

Initiating Coverage Thermax Ltd.

March 20, 2023





Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
Heavy Electrical Eq. & Engineering	Rs.2,311	Buy in the band of Rs.2290-2330& add more on dips to Rs.2020–2047 band	Rs.2537	Rs.2710	3 quarters

HDFC Scrip Code	THELTDEQNR
BSE Code	500411
NSE Code	THERMAX
Bloomberg	TMX:IN
CMP March, 17- 2023	2,311
Equity Capital (Rscr)	22.52
Face Value (Rs)	2
Equity Share O/S (cr)	11.26
Market Cap (Rscr)	27,533
Book Value (Rs)	297
Avg. 52 Wk Volumes	80,113
52 Week High	2,679
52 Week Low	1830

Share holding Pattern % (Dec, 2022)	
Promoters	61.99
Institutions	27.62
Non Institutions	10.39
Total	100.0

Our Take:

Thermax Ltd. (incorporated as Wanson India in 1966) headquartered in Pune, is a leading conglomerate providing integrated solutions in heating, cooling, power generation, water treatment and recycle, air pollution control, Ion exchange resins and performance chemicals related services. The company operates in different countries having 14 manufacturing facilities (10 in India and 4 overseas facilities) and has presence over 90 countries with approximately 26% of its revenue coming from global operations. The company has 3 major segments, Energy segment contributing majority to its revenue followed by Environment segment and Chemical segment. The Order-book of the company as on December'22 stands at Rs.9,859 crores with a well-diversified order-book across Cement, Fertilizer, Sugar, Metal and refinery sectors.

The company has been at the forefront of green technology for more than a decade. Thermax ordering from the green portfolio has expanded from 40% in FY10 to 74% in FY22. The lower carbon footprint target around the globe has allowed company to position itself globally in clean water, air and energy products and solutions. Over the years, it has streamlined its business segments (synergising via boiler business transfer) and modified the business model.

The company is also benefitted from the investment in clean energy, sustainability, decarbonisation, normalisation of the international market and government impetus for cleaner air and water.

We expect all these businesses to perform well both in terms of revenue and order-book, on account of its new opex business model, the company is expecting to maintain its current margin levels and is also aiming for double digit margins.

Valuation & Recommendation:

We feel that Thermax displays strong long term outlook given the areas in which it operates and its competencies build over time. It could record good revenue and earnings growth in the coming years. We expect revenue/EBITDA/PAT to grow at a CAGR of 21.3%/30.2%/29.9% over FY22–25E. As a result of the increased share of green offering, the PE multiple for the company increased significantly. The higher valuation reflects the expectation of it gaining a higher market share in green technology. We expect it to be further rerated with large-size order wins and normalisation in international ordering. **We think the base case fair value of the stock is Rs.2537 (44x Dec24E EPS) and the bull case fair value is Rs.2710 (47x Dec24E EPS) over the next two-three quarters. Investors can buy the stock in the band of Rs.2290 - 2330(40x Dec24E EPS) and add more on dips to Rs.2020- 2047 band (35.5x Dec24E EPS).**



HDFCsec Retail research
stock rating meter

for details about the ratings, refer at the end of the report

* Refer at the end for explanation on Risk Ratings

Fundamental Research Analyst

Jinesh Kothari

jinesh.kothari@hdfcsec.com



Financial Summary (Rs Cr)

