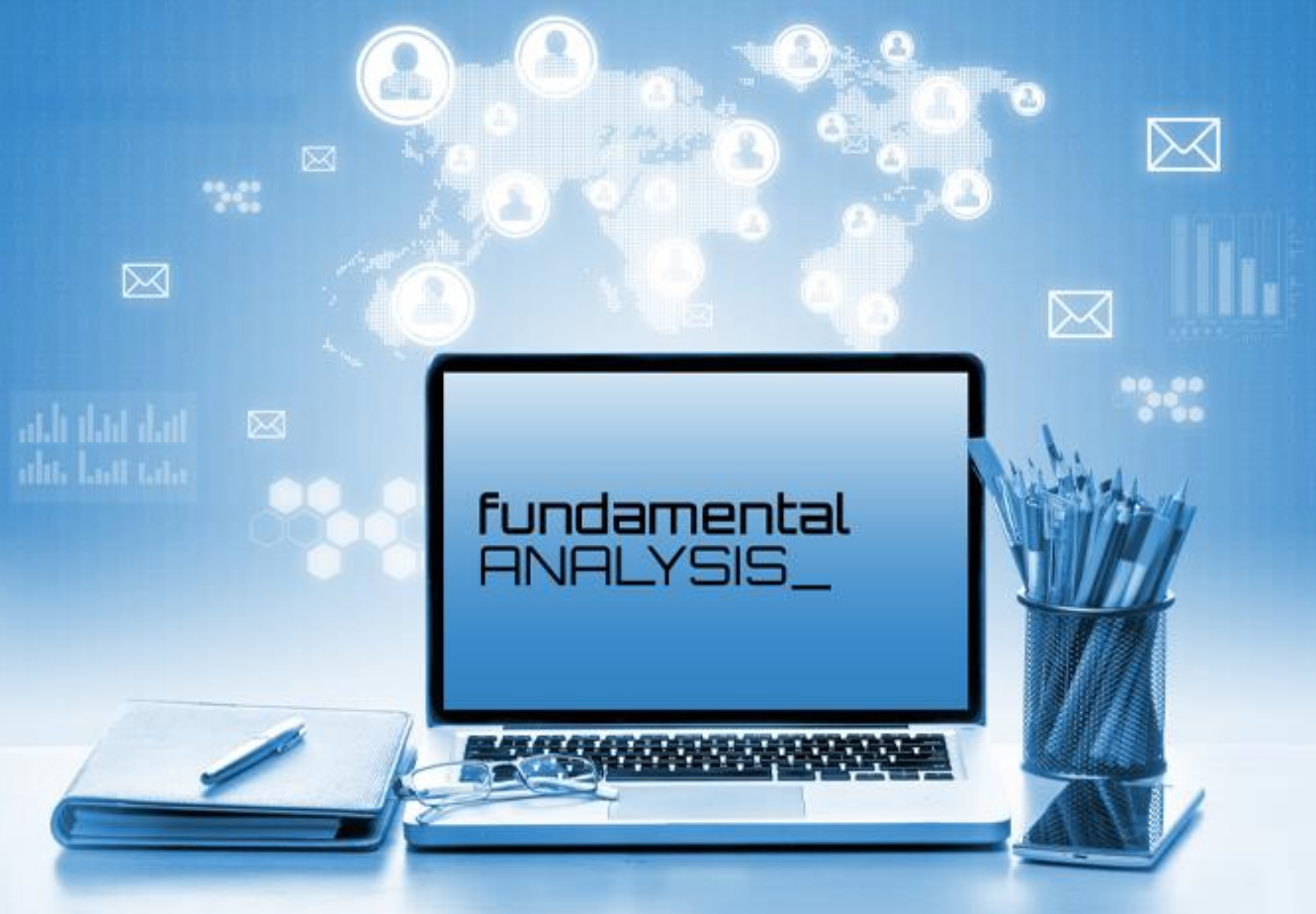
Stock Note

Exide Industries Ltd.

July 03, 2023



RETAILRESEARCH

HDFC securities
Click. Invest. Grow.
20 YEARS

Exide Industries Ltd.

Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
Auto Ancillaries	Rs 237	Buy in Rs 235-241 band & add more on dips in Rs 209-213 band	Rs 263	Rs 285	3-4 quarters

HDFC Scrip Code	EXIINDEQNR
BSE Code	500086
NSE Code	EXIDEIND
Bloomberg	EXID IN
CMP Jun 30, 2023	236.7
Equity Capital (Rs cr)	85.0
Face Value (Rs)	1
Equity Share O/S (cr)	85.0
Market Cap (Rs cr)	20124
Book Value (Rs)	131.9
Avg. 52 Wk Volumes	31,07,000
52 Week High (Rs)	238.7
52 Week Low (Rs)	136.8

Share holding Pattern % (Mar, 2023)	
Promoters	46.0
Institutions	31.2
Non Institutions	22.8
Total	100.0

* Refer at the end for explanation on Risk Ratings

Fundamental Research Analyst
Atul Karwa
atul.karwa@hdfcsec.com

Our Take:

Exide Industries (Exide) is the leading battery manufacturer in India catering to automobiles and industrial segments. The company is present in the OEM as well as replacement and export segments. Exide is the market leader in the organized lead acid battery segment, commanding the majority market share in the domestic market. In organized OEM segment, its overall market share 3/4W is ~60% while 2W it is ~75%. Over the last 3 years the company has almost doubled its distributor network and entered new geographies in Europe and Russia. In the domestic market, organised players are expected to continue gaining market share in the auto replacement segment due to GST and stricter environmental norms.

The company has collaborated with Svolt, China to set up lithium-ion battery manufacturing plant in India. SVOLT partnership would support manufacturing/technology/raw material procurement. It has already incurred capex of Rs 715cr and expects total capex of Rs 4000cr in the first phase by FY25. With increasing EV penetration, the company would have first mover advantage as the homologation process with OEM takes 1.5-2 years.

Valuation & Recommendation:

The management expects replacement demand to pick up in FY24. Its battery management system subsidiary has an outstanding orderbook of Rs 600-700cr and expects revenue of Rs 400-500cr in FY24. Focus on premium products and calibrated price hike should aid in margin expansion. The high capex lithium ion battery business could provide trigger for the medium term although it carries risk of execution and technology changes.

We expect Exide's Revenue/PAT to grow at 12/19% CAGR over FY23-FY25E. We believe investors can buy the stock in Rs 235-241 band and add on dips in Rs 209-213 band (14x FY25E EPS) for a base case fair value of Rs 263 (17.5x FY25E EPS) and bull case fair value of Rs 285 (19x FY25E EPS) over the next 3-4 quarters. We are not separately ascribing any value to the 8.7 cr shares of HDFC life held by Exide for valuation purposes.

Financial Summary

Particulars (Rs cr)	Q4FY23	Q4FY22	YoY (%)	Q3FY23	QoQ (%)	FY22	FY23	FY24E	FY25E
Operating Income	3,543	3,417	3.7	3,412	3.8	12,382	14,592	16,285	18,369
EBITDA	367	350	4.9	401	-8.4	1,396	1,568	1,799	2,076
APAT	208	4,120	-95.0	223	-6.9	4,684	904	1,056	1,277
Diluted EPS (Rs)	2.4	48.5	-95.0	2.6	-6.9	55.1	10.6	12.4	15.0
RoE (%)						53.5	8.3	9.1	10.2
P/E (x)						4.3	22.3	19.1	15.8
EV/EBITDA (x)						13.8	12.4	11.2	10.0

(Source: Company, HDFC sec)

Q4FY23 Result Review

Exide reported subdued numbers for Q4FY23 with revenue/EBITDA growth of 4/5% YoY to Rs 3543/367 crore. Domestic OEM volumes growth was good while replacement market volumes remained subdued. Industrial segment sales such as industrial UPS, solar, traction, telecoms and power continue to do well. Exports were muted due to anti-dumping duty on base level lead batteries in GCC countries and weak macros.

Gross margin expanded 180bp YoY (-250bp QoQ) to 29.8%. However, operating deleverage restricted EBITDA margin expansion to just 10bp YoY (-140bp QoQ) to 10.4%. Adj PAT declined 25% YoY to Rs 208cr.

Key Triggers

Automotive replacement and industrial segment to drive steady sales

As the automobile battery's life is about 3-3.5 years, it translates into linear replacement demand from the existing vehicle population. The automotive replacement battery segment will continue to offer a secular and profitable growth opportunity, driven by (a) increasing penetration of automobiles driving expansion in automobile population, (b) GST-led consolidation and (c) New segment like E-Rickshaws. GST and new segments would drive consolidation in the replacement market of automotive and inverter batteries, leading to strong growth for the organised players.

