India Equity Research | Auto Ancillaries September 2, 2021 Initiating Coverage

Minda Industries

Refer to important disclosures at the end of this report

Dominant and disruption-proof with a long growth-runway

- Minda Industries, founded in 1958, is the largest domestic supplier of Switches, Horns, Alloy wheels, Seating and Blow-molding. Further, it is the 2nd largest supplier of Airbags, Air filters, Speakers & Telematics, and the 3rd largest provider in Lightings segment.
- Minda is exposed to multiple growth drivers: 1) cyclical recovery in the 2W/4W segments; 2) market share gains, driven by import substitution in Switches and Alloy wheels; and 3) growing Content per Vehicle (CPV), led by premiumization and new product forays such as Sensors. Further, Minda is well-placed to benefit immensely from EV adoption over the long term, which should result in significantly higher 'kit values' compared to ICE vehicles.
- Revenues saw a 21% CAGR in FY11-21 vs. 2W+4W volume CAGR of 3%; we forecast 19% revenue CAGR over FY21-31E vs. industry volume CAGR of 8%. Our forecast of 50% EPS CAGR over FY22-24E is driven by a 22% revenue CAGR and a 240bps EBIT margin expansion. RoIC will likely surge to 24% in FY24E from 10% in FY21. We model average annual FCF generation of Rs4.2bn for FY21-24E, and expect the company to turn net-cash-positive by FY24E, from Rs5.3bn of pro-forma net-debt post its recent QIP.
- Our Sep'22E TP of Rs840 is DCF-driven and implies forward P/E of 32x. Minda deserves to trade at premium valuations, given its exposure to the PV segment, long term upside from EV adoption and a sustainable upward re-set in return ratios. Key risks: delay in auto sector or macro recovery, govt. allowing cheaper imports, adverse currency movements.

We expect Minda to deliver overall revenue CAGR of 22% over FY22-24E. In Switches (28% of revenues in FY21), it should benefit from higher CPV due to the shift to premium models and import substitution. It has outpaced industry volume growth by 11pps in past 5-yrs, and we expect ~4pps outperformance over FY22-24E (Rev CAGR: 17%).

In Lightings (22% of revenues), Minda is poised to benefit from rising LED adoption, which will likely increase over medium-term to 70% from 20-25% in PVs, and to >90% from 40-45% in 2Ws. Minda has outgrown industry volumes by 26pps in the past five-years, and we expect a ~7pps outperformance over FY22-24E (Revenue CAGR: 20%).

In Castings (12% of revenues), it is well-placed to benefit from alloy wheel penetration, which is likely to increase to >80% in PVs from ~50% currently, and to >90% in 2Ws from ~70%. Minda has outstripped industry volume growth by 34pps in the past five years, and we expect ~18pps outperformance over FY22-24E (revenue CAGR of 34%).

In the recently acquired Seating division (10% of revenues), we expect outperformance of 16pps over FY21-24E (Revenue CAGR: 26%), driven by cross-selling efforts, new products and robust exports. In Acoustics (10% of revenues), it should benefit from a gradual shift to electronic horns from mechanical ones. It has outgrown industry by 5pps in the past five years, and we expect outperformance of ~3pps over FY22-24E (Revenue CAGR: 11%).

In order to tap **future revenue opportunities**, Minda is focusing on product lines such as Sensors, EV components, Controllers and Blow-molded products. Revenue from these segments is likely to see 25% CAGR and reach c.Rs21bn in FY24E (18% of total revenues). Minda has an EV-agnostic portfolio and EV adoption will be a key growth driver over the medium-to-long term, with potential increase in kit value by 4x-6x in 2Ws/4Ws.

Please see our sector model portfolio (Emkay Alpha Portfolio): Automobiles & Auto Ancillaries (Page 40)

Financial Snapshot (Consolidated)

(Rs mn)	FY20	FY21	FY22E	FY23E	FY24E
Revenue	62,220	63,737	80,282	99,286	118,945
EBITDA	6,718	7,250	9,596	13,100	16,067
EBITDA Margin (%)	10.8	11.4	12.0	13.2	13.5
APAT	1,827	2,052	3,788	6,416	8,581
EPS (Rs)	7.0	7.5	13.3	22.5	30.0
EPS (% chg)	(36.0)	8.3	75.7	69.4	33.7
ROE (%)	10.3	10.0	13.6	17.9	20.3
P/E (x)	101.4	93.6	53.3	31.5	23.5
EV/EBITDA (x)	28.8	27.9	21.7	15.5	12.4
P/BV (x)	10.0	8.5	6.1	5.2	4.4

Source: Company, Emkay Research



СМР	Target Price
Rs 707 as of (September 1, 2021)	Rs 840 12 months
Rating	Upside
BUY	18.9 %

Change in Estimates

change in i	_sullat	.69				
EPS Chg F	/22E/F1	Y23E (%	6)	-/		
Target Price	Target Price change (%)					
Target Perio		12				
Previous Re	eco			NA		
Emkay vs C	Consen	sus				
	EPS E	stimat	es			
		F١	(22E	FY23E		
Emkay			13.3	22.5		
Consensus			14.5	21.2		
Mean Conse	ensus T	P (12M)	Rs 721		
Stock Detai	ils					
Bloomberg	Code		ſ	MNDA IN		
Face Value	(Rs)			2		
Shares outs	tanding	(mn)		286		
52 Week H/	L		8	334 / 286		
M Cap (Rs b	on/USD	bn)	20	02 / 2.76		
Daily Avg V	olume (ı	nos.)		524,945		
Daily Avg Tu	urnover	(US\$ m	nn)	4.9		
<u>Shareholdi</u>	ng Patt	ern Au	g '21			
Promoters				67.5%		
FIIs				9.5%		
DIIs				13.1%		
Public and (Others			9.9%		
Price Perfo	rmance)				
(%)	1M	3M	6M	12M		
Absolute	(5)	20	24	115		
Rel. to Nifty	/ (12)	9	7	44		
Relative pr	ice cha	rt				
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Source: Bloomberg

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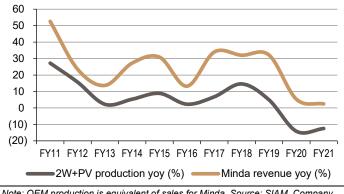
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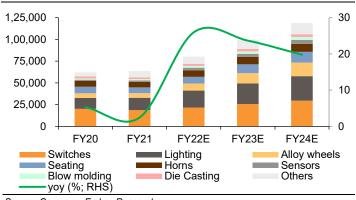
Story in Charts: A growth machine, consistently outpacing Auto industry's volume growth rates

Exhibit 1: Minda has consistently outpaced industry growth on new products, acquisitions and premiumization



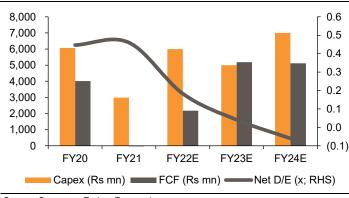
Note: OEM production is equivalent of sales for Minda. Source: SIAM, Company, Emkay Research

Exhibit 3: Expect a robust revenue CAGR of 22% in FY22E-24E...



Source: Company, Emkay Research

Exhibit 5: Strong FCF generation to drive reduction in net debt

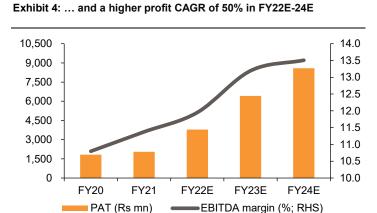


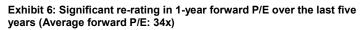
Source: Company, Emkay Research

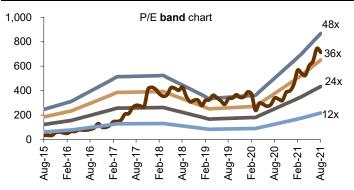
Exhibit 2: Addressable content per vehicle [CPV] has been increasing thanks new product forays

CPV (Rs)	FY18	FY19	FY20	FY21	CAGR % (FY18-21)
2Ws					
Economy	4,572	5,209	6,261	8,457	23%
Executive	5,162	5,266	7,110	9,585	23%
Premium	6,801	6,966	9,231	12,336	22%
Scooters	4,308	4,085	4,517	8,243	24%
Mopeds	2,750	3,357	3,611	6,978	36%
PVs					
<rs220,000< td=""><td>19,893</td><td>25,924</td><td>29,095</td><td>34,095</td><td>20%</td></rs220,000<>	19,893	25,924	29,095	34,095	20%
Rs221,000-450,000	32,906	37,805	43,078	48,078	13%
Rs450,000-830,000	44,064	37,433	43,303	48,303	3%
Rs830,000-1.6mn	63,683	68,801	63,683		
>Rs1.6mn	75,879	80,509	120,788	140,788	23%
Tractors	3,378	3,450	6,873	7,904	33%

Note: Includes Associates CPV. Source: Company, Emkay Research







Source: Company, Emkay Research

Company background

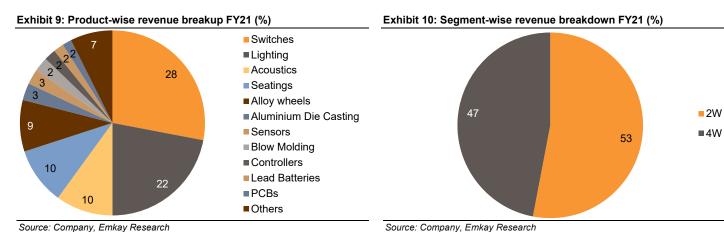
Exhibit 7: About the company

Company Background	Minda Industries (founded in 1958) is the largest domestic supplier of Switches, Horns, Alloy wheels, Seating & Blow molding, 2nd largest in Airbags, Air filters, Speaker & Telematics and the 3rd largest in Lighting, Reverse parking sensor & Body sealing. Further, it is the 2nd largest globally in Horns.
About Promoter	Mr. Nirmal K. Minda is the Chairman and Managing Director of Minda Industries. Mr. Minda has experience of more than three decades in the Auto components sector. He has been instrumental in forging new alliances and joint venture partnership with global companies. He has held many offices in bodies like CII as Vice Chairman, Haryana State Council & Special Invitee, Northern Regional Council and President of ACMA.
Products	20+ product lines
Partnerships	12 JV partners, 7 acquisitions and 3 technical licensing agreements
R&D	Globally: 15 R&D and product engineering centers, 4 design centers, 275+ patents, 250+ design registrations and 700+ engineers
Plants (including Subsidiaries and Associates)	72 plants globally. Switching systems - 9 plants, Lighting division - 9 plants (includes Uz Chasys plant), Acoustic systems - 6 plants, Casting - 6 plants, Seating systems -10 plants, Blow-molded parts - 3 plants, Lead Batteries - 1 plant, Sensor division - 1 plant, Controller division - 2 plants, PCB - 1 plant, ASEAN (switches & lighting) - 2 plants, Air filtration system - 3 plants, Airbag - 3 plants, Car Infotainment - 1 plant, RPAS - 1 plant, CNG kits - 1 plant, Mould - 1 plant, Hoses - 1 plant, Fuel cap - 1 plant, Speakers - 1 plant, Trading - 1 plant, Aftermarket - 1 plant and Others - 7 plants
Employees	23,000+
Credit rating	Long terms debt – AA+ (ICRA), Short term debt - A1+ (ICRA)
Auditors	B S R & Co LLP (KPMG)

Source: Company, Emkay Research

Exhibit 8: Key clients and competitors

Product lines	Clients	Competitors
Switches	PV: Maruti Suzuki (largest), Toyota, Mahindra & Mahindra, Tata Motors, Honda 2W: Bajaj Auto (largest), TVS Motors, Honda, Royal Enfield, Yamaha	LS Automotive, Napino, Kunal Auto, Varroc
Lighting	PV: Maruti Suzuki (largest), Mahindra & Mahindra, Toyota, Renault, Tata Motors 2W: Bajaj Auto (largest), TVS Motors, Honda, Royal Enfield, Hero MotoCorp	Lumax Industries, Fiem, Magneti Marelli Motherson
Acoustics	Global: BMW, Volkswagen, Hyundai, Daimler India: Bajaj Auto, TVS Motors	Hella India, Roots Industries
Alloy wheels	Minda Kosei: Maruti Suzuki, Mahindra & Mahindra 2W: Bajaj Auto Kosei Minda: Toyota, Renault, Nissan, Honda	PV: Steel Strip Wheels, Enkei Wheels, Rockman Industries, Maxion Wheels 2W: Rockman Industries, Rico Jinfei, Endurance Technologies
Aluminium Die Casting	Honda 2W, TVS Motors, Wabco India	Endurance Technologies, Alicon Castalloy, Craftsman Automation, Sundaram Clayton, Sunbeam, Jaya Hind Industries
Seating	2W: TVS Motors, Royal Enfield 4W: Tata Motors, Daimler, TAFE, John Deere	Bharat Seats, TS Tech, Autofit, Varroc
Blow Molding	Maruti Suzuki, Toyota, Suzuki Motors, Honda Car, Mahindra & Mahindra	Lumax Cornaglia, Mitsui Chem Plast
Sensors & Controllers	PV: Maruti Suzuki, Mahindra & Mahindra, Toyota, Tata Motors 2W: Bajaj Auto, Honda, Hero MotoCorp	Bosch, Continental, Wabco, Lumax Ituran
Batteries	Aftermarket	Exide Industries, Amara Raja Batteries
Air filters	Honda 2W	Mahle Anand, Denso, Fiem Industries
Airbags	Maruti Suzuki, Honda Car, Toyota	Autoliv, Rane TRW Steering Systems, Takata Corp
Car Infotainment	Maruti Suzuki, Toyota	Nippon Audiotronix, Harman Kardon (Samsung), Blaupunkt, Alpine, Pioneer, Sony, Panasonic



