August 27, 2019

Sugar breaking out of bitter cycles…

The sugar industry is going through transformational changes through various government & industry efforts to make business models more sustainable by increasing the ethanol-blending target to 10% by 2022 & 20% by 2030. Moreover, with the introduction of concept of minimal selling price (MSP) for sugar, losses in the sugar business can be avoided. With new bio fuel policy introducing ethanol production through 'B' heavy route, most sugar companies are expanding their distillery capacity. Also, the government has approved a soft loan (interest subvention of 5%) for 114 projects. This would lead to building of more than 200 crore litre of annual capacity by 2023. These measures can be a long term solution to escape the sectoral cyclicity and reinstate sustainable earnings for sugar companies.

Ethanol blending programme to change industry fundamentals

With the aggressive government approach to increase the ethanol blending programme to 10% by 2020 and 20% by 2030, sugar companies are witnessing a massive expansion of distillery capacities. Currently, sugar companies are able to supply only 70% of tenders floated by oil marketing companies. OMCs would require 330 crore litre for 10% ethanol blending with petrol. In June 2018, the government allowed ethanol production through B heavy route and increased prices of B heavy ethanol from ₹ 47/litre to ₹ 52/litre. Moreover, the government is also giving interest subvention for distillery capacity expansion. We believe increasing blending levels and sugarcane diversion towards B heavy ethanol would benefit integrated sugar companies. Moreover, in the long run, the industry would be able to balance sugar inventory levels during times of excess sugar production. This would drive earnings for sugar companies.

Government support to help evade losses in sugar segment

The bumper sugar production of 32-33 million tonnes (MT) in the last two years is likely to lead to build up of inventory to 14.5 MT by October 2019. However, the industry has been able to evade any losses mainly due to government's timely decision of introducing minimal selling prices (MSP) for sugar and a monthly release mechanism. Moreover, government is also supporting industry with a favourable biofuel policy. All these measures have stabilised sugar company earnings. We believe sugar inventory can come down through (1) sugar production decline in Maharashtra & Karnataka due to lack water availability, (2) export of 3-4 MT each for two years & (3) diversion of sugarcane towards ethanol production. This would bring down sugar inventory to the comfortable 7-8 MT in next two years.

Attractive valuation multiples of sugar companies

With various government measures and a favourable biofuel policy, sugar companies have witnessed strong earnings in FY19. However, cash flow from operations is still negative mainly due to higher sugar production. We believe that with the liquidation of current sugar inventory and diversion of sugarcane towards ethanol, sugar companies would witness higher cash flow from operations in FY20E & FY21E. At the current stock prices, sugar stocks are trading at 3-7x one year forward price to earnings. On a P/BV basis, the stocks are trading at 0.7-1.2x one year forward book value. We believe that with the sustainable earnings, the book values of sugar companies would grow 30-60% in the next two years. Without considering any re-rating, we believe sugar companies would at least command 1.0-1.5x one year forward book value. We initiate coverage on the sugar industry with a **BUY** recommendation on **Balrampur Chini**, **Dhampur Sugar**, **Dalmia Bharat Sugar, Dwarikesh Sugar, Triveni Engineering** and **Avadh Sugar**.

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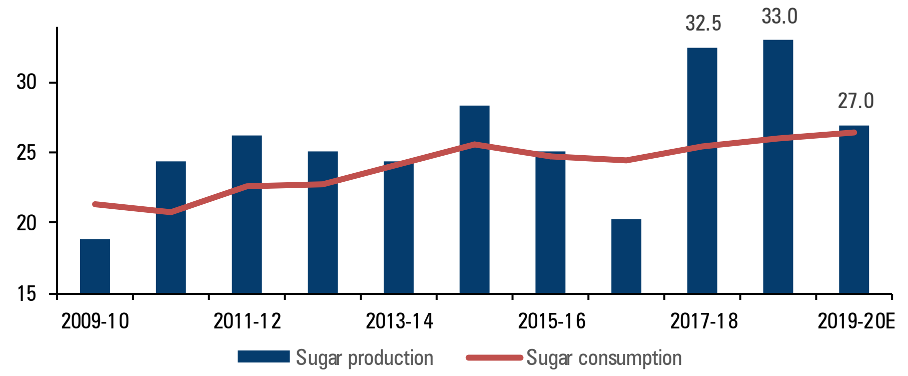
Domestic demand supply scenario

Historically, the sugar industry is considered a cyclical industry. Also, sugarcane production has remained volatile due to multiple factors. In the pre-2010 decade, farmers used to switch to other crops during increased sugarcane arrears by sugar mills at a time of glut in sugar production. However, between 2010 and 2012, state advised price (SAP) by the Uttar Pradesh government increased significantly making sugarcane a more remunerative crop for farmers compared to paddy or wheat. This rendered sugarcane farmers immune to a delay in payments while production of sugarcane & sugar stabilised in the state. Post 2012-13, sugar production has declined in the country only in water scarce states like Maharashtra, Karnataka and Tamil Nadu. Southern & western states in India are largely dependent on rainfall for sugarcane production. However, irrigation facilities are in much better shape in UP due to sufficient ground water availability.

Exhibit 1: Sugar production & consumption in India (in million tonne)

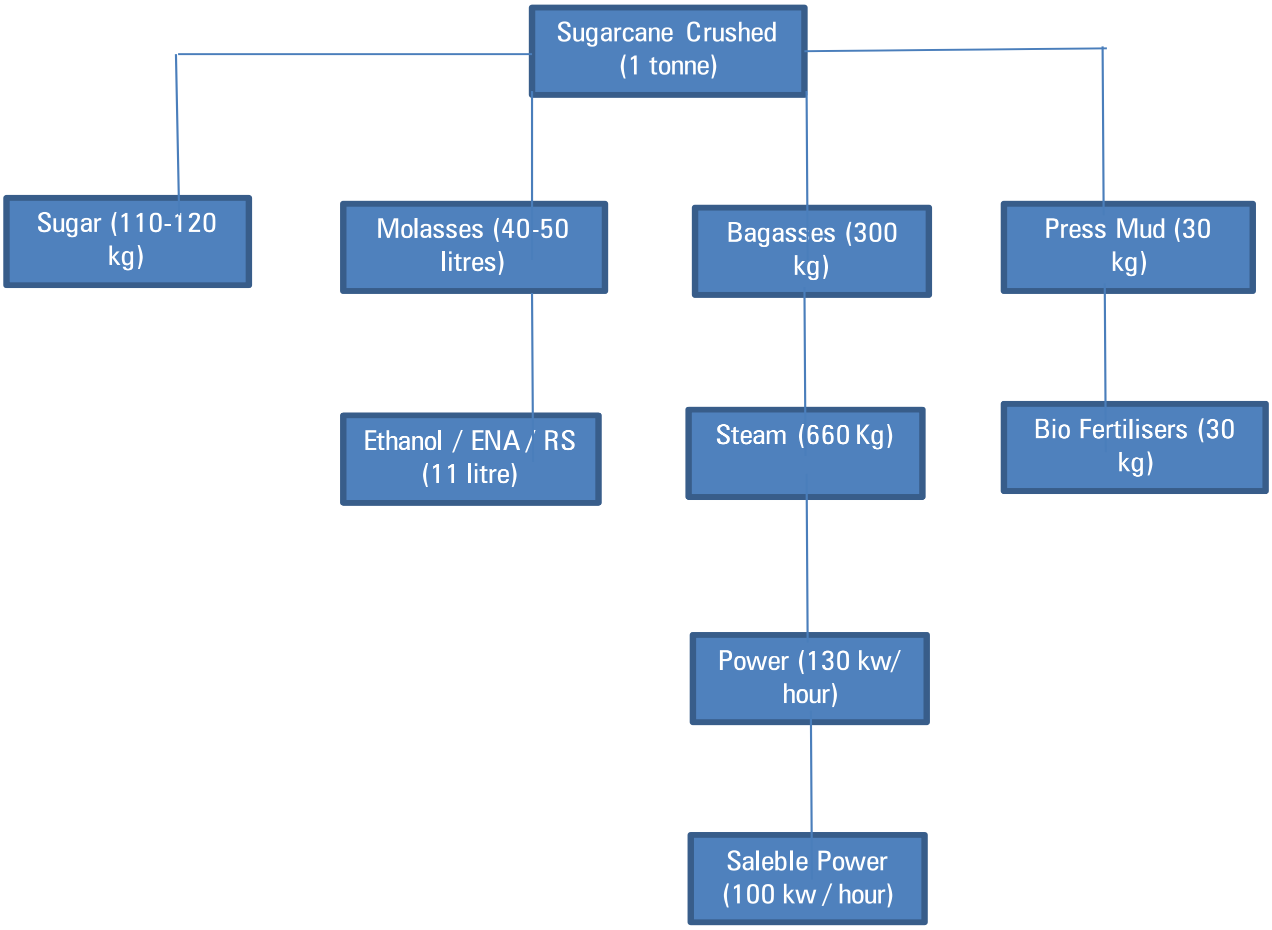


Source: Company, ICICI Direct Research

India witnessed bumper sugar production in the last two years, which built up inventory to all-time highs of 14.5 million tonne (MT). We believe lack of water availability in Maharashtra & Karnataka along with diversion towards B heavy ethanol would result in 18% decline in sugar production in 2019-20E

In the last two years, sugar production touched its peak at 32-33 MT due to stable sugarcane availability and dramatic increase in recovery rates. Sugar consumption in India was at 26 MT. Two years of consistently higher production led to the build-up of sugar inventory to 10.5 MT by October 2018. This is expected to increase to 14.5 MT by October 2019 despite expected 4 MT of sugar exports. The two consecutive years of higher sugar production led to crashing of sugar prices to ₹ 26 /kg in June 2018. This resulted in government intervention with various measures for the sugar industry and, in turn, sugar farmers.

Exhibit 2: Sugarcane value chain

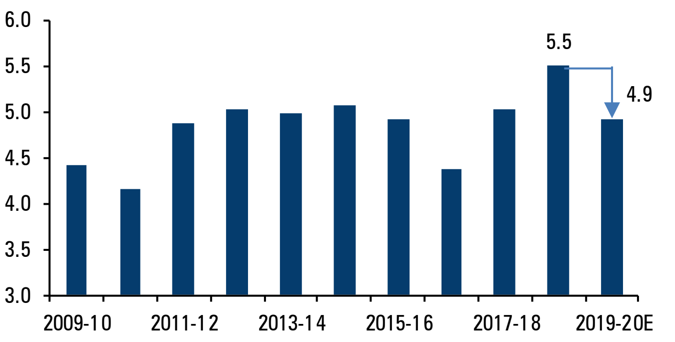


Source: Company, ICICI Direct Research

Sugarcane production to decline

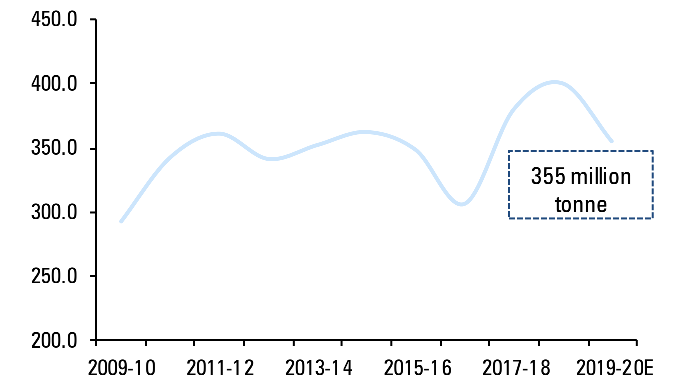
With excess sugar production for two consecutive years, the sugar inventory is likely to reach an all-time high of 14.5 MT by October 2019. This led sugarcane arrears to climb to ₹ 30,000 crore in March 2019. However, sugar production is expected to come down to 27 MT in 2019-20 mainly due to lack of availability of water in Maharashtra and Karnataka. Historically, it has been seen that after two to three years of higher sugarcane production, area under sugarcane reduces significantly. Moreover, sugarcane diversion towards sugar also reduces at a time of excess sugar inventory in the system. In 2019-20, area under sugarcane has come down by 11-12%. Moreover, we expect sugarcane production to decline 12% in 2019-20. Further, we also expect diversion towards sugar to also come down to less than 70% this year. Hence, sugar production is likely to dip to 27 MT in 2019-20.

Exhibit 3: Area under sugarcane (in million hectare)



Source: ISMA, ICICI Direct Research, Company

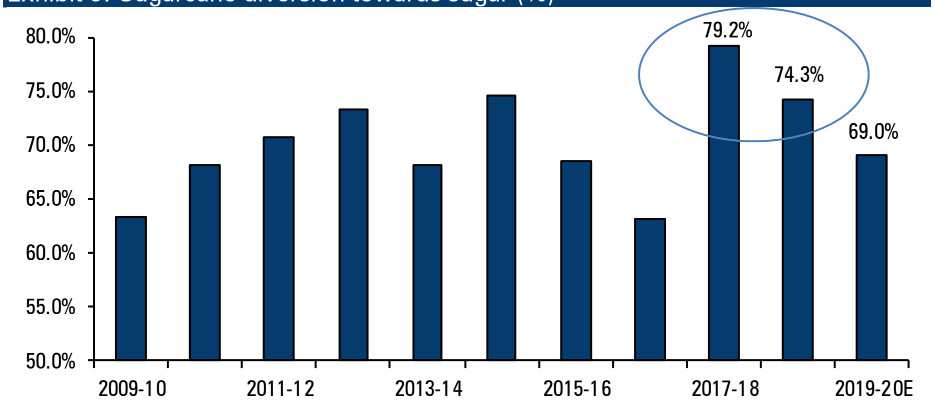
Exhibit 4: Sugarcane production (in million tonne)



Source: ISMA, ICICI Direct Research, Company

Notably, ~11% of sugarcane is used for the purpose of sapling while 15-25% of sugarcane is diverted to ***'Gur'*** or ***'Khandsari'*** depending on sugarcane availability. Historically, in 2014-15, around 75% of the sugarcane diverted towards sugar resulted in bumper sugar production of 28.5 MT, which led to higher sugar inventory of 9 MT in 2015-16. However, with the excess inventory in the system, the subsequent two years witnessed a substantial decline in diversion towards sugar production to 63%. Similarly, 72% and 75% sugarcane was diverted towards sugar in 2017-18 and 2018-19, respectively. Considering all-time high inventory of 14.5 MT along with sugarcane arrears of ₹ 30,000 crore, sugarcane diversion towards sugar would be less than 70% in the next two years resulting in lower sugar production. We believe this, coupled with higher proportion of B heavy molasses and 3-4 MT of exports, would bring down the inventory to the comfortable level of 7-8 MT.

Exhibit 5: Sugarcane diversion towards sugar (%)



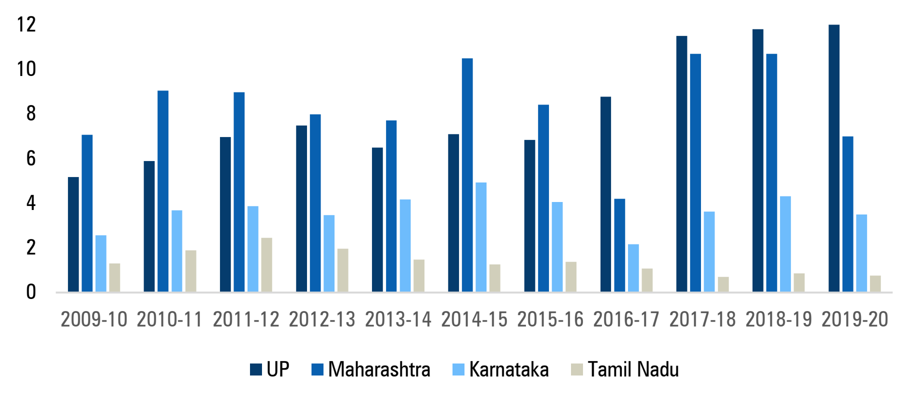
Source: ISMA, Company, ICICI Direct Research

Historically, two consecutive years of higher sugarcane diversion towards sugar leads to a sudden reduction in sugarcane diversion rate in the subsequent year. Between 2017 and 2019, sugarcane diversion towards sugar was at all-time highs of more than 75%. We believe that in 2019-20, sugarcane diversion towards sugar would dip to below 70%. This would lead to a reduction in sugar production

Uttar Pradesh sugar mills comfortably placed

With easier availability of ground water, in Uttar Pradesh (UP), production of sugarcane and sugar is much more stable compared to Maharashtra, Karnataka and Tamil Nadu. Hence, UP sugar companies would have sustainable sugar volumes. Moreover, cash flow generation resulted in a lighter balance sheet for most companies with repayment of entire high cost long term as well as short-term debt. Many of the sugar companies are using the government's low cost (5-6%) soft loans for their working capital requirement. Extreme weather condition in western, southern states would lead to lower sugar production in these states and higher sugar prices. Eventually, this would perk up earnings of sugar millers. Hence, UP sugar mills would always remain advantageously placed compared to companies in the south & west.

