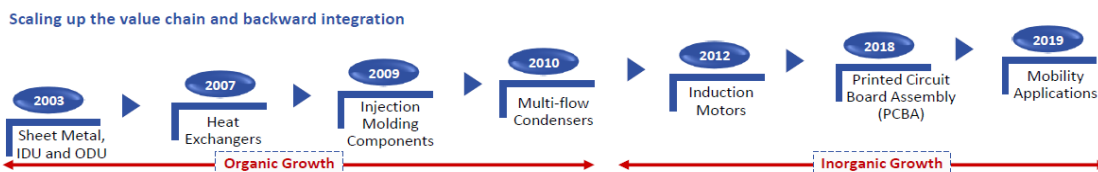
### Key milestones in the journey

Exhibit 38: Amber has continuously added capabilities across segments through either capex or inorganic acquisition over the years to capture a larger value chain



Source: Company, Kotak Institutional Equities

Exhibit 39: The company undertook the scaling up of value chain and backward integration continuously



Source: Company, Kotak Institutional Equities

## Key business segments of Amber Enterprises

### RACs

Amber designs and manufactures complete RACs, including IDUs, WACs and ODUs of split ACs with specifications ranging from 1 ton to 2 tons, across energy ratings and types of refrigerants. The company manufactures both fixed speed and inverter ACs. All major brands in the country are customers of Amber, with the new additions being driven by converting existing customers from the first stage of gas filling to CBU. On the commercial RAC front, the company has added commercial ductable and cassette ACs to increase its offerings for its customer.

### AC components

Amber manufactures reliable functional RAC components such as heat exchangers, copper system tubing, multi-flow condensers, sheet metal components, injection moldings, cross-flow fans and ODU fans. The company also manufactures other non-AC components such as vacuum formed components, plastic extruded sheets, sheet metal components and injection molding components for refrigerators, washing machine and microwave ovens. Currently, Amber covers ~70% of the total value chain of IDU and ODU for inverter SACs. Its recent acquisition of Amber PR and Pravartaka Tooling will enhance the revenue growth for the AC components division.

### Motors (PICL)

PICL is the largest induction motor manufacturer for the HVAC industry in India. It has around 200+ models and serves a marquee customer base across the domestic and export markets. PICL has a capacity of 4 mn motors p.a., with 7 lines of manufacturing. Over the years, PICL has successfully widened its product offering from PSC motors to BLDC motors. Its key customers include Hitachi, Whirlpool, Daikin, Carrier, Voltas, Panasonic, Blue Star, East West (US) and Samco (KSA).

### Electronics (ILJIN and Ever)

ILJIN and Ever are market leaders in PCB manufacturing and assembly, with over 2 decades of experience in providing solutions in the home appliances and automobile industry. These companies have strong R&D capabilities, resulting in one-stop solutions. Combined capacity of both companies stood at 10.5 mn PCBs p.a., with 10 SMT lines, 7 AI lines and 9 ML lines, as of March 2022. Key customers include IFB, LG, Hitachi, Hyundai, Blue Star, Bajaj, Panasonic and LS Automotive. The company has also entered into a definitive agreement for acquiring a majority stake in PCB manufacturer Ascent Circuits—this is following its strategy of backward integration and helping it differentiate itself from peer EMS companies.

### Mobile ACs (Sidwal)

Amber enterprises acquired Sidwal in 2019 to complete its offering for mobility AC solutions. Sidwal is the largest supplier of roof-mounted package unit ACs. It is a key player in providing products across mobility applications, with clients spread across railways, metro systems, bus AC, IT, telecom and defense applications. Its key clients include Indian railways, BEML, Siemens, DMRC, CAF and Alstom. Sidwal has a current order book of Rs11bn+ to be executed in the next 1.0-1.5 years. The pan-India service network makes the company a preferred partner for customers by ensuring availability of after-sales support. Through Sidwal, Amber offers a wide range of mobility products, including roof-mounted ACs for mainline coaches, AC & refrigeration solutions for railways, roof-mounted loco drivers' cab AC and defense HVAC products. Products under roof-mounted ACs for the mainline coaches segment include standard RMPU, LHB, double-deckers and meter gauge. Products under electronics and refrigeration solutions for railways include cold units for pantries and hot case for pantry & electronic control panel (switchboard cabinet). Defense HVAC products include ACs for military ambulance, mine-protected vehicles, tracked vehicles, crew compartment, bullet-proof jeeps, ACUs & TCUs for MBTs and missiles.

**Amber PR**

Amber PR Technoplast India Private Limited, the recent acquisition done by the company, is one of the leading cross-flow fans (CFF) manufacturers in India. This company was (erstwhile Pasio India) acquired from Pee Aar and business is spread across CFFs, ODU fans & fan guards and plastic parts for water dispenser and refrigeration along with plastic parts for seats of trucks, tractors and buses. Pee Aar is the only domestic company manufacturing CFF along with 2 other foreign entities in India.

**Pravartaka Tooling Services Private Limited**

Amber has entered into definitive agreements with Pravartaka Tooling Services Private Limited and acquired a 60% stake in the equity share capital of Pravartaka, which is engaged in the business of injection mold tool manufacturing and injection molding components manufacturing for various industries. The business is being acquired by Pravartaka from Pioneer Tooling Services, which is one of the leading injection molding tool and injection molding component makers for the consumer durables, automotive and electronics industries, on a slump sale basis in FY2022. This acquisition will help the company to have the in-house capability of injection molding tools manufacturing and grow its component segment with a focus on providing more diversified solutions of injection molding components for industries such as automotive, electronics and consumer durables.

# 8

## Appendix 2: Key management personnel

### Exhibit 40: Brief background of senior management team

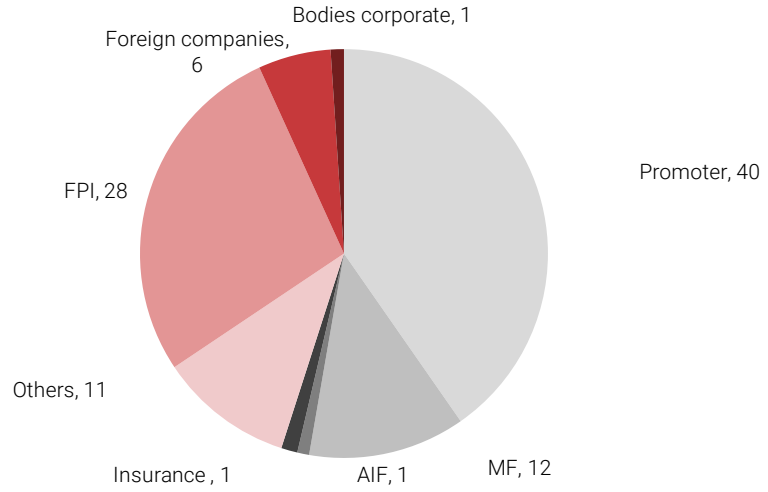
Name	Position	Remarks
Jasbir Singh	Chairman and CEO	Jasbir Singh has over 19 years of experience in RAC Manufacturing sector. He is instrumental in successful commissioning of various factories of Amber in last few years. He handles key customer relationships and is Co-Chair in FICCI – Electronics & Appliances. He is also the secretary in CEAMA. Mr Singh holds Bachelor’s Degree in Engineering (Industrial Production), Karnataka University & MBA from University of Hull, United Kingdom. He was also awarded Man of Appliance by CEAMA- 2018.
Daljot Singh	Managing Director	Daljot Singh has over 17 years of experience in RAC Manufacturing sector. He had previously worked with Morgan Stanley in New York, USA. He was also awarded “Entrepreneur of the Year 2016” by Ludhiana Management Association. He holds Bachelor’s Degree in Electronic Engineering, Nagpur University & Masters degree in Information Technology, Rochester Institute of Technology, USA.
Sanjay Arora	CEO Electronics Division	Mr. Sanjay Arora is CEO of Electronic Division of Amber. He is also responsible for heading innovation, security and legal matters for Amber. He has around 37 years of work experience; joined Amber in 2012. He holds diploma degree in Electrical Engineering from YMCA Institute of Engineering, India.
Udaiveer Singh	CEO Mobility Division	Udaiveer Singh is the CEO of Mobility Division of Amber and is also responsible for Planning & Operations of the RAC manufacturing facilities. He has nearly 26 years of work experience; joined Amber in 1992. He holds Diploma in Mechanical Engineering from Board of Technical Education U.P.
Sachin Gupta	CEO RAC & CAC division	Sachin Gupta is CEO of RAC & CAC Division of Amber and is also responsible for Business Development. He has around 17+ years of work experience; joined Amber in 2014. He holds Bachelor’s degree in Electrical Engineering from Punjab Technical University & PGDBA from AIIMS Chennai.
Sudhir Goyal	CFO	Sudhir Goyal is responsible for Finance & Accounts. He has 17+ years of work experience; joined Amber in 2012. He is a Chartered Accountant from ICAI, B.Com (Hons) from Delhi University.

Source: Company, Kotak Institutional Equities

A2

**Appendix 3: Shareholding pattern**

**Exhibit 41: Shareholding pattern of Amber Enterprises for the period ending December 2023 (%)**



Source: BSE, Kotak Institutional Equities

# Syrma SGS Technology (SYRMA)

Electronic Manufacturing Services

**REDUCE**

CMP(₹): 488

Fair Value(₹): 500

Sector View: **Cautious**

NIFTY-50: 22,519

April 12, 2024

## Balanced risk-reward

Syrma SGS is engaged in turnkey electronics manufacturing services for diverse industries. We expect robust revenue growth (40% CAGR) and improving working capital trends to be the key positive drivers. However, a weakening margin profile and growth at the expense of margins keep us on the sidelines. Syрма aspires to attain 25%+ return ratios, which seems difficult in the short term given its moderate margins of 7-8% and working capital cycle of 70 days. We expect return ratios to remain below 20%; a higher margin profile (driven by higher value addition—higher box builds/design content) and a lower working capital cycle will remain key for Syрма to achieve its targeted return ratios. We initiate coverage with a REDUCE rating and a FV Rs500 (2% upside).

### Initiate coverage with REDUCE rating and DCF-based Fair Value of Rs500

We initiate coverage on Syрма SGS with a REDUCE rating and a DCF-based FV of Rs500, implying 30X P/E on March 2026E earnings. Our FV implies (1) revenue CAGR of 28% over FY2023-33E, (2) average EBITDA margin at 8% and EBITDA CAGR of 27% and (3) WACC of 12.1% and terminal growth of 4%. The CMP factors robust revenue growth (in line with our expectation) and an improving margin trajectory (we see limited visibility currently).

### Multiple growth levers: Diverse end-markets, acquisitions and revival in exports

Syrma's competitive positioning lies in its (1) strong revenue growth prospects, driven by exposure to multiple end-markets such as consumer, autos, industrial, healthcare, IT and railways; (2) ability to successfully capture growth opportunities via a series of acquisitions; and (3) balance between domestic and export end markets. Syрма has been trying to increase its export mix, driven by new contract wins and acquisition of Johari Digital. Further, the company is keen on increasing its ODM (design-led growth) mix back to 25%+ levels (from 18% currently), both of which could prove to be key margin drivers over the medium term and remain the key points to look out for.

### Financials: We expect 34% earnings CAGR over FY2023-26E

We expect Syрма's revenue to see a 40% CAGR over FY2023-26E, led by the consumer (53% CAGR), auto (49% CAGR) and industrial (27% CAGR) segments, driven by a strong ordering momentum (order book at the end of 9MFY24 at Rs45 bn was 3.75X FY2022 levels). However, strong revenue growth is offset by moderate margins (EBITDA CAGR of 34%), driven by a mix shift toward more build-to-print contracts and lower-margin consumer segment (40% of sales in FY2024/25E from 32% in FY2023). As a result, we expect 40% revenue CAGR to drive 33% PAT CAGR for Syрма over FY2023-26E.

### Risks: Improving margin trajectory; value-accretive acquisitions

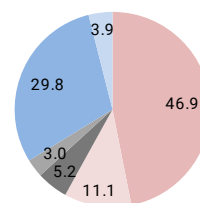
We expect moderation in Syрма's margins due to mix change; however, higher ODM & export revenues could provide upside to numbers. Any further value-accretive acquisitions given Syрма's track-record could provide revenue upside.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	488/500/REDUCE
52-week range (Rs) (high-low)	705-283
Mcap (bn) (Rs/US\$)	87/1.0
ADTV-3M (mn) (Rs/US\$)	367/4.4

##### Shareholding pattern (%)



■ Promoters ■ FPIs ■ MFs ■ BFI ■ Retail ■ Others

##### Price performance (%)

	1M	3M	12M
Absolute	(1)	(20)	67
Rel. to Nifty	(2)	(24)	40
Rel. to MSCI India	(3)	(28)	29

##### Forecasts/Valuations

	2024	2025E	2026E
EPS (Rs)	7.4	11.4	16.4
EPS growth (%)	5.5	54.0	44.8
P/E (X)	66.2	43.0	29.7
P/B (X)	5.1	4.6	4.0
EV/EBITDA (X)	40.8	26.7	19.1
RoE (%)	8.1	11.3	14.4
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	30	42	57
EBITDA (Rs bn)	2	3	5
Net profits (Rs bn)	1	2	3

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Deepak Krishnan

Aditya Mongia

Sai Siddhardha P



## Financial overview: Expect 33% PAT CAGR over FY2023-26E

### Forecasts and valuation ratios of Syrma SGS (consolidated), March fiscal year-ends, 2020-27E

Exhibit 1: We expect Syrma's EPS to grow by 33% over FY2023-26E

	Net sales (Rs bn)	EBITDA (Rs bn)	PAT (Rs bn)	EPS (Rs)	EPS growth (%)	EV/EBITDA (X)	P/E (X)	P/B (X)	RoCE (%)	RoE (%)
2020	3,971	677	438.8	2.5		127.4	196.0	84.6	27.7	43.1
2021	4,383	468	320.2	1.8	(27.0)	182.0	268.6	35.6	11.5	18.7
2022	10,197	944	566.7	3.2	77.0	92.0	151.7	14.8	9.3	13.7
2023	20,484	1,878	1,230.8	7.0	117.2	42.9	69.9	5.6	8.1	11.6
2024E	30,000	2,070	1,298.8	7.4	5.5	40.5	66.2	5.1	6.0	8.1
2025E	42,000	3,192	2,000.4	11.4	54.0	26.5	43.0	4.6	9.4	11.3
2026E	56,700	4,536	2,896.0	16.4	44.8	18.9	29.7	4.0	12.3	14.4
2027E	74,925	5,994	3,822.6	21.7	32.0	14.6	22.5	3.4	14.5	16.2

Source: Company, Kotak Institutional Equities estimates

Exhibit 2: Summary financials of Syrma SGS (consolidated), March fiscal year-ends, 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Income statement</b>								
Net revenues	3,971	4,383	10,197	20,484	30,000	42,000	56,700	74,925
Total operating expenses	(3,294)	(3,915)	(9,253)	(18,606)	(27,930)	(38,808)	(52,164)	(68,931)
<b>EBITDA</b>	<b>677</b>	<b>468</b>	<b>944</b>	<b>1,878</b>	<b>2,070</b>	<b>3,192</b>	<b>4,536</b>	<b>5,994</b>
Depreciation & Amortization	(97)	(121)	(194)	(312)	(496)	(510)	(617)	(749)
<b>EBIT</b>	<b>580</b>	<b>347</b>	<b>750</b>	<b>1,566</b>	<b>1,574</b>	<b>2,682</b>	<b>3,919</b>	<b>5,245</b>
Other income	78	62	123	437	507	322	287	206
Interest expense	(80)	(45)	(64)	(216)	(319)	(319)	(319)	(319)
<b>PBT</b>	<b>578</b>	<b>363</b>	<b>809</b>	<b>1,787</b>	<b>1,762</b>	<b>2,685</b>	<b>3,887</b>	<b>5,131</b>
Tax expense	(84)	(77)	(268)	(556)	(449)	(685)	(991)	(1,308)
<b>Net profit</b>	<b>439</b>	<b>320</b>	<b>567</b>	<b>1,231</b>	<b>1,299</b>	<b>2,000</b>	<b>2,896</b>	<b>3,823</b>
<b>Reported PAT</b>	<b>439</b>	<b>320</b>	<b>567</b>	<b>1,231</b>	<b>1,299</b>	<b>2,000</b>	<b>2,896</b>	<b>3,823</b>
<b>Recurring EPS</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>11</b>	<b>16</b>	<b>22</b>
<b>Balance sheet</b>								
<b>Shareholders' funds</b>	<b>1,017</b>	<b>2,416</b>	<b>5,721</b>	<b>15,403</b>	<b>16,702</b>	<b>18,702</b>	<b>21,598</b>	<b>25,421</b>
Share capital	7	7	1,376	1,768	1,768	1,768	1,768	1,768
Reserves & surplus	1,010	2,408	4,344	13,635	14,934	16,934	19,830	23,653
Debt	774	561	1,942	3,468	3,468	3,468	3,468	3,468
Deferred tax liabilities	—	2	124	138	138	138	138	138
Minority interest and other liabilities	77	80	430	402	402	402	402	402
<b>Total sources of funds</b>	<b>1,868</b>	<b>3,060</b>	<b>8,217</b>	<b>19,411</b>	<b>20,709</b>	<b>22,710</b>	<b>25,606</b>	<b>29,429</b>
Net fixed assets	779	751	2,340	3,837	7,636	7,926	9,410	11,264
Net working capital (ex-cash)	489	772	2,955	4,938	5,688	8,007	10,848	14,371
Investments	248	1,235	2,553	10,091	6,591	3,091	3,091	3,091
Cash and bank balances and current investments	352	302	369	544	795	3,685	2,257	703
<b>Total application of funds</b>	<b>1,868</b>	<b>3,060</b>	<b>8,217</b>	<b>19,411</b>	<b>20,709</b>	<b>22,710</b>	<b>25,606</b>	<b>29,429</b>
<b>Free cash flow</b>								
Operating profit before wcap. changes	726	503	1,036	1,994	2,564	3,514	4,823	6,200
Change in working capital / other adjustments	48	(164)	(659)	(2,299)	(750)	(2,319)	(2,841)	(3,522)
<b>Net cashflow from operating activities</b>	<b>708</b>	<b>239</b>	<b>145</b>	<b>(703)</b>	<b>1,365</b>	<b>510</b>	<b>991</b>	<b>1,369</b>
Capex	(296)	(57)	(817)	(1,110)	(4,295)	(800)	(2,100)	(2,604)
<b>Free cash flow (CFO + net capex)</b>	<b>413</b>	<b>182</b>	<b>(671)</b>	<b>(1,813)</b>	<b>(2,930)</b>	<b>(290)</b>	<b>(2,100)</b>	<b>(2,604)</b>
<b>Growth (%)</b>								
Revenue growth		10.4	132.7	100.9	46.5	40.0	35.0	32.1
EBITDA growth		(30.9)	101.9	98.9	10.2	54.2	42.1	32.1
Recurring PAT growth		(27.0)	77.0	117.2	5.5	54.0	44.8	32.0
<b>Key ratios</b>								
EBITDA margin (%)	17.0	10.7	9.3	9.2	6.9	7.6	8.0	8.0
Net debt/equity (X)	0.3	(0.4)	0.1	(0.4)	(0.1)	(0.1)	(0.0)	0.1
Net debt/EBITDA (X)	0.4	(2.0)	0.9	(2.9)	(1.1)	(0.5)	(0.0)	0.2
Book value per share (Rs)	6	14	33	88	95	106	123	144
RoAE (%)	43.1	18.7	13.7	11.6	8.1	11.3	14.4	16.2
RoACE (%)	27.7	11.5	9.3	8.1	6.0	9.4	12.3	14.5

Source: Company, Kotak Institutional Equities estimates

# 2

## Valuation: Initiate with a REDUCE rating and Fair Value of Rs500

We initiate coverage on Syrma SGS with a REDUCE rating and DCF-based Fair Value of Rs500, implying 30X P/E on March 2026E consolidated earnings. Syrma SGS is a technology-focused engineering and design company engaged in electronics manufacturing services for diverse industries, including industrial appliances, automotive, consumer, healthcare and IT industry. We forecast Syrma’s earnings to grow at 33% CAGR over FY2023-26E driven by 40% CAGR in revenue led by the consumer, auto and industrial segments. We expect robust revenues and improving working capital to be the key drivers for Syrma. However, a weakening margin profile and growth at the expense of margins keep us on the sidelines.

### Our DCF-based valuation implies a 2% upside

We value Syrma SGS using a three-stage DCF model with explicit forecasts over FY2023-33E, followed by a fade period over FY2033-45E and assume terminal growth after that. In the explicit forecast period, we build in (1) revenue CAGR of 28% and (2) average EBITDA margin at 8% (versus 9.7% over FY2021-23) and EBITDA CAGR of 27%. We forecast gradual moderation in FCF growth to 11% by FY2045E. We assume WACC of 12.1% and a terminal growth rate of 4%. The DCF-based FV of Rs500 implies 19X EV/EBIDTA FY2026E and 30X March 2026E P/E.

### We arrive at a valuation of Rs500/share for Syrma SGS

Exhibit 3: Syrma SGS DCF model, March fiscal year-ends, 2020-45E (Rs mn)

(March fiscal year-ends, Rs mn)	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2035E	2045E
<b>Free cash flow calculation</b>																
Revenue	3,971	4,383	10,197	20,484	30,000	42,000	56,700	74,925	96,867	122,468	151,335	182,683	215,306	247,601	319,880	723,733
yoy growth (%)	-	10	133	101	46	40	35	32	29	26	24	21	18	15	13	4
EBIT (excl. other income)	580	347	750	1,566	1,574	2,682	3,919	5,245	6,840	8,702	10,801	13,080	15,452	17,801	22,997	52,031
EBIT margin (%)	14.6	7.9	7.4	7.6	5.2	6.4	6.9	7.0	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.2
Effective tax rate (%)	14	21	33	31	26	26	26	26	26	26	26	26	26	26	26	26
NOPAT	496	273	502	1,078	1,172	1,998	2,920	3,907	5,096	6,483	8,046	9,745	11,512	13,261	17,133	38,763
Change in working capital (excl. cash)	48	(164)	(659)	(2,299)	(750)	(2,319)	(2,841)	(3,522)	(4,241)	(4,948)	(5,579)	(6,059)	(6,305)	(6,242)	(7,343)	(5,464)
Depreciation	97	121	194	312	496	510	617	749	909	1,096	1,306	1,535	1,772	2,008	2,594	5,868
Capex	(296)	(57)	(817)	(1,110)	(4,295)	(800)	(2,100)	(2,604)	(3,135)	(3,657)	(4,124)	(4,478)	(4,660)	(4,614)	(2,594)	(5,868)
<b>FCFF</b>	<b>345</b>	<b>173</b>	<b>(779)</b>	<b>(2,019)</b>	<b>(3,376)</b>	<b>(611)</b>	<b>(1,405)</b>	<b>(1,469)</b>	<b>(1,370)</b>	<b>(1,027)</b>	<b>(351)</b>	<b>742</b>	<b>2,319</b>	<b>4,413</b>	<b>9,789</b>	<b>33,299</b>

	WACC %				
	11.6	12.1	12.1	12.6	13.1
Terminal growth rate (%)	3.0	520	470	470	380
	3.5	540	490	490	390
	4.0	560	500	500	400
	4.5	590	520	520	420
	5.0	620	550	550	430

WACC (%)	12.1
Terminal growth rate (%)	4.0

DCF valuation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2035
PV of cash flows						35,124	39,970	46,192							
PV of Terminal value						44,147	49,469	55,432							
<b>EV</b>						<b>79,272</b>	<b>89,439</b>	<b>101,624</b>							
Less: Net debt						(1,568)	(140)	1,414							
<b>Implied Equity value</b>						<b>80,804</b>	<b>89,578</b>	<b>100,210</b>							

Mar 2026E-based Fair value (Rs/share)	500
---------------------------------------	-----

Source: Company, Kotak Institutional Equities estimates

### Consumer and auto sectors to be key near-term growth drivers

Syrma has seen a healthy 33% CAGR in revenue growth (pro forma basis), driven primarily by the domestic segment (57% CAGR) with all verticals (ex-healthcare) seeing strong growth, consumer and auto segment having been the key growth drivers. Further, the order book momentum for Syrma continues to be strong, providing ample near-term visibility (order book at the end of 9MFY24 stands at Rs45 bn, 3.75X FY2022 levels).

Looking ahead, we expect near-term growth to be primarily driven by three key segments—consumer (53% CAGR), auto (50% CAGR) and industrial (27% CAGR). Turnaround in healthcare operations and pick-up in the railway segment would be longer-term opportunity. As a result, we expect Syrma to post a robust revenue growth of 40% CAGR over FY2023-26E.

**Consumer—5G subscriber devices and smart electronics to be key drivers of growth**

Syrma's consumer business caters to four key end-markets—(1) water purification, (2) smart electronics and BLDC systems for fans, (3) 5G subscriber devices (set top boxes and routers) and (4) FASTag and RFID applications.

Syrma today caters to ~2% (Rs6.6 bn revenue as of FY2023) of the total addressable market of Rs304 bn for its consumer portfolio. The TAM for each of the end products is as follows—(1) water purifier—EMS end market of Rs2 bn as of FY2023, ~10% of total water purifier COGS. The water purifier market is Rs40 bn with COGS of ~Rs20 bn, (2) smart electronic devices—EMS TAM of Rs163 bn, (3) telecom EMS market has a TAM of Rs96 bn and (4) RFID market is Rs43 bn.

Further, each of the end markets is expected to see strong growth in coming years: (1) the water purifier market is expected to grow at 7% CAGR over FY2023-26E, as per KIE estimate (consumer durable analysts); (2) we estimate 19% CAGR and 10% CAGR for smart devices and telecom EMS (the industry section has detailed projections); and (3) the RFID market, as per industry estimates, is expected to grow at 13% CAGR.

As a result, we see the consumer segment for Syrma growing at 53% CAGR over FY2023-26E, driven by a healthy order backlog (40% of total order backlog), and expect the consumer segment's share in revenues to reach 42% by FY2026E.

**Auto—key beneficiary of shift toward EVs**

Syrma has been catering to the auto segment since 2007, manufacturing products such as sensor PCBA, cluster units, light controllers and engine control units, largely focusing on the traditional ICE segment. However, with the introduction of EV vehicles, Syrma has started manufacturing additional products such as controllers for the EV battery management systems and EV chargers.

An EV two-wheeler has electronics components worth ~Rs15k-20k, up ~7X versus ~Rs2k for combustion two-wheelers. Similarly, an EV four-wheeler has electronics components worth ~Rs60k-70k versus ~Rs15k-20k for traditional four-wheeler vehicles, providing a large TAM for EMS players.

Syrma today caters to ~3% (Rs4 bn revenue as of FY2023) of the total addressable market of Rs131 bn for its auto segment. We see the auto EMS market growing at 17% CAGR over FY2023-26E, driven by a shift toward the EV segment (see industry section of the report) and reaching Rs213 bn by FY2026E.

As a result, we expect the auto segment to be a key driver of Syrma's growth and see 50% revenue CAGR. The market share is likely to double to ~6% by FY2026E.

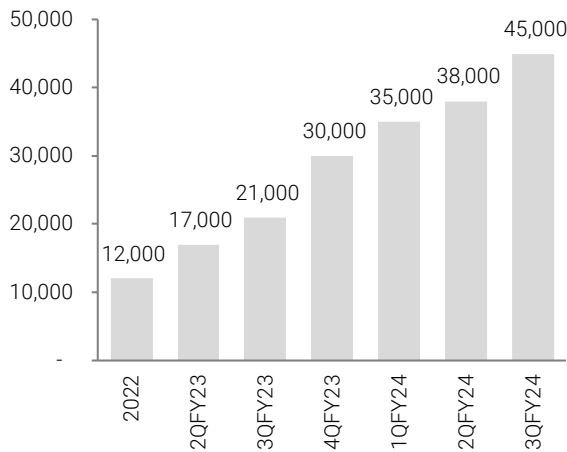
**Industrial—smart energy meter for global end market to be key short-term driver of growth**

Syrma's industrial segment caters to smart energy meters, industrial power supply units, 5G infrastructure components, and used to be the largest segment for the company as of FY2020 (38% of sales). While consumer has become the largest segment, Syrma recently achieved a breakthrough in the US market with a contract for utility metering systems for a large US company. Production is expected to start 3QFY24 and could significantly aid revenues in FY2025.

Syrma today caters to ~13% (Rs6.4 bn revenue as of FY2023) of the total addressable market of Rs50 bn for its industrial segment. We expect the industrial EMS market to grow at 12% CAGR over FY2023-26E and see industrials as the third biggest driver of growth for Syrma, and bake in 27% revenue CAGR over FY2023-26E as domestic growth is aided by international orders.

**Syrma’s order book has grown 3.75X in the past seven quarters, providing strong near-term revenue visibility**

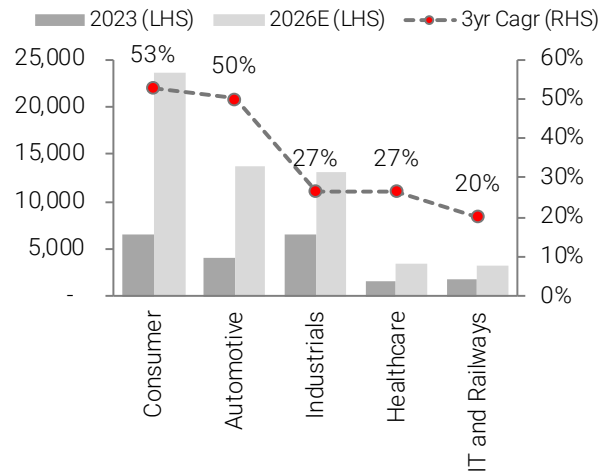
Exhibit 4: Syrma’s order book, March fiscal year-ends, 2022-9MFY24 (Rs mn)



Source: Companies, Kotak Institutional Equities

**We expect a 40% revenue CAGR driven by Consumer (53% CAGR) and Auto segments (50% CAGR)**

Exhibit 5: Syrma’s revenue and revenue CAGR trends, March fiscal year-ends, 2023-26E (Rs mn)



Source: Companies, Kotak Institutional Equities

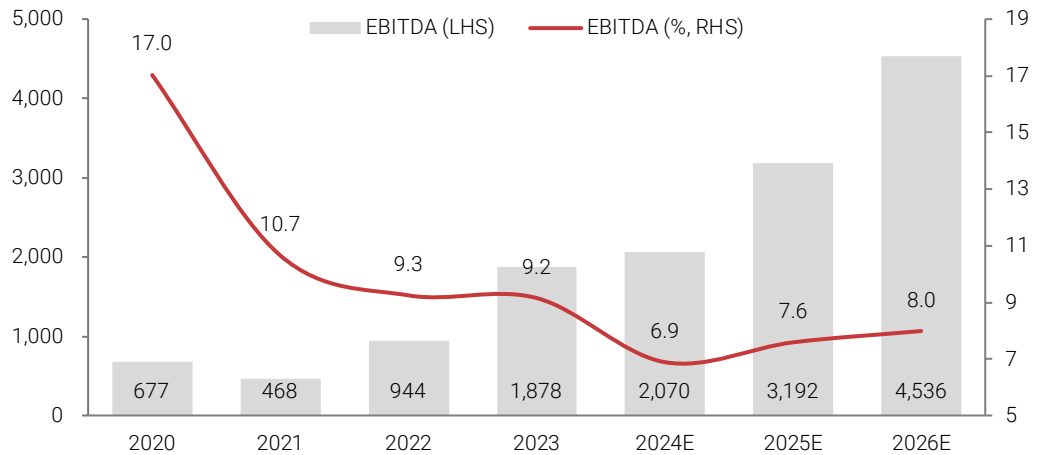
**Margins to remain under pressure**

Margins for Syrma have been on a downward trajectory over the past couple of years; this has been driven primarily by a decline in gross margin, offsetting most of the gains from operating leverage. Syrma’s gross margin decline from 36% in FY2021 to 25% in FY2023 has been primarily led by a mix shift toward more build-to-print contracts. Further, among segments, we see that the business mix has primarily moved from industrial segment (38% of sales in FY2020 to 31% of sales in FY2023) to the consumer segment (23% of sale in FY2020 to 32% of sales in FY2023). With incremental order wins expected to be driven more by the consumer segment (consumer segment expected to contributed 40%+ of sales in FY2024/25), we expect margins to remain under pressure for Syrma. The consumer segment mix has shifted toward more built-to-print high and flexible volume products; as a result, segmental gross margins are now at 16% in 1HFY24 versus 50% in FY2020 and would continue to be a drag on margins over the medium term.

Syrma has indicated that the company wants to increase the contribution of ODM products from 18% as of FY2023 to mid-twenties over the medium term. Further, recovery in export markets (especially healthcare) could aid margins over the medium term. However, we expect the impact of these changes to be only gradual and expect EBITDA margins to reach 8% levels by FY2026E on the back of operating leverage and some pick-up in ODM/export orders. Our estimates are still 130/120 bps lower than FY2022/23 levels, given the mix shift toward consumer and auto segments.

**We expect gradual improvement in EBITDA margins over FY2024-26E; however, we expect margins to remain below historical range (EBITDA CAGR of 34%)**

**Exhibit 6: Syrma’s EBITDA (Rs mn) and EBITDA margin (%) trends, March fiscal year-ends, 2020-26E**



Source: Company, Kotak Institutional Equities estimates

**Working capital: Gradual improvement driven by favorable mix**

Syrma’s revenue mix has changed over the past couple of years toward the consumer sector, which we expect to continue in the coming years as well. The contribution of industrial segment is expected to decrease whereas the consumer segment is expected to contribute more than 40% of revenues by FY2026E.

Among all the sectors, the consumer segment has higher volumes, lower degree of backward integration and tends to have lower margin and short working capital cycle (can range from 30 days for very high volume and 60 days+ for flexible volume products). Thus, lower working capital cycle will aid Syrma in maintaining its return profile despite a decrease in EBITDA margins.

**We expect a 20 days reduction in working capital driven by mix shift toward consumer vertical**

**Exhibit 7: Operating working capital as days of sales of Syrma SGS, March fiscal year-ends, 2020-26E**

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	63	64	104	105	100	100	100
Receivable as days of sales	107	106	97	72	70	70	70
Payable as days of sales	98	96	86	87	100	100	100
NWC as days of sales	71	75	116	90	70	70	70

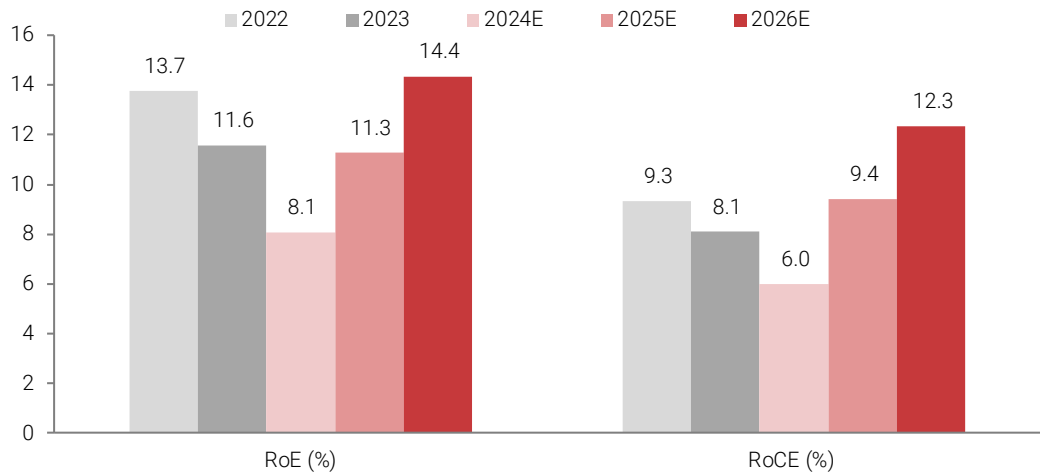
Source: Company, Kotak Institutional Equities estimates

**Return ratios**

We expect Syrma’s return ratios (RoE and RoCE) to remain in the mid-teens range over the next couple of years. Syrma is targeting RoCE of 25%+ over the medium term. However, with the mix shifting toward consumer and auto segments, we see the benefits of lower inventory/working capital days being more than offset by a weaker margin profile for these segments. With an asset turn of ~7X, margins in the 7-8% range and working capital cycle of 70 days, we see Syrma return ratios remaining below 20%. A higher margin profile (driven by higher value addition—higher box-builds/design content) as well as lower working capital cycle will remain key for Syrma to attain 25% return ratios, which seems difficult over the short term.

**We expect return ratios to remain range-bound as improvement in working capital is offset by weaker margin profile**

**Exhibit 8: Trend in RoE and RoCE, March fiscal year-ends, 2022-26E (%)**



Source: Company, Kotak Institutional Equities

**Relative valuation**

Syrma trades at 30X March 2026E EPS, a slight discount to other EMS players. We expect Syrma SGS to report 33% CAGR in revenue growth over the next three years, driven by sharp pick-up across three key end markets—(1) consumer (53% CAGR), (2) auto (50% CAGR) and (3) industrial (27% CAGR). Further, with the mix shifting toward consumer segment, working capital cycle is expected to reduce to 75 days in FY2026 from 90 days in FY2023. However, these positives are offset by a weakening margin profile as the high-growth consumer segment and higher mix of build-to-print jobs would keep EBITDA margins below the previous levels. Hence, we expect Syrma to continue trade at a discount to peers despite its superior growth.

**Syrma now trades at a discount to EMS peers post the 26% YTD correction in share price**

**Exhibit 9: Valuation comparable metric for Syrma SGS, March fiscal year-ends, 2024-26E**

Company	Mkt Cap. (US\$ mn)	Price (LC)	Year end	EV (US\$ mn)	EV/EBITDA (X)			P/E (X)			P/B (X)			RoE (%)		
					2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Global</b>																
Hon Hai Precision Industry	66,966	154.5	Dec	59,165	6.7	5.8	4.9	13.6	11.8	12.0	1.3	1.2	1.2	9.5	10.1	9.4
Pegatron Corp	8,413	101.0	Dec	8,997	8.2	7.1	6.2	15.8	14.1	12.9	1.3	1.3	1.2	8.4	9.0	9.8
Quanta Computer Inc	34,056	282.0	Dec	32,424	14.3	11.2	10.4	21.8	17.6	15.3	5.4	4.9	4.5	24.8	27.7	27.3
Compal Electronics	5,043	36.7	Dec	6,139	8.9	8.1	7.3	14.9	13.0	10.4	1.3	1.2	1.2	8.3	8.8	9.1
Wistron Corp	11,378	125.5	Dec	13,688	8.4	6.8	5.6	19.2	14.7	11.4	2.9	2.6	2.4	16.0	18.1	20.9
Jabil Inc	16,465	136.5	Dec	16,789	7.4	6.9	6.5	16.3	13.0	11.4	8.6	6.0	4.4	43.6	52.8	47.1
<b>India</b>																
Dixon Technologies India Ltd	5,585	7,814.0	Mar	5,600	64.0	39.5	31.4	116.9	66.9	53.4	27.6	19.5	14.2	26.7	34.1	30.8
Amber Enterprises India Ltd	1,504	3,705.0	Mar	1,610	27.5	20.4	16.8	74.0	46.4	35.6	6.0	5.3	4.6	8.5	12.1	13.9
Avalon Technologies Ltd	409	520.0	Mar	389	54.2	31.7	22.1	119.6	52.0	38.0	6.0	5.4	4.7	5.1	10.9	13.2
Kaynes Technology India Ltd	1,931	2,508.8	Mar	1,746	67.8	49.0	32.3	103.8	81.3	51.3	5.8	5.4	4.8	8.9	7.5	10.9
Cyient Dlm Ltd	673	705.0	Mar	630	47.4	32.0	23.9	87.7	44.4	35.6	6.0	5.3	4.6	6.8	11.9	12.9
P G Electroplast	562	1,802.1	Mar	623	20.8	17.3	14.9	37.1	27.5	21.9	4.6	3.8	3.0	14.4	14.4	15.1
Syrma Sgs Technology Ltd	1,036	488.0	Mar	1,010	40.5	26.5	18.9	66.2	43.0	29.7	5.1	4.6	4.0	8.1	11.3	14.4

Notes:

(a) All global companies ending Dec have valuation ratios for CY2023/24/25. All domestic companies ending March have valuation ratios for FY2024/25/26.

Source: Bloomberg, Kotak Institutional Equities, Company

# 3

## Multiple growth levers: Diverse end markets, acquisitions, revival in exports

Syrma’s competitive positioning lies in its (1) strong revenue growth prospects driven by exposure to multiple end-markets such as consumer, autos, industrial, healthcare, IT and railways; (2) ability to successfully capture growth opportunities via a series of inorganic acquisitions; and (3) balance between domestic and export end-markets. We expect robust revenue growth (40% CAGR) and improving working capital to be key positive drivers for Syrma. However, a weakening margin profile (growth at the expense of margins) and steady return profile keep us on the sidelines.

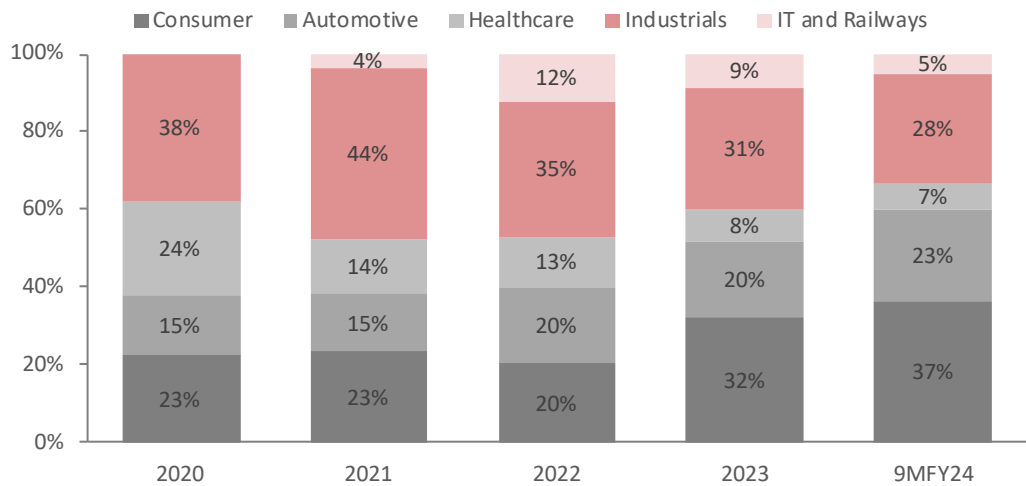
### Catering to multiple high-growth industries

Syrma SGS was formed in 2021 when Syrma (founded in 2006) acquired SGS Techniks (incorporated in 1990). Syrma historically was an export-focused company while SGS Techniks had a strong domestic presence. Further, Syrma’s focus sectors were healthcare, IT and railway whereas SGS Techniks focused primarily on automotive, consumer and industrial sectors. Hence, today Syrma SGS is engaged in turnkey electronics manufacturing services for diverse industries including industrial appliances, automotive, consumer, healthcare and IT industry, catering to 270+ clients as of FY2023.

Over the past three years, Syrma SGS has seen a 33% revenue CAGR (FY2020-23) driven by consumer, auto and industrial domestic end markets. In line with the robust revenue growth, we see Syrma’s order booking also grow at a similar pace. At the end of 9MFY24, Syrma has an order backlog of Rs45 bn, which is 3.75X FY2022 order backlog, providing strong near-term visibility for revenue growth. We see Syrma’s revenue recording a 40% CAGR over the next three years (FY2023-26E), driven by three key segments—consumer (53% CAGR), auto (50% CAGR) and industrial (27% CAGR).

### Consumer, auto and industrial have been drivers for Syrma (contributes 83% of sales as of FY2023)

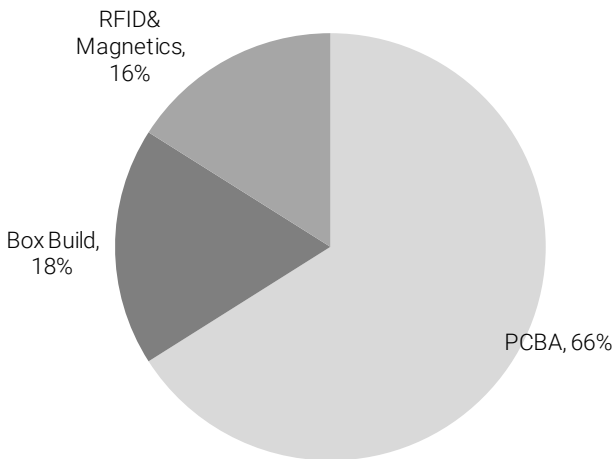
Exhibit 10: Syrma’s revenue split by end user industry, March fiscal year-ends, 2020-9MFY24



Source: Company, Kotak Institutional Equities

**PCBA contributing 66% of topline (as of FY2023)**

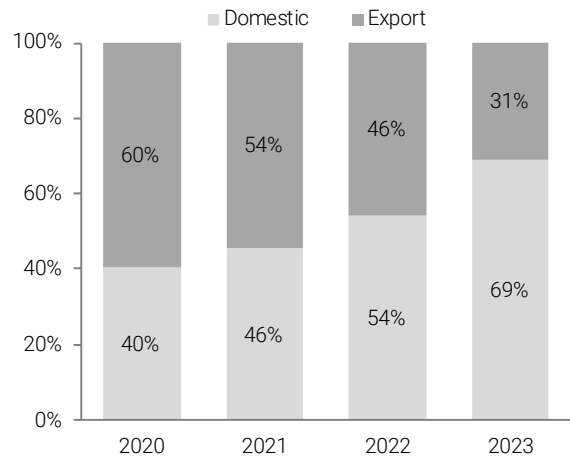
Exhibit 11: Syrma’s revenue split by product type, March fiscal year-end, 2023 (%)



Source: Company, Kotak Institutional Equities

**Pick-up in India business and destocking globally have shifted the business mix toward the domestic market**

Exhibit 12: Syrma’s revenue split by geography, March fiscal year-ends, 2020-23 (%)



Source: Company, Kotak Institutional Equities

**Consumer—5G subscriber devices and smart electronics to be key drivers of growth**

Syrma’s consumer business caters to four key end markets—(1) water purification, (2) smart electronics and BLDC systems for fans, (3) 5G subscriber devices (set top boxes and routers) and (4) FASTag and RFID applications. The consumer segment share within Syrma’s revenue mix has increased to 37% in 9MFY24 from 23% in FY2020, driven by pick-up in 5G devices, smart electronics (wearables) and BLDC systems.

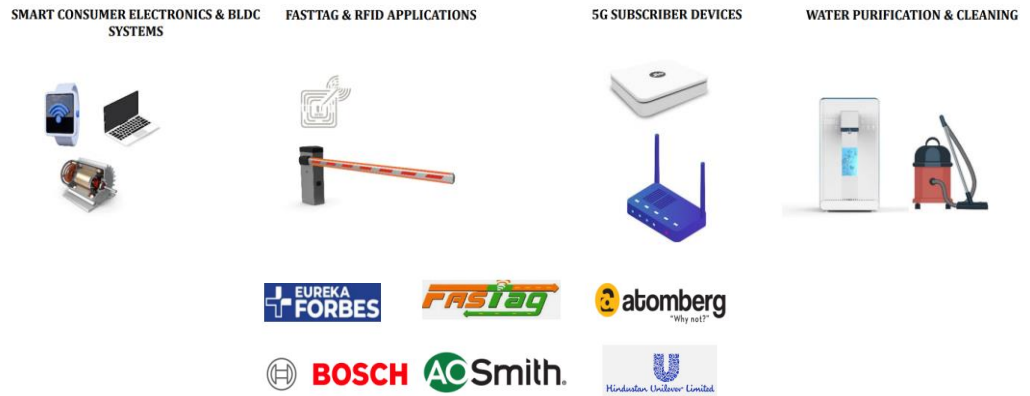
Syrma today caters to ~2% (Rs6.6 bn revenue as of FY2023) of the total addressable market of Rs304 bn for its consumer portfolio. The TAM for each of the end products is as follows—(1) water purifier (EMS end market of Rs2 bn as of FY2023, ~10% of total water purifier COGS. The water purifier market is Rs40 bn with COGS of ~Rs20 bn), (2) smart electronic devices—EMS TAM of Rs163 bn, (3) telecom EMS market has a TAM of Rs96 bn and (4) RFID market is Rs43 bn.

Further, each of the end markets is expected to see strong growth in coming years—(1) the water purifier market is expected to grow at 7% CAGR over FY2023-26E as per KIE estimate, (2) we estimate 19% CAGR and 10% CAGR for smart devices and telecom EMS (see industry section for detailed projections) and (3) the RFID market as per industry estimates is expected to grow at 13% CAGR.

As a result, we expect the consumer segment for Syrma to grow at 53% CAGR over FY2023-26E, driven by a healthy order backlog (40% of total order backlog), and see the consumer segment’s share in revenues reaching 42% by FY2026E.

**Syrma focuses on four key end-markets within the consumer segment with 5G devices being the key short-term driver of growth**

**Exhibit 13: Syrma’s consumer segment product offering**



Source: Company, Kotak Institutional Equities

**Automotive—key beneficiary of shift toward EVs**

Syrma has been catering to the auto segment since 2007, focusing on products such as sensor PCBA, cluster units, light controllers and engine control units largely in the traditional ICE segment. However, with the introduction of EV vehicles, Syrma has started manufacturing additional products such as controllers for the EV battery management systems and EV chargers.

An EV two-wheeler has electronics components worth ~Rs15k-20k, up ~7X versus ~Rs2k for combustion two-wheelers. Similarly, an EV four-wheeler has electronics components worth ~Rs60k-70k versus ~Rs15k-20k for traditional four-wheeler vehicles, providing a large TAM for EMS players.

Syrma used to be a tier-2 supplier in case of ICE segment whereas for EV vehicles, the company directly supplies to the OEMs in most cases, helping it generate slightly higher margins.

Syrma today caters to ~3% (Rs4 bn revenue as of FY2023) of the total addressable market of Rs131 bn for its auto segment. We forecast auto EMS market to grow at 17% CAGR over FY2023-26E, driven by a shift toward the EV segment (see industry section of the report) and reaching Rs213 bn by FY2026E.

As a result, we expect the auto segment to be a key driver for Syrma and see 50% revenue CAGR. Market share is expected to double to ~6% by FY2026E.

**EV segment, driven by two-wheelers, is expected to be key near-term driver of growth for Syrma’s auto vertical**

**Exhibit 14: Syrma’s auto segment product offering**



Source: Company, Kotak Institutional Equities

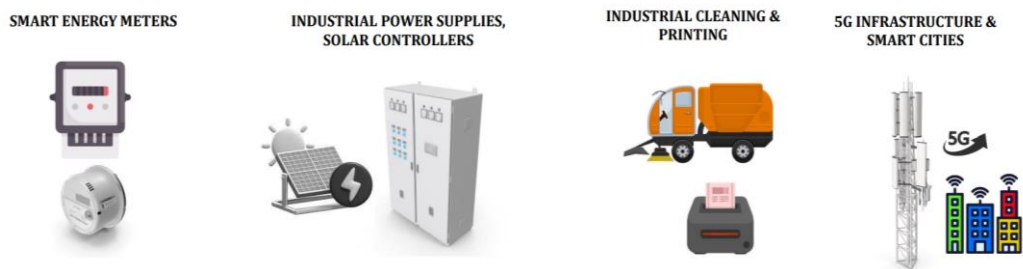
**Industrials—smart energy meter for global end market to be key short-term driver of growth**

Syrma’s industrial segment caters to smart energy meters, industrial power supply units, 5G infrastructure components and used to be the largest segment for the company in FY2020 (38% of sales). While consumer has become the largest segment now, Syрма recently achieved a breakthrough in the US market with a contract for utility metering systems for a large company. The production is expected to start in 3QFY24 and could significantly aid revenues in FY2025.

Syrma caters to ~13% (Rs6.4 bn revenue as of FY2023) of the total addressable market of Rs50 bn for its industrial segment as of FY2023. We expect the industrial EMS market to see a 12% CAGR over FY2023-26E and see industrials as the third biggest driver of growth for Syрма and bake in 27% revenue CAGR over FY2023-26E, as domestic growth is aided by international orders as well.

**Smart energy meter for global end markets and industrial power supply orders are key to Syрма seeing strong growth over the medium term**

Exhibit 15: Syрма’s industrial segment product offering



Source: Company, Kotak Institutional Equities

**Healthcare**

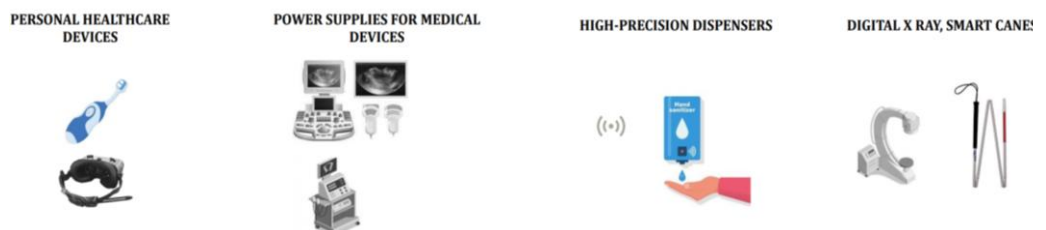
Export of personal healthcare devices to global markets had been a key driver for the healthcare segment growth. However, with slowdown across global geographies, healthcare segment revenue declined at -7% CAGR over FY2020-23. Now with the acquisition of Johari Digital Healthcare and gradual revival in export markets, Syрма expects to see strong growth in coming years.

In 1QFY24, Syрма acquired Johari Digital Healthcare (JDHL), which primarily catered to the export market and was more focused on manufacturing of electro-medical devices in areas such as aesthetics, diagnostics, physiotherapy, and life sciences versus Syрма’s traditional focus on personal healthcare devices for European markets. The acquisition of JDHL is also expected to be margin-accretive for Syрма as JDHL enjoys a significantly higher margin profile (EBITDA margin of ~36% in FY2023 versus 9.2% for Syрма).

Syrma today caters to ~2% (Rs1.6 bn revenue as of FY2023) of the total addressable market of Rs90 bn for its medical segment. We expect the domestic medical EMS market to grow at 10% CAGR over FY2023-26E and expect Syрма revenue to grow at 27% CAGR, driven largely by the acquisition of Johari Digital Healthcare, which primarily caters to the international market.

**Johari acquisition and pick-up in exports are key drivers of Syрма’s healthcare growth**

Exhibit 16: Syрма’s healthcare segment product offering



Source: Company, Kotak Institutional Equities

**IT and railways: IT PLI tie-ups and railway signaling orders key drivers of growth**

IT and railways have historically been a very small part of the overall mix for Syrma. However, with the company being a beneficiary of the revised IT PLI scheme and looking to increasingly participate in the railway signaling segment via tie-ups with global OEMs, this segment could be a growth driver over the medium term. Syrma today has negligible share of Rs434 bn and Rs50 bn IT and Industrial EMS markets.

We expect 20% revenue CAGR over the next three years. Tie-up with OEMs for IT PLI remains the key catalyst.

**IT PLI scheme and entry into railway segment are key short-term drivers for Syrma**

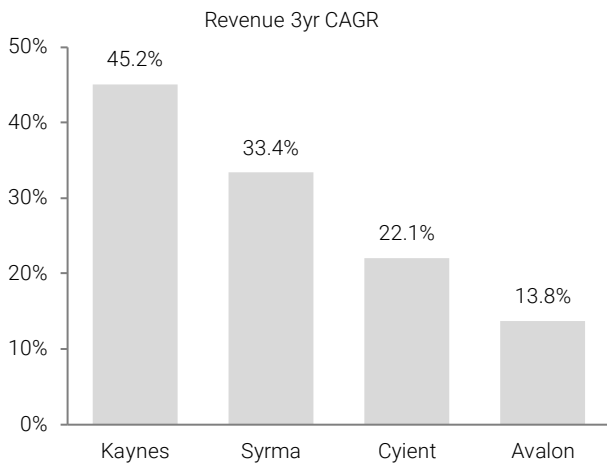
**Exhibit 17: Syrma's IT and railway segment product offering**



Source: Company, Kotak Institutional Equities

**Syrma has seen a healthy 33% revenue CAGR over FY2020-23, driven by consumer and auto segments**

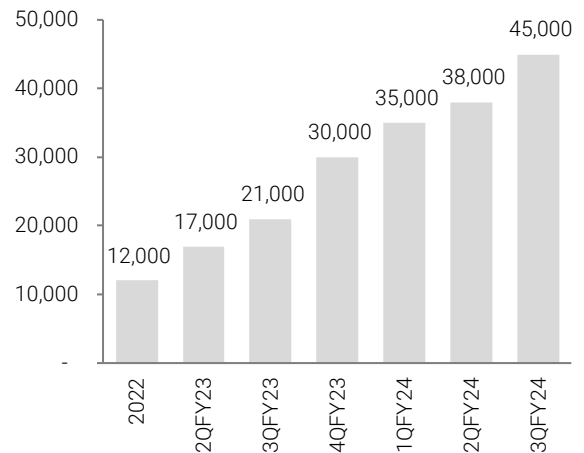
**Exhibit 18: Comparison of revenue CAGR for B2B EMS players, March fiscal year-ends, 2020-23 (%)**



Source: Companies, Kotak Institutional Equities

**However, with 9MFY24 order book at 3.75X FY2022 levels, near-term revenue visibility remains strong**

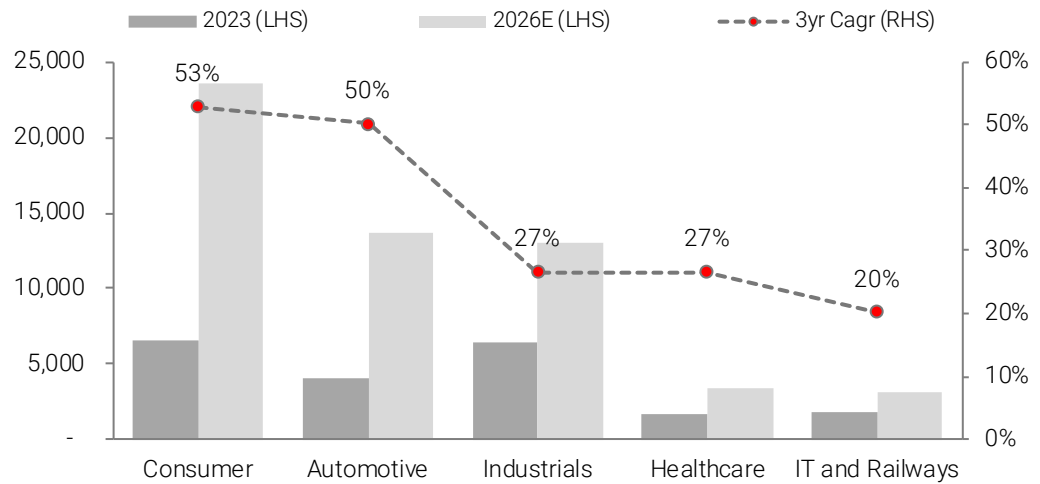
**Exhibit 19: Syrma's order book, March fiscal year-ends, 2022-9MFY24 (Rs mn)**



Source: Companies, Kotak Institutional Equities

**We expect a 40% revenue CAGR, driven by consumer (53% CAGR) and auto (50% CAGR) segments**

**Exhibit 20: Syrma’s revenue (Rs mn) and revenue CAGR (%) trends, March fiscal year-ends, 2023-26E**



Source: Company, Kotak Institutional Equities estimates

**Expanding offerings via acquisitions**

Apart from organic growth, Syrma has successfully undertaken multiple inorganic acquisitions in the past to expand its product offerings in the fast-growing EMS market.

- ▶ In December 2014, Syrma acquired Tovyva Automation and in April 2016, it acquired 3G Communications, both of which helped the company increase its technical knowhow of IoT-related offerings and helped it pre-qualify for certain government tender contracts.
- ▶ In September 2021, Syrma acquired SGS Teknics, which helped it move from being a largely export-focused entity and cater to fast-growing domestic end markets such as consumer and auto, which were absent from Syrma’s portfolio and would have taken years to get prequalified with select customers.
- ▶ In October 2021, Syrma acquired Perfect ID, which helped increase its dominant position in the RFID market by leveraging Perfect ID’s capabilities in manufacturing RFID label tags and passive inlay tags versus Syrma’s traditional focus on RFID hard tags.
- ▶ In 1QFY24, Syrma acquired Johari Digital Healthcare (JDHL), which primarily catered to the export market and was more focused on manufacturing of electro-medical devices in areas such as aesthetics, diagnostics, physiotherapy and life sciences versus Syrma’s traditional focus on personal healthcare devices for European markets. The acquisition of JDHL is also expected to be margin-accretive for Syrma as JDHL enjoys a significantly higher margin profile (EBITDA margin of ~36% in FY2023 versus 9.2% for Syrma).

**Exhibit 21: Syrma has undertaken multiple acquisitions to enhance its offerings and cater to high-growth areas**

Year	Milestone
2014	Acquired Tovyva Automation to enhance lot product offerings
2016	Acquired 3G communications to enhance lot product offerings
2021	Acquired SGS Teknics Manufacturing Pvt Ltd to cater to domestic market and Auto, Consumer and Industrial verticals
2021	Acquired 75% of the issued and paid-up share capital of RFID player Perfect ID
2023	Acquired Johari Digital Healthcare Limited

Source: Company, Kotak Institutional Equities

**Recovery in exports could provide further upside over the medium term**

Exports used to be a significant part of Syrma’s overall revenues. Syrma’s export revenue accounted for 60% of revenue in FY2020 and has decreased to 31% in FY2023. Weak economic activity in export geographies (export grew at 7% CAGR) coupled with strong pickup in the domestic market (60% CAGR) are the key reasons for this mix shift.

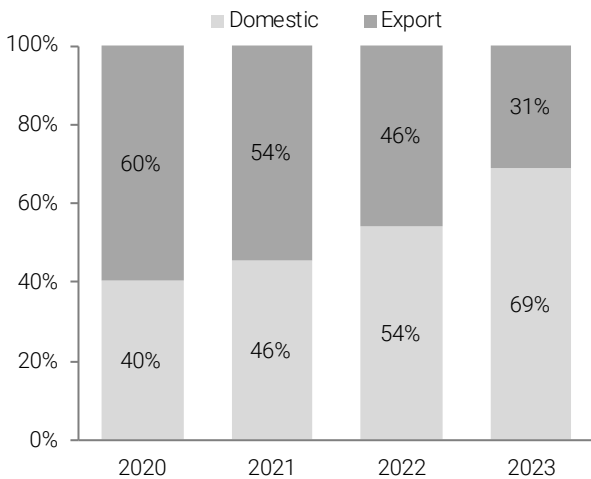
However, Syrma has recently achieved a breakthrough in the US market with a contract for utility metering systems for a large company. Production is expected to start 3QFY24 and could significantly aid revenues in FY2025.

The company’s recent acquisition of Johari Digital Healthcare (JDHL) is also focused on reviving exports for the healthcare vertical as Johari’s products (electro-medical devices in areas such as aesthetics, diagnostics, physiotherapy and life sciences) primarily cater to global end markets.

With exports generally having higher margins and better working capital terms, revival in exports could aid margin and return ratios for Syrma over the medium term. We expect to see export mix moving closer to 35-40% over the next two years, i.e., by FY2026E, even as the domestic consumer segment remains the key driver of revenue growth.

**Pick-up in India business and destocking globally have shifted the business mix toward the domestic market**

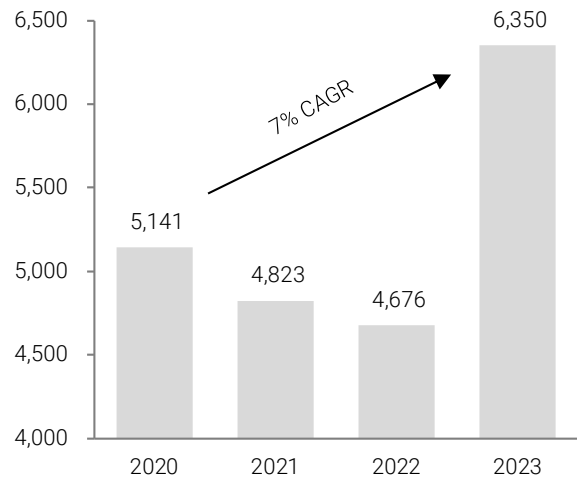
Exhibit 22: Syrma’s revenue split by geography, March fiscal year-ends, 2020-23 (%)



Source: Company, Kotak Institutional Equities

**As a result, exports have seen modest 7% CAGR in revenue growth over FY2020-23**

Exhibit 23: Syrma’s export revenue, March fiscal year-ends, 2020-23 (Rs mn)



Source: Company, Kotak Institutional Equities

**Renewed focus on design vertical to boost ODM sales and increase value addition**

Syrma has seen 33% CAGR in revenue growth over FY2020-23, driven primarily by a shift toward the consumer segment and higher contribution from built-to-print business. As a result, the contribution of own design products, i.e. ODM sales for Syrma, has fallen from 43% in FY2020 to 18% in FY2023.

In terms of margins, we see the impact of the shift away from ODM business leading to gross margins declining to 25% in FY2023 versus 43% in FY2020 (EBITDA margins have declined to 9.2% in FY2023 versus 17% in FY2020). In order to address this margin decline and increase the wallet share with the end customers, Syrma has renewed its focus on its design offerings.

SYRMA carved out the design & development center and housed it in a 100% owned subsidiary Syrma SGS Engineering and Technology Services (SYRMA SETS) in April 2023. SYRMA SETS is now being headed by the CEO of erstwhile SYRMA (i.e., before the merger of Syrma, SGS and Perfect ID), Dr Sreeram Srinivasan.

We currently are not baking in additional margin benefit from the renewed focus on ODM and see this impact only over the medium term. Should Syrma increase its ODM mix back to 25-30% level, then this could provide additional upside to our margin and return ratio estimates.

# 4

## **Key risks: Improving margin trajectory and deteriorating working capital**

Syrma's performance can come in ahead of our expectation, driven by sharper-than-expected improvement in margins aided by higher contribution from exports and ODM businesses. We expect strong momentum in revenue growth aided by consumer and auto segments, which will lead to improvement in working capital. Hence, any slowdown in these two segments can lead to us revising our revenue estimates lower and increasing our working capital estimates.

### **Higher ODM and design mix to drive improvement**

We expect Syrma margins to remain range-bound in 7.3-8% over FY2024-26E versus ~9.3% in FY2021 and FY2022, given the mix shift toward consumer and automobile segments, which have lower margins. However, if Syrma is able to increase its share of design-led revenue or increase the ODM mix, then margins could come in ahead of our expectation.

### **Deterioration in working capital**

Syrma has the best working capital cycle in its peer set due to higher exposure to the consumer segment, which typically has the shortest working capital cycle. We expect Syrma's working capital cycle to be around 70 days in FY2026 versus 116 days in FY2022. However, any adverse change in supply chain leading to higher inventory levels or change in business mix toward sectors having higher working capital cycle could lead to elevated working capital days and potentially lower RoCE for Syrma.

### **Value-accretive acquisitions**

Syrma has made various strategic acquisitions and remains opportunistic for inorganic growth—Tovya Automation (IoT space), SGS Tekniks (to increase focus on India business), Perfect Id (enhancement of RFID capabilities) and Johari Digital (medical devices segment). Hence, any further value-accretive acquisitions either to enhance capabilities in new sectors or increase wallet share in existing market could lead to us potentially revising our estimates upwards.

# 5

## Financials: Expect 33% CAGR in PAT during FY2023-26E

We expect Syrma’s revenue to grow at 40% CAGR over FY2023-26E led by the consumer, auto and industrial segments. With order book in 9MFY24 at 3.75X levels of FY2022, we see strong near-term visibility. However, most of this growth is driven by lower-margin build-to-print orders from the consumer segment; hence, we expect the unfavorable mix to keep margins under pressure (34% EBITDA CAGR over FY2023-26E). Overall, we are baking in 33% PAT CAGR as EBITDA growth is aided by stable other income.

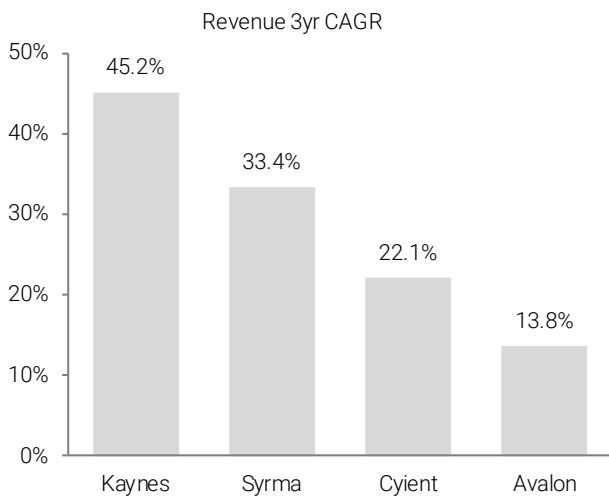
### Consumer and auto sectors to be key near-term growth drivers

Syrma has seen a healthy 33% CAGR in revenue growth (pro forma basis), driven primarily by the domestic segment (57% CAGR) with all verticals (ex-healthcare) seeing strong growth, consumer and auto segments having been the key growth drivers. Further, the order book momentum for Syrma continues to be strong, providing ample near-term visibility (order book at the end of 9MFY24 at Rs45 bn was 3.75X FY2022 levels).

