

Maximising ethanol volumes...

About the stock: Dwarikesh Sugar (DSL) is a UP based sugar company with sugar crushing capacity of 21500 TCD, distillery capacity of 337.5 KLD & co-generation capacity of 96 MW.

- The company would be diverting 15-20% of sugarcane towards juice ethanol & remaining towards B-heavy ethanol, which would result in 1.4 lakh tonnes (lt) of sugar equivalent sugarcane diversion towards ethanol

Q3FY23 Results: DSL witnessed weak results with a sharp dip in sugar sales.

- Sales were down 36.2% YoY on account of lower sugar sales volumes
- EBITDA was at ₹ 26.5 crore, down 51.9% YoY, with margins at 6.9%
- Consequently, PAT was at ₹ 10.5 crore (down 63.6% YoY)

What should investors do? DSL's share price has gone up 111% in the last five years (from ₹ 42 in February 2018 to ₹ 89 in February 2023).

- We cut our sales & earnings estimate considering lower sugar volumes, dip in recovery & increase in sugarcane SAP in 2023-24 sugar season
- We maintain our **BUY** rating on the stock

Target Price and Valuation: We value the stock at ₹ 120, valuing the business at 12x FY24 PE.

Key triggers for future price performance:

- DSL has increased its distillery capacity to 11 crore litre from 5.5 crore litre with the commissioning of new 175 KLD distillery. This would lead to distillery revenue CAGR of 32.8% in FY22-25E. Distillery segment is expected to contribute 35% to total revenues
- With increasing profitability and reduction in sugar inventory, the company would be able to generate cumulative ₹ 422 crore free cash flows in the next three years, which would be utilised working capital requirement and higher shareholder's payout
- With expected dip in sugar production in Maharashtra & Karnataka in 2022-23 season, domestic sugar prices could move up by ₹ 2/kg to ₹ 36-37/kg

Alternate Stock Idea: We like Dalmia Bharat Sugar in our sugar coverage.

- It is fastest in utilising B-heavy & sugarcane juice to produce ethanol. Distillery volumes to grow 1.8x to 22 crore litre by FY24. The company is aggressively exporting sugar & utilising higher global white sugar prices
- We value the stock at ₹ 490/share with a BUY recommendation



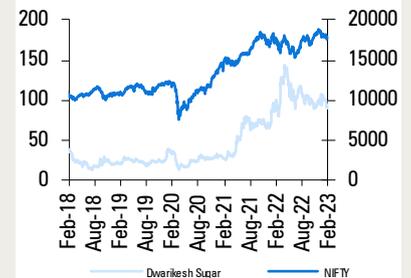
Particulars

Particulars (₹ crore)	Amount
Market Capitalization	1,674.9
Total Debt (FY22)	520.7
Cash and Investments (FY22)	38.6
EV	2,157.1
52 week H/L (₹)	148 / 79
Equity capital	18.8
Face value (₹)	1.0

Shareholding pattern

(in %)	Mar-22	Jun-22	Sep-22	Dec-22
Promoter	42.1	42.1	42.1	42.1
FII	7.7	7.2	7.0	5.7
DII	3.3	3.3	3.3	3.3
Others	47.0	47.5	47.7	49.0

Price Chart



Recent event & key risks

- The company is diverting 15-20% of its sugarcane towards juice ethanol
- Key Risk:** (i) Unexpected increase in sugarcane SAP in UP (ii) Any dip in recovery rate due to weather disruptions

Research Analyst

Sanjay Manyal
sanjay.manyal@icicisecurities.com

Key Financial Summary

Key Financials	FY21	FY22	5 Year CAGR (FY17-22)	FY23E	FY24E	FY25E	CAGR (FY22-25E)
Total Operating Income	1838.9	1974.1	10.6%	2080.0	2022.8	2124.0	2.5%
EBITDA	201.3	290.8	1.2%	263.2	308.4	341.2	5.5%
EBITDA Margin %	10.9	14.7		12.7	15.2	16.1	
Net Profit	91.5	155.2	-0.1%	141.5	190.7	220.1	12.3%
EPS (₹)	4.9	8.2		7.5	10.1	11.7	12.3%
P/E	18.3	10.8		11.8	8.8	7.6	
RoNW %	15.8	23.1		17.3	20.3	20.3	
RoCE (%)	14.4	20.6		18.8	21.9	23.1	