Particulars (Rscr)	Q3FY23	Q3FY22	YoY-%	Q2FY23	QoQ-%	FY20	FY21	FY22	FY23E	FY24E	FY25E
Total Operating Income	2049.3	1614.7	26.9	2075.3	-1.3	5,731.3	4,791.3	6,128.3	7,966.8	9,400.9	10,905.0
EBITDA	161.1	113.1	42.4	140.6	14.6	406.2	355.2	421.4	620.7	777.2	916.6
Depreciation	29.1	29.0	0.3	29.8	-2.4	116.6	114.6	113.2	101.9	112.1	123.3
Other Income	42.3	29.2	45.1	39.8	6.3	100.0	107.7	127.0	114.3	125.7	138.3
Interest Cost	9.1	5.3	73.4	8.0	14.3	15.0	20.6	25.2	33.0	38.0	28.5
Tax	38.6	28.6	34.8	33.2	16.0	162.1	68.6	97.8	150.0	188.2	225.8
PAT	126.7	79.4	59.4	109.4	15.8	212.5	259.1	312.2	450.1	564.6	677.3
Adjusted PAT	126.4	79.4	59.1	109.1	15.8	212.5	259.1	312.2	450.1	564.6	677.3
EPS (Rs)	11.2	7.1		9.7		18.9	18.3	27.7	40.0	50.1	60.2
RoE-%									12.1	13.4	14.0
P/E (x)									57.8	46.1	38.4
EV/EBITDA(x)									40.8	32.1	26.6

(Source: Company, HDFC sec)

Q3FY23 Earnings Update:

- Thermax delivered a strong quarterly performance in Q3FY23. Revenue for the period stood at Rs. 2,049.25crores (+26.9% YoY/ -1.3% QoQ).
- The company reported EBIDTA of Rs.161.1 crores (+42.4% YoY/ 14.6% QoQ) with an EBITDA margin of 7.9% indicating a strong improvement of 110bps in margins YoY. The improvement in the EBITDA margins was seen on account of lower raw material and moderating challenges on commodity cycle.
- Profit for the quarter stood at Rs. 126 crores (+59.1% YoY/ 15.8% QoQ).
- Organic/inorganic investments in new-age technologies/areas will be among key catalysts going forward.
- The Order-book as on December'22 stood at Rs.9,859crores, up 33% YoY, while fresh order booking during the quarter stood at Rs.2,204 crores down 10% YoY, mainly due to an order of flue gas desulphurisation (FGD) systems worth Rs. 830 crore in the environment segment received last year.

Con-Call Highlights:

- There are two businesses viz. Solar business and steam and water treatment solutions where the company is operating in its Opex business segment (where company puts utilities at the clients end) together with an investment of approximately Rs.400 crores (Rs.150 crores of which is allocated for Solar business and balance towards Water treatment solutions business)

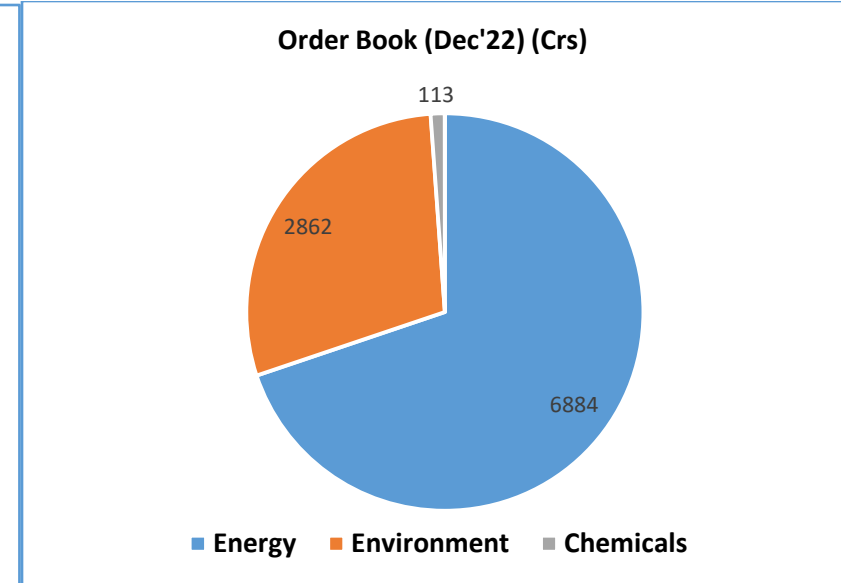
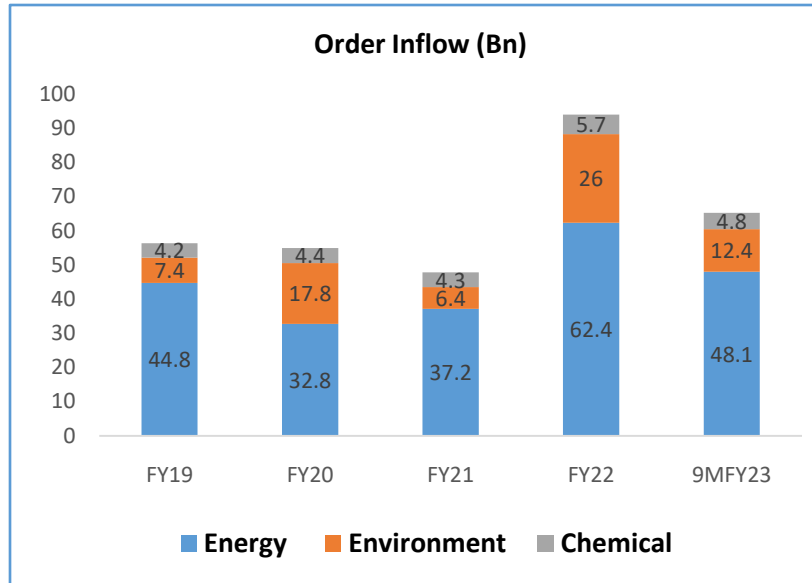