Source: Company, Emkay Research

Exhibit 11: Channel-wise revenue breakdown FY21 (%)

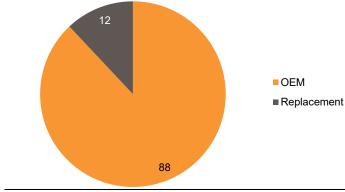
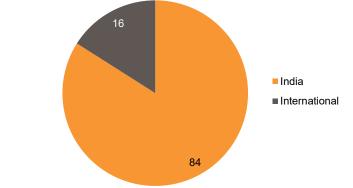


Exhibit 12: Geography-wise revenue breakdown FY21 (%)



Source: Company, Emkay Research

Exhibit 13: Global partnerships playing a key role in providing technology access

Year	Partnership	Classification	Shareholding (%)	Products	Home country	
1995	Table Dila	Subsidiary	51%	Panel and control switches, wheel covers	1	
2008	Tokia Rika	JV	30%	Seat belt, gear shifters, lock sets	Japan	
2010	Roki	JV	49%	Air filters, canisters	Japan	
		JV	18%			
2010	Kosei	Subsidiary	70%	Alloy wheels	Japan	
		Associate	49%	Moulded parts	-	
2010	Emer Westport	JV	49%	CNG & LPG kits	Italy	
2011	Torica	Subsidiary	60%	Raw material trading – Plastic parts	Japan	
2011	Kyoraku, Nagase	Subsidiary	68%	Blow moulding components - Air ducts, spoilers, EA pads	Japan	
2011	Toyoda Gosei	JV	49.9%	Airbags, body sealing, hoses, fuel caps, interior & exterior plastic components (bumpers, instrument panel)	Japan	
2012	Damas Tan	JV (manufacturing)	49%		lanan	
2012	Denso Ten	JV (trading)	51%	Car infotainment systems	Japan	
2012	AMS			Automotive Lamps (Technical Licensing Agreement TLA)	Korea	
2013	Clarton Horn	Subsidiary	100%	Horns (Acquisition)	Spain	
2010	Diadan	Standalone	100%	2W lighting (Acquisition)	Omerin	
2016	Rinder	JV	50%	Lighting (at Columbia plant)	Spain	
2016	Onkyo	JV	50%	Speakers	Japan	
2017	Katolec	Subsidiary	51%	Printed Circuit Boards (PCB) and box build assemblies	Japan	
2017	TTE	JV	50%	Driving Assistance Systems & Products (DAPS)	Taiwan	
2018	Sensata Technologies			Sensors for BS VI application and wheel speed sensors (TLA)	USA	
2018	ISYS RTS	Subsidiary	80%	Embedded Systems - controller units (Acquisition)	Germany	
2019	KPIT	Standalone	100%	Telematics for commercial segment (Acquisition of technical know-how)	India	
2019	Harita Seating Systems	Standalone	100%	Seating Systems for 2W/3W, CV, Tractors, CE	India	
2019	Delvis	Subsidiary	100%	Lighting Solutions – LED lamps (Acquisition)	Germany	
2020	Dayou Global			LPDC alloy wheels (TLA)	Korea	
2021	AMP			Battery Management Systems & EV charging solutions (TLA)	America	
2021	Uz Chasys	Subsidiary	51%	Lighting business (Acquisition)	Uzbekistan	

Investment Summary: Dominant and disruption-proof with a long growth-runway

Minda is a play on premiumization, import substitution, regulatory changes and disruptions such as the penetration of EVs. It has built scale through global tie-ups (JVs) and acquisitions. This has allowed entry into emerging segments/components, increase in content per vehicle and customer additions, resulting in industry-leading revenue CAGR of 20%/21% in the past 5/10 years. EBITDA CAGR was also higher at 25%/24% in the same period.

We expect growth momentum to continue over FY22-24E, with revenue CAGR of 22%, led by: 1) Cyclical upturn in underlying PV (16% CAGR) and 2W (12% CAGR) segments, 2) Increasing content in core businesses such as switches, lightings and acoustics, 3) Improving market presence in alloy wheels, sensors, airbags, controllers and blow molded parts, and 4) Growing content per vehicle led by Electric vehicle penetration.

- In Switches (28% of revenue in FY21), it should benefit from higher CPV due to the shift to premium models and import substitution. It has outpaced the industry volume growth by 11pps in the past five years, and we expect ~4pps outperformance over FY22-24E (revenue CAGR of 17%).
- In Lightings (22% of revenue), it is a play on increasing LED adoption, which is expected to significantly increase from 20-25% in PVs and 40-45% in 2Ws to over 70% in PVs and over 90% in 2Ws in the medium term. Minda has outgrown the industry by 26pps in the past five years, and we expect ~7pps outperformance over FY22-24E (revenue CAGR of 20%).
- In Castings (12% of revenue), it is well-placed to benefit from alloy wheel penetration, which is likely to notably increase from ~50% in PVs and ~70% in 2Ws to over 80% in PVs and over 90% in 2Ws in the medium term. It has outstripped industry growth by 34pps in the past five years, and we expect ~18pps outperformance over FY22-24E (revenue CAGR of 34%).
- In the recently acquired Seating division (10% of revenue), we expect outperformance of ~16pps over FY21-24E (revenue CAGR of 26%), driven by cross-selling efforts, new products and robust exports.
- In Acoustics (10% of revenue), it should benefit from a gradual shift to electronic horns from mechanical ones. It has overtaken industry growth by 5pps in the past five years, and we expect outperformance of ~3pps over FY22-24E (revenue CAGR of 11%).
- In order to tap future revenue opportunities, Minda is focusing on product lines such as Sensors, EV components, Controllers and Blow-molded products. Revenue from these products is expected to see 25% CAGR and reach Rs20.9bn in FY24E, translating to an 18% contribution to total revenues. Minda has an EV-agnostic portfolio and its adoption will be a key growth driver in the long term, with a potential increase in kit value by 4x-6x for 2Ws and 4Ws.

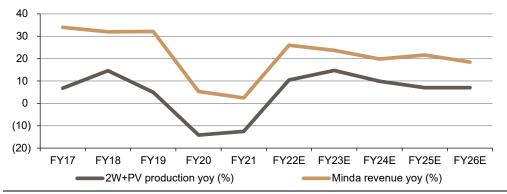
We have built in an earnings CAGR of 50% over FY22-24E. RoIC (post tax) should expand from 10%/14% in FY21/FY22E to 24% in FY24E, driven by improved profitability in both core and emerging segments. After annual capex of Rs6bn in the next three years, average annual FCF is likely to be robust at Rs4.2bn. Net debt-to-equity should improve from 0.2x in FY22E to -0.1x in FY24E, in our view.

We initiate coverage on Minda with a Buy rating and a Sep'22E TP of Rs840, applying 32x P/E on Sep'23E EPS (Rs26.3 per share); this is backed by our DCF model (11.5% WACC, 8.0% terminal growth).

Minda one-year forward P/E stood at 10x in Aug'16 and has witnessed a strong P/E rerating in the past five years and is currently trading at 42x. Average one-year forward P/E during this period was 34x.

Key risks are: include delay in macro/automobile sector recovery, increase in competitive intensity, regulatory changes allowing cheaper imports, supply constraints at company and customer-end, slower premiumization rate and adverse currency rates.

Exhibit 14: Revenue growth outperformance vis-a-vis industry volume growth will likely be driven by higher CPV (premiumization) and market share gains



Note: OEM production is equivalent of sales for Minda. Source: Company, Emkay Research

Exhibit 15: Revenue mix and drivers for medium term (FY21-26E)

	Revenue mix		CAGR for	FY21-26E (%)	
	FY21 (%)	Industry volumes	Content/vehicle	Market share gain	Revenues
<u>2W</u>					
Lighting	6	9	6	2	18
Switching	16	9	3	1	14
Acoustics	2	9	4	0	14
Alloy wheels	1	9	5	35	55
Seating	3	9	5	8	24
Die casting	3	9	3	0	13
Electric vehicles	1	93	(1)	11	112
2W Total	32	9	0	11	24
<u>PV</u>					
Lighting	9	12	6	5	25
Switching	8	12	3	1	17
Acoustics	2	12	4	0	17
Alloy wheels	8	12	6	5	25
Seating (CV, Tractors)	7	7	5	3	16
Sensors	3	12	8	17	42
Blow molding	2	12	5	6	25
Electric vehicles	0	138	(1)		
PV Total	39	12	0	13	27
<u> 2W + PV</u>					
Lighting	15	10	7	4	22
Switching	25	10	4	1	15
Acoustics	3	10	5	0	16
Alloy wheels	10	10	7	10	30
Seating [2W, CV, Tractors]	10	9	4	5	19
Die casting [2W]	3	9	3	0	13
Sensors [PV]	3	12	8	17	42
Blow molding [PV]	2	12	5	6	25
Electric vehicles	1	96	4	13	130
Total 2W + PV	72	10	1	13	26
Exports	16				15
Aftermarket	12				8
Others	2				10
Grand Total / Overall	100				22

Exhibit 16: Key assumptions: Expect robust revenue CAGR of 22% over FY22-24E

										CAGR %	CAGR %		Mix	c (%)	
Revenue (Rs mn)	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY16-21	FY22-24E	FY21	FY22E	FY23E	FY24E
Switches	10,868	11,344	14,750	22,370	20,220	18,680	21,719	25,705	29,553	11%	17%	29	27	26	25
Lighting	4,549	9,583	11,590	12,930	12,570	14,170	19,457	23,716	28,136	26%	20%	22	24	24	24
Acoustics	5,560	6,163	6,710	7,170	6,530	6,340	7,543	8,542	9,312	3%	11%	10	9	9	8
Casting	1,830	3,950	5,850	9,080	7,650	7,480	10,418	14,641	18,690	33%	34%	12	13	15	16
Others	2,466	2,823	5,806	7,531	7,680	10,567	13,379	16,699	20,865	34%	25%	17	17	17	18
Seating					7,570	6,500	7,767	9,983	12,390		26%	10	10	10	10
Total	25,273	33,863	44,706	59,081	62,220	63,737	80,282	99,286	118,495	20%	22%				
yoy (%)	13	34	32	32	5	2	26	24	20	CAGR %	CAGR %				
EBITDA (Rs mn)	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY16-21	FY22-24E	FY21	FY22E	FY23E	FY24E
Switches	978	1,193	1,762	2,814	1,990	2,242	2,715	3,522	4,137	18%	23%	31	28	27	26
Lighting	455	931	1,132	1,320	950	1,275	1,946	2,656	3,236	23%	29%	18	20	20	20
Acoustics	778	636	539	667	470	507	641	829	931	-8%	21%	7	7	6	6
Casting	164	980	1,361	2,118	2,040	1,646	2,240	3,075	3,831		31%	23	23	23	24
Others	104	960	544	334	700	1,158	1,472	2,171	2,817		38%	16	15	17	18
Seating					568	423	582	849	1,115		38%	6	6	7	7
Total	2,376	3,740	5,338	7,252	6,718	7,250	9,596	13,100	16,067	25%	29%				
уоу (%)	54	57	43	36	(7)	8	32	37	23	chg (bps)	chg (bps)				
EBITDA margin (%)	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY16-21	FY22-24E				
Switches	9.0	10.5	11.9	12.6	9.8	12.0	12.5	13.7	14.0	300	150				
Lighting	10.0	9.7	9.8	10.2	7.6	9.0	10.0	11.2	11.5	(100)	150				
Acoustics	14.0	10.3	8.0	9.3	7.2	8.0	8.5	9.7	10.0	(600)	150				
Casting	3.8	14.5	23.3	23.3	26.7	22.0	21.5	21.0	20.5		(100)				
Others	5.0	14.5	9.4	4.4	9.1	11.0	11.0	13.0	13.5		250				
Seating					7.5	6.5	7.5	8.5	9.0		150				
Total	9.4	11.0	11.9	12.3	10.8	11.4	12.0	13.2	13.5	197	156				

Source: Company, Emkay Research

Exhibit 17: Expect robust cash flows over next 10 years; PV of FCFF over FY22-31E at Rs51bn

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E	FY31E	CAGR (%) FY22- 31E
Revenues	63,737	80,282	99,286	118,945	144,644	360,414	18
EBIT	3,909	5,858	8,980	11,528	14,241	34,221	22
NOPAT	2,697	4,218	6,645	8,627	10,652	25,598	22
Minority Interest	(418)	(582)	(853)	(1,066)	(1,317)	(3,165)	21
JV/Associate	242	376	520	674	833	2,001	20
Depreciation	3,753	4,199	4,619	5,067	5,713	13,703	14
WC changes	(3,508)	(112)	(714)	(1,148)	(1,740)	(1,770)	
Capex	(2,991)	(6,000)	(5,000)	(7,000)	(7,912)	(20,435)	15
FCFF	(225)	2,099	5,217	5,153	6,229	15,930	25
PV of FCFF		2,217	4,940	4,377	4,745	6,314	12

Source: Emkay Research

Exhibit 18: DCF implies a target P/E multiple of 32x

Parameter	Value (Rs mn)	Parameter	Value
PV of FCF in Stage 1 (10 years)	50,784	Risk-free rate (Rf)	6.2%
PV of Terminal value	194,747	Equity risk premium (Rm)	5.4%
Enterprise value (Sep'22E)	245,531	Beta	0.98
Net debt adj. for dividends	5,654	Cost of equity	11.6%
Fair value of Equity	239,877	Equity (%)	98.0%
No. of shares (mn)	286	WACC	<u>11.5%</u>
<u>Fair value (Rs/share)</u>	<u>840</u>	Terminal growth rate	<u>8.0%</u>
Sep'23E EPS (Rs/share)	26.3	Implied P/E	<u>32</u>
Source: Emkay Research			

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Switches: Expect robust revenue CAGR at 17%; Outperformance over underlying industry expected at 4pps

In Switches (28% of revenue in FY21), it has leadership position with ~55% share in PVs and ~65% share in 2Ws. The company's JV partner is Tokai Rika, which has \$4.5bn revenues globally and is part of Toyota group. This tie-up has enabled quicker product development and better access to Japanese OEMs. Revenue grew at 11% CAGR over FY16-21, outpacing underlying industry production at -2% for PVs and -1% for 2Ws. Outperformance has been driven by increasing electronic content per vehicle due to focus on comfort/ convenience, customer additions and premiumization in PV/2W industry. Increasing penetration of switches for steering wheels, window-pads, electric start, sunroofs, gear-shift, etc., in PVs and switches for electric start, side stand, engine-kill, brake, hazard, ABS, ignition, USB chargers, etc. in 2Ws, should drive content ahead.

