

Estimate change	↔
TP change	↑
Rating change	↔

Motilal Oswal values your support in the **Asiamoney Brokers Poll 2021** for India Research, Sales, Corporate Access and Trading team. We [request your ballot](#).



Bloomberg	JKCE IN
Equity Shares (m)	77
M.Cap.(INRb)/(USDb)	240.4 / 3.2
52-Week Range (INR)	3690 / 1412
1, 6, 12 Rel. Per (%)	-8/7/62
12M Avg Val (INR M)	250

Financial Snapshot (INR b)

Y/E MARCH	2021	2022E	2023E
Sales	66.1	77.9	86.1
EBITDA	15.4	17.4	20.2
Adj. PAT	7.0	8.4	10.3
EBITDA Margin (%)	23.3	22.3	23.5
Adj. EPS (INR)	91.0	108.6	133.1
EPS Gr. (%)	45.5	19.4	22.5
BV/Sh. (INR)	484	572	681
Ratios			
Net D:E	0.4	0.4	0.4
RoE (%)	21.0	20.6	21.2
RoCE (%)	12.9	13.5	14.0
Payout (%)	16.5	18.4	18.0
Valuations			
P/E (x)	34.2	28.7	23.4
P/BV (x)	6.4	5.4	4.6
EV/EBITDA(x)	16.3	14.1	11.6
EV/ton (USD)	206	200	192
Div. Yield (%)	0.5	0.6	0.8
FCF Yield (%)	3.4	1.3	0.6

Shareholding pattern (%)

As On	Jun-21	Mar-21	Jun-20
Promoter	57.6	57.7	58.1
DII	20.6	20.6	23.3
FII	16.9	16.9	13.5
Others	4.9	4.9	5.2

FII Includes depository receipts

CMP: INR3,112 **TP: INR3,585 (+15%)** **Buy**

Market share gains to drive earnings

Central India expansion a long-term positive

- JK Cement (JKCE) continues to gain market share, with volumes up 71% YoY in 1QFY22, led by a ~40% capacity expansion. We expect this to continue over the next 4–5 years as the company is now setting up a 4mtpa greenfield plant (commissioning by 1QFY24) in Central India. This plant should improve the regional mix for North and Central India to ~85%.
- We keep our estimates broadly unchanged and reiterate **Buy** on a 21% EPS CAGR over FY21–23E, driven by a 12% volume CAGR.

Higher grey cement realization drives 21% beat on EBITDA

- Standalone revenue / EBITDA / adjusted PAT rose 69%/86%/168% YoY to INR16.3b/INR4.0b/INR2.1b in 1QFY22, beating our estimate by 4%/21%/27% – driven by higher grey cement realization (up 1% YoY) at INR4,679/t (+6% QoQ) v/s our est. of INR4,536/t.
- Volumes were up 71% YoY to 3.02mt (in line with est.) – Grey Cement (incl. clinker) rose 73% YoY to 2.76mt and White Cement was up 50% YoY to 0.26mt.
- Blended realization was up 3% QoQ at INR5,407/t (v/s our est. of INR5.193/t), led by higher cement realization and a higher mix of grey cement at 91.3% (v/s 89.9% in 4QFY21).
- EBITDA/t beat our est. of INR1,097/t and stood at INR1,323/t (+17% QoQ, +9% YoY). This was driven by higher grey cement realization as cost/t fell 1% QoQ to INR4,085 (-4% YoY), but was in line with our estimate.
- As a result, EBITDA was up 86% YoY to INR4.0b, while margins came in at 24.5% (+2.15pp YoY, +3.07pp QoQ; est. 21.1%).
- Standalone gross/net debt stood at INR28.1b/INR14.0b v/s INR28.4b/INR11.3b in Mar'21. Thus, net debt/EBITDA came in at 0.83x v/s 0.75x in Mar'21.
- The Nimbahera Line 3 upgrade is progressing as per schedule and expected to be completed in 2QFY22. INR3.9b out of the budgeted capex of INR4.1b has been spent to date.
- The greenfield expansion at Panna and grinding unit at Hamirpur are expected to be completed by Mar'23. INR4.4b out of the budgeted capex of INR29.7b has been spent to date.

