

Titan Company

BSE SENSEX

52,794

S&P CNX

15,782



Stock Info

Bloomberg	TTAN IN
Equity Shares (m)	888
M.Cap.(INRb)/(USDb)	1856.4 / 24
52-Week Range (INR)	2768 / 1433
1, 6, 12 Rel. Per (%)	-6/-5/35
12M Avg Val (INR M)	3379

Financials Snapshot (INR b)

Y/E Mar	2022	2023E	2024E
Sales	288.0	329.5	411.7
Sales Gr. (%)	33.1	14.4	24.9
EBITDA	34.2	39.6	50.7
EBITDA (%)	11.9	12.0	12.3
Adj. PAT	23.3	26.4	34.4
Adj. EPS (INR)	26.2	29.7	38.7
EPS Gr. (%)	137.8	13.1	30.4
BV/Sh. (INR)	105.1	121.1	146.3

Ratios

RoE (%)	27.7	26.3	29.0
RoCE (%)	25.2	24.5	27.7
Payout (%)	28.6	35.0	35.0

Valuations

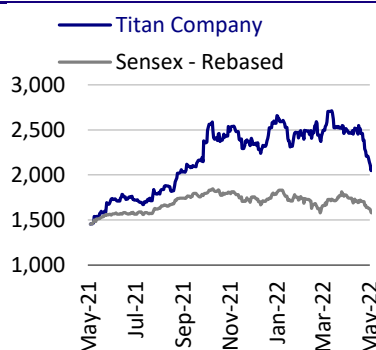
P/E (x)	79.7	70.5	54.1
P/BV (x)	19.9	17.3	14.3
EV/EBITDA (x)	53.8	46.3	36.0
Div Yield (%)	0.4	0.5	0.6

Shareholding pattern (%)

As On	Mar-22	Dec-21	Mar-21
Promoter	52.9	52.9	52.9
DII	10.4	10.5	11.5
FII	18.4	18.6	18.1
Others	18.3	18.1	17.5

FII Includes depository receipts

Stock performance (one-year)


CMP: INR2,091 TP: INR2,900 (+39%)
Buy

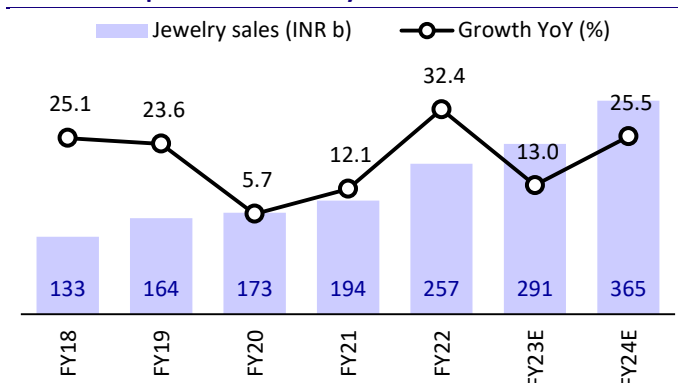
Ambitious growth targets; long-term vision encouraging

TTAN held its year-end analyst meet to discuss the business outlook, growth targets, and strategic path for each of its business divisions. We present our key takeaways.

- **Jewelry:** The management is targeting 2.5x of FY22 sales (INR232.7b) by FY27, i.e. ~20% CAGR. It targets having over 600 Tanishq stores in 300 towns over the next three years (389 stores in Mar'22). This is in line with a similar five-year target it had set in FY18 and is on course to achieve. With ~88% share of consolidated revenue in FY22, jewelry is the key business driving TTAN's revenue and earnings growth prospects over the medium term.
- The management's focus on operating leverage-led margin expansion is encouraging and more sustainable in the Jewelry segment, where TTAN has a long runway for growth with ~6% market share.
- **Watches and Wearables:** The management will like to achieve INR100b in sales in FY26 (~INR70b/INR30b for Watches/Wearables), with an 18% EBIT margin. The business posted sales of INR23b, with an EBIT margin of 5.8% in FY22, which was a COVID-affected year. While achieving these targets may be challenging, it is not a crucial one, as the vertical accounted for ~8% of FY22 sales and will be less of a factor in driving overall growth.
- **Eye Care:** It is targeting 40%/50% revenue/EBIT growth in Titan Eye in FY23 (INR550m sales in FY22). The management aims to reach 1,000 stores by Mar'23 (from 760 stores in Mar'22), with 25 Fastrack physical stores.
- **Other businesses:** Also interesting was its INR10b sales target for Taneira (Ethnic wear) and Women's handbags, a new initiative under the Fastrack brand, by FY27. In the international business (which focuses on the Indian diaspora), it is targeting sales of INR25b over the same period. Given that the Jewelry business accounts for an overwhelming majority of TTAN's consolidated business and is poised for strong growth, these new businesses are still likely to account for just 7-8% of sales put together, despite the strong growth targets mentioned above. Nevertheless, these businesses are adding growth engines for the future.
- **Valuation and view:** TTAN remains our top pick in the largecap Consumption space in India, with strong earnings growth visibility and compounding ~20% for an elongated period of time. In the Jewelry industry, which is organizing at a rapid pace, TTAN is clearly at the vanguard among organized players in leading this growth. Its runway for growth is long, with a market share of just ~6%. Unlike other high growth categories, the competitive intensity from organized and unorganized peers in Jewelry is considerably weaker. Expensive valuations in the near term will get burnt off by a rapid pace of growth. We maintain our **Buy** rating.