New segments in industrial batteries – motive power, and solar applications – would drive growth, as conventional drivers of this segment stabilise. Electric vehicles (EVs) are unlikely to displace lead-acid batteries (LAB) in the medium term as the cost of lithium-ion batteries is still very high, and LAB are still preferred for SLI (starter, lighting, and ignition) applications.

Foray into lithium ion cell manufacturing

With an eye on the future, Exide has laid out a detailed roadmap for its Lithium-ion cell manufacturing facility. It is looking to incur a capex of Rs 4,000 crore for the first phase of the 6 GWh Lithium-ion cell plant at Bengaluru. The work on the facility has already started and the project is progressing extremely well. All necessary permissions have been secured and site-enabling work has been completed. The first phase of the said plant will begin by the second half of the financial year 2025, and the management expects the production to stabilise by the financial year 2026.

Exide will also spend another Rs 2,000 crore for the second phase of this plant. The management also mentioned that it has reached out to several OEMs with regard to its lithium-ion plants and that they have received strong interest from its legacy automotive customers.

Exide has a tie-up with SVOLT, China to provide the technology for Li-ion battery manufacturing and can ride piggy back on its supply chain. As part of the deal, SVOLT will grant Exide an irrevocable right and license to use, exploit, and commercialize applicable lithium-ion cell manufacturing technology and know-how in India. SVOLT will also provide full support for the establishment of a state-of-the-art greenfield manufacturing facility.

Svolt is amongst the biggest battery manufacturers and its scale would ensure lower material prices for Exide. As a global high-tech company and spin-off of the Chinese automobile manufacturer Great Wall Motors, SVOLT develops and produces lithium-ion batteries and battery systems for electric vehicles as well as energy storage.

Before 2018, SVOLT was only an unknown player, but in just four years, it has advanced to become one of the top 10 ten in the world. According to SNE Research, a Korean market research institution, the cumulative installed capacity of SVOLT reached 2.6 GWh in the first half of 2022, an increase of 160% year-on-year, ranking it among the top 10 globally.

SVOLT has established many production and research bases in China. It has also announced six production expansion plans in 2022, involving 182.6 GWh battery capacity, with a total investment of 67.6 billion yuan. The company is in the process of building R&D bases in Europe, South Korea and other locales to construct a global R&D, production and service network.

Lithium-ion demand (GWh) in India by 2030

		2025	2030
Mobility	2Ws	10 - 12	40 - 45
	3Ws	1.2 - 1.7	5 - 6
	4Ws	4 - 5	40 - 45
	LCV / HCV	0.9 - 1.2	3 - 4
	Buses	1 - 1.5	4 - 5
	Tractors	1 - 1.5	6 - 7
Mobility Total		20-30	100-110
Stationary		20 - 25	50 - 60
Total		40 - 50	150 -160

(Source: Company, HDFC sec)

Strong orders for Battery Management Systems

In 2018, Exide entered a partnership with Leclanché S.A (Leclanché), based in Switzerland, for production of lithium-ion battery packs and modules. Headquartered in the automotive hub of Gujarat, Prantij, Nexcharge offers customised lithium ion batteries and energy solutions for transport and Industrial applications. Exide had invested Rs 277cr for 84.9% stake in the subsidiary and acquired the remaining stake from Leclanché in Nov’22 for Rs 25cr. The company has begun production and has an outstanding order book of Rs 600-700cr at the end of FY23. The cells for the module currently being imported would be manufactured by the upcoming facility. The company incurred a loss of Rs.43.2 cr on sales of Rs.33.4 cr in FY22.

Declining share of unorganized segment

The share of the unorganised segment in the replacement market has been gradually declining but is still 30-40%. Organised players dominate the PV and 2W segments, with a 70-80% share. The share of unorganised/small organized players in the CV, tractors, and home inverter segments is higher at 50-60%. However, going forward, it is expected that the organized market will consolidate through the acquisition of small players by larger ones. In addition, unorganized players are more likely to wind down due to stringent rules on recycling and manufacturing processes.

To counter the unorganised segment, the organised players are increasingly promoting entry-level brands at competitive pricing and shorter warranty period and are expanding distribution network in the semi-urban and rural markets. This should facilitate in increasing their share in the overall battery market.