Exhibit 19: Adoption levels can increase, notably driving content per vehicle

Switches - window pad			Switches - Heater control		
Lower mid variant	Penetration	Incl. all variants	Lower mid variant	Penetration	Incl. all variants
PV (entry)	72%	85%	PV (entry)	85%	85%
PV (compact)	96%	96%	PV (compact)	100%	100%
PV (mid-size)	100%	100%	PV (mid-size)	100%	100%
	Switches - Steering		Switcl	nes - Push start stop	
Lower mid variant	Penetration	Incl. all variants	Lower mid variant	Penetration	Incl. all variants
PV (entry)	9%	31%	PV (entry)	0%	7%
PV (compact)	92%	97%	PV (compact)	8%	92%
PV (mid-size)	89%	100%	PV (mid-size)	51%	89%
	Switches - Cruise		Demotion of the second	Electric start codtals	En sins bill suitsk
Lower mid variant	Penetration	Incl. all variants	Penetration	Electric start switch	Engine kill switch
PV (entry)	0%	0%	Scooters	100%	74%
PV (compact)	0%	39%	Motorcycles (<125cc)/Mopeds	36%	36%
PV (mid-size)	65%	89%	Motorcycles (>125cc)	100%	100%

Source: Emkay Research

Exhibit 20: New models are being launched with higher content per vehicle

TVS Ntorq 125 -	hazard switch (non-base variant)
Yamaha Ray/Fa	scino - side stand switch
Bajaj Chetak - e	ectronic switches
TVS Apache RT	R 200 4V - feather touch start, dedicated info switch
TVS Apache RR	310 - dedicated control cubes, hazard switch, side stand switch
TVS Moped BS6	- electric start switch, engine start stop switch
TVS iQube - par	k assist switch, brake switch, hazard switch
RE Himalayan -	ABS switch
RE 650cc twins	day flash switch
Honda XBlade -	hazard switch
Sauraa, Emiliar Da	2007ab

Source: Emkay Research

Exhibit 21: Order wins provide confidence for future outperformance

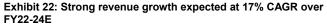
Switches: anti-pinch power window main/sub, power socket, steering wheel, second gear, driver side, power window, sunroof, audio & panel, gear shifters, neutral and side stand parts.

OEMs: Korean (Hyundai), Japanese (Maruti Suzuki, Yamaha), Indian (Royal Enfield), American (John Deere), European (Piaggio) and other Global players.

Markets: India, Russia, Indonesia and Turkey regions.

Source: Company, Emkay Research

In addition, there is potential of import substitution for high-end switches which currently form ~20% of industry requirements. Revenues are expected to see 17% CAGR and reach Rs29.6bn in FY24E. EBITDA margin is expected to expand from 12.5% in FY22E to 14% in FY24E, led by higher scale.



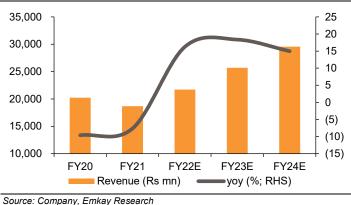
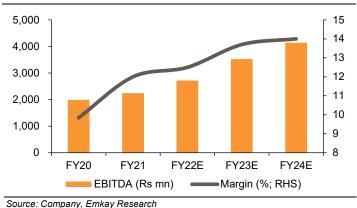


Exhibit 23: EBITDA margin to expand to 14% by FY24E





Switches division is divided into separate companies - Standalone is for 2W/CV switches and Minda Rika is for PV switches. Minda Rika is a JV between with Tokairika, Japan, with Minda shareholding of 51%. Tokai Rika (Toyota is promoter) is a leading manufacturer of Automotive Switches, Locks and Keys, Seatbelts, Shift Levers, Electronic Parts, Steering Wheels, Connectors, Mirrors, Plastic Wheel Covers in Japan, North America, Asia and Europe. Lock sets, Seatbelts and Shift levers are part of separate company Tokiarika Minda, where Minda has 30% shareholding.

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Lighting division: Expect strong revenue CAGR at 20%; Outperformance over underlying industry expected at 7pps

In Lighting (22% of revenue in FY21), it has a market share of ~27% in 2Ws and ~13% in PVs. The company's acquisitions include Rinder (Spain; 2016), Delvis (Germany; 2019) and UzChasys (Uzbekistan; 2021), which have strengthened technological capabilities and provided access to new customers and markets. Revenue grew at 26% CAGR over FY16-21, outpacing underlying industry production at -2% for PVs and -1% for 2Ws. Outperformance has been driven by the adoption of LED lamps, which have 2x-2.5x higher realizations in comparison to halogen lamps.

LED penetration has increased significantly over the last few years. Currently, LED penetration is 20-25% in PVs and 40-45% in 2Ws. Expect LED penetration to further increase to 70% in PVs and 90% in 2Ws over the medium term.

Exhibit 24: Global LED penetration is increasing rapidly



Source: Varroc, Yole, Emkay Research

Exhibit 25: Adoption levels can increase notably driving content per vehicle

LED DRL			LED Headlamp		
Penetration	Lower mid variant	Incl. all variants	Penetration	Lower mid variant	Incl. all variants
PV (entry)	6%	13%	PV (entry)	0%	0%
PV (compact)	26%	81%	PV (compact)	33%	65%
PV (mid-size)	66%	84%	PV (mid-size)	46%	65%
	LED Tail lamp			Projector Headlamp	
Penetration	LED Tail lamp Lower mid variant	Incl. all variants	Penetration	Projector Headlamp Lower mid variant	Incl. all variants
Penetration PV (entry)	•	Incl. all variants 6%	Penetration PV (entry)		Incl. all variants 7%
	Lower mid variant			Lower mid variant	

Penetration	LED DRL	LED Headlamps	LED Tail lamps
Scooters	19%	23%	17%
Motorcycles (<125cc)/Mopeds	10%	0%	0%
Motorcycles (>125cc)	20%	8%	57%

Source: Emkay Research

Exhibit 26: New models having higher LED content

PV Entry models	Hero Xtreme 160R - All LED	
Ignis - LED projector headlamp, LED DRL	Honda XBlade - All LED	
Triber - Projector headlamp, LED DRL	Honda Grazia 125 - LED tail lamp/DRL	
PV Mid-size models	Bajaj CT110 - LED DRL	
Seltos - All LED	Bajaj Pulsar 125 - LED tail lamp	
Hector - All LED	Bajaj Dominar 250 - All LED	
	Bajaj Chetak - LED headlamp/DRL	
	TVS RR 310 - All LED	
	TVS iQube - LED headlamp/Tail lamp	

Source: Emkay Research

New orders of over Rs2bn should also support market share improvement ahead. To meet the strong demand, the company is adding capacity in Gujarat plant at capex of Rs900mn by FY22.

Exhibit 27: Order wins provide confidence of market share gains

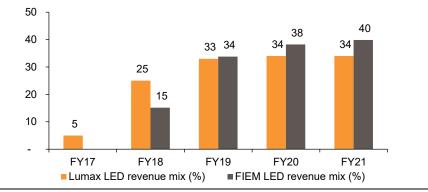
Lighting systems: LED lamps.

OEMs: European (Daimler, Audi, Renault), Japanese (Yamaha, Honda 2W, Maruti Suzuki, Toyota) and Indian (Royal Enfield, TVS Motors, Bajaj Auto) players.

Markets: India and Europe regions.

Source: Company, Emkay Research

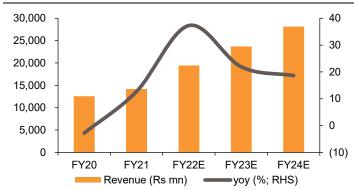
Exhibit 28: LED penetration trend has increased sharply over FY17-21 for peers as well



Source: Lumax Industries, FIEM Industries, Emkay Research

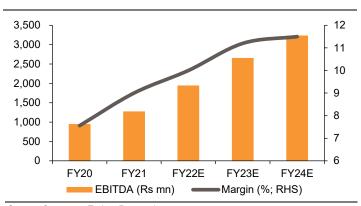
Revenues are expected to grow by 20% CAGR to Rs28.1bn in FY24E. EBITDA margin is expected to expand from 10% in FY22E to 11.5% in FY24E, led by higher scale.

Exhibit 29: Strong revenue growth expected at 20% CAGR over FY22-24E



Source: Company, Emkay Research

Exhibit 30: EBITDA margin to expand to 11.5% by FY24E



Source: Company, Emkay Research

Minda acquired Rinder in 2016, which provided a wide portfolio of LED offerings and new customers in 2Ws and PVs. Delvis' acquisition in 2019 provided solutions for exterior and interior lighting, lighting electronics and testing services. Products included premium interior lighting such as overhead control units, ambient lighting, indicator lighting, locator lighting and LED backlights, and in exterior lighting it offers product from basic headlights up to adaptive LED headlight systems. Delvis' FY21 revenue stood at Rs2.2bn and major customers include Volkswagen, Audi, Bugatti and Mercedes. The company has recently acquired a 51% shareholding in UzChasys, which manufactures automobile headlights and lamps. UzChasys is a leading OEM supplier in Uzbekistan and Central Asia. The acquisition would enable Minda's expansion in Central Asian markets. In CY20, revenue stood at Rs2bn. On backward integration, Minda Katolec Electronic Services has been supplying PCB components for LED lights. Components worth Rs527mn were sourced in FY21.

Casting division: Expect robust revenue CAGR at 34%; Outperformance over underlying industry expected at 18pps

In Castings (12% of revenue in FY21), it offers aluminum alloy wheels (AW) and die-cast components. It has a market share of ~45% in PV alloy wheels (AW) installed capacity in India. The company's JV partner is Kosei, which produces 6.6mn wheels annually. Revenue grew at 33% CAGR over FY16-21, outpacing underlying industry production at -2% for PVs and -1% for 2Ws.

AW revenue is expected to see 39% CAGR over FY22-24E from Rs8.1bn in FY22E to Rs15.6bn in FY24E against the industry growth of 16% in PVs and 12% in 2Ws. Outperformance is expected due to increased penetration and import substitution. PV AW annual demand stands at 8-9mn wheels with imports share at ~40%. 2W alloy wheel demand stands at 30-35mn wheels with imports share of ~60%. Import substitution will be a major growth driver, and it reduces the forex risk, lowers working capital needs and provides supply stability for OEMs. In addition, this trend is being supported by anti-dumping duties, which is currently up to 20%. AW penetration in PVs stands at ~40%, which is expected to increase to 80% over the medium term, on better mix of premium variants and models. Further, the company has launched AW in aftermarket, where market size stands at 0.5mn units and customers are shifting from steel wheels to aluminum alloy wheels. In 2Ws, penetration is at ~70%, which is likely to increase to over 90% in the medium term.

Exhibit 31: Adoption levels can increase notably driving content per vehicle

	PV AW		2W AW	Steel	Alloys
Penetration	Lower mid variant	Incl. all variants	Scooters	83%	17%
PV (entry)	-	17%	Motorcycles (<125cc)	30%	70%
PV (compact)	-	96%	Motorcycles (>125cc)	25%	75%
PV (mid-size)	65%	100%			

Source: Emkay Research

Exhibit 32: Order wins provide confidence of future outperformance

Castings: LPDC wheel and die casting parts (BS6 application).

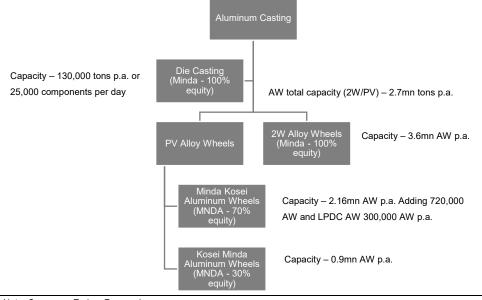
OEMs: Korean (Hyundai, Kia), Japanese (Maruti Suzuki) and Indian (Mahindra) players.

Markets: India and Global regions.

Source: Company, Emkay Research

PV's AW revenue is expected to grow by 35% CAGR from Rs5.6bn in FY22E to Rs10.1bn in FY24E. It is expanding annual capacity in Haryana plant by 720,000 wheels p.a. at capex of Rs1.7bn by FY22. It is also setting up a Low Pressure Die Casting (LPDC) plant with annual capacity of 300,000 wheels by FY22. It has technology licensing agreement with Dayou Global, Korea for manufacturing these LPDC alloy wheels with objective of catering to Korean/ western OEMs. Over 240,000 wheels per annum is booked by two Korean OEMs. Considering orders from Bajaj Auto, Minda has also entered into 2W segment by setting up a new plant with an annual capacity of 3.6mn wheels. 2W's AW revenue is expected to grow by 48% CAGR from Rs2.5bn in FY22E to Rs5.5bn by FY24E.

