ICICI direct Research

March 22, 2021

Sector Update

ICICI Securities – Retail Equity Research

Sugarcane turning into prominent energy crop…

We initiated coverage on the sugar sector with our *'August 2019 sector report'* on the premise of rationalising sugar inventory levels in the country and possibility of significant sugarcane diversion toward producing ethanol. Our view is materialising given sugar inventory levels are coming down from the peak of 14.5 million tonnes (MT) in September 2019 to ~8 MT in September 2021. Further, in the current sugar season, the industry would be diverting (sacrificing) 2 MT of sugar for ethanol production. With the government's aggressive stance on increasing ethanol blending with petrol to levels of 20% by 2025, the industry is undertaking huge capacity expansion programmes to meet the ethanol requirement of 10 billion litre by 2025. We believe this distillery capacity addition to utilise the B-Heavy & sugarcane juice route to produce ethanol, would be earnings accretive after the significant increase in ethanol prices in last two years. Also, higher sugarcane diversion towards ethanol production would keep sugar inventory levels in check, significantly de-leveraging industry balance sheet.

Ethanol blending programme to rationalise sugar inventories

With the aggressive capacity addition by sugar companies in the next two to three years, the industry would be able to sacrifice 5-6 MT of sugar by 2025 to produce ~600 crore litre of ethanol. We believe the government's target of 10% ethanol blending by 2022 can be easily achieved with the commissioning of many distilleries between October 2021 and March 2022. Further, to achieve 20% ethanol blending programme, ~300-400 crore litre of ethanol is required to be produced through grain based distilleries. We believe this has also opened one more revenue stream for sugar companies given some of them are setting up grain based distilleries as well.

Domestic sugar prices to move northwards

Sugar inventory levels are expected to come down to ~8 MT by September 2021 with the aggressive exports & diversion towards ethanol. We believe the industry would be able to maintain sugar inventories at 6-8 MT in future with increasing sugarcane diversion towards ethanol. This would result in domestic sugar prices moving up to reasonable levels. We believe higher domestic prices would also improve the profitability of sugar companies, going forward.

Improving profitability; attractive multiples

Given sugar companies would be commissioning or completing capacity addition in the next two years, the industry should see considerable improvement in earnings trajectory. We are incorporating FY23E numbers for sugar companies under coverage. We expect sugar companies to be able to completely de-leverage their balance sheet (including working capital debt) in the next two years and generate sustainable cash flows, going forward. Sugar stocks are trading at attractive multiples. We believe a multiple re-rating is imminent.

Research Analyst

Sanjay Manyal
sanjay.manyal@icicisecurities.com

Exhibit 1: Valuation matrix

Sector / Company	CMP (₹)	TP (₹)	Rating	M Cap (₹ Cr)	EPS (₹) FY21E	EPS (₹) FY22E	EPS (₹) FY23E	P/E (x) FY21E	P/E (x) FY22E	P/E (x) FY23E	EV/EBITDA (x) FY21E	EV/EBITDA (x) FY22E	EV/EBITDA (x) FY23E	P/B FY21E	P/B FY22E	P/B FY23E	RoCE (%) FY21E	RoCE (%) FY22E	RoCE (%) FY23E
Balrampur Chini (BALCHI)	204	285	Buy	4,284	23.7	27.2	37.4	8.6	7.5	5.5	7.5	6.7	4.6	1.6	1.5	1.3	17.1	18.4	25.5
Dalmia Bharat Sugar (DALSUG	161	225	Buy	1,303	33.4	36.7	44.2	4.8	4.4	3.6	4.8	4.3	3.4	0.7	0.6	0.6	15.6	15.0	16.6
Triveni Engineering (TRIENG)	85	125	Buy	2,041	15.2	17.1	21.2	5.6	4.9	4.0	4.7	4.4	3.6	1.2	1.1	0.9	20.7	20.5	23.3
Dhampur Sugar (DHASUG)	184	260	Buy	1,223	38.1	44.3	52.6	4.8	4.2	3.5	5.0	3.9	3.2	0.8	0.7	0.6	14.9	16.9	18.6
Dwarikesh sugar (DWASUG)	32	36	Hold	595	5.4	7.0	8.2	5.9	4.5	3.9	4.6	3.7	3.3	1.1	0.9	0.8	17.6	20.5	20.3
Avadh Sugar (AVASUG)	190	210	Hold	380	51.1	59.7	72.0	3.7	3.2	2.6	6.6	5.4	4.1	0.6	0.5	0.4	11.0	12.5	14.3