Price hikes, changing product mix to result in higher margin

Exide is focused on expanding margins through a) calibrated price hikes, b) mix optimization (product and channel mix) with higher share of premium products, and c) improving operational efficiencies through digitalization initiatives. The company would see a lower impact of the lead price inflation due to its captive smelter.

Government support for battery manufacturing

The government of India has introduced various policies to boost India's battery markets. These policies include the 'National Program on Advanced Chemistry Cell (ACC) Battery Storage (DHI) and the Battery swapping policy. India's EV battery market is expected to reach US$ 2 billion by 2026 and surpass US$ 3 billion by 2031.

Opportunities from increase in renewable energy generation:

The government's earlier renewable energy target of 175GW by 2030 has been further enhanced to 450GW. This would result in higher demand for energy storage systems in India. Increased renewable component in overall energy mix necessitates frequency stabilization and also handling of peak demand in morning and evening hours all of which will drive up energy storage needs. Stationary lead-acid batteries are more efficient in storage of energy obtained from renewable sources such as wind and solar and are more suitable in installations in the offshore and onshore platforms to store, supply and direct electric power.

Strong financial risk profile, with negligible debt and healthy cash accruals

Exide has remained net debt negative for the last several years, aided by healthy accruals. At the consolidated level, the company's total net cash accruals for the period FY19-FY22 stood at over Rs 4,000cr net cash accruals, and it had sizeable cash and liquid investments of Rs 911cr as against a consolidated gross debt of Rs 532cr (including lease liabilities of Rs 310cr) as on March 31, 2022. The net debt negative position has resulted in strong capital structure and coverage metrics for EIL. Exide also has long-term investments in HDFC Life Insurance Company Limited (8.7 cr shares), fair value of which is more than Rs 5600cr

Risks & Concerns

Slowdown in automobile/telecom industry

A prolonged slowdown in automotive volumes in future may hinder company's overall performance. Company derives significant revenues from industrial battery segment and telecom towers, economic slowdown can hurt the segment performance. Most of the end-user industries are cyclical in nature. Hence, Exide's industrial segment revenues are exposed to business downturns, although its diversified user base mitigates demand risk to a large extent.

Exposure to intense competition

The telecom segment has been going through a tough consolidation phase, wherein the telecom operators/ infrastructure players continue to exert pressure on vendors to reduce prices. Competition is also intensifying in the auto aftermarket battery segment and small-to-mid sized organized players (hitherto operating only in the industrial segment and now increasing focus on the auto segment) offering products at competitive prices.