Exhibit 33: Aluminum casting division (Structure and Capacities)



Note: Company, Emkay Research

Exhibit 34: Minda has been more aggressive than peers in building capacities in PVs and 2Ws

Company	(mn wheels p.a.)	Company	(mn wheels p.a.)
Minda Kosei	2.7	Rockman	12
Maxion Wheels	2	Minda Industries	3.6
Steel Strip Wheels	1.5	Rico Jinfei	3
Enkei	1.1	Endurance	2.4
Rockman	1.0	Enkei	1.4
Kosei Minda	0.9		
Neo Wheels	0.3		

Source: Media, Emkay Research

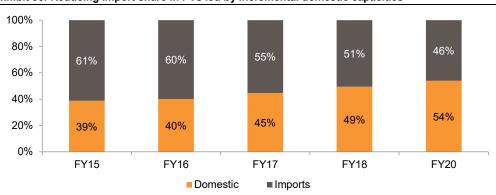
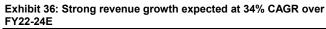


Exhibit 35: Reducing import share in PVs led by incremental domestic capacities

Source: DGTR, Company, Emkay Research

Die casting revenue is expected to grow in line with Automobile production in the near term, at a 15% CAGR to Rs3.1bn in FY24E. It supplies components such as engine cover for TVS Motors as well as Honda 2Ws, and braking components to Wabco. In the long term, EV penetration is expected to drive growth as the aluminum content is expected to increase drastically for 2Ws/PVs/CVs from 3/39/43kgs/vehicle in ICEs to 16/91/158kgs/vehicle in EVs due to the shift in structural parts to aluminum from steel.

Revenues are expected to grow by 34% CAGR to Rs18.7bn in FY24E. EBITDA margin is expected to contract from 21.5% in FY22E to 20.5% in FY24E, despite higher scale, owing to increasing share of 2W AW.



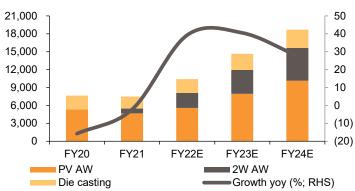
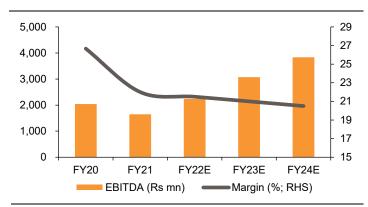
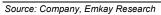


Exhibit 37: EBITDA margin to remain over 20% by FY24E

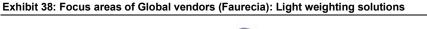




Seating: Expect robust revenue CAGR at 26%; Outperformance over underlying industry expected at 16pps

Seating division has been a new addition with the acquisition of Harita Seating Systems. Minda is also acquiring the remaining 49% stake for Rs1.15bn from the existing JV partner FS Fehrer, which caters to 2W segment. In seating division, it has a dominant market share of ~53% in the MHCV cargo segment, while it has a healthy presence with ~33% in Tractors, ~16% in 2Ws, ~15% in Buses and ~13% in 3Ws.

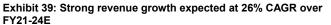
Minda expects to double revenues from Rs7.5bn in FY20 to Rs15bn in FY25, driven by crossselling initiatives, new products and increase in exports to ASEAN countries, leveraging Minda's customer base and network. It recently won an export order of Rs750mn per annum from a European and American CV customer. New product realizations are higher for due to efforts toward light weighting, comfort solutions and electronic solutions. It has already secured businesses from Japanese OEMs.





Source: Faurecia, Emkay Research

Revenues are expected to grow by 26% CAGR to Rs12.4bn in FY24E. EBITDA margin is expected to expand from 7.5% in FY22E to 9% in FY24E, driven by higher scale.



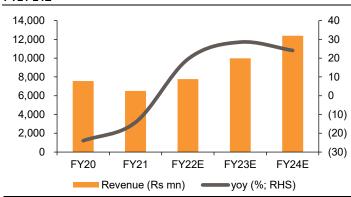
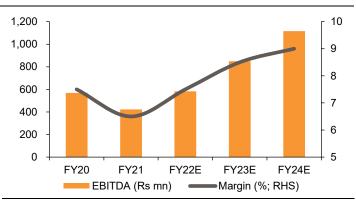


Exhibit 40: EBITDA margin to expand to 9% by FY24E



Source: Company, Emkay Research

Acoustics: Expect robust revenue CAGR at 11%; Outperformance over underlying industry expected at 3pps

In Acoustics (10% of revenue in FY21), it has a dominant market share of ~47% in 2Ws and ~40% in PVs. With the acquisition of Clarton Horns in 2013, it has become the second-largest global player with an annual capacity of 36mn units. Clarton has a wide product portfolio, including trumpet, disc and electronic horns, which will be introduced in Indian markets over the medium term. Clarton currently caters to European OEMs including BMW, Volkswagen, Hyundai, Daimler, PSA-Peugeot and Renault.

Revenues saw 3% CAGR over FY16-21, outpacing underlying industry production at -1%/-2% in 2Ws/PVs and -3% in Europe PV due to the adoption of electronic horns and a healthy orderbook.

Dual Horn	
Lower mid variant	Penetration
PV (entry)	0%
PV (compact)	32%
PV (mid-size)	30%
Source: Emkay Research	

Exhibit 42: Order wins to support future outperformance

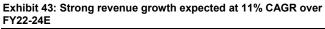
Products: Electronic horn

OEMs: Japanese, American (Ford), Korean (Kia, Hyundai), European (FCA) and Indian (Mahindra, Tata Motors) players.

Markets: Japan, America, Korea, Europe and India regions.

Source: Company, Emkay Research

Revenues are expected to grow by 11% CAGR to Rs9.3bn in FY24E. EBITDA margin is expected to expand from 8.5% in FY22E to 10% in FY24E, led by higher scale.



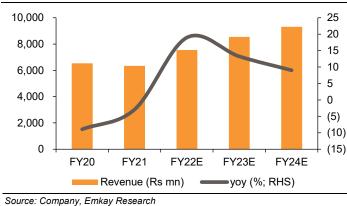
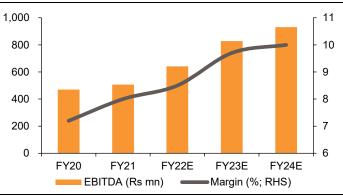


Exhibit 44: EBITDA margin to expand to 10% by FY24E



Source: Company, Emkay Research

Nascent segments: Expect robust revenue CAGR at 25%; Outperformance over underlying industry expected at 11pps

Nascent product lines with large future potential include Sensors, EV components, Controllers and Blow-molded products, among others. Revenues are expected to grow by 25% CAGR to Rs20.9bn in FY24E. EBITDA margin is expected to expand from 11% in FY22E to 13.5% in FY24E, driven by higher scale.

Exhibit 45: Strong revenue growth expected at 25% CAGR over FY22-24E

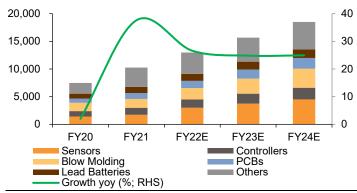
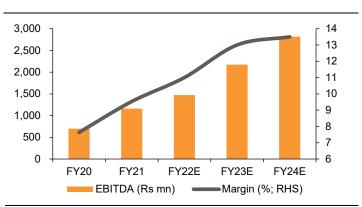


Exhibit 46: EBITDA margin to expand to 13.5% by FY24E



Source: Company, Emkay Research

Sensor revenues are expected to increase notably due to regulatory changes, import substitution and increasing electronic content. BS6 emission norms have increased the requirement of sensors in powertrain management and emission control systems. Minda has a technology licensing agreement with Sensata Technologies (USA) for the distribution and manufacturing of sensors. It has acquired magnetic speed and position sensor (Cam & Crank and TISS sensors products) from Sensata, which has applications in BS6 products. It also acquired wheel speed sensor machinery from Sensata's Chinese subsidiaries for India and South Korea markets.

Currently, most of the sensors procured by domestic automobile industry are imported. Minda has recently opened a new plant for sensors with an investment of Rs1.3bn in the initial phase, with further increase to Rs2.75bn as it adds more products.

Exhibit 47: Size of Sensors	market: Offers large	e potential for ancillarie	s like Minda
	manitori entere large		o milo miliaa

Key sensors	Industry size	Industry volume	Per unit
,	(Rs mn)	(mn units)	(Rs)
Oxygen	38,790	9.24	4,198
Air mass flow (HFM)	6,040	4.03	1,499
Crank position	5,030	5.03	1,000
Cam	5,030	5.03	1,000
Parking	4,310	14.36	300
Temperature manifold absolute pressure	2,620	4.03	650
Fuel level	2,520	5.03	501
Accelerator pedal /Throttle position	2,370	4.74	500
Ambient temperature	1,610	3.22	500
Coolant temp	1,510	5.03	300
Vehicle speed	1,510	5.03	300
Wheel speed	1,320	3.31	399
Air pressure	940	2.34	402
Tyre pressure monitoring system	850	1.7	500
Total	74,450	72	1,032

Note: Based on 2015 study for 2020. Source: ACMA, Emkay Research

EV adoption will further increase content/vehicle of sensors by ~20% as per Sensata. In E-2Ws, addressable content per vehicle will be at 3-4x higher than ICEs for Minda. New products include accelerator position sensor, brake pedal sensor for regenerative braking, battery temperature sensors, vacuum sensors for braking system, start stop sensors, contact/ non-contact speed

Source: Company, Emkay Research

sensors, HID ballast sensors, tyre pressure monitoring system, electronic accelerator pedal module, DC-DC converter, smart plugs, telematics, on board charger, body control module, battery management system and motor controller.

Exhibit 48: Electric vehicle adop	tion to drive higher sensor	content per vehicle by 20%

ICE specific (~\$20)	Powertrain agnostic (~\$20)	EV specific (~\$30)
Engine pressure applications	Tire pressure	Thermal management pressure + temperature
Transmission speed & position	A/C pressure	Electromechanical brake pressure
Exhaust pressure & temperature	Electronic stability control brake pressure	Battery pressure
		E-motor position
		Fuses
		Contactors

Source: Sensata Technologies, Emkay Research

Exhibit 49: Addressable content per vehicle in E-2Ws at 3-4x higher than ICEs for Minda; Recently Body Control Module has been brought under production

Potential EV KIT Value - 2W	(Rs)
Existing Product which can be fitted in EV	7,300
Positive Impact on LED Lamps & Sensors	2,000
Product under Production - Smart Plug, Telematics	4,500
Product Under Development - On board charger, DC-DC Converter, Body Control Module, Battery Management System	12,500
Product Under Study - Motor Controller	7,500
Total	33,300

Source: Sensata Technologies, Emkay Research

Exhibit 50: EV agnostic product portfolio. Negative impact would be less than 10% of PAT as of FY21

Domains	Product Lines	BS VI	EV
	4W Switches & HVAC	~	~
	Charging Sockets	~	~
	Sensors	~	<
	Actuators	~	~
Iectronic & Control Systes4W Switches & HVAC Charging Sockets Sensors Actuators Controllers Seat Belts Shifters Infotainment Systems Cameras Telematics & TCU RPAS & ADASSafety & Comfort SystemsSteering Wheel with Airbags Body Sealing EA PadSafety & Comfort SystemsSteering Wheel with Airbags Body Sealing EA PadLighting & AccousticsAlternate Fuel SystemsLighting & AccousticsAlternate Fuel Systems	~	~	
	Seat Belts	~	~
Systes	Shifters	~	~
	Infotainment Systems	~	~
	Cameras	~	~
	Telematics & TCU	~	~
	RPAS & ADAS	~	~
	Steering Wheel with Airbags	~	~
	Body Sealing	~	~
	EA Pad	~	~
Safety & Comfort	Charging SocketsSensorsActuatorsControllersSystesShiftersInfotainment SystemsCamerasTelematics & TCURPAS & ADASSteering Wheel with AirbagsBody SealingEA PadAir Ducts & Washer BottleSpoilerBrake HosesFuel HosesSeatsAlternate Fuel SystemsLighting & AccousticsLighting & Accoustics	~	~
Systems	Spoiler	~	~
	Brake Hoses	~	~
		~	×
	Seats	vitches & HVAC ✓ ing Sockets ✓ rs ✓ tors ✓ oblers ✓ elts ✓ rs ✓ inment Systems ✓ ras ✓ atics & TCU ✓ & ADAS ✓ ng Wheel with Airbags ✓ Sealing ✓ d ✓ tcts & Washer Bottle ✓ r ✓ Hoses ✓ loses ✓ ers ✓ Wheels ✓ g ✓ ers ✓ wheels ✓ g ✓ ers ✓	~
	Alternate Fuel Systems	~	×
Lighting &	Horns	~	~
Accoustics	Lamps	~	~
	Speakers	~	~
	Alloy Wheels	·····	~
Light Metal & Power	Casting		~
Train	Air Filteration Systems	(1) ✓	×
		····	×
Battery	Batteries - Lead Acid	~	Δ

Exhibit 51: New orders provide revenue visibility

Products: Sensor (wheel speed, temperature), Controllers (wireless chargers), Blow molding and Electric vehicles (smart plugs, DC-DC convertor).

OEMs: Korean, Japanese (Maruti Suzuki, Yamaha) and Indian (TVS Motors) players.

Markets: Korea and India regions.

Source: Company, Emkay Research

Exhibit 52: EV penetration: expect increased penetration across segments over FY25 and FY30

Penetration (%)		Base	case	Bull	case
	FY20	FY25E	FY30E	FY25E	FY30E
2W	0.9	12	35	16	40
3W	29	35	60	40	70
PV	0.2	6	20	10	35
Buses	6.4	10	20	20	45

Source: Emkay Research

Future disruptions such as autonomous vehicles can further increase potential opportunity for sensors.

