Astra Microwave Products



Moving up the value chain

Specialized deep technology firm in strategic electronics

Astra Microwave (ASTM IN), set up in 1991, is engaged in designing, developing, and manufacturing microwave & RF systems, sub-systems and components. It has five manufacturing facilities at Hyderabad in Telangana. It caters to key segments of defence, space, meteorology, and exports. The company aims to move up the value chain from subsystems to systems, and wants to provide complete solutions in radars, given its 30-year domain experience coupled with strong in-house R&D. ASTM has set a target to ramp up the defence business in the next 2-3 years (FY21: 30% contribution in total sales, and FY22 at 45% and FY23 at 56%), led by complete solutions offerings and new products.

Total addressable market of INR 240-250bn until FY28

The total addressable market (TAM) for ASTM across sectors amounts to INR 240-250bn during FY24-28 vs cumulative order inflows worth INR 31bn over FY19-23 (Source: company). This marks a huge jump in business operations & opportunities, and it would include radars, turnkey projects, special projects, missiles & telemetry, exports, space, and electronic warfare. A major portion of opportunities comes from radar systems (radars formed 83% of orderbook as on FY23) wherein ASTM moved up the value chain, from making AAAU for Uttam AESA Radar to a complete radar system. Other focus areas are a counter drone system, multifunctional & Doppler radar, as well as bird detection and deterrence radars. These programs are currently in the development phase and management expects to launch them and win orders in the next five years.

Margin to scale up further on better mix

As on FY23, exports (including deemed exports) formed 40% of total revenue while domestic stood at 60% (including defence, space, and meteorology). Management aims to increase domestic contribution to 70% in the next 2-3 years, aided by new launches and a robust defence pipeline. The domestic business earns a gross margin of up to 40-45% while exports' is restricted to 8-10%. <u>During FY21-23</u>, exports fell from 59% of total sales to 40% in FY23. During the same period, EBITDA margin rose 580bp to 18.1% in FY23. This implies a further uptick in margin as exports continues to reduce.

Strong contender to reap benefits from defence & space themes

The government's thrust to indigenize and scale up domestic defence production augurs well for ASTM. With five PIL covering 4,666 components, sub-systems, systems & LRUs, domestic firms such as ASTM are well positioned to aim for a high-growth phase in the upcoming decade. Post the PSUs, we believe small & medium defence companies like ASTM will be biggest beneficiary of the defence & aerospace sector. We expect further re-rating to continue in the defence sector as small companies thrive to become system integrator.

Rating: Not Rated

CMP: INR 602 (as on 11 December 2023)

Key data	
Bloomberg / Reuters Code	ASTM IN/ASTM.BO
Current /Dil Shares O/S (mn)	95/87
Mkt Cap (INR bn/USD mn)	57/686
Daily Volume (3M NSE Avg)	742,325
Face Value (INR)	2

1 USD = INR 83.4

Note: *as on 11 December 2023; Source: Bloomberg

Price & Volume 800 600 400 200 Dec-22 Mar-23 Jun-23 Sep-23 Dec-23 Vol. in mn (RHS) Astra Microwave (LHS)

Source: Bloomberg

Shareholding (%)	Q3FY23	Q4FY23	Q1FY24	Q2FY24
Promoter	8.3	7.2	6.5	6.5
Institutional Investor	2.4	2.4	12.9	17.0
Other Investor	52.0	51.7	47.9	44.4
General Public	37.3	38.7	32.7	32.1
Source: BSE				
Price performance (9	%)	3M	6M	12M

13.1

64.3

13.5

87.6

5.0

41.5

Source: Bloomberg

Astra Microwave Products

Niftv

Key financials											
YE March	Revenue (INR mn)	YoY (%)	EBITDA (INR mn)	EBITDA margin (%)	Adj PAT (INR mn)	YoY (%)	Fully DEPS (INR)	RoE (%)	RoCE (%)	P/E (x)	EV/EBITDA (x)
FY20	4,672	59.2	825	17.7	440	351.2	3.3	8.5	9.3	15.8	5.5
FY21	6,409	37.2	790	12.3	289	(34.5)	4.1	5.3	7.8	31.7	15.2
FY22	7,505	17.1	892	11.9	379	31.3	4.8	6.6	8.3	46.6	21.7
FY23	8,155	8.7	1,476	18.1	698	84.4	5.5	11.4	12.7	40.5	13.7
Note: pricing as on year-end; Source: Bloomberg, Company, Elara Securities Research											