We expect growth to be primarily driven by three key segments—consumer (53% CAGR), auto (50% CAGR) and industrial (27% CAGR). A turnaround in healthcare operations and pick-up in the railway segment would be longer-term opportunity. As a result, we expect Syrma to post robust revenue growth of 40% CAGR over FY2023-26E.

### Syrma has seen a healthy 33% revenue CAGR over FY2020-23, driven by consumer and auto segments

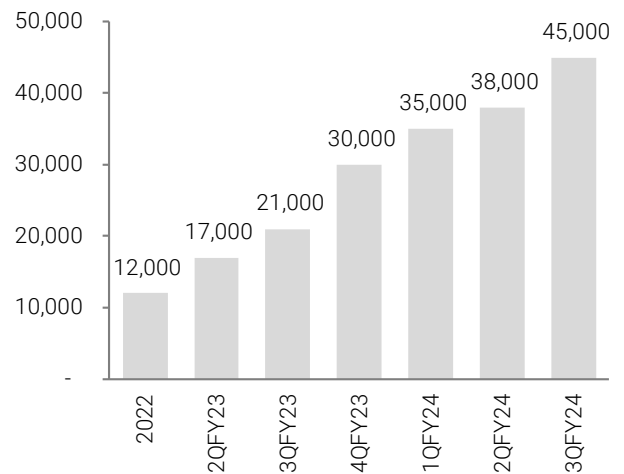
Exhibit 24: Comparison of revenue CAGR for B2B EMS players, March fiscal year-ends, 2023-26E



Source: Companies, Kotak Institutional Equities

### However, with 9MFY24 order book at 3.75X FY2022 level, near-term revenue visibility remains strong

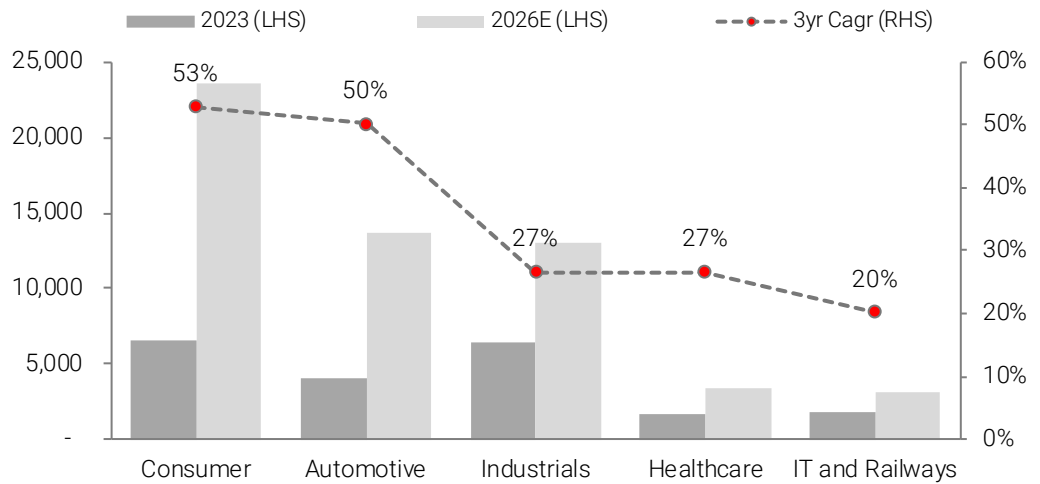
Exhibit 25: Syrma’s order book, March fiscal year-ends, 2022-9MFY24 (Rs mn)



Source: Companies, Kotak Institutional Equities

**We expect 40% revenue CAGR driven by consumer (53% CAGR) and auto (50% CAGR) segments**

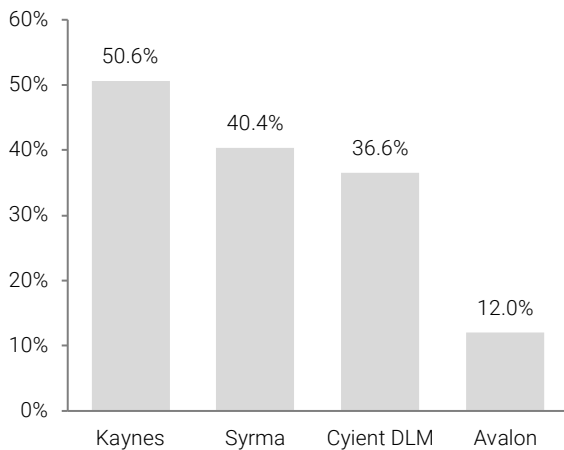
**Exhibit 26: Syrma's revenue (Rs mn) and revenue CAGR trends, March fiscal year-ends, 2023-26E**



Source: Company, Kotak Institutional Equities estimates

**We see strong near-term growth for Syrma led by consumer and auto segments...**

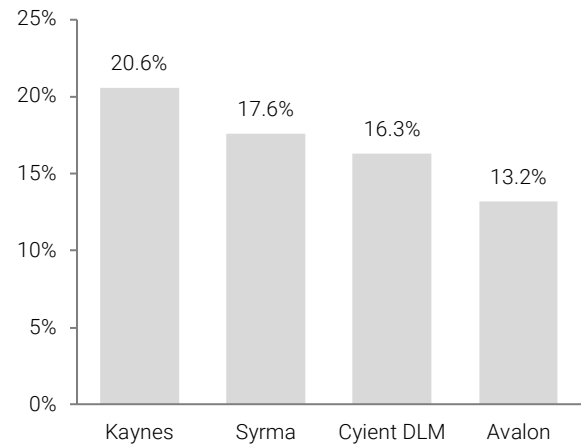
**Exhibit 27: Comparison of revenue CAGR for B2B EMS players, March fiscal year-ends, 2023-26E (%)**



Source: Company, Kotak Institutional Equities estimates

**...with medium-term growth continuing to be ahead of globally exposed peers**

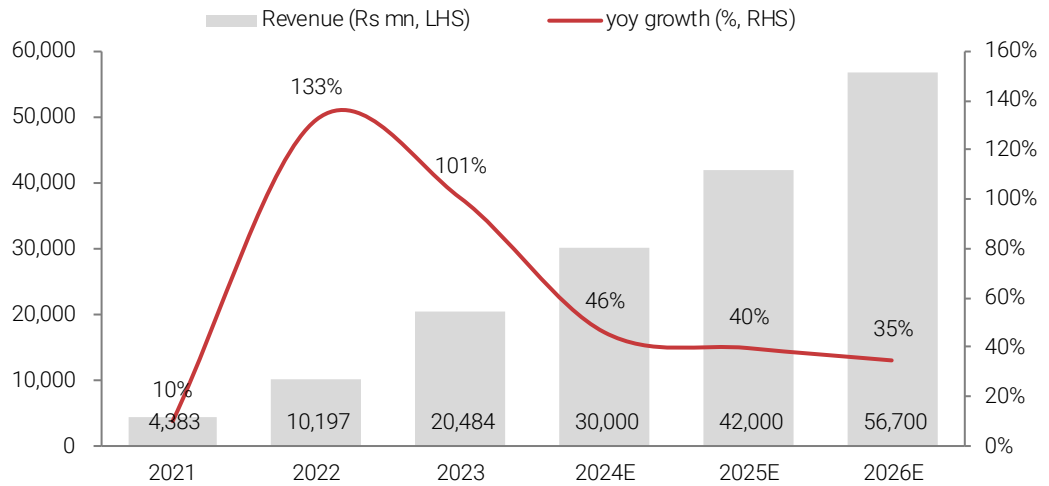
**Exhibit 28: Comparison of revenue CAGR for B2B EMS players, March fiscal year-ends, 2023-45E (%)**



Source: Company, Kotak Institutional Equities estimates

**Overall, we are baking in 40% revenue CAGR over the next three years, with exports having a potential to provide further revenue upside**

**Exhibit 29: Syrma’s revenue (Rs mn) and revenue growth (%) trends, March fiscal year-ends, 2021-26E**



Source: Company, Kotak Institutional Equities estimates

**Margins to remain under pressure**

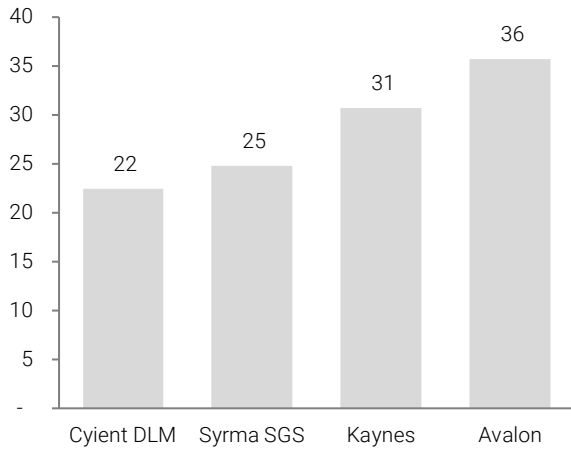
Historically, among its peer set, Syrma has EBITDA margins at the lower end of the range driven by lower contribution from box build (indicating slightly lower level of backward integration) and shift of business more toward the domestic market.

Margins for Syrma have been on a downward trajectory over the past couple of years; this has been driven primarily by a decline in gross margin, offsetting most of the gains from operating leverage. Syrma’s gross margin decline from 36% in FY2021 to 25% in FY2023 has been primarily led by a mix shift toward more build-to-print contracts. Among segments, we see that business mix has primarily moved from industrial segment (38% of sales in FY2020 to 31% of sales in FY2023) to consumer segment (23% of sale in FY2020 to 32% of sales in FY2023). With incremental order wins expected to be driven more by the consumer segment (consumer segment expected to contribute 40%+ of sales in FY2024/25), we expect margins to remain under pressure for Syrma. The consumer segment mix has shifted toward more built-to-print high and flexible volume products; as a result, segmental gross margins are now at 16% in 1HFY24 versus 50% in FY2020 and would continue to be a drag on margins over the medium term.

Syrma has indicated that it wants to increase the contribution of ODM products from 18% as of FY2023 to mid-twenties over the medium term. Further recovery in export markets (especially healthcare) could aid margins over the medium term. However, we expect the impact of these changes to be only gradual and expect EBITDA margins to reach 8% levels by FY2026 on the back of operating leverage and some pick-up in ODM/export orders; however, our estimates are still 130/120 bps lower than FY2022/23 levels, given the mix shift toward consumer and autos.

**Syrma’s gross margin is at the lower end of its peer set, driven by contribution from consumer and lower box build**

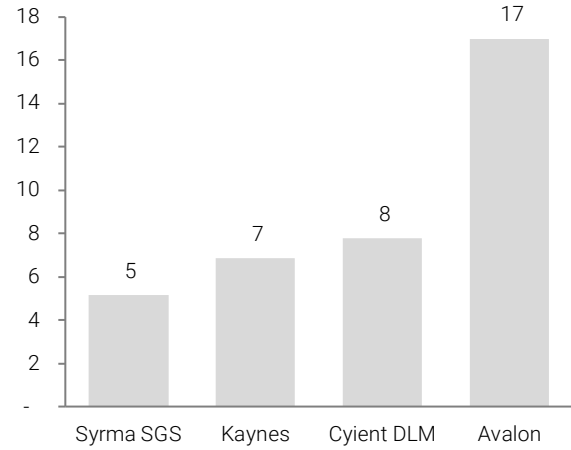
Exhibit 30: Comparison of gross margin for B2B EMS players, March fiscal year-end, 2023 (%)



Source: Company, Kotak Institutional Equities

**However, with a higher mix of contract workforce, Syrma has been able to control its employee expenses**

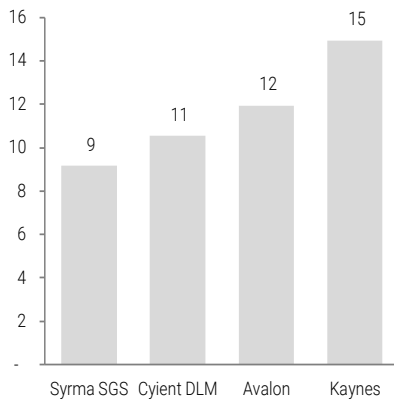
Exhibit 31: Comparison of employee costs as (%) of sales for B2B EMS players, March fiscal year-end, 2023



Source: Company, Kotak Institutional Equities

**Overall weak gross margin, higher other expenses drive Syrma’s low EBITDA margin...**

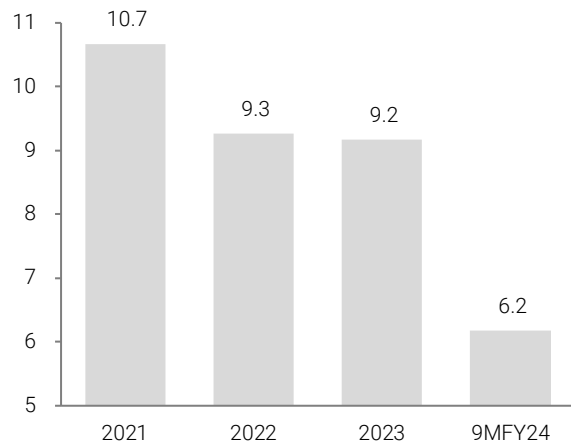
Exhibit 32: Comparison of EBITDA margin for B2B EMS players, March fiscal year-end, 2023 (%)



Source: Company, Kotak Institutional Equities

**...which has further deteriorated in 9MFY24 due to increasing business shifting toward consumer vertical**

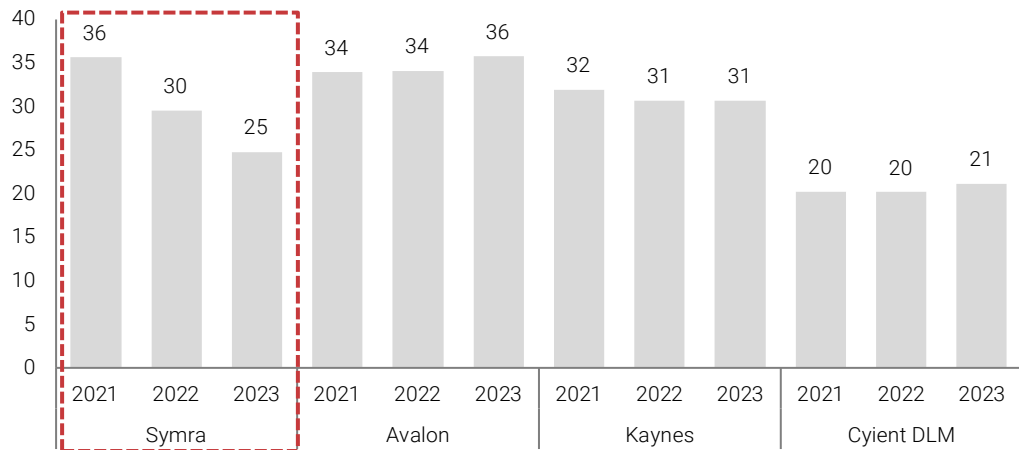
Exhibit 33: Syrma’s EBITDA margin trends, March fiscal year-ends, 2021-9MFY24 (%)



Source: Company, Kotak Institutional Equities

**Syrma has seen a steady decline in gross margins (unlike its peers)**

**Exhibit 34: Comparison of gross margin for B2B EMS players, March fiscal year-ends, 2021-23 (%)**



Source: Company, Kotak Institutional Equities

**Syrma’s gross margin decline is driven by incremental lower-margin consumer segment orders**

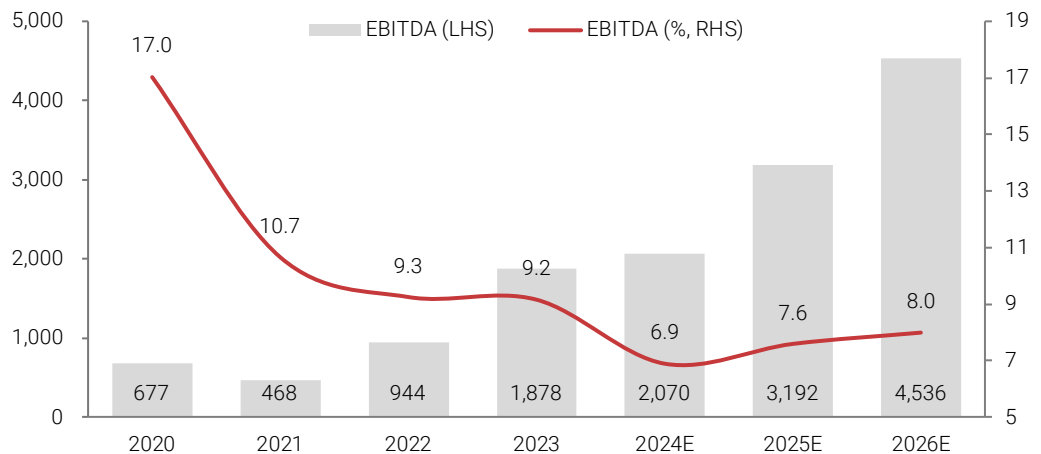
**Exhibit 35: Syrma’s gross margin trends, March fiscal year-ends, 2020-1HFY24 (%)**

Gross margin %	2020	2021	2022	2023	1HFY24
Automotive	18%	13%	20%	22%	20%
Consumer	53%	42%	38%	17%	16%
Healthcare	39%	37%	49%	54%	47%
Industrials	35%	31%	31%	30%	30%
IT and Railways	15%	8%	5%	10%	10%

Source: Company, Kotak Institutional Equities

**We expect gradual improvement in EBITDA margins over FY2024-2026E; however, we expect margins to remain below historical range (EBITDA CAGR of 34%)**

**Exhibit 36: Syrma’s EBITDA (Rs mn) and EBITDA margin (%) trends, March fiscal year-ends, 2020-26E**



Source: Company, Kotak Institutional Equities estimates

Exhibit 37: P&L of Syrma SGS (consolidated), March fiscal year-ends 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E	CAGR 2023-26E (%)
<b>Net sales</b>	<b>3,971</b>	<b>4,383</b>	<b>10,197</b>	<b>20,484</b>	<b>30,000</b>	<b>42,000</b>	<b>56,700</b>	<b>74,925</b>	<b>40.4</b>
Cost of material	(2,273)	(2,821)	(7,185)	(15,405)	(23,250)	(32,424)	(43,546)	(57,542)	
Employee expense	(264)	(286)	(597)	(1,060)	(1,410)	(1,974)	(2,665)	(3,521)	
Other expenses	(757)	(808)	(1,470)	(2,142)	(3,270)	(4,410)	(5,954)	(7,867)	
<b>Total expenses</b>	<b>(3,294)</b>	<b>(3,915)</b>	<b>(9,253)</b>	<b>(18,606)</b>	<b>(27,930)</b>	<b>(38,808)</b>	<b>(52,164)</b>	<b>(68,931)</b>	
<b>EBITDA</b>	<b>677</b>	<b>468</b>	<b>944</b>	<b>1,878</b>	<b>2,070</b>	<b>3,192</b>	<b>4,536</b>	<b>5,994</b>	<b>34.2</b>
Depreciation	(97)	(121)	(194)	(312)	(496)	(510)	(319)	(319)	<b>0.8</b>
<b>EBIT</b>	<b>580</b>	<b>347</b>	<b>750</b>	<b>1,566</b>	<b>1,574</b>	<b>2,682</b>	<b>4,217</b>	<b>5,675</b>	
Other income	78	62	123	437	507	322	287	206	
Interest	(80)	(45)	(64)	(216)	(319)	(319)	(319)	(319)	<b>13.9</b>
<b>Profit before tax</b>	<b>578</b>	<b>363</b>	<b>809</b>	<b>1,787</b>	<b>1,762</b>	<b>2,685</b>	<b>3,887</b>	<b>5,131</b>	<b>29.6</b>
Tax expense	84	77	268	556	449	685	991	1,308	
<b>Adjusted PAT</b>	<b>495</b>	<b>320</b>	<b>567</b>	<b>1,231</b>	<b>1,312</b>	<b>2,000</b>	<b>2,896</b>	<b>3,823</b>	<b>33.0</b>
<b>Reported PAT</b>	<b>439</b>	<b>320</b>	<b>567</b>	<b>1,231</b>	<b>1,299</b>	<b>2,000</b>	<b>2,896</b>	<b>3,823</b>	
<b>Adjusted EPS (Rs)</b>	<b>2.8</b>	<b>1.8</b>	<b>3.2</b>	<b>7.0</b>	<b>7.4</b>	<b>11.4</b>	<b>16.4</b>	<b>21.7</b>	<b>33.0</b>
<b>Key ratios</b>									
Raw material expense/sales	57.2	64.4	70.5	75.2	77.5	77.2	76.8	76.8	
Employee expense/sales	6.6	6.5	5.9	5.2	4.7	4.7	4.7	4.7	
Other expenses/sales	19.1	18.4	14.4	10.5	10.9	10.5	10.5	10.5	
<b>EBITDA margin (%)</b>	<b>17.0</b>	<b>10.7</b>	<b>9.3</b>	<b>9.2</b>	<b>6.9</b>	<b>7.6</b>	<b>8.0</b>	<b>8.0</b>	
Effective tax rate (%)	14.4	21.2	33.1	31.1	25.5	25.5	25.5	25.5	
Adjusted PAT margin (%)	12.5	7.3	5.6	6.0	4.4	4.8	5.1	5.1	
<b>Yoy growth (%)</b>									
Net sales		10.4	132.7	100.9	46.5	40.0	35.0	32.1	
EBITDA		(30.9)	101.9	98.9	10.2	54.2	42.1	32.1	
Adjusted PAT		(27.0)	77.0	117.2	5.5	54.0	44.8	32.0	

Source: Company, Kotak Institutional Equities estimates

## Balance sheet: Balancing growth with working capital holds the key

### Working capital: Gradual improvement driven by favorable mix

Syrma's working capital days (NWC as days of sales) are lower than most of its peers excluding Cyient DLM, which receives customer advances from domestic customers such as BEL. However, even Syrma has seen a trend of increasing working capital days over the past four years—from 71 days in FY2020 to 90 days in FY2023. A major part of this increase has been driven by global supply-chain disruptions in the electronic industry leading to higher inventory (common across players).

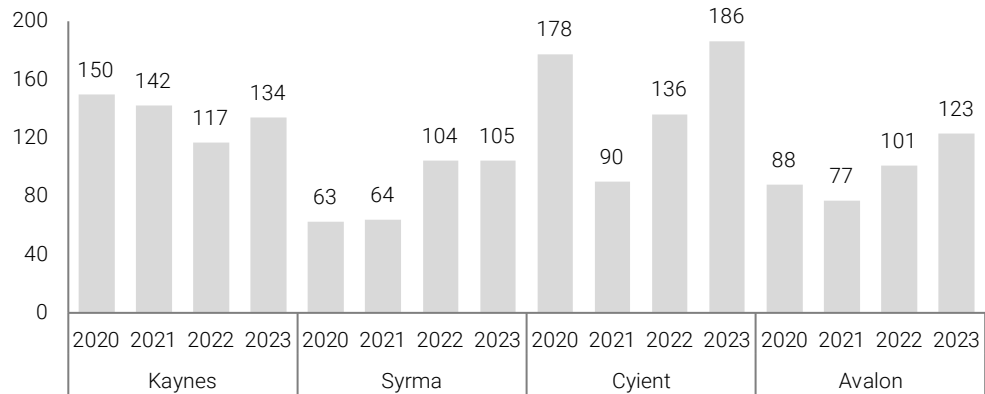
However, looking ahead, we expect a reduction in working capital requirement for Syrma for the next couple of years. Syrma's revenue mix has changed over the past couple of years, which we expect to continue in coming years as well. The contribution of industrial segment is expected to decrease whereas consumer segment is expected to contribute more than 40% of revenue by FY2026E.

Among all the sectors, consumer segment that has higher volumes and lower degree of backward integration tends to have lower margin and short working capital cycle (can range from 30 days for very high volume and 60 days+ for flexible volume products). Thus, lower working capital cycle will also aid in Syrma maintaining its return profile despite a decrease in EBITDA margins.

A pick-up in export could also help in keeping working capital in check. Should Syrma's revenue mix shift toward higher ODM and higher level of backward integration, we could see a pick-up in working capital requirements, which offsets some of the impacts of a higher margin.

**Syrma working capital cycle is lower than most peers (ex-Cyient DLM) due to favorable industry mix (consumer and auto)**

Exhibit 38: Operating working capital as days of sales for B2B EMS players, March fiscal year-ends, 2020-23



Source: Company, Kotak Institutional Equities

**We expect a 20 days reduction in working capital, driven by mix shift toward consumer vertical**

Exhibit 39: Operating working capital as days of sales for Syrma SGS, March fiscal year-ends, 2020-26E

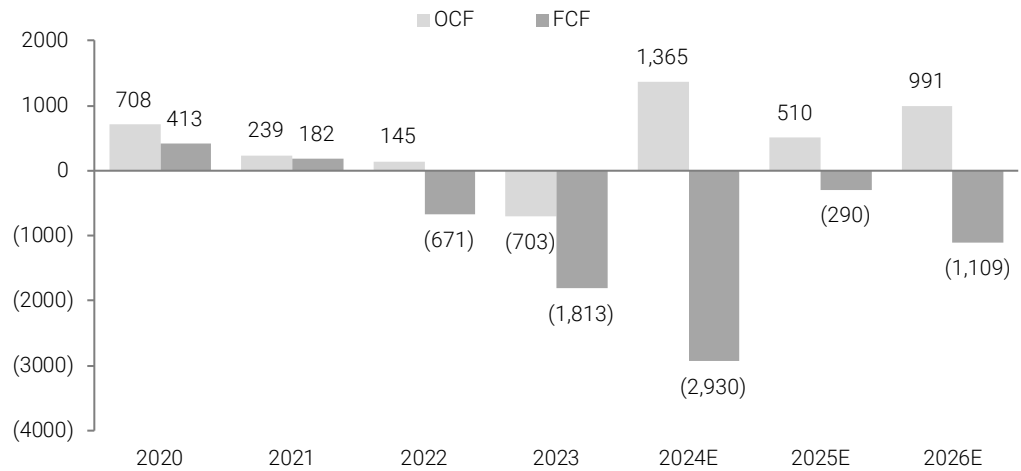
	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	63	64	104	105	100	100	100
Receivable as days of sales	107	106	97	72	70	70	70
Payable as days of sales	98	96	86	87	100	100	100
NWC as days of sales	71	75	116	90	70	70	70

Source: Company, Kotak Institutional Equities estimates

Improvement in working capital cycle from 90 days in FY2023 to 70 days in FY2024E, driven by a mix shift toward consumer-oriented business, should help Syrma generate positive operating cash flow in FY2024-26E (versus negative cash flow in FY2023). However, cash outgo for the Johari acquisition along with capacity build in Southern India and Noida would keep free cash flow negative at ~Rs3 bn.

**Lowering working capital levels to lead to positive OCF; however, higher capex and acquisitions will impact FCF generation**

**Exhibit 40: Syrma’s operating cash flow and free cash flow, March fiscal year-ends, 2020-26E (Rs mn)**



Source: Company, Kotak Institutional Equities estimates

**Capex:** Syrma is currently looking at expanding its capacity in line with the increased revenue outlook. Syrma has recently acquired a 16-acre plot from SIPCOT in Krishnagiri district and will be undertaking further expansion in Chennai. In addition to this, the company has signed a lease for a 100k sq. ft facility in Noida and has plans to make a facility dedicated to the high-volume consumer-oriented business. As a result, we expect Syrma to continue to undertake capex over the next couple of year and bake in Rs7 bn in capex over FY2023-26E (incremental capex assumption is based on gross FATR to be in the 7X range in line with the industry). Our capex estimate includes acquisition-related payments as well.

**Leverage:** Despite the company undertaking capex, we don’t see leverage as a concern for Syrma and expect debt:equity ratio of 0.2X in FY2026E. Managing working capital levels and not undertaking short-term debt would be key for Syrma to keep leverage in check, in our view.

Exhibit 41: Balance sheet of Syrma SGS (consolidated), March fiscal year-ends, 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Shareholders funds</b>	<b>1,017</b>	<b>2,416</b>	<b>5,721</b>	<b>15,403</b>	<b>16,702</b>	<b>18,702</b>	<b>21,598</b>	<b>25,421</b>
Equity share capital	7	7	1,376	1,768	1,768	1,768	1,768	1,768
Reserves and surplus	1,010	2,408	4,344	13,635	14,934	16,934	19,830	23,653
Loan funds	774	561	1,942	3,468	3,468	3,468	3,468	3,468
Deferred tax liabilities	–	2	124	138	138	138	138	138
Minority Interest and other liabilities	77	80	430	402	402	402	402	402
<b>Total sources of funds</b>	<b>1,868</b>	<b>3,060</b>	<b>8,217</b>	<b>19,411</b>	<b>20,709</b>	<b>22,710</b>	<b>25,606</b>	<b>29,429</b>
Net block	779	751	2,340	3,837	7,636	7,926	9,410	11,264
CWIP	66	50	633	472	472	472	472	472
<b>Net fixed assets</b>	<b>846</b>	<b>800</b>	<b>2,973</b>	<b>4,310</b>	<b>8,108</b>	<b>8,399</b>	<b>9,882</b>	<b>11,736</b>
Investments + Goodwill	182	1,185	1,557	8,838	5,338	1,838	1,838	1,838
Cash and bank balances	352	302	369	544	795	3,685	2,257	703
<b>Current assets</b>	<b>2,088</b>	<b>2,346</b>	<b>6,643</b>	<b>11,720</b>	<b>16,243</b>	<b>22,409</b>	<b>29,962</b>	<b>39,326</b>
Inventories	682	771	2,913	5,874	8,219	11,507	15,534	20,527
Sundry debtors	1,164	1,279	2,722	4,032	5,753	8,055	10,874	14,369
Loans and advances	37	55	437	828	828	828	828	828
Other current assets	205	242	571	985	1,442	2,019	2,725	3,601
<b>Current liabilities</b>	<b>1,599</b>	<b>1,574</b>	<b>3,325</b>	<b>6,001</b>	<b>9,774</b>	<b>13,621</b>	<b>18,333</b>	<b>24,175</b>
Trade payables	1,068	1,148	2,405	4,881	8,219	11,507	15,534	20,527
Other current liabilities	411	378	880	1,079	1,514	2,072	2,757	3,606
Provisions	120	48	41	42	42	42	42	42
<b>Net current assets (excl. cash)</b>	<b>489</b>	<b>772</b>	<b>3,318</b>	<b>5,719</b>	<b>6,468</b>	<b>8,788</b>	<b>11,629</b>	<b>15,151</b>
<b>Total application of funds</b>	<b>1,868</b>	<b>3,060</b>	<b>8,217</b>	<b>19,411</b>	<b>20,709</b>	<b>22,710</b>	<b>25,606</b>	<b>29,429</b>
<b>Key ratios</b>								
Debt / equity (X)	0.8	0.2	0.3	0.2	0.2	0.2	0.2	0.1
Net debt / equity (incl. acceptances) (X)	0.3	(0.4)	0.1	(0.4)	(0.1)	(0.1)	(0.0)	0.1
Gross FATR (X)	4.5	4.6	3.3	4.2	3.3	4.2	4.7	5.1
BVPS (Rs)	6	14	33	88	95	106	123	144
RoAE (%)	43.1	18.7	13.7	11.6	8.1	11.3	14.4	16.2
RoACE (%)	27.7	11.5	9.3	8.1	6.0	9.4	12.3	14.5
<b>Working capital as days of sales</b>								
<b>Current assets</b>	<b>193</b>	<b>193</b>	<b>223</b>	<b>195</b>	<b>189</b>	<b>188</b>	<b>188</b>	<b>188</b>
Inventories	63	64	104	105	100	100	100	100
Sundry debtors	107	106	97	72	70	70	70	70
Loans and advances	4	2	1	1	1	1	1	0
Other current assets	19	20	20	18	18	18	18	18
<b>Current liabilities</b>	<b>145</b>	<b>131</b>	<b>118</b>	<b>105</b>	<b>118</b>	<b>117</b>	<b>117</b>	<b>117</b>
Trade payables	98	96	86	87	100	100	100	100
Other current liabilities	36	31	30	17	17	17	17	17
Provisions	11	4	1	1	1	0	0	0
<b>Net current assets (excl. cash) as days</b>	<b>48</b>	<b>62</b>	<b>106</b>	<b>91</b>	<b>71</b>	<b>71</b>	<b>71</b>	<b>71</b>

Source: Company, Kotak Institutional Equities estimates

**Cash flow:** Improvement in working capital cycle from 90 days in FY2023 to 70 days in FY2024E, driven by a mix shift toward consumer-oriented business, should help Syrma generate positive operating cash flow in FY2024-26E (versus negative cash flow in FY2023). However, cash outgo for the Johari acquisition along with capacity build in Southern India and Noida would keep free cash flow negative at ~Rs4 bn.

Exhibit 42: Cash flow statement of Syrma SGS (consolidated), March fiscal year-ends, 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Cash flow from operating activities</b>								
Net profit before tax	522	363	809	1,787	1,762	2,685	3,887	5,131
Add: Depreciation	97	121	194	312	496	510	617	749
Add: Net interest	80	45	64	216	319	319	319	319
Others	27	(26)	(31)	(321)	(14)	–	–	–
<b>Op. Profit before Working Capital Changes</b>	<b>726</b>	<b>503</b>	<b>1,036</b>	<b>1,994</b>	<b>2,564</b>	<b>3,514</b>	<b>4,823</b>	<b>6,200</b>
Changes in Working capital	48	(164)	(659)	(2,299)	(750)	(2,319)	(2,841)	(3,522)
Taxes	(66)	(100)	(232)	(397)	(449)	(685)	(991)	(1,308)
<b>Cash flow from operating activities</b>	<b>708</b>	<b>239</b>	<b>145</b>	<b>(703)</b>	<b>1,365</b>	<b>510</b>	<b>991</b>	<b>1,369</b>
<b>Cash flow from investing activities</b>								
Capex	(296)	(57)	(817)	(1,110)	(4,295)	(800)	(2,100)	(2,604)
Investments	–	–	(25)	(74)	–	–	–	–
Others	5	(887)	(3,095)	(7,961)	3,500	3,500	–	–
<b>Cash flow from investing activities</b>	<b>(291)</b>	<b>(944)</b>	<b>(3,936)</b>	<b>(9,145)</b>	<b>(795)</b>	<b>2,700</b>	<b>(2,100)</b>	<b>(2,604)</b>
<b>Cash flow from financing activities</b>								
Debt	(128)	(232)	747	1,478	–	–	–	–
Equity	(125)	1,034	2,715	8,760	–	–	–	–
Interest	–	(52)	(57)	(192)	(319)	(319)	(319)	(319)
Dividend	–	–	–	–	–	–	–	–
Others	47	(70)	183	(78)	–	–	–	–
<b>Cash flow from financing activities</b>	<b>(206)</b>	<b>680</b>	<b>3,587</b>	<b>9,967</b>	<b>(319)</b>	<b>(319)</b>	<b>(319)</b>	<b>(319)</b>
<b>FCF</b>	<b>413</b>	<b>182</b>	<b>(671)</b>	<b>(1,813)</b>	<b>(2,930)</b>	<b>(290)</b>	<b>(1,109)</b>	<b>(1,235)</b>
<b>Total cash flow</b>	<b>211</b>	<b>(26)</b>	<b>(204)</b>	<b>120</b>	<b>250</b>	<b>2,891</b>	<b>(1,428)</b>	<b>(1,554)</b>
Opening cash	61	308	280	334	465	715	3,606	2,178
Other bank balances	35	(3)	258	11	–	–	–	–
Closing cash	308	280	334	465	715	3,606	2,178	624

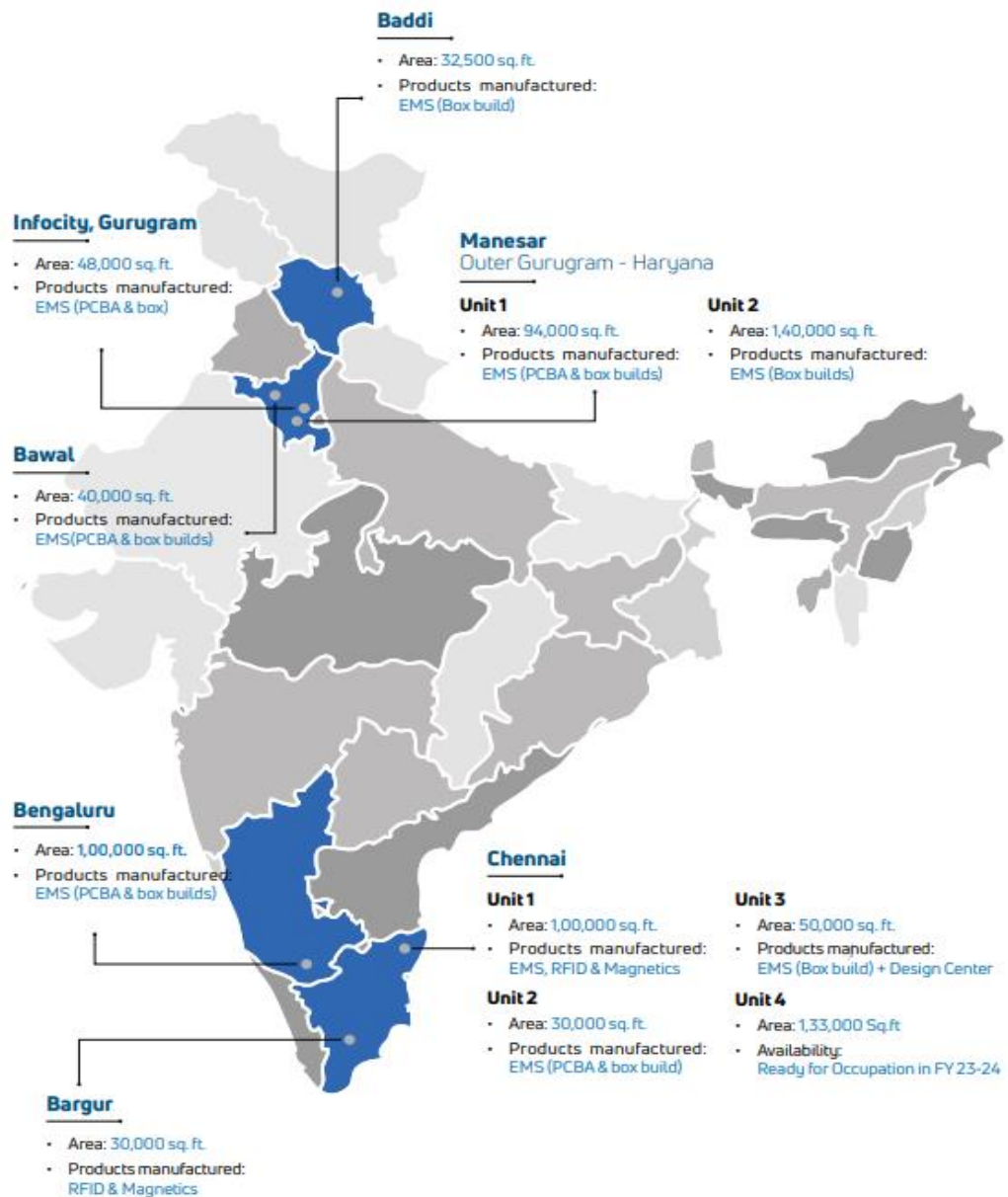
Source: Kotak Institutional Equities estimates, Company

# A1

## Appendix 1: Company profile

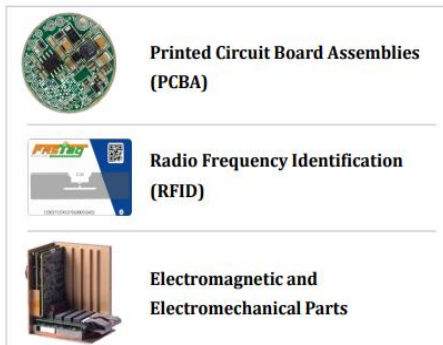
Syrma SGS was formed in 2021 when Syрма (founded in 2006) acquired SGS Teknics (incorporated in 1990). Syрма historically was an export-focused company while SGS Teknics had a strong domestic presence. Today Syрма SGS is a technology-focused engineering and design company engaged in turnkey electronics manufacturing services for diverse industries, including industrial appliances, automotive, consumer, healthcare and IT industry. Syрма SGS has evolved to provide integrated services and solutions to OEMs, from the initial product concept stage to volume production through concept co-creation and product realization. The company focuses on high-mix products with flexible production volumes. Syрма SGS is one of India’s leading PCBA manufacturers, and it is also among the top key global manufacturers of custom RFID tags.

Exhibit 43: Syрма SGS manufacturing footprint, March fiscal year-end, 2023



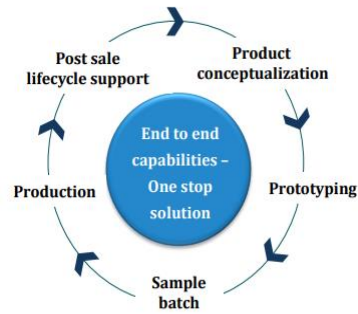
Source: Company data, Kotak Institutional Equities

**Exhibit 44: Syrma SGS product portfolio, March fiscal year-end, 2023**



Source: Company data, Kotak Institutional Equities

**Exhibit 45: Syrma SGS service offerings, March fiscal year-end, 2023**



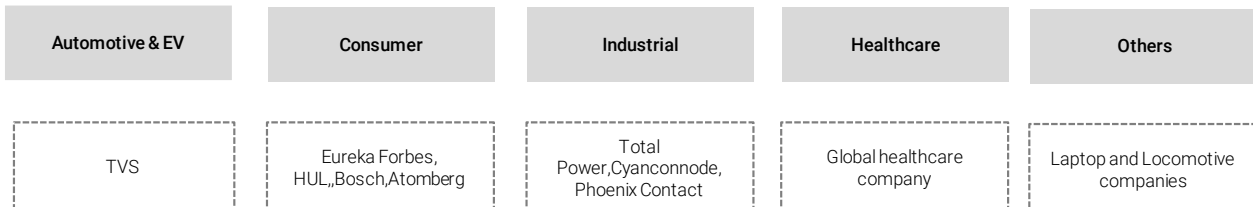
Source: Company data, Kotak Institutional Equities

**Exhibit 46: Syrma SGS key milestones, March fiscal year-end, 2023**

Year	Milestone
2006	Set up manufacturing unit in MEPZ-SEZ, Chennai
2010	Set up manufacturing facility in Bargur
2012	Commenced manufacturing beacons for vehicles
2014	Set up first research & development department for ODM in India
2016	Commenced manufacturing RFID tags
2018	Set up manufacturing facility in Bawal
2018	Set up 'zone of autonomous creation' to support the provision of rapid prototyping
2018	Set up another manufacturing unit in MEPZ-SEZ, Chennai
2019	Commenced offering repair and rework services
2020	Commenced the manufacture of controllers for EV battery management systems
2020	Investment in Syrma by South Asia Growth Fund II Holdings LLC and South Asia
2021	Acquired SGS Teknics Manufacturing Pvt Ltd
2021	Acquired 75% of the issued and paid-up share capital of RFID player Perfect ID
2023	Acquired Johari Digital Healthcare Limited

Source: Company data, Kotak Institutional Equities

**Exhibit 47: Syrma SGS: Key customers across end markets, March fiscal year-end, 2023**



Source: Company data, Kotak Institutional Equities

## A2

## Appendix 2: Key management personnel

Exhibit 48: Brief background of key management personnel at Syrma SGS

Name	Position	Remarks
Sandeep Tandon	Executive Chairman	Sandeep Tandon is the Executive Chairman of the Company. He holds a bachelor of science in electrical engineering from the University of Southern California and has completed the YPO Presidents' Program from the Harvard Business School. He has approximately 18 years of experience in the electronics manufacturing sector. He has previously been associated with Celetronix Inc., USA.
Jasbir S. Gujral	Managing Director	Jasbir Singh Gujral is the Managing Director of the Company. He holds a bachelor of commerce (honours) from the University of Delhi. He is a fellow member of the Institute of Chartered Accountants of India. He was a director of SGS Teknics Manufacturing Private Limited
Krishna Kumar Pant	Co-founder & Head, Domestic Business	Krishna Kumar Pant heads the domestic business operations. He has 39+ years of experience in Marketing and Management and is one of the founding members of of SGS Teknics Private Limited.
Ranjit Singh	Co-founder & Head, International Business	Ranjit Singh heads the international business operations. He has 40+ years of experience in EMS industry and is one of the founding members of of SGS Teknics Private Limited.
Sreeram Srinivasan	CEO, SETS	Sreeram Srinivasan is the chief executive officer of Syrma and has been associated with the company since 2015. He has over 20 years of experience. Prior to joining Syrma he has worked with Saint Gobain Sekurit India Limited, MTAR Technologies Private Limited, Shanti Gears Limited and Rane Engine Valves Limited.
Bijay Agarwal	Chief Financial Officer	Bijay Kumar Agrawal is the chief financial officer of the company since Oct 2021. He holds a master's degree in business administration. He has approximately 16 years of experience in finance and business strategy. Before his association with Syrma, he has previously been associated with Motorola India Private Limited, Times Internet Limited, Dalmia Bharat Limited and Omax Autos Limited.

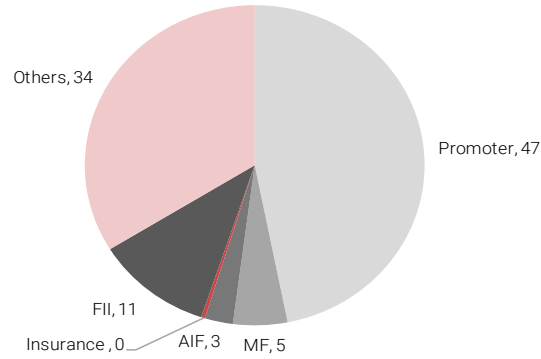
Source: Company, Kotak Institutional Equities

# A3

## Appendix 3: Shareholding pattern

The promoter holding of 47% is ~40% holding of the Tandon family and ~7% holding of the Managing Director (Jasbir S Gujral). Krishna Kumar Pant (~6.95%), Ranjeet Singh Lonial (~6.86%) and Sanjiv Narayan (~5.96%), all co-founders of SGS Teknics, are classified as individual shareholders (non-promoter).

Exhibit 49: Shareholding pattern of SYRMA SGS Technology for the period ending December 2023 (%)



Source: BSE, Kotak Institutional Equities

# Avalon Technologies (AVALON)

Electronic Manufacturing Services

**SELL**

CMP(₹): 520

Fair Value(₹): 410

Sector View: **Cautious**

NIFTY-50: 22,519

April 12, 2024

## Not out of the woods yet

Avalon is a vertically integrated EMS player, with end-to-end capabilities in delivering box-build solutions. Avalon's operations have been impacted by the ongoing slowdown in the US. A modest order inflow growth over the past nine months provides limited visibility of an immediate turnaround. With US operations weak, the impact of negative operating leverage and an unfavorable mix will keep margins under pressure and working capital elevated, in our view. Initiate with SELL and an FV of Rs410 (21% downside).

### Initiate coverage with SELL; Fair Value of Rs410

We initiate coverage on Avalon Technologies with a SELL rating and a DCF-based FV of Rs410, implying 30X P/E on March 2026E earnings. Our FV implies (1) a revenue CAGR of 18% over FY2023-33E, (2) average EBITDA margin at 10.6% (versus 11% over FY2021-23) and EBITDA CAGR of 19% and (3) WACC of 12% and terminal growth of 4%. The CMP factors in a quick turnaround in the US operations, driving growth and margins in line with peers, which we see limited visibility currently.

### Vertically integrated EMS play exposed to global markets & new-age industries

At the heart of Avalon's competitive positioning is its (1) vertically integrated business model, which helps the company have the highest share of box-build revenue and industry-leading gross margins, (2) increased focus on new age industries such as solar, hydrogen and home electrification, which could see strong growth in the coming years and (3) global manufacturing set-up, which helps the company cater to the US market with an Indian cost structure. While these factors will be key to Avalon's medium-term growth strategy. Near-term destocking by key US customers has led to a decline in US revenue and margins. The environment will remain challenging for Avalon until we see a turnaround in US operations. The pickup in order inflow, driven by US end-customers and qoq recovery in the execution of legacy US order backlog where many orders remain unexecuted in FY2024, will be data points we would be tracking to see signs of a pickup in US business activity for Avalon.

### Financials: We expect 19% earnings CAGR over FY2023-26E

We expect Avalon's revenue to see a CAGR of 12% over FY2023-26E, led by the mobility and communication segments and a rebound in clean energy after a weak FY2024E. However, modest order inflow growth in the past nine months provides limited visibility in the near term. With US operations weak, the impact of negative operating leverage will keep margins under pressure, in our view. We are baking in a 9% EBITDA CAGR and a 19% PAT CAGR for FY2023-26E.

### Risks: Sharp turnaround in US operations; ramp-up of India operations

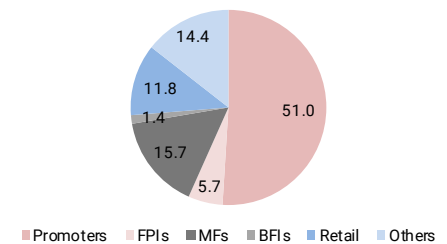
Sharp turnaround in US operations, aiding margin performance and reducing inventory overhang, is a key risk to our thesis. A strong ramp-up of India operations could provide an additional upside to our revenue estimates.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	520/410/SELL
52-week range (Rs) (high-low)	732-347
Mcap (bn) (Rs/US\$)	34/0.4
ADTV-3M (mn) (Rs/US\$)	125/1.5

##### Shareholding pattern (%)



##### Price performance (%)

	1M	3M	12M
Absolute	(0)	(4)	0
Rel. to Nifty	(1)	(8)	0
Rel. to MSCI India	(2)	(12)	0

##### Forecasts/Valuations

	2024	2025E	2026E
EPS (Rs)	4.3	10.0	13.7
EPS growth (%)	(45.9)	130.0	36.8
P/E (X)	119.6	52.0	38.0
P/B (X)	6.0	5.4	4.7
EV/EBITDA (X)	54.5	31.9	22.2
RoE (%)	5.1	10.9	13.2
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	9	10	13
EBITDA (Rs bn)	1	1	1
Net profits (Rs bn)	0	1	2

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Deepak Krishnan

Aditya Mongia

Sai Siddhardha P

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## Financial overview: Expect 19% PAT CAGR over FY2023-26E

### Forecasts and valuation ratios of Avalon (consolidated), March fiscal year-ends, 2020-27E

Exhibit 1: We expect Avalon's EPS to increase 19% over FY2023-26E

	Net sales (Rs bn)	EBITDA (Rs bn)	PAT (Rs bn)	EPS (Rs)	EPS growth (%)	EV/EBITDA (X)	P/E (X)	P/B (X)	RoCE (%)	RoE (%)
2020	6,419	645	123	1.9		56.1	275.5	72.9	13.4	26.5
2021	6,905	661	231	3.5	87.3	55.3	147.1	56.6	12.4	43.3
2022	8,407	975	682	10.4	195.3	37.7	49.8	38.9	15.8	65.5
2023	9,447	1,128	525	8.0	(23.0)	29.1	64.7	6.3	11.0	16.8
2024E	8,502	596	284	4.3	(45.9)	54.2	119.6	6.0	3.5	5.1
2025E	10,203	1,000	653	10.0	130.0	31.7	52.0	5.4	8.3	10.9
2026E	13,264	1,419	893	13.7	36.8	22.1	38.0	4.7	12.1	13.2
2027E	16,959	1,899	1,202	18.4	34.7	16.4	28.2	4.0	14.3	15.4

Source: Company, Kotak Institutional Equities estimates

Exhibit 2: Summary financials of Avalon (consolidated), March fiscal year-ends, 2020-27E (Rs mn)

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Income statement</b>								
Net revenues	6,419	6,905	8,407	9,447	8,502	10,203	13,264	16,959
Total operating expenses	(5,774)	(6,243)	(7,432)	(8,319)	(7,907)	(9,203)	(11,845)	(15,059)
<b>EBITDA</b>	<b>645</b>	<b>661</b>	<b>975</b>	<b>1,128</b>	<b>596</b>	<b>1,000</b>	<b>1,419</b>	<b>1,899</b>
Depreciation & Amortization	(155)	(157)	(172)	(197)	(228)	(247)	(308)	(386)
<b>EBIT</b>	<b>490</b>	<b>504</b>	<b>804</b>	<b>931</b>	<b>368</b>	<b>753</b>	<b>1,111</b>	<b>1,514</b>
Other income	113	54	109	144	177	129	93	106
Interest expense	(450)	(270)	(248)	(348)	(164)	(6)	(6)	(6)
<b>PBT</b>	<b>153</b>	<b>288</b>	<b>664</b>	<b>727</b>	<b>381</b>	<b>876</b>	<b>1,198</b>	<b>1,614</b>
Tax expense	(30)	(57)	(183)	(202)	(97)	(223)	(306)	(412)
<b>Net profit</b>	<b>123</b>	<b>231</b>	<b>482</b>	<b>525</b>	<b>284</b>	<b>653</b>	<b>893</b>	<b>1,202</b>
<b>Reported PAT</b>	<b>123</b>	<b>231</b>	<b>682</b>	<b>525</b>	<b>284</b>	<b>653</b>	<b>893</b>	<b>1,202</b>
<b>Recurring EPS</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>8</b>	<b>4</b>	<b>10</b>	<b>14</b>	<b>18</b>
<b>Balance sheet</b>								
<b>Shareholders' funds</b>	<b>466</b>	<b>599</b>	<b>872</b>	<b>5,370</b>	<b>5,654</b>	<b>6,307</b>	<b>7,200</b>	<b>8,402</b>
Share capital	15	16	16	116	116	116	116	116
Reserves & surplus	450	583	856	5,254	5,538	6,191	7,084	8,286
Debt	2,485	2,953	2,941	3,063	1,563	63	63	63
Deferred tax liabilities	-	-	-	-	-	-	-	-
Minority interest and other liabilities	(135)	(78)	276	416	416	416	416	416
<b>Total sources of funds</b>	<b>2,816</b>	<b>3,475</b>	<b>4,088</b>	<b>8,849</b>	<b>7,633</b>	<b>6,786</b>	<b>7,678</b>	<b>8,881</b>
Net fixed assets	1,006	1,033	1,136	1,404	1,501	1,679	1,923	2,244
Net working capital (ex-cash)	1,180	1,811	2,610	2,960	2,640	2,524	2,845	3,444
Investments	364	296	241	263	263	263	263	263
Cash and bank balances and current investments	266	335	101	4,222	3,229	2,320	2,647	2,930
<b>Total application of funds</b>	<b>2,816</b>	<b>3,475</b>	<b>4,088</b>	<b>8,849</b>	<b>7,633</b>	<b>6,786</b>	<b>7,678</b>	<b>8,881</b>
<b>Free cash flow</b>								
Operating profit before wcap. changes	825	651	1,112	1,181	773	1,129	1,512	2,005
Change in working capital / other adjustments	(121)	(561)	(848)	(1,125)	320	116	(321)	(598)
<b>Net cashflow from operating activities</b>	<b>657</b>	<b>55</b>	<b>139</b>	<b>(133)</b>	<b>995</b>	<b>1,022</b>	<b>885</b>	<b>995</b>
Capex	(170)	(192)	(159)	(273)	(325)	(425)	(553)	(706)
<b>Free cash flow (CFO + net capex)</b>	<b>487</b>	<b>(137)</b>	<b>(21)</b>	<b>(406)</b>	<b>670</b>	<b>597</b>	<b>332</b>	<b>289</b>
<b>Growth (%)</b>								
Revenue growth		7.6	21.8	12.4	(10.0)	20.0	30.0	27.9
EBITDA growth		2.6	47.5	15.6	(47.2)	67.9	41.9	33.8
Recurring PAT growth		87.3	108.7	9.0	(45.9)	130.0	36.8	34.7
<b>Key ratios</b>								
EBITDA margin (%)	10.0	9.6	11.6	11.9	7.0	9.8	10.7	11.2
Net debt/equity (X)	4.8	4.4	3.3	(0.2)	(0.3)	(0.4)	(0.4)	(0.3)
Net debt/EBITDA (X)	3.4	4.0	2.9	(1.0)	(2.8)	(2.3)	(1.8)	(1.5)
Book value per share (Rs)	7	9	13	82	87	97	110	129
RoAE (%)	26.5	43.3	65.5	16.8	5.1	10.9	13.2	15.4
RoACE (%)	13.4	12.4	15.8	11.0	3.5	8.3	12.1	14.3

Source: Company, Kotak Institutional Equities estimates

# 2

## Valuation: Initiate with SELL and Fair Value of Rs410

We initiate coverage on Avalon Technologies, with a SELL rating and DCF-based Fair Value of Rs410 (21% downside from current levels), implying 30X P/E on March 2026E consolidated earnings. Avalon is a vertically integrated EMS player, with end-to-end capabilities in delivering box-build solutions and a focus on high-value precision engineered products. We forecast Avalon’s earnings to increase at a CAGR of 19% over FY2023-26E, driven by a CAGR of 12% in revenue, led by the communication, mobility and clean energy segments. However, we remain cautious on the medium-term prospects of the company driven by (1) uncertainty regarding the recovery in US operations, (2) margins remaining below the previous peak, driven by the mix toward domestic sales, and (3) a gradual improvement in elevated working capital levels.

### Our DCF-based valuation implies a 21% downside

We value Avalon Technologies using a three-stage DCF model, with explicit forecasts over FY2023-33E, followed by a fade period over FY2033-45E and assume terminal growth after that. In the explicit forecast period, we build in (1) a revenue CAGR of 18%, (2) average EBITDA margin at 10.6% (versus 11% over FY2021-23) and (3) EBITDA CAGR of 19%. We forecast gradual moderation in FCF growth to 8% by FY2045. We assume WACC of 12% and a terminal growth rate of 4%. The DCF-based FV of Rs410 implies 17X EV/EBIDTA FY2026E and 30X March 2026E P/E.

### We arrive at a valuation of Rs410/share for Avalon Technologies

Exhibit 3: Avalon Technologies’ DCF model (Rs mn), March fiscal year-ends, 2020-45E

(March fiscal year-ends, Rs mn)	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2035E	2045E	
<b>Free cash flow calculation</b>																	
Revenue	6,419	6,905	8,407	9,447	8,502	10,203	13,264	16,959	21,320	26,345	31,990	38,160	44,702	51,407	66,368	144,522	
yoy growth (%)	-	8	22	12	10	20	30	28	26	24	21	19	17	15	13	4	
EBIT (excl. other income)	490	504	804	931	368	753	1,111	1,514	1,904	2,347	2,832	3,348	3,876	4,392	5,670	12,347	
EBIT margin (%)	7.6	7.3	9.6	9.9	4.3	7.4	8.4	8.9	8.9	8.9	8.9	8.8	8.7	8.5	8.5	8.5	
Effective tax rate (%)	19	20	27	28	26	26	26	26	26	26	26	26	26	26	26	26	
NOPAT	395	404	583	673	274	561	828	1,128	1,419	1,748	2,110	2,495	2,888	3,272	4,224	9,198	
Change in working capital (excl. cash)	(121)	(561)	(848)	(1,125)	320	116	(321)	(598)	(843)	(1,239)	(1,392)	(1,521)	(1,613)	(1,653)	(1,758)	(1,266)	
Depreciation	155	157	172	197	228	247	308	386	483	604	751	925	1,130	1,366	1,763	3,840	
Capex	(170)	(192)	(159)	(273)	(325)	(425)	(553)	(706)	(888)	(1,097)	(1,333)	(1,590)	(1,862)	(2,141)	(1,763)	(3,840)	
OCF	429	1	(94)	(256)	821	924	814	915	1,059	1,113	1,469	1,899	2,405	2,984	4,229	11,772	
<b>FCFF</b>	<b>258</b>	<b>(192)</b>	<b>(253)</b>	<b>(529)</b>	<b>496</b>	<b>499</b>	<b>262</b>	<b>209</b>	<b>171</b>	<b>16</b>	<b>136</b>	<b>309</b>	<b>543</b>	<b>843</b>	<b>2,466</b>	<b>7,933</b>	
Post tax cost of debt (%)	7.5																
Risk free rate (%)	7.0																
Risk premium (%)	4.9																
Beta	1.2																
Cost of equity	12.9																
1H FY24 debt	1,019																
1H FY24 equity	5,330																
<b>WACC (%)</b>	<b>12.0</b>																
Terminal growth rate (%)	4.0																
<b>DCF valuation</b>																	
PV of cash flows						10,845	11,647	12,782									
PV of Terminal value						10,693	11,976	13,413									
<b>EV</b>						<b>21538</b>	<b>23623</b>	<b>26195</b>									
Less: Net debt						(2,258)	(2,584)	(2,868)									
<b>Implied Equity value</b>						<b>23795</b>	<b>26207</b>	<b>29063</b>									
<b>Mar 2026E-based Fair value (Rs/share)</b>	<b>410</b>																

Source: Company, Kotak Institutional Equities estimates

### Revenue: Recovery in US operations key

Most peers have capitalized on the increasing penetration of electronics in the auto and industrial sectors. Avalon’s three-year (FY2020-23) revenue CAGR is just 14% compared with 45% and 33% for peers Kaynes and Syrma, respectively. Avalon’s domestic business has grown at 16%, which is still below peers, and the international business is even lower at a CAGR of 11%. Further headwinds in the US economy and destocking by key customers have severely impacted Avalon’s sales in the past nine months.

We are baking in a revenue CAGR of 12% for Avalon over FY2023-26E, driven by growth in the mobility (13% CAGR) and communication (25% CAGR) segments, and recovery in the clean energy segment (17% CAGR).

**Clean energy—pickup in US activity by 1HFY25 key to clean energy growth**

In the clean energy vertical, Avalon caters to the solar, EV and hydrogen end-markets, primarily focused on US clients.

The company's major product is power units for Ohmium's Proton Exchange Membrane (PEM)-based hydrogen electrolyzers. Avalon also manufactures electronic displays, battery management systems, vehicle control units for the EV segment and solar invertors/chargers for the solar segment.

The contribution of clean energy in Avalon's revenue mix has increased from 16% in FY2020 to 25% in FY2023. Avalon had expected the share of clean energy to rise to 35% in the next 18-24 months (2HFY25). However, the contribution of the clean energy segment has reduced to 19% in 9MHY24 due to destocking by key US customers. Hence, while the growth opportunity exists for Avalon, we expect volatility in revenue growth in the near term. The pickup in activity by key US clients holds the key for Avalon in the clean energy segment.

According to peer Jabil, the global energy storage market for EMS players is US\$20 bn and EV charging is US\$15 bn, which are increasing at a CAGR of 17% and 22%, respectively. Avalon's current clean energy revenue is Rs2.5 bn; hence, there exists a strong growth potential.

We estimate a CAGR of 17% in clean energy revenue over FY2023-26E. We are baking in a 29% decline in clean energy revenues in FY2024, but we expect a strong rebound in FY2025-26E, driven by a pickup in activity by existing customers in the solar and hydrogen segments and the addition of new orders from newer focus areas such as home electrification.

**Mobility—global aerospace orders and domestic railway segment remain growth drivers**

We see mobility as the second key growth driver for Avalon, driven by the aerospace and railway verticals. We are expecting a CAGR of 13% over FY2023-26E in the mobility segment.

**Aerospace:** In the aerospace vertical, Avalon's offerings include pilot seat frames, crew seat frames, smoke detector enclosures, lighting parts & enclosures, engine parts, cargo parts and auxiliary power enclosures. The aerospace vertical is largely an export-oriented business, where the company's offering includes sheet metals, plastic and PCBA. Due to a higher mix of sheet metal offering, the aerospace vertical enjoys the highest margin among the various sub-segments within the mobility vertical. The company has recently won a large multi-year contract from Collins Aerospace to manufacture wiper blades for aircraft. It has won multiple contracts, which involves manufacturing various aircraft part interiors, hence the near-term growth outlook for this sector remains strong for the company.

In terms of market size, peer Sanmina gets US\$5.4 bn in revenue from the Industrial, Medical, Aerospace & Defense (A&D) and Automotive segments in FY2023. Celestica's Advanced Technology Solutions (ATS) segment, which includes the A&D, Industrial, Energy, HealthTech and Capital Equipment businesses, generated US\$2.9 bn revenue in FY2023; Jabil generated US\$4.7 bn in revenue from the Industrial and Capital Equipment business, all of which has an overlap with Avalon's aerospace business.

**Railways:** In the railways vertical, Avalon is primarily involved in railway signaling, tracking and braking equipment. Kyosan and Faiveley are some key end-customers for the company, with India being the primary end-market. Avalon sees signaling orders for metros, high-speed rail and mainline as the key drivers of order inflows. The railway union budget has an allocation of ~Rs50 bn toward signaling equipment (electronic content in signaling is ~10% of order value). The second-biggest driver of growth would be the Kavach Automatic Train Protection System, which is expected to be installed on 34,000 km of broad-gauge rail network by 2028 and Avalon has tie-ups with a few of the approved vendors. According to Indian Railways, the total spends on Kavach, is expected to be close to Rs340 bn (Rs5 mn per km with total broad-gauge network of 68,000 km). Overall, the Indian Industrial EMS market's (including railways) size today is ~Rs50 bn and we estimate that the industrial EMS market is likely to increase at a CAGR of 12% over FY2023-26E, hence the growth outlook for this segment remains strong.

**Communication—5G and digital infrastructure orders remain key growth drivers**

Avalon’s communication segment primarily caters to three end-markets, i.e., (1) telecom, (2) digital infrastructure and (3) satellite.

Avalon supports 5G network equipment manufacturers with concept-to-realization and turnkey builds. It has an integrated vertical manufacturing set-up for products such as antenna boxes, remote radio heads (RRH) and base band units (BBU) used in 5G technologies. It also supports market movers and market makers by combining its expertise in telemetry and geolocation technologies with integrated manufacturing capabilities to help create satellite-enabled location-based solutions.

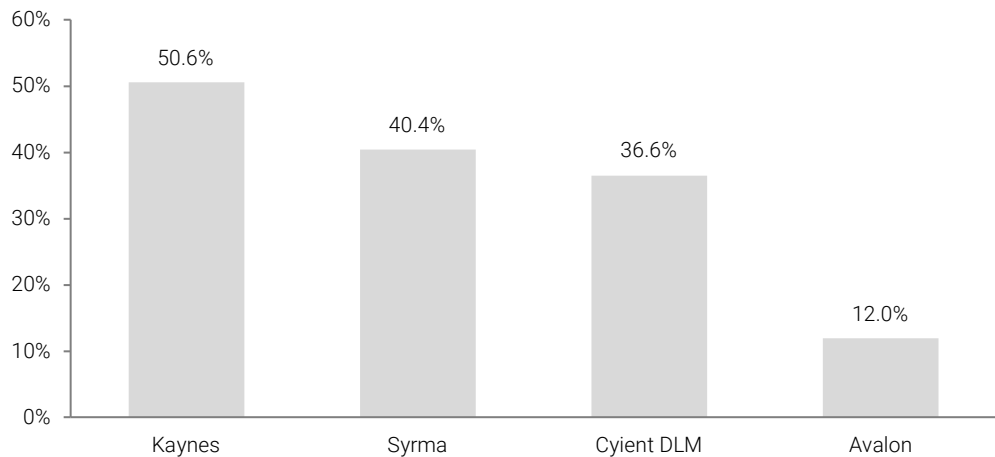
Avalon’s segmental revenue for the communication segment was Rs1 bn in FY2023. We compare this to our estimate of the Indian telecom EMS market of Rs96 bn and US players such as Sanmina (US\$3.5 bn revenue from communication in FY2023) and Jabil (US\$10.8 bn revenue from communication in FY2023). Hence, while the potential for growth is multifold, it would depend on Avalon ability to sign up large customers.

We are baking in a CAGR of 25% for the communication segment over FY2023-26E, driven by the revival in the US market.

Over the long term, we expect a revenue CAGR of 13% for Avalon over FY2023-45E. However, until there is a pickup in US order inflows (4% order book growth in 9MFY24), revenue growth visibility remains limited. Further, the execution of legacy US order backlog where many orders remain unexecuted in FY2024 will be data points we would be tracking to see signs of a pickup in US business activity for Avalon.

**In near term, we expect Avalon’s growth to be the lowest among its peer set**

Exhibit 4: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2023-26E (%)



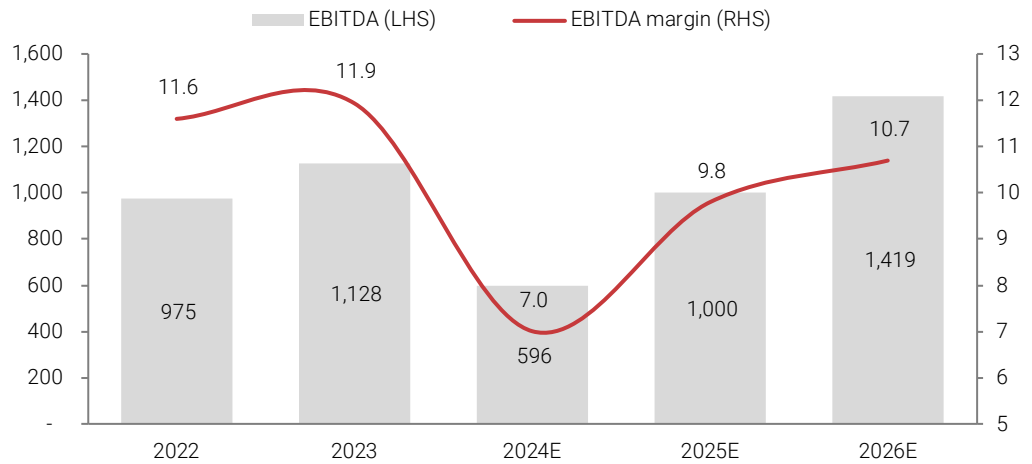
Source: Company, Kotak Institutional Equities estimates

**Margin recovery to be gradual**

Avalon has the highest gross margin among EMS peers, given its vertically integrated business model. However, this advantage in gross margin does not translate into superior EBITDA margins due to higher employee costs, driven by its manufacturing presence in the US (~10% of workforce in the US account for 50% of employee costs). Further, Avalon has lower number of contract workforce, hence a higher fixed cost base leads to negative operating leverage within a weak operating environment. With US operations impacted over the past three quarters, this higher fixed cost base in the US (manufacturing set-up and employee cost) has led the company to report losses in its US business over the past 9 months and consolidated EBITDA margins have declined to 7% in 9MFY24. In order to reduce the impact of the higher US cost base, the company is looking to shift operations to India. However, the positive impact of this would only be visible over the medium term. Near term, we expect EBITDA margins to reach 10.7% levels by FY2026, owing to some recovery in US revenue; however, our estimates are still 120/90 bps lower than the FY2023/FY2022 levels, given the mix shift toward India (domestic revenue contribution to increase to ~50% in the coming quarters versus 38% in FY2022), which has slightly lower margins.