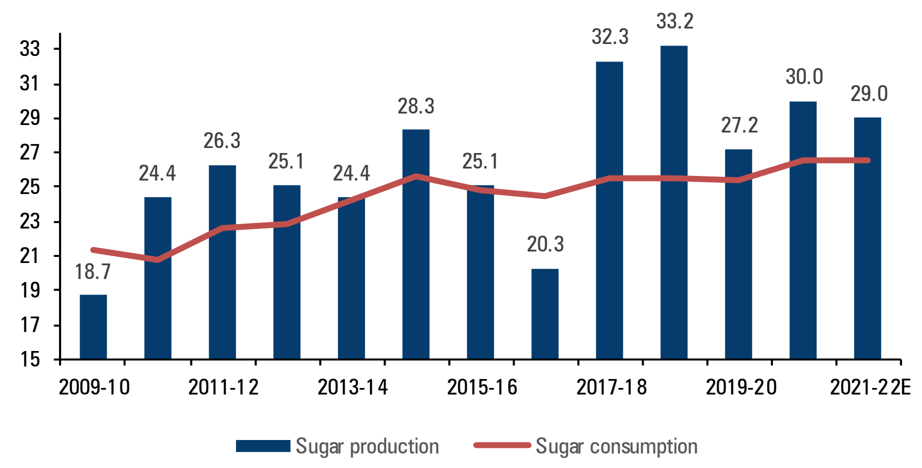
Source: Company, ICICI Direct Research

Sugar economy getting better

The sugar economy has improved significantly in the last two years with increase in sugar production aided by better sugarcane yield & sugar recoveries (prevalent use of sugarcane variety CO-0238). Further, implementation of minimal selling price (MSP) for sugar, export subsidy, diversion of sugarcane for ethanol production through B-heavy & sugarcane juice route have helped in rationalisation of inventory. We believe the industry would be able to sacrifice 5-6 MT (equivalent of sugar exports) of sugar for ethanol production in the next two to three years. This would help the industry to reduce sugar production to the level of sugar consumption in the country, which would keep sugar inventory at rational levels and, in turn, result in higher domestic sugar prices.

Sugar production in the current season is likely to be ~30 MT given 2 MT has been sacrificed for ethanol production either through B-heavy or sugarcane process

Exhibit 2: Sugar production & consumption in India (in million tonne)



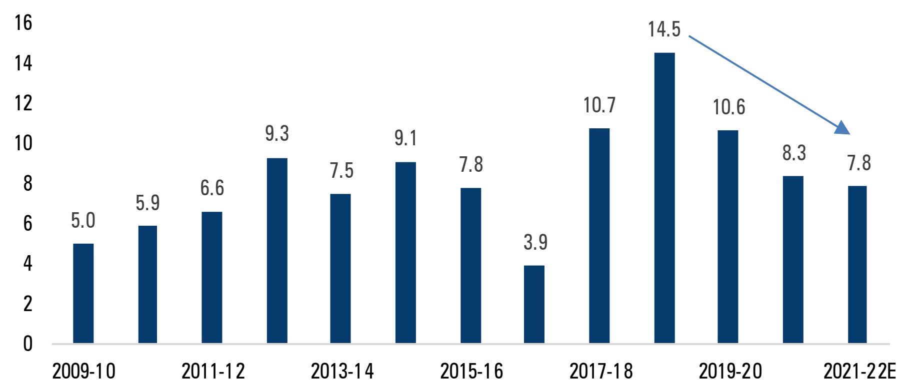
Source: Company, ICICI Direct Research

Sugar inventory shrinking to comfortable levels

With the surge in sugar production since 2018, sugar inventories peaked at 14.5 MT (~55% of total consumption) in September 2019. Given diversion of sugarcane towards ethanol production through B-heavy route & aggressive 6 MT of exports (government gave export subsidy of ₹ 10.4/kg for 2019-20 sugar season), this led to sugar inventories coming down to 10.5 MT in September 2020. Further, the government is incentivising sugar exports in the 2020-21 sugar season as well with ₹ 5.85/kg sugar export subsidy for 6 MT. We believe sugar inventories would come down to ~8.0 MT by September 2021 with aggressive exports and 2.0 MT sugar sacrifice for ethanol. Inventory levels at 7-8 MT would push sugar prices to more remunerative levels.