Financials (YE Mar)

Income Statement (INR mn)	FY20	FY21	FY22	FY23
Net Sales	4,672	6,409	7,505	8,155
EBITDA	825	790	892	1,476
Margin (%)	17.7	12.3	11.9	18.1
Add:- Non operating Income	122	109	64	55
Depreciation	258	235	220	237
EBIT	689	663	736	1,294
Less:- Interest Expenses	85	249	211	305
PBT	591	385	502	959
Less :- Taxes	151	97	123	261
PAT	440	289	379	698
Adjusted PAT	440	289	379	698
Balance Sheet (INR mn)	FY20	FY21	FY22	FY23
Share Capital	173	173	173	173
Reserves	5,228	5,414	5,683	6,253
Net Worth	5,402	5,587	5,856	6,426
Loans	549	1,216	704	1,855
Net Deferred Tax Liability	(13)	(28)	(69)	(91
Capital Employed	5,950	6,803	6,560	8,281
Gross Block	2,662	2,817	3,104	3,406
Less:- Accumulated Depreciation	1,055	1,290	1,508	1,738
Add:- Capital work in progress	1,033	0	1,500	22
Net Fixed Assets	1,728	1, 527	1,597	1,690
Net Working Capital	3,558	4,689	4,049	5,372
Cash & Bank Balance	532	425	775	1,109
Application of Funds	5,950	6,803	6,560	8,281
Cash Flow Statement (INR mn)	FY20	FY21	FY22	FY23
Cash Profit adjusted for non-cash items		843		1,527
•	887		972	
Add/Less: Working Capital Changes	(780)	(1,012)	383	(1,526)
Operating Cash Flow before Tax Tax	106 (179)	(168)	1,355	(256
		(78) (246)	(208)	
Operating Cash Flow	(73)		1,147	(255)
Less:- Capex	(180)	(37)	(270)	(331)
Free Cash Flow	(253)	(283)	877	(586)
Investing Cash Flow	(122)	29 338	10	49 748
CF from Fin. Activity	368		(787)	
Net Change in Cash	(7)	85	100	211
Ratio Analysis	FY20	FY21	FY22	FY23
Income Statement Ratios (%)	F0.2	27.2	17.1	0 =
Revenue growth	59.2	37.2	17.1	8.7
EBITDA growth	186.7	(4.3)	13.0	65.5
PAT growth	351.2	(34.5)	31.3	84.4
EBITDA margin	17.7	12.3	11.9	18.1
Net margin	9.4	4.5	5.0	8.6
Per Share data (INR)				
Diluted EPS	3.3	4.1	4.8	5.5
DPS	4.5	1.8	2.2	2.5
Book value per share	16.8	19.0	21.6	24.6
D . /: I D: T \ ////	137.0	44.1	45.7	45.1
Payout (incl. Div.Tax) (%)				1.1
Dividend yield (%)	8.7	1.4	1.0	
Dividend yield (%) Valuation (x)	8.7	1.4		
Dividend yield (%) Valuation (x)		31.7	46.6	
Payout (incl. Div.Tax) (%) Dividend yield (%) Valuation (x) P/E EV/EBITDA	8.7			40.5
Dividend yield (%) Valuation (x) P/E EV/EBITDA	15.8	31.7	46.6	40.5 13.7
Dividend yield (%) Valuation (x) P/E	15.8 5.5	31.7 15.2	46.6 21.7	40.5 13.7 2.5 9.1
Dividend yield (%) Valuation (x) P/E EV/EBITDA EV/Sales	15.8 5.5 1.0	31.7 15.2 1.9	46.6 21.7 2.6	40.5 13.7 2.5
Dividend yield (%) Valuation (x) P/E EV/EBITDA EV/Sales Price/Book value	15.8 5.5 1.0	31.7 15.2 1.9	46.6 21.7 2.6	40.5 13.7 2.5
Dividend yield (%) Valuation (x) P/E EV/EBITDA EV/Sales Price/Book value Return and Liquidity Ratios	15.8 5.5 1.0 3.1	31.7 15.2 1.9 6.8	46.6 21.7 2.6 10.4	40.5 13.7 2.5 9.1