Source: Company, ICICI Direct Research

Key takeaways of recent quarter

Q3FY23 Results: Sugar recovery stagnates; focus on maximising ethanol production

- Revenue witnessed de-growth of 36.2% to ₹ 383.8 crore adversely impacted by lower domestic sugar sales volumes & stagnant sugar prices. However, distillery segment continues to perform well on the back of higher volumes as well as realisation
- Sugar sales were down 50.4%, adversely impacted by 54.3% dip in sugar volumes & flat sugar realisation. The company sold 0.65 lakh tonnes (lt) of sugar with average domestic realisation of ₹ 35.5 /kg. Sugar volumes include 0.43 lt of exports & 0.22 lt of domestic sale
- The significant decline in domestic sugar volume was mainly due to lower domestic sale quota during the quarter given the company was holding very low sugar inventory at the start of the quarter (October inventory level was 18,000 tonnes)
- DSL received sugar export quota of 0.86 lt, out of which it has contracted 0.5 lt of exports and traded remaining 0.36 lt for the exchange of domestic sugar. We believe the company would have earned of ₹ 10-12 crore for the export quota sale. The export realisation for 0.5 lt of raw sugar is ₹ 36/kg but adjusting for freight, it is ₹ 34/kg
- Sugar inventory at the end of December was 0.47 lt valued at ₹ 32.57/kg against 1.1 lt valued at ₹ 31.6/kg
- Distillery sales were up 65.8% to ₹ 110.3 crore led by 48.7% jump in volumes and 10.9% higher realisations. The company sold 1.67 crore litre of ethanol at a realisation of ₹ 65/litre
- The growth in distillery volumes was led by commissioning of new capacity in July-2022. The higher distillery realisation was mainly on account of sale of ethanol manufactured from sugarcane juice (fetches highest realisation of ₹ 65.6/litre)
- Power sales volumes dipped 3.8% to 4.7 crore units given the company is utilising additional captive power for newly commissioned distillery. Average realisation increased by 3% to ₹ 3.3/unit
- In the current 2022-23 season, the company crushed 12.5 lt of sugarcane. Out of this, 2.3 lt (18.4%) was diverted to produce ethanol from sugarcane juice route and remaining 10.2 lt was diverted toward B-heavy ethanol route. The company produced 0.93 lt of sugar during the season
- Gross sugar recovery in the current season is down by 19 bps mainly due to unfavourable weather and red-rot disease in its catchment areas of Bareilly plant. However, the management believe sugar recovery would improve as the plant sugarcane starts getting crushed. Moreover, DSL is changing sugarcane variety to reduce the dependence on waning Co-0238 variety. It would be able to change the varietal balance in next three years
- According to the management, sugarcane crushing and gross sugar recovery is expected to remain similar to last season. The company is expected to produce 3.2 – 3.5 lt of sugar in the 2022-23 season
- Operating profit declined 51.9% to ₹ 26.5 crore on account of lower sugar sales. PAT de-grew 63.6% to ₹ 10.5 crore, mainly due to lower operating profit and higher interest cost
- The company commissioned 175 KLD distillery capacity in July 2022, which would increase its annual ethanol volumes to 11 crore litre. DSL has started utilising sugarcane juice route to produce ethanol in 2022-23 sugar season and would be diverting 15-20% of sugarcane towards sugarcane juice route. Out of the total 11 crore litre, 6 crore litre would be contributed by juice ethanol and 5 crore litre by B-heavy ethanol

- Long term debt is at ₹ 296.1 crore, which is at a concessional interest rate. The company is utilising cash on the books for the working capital requirement until December 2022
- DSL would be producing ethanol from sugarcane juice in both of its plants during sugar season (November-May). It would be producing ethanol from B-heavy molasses during off-season (June-October)
- The company is actively evaluating capex for sugar refinery, which could improve export realisation given refined sugar prices trade at a premium in the export market
- Industry wise sugar production is expected to be 34 million tonnes (MT) after diverting 4.5 MT of sugar towards ethanol. Considering, 27.5 MT of consumption & exports of 6.1 MT, sugar inventory would be close to 5.5 MT by September 2023, which would be close to last year's level