Valuation and view

- We expect JKCE to deliver an above-industry volume CAGR of 12% over FY21–23E on account of its expansion in North India. The announced expansion at Panna should continue to drive market share gains over the long term as well as improve its regional mix in favor of North/Central India. It should help the company move down the cost curve by lowering power and fuel as well as other costs.
- Our TP of INR3,585/share is based on 15x Sep'23E EV/EBITDA for the White Cement business and 12x for the Grey Cement business. **Maintain Buy**.

Standalone quarterly performance (INR m)												
Y/E March	FY21				FY22				FY21	FY22E	FY22E	Var. (%)
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE				
Sales Dispatches (mt)	1.77	2.81	3.17	3.89	3.02	3.16	3.41	4.05	11.64	13.64	3.02	0
YoY Change (%)	-23.5	25.5	23.9	46.0	71.1	12.4	7.6	4.0	19.1	17.2	71.1	
Realization (INR/t)	5,464	5,517	5,556	5,270	5,407	5,546	5,518	5,448	5,437	5,479	5,193	4
YoY Change (%)	-5.0	-1.5	1.2	-4.8	-1.0	0.5	-0.7	3.4	-2.7	0.8	-5.0	
QoQ Change (%)	-1.3	1.0	0.7	-5.1	2.6	2.6	-0.5	-1.3			-1.5	
Net Sales	9,650	15,507	17,601	20,525	16,337	17,516	18,811	22,076	63,283	74,740	15,688	4
YoY Change (%)	-27.3	23.6	25.3	38.9	69.3	13.0	6.9	7.6	15.8	18.1	62.6	
Total Expenditure	7,497	11,400	13,113	16,134	12,341	13,586	14,597	17,147	48,144	57,672	12,374	0
EBITDA	2,153	4,107	4,488	4,391	3,996	3,930	4,214	4,928	15,139	17,069	3,314	21
Margin (%)	22.3	26.5	25.5	21.4	24.5	22.4	22.4	22.3	23.9	22.8	21.1	
Depreciation	580	597	622	649	657	657	677	715	2,447	2,706	650	
Interest	572	537	593	529	560	550	550	605	2,232	2,265	530	
Other Income	203	287	303	340	273	330	330	415	1,134	1,348	320	
PBT before EO expense	1,204	3,260	3,576	3,553	3,052	3,053	3,317	4,023	11,594	13,445	2,454	24
Extra-Ord. expense	0	0	0	1,669	0	0	0	0	1,669	0	0	
PBT	1,204	3,260	3,576	1,885	3,052	3,053	3,317	4,023	9,925	13,445	2,454	24
Tax	427	1,025	1,194	1,251	969	970	1,054	1,445	3,897	4,437	810	
Rate (%)	35.5	31.4	33.4	66.4	31.8	31.8	31.8	35.9	39.3	33.0	33.0	
Reported PAT	777	2,235	2,383	633	2,083	2,083	2,264	2,578	6,028	9,008	1,644	27
Adj. PAT	777	2,235	2,383	2,522	2,083	2,083	2,264	2,578	7,917	9,008	1,644	27
YoY Change (%)	-49.5	105.5	73.2	41.4	168.1	-6.8	-5.0	2.2	36.9	13.8	111.7	