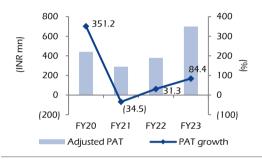
Note: pricing as on year-end; Source: Bloomberg, Company, Elara Securities Research

Revenue & EBITDA margin trend



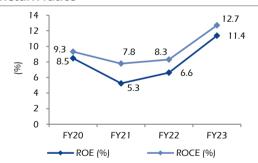
Source: Bloomberg, Company, Elara Securities Research

Adjusted profit growth trend



Source: Bloomberg, Company, Elara Securities Research

Return ratios



Source: Bloomberg, Company, Elara Securities Research



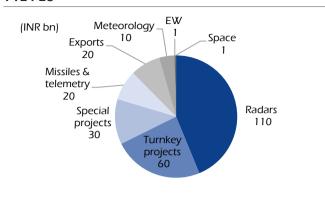
Exhibit 1: Key opportunities across categories

Program	(INR mn)	Timeline	Client
Radars	•		
Medium Powered Radar (MPR, Arudhra)	4,000	FY24	BHE
High Power Radar (HPR) Sub-systems	11,000	FY27	IAF
Mountain Radar	1,300	FY26	BHE
Jttam AESA Radar for LCA Mk1A	4,500	FY25-27	HNAL
Jttam AESA Radar for LCA Mk2	3,000	FY28-30	HNAL
Jttam AESA Radar for Su-30 MKI	10,000	FY26-30	HNAL
Jttam AESA Radar for AMCA	5,000	FY26-30	HNAL
Jttam AESA Radar for TEDBF	3,000	FY27	HNAL
ong Range Radar (LRR)	10,000	FY24	DRDO
RSAM Radar	5,000	FY24	DRDO
NEW&C-11	1,600	FY24	DRDO
DRSAM	20,000	FY24-26	BHE
pace Debris Radar	14,000	FY24-27	ISRO
ire Control Radar (FCR)	13,170	FY26	BHE
Iltra-high frequency (UHF) radar	4,500	FY29	DRDO
-band radar	12,000	FY29	DRDO
ir defence radar	7,000	FY27	DRDO
Counter drone radar	1,400	FY24-30	DRDO
otal	130,470	50	-
Aissiles	150,170		
sstra	4,000	FY24-26	DRDL and BDL
ukash	4,350	FY24-26	BDL
DRSAM	640	FY24-26	BDL
LCM	1,320	FY27	ANSP
IGARM	1,860	FY27	DRDL
ralay, Brahmos and SMART	500	FY24	DRDL and BDL
est Range Systems - PATM, Decoy	1,000	FY24-26	ITR
elemetry Modules	940	FY24-26	DRDO
Converters	340	FY27	SPIC
ransponders	640	FY27	DRDL
otal	15,590	1127	DRDE
lectronic warfare	13,370		
SPJ Pod for LCA Mk1A	500	FY25-27	HNAL
W Products	2,300	FY25-27	BHE
W Froducts R118-DST, MASS, BIT for SU-30 MKI	2,500	FY24-26	BHE
	5,300	1124-20	DI IL
otal pace	5,300		
	0.250	EV24.20	MoD ISDO Satellite users
AR, Communication Payload Satellite	9,250	FY24-30	MoD, ISRO, Satellite users
otal	9,250		
ystems	20.000	EV24	Indian Army
C-UAS	20,000	FY24	Indian Army
Vind Profile Radar & DWR	2,000	FY24-27	IAF
owe level light weight radar	1,000	FY25	Indian Army
ird detection & monitoring radar	800	FY25	IAF
otal	23,800		
		EVOE 22	Communication
-	2 2 2 2	FY25-30	Commercial market
RNSS module and VTU	3,000		
RNSS module and VTU IAVIC timing receiver	5,000	FY25-30	Telcos, banks, MoD, ISRO, airports, power grids
RNSS module and VTU NAVIC timing receiver CORS receiver	5,000 5,000	FY25-30 FY25-30	State governments for survey of India
RNSS module and VTU NAVIC timing receiver CORS receiver Robotics	5,000 5,000 750	FY25-30 FY25-30 FY25-30	State governments for survey of India MoA, MHA, State Police
Special Projects RNSS module and VTU NAVIC timing receiver CORS receiver Robotics OGHz ITS radar timing receiver	5,000 5,000	FY25-30 FY25-30	State governments for survey of India