**We expect Avalon’s margins to be below FY2022/FY2023 levels, driven by weak US operations and unfavorable mix (EBITDA CAGR of 8% over FY2023-26E)**

**Exhibit 5: Avalon’s EBITDA (Rs mn) and EBITDA margin (%) trends, March fiscal year-ends, 2022-26E**



Source: Company, Kotak Institutional Equities estimates

**Working capital: Challenges to persist**

We expect a gradual improvement in working capital days from 148 days at end-FY2023 to 110 days in FY2026E, as we expect some recovery in US operations will lead to lower inventory levels. Avalon has seen the maximum deterioration in working capital among its peer set (from 76 days in FY2020 to 148 days in FY2023), driven by global supply chain disruption and lower offtake by customers. Over the medium term, maintaining working capital closer to 60-80 days would ensure healthy return ratios. The pre-Covid number was close to 90 days, but we still think it is sometime away before the company reaches those levels. Moderation in US sales and pile-up of inventories have been the key factors that has led to deterioration in its working capital.

**We expect 38 days improvement NWC days over next 3 years, driven by recovery in US operations**

**Exhibit 6: Operating working capital as days of sales of Avalon, March fiscal year-end, FY2020-26E**

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	88	77	101	123	125	110	95
Receivable as days of sales	65	96	77	80	65	55	55
Payable as days of sales	77	67	51	55	40	40	40
NWC as days of sales	76	106	127	148	150	125	110

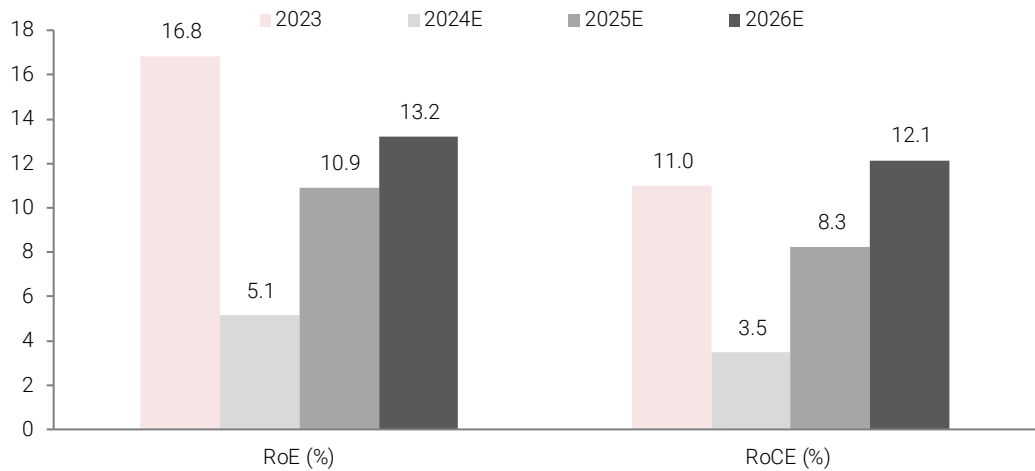
Source: Company, Kotak Institutional Equities estimates

**Return ratios**

We expect a very gradual improvement in return ratios (RoE and RoCE) for Avalon over the next couple of years. (1) Strong US topline growth, (2) margins moving back to previous peaks (~12%), driven by revival in US operations and higher contribution from segments such as aerospace, and (3) net working capital days (as days of sales) moving back to 90 days (seen during pre-Covid times) will be key for the company to move its RoCE to around 25%, which the company aspires to reach. In our estimate, we bake in some normalization in US operations (revenue and margin) and about 38 days reduction in net working capital days.

**EBITDA margins reaching previous peak of 12% and net working capital days (as days of sales) moving back to 90 days level will be key drivers of an improving return profile**

**Exhibit 7: Trend in RoE and RoCE, March fiscal year-ends, 2023-26E (%)**



Source: Company, Kotak Institutional Equities estimates

**Relative valuation**

Avalon trades at 38X March 2026E EPS, at a 10% discount to its peers in the EMS space. The discount in valuations is mainly driven by (1) weak growth over the past three years and expected weakness in earnings to continue in FY2024, (2) smaller scale of operations as compared with the peer set and higher mix of export business, which has the potential to grow at a slower pace as compared with the India market, (3) although Avalon has a superior gross margin profile due to a higher degree of backward integration, higher cost of US manufacturing negates most of this benefit and (4) further working capital cycle is the weakest among the peer set. We expect the discount for Avalon to persist over the near term; pickup in export operations, translating to better margins and improved working capital cycle, would be a key for the stock to re-rate. We await signs of a pickup in order inflow, which would give us confidence that turnaround is around the corner.

**Exhibit 8: Valuation comparable metric for Avalon Technologies, March fiscal year-ends, 2024-26E**

Company	Mkt Cap. (US\$ mn)	Price (LC)	Year end	EV (US\$ mn)	EV/EBITDA (X)			P/E (X)			P/B (X)			RoE (%)		
					2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Global</b>																
Hon Hai Precision Industry	66,966	154.5	Dec	59,165	6.7	5.8	4.9	13.6	11.8	12.0	1.3	1.2	1.2	9.5	10.1	9.4
Pegatron Corp	8,413	101.0	Dec	8,997	8.2	7.1	6.2	15.8	14.1	12.9	1.3	1.3	1.2	8.4	9.0	9.8
Quanta Computer Inc	34,056	282.0	Dec	32,424	14.3	11.2	10.4	21.8	17.6	15.3	5.4	4.9	4.5	24.8	27.7	27.3
Compal Electronics	5,043	36.7	Dec	6,139	8.9	8.1	7.3	14.9	13.0	10.4	1.3	1.2	1.2	8.3	8.8	9.1
Wistron Corp	11,378	125.5	Dec	13,688	8.4	6.8	5.6	19.2	14.7	11.4	2.9	2.6	2.4	16.0	18.1	20.9
Jabil Inc	16,465	136.5	Dec	16,789	7.4	6.9	6.5	16.3	13.0	11.4	8.6	6.0	4.4	43.6	52.8	47.1
<b>India</b>																
Dixon Technologies India Ltd	5,585	7,814.0	Mar	5,600	64.0	39.5	31.4	116.9	66.9	53.4	27.6	19.5	14.2	26.7	34.1	30.8
Amber Enterprises India Ltd	1,504	3,705.0	Mar	1,610	27.5	20.4	16.8	74.0	46.4	35.6	6.0	5.3	4.6	8.5	12.1	13.9
Avalon Technologies Ltd	409	520.0	Mar	389	54.2	31.7	22.1	119.6	52.0	38.0	6.0	5.4	4.7	5.1	10.9	13.2
Kaynes Technology India Ltd	1,931	2,508.8	Mar	1,746	67.8	49.0	32.3	103.8	81.3	51.3	5.8	5.4	4.8	8.9	7.5	10.9
Cyient Dlm Ltd	673	705.0	Mar	630	47.4	32.0	23.9	87.7	44.4	35.6	6.0	5.3	4.6	6.8	11.9	12.9
P G Electroplast	562	1,802.1	Mar	623	20.8	17.3	14.9	37.1	27.5	21.9	4.6	3.8	3.0	14.4	14.4	15.1
Syrma Sgs Technology Ltd	1,036	488.0	Mar	1,010	40.5	26.5	18.9	66.2	43.0	29.7	5.1	4.6	4.0	8.1	11.3	14.4

Notes:

(a) All global companies ending Dec have valuation ratios for CY2023/24/25. All domestic companies ending March have valuation ratios for FY2024/25/26.

Source: Bloomberg, Kotak Institutional Equities, Company

# 3

## Vertically integrated EMS play exposed to global markets & new-age industries

At the heart of Avalon’s competitive positioning is its (1) vertically integrated business model, which helps the company have the highest share of box-build revenue and industry-leading gross margin, (2) increased focus on new age industries such as solar, hydrogen and home electrification, which could see strong growth in the coming years and (3) global manufacturing set-up, which helps it cater to the US market with an Indian cost structure. These factors will be key to Avalon’s medium-term growth strategy. Near-term destocking by key US customers has led to a decline in US revenue and margins. With a turnaround expected only after 2HFY25, we expect the near-term environment to remain challenging for the company.

### Vertically integrated EMS play

Avalon began its journey in 1999 in Chennai as a pure-play PCB assembler and is now one of the most vertically integrated EMS players. Avalon provides services across the entire value chain from PCBA, cable harnessing, metals, magnetics and design. These capabilities help Avalon deliver a complete box-build solution in-house.

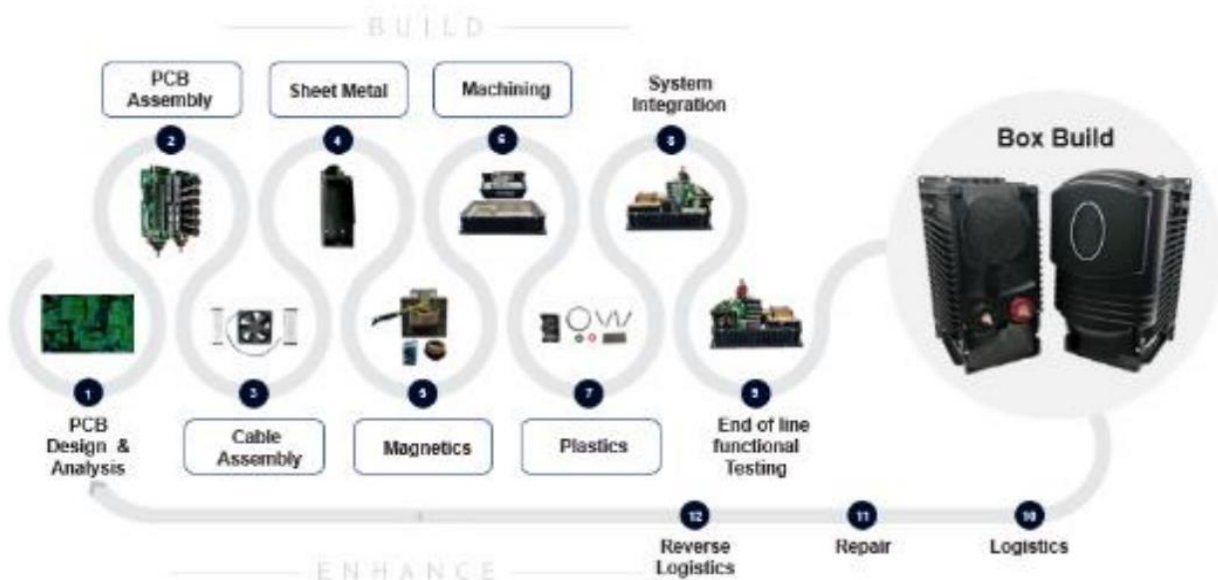
Each vertical operates as a separate business unit within the company and serves as a captive supplier for its box-build operations. In many instances, Avalon has initially engaged with customers for a single product line and then gradually moved onto providing the entire box build solution, thereby increasing its wallet share.

In the case of the aerospace sector for many clients, the primary offering is sheet metal and not PCBA, which also helps the company differentiate itself from peers.

These measures have been one of the key drivers for Avalon’s peer-leading gross margins, which we expect will continue, given the company’s focus on increasing the share of box build in the overall mix.

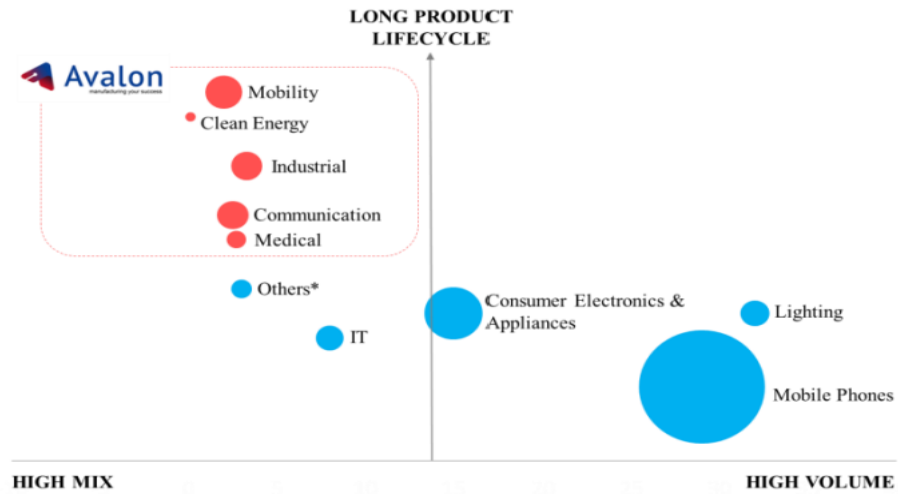
### Avalon’s vertically integrated business model helps it offer the entire box build solution in-house

Exhibit 9: Box build manufacturing process



Source: Company, Kotak Institutional Equities

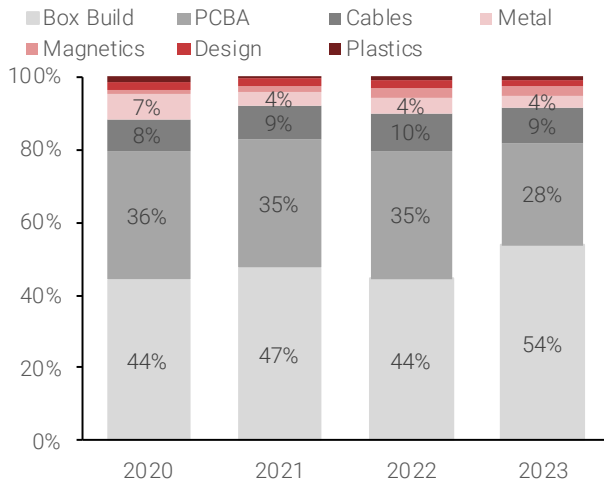
Exhibit 10: Avalon’s end-market exposure based on product lifecycle and volume requirement



Source: Company, Kotak Institutional Equities

**Increasing wallet share with end-customers by manufacturing entire box build remains Avalon’s focus**

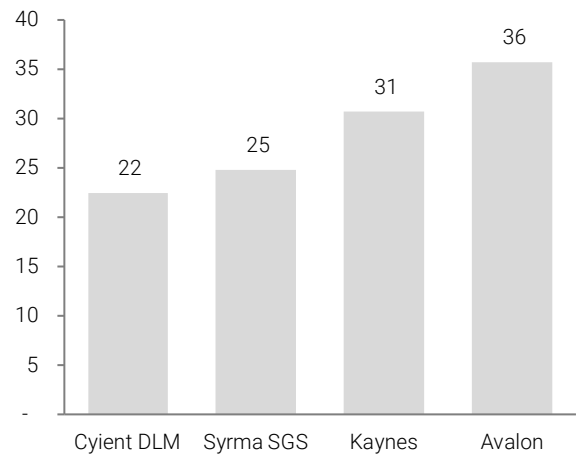
Exhibit 11: Avalon’s segmental revenue split, March fiscal year-ends, 2020-23 (%)



Source: Company, Kotak Institutional Equities

**Avalon has highest gross margins among peers, driven by right sector mix and higher degree of backward integration**

Exhibit 12: Gross margin for B2B EMS players, March fiscal year-ends, 2023 (%)



Source: Company, Kotak Institutional Equities

**Increased focus on growing industries**

Avalon started its operations with a single-sector focus for the initial 6-7 years. Avalon’s primary end-market was communication products (networking and telecom products) for the US geography. It gradually diversified its presence with clean energy, industrial, mobility and communication being the four major verticals the company currently focuses on.

When we look at the mix of clients, Avalon has long-standing relationship (80% of customers have been with Avalon for eight years or more) with many established companies and increasing focus on end-customers, who primarily cater to new age industries such as green hydrogen, solar, home electrification and 5G, which have the potential to see strong exponential growth over the next decade, driven by US government policies such as the Inflation Reduction Act.

**Avalon has been steadily expanding its client base across its four key verticals—clean energy, mobility, industrial and communication**

Exhibit 13: Avalon’s customers by end-use industry, March fiscal year-end, 2020-22

Sr No	Industry	No of customers by End Use Industry		
		2020	2021	2022
1	Clean Energy	4	6	11
2	Mobility	11	12	14
3	Industrial	26	30	38
4	Communication	5	6	8
5	Medical & Others	8	8	10
	Total	54	62	81

Source: Company, Kotak Institutional Equities

**Avalon has long-standing relationships with most of its end-customers (80% of customers have been with Avalon for 8 years or more)**

Exhibit 14: Avalon’s major customers by end-markets, March fiscal year-end, 2023

Industry	End markets	Key customer
Clean Energy	Electric vehicles, solar and hydrogen industries	Ohmium India Private Limited and TMEIC
Mobility	Railways, Automotive and Aerospace	Kyosan India Private Limited, Faiveley Transport Rail Technologies, TransDigm Technologies India Private Limited, The US Malabar Company, Zonar Systems Inc., and Collins Aerospace
Industrial	Power and Automation	e-Infochips Private Limited and Haas Automation Inc
Communication	Telecom, Satellite and Digital Infrastructure	LiveView Technologies Inc, Systech Corporation and Meggitt
Medical & Others	Medical and Defense	Caire Inc

Source: Company, Kotak Institutional Equities

**Clean energy—pickup in US activity by 1HFY25 key to clean energy growth**

In the clean energy vertical, the company caters to the solar, EV and hydrogen end-markets primarily focused on US clients.

Avalon’s major product is power units for Ohmium’s PEM-based hydrogen electrolyzers. The company also manufactures electronic displays, battery management systems, vehicle control units for the EV segment and solar invertors/chargers for the solar segment.

The Inflation Reduction Act passed in the US has dedicated US\$76 bn (total bill size of US\$550 bn) to be provided as incentives for manufacturing clean energy products (ex-EV vehicles) locally in the US. Listed clean energy companies such as Bloom Energy expect the US Hydrogen market TAM to reach US\$2.3 tn by FY2030E. Thus, the clean energy segment has a strong runway for growth.

The contribution of clean energy in Avalon’s revenue mix has increased from 16% in FY2020 to 25% in FY2023. The company expects the share of clean energy to rise to 35% over the next 18-24 months (2HFY25). However, the contribution of the clean energy segment has reduced to 19% in 9MHY24 due to destocking by key US customers. Hence, while the growth opportunity exists for Avalon, we expect volatility in revenue growth over the near term. The pickup in activity by key US clients holds the key for Avalon in the clean energy segment.

According to peer Jabil, the global energy storage market for EMS players is US\$20 bn and EV charging is US\$15 bn; these are increasing at a CAGR of 17% and 22%, respectively. Avalon’s current clean energy revenue is Rs2.5 bn (as of FY2023), hence there exists a strong growth potential.

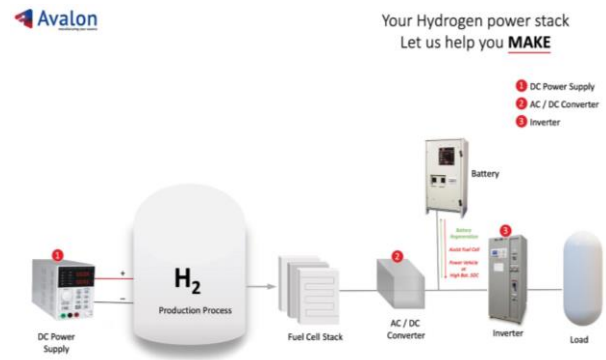
We estimate a CAGR of 17% in clean energy revenue over FY2023-26E. We are baking in a 29% decline in clean energy revenues in FY2024, but we expect a strong rebound in FY2025-26, driven by a pickup in activity by existing customers in the solar and hydrogen segment along with the addition of new orders from newer focus areas such as home electrification.

Exhibit 15: Solar trackers, inverters & chargers are some key products manufactured by Avalon for the solar end-market



Source: Company, Kotak Institutional Equities

Exhibit 16: DC power supply, AC/DC converters & inverters are some key components that it supplies to the hydrogen end-market



Source: Company, Kotak Institutional Equities

Exhibit 17: Home electrification is a new focus area for Avalon where the company focuses on chargers, DC converters and battery management systems



Source: Company, Kotak Institutional Equities

Exhibit 18: Avalon’s EV product basket primarily focuses on electronic dashboards, digital cockpit and battery management system



Source: Company, Kotak Institutional Equities

**Mobility—global aerospace orders and domestic railway segment remain growth drivers**

The second key growth driver for Avalon is the mobility segment. Avalon’s mobility segment primarily caters to three end-markets, i.e., (1) railways, (2) aerospace and (3) auto.

**Aerospace: Multiple large contract wins provide strong near-term revenue visibility**

In the aerospace vertical, Avalon’s offerings include pilot seat frames, crew seat frames, smoke detector enclosures, lighting parts & enclosures, engine parts, cargo parts and auxiliary power enclosures. The aerospace vertical is largely an export-oriented business, where the company’s offerings include sheet metals, plastic and PCBA. Due to a higher mix of sheet metal offering, the aerospace vertical enjoys the highest margin among the various sub-segments within the mobility vertical. The company has recently won a large multi-year contract from Collins Aerospace to manufacture wiper blades for aircraft. Avalon has won multiple contracts, which involve manufacturing various aircraft part interiors, hence the near-term growth outlook for this sector remains strong for the company.

**Railways: Signaling and Kavach system to be key drivers of growth**

In the railways vertical, Avalon is primarily involved in railway signaling, tracking and braking equipment. Kyosan and Faiveley are some key end-customers for the company, with India being the primary end-market. Avalon sees signaling orders for metros, high-speed rail and mainline as the key drivers of order inflows. The railway union budget has an allocation of ~Rs50 bn toward signaling equipment (electronic content in signaling is ~10% of order value). The second-biggest driver of growth would be the Kavach Automatic Train Protection System, which is expected to be installed on 34,000 km of broad-gauge rail network by 2028 and Avalon has tie-ups with a few of the approved vendors. According to Indian Railways, the total spends on Kavach, is expected to be close to Rs340 bn (Rs5 mn per km with total broad-gauge network of 68,000 km). Overall, the Indian Industrial EMS market’s (including railways) size today is ~Rs50 bn and we estimate that the industrial EMS market is likely to increase at a CAGR of 12% over FY2023-26E, hence the growth outlook for this segment remains strong

**Auto: Gaining a foothold in the market**

Auto is a relatively smaller vertical for Avalon within the mobility segment. The company primarily caters to the domestic end-market, with a focus on products such as electronic dashboards, digital cockpits and telematic control units.

Avalon’s market share of the Indian auto EMS market today of Rs131 bn is negligible. Furthermore, we expect the auto EMS market to see a CAGR of 17% over FY2023-26E, driven by the shift toward the EV segment (industry section of the report) and reaching Rs213 bn by FY2026E.

We expect a CAGR of 13% in the mobility segment’s revenues over FY2023-26E. This is primarily driven by execution pickup of the recent new order wins in the aerospace segment and execution of railway signaling and Kavach orders from 2HFY25.

Exhibit 19: Aerospace product offerings for Avalon includes sheet metal, plastic and PCBA



Source: Companies, Kotak Institutional Equities

Exhibit 20: Rail offerings for Avalon are primarily focused on the Indian market



Source: Companies, Kotak Institutional Equities

**Communication: 5G and digital infrastructure orders remain key growth drivers**

Avalon’s communication segment primarily caters to three end-markets, i.e., (1) telecom, (2) digital infrastructure and (3) satellite.

Avalon supports 5G network equipment manufacturers with concept-to-realization and turnkey builds. It has an integrated vertical manufacturing set-up for products such as antenna boxes, remote radio heads (RRH) and base band units (BBU) used in 5G technologies. It also supports market movers and market makers by combining its expertise in telemetry and geolocation technologies with integrated manufacturing capabilities to help create satellite-enabled location-based solutions. Avalon’s product offerings include the following:

**Telecom, 5G:** RRH, Antenna, BBU

**Satellite:** Base Station Antenna System, Digital Antenna, Control Panel System

**Digital Infrastructure:** Fleet Management, Tracking System, Vision System

Avalon’s segmental revenue for the communication segment was Rs1 bn in FY2023. We compare this to our estimate of the Indian telecom EMS market of Rs96 bn and US players such as Sanmina (US\$3.5 bn revenue from communication in FY2023) and Jabil (US\$10.8 bn revenue from communication in FY2023). Hence, while the potential for growth is multifold it would depend on Avalon ability to sign up large customers.

Exhibit 21: Avalon’s product offering for the telecom sector



Source: Company, Kotak Institutional Equities

Exhibit 22: Avalon’s product offering for the digital sector



Source: Company, Kotak Institutional Equities

**Industrial: Domestic industrial automation to drive orders**

Avalon’s industrial segment primarily caters to the power electronics and automation segments.

**Power electronics:** Power electronic products are integrated into all types of energy conversion applications and are expected to play a key in improving energy efficiency of electronics products. Smart metering, power conversion in EV charging and renewable energy are some key end-markets for this segment. Part of this segment also incorporates magnetic products that Avalon manufacturers such as chokes, transformers and inductors.

**Automation:** Automation end-markets for Avalon is largely driven by the pickup in industry 4.0 solutions across both process industries such as cement, steel, oil and gas along with the increased auto/electronic manufacturing in India, which would drive the adoption of discrete automation products.

Avalon today caters to ~5% (Rs2.8 bn revenue as of FY2023) of the total addressable market of Rs50 bn for its industrial segment. We estimate the industrial EMS market will increase at a CAGR of 12% over FY2023-26E.

We see the industrial and communication vertical combined reporting a CAGR of 10% over FY2023-26E.

**Global footprint—catering to the US markets while leveraging Indian operations**

Avalon is the only Indian EMS player to have a full-fledged manufacturing facility in the US. As of FY2023, around 73% of manufacturing was done (in value terms) in India and the balance across its two major facilities in the US (Atlanta, Georgia, and Fremont, California).

Avalon’s Indo-US manufacturing footprint allows the company to operate a hybrid delivery model that leverages the strengths of both the US and India.

Avalon primarily operates through two models of delivery in the US, depending on customer preferences:

- ▶ The labor-intensive portion of manufacturing is done in India, with the automated portion and final configuration being undertaken in the US.
- ▶ The option to cater to customers directly from India, leveraging the high value markets and optimizing on cost by manufacturing in India.

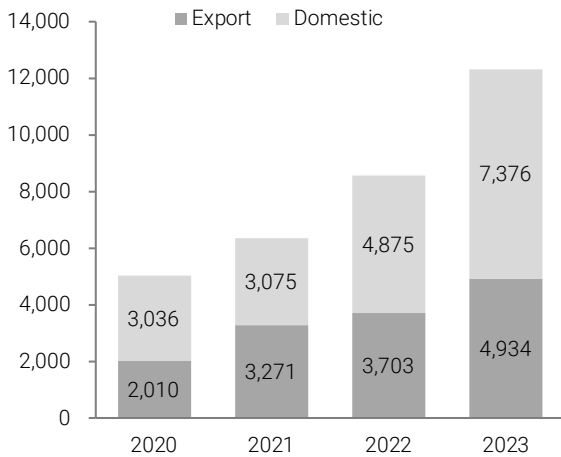
Multiple US customers have a preference for a manufacturing set-up or final assembly to be done locally. Furthermore, certain sectors such as green hydrogen require local sourcing to avail the inflation reduction benefits; hence, by catering to these customers or segments, Avalon’s local manufacturing presence gives it an edge over peers.

Recent acquisition by Kaynes of Digicom Electronics and Cyient DLM’s plan to focus on acquisition targets in the North American region to cater to local manufacturing requirements of US customers showcases the advantage that Avalon has with US manufacturing operations.

In the US market, Avalon is directly competing with global majors such as Jabil, Flex, Sanmina and Celestica, hence the company’s cost structures and capabilities have to be in line with global benchmarks.

**Pickup in domestic order book has helped offset the moderation seen in US orders**

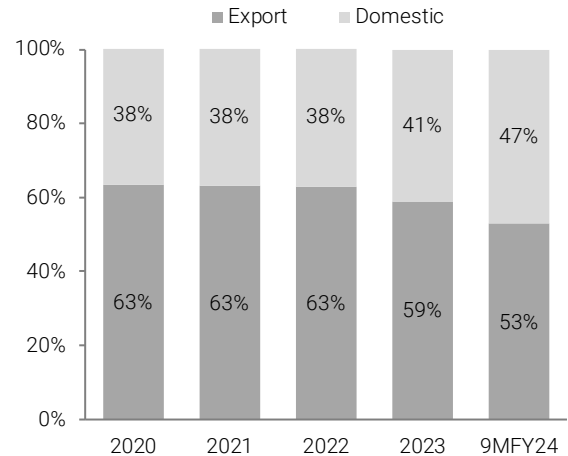
Exhibit 23: Avalon’s order book data by geography, March fiscal year-end, FY2020-23 (Rs mn)



Source: Company, Kotak Institutional Equities

**Avalon now expects domestic segment to contribute 50% of revenue over the near-term versus 38% in 2020**

Exhibit 24: Avalon’s revenue by geography, March fiscal year-end, 2020-9MFY24 (%)



Source: Company, Kotak Institutional Equities

# 4

## **Key risks: Sharp turnaround in US operations, aiding margin performance and reducing inventory overhang, remains a key risk to our thesis**

Avalon's performance can come in ahead of our expectations, driven by (1) faster-than-expected turnaround in US operations, (2) scaling up of the India business, (3) faster transition to India manufacturing, (4) better working capital management and (5) faster growth from newer markets.

### **Faster-than-expected recovery in US operations**

Of Avalon's total revenue, 53% is driven by the US geography in FY2023, which has seen a 14% de-growth in 9MFY24 due to inventory destocking by key end-customers. The company management has indicated a turnaround in US operations should start from 2HFY25. Any faster-than-expected turnaround in US operations could lead to a significant upside in our revenue estimates. A pickup in order inflow, driven by US orders and execution of legacy US order backlog where many orders remain unexecuted in FY2024, will be data points we would be tracking to see signs of a pickup in US business activity for Avalon.

### **Scaling up of India operations**

Avalon has historically been less focused on ramping up its India operations compared with most peers. However, given the strong growth seen in the domestic Indian market, a sharp ramp-up of India operations by onboarding newer clients and expanding wallet share with its existing clients base could drive better-than-expected revenue growth, in our view. India's contribution has increased from 38% in FY2020 to 47% in 9MFY24, with plans to increase to 50% over the near term. However, growth still lags peers such as Kaynes and Syrma, hence there remains a decent opportunity for Avalon to scale its business beyond the 50% share over the medium term.

### **Margin levers due to moving operations to India**

Avalon enjoys one of the highest gross margins among peers, but significantly higher employee costs due to manufacturing presence in the US and US overheads impacts its EBITDA margins. The company is in the process of moving a large part of its manufacturing to India from the US. Faster transition to India could be one of the key factors that could drive stronger-than-expected margin performance, in our view.

### **Better working capital management**

Working capital has been one of the key challenges that Avalon has faced during the recent years, driven by a sharp rise in inventory days from 88 days in FY2020 to 138 days in FY2023. The pickup in US execution and normalization of inventory levels could help drive better-than-expected operating and free cash flow generation.

### **Strong revenue growth from newer end-markets**

Avalon has expanded its presence in newer end-markets such as clean energy, electric vehicle and hydrogen. With many of these sectors expected to be closer to inflection. Any sharp pickup in revenue from these segments could imply that Avalon's growth rate could be much ahead of our expectations.

# 5

## Financials: Expect 19% PAT CAGR during FY2023-26E

We expect Avalon’s revenue to increase at a CAGR of 12% over FY2023-26E, led by the mobility and communication segments and a rebound in clean energy after a weak FY2024. However, modest order inflow growth over the past nine months provides limited visibility of a turnaround in operations over the near term. A pickup in order inflow and execution of orders, which have been sitting in the backlog for more than a year, will be the early signs that we will be looking at to gauge the pace of the turnaround. With US operations weak, the impact of negative operating leverage and unfavorable mix will keep margins under pressure, in our view. We are baking in an 8% EBITDA CAGR and a 19% PAT CAGR over FY2023-26E.

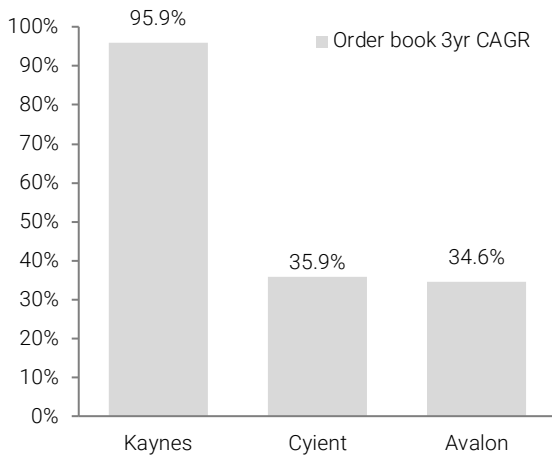
### Revenue: Recovery in US operations is key

While most peers have capitalized on the increasing penetration of electronics in the auto and industrial sectors in India. Avalon’s three-year (FY2020-23) revenue CAGR is just 14% compared with 45% and 33% for peers Kaynes and Syrma, respectively. The company’s domestic business has grown at 16%, which is significantly slower than peers and the international business is even lower at a CAGR of 11%. Further, headwinds in the US economy and destocking by key customers have severely impacted Avalon’s sales over the past nine months.

Avalon’s US-based customers typically followed a 16-20 weeks lead time; orders would be placed 16-20 weeks before they need to be delivered. However, during Covid, the lead times increased to 40-50 weeks due to supply chain disruptions. With supply chains now normalizing, customers have now reverted to the 16 to 20-week lead time, implying lower shipments would be required from Avalon until customer inventories normalize. Hence, the US revenue for Avalon has declined 14% in 9MFY24. Furthermore, some new customers have gone slow toward newer product launches, which impacts Avalon as well. This has meant that Avalon’s order book has just grown 4% in 9MFY24 (in the past nine months), despite very weak revenue growth.

### Avalon’s order book has grown at the slowest pace compared with peers due to slow international growth...

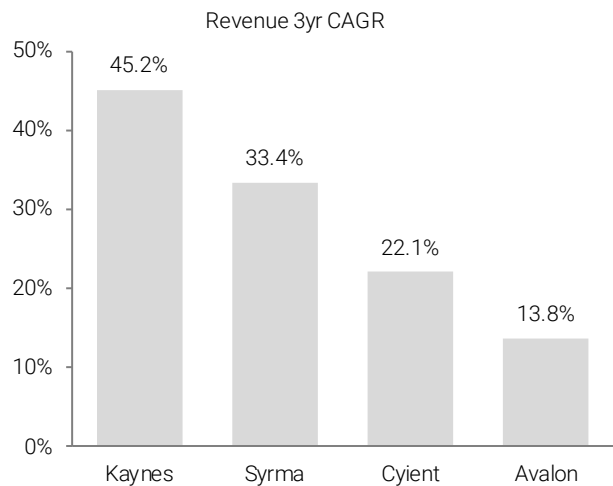
Exhibit 25: Comparison of order book CAGRs for B2B EMS players, March fiscal year-ends, 2020-23 (%)



Source: Companies, Kotak Institutional Equities

### ... that drives the weak revenue growth among its peer set

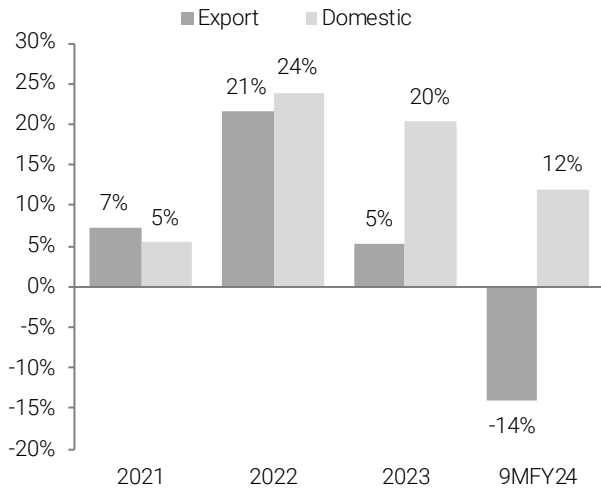
Exhibit 26: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2020-23 (%)



Source: Companies, Kotak Institutional Equities

**For 9MFY24, domestic sales grew 12% with export sales declining 14%**

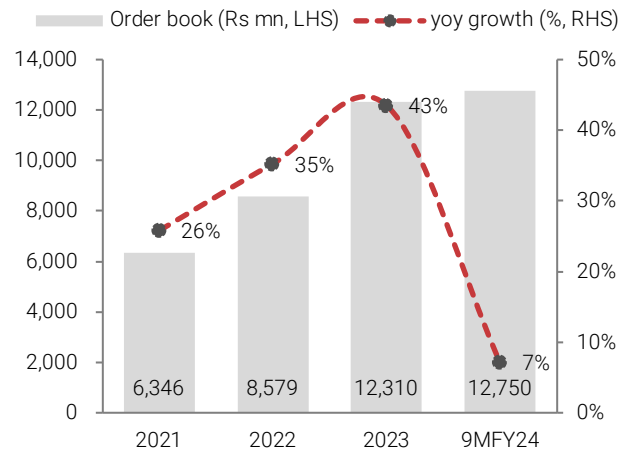
Exhibit 27: Avalon’s revenue growth by geography, March fiscal year-ends, 2021-9MFY24 (%)



Source: Kotak Institutional Equities, Companies

**However, the biggest near-term concern for us is the slowing order growth**

Exhibit 28: Avalon’s order book (Rs mn) and order book growth (%) trends, March fiscal year-ends, 2021-9MFY24

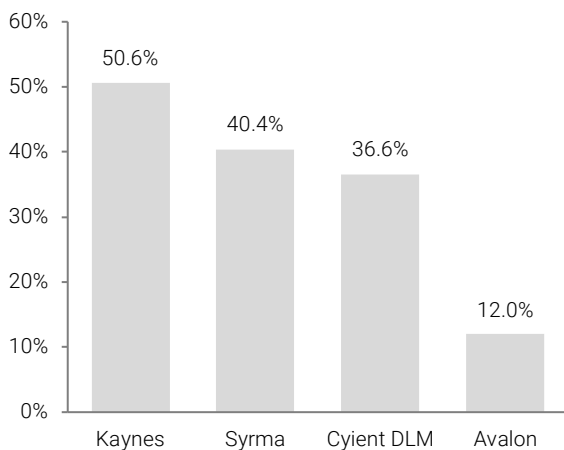


Source: Kotak Institutional Equities, Companies

Avalon’s plan remains to double revenue in the next three years. With an execution cycle of 12-14 months, we would first want to see an uptick in order book growth that provides medium-term revenue visibility. Furthermore, US customers have shown some initial signs of pickup in activity (customers have resumed production between 30% and 70% of normalized levels in most cases). Sustained qoq improvement to 100% normalized level of activity by end-1HFY25 will hold the key for Avalon, in our view.

**Near term, we expect Avalon’s growth to be lowest among peers**

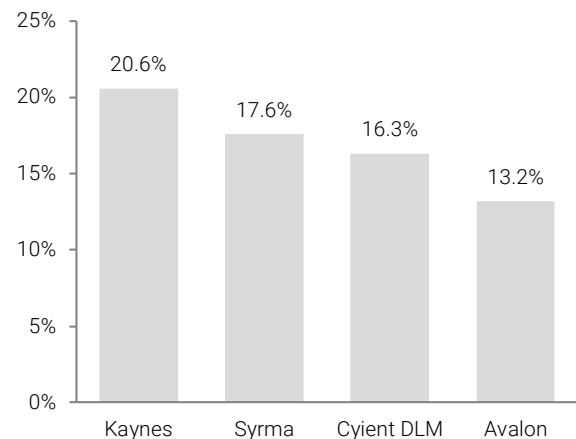
Exhibit 29: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2023-26E (%)



Source: Company, Kotak Institutional Equities estimates

**Medium-term growth for Avalon should see a similar trend**

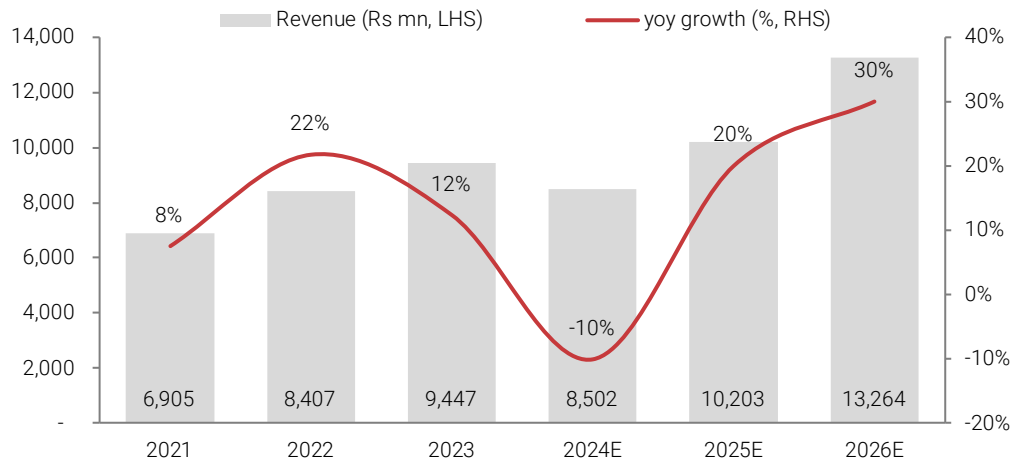
Exhibit 30: Comparison of revenue CAGRs for B2B EMS players, March fiscal year-ends, 2023-45E (%)



Source: Company, Kotak Institutional Equities estimates

**We are baking in 20%/30% revenue growth for FY2025E/FY2026E due to the rebound in US operations, although outlook remains very uncertain in the near term**

Exhibit 31: Avalon’s revenue (Rs mn) and revenue growth (%) trends, March fiscal year-ends, 2021-26E



Source: Kotak Institutional Equities estimates, Company

**Margin recovery to be gradual**

Avalon has the highest gross margin among EMS peers, given its vertically integrated business model, with the company providing services across the entire value chain from PCBA, box-build, cable harnessing, metals, magnetics and design. Furthermore, a favorable mix driven by higher contribution of exports and box build help Avalon in maintaining gross margins significantly ahead of peers.

However, this advantage in gross margins does not translate into superior EBITDA margins, given the higher employee costs as a result of manufacturing presence in the US (~10% of workforce in the US accounts for 50% of employee costs). Avalon has a lower number of contract workforce, hence a higher fixed cost base leads to negative operating leverage within a weak operating environment.

With US operations impacted over the past couple of quarters, this higher fixed cost base in the US (manufacturing set up and employee cost) has led the company to report losses in its US business over the past 9 months and consolidated EBITDA margins have declined to 7% in 9MFY24.

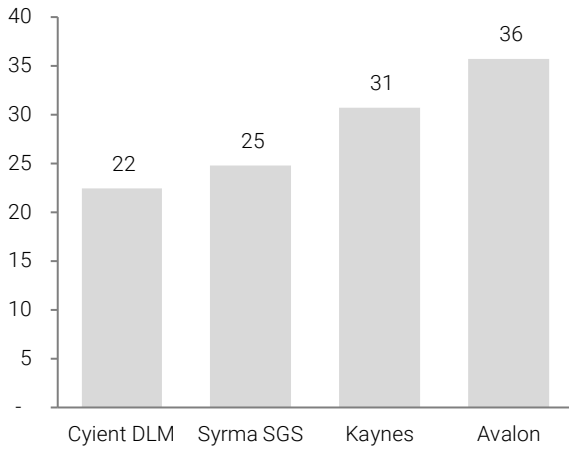
While 59% of Avalon’s sales are to the US market, around 75 of the manufacturing is done in India (25% in US). In order to reduce the impact of higher US cost base, the company is looking to further shift part of the US manufacturing to India based on client approvals.

However, the positive impact of this would only be visible over the medium term. Slower US operations has now led Avalon to increasingly focus on Indian operations, with India expecting to contribute 50% of the overall mix, hence an unfavorable mix of higher domestic operations would negate some impacts of cost optimization. In addition to cost optimization measures, we would first want to see a pickup in US orders to gain confidence regarding the pickup in business activity.

In the near term, we expect EBITDA margins to reach 10.7% levels by FY2026E, owing to some recovery in US revenue; however, our estimates are still 120/90 bps lower than the FY2023/FY2022 levels, given the mix shift toward India.

**Avalon has superior gross margin profile, driven by high degree of backward integration and higher contribution of box build...**

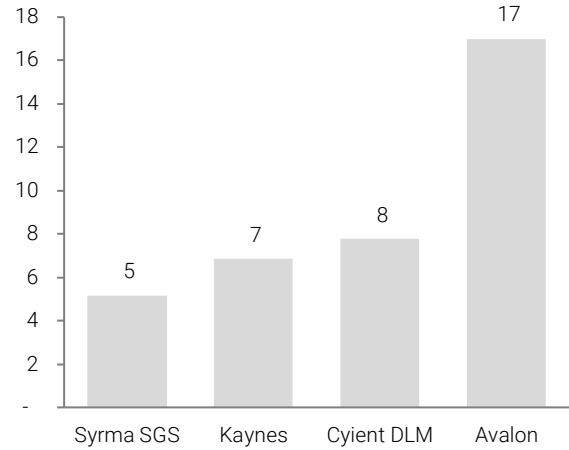
Exhibit 32: Comparison of gross margins for B2B EMS players, March fiscal year-ends, 2023 (%)



Source: Company, Kotak Institutional Equities

**... but, this is largely negated due to higher employee costs, driven by US manufacturing operations**

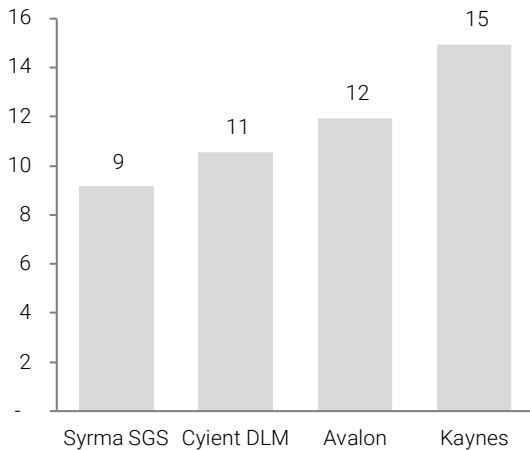
Exhibit 33: Comparison of employee costs as % of sales for B2B EMS players, March fiscal year-ends, 2023 (%)



Source: Company, Kotak Institutional Equities

**As a result, superior gross margin profile does not translate to superior EBITDA margins**

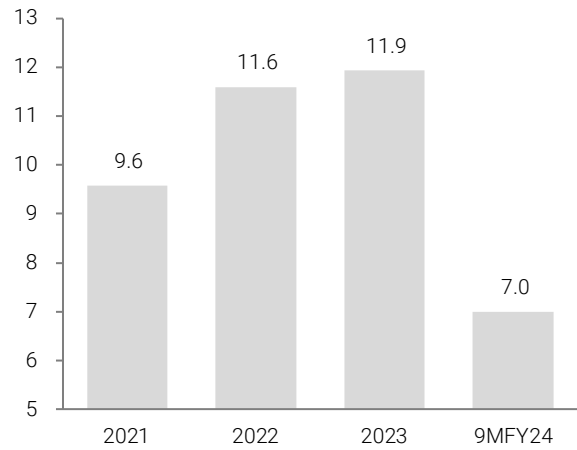
Exhibit 34: Comparison of EBITDA margins for B2B EMS players, March fiscal year-ends, 2023 (%)



Source: Company, Kotak Institutional Equities

**Further weak export performance and higher fixed cost base has taken margins to 7% levels in 9MFY24**

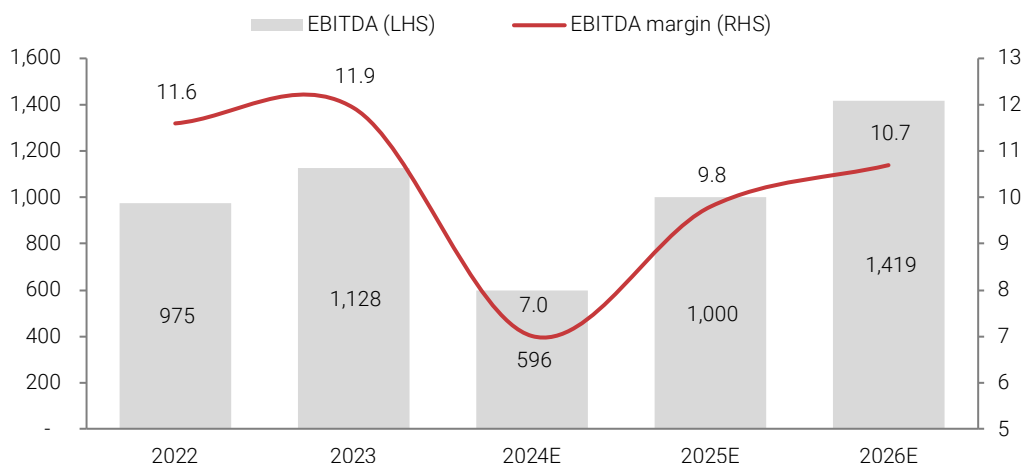
Exhibit 35: Avalon's EBITDA margin trends, March fiscal year-ends, 2021-9MFY24 (%)



Source: Company, Kotak Institutional Equities

**We expect Avalon’s margins to be below FY2022/FY2023 levels, driven by weak US operations and unfavorable mix (EBITDA CAGR of 8% over FY2023-26E)**

**Exhibit 36: Avalon’s EBITDA (Rs mn) and EBITDA margin (%) trends, March fiscal year-ends, 2022-26E**



Source: Company, Kotak Institutional Equities estimates

**Exhibit 37: P&L of Avalon Technologies (consolidated), March fiscal year-ends 2020-27E (Rs mn)**

	2020	2021	2022	2023	2024E	2025E	2026E	2027E	CAGR 2023-26E (%)
<b>Net sales</b>	<b>6,419</b>	<b>6,905</b>	<b>8,407</b>	<b>9,447</b>	<b>8,502</b>	<b>10,203</b>	<b>13,264</b>	<b>16,959</b>	<b>12.0</b>
Cost of material	(4,113)	(4,560)	(5,541)	(6,067)	(5,442)	(6,530)	(8,489)	(10,854)	
Employee expense	(1,162)	(1,192)	(1,314)	(1,605)	(1,819)	(1,939)	(2,454)	(3,053)	
Other expenses	(499)	(491)	(577)	(647)	(646)	(735)	(902)	(1,153)	
<b>Total expenses</b>	<b>(5,774)</b>	<b>(6,243)</b>	<b>(7,432)</b>	<b>(8,319)</b>	<b>(7,907)</b>	<b>(9,203)</b>	<b>(11,845)</b>	<b>(15,059)</b>	
<b>EBITDA</b>	<b>645</b>	<b>661</b>	<b>975</b>	<b>1,128</b>	<b>596</b>	<b>1,000</b>	<b>1,419</b>	<b>1,899</b>	<b>8.0</b>
Depreciation	(155)	(157)	(172)	(197)	(228)	(247)	(308)	(386)	<b>16.1</b>
<b>EBIT</b>	<b>490</b>	<b>504</b>	<b>804</b>	<b>931</b>	<b>368</b>	<b>753</b>	<b>1,111</b>	<b>1,514</b>	
Other income	113	54	109	144	177	129	93	106	
Interest	(450)	(270)	(248)	(348)	(164)	(6)	(6)	(6)	<b>(74.7)</b>
<b>Profit before tax</b>	<b>153</b>	<b>288</b>	<b>664</b>	<b>727</b>	<b>381</b>	<b>876</b>	<b>1,198</b>	<b>1,614</b>	<b>18.1</b>
Tax expense	(30)	(57)	(183)	(202)	(97)	(223)	(306)	(412)	
<b>Adjusted PAT</b>	<b>123</b>	<b>231</b>	<b>482</b>	<b>525</b>	<b>284</b>	<b>653</b>	<b>893</b>	<b>1,202</b>	<b>19.4</b>
<b>Reported PAT</b>	<b>123</b>	<b>231</b>	<b>682</b>	<b>525</b>	<b>284</b>	<b>653</b>	<b>893</b>	<b>1,202</b>	
<b>Adjusted EPS (Rs)</b>	<b>1.9</b>	<b>3.5</b>	<b>7.4</b>	<b>8.0</b>	<b>4.3</b>	<b>10.0</b>	<b>13.7</b>	<b>18.4</b>	<b>19.4</b>
<b>Key ratios</b>									
Raw material expense/sales	64.1	66.0	65.9	64.2	64.0	64.0	64.0	64.0	
Employee expense/sales	18.1	17.3	15.6	17.0	21.4	19.0	18.5	18.0	
Other expenses/sales	7.8	7.1	6.9	6.8	7.6	7.2	6.8	6.8	
<b>EBITDA margin (%)</b>	<b>10.0</b>	<b>9.6</b>	<b>11.6</b>	<b>11.9</b>	<b>7.0</b>	<b>9.8</b>	<b>10.7</b>	<b>11.2</b>	
Effective tax rate (%)	19.4	19.9	27.5	27.8	25.5	25.5	25.5	25.5	
Adjusted PAT margin (%)	1.9	3.3	5.7	5.6	3.3	6.4	6.7	7.1	
<b>Yoy growth (%)</b>									
Net sales		7.6	21.8	12.4	(10.0)	20.0	30.0	27.9	
EBITDA		2.6	47.5	15.6	(47.2)	67.9	41.9	33.8	
Adjusted PAT		87.3	195.3	(23.0)	(45.9)	130.0	36.8	34.7	

Source: Company, Kotak Institutional Equities estimates

**Balance sheet: Balancing growth with working capital holds the key**

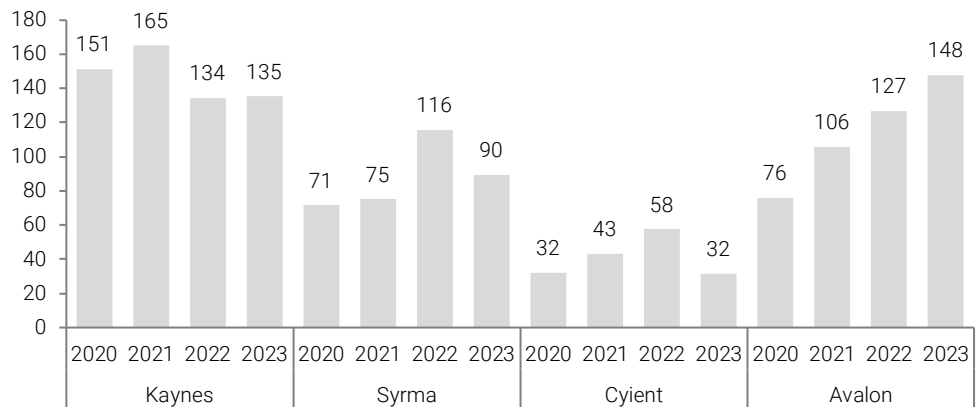
**Working capital challenges persist**

Avalon’s working capital days are the highest among peers (NWC as a percentage of sales), driven by its higher inventory days. The company’s receivable and payable cycle is comparable with peers. Avalon has faced the negative impact of (1) global supply chain disruptions in the electronic industry, leading to higher inventory (common across players) and (2) delayed offtake by end-customers (especially US customers), leading to higher inventory levels at Avalon. As a result, Avalon’s inventory days has doubled from 88 days in FY2020 to 123 days, as of FY2023, significantly ahead of peers (Cyient DLM has higher inventory days, but receives customer advances from domestic customers such as BEL).

With US recovery still some time away, in our view (yet to see a revival in order book growth for Avalon), we expect inventory challenges to persist for Avalon, impacting OCF and FCF generation. We expect working capital days to reduce to 110 days by FY2026E, based on gradual reduction in inventory levels after the recovery in US operations.

**Avalon’s working capital has seen a sharp rise over the past four years and is now highest among peers**

**Exhibit 38: Operating working capital as days of sales for B2B EMS players, March fiscal year-end, 2020-23**



Source: Company, Kotak Institutional Equities

**We expect 38 days improvement NWC days over next 3 years, driven by recovery in US operations**

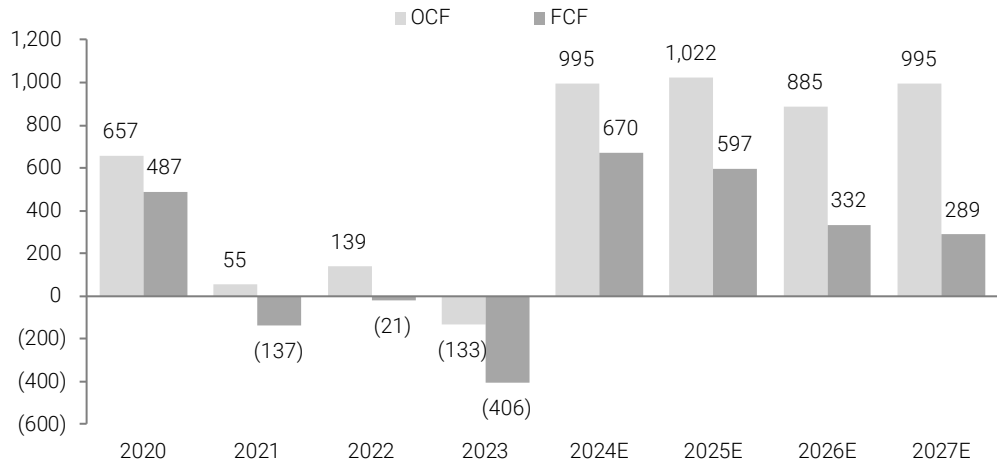
**Exhibit 39: Operating working capital as days of sales of Avalon, March fiscal year-end, 2020-26E**

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	88	77	101	123	125	110	95
Receivable as days of sales	65	96	77	80	65	55	55
Payable as days of sales	77	67	51	55	40	40	40
<b>NWC as days of sales</b>	<b>76</b>	<b>106</b>	<b>127</b>	<b>148</b>	<b>150</b>	<b>125</b>	<b>110</b>

Source: Company, Kotak Institutional Equities estimates

**We expect some improvement in OCF and FCF for Avalon, based on gradual improvement in its working capital cycle**

**Exhibit 40: Avalon’s operating cash flow and free cash flow, March fiscal year-end, 2020-27E (Rs mn)**



Source: Company, Kotak Institutional Equities estimates

**Capex:** Avalon’s capacity utilization was 63% (as of FY2022), with FY2024E seeing muted growth, most capex expenditure will largely be focused on incremental capacity enhancement and debottlenecking. Beyond that, we believe the company will have to undertake capex (incremental capex assumption is based on gross FATR to be around 7X, in line with the industry).

**Leverage:** Avalon has repaid loans worth Rs1.45 bn from IPO proceeds; hence, we expect the company to end the year with a debt:equity ratio of 0.2X. With no major capex expected to be undertaken over the short term, we do not expect leverage to be a concern for the company over the near term.

**Exhibit 41: Balance sheet of Avalon Technologies (consolidated), March Fiscal year-ends, 2020-27E (Rs mn)**

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Shareholders funds</b>	<b>466</b>	<b>599</b>	<b>872</b>	<b>5,370</b>	<b>5,654</b>	<b>6,307</b>	<b>7,200</b>	<b>8,402</b>
Equity share capital	15	16	16	116	116	116	116	116
Reserves and surplus	450	583	856	5,254	5,538	6,191	7,084	8,286
Loan funds	2,485	2,953	2,941	3,063	1,563	63	63	63
Deferred tax liabilities	—	—	—	—	—	—	—	—
Minority Interest and other liabilities	(135)	(78)	276	416	416	416	416	416
<b>Total sources of funds</b>	<b>2,816</b>	<b>3,475</b>	<b>4,088</b>	<b>8,849</b>	<b>7,633</b>	<b>6,786</b>	<b>7,678</b>	<b>8,881</b>
Net block	720	832	894	909	1,006	1,184	1,428	1,749
CWIP	287	200	242	495	495	495	495	495
<b>Net fixed assets</b>	<b>1,006</b>	<b>1,033</b>	<b>1,136</b>	<b>1,404</b>	<b>1,501</b>	<b>1,679</b>	<b>1,923</b>	<b>2,244</b>
Investments + Goodwill	364	296	241	263	263	263	263	263
Cash and bank balances	266	335	101	4,222	3,229	2,320	2,647	2,930
<b>Current assets</b>	<b>2,861</b>	<b>3,461</b>	<b>4,401</b>	<b>5,914</b>	<b>5,046</b>	<b>5,209</b>	<b>6,034</b>	<b>7,239</b>
Inventories	1,553	1,458	2,330	3,179	2,912	3,075	3,452	4,182
Sundry debtors	1,138	1,819	1,774	2,062	1,514	1,537	1,999	2,555
Loans and advances	9	14	13	38	38	38	38	38
Other current assets	161	170	284	635	582	559	545	465
<b>Current liabilities</b>	<b>1,681</b>	<b>1,650</b>	<b>1,791</b>	<b>2,954</b>	<b>2,406</b>	<b>2,685</b>	<b>3,188</b>	<b>3,796</b>
Trade payables	1,358	1,275	1,185	1,418	932	1,118	1,454	1,858
Other current liabilities	310	363	595	1,521	1,458	1,551	1,719	1,922
Provisions	13	12	11	16	16	16	16	16
<b>Net current assets (excl. cash)</b>	<b>1,180</b>	<b>1,811</b>	<b>2,610</b>	<b>2,960</b>	<b>2,640</b>	<b>2,524</b>	<b>2,845</b>	<b>3,444</b>
<b>Total application of funds</b>	<b>2,816</b>	<b>3,475</b>	<b>4,088</b>	<b>8,849</b>	<b>7,633</b>	<b>6,786</b>	<b>7,678</b>	<b>8,881</b>
<b>Key ratios</b>								
Debt / equity (X)	5.3	4.9	3.4	0.6	0.3	0.0	0.0	0.0
Net debt / equity (incl. acceptances) (X)	4.8	4.4	3.3	(0.2)	(0.3)	(0.4)	(0.4)	(0.3)
Gross FATR (X)	6.1	5.7	6.4	6.3	4.7	4.5	4.7	4.8
BVPS (Rs)	7	9	13	82	87	97	110	129
RoAE (%)	26.5	43.3	65.5	16.8	5.1	10.9	13.2	15.4
RoACE (%)	13.4	12.4	15.8	11.0	3.5	8.3	12.1	14.3
<b>Working capital as days of sales</b>								
<b>Current assets</b>	<b>163</b>	<b>183</b>	<b>191</b>	<b>228</b>	<b>217</b>	<b>186</b>	<b>166</b>	<b>156</b>
Inventories	88	77	101	123	125	110	95	90
Sundry debtors	65	96	77	80	65	55	55	55
Loans and advances	1	1	1	1	2	1	1	1
Other current assets	9	9	12	25	25	20	15	10
<b>Current liabilities</b>	<b>86</b>	<b>77</b>	<b>70</b>	<b>76</b>	<b>61</b>	<b>61</b>	<b>60</b>	<b>60</b>
Trade payables	77	67	51	55	40	40	40	40
Other current liabilities	8	9	18	20	20	20	20	20
Provisions	1	1	0	1	1	1	0	0
<b>Net current assets (excl. cash) as days</b>	<b>77</b>	<b>106</b>	<b>121</b>	<b>153</b>	<b>156</b>	<b>126</b>	<b>106</b>	<b>95</b>

Source: Kotak Institutional Equities estimates, Company

**Cash flow:** With working capital days improving from 148 days in FY2023 to 110 days in FY2026E and no major capex to be undertaken until FY2025E, we expect Rs1.2 bn of free cash flow generation over the next three years.

**Exhibit 42: Cash flow statement of Avalon Technologies (consolidated), March fiscal year-ends, 2020-27E (Rs mn)**

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Cash flow from operating activities</b>								
Net profit before tax	153	288	864	727	381	876	1,198	1,614
Add: Depreciation	155	158	172	197	228	247	308	386
Add: Net interest	434	222	204	241	164	6	6	6
Others	83	(17)	(128)	17	–	–	–	–
<b>Op. Profit before Working Capital Changes</b>	<b>825</b>	<b>651</b>	<b>1,112</b>	<b>1,181</b>	<b>773</b>	<b>1,129</b>	<b>1,512</b>	<b>2,005</b>
Changes in Working capital	(121)	(561)	(848)	(1,125)	320	116	(321)	(598)
Taxes	(47)	(35)	(125)	(189)	(97)	(223)	(306)	(412)
<b>Cash flow from operating activities</b>	<b>657</b>	<b>55</b>	<b>139</b>	<b>(133)</b>	<b>995</b>	<b>1,022</b>	<b>885</b>	<b>995</b>
<b>Cash flow from investing activities</b>								
Capex	(170)	(192)	(159)	(273)	(325)	(425)	(553)	(706)
Investments	(24)	29	–	–	–	–	–	–
Others	2	(104)	(7)	2	–	–	–	–
<b>Cash flow from investing activities</b>	<b>(192)</b>	<b>(267)</b>	<b>(166)</b>	<b>(271)</b>	<b>(325)</b>	<b>(425)</b>	<b>(553)</b>	<b>(706)</b>
<b>Cash flow from financing activities</b>								
Debt	(296)	461	86	128	(1,500)	(1,500)	–	–
Equity	–	73	–	4,815	–	–	–	–
Interest	(426)	(217)	(189)	(283)	(164)	(6)	(6)	(6)
Dividend	(4)	(37)	(38)	–	–	–	–	–
Others	302	(0)	(68)	(117)	–	–	–	–
<b>Cash flow from financing activities</b>	<b>(424)</b>	<b>280</b>	<b>(208)</b>	<b>4,542</b>	<b>(1,664)</b>	<b>(1,506)</b>	<b>(6)</b>	<b>(6)</b>
<b>FCF</b>	<b>487</b>	<b>(137)</b>	<b>(21)</b>	<b>(406)</b>	<b>670</b>	<b>597</b>	<b>332</b>	<b>289</b>
<b>Total cash flow</b>	<b>42</b>	<b>67</b>	<b>(235)</b>	<b>4,138</b>	<b>(994)</b>	<b>(909)</b>	<b>327</b>	<b>283</b>
Opening cash	204	246	313	78	4,219	3,225	2,317	2,644
Other bank balances	–	–	(0)	3	–	–	–	–
Closing cash	246	313	78	4,219	3,225	2,317	2,644	2,927

Source: Companies, Kotak Institutional Equities estimates

# A1

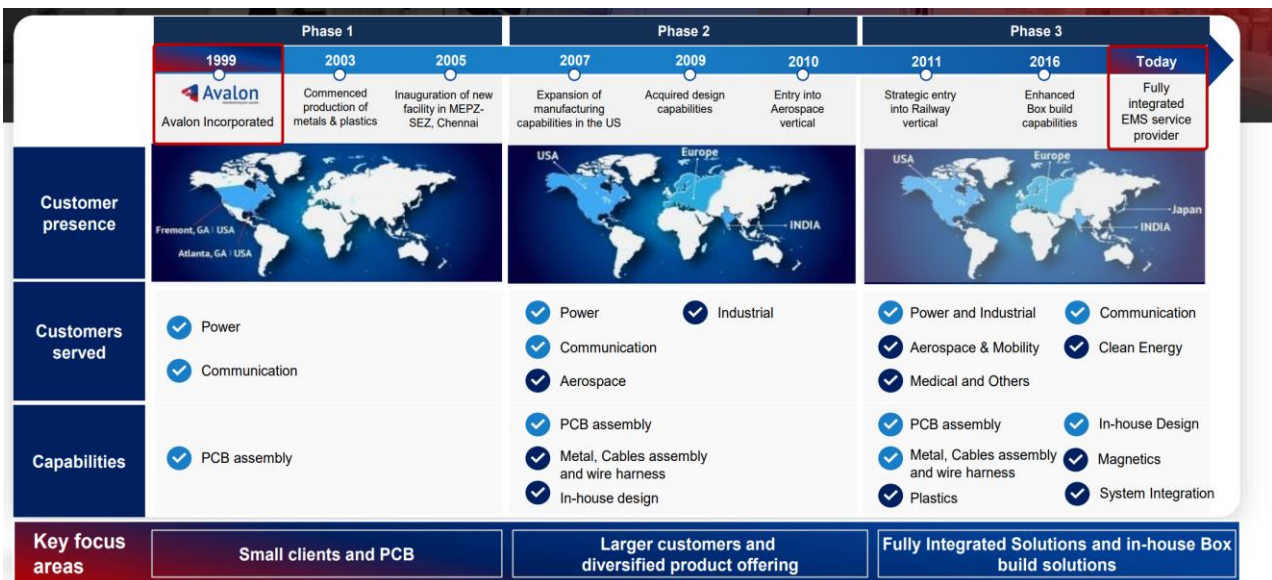
## Appendix 1: Company profile

Avalon began its journey in 1999 as a pure play PCB assembler and now has become a fully vertically integrated player with end-to-end capabilities in delivering box build solutions, with a focus on high-value precision engineered products. Avalon offers manufacturing services across the value chain, including designing and new product development, PCB assemblies, cable assembly, wire harness, machining & magnetics, injection molded plastics, sheet metal fabrication and box build.