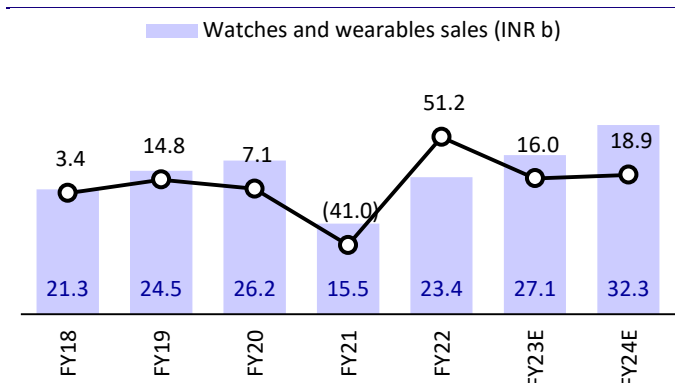
Story in charts

Exhibit 1: Expect 19.1% Jewelry CAGR over FY22-24



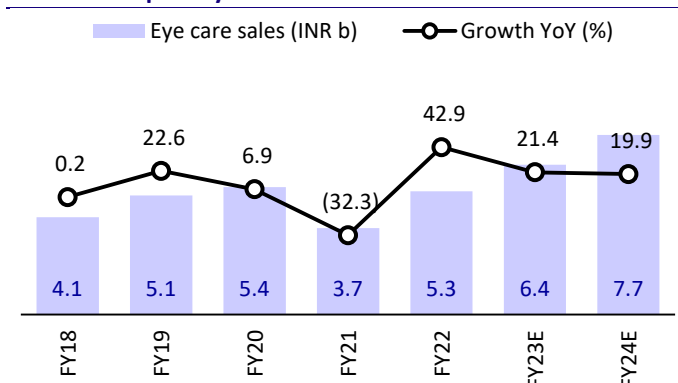
Source: MOFSL, Company

Exhibit 2: Expect Watches and Wearables to clock 17.4% CAGR over FY22-24 off a low base