E: MOFSL estimates

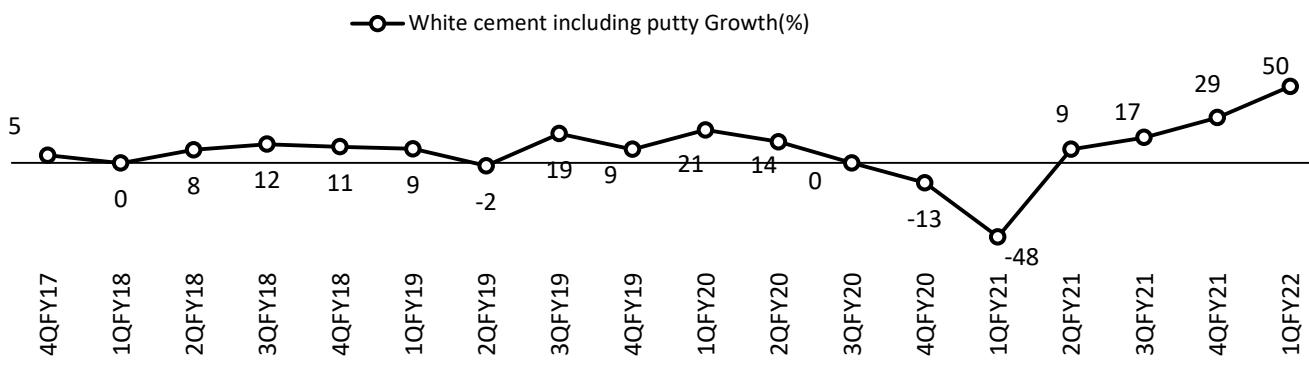
Standalone quarterly performance (INR m)												
Y/E March	FY21				FY22				FY21	FY22E	FY22E	Var
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE				
Grey Cement (mt)	1.59	2.45	2.76	3.50	2.76	2.77	2.98	3.65	10.30	12.15	2.77	0
Growth (%)	-19.3	28.4	25.0	48.1	73.5	13.0	8.0	4.2	21.9	18.0	74.0	
% of total Vols.	90.0	87.2	87.0	89.9	91.3	87.7	87.3	90.0	88.5	89.1	91.6	
White Cement (mt)	0.18	0.36	0.41	0.39	0.26	0.39	0.43	0.40	1.34	1.49	0.26	3
Growth (%)	-48.0	8.8	16.6	29.4	49.7	8.0	5.0	2.7	1.1	11.0	44.9	
% of total Vols.	10.0	12.8	13.0	10.1	8.7	12.3	12.7	10.0	11.5	10.9	8.4	

Per tonne analysis (INR)

Net realization	5,464	5,517	5,556	5,270	5,407	5,546	5,518	5,448	5,437	5,479	5,193	4
RM Cost	1,106	877	841	880	795	890	890	893	903	870	850	-6
Employee Expenses	538	347	347	282	410	386	364	308	354	363	364	13
Power, Oil, and Fuel	867	970	1,023	908	989	1,059	1,069	1,055	948	1,045	1,010	-2
Freight and handling	994	1,050	1,100	1,080	1,107	1,127	1,137	1,140	1,065	1,129	1,110	0
Other Expenses	740	812	828	992	783	839	821	836	866	821	761	3
Total Exp.	4,245	4,056	4,139	4,143	4,085	4,302	4,282	4,232	4,136	4,228	4,096	0
EBITDA	1,219	1,461	1,417	1,127	1,323	1,244	1,236	1,216	1,301	1,251	1,097	21