Source: Company, Elara Securities Research

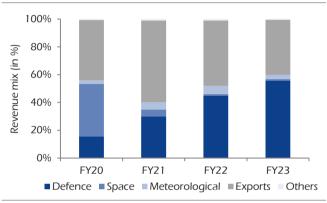


Exhibit 2: TAM for ASTM at INR 240-250bn during FY24-28



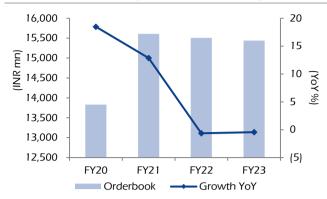
Source: Company, Elara Securities Research

Exhibit 3: Defence contribution grows from 16% in FY20 to 56% in FY23



Source: Company, Elara Securities Research

Exhibit 4: Orderbook growth muted during FY21-23



Source: Company, Elara Securities Research



Abbreviation and Acronyms

	Full Form
AAAU	Active Antenna Array Unit
AESA	Active Electronically Scanned Array
AEW&C	Airborne Early Warning and Control
AMCA	Advanced Medium Combat Aircraft
ANSP	Advanced Naval Systems Programme
ASPJ	Advanced Self-Protection Jammer
BDL	Bharat Dynamics
BHE	Bharat Electronics
BIT	BIT Button
CORS	Continuously Operating Reference Station
C-UAS	Counter Unmanned Aerial Systems
DR118-DST	Digital Radar 118 - Department of Science & Technology
DRDL	Defence Research & Development Laboratory
DRDO	Defence Research & Development Organisation
DWR	Doppler Weather Radars
EW	Electronic Warfare
HNAL	Hindustan Aeronautics
IAF	Indian Air Force
IRNSS	Indian Regional Navigation Satellite System
ISRO	Indian Space Research Organisation
ITR	Integrated Test Range
ITS	Intelligence Traffic System
LCA	Light Combat Aircraft
LRSAM	Long Range Surface-to-air Missile
LRU	Line Replaceable Unit
MASS	Multi-Ammunition Softkill System
MHA	Ministry of Home Affairs
MoA	Ministry of Agriculture
MoD	Ministry of Defence
NavIC	Navigation with Indian Constellation
NGARM	Next Generation Anti-Radiation Missile
NHAI	National Highway Authority of India
PATM	Principles of Air Transportation Management
PIL	Positive Indigenization List
QRSAM	Quick Range Surface-to-air Missile
RF	Radio Frequency
SAR	Synthetic Aperture Radar
SLCM	Submarine-Launched Cruise Missile
SMART	Supersonic Missile Assisted Release of Torpedo
SPIC	System Planning & Implementation Centre
TAM	Total Addressable Market