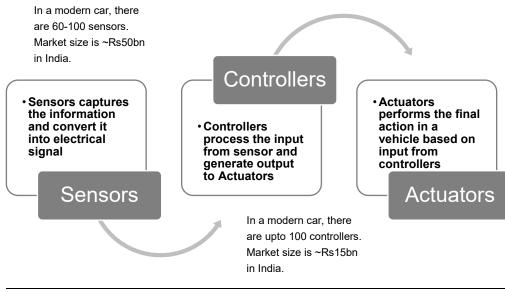
Exhibit 53: Globally automotive sensors to grow strongly led by Autonomous Driving Assistance Systems

Sensors (US\$ bn)	2020	2025	2030	CAGR (2020-30)
Body	2	2	3	4%
Chassis	5	7	8	5%
Powertrain	10	9	9	-1%
Autonomous driving based sensors	13	25	43	13%
Total	30	43	63	8%
Automobile sales (US\$ bn)	2,755	3,027	3,800	3%

Source: Mckinsey & Company, Emkay Research

Controller business is expected to surge due to Telematics, which Minda acquired from KPIT. Telematics product demand is being driven by implementation of AIS-140 standards, which are mandatory for buses and taxis. Also, Minda acquired iSYS RTS, Germany, which has technology for high-end controller products like body control (door closure, gate closure, pinch technology on the gate side), infotainment controllers and lighting controls. It has also invested Rs765mn for a new controller and telematics plant in Maharashtra. PV telematics unit iConnect is expected to be merged by FY22, which will further widen the portfolio.

Exhibit 54: SAC: Sensor market size at Rs50bn and Controller market size at Rs15bn



Source: Emkay Research

Exhibit 55: Adoption of Telematics still at nascent levels

Connectivity Apps (Telematics)					
Lower mid variant	Penetration	Incl all variants			
PV (entry)	-	3			
PV (compact)	-	28			
PV (mid-size)	30	66			

Source: Emkay Research

Exhibit 56: Increase of Electronic content to drive demand for SAC products

Technology	Segment	Controllers (Content share)	Sensors (Content share)	Actuators (Content share)
Reverse parking guide	PV, CV	Controllers (20%)	Ultrasonic sensor (20%)	Display/Cameras (25%)
Anti-lock braking system	2W, PV, CV	ECU (40%)	40%) Wheel speed sensors (30%)	
Body control module	PV, CV	100%		
Immobilizers	2W, PV, CV	RF based controller, Transponder based controller (100%)		
Tyre pressure monitoring system	2W, PV, CV	Controller (40%)	Tire pressure sensor (30%)	Display unit (30%)
Airbag electronics	PV, CV	Airbag control unit (45%)	Crash sensors (15%)	
LED based headlamps	2W, PV, CV	Head lamp levelling motors		
Fully automatic temperature control	PV, CV	Controller (50%)	Sensors (50%)	
Electric power steering	PV, CV	ECU (40%)	Torque and angle sensor (15%)	
Automatic transmission	2W, PV, CV	Transmission control unit	4 position sensor, 4 speed sensor, temperature sensor, 2 pressure sensor	11 Actuator solenoids
Electronic stability program	PV	Hydraulic control unit with integrated electronic controller	Steering wheel angle, yaw- rate, lateral acceleration, 4 wheel speed, 2 pressure transducer	
Advance driver assistance system	2W, PV, CV		Road condition sensors	
Powertrain management	PV, CV	Dosing control unit	Urea level, urea quality	EGR - solenoid
Emission control systems	2W, PV, CV	Dosing control unit	Urea level, urea quality	EGR - solenoid

Source: ACMA, Emkay Research

Exhibit 57: Globally automotive electronic market is expected to increase from USD238bn in 2020 to USD469bn by 2030

Automotive Electronic (USD bn)	2020	2025	2030	CAGR (2020-30)
Software	20	37	50	10%
Testing	13	25	34	10%
Controllers	92	129	156	5%
Sensors	30	44	63	8%
Power electronics	20	50	81	15%
Others (harnesses, control, switches, displays)	63	76	85	3%
Total	238	361	469	7%
Automobile sales (USD bn)	2,755	3,027	3,800	3%

Source: Mckinsey & Company, Emkay Research

Automotive blow-molded products such as Roof duct, IP duct, spoilers, washer bottles, washer tank system, deck board and energy absorber pad are seeing good traction. Minda has a partnership (JV) with Kyoraku and Nagase, Japan, which have global revenues of USD500mn. Minda is setting a new plant in Bangalore at a capex of Rs870mn for enhancement of capacity and in-house paint shop to cater orders from MSIL and other Japanese OEMs.

Exhibit 58: Adoption of Blow-molded parts is expected to increase

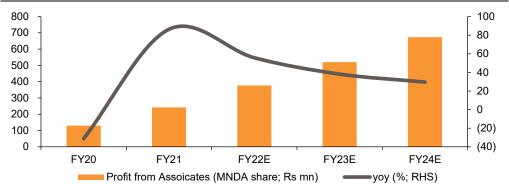
Rear AC	
Lower mid variant	Penetration
PV (entry)	11%
PV (compact)	48%
PV (mid-size)	65%
Rear Spoiler	
Lower mid variant	Penetration
PV (entry)	9%
PV (compact)	11%
PV (mid-size)	64%
Source: Emkay Research	

Source: Emkay Research

Share of profits from associates to surge to Rs674mn in FY24E, contributing 8% of PAT

We expect profit from associates to grow at a CAGR of 34% to Rs674mn, driven by growth in underlying auto industry, increase in content per vehicle and healthy order-book.

Exhibit 59: Expect share of profits from associates to surge due to cyclical upturn, increasing content per vehicle, healthy order-book



Source: Company, Emkay Research

In Roki Minda JV, Minda has a 49% holding and products include air filtration systems and canisters for 2W, 3W and PV segments and this entity is the 2nd largest player in domestic market. Roki has global revenues of \$500mn.

In Denso Ten Minda JV, Minda has 49% holding and focus in on infotainment products such as audio visual navigation, display audio, CD tuner, rear view camera, speakers and antenna amplifier. Denso Ten (Formerly known as Fujitsu Ten) has global revenues of \$3bn.

Exhibit 60: Infotainment penetration has scope to increase ahead

Audio Infotainment			Touch s	creen Infotainment	
Lower mid variant	Penetration	Incl. all variants	Lower mid variant	Penetration Incl. all	variants
PV (entry)	40%	85%	PV (entry)	0%	57%
PV (compact)	96%	96%	PV (compact)	6%	96%
PV (mid-size)	100%	100%	PV (mid-size)	81%	100%

Source: Emkay Research

In Toyoda Gosei Minda JV, Minda has 49.9% holding and products include airbags, fuel caps and weather-strip sealing parts. Toyoda Gosei has global revenues of \$7bn. The company will be merging Minda TG Rubber, manufacturer of automotive hoses (fuel and brake) into Toyoda Gosei Minda. It has also acquired 95% shareholding in TG South from TG Japan in Sep'20, manufacturer of interior (instrument cluster, door pads) and exterior (bumper) plastic molded components. Mandatory co-driver airbag regulation is being implemented from Dec'21, which would add incremental Rs500mn revenues per year.

Exhibit 61: Airbag penetration to increase ahead due to regulatory changes

Driver Airbag			ſ	Dual Airbag	
Lower mid variant	Penetration	Incl. all variants	Lower mid variant	Penetration	Incl. all variants
PV (entry)	100%	100%	PV (entry)	13%	85%
PV (compact)	100%	100%	PV (compact)	96%	96%
PV (mid-size)	100%	100%	PV (mid-size)	100%	100%
Dua	I+Side Airbag	I			
Lower mid variant	Penetration	Incl. all variants			
PV (entry)	0%	4%			
PV (compact)	0%	21%			
PV (mid-size)	45%	81%			

Source: Emkay Research

Kosei Minda Aluminum is a JV, where Minda has 18% holding, manufacturing aluminum alloy wheels and die casting parts. Kosei produces 6.6mn wheels annually. JV has annual capacity of 900,000 aluminum wheels and caters to PV segment.

Minda Onkyo is a JV, in which Minda has 50% holding, and products include speakers and related audio parts. Onkyo has global revenues of \$84mn.

Tokiarika Minda is a JV, where Minda has 30% holding and products include seat belts, gear shifters and lock sets. Tokai Rika has global revenues of \$4.5bn.

Robust earnings growth and free cash-flow generation over FY22-24E

We build in revenue and earnings CAGRs of 22% and 50% over FY22-24E, respectively. Driven by earnings growth, we expect ROE (pre-tax) to increase from 14% in FY22E to 20% in FY24E. Over FY21-24E, average FCF is expected be healthy at Rs4.2bn. Net debt-to-equity is expected to improve from 0.2x in FY22E to -0.1x in FY24E on strong FCF generation.

FY22 capex is expected at Rs6bn, which includes Rs3.5bn for project capex (Alloy wheel, Lighting and Blow-molding capacity expansion) and Rs2.5bn for maintenance capex (includes brownfield expansions).

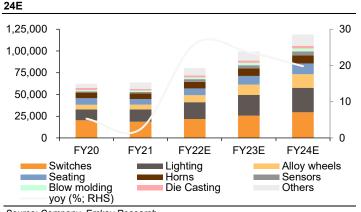
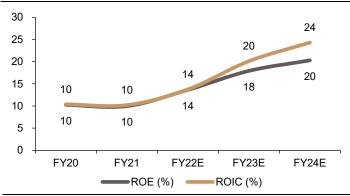


Exhibit 62: Expect robust revenue growth at 22% CAGR over FY22-

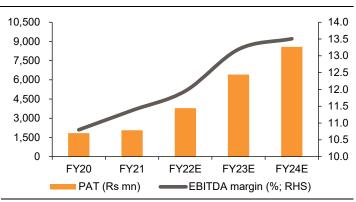
Source: Company, Emkay Research

Exhibit 64: Return ratios to expand notably on higher margins and asset turnover



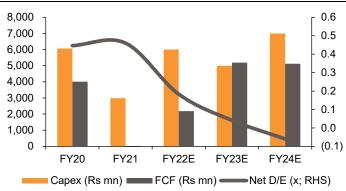
Source: Company, Emkay Research.

Exhibit 63: Expect higher earnings CAGR at 50% over FY22-24E



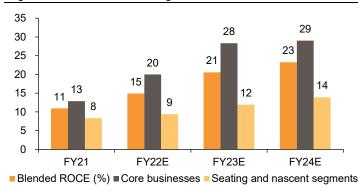
Source: Company, Emkay Research

Exhibit 65: Strong FCF generation expected to drive net debt reduction



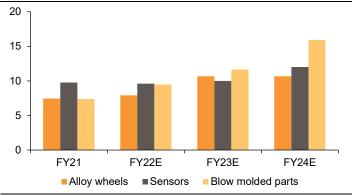
ROCE (pre-tax) is likely to expand from 15% in FY22E to 23% in FY24E, led by improvement in both core and nascent segments. Recently acquired seating business and nascent segments such as Alloy wheels, sensors and blow-molded parts are likely to see an improvement due to margin expansion and better asset turnover (owing to healthy order-book and pickup in underlying segments).

Exhibit 66: Expect ROCE (pre-tax) to expand to 23% in FY24E, led by improvement in core businesses, recently acquired seating segments and other nascent segments



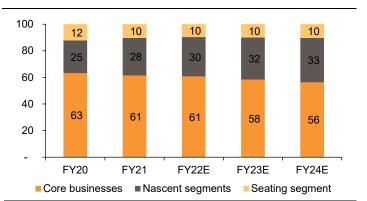
Source: Company, Emkay Research

Exhibit 68: Expanding ROCE for nascent segments (%)

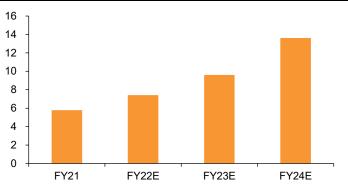


Source: Company, Emkay Research

Exhibit 67: Increasing share of nascent segments (Alloy wheels, sensors, blow-molded parts, etc.) in overall revenues (%)







Source: Company, Emkay Research

We recommend Buy with a Sep'22 TP of Rs840

Minda is a play on premiumization, import substitution, regulatory changes and disruptions such as Electric vehicles, with industry beating performance in past 5/10 years, and we expect this outperformance to continue.

We recommend Buy with a Sep'22E TP of Rs840, applying 32x P/E, backed by a DCF model. It has witnessed a strong re-rating over the past five years, and average one-year forward P/E during this period stands at 34x. Key risks include delay in macro/automobile sector recovery, increase in competitive intensity, regulatory changes allowing cheaper imports, supply constraints at the company and customer-end, slower premiumization rate and adverse currency rates.