Imposition of anti-dumping duty

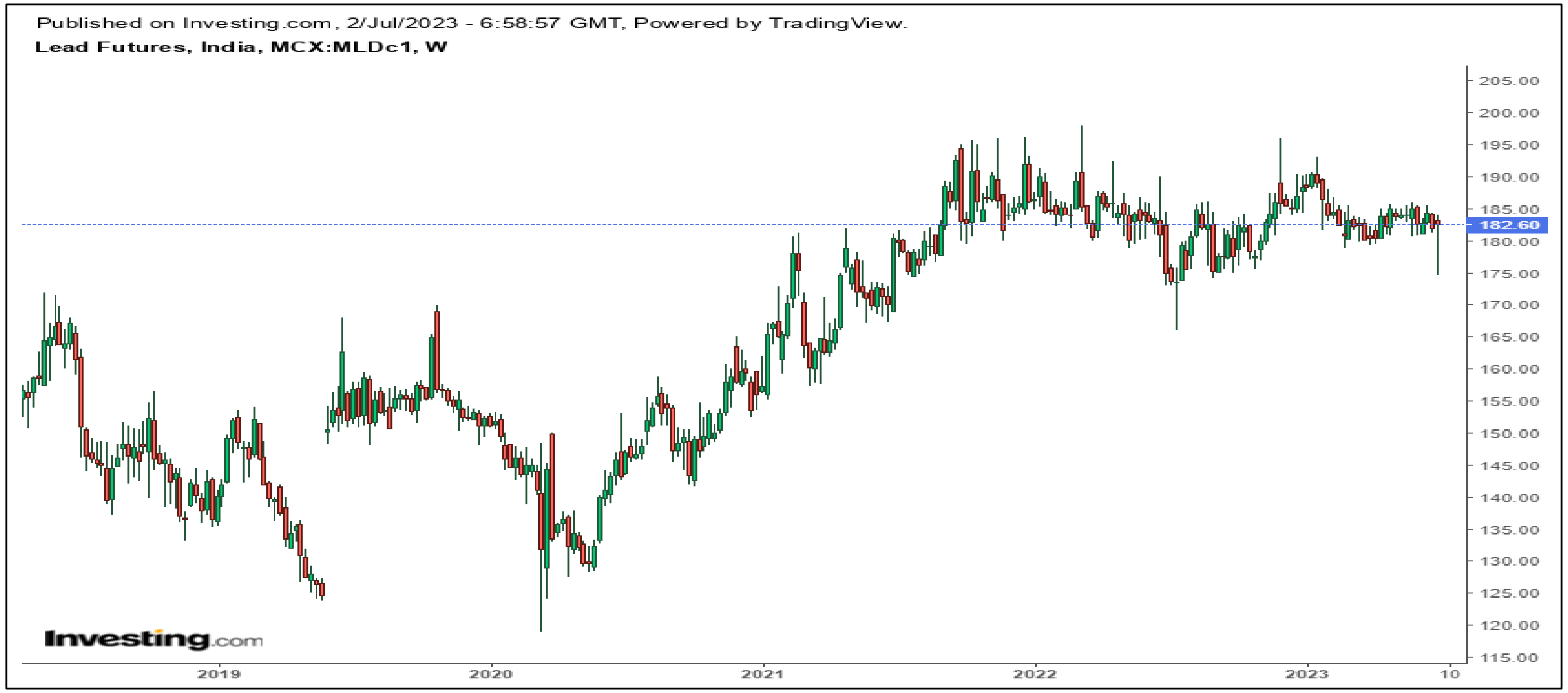
Bahrain has imposed anti-dumping duty on motor batteries between 32 and 225 amps from Turkey and India to guard local and domestic manufacturers. This has impacted exports of the company. Expansion of duty by other GCC countries could lead to further exports slowdown.

Forex volatility

Adverse currency movement may remain a risk to its profitability given that the key raw material - lead prices are based on international prices and Exide exports ~10% of its sales.

Exposure to volatility in lead prices

Lead is the main raw material for Exide and its prices have risen/are stable at high levels. Given the competitive scenario in the industry, price hikes to offset the higher raw material prices have to be gradual and may impact margins in the interim.



Exide faces the risk of execution in the large Lithium ion project:

Exide has collaborated with Svolt, China to set up lithium-ion battery manufacturing plant in India. Svolt partnership would support manufacturing/technology/raw material procurement. It has already incurred capex of Rs 715cr and expects total capex of Rs 4000cr in the first phase by FY25. In case this project faces execution/teething delays, then it may postpone the upside in revenues and profits affecting return ratios in the interim. The project being in the initial stages of construction exposes it to time and cost overruns. Further, significant dependence on imports for sourcing raw materials exposes it to geopolitical and region-specific risks for raw materials. Also, there are risks on the off-take front, given that EV penetration is still in nascent stages and the company does not have any 'take-or-pay' agreements. Also in case of technology changes in the interim, affecting the anticipated scale of demand for lithium ion, then the economic viability of the project may come under cloud. However while the capex is significant, it is critical to capitalise on opportunities from EVs.

Company Background:

For more than seven decades, Exide Industries has been one of India's most reliable brands, enjoying unrivalled reputation and recall. A leader in packaged power technology, Exide is India's largest storage battery company with the widest range of both conventional flooded as well as latest VRLA batteries. Constant emphasis on innovation, extensive geographic footprint, strong relationship with marquee clients and steady technology upgrades with global business partners have made the company a frontrunner in the lead-acid storage batteries space for both automotive and industrial applications. Exide designs, manufactures, markets and sells the widest range of lead acid storage batteries in the world to cover the broadest spectrum of applications.

It is constantly upgrading its technology and also acquiring new technology to meet the ever increasing demands of its customers. In addition to in-house R&D Centre recognised by the Government of India's Department of Scientific and Industrial Research (DSIR), Exide also acquires new technology through technical collaboration agreements with leading international battery manufacturers. Out of the nine factories, seven factories are dedicated to manufacturing batteries and the other two for home UPS Systems. Company manufactures batteries for automotive, power, renewable energy, telecom, infrastructure projects, as well as the railways, mining and defence sectors and also solar projects and submarines. Company derives about 30% of its revenues from automotive segment while around 70% revenues from industrial battery segment. Exide derived ~10% of its revenues from exports and targets to double the size by FY25.