Avalon operates in the high-mix and flexible volume product manufacturing segment across a variety of industries, including the power, clean energy, railways, aerospace and medical industries. Overall, Avalon has 14 manufacturing facilities (12 in India and 2 in the US—one of the few Indian players to have a manufacturing set-up in the US). The company derives 53% of revenue from the US and 47% from India, with a longer-term focus to manufacture more products in India, while continuing to service global markets.

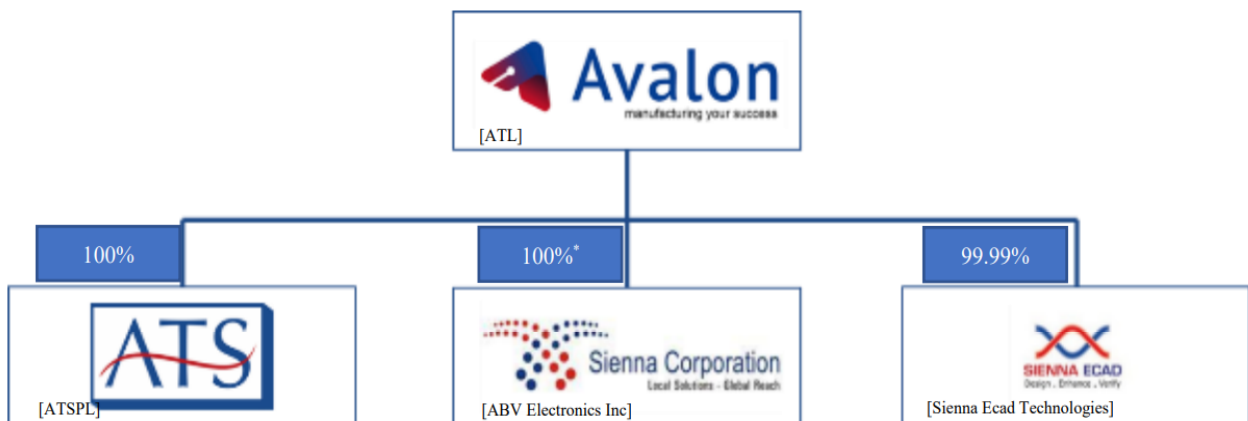
### Journey of Avalon and key milestones achieved over past few years

Exhibit 43: Avalon Tech overview



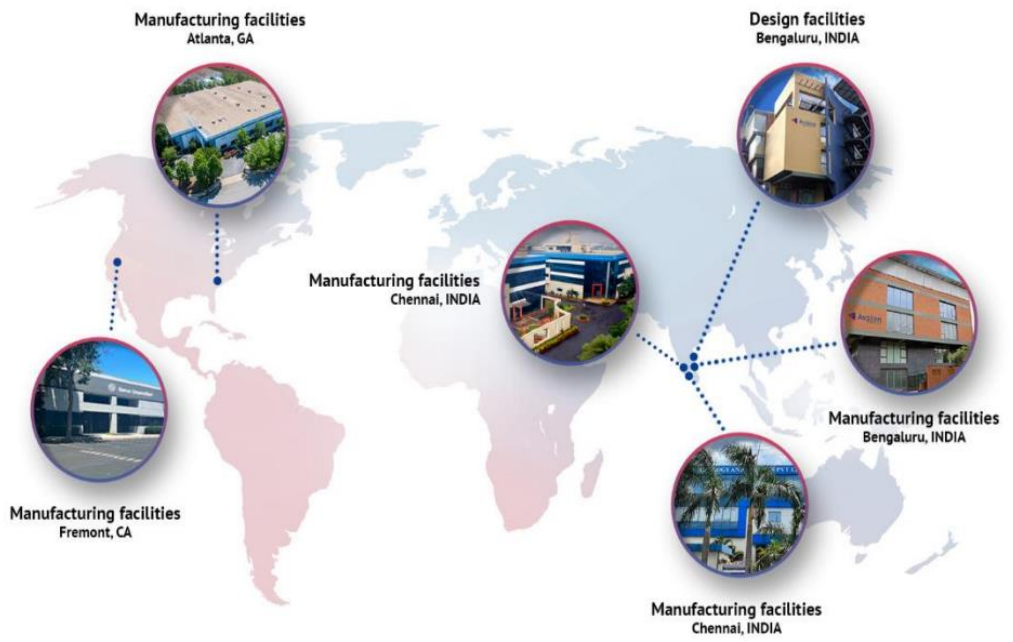
Source: Company data, Kotak Institutional Equities

Exhibit 44: Avalon's corporate structure



Source: Company data, Kotak Institutional Equities

Exhibit 45: Manufacturing footprint of Avalon Technologies, March fiscal year-end, 2023



Source: Company data, Kotak Institutional Equities

## A2

## Appendix 2: Key management personnel

Exhibit 46: Brief background of key management personnel at Avalon Technologies Ltd

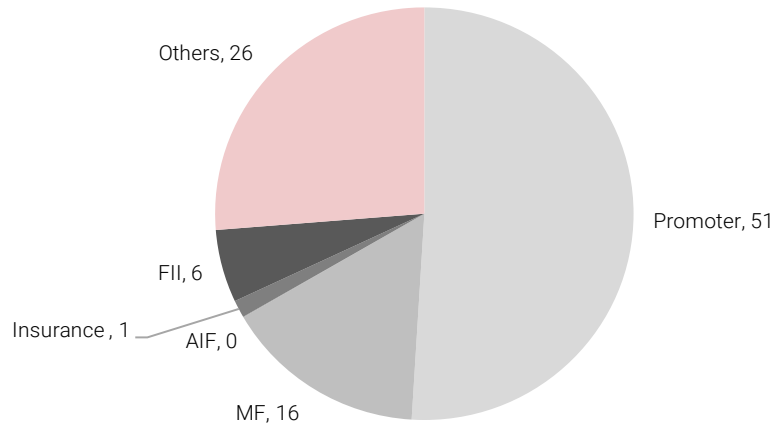
Name	Position	Remarks
Kunhamed Bicha	Chairman & Managing Director	Kunhamed Bicha is one of the co-founders and currently the Chairman and Managing Director of the company. He holds a bachelor's degree in mechanical engineering from PSG College of Technology and a master's degree in science (industrial engineering) from Wichita State University.
Bhaskar Srinivasan	Non-executive Director	Bhaskar Srinivasan is one of the co-founders and currently the Non-executive Director of the company. He cofounded Sienna and currently serves as its president. He holds a bachelor's degree in mechanical engineering from Annamalai University, a master's degree in business administration from Cochin University of Science and Technology and a master's degree in science (industrial engineering) from Wichita State University.
Michael Robinson	CEO	Michael Robinson is the chief operating officer of Sienna and is responsible for overall operations of the manufacturing business in the USA. Prior to joining Avalon Tech he was associated with Motorola Inc and Wconnect LLC.
RM Subramanian	CFO	RM Subramanian has been associated with the company since 2019 and is responsible for the financial functions. He holds a post graduate diploma in management from Indian Institute of Management, Bangalore. Prior to joining Avalon Tech he was associated with A.F. Ferguson & Co Cairn Energy India Pty. Ltd. and Essar Oil Ltd.
Shamil Bicha	VP - Business Development	Shamil Bicha has been associated with the company since 2002 and is responsible for overall sales, business development and marketing of the Company. Prior to joining Avalon Tech he was associated with Applied Materials.
Kesavan P	VP - Operations	Kesavan P has been associated with the company since 2000 and is responsible for the cables and PCB division operations. Prior to joining Avalon Tech he was associated with Quest Smartech Pvt. Ltd., Texmaxo Micro Indo Utama, Sun Fibre Optics Pvt. Ltd., MiniCircuits Ltd.
Arjun Balakrishnan	VP - Corporate Strategy	Arjun Balakrishnan has been associated with the company since 2015 and is responsible for the operations of the metals, aerospace and plastics division. Prior to joining Avalon Tech he was associated with Holm Industries, GE Power Controls India Ltd., Panasonic India Pvt. Ltd.
O J Sathish	VP	O J Sathish has been associated with the company since 1997 and heads the design and development division of Sienna ECAD. Prior to joining Avalon Tech he was associated with Alpha-Imager Private Limited.
Savita R Ganjigatti	VP-Engineering	Savita R Ganjigatti has been associated with the company since 1997 and heads the printed circuit board design and analysis team of Sienna ECAD. Prior to joining Avalon Tech she was associated with Karnataka Telecom Limited as technician and Alpha-Imager Private Limited.
Harold Frederick Schilb III	VP - Business Development	Harold is the vice president – business development of Sienna and leads the sales function of Sienna. He joined Sienna on December 2, 2021. Prior to joining the Sienna, he was associated with Dwfritz Automation, LLC, Celestica Corporation, Electri-Cord Manufacturing Co, IEC Electronics Corp, Industrial Electronics Services Inc, Plexus Corp and Solectron.

Source: Company data, Kotak Institutional Equities

# A3

## Appendix 3: Shareholding pattern

Exhibit 47: Shareholding pattern of Avalon Technology Ltd for the period ending December 2023 (%)



Source: BSE, Kotak Institutional Equities

# Cyient DLM (CYIENTDL)

Electronic Manufacturing Services

**SELL**

CMP(₹): 706

Fair Value(₹): 570

 Sector View: **Cautious**

NIFTY-50: 22,519

April 12, 2024

## Niche focus limits growth prospects

Cyient DLM offers EMS solution for mission-critical applications in highly regulated industries such as aerospace, defense, medical technology and industrials. We expect Cyient to see strong revenue growth over FY2023-26E (37% CAGR), driven by a robust order book (up 102% in FY2023). However, the weakening margin profile, deteriorating working capital cycle and limited growth prospects due to niche focus keep us cautious. We initiate coverage with a SELL rating and a FV of Rs570 (19% downside).

### Initiate coverage with SELL; Fair Value of Rs570

We initiate coverage on Cyient DLM with a SELL rating and a DCF-based FV of Rs570. Our FV implies: (1) a revenue CAGR of 26% over FY2023-33E, (2) an average EBITDA margin of 10.2% and an EBITDA CAGR of 25%, (3) an FCF CAGR of 18% and (4) a WACC of 12% and a terminal growth rate of 4%. The CMP factors in the medium-term sustenance of short-term growth trends (37% CAGR) similar to that of peers such as Kaynes and Syrma despite Cyient DLM's niche focus. However, we see a limited possibility for this currently.

### Tapping on niche verticals

Cyient DLM's key competitive strengths are: (1) niche focus on select segments (aerospace, defense, medical electronics and industrial sectors) that typically have higher entry barriers and limited competitive intensity; (2) long-term relationships with select customers (client concentration remains a key risk though); and (3) support to long-term performance from acquisitions and design capability. However, for the last five quarters, the order book growth has largely remained stagnant, with the decreasing book-to-bill ratio lowering revenue visibility beyond FY2025.

### Financials: We expect 71% earnings CAGR over FY2023-26E

We forecast Cyient DLM's earnings to see a 71% CAGR over FY2023-26E, driven by a 37% CAGR in revenues, which in turn should be fueled by a 102% increase in FY2023 order book that provides strong near-term visibility. However, we remain cautious about the medium-term prospects of the company, due to its: (1) weakening margin profile as a result of unfavorable product mix and higher investments; (2) revenue growth lagging peers due to the focus on select verticals and volatile revenues due to its limited client base; and (3) a deteriorating working capital cycle. We expect Cyient's return ratios to remain range-bound (RoCE to remain in the ~12% range), primarily because of the worsening of the net working capital cycle (NWC days as days of sales) to 95 days in FY20206E from 32 days in FY2023, as the impact of higher advances to BEL wanes off, offsetting the benefits of strong revenue growth.

### Risks: Pickup in order momentum; sharp turnaround in margins

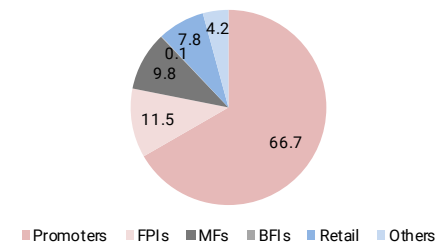
Cyient is seeing a pickup in order momentum, driven by new client additions/increased wallet share and a sharp improvement in margins after the BEL order completion. This, we believe, could provide some upside risk to our estimates.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	706/570/SELL
52-week range (Rs) (high-low)	884-401
Mcap (bn) (Rs/US\$)	56/0.7
ADTV-3M (mn) (Rs/US\$)	269/3.2

##### Shareholding pattern (%)



##### Price performance (%)

	1M	3M	12M
Absolute	(1)	5	0
Rel. to Nifty	(2)	1	0
Rel. to MSCI India	(4)	(3)	0

##### Forecasts/Valuations

	2024	2025E	2026E
EPS (Rs)	8.0	15.9	19.8
EPS growth (%)	103.6	97.4	24.9
P/E (X)	87.8	44.5	35.6
P/B (X)	6.0	5.3	4.6
EV/EBITDA (X)	47.4	32.0	23.9
RoE (%)	6.8	11.9	12.9
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	12	16	21
EBITDA (Rs bn)	1	2	2
Net profits (Rs bn)	1	1	2

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Deepak Krishnan

Aditya Mongia

Sai Siddhardha P

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## Financial overview: Expect 35%/71% PAT CAGR over FY2023-26E

Cyient DLM's EPS is expected to see a 71% CAGR over FY2023-26E

Exhibit 1: Valuation ratios of Cyient DLM, March fiscal year-ends, 2020-27E

	Net sales (Rs bn)	EBITDA (Rs bn)	PAT (Rs bn)	EPS (Rs)	EPS growth (%)	EV/EBITDA (X)	P/E (X)	P/B (X)	RoCE (%)	RoE (%)
2020	4,571	137	(66.9)	(0.8)		420.5	(835.8)	217.5	0.9	(26.0)
2021	6,280	459	118.2	1.5		126.0	473.1	148.5	6.4	31.4
2022	7,215	850	408.4	5.1	245.5	67.8	136.9	72.5	11.5	53.0
2023	8,320	878	313.3	4.0	(23.3)	65.4	178.5	28.3	8.7	15.8
2024E	11,815	1,105	637.8	8.0	103.6	47.4	87.7	6.0	5.4	6.8
2025E	16,308	1,631	1,258.9	15.9	97.4	32.0	44.4	5.3	9.3	11.9
2026E	21,200	2,162	1,572.4	19.8	24.9	23.9	35.6	4.6	11.1	12.9
2027E	27,106	2,765	1,982.7	25.0	26.1	18.7	28.2	4.0	12.3	14.0

Source: Kotak Institutional Equities estimates, Company

Exhibit 2: Summary financials of Cyient DLM, March fiscal year-ends, 2018-27E

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Income statement</b>										
Net revenues	3,878	4,805	4,571	6,280	7,215	8,320	11,815	16,308	21,200	27,106
Total operating expenses	(2,317)	(3,046)	(2,865)	(4,085)	(4,514)	(5,462)	(7,485)	(10,274)	(13,399)	(17,131)
EBITDA	38	186	137	459	850	878	1,105	1,631	2,162	2,765
Depreciation & Amortization	(83)	(83)	(106)	(185)	(193)	(194)	(212)	(225)	(235)	(309)
EBIT	(44)	102	31	275	657	684	892	1,405	1,927	2,456
Other income	91	25	78	89	80	63	285	293	192	213
Interest expense	(108)	(141)	(182)	(208)	(220)	(315)	(321)	(9)	(9)	(8)
PBT	(62)	(14)	(72)	156	517	431	856	1,690	2,111	2,661
Tax expense	24	6	5	(38)	(109)	(114)	(218)	(431)	(538)	(679)
Net profit	(38)	(8)	(67)	118	408	317	638	1,259	1,572	1,983
Reported PAT	(38)	(8)	(67)	118	408	313	638	1,259	1,572	1,983
Recurring EPS	(0)	(0)	(1)	1	5	4	8	16	20	25
<b>Balance sheet</b>										
Shareholders' funds	362	349	257	377	771	1,979	9,341	10,600	12,172	14,155
Share capital	14	14	14	14	14	529	529	529	529	529
Reserves & surplus	348	336	243	363	757	1,450	8,812	10,071	11,643	13,626
Debt	1,508	1,604	2,484	2,338	2,932	3,145	2,295	95	95	95
Deferred tax liabilities	-	-	-	-	-	-	-	-	-	-
Minority interest and other liabilities	11	30	467	528	811	624	624	624	624	624
Total sources of funds	1,880	1,983	3,208	3,242	4,514	5,748	12,260	11,319	12,891	14,874
Net fixed assets	483	493	1,799	1,844	1,712	1,576	1,546	1,466	1,339	1,846
Net working capital (ex-cash)	1,223	844	492	879	1,446	1,421	3,773	4,943	6,216	7,753
Investments	40	49	256	177	139	1,074	1,074	1,074	1,074	1,074
Cash and bank balances and current investments	135	596	661	342	1,218	1,676	5,867	3,836	4,262	4,201
Total application of funds	1,880	1,983	3,208	3,242	4,514	5,748	12,260	11,319	12,891	14,874
<b>Free cash flow</b>										
Operating profit before wcap. changes	188	250	236	548	876	918	1,390	1,924	2,354	2,978
Change in working capital / other adjustments	(319)	39	(105)	(200)	(329)	(229)	(2,352)	(1,169)	(1,273)	(1,537)
Net cashflow from operating activities	(135)	289	133	349	485	521	(1,180)	324	543	762
Capex	(150)	(117)	(830)	(274)	(84)	(76)	(182)	(145)	(108)	(815)
Free cash flow (CFO + net capex)	(284)	171	(697)	75	401	445	(1,362)	178	434	(53)
<b>Growth (%)</b>										
Revenue growth		23.9	(4.9)	37.4	14.9	15.3	42.0	38.0	30.0	27.9
EBITDA growth		384.3	(26.0)	234.7	85.0	3.2	25.8	47.6	32.6	27.9
Recurring PAT growth		(79.9)	768.8	(276.7)	244.9	(22.2)	101.1	97.4	24.9	26.1
<b>Key ratios</b>										
EBITDA margin (%)	1.0	3.9	3.0	7.3	11.8	10.6	9.4	10.0	10.2	10.2
Net debt/equity (X)	3.8	2.9	(0.0)	0.8	(0.3)	(0.3)	(0.5)	(0.4)	(0.3)	(0.3)
Net debt/EBITDA (X)	35.8	5.4	(0.1)	0.6	(0.3)	(0.8)	(4.5)	(2.3)	(1.9)	(1.5)
Book value per share (Rs)	5	4	3	5	10	25	118	134	153	178
RoAE (%)	(10.6)	(2.2)	(26.0)	31.4	53.0	15.8	6.8	11.9	12.9	14.0
RoACE (%)	(1.5)	2.9	0.9	6.4	11.5	8.7	5.4	9.3	11.1	12.3

Source: Company, Kotak Institutional Equities estimates

# 2

## Valuation: Initiate with SELL and Fair Value of Rs570

We initiate coverage on CYIENT DLM, with a SELL rating and a DCF-based Fair Value of Rs570 (19% downside from current levels), implying 29X P/E on March 2026E EPS. Cyient DLM is an EMS company offering electronics solutions for safety and mission-critical applications in highly regulated industries such as aerospace, defense, medical technology and industrials. We forecast Cyient DLM’s earnings to witness a 71% CAGR over FY2023-FY26E, driven by a 37% CAGR in revenue, which in turn, would be supported by a 102% increase in the FY2023 order book. However, we remain cautious on the medium-term prospects of the company due to (1) its weakening margin profile stemming from an unfavorable product mix (higher contribution of PCBA versus box build) and higher investments; (2) revenue growth lagging peers due to the focus on select verticals and volatile revenues as a result of its limited client base and (3) a deteriorating working capital cycle.

### Our DCF-based valuation implies 19% downside

We value Cyient DLM using a three-stage DCF model, with explicit forecasts over FY2023-33E, followed by a fade period over FY2033-45E and assume terminal growth after that. In the explicit forecast period, we build in (1) a revenue CAGR of 26%, (2) an average EBITDA margin of 10.2% (versus 7.4% over FY2021-23) and an EBITDA CAGR of 25% and (3) an FCF CAGR of 18%. We forecast a gradual moderation in FCF growth to 10% by FY2045E from 33% in FY2033E. We assume a WACC of 12% and a terminal growth rate of 4%. The DCF-based FV of Rs570 implies 19X EV/EBIDTA FY2026E and 29X March 2026E P/E.

### We arrive at a valuation of Rs 570/share for Cyient DLM

Exhibit 3: Cyient DLM DCF model (Rs mn), March fiscal year-ends, 2024-45E

(March fiscal year-ends, Rs mn)	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2035E	2045E
<b>Free cash flow calculation</b>													
Revenue	8,320	11,815	16,308	21,200	27,106	34,076	42,109	51,132	60,993	71,449	82,167	106,081	230,998
yoy growth (%)	15	42	38	30	28	26	24	21	19	17	15	13	4
EBIT (excl. other income)	684	892	1,405	1,927	2,456	3,079	3,793	4,593	5,464	6,382	7,319	9,449	20,575
EBIT margin (%)	8.2	7.6	8.6	9.1	9.1	9.0	9.0	9.0	9.0	8.9	8.9	8.9	8.9
Effective tax rate (%)	26	26	26	26	26	26	26	26	26	26	26	26	26
NOPAT	503	665	1,047	1,436	1,830	2,294	2,826	3,422	4,071	4,755	5,452	7,039	15,329
Change in working capital (excl. cash)	(229)	(2,352)	(1,169)	(1,273)	(1,537)	(1,814)	(2,091)	(2,349)	(2,567)	(2,721)	(2,789)	(3,317)	(2,388)
Depreciation	194.2	212.3	225.4	235.1	308.5	397.1	501.7	622.1	757.5	905.4	1,062.2	1,371	2,986
Capex	(76)	(182)	(145)	(108)	(815)	(984)	(1,162)	(1,339)	(1,504)	(1,644)	(1,743)	(2,057)	(1,481)
OCF	468	(1,475)	103	398	601	877	1,237	1,696	2,261	2,939	3,725	5,094	15,927
FCFF	392	(1,657)	(43)	289	(214)	(108)	75	357	758	1,295	1,983	3,037	14,446

Terminal growth rate (%)	WACC %				
	10.8	11.3	11.8	12.3	12.8
3.0	650	590	540	490	450
3.5	680	610	550	500	460
4.0	710	630	570	520	470
4.5	740	660	590	540	490
5.0	780	690	620	550	500

WACC (%)	12
Terminal growth rate (%)	4.0

DCF valuation	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2035
PV of cash flows			16,195	18,152	20,008							
PV of Terminal value			20,578	23,009	25,729							
<b>EV</b>			<b>36,773</b>	<b>41,161</b>	<b>45,737</b>							
Less: Net debt			(3,741)	(4,167)	(4,106)							
<b>Implied Equity value</b>			<b>40,514</b>	<b>45,328</b>	<b>49,842</b>							

Mar 2026E-based Fair value (Rs/share)	570
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Source: Company, Kotak Institutional Equities

### Revenue: Growth to lag peers due to niche focus

We expect Cyient DLM’s revenue to record a 37% CAGR over FY2023-FY26E, driven by 102% order book growth in FY2023 that provides strong visibility for a 40% CAGR over FY2024-25. We see aerospace & defense (48%) and industrial (19%) as the key growth drivers, with the medical segment seeing muted growth after Covid.

### Aerospace & defense: Robust growth outlook driven by marquee MNC tie-ups

Aerospace and defense are one of the most complex and specialized industries in electronics manufacturing. Cyient’s key offering in aerospace and defense include cockpit display units, flight

management systems, surveillance radar systems and communication/navigation systems. Honeywell, Thales, Bharat Electronics, Safran, BAE Systems and many Israel-based aerospace and defense companies are the main customers of Cyient in this segment.

In the domestic end-market, the company has won a large order from Bharat Electronics (~Rs7 bn in FY2023), which is expected to be executed by end-FY2025 and will be the main growth driver for the defense vertical. However, this order has significantly lower margins than the other orders and will be a drag on margins in the short term. Cyient has recently signed a long-term partnership with Honeywell with a TCV ~US\$300 mn for 10 years (implying 10% of current order book) and has on-boarded global majors such as Safran and BAE Systems in the last six months.

When we analyze the market potential for Cyient, we see the domestic defense electronics spending increasing from Rs273 bn as of FY2023 to Rs1.4 tn by FY2040E (11% CAGR). Our assumption is driven by defense spend as a percentage of total capital outlay remaining in the ~20% range, similar to the levels seen in FY2023. Cyient's FY2023 defense revenue of Rs3 bn indicates that the company caters to a very small part of the overall market.

In terms of global market size, Sanmina gets US\$5.4 bn in revenue from industrial, medical, aerospace & defense and automotive segments in FY2023. Celestica's advanced technology solutions (ATS) segment, which caters to the aerospace & defense (A&D), industrial, energy, healthtech and capital equipment businesses, generated US\$2.9 bn in revenue in FY2023. Jabil generated US\$4.7bn in revenue from the industrial and capital equipment business. All these companies have an overlap with Cyient's aerospace business.

We are baking in a 48% CAGR over FY2023-26E for the aerospace & defense vertical, primarily driven by the Bharat Electronics order in the short term and global customers in the medium term (from FY2026E onward).

#### **Industrial: Pickup in ordering from key customer ABB for North American market holds the key**

Cyient's industrial offering primarily caters to the oil and gas segment. Some of Cyient's key offerings includes flow measurement analysis, room and plant controllers and building technologies.

ABB is the main customer that Cyient caters to in its industrial segment. ABB accounts for 86% (as of FY2023) of the industrial segment revenue and the company caters to ABB's North American Oil and Gas market.

We estimate that India's industrial EMS market will be ~Rs50 bn as of FY2023 and that the industrial EMS market will witness a 12% CAGR over FY2023-26E. In the global market, the US peer Jabil recorded revenues of US\$4.7 bn in FY2023 from its industrial and capital equipment business. Cyient recorded a revenue of Rs2.1 bn in its industrial segment; hence, the company still caters to a very small part of the global industrial market. However, it needs to expand relationships beyond ABB North America. We are baking in a 19% CAGR in the industrial segment; however, growth depends on one key customer. Hence, any slowdown in orders from ABB remains a key point of concern.

#### **Medical: Entering a period of modest growth**

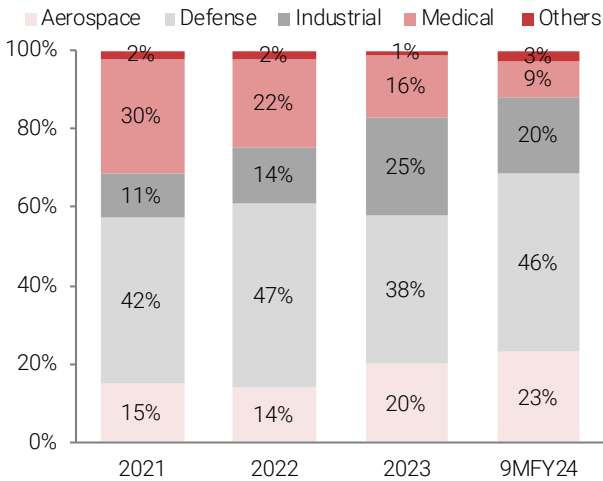
Cyient's medical segment offerings primarily fall under two main categories—patient care monitoring equipment and diagnostic equipment.

Molbio Diagnostics Private Limited has been one of the key end-customers for Cyient, to which the company supplied electronics for Covid testing equipment in recent years. With Covid now largely behind us, we have seen a slowdown in revenue in the last nine months (down ~13% yoy). We estimate the Indian medical devices EMS market will be ~Rs90 bn in FY2023 and grow at a 10% CAGR (see the industry report). However, we expect revenue growth to remain modest for the medical segment and bake in a 3% CAGR over FY2023-26E, driven by some rebound in volumes after a weak FY2024.

The near-term sharp uptick in the order book in FY2023 (Cyient's order book grew 102%) provides strong revenue visibility. However, for the last five quarters, the order book growth has largely remain stagnant, with the decreasing book-to-bill ratio lowering revenue visibility beyond FY2025.

**Defense, aerospace and industrial are the key growth driver for Cyient DLM**

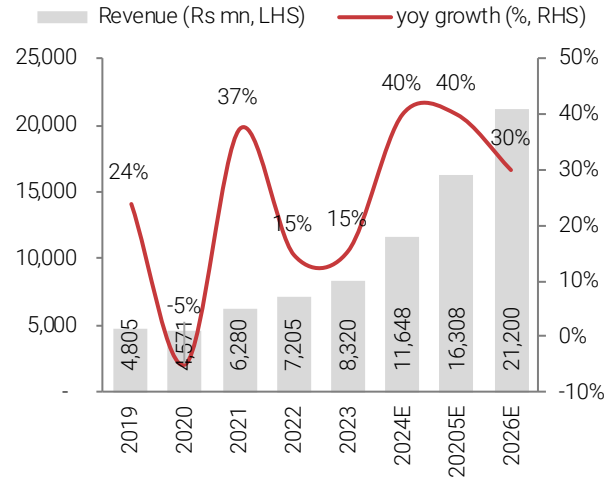
Exhibit 4: Cyient’s segmental revenue mix, March fiscal year-ends, 2021-9MFY24 (%)



Source: Company, Kotak Institutional Equities estimates

**We expect revenue to see 37% CAGR over FY2023-26E, driven by 102% growth in order book**

Exhibit 5: Cyient’s revenue (Rs mn) and revenue growth (%) trends, March fiscal year-ends, 2019-26E



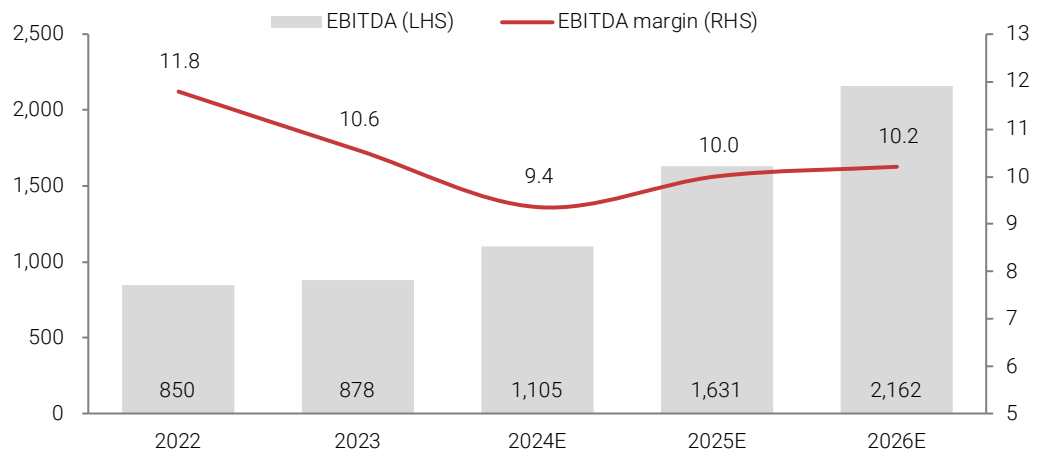
Source: Company, Kotak Institutional Equities estimates

**EBITDA: Weakening profile due to adverse product mix and higher investments**

Cyient DLM has a higher focus on export markets, which generally have higher margins. In addition, segments such as aerospace, defense and medical electronics have typically more stringent quality requirements and hence a longer approval cycles to on-board a vendor. These factors should have driven Cyient’s margins to be significantly ahead of its peers; however, we find that its margins today are in line with the peers that have a higher focus on low-margin consumer verticals. Cyient’s gross margins are lower than Kaynes and Avalon despite a superior mix, as they have a lower contribution from box build and higher revenue coming from PCBA (implying lower levels of backward integration). Further, with capacity utilization significantly below its peer set, Cyient’s India domestic defense exposure is toward a large multi-year contract from Bharat Electronics (BEL), which has significantly lower margins than the rest of the business. The BEL order is expected to be complete only by the end-FY2025, so margins are expected to remain under pressure in the short term. Cyient has indicated it will make investments to strengthen its sales and leadership teams. This is also expected to weigh on margins. As a result, we expect margins will remain at sub-10% levels for FY2024 and FY2025.

**We expect Cyient’s margin to be below the recent high, driven by unfavorable mix and higher investments (EBITDA CAGR of 33% over FY2023-26E)**

Exhibit 6: Cyient’s EBITDA (Rs mn) and EBITDA margin (%) trends, March fiscal year-ends, 2022-26E



Source: Company, Kotak Institutional Equities

**Working capital to deteriorate in the short term**

We expect working capital days to deteriorate from 32 days in FY2023 to 95 days in FY2025E, in line with the company guidance. Cyient’s working capital had been superior to peers in the past due to advances from domestic defense companies such as BEL. With advances and payables expected to decrease by 40 and 50 days, respectively, Cyient’s working capital should move closer to peers. In the medium term, maintaining working capital closer to 60-80 days would ensure healthy return ratios.

**With BEL order at advanced stages of execution, the decrease in advances with no equivalent decrease in inventory levels will drive higher net working capital cycle**

Exhibit 7: Operating working capital as days of sales of Cyient DLM, March fiscal year-end, FY2020-26E

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	178	90	136	186	140	140	140
Receivable as days of sales	44	132	77	71	85	85	85
Payable as days of sales	84	110	97	125	80	80	80
Other current liabilities (incl advances) as days of sales	105	68	58	101	50	50	50
NWC as days of sales	32	43	58	32	95	95	95

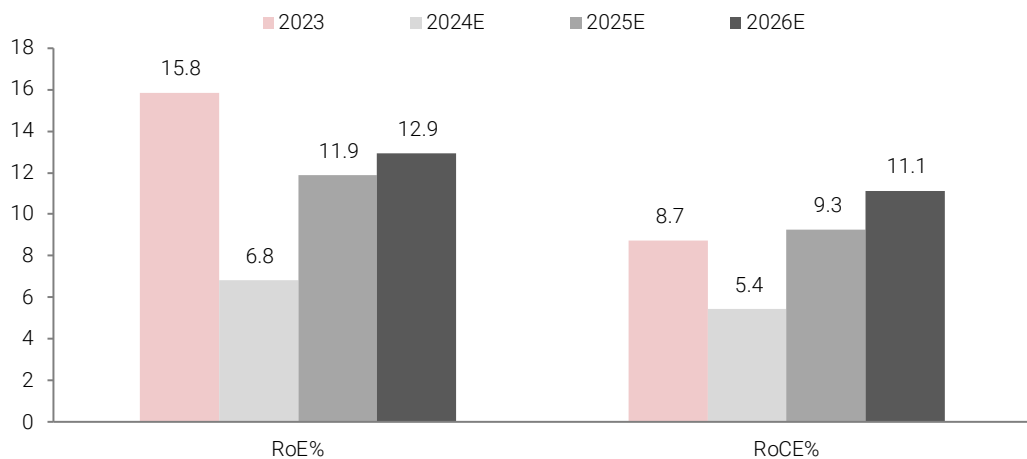
Source: Company, Kotak Institutional Equities

**Return ratios**

We expect return ratios (RoE and RoCE) for Cyient DLM to be range bound over the next couple of years. Strong topline growth (37% CAGR over FY2023-FY26E) is offset by weakening margin profile (EBITDA margins in FY20206E is expected to 10.2% vs 10.6% in FY2023). However, the biggest negative impact is deteriorating working capital, Cyient’s net working capital days (as days of sales) is expected to worsen to 95 days in FY20206E from 32 days in FY2023 as the impact of higher advances for BEL wanes off. Double digit margins and net working capital days (as days of sales) around 30 days along with robust topline growth will be key to move Cyient’s RoCE profile closer to 25% which all peers have been targeting.

**We expect return ratios to remain range-bound as strong revenue growth is offset by weak margins and worsening working capital days (as days of sales)**

Exhibit 8: Trend in RoE and RoCE, March fiscal year-ends, 2023-26E (%)



Source: Company, Kotak Institutional Equities estimates

### Relative valuation

Cyient trades at 36X March 2026E EPS, in line with comparable Indian peers. This is despite the fact the company is largely exposed to global aerospace, defense and industrial verticals, which have a much lower growth expectations in the medium term as compared to the Indian domestic EMS market. Further, we expect a deterioration in working capital and margins in the short term could potentially weigh on the stock in the near term. Signing of new clients with order book potential similar to that of the existing client base and ramp-up in order inflow would be key things to watch out for.

**Exhibit 9: Valuation comparable metric for Cyient DLM, March fiscal year-ends, 2024-26E**

Company	Mkt Cap. (US\$ mn)	Price (LC)	Year end	EV (US\$ mn)	EV/EBITDA (X)			P/E (X)			P/B (X)			RoE (%)		
					2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Global</b>																
Hon Hai Precision Industry	66,966	154.5	Dec	59,165	6.7	5.8	4.9	13.6	11.8	12.0	1.3	1.2	1.2	9.5	10.1	9.4
Pegatron Corp	8,413	101.0	Dec	8,997	8.2	7.1	6.2	15.8	14.1	12.9	1.3	1.3	1.2	8.4	9.0	9.8
Quanta Computer Inc	34,056	282.0	Dec	32,424	14.3	11.2	10.4	21.8	17.6	15.3	5.4	4.9	4.5	24.8	27.7	27.3
Compal Electronics	5,043	36.7	Dec	6,139	8.9	8.1	7.3	14.9	13.0	10.4	1.3	1.2	1.2	8.3	8.8	9.1
Wistron Corp	11,378	125.5	Dec	13,688	8.4	6.8	5.6	19.2	14.7	11.4	2.9	2.6	2.4	16.0	18.1	20.9
Jabil Inc	16,465	136.5	Dec	16,789	7.4	6.9	6.5	16.3	13.0	11.4	8.6	6.0	4.4	43.6	52.8	47.1
<b>India</b>																
Dixon Technologies India Ltd	5,585	7,814.0	Mar	5,600	64.0	39.5	31.4	116.9	66.9	53.4	27.6	19.5	14.2	26.7	34.1	30.8
Amber Enterprises India Ltd	1,504	3,705.0	Mar	1,610	27.5	20.4	16.8	74.0	46.4	35.6	6.0	5.3	4.6	8.5	12.1	13.9
Avalon Technologies Ltd	409	520.0	Mar	389	54.2	31.7	22.1	119.6	52.0	38.0	6.0	5.4	4.7	5.1	10.9	13.2
Kaynes Technology India Ltd	1,931	2,508.8	Mar	1,746	67.8	49.0	32.3	103.8	81.3	51.3	5.8	5.4	4.8	8.9	7.5	10.9
Cyient Dlm Ltd	673	705.0	Mar	630	47.4	32.0	23.9	87.7	44.4	35.6	6.0	5.3	4.6	6.8	11.9	12.9
P G Electroplast	562	1,802.1	Mar	623	20.8	17.3	14.9	37.1	27.5	21.9	4.6	3.8	3.0	14.4	14.4	15.1
Syrma Sgs Technology Ltd	1,036	488.0	Mar	1,010	40.5	26.5	18.9	66.2	43.0	29.7	5.1	4.6	4.0	8.1	11.3	14.4

Notes:

(a) All global companies ending Dec have valuation ratios for CY2023/24/25. All domestic companies ending March have valuation ratios for FY2024/25/26.

Source: Bloomberg, Kotak Institutional Equities, Company

# 3

## Tapping niche verticals

At the heart of Cyient DLM’s competitive positioning is its: (1) niche focus on select segments (aerospace, defense, medical electronics and industrial sectors), which typically have higher entry barriers and limited competitive intensity; (2) long-term relationship with select customers (although we believe that client concentration remains a key risk); and (3) acquisition and design capability that could aid long-term performance. In the near term, we expect Cyient to see strong revenue growth (37% CAGR FY2023-26E), driven by a robust order book (102% growth in FY2023). However, the weakening margin profile, deteriorating working capital cycle and limited growth prospects due to niche focus keep us cautious.

### Niche focus on select segments with higher entry barriers

Cyient DLM focuses on four key niche verticals—aircraft, defense, medical electronics and industrial sectors. This helps the company differentiate itself from its peers that have a broader focus on various sectors. Further, Cyient DLM has a higher focus on export markets that generally have higher margins than the domestic market. Last, segments such as aerospace, defense and medical electronics have typically more stringent quality requirements; hence, there are longer approval cycles to on-board a vendor that acts as a natural entry barrier for peers and limits competitive intensity for Cyient DLM.

### Cyient’s end-markets with stringent quality requirements and longer approval cycles have high entry barrier

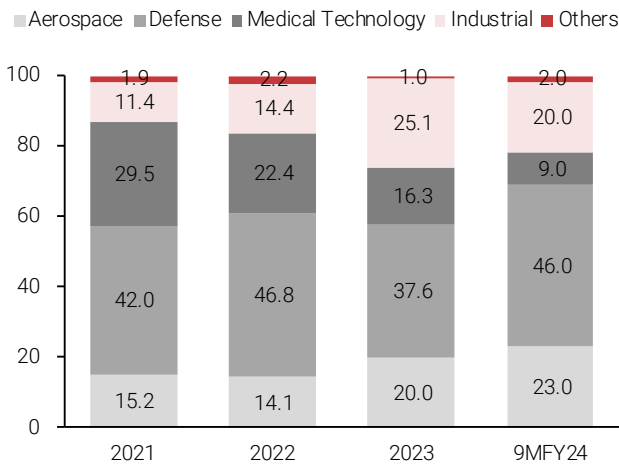
Exhibit 10: Cyient’s offering by end industry

Cyient DLM's offerings		
Aerospace and Defense	Industrial	Medical
<ul style="list-style-type: none"> <li>Cockpit Display units</li> <li>Flight Management Systems</li> <li>Surveillance Radar Systems</li> <li>Communication/ Navigation systems</li> <li>Radar sensors and RF Products</li> </ul>	<ul style="list-style-type: none"> <li>Flow meters</li> <li>Room and plant controllers</li> <li>Power systems</li> <li>I/O cards</li> </ul>	<ul style="list-style-type: none"> <li>Imaging systems</li> <li>In-vitro diagnostics</li> <li>Ultrasounds</li> <li>Pathology equipments</li> </ul>

Source: Company, Kotak Institutional Equities

### A&D, industrial and medical are the key focus sectors for Cyient

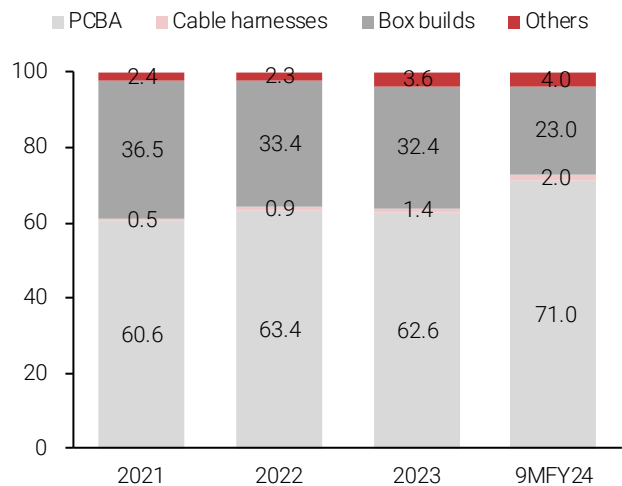
Exhibit 11: Cyient’s segmental revenue mix, March fiscal year-ends, 2021-9MFY24 (%)



Source: Company, Kotak Institutional Equities

### PCBA has the majority share by product type

Exhibit 12: Cyient’s revenue mix by product type, March fiscal year-ends, 2021-9MFY24 (%)



Source: Company, Kotak Institutional Equities

### **Aerospace and defense: Robust growth outlook driven by marquee MNC tie-ups**

Aerospace and defense is one of the most complex and specialized industries in electronics manufacturing. The applications in this industry are safety-critical, with a negligible margin for error and thus require superior technical expertise and engineering capabilities from EMS players. Cyient's key offering in the aerospace and defense arena include:

- ▶ **Cockpit display units:** Aircraft cockpit display units are used in flight instrument systems and typically used to show flight data.
- ▶ **Flight management systems:** A flight management system, or FMS, is an aircraft computer that has multiple functions right from pre-engine offset to take-off and landing to engine shutdown.
- ▶ **Surveillance radar systems:** The surveillance radar systems are designed typically to provide details on the location of aircraft over long or short ranges.
- ▶ **Communication/navigation systems:** Cyient offers EMS solutions to manufacture multiple communication and navigation systems used in defense and aerospace applications.

Honeywell, Thales, Bharat Electronics, Safran, BAE Systems and many of the Israel-based aerospace and defense companies are the main customers of Cyient in this segment.

In the domestic end-market, the company has won a large order from Bharat Electronics (~Rs7 bn in FY2023), which is expected to be executed by end-FY2025 and will be the main growth driver for the defense vertical. However, this order has significantly lower margins than the other orders and will be a drag on margins in the short term. Cyient has recently signed a long-term partnership with Honeywell, with a TCV of ~US\$300 mn for 10 years (implying 10% of the current order book) and on-boarded global majors such as Safran and BAE Systems in the last six months.

When we analyze the market potential for Cyient, we see the domestic defense electronic spending increasing from Rs273 bn as of FY2023 to Rs1.4 tn by FY2040E (11% CAGR). Our assumption is driven by defense spending as a percentage of total capital outlay remaining in the ~20% range similar to levels seen in FY2023. Cyient's FY2023 defense revenue of Rs3 bn indicates that the company caters to a very small part of the overall market.

When we look at the global scenario, Sanmina has US\$5.4 bn in revenue from industrial/medical/aerospace and defense & automotive segment in FY2023. Celestica's Advanced Technology Solutions (ATS) segment, which caters to aerospace and defense (A&D), industrial, energy, healthtech and capital equipment businesses generated US\$2.9 bn in revenue in FY2023 and Jabil generated US\$4.7 bn in revenue from the industrial and capital equipment business, all of which have an overlap with Cyient's aerospace and defense segment.

We are baking in a 48% CAGR over FY2023-26E for the aerospace and defense vertical, primarily driven by the Bharat Electronics order in the short term and global customers in the medium term (from FY2026E).

### **Industrial: Pickup in ordering from key customer ABB for North American market holds the key**

Cyient's industrial offering primarily caters to the oil and gas segment. Some of Cyient's key offerings include:

- ▶ **Flow measurement and analysis:** Electronic equipment that generally helps measure the level of liquid in a plant or industry (primarily catering to process industries such as oil & gas and paints).
- ▶ **Room and plant controllers:** Process control equipment as part of industrial automation solutions to steel, cement and oil & gas sector. Actuator is one of the key product offerings. Actuators are typically responsible for moving, controlling, or positioning a mechanism or system, to make the working of automated equipment seamless and easy.
- ▶ **Build technology:** Here Cyient is involved in field control devices like sensors, valves and actuators that help connect any building management system to its physical environment

ABB is the main customer that Cyient caters to in its industrial segment. ABB accounts for 86% (as of FY2023) of the industrial segment revenue and the company caters to ABB's North America oil & gas market.

We estimate India's industrial EMS market at ~Rs50 bn as of FY2023 and expect it to record a 12% CAGR over FY2023-26E. Cyient's US peer Jabil recorded revenue of US\$4.7 bn in FY2023 from its industrial and capital equipment business. Cyient recorded a revenue of Rs2.1 bn in its industrial segment; hence, the company still caters to a very small part of the global industrial market. It needs to expand its relationship beyond ABB North America.

We are baking in a 19% CAGR in the industrial segment. However, growth depends on one key customer; hence, any slowdown in orders from ABB remains a key point of concern.

#### **Medical: Entering a period of modest growth**

Cyient's medical segment offerings primarily fall under two main categories

- ▶ **Patient care monitoring equipment:** Patient monitoring involves the use of equipment to continually monitor a patient's vital indicators using a medical monitor and collect medical and other types of health data.
- ▶ **Diagnostic equipment:** Equipment for diagnostic imaging include X-rays, MRI scans, CT scans, ultrasonography, and nuclear imaging, among others.

Molbio Diagnostics Pvt Ltd is one of the company's key end-customers, to which it supplied electronics for Covid testing equipment in recent years. With the pandemic now largely behind us, we have seen a slowdown in revenue in the last nine months (down ~13% yoy).

We estimate the Indian medical devices EMS market to be ~Rs90 bn in FY2023 and growing at 10% CAGR (see the industry report). However, we expect revenue growth to remain modest for the medical segment and bake in a 3% CAGR over FY2023-26E, driven by some rebound in volumes after a weak FY2024.

#### **Select customer focus (higher concentration risk remains a key overhang)**

Cyient, after its acquisitions of Rangsons, had to incur losses for a couple of years due to the high provisions. The company has resolved these issues by focusing on a smaller set of clients. As a result, Cyient's customer base declined to 35 in FY2023 from 47 in FY2021. However, within the select customer base, Cyient has relationships that are more than 10 years old, and today Cyient has the highest concentration among its peers with top-10 customers accounting for 97% of sales (top-5 customers account for 68% of sales) as of FY2023.

As a result, continuous orders and increasing wallet share from the top-10 customers is of higher importance to Cyient. Its revenue saw a 15% CAGR over FY2021-23. And, 70% of incremental growth was driven by the industrial segment. ABB accounts for 86% (as of FY2023) of industrial segment revenues and the company caters to ABB's North America oil & gas market. Hence, any significant slowdown in procurement by just one customer can negatively impact Cyient's revenue outlook.

**Cyient’s top select customers account for 50%+ sales for each of the last three years**

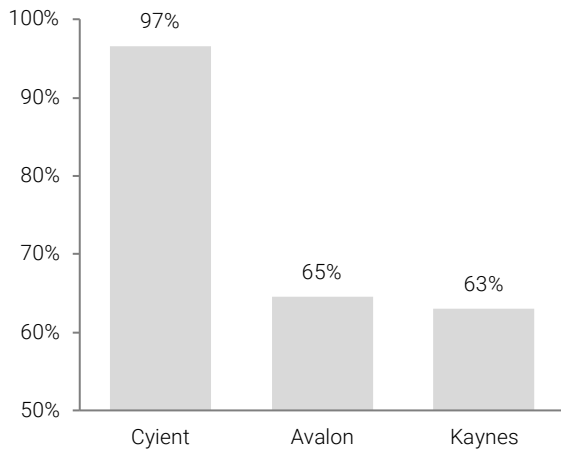
**Exhibit 13: Cyient’s revenue (Rs mn) and revenue contribution (as % of sales) for select customers, March fiscal year-ends, 2021-23**

Customer	Segment	No of years of relationship	Revenue in Rs mn		
			2021	2022	2023
ABB Inc	Industrial	14	431	786	1794
as % of sales			7%	11%	22%
Bharat Electronics Limited	Defense	12	867	1086	887
as % of sales			14%	15%	11%
Honeywell International Inc.	Aerospace and Defense	12	540	539	747
as % of sales			9%	7%	9%
Thales Global Services S.A.S	Aerospace and Defense	8	639	693	1046
as % of sales			10%	10%	13%
Molbio Diagnostics Private Limited	Medical	10	1031	515	241
as % of sales			16%	7%	3%
Total			3509	3619	4715
as % of sales			56%	50%	57%

Source: Company

**Cyient has the highest client concentration among its peer set (revenue contribution from top-10 customers)**

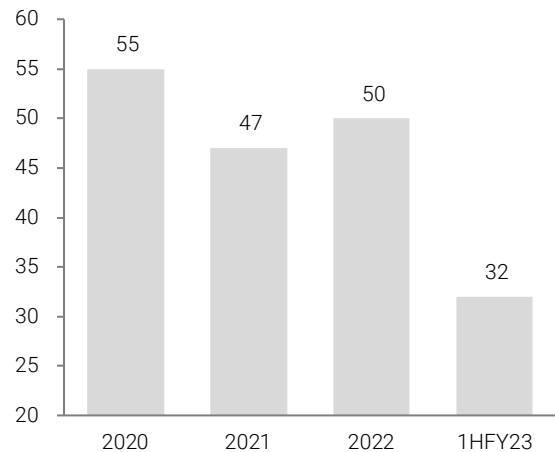
**Exhibit 14: Revenue contribution from top 10 client, March fiscal year-ends, 2023**



Source: Company, Kotak Institutional Equities

**With a declining customer set-wallet share and continuous orders from these customers is key**

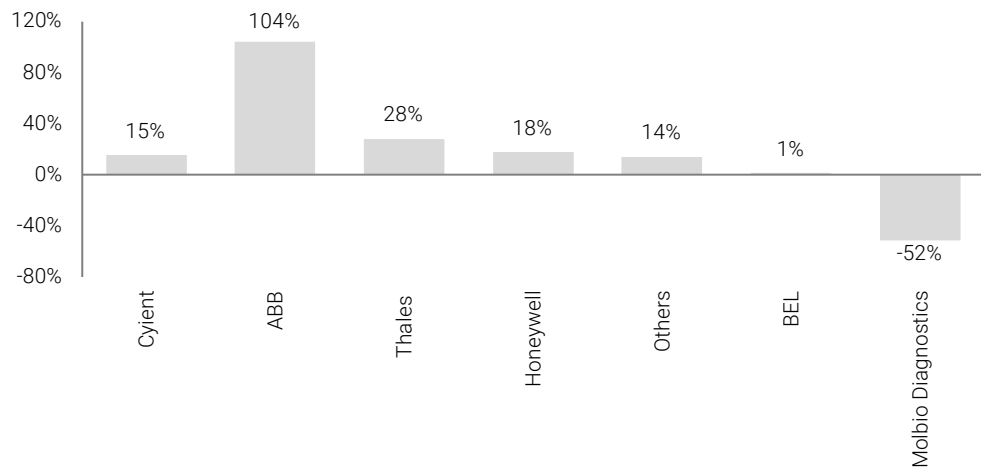
**Exhibit 15: No of customers, March fiscal year-ends, 2020-1HFY23**



Source: Company, Kotak Institutional Equities

**Cyient’s revenue growth in the last two years is largely led by a pickup in business from ABB**

**Exhibit 16: Cyient’s revenue CAGR for select customers, March fiscal year-ends, 2021-23 (%)**



Source: Company, Kotak Institutional Equities

**Inorganic acquisition remains a key focus area to expand offerings and client base**

Cyient is increasingly looking to expand its footprint in the North American market. It is keenly considering an acquisition that gives it exposure to new marquee clients or key product/industry segments that could drive revenue growth.

Multiple US customers have a preference for a manufacturing setup or final assembly to be done locally. Further, certain sectors such as green hydrogen requires local sourcing to avail the Inflation Reduction Act benefits. As a result, in order to cater to these customers or segments, a local manufacturing presence gives it an edge over peers.

The recent acquisition by Kaynes of Digicom Electronics and Avalon retaining its US manufacturing base despite losses showcases the importance of US manufacturing to cater to the large North American EMS opportunity.

Should Cyient undertake a meaningful acquisition in the North American market, then this could provide additional upside to our revenue estimates.

**Limited synergies with parent Cyient so far; Cyient’s design offering could aid DLM’s B2S efforts**

Cyient entered the EMS market with the acquisition of Rangsons (Cyient DLM), which had strong capabilities in manufacturing LVHM components. Initially, the strategy was to have an end-to-end play from design to manufacturing of components. However, the sourcing patterns of clients are quite different—ERD services spends are part of CTO budgets, while component purchases are under the purview of procurement teams. This disconnect led to limited realization of synergies between Cyient and Cyient DLM.

However, Cyient DLM has indicated that it wants to move its offerings from a build-to-print (B2P) model to build-to-specification (B2S) model. This will help it to be present in the development of the product from the design stage and increase its wallet share and margin profile. For this, it plans to have its own dedicated design team and could leverage Cyient’s design expertise to a certain extent.

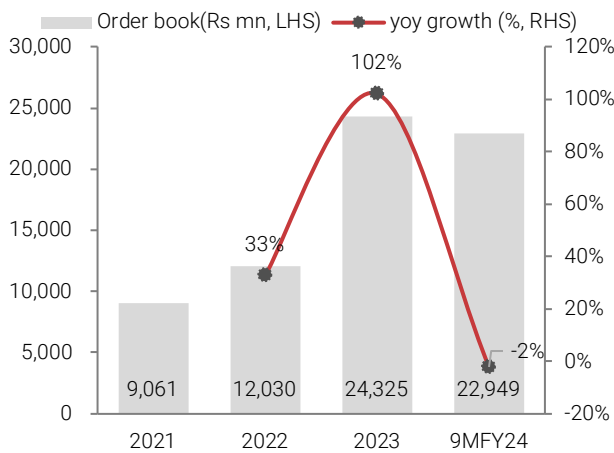
**Near-term visibility is strong but ramp-up of newer clients key**

After seeing a revenue CAGR of 16% in the last five years (FY2018-23), the company expects revenue to see a 40% CAGR in the next two years. The sharp near-term uptick in the order book in FY2023 (FY2023 Cyient’s order book grew 102%) provides strong revenue visibility. However, for the last five quarters, the order book growth has largely remained stagnant, with a decreasing book-to-bill ratio lowering revenue visibility beyond FY2025.

Cyient has recently signed a long-term partnership with Honeywell, with a TCV ~US\$300 mn for 10 years (implying 10% of the current order book); hence, multiple additional large contracts would be required, in our view.

**102% growth in orders in FY2023 provides decent revenue visibility for FY2024E and FY2025E**

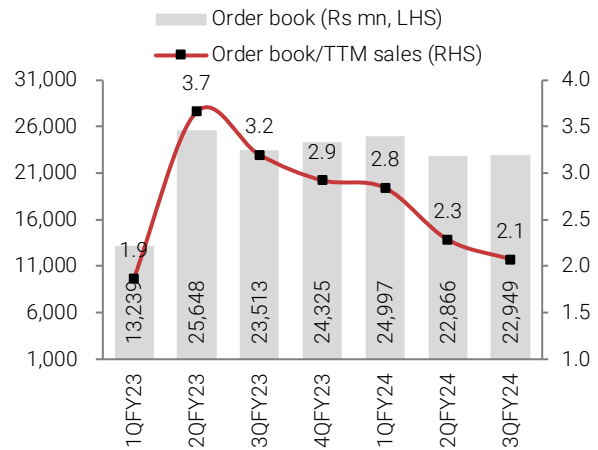
Exhibit 17: Cyient’s order book (Rs mn) and order book growth (%) trends, March fiscal year-ends, 2021-9MFY24



Source: Company, Kotak Institutional Equities

**However, with order book remaining flat for the last five quarters; visibility on medium-term growth is limited**

Exhibit 18: Cyient’s order book (Rs mn) and book-to-bill ratio(X), March fiscal year-ends, 1QFY23-3QFY24



Source: Company, Kotak Institutional Equities

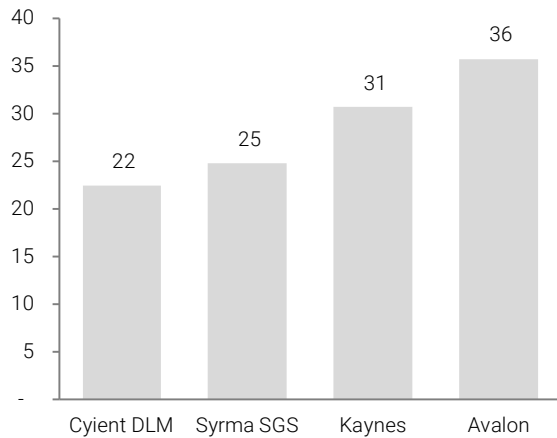
**Weakening margins profile due to unfavorable mix shift and higher investments**

Cyient DLM’s focus verticals of aerospace, defense and medical electronics typically have more stringent quality requirements and hence have longer approval cycles to on-board vendors. These factors should have driven Cyient’s margins to be significantly ahead of its peers. However, we find that its margins today are in line with peers that have a higher focus on the low-margin consumer verticals. Cyient’s gross margins are lower than that of Kaynes and Avalon despite a superior mix as they have a lower contribution from box-build and higher revenue coming from PCBA (implying a lower level of backward integration). Further, with capacity utilization significantly below its peer set, Cyient’s India domestic defense exposure is toward a large multi-year contract from Bharat Electronics (BEL), which has significantly lower margins than the rest of the business.

The BEL order expected to be complete only by end-FY2025 and margins are expected to remain under pressure in the short term. Further, Cyient has indicated that it will be undertaken investments to strengthen its sales and technical capabilities, which are also expected to weigh on margins. As a result, we estimate FY2024/FY2025 EBITDA margins of 9.4%/10% versus 11.8%/10.6% in FY2022/FY2023.

**Cyient has the lowest gross margin despite exposure to niche segments such as aerospace and defense**

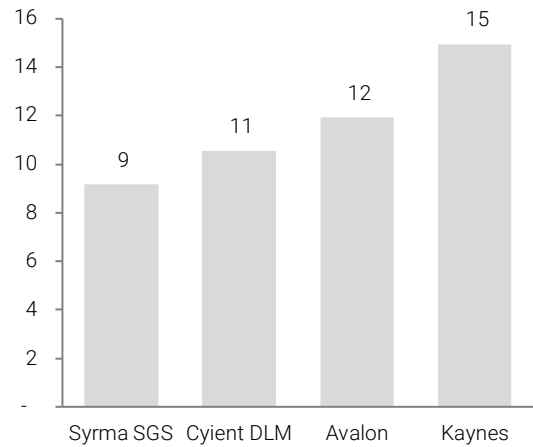
Exhibit 19: Comparison of gross margin (%) for B2B EMS players, March fiscal year-ends, 2023



Source: Company, Kotak Institutional Equities

**This is driven by unfavorable mix (lower box-build) and mid-tier EBITDA performance**

Exhibit 20: Comparison of EBITDA margin (%) for B2B EMS players, March fiscal year-ends, 2023

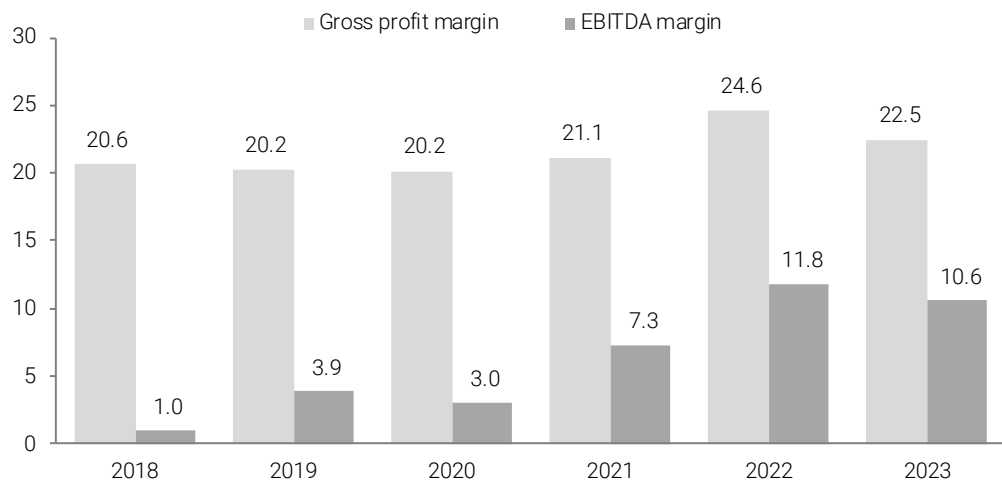


Source: Company, Kotak Institutional Equities

Further, historically Cyient has reported pretty subdued margins (in FY2018-20, it reported a low-single digit PAT margins). However, margins have been on an improving trajectory recently. EBITDA margins have expanded by 760 bps from 3% in FY2020 to 10.6% in FY2023. While 230 bps of that is driven by gross margin improvement, a large part of the improvement is driven by operating leverage and lower provisions of expected credit losses (Cyient, after its acquisition of Rangsons, had to incur losses for a couple of years due to higher provisions). It has resolved the issues by focusing on a smaller set of clients. Hence, we expect margins to remain in the 10-11% range. Faster ramp-up of higher-margin export clients and improving utilization levels should drive scale and can provide upside to our margin estimates.

**Historical margins for Cyient have been volatile; with recent improvement driven largely by operating leverage**

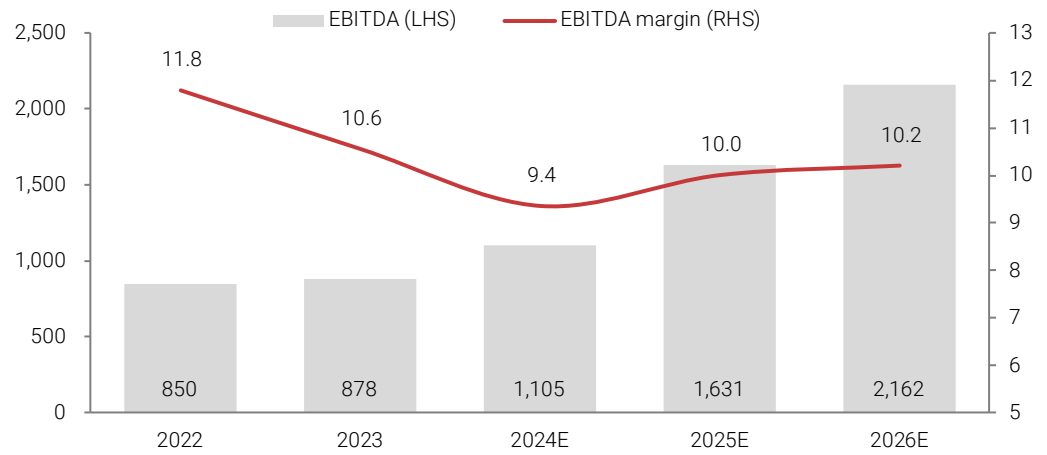
Exhibit 21: Gross profit margin and EBITDA margin trends, March fiscal year-end, FY2018-23 (%)



Source: Company, Kotak Institutional Equities

**We expect Cyient DLM’s margin to below FY2022 and FY2023 levels due to unfavorable mix and higher investments (EBITDA CAGR of 35% over FY2023-26E)**

**Exhibit 22: Cyient’s EBITDA (Rs mn) and EBITDA margin % trends, March fiscal year-ends, 2022-26E**



Source: Company, Kotak Institutional Equities

# 4

## **Key risks: Continued order inflow momentum and improving margin trajectory key risks to our thesis**

Cyient's performance can come in ahead of our expectations, driven by: (1) a sharper-than-expected improvement in margins; (2) faster ramp-up of new clients; (3) improvement in the working capital cycle; (4) inorganic growth drivers; and (5) increased global spending on defense.

### **Sharper-than-expected improvement in margins**

We expect Cyient's margins to remain subdued for FY2024-25 versus FY2023 levels due to the execution of the low-margin BEL contract and increased investments undertaken by the company. However, any sharp uptick in export orders and execution could lead to margins coming in significantly ahead of our expectations.

### **Faster ramp-up of new clients**

Cyient has the highest client concentration risk among its peer set (Top-10 customers contributed 97% of revenue in FY2023). Cyient, over the recent years, has focused on only growing select customers; however, any sharp ramp-up of new customer offering revenues and margin profile similar to its key clients could drive sharper-than-expected topline growth for the company.

### **Improvement in working capital cycle**

Currently, Cyient's working capital is lower than that of its peers due to customer advances received from BEL. With the BEL order gradually expected to be executed by FY2025, Cyient expects advances days to reduce to 50 days from 100+ days. As a result, we expect the working capital situation to deteriorate from hereon for Cyient. However, any sharp improvement in inventory days could lead to lower working capital days and better OCF and FCF generation.

### **Inorganic growth**

Cyient is increasingly looking to expand its footprint in the North American market; hence, any acquisition that gives the company exposure to new marquee clients or key product/industry segments could lead to revenue growing ahead of expectation.

### **Increased global spending on defense**

Cyient has historically had strong relations with defense companies based out of Israel. Any pickup in defense ordering from Israel due to the recent conflict could lead us to potentially revise our medium-term revenue estimates.

## 5

**Financials: Expect 71% CAGR in PAT in FY2023-26E**

We expect Cyient DLM's revenue to see a 37% CAGR over FY2023-26E. The order book growth of 102% in FY2023 provides strong visibility for a 40% revenue CAGR over FY2024-25E. However, in the medium term, continued order momentum from select customer base holds the key for the company to maintain a strong revenue momentum. Margins should remain under pressure in the next two years, driven by the execution of the BEL order and higher investments. Overall, we are baking in 35%/71% EBITDA/PAT CAGR as strong revenue growth and higher other income is offset by weak margins.

**Near-term revenue visibility strong; medium-term growth to lag peers**

We expect Cyient DLM's revenue to see a 37% CAGR over FY2023-26E, driven by 102% order book growth in FY2023, which provides strong visibility for a 40% CAGR over FY2024-25E. We see aerospace and defense (48%) and industrial (19%) as the key growth drivers, with the medical segment seeing muted growth post Covid.