Sugar Inventories would come down to ~8 MT by September 2021 after 6 MT of exports & 26 MT of consumption

Exhibit 3: Sugar inventories rationalising to comfortable levels (in million tonne)



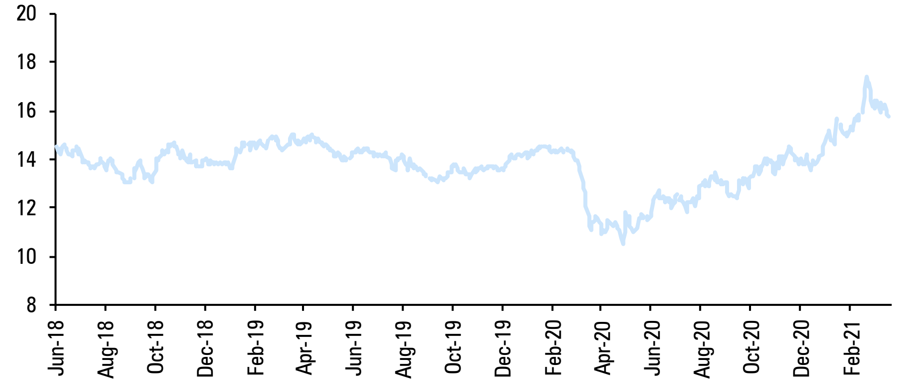
Source: Company, ICICI Direct Research

Surge in global prices helping export

Global sugar prices (raw sugar) have moved up from the lows of 10 cents/lb to 16.5 cents/lb in the last one year. The surge in these prices has been aided by lower sugar production in Thailand & EU. Further considerable increase in crude prices have increase the possibility of aggressive sugarcane diversion towards ethanol by Brazil in the upcoming sugar season. The surge in sugar prices at the right time resulted in India sugar companies getting contract for 4.3 MT (three-fourth of total 6 MT) of sugar within three months of announcement of sugar export subsidy. We believe the industry would be able to complete the export contracted by April-May 2021. Moreover, higher global prices have resulted in better sugar realisation for Maharashtra and Karnataka millers given their proximity to the port.

Global sugar prices have surged to above 16 cents / lb in last one year. This would help complete sugar export for the 2020-21 season

Exhibit 4: Global Sugar Prices (US cents / lb)



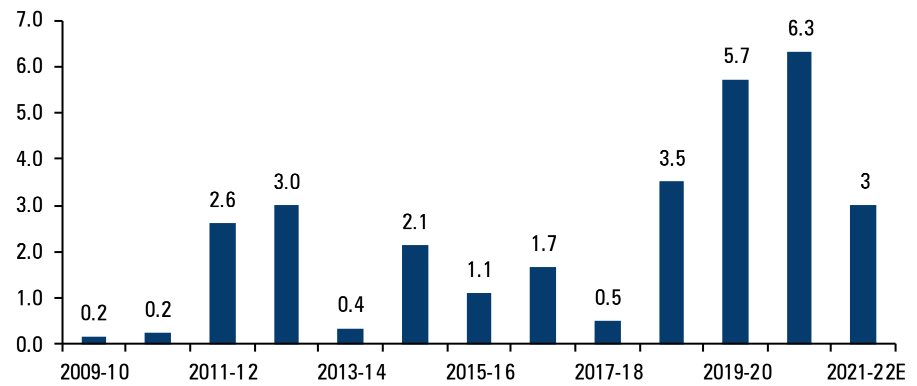
Source: Company, ICICI Direct Research

Domestic sugar prices to move northwards

The industry is likely to see 10% increase in sugar production to 30 MT in the 2020-21 season. Production in Maharashtra is likely to end at ~10 MT (4 MT increase from last year) mainly on account of higher sugarcane acreage. Similarly, production is UP is also likely to end at ~10 MT (2.7 MT lower from last year) impacted by lower sugarcane yield & lower sugar recovery. The sugarcane yield has been impacted by 'red rot' disease in some regions in UP. Further lower recoveries have been impacted by crushing of sugarcane, which was not fully mature given crushing season 2019-20 was extended with increase in sugarcane availability (given 'Gur' & 'Khandsari' units were closed early due to Covid-19). We believe the sugar industry would be able to export 6 MT of sugar and would be able to sacrifice 2 MT of sugar for ethanol in the 2020-21 season. This would result in bringing inventory levels down to 7-8 MT. We believe stable sugar inventories would push domestic sugar prices to ~₹ 34/kg, which would keep the sugar segment profitable.