Elara Securities (India) Private Limited



Disclosures & Confidentiality for non U.S. Investors

The Note is based on our estimates and is being provided to you (herein referred to as the "Recipient") only for information purposes. The sole purpose of this Note is to provide preliminary information on the business activities of the company and the projected financial statements in order to assist the recipient in understanding / evaluating the Proposal. Nothing in this document should be construed as an advice to buy or sell or solicitation to buy or sell the securities of companies referred to in this document. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved) and should consult its own advisors to determine the merits and risks of such an investment. Nevertheless, Elara Securities (India) Private Limited or any of its affiliates is committed to provide independent and transparent recommendation to its client and would be happy to provide any information in response to specific client queries. Elara Securities (India) Private Limited or any of its affiliates have not independently verified all the information given in this Note and expressly disclaim all liability for any errors and/or omissions, representations or warranties, expressed or implied as contained in this Note. The user assumes the entire risk of any use made of this information. Elara Securities (India) Private Limited or any of its affiliates, their directors and the employees may from time to time, effect or have effected an own account transaction in or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for or solicit investment banking or other business from any company referred to in this Note. Each of these entities functions as a separate, distinct and independent of each other. This Note is strictly confidential and is being furnished to you solely for your information. This Note should not be reproduced or redistributed or passed on directly or indirectly in any form to any other person or published, copied, in whole or in part, for any purpose. This Note is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject Elara Securities (India) Private Limited or any of its affiliates to any registration or licensing requirements within such jurisdiction. The distribution of this document in certain jurisdictions may be restricted by law, and persons in whose possession this document comes, should inform themselves about and observe, any such restrictions. Upon request, the Recipient will promptly return all material received from the company and/or the Advisors without retaining any copies thereof. The Information given in this document is as of the date of this report and there can be no assurance that future results or events will be consistent with this information. This Information is subject to change without any prior notice. Elara Securities (India) Private Limited or any of its affiliates reserves the right to make modifications and alterations to this statement as may be required from time to time. However, Elara Securities (India) Private Limited is under no obligation to update or keep the information current. Neither Elara Securities (India) Private Limited nor any of its affiliates, group companies, directors, employees, agents or representatives shall be liable for any damages whether direct, indirect, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. This Note should not be deemed an indication of the state of affairs of the company nor shall it constitute an indication that there has been no change in the business or state of affairs of the company since the date of publication of this Note. The disclosures of interest statements incorporated in this document are provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. Elara Securities (India) Private Limited generally prohibits its analysts, persons reporting to analysts and their family members from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Any clarifications / queries on the proposal as well as any future communication regarding the proposal should be addressed to Elara Securities (India) Private Limited. It is important to note that any dispute with respect to this research report, would not have access to stock exchange investor redressal forum or arbitration mechanism.

Elara Securities (India) Private Limited was incorporated in July 2007 as a subsidiary of Elara Capital (India) Private Limited.

Elara Securities (India) Private Limited is a SEBI registered Stock Broker in the Capital Market and Futures & Options Segments of National Stock Exchange of India Limited [NSE], in the Capital Market Segment of BSE Limited [BSE] and a Depository Participant registered with Central Depository Services (India) Limited [CDSL].

Elara Securities (India) Private Limited's business, amongst other things, is to undertake all associated activities relating to its broking business.

The activities of Elara Securities (India) Private Limited were neither suspended nor has it defaulted with any stock exchange authority with whom it is registered in last five years. However, during the routine course of inspection and based on observations, the exchanges have issued advise letters or levied minor penalties on Elara Securities (India) Private Limited for minor operational deviations in certain cases. Elara Securities (India) Private Limited has not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has the certificate of registration been cancelled by SEBI at any point of time.

Elara Securities (India) Private Limited offers research services primarily to institutional investors and their employees, directors, fund managers, advisors who are registered or proposed to be registered.

Details of Associates of Elara Securities (India) Private Limited are available on group company website www.elaracapital.com

Elara Securities (India) Private Limited is maintaining arms-length relationship with its associate entities.

Research Analyst or his/her relative(s) may have financial interest in the subject company. Elara Securities (India) Private Limited does not have any financial interest in the subject company, whereas its associate entities may have financial interest. Research Analyst or his/her relative does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report. Elara Securities (India) Private Limited does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report. Associate entities of Elara Securities (India) Private Limited may have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report. Research Analyst or his/her relative or Elara Securities (India) Private Limited or its associate entities does not have any other material conflict of interest at the time of publication of the Research Report.