Exhibit 1: Peer Comparison

Sector / Company	CMP		TP	Rating	M Cap (₹ Cr)	EPS growth (%)			EBITDA margins (%)			PE (x)			P/B (x)			RoCE (%)		
	(₹)	(₹)				FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E
Balrampur Chini (BALCHI)	365	485	Buy	7439	-0.3	1.0	59.1	14.4	14.5	17.8	14.5	14.3	9.0	2.4	2.3	2.0	15.3	14.9	22.3	
Dalmia Bharat Sugar (DALISUG)	332	490	Buy	2689	10.0	14.2	18.1	14.8	17.7	19.0	8.7	7.6	6.4	1.1	1.1	1.0	12.3	15.8	17.7	
Triveni Engineering (TRIENG)	272	360	Buy	6581	45.9	17.2	23.3	14.8	12.2	16.2	15.4	13.1	10.6	3.4	2.2	2.1	15.8	17.4	18.9	
Dwarikesh sugar (DWASUG)	89	120	Buy	1675	69.6	-8.8	34.8	14.7	12.7	15.2	10.8	11.8	8.8	2.5	2.1	1.8	20.6	18.8	21.9	
Dhampur Sugar (DHASUG)	212	270	Buy	1407	0.5	8.5	13.9	15.3	12.7	14.2	9.8	9.0	7.9	1.7	1.5	1.4	13.9	15.3	17.7	
Avadh Sugar (AVASUG)	468	750	Buy	935	60.3	25.2	28.4	11.0	12.0	12.9	16.0	15.9	10.0	1.2	1.0	0.9	12.5	15.3	19.8	

Source: Company, ICICI Direct Research

The sugar Industry in Uttar Pradesh has seen lower sugar recovery in 2021-22 season as well as in initial phase in 2022-23 season. This is indicating that sugarcane variety Co-0238 is waning and most sugar mills in UP are changing their sugarcane variety to sustain sugarcane yields & higher recovery. However, most sugar mills in UP have created huge distillery capacity to utilise B-heavy as well as sugarcane juice route to produce ethanol. With the commissioning of new distillery capacity, DSL would be able to divert 15-20% of sugarcane towards sugarcane juice & remaining towards B-heavy ethanol. This would result in more than 30% of sugar sacrifice for ethanol production. This would significantly reduce the company's dependence on sugar sales. We believe the company would be able to utilise its full distillery capacity to produce 11-12 crore litre of ethanol in FY24 and FY25. This would result in distillery revenue cagr of 32.8% during FY22-25E. However, we cut our profit estimate for FY23 and FY24 mainly incorporating lower sugar sales, dip in sugar recovery & expected increase in sugarcane state advised price (SAP) in UP in 2023-24 season. We expect earning CAGR of 12.3% for the company during FY22-25E. We remain positive on Dwarikesh considering lean balance sheet, strong earnings growth and attractive valuation multiple We maintain our **BUY** rating with a revised target price of ₹ 120/share (earlier ₹ 135).