- On Energy business segment, the company reported a EBIT margin of 7.6% in Q3, the segment comprises combination of many different businesses, the company aspires to achieve 10% margin in longer horizon but not sooner. On blended basis company is looking at 8-9% margin.
- The company is not witnessing high ordering demand from Petrochemical & FGD segment; few quarters back there were couple of projects on Petrochemical side, the company has taken a step back from quoting at very pricing levels, the company is expecting more opportunities from different projects and is expecting good momentum, the company does not see this momentum to be peak.
- The company's topline can be impacted due to lower large orders of Rs.800 to 1,000 cores ticket size. The company is backfilling the same by more orders from Rs.10 to 50 crores. On the contrary, the company is witnessing demand from steel sector driven by lot of steel industry coming for capex. Sugar, Ethanol, Cement and distillery space is witnessing decent demand and is expected to continue.
- The company does not expect the FGD business to make or report losses. It will not be making a lot of profit either but it expects it to make consistent profitability, going forward with revenue schedule that is or may be slightly delayed marginally relative to what it had guided earlier.
- The gas challenges in Europe are coming down and gas sector is expected to perform better with low profitability and decent volumes, but company is confident of not incurring losses.
- The company has created a new technology energy division two years ago, the company is having some bio-CNG orders worth Rs. 40-50 crores. The company is working towards technology for conversion of municipal solid waste to bio-CNG, biomass to bio-CNG, getting into more and more things that are biomass related in several different ways.
- The company continues to be quite bullish on the chemical segment, and is focusing on double-digit profitable growth again, and company will continue to look at capacity additions, adding new segments, new technologies, and new capabilities.
- The company is exploring new areas of opportunities and will invest in newer areas of technologies, which may come with some risks.

Key Drivers:

Strong Diversified Order-book& Order Inflow Outlook:

Thermax Ltd. has a diversified orderbook from different sectors majority comprising from Cement, Fertilizer, Steel, Sugar/Distillery, Refinery and Petrochemicals. The orderbook as on December'22 stands around Rs.9,859 crores, up 33% YoY. The fresh order inflows during the quarter stood at Rs.2,204 crores & 9MFY23 at Rs.6,530 crores. The management is positive and more inflow is expected from smaller ticket orders ranging from Rs.10-50 crores. The increase in capex in Cement and Steel sector is likely to drive more orders for the company. During the quarter, the company has received orders for waste heat recovery boilers from a leading cement manufacturer and a major order received from agro-chemical company for setting-up power plant on EPC basis. Historically, the O&G industry has been the driver for Thermax's order book and with the slowdown in the O&G segment, order book will be affected. However, this will be compensated by new technology orders for solar and biomass solutions across the industry segment and heat recovery solutions from Cement, Steel and Metals industries for electricity cogeneration. The order intake looks healthy despite absence of large orders.