 $Research\ Analyst\ or\ his/her\ relative (s)\ has\ not\ served\ as\ an\ officer,\ director\ or\ employee\ of\ the\ subject\ company.$

Research analyst or Elara Securities (India) Private Limited have not received any compensation from the subject company in the past twelve months. Associate entities of Elara Securities (India) Private Limited may have received compensation from the subject company in the past twelve months. Research analyst or Elara Securities (India) Private Limited or its associate entities have not managed or co-managed public offering of securities for the subject company in the past twelve months. Research analyst or Elara Securities (India) Private Limited or its associates have not received any compensation for investment banking or brokerage services from the subject company in the past twelve months. Research analyst or Elara Securities (India) Private Limited or its associate entities may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company or third party in connection with the Research Report in the past twelve months.

Disclaimer & Standard warning

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.



Elara Securities (India) Private Limited

Disclaimer for non U.S. Investors

The information contained in this note is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

Disclosures for U.S. Investors

The research analyst did not receive compensation from Astra Microwave Products Limited.

Elara Capital Inc.'s affiliate did not manage an offering for Astra Microwave Products Limited.

Elara Capital Inc.'s affiliate did not receive compensation from Astra Microwave Products Limited in the last 12 months.

Elara Capital Inc.'s affiliate does not expect to receive compensation from Astra Microwave Products Limited in the next 3 months.

Disclaimer for U.S. Investors

This material is based upon information that we consider to be reliable, but Elara Capital Inc. does not warrant its completeness, accuracy or adequacy and it should not be relied upon as such.

This material is not intended as an offer or solicitation for the purchase or sale of any security or other financial instrument. Securities, financial instruments or strategies mentioned herein may not be suitable for all investors. Any opinions expressed herein are given in good faith, are subject to change without notice, and are only correct as of the stated date of their issue. Prices, values or income from any securities or investments mentioned in this report may fall against the interests of the investor and the investor may get back less than the amount invested. Where an investment is described as being likely to yield income, please note that the amount of income that the investor will receive from such an investment may fluctuate. Where an investment or security is denominated in a different currency to the investor's currency of reference, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment to the investor. The information contained in this report does not constitute advice on the tax consequences of making any particular investment objectives, financial situations or needs and is not intended as a recommendation of particular securities, financial instruments or strategies to you. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

Certain statements in this report, including any financial projections, may constitute "forward-looking statements." These "forward-looking statements" are not guarantees of future performance and are based on numerous current assumptions that are subject to significant uncertainties and contingencies. Actual future performance could differ materially from these "forward-looking statements" and financial information.

Elara Securities (India) Private Limited

Managing Director



India Elara Securities (India) Pvt. Ltd.

Harendra Kumar

Sales

One International Center, Tower 3, 21st Floor, Senapati Bapat Marg, Elphinstone Road (West) Mumbai – 400 013, India Tel : +91 22 6164 8500

Europe Elara Capital Plc. Edira Capital Mc. 6th Floor, The Grove, 248A Marylebone Road, London, NW1 6JZ, United Kingdom Tel: +44 20 7486 9733

USA Elara Securities Inc. 230 Park Avenue, Suite 2415, New York, NY 10169, USA Tel: +1 212 430 5870 Fax: +1 212 208 2501

harendra.kumar@elaracapital.com

Asia / Pacific Elara Capital (Asia) Pte.Ltd. One Marina Boulevard, Level 20, Singapore 018989 Tel: +65 6978 4047