Exhibit 2: Variance Analysis

	Q3FY23	Q3FY22	YoY (%)	Q2FY23	QoQ (%)	Comments
Total Operating Income	383.8	601.3	-36.2	540.1	-28.9	Net sales de-grew 36.2% due to similar decline in sugar sales as the company received lower domestic sales quota during the quarter. However, distillery sales grew 65.8% in Q3 led by higher distillery volume as well as realisation
Other Operating Income	0.0	0.0	N.A.	0.0	N.A.	
Raw Material Expenses	286.0	478.4	-40.2	445.2	-35.8	
Employee Expense	31.0	30.7	1.1	33.5	-7.5	
Other operating Expenses	40.3	37.2	8.4	33.1	21.9	
EBITDA	26.5	55.1	-51.9	28.3	-6.4	Operating margins dipped due to negative operating leverage & higher contribution from relatively lower margin ethanol produced from sugarcane juice
EBITDA Margin (%)	6.9	9.2	-225 bps	5.2	166 bps	
Depreciation	13.4	11.0	21.2	13.3	0.7	Depreciation provisioning increased due to commissioning of distillery capacity earlier in the year
Interest	6.0	3.9	54.1	6.2	-2.6	
Other Income	7.9	1.0	711.7	2.3	241.4	Other income jumped given the company is holding cash surplus
PBT	15.0	41.1	-63.5	11.2	34.3	
Tax Outgo	4.5	12.2	-63.2	3.4	NC	
PAT	10.5	28.9	-63.6	7.8	34.2	Net profit dipped 63.6% due to lower weak operational performance
Key Metrics						
Sugar sales volume (in tonnes)	64,719	141,740	-54.3	114,870	-43.7	Sugar sales volume was down 54.3% due to lower domestic sales quota as company was holding very low sugar inventory at the start of the season
Domestic Sugar realisation (₹ per kg)	35.5	35.4	0.2	34.9	1.6	Domestic sugar realisation was flat
Distillery volumes (in crore litre)	1.7	1.1	48.7	2.2	-24.7	Distillery volumes jumped up significantly with commissioning of new distillery in H1FY23
Distillery realisation (₹ per litre)	65.0	58.6	10.9	59.1	10.0	Distillery realisation was up given the company sold ethanol produced from sugarcane juice

Source: Company, ICICI Direct Research

Exhibit 3: Change in estimates

(₹ Crore)	FY23E			FY24E			FY25E	Comments
	Old	New	% change	Old	New	% change	New	
Net sales	2,170.6	2,080.0	-4.2	2,330.1	2,022.8	-13.2	2,124.0	We cut our sales estimate due to lower sugar production & sales volume
EBITDA	285.1	263.2	-7.7	410.9	308.4	-25.0	341.2	We cut our operating profit estimate in FY23 due to lower sugar sales volumes & expected increase in sugarcane SAP
EBITDA Margin (%)	13.1	12.7	-48 bps	17.6	15.2	-239 bps	16.1	
PAT	162.0	141.5	-12.7	253.0	190.7	-24.6	220.1	
EPS (₹)	8.6	7.5	-12.6	13.4	10.1	-24.4	11.7	

Source: ICICI Direct Research

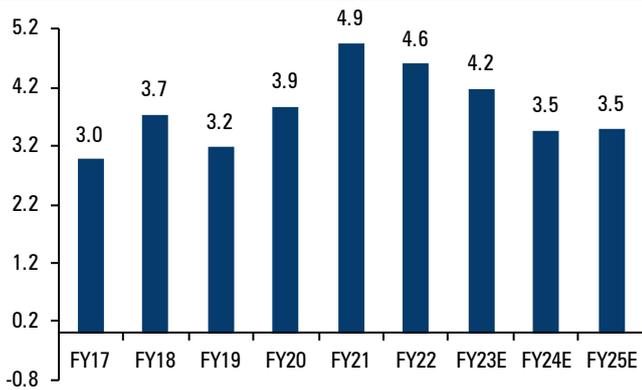
Exhibit 4: Assumptions

	Current						Earlier		Comments
	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY23E	FY24E	
Sugar Sold (in tonne)	3,87,848	4,94,890	4,59,850	4,18,464	3,47,325	3,49,061	4,62,149	4,39,042	We cut our sugar sales volume estimate given the company is diverting 15-20% of its sugarcane towards juice ethanol
Sugar Price (₹ per tonne)	31,301	32,099	33,907	35,000	35,500	36,000	34,500	35,500	We increase sugar realisation estimate for FY23 after accounting for selling of export sale quota in 9mFY23
Distillery volume	11,600	31,700	55,700	84,405	1,09,725	1,19,700	80,133	1,09,725	We raise our distillery volume estimate for FY23 as per guidance by the company
Distillery price (₹ per KL)	48,276	50,223	58,399	62,370	62,994	63,624	60,151	61,956	We raise our distillery realisation estimate due to higher proportion of Sugarcane juice contribution
Power Units sold	16.3	17.1	16.0	16.0	16.5	17.0	17.5	17.0	We change our power volume estimates
Price per unit (₹ per units)	2.9	3.1	3.2	3.3	3.4	3.5	3.3	3.4	