Exhibit 6: State wise sugar production (in million tonne)



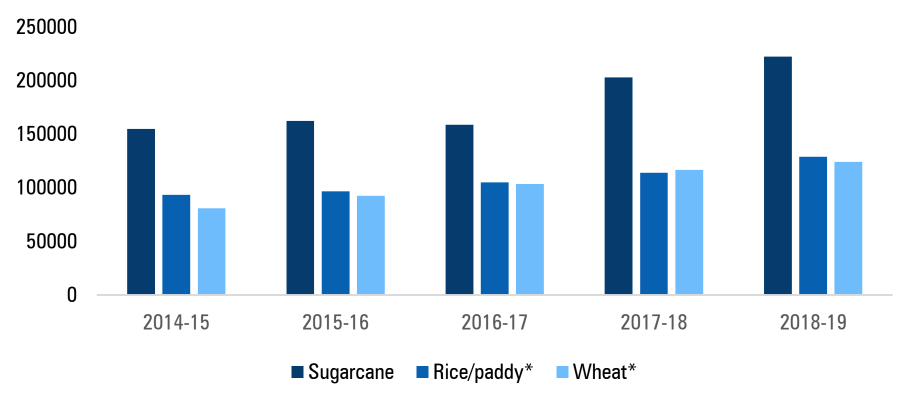
Source: ICICI Direct Research, Company

Sugar production in UP has remained consistent on account of steady ground water availability in the state. However, in Maharashtra and Karnataka, below normal monsoon or decline in water reservoirs led to a sharp decline in sugar production

Sugarcane remains most remunerative crop

In India, sugarcane is the most remunerative crop. An area under sugarcane cultivation of 4.7 million hectare generates ~380 MT of sugarcane, a yield of 80 tonnes per hectare. Considering the sugarcane price of ₹ 3150/tonne, income of farmers from 1 hectare of sugarcane production is ₹ 2.5 lakh per year. On the other hand, paddy cultivation area of 44 million hectare fetches around 161 million tonnes of paddy, which is 3.6 tonnes per hectare. Given paddy prices of ₹ 18,000 per tonne and two crops of paddy in a year, the farmers can earn around ₹ 1.3 lakh in a year. Similarly, wheat cultivation of 30 million hectare would fetch 100 MT of wheat, which is 3.4 tonne per hectare. Wheat price per tonne is ₹ 17,000. This provides farmers income of ₹ 1.15 lakh per year. Given no major difference in cost, sugarcane is by far the most remunerative crop for farmers.

Exhibit 7: Sugarcane remains most remunerative crop (₹ per hectare)



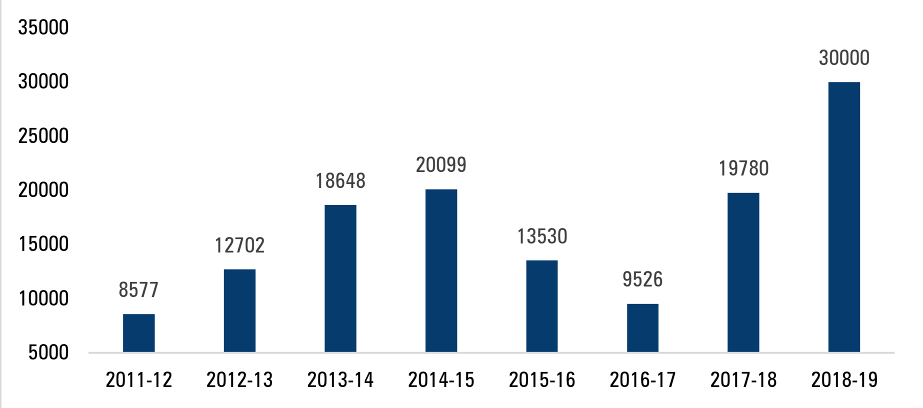
*Source: ICICI Direct Research *Paddy & Wheat gross income have been calculated for two crop seasons*

Farmer's gross income from 1 hectare of sugarcane production is ₹ 2.5 lakh per year, which is greater than that from 1 hectare of paddy production at ₹ 1.3 lakh per year and 1 hectare of wheat production at ₹ 1.15 lakh per year

Sugarcane cost to witness moderate rise

Given the cost dynamics for sugarcane farmers and very high inventory levels of sugar, the MSP of sugarcane is likely to witness a moderate increase in next few years. Also, the focus of UP & Maharashtra governments has been on timely payments to farmers rather than any irrational increase in sugarcane prices. The moderate increase ensures not only timely payment to farmers but also ensures a considerate stance towards viability of sugar industry. Hence, we believe sugarcane prices would remain stable over the next two to three years.

Exhibit 8: Sugarcane arrears (in ₹ crore)



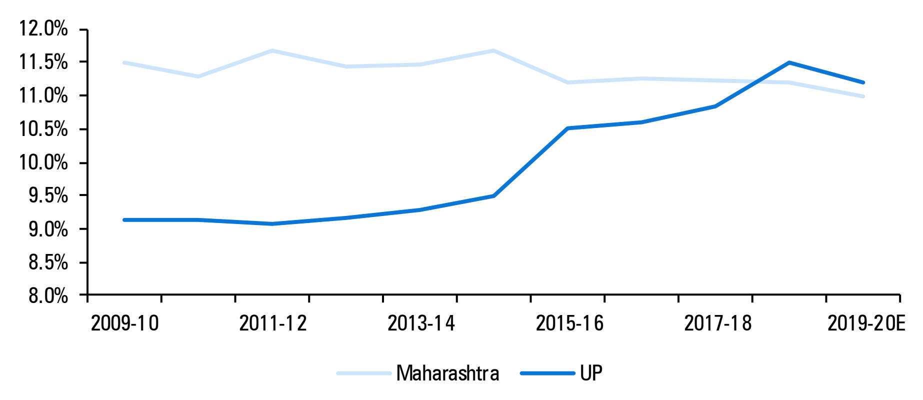
Source: ISMA, ICICI Direct Research

Sugarcane arrears are at the highest ever levels of ₹ 30000 crore as on 2018-19 sugar season

Co-0238 provides Midas touch to yields, recovery rate

In 2018-19, sugar recoveries in UP increased to more than 11.5% compared to10.85% in 2015-16. Historically, sugar recovery in UP used to be in the range of 9-10% depending on the early variety or general variety of sugarcane. However, with the introduction of Co-0238, sugarcane yield as well as recovery rate increased significantly. Bakshi Ram of Sugarcane Breeding Institute at Coimbatore developed this new variety of sugarcane. Sugarcane yield has increased from 60 tonnes per hectare in 2011-12 to 80 tonnes per hectare in 2018-19. This additional 20 tonnes increases the income of farmers by ₹ 65000 per year. Moreover, the average sugarcane recovery rate in UP has increased from 9.1% in 2011-12 to 11.5% in 2018-19. This higher recovery rate simply translates to 20% lower cost of production for sugar mills in UP. Currently, 69% of the sugarcane area in UP has been replaced with Co-0238 variety. This was one of the most important factors in bringing sugar mills to profits after suffering from low recovery rate for so many years. The new variety has also replaced the earlier variety in other north Indian states like Bihar, Haryana and Punjab.

Exhibit 9: Sugar recovery in UP & Maharashtra (%)



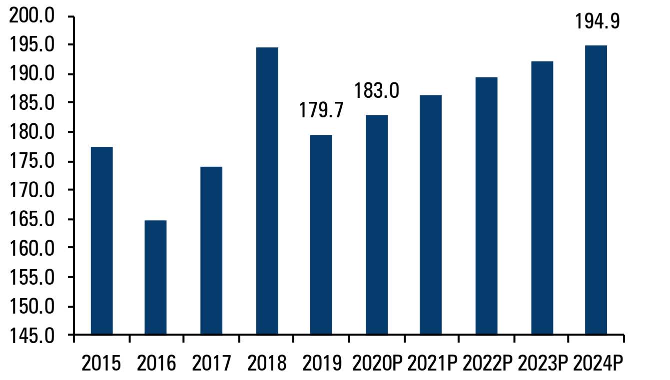
Source: ICICI Direct Research, ISMA

With the introduction of Co-0238, sugar recovery rate has increased from ~9.5% to ~11.5% over the last five years resulting in ~20% decline in cost of sugar production. Moreover, this has also improved sugarcane per hectare yield increasing farmers' income by ₹ 65000/hectare

Global sugar demand supply scenario

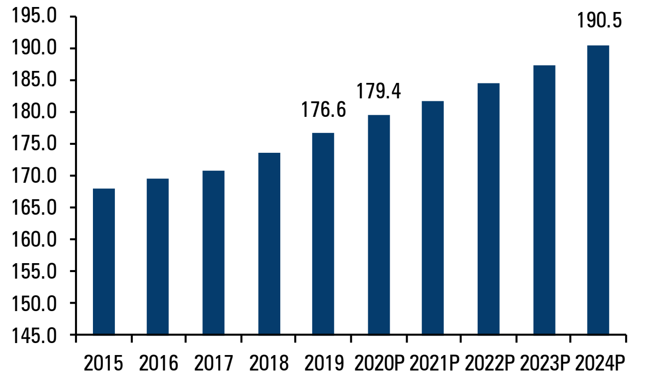
Global sugar production has been ranging from 160-190 million tonnes (MT) in the last five years largely depending on production in Brazil, India, EU, Thailand and Australia. On the other hand, global sugar consumption has been increasing at 1-2% per annum. Though Brazil, Thailand and Australia have been defining global prices, India has been an on & off exporter of sugar depending on the level of production. Brazil remained the dominant sugar producer for several years before cutting down its sugar production in 2018-19 for a higher shift towards ethanol manufacturing. Moreover, with India producing 33 MT in 2018-19, it will became the world's largest sugar producing country. In the last two years, bumper sugar production led to 3-4 MT of sugar exports by India. This, along with bumper production in Brazil in 2018-19 led to depressed global sugar prices. Current global prices have remained muted around 11-13 cent/lb in the last six months after touching multi-year lows of 10 cents/lb. With current global prices trading much lower than cost of production for Indian companies, it is absolutely unviable to export sugar. However, with huge inventories piling up, the Government of India has given ₹ 11/kg subsidy (as production and transport subsidy) to export 5 MT of sugar in 2018-19. We believe these incentives would continue for another year as sugar inventories remains high at 14.5 MT. However, 10% plus ethanol blending and production cut in the next two years in India would remove most of the excess sugar from the system. India may not export large quantities, going ahead. Moreover, the ethanol blending programme has been gaining prominence in many countries with sugarcane remaining the favourite crop to produce ethanol. In Brazil, 62% of sugarcane is likely to be processed for ethanol in 2019-20.

Exhibit 10: World sugar production (in million tonne)



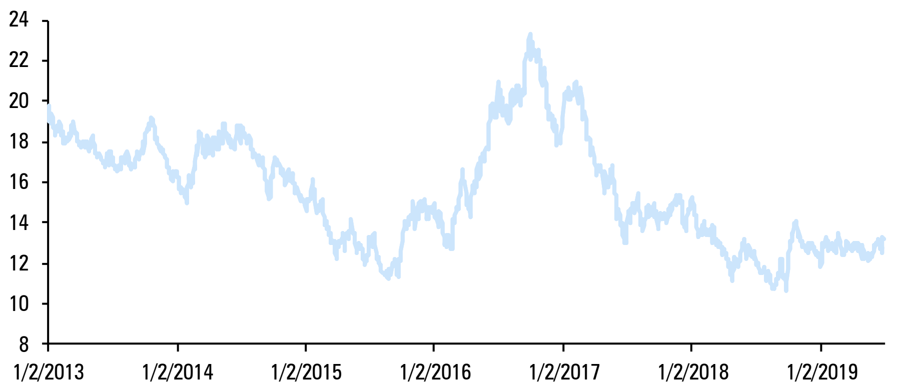
Source: FAO, ICICI Direct Research

Exhibit 11: World sugar consumption (in million tonne)



Source: FAO, ICICI Direct Research

Exhibit 12: International sugar prices (cents /lb)



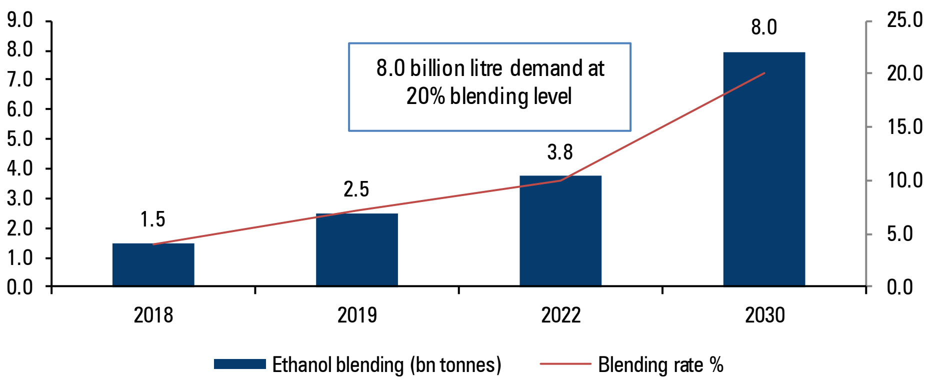
Source: Bloomberg

Global sugar prices at 12 cents are trading near multiyear low of 10 cents. We believe higher sugarcane diversion towards ethanol in Brazil and lower production in Thailand & EU would lead to a deficit of 4-5 MT in 2019-20. This could lead to higher global sugar prices and tend to help in higher sugar exports from India

Expanding ethanol blending programme

India's ethanol blending programme (EBP) started in 2004 with an initial target of 5% ethanol blending with petrol and later on increasing it to 10%. However, due to limited capacity, volatile sugarcane production and lower sugar recovery, EBP could not reach more than 3-4% till 2016. With India becoming the largest sugar producer globally with 32.5 MT in 2017-18, the government decided to allow ethanol production through B heavy molasses and sugarcane juice. Sugar production further increased to 33 MT in 2018-19, which is likely to sharply increase the sugar inventory to 14.5 MT in the country. Ethanol blending beyond 10% is one of the most economically viable solutions to not only reduce inventory but also aid miller's earnings. This would also ensure timely payments to sugarcane farmers. With oil marketing companies floating a tender of 325 crore litre for a year and many sugar companies coming up with distillery capacities, 10% ethanol blending can be achieved as early as 2020-21.

Exhibit 13: Ethanol demand with blending percentage



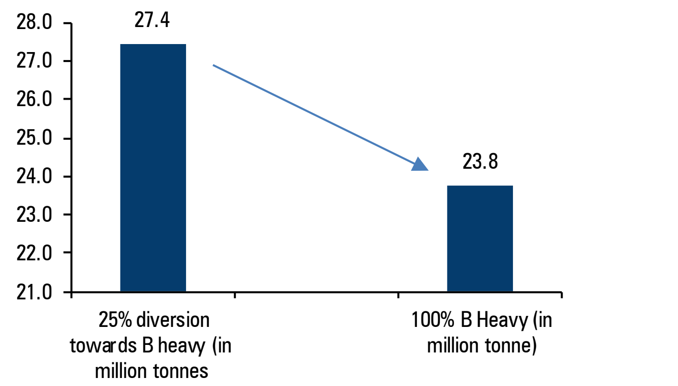
Source: Company, ICICI Direct Research

The government's aggressive approach towards increasing ethanol blending levels have achieved partial success of 7% ethanol blending in 2018-19. We believe 10% ethanol blending by 2022 and further 15% in the next five year can be easily achieved considering sufficient feedstock availability and creation of new distillery capacity in the next three years

What is B heavy molasses?