The industry would be able to successfully export 12 MT between September 2019 and September 2021. Moreover, the government can still continue sugar subsidy for exports until 2023. This would ensure that inventories would not build up till the industry is able to build sufficient distillery capacity for ethanol production

Exhibit 5: Aggressive sugar exports in last two seasons has helped bring down inventories (in million tonne)

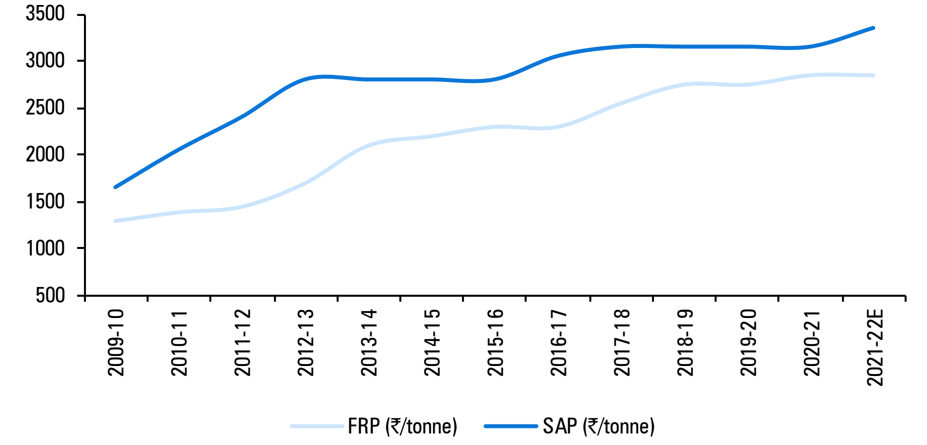


Source: Company, ICICI Direct Research

Stable SAP prices bring relief

The central government has increased the fair & remunerative prices (FRP) for sugarcane for the 2020-21 season by ₹ 10/quintal to ₹ 285/quintal (at 10% sugar recovery). However, State Advised Price (SAP) for sugarcane in UP has been kept at ₹ 315/quintal for the season. We believe sugarcane prices in UP can increase by 5-6% in the next sugar season given stable prices for three consecutive years and state elections due in February 2022. We believe rationalisation of sugar inventories and increase in ethanol sales would help the industry to absorb the increase in sugarcane prices next year. Sugarcane has remained one of the most remunerative agri crops in the country fetching ~70-80% more income compared to wheat & paddy.

Exhibit 6: Relatively stable sugarcane prices in last three years



Source: Company, ICICI Direct Research

Sugarcane prices have remained stable over the last three years. However, we expect a 6% increase in sugarcane prices in the next season given UP elections are due in March 2022

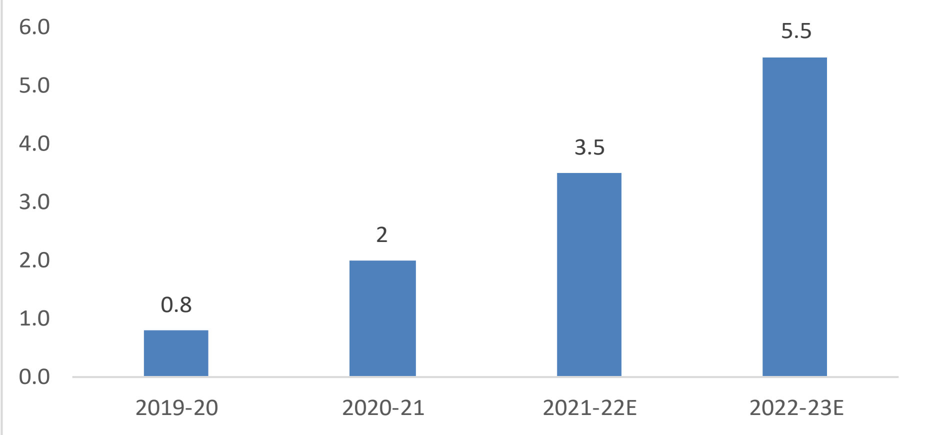
Ethanol economy moving at fast pace

Though the ethanol blending programme started way back in 2003, it has only gained pace from 2018 onwards. The lack of availability of feedstock, lower ethanol production capacity and no clarity on ethanol prices has delayed the targeted 10% ethanol blending by a decade. However, from 2018 onwards, the government has taken various decisions to promote ethanol blending. These are:

- The government allowed ethanol production through B-heavy & sugarcane juice route
- The separate pricing for C-heavy, B-heavy & Sugar Juice ethanol was declared to encourage higher ethanol production by sacrificing sugar partially or fully
- Interest subvention up to 50% for any ethanol capacity addition or capex related to insinuation boilers