Source: ICICI Direct Research

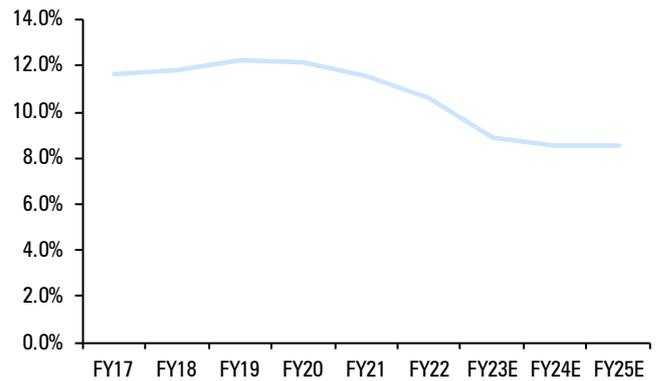
Key Metrics

Exhibit 5: Sugar sales volume (in lakh tonne)



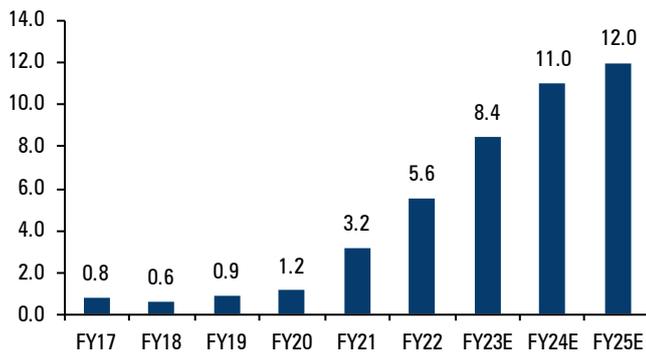
Source: ICICI Direct Research, Company

Exhibit 6: Sugar recovery rate (%)



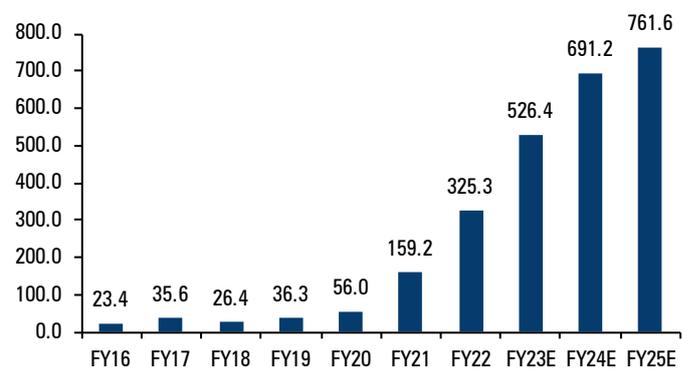
Source: ICICI Direct Research, Company

Exhibit 7: Ethanol volumes (in crore litre)



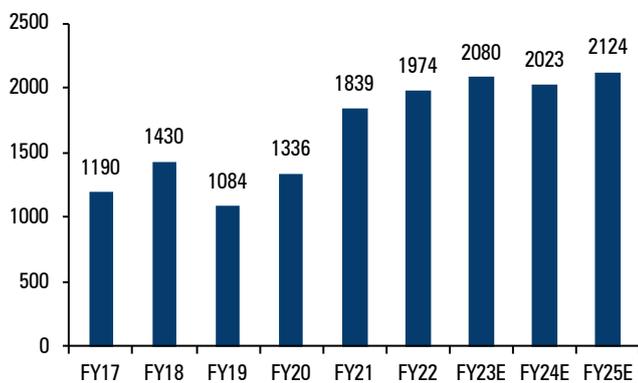
Source: Company, ICICI Direct Research

Exhibit 8: Ethanol sales (₹ crore)



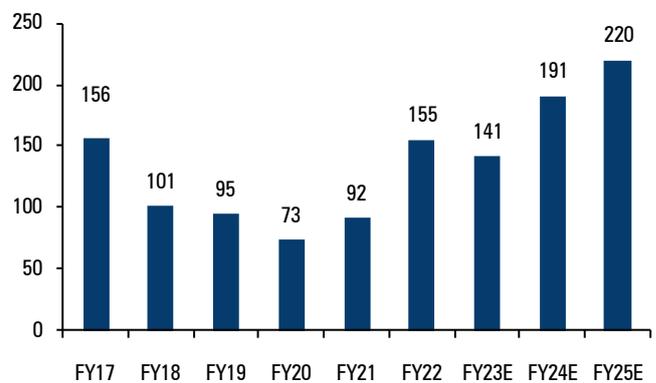
Source: Company, ICICI Direct Research

Exhibit 9: Revenue trend (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 10: Net profit trend (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 11: Valuation