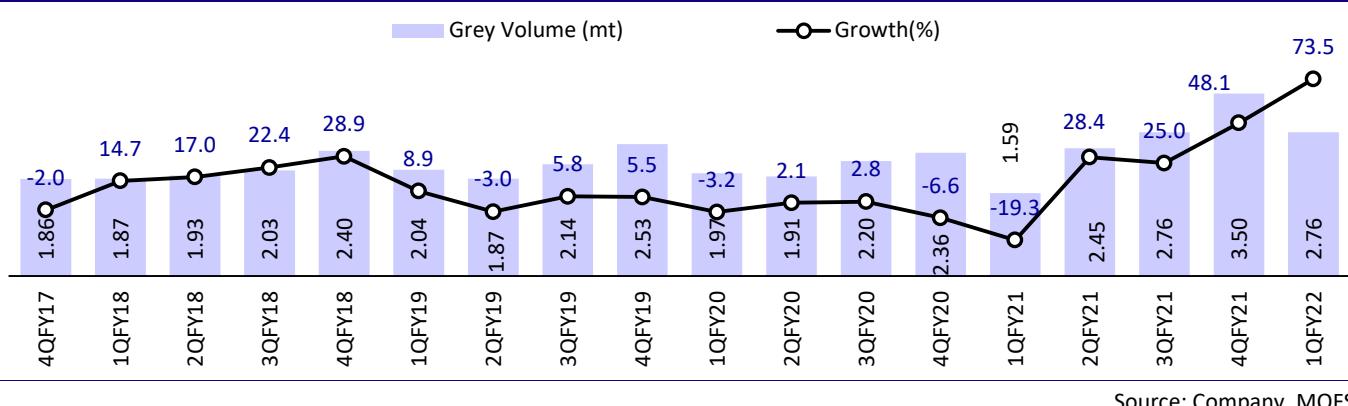
Key exhibits

Exhibit 1: White cement, including putty volumes, up 50% YoY in 1QFY22



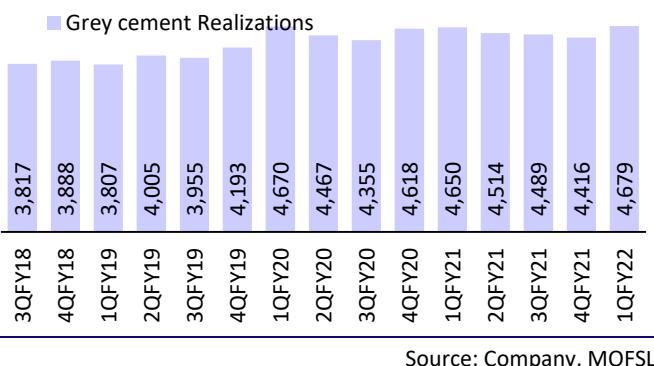
Source: MOFSL, Company

Exhibit 2: Grey cement volumes up 73% YoY in 1QFY22



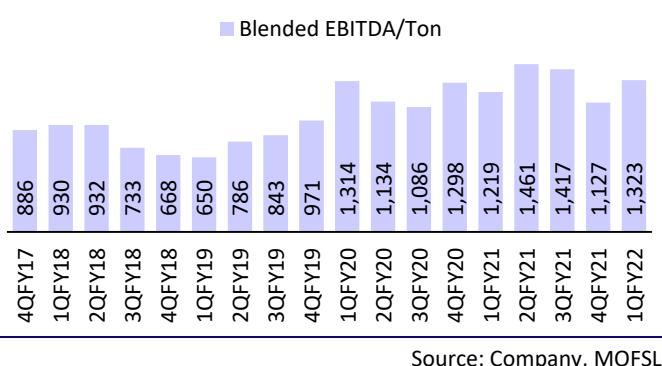
Source: Company, MOFSL

Exhibit 3: Grey cement realization up 1% YoY (INR/t)



Source: Company, MOFSL

Exhibit 4: Blended EBITDA/t (INR) up 9% YoY



Source: Company, MOFSL

Exhibit 5: Key performance indicators (blended)

INR/t	1QFY22	1QFY21	YoY	4QFY21	QoQ
Net realization	5,407	5,464	-1.0%	5,270	2.6%
RM Cost	795	1,106	-28.1%	880	-9.6%
Employee Expenses	410	538	-23.9%	282	45.5%
Power, Oil, and Fuel	989	867	14.1%	908	8.9%
Freight	1,107	994	11.4%	1,080	2.5%
Other Expenses	783	740	5.7%	992	-21.1%
Total Exp.	4,085	4,245	-3.8%	4,143	-1.4%
EBITDA	1,323	1,219	8.5%	1,127	17.3%

Source: Company, MOFSL

Valuation and view

Growing exposure to North/Central India a significant positive: After expanding its capacity in North India by 4.2mtpa, which is still being ramped up, JKCE has announced another lucrative 4mtpa expansion in Central India. These expansions bring three significant advantages to the company: i) strengthen its market share in North and Central India, the most attractive regions in the country, ii) reduce the share of South India in the volume mix to just ~12%, and iii) lower costs as ~90% of the grey cement capacity post expansion would be fuel-efficient. Once the Panna capacity is commissioned (likely by 1QFY24), the company's regional mix would improve further to ~85% in favor of North (65%) and Central (20%), while it would reduce to ~15% (from ~20%) in South India.