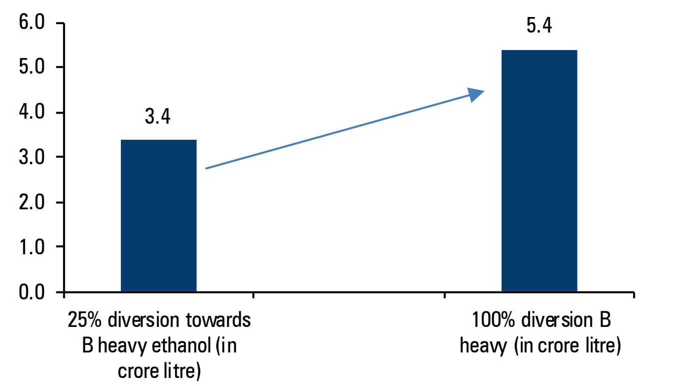
'B' heavy molasses are producing ethanol by cutting the sugar production cycle in between and diverting more sugarcane to produce more molasses and, in turn, more ethanol. Simultaneously, it also reduces sugar production. In a typical 'B' heavy route, millers sacrifice ~15% sugar production and double ethanol production. If sugar companies decide to extract ethanol directly through sugarcane juice then they have to sacrifice entire sugar and ethanol extraction increases to 6x compared to the usual 'C' heavy route. In a usual 'C' heavy route, 1 tonne of sugarcane crush extracts 115-120 kg of sugar and 11 litre of ethanol. However, in a 'B' heavy route, 1 tonne of sugarcane crushed extracts 100-105 kg of sugar and 22 litre of ethanol. In ethanol production through sugarcane juice, 1 tonne of sugarcane crushed extracts 60-65 litre of ethanol whereas it sacrifices entire sugar in the process. To encourage sugar millers, the government has increased the 'B' heavy ethanol prices to ₹ 52.3 per litre compared to C heavy ethanol of ₹ 43 per litre and ethanol through sugarcane juice to ₹ 59 per litre.

Exhibit 14: Sugar production (in million tonne)



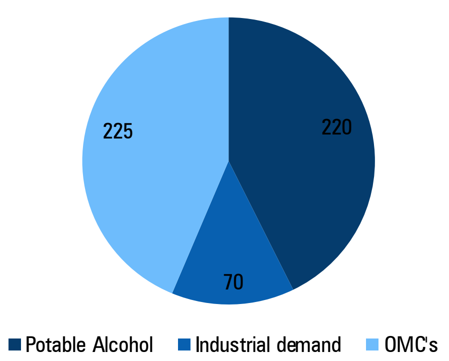
Source: ICICI Direct Research, Company

Exhibit 15: Ethanol production (in crore litre)



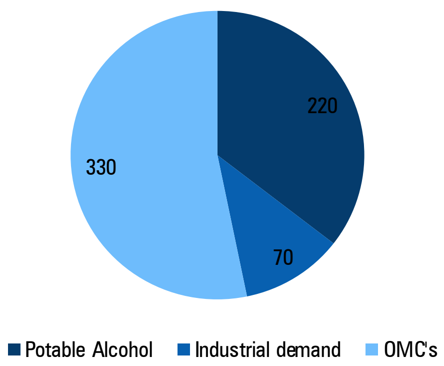
Source: ICICI Direct Research, Company

Exhibit 16: Ethanol/ENA supply (in crore litre)



Source: Company, ICICI Direct Research

Exhibit 17: Ethanol/ENA demand (in crore litre)



Source: Company, ICICI Direct Research

Soft loan to millers to expand distillery capacity

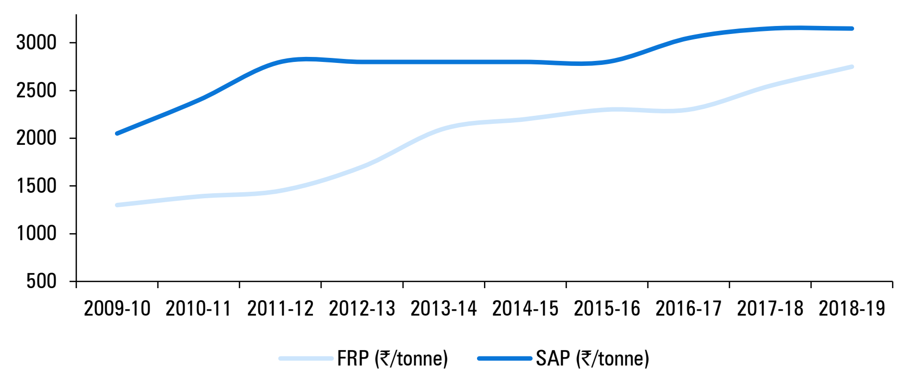
The other hurdle in EBP is limited distillery capacity, which produces ethanol, ENA & rectified spirits for oil marketing, liquor and chemical companies respectively. The current requirement for 10% ethanol blending is 325 crore litre. Moreover, demand for liquor and chemical companies has been around 250-300 crore litre. Currently, sugar companies are able to supply 230-240 crore litre to OMCs. With the opening up of the B heavy route, sugar companies, in totality, can supply maximum 500-550 crore litre. However, current capacities are insufficient to utilise the B heavy route with optimum potential. This has led the government to offer soft loans of ₹ 15000 crore to any company wanting to create greenfield/brownfield ethanol capacity. In aggregate, the government has received around 280 proposals to create new or expanding existing distillery capacity. The details of 114 projects are currently available. Out of this, 88 projects are mainly for new distillery capacity while 36 are for zero liquid discharge (ZLD) boilers. With these projects, additional 200 crore of ethanol capacity would be commissioned by 2022-23.

The government is giving a soft loan to build distillery capacity leading to 114 new projects being set up by 2023. These projects would increase distillery capacity by 200 crore litre to the existing 300-350 crore litre

Government declares MSP for sugar

Usually, the government declares minimal support price (MSP) for major crops in the country. However, for the first time, the government declared minimal selling price (MSP) for sugar millers in June 2018 at ₹ 29 per kg. This was further increased to ₹ 31 per kg in February 2019. This means millers cannot sell sugar below the MSP declared by the government. Moreover, the government also decides the monthly sales quota according to the proportionate production by mills. This supports sugar prices despite highest ever inventory levels.

Exhibit 18: FRP & SAP prices of sugarcane (₹ per tonne)



*Source: ICICI Direct Research, Company * FRP till 2017-18 @9.5% recovery rate & 2018-19 onwards @ 10% recovery*

After the steep rise in UP state advised price (SAP) between 2010 and 2013, raw material prices have been relatively stable. The gap between central government support price and UP SAP has been shrinking ever since

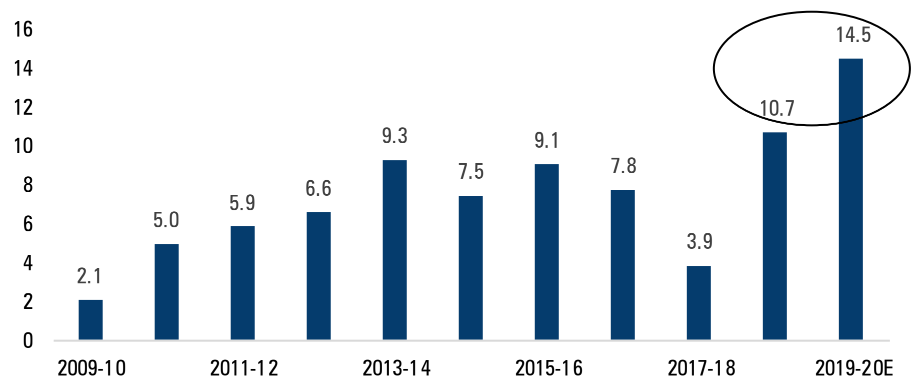
Creation of buffer stock

The government also created a buffer stock of 3 MT of sugar in 2018-19. This brought relief to sugar millers in terms of lower inventory storage cost. Considering the higher level of inventories, the buffer stock benefits would continue for millers for another year. The government has also approved 4 MT of buffer stock for 2019-20 to improve the cash flow of millers. This would reduce the storage cost of sugar companies significantly.

Export to curb further increase in inventories

The central government has declared production and transportation subsidy for millers with the condition to export proportionate quantities of sugar for millers. Though the government is aiming at 5 MT of sugar exports in 2018-19, the country is at best likely to export 4 MT of sugar. This subsidy was essential given global prices are trading 20-30% below the cost of production for Indian millers. We believe the government still needs to continue these incentives for another year to export ~5 million tonnes and reduce sugar inventory to 8-9 million tonnes.

Exhibit 19: Sugar inventories at start of season (October)



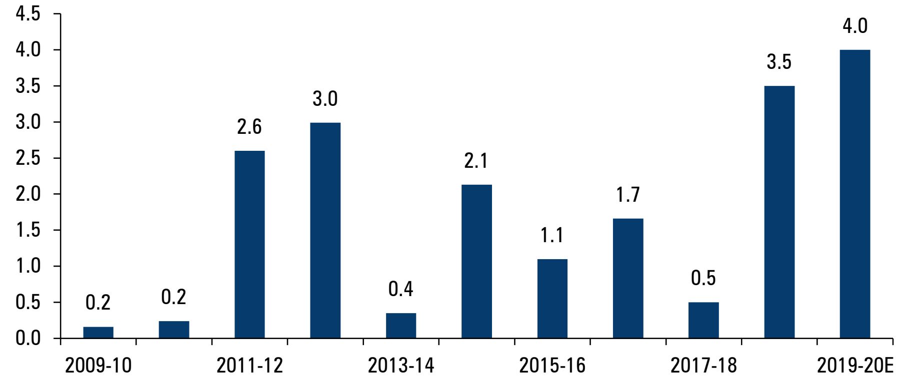
Source: ICICI Direct Research, Company

Sugar inventories would be at all-time highs of 14.5 MT. However, a decline in sugar production in Maharashtra, Karnataka, diversion towards B heavy ethanol and 3-4 MT of exports would lead to a decline in inventories to 7-8 MT by 2021-22

We believe sugar inventory in the country can come down in three ways (1) decline in sugar production in Maharashtra, Karnataka and Tamil Nadu due to non-availability of sufficient water, (2) Export of further 4-5 MT of sugar in the next 12 months and (3) sacrifice of 2-3 MT of sugar through diversion of sugarcane towards ethanol production. We believe all three measures are going to play out in the next 12-18 months. This is expected to lead inventory levels to come down to 10 MT in October 2020 and further to 8 MT in October 2021.

Saleable power tariffs for UP sugar mills have seen a dip in tariff rates which will negatively impact revenues from power segment

Exhibit 20: Sugar exports from India (in million tonne)

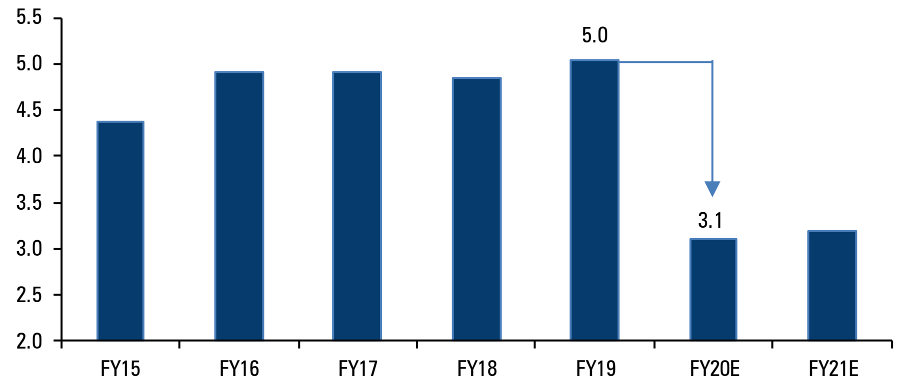


Source: ISMA, Company, ICICI Direct Research

Co-generations dynamics

One of the other ways of integration of sugar mills has been their co-generation capacity. In the process of sugarcane crushing, 1 tonne of sugarcane extract 110-120 kg of sugar, 40 litre of molasses and 300 kg of bagasse. Molasses can be converted to ethanol/ENA/rectified sprit, whereas bagasse can be burned to make power. Most integrated sugar mills use this power for captive use and sell excess power to the UP electricity board. Most sugar mills have entered into long-term contracts with the UP electricity board. The current power realisation for millers is ₹ 5/unit however according to new draft policy of UP power regulatory authority revised tariff would be~ ₹ 3/unit. This would significantly impact the earnings from power segment. Most of the millers would be contemplating selling bagasse to paper companies as current price of bagasse is ranging from ₹1.5-2.5 / kg, which is fetching better realisation compared to power.

Exhibit 21: Saleable co-generation tariff (₹ per unit)



Source: Company, ICICI Direct Research

Earnings stability for sugar companies

We believe structural changes in the sugar industry have improved the fundamentals of the industry. Though currently the industry is dependent on the government due to the excess sugar inventory in the system, we believe new ethanol capacity in the next two years would provide a lot more flexibility to millers to switch from sugar to ethanol and vice versa. This would automatically maintain the balance of sugar inventory in the system and, in turn, keep sugar prices above the cost of production. The government's commitment towards higher ethanol blending (10% by 2022 & 20% by 2030) is likely to cut the up & down cycle of the sector and bring stable earnings for millers. We believe bigger and most integrated sugar mills would benefit the most due to their economies of scale, deleveraged balance sheet and superior distillery capacity.

Exhibit 22: Revenue dynamics in C heavy, B heavy & sugarcane juice process

	C Molasses	B Molasses	Sugarcane Juice
1 tonne of sugarcane crushed			
Sugar (in Kg)	115	100	0
Current Sugar Price (₹)	32	32	32
Sugar Sales (₹)	3680	3200	0
Ethanol (in litre)	11	22	65
Ethanol Prices (₹)	43.3	52.4	59
Ethanol Sales (₹)	476.3	1153.5	3835
Total Sales (₹)	4156	4353	3835

Source: ICICI Direct Research, Company

At the current sugar and B heavy ethanol prices, UP sugar mills have been encouraged to produce ethanol through B heavy route. This would reduce sugar inventory by 1.5-2.0 MT in 2019-20

Further rise in distillery capacity to continue for bigger players

We believe integrated sugar mills will continue to have strong operating cash flows over the next two to three years. This would result in complete deleveraging of the balance sheet. Currently, Balrampur Chini, Dalmia Bharat Sugar, Triveni Engineering and Dwarikesh Sugar do not have any high cost long-term debt. Moreover, almost half of their working capital requirement has been met through internal cash flow generation. We believe that over the next few years, Dhampur Sugar and Avadh Sugar would also de-leverage their balance sheet with high cost long-term debt. Most of these sugar mills would also meet a large part of the working capital through internal accruals. We also believe that most of these companies would further utilise their cash flow generation to build up larger distillery capacities, which would augment earnings henceforth.

Risk & Concerns

Diversion of ethanol blending programme

Though the government seems to be serious about its 10%, 20% ethanol blending programme, historically it has faced multiple issues like lack of capacity, lower feedstock availability, lower crude prices and OMC resistance to adopt 10% ethanol blending. Hence, any change in government policy can derail the EBP and negatively impact sugar millers. However, this looks unlikely as the government has approved a soft loan to 114 projects for increasing distillery capacity.

Significant increase in sugarcane prices

In 2010-12, the UP government disproportionally increased sugarcane prices, resulting in losses for most sugar mills in the state and, in turn, delay in payment to farmers. Any similar arbitrary increase in sugarcane prices could negatively impact cash flows of sugar companies in UP. In turn, this could delay payment to farmers and break the entire value chain. However, we believe state governments in the last five years have been concentrating on timely payments to farmers rather than any irrational increase in sugarcane prices. We believe sugarcane, by far, remains the most remunerative crop for farmers. Hence, timely payment remains their primary demand of farmers.

Sunset clause for sugar MSP

The concept of minimal selling price (MSP) for sugar was introduced in June 2018 mainly to curb the decline in sugar prices due to excess inventory in the system. This was done to control sugar prices in a sugar glut scenario till the industry expands sufficient distillery capacity to utilise excess sugarcane in the system. If the government decides to abolish MSP for sugar before dip in sugar inventory to 7-8 MT, then sugar prices could decline significantly below the cost of production. This could bring back cyclicity of the sector. However, we believe the government is unlikely to abolish this MSP as it would indirectly impact the payment to farmers. We believe more than 200 crore litre per year of distillery capacity would be commissioned in the next two years. This would rationalise inventory levels automatically while sunset clause for MSP till that time remains a highly unlikely proposition.