	Sales (₹ cr)	Growth (%)	EPS (₹)	Growth (%)	PE (x)	EV/EBITDA (x)	RoNW (%)	RoCE (%)
FY22	1974.1	7.4	8.2	69.6	10.8	7.4	23.1	20.6
FY23E	2080.0	5.4	7.5	-8.8	11.8	7.7	17.3	18.8
FY24E	2022.8	-2.8	10.1	34.8	8.8	6.2	20.3	21.9
FY25E	2124.0	5.0	11.7	15.4	7.6	5.4	20.3	23.1

Source: Company, ICICI Direct Research

Financial Summary

Exhibit 12: Profit and loss statement				
	₹ crore			
(Year-end March)	FY22	FY23E	FY24E	FY25E
Total Operating Income	1,974.1	2,080.0	2,022.8	2,124.0
Growth (%)	7.4	5.4	-2.8	5.0
Raw Material Expenses	1,475.3	1,567.2	1,476.7	1,542.7
Employee Expenses	96.3	118.6	119.7	123.3
Administrative Expenses	0.0	0.0	0.0	0.0
Excise Duty	0.0	0.0	0.0	0.0
Other expenses	111.7	131.0	117.9	116.8
Total Operating Expenditure	1,683.3	1,816.8	1,714.4	1,782.8
EBITDA	290.8	263.2	308.4	341.2
Growth (%)	44.5	-9.5	17.1	10.6
Depreciation	43.6	50.7	52.8	51.5
Interest	31.7	26.6	16.8	13.7
Other Income	3.2	16.3	16.3	18.3
PBT	215.5	185.8	238.7	275.9
Exceptional items	0.0	0.0	0.0	0.0
Total Tax	63.5	60.6	64.3	74.1
PAT	155.2	141.5	190.7	220.1
Growth (%)	69.6	-8.8	34.8	15.4
EPS (₹)	8.2	7.5	10.1	11.7

Source: Company, ICICI Direct Research

Exhibit 13: Cash flow statement				
	₹ crore			
(Year-end March)	FY22	FY23E	FY24E	FY25E
Profit/Loss after Tax	218.7	141.5	190.7	220.1
Add: Depreciation	43.6	50.7	52.8	51.5
Add: Interest	31.7	0.0	0.0	0.0
(Inc)/dec in Current Assets	132.5	194.5	-26.6	-19.8
Inc/(dec) in Current Liabilities	-34.6	-13.0	3.5	-89.1
CF from operating activities	352.5	373.7	220.5	162.8
(Inc)/dec in Investments	0.0	0.0	0.0	0.0
(Inc)/dec in Fixed Assets	-175.3	-255.0	-50.0	-30.0
Others	0.7	38.3	0.0	0.0
CF from investing activities	-174.7	-216.7	-50.0	-30.0
Issue/(Buy back) of Equity	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	-85.0	-140.0	-100.0	-50.0
Dividend paid & dividend tax	-61.2	-37.7	-65.9	-75.3
Inc/(dec) in Sec. premium	-0.2	38.8	0.0	0.0
Others	-31.3	0.0	0.0	0.0
CF from financing activities	-177.7	-138.9	-165.9	-125.3
Net Cash flow	0.1	18.1	4.6	7.5
Opening Cash	0.1	0.2	18.4	22.9
Cash with bank	38.3	0.0	0.0	0.0
Closing Cash	38.6	18.4	22.9	30.4