**Aerospace and defense: Robust growth outlook driven by marquee MNC tie-ups**

Aerospace and defense are one of the most complex and specialized industries in electronics manufacturing. Cyient's key offering in aerospace and defense include cockpit display units, flight management systems, surveillance radar systems and communication/navigation systems. Honeywell, Thales, Bharat Electronics, Safran, BAE Systems and many Israel-based aerospace and defense companies are the main customers for Cyient in this segment.

In the domestic end-market, the company has won a large order from Bharat Electronics (~Rs7 bn in FY2023), which is expected to be executed by end-FY2025 and will be the main growth driver for the defense vertical. However, this order has significantly lower margins than other orders and will be a drag on margins in the short term. Cyient has recently signed a long-term partnership with Honeywell with a TCV ~US\$300 mn for 10 years (implying 10% of the current order book) and on-boarded global majors such as Safran and BAE Systems in the last six months.

When we analyze the market potential for Cyient, we see the domestic defense electronic spending increasing from Rs273 bn as of FY2023 to Rs1.4 tn by FY2040E (11% CAGR). Our assumption is driven by defense spending as a percentage of the total capital outlay remaining in the ~20% range, similar to the levels seen in FY2023. Cyient's FY2023 defense revenue of Rs3 bn indicates that the company caters to a very small part of the overall market.

We are baking in a 48% CAGR over FY2023-26E for the aerospace and defense vertical, primarily driven by the Bharat Electronics order in the short term and global customers in the medium term (from FY2026E).

**Industrial: Pickup in ordering from key customer ABB for North American market holds the key**

Cyient's industrial offering primarily caters to the oil and gas segment. Some of Cyient's key offerings includes flow measurement analysis, room and plant controllers and building technologies.

ABB is the main customer that Cyient caters to in its industrial segment. ABB accounts for 86% (as of FY2023) of the industrial segment revenues and the company caters to ABB's North American oil & gas market.

We estimate India's industrial EMS market to be ~Rs50 bn as of FY2023 and see the industrial EMS market to see a 12% CAGR over FY2023-26E. Cyient's US peer Jabil recorded a revenue of US\$4.7 bn in FY2023 from its industrial and capital equipment business. Cyient recorded a revenue of Rs2.1 bn in its industrial segment; hence, the company still caters to a very small part of the global industrial market. It needs to expand its relationship beyond ABB North America. We are baking in a 19% CAGR in the industrial segment; however, growth depends on one key customer. As a result, any slowdown in orders from ABB remains a key point of concern.

**Medical: Entering a period of modest growth**

Cyient's medical segment offering primarily falls under two main categories: Patient care monitoring equipment and diagnostic equipment.

Molbio Diagnostics is one of the key end-customers for Cyient, to which it supplied electronics for Covid testing equipment in recent years. With the pandemic now largely behind us, we have seen a slowdown in revenue in the last nine months (down ~13% yoy). We estimate that the Indian medical devices EMS market will be ~Rs90 bn in FY2023 and growing at a 10% CAGR (see the industry report). However, we expect revenue growth to remain modest for the medical segment and bake in a 3% CAGR over FY2023-26E, driven by some rebound in volumes post a weak FY2024.

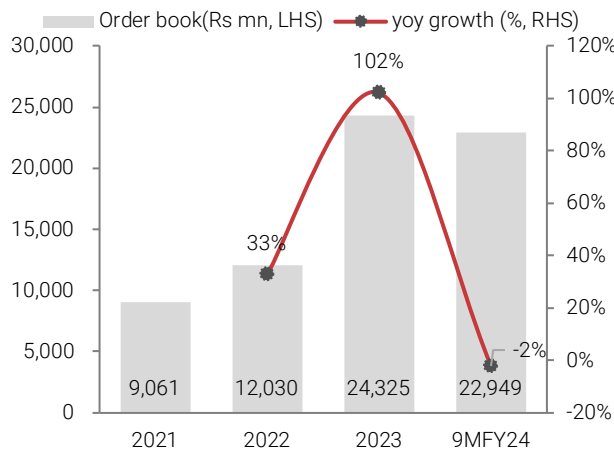
**Near-term visibility is strong but ramp-up of newer clients’ key**

After seeing a 16% revenue CAGR over the last five years (FY2018-23), the company expects revenue to grow at a 40% CAGR in the next two years. The sharp near-term uptick in the order book in FY2023 (in FY2023, Cyient’s order book grew 102%) provides strong revenue visibility. However, for the last five quarters, the order book growth has largely remained stagnant, with the decreasing book-to-bill ratio lowering revenue visibility beyond FY2025E.

Cyient has recently signed a long-term partnership with Honeywell with a TCv of ~US\$300 mn for 10 years (implying 10% of the current order book); hence, multiple additional large contracts would be required, in our view.

**102% growth in orders in FY2023 provides decent revenue visibility for FY2024E and FY2025E**

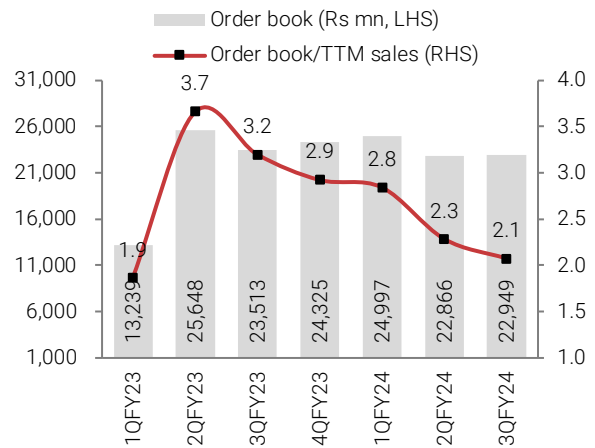
Exhibit 23: Cyient’s order book (Rs mn) and order book growth (%) trends, March fiscal year-ends, 2021-9MFY24



Source: Company, Kotak Institutional Equities

**However, with order book remaining flat for the last five quarters; visibility on medium-term growth is limited**

Exhibit 24: Cyient’s order book (Rs mn) and book-to-bill ratio (X), March fiscal year-ends, 1QFY23-3QFY24



Source: Company, Kotak Institutional Equities

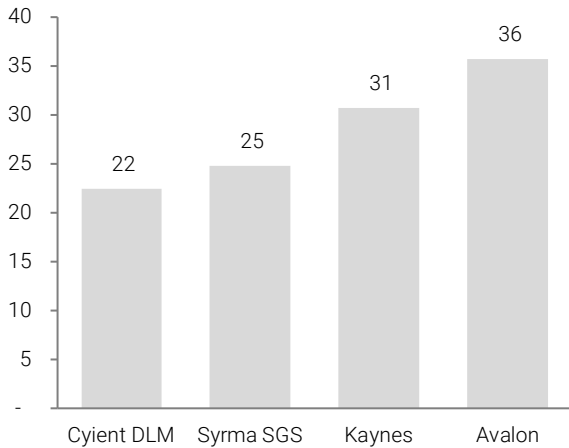
**EBITDA: Weakening profile due to adverse product mix and higher investments**

Cyient DLM’s has a higher focus on export markets that generally have higher margins, further segments such as aerospace, defense and medical electronics have typically more stringent quality requirements; hence, longer approval cycles to on-board a vendor. All of these factors should have driven Cyient’s margins to be significantly ahead of its peers. However, we find that Cyient’s margins today are in line with peers that have a higher focus on the low-margin consumer verticals. Cyient’s gross margins are lower than Kaynes and Avalon despite superior mix, as they have a lower contribution from box-build and higher revenue coming from PCBA (implying a lower level of backward integration). Further, with capacity utilization significantly below its peer set, Cyient’s India domestic defense exposure is toward a large multi-year contract from Bharat Electronics (BEL), which has significantly lower margins than the rest of the business.

The BEL order is expected to be completed only by end-FY2025E and margins are expected to remain under pressure over the short term. In addition, Cyient has indicated the company will be undertake investments to strengthen its sales and leadership teams, which are also expected to weigh on margins. As a result, we expect margins to remain around 10% for FY2024E and FY2025E.

**Cyient has the lowest gross margin despite exposure to niche segments such as aerospace and defense**

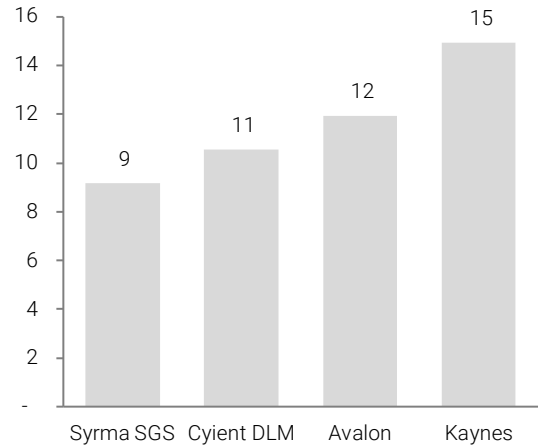
Exhibit 25: Comparison of gross margin for B2B EMS players, March fiscal year-ends, 2023 (%)



Source: Company, Kotak Institutional Equities

**This is driven by unfavorable mix (lower box build) and mid-tier EBITDA performance**

Exhibit 26: Comparison of EBITDA margin for B2B EMS players, March fiscal year-ends, 2023 (%)

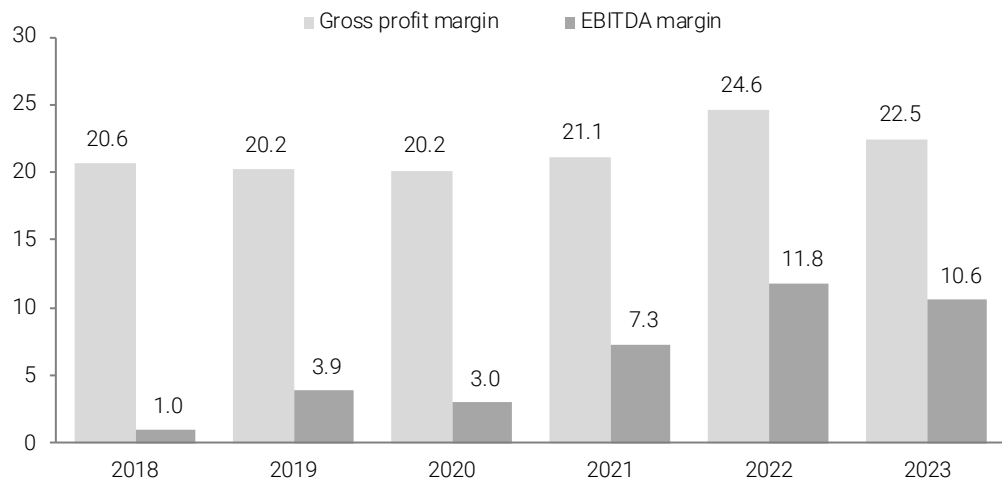


Source: Company, Kotak Institutional Equities

Further, Cyient has reported pretty subdued margins in the past (in FY2018-20, it reported a low-single digit PAT margins). However, margins have been on an improving trajectory recently. EBITDA margins for Cyient have expanded by 760 bps from 3% in FY2020 to 10.6% in FY2023. While 230 bps of it is driven by gross margin improvement, a large part of the improvement is driven by operating leverage and lower provisions of expected credit losses (Cyient, after its acquisition of Rangsons, had to incur losses for a couple of years due to the higher provisions). It has resolved these issues by focusing on a smaller set of clients. Hence, we expect margins to remain in ~10-11% range. A faster ramp-up of higher-margin export clients and improving utilization levels will drive scale and can provide upside to our margin estimates.

**Historical margins for Cyient have been volatile; with recent improvement driven largely by operating leverage**

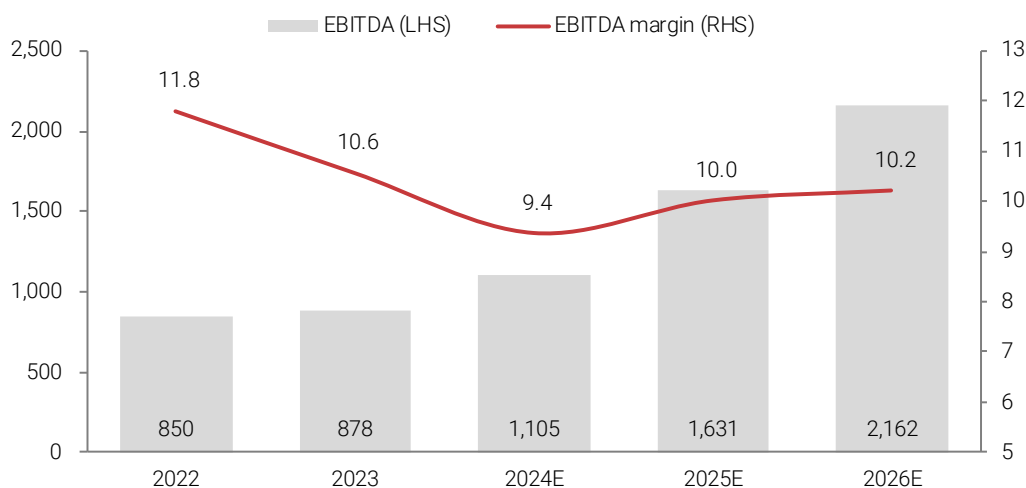
Exhibit 27: Cyient’s Gross and EBITDA margin trends, March fiscal year-ends, 2018-23 (%)



Source: Company, Kotak Institutional Equities

**We expect Cyient’s margin to below recent high driven by unfavorable mix and higher investments (EBITDA CAGR of 33% over FY2023-FY2026E)**

**Exhibit 28: Cyient’s EBITDA (Rs mn) and EBITDA margin (%) trends, March fiscal year-ends, 2022-26E**



Source: Company, Kotak Institutional Equities

**Exhibit 29: P&L of Cyient DLM, March Fiscal year-ends 2018-27E (Rs mn)**

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	CAGR 2023-26E (%)
<b>Net sales</b>	<b>3,878</b>	<b>4,805</b>	<b>4,571</b>	<b>6,280</b>	<b>7,215</b>	<b>8,320</b>	<b>11,815</b>	<b>16,308</b>	<b>21,200</b>	<b>27,106</b>	<b>36.6</b>
Cost of material	(3,079)	(3,833)	(3,649)	(4,953)	(5,440)	(6,452)	(9,097)	(12,476)	(16,218)	(20,736)	
Employee expense	(428)	(455)	(441)	(469)	(517)	(647)	(1,140)	(1,468)	(1,908)	(2,440)	
Other expenses	(333)	(331)	(344)	(399)	(409)	(344)	(473)	(734)	(912)	(1,166)	
<b>Total expenses</b>	<b>(3,840)</b>	<b>(4,619)</b>	<b>(4,434)</b>	<b>(5,821)</b>	<b>(6,365)</b>	<b>(7,443)</b>	<b>(10,710)</b>	<b>(14,677)</b>	<b>(19,038)</b>	<b>(24,341)</b>	
<b>EBITDA</b>	<b>38</b>	<b>186</b>	<b>137</b>	<b>459</b>	<b>850</b>	<b>878</b>	<b>1,105</b>	<b>1,631</b>	<b>2,162</b>	<b>2,765</b>	<b>35.1</b>
Depreciation	(83)	(83)	(106)	(185)	(193)	(194)	(212)	(225)	(235)	(309)	<b>6.6</b>
<b>EBIT</b>	<b>(44)</b>	<b>102</b>	<b>31</b>	<b>275</b>	<b>657</b>	<b>684</b>	<b>892</b>	<b>1,405</b>	<b>1,927</b>	<b>2,456</b>	
Other income	91	25	78	89	80	63	285	293	192	213	
Interest	(108)	(141)	(182)	(208)	(220)	(315)	(321)	(9)	(9)	(8)	<b>(70.0)</b>
<b>Profit before tax</b>	<b>(62)</b>	<b>(14)</b>	<b>(72)</b>	<b>156</b>	<b>517</b>	<b>431</b>	<b>856</b>	<b>1,690</b>	<b>2,111</b>	<b>2,661</b>	<b>69.7</b>
Tax expense	(24)	(6)	(5)	38	109	114	218	431	538	679	
<b>Adjusted PAT</b>			<b>(77)</b>	<b>194</b>	<b>627</b>	<b>546</b>	<b>1,074</b>	<b>2,121</b>	<b>2,649</b>	<b>3,340</b>	<b>69.3</b>
<b>Reported PAT</b>	<b>(38)</b>	<b>(8)</b>	<b>(67)</b>	<b>118</b>	<b>408</b>	<b>313</b>	<b>638</b>	<b>1,259</b>	<b>1,572</b>	<b>1,983</b>	
<b>Adjusted EPS (Rs)</b>	<b>(0)</b>	<b>(0)</b>	<b>(1)</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>16</b>	<b>20</b>	<b>25</b>	<b>71.2</b>
<b>Key ratios</b>											
Raw material expense/sales	79.4	79.8	79.8	78.9	75.4	77.5	77.0	76.5	76.5	76.5	
Employee expense/sales	11.0	9.5	9.6	7.5	7.2	7.8	9.7	9.0	9.0	9.0	
Other expenses/sales	8.6	6.9	7.5	6.4	5.7	4.1	4.0	4.5	4.3	4.3	
<b>EBITDA margin (%)</b>	<b>1.0</b>	<b>3.9</b>	<b>3.0</b>	<b>7.3</b>	<b>11.8</b>	<b>10.6</b>	<b>9.4</b>	<b>10.0</b>	<b>10.2</b>	<b>10.2</b>	
Effective tax rate (%)	38.1	43.4	7.2	24.2	21.2	26.5	25.5	25.5	25.5	25.5	
Adjusted PAT margin (%)	(0.0)	(0.0)	(0.0)	0.0	0.1	0.0	0.1	0.1	0.1	0.1	
<b>Yoy growth (%)</b>											
Net sales		23.9	(4.9)	37.4	14.9	15.3	42.0	38.0	30.0	27.9	
EBITDA		384.3	(26.0)	234.7	85.0	3.2	25.8	47.6	32.6	27.9	
Adjusted PAT		(79.9)	768.8	(276.7)	245.5	(23.3)	103.6	97.4	24.9	26.1	

Source: Kotak Institutional Equities estimates, Company

**Balance sheet: Working capital to deteriorate**

Cyient’s net working capital days are currently better than the peer average as higher inventory days—due to the exposure to sectors such as defense—is more than offset by customer advances that the company receives from domestic customers such as BEL.

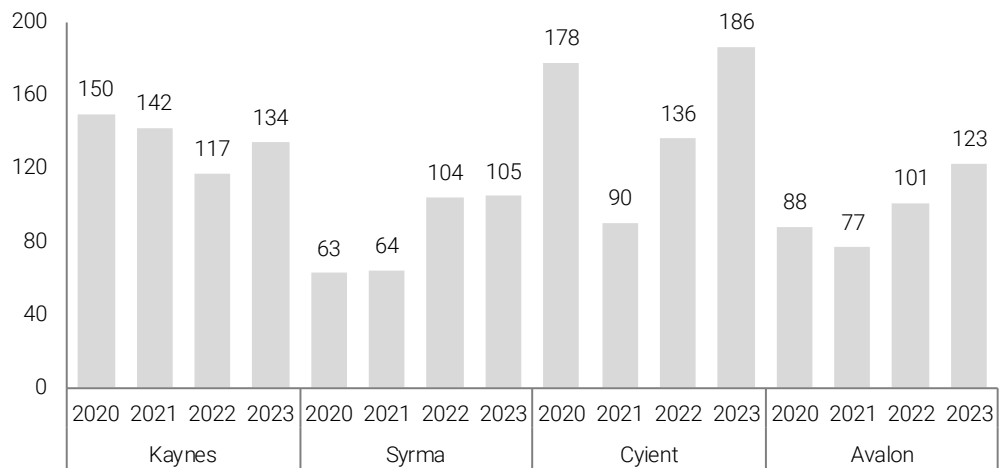
However, going ahead, with the BEL’s orders in advanced stage of execution in FY2024 and FY2025, the company expects a 60-day reduction in the other liabilities (including advances) days, with only a 45-day reduction in inventory levels. Hence, we expect working capital days for the company to deteriorate from 44 days on average over the last three years to 95 days in FY2024 and FY2025 and continue at current levels impacting OCF and FCF generation.

Further, with Israel also being a supplier to Cyient (~20% of shipments), any delay in the shipment of inventories from the country could put added pressure on the working capital cycle of the company.

Cyient’s peers have indicated that one of the key measures to improve working capital is higher order book, which helps in overcoming the challenge of minimum order quantity and better negotiating power with suppliers. With revenue growth lagging peers and smaller scale, we believe it would be still sometime for Cyient to leverage the benefits of scale.

**Cyient’s inventory days are the highest among its peer set due to exposure to sector such as aerospace and defense**

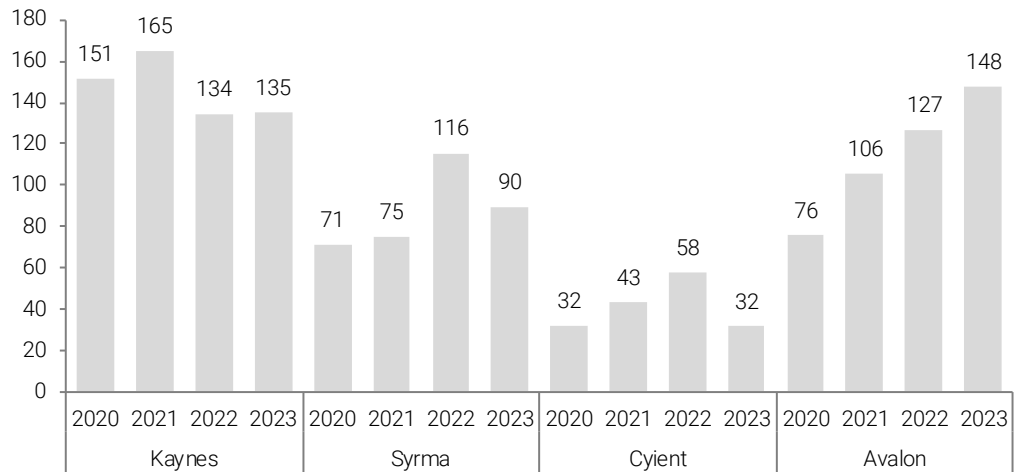
**Exhibit 30: Inventory as days of sales for B2B EMS players, March fiscal year-end, 2020-23**



Source: Company, Kotak Institutional Equities

**However, higher customer advances from domestic Indian customers such as BEL have helped keep net working capital under check**

**Exhibit 31: Operating working capital as days of sales for B2B EMS players, March fiscal year-end, 2020-23**



Source: Company, Kotak Institutional Equities

**With BEL order at advanced stages of execution the decreasing in advances will no equivalent decrease in inventory levels will drive higher net working capital cycle**

**Exhibit 32: Operating working capital as days of sales of Cyient DLM, March fiscal year-end, 2020-26E**

	2020	2021	2022	2023	2024E	2025E	2026E
Inventory as days of sales	178	90	136	186	140	140	140
Receivable as days of sales	44	132	77	71	85	85	85
Payable as days of sales	84	110	97	125	80	80	80
Other current liabilities (incl advances) as days of sales	105	68	58	101	50	50	50
NWC as days of sales	32	43	58	32	95	95	95

Source: Company, Kotak Institutional Equities

**Capex:** Cyient’s capacity utilization is only ~40%. Further, it has recently inaugurated a precision machining facility in Bangalore in December 2023. Hence, the company does not need to undertake any major capex. We bake in only Rs 400 mn capex in the next three years. Beyond that, we expect the company would have to undertake capex (incremental capex assumption is based on gross FATR to be in the 7X range, which is in line with the industry).

**Significant scope to improve capacity utilization at Hyderabad and Mysuru facilities for PCBA and cable harnesses**

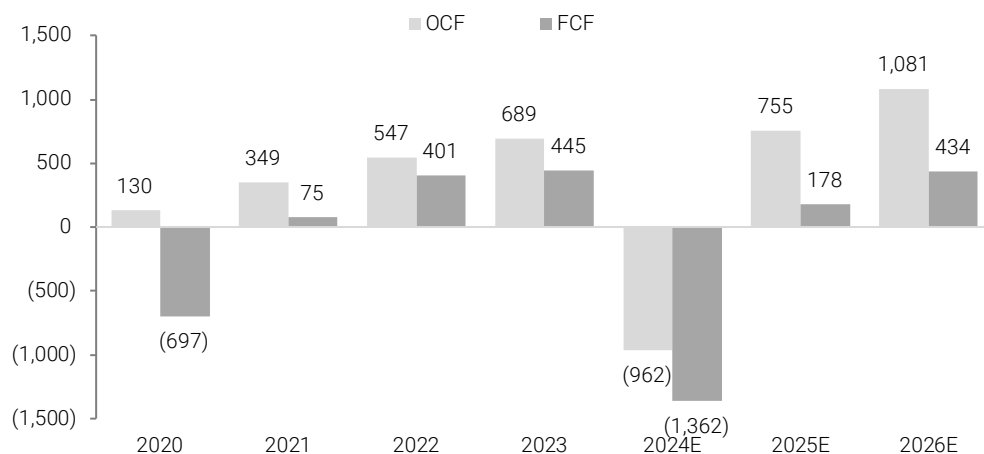
Exhibit 33: Installed capacity and capacity utilization trends of Mysuru and Hyderabad facilities, March fiscal year-ends, 2020-23

	2020	2021	2022	2023
<b>Installed capacity</b>				
<b>Mysuru</b>				
PCBA (component placements (mn)/annum)	412	431	449	449
Cable harnesses (cables (mn)/annum)	0.7	0.7	2.5	4.2
Box builds (boxes/annum)	7,160	10,900	10,120	13,420
<b>Hyderabad</b>				
PCBA (component placements (mn)/annum)	–	500	500	500
Cable harnesses (cables (mn)/annum)	–	–	–	–
Box builds (boxes/annum)	–	245,000	180,000	240,000
<b>Capacity utilization (%)</b>				
<b>Mysuru</b>				
PCBA	54.9	46.5	54.5	38.4
Cable harnesses	14.8	60.7	6.8	3.3
Box builds	95.4	96.4	94.9	98.7
<b>Hyderabad</b>				
PCBA	–	7.1	9.1	7.6
Cable harnesses	–	–	–	–
Box builds	–	97.9	93.0	99.9
<b>Hyderabad</b>				
Installed capacity (mn component placements/annum)		500	500	500
Capacity utilization (%)		7.1	9.1	7.6
<b>Bengaluru</b>				
Installed capacity (mn component placements/annum)	6,000	6,000	6,000	6,000
Capacity utilization (%)	43.0	79.0	84.0	84.0

Source: Company, Kotak Institutional Equities

**We expect Cyient’s FY2024 OCF and FCF to be impacted due to elevated working capital cycle**

Exhibit 34: Cyient’s operating cash flow and free cash flow, March fiscal year-end, 2020-26E (Rs mn)



Source: Company, Kotak Institutional Equities estimates

**Leverage:** Cyient has repaid loans worth Rs1.6 bn from the IPO proceeds; hence, we expect the company to end the year with a debt-to-equity Ratio of 0.2X. With no major capex expected to be undertaken in the short term, we do not expect leverage to be a concern for the company.

**Exhibit 35: Balance Sheet of Cyient DLM, March Fiscal year-ends 2018-27E (Rs mn)**

	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
<b>Shareholders funds</b>	<b>362</b>	<b>349</b>	<b>257</b>	<b>377</b>	<b>771</b>	<b>1,979</b>	<b>9,341</b>	<b>10,600</b>	<b>12,172</b>	<b>14,155</b>
Equity share capital	14	14	14	14	14	529	529	529	529	529
Reserves and surplus	348	336	243	363	757	1,450	8,812	10,071	11,643	13,626
Loan funds	1,508	1,604	2,484	2,338	2,932	3,145	2,295	95	95	95
Deferred tax liabilities	—	—	—	—	—	—	—	—	—	—
Minority Interest and other liabilities	11	30	467	528	811	624	624	624	624	624
<b>Total sources of funds</b>	<b>1,880</b>	<b>1,983</b>	<b>3,208</b>	<b>3,242</b>	<b>4,514</b>	<b>5,748</b>	<b>12,260</b>	<b>11,319</b>	<b>12,891</b>	<b>14,874</b>
Net block	483	483	572	1,401	1,295	1,218	1,187	1,107	980	1,487
CWIP	—	10	1,227	443	417	359	359	359	359	359
<b>Net fixed assets</b>	<b>483</b>	<b>493</b>	<b>1,799</b>	<b>1,844</b>	<b>1,712</b>	<b>1,576</b>	<b>1,546</b>	<b>1,466</b>	<b>1,339</b>	<b>1,846</b>
Investments + Goodwill	40	49	256	177	139	1,074	1,074	1,074	1,074	1,074
Cash and bank balances	135	596	661	342	1,218	1,676	5,867	3,836	4,262	4,201
<b>Current assets</b>	<b>2,914</b>	<b>3,523</b>	<b>3,219</b>	<b>4,087</b>	<b>4,701</b>	<b>6,721</b>	<b>8,136</b>	<b>10,905</b>	<b>13,921</b>	<b>17,562</b>
Inventories	1,222	1,789	2,226	1,554	2,696	4,251	4,532	6,255	8,132	10,397
Sundry debtors	1,375	1,197	546	2,264	1,523	1,617	2,751	3,798	4,937	6,312
Loans and advances	217	377	29	31	22	55	55	55	55	55
Other current assets	100	160	418	238	460	798	798	798	798	798
<b>Current liabilities</b>	<b>1,691</b>	<b>2,678</b>	<b>2,727</b>	<b>3,208</b>	<b>3,255</b>	<b>5,300</b>	<b>4,363</b>	<b>5,963</b>	<b>7,705</b>	<b>9,809</b>
Trade payables	1,232	962	1,049	1,900	1,925	2,853	2,590	3,574	4,647	5,941
Other current liabilities	440	1,707	1,676	1,296	1,317	2,444	1,770	2,386	3,056	3,865
Provisions	19	9	2	12	13	3	3	3	3	3
<b>Net current assets (excl. cash)</b>	<b>2,914</b>	<b>3,523</b>	<b>3,219</b>	<b>4,087</b>	<b>4,701</b>	<b>6,721</b>	<b>8,136</b>	<b>10,905</b>	<b>13,921</b>	<b>17,562</b>
<b>Total application of funds</b>	<b>1,880</b>	<b>1,983</b>	<b>3,208</b>	<b>3,242</b>	<b>4,514</b>	<b>5,748</b>	<b>12,260</b>	<b>11,319</b>	<b>12,891</b>	<b>14,874</b>
<b>Key ratios</b>										
Debt / equity (X)	4.2	4.6	9.7	6.2	3.8	1.6	0.2	0.0	0.0	0.0
Net debt / equity (incl. acceptances) (X)	3.8	2.9	7.1	5.3	2.2	0.7	(0.4)	(0.4)	(0.3)	(0.3)
Gross FATR (X)	3.9	5.0	3.9	2.9	3.3	3.8	5.0	6.5	8.1	7.9
BVPS (Rs)	5	4	3	5	10	25	118	134	153	178
RoAE (%)	(10.6)	(2.2)	(26.0)	31.4	53.0	15.8	6.8	11.9	12.9	14.0
RoACE (%)	(1.5)	2.9	0.9	6.4	11.5	8.7	5.4	9.3	11.1	12.3
<b>Working capital as days of sales</b>										
<b>Current assets</b>	<b>274</b>	<b>268</b>	<b>257</b>	<b>238</b>	<b>238</b>	<b>295</b>	<b>251</b>	<b>244</b>	<b>240</b>	<b>236</b>
Inventories	115	136	178	90	136	186	140	140	140	140
Sundry debtors	129	91	44	132	77	71	85	85	85	85
Loans and advances	20	29	2	2	1	2	2	1	1	1
Other current assets	9	12	33	14	23	35	25	18	14	11
<b>Current liabilities</b>	<b>116</b>	<b>199</b>	<b>189</b>	<b>179</b>	<b>156</b>	<b>226</b>	<b>130</b>	<b>130</b>	<b>130</b>	<b>130</b>
Trade payables	116	73	84	110	97	125	80	80	80	80
Other current liabilities	—	126	105	68	58	101	50	50	50	50
Provisions	—	—	—	—	—	—	—	—	—	—
<b>Net current assets (excl. cash) as days</b>	<b>158</b>	<b>68</b>	<b>68</b>	<b>59</b>	<b>82</b>	<b>69</b>	<b>121</b>	<b>114</b>	<b>110</b>	<b>106</b>

Source: Kotak Institutional Equities estimates, Company

**Cash flow:** With working capital days deteriorating from 32 days in FY2023 to 95 days in FY2024, we expect cash-flow generation to remain muted for FY2024. For FY2025 and FY2026, we expect Rs613 mn free cashflow generation, driven by stable working capital and no major capex requirements until FY2026.

Exhibit 36: Cash Flow statement of Cyient DLM, March Fiscal year-ends 2018-27E (Rs mn)

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Cash flow from operating activities</b>										
Net profit before tax	(62)	(9)	(67)	118	398	317	856	1,690	2,111	2,661
Add: Depreciation	83	83	106	185	193	194	212	225	235	309
Add: Net interest	108	141	182	188	191	297	321	9	9	8
Others	59	36	15	57	95	110	—	—	—	—
<b>Op. Profit before Working Capital Changes</b>	<b>188</b>	<b>250</b>	<b>236</b>	<b>548</b>	<b>876</b>	<b>918</b>	<b>1,390</b>	<b>1,924</b>	<b>2,354</b>	<b>2,978</b>
Changes in Working capital	(319)	39	(105)	(200)	(329)	(229)	(2,352)	(1,169)	(1,273)	(1,537)
Taxes	(4)	(1)	3	1	(62)	(168)	(218)	(431)	(538)	(679)
<b>Cash flow from operating activities</b>	<b>(135)</b>	<b>289</b>	<b>133</b>	<b>349</b>	<b>485</b>	<b>521</b>	<b>(1,180)</b>	<b>324</b>	<b>543</b>	<b>762</b>
<b>Cash flow from investing activities</b>										
Capex	(150)	(117)	(830)	(274)	(84)	(76)	(182)	(145)	(108)	(815)
Investments	—	—	—	—	—	—	—	—	—	—
Others	5	18	(3)	265	(240)	(1,342)	—	—	—	—
<b>Cash flow from investing activities</b>	<b>(144)</b>	<b>(100)</b>	<b>(832)</b>	<b>(9)</b>	<b>(324)</b>	<b>(1,418)</b>	<b>(182)</b>	<b>(145)</b>	<b>(108)</b>	<b>(815)</b>
<b>Cash flow from financing activities</b>										
Debt	—	109	905	(336)	534	(4)	(850)	(2,200)	—	—
Equity	—	—	—	—	—	889	6,724	—	—	—
Interest	—	(125)	(204)	(92)	(73)	(145)	(321)	(9)	(9)	(8)
Dividend	—	—	—	—	—	—	—	—	—	—
Others	212	—	—	—	—	—	—	—	—	—
<b>Cash flow from financing activities</b>	<b>212</b>	<b>(16)</b>	<b>701</b>	<b>(428)</b>	<b>461</b>	<b>740</b>	<b>5,553</b>	<b>(2,209)</b>	<b>(9)</b>	<b>(8)</b>
<b>FCF</b>	<b>(284)</b>	<b>171</b>	<b>(697)</b>	<b>75</b>	<b>401</b>	<b>445</b>	<b>(1,362)</b>	<b>178</b>	<b>434</b>	<b>(53)</b>
<b>Total cash flow</b>	<b>(67)</b>	<b>173</b>	<b>2</b>	<b>(88)</b>	<b>622</b>	<b>(157)</b>	<b>4,191</b>	<b>(2,031)</b>	<b>426</b>	<b>(61)</b>
Opening cash	127	60	233	235	147	769	1,676	5,867	3,836	4,262
Other bank balances										
Closing cash	60	233	235	147	769	612	5,867	3,836	4,262	4,201

Source: Kotak Institutional Equities estimates, Company

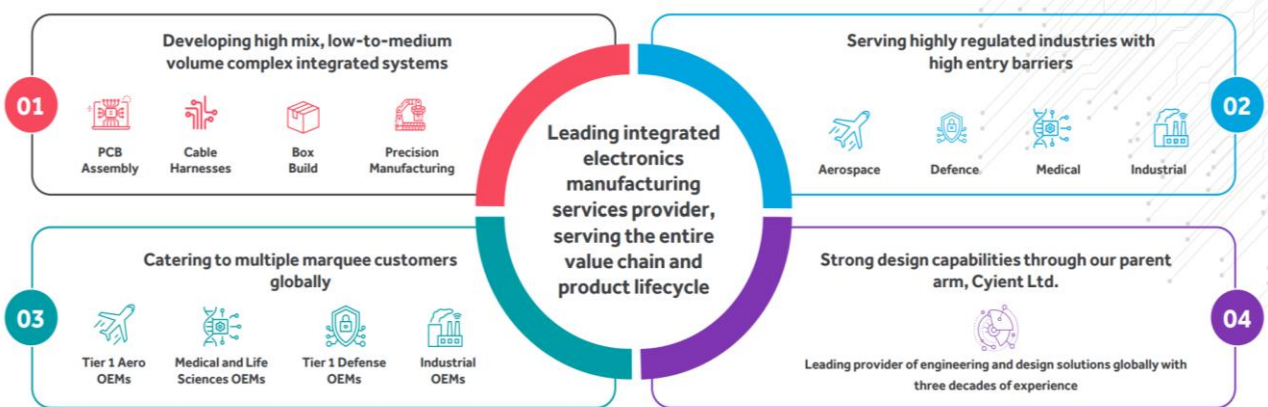
# A1

## Appendix 1: Company profile

Cyient acquired Rangsons Electronics in January 2015 to tap into the large EMS opportunity. Cyient DLM is uniquely positioned as one of the few EMS companies in India offering electronics solutions for safety and mission-critical applications in highly regulated industries such as aerospace & defense, medical technology and industrials. The clients in these verticals place emphasis on quality and customization and manufacturing is typically for low-volume high-mix (LVHM) components.

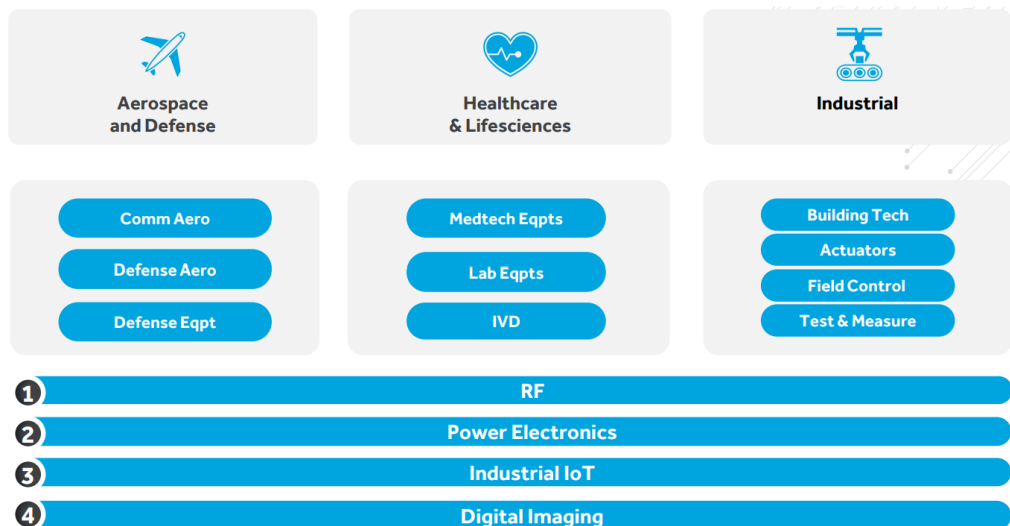
Cyient DLM has three facilities through which it primarily provides solutions for (1) printed circuit board assembly (PCBA), (2) cable harnesses and (3) box builds, which are used in safety critical systems such as cockpits, inflight systems, landing systems and medical diagnostic equipment. Its solutions include Industrial IoT, power electronics, radio frequency and digital imaging across the core industries such as aerospace & defense, industrial and medical devices. Most of these applications have high barriers to entry due to their criticality of these components for clients and the also has higher revenue visibility due to long-term nature of contracts. Large clients of Cyient DLM include Honeywell, Thales, ABB, Bharat Electronics and Molbio Diagnostics with which it has relationships in 8-14 years range.

Exhibit 37: Cyient DLM company overview



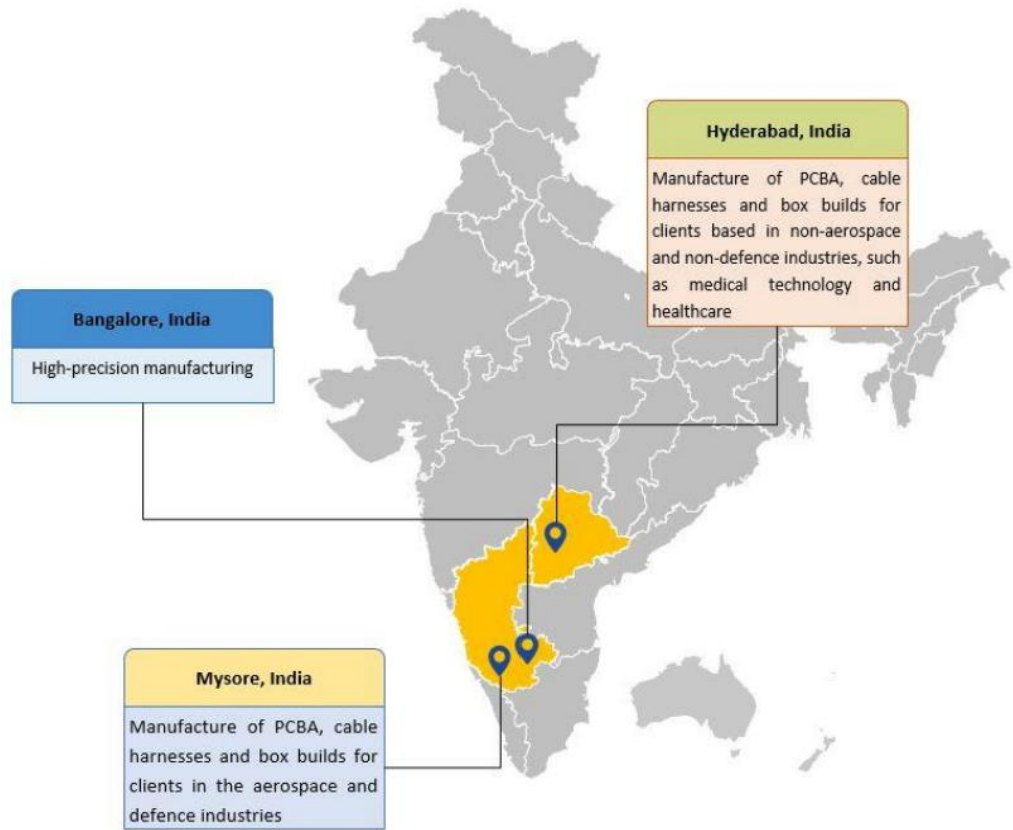
Source: Company data, Kotak Institutional Equities

Exhibit 38: Segmental detailing of Cyient DLM, March fiscal year-end, 2023



Source: Company data, Kotak Institutional Equities

Exhibit 39: Manufacturing footprint of Cyient DLM, March fiscal year-end, 2023



Source: Company data, Kotak Institutional Equities

## A2

## Appendix 2: Key management personnel

Exhibit 40: Brief Background of key management personnel at Cyient DLM Ltd

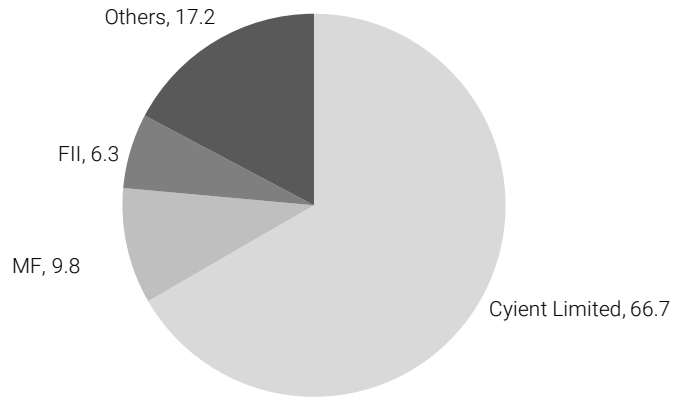
Name	Position	Remarks
Anthony Montalbano	CEO	Over 3 decades of experience in executing transformative strategies, driving growth, leading M&A, creating and winning large deals, and enabling strategic partnerships. Prior to joining Cyient DLM, he was associated with HCL, Aricent, Wipro and Flextronics.
Rajendra Velagapudi	Managing Director	He has been associated with Cyient since 1999. Expertise in engineering operations and building solutions and strategic partnerships with clients. Prior to Cyient he was associated with Ford truck division and BEML
Shrinivas Kulkarni	CFO	Diverse experience of working in IT industry across MNCs and startups, driving growth and profitability initiatives and engaging with investors. He was earlier associated with Intel, EMC software and Sasken.
Ram Dornala	SVP & COO	Expertise in supply chain strategy and operational transformation. Prior to joining Cyient DLM, he was associated with Jabil Circuit and Wistron
Joseph Crowley	VP - Sales	Over 25 years experience leading teams and business development in industrial, life sciences, automation, technology and instrumentation sectors. He was earlier associated with Venture Corporation Limited, Flextronics and Celestica
Suchitra R C	Head of EMS	Skilled in DFX, value stream mapping, failure mode and effects analysis (FMEA) and Quality Management.
Jonathan Wong Yung Hue	AVP & Head of SCM	Over 25 years of experience in supply chain management, procurement and logistics. He is familiar with medical devices, automotive, communications and consumer electronics markets
Prashant Mokashi	Head of Program management	Experienced in manufacturing operations management and engineering management
Pooja Jamwal	Head of Corporate development	Experience across corporate strategy planning and execution, driving strategic initiatives, GTM strategy, M&A, business development, and operations
Neeraja Polishetty	Head of HR	Expertise in building teams, promoting employee engagement & development

Source: Company, Kotak Institutional Equities

# A3

## Appendix 3: Shareholding pattern

Exhibit 41: Shareholding pattern of Cyient DLM for the period ending, Dec 2023 (%)



Source: BSE, Kotak Institutional Equities

# TCS (TCS)

IT Services

ADD

CMP(₹): 4,001

Fair Value(₹): 4,300

Sector View: Neutral

NIFTY-50: 22,519

April 12, 2024

## Margin execution comes to the fore

TCS reported modest qoq revenue growth of 1.1%, driven by large deal ramp-ups. Weak discretionary spending will extend into FY2025, factored in by a ~1% cut to FY2025-26E revenue, despite strong deal wins. Solid margin performance was aided by cost optimization initiatives in resource costs. Balanced portfolio of services catering to discretionary and a cost reduction focus on enterprises, coupled with strong relationships with a quality F-500 client base, would enable TCS to deliver consistent growth. We expect TCS to outperform peers in FY2025 on growth, aided by the BSNL ramp-up. Maintain ADD with FV of Rs4,300 (earlier Rs4,140).

### BSNL deal ramp-up drives 1.1% qoq revenue growth

TCS reported revenue of US\$7,363 mn, growing 1.1% qoq and 2.2% yoy. C/C growth of 1.1% was lower than our estimate of 1.7% due to (1) slower ramp-up of the BSNL deal; we estimate a 60 bps qoq growth from BSNL as against expectations of 90 bps and (2) continued weakness in discretionary spending. Regional markets (6.1%) and manufacturing (3.5%) led sequential growth, while BFSI, hi-tech and E&U declined. From a geographical perspective, India (11.1%) led growth, followed by the UK (3.6%), while North America was flat.

### Healthy margin expansion, driven by cost optimization measures

Adjusted EBIT margin increased 100 bps qoq and 150 bps yoy to 26%, beating our estimate of 25.3%, driven by resource cost optimization, visible in lower subcon and likely increase in utilization (headcount declined 0.3% qoq versus revenue growth of 1.1% qoq). Net profit of Rs124.3 bn increased 12.4% qoq and 9.1% yoy, beating our estimate by 2.2%, driven by the beat at EBIT level.

### Perplexing divergence between TCV and revenue growth outlook

Management did not sound optimistic on near-term revenue growth, despite strong growth in TCV. The divergence is intriguing, especially given management commentary that the strength in TCV was not driven just by (1) renewals and (2) deals with higher tenure. This implies reasonable ACV of new deals. The divergence in deals and revenue growth can only be due to run-off in existing discretionary programs. Nonetheless, record TCV of US\$13.2 bn (32 yoy growth) bodes well.

### Weak discretionary spending to constrain revenue growth; maintain ADD

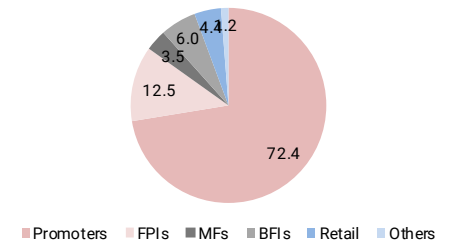
We bake in continued weakness in discretionary spending and cut FY2025-26E revenue growth by 1%. We raise our margin assumptions on impressive execution and cost management. This results in a 1-2% EPS increase. We expect TCS to lead peers on revenue growth in FY2025E, aided by contribution from BSNL and as other mega deals ramp-up. Clients remain focused on cost take-out initiatives, an area of strength for TCS, enabling it to gain wallet share against weaker peers, leveraging its broad range of service offerings and diversified presence across verticals and geographies. We value TCS at unchanged 26X FY2026E EPS, leading to FV of Rs4,300 (earlier Rs4,140). Maintain ADD.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	4,001/4,300/ADD
52-week range (Rs) (high-low)	4,255-3,056
Mcap (bn) (Rs/US\$)	14,477/173.6
ADTV-3M (mn) (Rs/US\$)	12,140/145.6

##### Shareholding pattern (%)



Price performance (%)	1M	3M	12M
Absolute	(5)	4	24
Rel. to Nifty	(5)	(0)	(3)
Rel. to MSCI India	(7)	(4)	(14)

Forecasts/Valuations	2024	2025E	2026E
EPS (Rs)	129.6	142.3	157.3
EPS growth (%)	12.6	9.7	10.6
P/E (X)	30.9	28.1	25.4
P/B (X)	15.5	14.1	12.7
EV/EBITDA (X)	21.8	19.8	17.8
RoE (%)	50.4	52.7	52.4
Div. yield (%)	1.5	2.8	3.1
Sales (Rs bn)	2,409	2,589	2,790
EBITDA (Rs bn)	643	705	780
Net profits (Rs bn)	466	515	569

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

[Full sector coverage on KINSITE](#)

Kawaljeet Saluja

Sathishkumar S

Vamshi Krishna

### Further ramp-up in BSNL powers growth in regional markets and others vertical

Regional markets and others revenue grew 6.1% qoq and 24.5% yoy in US\$ terms, respectively, driven by the ramp-up in the BSNL deal. Pass-through costs increased US\$47 mn and constitute 2.5% of revenue from 1.9% earlier. We attribute the increase to a further ramp-up of the BSNL deal and estimate 60 bps contribution to growth. TCS indicated delay in ramp-ups, but expects entire implementation to be completed within the next four quarters within schedule. This implies a further revenue uptick from the BSNL deal in the June quarter.

Another highlight of the quarter was the strong growth in the UK (3.6% qoq) and manufacturing (3.5% qoq). We believe the growth was aided by the ramp-up of the JLR deal (~US\$1 bn TCV over five years). We note that revenue from JLR has increased considerably in FY2024 (US\$350 mn from US\$211 mn in FY2023). Of the total incremental revenue in the manufacturing vertical, 66% was driven by the JLR account (we have assumed that the entire revenue from JLR lies in manufacturing).

### Mega deals to aid growth in FY2025; run-off in BSNL will impact growth in FY2026

Existing mega deals—BSNL, JLR and Aviva—will contribute 2.6% to FY2025 growth, in our view. Bulk of the growth will accrue from the BSNL deal, which we expect would contribute 1.9% to growth. We also anticipate some growth from yet-to-be-won new mega deal wins. We forecast 7.2% revenue growth in FY2025. We expect muted revenue stream in the BSNL deal after the implementation in FY2025. Run-off in revenue will impact FY2026E's growth rate. We forecast 6.3% growth in FY2026E.

### Expect further margin expansion in FY2025

We expect healthy improvement in profitability by 60 bps in FY2025, aided by benefits from optimized cost structure and operating efficiencies. Exhibit 12 provides a breakup of expense items in FY2024 versus FY2023 and across the past few quarters. While pass-through costs have increased courtesy of the BSNL deal, TCS has optimized costs in categories such as subcon, bench and employee costs. We believe that the company has further room to tighten operations in optimizing the average resource cost. TCS announced a wage hike of 4.5-7.0%, lower than in a normal year. We estimate a 25.2% EBIT margin in FY2025 and 26% in FY2026. We expect the BSNL deal ramp-up to impact margins by 60 bps in FY2025.

### Margin uptick, aided by COR and SG&A optimization

COR optimization increased margins by 30 bps qoq. Subcon costs declined 170 bps qoq. Utilization likely increased as well. These levers offset 70 bps higher pass-through costs from the BSNL deal ramp-up. SG&A, as a percentage of revenue, declined 70 bps qoq, aided by lower employee cost—this could be attributable to lower bench costs and lowering of onsite G&A costs. Note that TCS reports bench costs in SG&A.

### Attrition declines further, so does headcount

IT services attrition (LTM) moderated 80 bps qoq to 12.5%. This is now within the management's comfort band of 11-13% employee churn. TCS see further scope for moderation in attrition by 30-50 bps.

Headcount declined 0.3% qoq or by 1,759 to 601,546, marking the third straight quarter of net headcount decline. Exhibit 24 shows trend in headcount and US\$ revenue growth. It is interesting to note that headcount lagged revenue growth for the second year in FY2024, compensating for excess hiring in FY2021 and FY2022.

### Healthy TCV, but powered by renewals and long-tenured deals

TCV of US\$13.2 bn increased 63% qoq and 32% yoy and was robust. TCS continues to gain in cost take-out and vendor consolidation mandates of clients. TCV was powered by US\$2.5 bn, 15-year deal with Aviva, which included renewal component. Excluding Aviva, deal wins were lackluster in BFSI. Deal wins in North America and retail were reasonable.

Exhibit 18 provides the trend in yearly TCV across verticals and geos. TCV on yearly basis has tended to be volatile, but over a three-year period has been in the 7-13% CAGR band. Overall, TCV increased at a 10.7% CAGR during 2021-2024.

### TCS is optimistic on gen AI-driven revenue opportunity

AI and gen AI revenues increased to a US\$900 mn run-rate in 4QFY24, according to management. Gen AI adoption is still in early stages, as decisions related to defining architectures for future development and envisaging evolution of technology landscape are yet to be taken and spends being apportioned accordingly. Clients are gradually enhancing the scope of AI-related engagements by incorporating services related to cloud and data.

We believe the revenue opportunity for IT services players, ex-consulting, will be limited in the early stages of the technology. We believe headwinds from revenue deflation due to higher productivity are likely to occur first before the tailwinds kick in.

### FY2024 roundup—moderating growth, but healthy margin improvement

Revenue growth moderated in FY2024 to 3.4% in c/c, driven by strong growth in E&U and regional markets and moderate performance in the consumer, life sciences and manufacturing verticals, offset by revenue declines in the BFSI, technology & services and communication & media verticals. Among markets, the UK and rest of the world (India, MEA, Latin America and APAC) were robust, while North America and Europe's performance was tepid. Healthy progression in client metrics across various tiers: US\$100 mn+ (2 clients added); US\$50 mn+ (6 clients added); US\$20 mn+ (10 clients added).

EBIT margin increased 50 bps to 24.6%, aided by lower sub-con (290 bps), utilization, productivity benefits and operating efficiencies (80 bps), partly offset by headwinds from wage revision (250 bps) and third-party costs (70 bps). Adjusted EPS grew 10.9% yoy.

Employee headcount declined (13.2 K net reduction, 2.2% yoy) due to focus on utilization and resource optimization amid moderate demand environment during the year.

### Key highlights from earnings call

- ▶ **Demand.** Overall, demand environment remains challenging with clients focused on cost takeout and transformation initiatives. Enterprises are reprioritizing spends on programs, with higher RoI and tangible benefits in the near term. Vendor consolidation, cloud transformation and business process optimization initiatives benefit TCS, while discretionary spends remain under pressure. TCS expects accelerated spends on employee and customer experience transformation initiatives in areas such as customer experience, loyalty, hyper personalization and cloud ERP modernization.
- ▶ **TCV to revenue conversion.** The management indicated that recent deals won have contributed to revenues in line with expected timelines. However, in few instances, clients have abruptly reprioritized spends based on a challenging macroeconomic environment, leading to revenue shortfall from few engagements. This has led to difficulty in near-term revenue forecasting. TCS indicated that the March 2024 quarter's reported revenues were 50-100 bps lower than expectations in January 2024.
- ▶ **BFSI.** The vertical has remained relatively resilient, despite geopolitical risks and high inflation. The management sees pent-up demand in the vertical over the medium-long term, while near-term challenges remain. Insurance is expected to perform well, aided by multiple mega deals. The management indicated many long-term projects in the pipeline and the deal cycles would be longer.
- ▶ **India.** TCS believes in participating in the long-term potential of India. The company would prefer to take up engagements that meet its strategic priorities.
- ▶ **Margin.** Aggressive focus on costs has aided sharp improvement in profitability. EBIT margin improved 100 bps qoq to 26% in 4QFY24, aided by tailwinds from lower sub-con, improved productivity and better utilization (190 bps), partly offset by higher pass-through and travel costs (90 bps). Management indicated that sub-con costs have bottomed in the quarter. Management sees pricing, utilization and productivity enhancements as potential levers to improve margins.
- ▶ **Wage hike.** TCS announced wage hikes for all employees from April 2024. Wage hikes are expected to be in the 4.5-7.0% range offshore, with top-performers being rewarded with double-digit wage increases.
- ▶ **Pricing.** Improved pricing is unlikely to play out in the near term. Management is identifying areas where there could be scope for structural improvement in pricing to improve profitability over the long term.

- ▶ **BSNL deal.** As part of the deal, TCS would be modernizing the network for 100K towers, with further opportunity to increase the scope of the engagement. The project is slightly behind schedule, with 10K network setup for 10K towers currently. However, management remains confident of completing the network roll-out within expected timelines (end-FY2025E). TCS sees a follow-up opportunity from network optimization and management of OSS and BSS after the completion of the existing engagement.
- ▶ **Fresher hiring.** TCS announced that it has onboarded most trainees to whom offers were made, with the rest being onboarded in the current quarter. The company plans to hire a new batch of campus graduates in FY2025E.
- ▶ **DSO.** Receivable days (incl unbilled) increased by 1 day qoq to 89 days.
- ▶ **Cash conversion.** Cash generation was healthy with CFO of Rs469.3 bn (102.2% of net profit) and FCF of Rs442.8 bn (96.5% of net profit). CFO grew 5.5% and FCF grew 6.9% yoy in FY2024.
- ▶ **COO role.** The company has already announced retirement of NGS in April 2024. His responsibilities would be distributed among existing leaders and a replacement with a new COO is unlikely.
- ▶ **Capital returns.** TCS has announced DPS of Rs73/share, including a final dividend of Rs28/share for FY2024. The company had also announced buy-back of Rs170 bn (Rs210 bn, including taxes) earlier. Overall, capital returned to shareholders was at Rs476 bn in FY2024.