Abolition of Sugar export subsidy

Currently, sugar millers are getting export linked production subsidy of ₹8 /kg along with ₹ 3/kg as reimbursement for transportation cost. Though, industry is increasing ethanol capacity to divert more sugarcane towards manufacturing of ethanol but this would take another 1-2 years to make any material difference to sugar production. Until additional distillery capacity are created, the companies are required to export 4-5 million tonnes of sugar to reduce the current sugar inventories. Any delay of denial of export subsidy would pressurise sugar prices. Moreover, sugar companies would require to incur interest cost on the additional working capital requirement.

Balrampur Chini (BALCHI)

ICICI direct Research

CMP: ₹ 123 | Target: ₹ 165 (↑ 34%) | Target Period: 12 months | BUY

August 27, 2019

Initiating Coverage

ICICI Securities – Retail Equity Research

Distillery expansion, efficient operations to drive PAT

Balrampur Chini is second largest sugar company in India with 76,500 TCD (tonnes crushed per day) sugarcane capacity. It also have 360 KLD (kilolitres per day) and 228 MW co-generation (163 MW saleable) capacity. The company would be increasing its ethanol capacity by 160 KLD to leverage the opportunity of ethanol blending with petrol to 10% by 2022.

Higher ethanol capacities, prices to boost earnings

With the expansion of distillery capacity from 360 KLD to 520 KLD, the company would be able to produce 17-18 crore litres of ethanol annually. This would generate ₹800-850 crore of revenue from distillery segment. Moreover, the company would be able to divert 50% sugarcane towards B heavy molasses given it would have enough capacity to utilise entire indigenous molasses. This would reduce the sugar inventory for the company and also significantly increase earnings from distillery segment. In Bio-fuel Policy 2018, the government allowed ethanol production through B heavy molasses and increase the prices of B heavy from ₹ 47 / litre to ₹ 52 / litre. The current sugar & ethanol prices encourage sugar companies to divert sugarcane towards B heavy ethanol. We expect distillery revenue to grow from ₹ 463 crore in FY19 to ₹ 818 crore in FY21E. The additional distillery revenue would directly flow down to PBT.

Government initiatives to support cash flows

In last one year, various government initiatives has taken various initiatives to improve the cash flows of sugar mills. With the decision to introduce MSP (minimum selling price) for sugar at ₹ 29 / kg in June 2018 and ₹ 31 / kg in Feb 2019, the government has ensured that sugar millers doesn't sell sugar below the cost of production. Moreover, the government has re-introduced monthly sales quota mechanism to control the sugar supply in the market. Though, high sugar production at 32-33 million tonnes in last two years is likely to increase the inventory to 14.5 million tonnes by October 2019, the government is incentivizing millers to export 5 million tonnes of sugar. We believe lower sugarcane cultivation area in Maharashtra & Karnataka (due to lack of availability of water) and 4 million tonnes of sugar exports and diversion of sugarcane towards producing more ethanol would reduce the inventory from the system. We believe UP based sugar companies specifically Balrampur Chini would be beneficiaries with sustainable sugar production & higher ethanol capacities.

Valuation & Outlook

Balrampur Chini is likely to generate ₹ 471 crore, ₹ 514 crore of earnings in FY20E & FY21E respectively. The stock is trading at a FY20E price to book of 1.1x and FY21E P/BV of 1x. On a PE valuation multiple, the stock is trading at 5.7x FY20E earnings & 5.3x FY21E earnings. Considering higher earnings visibility led by its high distillery capacity, de-leveraged balance sheet and historic strong performance in down cycles, we value the stock at 1.5x FY20E book value to ₹ 165 / share

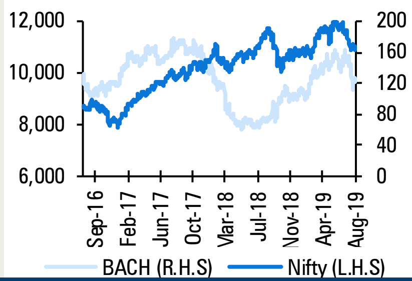
Stock Data

Particulars (₹ crore)	Amount
Market Capitalization	3,005.1
Total Debt (FY19)	1,673.9
Cash and Investments (FY19)	4.9
EV	4,674.0
52 week H/L (₹)	167 / 66
Equity capital	22.8
Face value (₹)	1.0

Key Highlights

- Fully integrated operations enables distillery and power segments to contribute to profitability and thereby de-risk sugar business down cycles
- Setting up 160 KLD distillery to reap the benefit of increasing ethanol blending levels and higher available molasses
- Initiate Buy with a target price of ₹ 165 per share

Price Performance



Research Analyst

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Key Financial Summary

Key Financials	FY17	FY18	FY19	FY20E	FY21E	CAGR (FY19-21E)
Total Operating Income	3460.1	4342.5	4285.8	4623.4	4935.0	9.3%
EBITDA	869.0	451.7	689.1	743.6	790.2	-2.3%
EBITDA Margin %	25.1	10.4	16.1	16.1	16.0	
Net Profit	592.8	231.7	575.8	470.7	513.7	-3.5%
EPS (₹)	25.22	10.14	25.21	21.39	23.35	
P/E	4.9	12.1	4.9	5.7	5.3	
RoNW %	38.0	14.3	27.2	19.6	19.1	
RoCE (%)	23.1	14.3	16.3	17.3	18.9	

Strong balance sheet

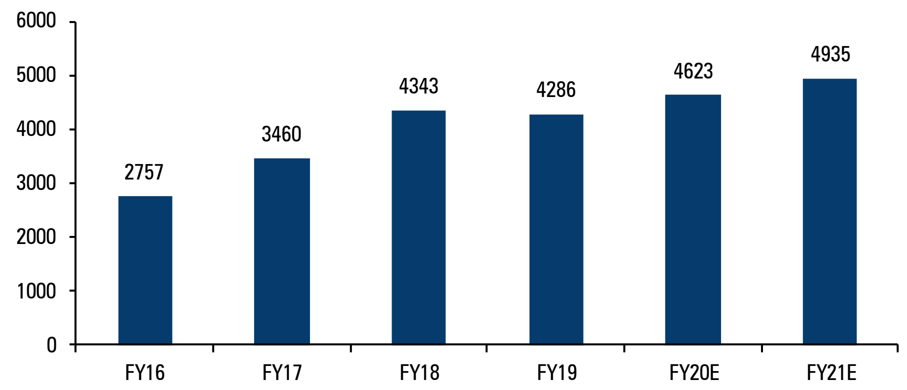
The long term debt for the company remains below ₹ 300 crore. This was taken at a concessional rate at 5%. The interest cost for the company has been ₹ 40 crore in FY19. The company only requires working capital debt of ₹ 1200 - ₹1500 crore for a very short period of time. We believe Balrampur Chini remains one of the most efficient players in the industry and it is likely to be benefited by the structural changes in ethanol policy.

New sugarcane variety has improved sugarcane yield & Sugar recovery

With the introduction of new sugarcane variety, UP based sugar mills have witnessed improvement in sugar recoveries by 20%. Sugar recovery rate for Balrampur Chini has improved from 9.8% in 2015 to 11.6% in 2019. This has reduced the cost of production for Balrampur Chini by 20%. Moreover, higher sugarcane crushing has also reduced the cost of production for the company due to the economies of scale. Currently, 70% of the catchment area for Balrampur has been benefited with the new sugarcane variety. We believe recovery rate for the company can further improve in next two sugar seasons.

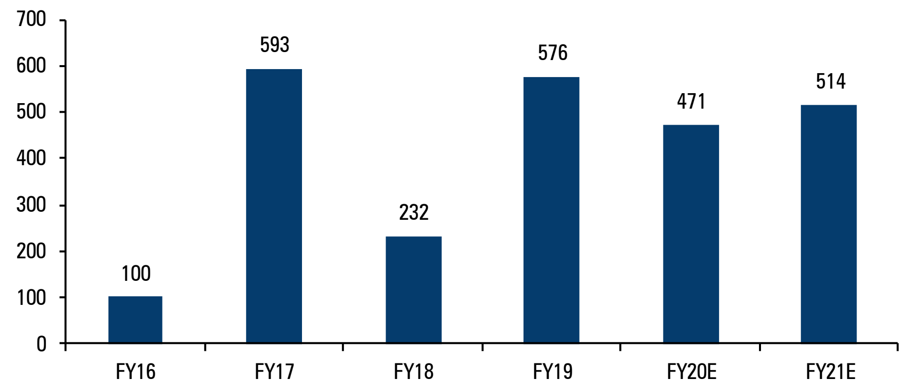
We expect 9.3% revenue CAGR during FY19-21E mainly on account of additional ₹ 355 crore revenue from expansion of new distillery capacity

Exhibit 1: Net Sales (₹ crore)



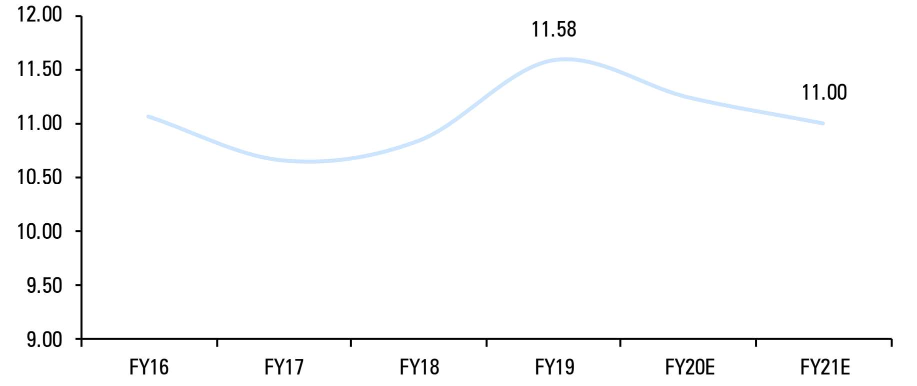
Source: Company, ICICI Direct Research

Exhibit 2: Net Profit (₹ crore)



Source: Company, ICICI Direct Research

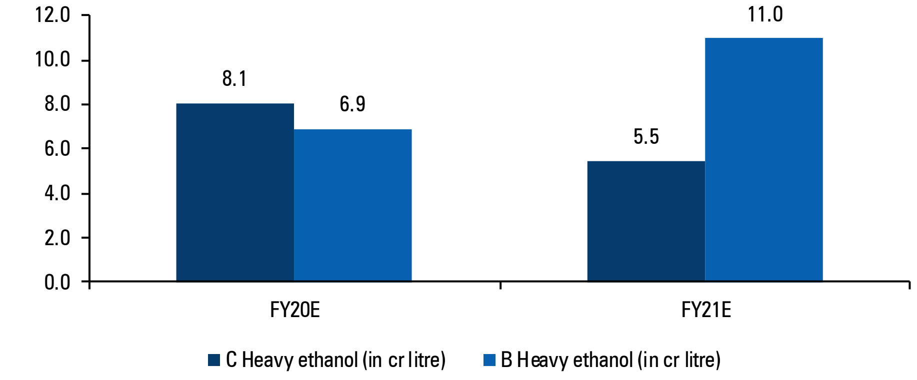
Exhibit 3: Sugar Recovery Rate (%)



Source: ICICI Direct Research, Company

Sugar recovery would come down to 11% by FY21 on the back of higher diversion towards B heavy ethanol

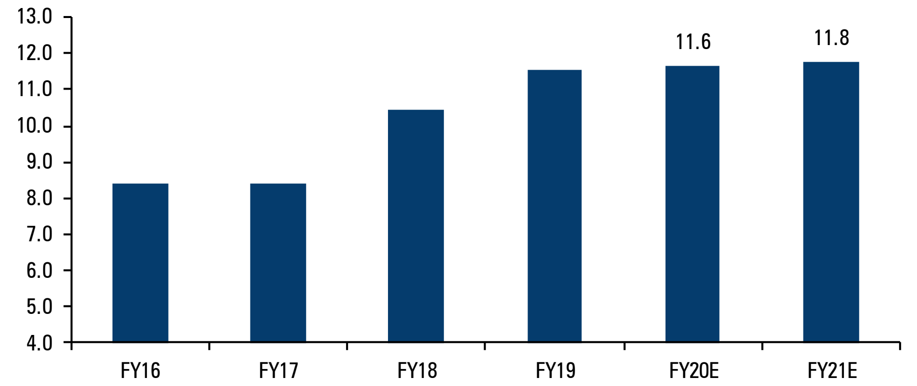
Exhibit 4: Contribution of B Heavy & C heavy Ethanol (in crore litre)



Source: Company, ICICI Direct Research

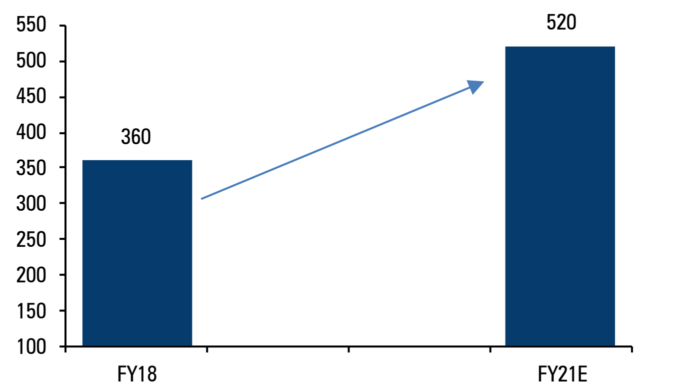
We believe the company would be diverting 20% & 50% of sugarcane towards B heavy ethanol in FY20E & FY21E respectively. This would reduce sugar inventory by FY21E

Exhibit 5: Sugar Sales Volume (in lakh tonnes)



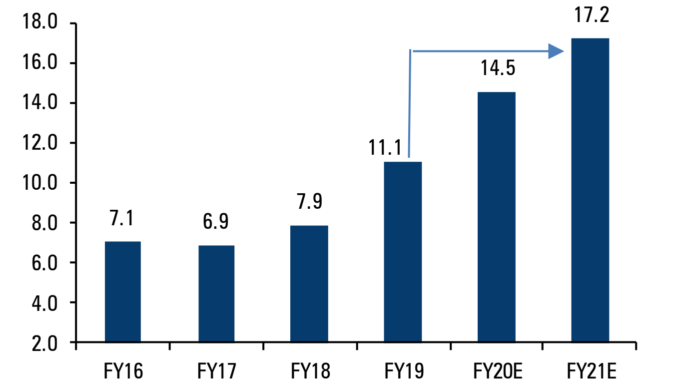
Source: Company, ICICI Direct Research

Exhibit 6: Distillery Capacity (KLD)



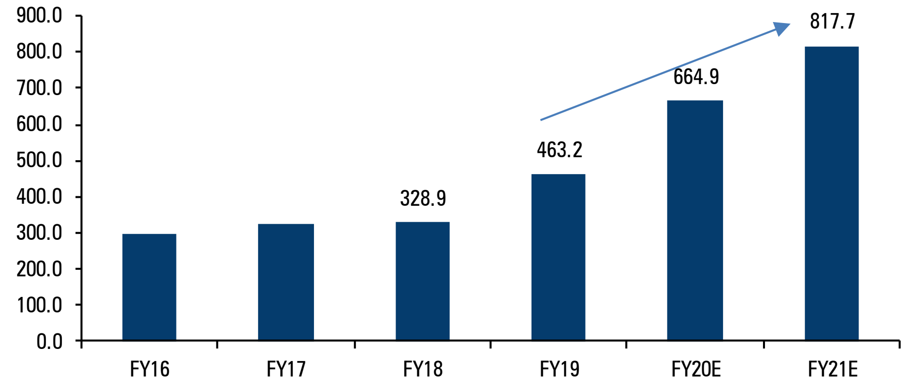
Source: Company, ICICI Direct Research

Exhibit 7: Ethanol volumes (in crore litre)



Source: Company, ICICI Direct Research

Exhibit 8: Ethanol Sales (₹ crore)

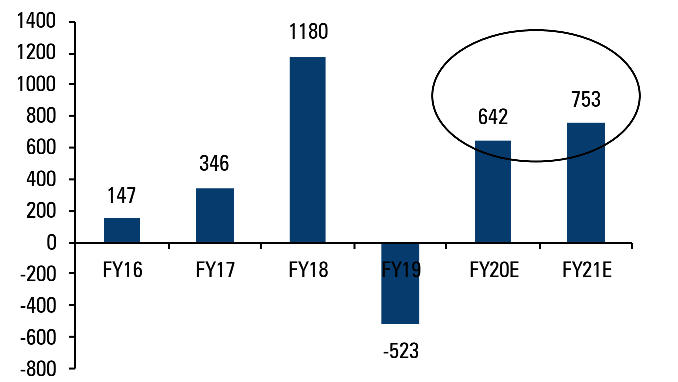


Source: Company, ICICI Direct Research

Inventory liquidation to improve operating cash flows

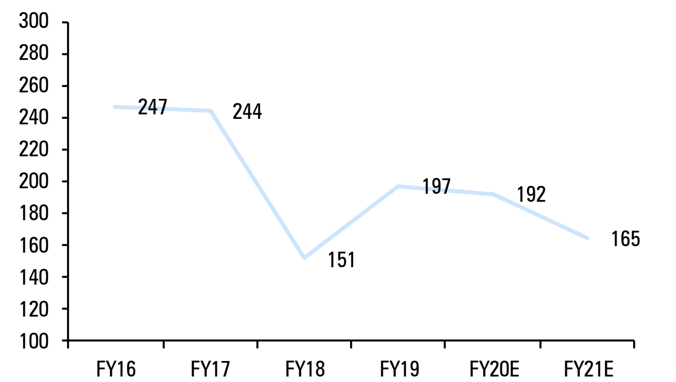
We expect higher diversion towards B heavy ethanol would reduce sugar inventory in next two years, which would significantly improve operating cash flow for the company. Further, with no capex requirement, the company would reduce its working capital debt requirement.