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E	FY31E	CAGR (%) FY22- 31E
Revenues	63,737	80,282	99,286	118,945	144,644	360,414	18
EBIT	3,909	5,858	8,980	11,528	14,241	34,221	22
NOPAT	2,697	4,218	6,645	8,627	10,652	25,598	22
Minority Interest	(418)	(582)	(853)	(1,066)	(1,317)	(3,165)	21
JV/Associate	242	376	520	674	833	2,001	20
Depreciation	3,753	4,199	4,619	5,067	5,713	13,703	14
WC changes	(3,508)	(112)	(714)	(1,148)	(1,740)	(1,770)	
Capex	(2,991)	(6,000)	(5,000)	(7,000)	(7,912)	(20,435)	15
FCFF	(225)	2,099	5,217	5,153	6,229	15,930	25
PV of FCFF		2,217	4,940	4,377	4,745	6,314	12

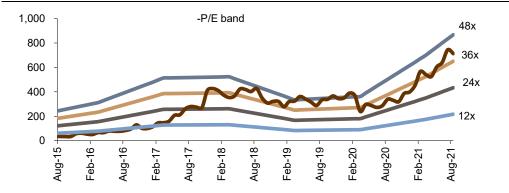
Source: Emkay Research

Exhibit 71: DCF implies a target P/E multiple of 32x

Parameter	Value (Rs mn)	Parameter	Value
PV of FCF in Stage 1 (10 years)	50,784	Risk-free rate (Rf)	6.2%
PV of Terminal value	194,747	Equity risk premium (Rm)	5.4%
Enterprise value (Sep'22E)	245,531	Beta	0.98
Net debt adj. for dividends	5,654	Cost of equity	11.6%
Fair value of Equity	239,877	Equity (%)	98.0%
No. of shares (mn)	286	WACC	<u>11.5%</u>
<u>Fair value (Rs/share)</u>	<u>840</u>	Terminal growth rate	<u>8.0%</u>
Sep'23E EPS (Rs/share)	26.3	Implied P/E	<u>32</u>
Source: Emkou Pesearch			

Source: Emkay Research





Upside risks to our estimates and fair value

Minda is beneficiary of Electric Vehicle penetration, as addressable content in E-2W is higher by 3-4x than ICEs. Similarly, Minda would benefit from penetration of electric vehicle in the PV segment. We have factored 50%/75% of the potential EV revenues from PV/2W segments in our estimates, which indicates scope for upside potential versus our TP.

Exhibit 73: Incremental kit value from E-2W; Recently Body Control Module have been brought under production

		State of evolution							
2W products	Incremental kit value (Rs)	Under production	Under development	Under study	Technology tie-up				
Smart Plug	4,500	Yes							
Telematics	4,500	Yes							
Body Control Module	4,000	Yes							
On-board chargers			Yes						
DC-DC Converter	8,500		Yes						
Battery Management System			Yes		Yes				
Motor Controller	7,500			Yes	1				
Total	24,500								

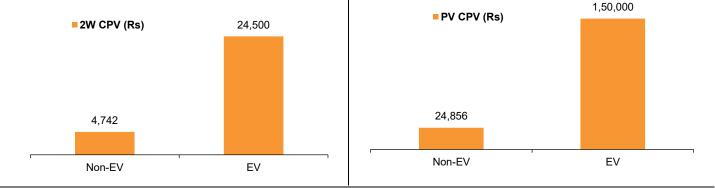
Source: Company, Emkay Research

Exhibit 74: Incremental revenues CAGR of 3% expected from EV products over FY21-26E

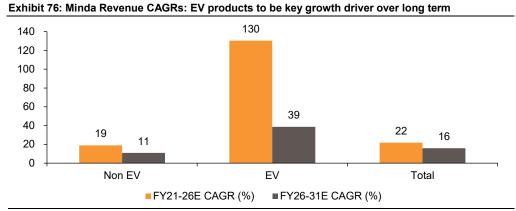
(Rs bn)	FY26E	FY31E
Overall revenues	171	358
Non EV revenues	151	253
EV incremental revenues	20	105
2W	13	56
PV	7	49
	FY21-26E	FY21-31E
Overall revenue CAGR (%)	21.9	18.8
Revenue CAGR ex-EV	18.9	14.8
Contribution of EV to revenue CAGR (%)	2.9	4.0
	FY26E	FY31E
Contribution of EV to revenues (%)	11.9	29.3
Source: Emkay Research		

Source: Emkay Research

Exhibit 75: Content per vehicle potential to expand by 4x-6x for 2Ws and PVs led by EV adoption



Note: Not included Associate companies CPV. Source: Emkay Research



Source: Emkay Research

Minda is also exploring future potential areas led by driver of change such as **connected vehicles**, **comfort & convenience**, **safety & security**, **shared mobility and regulations**. Minda could also benefit from localization initiative by OEMs, supported by incentives from PLI scheme. Minda could route the opportunity through technology tie-ups, JV or acquisition.

Emkay Research is also available on www.emkayglobal.com and Bloomberg EMKAY<GO>. Please refer to the last page of the report on Restrictions on Distribution. In Singapore, this research report or research analyses may only be distributed to Institutional Investors, Expert Investors or Accredited Investors as defined in the Securities and Futures Act, Chapter 289 of Singapore.

Exhibit 77: Peer valuation: Minda is attractively valued on growth-adjusted P/E vs. peers like Endurance and Sona Comstar

	Мсар	Мсар	040	Target		P/E		EPS CAGR (%)		ROE (%))	PEG ratio (x)
Company	(Rs bn)	(US\$ bn)	CMP (Rs/share)	price (Rs/share)	FY22E	FY23E	FY24E	FY22-24E	FY22E	FY23E	FY24E	
Consensus estimates												
Mahindra CIE (NC)	91	1.2	241		31.2	15.2	13.3	53	8.1	11.1	11.7	0.6
SKF India (NC)	152	2.0	3,079		39.5	32.8	28.3	18	22.1	22.5	22.8	2.2
Timken India (NC)	125	1.7	1,661		54.0	38.9	32.8	28	15.8	19.3	20.3	1.9
Sundaram Fasteners (NC)	167	2.2	796		31.4	24.2	19.9	26	20.7	22.4	22.7	1.2
Wabco India (NC)	133	1.8	6,987		62.2	36.2	30.6	43	10.1	15.3	16.0	1.5
Bosch India (NC)	409	5.5	13,859		32.1	25.3	29.2	5	14.0	15.4	11.9	6.5
Fiem Industries (NC)	14	0.2	1,042		17.6	13.2			13.2	15.9		
Jamna Auto (NC)	36	0.5	90		29.9	20.7	15.6	38	19.3	24.2	28.0	0.8
Lumax Industries (NC)	13	0.2	1,444		21.9	12.7	12.8	31	12.7	19.2	17.8	0.7
Suprajit Industries (NC)	45	0.6	324		25.3	19.2	16.3	25	17.1	19.5	19.6	1.0
Minda Corporation (NC)	29	0.4	120		17.6	12.1	9.9	33	13.3	16.5	17.7	0.5
Endurance Technologies (NC)	234	3.1	1,663		34.6	27.3	25.2	17	17.2	18.9	17.7	2.0
Ramkrishna Forgings (NC)	32	0.4	990		19.6	14.9	12.8	23	17.1	19.1	18.5	0.8
Sona BLW Forging (NC)	263	3.5	1,365		40.6	31.2	24.6	29	26.4	28.0	27.6	1.4
Emkay estimates												
Minda Industries	202	2.7	707	840	53.3	31.5	23.5	50	13.6	17.9	20.3	1.1
Amara Raja Batteries	119	1.6	699	830	16.6	13.5	11.9	18	16.2	17.6	17.7	0.9
Apollo Tyres	135	1.8	213	305	15.9	11.6	9.5	29	7.2	9.3	10.5	0.6
Exide Industries	137	1.8	161	200	15.9	13.6	11.9	15	12.1	13.0	13.6	1.1
Motherson Sumi	690	9.3	219	300	26.7	18.5	15.3	32	22.5	27.2	27.4	0.8
Bharat Forge	357	4.8	767	920	38.0	25.5	21.4	33	15.0	19.9	20.4	1.2
Average					31.2	21.9	19.2	29	15.7	18.6	19.1	1.4

Note: PEG ratio = FY22E P/E/EPS CAGR (FY22-24E). Source: Bloomberg, Company, Emkay Research

Exhibit 78: Comparison with segment rivals: Revenue outperformance across most s	egments
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0	FY17-20)	
Segments	Revenue CAGR %	EBITDA CAGR %	
Switches			
Minda	3	2	
LS Automotive India	(10)	NM	
Lighting			
Minda	9	1	
Lumax Industries	8	16	
Hella India	5	(1)	
Acoustics			
Minda	4	(10)	
Roots Industries (mainly India)	8	5	
Casting			
Minda	24	28	
Rockman Industries	1	(13)	
Endurance Technologies	7	14	
Steel Strips Wheels	6	1	
Enkei Wheels	7	(3)	
Air filters			
Minda	43	69	
Mahle Filter	0	(1)	

Source: Capital line, Emkay Research

Key Financials (Consolidated)

Income Statement

Y/E Mar (Rs mn)	FY20	FY21	FY22E	FY23E	FY24E
Revenue	62,220	63,737	80,282	99,286	118,945
Expenditure	55,502	56,488	70,686	86,186	102,878
EBITDA	6,718	7,250	9,596	13,100	16,067
Depreciation	3,401	3,753	4,199	4,619	5,067
EBIT	3,317	3,497	5,397	8,481	11,000
Other Income	405	470	714	986	1,302
Interest expenses	942	737	562	346	311
PBT	2,781	3,231	5,548	9,121	11,991
Тах	755	1,002	1,553	2,372	3,018
Extraordinary Items	(276)	14	0	0	0
Minority Int./Income from Assoc.	(198)	(176)	(206)	(333)	(392)
Reported Net Income	1,552	2,066	3,788	6,416	8,581
Adjusted PAT	1,827	2,052	3,788	6,416	8,581

Balance Sheet

Y/E Mar (Rs mn)	FY20	FY21	FY22E	FY23E	FY24E
Equity share capital	524	544	571	571	571
Reserves & surplus	18,086	22,022	32,412	38,058	45,352
Net worth	18,611	22,566	32,983	38,629	45,923
Minority Interest	2,828	3,065	3,647	4,500	5,567
Loan Funds	11,968	12,775	6,121	5,520	4,933
Net deferred tax liability	410	299	327	373	433
Total Liabilities	33,818	38,705	43,078	49,022	56,855
Net block	26,742	27,968	27,828	28,756	29,594
Investment	3,983	5,302	10,072	14,872	19,672
Current Assets	21,483	25,162	26,127	30,068	33,550
Cash & bank balance	3,409	2,382	73	122	74
Other Current Assets	2,011	2,293	2,808	3,373	3,922
Current liabilities & Provision	21,991	21,070	24,232	27,410	29,791
Net current assets	(508)	4,092	1,895	2,658	3,758
Misc. exp	0	0	0	0	0
Total Assets	<u>33,818</u>	38,705	43,078	49,022	<u>56,855</u>

Y/E Mar (Rs mn)	FY20	FY21	FY22E	FY23E	FY24E
PBT (Ex-Other income) (NI+Dep)	2,031	2,778	5,210	8,655	11,363
Other Non-Cash items	0	0	0	0	0
Chg in working cap	4,464	(3,508)	(112)	(714)	(1,148)
Operating Cashflow	10,081	2,957	8,179	10,190	12,118
Capital expenditure	(6,068)	(2,991)	(6,000)	(5,000)	(7,000)
Free Cash Flow	4,013	(34)	2,179	5,190	5,118
Investments	(1,943)	(1,279)	(750)	(1,000)	(1,000)
Other Investing Cash Flow	(341)	660	0	0	0
Investing Cashflow	(7,947)	(3,139)	(6,036)	(8,814)	(10,498)
Equity Capital Raised	0	2,507	6,980	0	0
Loans Taken / (Repaid)	389	(1,460)	(6,654)	(601)	(587)
Dividend paid (incl tax)	(440)	(186)	(223)	(379)	(770)
Other Financing Cash Flow	1,134	(962)	(3,993)	0	0
Financing Cashflow	175	(845)	(4,452)	(1,326)	(1,668)
Net chg in cash	2,309	(1,027)	(2,309)	50	(48)
Opening cash position	1,101	3,409	2,382	73	122
Closing cash position	3,409	2,382	73	122	74

Profitability (%)	FY20	FY21	FY22E	FY23E	FY24E
EBITDA Margin	10.8	11.4	12.0	13.2	13.5
EBIT Margin	5.3	5.5	6.7	8.5	9.2
Effective Tax Rate	27.2	31.0	28.0	26.0	25.2
Net Margin	3.3	3.5	5.0	6.8	7.5
ROCE (pre-tax)	11.6	10.9	14.9	20.6	23.2
ROE (pre-tax)	10.3	10.0	13.6	17.9	20.3
RoIC (pre-tax)	14.1	13.3	18.2	27.8	34.1
Per Share Data (Rs)	FY20	FY21	FY22E	FY23E	FY24E
EPS	7.0	7.5	13.3	22.5	30.0
CEPS	19.9	21.3	28.0	38.6	47.8
BVPS	71.0	83.0	115.5	135.2	160.8
DPS	0.4	0.8	1.3	2.7	4.5
Valuations (x)	FY20	FY21	FY22E	FY23E	FY24E
PER	101.4	93.6	53.3	31.5	23.5
P/CEPS	35.4	33.1	25.3	18.3	14.8
P/BV	10.0	8.5	6.1	5.2	4.4
EV / Sales	3.1	3.2	2.6	2.0	1.7
EV / EBITDA	28.8	27.9	21.7	15.5	12.4
Dividend Yield (%)	0.1	0.1	0.2	0.4	0.6
Gearing Ratio (x)	FY20	FY21	FY22E	FY23E	FY24E
Net Debt/ Equity	0.4	0.5	0.2	0.0	(0.1
Net Debt/EBIDTA	1.2	1.4	0.6	0.1	(0.2
Working Cap Cycle (days)	(23.0)	9.8	8.3	9.3	11.3
Growth (%)	FY20	FY21	FY22E	FY23E	FY24E
Revenue	5.3	2.4	26.0	23.7	19.8
EBITDA	(7.4)	7.9	32.4	36.5	22.6
EBIT	(32.4)	5.4	54.3	57.2	29.7
PAT	(45.7)	33.2	83.3	69.4	33.7
	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22
Quarterly (Rs mn)			00.040	22,383	16.026
Quarterly (Rs mn) Revenue		16,364	20,312	22,000	10,020
Revenue	4,679	16,364 2,289	20,312 2,789		
	4,679 (844)	16,364 2,289 14.0	20,312 2,789 13.7	3,016 13.5	1,467
Revenue EBITDA	4,679 (844) (18.0)	2,289	2,789 13.7	3,016 13.5	1,467 9.2
Revenue EBITDA EBITDA Margin (%) PAT	4,679 (844)	2,289 14.0	2,789	3,016	16,026 1,467 9.2 154 0.6
Revenue EBITDA EBITDA Margin (%)	4,679 (844) (18.0) (1,345)	2,289 14.0 854	2,789 13.7 1,154	3,016 13.5 1,386	1,467 9.2 154
Revenue EBITDA EBITDA Margin (%) PAT EPS (Rs)	4,679 (844) (18.0) (1,345)	2,289 14.0 854	2,789 13.7 1,154	3,016 13.5 1,386	1,467 9.2 154 0.6
Revenue EBITDA EBITDA Margin (%) PAT EPS (Rs) Source: Company, Emkay Research	4,679 (844) (18.0) (1,345) (5.1)	2,289 14.0 854 3.1	2,789 13.7 1,154 4.2	3,016 13.5 1,386 5.1	1,467 9.2 154 0.6 Aug-21
Revenue EBITDA EBITDA Margin (%) PAT EPS (Rs) Source: Company, Emkay Research Shareholding Pattern (%)	4,679 (844) (18.0) (1,345) (5.1) Dec-20	2,289 14.0 854 3.1 Mar-21	2,789 13.7 1,154 4.2 Jun-21	3,016 13.5 1,386 5.1 Jun-21	1,467 9.2 154 0.6 Aug-21
Revenue EBITDA EBITDA Margin (%) PAT EPS (Rs) Source: Company, Emkay Research Shareholding Pattern (%) Promoters	4,679 (844) (18.0) (1,345) (5.1) Dec-20 70.9	2,289 14.0 854 3.1 Mar-21 70.9	2,789 13.7 1,154 4.2 Jun-21 69.9	3,016 13.5 1,386 5.1 Jun-21 69.9	1,467 9.2