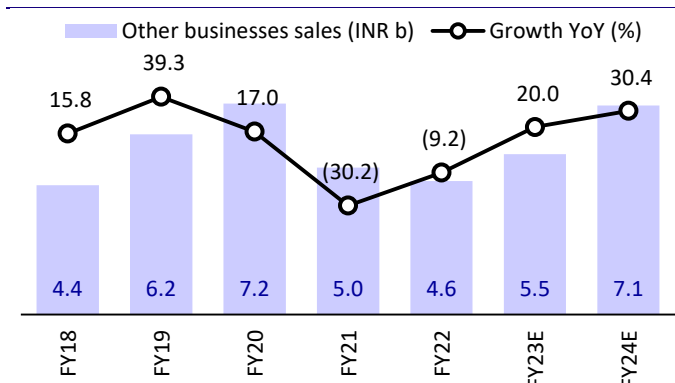
Source: MOFSL, Company

Exhibit 3: Expect Eye Care CAGR of 20.6% over FY22-24



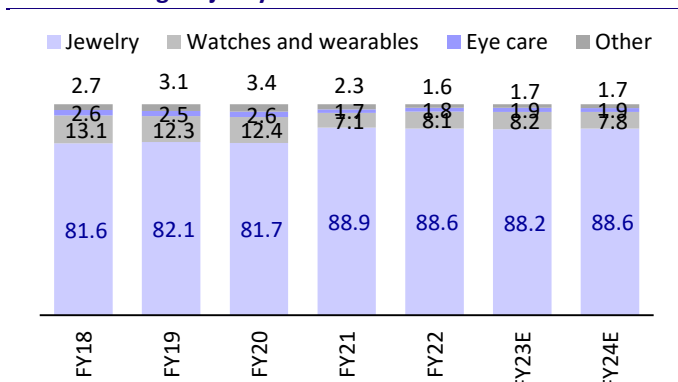
Source: MOFSL, Company

Exhibit 4: Expect other businesses to clock 25.1% CAGR over FY22-24



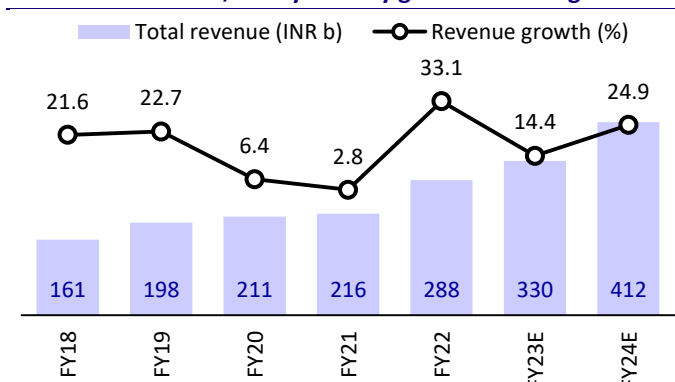
Source: MOFSL, Company

Exhibit 5: Expect Jewelry to continue, accounting for an overwhelming majority of TTAN's consolidated revenue

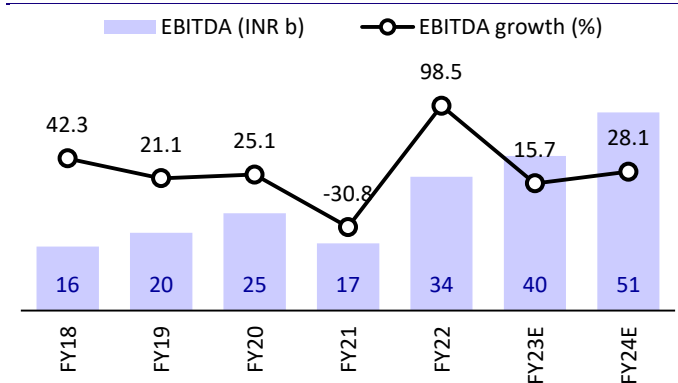


Source: MOFSL, Company

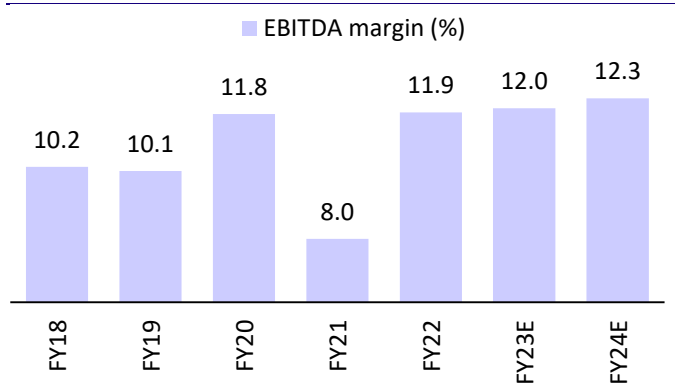
Exhibit 6: Expect consolidated revenue to register 19.6% CAGR over FY22-24, led by healthy growth in all segments



Source: MOFSL, Company

Exhibit 7: Expect EBITDA to clock 21.8% CAGR over FY22-24

Source: MOFSL, Company

Exhibit 8: EBITDA margin to stay robust, given the higher mix of studded jewelry and operating leverage

Source: MOFSL, Company

Key highlights from the top management

Characteristics that make TTAN an organization set for success

- The CEO emphasized the three 'C's that provide the framework for TTAN's growth, i.e. Capability, Culture, and Commitment.
- Particularly interesting was the focus on a culture a) that enables dissent and debate; b) where there is individual responsibility, despite a family environment; and c) where the team takes its work seriously without having to take itself seriously. These are cultural factors that have helped TTAN grow tremendously and will continue to be important pillars for growth.
- Another feature of the company that has been an important driver of long-term growth is its 'portfolio vibrancy'. TTAN has a wide portfolio that caters to customers across age groups and income classes.