Exhibit 9: Operating cash flow (₹ crore)



Source: ICICI Direct Research, Company

Exhibit 10: Inventory turnover days (₹ crore)



Source: ICICI Direct Research, Company

Financial Summary

Exhibit 11: Profit & Loss Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Total Operating Income	**3,460.1**	**4,342.5**	**4,285.8**	**4,623.4**	**4,935.0**
Growth (%)		25.5	-1.3	7.9	6.7
Raw Material Expenses	2,157.3	3,474.6	3,057.0	3,325.0	3,557.5
Employee Expenses	181.0	204.0	230.5	254.3	271.4
Administrative Expenses	18.1	18.4	69.0	69.4	74.0
Excise Duty	180.9	58.2	0.0	0.0	0.0
Other expenses	188.0	193.8	240.2	231.2	241.8
Total Operating Expenditure	2,591.1	3,890.9	3,596.7	3,879.8	4,144.7
EBITDA	**869.0**	**451.7**	**689.1**	**743.6**	**790.2**
Growth (%)		-48.0	52.6	7.9	6.3
Depreciation	105.0	95.2	95.9	100.5	109.2
Interest	55.4	52.0	40.9	68.5	47.0
Other Income	25.1	30.3	42.7	36.3	32.7
PBT	708.6	304.5	552.3	574.5	634.0
Exceptional items	0.0	0.0	0.0	0.0	0.0
Total Tax	142.2	113.5	26.0	143.5	156.7
PAT	**592.8**	**231.7**	**575.8**	**470.7**	**513.7**
Growth (%)		-60.9	148.5	-18.3	9.1
EPS (₹)	25.2	9.7	24.9	21.2	23.2

Source: Company, ICICI Direct Research

Exhibit 12: Balance Sheet

	FY17	FY18	FY19	FY20E	FY21E
Liabilities					
Equity Capital	23.5	22.8	22.8	22.0	22.0
Reserve and Surplus	1,537.1	1,594.2	2,094.9	2,380.0	2,668.3
Total Shareholders funds	1,560.6	1,617.1	2,117.8	2,402.0	2,690.3
Total Debt	1,701.7	876.2	1,673.9	1,415.9	967.9
Long Term Provisions	3.2	4.3	5.3	3.3	1.3
Other Non-current Liabilities	156.1	196.0	115.3	116.3	117.3
Total Liabilities	**3,396.0**	**2,693.6**	**3,912.3**	**3,937.5**	**3,776.8**
Assets					
Gross Block	1,616.7	1,743.1	1,811.0	2,011.0	2,061.0
Less: Acc Depreciation	207.2	299.5	390.9	491.5	600.7
Net Block	1,409.5	1,443.6	1,420.0	1,519.5	1,460.2
Capital WIP	6.1	11.3	45.8	45.8	45.8
Intangible assets	2.8	2.0	1.5	1.5	1.5
Non Current Investments	73.6	122.1	165.8	170.8	220.8
Other non-current assets	12.0	55.1	86.0	66.0	46.0
Current Assets					
Inventory	2,313.6	1,802.2	2,315.9	2,436.3	2,224.9
Debtors	162.8	182.2	450.0	488.0	520.9
Cash	4.5	8.7	4.9	17.2	16.5
Loans & Advances	9.6	0.1	0.0	0.0	0.0
Other Current Assets	33.0	72.2	212.2	192.2	172.2
Current Liabilities					
Creditors	295.3	785.3	618.5	660.7	549.8
Provisions	3.3	3.7	5.7	5.7	5.7
Other CL	307.2	217.1	165.6	333.4	376.5
Net Current Assets	1,917.6	1,059.4	2,193.2	2,133.9	2,002.4
Total Assets	**3,421.6**	**2,693.6**	**3,912.3**	**3,937.5**	**3,776.8**

Source: Company, ICICI Direct Research

Exhibit 13: Cash Flow Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Profit/Loss after Tax	734.1	334.7	595.0	470.7	513.7
Add: Depreciation	104.9	95.2	95.9	100.5	109.2
Add: Interest	55.4	52.0	40.9	0.0	0.0
(Inc)/dec in Current Assets	-361.3	370.5	-925.5	-138.4	198.5
Inc/(dec) in Current Liabilities	-93.8	452.9	-182.7	208.9	-68.7
CF from operating activities	**346.3**	**1,179.8**	**-523.0**	**641.8**	**752.7**
(Inc)/dec in Investments	0.0	0.0	0.0	15.0	-30.0
(Inc)/dec in Fixed Assets	-122.3	-132.1	-125.7	-200.0	-50.0
Others	7.0	-27.2	-33.5	2.8	0.0
CF from investing activities	**-115.2**	**-159.3**	**-159.2**	**-182.2**	**-80.0**
Issue/(Buy back) of Equity	-176.1	-102.8	0.0	-0.8	0.0
Inc/(dec) in loan funds	111.2	-792.5	790.2	-258.0	-448.0
Dividend paid & dividend tax	-103.2	-70.7	-68.8	-185.7	-225.4
Inc/(dec) in Sec. premium	0.0	0.0	0.0	0.0	0.0
Others	-64.6	-54.1	-39.5	0.0	0.0
CF from financing activities	**-232.7**	**-1,020.1**	**681.9**	**-444.5**	**-673.4**
Net Cash flow	-1.6	0.4	-0.3	15.1	-0.7
Opening Cash	7.2	2.0	2.5	2.1	17.2
Cash change due to asset held for sale tran:	-3.5	0.0	0.0	0.0	0.0
Cash with bank	2.5	6.3	2.8	0.0	0.0
Closing Cash	**4.5**	**8.7**	**4.9**	**17.2**	**16.5**

Source: ICICI Direct Research, Company

Exhibit 14: Key Ratios

	FY17	FY18	FY19	FY20E	FY21E
Per share data (₹)					
EPS	25.2	10.1	25.2	21.4	23.4
Cash EPS	29.7	14.3	29.4	26.0	28.3
BV	66.4	70.8	92.7	109.2	122.3
DPS	4.4	3.1	3.0	8.4	10.2
Cash Per Share	8.8	13.1	17.1	22.3	27.3
Operating Ratios (%)					
EBITDA Margin	25.1	10.4	16.1	16.1	16.0
PBT / Net Sales	21.2	7.7	13.9	13.2	13.5
PAT Margin	17.1	5.3	13.4	10.2	10.4
Inventory days	244.1	151.5	197.2	192.3	164.6
Debtor days	17.2	15.3	38.3	38.5	38.5
Creditor days	31.2	66.0	52.7	52.2	40.7
Return Ratios (%)					
RoE	38.0	14.3	27.2	19.6	19.1
RoCE	23.1	14.3	16.3	17.3	18.9
Valuation Ratios (x)					
P/E	4.9	12.1	4.9	5.7	5.3
EV / EBITDA	5.3	8.0	6.4	5.4	4.6
EV / Net Sales	1.3	0.8	1.0	0.9	0.7
Market Cap / Sales	0.8	0.6	0.7	0.6	0.5
Price to Book Value	1.9	1.7	1.3	1.1	1.0
Solvency Ratios					
Debt/EBITDA	2.0	1.9	2.4	1.9	1.2
Debt / Equity	1.1	0.5	0.8	0.6	0.4
Current Ratio	5.4	2.5	4.4	4.1	4.2
Quick Ratio	0.4	0.3	1.0	0.9	1.0

Source: ICICI Direct Research, Company

Dhampur Sugar (DHASUG)

CMP: ₹ 142 | Target: ₹ 200 (⬆ 41%) | Target Period: 12 months | BUY

August 27, 2019

Best placed to benefit from ethanol expansion

Dhampur Sugar is one of the most optically integrated sugar company in UP with the sugar crushing capacity of 45,500 tcd (tonnes crushed per day), 400 KLD (kilolitres per day) and 220 MW of co-generation capacity (out of this 125 MW is salable capacity). Considering government initiatives to keep the sugar prices above cost of production and increasing distillery capacity, we expect Dhampur's earnings to grow at 8.2% CAGR during FY19-21E. Moreover, we believe the company can further increase its distillery capacities, which can utilise excess molasses in sugar glut scenario.

Strong distillery capacity

With recent commissioning of 100 KLD distillery capacity, the company can produce 10 crore litre ethanol from indigenous molasses. Moreover, the company can buy additional molasses from surrounding mills (those producing excess molasses) to produce 2-3 crore litres of ethanol. Considering it has additional distillery capacity, it would opt to produce more than 60% of ethanol through B heavy molasses. We expect distillery sales to grow from ₹ 498 crore in FY19 to ₹ 652 crore by FY21E. This would also result in substantial decline in the excess inventory with the company.

Low cost of production

Dhampur sugar is one of the early adopters of new sugarcane variety Co-0238, which resulted in improvement in sugar recovery from 9.5% in 2015 to close to 11.5% in 2019. Moreover, higher recoveries would help companies to take up 40% sugarcane diversion towards B heavy molasses. The per kg cost of raw material is ₹ 28 / kg for the company. We believe sugar recoveries could inch up further in 2020 as still some areas under sugarcane is yet to sow new variety. This along with the MSP for sugar at ₹ 31 / kg has resulted in stable earnings from sugar segment. We believe higher recovery & stable sugar prices would eliminate cyclical losses to sugar companies in sugar glut scenario.

Valuation & Outlook

Sugar prices have been stable given government introduced MSP (minimal selling prices) and monthly sale quota. In FY19, the company witnessed strong earnings however, cash flow from operation still remains negative considering higher sugar inventory led by robust sugar recoveries. However, we believe additional revenue from distillery segment would lead to strong earnings growth in FY20E. We expect earnings to grow by 12% in FY20E. Also, it would generate positive cash flow from operations in excess of ₹ 200 crore in FY20E, which would help the company to deleverage its balance sheet and working capital requirement would come down from ₹ 1100 to ₹ 800 crore by FY21E. We value the stock at 0.9x FY20E book value for the target price of 200 per share. We initiate coverage on Dhampur Sugar with a **BUY** recommendation.

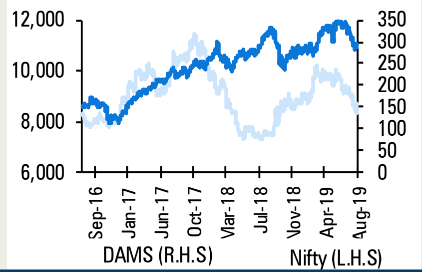
Stock Data

Particulars (₹ crore)	Amount
Market Capitalization	943.6
Total Debt (FY19)	1,676.0
Cash and Investments (FY19)	20.2
EV	2,599.3
52 week H/L (₹)	252 / 83
Equity capital	66.5
Face value (₹)	10.0

Key Highlights

- Dhampur has the second best recovery rate in UP given it has been early adopter of Co-038 variety in its vicinity
- Additional 100 KLD distillery capacity provides Dhampur opportunity to produce more ethanol from B heavy molasses
- Initiate Buy with a target price of ₹ 200 per share

Price Performance



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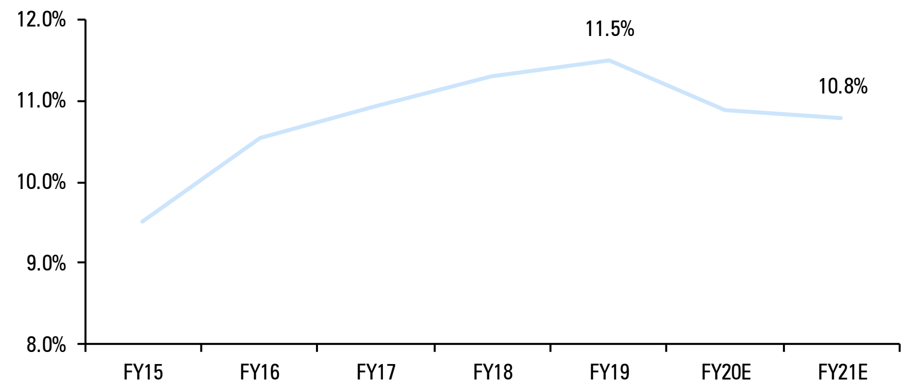
Initiating Coverage

ICICI Securities – Retail Equity Research

Key Financial Summary

Key Financials	FY17	FY18	FY19	FY20E	FY21E	CAGR (FY19-21E)
Total Operating Income	2583.7	3351.8	2954.1	3298.5	3558.7	9.8%
EBITDA	516.1	354.5	462.8	507.7	518.5	5.9%
EBITDA Margin %	20.0	10.6	15.7	15.4	14.6	
Net Profit	229.5	151.3	250.9	280.2	293.5	8.2%
EPS (₹)	35.31	22.79	37.80	42.21	44.22	
P/E	4.0	6.2	3.8	3.4	3.2	
RoNW %	25.4	15.1	20.5	19.0	17.1	
RoCE (%)	17.6	12.6	13.7	14.3	15.0	

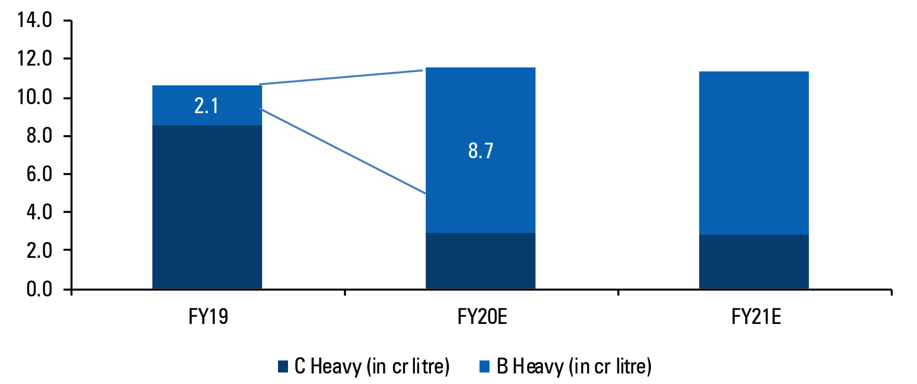
Exhibit 1: Sugar Recovery rate (%)



Source: Company, ICICI Direct Research

Sugar recovery to come down to 10.8% mainly due to higher sugarcane diversion towards B heavy ethanol

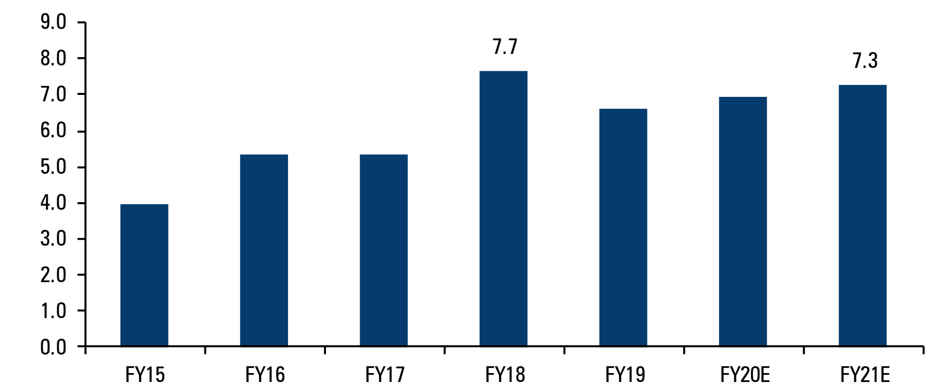
Exhibit 2: Volume Contribution from B heavy & C heavy Ethanol



Source: ICICI Direct Research, Company

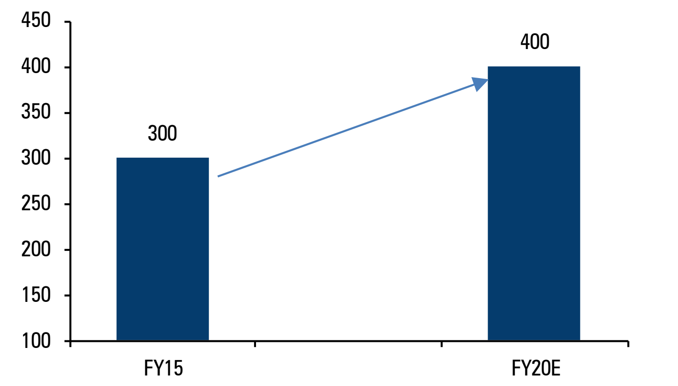
With the additional 100 KLD capacity, we believe the company would be able to produce more than 50% of ethanol through B heavy process. This would significantly reduce sugar inventory for the company. Further, it would also result in lower working capital requirement.