Upgrade and expansion at existing kiln at Nimbahera to improve EBITDA: JKCE is increasing the production capacity of one of its kilns at Nimbahera to 6,000tpd from 5,000tpd currently. This would help extend the GST benefits for the company up to CY27. Currently, it enjoys GST benefits at its Mangrol plant, which are due to expire in CY21. It is also upgrading the kiln by changing the pre-heater, a step that would result in power savings of 10–12 units and fuel savings of 40–50kcal. The capex required for the same is INR5b and would be completed by 2QFY22. These benefits should result in annual savings of INR300–400m for the company.

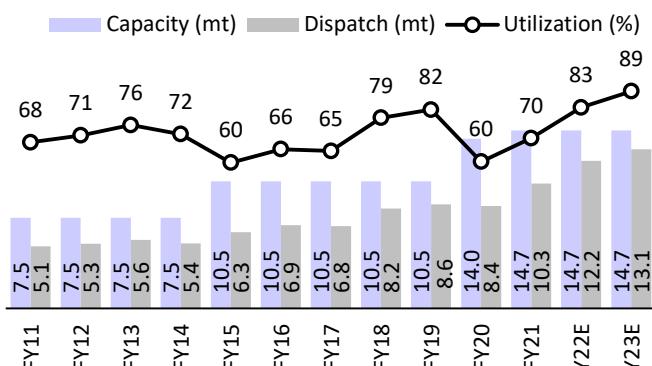
Putty capacity expansion provides growth visibility: JKCE recently expanded its wall putty capacity in Katni by 0.3mtpa, increasing the overall putty capacity to 1.2mtpa. White cement and putty currently contribute around one-third to overall EBITDA. This is a high-margin business and has been growing at an over 10% CAGR for the past few years. Expansion is, thus, timely and would help JKCE fully participate in market growth.

Significant brownfield potential in Central India: While JKCE is setting up a 4mtpa integrated plant at Panna (Madhya Pradesh), it has two mining leases with sufficient reserves to support expansion at this location (to 15mtpa). Once this capacity is commissioned (likely by 1QFY24), we expect the company to embark on further expansion at this location at lower capex (as it would be brownfield in nature).

Expect 21% EPS CAGR over FY21–23E: We expect JKCE to deliver a 21% EPS CAGR over FY21–23E, led by a 12% volume CAGR on account of its new capacity in North India. We arrive at our TP of INR3,585/share, valuing the White/Grey Cement business at 15x/12x Sep'23E EV/EBITDA. **Maintain Buy.**