New initiatives that could potentially drive future growth

- The company would like to achieve INR10b in sales for women's ethnic wear by FY27 with 125 stores across the country.
- It intends to revive the *saree*, especially among young women, and will like to offer contemporary, elegant and differentiated designs.
- Taneira's network is 90% a franchisee model.
- While the salience of *sarees* to Taneira's business is currently 93%, it is expected to move toward 75% by FY27 as other Ethnic wear like *lehengas*, *salwar kameez*, etc. begin to sell.
- Women's handbags will see a launch in FY23 under the Fastrack brand and the target is to achieve INR10b sales by FY27.

International significance

- The international business accounts for less than 1% of sales currently.
- TTAN would like to see Tanishq as the brand of choice among the Indian diaspora living in North America and West Asia which is currently under-served. This audience has an affinity for tradition and a sense of pride in India.
- The ambition for FY27 is to have 30 stores with omnichannel capabilities and achieve INR25b of sales.
- TTAN currently has one Tanishq store in the UAE, with a new store set to launch in New Jersey within the next two months.

Redefining omnichannel through digital expertise

- TTAN's video-assisted sales are already clocking a run-rate of over INR9b, while assisted commerce has reached INR11b in sales. Orders worth INR21.b for Tanishq come from omnichannel sales.
- The aim of the company is to democratize data access to allow for better analytics and insights into shopping habits.
- TTAN is working to digitalize across the value chain by creating a deep integration of its systems with dealers and franchisees.
- The company also intends to use its digital capabilities to imbibe a sense of trust and sustainability with examples like being able to suggest the right lens for customers or to allow traceability for its ethnic wear all the way to the weaver.

Exhibit 9: TTAN's wide portfolio enables it to cater to customers across demographic segments

				
Luxury				
Premium				
Mid Market				
Mass Market				

Source: MOFSL, Company

Exhibit 10: Continued focus on new age channels, which have rapidly grown to offer meaningful contribution














New age channels	Video commerce	Virtual try-on	Assisted commerce	Endless aisle
				
	900+ cr	6% conversion	1,100+ cr	750+ cr
Traditional channels	Stores			Websites
	    	  		

Exhibit 11: A snapshot of TTAN's portfolio transformation

Brands	5 Yrs back	Today
Tanishq	Cruising	Cruising
Zoya	Plans in place	Cruising
Mia	Plans in place	Cruising
CaratLane	Plans in place	Cruising
Titan Watches	Cruising	Cruising
Fastrack	Cruising	Cruising
Sonata	Cruising	Cruising
Helios	Cruising	Cruising
Titan Eye+	Striving	Cruising
Skinn	Striving	Cruising
Taneira	Striving	Plans in place
Favre Leuba	Striving	Non Existing
Mont Blanc	Striving	Non Existing
TEAL	Plans in place	Cruising
Titan Smart	Non Existing	Plans in place



- Cruising
- Sailing
- Plans in place
- Striving
- Non Existing

Source: MOFSL, Company

Further insights from the management

- While the standalone business is currently 93% of the total consolidated business, subsidiaries are geared to deliver faster growth in coming years and their salience to consolidated sales is expected to increase.
- Improving sales in recent years have been driven by increased jewelry contribution, improved mix, digital and omni-channels, increased productivity.
- The increasing scale of the business helps with better margin prediction.
- Internal accruals will be sufficient for 20% organic sales growth.
- Investments will need to be made before growth is achieved. FY23 will be a big year for investments. The management will be investing even more in talent, augmenting digital capabilities, and its emerging/international businesses.

Jewelry business**Business performance and ambitions**

- The jewelry business has posted a healthy CAGR of 18% over the last five years, despite COVID-led disruptions. It's EBIT CAGR has been even stronger at 24% over the same period.
- On the other hand, the increase in sq. feet and store count have posted a CAGR of 9% over the past five years, suggesting that half the growth during this period has come from SSSG which is very encouraging.
- The business still has huge headroom for growth with just a 6% market share of the INR4t segment. Furthermore, it has a much lower share in the weddings, solitaire, and high value studded segment.
- The management highlighted its ambition to reach 2.5x of FY22 sales (excluding sale of bullion) by FY27 with over 600 Tanishq stores in 300 towns. Aim to open 40 new stores every year.
- The focus is to grow the core through a thrust on volumes.
- It expects EBIT margin to remain stable over the next two years.