Exhibit 3: Sugar Sales Volume (in lakh tonnes)



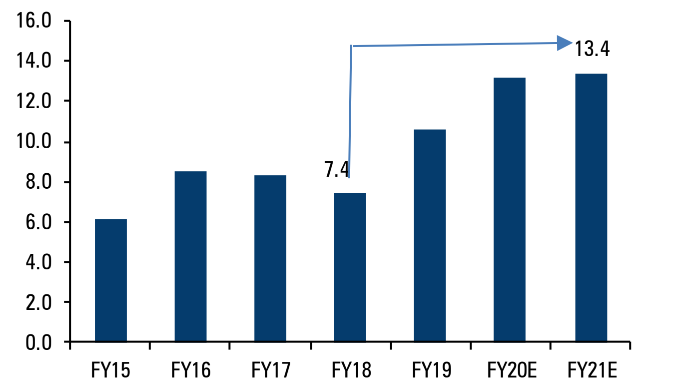
Source: Company, ICICI Direct Research

Exhibit 4: Distillery Capacity



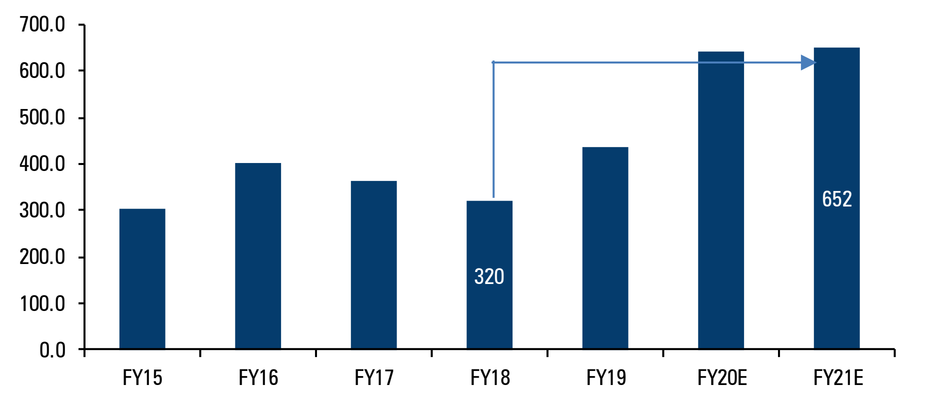
Source: Company, ICICI Direct Research

Exhibit 5: Ethanol Sales volume (in Cr litre)



Source: Company, ICICI Direct Research

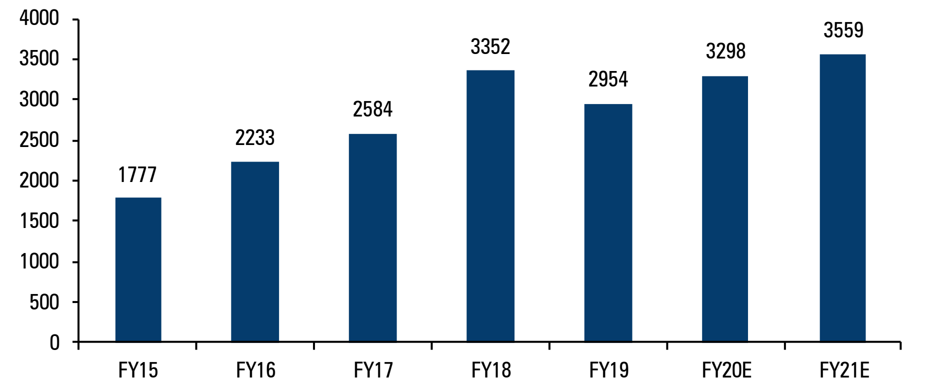
Exhibit 6: Distillery Sales (₹ crore)



Source: ICICI Direct Research, Company

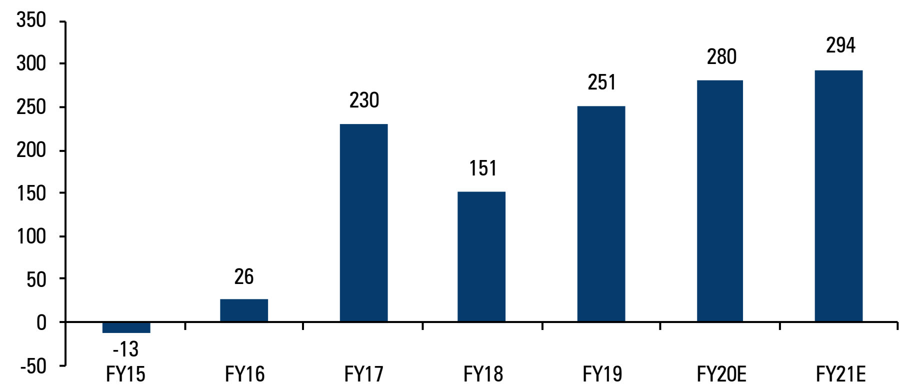
Distillery sales to more than double to ₹ 652 crore from FY18 sales on the back of additional 10 KLD distillery capacity and higher B heavy ethanol realisation by 10% to ₹ 52 / litre

Exhibit 7: Net Sales (₹ crore)



Source: ICICI Direct Research, Company

Exhibit 8: Net Profit (₹ crore)

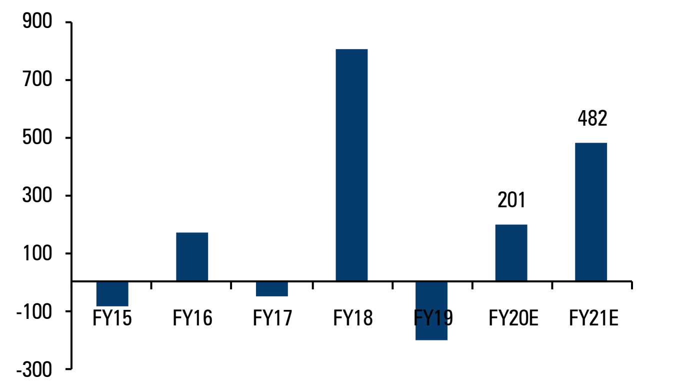


Source: ICICI Direct Research, Company

Positive operating cash flows generation with liquidation of sugar inventories

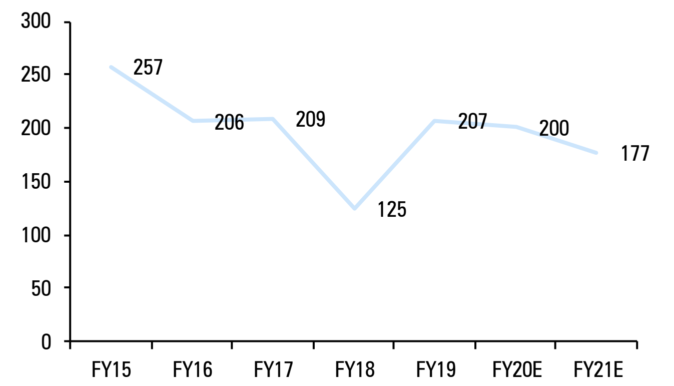
We believe higher diversion of sugarcane towards producing B heavy ethanol would result in substantial reduction in inventory, which would further reduce working capital requirement for the company. We expect debt to equity (including working capital debt) would come down to 0.7x by FY21E

Exhibit 9: Cash flow from operations (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 10: Inventory Turnover days



Source: Company, ICICI Direct Research

Financial Summary

Exhibit 11: Profit & Loss Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Total Operating Income	**2,583.7**	**3,351.8**	**2,954.1**	**3,298.5**	**3,558.7**
Growth (%)		29.7	-11.9	11.7	7.9
Raw Material Expenses	1,711.9	2,640.2	2,077.8	2,529.7	2,533.0
Employee Expenses	125.4	126.5	149.7	155.0	160.1
Administrative Expenses	37.2	46.1	61.3	59.4	64.1
Excise Duty	132.1	44.0	0.0	0.0	0.0
Other expenses	193.1	184.5	202.5	184.7	195.7
Total Operating Expenditure	2,067.5	2,997.3	2,491.3	2,790.8	3,040.1
EBITDA	**516.1**	**354.5**	**462.8**	**507.7**	**518.5**
Growth (%)		-31.3	30.5	9.7	2.1
Depreciation	54.3	57.7	70.8	74.0	74.9
Interest	167.2	121.5	91.3	88.4	82.9
Other Income	25.0	27.3	18.4	18.6	20.5
PBT	294.7	175.2	300.7	345.3	360.7
Exceptional items	0.0	0.0	0.0	0.0	0.0
Total Tax	90.1	51.3	68.2	0.0	0.0
PAT	**229.5**	**151.3**	**250.9**	**280.2**	**293.5**
Growth (%)		-34.1	65.9	11.7	4.7
EPS (₹)	35.3	22.8	37.8	42.2	44.2

Source: Company, ICICI Direct Research

Exhibit 12: Balance Sheet

	FY17	FY18	FY19	FY20E	FY21E
Liabilities					
Equity Capital	66.5	66.5	66.5	66.5	66.5
Reserve and Surplus	835.6	934.9	1,158.3	1,408.0	1,655.0
Total Shareholders funds	902.0	1,001.3	1,224.7	1,474.4	1,721.4
Total Debt	1,797.2	1,353.5	1,676.0	1,606.0	1,276.0
Long Term Provisions	25.0	26.3	29.1	27.1	25.1
Other Non-current Liabilities	40.6	45.3	64.2	65.2	66.2
Total Liabilities	**2,764.8**	**2,426.3**	**2,993.9**	**3,172.6**	**3,088.6**
Assets					
Gross Block	2,293.5	2,451.3	2,520.3	2,644.2	2,739.1
Less: Acc Depreciation	802.2	857.2	926.4	1,000.3	1,075.2
Net Block	1,491.3	1,594.1	1,593.9	1,643.9	1,663.9
Capital WIP	27.1	24.1	34.0	14.0	4.0
Intangible assets	2.6	3.3	3.3	3.3	3.3
Non Current Investments	1.8	1.9	11.8	16.8	21.8
Other non-current assets	20.8	25.1	32.7	32.7	32.7
Current Assets					
Inventory	1,476.9	1,145.9	1,674.1	1,811.4	1,725.0
Debtors	216.0	245.2	391.3	348.2	375.6
Cash	27.9	46.9	20.2	12.3	28.1
Loans & Advances	2.7	2.2	7.7	7.7	7.7
Other Current Assets	64.3	46.9	157.8	177.8	197.8
Current Liabilities					
Creditors	263.1	525.1	666.4	707.8	707.1
Provisions	5.8	9.0	7.6	7.6	7.6
Other CL	297.7	175.4	258.8	179.9	256.5
Net Current Assets	1,221.2	777.7	1,318.3	1,462.0	1,363.0
Total Assets	**2,764.8**	**2,426.3**	**2,993.9**	**3,172.6**	**3,088.6**

Source: Company, ICICI Direct Research

Exhibit 13: Cash Flow Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Profit/Loss after Tax	319.7	202.6	319.2	280.2	293.5
Add: Depreciation	54.3	57.7	70.8	74.0	74.9
Add: Interest	167.2	121.5	91.3	0.0	0.0
(Inc)/dec in Current Assets	-150.4	321.7	-756.4	-114.2	39.0
Inc/(dec) in Current Liabilities	-352.6	159.2	148.3	-38.5	74.8
CF from operating activities	**-48.2**	**805.1**	**-201.9**	**201.5**	**482.2**
(Inc)/dec in Investments	-1.0	0.9	-11.8	-5.0	-5.0
(Inc)/dec in Fixed Assets	-55.1	-145.0	-81.1	-104.0	-84.9
Others	0.4	4.3	1.6	7.1	0.0
CF from investing activities	**-55.8**	**-139.9**	**-91.3**	**-101.9**	**-89.9**
Issue/(Buy back) of Equity	59.3	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	245.7	-466.1	398.9	-70.0	-330.0
Dividend paid & dividend tax	-19.8	-51.3	-27.6	-29.9	-46.5
Inc/(dec) in Sec. premium	0.0	0.0	0.0	-0.6	0.0
Others	-179.5	-129.3	-103.7	0.0	0.0
CF from financing activities	**105.7**	**-646.7**	**267.6**	**-100.5**	**-376.5**
Net Cash flow	1.7	18.6	-25.6	-0.9	15.8
Opening Cash	18.5	20.2	38.8	13.2	12.3
Cash & cash equivalents of DETS Limited	0.0	0.0	0.0	0.0	0.0
Cash with bank	7.6	8.2	7.1	0.0	0.0
Closing Cash	**27.9**	**46.9**	**20.2**	**12.3**	**28.1**

Source: ICICI Direct Research, Company

Exhibit 14: Key Ratios

	FY17	FY18	FY19	FY20E	FY21E
Per share data (₹)					
EPS	35.3	22.8	37.8	42.2	44.2
Cash EPS	42.7	31.5	48.4	53.3	55.4
BV	135.7	150.7	184.3	221.9	259.1
DPS	3.0	7.8	4.2	4.5	7.0
Cash Per Share	120.7	129.0	139.4	150.5	161.8
Operating Ratios (%)					
EBITDA Margin	20.0	10.6	15.7	15.4	14.6
PBT / Net Sales	0.1	0.1	0.1	0.1	0.1
PAT Margin	8.9	4.5	8.5	8.5	8.2
Inventory days	208.6	124.8	206.9	200.4	176.9
Debtor days	30.5	26.7	48.3	38.5	38.5
Creditor days	37.2	57.2	82.3	78.3	72.5
Return Ratios (%)					
RoE	25.4	15.1	20.5	19.0	17.1
RoCE	17.6	12.6	13.7	14.3	15.0
Valuation Ratios (x)					
P/E	4.0	6.2	3.8	3.4	3.2
EV / EBITDA	5.2	6.3	5.5	4.9	4.2
EV / Net Sales	1.0	0.7	0.9	0.8	0.6
Market Cap / Sales	0.4	0.3	0.3	0.3	0.3
Price to Book Value	1.0	0.9	0.8	0.6	0.5
Solvency Ratios					
Debt/EBITDA	3.5	3.8	3.6	3.2	2.5
Debt / Equity	2.0	1.4	1.4	1.1	0.7
Current Ratio	4.5	2.5	3.0	2.8	2.6
Quick Ratio	0.7	0.5	0.8	0.6	0.7

Source: ICICI Direct Research, Company

Dalmia Bharat Sugar (DALSUG)

CMP: ₹ 73 | Target: ₹ 100 (37%) | Target Period: 12 months | **BUY**

August 27, 2019

Optimum by-product capacities to aid earnings…

Dalmia Bharat Sugar is one of the leading sugar companies with sugar capacities in both Maharashtra & Uttar Pradesh. The company has 34700 tonnes crushed per day (tcd) sugar capacity along with 240 kilolitre per day (KLD) and 102 MW power plant. Moreover, the company also has 17 MW wind power capacity. Given stable sugar earnings, increasing distillery revenues & low debt to equity, the company is likely to achieved 10.6% revenue CAGR in FY19-21E.