Exide also had a presence in the Life Insurance business through its fully-owned subsidiary, namely Exide Life insurance, which was sold to HDFC Life Insurance in Q3FY22 for a consideration of Rs 726cr cash and 8.7cr shares of HDFC Life Insurance.

Peer Comparison

(Rs cr)	Mcap	Sales			EBITDA Margin (%)			PAT			RoE (%)			P/E (x)			P/B (x)		
		FY23	FY24E	FY25E	FY23	FY24E	FY25E	FY23	FY24E	FY25E	FY23	FY24E	FY25E	FY23	FY24E	FY25E	FY23	FY24E	FY25E
Exide Ind	20124	14592	16285	18369	10.7	11.1	11.3	904	1056	1277	8.3	9.1	10.2	22.3	19.1	15.8	1.8	1.7	1.5
Amara Raja Batt	11638	10388	11660	12599	13.0	13.9	13.9	728	850	954	14.1	16.0	15.4	16.0	13.6	12.5	2.2	2.0	1.8

(Source: HDFC sec, Bloomberg)

Financials

Income Statement

(Rs cr)	FY21	FY22	FY23	FY24E	FY25E
Net Revenues	**10041**	**12382**	**14592**	**16285**	**18369**
Growth (%)	***1.9***	***23.3***	***17.9***	***11.6***	***12.8***
Operating Expenses	8685	10986	13024	14485	16293
EBITDA	**1356**	**1396**	**1568**	**1799**	**2076**
Growth (%)	***-0.7***	***3.0***	***12.4***	***14.8***	***15.4***
EBITDA Margin (%)	***13.5***	***11.3***	***10.7***	***11.1***	***11.3***
Depreciation	379	413	456	478	471
Other Income	65	80	132	122	138
EBIT	**1042**	**1063**	**1245**	**1444**	**1742**
Interest expenses	24	38	30	32	35
PBT	**1018**	**5719**	**1215**	**1412**	**1707**
Tax	260	1035	311	356	430
PAT	**758**	**4684**	**904**	**1056**	**1277**
Share of Asso./Minority Int.	0	0	0	0	0
Adj. PAT	**758**	**4684**	**904**	**1056**	**1277**
Growth (%)	***-8.1***	***517.7***	***-80.7***	***16.9***	***20.9***
EPS	8.9	55.1	10.6	12.4	15.0

Balance Sheet

(Rs cr)	FY21	FY22	FY23	FY24E	FY25E
SOURCE OF FUNDS					
Share Capital	85	85	85	85	85
Reserves	6809	10521	11125	11970	12991
Shareholders' Funds	**6894**	**10606**	**11210**	**12055**	**13076**
Total Debt	0	0	0	725	1225
Net Deferred Taxes	77	-58	-116	-116	-116
Other Non-curr. Liab.	290	284	284	326	367
Total Sources of Funds	**7260**	**10831**	**11378**	**12989**	**14553**
APPLICATION OF FUNDS					
Net Block & Goodwill	2672	2802	2850	2524	2002
CWIP	201	312	101	1250	2400
Investments	3244	6151	6452	6472	6488
Other Non-Curr. Assets	185	108	110	130	147
Total Non Current Assets	**6116**	**9265**	**9403**	**10245**	**10891**
Inventories	2346	2458	2989	3458	3770
Debtors	887	1192	1274	1477	1680
Cash & Equivalents	91	161	74	71	60
Other Current Assets	187	208	194	170	196
Total Current Assets	**3512**	**4020**	**4532**	**5175**	**5705**
Creditors	1642	1610	1526	1785	1912
Other Current Liab & Provisions	727	844	1031	1147	1281
Total Current Liabilities	**2369**	**2454**	**2557**	**2931**	**3194**
Net Current Assets	1144	1566	1975	2244	2512
Total Application of Funds	**7260**	**10831**	**11378**	**12989**	**14553**