Recent developments

- Owing to supply-side disruptions, diamond prices have been up 30-35% on average in the last six months.
- Formalization of the industry continues, as do disruptions from internal and external factors. All organized jewelers are expanding.
- In Tamil Nadu, a huge market for jewelry, Tanishq is the fastest growing brand and is gaining share.
- Wedding play is now more profitable for Titan.

Sub-formats – Mia, Zoya, Dor

- **Mia** – Aim to grow sales from INR2.9b in FY22 to INR20b in FY25. Increase the POS' to 550 from 275.
- **Zoya** – Ambition to grow the customer base 4x in three years in this luxury brand. Increase the number of Zoya boutiques to 12-15 by FY25 from five and the number of Zoya galleries to 15-20 from six.
- **Dor** – TTAN's brand for *Manalgsutras* with contemporary designs.

Supply chain/Building on expertise

- Bangles will be a big focus area over the next few months.
- **Net promoter score:** Customer feedback has been 88% positive with ~40% of customers participating ensuring large sample size.
- Manufacturing, sourcing, and supply chain is very complex for TTAN and difficult for the competition to replicate.
- The platinum capacity is being ramped up in Pantnagar.
- TTAN sources only LBMA gold – the most ethically sourced gold available.
- **Sourcing:** Customer exchange gold = 40%; Fresh bullion/gold on lease = 45%; Outright sourcing from vendor partners = 15%
- Currently, big diamond traceability is easy, and the company is working on ensuring traceability for small diamonds as well. Its polishing process is also TSEP compliant.
- TTAN has 15,000 *karigars* of its own.

Caratlane

- While there is some degree of overlap with the main business, the management would rather risk a small bit of cannibalization rather than leave a gap.
- Price points are falling in online segment.
- While the last five-year CAGR for the Jewelry segment was 17%, it was 47% for Caratlane.
- Caratlane has seen a 10-fold increase in sales between FY08 and FY12, FY12 and FY16, FY16 and FY20, and is targeting the same between FY20 and FY25.
- The business currently has 137 stores and its NSV is increasing.
- The addressable market includes the global Indian. Indians settled in the US have an average annual income of USD90k which is twice as high as the average per capita income in the US.

Exhibit 12: Expect growth in the Jewelry business to do well in coming years

No	Growth Engine	FY20	FY21	FY22	FY23 & Beyond
1	Retail expansion (stores)	41	27	~ 36	40+
2	Wedding				Regionalization
3	High value studded				Formalization
4	Golden Harvest				
5	Gold Exchange				
6	Many India's		Redefined		Multiple markets
7	Grow the Core	New →	New →		Volume thrust
8	Leap ahead: Omni, Remote	New →	4X	3X	2X



Source: MOFSL, Company

Watches and Wearables

- Trends post pandemic:
 - The premium segment recovered before the mid-market segment
 - Smaller towns recovered before larger towns
 - There has been a boom in online sales
 - Fostered a culture of agility and value creation
- The management is still optimistic about the analog Watch segment especially the part representing style, self-expression, and status.
- Gifting and outdoor occasions which had been significantly affected in the preceding couple of years are seeing a revival.
- The business is witnessing growth in both the Premium and Luxury segment as well as the mass sub-INR1,000 segment.
- 19% of sales are happening via the online channel.
- Titan World has been reimagined to be positioned as a much more premium offering. Renovated 130 stores in FY22 while adding 60 stores. Aim to add 130 stores in FY23. The new format now covers 60% of the network.
- **Sourcing:** Focusing on make in India with 49% import content by value in FY20 down to 30% by FY23 and just 20% by FY24.
- Wearables is touted to be an INR96b market in FY23. Titan is present in the INR4,000-15,000 price point.

Eye Care

- The next two years are expected to be transformational years for TTAN's Eye Care business. The company has shifted its focus towards 'Eye Care' v/s just eye wear.
- There has been a slew of meaningful innovations, including anti-fog, anti-viral, lens technology, as well as perfecting the fit of frames for Indian faces.