Source: Capitaline

Annexure

Board of Directors	
Nirmal K. Minda (Chairman & Managing Director)	He has experience of more than three decades in the Auto components sector. He has been instrumental in forging new alliances and joint venture partnership with global companies. He has held many offices in bodies like CII as Vice Chairman, Haryana State Council & Special Invitee, Northern Regional Council and President of ACMA.
Ravi Mehra (Deputy Managing Director & CEO- Electronics & Control systems)	He is a qualified Chartered Accountant. With over three decades in the industry, he has a rich management experience and has handled roles in strategy, finance, marketing, manufacturing, materials, HR, and product/technology development. His association with Minda dates back to 1995, when he joined the Group as General Manager (Finance). He has held various leadership positions in Minda Group. Under his leadership, the Group's 2W/3W switch business has expanded globally, catering to ASEAN countries, Europe, and Japan, besides being No. 1 in India.
Anand Kumar Minda (Non – Executive Director)	He has over 36 years of experience in financial control, reviews, manufacturing, and project management. He has been appointed as member of the Board since 2011. He plays a pivotal role in new projects and strategy formulation. He is also the member of Audit Committee, Stakeholders Relationship Committee and CSR Committee of the company.
Paridhi Minda (Whole Time Director)	She is the elder daughter of N. K. Minda. She is a management graduate from Bradford University. London and has a certification from London School of Economics in Marketing. In addition, she completed her Finishing school from Institut Villa Pierrefeu in Switzerland. She joined Minda Group in 2001. She also worked closely with all 6M functional heads. In her subsequent assignment, she got associated with the Lamp business of Minda Group and worked closely in diverse functions over next 7–8 years. She was also instrumental in driving process efficiency and led some debottlenecking assignments.
K Jalan (Independent Director)	He is a post graduate in Social Science (Development Administration) with distinction from University of Birmingham, UK. He has a service experience of over 40 years which includes secretary to the Government of India for the Ministry of Micro, Small & Medium Enterprises. He has spearheaded significant changes at Employee Provident Fund Organization as Central provident Fund Officer.
Satish Sekhri (Independent Director)	He is a graduate of Mechanical Engineering from Delhi College of Engineering and has a Master of Business Administration. He has more than 40 years of experience in the field of automotive industry. He has held various senior positions, including Managing Director of Bosch Chassis Systems India. He has been a member of the Executive Committee of various professional bodies like Automotive Components Manufacturers Association, Maharashtra Chamber of Commerce Industries, and Agriculture and CII Pune Zone Council.
Pravin Tripathi (Independent Director)	She is a former Indian Audit & Accounts Service (IAAS) Officer of 1973 Batch with more than 4 decades of experience in the field of Audit & Accounts. She held various senior positions including that of Deputy Comptroller & Auditor General of India and Chairperson Audit Board, Member of the Competition Appellate Tribunal, Member of Airport Economic Regulatory Authority Appellate Tribunal and Chief Auditor, Municipal Corporation of Delhi etc. She has done master in English Literature from Punjab University.
Dr. Chandan Chowdhury (Independent Director)	He has done MS in Mechanical Engineering and has a double Doctorate. Currently, he is a Senior Associate Dean and a Practice Professor of Operations Management and Information Systems at the Indian School of Business (ISB). He is also the Executive Director leading the Munjal Institute for Global Manufacturing and the Punj-Lloyd Institute for Infrastructure Management at ISB, two institutes set-up with MIT, as an Associate Partner. Before joining ISB, he served multinationals like Dassault Systems and IBM – Software Group as Managing Director and Country Manager.
Rakesh Batra (Additional Director)	He has done his B.Tech from IIT, Kharagpur, MBA from IIM, Ahmedabad and MBT-Business & Technology from University of New South Wales, Sydney, Australia. He has experience in both corporate and consulting roles, working with Indian and multinational clients, especially in auto sector. He was partner of Ernst & Young and National Leader Auto Sector from 2008 to 2019 for approximately 11 years. He was also partner of Accenture from 2005 to 2008. He brings management and consulting experience of 40 years in India, US and Australia in the Automotive, Industrial Equipment and Manufacturing industries with corporate strategy and business transformation experience.

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Exhibit 80:	Тор	management	profiles
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Top Management Team	
Sunil Bohra (Group: Chief Finance Officer & Group Chief Procurement officer)	He is a Commerce graduate with honours from MDS University. He is a member of the Institute of Chartered Accountants of India and alumni of the Harvard Business School. Prior to Minda group, he was associated with the Vedanta Group where he spent close to two decades in various leadership roles. He has experience in setting up systems and processes, formulating new strategies and developing organisation structures to facilitate growth. His last stint was as Chief Commercial Officer at Cairn India. In addition to the finance function, he is responsible for all strategic planning activities of the Group, global acquisitions and collaborations.
Naveesh Garg (Group Chief Strategy and Marketing Officer)	A graduate in B- Tech, Production Engineering from NIT – Calicut. He has done his post-graduation in MBA from MDI, Gurgaon. He has been associated with Minda since 1990 and has played a role in the company's growth & expansion across different segments & verticals. He has technical & strategical experience with understanding of industry existing & upcoming trends, business potential, way- forward planning.
Kundan K. Jhaa (CEO- Light Metal and Powertrain Systems)	Academic exposure includes a Post Graduate in Quality Management from England, as well as a Bachelor's Degree in Mechanical Engineering from the Birla Institute of Technology. His professional exposure includes corporate exposure of more than 32 years, with his association with Minda starting in Nov'17. Before joining, he was working with Aurangabad Electricals Ltd. as ED and CEO. Prior to that, Mr. Jha has worked with Bharat Forge Ltd, Sundaram Clayton Ltd., Enkei Castalloy Ltd., and Maruti Suzuki India Ltd.
Rajiv Kapoor (Chief Human Resource Officer)	Academic exposure includes bachelor's degree in Arts with Honors in English and LL.B. from the Punjab University. His professional exposure includes exposure of 30+ years out of which 24 years has been in manufacturing and 4 years in healthcare and manpower services. Prior to Minda, he had stints with organizations like G4S as HR Director - India & Bangladesh, Fortis Healthcare as Chief People Officer, JCB India Ltd. as Executive Vice President HR & Legal, Tecumseh Products India Ltd, Goodyear and Hindustan Vacuum Glass.
Amit Jain (Chief Technology Officer)	An experienced professional of having spent 21 years in the automotive Industry. He completed his engineering from R V College, Bangalore and an Advanced Management Program from IIM, Bangalore. Prior to joining Minda, he was associated with Visteon Corporation as its Country Head – Electronics.
Rajeev Gandotra (CEO- Lighting & Acoustics Systems)	A graduate engineer (Tool Room Training Centre). He plays a role in Business Planning, Procurement Planning, Group Strategy. He has experience in Greenfield projects, M&A, operational and financial turnaround, financial control and reviews, managing joint venture relationships, international business and organization building, and talent development.
Rakesh Kher (CEO-Aftermarket)	An MBA from FMS, Delhi, Post Graduate from IIT Kharagpur, and an Engineer from NIT Rourkela. He is driven by his strength in business & people management. He has over 3 decades of experience in varied industries (Automotive, Metals, Industrial Products and services), across all organizational functions. He had joined Minda in 2005 as corporate level head of International business & strategy implementation. He has been actively associated with ACMA committees of Globalisation & Aftermarket.
Sudhir Kashyap (CEO- Safety & Comfort Systems)	He was previously employed as an Executive Director & CEO-Security Division by Minda Corp. He received his undergraduate degree from Indian Institute of Management and an undergraduate degree from Punjab Engineering College.

Source: Company

Exhibit 81:	Company	history
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	History
Year	History
1958	Incorporated business by producing Ammeters used in switches for Royal Enfield
1960	Started manufacture of automotive Switches
1980	Started manufacture of automotive Lighting
1985	Started manufacture of automotive Ignition switch
1992	Minda Industries established
1993	Started manufacture of automotive Horn
1995	Automotive Ignition switch division transferred to younger brother Ashok Minda (Minda Corporation)
1995	4W Automotive Switches - JV with Tokia Rika, Japan
2001	Alternative fuel kits - TLA with IMPCO, USA
2001	Alternative fuel kits - JV with Emer, Italy
2005	Indonesia facility for Switches and Lightings
2007	IMPCO merged into Minda
2007	Started manufacture of automotive Batteries
2008	Airbags, Hoses - JV with Toyoda Gosei, Japan
2009	Vietnam facility for Switches and Lightings
2011	Aluminium Die Casting - JV with JBM, India
2011	Raw material trading (mainly plastics) - JV with Torica, Japan
2011	Blow molded components - JV with Kyoraku, Japan
2012	Car Infotainment - JV with Denso Ten, Japan
2012	Air Filters - JV with Roki, Japan
2012	Automotive Lamps - TLA with AMS, Korea
2013	Automotive Horn - Acquisition of Clarton Horns, Spain
2014	Automotive Batteries - JV with Panasonic
2015	4W Alloy wheels - JV with Kosei
2015	Acquired ASEAN facilities - Switching and Lighting (Group Consolidation)
2015	Acquired stake in Die Casting division (Group Consolidation)
2016	Automotive Lighting - Acquisition of Rinder, Spain
2016	Acquired stake in Minda TG - Hoses (Group Consolidation)
2016	Acquired stake in Kosei Minda - Alloy wheel (Group Consolidation)
2016	Acquired stake in Roki Minda - Air filters (Group Consolidation)
2016	Panasonic exits Automotive batteries JV
2016	Speakers - JV with Onkyo, Japan
2017	JBM exits AL Die Casting JV
2017	Reverse Parking Assistance System - JV with TTE, Taiwan
2017	Printed Circuit Board - JV with Katolec
2018	Acquired stake in Minda Rika - 4W Switches (Group Consolidation)
2018	Acquired stake in Minda Torica - Plastic trading (Group Consolidation)
2018	Acquired stake in Denso Ten Minda - Car Infotainment (Group Consolidation)
2018	Acquired stake in Toyoda Gosei Minda - Air bags, Body Sealing (Group Consolidation)
2018	Controllers - Acquisition of iSYS RTS, Germany
2018	Sensors - TLA with Sensata Technologies, USA
2018	Controllers - Acquisition of KPIT Telematics business
2019	Automotive Seating - Acquisition of Harita Seatings
2019	Automotive Lighting - Acquisition of Delvis, Spain
2020	Amalgamated subsidiaries - MJCL (die casting), MSDL (aftermarket), Rinder (Lighting), MACL (handle bar assembly) into Minda
2020	Acquired stake in Toyoda Gosei South - Plastic Interior & Exterior components
2020	Acquired stake in Minda iConnect - Telematics (Group Consolidation). Acquisition is under process
2020	Acquired stake in Tokia Rika Minda - Seat belt, Gear Shifters, Lock sets (Group Consolidation)
2021	Toyoda Gosei Minda consolidated all business (Airbags, Body Sealing, Hoses, Plastic interior & exterior) into one company