Optimum distillery capacity

The company has increased its distillery capacity from 140 KLD to 240 KLD in FY19. Moreover, it is likely to install insulation boiler at the existing plant by November 2019 mainly to comply with ZLD norms. This is expected to lead the distillery to function for 330 days compared to current 270 days. We believe additional capacity would boost ethanol/ENA volumes to 8 crore litre by FY21E compared to 4.8 crore litre in FY19E. This would also give leeway to divert as much as 70% sugarcane crushing towards B heavy ethanol to reduce excess sugar inventories. We expect distillery revenues to increase by 46% to ₹ 392 crore in FY19-21E. In power, recent reduction in power tariffs by ₹ 2/unit by UP power regulator would result in blended power reduction by ₹ 1.4/ unit considering 20% of its power capacity is in Maharashtra where power tariffs remain at more than ₹ 5/unit. We expect power revenues to decline from ₹ 211 crore in FY19 to ₹ 122 crore in FY20E.

Higher recovery; low cost of production

Dalmia Sugar has 30% of its sugar capacity in Maharashtra, which periodically has higher recovery rates. Moreover, with the introduction of Co-0238 sugar variety in UP, their blended recovery rate has improved from 11.0% in FY14 to 12.5% in FY19E. This has reduced the per kg raw material cost for the company and, hence, aided EBITDA per kg. Moreover, introduction of concept of MSP for sugar has stabilised earnings for the company. We expect average sugar prices of ₹ 32 in FY20E and 5% CAGR increase in sugar volumes considering restricted sugar sale quota, 4-5 million tonnes of sugar exports & higher diversion towards ethanol. We expect sugar sales to grow at a CAGR of 10.8% during FY19-21E.

Healthy earnings; strong balance sheet

With stable sugar prices, increasing sugar volumes on account of sugar exports and higher distillery sales, we expect strong earnings for sugar companies. Moreover, Dalmia Sugar has a strong balance sheet considering ₹ 700 crore net peak debt (including working capital requirement). Debt to equity for the company remains low at 0.6x. We value the sugar business at a 5x EV/EBITDA to ₹ 91/share and value of investment (Dalmia Cement) at ₹ 9/share, which is at a 60% discount to the current market price. We have a **BUY** recommendation on the stock with a target price of ₹ 100/share.

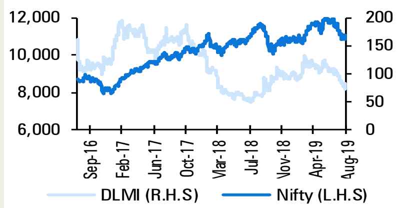
Stock Data

Particulars (₹ crore)	Amount
Market Capitalization	590.9
Total Debt (FY19)	977.8
Cash and Investments (FY19)	28.6
EV	1,540.0
52 week H/L (₹)	83 / 59
Equity capital	16.2
Face value (₹)	2.0

Key Highlights

- Dalmia Sugar has 24000 tcd sugar crushing capacity in UP, 10700 tcd capacity in Maharashtra
- The company has commissioned 100 KLD distillery capacity provides Dalmia opportunity to produce up to 70% ethanol from B heavy molasses
- Initiate coverage with BUY recommendation with a target price of ₹ 100 per share

Price Performance



Research Analyst

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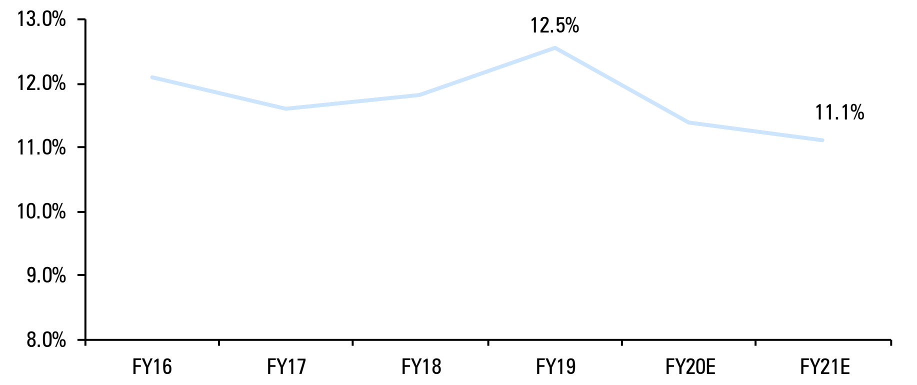
Initiating Coverage

ICICI Securities – Retail Equity Research

Key Financial Summary

Key Financials	FY17	FY18	FY19	FY20E	FY21E	CAGR (FY19-21E)
Total Operating Income	1686.0	2244.4	2018.5	2272.7	2470.4	10.6%
EBITDA	377.8	234.2	265.7	252.3	249.9	-3.0%
EBITDA Margin %	22.4	10.4	13.2	11.1	10.1	
Net Profit	186.3	122.3	175.2	147.8	164.6	-3.1%
EPS (₹)	23.01	15.11	21.64	18.26	20.33	
P/E	3.2	4.8	3.4	4.0	3.6	
RoNW %	14.8	8.1	11.4	8.9	9.2	
RoCE (%)	13.6	8.1	9.8	9.0	10.1	

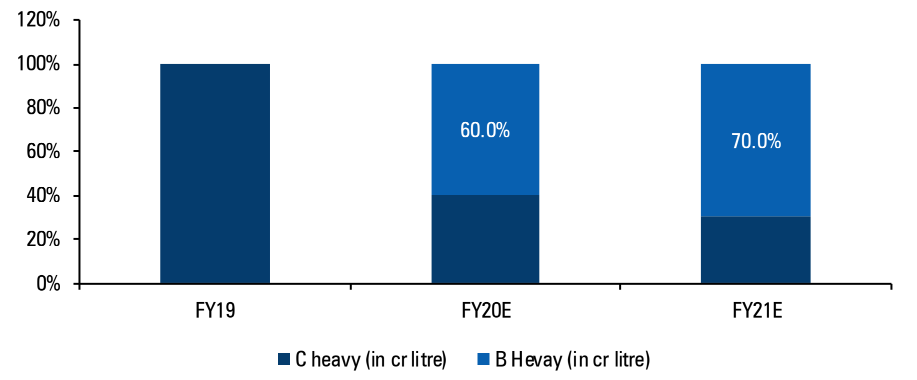
Exhibit 1: Sugar recovery rate (%)



Source: Company, ICICI Direct Research

Sugar recovery to come down to 11.1% mainly due to 70% sugarcane diversion towards B heavy ethanol

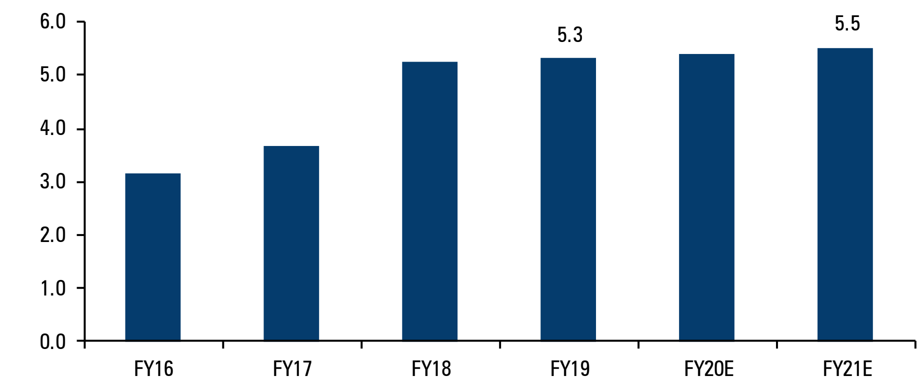
Exhibit 2: Volume contribution from B heavy & C heavy ethanol



Source: ICICI Direct Research, Company

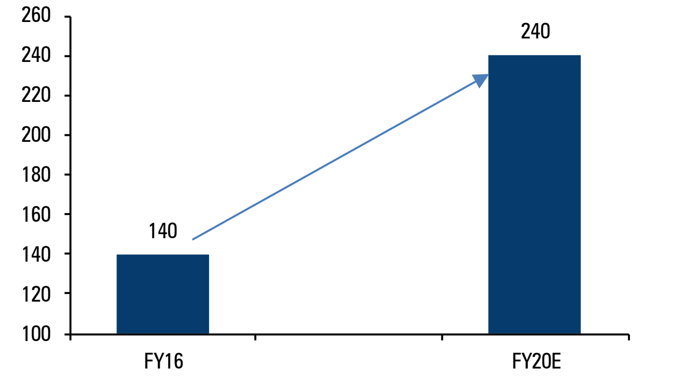
With the additional 100 KLD capacity, we believe the company would be able to produce 70% of ethanol through B heavy process by FY21E. This would significantly reduce sugar inventory for the company. Further, it would also result in lower working capital requirement

Exhibit 3: Sugar sales volume (in lakh tonne)



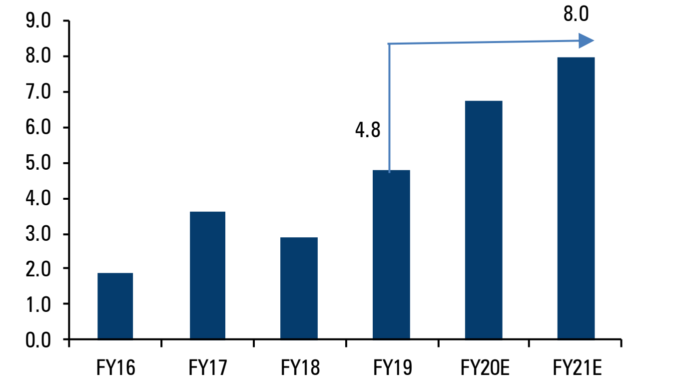
Source: Company, ICICI Direct Research

Exhibit 4: Distillery capacity



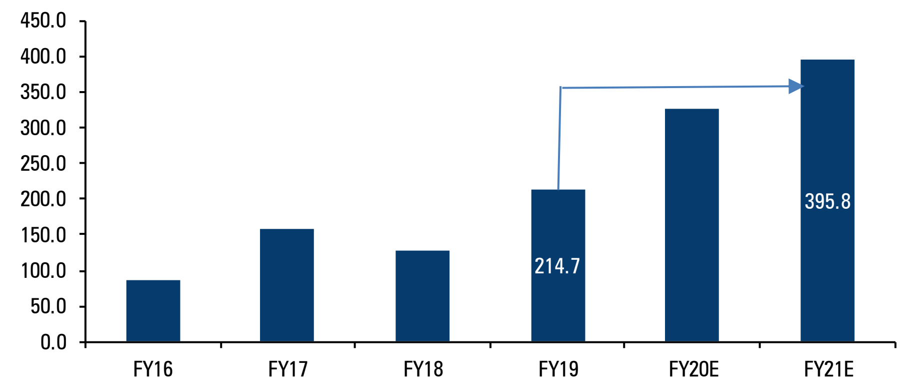
Source: Company, ICICI Direct Research

Exhibit 5: Ethanol sales volume (in crore litre)



Source: Company, ICICI Direct Research

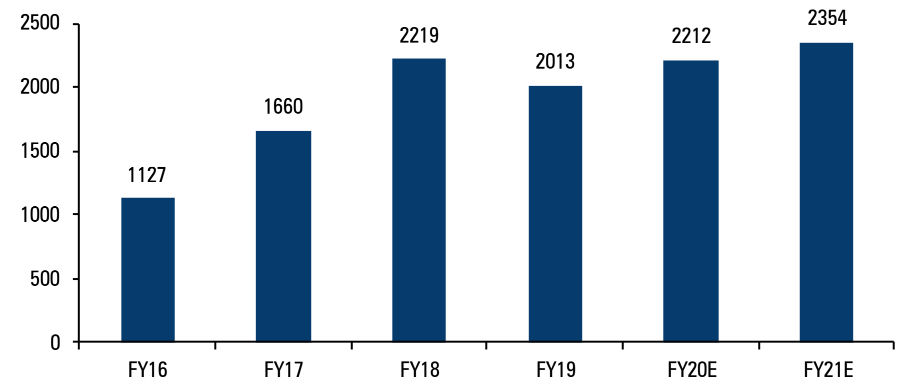
Exhibit 6: Distillery sales (₹ crore)



Source: ICICI Direct Research, Company

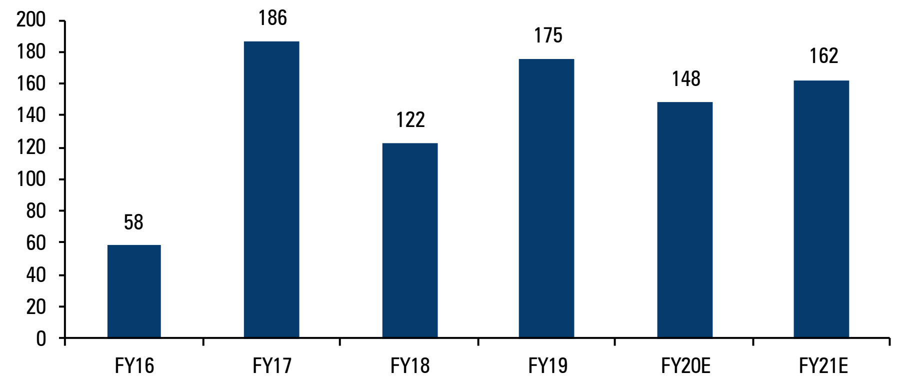
Distillery sales to increase by 80% to ₹ 396 crore from FY19 sales on the back of additional 100 KLD distillery capacity and higher B heavy ethanol realisation by 10% to ₹ 52/litre

Exhibit 7: Net sales (₹ crore)



Source: ICICI Direct Research, Company

Exhibit 8: Net profit (₹ crore)

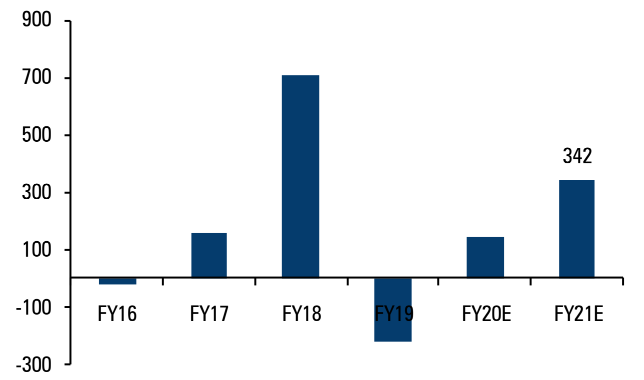


Source: ICICI Direct Research, Company

Liquidation of sugar inventories to generate high CFO

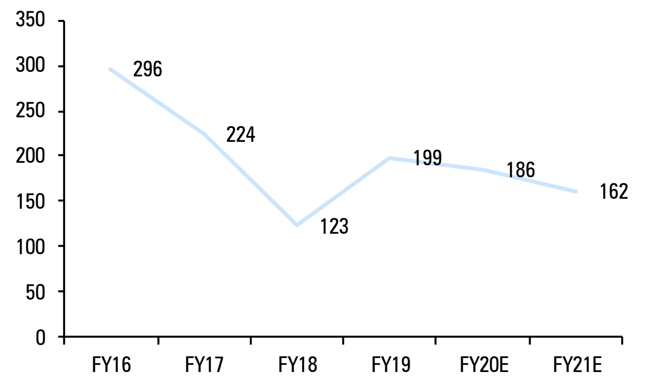
We believe higher diversion of sugarcane towards producing B heavy ethanol would result in a substantial reduction in inventory, which would further reduce working capital requirement for the company. We expect debt to equity (including working capital debt) to come down to 0.3x by FY21E.