Source: Company, ICICI Direct Research

Exhibit 14: Balance Sheet				
	₹ crore			
	FY22	FY23E	FY24E	FY25E
Liabilities				
Equity Capital	18.8	18.8	18.8	18.8
Reserve and Surplus	654.5	797.1	921.9	1,066.6
Total Shareholders funds	673.3	815.9	940.7	1,085.4
Total Debt	520.7	380.7	280.7	230.7
Long Term Provisions	22.3	20.3	18.3	16.3
Other Non-current Liabilities	1.4	1.4	1.4	1.4
Total Liabilities	1,217.7	1,218.3	1,241.1	1,333.8
Assets				
Gross Block	953.2	1,208.2	1,258.2	1,288.2
Less: Acc Depreciation	565.1	615.9	668.7	720.3
Net Block	388.1	592.4	589.5	568.0
Capital WIP	142.5	142.5	142.5	142.5
Intangible assets	0.0	0.0	0.0	0.0
Non Current Investments	0.3	0.3	0.3	0.3
Other non-current assets	41.7	41.7	41.7	41.7
Current Assets				
Inventory	757.7	508.4	516.9	513.3
Debtors	34.5	69.3	67.4	70.8
Cash	38.6	18.4	22.9	30.4
Loans & Advances	0.3	0.3	0.3	0.3
Other Current Assets	15.8	35.8	55.8	75.8
Current Liabilities				
Creditors	96.3	85.3	90.8	93.5
Provisions	4.4	4.4	4.4	4.4
Other CL	101.1	101.1	101.1	11.3
Net Current Assets	645.0	441.4	467.0	581.3
Total Assets	1,217.7	1,218.3	1,241.1	1,333.8

Source: Company, ICICI Direct Research

Exhibit 15: Key ratios				
	FY22	FY23E	FY24E	FY25E
Per share data (₹)				
EPS	8.2	7.5	10.1	11.7
Cash EPS	10.6	10.2	12.9	14.4
BV	35.8	43.3	50.0	57.6
DPS	1.3	2.0	3.5	4.0
Cash Per Share	30.0	32.7	35.5	38.3
Operating Ratios (%)				
EBITDA Margin	14.7	12.7	15.2	16.1
PBT / Net Sales	11.1	9.7	12.6	13.9
PAT Margin	7.9	6.8	9.4	10.4
Inventory days	140.1	89.2	93.3	88.2
Debtor days	6.4	12.2	12.2	12.2
Creditor days	17.8	15.0	16.4	16.1
Return Ratios (%)				
RoE	23.1	17.3	20.3	20.3
RoCE	20.6	18.8	21.9	23.1
Valuation Ratios (x)				
P/E	10.8	11.8	8.8	7.6
EV / EBITDA	7.4	7.7	6.2	5.4
EV / Net Sales	1.1	1.0	0.9	0.9
Market Cap / Sales	0.8	0.8	0.8	0.8
Price to Book Value	2.5	2.1	1.8	1.5
Solvency Ratios				
Debt/EBITDA	1.8	1.4	0.9	0.7
Debt / Equity	0.8	0.5	0.3	0.2
Current Ratio	7.2	6.1	6.0	6.0
Quick Ratio	0.5	1.0	1.2	1.3

Source: Company, ICICI Direct Research

Exhibit 16: ICICI Direct coverage universe (Sugar)

Sector / Company	CMP	TP	M Cap	EPS (₹)			P/E (x)			EV/EBITDA (x)			P/B			RoCE (%)			
	(₹)	(₹)		Rating	(₹ Cr)	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E
Balrampur Chini (BALCHI)	365	485	Buy	7,439	22.8	23.0	36.6	16.0	15.9	10.0	11.2	10.6	7.0	2.4	2.3	2.0	15.3	14.9	22.3
Dalmia Bharat Sugar (DALSUG)	332	490	Buy	2,689	36.7	42.0	49.5	9.0	7.9	6.7	7.3	5.4	4.3	1.1	1.1	1.0	12.3	15.8	17.7
Triveni Engineering (TRIENG)	272	360	Buy	6,581	17.7	20.8	25.7	15.3	13.1	10.6	12.7	10.7	8.4	3.4	2.2	2.1	15.8	17.4	18.9
Dwarikesh sugar (DWASUG)	89	120	Buy	1,675	8.2	7.5	10.1	10.8	11.8	8.8	7.4	7.7	6.2	2.5	2.1	1.8	20.6	18.8	21.9
Dhampur Sugar (DHASUG)	212	270	Buy	1,407	21.7	23.5	26.8	9.8	9.0	7.9	7.9	7.1	5.9	1.7	1.5	1.4	13.9	15.3	17.7
Avadh Sugar (AVASUG)	468	750	Buy	935	62.2	77.9	100.0	7.5	6.0	4.7	7.1	5.4	3.8	1.2	1.0	0.9	12.5	15.3	19.8