Sub-segment OB (%)	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22	Q2FY22	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23
Metals/ Steel	12%	6%	12%	10%	14%	15%	7%	4%	18%	16%	10%
Chemical	7%	7%	4%	20%	7%	7%	7%	6%	7%	12%	0%
Refinery and Petro Chemical	0%	17%	31%	11%	26%	19%	7%	6%	24%	11%	10%
Sugar/ Distillery	7%	0%	3%	5%	0%	10%	9%	4%	10%	9%	12%
Power	0%	5%	5%	6%	5%	0%	40%	17%	10%	9%	0%
Cement	0%	21%	8%	19%	16%	4%	11%	5%	5%	6%	19%
Fertiliser	0%	4%	4%	8%	6%	0%	0%	0%	4%	4%	15%
Pharma	6%	0%	0%	3%	4%	0%	2%	4%	3%	0%	0%
Food and Beverage	8%	10%	10%	8%	6%	10%	4%	8%	9%	11%	7%
Textile	0%	5%	0%	0%	0%	10%	0%	0%	0%	0%	0%
Paper and Pulp	0%	4%	3%	3%	0%	0%	0%	0%	0%	0%	7%
Transportation	0%	0%	0%	0%	0%	6%	0%	34%	0%	0%	8%
Bioenergy	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Others	60%	21%	20%	7%	16%	19%	14%	12%	10%	17%	12%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Push towards New Energy Businesses:

The company's subsidiary TOESL (Thermax Onsite EnergySolutions Limited) is sustainable utility provider that uses the build-own-operate (BOO) business model to deliver utilities such as steam, heat, treated water, and cogeneration power in which company invests capital, establishes the utility plant, and operates it on client premises for the duration of the plant's lifecycle, performing comprehensive operation and maintenance, including supply chain management of fuel, spares, and consumables. Another subsidiary FEPL (First Energy Private Ltd) is expanding presence in Renewable energy sector access-based solar and solar hybrid farms, hybridising solar with storage and other solutions, and delivering appropriate renewable power to customers. The company will invest approximately Rs. 250 crores in TOESL and Rs.150 crores in FEPL business aiming an average IRR of 15%.

Increase in Share of Green Offerings: TOESL bagged several contracts for 100% biomass-based green utility delivery solutions in FY22, company negotiated two substantial contracts with one of the world's leading equity funds players to produce roughly 15 tonnes of CBG (compressed biogas) and prevent the annual burning of approximately 36,000 tonnes of stubble in Punjab per project. Thermax in Mar'23 signed an MoU with Fortescue Future Industries (FFI), a green arm of an Australian conglomerate, for exploring green hydrogen projects in India. The PLI scheme under the National Green Hydrogen mission could be leveraged for setting up a new manufacturing facility for electrolyzers. FFI is currently developing Green Energy Manufacturing Centre in Gladstone, Queensland. Under the first phase, it is constructing electrolyzers with a capacity of 2GW per annum. This project is a JV with an American hydrogen fuel cell developer, Plug Power Inc.

Chemical Division to witness steady Growth: The chemical segment overall comprises of approximately 10% of company's total revenues. The management is bullish and is aiming for double digit profitability growth. The company is looking at capacity additions, new additions of technologies. The revenue from chemical segment in Q3 stood at Rs.164 crores up 5.8% YoY, with margin of 14.1%. Also, increase in demand for solvent-free and low total organic carbon (TOC) resins for ultrapure water, rise in demand for RO, multi effect evaporator (MEE), and incinerators which help boost water treatment chemicals that aid in zero liquid discharge and effluent treatment. Chemical will start contributing more to the order book with new capacity addition planned as Thermax positions itself for a five-year cycle in chemicals with the current application varying from water to oilfield to construction chemicals. Within the sugar/distillery sub-segment, Thermax is finding a strong build-up in the pipeline with the next 12 months particularly strong. Within sugar/distillery, the technology is still evolving in the ethanol blending space and Thermax is cautiously winning orders.