Cash Flow Statement

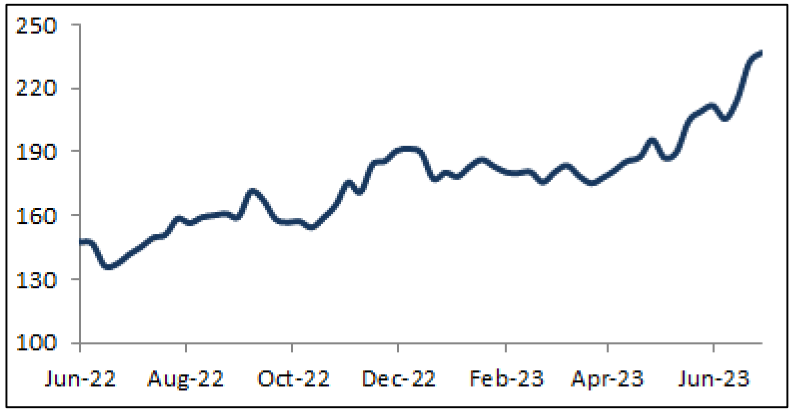
(Rs cr)	FY21	FY22	FY23	FY24E	FY25E
Reported PBT	1018	5719	1215	1412	1707
Non-operating & EO items	-39	-4750	-77	22	25
Interest Expenses	23	31	30	32	35
Depreciation	379	413	456	478	471
Working Capital Change	304	-353	-454	-273	-279
Tax Paid	-272	-1048	-321	-356	-430
OPERATING CASH FLOW (a)	**1413**	**12**	**848**	**1315**	**1529**
Capex	-338	-581	-321	-1300	-1100
Free Cash Flow	1075	-569	527	15	429
Investments	-872	218	197	0	0
Non-operating income	-66	636	-763	-500	-650
INVESTING CASH FLOW (b)	**-1277**	**273**	**-888**	**-1800**	**-1750**
Debt Issuance / (Repaid)	0	0	-10	725	500
Interest Expenses	-4	-14	-6	-32	-35
FCFE	132	271	-55	207	244
Share Capital Issuance	0	0	0	0	0
Dividend	-170	-170	0	-211	-255
Others	-24	-30	-31	0	0
FINANCING CASH FLOW (c)	**-174**	**-184**	**-16**	**482**	**210**
NET CASH FLOW (a+b+c)	**-38**	**101**	**-55**	**-4**	**-11**

Key Ratios

Particulars	FY21	FY22	FY23	FY24E	FY25E
Profitability Ratios (%)					
EBITDA Margin	13.5	11.3	10.7	11.1	11.3
EBIT Margin	10.4	8.6	8.5	8.9	9.5
APAT Margin	7.6	37.8	6.2	6.5	7.0
RoE	11.5	53.5	8.3	9.1	10.2
RoCE	15.8	12.2	11.4	12.0	12.9
Solvency Ratio (x)					
Net Debt/EBITDA	-0.1	-0.1	0.0	0.4	0.6
Net D/E	0.0	0.0	0.0	0.1	0.1
PER SHARE DATA (Rs)					
EPS	8.9	55.1	10.6	12.4	15.0
CEPS	13.4	60.0	16.0	18.0	20.6
BV	81.1	124.8	131.9	141.8	153.8
Dividend	2.0	2.0	2.0	2.4	3.0
Turnover Ratios (days)					
Debtor days	31	31	31	31	31
Inventory days	82	71	68	72	72
Creditors days	49	48	39	37	37
VALUATION (x)					
P/E	26.5	4.3	22.3	19.1	15.8
P/BV	2.9	1.9	1.8	1.7	1.5
EV/EBITDA	14.1	13.8	12.4	11.2	10.0
EV / Revenues	1.9	1.6	1.3	1.2	1.1
Dividend Yield (%)	0.8	0.8	0.8	1.0	1.3
Dividend Payout (%)	22.4	3.6	18.8	19.3	20.0

(Source: Company, HDFC sec)

Price chart



HDFC Sec Retail Research Rating description

Green Rating stocks

This rating is given to stocks that represent large and established business having track record of decades and good reputation in the industry. They are industry leaders or have significant market share. They have multiple streams of cash flows and/or strong balance sheet to withstand downturn in economic cycle. These stocks offer moderate returns and at the same time are unlikely to suffer severe drawdown in their stock prices. These stocks can be kept as a part of long term portfolio holding, if so desired. This stocks offer low risk and lower reward and are suitable for beginners. They offer stability to the portfolio.