+91 22 6164 8571

Ashok Aganyal	India		ashok agarwal@olarasapital.com	+91 22 6164 8558
Ashok Agarwal			ashok.agarwal@elaracapital.com	
Hitesh Danak	India		hitesh.danak@elaracapital.com	+91 22 6164 8543
Karan Rathod	India		karan.rathod@elaracapital.com	+91 22 6164 8570
Lekha Nahar	India		lekha.nahar@elaracapital.com	+91 22 6164 8512
Prashin Lalvani	India		prashin.lalvani@elaracapital.com	+91 22 6164 8544
Shraddha Shrikhande	India		shraddha.shrikhande@elaracapital.com	+91 22 6164 8567
Sudhanshu Rajpal	India		sudhanshu.rajpal@elaracapital.com	+91 22 6164 8508
Joshua Saldanha	Asia		joshua.saldanha@elaracapital.com	+91 22 6164 8541
Anita Nazareth	Corporate Acc	ess, Conference & Events	anita.nazareth@elaracapital.com	+91 22 6164 8520
Tina D'souza	Corporate Acc	ess	tina.dsouza@elaracapital.com	+91 22 6164 8595
Quantitative, Alternatives,	Sales Trading & Deal	ing	<u>'</u>	
Sunil Jain	Quantitative &	Alternates	sunil.jain@elaracapital.com	+91 22 6164 8531
Nandish Patel	Quantitative &		nandish.patel@elaracapital.com	+91 22 6164 8564
Biren Mehta	Head - Sales Tr		biren.mehta@elaracapital.com	+91 22 6164 8500
Kalpesh Parekh	India	9	kalpesh.parekh@ElaraCapital.com	+91 22 6164 8555
Manoj Murarka	India		manoj.murarka@elaracapital.com	+91 22 6164 8551
Anil Pawar	India		anil.pawar@elaracapital.com	+91 22 6164 8552
Nilesh Chheda	India		nilesh.chheda@elaracapital.com	+91 22 6164 8554
Nupur Barve	India		nupur.barve@elaracapital.com	+91 22 6164 8532
Research				
Dr Bino Pathiparampil	Head of Persarch	Healthcare, Pharmaceuticals, Strategy	bino.pathiparampil@elaracapital.com	+91 22 6164 8689
Amit Purohit				+91 22 6164 8594
	Analyst	Building Materials, Dairy, FMCG, Paints	amit.purohit@elaracapital.com	
Ankita Shah	Analyst	Infrastructure, Ports & Logistics, Industrials	ankita.shah@elaracapital.com	+91 22 6164 8516
Biju Samuel	Analyst	Quantitative & Alternate Strategy	biju.samuel@elaracapital.com	+91 22 6164 8505
Gagan Dixit	Analyst	Aviation, Chemicals, Oil & Gas	gagan.dixit@elaracapital.com	+91 22 6164 8504
Garima Kapoor	Economist		garima.kapoor@elaracapital.com	+91 22 6164 8527
Harshit Kapadia	Analyst	Capital Goods, Consumer Electronics	harshit.kapadia@elaracapital.com	+91 22 6164 8542
Jay Kale, CFA	Analyst	Auto & Auto Ancillaries	jay.kale@elaracapital.com	+91 22 6164 8507
Karan Taurani	Analyst	Media & Entertainment, Alcobev, QSR, Internet	t karan.taurani@elaracapital.com	+91 22 6164 8513
Prakhar Agarwal	Analyst	Banking & Financials	prakhar.agarwal@elaracapital.com	+91 22 6164 8502
Prashant Biyani	Analyst	Agrochemicals, Fertilisers, Sugar	prashant.biyani@elaracapital.com	+91 22 6164 8581
Prerna Jhunjhunwala	Analyst	Textiles, Retail	prerna.jhunjhunwala@elaracapital.com	+91 22 6164 8519
Ravi Sodah	Analyst	Cement, Metals & Mining	ravi.sodah@elaracapital.com	+91 22 6164 8517
Ruchi Mukhija	Analyst	IT Services	ruchi.mukhija@elaracapital.com	+91 22 6164 8583
Rupesh Sankhe	Analyst	Utilities, Renewables, Capital Goods, Real Estat		+91 22 6164 8518
Shweta Daptardar	Analyst	Diversified Financials, Non-Lending Financials	shweta.daptardar@elaracapital.com	+91 22 6164 8559
Saurabh Mitra	Sr. Associate	Cement, Metals & Mining	saurabh.mitra@elaracapital.com	+91 22 6164 8546
			aditya.jaiswal@elaracapital.com	+91 22 4204 8683
Aditya Jaiswal	Associate	Strategy		+91 22 4204 8664
Amogh Deshpande	Associate	Aviation, Chemicals, Oil & Gas	amogh.deshpande@elaracapital.com	