Strong Financial Position and Improvement in Operating Margins: In the previous quarter, the company reported decent growth in its performance with an improvement in the margins on account of cooling of commodity prices. The company is confident on improvement in margins going forward. The two material international subsidiaries, Danstoker and PTTI, which service and manufactures boilers for



European and South East Asia respectively are expected to become profitable within a year. The company has comfortable outlook on maintaining its margins in range of 8-9% in coming years.

Subsidiaries are likely to report improved performance: The company's subsidiaries in the last six years have been its pain point, especially the European and Chinese subsidiaries. The company has closed its Chinese subsidiaries TZL and has also transferred Boiler & Heater division from Thermax Ltd. to its Indian subsidiary TBWES to create operational synergy. Further, the company has shifted the Boiler manufacturing plant for the European market from Denmark to a low-cost facility in Poland. Company has not taken any impairment provision in FY23TD. Thermax has taken a lot of impairments over the past 6 years for its subsidiaries and now it feels that the pace of impairments can slow dramatically. And the two material international subsidiaries, Danstoker and PTTI (Indonesian step-down subsidiary), which service and manufacture boilers for European and South East Asia, are expected to become profitable within a year.

Export markets to pick up pace post Covid slowdown: The export market has picked up from FY21 lows, affected by Covid19; however, it is yet to attain the pre-Covid level. The momentum in terms of ordering in FY23YTD has been strong, with Rs.16.5bn of order inflows from international markets. Within the environment segment, Air Pollution Control (APC) solutions and products are expected to drive demand in South-East Asia as pollution control norms enforcement intensifies.

Key Risks:

Slowdown in Capex and Overall Demand: Currently, during last few quarters the company has not received big orders from Energy and FGD segment. The company is witnessing slowdown from the Petrochemical and Refining segment, the decrease in the big ticket size orders may hurt the ability to show better growth in the order-book side, though the company is confident to backfill the order book with more small orders ranging from Rs.10-50 crores. On FGD front, the large issue of the FGD project is behind since the last couple of quarters; the company wasn't able to liquidate the revenue, the company though doesn't expect FGD segment to report losses but stagnant profitability with lack of growth can be a concern.

Decline in the Boilers and Chiller Business: The Company is witnessing decline in its cooling business, which was one of the most profitable segment for the company. The margins have been impacted adversely due to increasing prices of Lithium Bromide (the primary chemical used in cooling business). Also, the mix within has also changed, the gas fired engines business which used to drive the chillers business itself is in downtrend. But, in long run we expect more opportunities to come in cooling business.

Volatility in raw material prices and forex rates could hurt its margins: The Company's export business revenue constitutes approx. 25.3% of total revenue for 9MFY23 revenue. Also company's presence across different geographies exposes it to changing to forex rates. Further, the changing raw material prices and base metals price change may affect company's margins.



Company Background:

Thermax Ltd. (incorporated as Wanson India in 1966) headquartered in Pune, is a leading conglomerate providing integrated solutions in heating, cooling, power generation, water treatment and recycle, air pollution control, ion exchange resins and performance chemicals related services. The company operates in different countries having 14 manufacturing facilities (10 in India and 4 overseas Facilities) and has presence over 90 countries with approximately 26% of its revenue coming from global operations. The company has majority 3 segments, Energy segment contributing majority to its revenue followed by Environment segment and Chemical segment. The Order-book of the company as on December'22 stands at Rs.9,859 crores with a well-diversified order-book across Cement, Fertilizer, Sugar, Metal and refinery sectors.