Exhibit 1: TCS' interim results--4QFY24 (consolidated, IFRS)

	4QFY24	4QFY24E	4QFY23	3QFY24	% chg.			FY2024	FY2023	% chg.	FY2025E	% chg.
					KIE	yoy	qoq					
Re/US\$ rate	83.2	83.1	82.2	83.2	0.0	1.1	(0.0)	82.8	80.7	2.6	83.1	0.3
Revenues (US\$ mn)	7,363	7,413	7,195	7,281	(0.7)	2.3	1.1	29,080	27,927	4.1	31,168	7.2
Revenues	612,370	616,279	591,620	605,830	(0.6)	3.5	1.1	2,408,930	2,254,580	6.8	2,589,105	7.5
Cost of revenues	(360,460)	(365,450)	(354,090)	(358,710)	(1.4)	1.8	0.5	(1,435,950)	(1,362,680)	5.4	(1,534,182)	6.8
Gross profit	251,910	250,829	237,530	247,120	0.4	6.1	1.9	972,980	891,900	9.1	1,054,923	8.4
SG&A expenses	(92,730)	(95,052)	(92,650)	(95,570)	(2.4)	0.1	(3.0)	(379,870)	(349,530)	8.7	(401,707)	5.7
EBIT	159,180	155,777	144,880	151,550	2.2	9.9	5.0	593,110	542,370	9.4	653,215	10.1
Other Income	9,310	7,958	9,030	7,150	17.0	3.1	30.2	37,270	26,700	39.6	39,572	6.2
Profit before tax	168,490	163,735	153,910	158,700	2.9	9.5	6.2	630,380	569,070	10.8	692,787	9.9
Provision for tax	(43,470)	(41,698)	(39,550)	(40,960)	4.2	9.9	6.1	(162,620)	(146,040)	11.4	(176,359)	8.4
Net income before MI	125,020	122,037	114,360	117,740	2.4	9.3	6.2	467,760	423,030	10.6	516,428	10.4
Minority Interest	(680)	(398)	(440)	(390)				(1,910)	(1,560)		(1,672)	
Net income (before EO items)	124,340	121,639	113,920	117,350	2.2	9.1	6.0	465,850	421,470	10.5	514,756	10.4
Extraordinary items	—	—	—	(6,770)				(6,770)	—		—	
Net income	124,340	121,639	113,920	110,580	2.2	9.1	12.4	459,080	421,470	8.9	514,756	12.1
EPS (Rs/ share)	34.4	33.6	31.1	30.3	2.2	10.4	13.5	125.9	115.2	9.3	142.3	11.3
As % of revenues												
Gross profit margin	41.1	40.7	40.1	40.8				40.4	39.6		40.7	
Operating margin (EBIT)	26.0	25.3	24.5	25.0				24.6	24.1		25.2	
SG&A expenses	15.1	15.4	15.7	15.8				15.8	15.5		15.5	
Tax rate (% of PBT)	25.8	25.5	25.7	25.7				25.8	25.7		25.5	

Source: Company, Kotak Institutional Equities estimates

Exhibit 2: TCS—key changes to FY2025-27E estimates

Rs mn	New			Old			Change (%)		
	2025E	2026E	2027E	2025E	2026E	2027E	2025E	2026E	2027E
Revenues	2,589,105	2,790,099	3,072,919	2,628,003	2,822,465		(1.5)	(1.1)	
EBIT	653,215	726,510	798,933	646,223	718,286		1.1	1.1	
Net Profit	514,756	569,087	620,869	507,519	562,191		1.4	1.2	
EPS (Rs/ share)	142.3	157.3	171.6	140.3	155.4		1.4	1.2	
Revenues (US\$ mn)	31,168	33,117	36,366	31,473	33,402		(1.0)	(0.9)	
Revenue growth (US\$, %)	7.2	6.3	9.8	8.0	6.1				
Revenue growth (c/c, %)	7.2	6.3	9.8	8.0	6.1				
Revenue growth (organic c/c, %)	7.2	6.3	9.8	8.0	6.1				
Revenue growth (organic c/c, %) ex-BSNL deal	7.2	8.8	8.8	7.2	8.8				
Re/\$ rate	83.1	84.3	84.5	83.5	84.5		(0.5)	(0.3)	
EBIT margin	25.2	26.0	26.0	24.6	25.4				
EBIT margin ex-BSNL deal	25.8	26.0		25.2	25.4				

Source: Kotak Institutional Equities estimates

Exhibit 3: Revenue mix across geographies and verticals (March 2024)

	Revenues (US\$ mn)	Growth (%)			C/C growth (%)	
		QoQ	YoY	% of total	QoQ	YoY
<b>Total revenues</b>	<b>7,363</b>	<b>1.1</b>	<b>2.3</b>	<b>100.0</b>	<b>1.1</b>	<b>2.2</b>
<b>Revenue by geography</b>						
North America	3,682	(0.1)	(2.4)	50.0	NA	(2.3)
Latin America	147	(3.7)	13.7	2.0	NA	9.8
UK	1,237	3.6	9.5	16.8	NA	6.2
Continental Europe	1,075	(1.6)	(1.1)	14.6	NA	(2.0)
India	493	11.1	37.1	6.7	NA	37.9
Asia Pacific	574	1.1	(0.2)	7.8	NA	5.2
MEA	155	6.2	7.5	2.1	NA	10.7
<b>Revenue by verticals</b>						
BFSI	2,305	(0.1)	(2.6)	31.3	NA	(3.2)
Retail & CPG	1,156	1.1	0.4	15.7	NA	(0.3)
Communication & Media	486	(0.4)	(4.9)	6.6	NA	(5.5)
Manufacturing	648	3.5	9.8	8.8	NA	9.7
Life sciences & healthcare	803	1.1	2.3	10.9	NA	1.7
Technology & Services	604	(1.3)	(5.7)	8.2	NA	(5.6)
Energy, Resources & Utilities	412	(0.6)	6.1	5.6	NA	7.3
Regional markets and others	950	6.1	24.5	12.9	NA	26.0

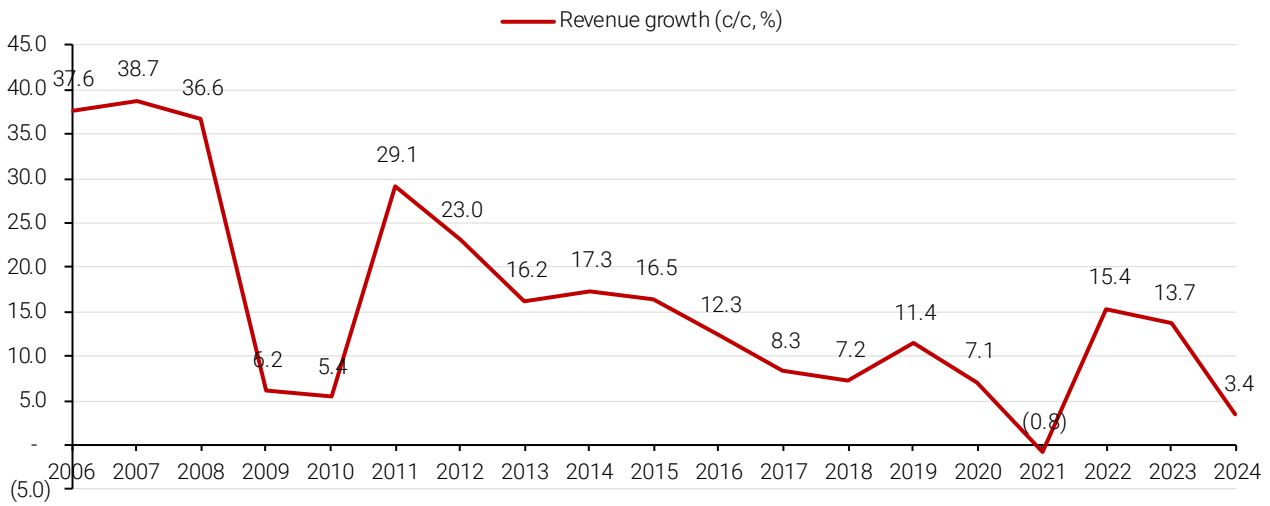
Source: Company, Kotak Institutional Equities

Exhibit 4: Revenue mix across geographies and verticals (FY2024)

	Revenues	Growth (%)	% of total	C/C growth (%)
	(US\$ mn)	YoY		YoY
<b>Total revenues</b>	<b>29,080</b>	<b>4.1</b>	<b>100.0</b>	<b>3.4</b>
<b>Revenue by geography</b>				
North America	14,860	(0.4)	51.1	(0.2)
Latin America	582	15.7	2.0	12.4
UK	4,798	14.5	16.5	10.1
Continental Europe	4,333	4.1	14.9	0.7
India	1,628	16.6	5.6	20.2
Asia Pacific	2,268	1.5	7.8	4.5
MEA	611	15.1	2.1	14.4
<b>Revenue by verticals</b>				
BFSI	9,306	0.1	32.0	(1.0)
Retail & CPG	4,595	2.8	15.8	1.8
Communication & Media	1,977	(1.7)	6.8	(2.6)
Manufacturing	2,501	9.2	8.6	7.3
Life sciences & healthcare	3,170	5.1	10.9	4.8
Technology & Services	2,472	(1.7)	8.5	(2.3)
Energy, Resources and Utilities	1,628	12.1	5.6	12.6
Regional markets and others	3,431	19.3	11.8	19.8

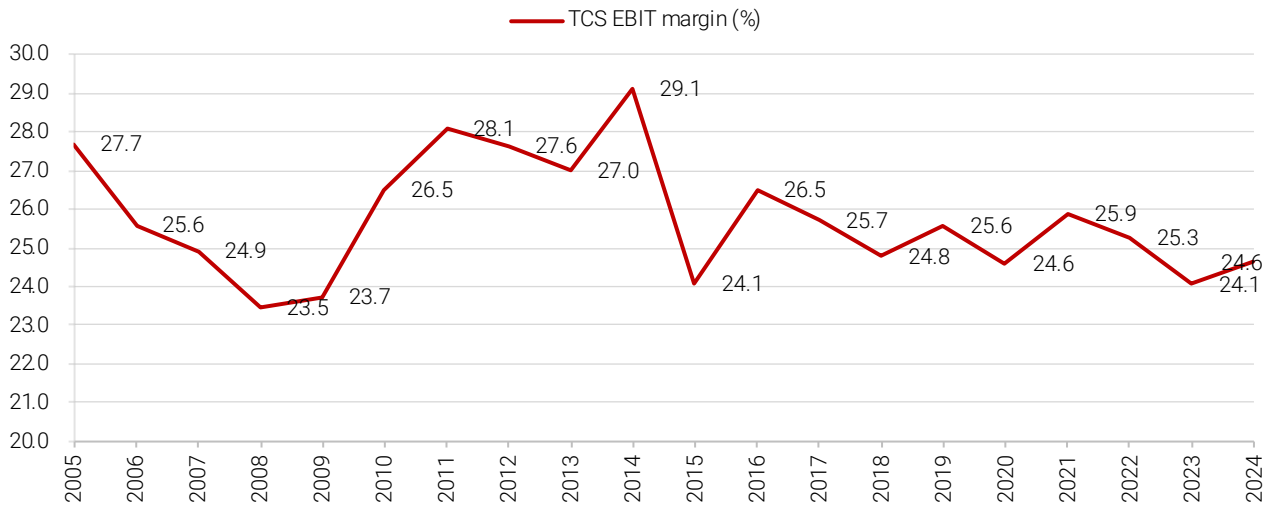
Source: Company, Kotak Institutional Equities

Exhibit 5: Revenue growth declines sharply to 3.4%, after healthy double-digit growth in FY2022 and FY2023



Source: Company, Kotak Institutional Equities estimates

Exhibit 6: EBIT margin improves 50 bps to 24.6%, aided by cost optimization and efficiency measures, despite weak revenue growth



Source: Company, Kotak Institutional Equities

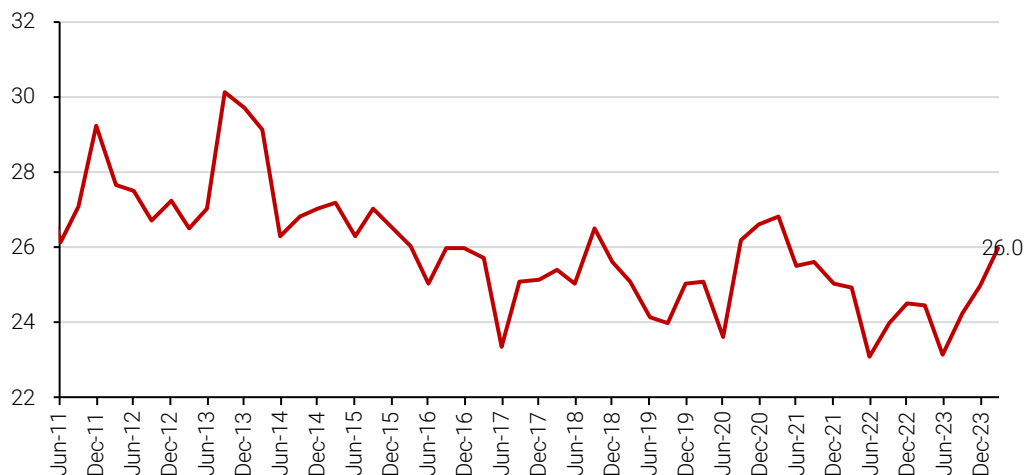
Exhibit 7: Revenue growth across geographies and verticals in constant-currency terms, %, September 2021-March 2024

	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
<b>Constant currency revenue (qoq %)</b>											
<b>Total growth</b>	4.0	4.0	3.2	3.5	4.0	2.2	0.6	-	-	-	1.1
<b>Constant currency revenue (yoy %)</b>											
<b>Revenue by geography</b>											
North America	17.4	18.0	18.7	19.1	17.6	15.4	9.6	4.6	0.1	(3.0)	(2.3)
Latin America	15.2	21.1	20.6	21.6	19.0	14.6	15.1	13.5	13.1	13.2	9.8
UK	15.6	12.7	13.0	12.6	14.8	15.4	17.0	16.1	10.7	8.1	6.2
Continental Europe	13.5	17.5	10.1	12.1	14.1	9.7	8.4	3.4	1.3	0.5	(2.0)
India	20.1	15.2	7.0	20.8	16.7	9.1	13.4	14.0	3.9	23.4	37.9
Asia Pacific	7.6	4.3	5.5	6.2	7.0	9.5	7.5	4.7	4.1	3.9	5.2
MEA	13.8	6.9	7.3	3.2	8.2	8.6	11.3	15.2	15.9	16.0	10.7
<b>Revenue by verticals - NEW</b>											
BFSI	17.0	17.9	12.9	13.9	13.1	11.1	9.1	3.0	(0.5)	(3.0)	(3.2)
Retail & CPG	18.4	20.4	22.1	25.1	22.9	18.7	13.0	5.3	1.0	(0.3)	(0.3)
Communication & Media	15.6	14.4	18.7	19.6	18.7	13.5	5.3	0.5	(2.1)	(4.9)	(5.5)
Manufacturing	21.7	18.3	19.0	16.4	14.5	12.5	9.1	9.4	5.8	7.0	9.7
Life sciences & healthcare	19.0	16.3	16.4	11.9	14.5	14.4	12.3	10.1	5.0	3.1	1.7
Technology & Services	14.8	17.7	18.0	16.4	15.9	13.6	9.2	4.4	(2.2)	(5.0)	(5.6)
Energy, Resources & Utilities									14.8	11.8	7.3
Regional markets and others	6.4	5.2	4.0	9.8	13.1	13.3	14.6	16.9	14.3	19.2	26.0
<b>Revenue by services</b>											
<b>Total growth</b>	15.5	15.4	14.3	15.5	15.4	13.5	10.7	7.0	2.8	1.7	2.2

Source: Company, Kotak Institutional Equities

**Adjusted EBIT margin increased 100 bps sequentially to 26.0%**

Exhibit 8: Trend in EBIT margin, %, June 2011-March 2024



Note: Dec 2023 quarter margin, excluding one-time costs

Source: Company, Kotak Institutional Equities

**EBITDA margin increased for all verticals, except telecom, qoq and yoy**

Exhibit 9: Trend in segmental EBITDA margin, %, March 2024 quarter

	EBITDA margin (%)	QoQ change (%)	YoY change (%)	Revenue mix (%)	US\$ growth (%)	
					QoQ	YoY
BFSI	27.7	1.4	1.8	37.2	0.5	(0.6)
Manufacturing	34.2	2.7	6.8	10.0	3.5	9.3
Retail CPG	27.5	1.2	1.1	16.2	0.8	0.1
CMT	25.9	(2.6)	(3.9)	16.8	3.7	4.9
LSH	30.6	2.0	2.8	11.0	0.5	1.5
Others	24.1	1.9	2.1	8.8	(1.9)	8.3
<b>Total</b>	<b>28.0</b>	<b>1.0</b>	<b>1.4</b>	<b>100.0</b>	<b>1.1</b>	<b>2.3</b>

Note: Dec 2023 quarter margin, excluding one-time costs

Source: Company, Kotak Institutional Equities

**EBITDA margin increased 40 bps yoy in FY2024, driven by strong margin increase in manufacturing**

Exhibit 10: Trend in segmental EBITDA margin, %, FY2024

	EBITDA margin (%)	YoY change (%)	Revenue mix (%)	YoY US\$ growth (%)
BFSI	25.9	(0.0)	37.7	2.9
Manufacturing	30.9	3.4	9.8	7.8
Retail CPG	26.0	0.4	16.3	2.3
CMT	27.7	(0.6)	16.4	1.9
LSH	28.5	0.4	11.1	6.0
Others	22.3	1.2	8.7	11.6
<b>Total</b>	<b>26.7</b>	<b>0.4</b>	<b>100.0</b>	<b>4.1</b>

Note: Excludes one-time provision for settlement claim

Source: Company, Kotak Institutional Equities

**Employee costs increased 10 bps qoq to 57.4%**

Exhibit 11: Trend in employee expenses as a % of revenue, March 2014-March 2024



Source: Company, Kotak Institutional Equities

**EBIT margin increased 50 bps yoy as 80 bps tailwind from COR offsets 30 bps headwind from SG&A**

Exhibit 12: Expense breakup as a % of revenue, FY2023-24, March fiscal year-ends

	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	2023	2024
<b>COR</b>							
Employee cost	44.3	46.0	45.9	44.5	45.1	44.0	45.4
<b>Fee to external consultants</b>	<b>8.2</b>	<b>7.4</b>	<b>6.8</b>	<b>6.1</b>	<b>4.6</b>	<b>9.2</b>	<b>6.2</b>
Equipment and software	1.1	0.9	0.8	1.9	2.6	0.8	1.5
Facility expenses	0.7	0.8	0.8	0.8	0.8	0.7	0.8
Depreciation	1.7	1.6	1.6	1.6	1.6	1.7	1.6
Travel	0.8	0.8	0.9	0.8	0.9	0.8	0.9
Communication	0.7	0.6	0.6	0.6	0.6	0.7	0.6
Other expenses	2.4	2.4	2.6	2.9	2.7	2.6	2.7
<b>Total COR</b>	<b>59.8</b>	<b>60.5</b>	<b>59.9</b>	<b>59.2</b>	<b>58.9</b>	<b>60.4</b>	<b>59.6</b>
<b>SG&amp;A</b>							
<b>Employee cost</b>	<b>12.7</b>	<b>13.2</b>	<b>13.0</b>	<b>12.8</b>	<b>12.3</b>	<b>12.6</b>	<b>12.8</b>
Fee to external consultants	0.3	0.3	0.4	0.4	0.3	0.3	0.3
Facility expenses	0.5	0.5	0.5	0.5	0.5	0.4	0.5
Depreciation	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Travel	0.5	0.5	0.3	0.3	0.4	0.4	0.4
Communication	0.4	0.4	0.3	0.4	0.3	0.3	0.3
Provision for Doubtful Debts	0.1	0.0	0.1	0.0	0.1	0.1	0.1
Other expenses	0.8	0.9	0.9	0.9	0.9	0.9	0.9
<b>Total SG&amp;A</b>	<b>15.7</b>	<b>16.4</b>	<b>15.8</b>	<b>15.8</b>	<b>15.1</b>	<b>15.5</b>	<b>15.8</b>
<b>Total COR and SG&amp;A</b>	<b>75.5</b>	<b>76.8</b>	<b>75.7</b>	<b>75.0</b>	<b>74.0</b>	<b>75.9</b>	<b>75.4</b>

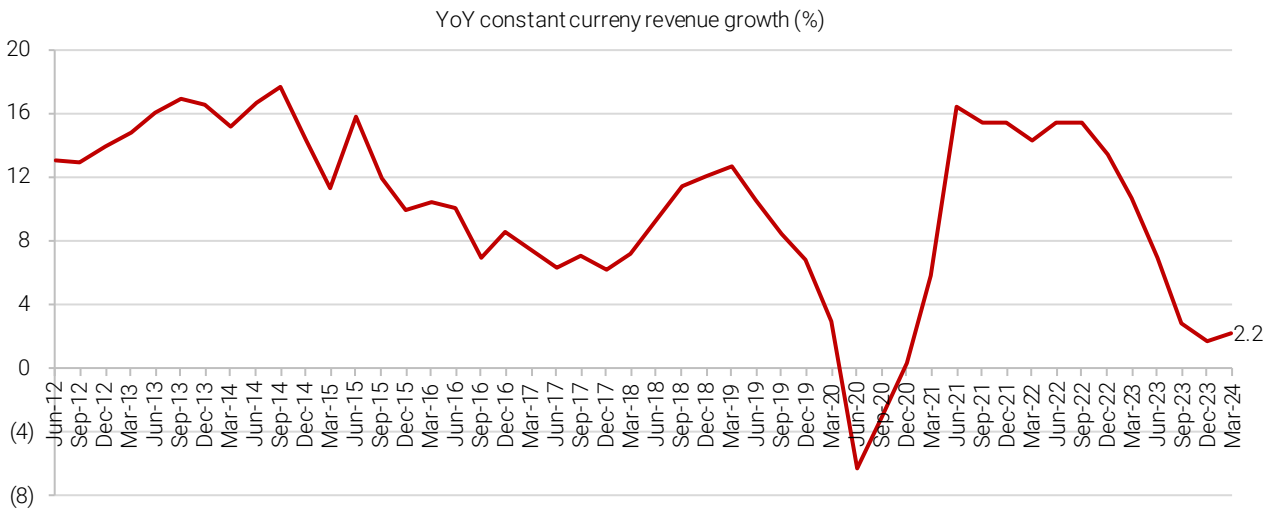
Notes:

(a) Excludes one-time provision for settlement claim.

Source: Company, Kotak Institutional Equities

**Revenue growth increases a tad to 2.2% yoy from 1.7% in the December 2023 quarter**

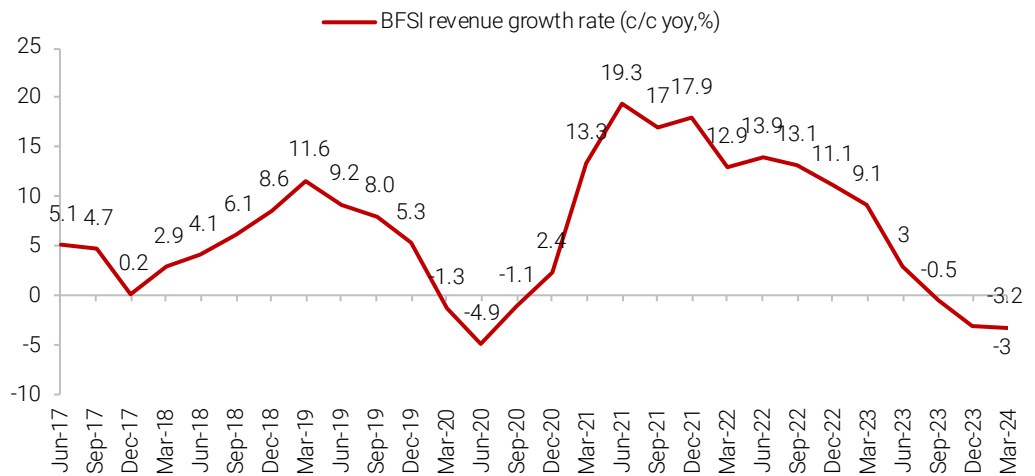
**Exhibit 13: Trend in constant currency yoy revenue growth, %, June 2012-March 2024**



Source: Company, Kotak Institutional Equities

**BFSI revenue declined 3.2% yoy**

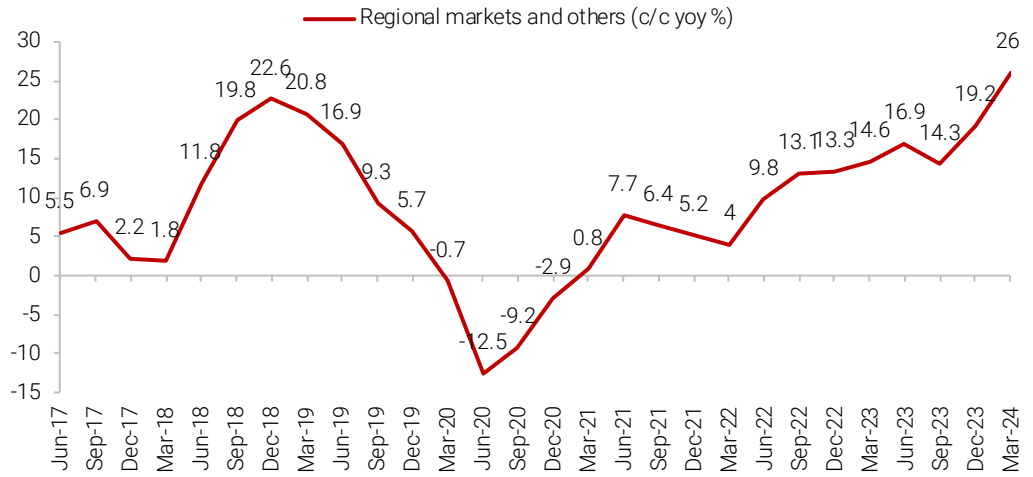
**Exhibit 14: Trend in constant currency yoy revenue growth of BFSI vertical, %, June 2017-March 2024**



Source: Company, Kotak Institutional Equities

**Regional markets and others revenue growth increases further to 26% yoy, driven by BSNL deal**

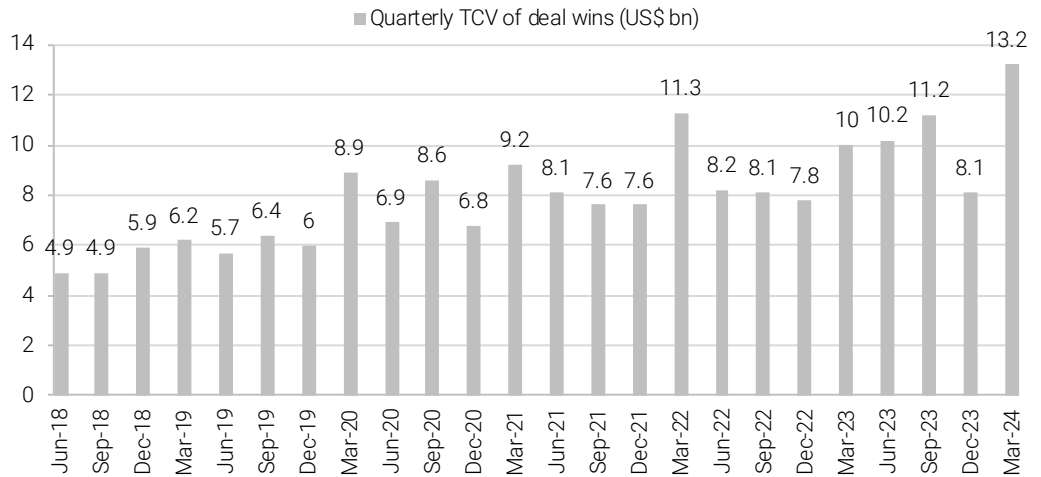
**Exhibit 15: Trend in constant currency yoy revenue growth of regional markets and others vertical, %, June 2017-March 2024**



Source: Company, Kotak Institutional Equities

**Deal wins grew at a strong pace of 32% yoy, driven by Aviva deal (US\$2.5 bn TCV)**

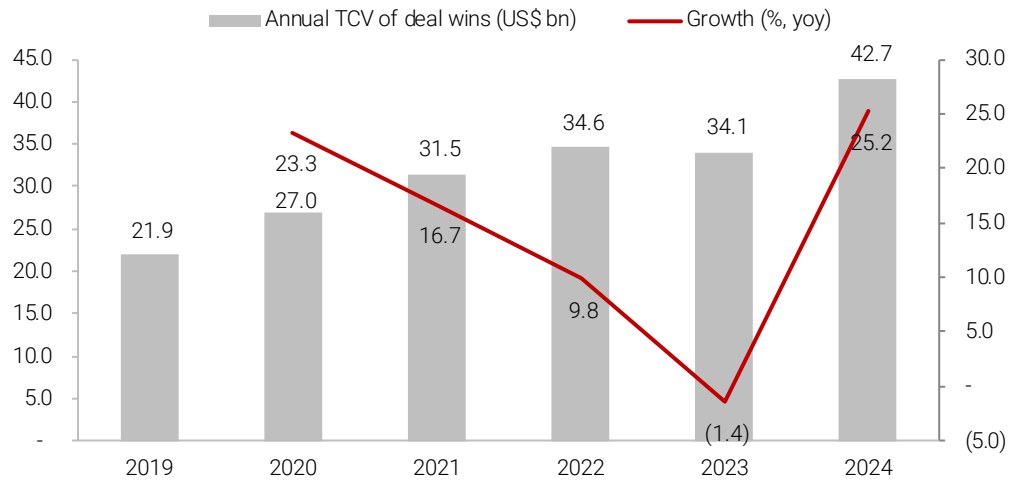
**Exhibit 16: Trend in TCV of all deal wins, US\$ bn, June 2018-March 2024**



Source: Company, Kotak Institutional Equities

**Deal wins grew at a strong pace of 25.2% in FY2024, aided by multiple mega deals**

Exhibit 17: Trend in TCV of all deal wins, US\$ bn, June 2018-March 2024



Source: Company, Kotak Institutional Equities

**TCV across various verticals/geos has been volatile yoy, but has increased at 3-year CAGR of 7-13%**

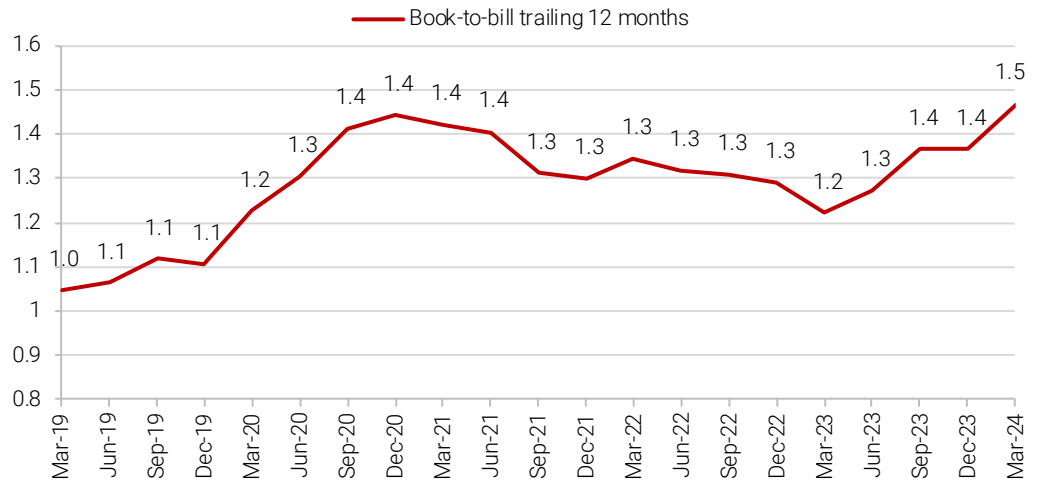
Exhibit 18: Trend in TCV of all deal wins, US\$ bn, 2021-2024, March fiscal year-ends

	2021	2022	2023	2024	CAGR (%)
<b>Geo-wise TCV (US\$ mn)</b>					
North America	14,700	18,500	18,000	19,600	10.1
Ex-North America	16,800	16,100	16,100	23,100	11.2
<b>Growth in geo-wise TCV (%)</b>					
North America		25.9	(2.7)	8.9	
Ex-North America		(4.2)	-	43.5	
<b>Vertical-wise TCV (US\$ mn)</b>					
Retail	4,280	6,300	5,300	5,700	10.0
BFSI	10,300	10,400	10,400	12,700	7.2
Ex-retail and BFSI	16,920	17,900	18,400	24,300	12.8
<b>Growth in geo-wise TCV (%)</b>					
Retail		47.2	(15.9)	7.5	
BFSI		1.0	-	22.1	
Ex-retail and BFSI		5.8	2.8	32.1	
<b>Total TCV</b>	<b>31,500</b>	<b>34,600</b>	<b>34,100</b>	<b>42,700</b>	<b>10.7</b>

Source: Company, Kotak Institutional Equities

**Book-to-bill ratio increased to 1.5X on ttm basis**

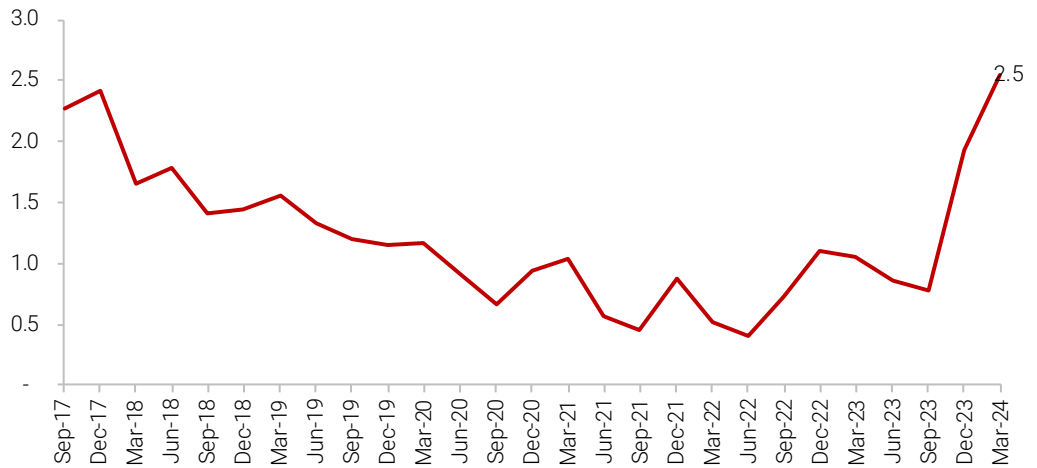
Exhibit 19: Trend in book-to-bill ratio, ttm, March 2019-March 2024



Source: Company, Kotak Institutional Equities

**Cost of equipment and software licenses increased 60 bps qoq, primarily attributable to BSNL deal**

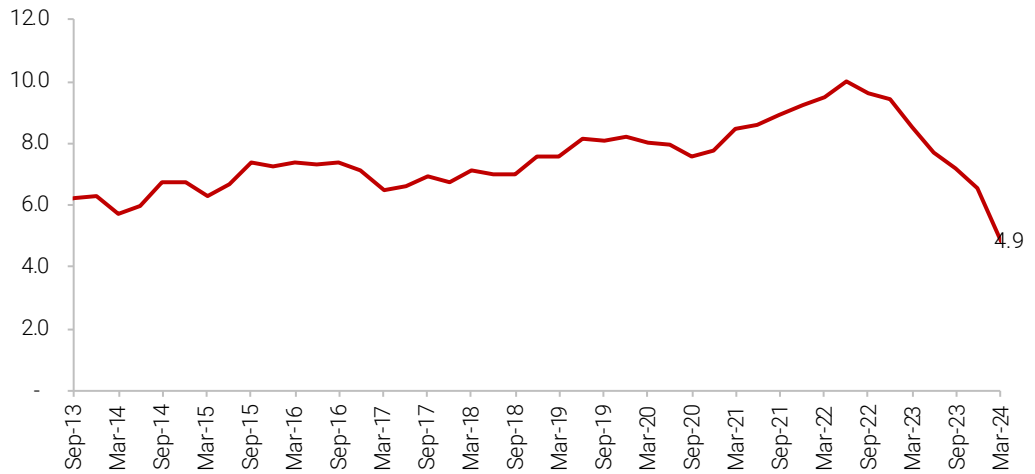
Exhibit 20: Trend in equipment and software license costs as a % of revenue, September 2013-March 2024



Source: Company, Kotak Institutional Equities

**Subcontracting cost as a % of revenue decline 170 bps sequentially to 4.9%**

**Exhibit 21: Trend in subcontractor costs as a % of revenue, September 2013-March 2024**



Source: Company, Kotak Institutional Equities

**Travel costs as a % of revenue remain range-bound at levels lower than pre-Covid**

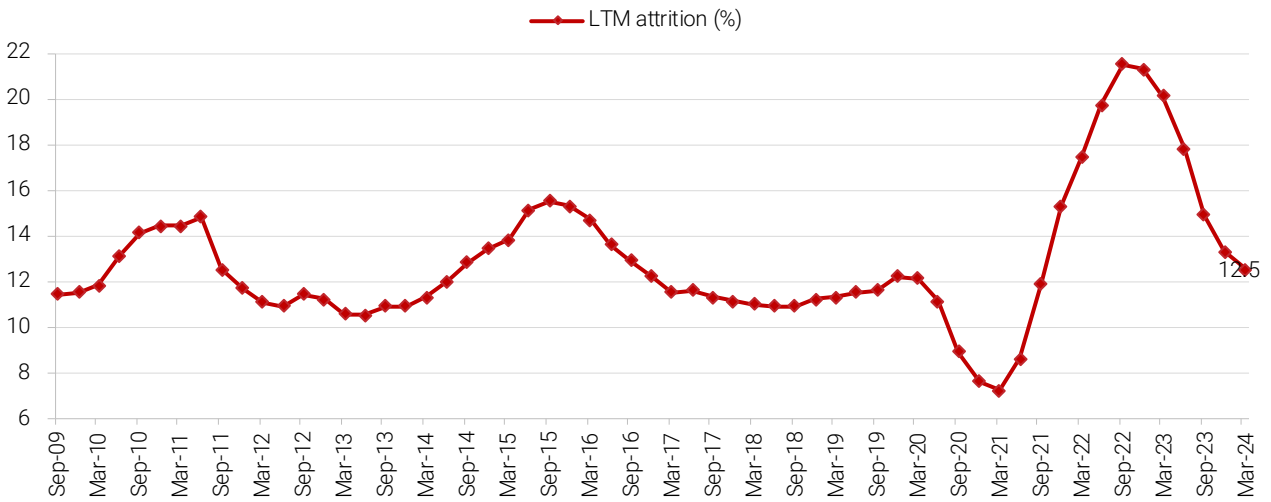
**Exhibit 22: Trend in travel costs as a % of revenue, June 2014-March 2024**



Source: Company, Kotak Institutional Equities

**Attrition rate moderates to 12.5%, trending toward historical levels**

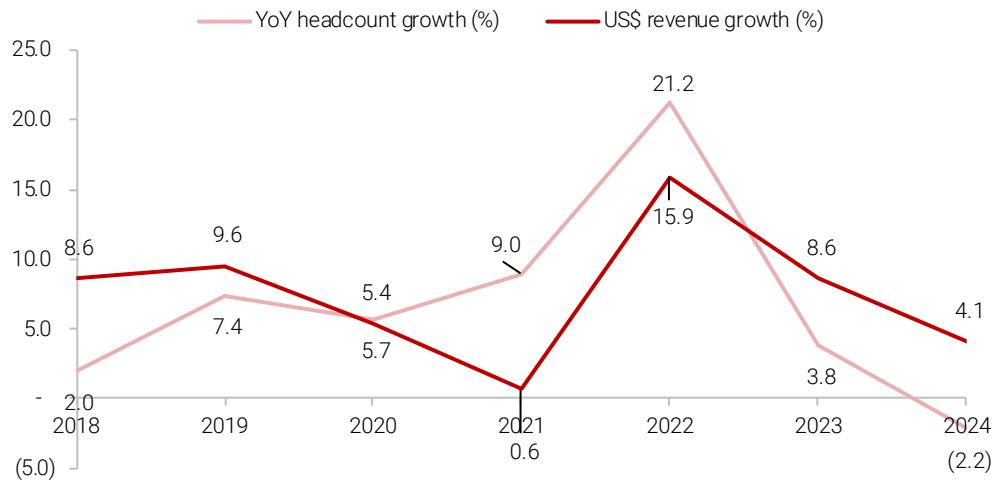
Exhibit 23: Trend in attrition rates, %, March 2009-March 2024



Source: Company, Kotak Institutional Equities

**Headcount lagged revenue growth in FY2023 and FY2024, after sharp increase in FY2021 and FY2022**

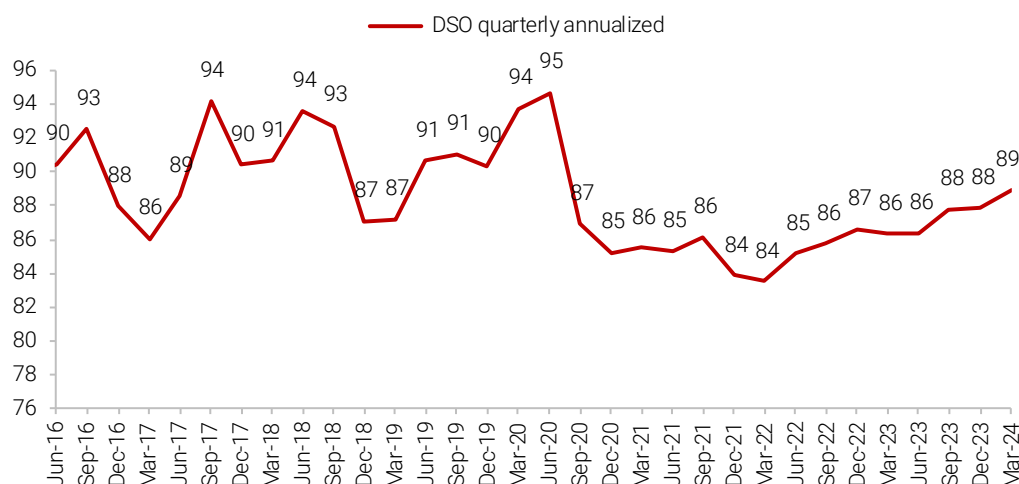
Exhibit 24: Trend in headcount and US\$ revenue growth, 2018-2024, March fiscal year-ends



Source: Company, Kotak Institutional Equities

**DSO increased by 1 to 89**

**Exhibit 25: Trend in DSO, June 2016-March 2024**



Source: Company, Kotak Institutional Equities

**Number of US\$100 mn clients increased by 1 qoq and increased by 2 yoy to 62**

**Exhibit 26: Trend in number of clients in various billing buckets, September 2021-March 2024**

	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
US\$1 mn clients	1,138	1,175	1,182	1,196	1,210	1,217	1,241	1,268	1,272	1,288	1,294
US\$5 mn clients	609	619	638	650	650	658	665	677	688	693	693
US\$10 mn clients	417	426	439	446	455	456	461	468	483	480	487
US\$20 mn clients	247	255	268	272	283	290	291	296	292	299	301
US\$50 mn clients	114	118	120	124	124	130	133	137	137	137	139
US\$100 mn clients	54	58	58	59	59	59	60	60	61	61	62

Source: Company, Kotak Institutional Equities

**Exhibit 27: Key model assumptions, March fiscal year-ends, 2020-2027E**

	2020	2021	2022	2023	2024	2025E	2026E	2027E
Average Exchange Rate	71.2	74.0	74.6	80.7	82.8	83.1	84.3	84.5
<b>Revenues (US\$ mn)</b>	<b>22,031</b>	<b>22,174</b>	<b>25,707</b>	<b>27,927</b>	<b>29,081</b>	<b>31,168</b>	<b>33,117</b>	<b>36,366</b>
Revenue Growth (%)	5.4	0.6	15.9	8.6	4.1	7.2	6.3	9.8
C/c revenue growth	7.1	(0.8)	15.4	13.7	3.4	7.2	6.3	9.8
C/c organic revenue growth	7.1	(0.8)	15.4	13.7	3.4	7.2	6.3	9.8
<b>Employees</b>	<b>438,564</b>	<b>477,649</b>	<b>579,195</b>	<b>601,395</b>	<b>588,446</b>	<b>636,638</b>	<b>685,706</b>	<b>733,705</b>
Employee addition	22,739	39,085	101,546	22,200	(12,949)	48,192	49,068	47,999
Utilization rates	84.2	83.3	83.8	85.5	87.9	88.0	87.9	88.0
EBITDA margin (%)	26.8	28.4	27.7	26.3	26.7	27.2	28.0	27.8
EBIT margin (%)	24.6	25.9	25.3	24.1	24.6	25.2	26.0	26.0
SG&A (%)	16.6	15.0	15.0	15.5	15.8	15.5	15.6	15.6
Effective tax rate (%)	23.2	25.5	25.6	25.7	25.8	25.5	25.7	25.6

Source: Company, Kotak Institutional Equities estimates

**Exhibit 28: Key operating metrics**

	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Revenues (US\$ mn)	6,696	6,780	6,877	7,075	7,195	7,226	7,210	7,281	7,363
Revenues (Rs mn)	505,910	527,580	553,090	582,290	591,620	593,810	596,920	605,830	612,370
Exchange rate (Re/US\$)	75.6	77.8	80.4	82.3	82.2	82.2	82.8	83.2	83.2
<b>Revenue by geography (%)</b>									
North America	51.6	53.2	54.3	53.7	52.4	52.0	51.7	50.6	50.0
Latin America	1.7	1.8	1.7	1.8	1.8	2.0	2.0	2.1	2.0
UK	15.6	14.9	14.5	14.9	15.7	16.4	16.5	16.4	16.8
Continental Europe	15.5	15.2	14.5	14.8	15.1	14.9	14.9	15.0	14.6
India	5.1	4.8	5.1	5.1	5.0	4.9	4.9	6.1	6.7
Asia Pacific	8.5	8.3	8.0	7.9	8.0	7.8	7.8	7.8	7.8
MEA	2.0	1.8	1.9	1.8	2.0	2.0	2.2	2.0	2.1
<b>Vertical split of revenues (%)</b>									
BFSI	31.9	32.1	31.9	31.5	31.4	31.0	NA	NA	NA
Retail & CPG	15.4	15.9	15.9	15.7	15.6	15.7	NA	NA	NA
Communication & Media	6.7	6.8	6.7	6.6	6.5	6.4	NA	NA	NA
Manufacturing	10.0	9.9	9.9	9.9	9.9	10.2	NA	NA	NA
Life sciences & healthcare	10.0	10.1	10.2	10.3	10.4	10.5	NA	NA	NA
Technology & Services	8.7	8.8	9.0	8.9	8.7	8.6	NA	NA	NA
Regional markets and others	17.3	16.4	16.4	17.1	17.5	17.6	NA	NA	NA
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>Vertical split of revenues (%) - new classification</b>									
BFSI			33.6	33.1	32.9	32.5	32.6	31.7	31.3
Consumer Business			16.1	16.0	16.0	16.1	15.9	15.7	15.7
Communication & Media			7.3	7.2	7.1	7.0	6.9	6.7	6.6
Manufacturing			8.2	8.2	8.2	8.3	8.5	8.6	8.8
Life sciences & healthcare			10.7	10.8	10.9	11.0	10.9	10.9	10.9
Technology & Services			9.1	9.0	8.9	8.7	8.6	8.4	8.2
Energy, Resources & Utilities			5.0	5.2	5.4	5.5	5.6	5.7	5.6
Regional markets and others			10.0	10.5	10.6	10.9	11.0	12.3	12.9
<b>Total</b>			<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Client metrics</b>									
US\$1 mn clients	1,182	1,196	1,210	1,217	1,241	1,268	1,272	1,288	1,294
US\$5 mn clients	638	650	650	658	665	677	688	693	693
US\$10 mn clients	439	446	455	456	461	468	483	480	487
US\$20 mn clients	268	272	283	290	291	296	292	299	301
US\$50 mn clients	120	124	124	130	133	137	137	137	139
US\$100 mn clients	58	59	59	59	60	60	61	61	62
<b>TCV of deal wins (US\$ mn)</b>									
Total	11,300	8,200	8,100	7,800	10,000	10,200	11,200	8,100	13,200
North America	6,100	4,500	4,300	4,200	5,000	5,200	4,500	4,200	5,700
Financial services	3,200	2,600	2,300	2,500	3,000	3,000	3,000	2,600	4,100
Retail	2,600	1,200	1,600	1,200	1,300	1,200	1,400	1,500	1,600
<b>Employee metrics</b>									
Total employees - incl Indian subsidiaries	592,195	606,331	616,171	613,974	614,795	615,318	608,985	603,305	601,546
Net addition	35,209	14,136	9,840	(2,197)	821	523	(6,333)	(5,680)	(1,759)
IT services attrition rate (%)	17.4	19.7	21.5	21.3	20.1	17.8	14.9	13.3	12.5

**Note:**

(a) Verticals reclassified in Sep 2023 quarter

Source: Company, Kotak Institutional Equities

Exhibit 29: Profit model, balance sheet, cash model of TCS, March fiscal year-ends (Rs mn), 2019-2026E

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Profit model</b>								
<b>Revenues</b>	<b>1,569,490</b>	<b>1,641,770</b>	<b>1,917,540</b>	<b>2,254,580</b>	<b>2,408,930</b>	<b>2,589,105</b>	<b>2,790,099</b>	<b>3,072,919</b>
Cost of sales	(923,220)	(971,380)	(1,146,210)	(1,362,680)	(1,435,950)	(1,534,182)	(1,625,239)	(1,795,399)
SG&A expenses	(260,470)	(245,580)	(286,800)	(349,530)	(379,870)	(401,707)	(438,351)	(478,587)
<b>EBIT</b>	<b>385,800</b>	<b>424,810</b>	<b>484,530</b>	<b>542,370</b>	<b>593,110</b>	<b>653,215</b>	<b>726,510</b>	<b>798,933</b>
Other income	36,680	24,970	32,340	26,700	37,270	39,572	41,821	37,961
<b>Pre-tax profits</b>	<b>422,480</b>	<b>449,780</b>	<b>516,870</b>	<b>569,070</b>	<b>630,380</b>	<b>692,787</b>	<b>768,331</b>	<b>836,893</b>
Provision for tax	(98,010)	(114,580)	(132,380)	(146,040)	(162,620)	(176,359)	(197,434)	(214,214)
<b>Recurring net income</b>	<b>324,470</b>	<b>335,200</b>	<b>384,490</b>	<b>423,030</b>	<b>467,760</b>	<b>516,428</b>	<b>570,897</b>	<b>622,679</b>
Minority Interest	(1,070)	(1,320)	(1,220)	(1,560)	(1,628)	(1,672)	(1,810)	(1,810)
Extraordinary items	—	—	—	—	(6,770)	—	—	—
<b>Reported net income</b>	<b>323,400</b>	<b>333,880</b>	<b>383,270</b>	<b>421,470</b>	<b>466,132</b>	<b>514,756</b>	<b>569,087</b>	<b>620,869</b>
<b>EPS (Rs)</b>	<b>86.2</b>	<b>89.3</b>	<b>103.6</b>	<b>115.2</b>	<b>129.6</b>	<b>142.3</b>	<b>157.3</b>	<b>171.6</b>
<b>Balance Sheet</b>								
Shareholders funds	862,400	885,550	912,590	925,420	926,120	1,029,071	1,142,889	1,267,062
Borrowings	—	—	—	—	—	—	—	—
Minority interest	6,230	6,750	7,070	7,820	8,300	9,972	11,783	13,593
Other non-current liabilities	88,820	88,240	90,670	85,770	90,720	91,806	93,033	94,667
<b>Total liabilities</b>	<b>957,450</b>	<b>980,540</b>	<b>1,010,330</b>	<b>1,019,010</b>	<b>1,025,140</b>	<b>1,130,850</b>	<b>1,247,704</b>	<b>1,375,322</b>
Net fixed assets	119,380	121,350	120,800	115,950	112,240	119,925	128,981	137,611
Goodwill	38,500	39,480	39,350	40,060	39,890	39,890	39,890	39,890
Intangibles	2,830	4,800	11,010	8,670	5,100	5,100	5,100	5,100
Investments	2,160	2,130	2,230	2,660	2,810	2,810	2,810	2,810
Other non-current assets	149,640	150,110	159,630	162,910	159,210	161,544	164,624	167,975
Cash and bank balances	441,092	502,338	555,770	495,973	465,440	530,313	605,097	678,613
Net current assets excluding cash	203,848	160,332	121,540	192,787	240,450	271,268	301,202	343,323
<b>Total assets</b>	<b>957,450</b>	<b>980,540</b>	<b>1,010,330</b>	<b>1,019,010</b>	<b>1,025,140</b>	<b>1,130,850</b>	<b>1,247,704</b>	<b>1,375,322</b>
<b>Cash flow</b>								
Operating cash flow, excl. working capital changes	370,360	388,970	427,180	461,820	512,360	528,355	582,834	640,819
Working capital	(46,670)	8,630	(27,690)	(42,170)	(75,940)	(30,032)	(29,057)	(40,887)
<b>Cash flow from operations</b>	<b>323,690</b>	<b>397,600</b>	<b>399,490</b>	<b>419,650</b>	<b>436,420</b>	<b>498,324</b>	<b>553,777</b>	<b>599,932</b>
Capital expenditure	(33,150)	(31,390)	(34,850)	(31,000)	(26,470)	(44,792)	(45,429)	(46,715)
Net finance cost/ income	36,680	24,970	32,340	26,700	37,270	39,572	41,821	37,961
Increase/(decrease) in lease liabilities	(10,620)	(13,360)	(14,170)	(15,150)	(16,140)	(19,266)	(20,116)	(20,966)
<b>Free cash flow</b>	<b>316,600</b>	<b>377,820</b>	<b>382,810</b>	<b>400,200</b>	<b>431,080</b>	<b>473,837</b>	<b>530,053</b>	<b>570,212</b>
<b>Ratios (%)</b>								
Gross profit margin	41.2	40.8	40.2	39.6	40.4	40.7	41.7	41.6
EBITDA margin	26.8	28.4	27.7	26.3	26.7	27.2	28.0	27.8
EBIT margin	24.6	25.9	25.3	24.1	24.6	25.2	26.0	26.0
EPS growth	3.8	3.7	16.0	11.1	12.6	9.7	10.6	9.1
RoAE	36.4	38.2	42.6	45.9	50.4	52.7	52.4	51.5

Source: Company, Kotak Institutional Equities estimates

# Vodafone Idea (IDEA)

Telecommunication Services

RS

CMP(₹): 13

Fair Value(₹): -

 Sector View: **Attractive**

NIFTY-50: 22,519

April 15, 2024

## FPO to improve fortune in ST; LT revival still contingent on Gol

Vi's Rs180 bn FPO is a step in the right direction (albeit much delayed) and should help: 1) bridge the network coverage gap and 2) improve competitiveness versus peers (to some extent). Further, with a sharp reduction in Vi's bank debt, we believe Vi will be able to secure further funding from banks. While the fund-raise should improve Vi's near-term fortunes, we don't expect Vi to gain any meaningful market share from peers and remain concerned about potential large equity dilution (on the conversion of Gol dues). Potentially, the Gol could own an 80%+ stake in Vi on a fully diluted basis in the worst case, which would limit any meaningful upside for Vi's minority investors.

### Fund-raise could improve Vi's near-term competitiveness versus peers on 4G

Vi has announced a Follow-on Public Offering (FPO) worth Rs180 bn at Rs10-11/share, in addition to the recent Rs20.8 bn preferential equity issuance to promoters. Further, with a sharp reduction in bank debt (~Rs45 bn at end-Feb 2024), we believe Vi will be able to secure further funding from banks. Vi plans to use ~70% of the FPO proceeds for boosting 4G coverage (26k sites), 4G capacity (40.8k sites) and 5G rollout (22k sites). We believe that increased 4G coverage will help arrest market share losses on 4G in the near term.

### Vi gaining back market share from larger peers would still remain a tall ask

Vi lost ~19% market share since the merger due to its inadequate network spends. While we expect Vi to bridge the network coverage gap on 4G and arrest some of the market share losses. However, the gap in 5G coverage (versus larger peers) would still remain significant. Further, Vi's peers should benefit more from any potential tariff hike and can outspend Vi on customer acquisition, which would prevent any meaningful market share gains from Bharti and R-Jio, in our view.

### Potential large dilution on Gol's equity conversion to limit upside for minority

Vi owes ~Rs2.1 tn (and rising!) debt to the Gol, with a large part of it under moratorium until 1HFY26. Vi would have repayments of Rs291 bn in 2HFY26 and Rs430 bn annually over FY2027-31. The fund-raise and potential tariff hike should improve Vi's financials. However, we don't see a credible case where Vi's cash EBITDA (currently Rs83 bn) would increase sufficiently to meet large annual dues to the Gol.

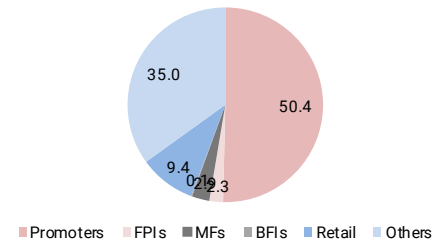
While there could be an extension of the moratorium, a partial waiver (relief on AGR dues) and further relief from the Gol, we believe writing off Gol dues in entirety for a specific company will be difficult. We expect Vi to convert a large part of the Gol dues into equity over time, which could potentially lead to large equity dilutions for Vi's non-Gol investors. In the worst case (100% of Gol's dues converted to equity at Rs10/share), **Gol could end up with ~81% stake**, with existing promoters stake diluted to ~9% (versus 49% currently and ~38% post fund-raise) and **non-promoters' stake diluted to ~9%** (from 16% currently and ~36% post fund-raise). We raise our FY2025-26E EBITDA sharply on lower subs declines post fund raise and higher ARPU. Rating remains suspended for now.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	13/-/RS
52-week range (Rs) (high-low)	18-6
Mcap (bn) (Rs/US\$)	630/7.6
ADTV-3M (mn) (Rs/US\$)	6,907/82.8

##### Shareholding pattern (%)



##### Price performance (%)

	1M	3M	12M
Absolute	(5)	(18)	109
Rel. to Nifty	(6)	(22)	82
Rel. to MSCI India	(8)	(26)	71

##### Forecasts/Valuations

	2024	2025E	2026E
EPS (Rs)	(6.6)	(4.3)	(4.0)
EPS growth (%)	(9.2)	35.1	5.6
P/E (X)	(2.0)	(3.1)	(3.2)
P/B (X)	(0.6)	(0.8)	(0.6)
EV/EBITDA (X)	18.4	16.2	15.4
RoE (%)	(35.5)	(26.5)	(21.6)
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	426	465	512
EBITDA (Rs bn)	171	194	214
Net profits (Rs bn)	(320)	(289)	(273)

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

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Aditya Bansal

Anil Sharma

**70%+ of the FPO proceeds to be used for expanding network coverage/capacity**

Exhibit 1: Indicated usage of Vi's FPO proceeds, March fiscal year-ends, (Rs bn)

(Rs bn)	FY2025	FY2026	Overall	Proportion (%)
<b>Network capex</b>	<b>66.2</b>	<b>61.3</b>	<b>127.5</b>	<b>70.8</b>
New 4G sites capex	17.4	20.3	37.7	20.9
4G capacity expansion	22.8	9.8	32.6	18.1
New 5G sites capex	26.0	31.2	57.2	31.8
<b>Deferred spectrum payments</b>	<b>21.5</b>	<b>0.3</b>	<b>21.8</b>	<b>12.1</b>
2021 auction	1.6	0.3	1.9	1.1
2022 auction	19.8	–	19.8	11.0
<b>General corporate purposes</b>			<b>30.7</b>	<b>17.1</b>
<b>Net FPO proceeds</b>			<b>180.0</b>	

Note:

(1) Net FPO proceeds would be slightly below Rs180 bn after bankers' fee etc. However, for indicative purposes we have shown usage for entire Rs180 bn FPO proceeds.

Source: Company, Kotak Institutional Equities

**Vi proposes to deploy 48,000 new sites and upgrade capacity at ~41,000 4G sites over FY2025-26**

Exhibit 2: Vi's network expansion and upgradation plan, March fiscal year-ends, (Rs bn, #)

	FY2025	FY2026	Overall	Assumed cost per site (Rs mn)
<b>New sites (#)</b>	<b>22,000</b>	<b>26,000</b>	<b>48,000</b>	
New 4G sites (#)	12,000	14,000	26,000	1.5
New 5G sites (#)	10,000	12,000	22,000	2.6
<b>Site upgradation (#)</b>	<b>28,500</b>	<b>12,250</b>	<b>40,750</b>	
4G sites upgradation (#)	28,500	12,250	40,750	0.8

Source: Company, Kotak Institutional Equities

**Vi's current promoters would hold ~38% stake with ~24% stake with Gol after the fund-raise; however, there could be significant ~76% equity dilution if Gol were to convert its entire dues to equity (worst case assumed at Rs10/share conversion price)**

Exhibit 3: Vi's shareholding pattern post fund-raise and potential shareholding after full Gol equity conversion (in the worst case)

Vi shareholding (%)	Post Vodafone and Idea merger Sep-18	Post 2019 rights issue May-19	Rs45 bn promoter infusion May-22	Post Gol's equity conversion Feb-23	Vodafone Plc.'s warrants conversion Mar-23	ATC's partial OCD conversion Feb-24	Post FPO Apr-24	Post ABG's preferential issuance May-24	Likely post ATC's residual OCD conversion Aug-24	Fully diluted ownership with full Gol conversion (in worst case) Starting Oct 2025
<b>Promoters</b>	<b>71.3</b>	<b>72.1</b>	<b>75.0</b>	<b>49.9</b>	<b>50.4</b>	<b>48.9</b>	<b>36.9</b>	<b>38.2</b>	<b>38.1</b>	<b>9.3</b>
Vodafone Plc.	45.3	44.4	47.6	31.7	32.3	31.4	23.6	23.2	23.1	5.7
Aditya Birla Group	26.1	27.7	27.4	18.2	18.1	17.5	13.2	15.0	15.0	3.7
<b>Gol</b>				<b>33.4</b>	<b>33.1</b>	<b>32.2</b>	<b>24.3</b>	<b>23.8</b>	<b>23.7</b>	<b>81.3</b>
ATC						2.9	2.2	2.1	2.3	0.6
<b>Others</b>	<b>28.7</b>	<b>28.0</b>	<b>25.0</b>	<b>16.6</b>	<b>16.5</b>	<b>16.0</b>	<b>36.7</b>	<b>35.9</b>	<b>35.9</b>	<b>8.8</b>
Share count (mn)	8,736	28,735	32,119	48,252	48,680	50,120	66,483	67,879	67,995	277,995

Source: BSE, Company, Kotak Institutional Equities estimates

**Bharti has been the biggest beneficiary of tariff hikes in the past**

Exhibit 4: Wireless ARPU trends for three private telcos since Sep 2019, March fiscal year-ends, Sep 2019 onward

Telcos	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23	Sep-23 vs Sep-19
	ARPU (Rs/month)					Change %
Bharti	128	162	153	190	203	58
R-Jio (i)	128	145	141	172	176	38
Vi (ii)	107	119	109	131	142	33

Notes:

- (1) Our estimate for Wireless revenue and ARPU post adjusting for FTTH contribution for R-Jio
- (2) Adjusted for Vi's Enterprise revenue

Source: Companies, Kotak Institutional Equities estimates

**Tariff hike benefits offset by continued subscriber base decline for Vi**

Exhibit 5: Wireless revenue trends for three private telcos since Sep 2019, March fiscal year-ends, Sep 2019 onward

Telcos	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23	Sep-23 vs Sep-19
	Wireless revenue (Rs bn)					Change %
Bharti	110	138	152	189	210	91
R-Jio (i)	131	175	182	215	234	78
Vi (ii)	101	98	83	93	94	(7)

Notes:

- (1) Our estimate for Wireless revenue and ARPU post adjusting for FTTH contribution for R-Jio
- (2) Adjusted for Vi's Enterprise revenue

Source: Companies, Kotak Institutional Equities estimates

**R-Jio and Bharti to benefit a lot more from industry tariff hikes**

Exhibit 6: Impact of tariff hike on the three private telcos' wireless revenue and EBITDA

	R-Jio	Bharti	Vi
Current wireless ARPU (Rs)	175	208	145
Paying subs base (mn)	460	346	215
3QFY24 annualized revenue	954	857	378
3QFY24 annualized EBITDA	531	477	174
<b>Rs10 higher ARPU impact</b>			
- on revenue (Rs bn)	55	41	26
% increase	6	5	7
- on EBITDA (Rs bn)	41	31	19
% increase	8	7	11

Note:

- (1) Our estimate for Wireless revenue and ARPU post adjusting for FTTH contribution

Source: Company, Kotak Institutional Equities estimates

**Vi's net debt was ~Rs2.15 tn including accrued interest**

Exhibit 7: Vodafone Idea debt build-up, as of 3QFY2024 (Rs bn)

Vi debt build-up (Rs bn)	
External debt (a)	60
OCD issuance to ATC (b)	17
Government debt (c)	2,073
Deferred spectrum liabilities	1,382
AGR dues	690
<b>Gross debt (a) + (b) + (c)</b>	<b>2,150</b>
Cash and equivalents (d)	3.2
<b>Net debt (a) + (b) + (c) - (d)</b>	<b>2,146</b>

Source: Company, Kotak Institutional Equities estimates

**Vi has large Gol dues starting 2HFY26 (post moratorium)**

Exhibit 8: Vi debt repayment schedule, March fiscal year-ends

	4QFY24	2025E	2026E	2027E	2028E	2029E
<b>Vi debt repayments (Rs bn)</b>						
External loans	20	17	19	5	0	0
NCDs / OCDs	0	0	0	0	0	0
Government dues	2	19	308	442	442	442
<b>Total debt repayment</b>	<b>22</b>	<b>35</b>	<b>327</b>	<b>447</b>	<b>442</b>	<b>442</b>

Notes:

- (1) Assuming equity conversion of ATC's OCD (Rs 16 bn)

Source: Company, Kotak Institutional Equities estimates

**With the fund-raise, Vi would be able to service dues until FY2026; survival beyond FY2027 remains contingent on waiver/conversion of Gol dues**

Exhibit 9: Vi's likely cash inflows, outflows and cash shortfall, March fiscal year-ends, (Rs bn)

	FY2023	9MFY24	4QFY24E	FY2024E	FY2025E	FY2026E	FY2025-26E	FY2027-31E
<b>Cash inflows</b>	<b>83</b>	<b>73</b>	<b>21</b>	<b>95</b>	<b>557</b>	<b>191</b>	<b>747</b>	<b>766</b>
Cash EBITDA	83	62	21	83	107	127	233	766
Other non-operational cashflows	–	11		11		64	64	
Equity fund raise					200		200	
Likely debt fund raise					250		250	
<b>Cash outflows</b>	<b>117</b>	<b>91</b>	<b>25</b>	<b>116</b>	<b>133</b>	<b>417</b>	<b>550</b>	<b>2,752</b>
External dues repayments	67	54	16	70	17	17	34	257
Gol debt repayments	17	18	2	19	19	308	327	2,211
Vendor dues repayments	(20)	(2)		(2)			–	
Capex	34	13	5	18	77	64	141	216
Likely interest on external dues	20	9	2	11	21	28	48	69
<b>Net cash shortfall</b>	<b>(34)</b>	<b>(18)</b>	<b>(3)</b>	<b>(21)</b>	<b>424</b>	<b>(227)</b>	<b>198</b>	<b>(1,986)</b>
Change in cash and equivalents	(12)	0.9		0.9				
<b>Gross cash shortfall</b>	<b>(47)</b>	<b>(17)</b>	<b>(3)</b>	<b>(20)</b>	<b>424</b>	<b>(227)</b>	<b>198</b>	<b>(1,986)</b>

Source: Company, Kotak Institutional Equities estimates

**Vi would require 134% ARPU uptick (or ARPU of ~Rs340) to be able to service Gol dues post moratorium and likely higher if subscriber churn were to continue and EBITDA boost post upcoming fund-raise is lower**

Exhibit 10: ARPU requirement for Vi to meet its Gol debt repayments post moratorium

	Post moratorium
<b>Vi incremental revenue ask-rate (Rs bn)</b>	
Debt repayments	447
Interest payments on external loans	28
Capex	56
<b>Cash requirements</b>	<b>530</b>
Likely Ind-AS EBITDA	153
<b>Cash shortfall</b>	<b>377</b>
Incremental revenue requirement	503
3QFY24 annualized revenue	427
<b>Revenue uptick required (%)</b>	<b>118</b>
3QFY24 subscriber base (mn)	215
<b>Incremental ARPU requirement (Rs /month)</b>	<b>195</b>
3QFY24 ARPU (Rs /month)	145
Required ARPU (Rs /month)	340
<b>ARPU uptick required (%)</b>	<b>134</b>

Notes:

(1) Assumed 75% incremental EBITDA margin

Source: Company, Kotak Institutional Equities estimates

**Vi's consistent subscriber losses have offset the benefits of tariff hikes and subscriber mix upgradation**

**Exhibit 11: Key performance indicators, March fiscal year-ends, 1QFY22 onward**

Key performance indicators	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	2QFY23	3QFY23	4QFY23	1QFY24	2QFY24	3QFY24
Paying subscriber base (EoP) (mn)	255.4	253.0	247.2	243.8	240.4	234.4	228.6	225.9	221.4	219.8	215.2
Paying net adds (mn)	(12.4)	(2.4)	(5.8)	(3.4)	(3.4)	(6.0)	(5.8)	(2.7)	(4.5)	(1.6)	(4.6)
VLR subscribers (EoP) (mn)	241.7	235.7	229.5	226.1	218.7	212.2	209.6	207.9	202.7	199.8	196.7
Net VLR subscriber addition (mn)	(14.0)	(6.0)	(6.2)	(3.4)	(7.4)	(6.5)	(2.6)	(1.7)	(5.1)	(3.0)	(3.1)
Pre-paid subscribers (% of EoP subscribers)	92.1	92.1	92.0	91.8	91.6	91.1	90.4	90.1	89.7	89.5	89.0
Total data subscribers (2G+3G+4G) (mn)	136.1	136.7	135.8	135.7	135.7	135.2	135.3	136.2	135.9	137.2	137.4
4G subscribers (mn)	112.9	116.2	117.0	118.1	119.0	120.6	121.6	122.6	122.9	124.7	125.6
Blended monthly churn rate (%)	3.5	2.9	3.4	3.4	3.5	4.3	4.4	3.8	3.9	4.1	4.3
Blended ARPU (Rs/month)	104	109	115	124	128	131	135	135	139	142	145
Total data volume (2G+3G+4G) (bn MB)	5,497	5,517	5,242	5,237	5,425	5,718	5,762	5,802	6,002	6,119	6,004
Data usage by data subscribers (2G+3G+4G) (MB/month)	13,278	13,482	12,824	12,859	13,326	14,072	14,201	14,247	14,705	14,937	14,576
Voice traffic (bn min)	504	480	465	452	450	428	424	425	420	406	401
Average MoU (min/subscriber/month)	641	630	620	614	620	601	611	623	626	613	615
Total unique towers (EoP)	180,674	183,886	184,579	184,794	184,607	184,756	184,403	184,382	183,638	183,565	183,358
Total unique broadband towers (EoP)	166,241	167,548	168,238	169,016	169,153	169,771	169,805	170,359	170,411	170,423	170,351
Total broadband sites (3G+4G)	447,114	450,481	450,330	455,264	454,727	444,228	443,450	443,537	442,062	440,467	438,901

Source: Company, Kotak Institutional Equities estimates

**Vi's external/banking debt declined further to modest ~Rs45 bn; bulk of Vi's Rs2.1 tn+ debt is Gol debt for spectrum and AGR**

**Exhibit 12: Vi gross debt, cash, net debt and capex trends (Rs bn), March fiscal year-ends, Sep-2019 onward**

Debt and capex trends	Sep-19	Mar-20	Sep-20	Mar-21	Sep-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Sep-23	Dec-23	Feb-24
<b>Gross debt</b>	<b>1,173</b>	<b>1,150</b>	<b>1,159</b>	<b>1,803</b>	<b>1,948</b>	<b>1,979</b>	<b>1,991</b>	<b>2,203</b>	<b>2,229</b>	<b>2,093</b>	<b>2,128</b>	<b>2,150</b>	<b>2,078</b>
External debt	281	273	236	231	228	181	152	151	132	114	79	60	44
OCD issuance to ATC										16	16	17	16
<b>Gol debt</b>	<b>892</b>	<b>876</b>	<b>923</b>	<b>1,572</b>	<b>1,720</b>	<b>1,798</b>	<b>1,839</b>	<b>2,052</b>	<b>2,097</b>	<b>1,963</b>	<b>2,033</b>	<b>2,073</b>	<b>2,018</b>
Deferred spectrum liabilities	892	876	923	963	1,086	1,139	1,166	1,367	1,398	1,307	1,351	1,382	1,307
AGR dues	—	—	—	610	634	660	673	686	699	656	682	690	651
Cash and equivalents	153.9	24.8	14.3	3.5	2.5	14.6	8.6	1.9	1.6	2.3	1.2	3.2	
<b>Net debt</b>	<b>1,019</b>	<b>1,125</b>	<b>1,145</b>	<b>1,800</b>	<b>1,945</b>	<b>1,964</b>	<b>1,982</b>	<b>2,201</b>	<b>2,227</b>	<b>2,090</b>	<b>2,127</b>	<b>2,146</b>	
Net debt (ex-leases) to annualized Ind-AS adjusted EBITDA	24	16	18	26	34	25	23	26	28	25	26	25	
<b>Capex</b>	<b>21.4</b>	<b>18.2</b>	<b>10.4</b>	<b>15.4</b>	<b>13.0</b>	<b>12.1</b>	<b>8.4</b>	<b>12.1</b>	<b>7.5</b>	<b>5.6</b>	<b>5.2</b>	<b>3.3</b>	
as % of revenue	19.7	15.5	9.6	16.1	13.8	11.8	8.1	11.4	7.1	5.3	4.9	3.1	

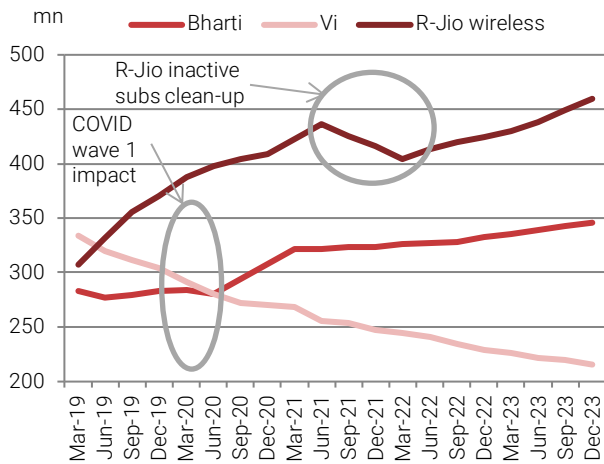
Note:

- (1) ATC has opted for equity conversion of Rs14.4 bn worth OCDs in Mar 2024
- (2) The Gol debt likely doesn't include the interest accrued but not due for the period ending Feb 2024

Source: Company, Kotak Institutional Equities estimates

**Vi's subscriber losses inched up on lower network investments**

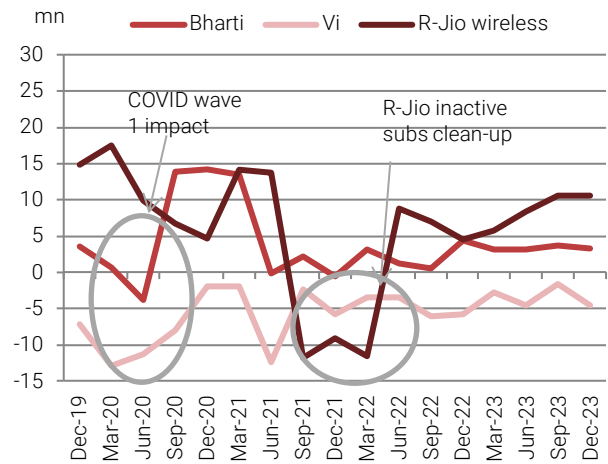
**Exhibit 13: Wireless subs trends across three private telcos**



Source: Companies, Kotak Institutional Equities estimates

**Vi's quarterly net paying subs on consistently declining trends**

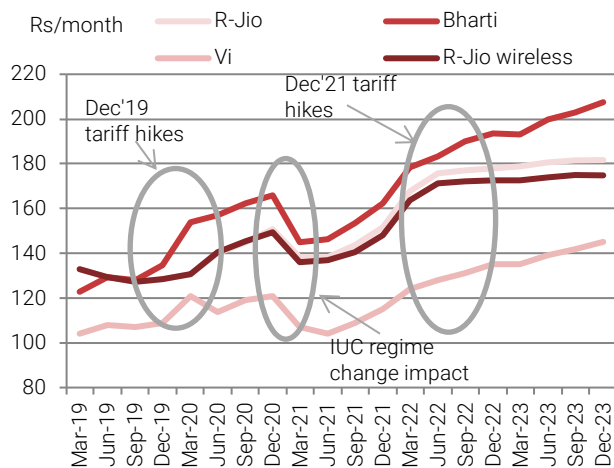
**Exhibit 14: Wireless net adds trends across three private telcos**



Source: Companies, Kotak Institutional Equities estimates

**Vi's ARPU continue to rise on flow through of minimum recharge hikes and subscriber mix improvements**

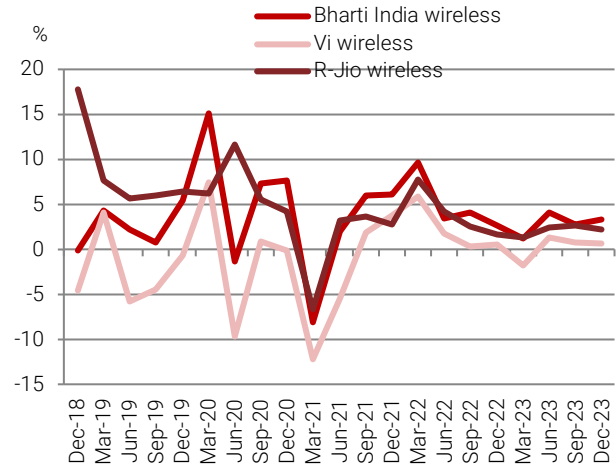
**Exhibit 15: Wireless ARPU trends across three private telcos**



Source: Companies, Kotak Institutional Equities estimates

**Vi continues to trail peers on qoq revenue growth as higher ARPU is offset by subscriber base declines**

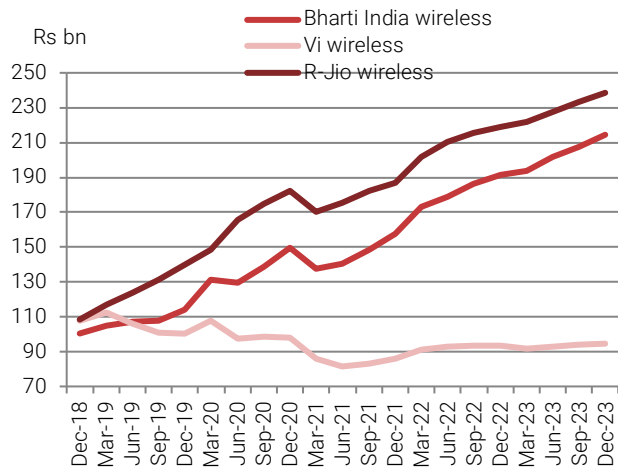
**Exhibit 16: Wireless revenue qoq change for three telcos**



Source: Companies, Kotak Institutional Equities estimates

**Despite sharp tariff hikes, Vi's wireless revenue remains below pre-tariff hike (Sep-2019) levels**

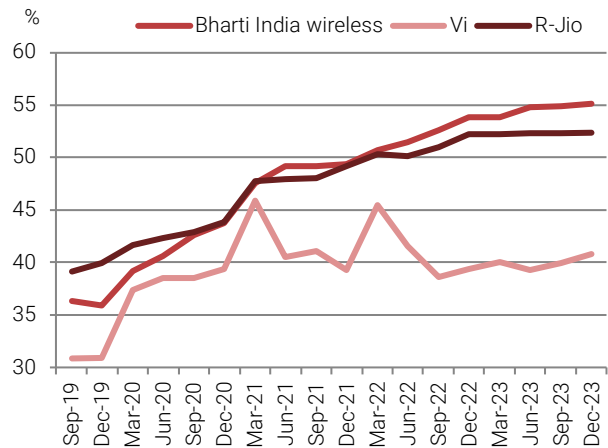
Exhibit 17: Wireless revenue trend across three private telcos



Source: Companies, Kotak Institutional Equities estimates

**Vi's margins remain significantly below Bharti and R-Jio**

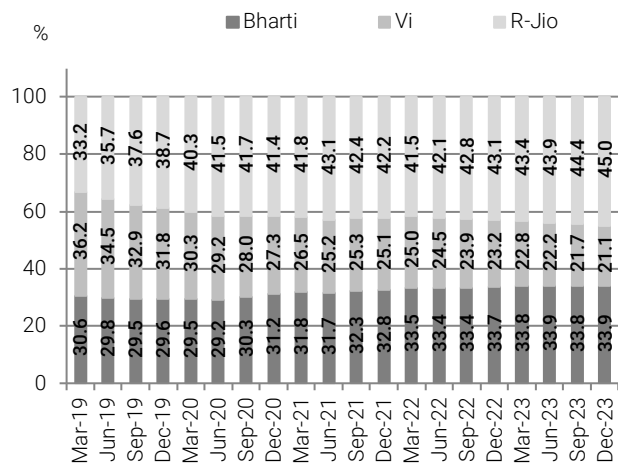
Exhibit 18: EBITDA margin trend across three private telcos



Source: Companies, Kotak Institutional Equities estimates

**Vi has been consistently losing subscriber market share to larger peers**

Exhibit 19: Private telcos paying subs market share, March fiscal year-ends, March-2019 onward



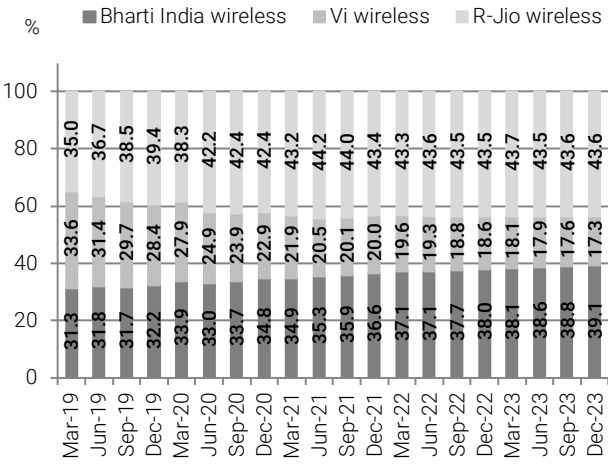
Note:

(1) Market share among three private telcos based on our estimate for R-Jio's wireless subs.