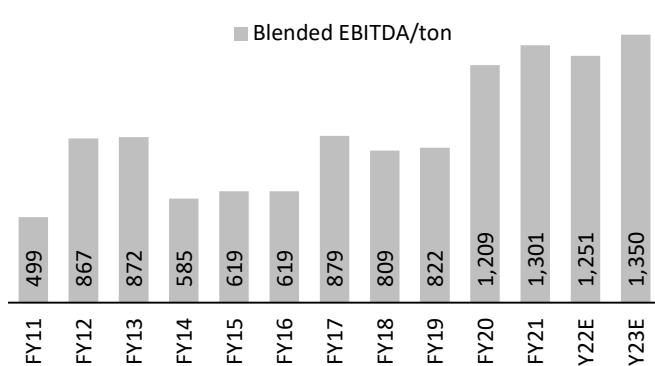
Story in charts

Exhibit 6: Expansion to aid volume growth



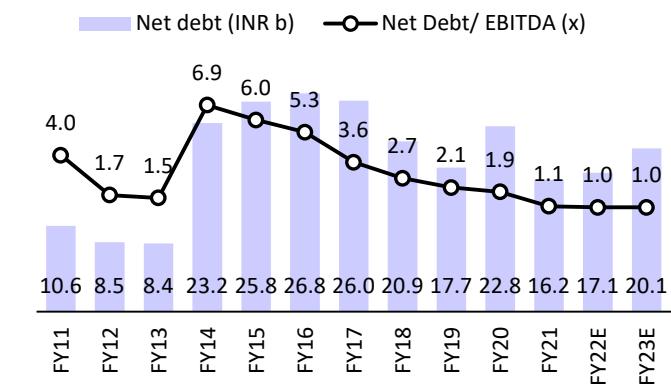
Source: Company, MOFSL

Exhibit 7: Blended EBITDA/t trend (INR)



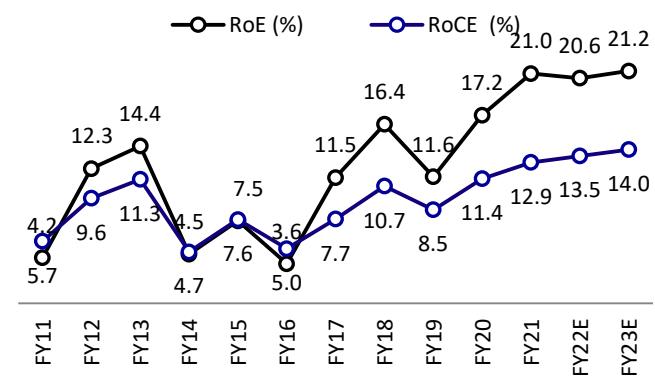
Source: Company, MOFSL

Exhibit 8: Net debt/EBITDA trend



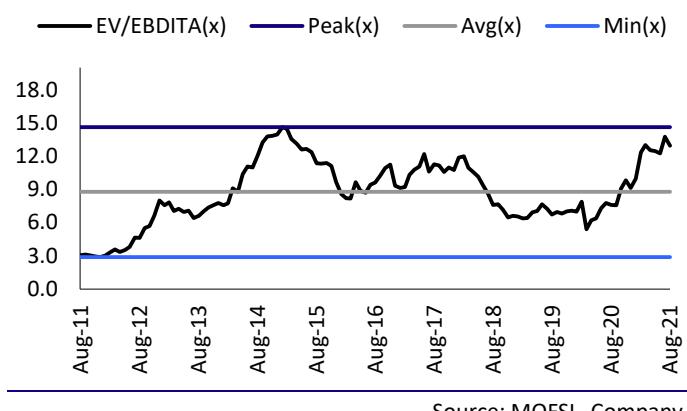
Source: MOFSL, Company

Exhibit 9: Return ratios should continue to improve (%)