In terms of the operating structure, three categories are defined—products, services and projects. Products are both standard and custom-designed. Larger unit products are generally custom-designed and built. Services include lifecycle and O&M services to operate plants and other services that the company provides to customers and projects include EPC contracts, which are for larger non-standard products. Projects business by nature is cyclical and in order to mitigate the cyclicity in it, Thermax increased the share of business from products and services. The proportion of such an order might look low at 38% in FY22. However, in absolute terms, the product and service business has increased to Rs.36bn (FY22), from Rs. 25bn in FY18. In the medium term, within the project business, margins have been in the range of 5- 6% and Thermax expects to increase the margin to the 5-8% range with the business being less capital intensive and running on negative working capital. Margins in the product business are expected to be 10% on the back of lower commodity prices and better economic growth.



Financials

Income- Statement

(Rs Cr)	FY20	FY21	FY22	FY23E	FY24E	FY25E
Net Revenues	5731.3	4791.3	6128.3	7966.8	9400.9	10905
Growth (%)	-4	-16.4	27.9	30	18	16
Operating Expenses	5325.1	4436.1	5707	7346.2	8623.7	9988.4
EBITDA	406.2	355.2	421.4	620.7	777.2	916.6
Growth (%)	-11.2	-12.6	18.6	47.3	25.2	17.9
EBITDA Margin (%)	7.1	7.4	6.9	7.8	8.3	8.4
Depreciation	116.6	114.6	113.2	101.9	112.1	123.3
EBIT	289.6	240.6	308.1	518.8	665	793.3
Other Income	100	107.7	127	114.3	125.7	138.3
Interest expenses	15	20.6	25.2	33	38	28.5
PBT	374.5	327.7	410	600.1	752.8	903.1
Tax	162.1	68.6	97.8	150	188.2	225.8
PAT	212.5	259.1	312.2	450.1	564.6	677.3
Adjusted PAT	212.5	259.1	312.2	450.1	564.6	677.3
Growth (%)	-48.9	22	20.5	44.2	25.5	20
EPS	18.9	18.3	27.7	40	50.1	60.2

Balance-Sheet

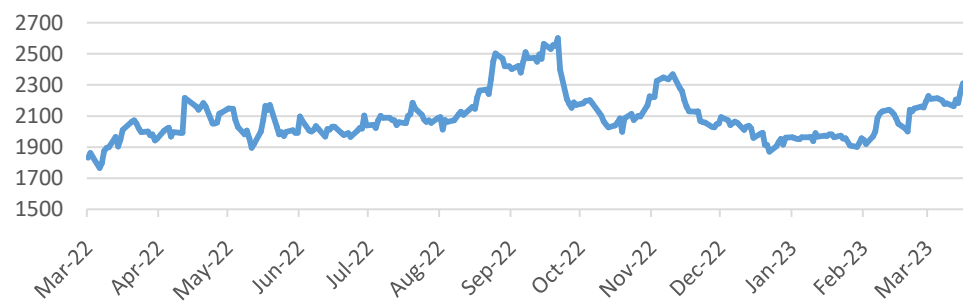
As at March	FY20	FY21	FY22	FY23E	FY24E	FY25E
SOURCE OF FUNDS						
Share Capital	23	23	23	23	23	23
Reserves	3005	3229	3470	3796	4223	4749
Shareholders' Funds	3028	3251	3492	3818	4246	4772
Long Term Debt	33	22	61	50	65	75
Net Deferred Taxes	-151	-154	-127	-127	-127	-127
Long Term Provisions & Others	103	156	146	157	170	184
Total Source of Funds	3014	3275	3573	3899	4354	4903
APPLICATION OF FUNDS						
Net Block & Goodwill	1114	1245	1195	1193	1231	1207
CWIP	55	21	44	55	70	75
Other Non-Current Assets	654	613	1354	1399	1447	1498
Total Non Current Assets	1823	1879	2593	2647	2747	2780
Current Investments	816	115	767	917	1017	1142
Inventories	455	405	727	829	1030	1255
Trade Receivables	1386	1237	1424	1964	2241	2480
Cash & Equivalents	476	1939	954	975	1208	1666
Other Current Assets	844	770	867	979	1107	1250
Total Current Assets	3977	4466	4738	5664	6602	7792
Short-Term Borrowings	178	295	294	319	304	329
Trade Payables	960	1138	1460	1855	2189	2540
Other Current Liab& Provisions	1648	1637	2004	2238	2502	2800
Total Current Liabilities	2787	3071	3758	4412	4995	5669
Net Current Assets	1190	1396	980	1252	1606	2123
Total Application of Funds	3014	3275	3573	3899	4354	4903