The industry has been able to achieve 5% overall blending in 2019-20 and has got contract for 289 crore litre of ethanol supply from OMCs for 2020-21. This would result in ~7% ethanol blending with petrol in the current year. Given ~289 crore ethanol production, ethanol economy accounts for ₹ 17000 crore. The government is planning 10% ethanol blending by 2022 and 20% blending by 2025. This would require 1000 crore litre of ethanol by 2025. We believe the ethanol economy would grow to ₹ 60,000 crore by 2025. Moreover, total distillery sales (ethanol, ENA, rectified spirit) would account for ~₹ 90,000 crore by 2025.

Exhibit 7: Sugar sacrifice arising due to sugarcane diversion towards ethanol production in India (in million tonne)



Source: Company, ICICI Direct Research

The industry would be able to sacrifice 5-6 MT of sugar by diverting sugarcane towards ethanol production in the next two to three years

Industry undertaking aggressive capex

Interest subvention on capacity expansion for distillery has propelled the industry to aggressively increase distillery capacities, which would be utilised for production of B-heavy, sugarcane juice & grain based ethanol. The government expect distillery projects worth ₹ 40,000 crore to be commissioned in the next four to five years, which would increase distillery capacity in the country to ~1600 crore litre. Out of this 1000 crore litre would be required by OMCs as ethanol & rest would be utilised to produce extra neutral alcohol (ENA) and rectified spirit for the liquor & chemicals industry.

Direct juice ethanol is remunerative

The government increased ethanol prices in October 2021 mainly to encourage higher ethanol production. It has increase C-Heavy ethanol prices by 4.4% to ₹ 45.7/litre. Moreover, B-heavy & sugarcane juice ethanol prices have increased by 6.2% to ₹ 57.6/litre & 5.3% to ₹ 62.7/litre, respectively. With this increase, ethanol produced from sugarcane juice is more remunerative than B-heavy or C-heavy ethanol (considering sugar prices at ₹ 32/kg). This has resulted in many sugar mills announcing capacity addition for the distillery segment. India produces ~6 MT of excess sugar every year compared to its consumption. Currently, this excess is exported with the help of government subsidy. The industry is require to sacrifice this 6 MT of sugar for ethanol production to maintain demand-supply equation. We believe aggressive capacity addition by most millers would result in ~3.5 MT of sugar diversion in 2021-22 & ~5.5 MT of sugar diversion in 2022-23.

The government has increased the B-Heavy & sugarcane juice ethanol prices by ₹ 3/litre. This would encourage millers to divert sugarcane towards ethanol production

Exhibit 8: Increase in B-heavy & sugarcane juice ethanol changes dynamics

	C Molasses	B Molasses	Sugarcane Juice
1 tonne of sugarcane crushed			
Sugar (kg)	120	105	0
Current Sugar Prices	32	32	32
Sugar Sales (₹)	3840	3360	0
Ethanol (in litres)	11	20	85
Current Ethanol Prices	45.7	57.6	62.7
Ethanol sales (₹)	503	1152	5325
Total Sales (₹)	**4343**	**4512**	**5325**

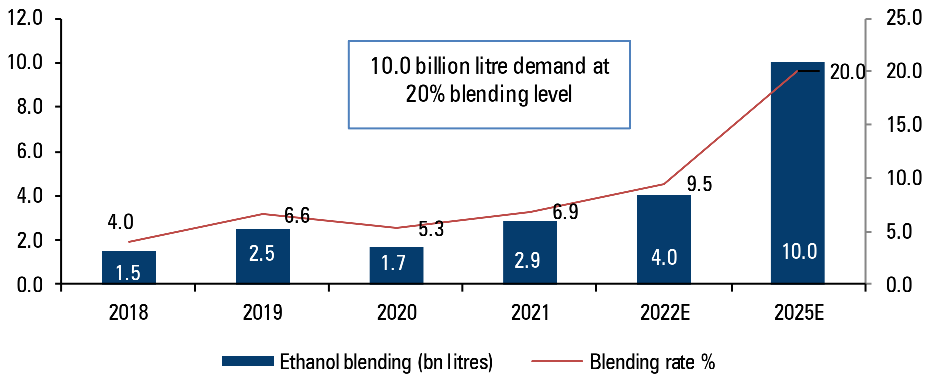
Source: Company, ICICI Direct Research

Ethanol blending at 20% by 2025 possible

The government is targeting 10% ethanol blending by 2022 & 20% ethanol blending by 2025 (advanced from 2030). To achieve these targets, OMCs would require 430 crore litre of ethanol supply by 2022 & 1000 crore litre of ethanol supply by 2030. We believe this target is achievable after the considerable increase in B-heavy & sugarcane juice ethanol prices in the current year. Moreover, the industry is undertaking significant capacity addition to achieve this target.