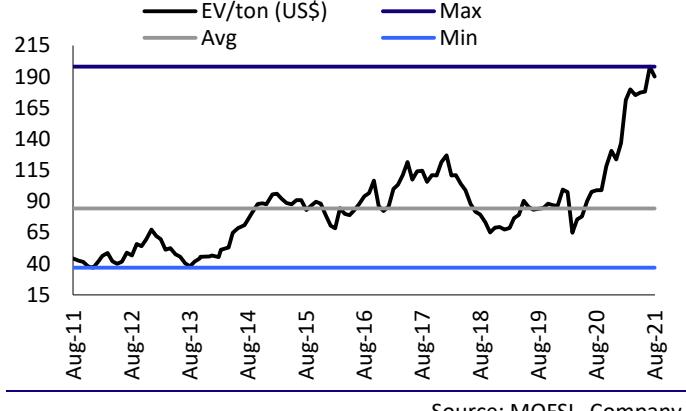
Source: MOFSL, Company

Exhibit 10: JKCE's EV/EBITDA trend



Source: MOFSL, Company

Exhibit 11: JKCE's EV/t trend



Source: MOFSL, Company

Financials and valuations

Income Statement								(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Net Sales	37,463	40,214	48,535	52,587	58,016	66,061	77,885	86,071
Change (%)	10.6	7.3	20.7	8.3	10.3	13.9	17.9	10.5
EBITDA	5,065	7,261	7,875	8,345	12,134	15,387	17,367	20,237
Margin (%)	13.5	18.1	16.2	15.9	20.9	23.3	22.3	23.5
Depreciation	1,974	2,169	2,313	2,413	2,880	3,062	3,322	3,475
EBIT	3,091	5,092	5,561	5,932	9,255	12,325	14,046	16,762
Int. and Finance Charges	3,049	3,027	2,841	2,611	2,764	2,528	2,561	2,493
Other Income - Rec.	895	984	1,269	804	853	1,130	1,344	1,357
PBT bef. EO Exp.	936	3,049	3,989	4,124	7,344	10,927	12,829	15,626
EO Expense/(Income)	0	193	157	0	0	0	0	0
PBT after EO Exp.	936	2,856	3,832	4,124	7,344	10,927	12,829	15,626
Current Tax	388	705	941	1,037	1,593	3,296	3,361	4,050
Deferred Tax	0	432	35	451	917	600	1,076	1,296
Tax Rate (%)	41.4	39.8	25.5	36.1	34.2	35.7	34.6	34.2
Reported PAT	548	1,719	2,856	2,636	4,834	7,031	8,392	10,281
PAT adj. for EO items	548	1,835	2,973	2,636	4,834	7,031	8,392	10,281
Change (%)	-56.1	234.8	62.0	-11.3	83.4	45.5	19.4	22.5
Margin (%)	1.5	4.6	6.1	5.0	8.3	10.6	10.8	11.9
Less: Minority Interest	-30.2	-57.7	-39.9	-67.1	-90.0	-66.2	0.0	0.0
Net Profit	578	1,893	3,013	2,703	4,924	7,097	8,392	10,281
Balance Sheet								(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	699	699	699	773	773	773	773	773
Total Reserves	15,171	16,408	19,049	26,249	29,504	36,595	43,441	51,868
Net Worth	15,870	17,107	19,749	27,022	30,277	37,367	44,214	52,640
Deferred Liabilities	2,165	2,599	2,670	3,123	4,173	5,930	7,005	8,301
Minority Interest	98	40	0	-72	-203	-257	-257	-257
Total Loans	31,204	30,961	27,306	26,779	32,840	34,017	34,017	39,017
Capital Employed	49,337	50,706	49,724	56,852	67,086	77,057	84,979	99,701
Gross Block	53,636	58,456	59,334	62,681	75,780	82,126	86,511	90,011
Less: Accum. Deprn.	11,100	13,039	14,900	17,313	20,235	22,752	26,074	29,549
Net Fixed Assets	42,535	45,417	44,433	45,367	55,545	59,374	60,437	60,462
Capital WIP	3,211	1,267	1,043	5,618	5,295	5,093	13,208	26,208
Total Investments	786	803	1,189	4,383	458	1,422	1,422	1,422
Curr. Assets, Loans and Adv.	15,261	16,621	17,877	18,810	24,122	32,831	33,281	36,694
Inventory	4,931	5,609	5,898	6,365	6,904	7,566	8,809	9,666
Account Receivables	2,113	2,019	2,358	2,606	2,677	3,615	3,526	3,851
Cash and Bank Balance	3,731	4,353	5,595	5,115	6,345	16,416	15,542	17,574
Loans and Advances	4,486	4,640	4,026	4,722	8,196	5,233	5,403	5,603
Curr. Liability and Prov.	12,511	13,403	14,818	17,325	18,334	21,663	23,370	25,086
Account Payables	12,141	13,074	14,316	16,809	16,725	20,276	21,919	23,568
Provisions	370	329	502	516	1,609	1,388	1,451	1,518
Net Current Assets	2,750	3,219	3,059	1,484	5,788	11,167	9,911	11,608
Appl. of Funds	49,282	50,706	49,724	56,852	67,086	77,057	84,979	99,701