Source: Companies, Kotak Institutional Equities estimates

**Vi has also consistently lost revenue market share to larger peers**

Exhibit 20: Private telcos wireless revenue market share, March fiscal year-ends, March-2019 onward



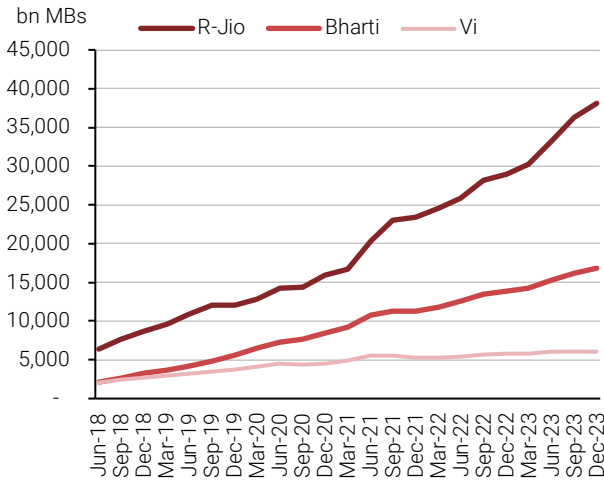
Note:

(1) Market share among three private telcos based on our estimate for R-Jio's wireless revenue.

Source: Companies, Kotak Institutional Equities estimates

**Vi significantly trails peers on data consumption on its network**

**Exhibit 21: Data consumption across three private telcos**



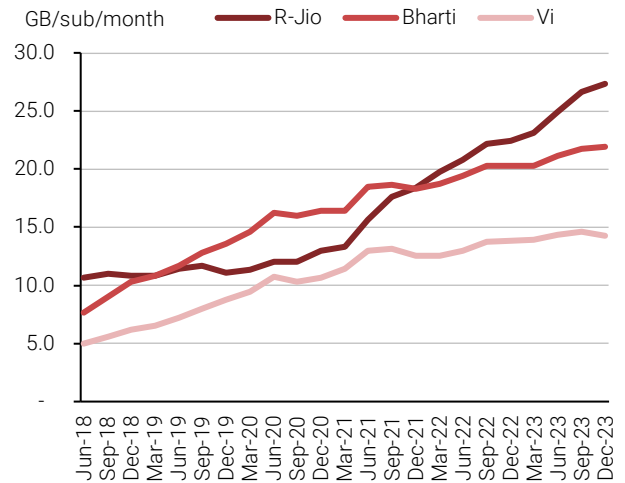
Note:

(1) R-Jio's reported data consumption also includes contribution from FTTH

Source: Companies, Kotak Institutional Equities estimates

**Vi's data usage per sub stood at 14.2GB/month, significantly below Bharti and R-Jio**

**Exhibit 22: Data usage per subs across three telcos**



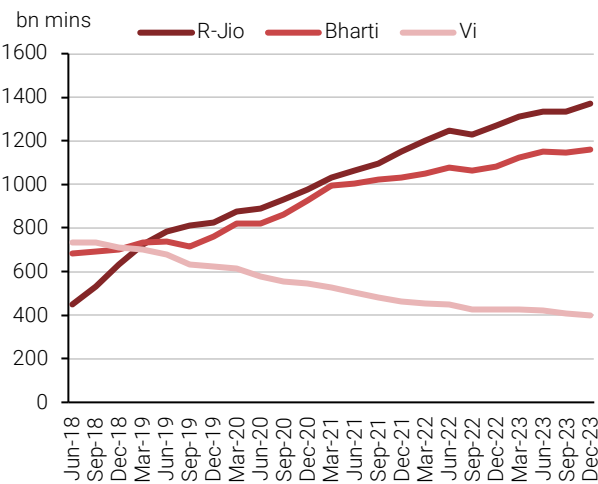
Note:

(1) R-Jio's reported data usage per sub includes contribution from FTTH subs

Source: Companies, Kotak Institutional Equities estimates

**From a lead post-merger, Voice usage on Vi's network now significantly below peers**

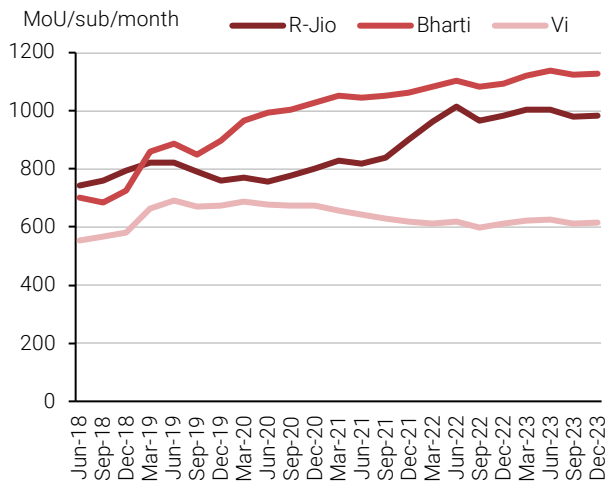
**Exhibit 23: Voice usage on network trends across Indian telcos**



Source: Companies, Kotak Institutional Equities estimates

**Vi lags peers in MoU per sub with 614 min/month as of 3QFY24**

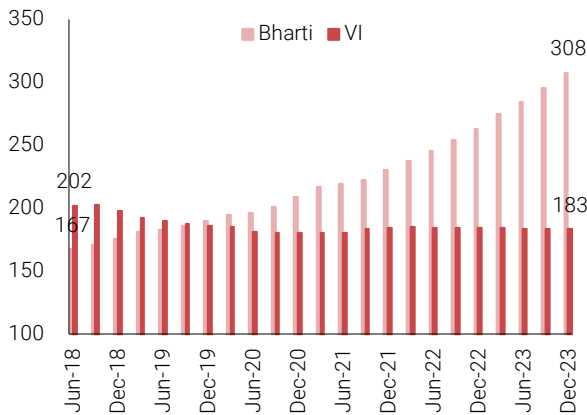
**Exhibit 24: Minutes of Use (MoU) trends across Indian telcos**



Source: Companies, Kotak Institutional Equities estimates

**From a lead post-merger, Vi's overall tower count now significantly below Bharti's**

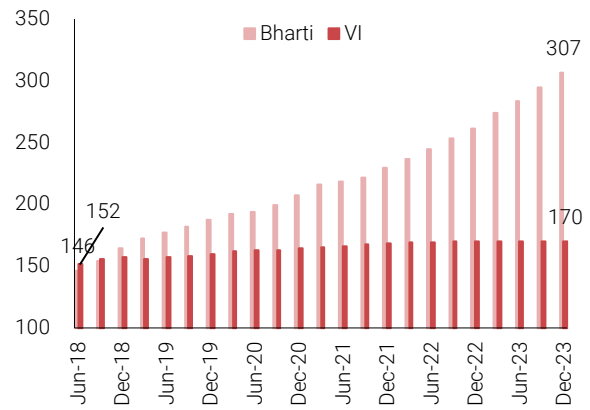
Exhibit 25: Overall tower count comparison for Bharti and Vi



Source: Companies, Kotak Institutional Equities estimates

**Similarly on MBB towers, compared to a lead post-merger, Vi now significantly trails Bharti**

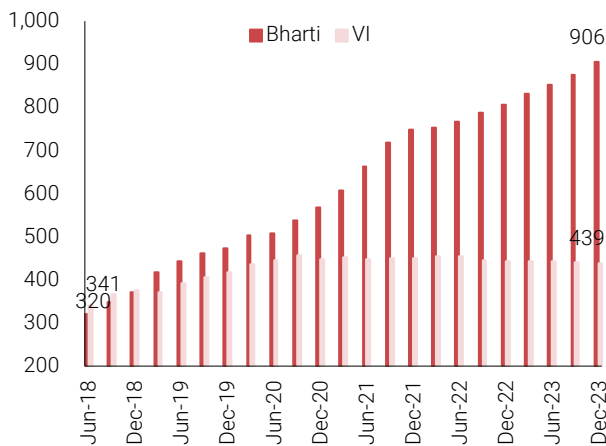
Exhibit 26: MBB tower count comparison for Bharti and Vi



Source: Companies, Kotak Institutional Equities estimates

**From a lead post-merger, Vi now almost half on Bharti in MBB sites count**

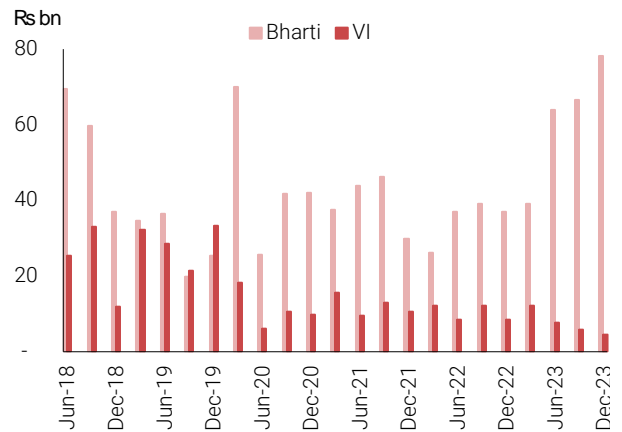
Exhibit 27: MBB sites count comparison for Bharti and Vi



Source: Companies, Kotak Institutional Equities estimates

**Vi's capex has been a small fraction of Bharti's India wireless capex for past several years**

Exhibit 28: Capex comparison for Vi and Bharti's India wireless segment



Source: Companies, Kotak Institutional Equities estimates

Exhibit 29: Key changes in Vi model, March fiscal year-ends, 2024-27E (Rs bn)

	Revised estimates				Old estimates			Change (%)		
	FY2024E	FY2025E	FY2026E	FY2027E	FY2024E	FY2025E	FY2026E	FY2024E	FY2025E	FY2026E
Revenues	426	465	512	559	426	452	432	(0)	3	19
<b>EBITDA</b>	<b>171</b>	<b>194</b>	<b>214</b>	<b>241</b>	<b>171</b>	<b>188</b>	<b>176</b>	<b>0</b>	<b>3</b>	<b>22</b>
<b>Ind-AS adjusted EBITDA</b>	<b>83</b>	<b>107</b>	<b>127</b>	<b>153</b>	<b>83</b>	<b>100</b>	<b>88</b>	<b>0</b>	<b>6</b>	<b>44</b>
EBIT	(53)	(28)	(6)	22	(53)	(35)	(30)	0	18	78
PAT	(320)	(289)	(273)	(250)	(319)	(293)	(306)	(0)	1	11
Recurring EPS (Rs/share)	(6.6)	(4.3)	(4.0)	(3.7)	(6.6)	(6.0)	(6.3)	(0)	29	36
<b>EoP subscribers (mn)</b>	<b>211</b>	<b>205</b>	<b>200</b>	<b>192</b>	<b>211</b>	<b>190</b>	<b>170</b>	<b>-</b>	<b>8</b>	<b>17</b>
<b>ARPU (Rs/sub/month)</b>	<b>143</b>	<b>165</b>	<b>188</b>	<b>213</b>	<b>143</b>	<b>166</b>	<b>175</b>	<b>(0)</b>	<b>(0)</b>	<b>7</b>
EBITDA margins (%)	40.2	41.9	41.8	43.1	40.1	41.6	40.7	4 bps	25 bps	109 bps

Source: Kotak Institutional Equities estimates

Exhibit 30: Key assumptions for Vi's wireless business, March fiscal year-ends, 2020-27E

	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Key assumptions</b>								
<b>Paying subscriber base (EoP) (mn)</b>	<b>291</b>	<b>268</b>	<b>244</b>	<b>226</b>	<b>211</b>	<b>205</b>	<b>200</b>	<b>192</b>
Paying net adds (mn)	(43.0)	(23.3)	(24.0)	(17.9)	(14.7)	(6.5)	(5.0)	(8.0)
VLR subscribers (EoP) (mn)	293.7	255.7	226.1	207.9	193.1	187.7	182.4	173.4
Net VLR subscriber addition (mn)	(74.6)	(38.0)	(29.6)	(18.2)	(14.8)	(5.4)	(5.3)	(9.0)
Pre-paid subscribers (% of EoP subscribers)	92.1	92.2	91.8	90.1	88.7	87.8	87.0	86.0
<b>Total data subscribers (2G+3G+4G) (mn)</b>	<b>140</b>	<b>140</b>	<b>136</b>	<b>136</b>	<b>138</b>	<b>141</b>	<b>144</b>	<b>146</b>
4G subscribers (mn)	105.6	113.9	118.1	122.6	126.4	131.7	136.3	138.9
<b>Blended ARPU (Rs/month)</b>	<b>111</b>	<b>114</b>	<b>112</b>	<b>132</b>	<b>143</b>	<b>165</b>	<b>188</b>	<b>213</b>
Total data volume (2G+3G+4G) (bn MB)	14,594	18,208	21,493	22,707	24,159	25,362	27,181	29,167
Data usage by data subscribers (2G+3G+4G) (MB/month)	8,511	10,861	12,998	13,919	14,703	15,159	15,884	16,762
Voice traffic (bn min)	2,547	2,210	1,901	1,727	1,622	1,593	1,657	1,608
Average MoU (min/subscriber/month)	679	659	619	613	618	638	683	685
Total unique towers (EoP)	185,544	180,484	184,794	184,382				
Total unique broadband towers (EoP)	162,380	165,409	169,016	170,359				
Total broadband sites (3G+4G)	436,006	452,650	455,264	443,537				

Source: Company, Kotak Institutional Equities estimates

**For every Rs10 change in ARPU, reported EBITDA changes by ~Rs16 bn (~8%) and for every 10 mn change in subs base, reported EBITDA changes by ~Rs6.5 bn (~3.3%)**

Exhibit 31: Sensitivity of Vi's reported EBITDA to ARPU and subscriber base

		FY2025E Wireless ARPU (Rs)				
		145	155	165	175	185
FY2025E Wireless subs (mn)	185	151	166	182	197	212
	195	156	172	188	204	220
	205	162	178	<b>194</b>	211	227
	215	168	184	201	217	234
	225	173	190	207	224	241

Source: Kotak Institutional Equities estimates

**For every Rs10 change in ARPU, reported EBITDA changes by ~Rs15-16 bn (~15%) and for every 10 mn change in subs base, reported EBITDA changes by ~Rs6.5 bn (~6%)**

**Exhibit 32: Sensitivity of Vi's Ind-AS 116 adjusted EBITDA to ARPU and subscriber base**

		FY2025E Wireless ARPU (Rs)				
		145	155	165	175	185
FY2025E Wireless subs (mn)	185	63	78	94	109	125
	195	69	85	100	116	132
	205	74	91	107	123	139
	215	80	97	113	130	146
	225	86	103	120	137	154

Source: Kotak Institutional Equities estimates

**Exhibit 33: Summary financials for Vi, March fiscal year-ends, 2019-27E (Rs mn)**

	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
<b>Profit and loss statement</b>									
<b>Revenues</b>	<b>370,925</b>	<b>449,575</b>	<b>419,522</b>	<b>385,155</b>	<b>421,772</b>	<b>426,189</b>	<b>464,509</b>	<b>512,116</b>	<b>559,410</b>
Total costs	(332,495)	(301,598)	(250,065)	(224,794)	(253,602)	(254,941)	(270,090)	(297,952)	(318,578)
Total costs ex-IC, ex-LF/SUC	(251,474)	(193,140)	(155,864)	(153,651)	(174,590)	(177,787)	(189,918)	(212,218)	(227,736)
<b>EBITDA</b>	<b>38,430</b>	<b>147,977</b>	<b>169,457</b>	<b>160,361</b>	<b>168,170</b>	<b>171,248</b>	<b>194,419</b>	<b>214,165</b>	<b>240,831</b>
EBITDA margin (%)	10.4	32.9	40.4	41.6	39.9	40.2	41.9	41.8	43.1
<b>Ind-AS 116 adjusted EBITDA (ex one-offs)</b>	<b>36,430</b>	<b>52,975</b>	<b>66,457</b>	<b>62,761</b>	<b>82,970</b>	<b>83,444</b>	<b>106,819</b>	<b>126,565</b>	<b>153,231</b>
Ind-AS 116 adjusted EBITDA margin (%)	9.8	11.8	15.8	16.3	19.7	19.6	23.0	24.7	27.4
D&A	(145,356)	(243,564)	(236,385)	(235,843)	(230,497)	(224,360)	(222,687)	(220,637)	(218,587)
<b>EBIT</b>	<b>(106,926)</b>	<b>(95,587)</b>	<b>(66,928)</b>	<b>(75,482)</b>	<b>(62,327)</b>	<b>(53,112)</b>	<b>(28,268)</b>	<b>(6,473)</b>	<b>22,244</b>
Net finance costs	(87,317)	(142,379)	(178,239)	(208,514)	(230,430)	(258,274)	(260,947)	(266,430)	(272,047)
PBT	(194,243)	(237,966)	(245,167)	(283,996)	(292,757)	(311,386)	(289,216)	(272,903)	(249,803)
Provision for taxes	48,950	(120,811)	203	(113)	(35)	(8,199)	0	0	0
<b>PAT before MI/associates</b>	<b>(145,293)</b>	<b>(358,777)</b>	<b>(244,964)</b>	<b>(284,109)</b>	<b>(292,792)</b>	<b>(319,585)</b>	<b>(289,216)</b>	<b>(272,903)</b>	<b>(249,803)</b>
MI + Associates	1,969	3,553	2,314	12	5	(29)	0	0	0
<b>Recurring PAT</b>	<b>(143,324)</b>	<b>(355,224)</b>	<b>(242,650)</b>	<b>(284,097)</b>	<b>(292,787)</b>	<b>(319,614)</b>	<b>(289,216)</b>	<b>(272,903)</b>	<b>(249,803)</b>
EO items	(23,124)	(383,557)	(199,681)	1,643	(224)	7,555	-	-	-
<b>Reported PAT</b>	<b>(166,448)</b>	<b>(738,781)</b>	<b>(442,331)</b>	<b>(282,454)</b>	<b>(293,011)</b>	<b>(312,059)</b>	<b>(289,216)</b>	<b>(272,903)</b>	<b>(249,803)</b>
# of shares (mn)	8,736	28,735	28,735	32,119	48,680	48,680	67,879	67,879	67,879
<b>EPS (Rs/share)</b>	<b>(16.4)</b>	<b>(12.4)</b>	<b>(8.4)</b>	<b>(8.8)</b>	<b>(6.0)</b>	<b>(6.6)</b>	<b>(4.3)</b>	<b>(4.0)</b>	<b>(3.7)</b>
<b>Condensed balance sheet</b>									
Net fixed assets	1,801,588	1,868,780	1,680,900	1,571,425	1,565,555	1,432,308	1,335,494	1,206,753	1,043,886
Other LT assets	311,595	233,555	212,911	200,511	367,843	372,971	386,608	404,714	423,420
Current assets ex-cash	183,812	166,861	140,995	168,355	139,029	168,122	401,439	224,102	188,787
<b>Total assets</b>	<b>2,296,995</b>	<b>2,269,196</b>	<b>2,034,806</b>	<b>1,940,291</b>	<b>2,072,427</b>	<b>1,973,400</b>	<b>2,123,541</b>	<b>1,835,569</b>	<b>1,656,092</b>
Shareholders' equity	596,348	59,799	(382,280)	(619,648)	(743,591)	(1,055,650)	(1,129,716)	(1,402,619)	(1,652,422)
Net debt	1,183,883	1,125,200	1,780,897	2,001,016	2,271,993	2,453,993	2,443,420	2,605,357	2,715,775
Other LT liabilities	(25,620)	126,407	(27,836)	(52,416)	(56,202)	17,798	279,371	118,434	69,016
Current liabilities	542,384	957,790	664,025	611,339	600,227	557,259	530,466	514,396	523,723
<b>Total equity and liabilities</b>	<b>2,296,995</b>	<b>2,269,196</b>	<b>2,034,806</b>	<b>1,940,291</b>	<b>2,072,427</b>	<b>1,973,400</b>	<b>2,123,541</b>	<b>1,835,569</b>	<b>1,656,092</b>
<b>Condensed CF statement</b>									
Operating cash flow before working capital changes	45,398	165,730	170,842	177,277	182,412	210,066	202,641	251,698	275,853
Working capital changes	50,179	(92,455)	(14,445)	(3,407)	6,275	(3,630)	(12,654)	(17,238)	(20,128)
Net finance costs	(53,962)	(152,585)	(28,256)	(150,535)	(151,115)	(258,274)	(260,947)	(266,430)	(272,047)
Cash flow from operations	41,615	(79,310)	128,141	23,335	37,572	(51,838)	(70,960)	(31,970)	(16,321)
Capex	(44,000)	(83,640)	(52,844)	(61,124)	(56,222)	(17,505)	(76,812)	(64,015)	(55,941)
<b>Free cash flow</b>	<b>(2,385)</b>	<b>(162,950)</b>	<b>75,297</b>	<b>(37,789)</b>	<b>(18,650)</b>	<b>(69,342)</b>	<b>(147,772)</b>	<b>(95,985)</b>	<b>(72,262)</b>

Source: Company, Kotak Institutional Equities estimates

# Vedant Fashions (MANYAVAR)

Consumer Durables & Apparel

**REDUCE**

CMP(₹): 914

Fair Value(₹): 950

Sector View: **Cautious**

NIFTY-50: 22,519

April 12, 2024

## Expect few more quarters of sluggish revenue performance

We expect Vedant Fashions to report sluggish revenue growth over the next two quarters, at least on weak discretionary consumption, particularly in Tier II/III cities. We believe the company is trying to cope with this with increased store addition in Tier I cities, though this may take time to bear fruit. We model a 16% store area addition CAGR over FY2024-26, with SSSG of 5.5% in FY2025 and 6.5% in FY2026. We trim FY2024-26 EPS estimates by 2-10% and cut the Fair Value to Rs950 from Rs1,150. Stock may remain sideways until there is visibility on revenue recovery.

### Revenue growth headwinds continue

Our recent channel checks suggest that discretionary demand for apparel remains weak, with a recovery now expected only in 2HFY25. Manyavar, which has posted fairly weak SSSG prints for the past three quarters, may not witness a respite in the next couple of quarters as well. FY2023, in some sense, was a year of high revenues due to the large number of weddings in that year; FY2024 represents a more normalized base.

### Re-focusing on addition of larger-sized stores in bigger cities

Despite sluggish demand trends, Manyavar added 24 stores and increased retail area to 1.64 mn sq. ft in 9MFY24, implying an 18% yoy area growth. The company, for the future, has also indicated 15% store area addition CAGR and has not revised down the pace of store addition, despite weak sales. We believe bulk of the store addition here will be just for the Manyavar/Manyavar-Mohey format, with calibrated addition of Twamev stores (four stores currently) and standalone Mohey stores (3 stores in the pilot phase currently). Mumbai-MMR, for instance, has three Manyavar-Mohey stores and 17 Manyavar stores.

### Competition more than before, but overall demand slowdown is a bigger factor

ABFRL's Tasva had 67 stores and Raymond's Ethnix had 105 stores compared with Manyavar's 673 stores, as of December 2023. For now, our channel checks indicate that Manyavar is not facing any material market share loss and demand seems to be weak industry-wide. Players in the organized and unorganized ethnic wear industries are witnessing reduced demand.

### Revise down FY2025-26 EPS by 9-10%; retain REDUCE

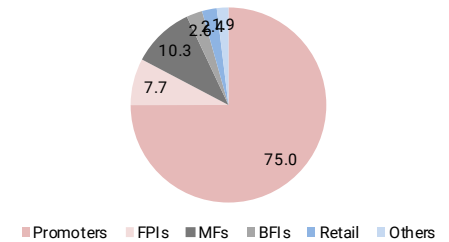
We revise down our FY2024-26 revenue estimates by 2-11% and EPS estimates by 2-10%. We model a 14% revenue CAGR over FY2024-26, driven by 6-7% SSSG and store area addition CAGR of 16%. After the revenue growth of 2% yoy in FY2024, we assume more normalized revenue growth trajectory in FY2025 (skewed toward 2HFY25) and FY2026, driven by growth in wedding count and consumer spends. We retain REDUCE with a DCF-based FV of Rs950; our DCF assumes a reasonable 15% revenue and 16% EBIT CAGR over FY2024-30.

#### Company data and valuation summary

##### Stock data

CMP(Rs)/FV(Rs)/Rating	914/950/REDUCE
52-week range (Rs) (high-low)	1,488-886
Mcap (bn) (Rs/US\$)	222/2.7
ADTV-3M (mn) (Rs/US\$)	383/4.6

##### Shareholding pattern (%)



Price performance (%)	1M	3M	12M
Absolute	(4)	(24)	(25)
Rel. to Nifty	(5)	(28)	(52)
Rel. to MSCI India	(6)	(32)	(63)

Forecasts/Valuations	2024	2025E	2026E
EPS (Rs)	16.7	19.1	22.3
EPS growth (%)	(3.2)	13.9	17.1
P/E (X)	54.6	47.9	40.9
P/B (X)	13.8	11.7	9.8
EV/EBITDA (X)	32.9	28.3	24.0
RoE (%)	27.3	26.4	26.0
Div. yield (%)	0.0	0.0	0.0
Sales (Rs bn)	14	16	18
EBITDA (Rs bn)	7	8	9
Net profits (Rs bn)	4	5	6

Source: Bloomberg, Company data, Kotak Institutional Equities estimates

Prices in this report are based on the market close of April 12, 2024

#### Related Research

→ [Vedant Fashions: SSSG in negative territory](#)

→ [Vedant Fashions: High hopes pinned on](#)

[Full sector coverage on KINSITE](#)

Garima Mishra

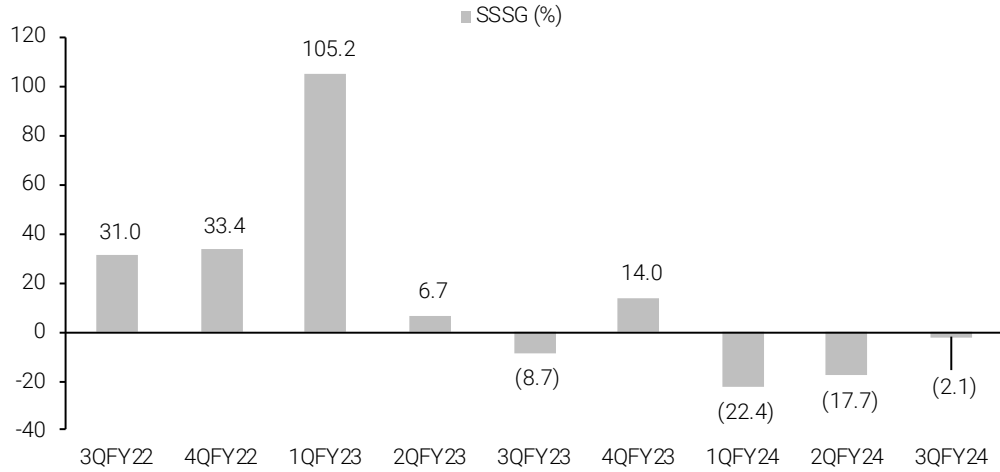
Shubhangi Nigam

**Revenue growth may remain subdued for some more time**

Vedant Fashions posted 9MFY24 SSSG of (-)12.7%, after posting SSSG of 18.1% in FY2023. While the base is getting easy, we believe it may see a couple of quarters of sluggish SSSG prints before posting decent revenue recovery.

**SSSG has remained weak owing to muted wedding dates and off a high base**

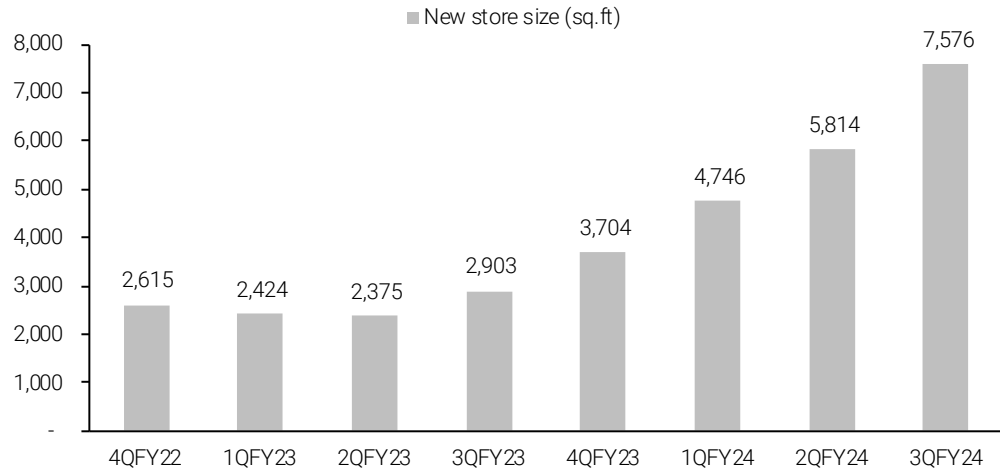
**Exhibit 1: Quarterly SSSG of Vedant Fashions, March fiscal year-ends, (%)**



Source: Company, Kotak Institutional Equities

**VFL is adding larger-sized stores**

**Exhibit 2: New store size of Vedant Fashions, March fiscal year-ends, (sq. ft)**



Notes:

(a) The above calculation is based on net store addition figures. For instance, 3QFY24 new store size is calculated based on TTM net retail area addition, divided by TTM net store addition.

Source: Company, Kotak Institutional Equities estimates

**Competition from other players has increased, though overall demand weakness is a bigger factor**

**Exhibit 3: Annual store addition of ethnic wear players (#)**

	Dec-22	Dec-23	Net adds
Manyavar	649	673	24
Tasva by ABFRL	32	67	35
Ethnix by Raymond	46	105	59

Source: Company, Kotak Institutional Equities

**Key changes in estimates**

Hopes of a full-fledged recovery in FY2025 are a little muted, given weak end-user demand. Thus, we revise down our FY2025-26 revenue forecasts, resulting in a 9-10% EPS cut. We cut our FY2024-26 revenue estimates by 2-11%. We broadly maintain margins, resulting in a 2-10% EPS cut over FY2024-26E.

**We trim FY2024-26 EPS estimates by ~2-10%, as we bake in lower revenues**

**Exhibit 4: Key changes in estimates for Vedant Fashions, March fiscal year-ends, 2024-26E (Rs mn)**

	New estimates			Old estimates			% revision		
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Total</b>									
<b>Revenue (Rs mn)</b>	<b>13,779</b>	<b>15,571</b>	<b>17,859</b>	<b>14,123</b>	<b>17,004</b>	<b>19,943</b>	<b>(2.4)</b>	<b>(8.4)</b>	<b>(10.5)</b>
Revenue growth (%)	2	13	15	4	20	17			
Gross profit (Rs mn)	9,232	10,479	12,073	9,669	11,641	13,654	(4.5)	(10.0)	(11.6)
Gross margin (%)	67.0	67.3	67.6	68.5	68.5	68.5			
<b>EBITDA (Rs mn)</b>	<b>6,673</b>	<b>7,653</b>	<b>8,916</b>	<b>6,822</b>	<b>8,251</b>	<b>9,751</b>	<b>(2.2)</b>	<b>(7.3)</b>	<b>(8.6)</b>
EBITDA margin (%)	48.4	49.1	49.9	48.3	48.5	48.9			
PBT (Rs mn)	5,585	6,363	7,449	5,734	6,961	8,297	(2.6)	(8.6)	(10.2)
Net profit (Rs mn)	4,155	4,734	5,542	4,266	5,179	6,173	(2.6)	(8.6)	(10.2)
<b>EPS (Rs)</b>	<b>16.7</b>	<b>19.1</b>	<b>22.3</b>	<b>17.2</b>	<b>20.9</b>	<b>24.9</b>	<b>(2.6)</b>	<b>(8.6)</b>	<b>(10.2)</b>
EPS growth (%)	(3)	14	17	(1)	21	19			

Source: Kotak Institutional Equities estimates

**We model 9% customer revenue CAGR over FY2023-26E**

**Exhibit 5: Revenue build-up of Vedant Fashions, March fiscal year-ends, 2019-26E (Rs mn)**

	2019	2020	2021	2022	2023	2024E	2025E	2026E	FY2023-26E CAGR (%)
<b>Customer revenues (Rs mn)</b>									
Revenues from EBO	10,469	11,531	7,538	13,396	16,778	16,375	18,190	20,527	7
Revenues from LFS+MBO	803	994	638	930	1,265	1,280	1,495	1,747	11
Revenues from e-commerce	83	127	186	408	571	828	1,201	1,681	43
Total customer revenues	11,355	12,652	8,363	14,734	18,614	18,483	20,886	23,956	9
<b>Net revenues (Rs mn)</b>									
Revenues from EBO	7,375	8,338	5,102	9,400	12,204	12,199	13,551	15,292	8
Revenues from LFS+MBO	562	716	428	651	920	953	1,114	1,302	12
Revenues from e-commerce	58	91	112	286	415	617	895	1,253	44
Total net revenues	7,995	9,145	5,641	10,336	13,540	13,770	15,560	17,847	10
<b>Customer revenue mix (% of total)</b>									
Revenues from EBO	92.2	91.1	90.1	90.9	90.1	88.6	87.1	85.7	
Revenues from LFS+MBO	7.1	7.9	7.6	6.3	6.8	6.9	7.2	7.3	
Revenues from e-commerce	0.7	1.0	2.2	2.8	3.1	4.5	5.7	7.0	
Total customer revenues	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Kotak Institutional Equities estimates

**We model in-store area addition of 16% over FY2023-26E**

**Exhibit 6: Details of key assumptions for Vedant Fashions, March fiscal year-ends, 2019-26E (Rs mn)**

	2019	2020	2021	2022	2023	2024E	2025E	2026E	CAGR (%) 2023-26E
Customer revenues									
EBO revenues									
<b>SSSG (%)</b>	<b>7.0</b>	<b>7.0</b>	<b>(20.0)</b>	<b>65.2</b>	<b>18.1</b>	<b>(9.7)</b>	<b>5.5</b>	<b>6.5</b>	
Total number of EBOs (#)	470	526	530	595	649	680	715	755	5
EBO retail space footprint (mn sq. ft)	0.9	1.1	1.1	1.3	1.5	1.7	2.0	2.3	16
<b>Revenues per sq. ft (Rs/sq. ft)</b>	<b>11,633</b>	<b>10,717</b>	<b>6,875</b>	<b>11,224</b>	<b>12,247</b>	<b>10,332</b>	<b>9,930</b>	<b>9,691</b>	<b>(8)</b>
Yoy growth (%)		(8)	(36)	63	9	(16)	(4)	(2)	
Customer revenues from EBOs	10,469	11,531	7,538	13,396	16,778	16,375	18,190	20,527	7
Other channels (MBO+LFS+e-commerce)									
Customer revenues from other channels (Rs mn)	886	1,121	825	1,338	1,836	2,108	2,696	3,429	23
<b>Total customer revenues (Rs mn)</b>	<b>11,355</b>	<b>12,652</b>	<b>8,363</b>	<b>14,734</b>	<b>18,614</b>	<b>18,483</b>	<b>20,886</b>	<b>23,956</b>	<b>9</b>
<b>Net revenues from sale of products (Rs mn)</b>	<b>7,995</b>	<b>9,145</b>	<b>5,641</b>	<b>10,336</b>	<b>13,540</b>	<b>13,770</b>	<b>15,560</b>	<b>17,847</b>	<b>10</b>
Net revenues as proportion of customer revenues (%)	70	72	67	70	73	75	75	75	
Other operating income (Rs mn)	12	10	7	8	9	10	11	12	
Net revenues (Rs mn)	8,007	9,155	5,649	10,344	13,549	13,779	15,571	17,859	10
Yoy growth (%)		14	(38)	83	31	2	13	15	

Source: Company, Kotak Institutional Equities estimates

**We expect EPS CAGR of 9% over FY2023-26E**

**Exhibit 7: Consolidated financial snapshot of Vedant Fashions, March fiscal year-ends, 2019-26E (Rs mn)**

	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Profit model</b>								
Revenue from operations	8,007	9,155	5,648	10,408	13,549	13,779	15,571	17,859
EBITDA	3,358	3,938	2,431	4,959	6,708	6,673	7,653	8,916
Depreciation and amortisation expense	(643)	(887)	(955)	(944)	(1,038)	(1,327)	(1,540)	(1,762)
EBIT	2,715	3,050	1,475	4,015	5,671	5,346	6,113	7,154
Other income	191	324	602	499	402	664	766	924
Finance costs	(196)	(256)	(258)	(284)	(315)	(424)	(517)	(628)
Profit before tax	2,709	3,118	1,819	4,230	5,758	5,585	6,363	7,449
Taxation	(945)	(752)	(490)	(1,081)	(1,467)	(1,430)	(1,629)	(1,907)
Profit after tax	1,764	2,366	1,329	3,149	4,291	4,155	4,734	5,542
Reported PAT	1,764	2,366	1,329	3,149	4,291	4,155	4,734	5,542
Retained earnings	1,764	1,762	245	3,149	2,058	2,418	2,997	3,805
Diluted EPS (Rs/share)	7.0	9.4	5.4	12.7	17.3	16.7	19.1	22.3
Weighted average number of shares - diluted (mn)	250	250	248	248	248	248	248	248
<b>Balance sheet</b>								
Shareholder's funds	8,828	10,660	10,914	10,827	13,999	16,417	19,414	23,219
Lease liabilities	1,837	2,427	2,104	2,787	2,934	3,858	4,689	5,687
Total sources of funds	10,755	13,168	13,165	13,783	17,130	20,472	24,301	29,104
Fixed assets (tangible/intangible)	2,252	2,449	2,397	2,322	2,257	2,249	2,246	2,249
Capital work-in-progress	25	3	4	1	22	22	22	22
Cash and bank balances	1,194	199	71	39	100	2,612	5,149	8,339
Goodwill	157	157	157	157	157	157	157	157
RoU assets	1,963	2,460	2,035	2,667	2,791	3,714	4,546	5,544
Investments	1,944	4,010	5,356	5,124	7,871	7,871	7,871	7,871
Net working capital (ex-cash)	3,219	3,885	3,130	3,446	3,925	3,839	4,301	4,915
Others (DTA, miscellaneous)	—	6	16	26	7	7	7	7
Total usage of funds	10,755	13,168	13,165	13,783	17,130	20,472	24,301	29,104
<b>Cash flow</b>								
Operating cash flow before working capital changes	1,833	2,437	1,549	3,126	4,152	3,641	4,119	4,774
Working capital changes	(67)	(804)	399	(450)	(569)	86	(462)	(613)
Net finance cost/ income	48	155	135	76	85	574	676	834
Cash flow from operations	1,815	1,788	2,083	2,752	3,668	4,300	4,334	4,994
Capital expenditure	(101)	(284)	(125)	(23)	(45)	(51)	(59)	(68)
Free cash flow	1,715	1,503	1,958	2,729	3,623	4,249	4,274	4,926
<b>Key ratios/metrics</b>								
Yoy revenue growth (%)		14.3	(38.3)	84.3	30.2	1.7	13.0	14.7
EBITDA margin (%)	41.9	43.0	43.0	47.6	49.5	48.4	49.1	49.9
RoAE (%)		24.3	12.3	29.0	34.6	27.3	26.4	26.0
RoACE (%)		23.8	10.0	27.5	34.0	26.2	25.4	25.0

**Notes:**

(a) Operating cash flow before working capital changes is calculated as EBITDA less taxes less lease expense FY2023 onward.

Source: Company, Kotak Institutional Equities estimates

# Economy

## Prices

April 12, 2024

### March inflation moderates; global risks increasing

March headline inflation, as expected, moderated to 4.9%, while core inflation moderated marginally to 3.3%. We continue to expect only a gradual moderation in headline inflation. In the near term, we see upside risks to our 1QFY25 estimate from adverse weather and increasing commodity prices. We maintain our (1) FY2025 average headline inflation estimate at 4.5% and (2) call for a 50 bps repo rate cut starting in 3QFY25.

#### Food and fuel inflation-led moderation in March

March CPI inflation at 4.9% moderated from February's 5.1% (Kotak: 4.9%). Food inflation fell to 8.5% (8.7% in February). Sequentially, food inflation increased 0.2% (0.1% mom in February), led mainly by meat and fish, cereals, vegetables, and fruits (Exhibits 1-3). Durable inflation was marginally lower, while food and beverages inflation (excluding vegetables and fruits) increased to 5.2% (Exhibit 4). Fuel and light inflation contracted 3.2% (-2.6% mom) owing to LPG price cuts.

#### Core inflation continues on its downward trend

Core CPI inflation (CPI, excluding food and beverages, and fuel) moderated marginally to 3.3% (February: 3.4%). Sequentially, core CPI increased 0.2% (0.3% in February), led by personal care and effects (mainly gold and silver), and health (doctor's fee and medicine). However, various measures of core inflation continued on their downtrend, which will provide comfort to the MPC (Exhibit 5). We estimate core inflation to average 4% in FY2025.

#### Favorable base effects aid IIP growth in February

IIP growth in February improved to 5.7% (January: 4.1%), led by a favorable base effect. Sequentially, IIP contracted 3.1% (January: 3.3 % mom). According to the sectoral classification, manufacturing activity increased 5% (January: 3.6%), mining increased 8% (5.9%) and electricity production increased 7.5% (5.6%) (Exhibit 6). According to the use-based classification, all categories registered positive growths, except for consumer non-durables (Exhibit 7).

#### Maintain view of 50 bps repo rate cut from 3QFY25; global risks could delay easing

We expect headline inflation in the coming months to remain at sub-5% levels (barring the summer months). However, in the near term we see upside risks to our 1QFY25 average inflation of 5% from (1) the high temperatures causing volatile food inflation, (2) geopolitical risks and ongoing OPEC+ supply cuts pushing up crude oil prices and (3) higher non-energy commodity prices. These risks could continue to pose a challenge to the last mile disinflation, as noted by the RBI Governor as well. Overall, we do not see inflation settling durably around the 4% target before FY2026 (FY2025 and FY2026 average headline inflation is expected at 4.5% and 4.2%, respectively) (Exhibit 8). While we maintain our call for a 50 bps rate cut starting in 3QFY25, we note increasing risks of further delays to the RBI's rate cuts from (1) rising crude oil prices, (2) a further push-back to the timing of the US Fed's rate easing cycle and (3) volatile food inflation.

#### Summary of India's key macro metrics

	2023	2024E	2025E	2026E
<b>Real economy</b>				
Real GDP growth (%)	7.0	7.6	6.6	6.5
Nominal GDP growth (%)	14.2	9.1	10.8	10.7
CPI Inflation (avg., %)	6.7	5.4	4.5	4.2
<b>Public finance</b>				
Center's GFD/GDP (%)	6.4	5.8	5.1	4.5
<b>Monetary policy</b>				
Repo Rate (% eop)	6.50	6.50	6.00	5.50
SDF Rate (% eop)	6.25	6.25	5.75	5.25
CRR (% eop)	4.5	4.5	4.5	4.5
<b>External sector</b>				
Current Account Balance (% of GDP)	(2.0)	(0.8)	(1.1)	(1.0)
Brent crude oil price (avg., USD/bbl)	95.4	83.0	85.0	80.0
USD/INR (avg.)	80.3	82.8	83.1	84.0

Source: CEIC, Bloomberg, RBI, Kotak Economics Research estimates

#### Quick Numbers

March headline CPI inflation was at 4.9%; core inflation at 3.3%

CPI inflation, excluding vegetables, was at 3.6% (3.7% in February); durable components' inflation at 6.9% (7% in February)

Maintain our FY2025 average headline inflation estimate at 4.5%

Maintain our call of 50 bps of repo rate cuts from 3QFY25

[Full sector coverage on KINSITE](#)

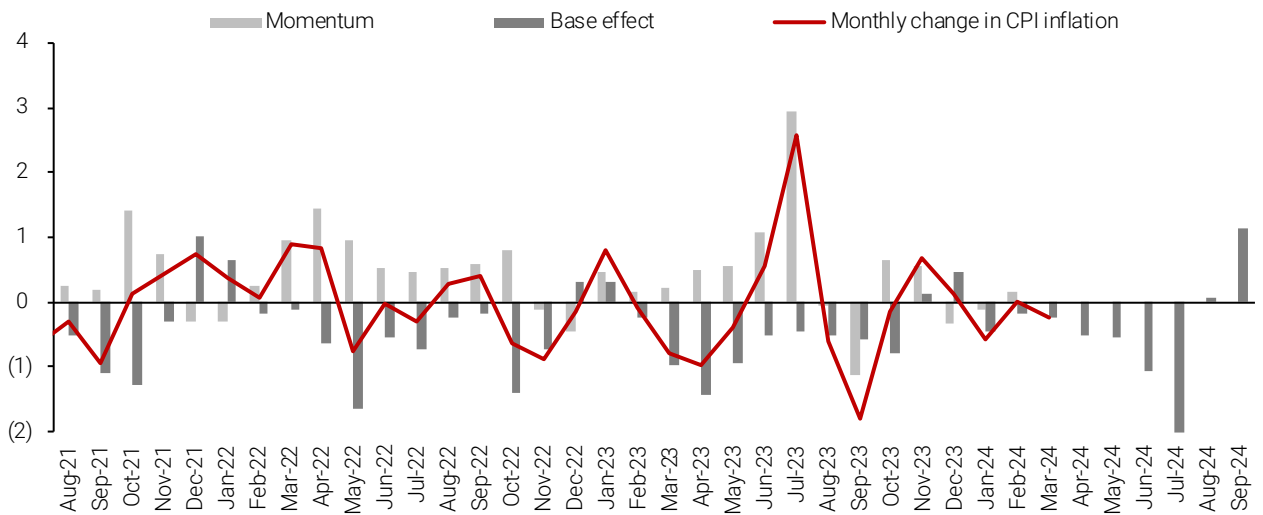
Upasna Bhardwaj

Suvodeep Rakshit

Anurag Balajee

**Headline inflation moderated to 4.9% in March**

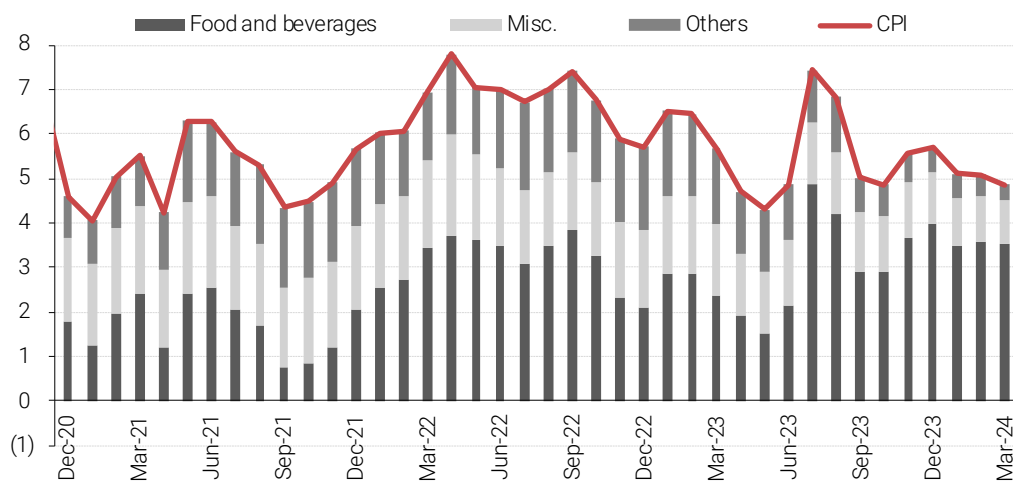
**Exhibit 1: Trend in momentum, base effect and monthly change in CPI inflation (%)**



Source: CEIC, Kotak Economics Research

**Food and beverages contribution to headline inflation remained steady in March**

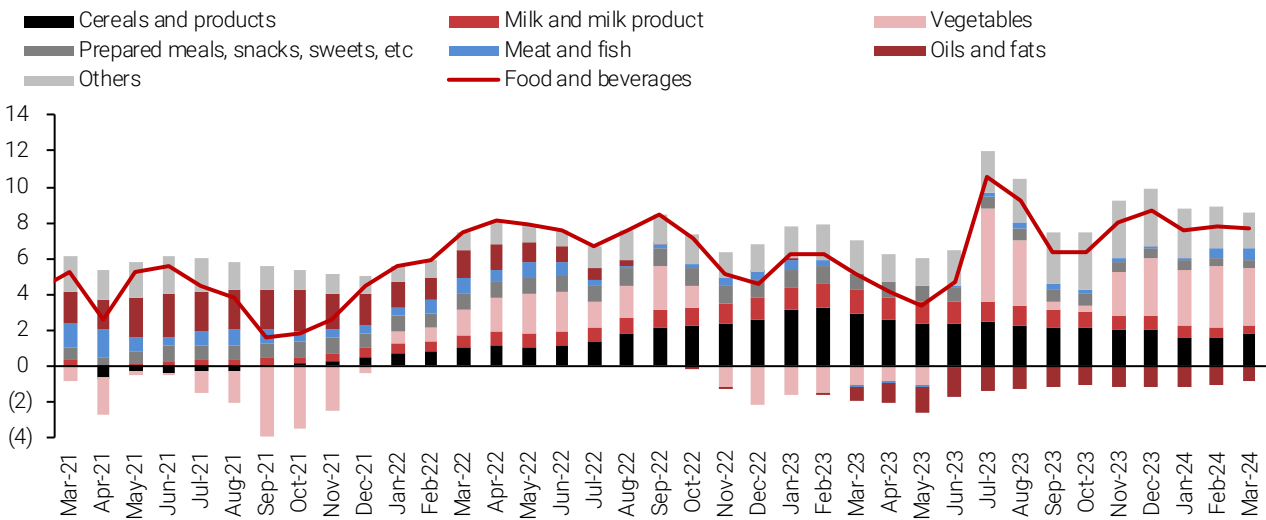
**Exhibit 2: Contribution to CPI inflation by major segments (%)**



Source: CEIC, Kotak Economics Research

**Contribution of most components to food inflation were steady in March; vegetables' contribution was lower**

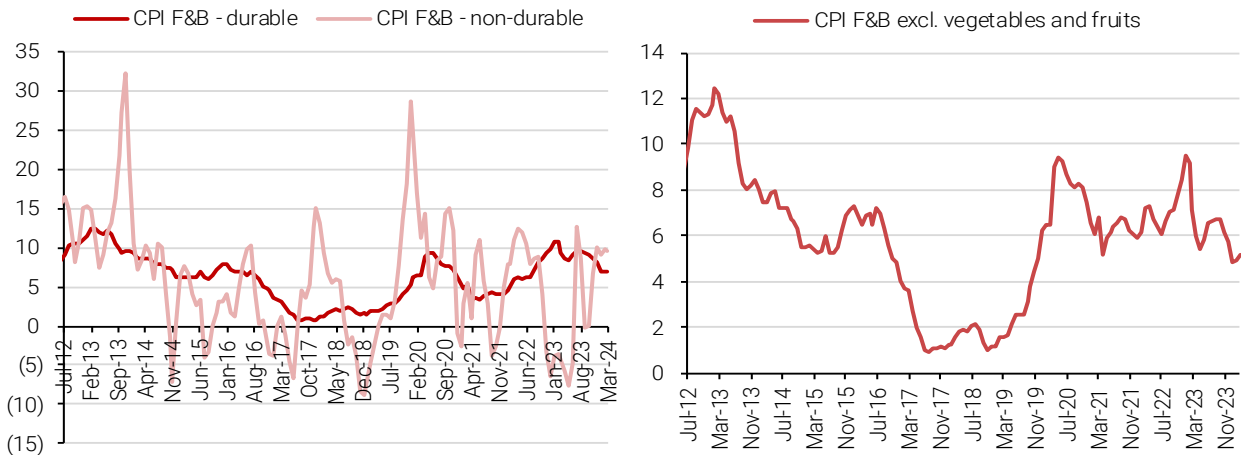
**Exhibit 3: Contribution to CPI food inflation by major segments (%)**



Source: CEIC, Kotak Economics Research

**Durable inflation was steady; food and beverages inflation, excluding vegetables and fruits, increased**

**Exhibit 4: Trend in various measures of food inflation**



Note:

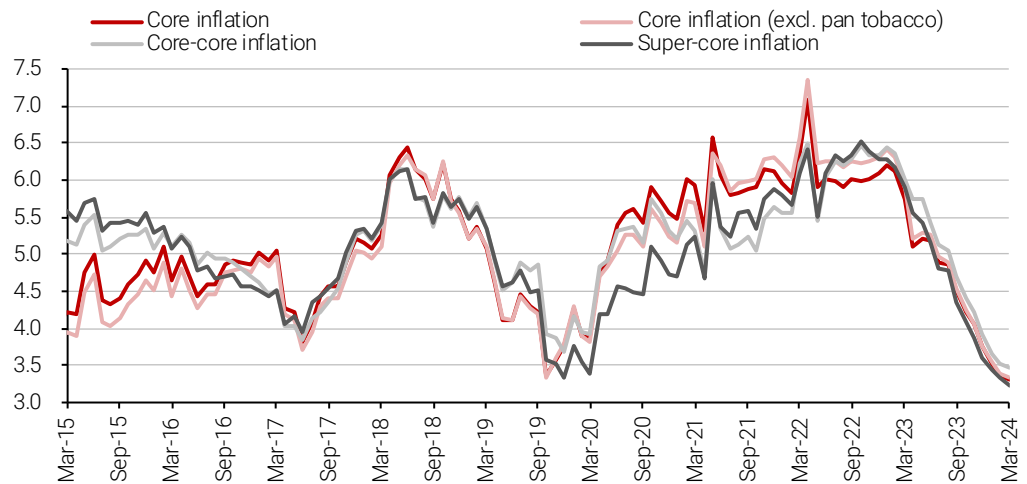
(a) F&B represents food and beverages.

(b) Durable food items include cereals, pulses, milk, meat & fish, spices, non-alcoholic beverages and prepared meals & snacks. Non-durable are the remaining items including vegetables and fruits.

Source: CEIC, Kotak Economics Research

**Various measures of core inflation at sub-4% levels will continue to provide comfort to the RBI**

**Exhibit 5: Trend in various measures of core CPI inflation (%)**



Note:

- (a) Core is defined as headline, excluding food and fuel.
- (b) Core-core is defined as core, excluding petrol and diesel.
- (c) Super-core is defined as core-core, excluding gold and silver.

Source: CEIC, Kotak Economics Research estimates

**Factory activity improved in February, aided mainly by favorable base effects**

**Exhibit 6: Sectoral classification of IIP growth, March fiscal year-ends, 2022-24 (%)**

	Mining (%)			Manufacturing (%)			Electricity (%)			General (%)		
	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
April	36.5	8.4	5.1	196.0	5.6	5.5	38.5	11.8	(1.1)	133.5	6.7	4.6
May	23.6	11.2	6.4	32.1	20.7	6.3	7.5	23.5	0.9	27.6	19.7	5.7
June	23.1	7.8	7.6	13.2	12.9	3.5	8.3	16.4	4.2	13.8	12.6	4.0
July	19.5	(3.3)	10.7	10.5	3.1	5.3	11.1	2.3	8.0	11.5	2.2	6.2
August	23.3	(3.9)	12.3	11.1	(0.5)	10.0	16.0	1.4	15.3	13.0	(0.7)	10.9
September	8.6	5.2	11.5	4.3	2.0	5.1	0.9	11.6	9.9	4.4	3.3	6.4
October	11.5	2.6	13.1	3.3	(5.8)	10.6	3.1	1.2	20.4	4.2	(4.1)	11.9
November	4.9	9.7	7.0	0.3	6.7	1.3	2.1	12.7	5.8	1.0	7.6	2.5
December	2.6	10.1	5.2	0.6	3.6	4.5	2.8	10.4	1.2	1.0	5.1	4.2
January	3.0	9.0	5.9	1.9	4.5	3.6	0.9	12.7	5.6	2.0	5.8	4.1
February	4.6	4.8	8.0	0.2	5.9	5.0	4.5	8.2	7.5	1.2	6.0	5.7
March	3.9	6.8		1.4	1.5		6.1	(1.6)		2.2	1.9	
<b>Average</b>	<b>13.8</b>	<b>5.7</b>		<b>22.9</b>	<b>5.0</b>		<b>8.5</b>	<b>9.2</b>		<b>17.9</b>	<b>5.5</b>	

Source: CEIC, Kotak Economics Research

**Only production of consumer non-durables contracted in February**

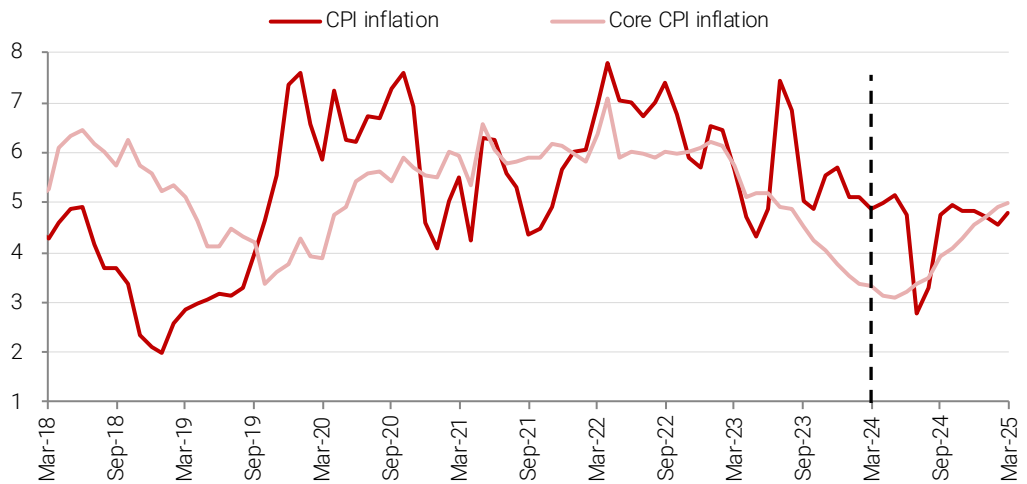
**Exhibit 7: Use-based classification of IIP growth, March fiscal year-ends, 2022-24 (%)**

	Primary goods			Capital goods			Intermediate goods			Infra and construction			Consumer durables			Consumer non-durables		
	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
April	36.9	10.3	1.9	1,028.6	12.0	4.4	213.0	7.1	1.7	609.4	4.0	13.4	1,778.2	7.2	(2.3)	92.6	(0.8)	11.4
May	15.8	17.8	3.6	74.9	53.3	8.1	54.2	17.5	3.4	46.5	18.4	13.0	80.4	59.1	1.5	0.2	1.4	8.9
June	12.0	13.8	5.3	27.3	28.6	2.9	22.6	10.5	5.2	20.0	9.4	13.3	28.0	25.2	(6.8)	(3.9)	2.9	0.5
July	12.4	2.5	7.7	30.3	5.1	5.1	14.6	3.7	3.2	12.3	4.8	12.6	19.4	2.3	(3.6)	(2.3)	(2.9)	8.3
August	16.9	1.7	12.4	20.0	4.3	13.1	11.8	1.3	7.4	13.5	3.0	15.7	11.1	(4.4)	6.0	5.9	(9.0)	9.9
September	4.6	9.5	8.0	3.3	11.4	8.4	7.0	1.7	6.1	9.3	8.2	10.1	1.6	(5.5)	1.0	(0.1)	(5.7)	2.7
October	9.0	2.1	11.4	(1.6)	(2.9)	21.7	4.6	(2.3)	9.5	6.6	1.7	12.6	(3.2)	(18.1)	15.9	0.7	(13.0)	9.3
November	3.5	4.8	8.4	(2.6)	20.7	(1.1)	2.1	3.5	3.4	3.1	14.3	1.5	(5.7)	5.0	(4.8)	(0.8)	10.0	(3.4)
December	2.8	8.5	4.8	(3.0)	7.8	3.6	1.0	1.5	3.9	2.0	11.0	5.1	(1.9)	(11.2)	5.3	0.3	7.9	2.4
January	1.6	9.8	2.9	1.8	10.5	3.4	2.5	1.4	5.3	5.9	11.3	5.5	(4.4)	(8.2)	11.9	3.1	6.5	(0.2)
February	4.6	7.0	5.9	1.3	11.0	1.2	4.1	1.0	9.5	8.6	9.0	8.5	(9.7)	(4.1)	12.3	(6.8)	12.5	(3.8)
March	5.7	3.3		2.4	10.0		1.8	1.8		6.7	7.2		(3.1)	(8.0)		(4.4)	(1.9)	
<b>Average</b>	<b>10.5</b>	<b>7.6</b>		<b>98.5</b>	<b>14.3</b>		<b>28.3</b>	<b>4.1</b>		<b>62.0</b>	<b>8.5</b>		<b>157.6</b>	<b>3.3</b>		<b>7.0</b>	<b>0.7</b>	

Source: CEIC, Kotak Economics Research

**We maintain our FY2025 average headline inflation estimate 4.5%**

**Exhibit 8: Trend in headline CPI and core inflation (%)**



Source: CEIC, Kotak Economics Research estimates

March 2024: Results calendar

Mon	Tue	Wed	Thu	Fri	Sat	Sun
<b>15-Apr</b>	<b>16-Apr</b>	<b>17-Apr</b>	<b>18-Apr</b>	<b>19-Apr</b>	<b>20-Apr</b>	<b>21-Apr</b>
	CRISIL	Angel One	Bajaj Auto	HDFC AMC	Alok Industries	Persistent Systems
		ICICI Lombard	HDFC Life Insurance	Hindustan Zinc	HDFC Bank	
		Just Dial	ICICI Securities	Wipro		
		Tata Communications	Infosys			
			Mastek			
			Network 18 Media			
			TV18 Broadcast			
<b>22-Apr</b>	<b>23-Apr</b>	<b>24-Apr</b>	<b>25-Apr</b>	<b>26-Apr</b>	<b>27-Apr</b>	<b>28-Apr</b>
Hatsun Agro	360 ONE	Dalmia Bharat	Bajaj Finance	Atul	Craftsman Automation	
Rallis India	ICICI Prudential Life	Equitas Small Finance Bank	Cyient	Bajaj Finserv	ICICI Bank	
Tejas Networks	MCX India	Hindustan Unilever	L&T Technology Services	Bajaj Holdings & Investment	IDFC Bank	
	Tata Consumer Products	LTIMindtree	Mphasis	CSB Bank	L&T Finance Holdings	
	Tata Elxsi	Maharashtra Scooters	Nestle India	HCL Technologies	SBFC	
		Nippon AMC	Schaeffler India	KSB	Yes Bank	
		Supreme Petrochem	Tech Mahindra	Mahindra Holidays		
		Syngene International	UTI AMC	Mahindra Lifespace Developers		
		Tata Investment Corp.	Zensar Technologies	Maruti Suzuki		
				SBI Life Insurance		
				Shriram Finance		
<b>29-Apr</b>	<b>30-Apr</b>	<b>1-May</b>	<b>2-May</b>	<b>3-May</b>	<b>4-May</b>	<b>5-May</b>
Gillette India	Castrol India	Orient Cement	Blue Star		Kansai Nerolac	
Kfin Technologies	Cholamandalam		CIE Automotive			
KPIT Technologies	Exide Industries		Coforge			
Poonawalla Fincorp	Indus Towers		Dabur India			
UltraTech Cement	IOCL		P&G Health			
	Nuvoco Vistas Corp					
	P&G Hygiene					
	Star Health and Allied Insurance					
<b>6-May</b>	<b>7-May</b>	<b>8-May</b>	<b>9-May</b>	<b>10-May</b>	<b>11-May</b>	<b>12-May</b>
Gujarat Gas	Dr Reddy's Laboratories	Capri Global	Asian Paints	ABB		
Marico	Latent View	GSPL	CAMS	Cholamandalam Financial		
	Max Financial Services		Rain Industries	Cipla		
	Navin Fluorine			Kalyan Jewellers		
	Pidlite Industries			TCI Expresss		
<b>13-May</b>	<b>14-May</b>	<b>15-May</b>	<b>16-May</b>	<b>17-May</b>	<b>18-May</b>	<b>19-May</b>
	BASF India		Biocon	JSW Steel		
	Shree Cement		Endurance Technologies			
			Motherson Sumi Wiring			
<b>20-May</b>	<b>21-May</b>	<b>22-May</b>	<b>23-May</b>	<b>24-May</b>	<b>25-May</b>	<b>26-May</b>
		Jubilant Foodworks	Bikaji Foods	Bosch		
			Esab India	HEG		
				Hindalco Industries		
<b>27-May</b>	<b>28-May</b>	<b>29-May</b>	<b>30-May</b>	<b>31-May</b>		
	Amara Raja Energy & Mobility	Cummins India				
	Medplus Health Services					
	TTK Prestige					