OMCs would require 4 billion litre of ethanol by 2022 & 10 billion litre of ethanol by 2025 to meet the demand of 10% & 20%, respectively

Exhibit 9: Ethanol blending requirement for 10% & 20% ethanol blending



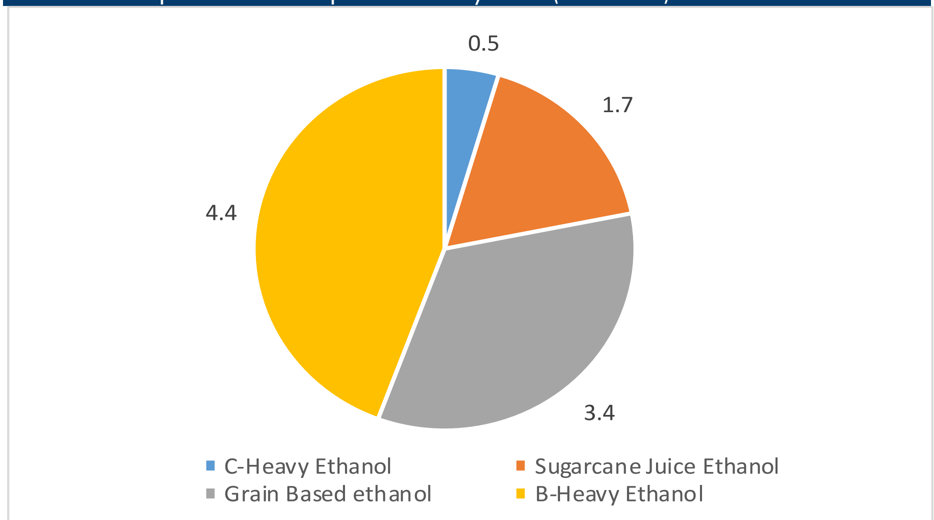
Source: Company, ICICI Direct Research

Grain based ethanol to add another revenue stream

The government is targeting 20% ethanol blending by 2025, which would require 1000 crore litre of ethanol. We believe diversion from sugarcane juice & B-heavy ethanol would only suffice for ~600-700 crore litre & rest 300-400 crore litre of ethanol would be produced through grains. The grain based ethanol would add one more revenue stream for the industry and contribute to the revenue & profitability. We believe sugar companies would produce ~65-70% of ethanol from B-heavy molasses. Moreover, 25-30% of ethanol is likely to be produced from sugarcane juice. Also, 5-10% of distillery volumes would comprise ENA for mandatory procurement by the UP based country liquor companies. Many sugar companies are planning to set up grain based distilleries to tap the opportunity arising out of increase in ethanol blending levels.

Out of the 10 billion litre of ethanol production, 600-700 crore litre would be produce from C-heavy, B-heavy & sugarcane juice processes & the 300-400 crore litre would be required from grain based ethanol

Exhibit 10: Expected ethanol production by 2025 (in bn litre)



Source: Company, ICICI Direct Research

Industry dynamics

With sugar inventories getting rationalised, demand-supply balance evening out & considerable increase in ethanol sales, the sugar industry is going to witness strong earnings growth in the next three to four years. We believe distillery revenues would contributes as much as 25% of the total sales for sugar companies. Further, lower sugar inventories would push sugar prices northwards. Both these factors would contribute to the earnings growth.

Industry level balance sheet de-leveraging

Most sugar companies have seen de-leveraging of balance sheet with significant reduction in sugar inventories. We believe the entire 6 MT of exports in 2020-21 and increasing ethanol sales would further reduce working capital requirement of sugar companies. Moreover, capex related low cost debt would be utilised for working capital. This would reduce the interest cost for most sugar millers, to a great extent.

Multiple re-rating on the cards

Despite sugar companies earnings likely to grow at a stable pace rather than usual cyclical ups & downs, sugar stocks are still trading at abysmal single digit earnings multiple. We believe huge growth opportunity in ethanol would result in structural earnings for the industry. Moreover, complete de-leveraging of balance sheet gives us comfort. We believe sugar stocks would remain a strong investment catalyst while a re-rating of sugar companies is imminent.