- Customer feedback has been very positive with an average rating of 4.9/5.0 across 465k reviews.
- The focus is on productivity, and the company prefers to adopt a no discount policy.
- The business has worked towards becoming leaner by closing four lens labs and exiting from LFS and CSD formats.
- Fastrack frames were launched targeting youth online and now the company is launching its first physical store.
- Titan eye+ opened 180 new stores in FY22 and has a total count of 760 stores, which are all mostly franchised.
- TTAN introduced the 10 second eye test. It is able to roll out recommendations rapidly to customers seeking a solution.
- The company has identified an addressable user base of 200m.
- **Growth targets:** Targeting 40%/50% topline/EBIT growth for Titan Eye in FY23 (INR550m sales in FY22). Aim to reach 1,000 stores by Mar'23 (760 stores in Mar'22) with 25 Fastrack physical stores.
- The management aims to double frame production and deliver 45% lens capacity growth in FY23.
- There was a 30% increase in sourcing frames domestically, with a target to increase another 20% in FY23.
- It aims to open two stores in Dubai by the end of FY23.

Financials and valuation

Income Statement							(INR b)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Net Sales	161.2	197.8	210.5	216.4	288.0	329.5	411.7
Change (%)	21.6	22.7	6.4	2.8	33.1	14.4	24.9
Gross Profit	44.3	53.8	59.0	52.3	71.6	88.6	111.8
Margin (%)	27.5	27.2	28.0	24.2	24.9	26.9	27.1
Other expenditure	27.9	33.9	34.0	35.1	37.4	49.0	61.0
EBITDA	16.4	19.9	24.9	17.2	34.2	39.6	50.7
Change (%)	42.3	21.1	25.1	-30.8	98.5	15.7	28.1
Margin (%)	10.2	10.1	11.8	8.0	11.9	12.0	12.3
Depreciation	1.3	1.6	3.5	3.8	4.0	4.4	4.8
Int. and Fin. Charges	0.5	0.5	1.7	2.0	2.2	2.3	2.4
Other Income - Recurring	0.9	1.8	1.5	1.9	2.3	2.4	2.5
Profit before Taxes	15.5	19.6	21.3	13.3	30.4	35.3	46.0
Change (%)	43.7	26.5	8.8	-37.5	128.2	16.1	30.4
Margin (%)	9.6	9.9	10.1	6.2	10.6	10.7	11.2
Tax	4.5	6.1	5.8	3.6	7.9	8.9	11.6
Deferred Tax	0.2	0.5	-0.4	0.1	0.8	0.0	0.0
Tax Rate (%)	27.6	29.0	28.9	26.5	23.2	25.2	25.2
Profit after Taxes	11.2	13.9	15.2	9.8	23.3	26.4	34.4
Change (%)	39.9	24.0	8.9	-35.4	138.4	13.1	30.4
Margin (%)	7.0	7.0	7.2	4.5	8.1	8.0	8.4
Extraordinary income	-167	0	-185	0	-1,360	0	0
Reported PAT	11.0	13.9	14.9	9.7	22.0	26.4	34.4

Balance Sheet							(INR b)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Share Capital	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Preference Share Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserves	50.0	60.0	65.8	74.1	92.4	106.6	129.0
Net Worth	50.9	60.8	66.7	75.0	93.3	107.5	129.9
Loans	0.8	0.3	7.2	1.7	5.2	0.5	0.3
Lease liabilities	0.0	0.0	12.4	12.6	13.6	13.6	13.6
Deferred Tax	-0.3	-0.7	-1.5	-1.0	-1.8	-1.8	-1.8
Capital Employed	51.3	60.5	84.9	88.3	110.3	119.8	141.9
Gross Block	13.4	15.4	17.7	18.2	22.0	24.4	27.0
Less: Accum. Depn.	2.1	3.3	4.6	5.8	9.8	14.2	19.0
Net Fixed Assets	11.2	12.1	13.1	12.4	12.2	10.2	8.0
Intangibles	3.5	3.6	4.0	3.8	3.7	3.7	3.7
Capital WIP	0.4	0.3	0.1	0.2	0.7	0.7	0.7
Right of use asset	0.0	0.0	9.3	9.2	9.7	9.7	9.7
Investments	0.0	0.7	1.1	28.1	2.8	2.8	3.3
Curr. Assets, L&A	79.7	99.7	106.3	109.9	181.0	182.1	224.6
Inventory	59.2	70.4	81.0	84.1	136.1	130.2	159.0
Account Receivables	3.0	4.2	3.1	3.7	5.7	6.8	8.5
Cash and Bank Balance	6.5	11.1	4.3	5.8	15.9	19.5	27.4
Others	11.0	14.1	17.9	16.3	23.4	25.7	29.7
Curr. Liab. and Prov.	43.5	55.9	49.0	75.2	99.8	89.4	108.0
Current Liabilities	41.9	53.9	46.1	73.4	97.4	86.8	105.1
Provisions	1.6	2.1	2.9	1.9	2.4	2.6	2.9
Net Current Assets	36.2	43.8	57.2	34.7	81.2	92.7	116.6
Misc. Expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Application of Funds	51.3	60.5	84.9	88.3	110.3	119.8	141.9