Source: BSE, NSE, Kotak Institutional Equities

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)	Fair Value	Upside	Mkt cap.		EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)		
		12-Apr-24	(Rs)	(%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	Traded	Delivered
<b>Automobiles &amp; Components</b>																											
Apollo Tyres	SELL	482	375	(22)	306	3.7	638	29	27	28	17	18	17	2.1	2.0	1.8	7	7	7	14	12	11	1.0	1.2	1.5	13	5
Ashok Leyland	REDUCE	178	170	(5)	524	6.3	2,936	9	10	9	19	19	19	5.1	4.3	3.8	11	11	11	28	25	21	2.1	2.1	2.1	34	18
Bajaj Auto	SELL	9,065	5,000	(45)	2,531	30	283	261	272	297	35	33	31	9.5	9.0	8.5	27	25	23	28	28	29	2.3	2.4	2.6	54	23
Balkrishna Industries	SELL	2,396	1,950	(19)	463	5.6	193	66	76	89	36	31	27	5.5	4.8	4.2	21	18	16	16	16	17	0.7	0.8	0.9	11	5
Bharat Forge	SELL	1,169	850	(27)	544	6.5	466	22	33	39	54	36	30	7.3	6.3	5.4	23	19	17	14	19	20	0.5	0.6	0.6	19	9
CEAT	SELL	2,588	1,670	(35)	105	1.3	40	173	158	139	15	16	19	2.6	2.4	2.1	7	7	8	19	15	12	1.7	1.5	1.3	8	4
CIE Automotive	ADD	488	465	(5)	185	2.2	378	21	24	27	23	20	18	3.1	2.8	2.5	13	12	10	14	14	15	1.0	1.2	1.4	4	2
Eicher Motors	SELL	4,302	3,100	(28)	1,178	14.1	272	147	154	166	29	28	26	7.6	6.6	5.8	24	22	20	28	25	24	1.0	1.2	1.4	34	18
Endurance Technologies	SELL	1,880	1,500	(20)	264	3.2	141	45	56	66	42	34	29	5.4	4.8	4.2	20	17	15	13	14	15	0.5	0.6	0.7	3	2
Escorts Kubota	SELL	3,024	2,150	(29)	334	4.0	111	94	104	112	32	29	27	3.6	3.2	2.9	28	25	22	11	11	11	0.5	0.5	0.6	10	4
Exide Industries	SELL	398	270	(32)	338	4.1	850	12	15	17	32	27	24	2.8	2.6	2.4	18	15	13	9	10	10	0.6	0.6	0.6	22	9
Hero Motocorp	SELL	4,441	3,675	(17)	888	10.6	200	213	233	249	21	19	18	5.0	4.6	4.3	14	12	11	25	25	25	3.4	3.7	3.9	41	19
Mahindra & Mahindra	ADD	2,071	1,800	(13)	2,575	30.9	1,159	89	85	93	23	25	22	4.6	4.0	3.4	20	18	15	22	17	17	0.6	0.6	0.7	73	43
Maruti Suzuki	SELL	12,267	8,900	(27)	3,857	46.2	314	405	399	428	30	31	29	5.7	5.1	4.6	21	21	19	20	17	17	1.3	1.3	1.4	75	41
MRF	SELL	131,717	90,000	(32)	559	6.7	4	5,234	4,846	5,004	25	27	26	3.3	3.0	2.7	12	12	11	14	12	11	0.3	0.3	0.3	22	7
Samvardhana Motherson	ADD	121	125	4	817	9.8	6,776	3	5	6	35	23	20	3.4	3.0	2.7	11	9	8	10	14	14	0.6	0.7	0.7	35	18
Schaeffler India	ADD	3,268	3,000	(8)	511	6.1	156	58	65	75	57	50	43	10.6	9.5	8.5	37	33	29	20	20	21	0.1	0.1	0.0	3	2
SKF	ADD	4,627	4,400	(5)	229	2.7	49	107	132	150	43	35	31	8.5	7.4	6.4	31	25	22	20	21	21	0.7	0.8	0.9	2	1
Sona BLW Precision	REDUCE	680	550	(19)	399	4.8	583	9	12	14	76	57	48	14.7	12.3	10.3	44	34	29	21	23	24	0.3	0.4	0.5	15	8
Tata Motors	ADD	1,019	950	(7)	3,901	46.8	3,829	64	71	79	16	14	13	5.7	4.0	3.1	7	6	5	44	33	27	0.2	0.2	0.3	134	54
Timken	ADD	2,940	2,800	(5)	221	2.7	75	47	60	76	62	49	39	9.3	7.9	6.6	42	32	26	16	18	19	0.1	0.1	0.0	3	2
TVS Motor	SELL	2,047	1,180	(42)	972	11.7	475	44	47	53	47	44	39	13.0	10.7	9.0	29	25	23	31	27	25	0.5	0.6	0.6	23	11
Uno Minda	ADD	723	660	(9)	415	5.0	571	15	17	19	49	43	38	8.4	7.1	6.1	28	24	21	17	17	16	0.3	0.3	0.4	5	3
Varrco Engineering	ADD	514	500	(3)	79	0.9	153	37	26	33	14	20	16	4.2	3.5	2.9	12	9	7	30	17	18	—	—	—	3	1
<b>Automobiles &amp; Components</b>																											
<b>Automobiles &amp; Components</b>		<b>Cautious</b>			<b>22,358</b>	<b>268.1</b>					<b>26.1</b>	<b>24.7</b>	<b>22.6</b>	<b>5.6</b>	<b>4.8</b>	<b>4.2</b>	<b>14.3</b>	<b>13.0</b>	<b>11.7</b>	<b>21</b>	<b>19.4</b>	<b>18.4</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>653</b>	<b>308</b>
<b>Banks</b>																											
AU Small Finance Bank	ADD	639	600	(6)	427	5.1	667	23	33	43	28	20	15	3.5	3.0	2.6	—	—	—	13	17	18	—	—	—	29	12
Axis Bank	BUY	1,073	1,225	14	3,313	39.7	3,077	78	82	94	14	13	11	2.3	2.0	1.8	—	—	—	18	16	16	1.1	1.2	1.3	141	77
Bandhan Bank	BUY	183	270	48	295	3.5	1,611	20	26	29	9	7	6	1.4	1.2	1.1	—	—	—	15	17	17	1.6	2.1	2.4	36	16
Bank of Baroda	ADD	268	280	4	1,386	16.6	5,178	33	30	31	8	9	9	1.4	1.2	1.1	—	—	—	16	13	12	2.5	2.3	2.4	63	24
Canara Bank	REDUCE	606	530	(13)	1,099	13.2	1,814	81	78	86	7	8	7	1.6	1.3	1.1	—	—	—	18	16	15	2.7	2.6	2.9	59	22
City Union Bank	ADD	156	155	(0)	115	1.4	740	14	14	16	11	11	10	1.5	1.3	1.2	—	—	—	13	12	12	1.7	1.8	2.0	8	4
DCB Bank	BUY	123	160	30	39	0.5	312	17	19	24	7	6	5	0.9	0.8	0.7	—	—	—	11	11	13	1.4	1.9	2.8	4	2
Equitas Small Finance Bank	ADD	101	115	14	114	1.4	1,131	8	9	11	13	11	9	2.0	1.8	1.5	—	—	—	15	16	18	—	—	—	5	3
Federal Bank	BUY	156	185	19	380	4.6	2,419	15	15	18	10	10	9	1.4	1.3	1.2	—	—	—	15	12	13	2.0	2.0	2.3	30	13
HDFC Bank	BUY	1,519	1,750	15	11,539	138.4	7,580	85	93	106	18	16	14	2.7	2.4	2.2	—	—	—	18	16	16	1.2	1.4	1.5	469	289
ICICI Bank	BUY	1,104	1,220	10	7,756	93.0	6,984	57	57	62	19	19	18	3.4	3.0	2.7	—	—	—	18	16	15	1.0	1.0	1.1	217	115
IndusInd Bank	BUY	1,556	1,800	16	1,211	14.5	776	111	126	143	14	12	11	2.0	1.8	1.6	—	—	—	15	15	15	1.0	1.2	1.4	70	36
Karur Vysya Bank	BUY	192	195	2	153	1.8	802	19	20	23	10	10	8	1.6	1.5	1.3	—	—	—	16	16	16	2.5	2.7	3.1	7	4
Punjab National Bank	SELL	135	105	(22)	1,485	17.8	11,011	7	12	13	19	11	10	1.6	1.4	1.3	—	—	—	8	12	12	1.5	2.5	2.8	100	28
SBI Cards and Payment Services	BUY	738	900	22	701	8.4	946	25	30	44	30	25	17	5.9	4.9	3.9	—	—	—	21	21	25	0.4	0.5	0.6	17	9
State Bank of India	BUY	766	850	11	6,839	82.0	8,925	60	63	69	13	12	11	2.0	1.8	1.6	—	—	—	15	14	14	1.5	1.5	1.5	181	73
Ujivan Small Finance Bank	ADD	54	65	21	105	1.3	1,929	6	7	7	9	8	8	1.7	1.5	1.3	—	—	—	24	20	18	2.3	2.5	2.6	8	4
Union Bank	ADD	149	155	4	1,139	13.7	7,634	19	23	24	8	7	6	1.3	1.1	1.0	—	—	—	17	17	15	3.1	3.7	3.9	50	21
Utkarsh Small Finance Bank	BUY	54	65	21	59	0.7	1,098	4	5	6	12	10	9	2.0	1.7	1.4	—	—	—	19	17	18	0.0	0.0	0.0	5	2
YES Bank	REDUCE	24	19	(22)	698	8.4	31,315	0	1	1	71	27	17	1.7	1.6	1.5	—	—	—	2	6	9	0.0	0.0	0.0	134	39
<b>Banks</b>		<b>Attractive</b>			<b>38,854</b>	<b>465.9</b>					<b>14.8</b>	<b>13.7</b>	<b>12.2</b>	<b>2.2</b>	<b>1.9</b>	<b>1.7</b>				<b>14.6</b>	<b>14.0</b>	<b>13.9</b>	<b>1.3</b>	<b>1.4</b>	<b>1.6</b>	<b>1,635</b>	<b>793</b>

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)	Fair Value	Upside	Mkt cap.		O/S shares	EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)			
		12-Apr-24	(Rs)	(%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	Traded
<b>Building Products</b>																													
Astral	SELL	1,964	1,600	(19)	528	6.3	269	21	28	33	93	70	59	16.5	13.7	11.5	55	43	37	19.2	21	21	0.2	0.2	0.3	17	8		
<b>Building Products</b>		<b>Cautious</b>			<b>528</b>	<b>6.3</b>					<b>93.2</b>	<b>69.8</b>	<b>58.9</b>	<b>16.5</b>	<b>13.7</b>	<b>11.5</b>	<b>54.9</b>	<b>43.3</b>	<b>37.2</b>	<b>17.7</b>	<b>19.7</b>	<b>19.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>17</b>	<b>8</b>		
<b>Capital goods</b>																													
ABB	REDUCE	6,753	4,600	(32)	1,431	17.2	212	59	72	84	115	93	81	24.1	19.5	16.0	93	75	64	23	23	22	0.0	0.1	0.1	32	13		
Bharat Electronics	SELL	234	130	(44)	1,707	20.5	7,310	5	5	6	49	45	39	11.1	10.0	9.0	36	31	27	24	24	24	1.0	1.0	1.2	69	33		
BHEL	SELL	263	70	(73)	914	11.0	3,482	(1)	(2)	1	NM	NM	198	3.4	3.5	3.4	NM	2,077	58	NM	NM	2	0.0	0.1	(0.1)	108	34		
Carborundum Universal	REDUCE	1,249	1,140	(9)	238	2.8	190	24	31	39	52	40	32	7.5	6.5	5.6	32	26	21	15	17	19	0.4	0.5	0.6	3	2		
CG Power & Industrial	SELL	494	370	(25)	755	9.1	1,527	6	7	8	89	69	59	25.6	20.3	16.3	65	50	43	29	29	28	(0.3)	(0.4)	(0.5)	22	13		
Cochin Shipyard	SELL	1,097	540	(51)	288	3.5	263	27	24	30	40	46	36	5.9	5.4	5.0	30	32	24	15	12	14	0.6	0.7	0.8	50	14		
Cummins India	BUY	3,060	2,750	(10)	848	10.2	277	56	66	77	54	46	40	14.2	12.7	11.3	51	43	37	28	29	30	1.0	1.2	1.4	22	11		
G R Infraprojects	SELL	1,354	920	(32)	131	1.6	97	65	58	89	21	23	15	2.2	2.0	1.8	13	14	10	11	9	13	0.0	0.0	0.0	3	1		
IRB Infrastructure	ADD	68	65	(4)	411	4.9	6,039	1	2	3	53	31	26	3.1	3.1	3.0	16	14	12	6	10	12	2.3	3.0	3.4	27	11		
Kapataru Projects	ADD	1,169	1,050	(10)	190	2.3	160	35	66	83	33	18	14	3.6	3.0	2.5	13	9	7	11	18	20	0.3	0.4	0.4	5	2		
KEC International	REDUCE	747	630	(16)	192	2.3	257	17	34	45	44	22	17	4.6	3.9	3.2	16	11	9	11	19	21	0.2	0.5	0.6	8	4		
L&T	SELL	3,679	3,100	(16)	5,058	60.6	1,373	98	115	140	38	32	26	7.1	6.2	5.4	25	21	18	18	21	22	0.8	0.9	1.1	111	68		
Siemens	SELL	5,577	3,950	(29)	1,986	23.8	356	65	79	94	86	70	59	13.4	11.8	10.3	67	56	47	17	18	19	0.3	0.4	0.4	16	8		
Thermax	ADD	4,545	3,550	(22)	542	6.5	113	54	62	77	84	73	59	11.7	10.5	9.2	70	56	41	15	15	17	0.3	0.3	0.3	5	3		
<b>Capital goods</b>		<b>Cautious</b>			<b>14,690</b>	<b>176.1</b>					<b>55.0</b>	<b>46.0</b>	<b>36.8</b>	<b>8.0</b>	<b>7.2</b>	<b>6.4</b>	<b>34.1</b>	<b>28.7</b>	<b>24.1</b>	<b>14.5</b>	<b>15.7</b>	<b>17.4</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>	<b>#N/A</b>	<b>216</b>		
<b>Commercial &amp; Professional Services</b>																													
SIS	REDUCE	452	500	11	65	0.8	147	20	26	31	22	17	14	2.5	2.2	1.9	12	10	9	12	13	14	0.0	0.0	0.0	1	0		
TeamLease Services	REDUCE	3,367	2,500	(26)	56	0.7	17	69	93	119	49	36	28	6.9	5.8	4.8	42	31	25	14.2	17.3	18.5	—	—	—	2	1		
<b>Commercial &amp; Professional Services</b>		<b>Neutral</b>			<b>122</b>	<b>1.5</b>					<b>29.3</b>	<b>22.6</b>	<b>18.4</b>	<b>3.5</b>	<b>3.0</b>	<b>2.6</b>	<b>17.3</b>	<b>14.1</b>	<b>11.8</b>	<b>12.0</b>	<b>13.5</b>	<b>14.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3</b>	<b>1</b>		
<b>Commodity Chemicals</b>																													
Asian Paints	REDUCE	2,855	3,100	9	2,738	32.8	959	58	60	62	49	47	46	14.6	12.8	11.4	34	33	31	32	29	26	1.1	1.1	1.2	48	29		
Berger Paints	SELL	557	485	(13)	649	7.8	1166	10	11	12	54	51	48	12.5	11.0	9.7	34	32	31	25	23	21	0.8	0.9	0.8	7	3		
Indigo Paints	REDUCE	1,348	1,400	4	64	0.8	48	33	37	40	41	36	34	7.1	6.2	5.5	25	22	20	19	18	17	0.5	0.7	1.0	2	1		
Kansai Nerolac	REDUCE	280	290	3	227	2.7	808	9	9	9	32	31	30	4.5	4.2	3.9	21	20	19	14	14	14	1.2	1.6	1.7	2	1		
Tata Chemicals	SELL	1,148	820	(29)	293	3.5	255	45	32	36	25	35	32	1.4	1.4	1.4	10	11	10	6	4	4	1.4	1.0	1.1	45	15		
<b>Commodity Chemicals</b>		<b>Cautious</b>			<b>3,971</b>	<b>47.6</b>					<b>45.1</b>	<b>45.3</b>	<b>43.2</b>	<b>7.9</b>	<b>7.2</b>	<b>6.7</b>	<b>27.8</b>	<b>27.6</b>	<b>26.2</b>	<b>17.5</b>	<b>16.0</b>	<b>15.5</b>	<b>1.0</b>	<b>1.1</b>	<b>1.2</b>	<b>104</b>	<b>50</b>		
<b>Construction Materials</b>																													
ACC	REDUCE	2,468	2,160	(12)	464	5.6	188	92	112	131	27	22	19	3.0	2.7	2.4	15	12	10	12	13	14	0.7	0.9	1.1	13	5		
Ambuja Cements	SELL	609	395	(35)	1,338	16.0	2,463	13	17	19	46	35	32	3.0	2.8	2.6	18	14	12	8	8	9	0.3	0.4	0.5	26	12		
Dalmia Bharat	ADD	1,952	2,100	8	366	4.4	187	40	65	88	48	30	22	2.2	2.1	2.0	13	11	9	5	7	9	0.3	0.5	0.7	10	6		
Grasim Industries	REDUCE	2,254	2,135	-	1,507	18.1	658	115	127	134	20	18	17	1.7	1.6	1.5	10	8	7	9	9	9	0.5	0.6	0.6	23	12		
J K Cement	SELL	4,281	2,800	(35)	331	4.0	77	101	131	152	42	33	28	6.2	5.3	4.5	17	15	13	16	17	17	0.4	0.4	0.4	8	4		
Nuvoco Vistas Corp.	ADD	314	340	8	112	1.3	357	3	10	14	105	33	23	1.3	1.2	1.1	9	8	8	1	4	5	0.0	0.0	0.0	2	1		
Orient Cement	REDUCE	209	210	0	43	0.5	205	8	12	14	26	18	15	2.5	2.2	2.0	11	8	7	10	13	14	1.0	1.0	1.0	2	1		
Shree Cement	SELL	25,491	19,000	(25)	920	11.0	36	647	739	804	39	34	32	4.5	4.1	3.7	20	17	15	12	13	12	0.4	0.5	0.6	12	6		
The Ramco Cements	SELL	837	630	(25)	198	2.4	236	16	25	34	51	34	25	2.7	2.6	2.3	16	14	12	5	8	10	0.2	0.3	0.4	7	4		
UltraTech Cement	SELL	9,653	7,000	(27)	2,787	33.4	289	241	326	361	40	30	27	4.7	4.1	3.7	22	18	15	12	15	15	0.4	0.5	0.3	38	22		
<b>Construction Materials</b>		<b>Cautious</b>			<b>8,064</b>	<b>96.7</b>					<b>33.5</b>	<b>26.6</b>	<b>23.8</b>	<b>3.0</b>	<b>2.7</b>	<b>2.5</b>	<b>15.0</b>	<b>12.5</b>	<b>10.9</b>	<b>8.9</b>	<b>10.2</b>	<b>10.5</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>142</b>	<b>73</b>		

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)	Fair Value	Upside	Mkt cap.		O/S shares			EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)		
		12-Apr-24	(Rs)	(%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	Traded	Delivered
<b>Consumer Durables &amp; Apparel</b>																														
Aditya Birla Fashion and Retail	REDUCE	234	220	(6)	237	2.8	998	(7)	(5)	(3)	NM	NM	NM	5.8	4.9	5.3	18	13	10	NM	NM	NM	--	--	--	--	--	--	19	8
Campus Activewear	ADD	237	275	16	72	0.9	304	3	4	6	94	56	43	11.5	9.5	8.1	36	26	21	13	19	20	--	--	--	0.6	5	2		
Cello World	ADD	834	950	14	177	2.1	212	16	18	21	54	46	39	15.4	12.4	10.1	35	29	24	44	30	29	--	1--	0.8	4	3			
Crompton Greaves Consumer	ADD	299	300	0	192	2.3	640	7	8	10	44	35	29	6.4	5.7	4.9	27	23	19	15	17	18	0.8	0.8	0.8	12	7			
Eureka Forbes	BUY	463	680	47	89	1.1	208	5	7	10	95	69	45	2.3	2.2	2.1	47	36	25	2	3	5	--	--	--	4	3			
Havells India	SELL	1,511	1,130	(25)	947	11.4	628	19	24	29	80	64	53	13.1	11.8	10.6	54	43	36	17	20	21	0.5	0.6	0.8	20	11			
Page Industries	SELL	35,804	31,000	(13)	399	4.8	11	569	615	712	63	58	50	23.8	20.0	17.0	41	38	32	42	37	37	0.8	1.0	1.2	12	6			
Polycab	SELL	5,302	4,060	(23)	797	9.6	150	115	125	144	46	42	37	10.1	8.6	7.4	32	28	25	24	22	22	0.5	0.6	0.6	64	26			
TCNS Clothing Co.	REDUCE	393	420	7	25	0.3	69	(30)	(5)	2	NM	NM	231	6.1	6.1	5.5	(30)	21	14.4	NM	NM	2	--	--	--	1	0			
Vedant Fashions	REDUCE	914	950	4	222	2.7	248	17	19	22	55	48	41	13.8	11.7	9.8	33	28	24	27	26	26	--	--	--	5	3			
Voltas	SELL	1,309	930	(29)	433	5.2	331	12	24	30	114	54	44	7.6	6.9	6.2	84	43	36	7	13	15	0.3	0.6	0.7	26	12			
Whirlpool	SELL	1,422	1,090	(23)	180	2.2	127	18	25	36	81	57	39	4.9	4.6	4.2	41	30	22	6	8	11	0.3	0.3	0.4	12	7			
<b>Consumer Durables &amp; Apparel</b>	<b>Cautious</b>				<b>3,772</b>	<b>45.2</b>					<b>82.9</b>	<b>60.1</b>	<b>47.7</b>	<b>9.2</b>	<b>8.1</b>	<b>7.3</b>	<b>38.8</b>	<b>30.0</b>	<b>24.9</b>	<b>11.0</b>	<b>13.4</b>	<b>15.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>	<b>183</b>	<b>88</b>			
<b>Consumer Staples</b>																														
Britannia Industries	ADD	4,752	5,225	10	1,145	13.7	241	89	101	113	53	47	42	29.0	25.7	22.9	37	33	30	57	58	57	1.7	1.9	2.1	19	10			
Colgate-Palmolive (India)	REDUCE	2,662	2,425	(9)	724	8.7	272	49	54	59	55	50	45	39.5	37.4	35.3	38	34	31	75	77	80	1.7	1.9	2.1	10	5			
Dabur India	ADD	501	600	20	887	10.6	1,772	11	12	14	45	40	36	8.9	8.0	7.2	36	31	28	21	21	21	1.1	1.2	1.4	13	9			
Godrej Consumer Products	BUY	1,200	1,375	15	1,227	14.7	1,023	19	24	27	63	51	44	8.1	7.4	6.8	41	35	31	13	15	16	0.6	0.9	1.1	18	11			
Hindustan Unilever	ADD	2,232	2,725	22	5,245	62.9	2,350	43	49	55	51	46	41	10.2	9.9	9.5	36	32	29	20	22	24	1.7	1.9	2.2	56	38			
ITC	ADD	430	460	7	5,370	64.4	12,428	16	18	19	26	25	23	7.6	7.3	7.0	21	19	17	28	29	31	3.3	3.5	3.8	132	81			
Jyothy Labs	SELL	435	420	(3)	160	1.9	367	10	11	13	42	38	34	9.0	8.1	7.2	32	29	26	23	22	22	1.0	1.3	1.4	7	3			
Marico	REDUCE	515	545	6	666	8.0	1,290	12	12	14	45	41	37	14.7	12.5	10.8	32	29	26	36	33	31	1.2	1.3	1.4	10	6			
Nestle India	ADD	2,536	2,550	1	2,445	29.3	964	31	36	41	81	71	62	79.1	54.1	40.6	55	48	42	108	91	74	0.7	0.8	1.0	28	17			
Sula Vineyards	ADD	571	640	12	48	0.6	84	11	13	15	52	45	38	8.0	7.1	6.2	28	24	22	16	17	17	0.5	0.6	0.8	9	4			
Tata Consumer Products	NR	1,149	-	-	1,095	13.1	929	15	18	20	79	65	56	6.4	6.1	5.8	48	41	36	8	10	11	0.8	0.9	1.0	26	14			
United Breweries	ADD	1,850	1,875	1	489	5.9	264	18	30	38	103	62	49	11.5	10.5	9.6	61	39	32	12	18	20	0.7	1.2	1.5	5	2			
United Spirits	ADD	1,183	1,160	(2)	860	10.3	727	16	19	22	75	61	54	12.1	11.1	10.1	49	41	36	17	19	19	0.2	0.8	1.0	12	7			
Varun Beverages	ADD	1,386	1,400	1	1,801	21.6	1,299	16	21	26	88	67	53	26.0	19.4	14.7	51	38	31	34	33	32	0.2	0.2	0.2	37	23			
<b>Consumer Staples</b>	<b>Attractive</b>				<b>22,162</b>	<b>265.7</b>					<b>46.2</b>	<b>41.2</b>	<b>36.9</b>	<b>11.2</b>	<b>10.4</b>	<b>9.7</b>	<b>33.5</b>	<b>29.3</b>	<b>26.1</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>1.6</b>	<b>1.8</b>	<b>2.0</b>	<b>381</b>	<b>230</b>			
<b>Diversified Financials</b>																														
360 One	BUY	749	750	0	269	3.2	355	21	24	30	35	31	25	7.8	7.3	6.8	--	--	--	24	24	28	2.1	2.4	3.0	4	2			
Aavas Financiers	BUY	1,569	2,025	29	124	1.5	79	60	74	90	26	21	17	3.3	2.9	2.5	--	--	--	14	15	15	0.0	0.0	0.0	11	7			
ABSL AMC	ADD	496	500	1	143	1.7	288	26	28	29	19	18	17	5.1	4.6	4.1	--	--	--	NM	NM	NM	3.1	3.4	3.5	1	1			
Aptus Value Housing Finance	ADD	326	370	14	162	1.9	498	12	14	17	27	23	19	4.3	3.6	3.1	--	--	--	17	17	17	1.2	0.0	0.0	3	2			
Bajaj Finance	ADD	7,230	7,800	8	4,475	53.7	617	233	306	381	31	24	19	5.9	4.8	4.0	--	--	--	22	23	23	0.4	0.5	0.7	112	60			
Bajaj Finserv	ADD	1,699	1,800	6	2,710	32.5	1,593	68	84	101	25	20	17	5.0	4.2	3.6	--	--	--	22	23	23	0.1	0.1	0.1	28	13			
Cholamandalam	BUY	1,178	1,350	15	989	11.9	839	39	50	60	30	24	20	5.3	4.5	3.5	--	--	--	20	20	19	0.2	0.3	0.4	26	15			
Computer Age Management Services	REDUCE	3,115	3,100	(0)	153	1.8	49	71	86	99	44	36	31	16.7	14.3	12.2	--	--	--	41	42	42	1.5	1.8	2.1	13	7			
CRISIL	SELL	4,843	3,700	(24)	354	4.2	73	90	101	113	54	48	43	17.6	15.7	14.1	--	--	--	33	32	32	1.1	1.4	1.5	3	2			
Five Star Business Finance	ADD	720	875	22	211	2.5	291	28	35	42	25	21	17	4.1	3.4	2.8	--	--	--	17	18	18	--	--	--	5	3			
HDFC Finance	REDUCE	3,680	3,750	2	786	9.4	214	89	106	117	41	35	31	11.7	10.8	10.0	--	--	--	30	33	33	1.8	2.2	2.4	22	9			
Home First Finance	BUY	899	1,200	34	80	1.0	88	34	40	50	26	22	18	3.8	3.3	2.8	--	--	--	15	16	17	--	--	0.6	2	1			
ICRA	REDUCE	5,450	5,150	(6)	53	0.6	10	153	175	198	36	31	28	5.0	4.7	4.4	--	--	--	14	15	16	--	--	0	0	0			
India Shelter	BUY	598	685	15	64	0.8	106	25	30	39	24	20	16	2.8	2.4	2.1	--	--	--	14	13	14	--	--	--	2	1			
Kfin Technologies	REDUCE	625	620	(1)	107	1.3	169	14	17	20	43	36	31	9.9	8.1	7.0	--	--	--	18	19	20	--	0.8	1	6	3			
L&T Finance Holdings	SELL	167	120	(28)	416	5.0	2,480	10	11	13	17	15	13	1.8	1.7	1.6	--	--	--	11	12	13	3.5	3.4	4.0	11	5			
LIC Housing Finance	BUY	649	725	12	357	4.3	550	86	84	83	8	8	8	1.4	1.2	1.1	--	--	--	16	14	12	2.1	2.1	2.1	18	8			
Mahindra & Mahindra Financial	ADD	303	310	2	375	4.5	1,234	15	19	25	20	16	12	2.1	2.0	1.8	--	--	--	10	12	14	1.0	1.3	1.6	12	6			
Muthoot Finance	ADD	1,667	1,620	(3)	669	8.0	401	101	120	143	17	14	12	2.8	2.4	2.0	--	--	--	18										

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)	Fair Value	Upside	Mkt cap.		O/S shares	EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)		
		12-Apr-24	(Rs)	(%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Electric Utilities</b>																												
CESC	SELL	141	115	(18)	187	2.2	1,326	10	12	13	13	11	11	1.3	1.3	1.2	7	7	6	11	12	12	3.2	3.0	3.3	12	5	
JSW Energy	SELL	616	235	(62)	1,077	12.9	1,640	10	15	19	64	41	32	5.1	4.6	4.1	24	17	15	8	12	13	0.3	0.3	0.3	27	11	
NHPC	SELL	92	60	(35)	927	11.1	10,045	4	5	6	23	18	15	2.4	2.3	2.1	25	12	9	11	13	14	2.3	2.9	3.4	167	48	
NTPC	SELL	362	270	(25)	3,508	42.1	9,895	20	22	24	18.5	16.1	15	2.2	2.0	1.9	12	10	9	12	13	13	2.0	2.2	2.3	71	39	
Power Grid	SELL	275	240	(13)	2,560	30.7	9,301	18	18	19	15.3	15.0	14	2.8	2.6	2.4	9	8	8	19	18	18	3.8	3.9	4.2	73	42	
Tata Power	SELL	437	240	(45)	1,396	16.7	3,196	11	10	13	41	44	33	4.3	3.9	3.5	16	16	14	11	9	11	—	—	—	94	31	
<b>Electric Utilities</b>	<b>Attractive</b>				<b>9,655</b>	<b>115.8</b>					<b>20.8</b>	<b>18.7</b>	<b>16.9</b>	<b>2.7</b>	<b>2.5</b>	<b>2.3</b>	<b>12.0</b>	<b>10.6</b>	<b>9.6</b>	<b>13.0</b>	<b>13.3</b>	<b>13.6</b>	<b>2.1</b>	<b>2.2</b>	<b>2.4</b>	<b>444</b>	<b>177</b>	
<b>Electronic Manufacturing Services</b>																												
Amber Enterprises	ADD	3,694	4,000	8	124	1.5	34	50	80	104	74	46	35	6.0	5.3	4.6	27	20	17	8	12	14	0.0	0.0	0.0	10	4	
Avalon Technologies	SELL	520	410	(21)	34	0.4	65	4	10	14	120	52	38	6.0	5.4	4.7	55	32	22	5	11	13	0.0	0.0	0.0	1	1	
Cyient DLM	SELL	706	570	(19)	56	0.7	79	8	16	20	88	44	36	6.0	5.3	4.6	47	32	24	7	12	13	0.0	0.0	0.0	3	2	
Dixon Technologies	SELL	7,845	5,200	(34)	469	5.6	59	67	117	146	117.4	67.1	54	27.7	19.6	14.3	65	40	32	27	34	31	0.0	0.0	0.0	30	10	
Kaynes Technology	ADD	2,503	2,850	14	160	1.9	58	24	31	49	103.5	81.1	51	5.8	5.4	4.8	59	43	28	9	8	11	0.0	0.0	0.0	8	5	
Syrra SGS Technology	REDUCE	488	500	2	87	1.0	176	7	11	16	66	43	30	5.2	4.6	4.0	41	27	19	8	11	14	—	—	—	4	2	
<b>Electronic Manufacturing Services</b>	<b>Cautious</b>				<b>931</b>	<b>11.2</b>					<b>96.6</b>	<b>58.3</b>	<b>43.7</b>	<b>9.9</b>	<b>8.5</b>	<b>7.1</b>	<b>50.0</b>	<b>33.4</b>	<b>25.5</b>	<b>10.2</b>	<b>14.5</b>	<b>16.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>57</b>	<b>23</b>	
<b>Fertilizers &amp; Agricultural Chemicals</b>																												
Bayer Cropscience	SELL	5,476	5,190	(5)	246	3.0	45	181	204	226	30	27	24	8.7	8.3	7.9	21	19	17	29	32	33	2.8	3.2	3.5	1	1	
Godrej Agrovet	ADD	534	600	12	103	1.2	192	18	23	30	30	23	18	3.5	3.2	2.8	18	14	11	12	14	17	1.4	1.8	2.4	1.2	0.7	
Rallis India	SELL	279	220	(21)	54	0.7	195	8	11	12	34	27	23	3.0	2.8	2.6	17	15	13	9	11	12	1.3	1.4	1.6	5	2	
UPL	SELL	502	390	(22)	377	4.5	751	(18)	8	28	NM	60	18	1.5	1.5	1.4	14	8	6	NM	2	8	1.0	1.0	1.0	26	12	
<b>Fertilizers &amp; Agricultural Chemicals</b>	<b>Cautious</b>				<b>780</b>	<b>9.4</b>					<b>NM</b>	<b>35.6</b>	<b>20.0</b>	<b>2.4</b>	<b>2.3</b>	<b>2.1</b>	<b>15.6</b>	<b>10.3</b>	<b>8.2</b>	<b>NM</b>	<b>6.5</b>	<b>10.7</b>	<b>1.6</b>	<b>1.8</b>	<b>2.0</b>	<b>34</b>	<b>15</b>	
<b>Gas Utilities</b>																												
GAIL (India)	SELL	201	150	(25)	1,322	15.9	6,575	14	14	15	14	14	14	2.2	2.1	1.9	11	10	10	16	15	14	3.7	4.0	4.2	54	23	
GSPL	BUY	377	465	23	213	2.5	564	23	18	19	17	21	19	2.1	2.0	1.9	10	11	10	13	10	10	2.2	2.4	2.5	8	4	
Indraprastha Gas	SELL	463	375	(19)	324	3.9	700	29	28	29	16	17	16	4.0	3.5	3.2	12	12	11	27	22	21	2.2	2.3	2.4	14	7	
Mahanagar Gas	SELL	1,429	1,050	(27)	141	1.7	99	131	93	90	11	15	16	2.8	2.5	2.3	7	10	9	28	17	15	3.0	2.3	2.2	12	5	
Petronet LNG	SELL	305	190	(38)	458	5.5	1,500	24	21	22	13	14	14	2.6	2.3	2.0	7	9	9	22	17	15	3.3	1.6	0.8	26	12	
<b>Gas Utilities</b>	<b>Cautious</b>				<b>2,458</b>	<b>29.5</b>					<b>13.9</b>	<b>14.8</b>	<b>14.5</b>	<b>2.4</b>	<b>2.2</b>	<b>2.1</b>	<b>10.1</b>	<b>10.2</b>	<b>10.0</b>	<b>17.5</b>	<b>15.1</b>	<b>14.2</b>	<b>3.3</b>	<b>3.1</b>	<b>3.1</b>	<b>115</b>	<b>51</b>	
<b>Health Care Services</b>																												
Apollo Hospitals	ADD	6,407	6,860	7	921	11.0	144	64	95	133	100	68	48	13.1	11.2	9.3	39	30	24	14	18	21	0.1	0.2	0.2	38	20	
Aster DM Healthcare	ADD	488	480	(2)	244	2.9	498	7	13	17	66	37	29	5.2	4.6	4.1	14	11	9	8	13	15	—	—	—	10	5	
Dr Lal Pathlabs	ADD	2,358	2,360	0	197	2.4	83	43	51	58	55	47	41	10.7	9.7	8.7	31	26	22	21	22	22	1.0	1.1	1.3	7	3	
Global Health	REDUCE	1,398	1,160	(17)	375	4.5	268	18	22	28	77	64	50	13.2	11.2	9.4	43	36	29	18	19	20	0.2	0.2	0.3	10	6	
KIMS	ADD	1,978	2,275	15	158	1.9	80	41	54	68	48	37	29	7.9	6.5	5.3	26	20	16	18	19	20	0.0	0.0	0.0	3	2	
Max Healthcare	REDUCE	870	705	(19)	846	10.1	971	13	16	20	65	55	43	9.0	7.8	6.7	44	36	29	15	15	17	0.1	0.1	0.2	33	22	
Metropolis Healthcare	REDUCE	1,841	1,600	(13)	94	1.1	51	27	41	49	69	45	37	8.7	7.8	6.9	33	25	21	13	18	20	0.4	0.7	0.8	7	3	
Narayana Hrudayalaya	ADD	1,288	1,365	6	263	3.2	204	41	43	51	31	30	25	8.9	6.8	5.4	22	19	16	33	26	24	—	—	—	6	4	
Rainbow Children's Medicare	ADD	1,341	1,215	(9)	136	1.6	102	21	26	30	64	51	44	11.0	9.3	8.0	32	26	23	19	20	19	0.3	0.3	0.4	4	2	
<b>Health Care Services</b>	<b>Cautious</b>				<b>3,235</b>	<b>38.8</b>					<b>65.3</b>	<b>50.9</b>	<b>40.0</b>	<b>9.8</b>	<b>8.4</b>	<b>7.1</b>	<b>31.9</b>	<b>25.9</b>	<b>21.1</b>	<b>15.0</b>	<b>16.5</b>	<b>17.7</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>118</b>	<b>66</b>	
<b>Hotels &amp; Restaurants</b>																												
Chalet Hotels	ADD	876	790	(10)	191	2.3	205	14	19	30	62	46	30	9.8	8.1	6.3	35	26	19	17	19	24	0.0	0.0	0.0	4	2	
Devyani International	ADD	164	178	9	198	2.4	1,204	1	1	2	179	175	108	18.3	17.4	16.1	32	23	19	11	10	15	0.0	0.0	0.0	7	4	
Indian Hotels	ADD	607	535	(12)	865	10.4	1,420	10	14	17	63	42	35	9.3	7.7	6.3	37	26	22	16	20	20	0.1	0.1	0.1	25	11	
Jubilant Foodworks	REDUCE	461	480	4	304	3.7	660	4	5	6	119	97	72	13.1	11.9	10.6	27	24	20	11	13	16	0.3	0.3	0.4	18	10	
Lemon Tree Hotels	REDUCE	140	122	(13)	111	1.3	792	2	5	6	56	29	24	11.9	9.6	7.7	23	14	12	22	37	36	0.9	1.2	1.4	9	4	
Restaurant Brands Asia	REDUCE	99	105	6	49	0.6	495	(1)	(1)	(1)	NM	NM	NM	2.7	2.8	2.8	20	16	13	NM	NM	NM	0.0	0.0	0.0	5	2	
Samhri Hotels	BUY	198	270	36	43	0.5	218	(8)	6	10	NM	34	20	4.3	3.8	3.2	22	13	11	NM	12	17	0.0	0.0	0.0	6		
Sapphire Foods	BUY	1,564	1,730	11	100	1.2	64	5	4	8	287	371	193	7.7	7.5	7.3	22	19	16	3	2	4	0.0	0.0	0.0	4	2	
Westlife Foodworld	REDUCE	826	745	(10)	129	1.5	156	5	5	8	177	178	107	20.6	18.9	16.5	35	32	25	12	11	17	0.0	0.0	0.0	2	1	
<b>Hotels &amp; Restaurants</b>	<b>Attractive</b>				<b>1,989</b>	<b>23.9</b>					<b>95.1</b>	<b>57.9</b>	<b>44.1</b>	<b>9.8</b>	<b>8.6</b>	<b>7.3</b>	<b>31.0</b>	<b>22.9</b>	<b>18.8</b>	<b>10.4</b>	<b>14.8</b>	<b>16.6</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>79</b>	<b>37</b>	

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)			Mkt cap.			O/S shares			EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)	
		12-Apr-24	Fair Value (Rs)	Upside (%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	Traded	Delivered
<b>Insurance</b>																														
HDFC Life Insurance	BUY	619	800	29	1,330	16.0	2,020	8	9	10	81	68	59	9.7	9.1	8.5	—	—	—	12	14	15	0.3	0.4	0.4	37	21			
ICICI Lombard	REDUCE	1,667	1,475	(12)	821	9.8	491	39	48	57	42	35	29	6.9	6.0	5.2	—	—	—	17	19	19	0.6	0.7	0.9	19	11			
ICICI Prudential Life	BUY	629	625	(1)	906	10.9	1,439	6	7	8	105	93	78	8.4	7.8	7.2	—	—	—	8	9	10	0.5	0.5	0.5	17	9			
LIC	BUY	971	1,300	34	6,141	73.6	6,325	55	50	53	18	19	18	8.5	6.4	5.1	—	—	—	59	37	31	—	—	—	68	25			
Max Financial Services	BUY	1,034	1,200	16	357	4.3	345	2	2	2	624	555	483	—	—	—	—	—	—	1	1	1	—	—	—	14	8			
PB Fintech	ADD	1,264	950	(25)	570	6.8	450	1	7	13	1,148	190	97	—	—	—	—	—	—	1	5	9	—	—	—	33	20			
SBI Life Insurance	BUY	1,493	1,675	12	1,495	17.9	1,004	19	20	21	80	76	70	11.5	10.2	9.1	—	—	—	15	14	14	0.2	0.2	0.2	24	14			
Star Health and Allied Insurance	ADD	551	600	9	322	3.9	582	14	19	23	40	29	24	5.1	4.4	3.7	—	—	—	14	16	17	—	—	—	7	4			
<b>Insurance</b>	<b>Attractive</b>				<b>11,944</b>	<b>143.2</b>					<b>28.4</b>	<b>29.6</b>	<b>27.1</b>	<b>8.5</b>	<b>7.0</b>	<b>5.9</b>				<b>30</b>	<b>24</b>	<b>22</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>218</b>	<b>112</b>			
<b>Internet Software &amp; Services</b>																														
Cartrade Tech	SELL	705	480	(32)	33	0.4	51.5	8	11	12	83	66	58	1.7	1.7	1.6	50	35	28	2.1	2.6	2.9	0.0	0.0	0.0	2	1			
FSN E-commerce Ventures	ADD	178	165	(7)	509	6.1	2,875.0	0	1	2	804	209	113	35.8	30.6	24.1	153	83	55	4.5	15.8	24	—	—	—	17	9			
Indiamart	SELL	2,581	2,400	(7)	155	1.9	60.7	57	68	81	45	38	32	8.2	6.7	5.6	36	29	24	17.6	19.5	19.1	0.1	0.1	0.1	7	3			
Info Edge	ADD	5,974	5,800	(3)	773	9.3	129.0	65	69	83	92	87	72	6.7	6.4	6.0	77	71	58	7.5	7.5	8.5	0.3	0.3	0.3	21	10			
Just Dial	BUY	895	1,050	17	76	0.9	85.0	40	51	59	22	18	15	1.9	1.7	1.5	16	10	7	9.0	10.2	10.6	—	—	—	6	2			
Zomato	BUY	192	210	9	1,694	20.3	9,131	0	2	4	559	97	49	8.7	7.8	6.6	2,044	101	46	1.6	8.5	14.8	0.0	0.0	0.0	125	67			
<b>Internet Software &amp; Services</b>	<b>Attractive</b>				<b>3,240</b>	<b>38.8</b>					<b>166</b>	<b>84</b>	<b>52</b>	<b>7.9</b>	<b>7.2</b>	<b>6.3</b>	<b>152</b>	<b>75</b>	<b>46</b>	<b>4.7</b>	<b>8.5</b>	<b>12.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>177</b>	<b>93</b>			
<b>IT Services</b>																														
Cyent	BUY	2,089	2,400	15	232	2.8	111	67	85	98	31	25	21	5.2	4.6	4.1	17	15	13	19	20	21	1.7	2.2	2.5	9	6			
HCL Technologies	ADD	1,522	1,730	14	4,129	49.5	2,714	58	64	72	26	24	21	6.1	5.8	5.5	16	15	13	24	25	27	3.3	3.6	3.8	59	36			
Infosys	BUY	1,485	1,790	21	6,163	73.9	4,146	59	65	73	25	23	20	7.6	7.0	6.5	16	15	13	31	32	33	3.0	3.3	3.7	137	87			
KPIT Technologies	SELL	1,475	1,000	(32)	404	4.8	273	21	28	36	69	52	40	18.2	14.4	11.3	40	31	25	30	31	31	0.4	0.5	0.7	24	11			
L&T Technology Services	SELL	5,651	4,700	(17)	598	7.2	106	123	142	164	46	40	34	10.4	9.1	7.9	30	26	23	24	24	25	0.7	0.9	1.1	12	5			
LTI Mindtree	REDUCE	4,889	5,050	3	1,448	17.4	296	156	176	206	31	28	24	7.6	6.6	5.7	21	19	16	26	25	26	1.4	1.6	1.8	35	20			
Mphasis	REDUCE	2,446	2,380	(3)	462	5.5	188	82	91	105	30	27	23	5.5	5.2	4.9	19	17	15	19	20	22	2.5	2.7	2.9	18	8			
Persistent Systems	REDUCE	3,978	3,760	(5)	613	7.3	154	73	91	113	54	44	35	13.3	11.1	9.2	35	28	23	26	28	29	0.7	0.8	1.0	29	13			
RateGain	ADD	676	900	33	80	1.0	113	13	16	22	53	41	31	5.2	4.8	4.1	37	27	20	13	12	14	0.0	0.0	0.0	5	2			
Tata Elxsi	SELL	7,754	5,400	(30)	483	5.8	62	130	143	168	60	54	46	19.8	17.3	15.2	44	39	33	36	34	35	0.9	1.1	1.4	13	7			
Tata Technologies	SELL	1,090	700	(36)	442	5.3	406	17	21	25	63	52	43	13.2	11.7	10.3	46	36	30	22	24	25	0.8	1.0	1.2	19	10			
TCS	ADD	4,001	4,300	7	14,477	173.6	3,595	130	142	157	31	28	25	15.5	14.1	12.7	22	20	18	50	53	52	1.5	2.8	3.1	146	86			
Tech Mahindra	REDUCE	1,242	1,260	1	1,093	13.1	890	28	47	64	44	26	20	4.0	4.0	3.8	21	15	11	9	15	20	2.1	3.1	3.2	34	17			
Wipro	SELL	471	435	(8)	2,460	29.5	5,276	21	23	25	22	20	19	3.4	2.9	2.6	13	12	11	15	15	15	0.2	0.2	1.9	53	20			
<b>IT Services</b>	<b>Neutral</b>				<b>33,083</b>	<b>396.7</b>					<b>29.6</b>	<b>26.4</b>	<b>23.4</b>	<b>8.4</b>	<b>7.6</b>	<b>7.0</b>	<b>19.3</b>	<b>17.4</b>	<b>15.4</b>	<b>28.3</b>	<b>28.9</b>	<b>29.7</b>	<b>1.8</b>	<b>2.5</b>	<b>2.9</b>	<b>593</b>	<b>328</b>			
<b>Media</b>																														
PVR INOX	ADD	1,414	1,700	20	139	1.7	98	18	41	56	76	35	25	1.7	1.6	1.5	18	13	10	2	5	6	0.1	0.3	0.4	11	6			
Sun TV Network	BUY	619	725	17	244	2.9	394	49	52	55	13	12	11	2.4	2.2	2.0	8	8	7	20	19	19	4.0	4.4	4.8	5	2			
Zee Entertainment Enterprises	SELL	147	150	2	141	1.7	960	7	7	9	22	20	16	1.3	1.3	1.2	14	11	10	6	7	8	2.0	2.7	2.7	77	33			
<b>Media</b>	<b>Attractive</b>				<b>523</b>	<b>6.3</b>					<b>19.1</b>	<b>16.5</b>	<b>14.6</b>	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>	<b>11.6</b>	<b>9.8</b>	<b>8.6</b>	<b>9.4</b>	<b>10.3</b>	<b>11.0</b>	<b>2.5</b>	<b>2.9</b>	<b>3.1</b>	<b>93</b>	<b>40</b>			
<b>Metals &amp; Mining</b>																														
Gravita India	BUY	1,004	1,200	20	69	0.8	69	35	44	52	28	23	19	8.7	6.6	5.1	19.8	16.8	13.8	35	33	30	0.5	0.7	0.8	3	1			
Hindalco Industries	ADD	599	535	(11)	1,345	16.1	2,220	44	44	46	14	13	13	1.3	1.2	1.1	6.7	6.5	6.2	10	9	9	0.7	0.7	0.8	50	25			
Hindustan Zinc	SELL	432	270	(37)	1,825	21.9	4,225	20	20	21	21	21	21	14.1	14.1	14.1	12.6	12.1	11.6	66	66	68	4.7	4.7	4.8	6	3			
Jindal Steel and Power	BUY	898	900	0	916	11.0	1,020	49	62	86	18	14	10	2.1	1.9	1.6	9.5	8.2	6.2	12	14	17	0.3	0.7	1.4	23	9			
JSW Steel	REDUCE	866	860	(1)	2,119	25.4	2,417	48	66	85	18	13	10	2.8	2.4	2.0	9.3	7.5	6.2	16	19	21	0.8	1.1	1.5	25	10			
National Aluminium Co.	SELL	178	90	(49)	327	3.9	1,837	8	8	8	22	21	21	2.3	2.2	2.0	12.0	11.3	10.8	11	11	10	1.8	1.9	1.9	63	21			
NMDC	SELL	239	195	(18)	700	8.4	2,931	22	18	19	11	13	12	2.7	2.5	2.2	7.3	8.6	8.1	26	20	19	4.5	3.8	4.0	57	24			
SAIL	SELL	155	70	(55)	642	7.7	4,130	4	6	7	35	27	23	1.1	1.1	1.1	10.6	9.9	9.5	3	4	5	1.0	1.3	1.6	83	28			
Tata Steel	REDUCE	164	140	(14)	2,041	24.5	12,224	4	10	16	43	17	10	2.0	1.8	1.6	11.7	8.5	6.6	5	11	17	0.6	1.5	2.4	98	39			
Vedanta	SELL	373	255	(32)	1,386	16.6	3,717	17	20	23	22	18	16	3.3	3.2	3.1	6.4	5.9	5.4	15	18	19	4.0	4.8	5.1	55	25			
<b>Metals &amp; Mining</b>	<b>Cautious</b>				<b>11,371</b>	<b>136.3</b>					<b>20.5</b>	<b>16.3</b>	<b>13.2</b>	<b>2.4</b>	<b>2.2</b>	<b>2.0</b>	<b>9.0</b>	<b>7.9</b>	<b>6.9</b>	<b>11.7</b>	<b>13.4</b>	<b>15.0</b>	<b>2.0</b>	<b>2.3</b>	<b>2.7</b>	<b>462</b>	<b>1</b>			

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)	Fair Value	Upside	Mkt cap.		O/S shares	EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)	
		12-Apr-24	(Rs)	(%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	Traded	Delivered
<b>Oil, Gas &amp; Consumable Fuels</b>																											
BPCL	SELL	601	440	(27)	1,304	15.6	2,129	133	52	54	5	12	11	1.9	1.7	1.6	3.4	7.3	7.1	47	16	15	10.1	3.9	4.1	80	31
Coal India	SELL	456	335	(26)	2,808	33.7	6,163	49	35	35	9	13	13	3.9	3.6	3.3	9.3	13.8	13.5	47	29	27	5.5	5.5	5.5	76	31
HPCL	SELL	478	320	(33)	678	8.1	1,419	104	59	60	5	8	8	1.9	1.6	1.5	5.1	8.2	8.2	46	22	19	8.7	5.0	5.0	56	20
IOCL	SELL	170	115	(32)	2,403	28.8	14,121	30	16	15	6	11	11	1.5	1.4	1.4	4.0	6.4	6.5	29	14	12	8.9	4.6	4.5	80	30
Oil India	REDUCE	611	475	(22)	663	7.9	1,084	63	62	66	10	10	9	1.8	1.6	1.4	8.1	7.5	6.9	19	17	16	2.5	3.3	3.8	47	15
ONGC	REDUCE	266	250	(6)	3,343	40.1	12,580	41	42	40	6	6	7	1.1	0.9	0.9	3.7	3.7	3.6	17	16	14	4.6	5.1	4.8	69	30
Reliance Industries	ADD	2,934	2,900	(1)	19,854	238.1	6,766	101	128	140	29	23	21	2.6	2.3	2.1	14.0	11.7	10.2	9	11	10	-	0.3	0.3	214	123
<b>Oil, Gas &amp; Consumable Fuels</b>	<b>Neutral</b>				<b>31,052</b>	<b>372.3</b>					<b>12.8</b>	<b>14.8</b>	<b>14.4</b>	<b>2.1</b>	<b>1.9</b>	<b>1.8</b>	<b>7.9</b>	<b>8.6</b>	<b>7.9</b>	<b>16.6</b>	<b>13.0</b>	<b>12.2</b>	<b>2.5</b>	<b>1.9</b>	<b>1.9</b>	<b>622</b>	<b>280</b>
<b>Pharmaceuticals</b>																											
Aurobindo Pharma	REDUCE	1,088	1,000	(8)	638	7.6	586	56	67	77	20	16	14	2.2	2.0	1.8	11	9	8	12	13	13	1.4	1.7	2.0	36	16
Biocon	REDUCE	274	260	(5)	329	3.9	1,202	2	8	15	117	35	18	1.5	1.4	1.3	16	13	9	1	4	7	1.2	1.0	1.9	24	10
Blue Jet Healthcare	ADD	392	410	5	68	0.8	173	10	13	16	38	29	24	8.4	6.9	5.7	27	21	17	24	26	26	0.6	0.9	1.1	1	
Cipla	ADD	1,397	1,545	11	1,128	13.5	806	52	57	64	27	25	22	4.2	3.7	3.3	17	15	13	16	16	16	0.8	0.9	1.1	28	15
Concord Biotech	REDUCE	1,560	1,450	(7)	163	2.0	105	30	37	47	53	42	33	10.7	9.0	7.5	37	30	24	22	23	25	0.5	0.6	0.7	2	1
Divis Laboratories	SELL	3,780	3,025	(20)	1,003	12.0	265	60	79	101	63	48	37	7.5	7.0	6.3	44	33	26	12	15	18	1.0	1.1	1.2	22	13
Dr Reddy's Laboratories	REDUCE	6,084	5,750	(5)	1,015	12.2	166	338	350	329	18	17	19	3.6	3.0	2.7	11	10	11	22	19	15	0.7	0.7	0.7	29	15
Gland Pharma	SELL	1,750	1,400	(20)	288	3.5	164	51	63	70	35	28	25	3.3	2.9	2.6	19	16	14	10	11	11	-	-	-	11	6
Glenmark Life Sciences	ADD	809	710	(12)	99	1.2	123	45	49	53	18	17	15	4.1	3.7	3.3	12	11	10	24	24	23	3.1	3.1	3.1	2	1
Laurus Labs	SELL	442	300	(32)	238	2.9	536	4	9	13	110	52	33	5.6	5.0	4.4	30	21	16	5	10	14	-	-	-	11	5
Lupin	SELL	1,622	1,375	(15)	739	8.9	455	45	51	62	36	32	26	5.2	4.6	4.0	19	16	14	15	15	16	0.5	0.5	0.7	22	12
Mankind Pharma	ADD	2,320	2,275	(2)	930	11.1	401	46	56	69	51	41	34	10.6	8.9	7.4	36	30	24	22	23	24	0.5	0.6	0.7	19	12
Sun Pharmaceuticals	ADD	1,540	1,455	(6)	3,695	44.3	2,399	39	48	56	39	32	28	5.9	5.1	4.5	27	22	18	16	17	17	0.6	0.6	0.7	46	29
Torrent Pharmaceuticals	REDUCE	2,578	2,325	(10)	872	10.5	338	47	62	77	55	42	33	11.5	9.4	7.6	26	22	19	23	25	25	0.3	0.4	0.5	8	4
<b>Pharmaceuticals</b>	<b>Neutral</b>				<b>11,205</b>	<b>134.4</b>					<b>35.2</b>	<b>29.2</b>	<b>25.1</b>	<b>4.8</b>	<b>4.3</b>	<b>3.8</b>	<b>21.0</b>	<b>17.7</b>	<b>15.2</b>	<b>13.8</b>	<b>14.6</b>	<b>15.0</b>	<b>0.5</b>	<b>0.6</b>	<b>0.7</b>	<b>263</b>	<b>139</b>
<b>Real Estate</b>																											
Brigade Enterprises	ADD	1,003	1,025	2	232	2.8	231	13	27	35	80	37	29	6.7	5.8	4.9	27	15	11	9	17	18	0.2	0.2	0.2	5	2
Brookfield India Real Estate Trust	ADD	257	290	13	113	1.4	439	0	10	15	1,250	26	18	1.1	1.2	1.3	17	12	11	NM	3	5	7.5	9.0	9.9	1	1
DLF	ADD	909	840	(8)	2,249	27.0	2,475	10	16	23	89	56	40	5.7	5.2	4.7	121	85	49	7	10	12	0.2	0.2	0.2	53	24
Embassy Office Parks REIT	ADD	356	385	8	338	4.0	948	10	14	18	37	25	20	1.5	1.5	1.6	16	13	12	4	6	8	6.1	7.2	8.2	5	4
Godrej Properties	SELL	2,672	1,525	(43)	743	8.9	278	21	45	51	127	60	53	7.5	6.7	5.9	(323)	183	247	6	12	12	-	-	-	24	9
Macrotech Developers	ADD	1,198	1,080	(10)	1,192	14.3	964	17	48	54	69	25	22	8.0	6.1	4.8	46	19	16	12	28	24	-	-	-	16	10
Mindspace REIT	ADD	345	380	10	204	2.5	593	9	11	13	39	30	26	1.4	1.4	1.5	15	13	12	4	5	6	6.0	6.5	6.9	1	1
Nexus Select Trust	ADD	134	145	9	203	2.4	1,515	4	5	6	31	27	23	6.9	9.0	12.4	16	14	13	25	29	45	6.9	7.0	7.4	1	0
Oberoi Realty	REDUCE	1,500	1,245	(17)	545	6.5	364	47	54	90	32	28	17	3.9	3.4	2.9	22	18	11	13	13	19	0.1	0.1	0.1	15	7
Phoenix Mills	REDUCE	2,997	2,495	(17)	536	6.4	179	62	84	97	48	36	31	5.7	4.9	4.3	26	19	17	12	15	15	0.1	0.1	0.2	20	11
Prestige Estates Projects	ADD	1,191	1,160	(3)	477	5.7	401	31	11	17	38	105	69	4.3	4.1	3.9	28	21	16	12	4	6	0.1	0.1	0.1	15	9
Signature Global	SELL	1,315	1,175	(11)	185	2.2	141	13	38	27	103	34	48	22.3	13.5	10.5	80	27	33	41	49	25	-	-	-	8	2
Sobha	SELL	1,601	1,050	(34)	152	1.8	95	15	50	45	106	32	36	5.8	5.0	4.5	40	17	18	6	17	13	0.2	0.3	0.3	8	3
Sunteck Realty	BUY	435	550	26	64	0.8	140	19	22	60	22	20	7	2.0	1.8	1.5	19	15	6	9	10	22	0.2	0.2	0.2	4	2
<b>Real Estate</b>	<b>Attractive</b>				<b>7,231</b>	<b>86.7</b>					<b>61.5</b>	<b>38.5</b>	<b>30.0</b>	<b>4.5</b>	<b>4.2</b>	<b>3.8</b>	<b>38.2</b>	<b>24.8</b>	<b>19.4</b>	<b>7.4</b>	<b>11.0</b>	<b>12.8</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>174</b>	<b>85</b>
<b>Retailing</b>																											
Avenue Supermarts	SELL	4,765	3,650	(23)	3,101	37.2	651	40	51	64	121	93	75	16.6	14.1	11.9	76	59	48	15	16	17	-	-	-	22	14
Metro Brands	REDUCE	1,049	1,125	7	285	3.4	272	12	16	20	86	66	53	16.1	13.7	11.6	40	32	27	20	23	23	-	1-	0.6	5	3
Titan Company	ADD	3,619	3,750	4	3,213	38.5	888	41	50	62	88	73	58	33.9	25.8	19.6	60	47	39	34	40	38	0.4	0.4	0.5	44	24
Trent	ADD	4,054	3,800	(6)	1,441	17.3	356	30	43	62	136	95	65	39.4	27.8	19.5	75	54	40	34	34	35	-	-	-	44	23
<b>Retailing</b>	<b>Neutral</b>				<b>6,599</b>	<b>96.4</b>					<b>105.7</b>	<b>83.0</b>	<b>64.8</b>	<b>24.0</b>	<b>19.3</b>	<b>15.4</b>	<b>66.7</b>	<b>51.8</b>	<b>41.5</b>	<b>23</b>	<b>23</b>	<b>24</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>114</b>	<b>63</b>

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Kotak Institutional Equities: Valuation summary of KIE Universe stocks

Company	Rating	Price (Rs)	Fair Value	Upside	Mkt cap.		O/S shares	EPS (Rs)			P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			Dividend yield (%)			ADV-3M (US\$ mn)	
		12-Apr-24	(Rs)	(%)	(Rs bn)	(US\$ bn)	(mn)	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E	Traded	Delivered
<b>Specialty Chemicals</b>																											
Aarti Industries	SELL	751	480	(36)	272	3.3	363	11	15	20	66	50	37	5.2	4.7	4.3	31	24	19	8	10	12	0.2	0.3	0.5	15	6
Atul	SELL	6,155	4,050	(34)	181	2.2	29	134	167	203	46	37	30	3.6	3.4	3.1	25	21	17	8	9	11	0.3	0.5	0.7	3	2
Castrol India	SELL	223	180	(19)	221	2.7	989	9	10	11	26	22	21	10.4	9.5	8.6	17	15	14	43	45	44	3.4	3.6	3.8	16	6
Clean Science & Technology	ADD	1,357	1,540	13	144	1.7	106	22	30	51	60	45	26	12.0	9.8	7.5	44	33	19	22	24	32	0.3	0.4	0.7	2	1
Deepak Nitrite	REDUCE	2,317	2,190	(5)	316	3.8	136	56	65	81	41	36	29	6.6	5.7	4.8	28	26	22	17	17	18	0.3	0.3	0.3	7	3
Navin Fluorine	REDUCE	3,297	3,120	(5)	163	2.0	50	44	72	104	75	46	32	6.8	6.1	5.2	42	26	19	9	14	18	0.3	0.4	0.5	9	5
Pidlite Industries	ADD	2,986	3,075	3	1,519	18.2	508	37	44	51	81	68	58	18.5	16.4	14.7	54	46	40	24	26	27	0.6	0.8	1.0	20	12
PI Industries	ADD	3,860	3,830	(1)	586	7.0	152	108	114	128	36	34	30	6.8	5.8	5.0	28	25	22	21	18	18	0.3	0.4	0.5	16	10
SRF	BUY	2,632	2,660	1	780	9.4	296	45	64	95	59	41	28	6.9	6.1	5.1	30	23	17	12	16	20	0.5	0.5	—	16	8
Vinati Organics	SELL	1,577	1,100	(30)	162	1.9	104	29	38	48	54	41	38	6.2	5.5	4.8	36	28	22	13	14	16	0.3	0.4	0.5	1	1
<b>Specialty Chemicals</b>	<b>Neutral</b>				<b>4,345</b>	<b>52.1</b>					<b>54.1</b>	<b>44.0</b>	<b>35.0</b>	<b>8.4</b>	<b>7.4</b>	<b>6.5</b>	<b>34.5</b>	<b>28.2</b>	<b>22.9</b>	<b>15.6</b>	<b>16.9</b>	<b>18.5</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>	<b>108</b>	<b>55</b>
<b>Telecommunication Services</b>																											
Bharti Airtel	ADD	1,226	1,200	(2)	7,254	87.0	5,967	21	39	52	57	31	23	8.4	6.4	5.2	11	9	7	15	23	24	0.4	0.4	0.5	93	59
Indus Towers	ADD	328	245	(25)	884	10.6	2,695	20	22	14	16	15	24	3.3	2.7	2.7	7	6	7	23	20	12	0.4	4.0	2.3	80	37
Vodafone Idea	RS	13	—	—	630	7.6	48,680	(7)	(4)	(4)	NM	NM	NM	NM	NM	NM	18	16	15	NM	NM	NM	—	—	—	83	19
Tata Communications	SELL	1,945	1,595	(18)	554	6.6	285	39	52	69	49	38	28	30.1	19.2	12.9	15	12	10	67	62	55	0.7	1.0	1.3	20	9
<b>Telecommunication Services</b>	<b>Attractive</b>				<b>9,323</b>	<b>111.8</b>					<b>NM</b>	<b>557.4</b>	<b>96.3</b>	<b>93</b>	<b>25</b>	<b>25</b>	<b>11.6</b>	<b>9.5</b>	<b>8.3</b>	<b>NM</b>	<b>4.5</b>	<b>26</b>	<b>0.4</b>	<b>0.8</b>	<b>0.7</b>	<b>276</b>	<b>124</b>
<b>Transportation</b>																											
Adani Ports and SEZ	BUY	1,344	1,520	13	2,904	34.8	2,160	43	53	64	31	26	21	5.4	4.5	3.8	20	17	14	19	19	20	0.2	0.3	0.5	67	25
Container Corp.	SELL	947	720	(24)	577	6.9	609	21	25	29	45	38	33	4.9	4.6	4.4	28	24	20	11	13	14	1.0	1.2	1.4	24	11
Delhivery	BUY	465	570	23	342	4.1	739	(3)	(0)	2	NM	NM	202	3.7	3.7	3.6	234	69	40	NM	NM	2	—	—	—	16	10
Gateway Distriparks	ADD	107	119	11	53	0.6	500	5	6	7	20	17	15	2.7	2.5	2.2	14	12	10	14	15	16	1.6	1.7	1.9	2	1
GMR Airports	SELL	84	63	(25)	505	6.1	6,036	(1)	(0)	1	NM	NM	145	NM	NM	NM	29	15	12	NM	NM	25	—	—	—	41	17
Gujarat Pipavav Port	REDUCE	216	167	(23)	104	1.3	483	8	10	11	26	22	19	4.3	4.1	3.8	16	14	12	17	19	21	2.6	3.0	3.5	19	7
InterGlobe Aviation	BUY	3,693	4,300	16	1,426	17.1	383	198	190	211	19	19	18	106.7	16.5	4.5	7	6	5	NM	146	64	—	—	—	60	33
JSW Infrastructure	SELL	241	185	(23)	506	6.1	2,100	6	8	9	42	31	27	6.3	5.5	19.6	27	21	20	20	19	19	0.2	0.6	0.7	16	8
Mahindra Logistics	SELL	465	300	(35)	33	0.4	71	(1)	8	16	NM	57	28	6.1	5.6	4.9	17	12	9	NM	10	18	—	—	—	2	1
<b>Transportation</b>	<b>Attractive</b>				<b>6,451</b>	<b>77.3</b>					<b>34.0</b>	<b>28.8</b>	<b>23.8</b>	<b>7.1</b>	<b>5.9</b>	<b>4.8</b>	<b>17.1</b>	<b>13.5</b>	<b>11.3</b>	<b>21</b>	<b>20</b>	<b>20</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>248</b>	<b>114</b>
<b>KIE universe</b>					<b>285,361</b>	<b>3,422</b>					<b>25.6</b>	<b>23.6</b>	<b>20.8</b>	<b>4.1</b>	<b>3.7</b>	<b>3.3</b>	<b>15.3</b>	<b>14.0</b>	<b>12.4</b>	<b>16.0</b>	<b>15.5</b>	<b>15.7</b>	<b>1.2</b>	<b>1.3</b>	<b>1.5</b>		

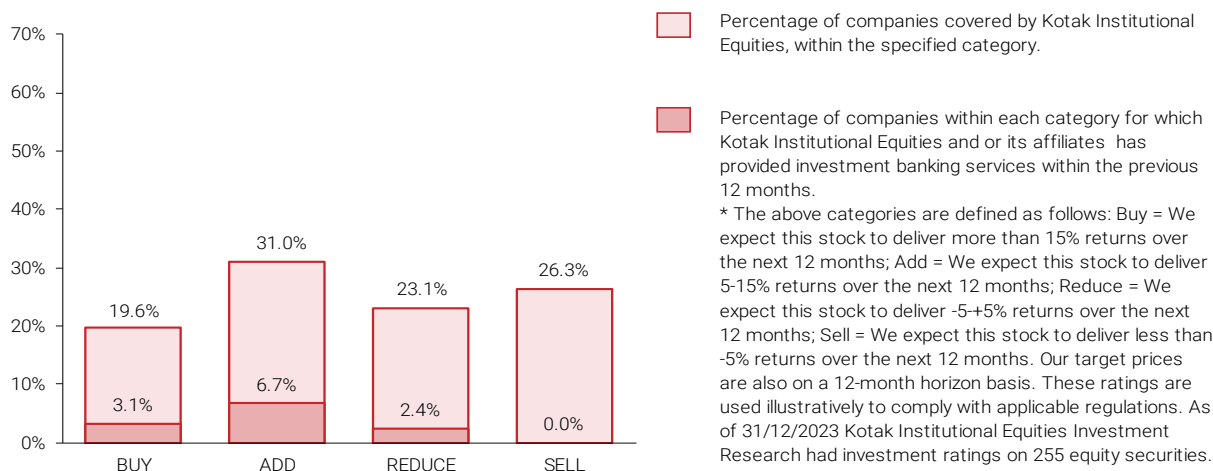
Notes:

- (a) We have used adjusted book values for banking companies.
- (b) 2024 means calendar year 2023, similarly for 2025 and 2026 for these particular companies.
- (c) Exchange rate (Rs/US\$)= 83.4

Source: Company, Bloomberg, Kotak Institutional Equities estimates

**Distribution of ratings/investment banking relationships**

Kotak Institutional Equities Research coverage universe



Source: Kotak Institutional Equities

As of December 31, 2023

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**BUY.** We expect this stock to deliver more than 15% returns over the next 12 months.

**ADD.** We expect this stock to deliver 5-15% returns over the next 12 months.

**REDUCE.** We expect this stock to deliver -5+5% returns over the next 12 months.

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In absence of response/complaint not addressed to your satisfaction, you may lodge a complaint with SEBI at SEBI, NSE, BSE, Investor Service Center | NCDEX, MCX. Please quote your Service Ticket/Complaint Ref No. while raising your complaint at SEBI SCORES/Exchange portal. Kindly refer <https://www.kotaksecurities.com/contact-us/>