Yellow Rating stocks

This rating is given to stocks that have strong balance sheet and are from relatively stable industries which are likely to remain relevant for long time and unlikely to be affected much by economic or technological disruptions. These stocks have emerged stronger over time but are yet to reach the level of green rating stocks. They offer medium risk, medium return opportunities. Some of these have the potential to attain green rating over time.

Red Rating stocks

This rating is given to emerging companies which are riskier than their established peers. Their share price tends to be volatile though they offer high growth potential. They are susceptible to severe downturn in their industry or in overall economy. Management of these companies need to prove their mettle in handling cyclicality of their business. If they are successful in navigating challenges, the market rewards their shareholders with handsome gains; otherwise their stock prices can take a severe beating. Overall these stocks offer high risk high return opportunities.

ATUL JAGDISH KARWA

Digitally signed by ATUL JAGDISH KARWA
Date: 2023.07.03 09:41:46 +05'30'

Disclosure:

I**, Atul Karwa,** Reesearch Analyst, **MMS,** authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. SEBI conducted the inspection and based on their observations have issued advise/warning. The said observations have been complied with. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

Research Analyst or his/her relative or HDFC Securities Ltd. **does not have** any financial interest in the subject company. Also Research Analyst or his relative or HDFC Securities Ltd. or its Associate may have beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of the Research Report. Further Research Analyst or his relative or HDFC Securities Ltd. or its associate **does not have** any material conflict of interest.

Any holding in stock – No

HDFC Securities Limited (HSL) is a SEBI Registered Research Analyst having registration no. INH000002475.

Disclaimer:

This report has been prepared by HDFC Securities Ltd and is solely for information of the recipient only. The report must not be used as a singular basis of any investment decision. The views herein are of a general nature and do not consider the risk appetite or the particular circumstances of an individual investor; readers are requested to take professional advice before investing. Nothing in this document should be construed as investment advice. Each recipient of this document should make such investigations as they deem necessary to arrive at an independent evaluation of an investment in securities of the companies referred to in this document (including merits and risks) and should consult their own advisors to determine merits and risks of such investment. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete. HSL is not obliged to update this report for such changes. HSL has the right to make changes and modifications at any time.

This report is not directed to, or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity who is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject HSL or its affiliates to any registration or licensing requirement within such jurisdiction.

If this report is inadvertently sent or has reached any person in such country, especially, United States of America, the same should be ignored and brought to the attention of the sender. This document may not be reproduced, distributed or published in whole or in part, directly or indirectly, for any purposes or in any manner.

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk. It should not be considered to be taken as an offer to sell or a solicitation to buy any security.

This document is not, and should not, be construed as an offer or solicitation of an offer, to buy or sell any securities or other financial instruments. This report should not be construed as an invitation or solicitation to do business with HSL. HSL may from time to time solicit from, or perform broking, or other services for, any company mentioned in this mail and/or its attachments.

HSL and its affiliated company(ies), their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

HSL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc.

HSL and other group companies, its directors, associates, employees may have various positions in any of the stocks, securities and financial instruments dealt in the report, or may make sell or purchase or other deals in these securities from time to time or may deal in other securities of the companies / organizations described in this report. As regards the associates of HSL please refer the website.

HSL or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

HSL or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from t date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction in the normal course of business.

HSL or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither HSL nor Research Analysts have any material conflict of interest at the time of publication of this report. Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. HSL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Research entity has not been engaged in market making activity for the subject company. Research analyst has not served as an officer, director or employee of the subject company. We have not received any compensation/benefits from the subject company or third party in connection with the Research Report.

HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066

Compliance Officer: Murli V Karkera Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

For grievance redressal contact Customer Care Team Email: customercare@hdfcsec.com Phone: (022) 3901 9400

HDFC Securities Limited, SEBI Reg. No.: NSE, BSE, MSEI, MCX: INZ000186937; AMFI Reg. No. ARN: 13549; PFRDA Reg. No. POP: 11092018; IRDA Corporate Agent License No.: CA0062; SEBI Research Analyst Reg. No.: INH000002475; SEBI Investment Adviser Reg. No.: INA000011538; CIN - U67120MH2000PLC152193

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

Mutual Funds Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.

Registration granted by SEBI, membership of BASL (in case of IAs) and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.