India Equity Research | Initiating Coverage

Company	Effective	Stake	Acquisition					Financials	3			1)	yr forw	vard		
(Rs mn)	date	(%)	cost	EV	Мсар	Year	Revenue	EBITDA	PAT	Net worth	Net debt	P/B	P/E	EV/E	Product	Comments
Sam Global (Minda Vietnam)	Jul-15	51	194	381	338	FY17	458	NA	11	224	43	0.5	11.3	NA	Switches, Lighting	100% of Vietnam facility and 37% of Indonesia facility
Minda ASEAN, Indonesia	Jul-15	13	61	472	591	FY17	1,422	125	87	832	(119)	0.7	6.8	3.8	Switches, Lighting	Previously had 19% stake
MJ Casting	Aug-15	50	141	282	(183)	FY17	2,308	323	50	481	465	(0.4)	(3.6)	0.9	Die Casting	
Kosei Minda	Mar-16	30	123	410	NA	FY17	1,938	491	260	575	NA	NA	NA	0.8	Alloy wheel	Caters to Toyota, Renault and Honda
Minda TG Rubber	Mar-16	51	179	351	61	FY17	352	11	(49)	335	290	0.2	(1.2)	31.8	Hoses	
Roki Minda	Oct-16	49	431	879	NA	FY18	3,679	674	240	1,249	NA	NA	NA	1.3	Air filter	
Sam Global (Minda Vietnam)	Apr-17	49	135	276	328	FY18	447	102	92	217	(53)	0.4	1.0	0.9	Switches, Lighting	
Minda ASEAN, Indonesia	Apr-17	31	159	505	630	FY18	1,702	205	176	626	(125)	1.0	3.6	2.5	Switches, Lighting	
Denso Ten Minda	Jan-18	49	223	455	NA	FY19	4,186	377	185	838	NA	NA	NA	1.2	Car infotainment	Manufacturing company
Minda Denso Ten	Jan-18	51	38	75	76	FY19	4,303	55	36	128	(1)	0.6	2.1	1.4	Car infotainment	Trading company
Minda Rika	Jan-18	24	949	3,953	3,612	FY19	8,014	1,010	488	1,906	342	1.9	7.4	3.9	4W switches	Previously had 27% stake
Toyoda Gosei Minda	Mar-18	6	202	3,363	NA	FY19	4,959	244	8	4,042	NA	NA	NA	13.8	Airbags, Body Sealing	
MI Torica	Apr-18	60	84	141	NA	FY19	605	12	5	142	NA	NA	NA	11.4	Plastic trading	
Toyoda Gosei Minda	Jul-18	42	1,368	3,257	NA	FY19	4,959	244	8	4,042	NA	NA	NA	13.4	Airbags, Body Sealing	
Tokai Rika Minda	Mar-20	13	226	1,757	NA	FY21	5,297	288	(67)	117	NA	NA	NA	6.1	Lock sets, Gear shifters and Seat belt	

Exhibit 82: Group consolidation exercise (UNO Minda group businesses transferred to listed entity) was done at attractive valuations

Source: Company, Emkay Research

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Non-current investments (Rs mn)	FY16	FY17	FY18	FY19	FY20	FY2 [°]
Investments in Subsidiaries						
Minda Auto Components	2	2	2			
Minda Kyoraku	317	317	317	478	478	47
Minda Distribution and Services	20	20	20			
Minda Kosei Aluminum Wheel	420	747	1,319	1,319	1,319	1,31
SAM Global	194	194	329	329	329	32
Minda TG Rubber	179	238	258	258	258	
PT Minda Asean Automotive (Indonesia)	70	70	229	229	229	22
Global Mazinkert	109	269	269	413	413	41
Minda Rinder		397	397			
Minda Storage Batteries		91	91	91	91	9
Minda Katolec Electronics Services			77	77	77	17
Mindarika			1,019	1,019	1,019	1,01
MJ Casting	433	433	445	,	,	, -
MI Torica				84	84	8
ISYS RTS				513	513	51
Harita Fehrer				0.0	2,636	2,63
Investments in partnership firms					,	,
Auto Component	70	57	41	38	39	4
YA Auto Industries	0	28	25	24	28	1
Yogendra Engineering	24	2	1	1	1	
Associates		_	•	•		
Minda Accoustic						
Minda Autogas						
Om Marubeni Logistics						
Valeo Minda Electrical Systems						
Minda Autocare						
Mindarika	70	70				
Minda NexGenTech	31	31	31	31	31	3
Kosei Minda Aluminium	123	165	165	165	165	16
Joint Ventures	125	105	105	105	105	
Minda Emer Technologies	27	27	27	27	27	2
Roki Minda	21	431	431	431	431	43
Minda TG Rubber		431	431	431	431	43 25
Minda TTE DAPS			30	50	50	20
Minda Onkyo			83	120	195	33
Minda D-Ten			38	38	38	3
Denso Ten Minda			223	223	223	22
Rinder Riduco S.A.						
Kosei Minda Mould				63	63	6
Tokia Rika Minda				4 570	4 570	65
Toyoda Gosei Minda				1,570	1,570	1,90
Investments measured at Fair value through profit						
Minda Industria E Comerico De Autopecsa	1	1	1	1	1	
Toyoda Gosei Minda			202			
OPG Power Generation	0	0	0	0	0	
M J Casting (preference shares)	8	8	8			
Life Insurance Corporation of India, Mumbai					7	
Less: diminution value of investment						
Kosei Minda Aluminum					(83)	(83
Minda Industria E Comerico De Autopecsa					(1)	(
Minda NexGenTech	(31)	(31)	(31)	(31)	(31)	(31
Minda Onkyo						(50
Minda TTE DAPS						(50
Total non-current investment	2,068	3,568	6,044	7,560	10,199	11,31
yoy (%)	152	72	69	25	35	1

Source: Company, Emkay Research

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Exhibit 84: Subsidiary financials (FY21)

Subsidiaries (Rs mn)	Capital	Reserves	Total Assets	Total Liabilities	Investments	Turnover	PBT	Тах	PAT	% Holding	Business
Minda Kyoraku	620	567	1,851	664		1,680	240	61	179	68%	Blow Molding
Minda Kosei Aluminum Wheel	1,884	2,380	6,922	2,658		5,226	797	198	599	70%	Alloy Wheels
Minda Storage Batteries	1,886	(760)	1,365	239		1,167	(20)		(20)	100%	Lead Batteries
YA Auto Industries	49	(12)	125	88		723	136	48	88	51%	
Minda Katolec Electronics Services	351	(271)	859	780		1,061	(76)		(76)	51%	Printed Circuit Board
Mindarika	100	2,120	4,027	1,808		6,609	469	125	344	51%	4W Switches
MI Torica	90	45	161	26	32	80	2	(1)	3	60%	Raw material trading
MITIL Polymer*	34	106	912	773		1,803	36	9	27	57%	Raw material trading
Harita Fehrer	201	1,747	3,145	1,197	2	4,176	250	63	188	51%	Seating
Global Mazinkert S.L.	216	(21)	871	675	667		(16)	(4)	(12)	100%	Acoustics
Clarton Horn Spain*	83	1,172	2,865	1,611	567	3,673	(118)	4	(121)	100%	Acoustics
Clarton Horn Morocco*	9	1	22	11		52	(9)	0	(9)	100%	Acoustics
Clarton Horn Signalakustic*	2	13	27	12		40	1	0	1	100%	Acoustics
Clarton Horn Mexico*	582	(494)	666	578		508	(15)		(15)	100%	Acoustics
Light & System Technical Centre*	114	0	273	159	45	223	14	7	7	100%	Lighting
PT Minda Asean Automotive	42	782	1,010	187	467	1,169	184	43	141	100%	Switches & Lighting
PT Minda Trading*	5	78	140	57		252	34	8	26	100%	Switches & Lighting
Sam Global	44	382	640	213	559	176	154		154	100%	Switches & Lighting
Minda Industries Vietnam*	37	213	353	103		515	118	15	103	100%	Switches & Lighting
Minda Korea*	7	(15)	52	59		29	(15)		(15)	100%	
iSYS RTS	3	197	734	534		1,119	38	13	25	80%	Controllers
Minda Delvis*		405	3,840	3,435	431	43	(43)	(17)	(26)	100%	Lighting
Delvis Solutions*	9	121	310	181			(9)		(9)	100%	Lighting
Delvis Products*		(172)	525	697		112	(9)		(9)	100%	Lighting
Total						19,008	1,908		1,426		
Share of consolidated numbers						30%	59%				

*Step down subsidiaries. Source: Company, Emkay Research

	ity to customer plants	
Product	Company	Facility location
Domestic facilities		
Switches		
2W	Standalone	Manesar, Pune, Pantnagar, Aurangabad, Hosur
4W	Mindarika	Manesar, Pune, Chennai, Ahmedabad
Lightings		
4W	Standalone	Manesar, Pune, Chennai
2W	Standalone	Bahadurgarh, Pune, Hosur, Sonipat
Alloy wheels		
4W	Minda Kosei	Bawal, Dekavada
4W	Kosei Minda	Chennai
2W	Standalone	Ahmednagar
Wheel & Tyre Assembly	Standalone	Dekavada
Seating Systems		
2W	Standalone	Hosur, Chennai, Pune, Mysuru
4W	Standalone	Hosur, Ranjangaon, Jamshedpur, Pant Nagar,
CNG	Minda Westsport/Minda Auto Gas	Chennai, Pithampur Manesar
Lead batteries	Minda Storage Batteries	
		Pantnagar Rowal Hacur
Die casting	Standalone Standalone	Bawal, Hosur
Sensor		Pune
Controller	Standalone	Pune
Mould	Kosei Minda Mould	Bawal
Air filters & Canisters	Roki Minda	Bawal, Ahmedabad, Chennai
Airbags	TG Minda	Neemrana, Bawal, Dekavada
Hoses	TG Minda	Bawal
Car Infotainment	D-Ten Minda	Bawal
Acoustics	Standalone	Manesar, Pantnagar
Fuel cap	Standalone	Manesar
Blow Molding	Minda Kyoraku	Bangalore, Bawal, Dekavada
Car Telematics	Minda iConnect	Gurugram
Speakers	Minda Onkyo	Bawal
РСВ	Minda Katolec Electronics Services	Pune
Rear Assistance Parking System	TTE DAPS	Manesar
Raw material trading	Minda Torica	Manesar
Aftermarket	Standalone	New Delhi
Auto Components	YA Auto	Rudrapur
Auto Components	Standalone	Mysore, Nalagarh, Surajpur, Ahmedabad, Chennai, Narsapur
CREAT - Technical center	Standalone	Pune
Overseas facilities		
_ightings	Light Systems And Technical Centre S.I.	Spain
Acoustics	Clarton Horns	Spain, Mexico, Morocco
Lightings	Rinder Riduco	Colombia
Lightings	Delvis	Germany
Lightings	Uz Chasys	Uzbekistan
Switches/Lightings	PT Minda Asean	Indonesia
Switches/Lightings	Minda Vietnam	Vietnam
Controller	iSYS RTS	Germany



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Sector

Automobiles and Ancillaries

Analyst bio

Raghu holds an MBA and comes with total 12 years of research experience. His team currently covers 14 stocks in the Indian Automobiles and Ancillaries space.

Emkay Alpha Portfolio – Automobiles & Auto Ancillaries

EAP	sector	portfolio

Company Name	BSE200 Weight	EAP Weight	OW/UW (%)	OW/UW (bps)	EAP Weight (Normalised)
Auto & Auto Ancillaries	4.47	4.47	0%	0	100.00
Amara Raja Batteries	0.06	0.05	-22%	-1	1.02
Apollo Tyres	0.00	0.00	NA	0	0.00
Ashok Leyland	0.18	0.19	8%	2	4.30
Atul Auto	0.00	0.00	NA	0	0.00
Bajaj Auto	0.50	0.51	2%	1	11.35
Bharat Forge	0.20	0.20	0%	0	4.45
Eicher Motors	0.38	0.36	-6%	-2	8.07
Escorts	0.00	0.00	NA	0	0.00
Exide Industries	0.08	0.06	-18%	-1	1.39
Hero Motocorp	0.37	0.36	0%	0	8.14
Mahindra & Mahindra	0.78	0.78	-1%	0	17.33
Maruti Suzuki India	0.93	0.94	1%	1	21.06
Motherson Sumi	0.27	0.27	0%	0	6.04
Tata Motors	0.56	0.57	1%	1	12.67
Tata Motors DVR*	0.07	0.08	12%	1	1.69
TVS Motor	0.11	0.11	4%	0	2.49
Cash	0.00	0.00	NA	0	0.00

Source: Emkay Research

High Conviction/Strong Over Weight High Conviction/Strong Under Weight

Sector portfolio NAV

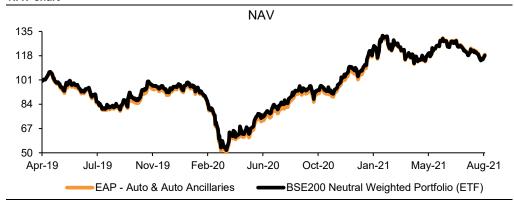
	Base					Latest		
	1-Apr-19	1-Sep-20	2-Mar-21	1-Jun-21	30-Jul-21	31-Aug-21		
EAP - Auto & Auto Ancillaries	100.0	91.2	128.4	124.4	119.8	118.9		
BSE200 Neutral Weighted Portfolio (ETF)	100.0	93.4	128.9	124.5	119.1	118.2		
*Performance measurement base date 1 st April 2019								

Source: Emkay Research

Price Performance (%)

	1m	3m	6m	12m
EAP - Auto & Auto Ancillaries	-0.8%	-4.4%	-7.4%	30.4%
BSE200 Neutral Weighted Portfolio (ETF)	-0.8%	-5.1%	-8.3%	26.6%
Source: Emkay Research				

NAV chart



Source: Emkay Research

Please see our model portfolio (Emkay Alpha Portfolio): Nifty

Please see our model portfolio (Emkay Alpha Portfolio): SMID

"Emkay Alpha Portfolio – SMID and Nifty are a supporting document to the Emkay Alpha Portfolios Report and is updated on regular intervals"

Emkay Rating Distribution

Expected Return within the next 12-18 months.
Over 15%
Between -5% to 15%
Below -5%

Completed Date: 02 Sep 2021 02:37:20 (SGT) Dissemination Date: 02 Sep 2021 02:38:20 (SGT)

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