E: MOFSL estimates

Financials and valuation

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Basic (INR)							
EPS	12.6	15.7	17.1	11.0	26.2	29.7	38.7
Cash EPS	14.0	17.3	18.9	12.9	30.8	34.7	44.2
BV/Share	57.3	68.5	75.2	84.5	105.1	121.1	146.3
DPS	4.6	6.0	4.1	4.0	7.5	10.4	13.5
Payout (%)	36.4	38.5	23.8	36.5	28.6	35.0	35.0
Valuation (x)							
P/E	165.6	133.5	122.5	189.6	79.7	70.5	54.1
Cash P/E	149.2	120.6	110.8	162.1	67.9	60.3	47.3
EV/Sales	11.5	9.3	8.8	8.4	6.4	5.6	4.4
EV/EBITDA	112.5	92.6	74.6	105.8	53.8	46.3	36.0
P/BV	36.5	30.5	27.8	24.7	19.9	17.3	14.3
Dividend Yield (%)	0.2	0.3	0.2	0.2	0.4	0.5	0.6
Return Ratios (%)							
RoE	24.0	24.9	23.8	13.8	27.7	26.3	29.0
RoCE	24.7	25.5	22.5	13.0	25.2	24.5	27.7
RoIC	29.8	28.0	23.9	14.8	32.0	28.0	33.1
Working Capital Ratios							
Debtor (Days)	7	8	5	6	7	7	8
Asset Turnover (x)	3.1	3.3	2.5	2.5	2.6	2.8	2.9
Leverage Ratio							
Debt/Equity ratio (x)	0.0	0.0	0.1	0.0	0.1	0.0	0.0

Cash Flow Statement

(INR b)

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
OP/(loss) before Tax	15.3	19.6	21.0	13.3	29.0	35.3	46.0
Int./Div. Received	-0.1	1.1	-0.2	-0.6	-1.3	-2.4	-2.5
Deferred Revenue Exp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation and Amort.	1.3	1.6	3.5	3.8	4.0	4.4	4.8
Interest Paid	-0.1	-0.5	0.7	1.4	1.2	2.3	2.4
Direct Taxes Paid	4.6	6.4	5.6	2.7	8.0	8.9	11.6
Incr. in WC	12.4	3.0	22.7	-26.2	32.2	7.9	16.0
CF from Operations	-0.5	12.4	-3.3	41.4	-7.2	22.8	23.2
Extraordinary Income	0.0	0.0	-185.0	0.0	-1,360.0	0.0	0.0
Incr. in FA	3.0	2.6	3.5	1.4	2.2	2.4	2.6
Free Cash Flow	-3.5	9.8	-6.9	40.0	-10.8	20.4	20.6
Investments	-4.1	0.2	-3.2	27.3	-16.4	0.1	0.4
Others	-0.3	0.2	0.6	-1.0	-8.5	4.4	1.1
CF from Invest.	1.4	-3.0	-1.1	-27.7	21.4	-6.9	-4.1
Issue of Shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr. in Debt	0.0	0.0	6.9	-5.6	3.4	-4.7	-0.3
Dividend Paid	2.8	4.0	5.4	3.6	3.6	6.7	8.4
Others	-0.2	0.9	4.0	3.2	3.9	2.3	2.4
CF from Fin. Activity	-2.5	-4.9	-2.4	-12.3	-4.0	-13.7	-11.1
Incr./Decr. in Cash	-1.6	4.5	-6.8	1.4	10.1	2.2	8.0
Add: Opening Balance	8.2	6.5	11.1	4.4	5.8	17.2	19.5
Closing Balance	6.5	11.1	4.3	5.8	15.9	19.5	27.4

E: MOFSL estimates

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act") and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months
- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 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)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other 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. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. 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. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, 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 report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report 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 MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com CIN no.: L67190MH2005PLC153397. Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance Products and IPOs. Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.: 022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.