Ash Shah	Associate	Infrastructure, Ports & Logistics	ash.shah@elaracapital.com	+91 22 6164 8500
Bhavi Shah	Associate	Cement, Metals & Mining	bhavi.shah@elaracapital.com	+91 22 6164 8521
Gaurang Sakare	Associate	Healthcare, Pharmaceuticals	gaurang.sakare@elaracapital.com	+91 22 4204 8618
Heet Van	Associate	Healthcare, Pharmaceuticals	heet.van@elaracapital.com	+91 22 6164 8545
Himanshu Dhyawala	Associate	Diversified Financials, Non-Lending Financials	himanshu.dhyawala@elaracapital.com	+91 22 4204 8661
Kartik Solanki	Associate	Banking & Financials	kartik.solanki@elaracapital.com	+91 22 4204 8604
Ketul Dalal	Associate	Auto & Auto Ancillaries	ketul.dalal@elaracapital.com	+91 22 4204 8693
Keval Shah	Associate	Strategy	keval.shah@elaracapital.com	+91 22 4204 8669
Mudit Kabra	Associate	Capital Goods, Consumer Electronics	mudit.kabra@elaracapital.com	+91 22 4204 8611
Nemish Sundar	Associate	Capital Goods, Consumer Electronics	nemish.sundar@elaracapital.com	+91 22 6164 8500
Nishant Chowhan, CFA	Associate	Auto & Auto Ancillaries	nishant.chowhan@elaracapital.com	+91 22 4204 8667
Palak Shah	Associate	Banking & Financials	palak.shah@elaracapital.com	+91 22 6164 8500
Ragini Pande	Associate	Utilities, Renewables	ragini.pande@elaracapital.com	+91 22 6164 8500
Rohit Harlikar	Associate	Building Materials, Dairy, FMCG, Paints	rohit.harlikar@elaracapital.com	+91 22 6164 8562
Rounak Ray	Associate	Media & Entertainment, Alcobev, QSR, Internet		+91 22 4204 8684
		IT Services		+91 22 4204 8687
Seema Nayak	Associate		seema.nayak@elaracapital.com	
Shweta Roy	Associate	Economics	shweta.roy@elaracapital.com	+91 22 6164 8500
Subhankar Sanyal	Associate	Economics	subhankar.sanyal@elaracapital.com	+91 22 4204 8688
Tanvi Tambat	Associate	Real Estate	tanvi.tambat@elaracapital.com	+91 22 6164 8537
Ujwal Wadighare	Associate	Agrochemicals, Fertilisers, Sugar	ujwal.wadighare@elaracapital.com	+91 22 6164 8500
Vaibhav Chechani	Associate	IT Services	vaibhav.chechani@elaracapital.com	+91 22 4204 8682
Vidhi Puj	Associate	Building Materials, Dairy, FMCG, Paints	vidhi.puj@elaracapital.com	+91 22 4204 8692
Vinayak Patil	Database		vinayak.patil@elaracapital.com	+91 22 6164 8510
Priyanka Sheth	Editor		priyanka.sheth@elaracapital.com	+91 22 6164 8568
Prakriti Singh	Editor		prakriti.singh@elaracapital.com	+91 22 6164 8500
Gurunath Parab	Production		gurunath.parab@elaracapital.com	+91 22 6164 8515
Jinesh Bhansali	Production		jinesh.bhansali@elaracapital.com	+91 22 6164 8537
			j	1 : 0.0.0337
Access our reports on Pla	ombora: Typo PEC	ESEC ACON	Also available on The	mean C Pourtors

Access our reports on Bloomberg: Type RESP ESEC <GO>

Also available on Thomson & Reuters

Elara Securities (India) Private Limited

Registered Office Address: One International Center, Tower 3, 21st Floor, Senapati Bapat Marg,
Elphinstone Road (West) Mumbai – 400 013, India Tel: +91 22 6164 8500

CIN: U74992MH2007PTC172297 | SEBI Research Analyst Registration No.: INH000000933

Member of BSE Limited and National Stock Exchange of India Limited | SEBI REGN. NO.: INZ 000 238236 Member of Central Depository Services (India) Limited | SEBI REGN. NO.: IN-DP-370-2018 Investor Grievance Email ID: <u>investor.grievances@elaracapital.com</u> - Tel. +91 22 6164 8509 Compliance Officer: Mr. Anand Rao - Email ID: <u>anand.rao@elaracapial.com</u> - Tel. +91 22 6164 8509