Source: Bloomberg, ICICI Direct Research

RATING RATIONALE

ICICI Direct endeavours to provide objective opinions and recommendations. ICICI Direct assigns ratings to its stocks according to their notional target price vs. current market price and then categorizes them as Buy, Hold, Reduce and Sell. The performance horizon is two years unless specified and the notional target price is defined as the analysts' valuation for a stock

Buy: >15%

Hold: -5% to 15%;

Reduce: -15% to -5%;

Sell: <-15%



Pankaj Pandey

Head – Research

pankaj.pandey@icicisecurities.com

**ICICI Direct Research Desk,
ICICI Securities Limited,
1st Floor, Akruiti Trade Centre,
Road No 7, MIDC,
Andheri (East)
Mumbai – 400 093
research@icicidirect.com**

ANALYST CERTIFICATION

[We, Sanjay Manyal MBA (FINANCE) Research Analyst, 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. 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. It is also confirmed that above mentioned Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months and do not serve as an officer, director or employee of the companies mentioned in the report.

Terms & conditions and other disclosures:

ICICI Securities Limited (ICICI Securities) is a full-service, integrated investment banking and is, inter alia, engaged in the business of stock brokering and distribution of financial products.

ICICI Securities is Sebi registered stock broker, merchant banker, investment adviser, portfolio manager and Research Analyst. ICICI Securities is registered with Insurance Regulatory Development Authority of India Limited (IRDAI) as a composite corporate agent and with PFRDA as a Point of Presence. ICICI Securities Limited Research Analyst SEBI Registration Number – INH00000990. ICICI Securities Limited SEBI Registration is INZ000183631 for stock broker. ICICI Securities is a subsidiary of ICICI Bank which is India's largest private sector bank and has its various subsidiaries engaged in businesses of housing finance, asset management, life insurance, general insurance, venture capital fund management, etc. ("associates"), the details in respect of which are available on www.icicibank.com.

ICICI Securities is one of the leading merchant bankers/ underwriters of securities and participate in virtually all securities trading markets in India. We and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Investment Research Department. ICICI Securities and its analysts, persons reporting to analysts and their relatives are generally prohibited from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover.

Recommendation in reports based on technical and derivative analysis centre on studying charts of a stock's price movement, outstanding positions, trading volume etc as opposed to focusing on a company's fundamentals and, as such, may not match with the recommendation in fundamental reports. Investors may visit icicidirect.com to view the Fundamental and Technical Research Reports.

Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein.

ICICI Securities Limited has two independent equity research groups: Institutional Research and Retail Research. This report has been prepared by the Retail Research. The views and opinions expressed in this document may or may not match or may be contrary with the views, estimates, rating, and target price of the Institutional Research.

The information and opinions in this report have been prepared by ICICI Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the select 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 of ICICI Securities. While we would endeavour to update the information herein on a reasonable basis, ICICI Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent ICICI Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or ICICI Securities policies, in circumstances where ICICI Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

This report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall 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. Though disseminated to all the customer: simultaneously, not all customers may receive this report at the same time. ICICI Securities will not treat recipients as customers by virtue of their receiving this report. 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. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. ICICI Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice.

ICICI Securities 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

ICICI Securities 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.

ICICI Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months.

ICICI Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. ICICI Securities or its associates 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 ICICI Securities nor Research Analysts and their relatives 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.

ICICI Securities or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report.

Since associates of ICICI Securities and ICICI Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/ beneficial ownership of one percent or more or other material conflict of interest various companies including the subject company/companies mentioned in this report.

ICICI Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Neither the Research Analysts nor ICICI Securities have been engaged in market making activity for the companies mentioned in the report.

We submit that no material disciplinary action has been taken on ICICI Securities by any Regulatory Authority impacting Equity Research Analysis activities.

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 ICICI Securities and affiliates 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.