Cash Flow Statement

(Rs Cr)	FY20	FY21	FY22	FY23E	FY24E	FY25E
Reported PBT	374.5	275.2	410.1	600.1	752.8	903.1
Non-operating & EO items	-44.4	54.1	-56.6	0	0	0
Interest Expenses	-11.8	-54	-38.4	23	23	13.5
Depreciation	116.6	114.6	113.2	101.9	112.1	123.3
Working Capital Change	21.8	473.4	-0.5	-159.7	-41.6	4
Tax Paid	-131.3	-93.8	-103	-150	-188.2	-225.8
OPERATING CASH FLOW (a)	325.6	769.5	324.8	415.3	658.1	818.1
Capex	-48	-83.4	-83.8	-121.4	-180	-110
Free Cash Flow	277.6	686.1	241.1	293.9	478.1	708.1
Investments	-144.3	-578.9	-426.3	-150	-100	-125
Non-operating income	0	26.6	88.5	10	15	15
INVESTING CASH FLOW (b)	-192.3	-635.7	-421.6	-261.4	-265	-220
Debt Issuance / (Repaid)	-31	94.7	76.2	13.6	0	35
Interest Expenses	-8.5	-11.8	-13.5	-33	-38	-28.5
FCFE	238	768.9	303.8	274.5	440.1	714.6
Share Capital Issuance/ (Buy Back)	0	0	0	0	0	0
Dividend	-190.1	0	-78.8	-124.1	-137.2	-151.7
Others	25.7	3.2	-2.4	0	0	0
FINANCING CASH FLOW (c)	-204	86	-18.5	-143.5	-175.2	-145.2
NET CASH FLOW (a+b+c)	-70.7	219.8	-115.2	10.4	218	453

1 Year Price Chart



Key-Ratios

	FY20	FY21	FY22	FY23E	FY24E	FY25E
PROFITABILITY RATIOS						
EBITDA Margin	7.1	7.4	6.9	7.8	8.3	8.4
EBIT Margin	5.1	5	5	6.5	7.1	7.3
PAT Margin	3.7	5.4	5.1	5.6	6	6.2
RoE	7	8.3	9.3	12.3	14	15
RoCE	8.9	7.1	8.3	12.9	15.1	16.2
SOLVENCY RATIOS						
Debt/EBITDA (x)	0.5	0.9	0.8	0.6	0.5	0.4
D/E	0.1	0.1	0.1	0.1	0.1	0.1
PER SHARE DATA						
EPS	18.9	18.3	27.7	40	50.1	60.1
CEPS	29.2	33.2	37.8	49	60.1	71.1
Dividend	14	0	9	11	12	13.5
BVPS	268.9	288.7	310.1	339.1	377	423.7
TURNOVER RATIOS						
Debtor days	88	100	79	78	82	79
Inventory days	31	33	34	36	36	38
Creditors days	74	80	77	76	79	79
VALUATION						
P/E	122.5	126	83.3	57.8	46.1	38.4
P/BV	8.6	8	7.5	6.8	6.1	5.5
EV/EBITDA	63.4	68.7	60.3	41	32.4	27
EV/Revenues	4.5	5.1	4.1	3.2	2.7	2.3
Dividend Yield (%)	0.6	0	0.4	0.5	0.5	0.6
Dividend Payout	74.2	0	32.5	27.5	23.9	22.4



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. These 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 cyclicity 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.

Disclosure:

I, **Jinesh Kothari, Research Analyst, Chartered Accountant**, 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. HSL has no material adverse disciplinary history as on the date of publication of this report. 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 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 her 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 meant for sole use by the recipient and not for circulation. 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. This document is for information purposes only. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete and 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 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. 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.

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 the 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: Murlu V Karkera Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

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

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