E: MOFSL estimates

Financials and valuations

Ratios								
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)*								
Consol. EPS	7.8	26.2	42.5	34.1	62.6	91.0	108.6	133.1
Cash EPS	36.1	57.3	75.6	65.3	99.8	130.6	151.6	178.0
BV/Share	227.0	244.6	282.4	349.7	391.8	483.6	572.2	681.3
DPS	3.6	7.2	9.0	10.0	17.5	15.0	20.0	24.0
Payout (%)	61.4	39.2	29.5	35.3	33.7	16.5	18.4	18.0
Valuation (x)*								
P/E						34.2	28.7	23.4
Cash P/E						23.8	20.5	17.5
P/BV						6.4	5.4	4.6
EV/Sales						3.8	3.1	2.7
EV/EBITDA						16.3	14.1	11.6
EV/t (USD)						206	200	192
Dividend Yield (%)						0.5	0.6	0.8
Return Ratios (%)								
RoIC	4.4	7.1	9.6	9.1	13.0	15.0	16.9	20.2
RoE	3.6	11.5	16.4	11.6	17.2	21.0	20.6	21.2
RoCE	5.0	7.7	10.7	8.5	11.4	12.9	13.5	14.0
Working Capital Ratios								
Asset Turnover (x)	0.8	0.8	1.0	0.9	0.9	0.9	0.9	0.9
Inventory (Days)	48.0	50.9	44.4	44.2	43.4	41.8	41.3	41.0
Debtor (Days)	18	16	17	18	17	20	17	16
Creditor (Days)	118	119	108	117	105	112	103	100
Working Capital Turnover (Days)	-10	-10	-19	-25	-24	-29	-26	-25
Leverage Ratio (x)								
Current Ratio	1.2	1.2	1.2	1.1	1.3	1.5	1.4	1.5
Debt/Equity	2.0	1.8	1.4	1.0	1.1	0.9	0.8	0.7

Cash Flow Statement (INR m)								
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
OP/(Loss) before Tax	1,010	2,856	3,832	4,124	7,344	10,927	12,829	15,626
Depreciation	1,974	2,170	2,313	2,413	2,880	3,062	3,322	3,475
Interest and Finance Charges	2,629	2,527	2,348	2,209	1,975	1,666	2,561	2,493
Direct Taxes Paid	-306	-633	-996	-977	-1,530	-1,959	-3,361	-4,050
(Inc.)/Dec. in WC	722	416	1,193	-778	2,819	1,715	383	334
CF from Operations	6,029	7,335	8,691	6,991	13,488	15,411	15,733	17,879
Others	-229.1	382.9	140.7	5	179.2	490	0	0
CF from Operations incl. EO	5800	7718.2	8831.2	6996.1	13,668	15,901	15,733	17,879
(Inc.)/Dec. in FA	-3,813	-3,840	-1,443	-6,191	-12,428	-7,678	-12,500	-16,500
Free Cash Flow	1,987	3,879	7,388	805	1,240	8,223	3,233	1,379
(Pur.)/Sale of Investments	-499	8	-369	-3,193	-2,622	-11,747	0	0
Others	4	192	1,642	182	3,693	11,665	0	0
CF from Investments	-4,308	-3,640	-170	-9,202	-11,357	-7,760	-12,500	-16,500
Issue of Shares	0	0	0	5,043	0	0	0	0
Inc./(Dec.) in Debt	1,413	328	-4,010	328	3,133	1,120	0	5,000
Interest Paid	-3,009	-2,971	-2,789	-2,798	-2,507	-2,427	-2,561	-2,493
Dividend Paid	-337	-337	-673	-843	-1,630	0	-1,545	-1,854
Others	0	-476	54	-3	-77	-68	0	0
CF from Fin. Activity	-1,932	-3,456	-7,419	1,727	-1,081	-1,375	-4,107	653
Inc./Dec. in Cash	-440	622	1,242	-479	1,229	6,767	-874	2,032
Opening Balance	4,171	3,731	4,353	5,595	5,116	9,650	16,416	15,542
Closing Balance	3,731	4,353	5,595	5,116	6,345	16,416	15,542	17,574

NOTES

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 warranty, 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 alterations 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.: INP00000670); 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.