Exhibit 9: Cash flow from operations (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 10: Inventory turnover days



Source: Company, ICICI Direct Research

Financial Summary

Exhibit 11: Profit & Loss Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Total Operating Income	**1,686.0**	**2,244.4**	**2,018.5**	**2,211.6**	**2,354.2**
Growth (%)		33.1	-10.1	9.6	6.4
Raw Material Expenses	1,013.9	1,704.7	1,408.2	1,659.5	1,656.5
Employee Expenses	108.0	108.7	118.7	121.6	129.5
Administrative Expenses	24.0	30.6	31.1	33.2	35.3
Excise Duty	78.1	30.5	0.0	0.0	0.0
Other expenses	162.3	166.2	194.8	173.6	195.4
Total Operating Expenditure	1,308.2	2,010.2	1,752.8	1,959.1	2,097.9
EBITDA	**377.8**	**234.2**	**265.7**	**252.5**	**256.2**
Growth (%)		-38.0	13.5	-5.0	1.5
Depreciation	55.6	53.8	80.2	67.4	60.2
Interest	102.5	69.5	68.6	52.7	46.0
Other Income	23.8	25.3	74.7	59.7	60.9
PBT	219.8	110.9	116.9	132.4	150.0
Exceptional items	0.0	0.0	0.0	0.0	0.0
Total Tax	57.3	13.9	16.4	0.0	0.0
PAT	**186.3**	**122.3**	**175.2**	**147.9**	**162.4**
Growth (%)		-34.3	43.2	-15.5	9.8
EPS (₹)	23.0	15.1	21.6	18.3	20.1

Source: Company, ICICI Direct Research

Exhibit 12: Balance Sheet

	FY17	FY18	FY19	FY20E	FY21E
Liabilities					
Equity Capital	16.2	16.2	16.2	16.2	16.2
Reserve and Surplus	1,245.3	1,488.4	1,515.5	1,635.1	1,765.1
Total Shareholders funds	1,261.4	1,504.6	1,531.7	1,651.2	1,781.3
Total Debt	1,121.4	720.9	977.8	937.8	707.8
Long Term Provisions	10.1	16.8	22.8	20.8	18.8
Other Non-current Liabilities	159.5	133.8	117.0	118.0	119.0
Total Liabilities	**2,552.4**	**2,376.0**	**2,649.2**	**2,727.8**	**2,626.8**
Assets					
Gross Block	1,974.7	2,041.6	2,143.7	2,243.7	2,293.7
Less: Acc Depreciation	697.7	750.1	828.1	895.5	955.7
Net Block	1,276.9	1,291.5	1,315.6	1,348.2	1,338.0
Capital WIP	2.4	6.9	10.9	8.9	7.9
Intangible assets	2.9	1.7	0.5	0.5	0.5
Non Current Investments	207.9	284.9	197.3	202.3	207.3
Other non-current assets	42.8	59.1	55.9	45.9	45.9
Current Assets					
Inventory	1,020.7	749.8	1,095.1	1,124.2	1,043.0
Debtors	110.5	76.0	203.6	184.3	196.2
Cash	58.7	59.6	28.6	9.8	35.8
Loans & Advances	0.9	1.7	1.1	1.1	1.1
Other Current Assets	211.2	381.7	280.6	310.6	340.6
Current Liabilities					
Creditors	173.4	428.6	420.2	386.5	385.8
Provisions	3.8	4.3	6.7	6.7	6.7
Other CL	205.4	104.0	113.1	114.9	197.0
Net Current Assets	1,019.5	731.9	1,068.9	1,121.9	1,027.1
Total Assets	**2,552.4**	**2,376.0**	**2,649.2**	**2,727.8**	**2,626.8**

Source: Company, ICICI Direct Research

Exhibit 13: Cash Flow Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Profit/Loss after Tax	243.6	136.2	191.6	147.9	162.4
Add: Depreciation	55.6	53.7	80.2	67.4	60.2
Add: Interest	102.5	69.5	68.6	0.0	0.0
(Inc)/dec in Current Assets	-116.3	312.5	-487.5	-39.9	39.3
Inc/(dec) in Current Liabilities	-67.7	195.6	2.8	-32.9	80.4
CF from operating activities	**154.8**	**706.2**	**-220.4**	**142.6**	**342.4**
(Inc)/dec in Investments	-74.5	-109.3	73.4	-5.0	-5.0
(Inc)/dec in Fixed Assets	-71.3	-71.5	-107.0	-98.0	-49.0
Others	1.9	2.8	4.4	10.5	0.0
CF from investing activities	**-143.9**	**-178.1**	**-29.2**	**-92.5**	**-54.0**
Issue/(Buy back) of Equity	0.0	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	93.1	-445.1	271.5	-40.0	-230.0
Dividend paid & dividend tax	0.0	-19.5	0.0	-28.4	-32.4
Inc/(dec) in Sec. premium	0.0	0.0	0.0	0.0	0.0
Others	-90.8	-63.0	-52.8	0.0	0.0
CF from financing activities	**2.2**	**-527.5**	**218.7**	**-68.4**	**-262.4**
Net Cash flow	13.1	0.6	-31.0	-18.3	26.0
Opening Cash	45.2	58.3	59.0	28.0	9.8
Cash with bank	0.4	0.6	0.5	0.0	0.0
Closing Cash	**58.7**	**59.6**	**28.6**	**9.8**	**35.8**

Source: ICICI Direct Research, Company

Exhibit 14: Key Ratios

	FY17	FY18	FY19	FY20E	FY21E
Per share data (₹)					
EPS	23.0	15.1	21.6	18.3	20.3
Cash EPS	29.9	21.8	31.5	26.6	27.8
BV	155.9	185.9	189.2	204.0	220.3
DPS	0.0	2.0	0.0	3.0	4.0
Cash Per Share	86.2	92.7	102.3	110.6	118.1
Operating Ratios (%)					
EBITDA Margin	22.8	10.6	13.2	11.1	10.1
PBT / Net Sales	0.1	0.1	0.1	0.1	0.1
PAT Margin	11.2	5.5	8.7	6.5	6.7
Inventory days	224.4	123.3	198.6	172.1	130.7
Debtor days	24.3	12.5	36.9	30.4	30.4
Creditor days	38.1	70.5	76.2	62.1	57.0
Return Ratios (%)					
RoE	14.8	8.1	11.4	8.9	9.2
RoCE	13.6	8.1	9.8	9.0	10.1
Valuation Ratios (x)					
P/E	3.2	4.8	3.4	4.0	3.6
EV / EBITDA	4.3	5.2	5.7	5.7	4.4
EV / Net Sales	1.0	0.5	0.8	0.6	0.4
Market Cap / Sales	0.4	0.3	0.3	0.3	0.2
Price to Book Value	0.5	0.4	0.4	0.4	0.3
Solvency Ratios					
Debt/EBITDA	3.0	3.1	3.7	3.7	2.3
Debt / Equity	0.9	0.5	0.6	0.6	0.3
Current Ratio	5.3	2.7	3.6	3.4	2.8
Quick Ratio	1.3	1.0	1.1	1.1	1.1

Source: ICICI Direct Research, Company

Dwarikesh Sugar (DWASUG)

CMP: ₹ 23 | Target: ₹ 30 (⬆ 30%) | Target Period: 12 months | BUY

August 27 2019

Strong balance sheet; best sugar recovery in industry

Dwarikesh sugar is a smaller sugar company with 21500 tcd (tonne crushed per day) crushing capacity, 30 KLD (kilolitres per day) distillery and 86 MW of co-generation (56 MW salable) capacity. Considering, the best sugar recovery rate in industry, increasing distillery capacity and strong balance sheet, we estimate the company to witness 14.5% CAGR sales growth in FY19-21E. Further, distillery revenue would directly contribute to PBT, hence, we expect earnings to witness a 26.2% CAGR growth in FY19-21E

Highest sugar recovery rate in the industry

The company was the first one to encourage high yielding sugarcane variety in its catchment area and currently 100% of its sugarcane is Co-0238 variety. This has taken the sugar recovery for Dwarikesh at 12.3% in FY19, which is highest in the industry. This has kept the per kg raw material for the company at ₹ 28 per kg. Though, we believe recovery rate may not increase from the current level, the company would continue to get the benefit from high yielding sugarcane variety for next few years.

Distillery expansion by 4x to boost earnings

With the implementation of 10% ethanol blending, the oil marketing companies needed 330 crore litre of ethanol. However, due to lack of capacities, the government has approved ₹ 15,000 crore soft loan for sugar industry to increase distillery capacities. The company is undertaking an expansion of distillery capacity of 100 KLD, which would be commissioned in November 2019. This would increase the distillery volume from 90 lakh in FY19 to 4.3 crore by FY21E. We believe the company would divert 35% of its sugarcane crushing towards B heavy ethanol, which would increase the distillery revenue from ₹ 36.3 crore in FY19 to ₹ 199.1 crore in FY21E.

Valuation & Outlook

The stock is trading at 4.8x & 2.9x its FY20E & FY21E earnings. Moreover, on price to BV, the stock is trading at 0.8x & 0.7x its FY20E & FY21E book value. We believe various government initiatives would prevent sugar segment to incur any loss in excess production scenario. Further, new distillery capacity would result in strong earnings growth in FY21. The long term debt to equity of the company is 0.3x. Moreover, the working capital debt for the company is ~₹ 500 crore, which has been taken at concessional interest rate. We expect the company to generate operating cash flow of ₹ 37 crore & ₹ 104 crore despite increasing inventory levels. With no capex requirement after commissioning of new distillery capacity, we believe the company would be able to further de-leverage its balance sheet by repaying high cost working capital debt. Also, at current price, the stock offer more than 4% dividend yield. Considering better operational parameter & stronger balance sheet, we value the stock at 1.1x FY20E book value. We initiate coverage on Dwarikesh Sugar with a **BUY** recommendation and target price of ₹ 30.

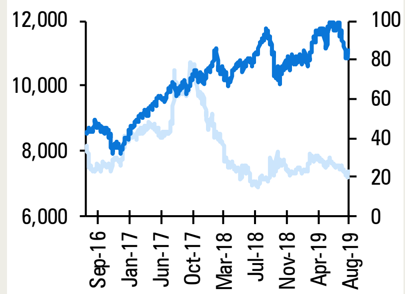
Stock Data

Particulars (₹ crore)	Amount
Market Capitalization	433.1
Total Debt (FY19)	635.6
Cash and Investments (FY19)	1.3
EV	1,067.3
52 week H/L (₹)	34.3 / 17.5
Equity capital	18.8
Face value (₹)	1.0

Key Highlights

- New 100 KLD distillery capacity & higher ethanol prices to increase distillery sales by 5x from FY19 to FY21E
- Strong balance sheet with long term debt to equity of 0.3x
- Highest sugar recovery rate in the industry at 12.3% in FY19

Price Performance



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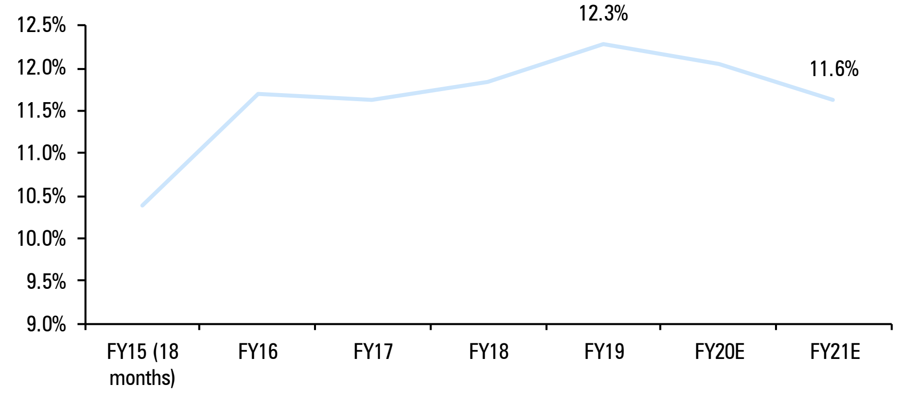
Initiating Coverage

ICICI Securities – Retail Equity Research

Key Financial Summary

Key Financials	FY17	FY18	FY19	FY20E	FY21E	CAGR (FY19-21E)
Total Operating Income	1190.4	1429.9	1084.1	1234.4	1421.8	14.5%
EBITDA	273.4	142.5	129.1	171.8	239.1	36.1%
EBITDA Margin %	23.0	10.0	11.9	13.9	16.8	
Net Profit	156.1	101.4	95.1	90.6	151.5	26.2%
EPS (₹)	8.29	5.39	5.05	4.81	8.05	
P/E	2.8	4.3	4.6	4.8	2.9	
RoNW %	53.7	27.7	20.5	17.1	23.3	
RoCE (%)	33.2	15.9	11.8	11.9	16.3	

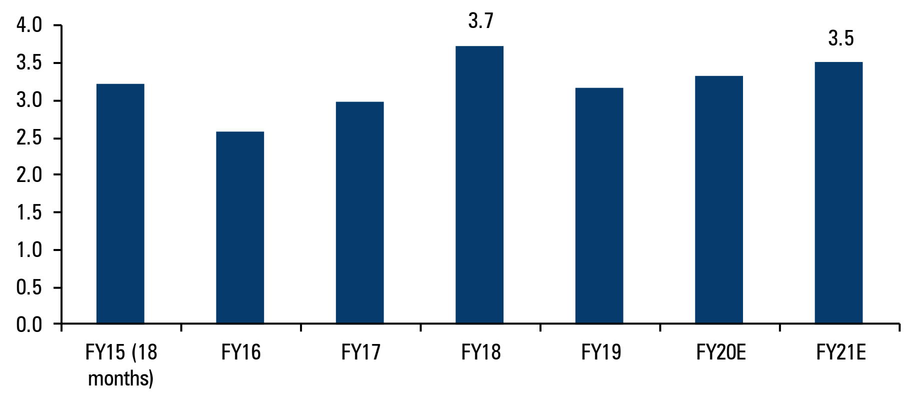
By Sugar Recovery rate (%)



Source: ICICI Direct Research, Company

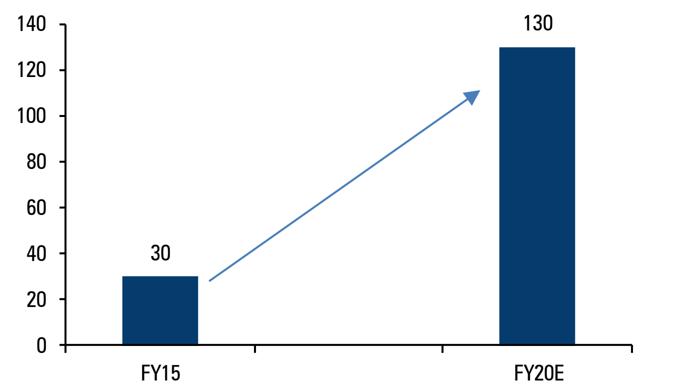
The company has highest sugar recovery rate in 2018-19 sugar season. With 32% sugarcane diversion towards B heavy ethanol, effective recovery rate would come down to 11.6% by 2021E

Exhibit 1: Sugar Sales volume (in lakh tonnes)



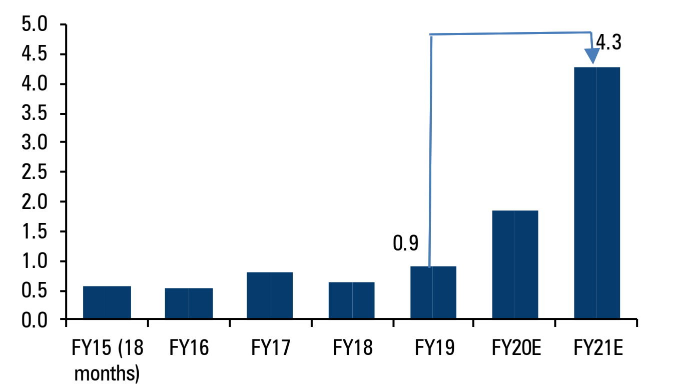
Source: ICICI Direct Research, Company

Exhibit 2: Distillery Capacity (KLD)



Source: ICICI Direct Research, Company

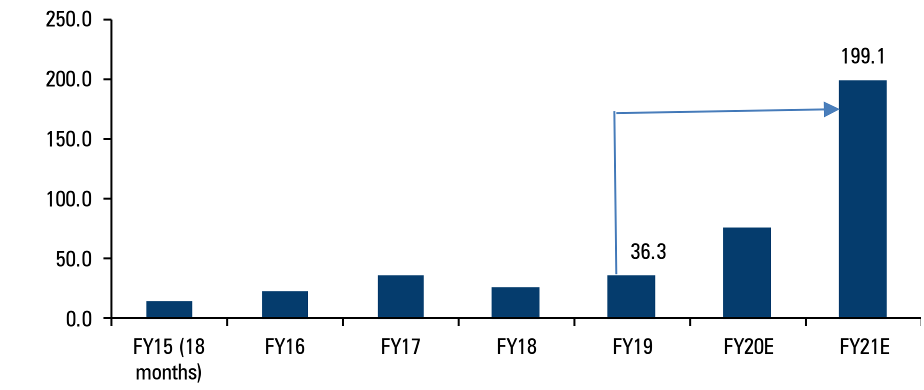
Exhibit 3: Ethanol Sales Volume (in crore)



Source: ICICI Direct Research, Company

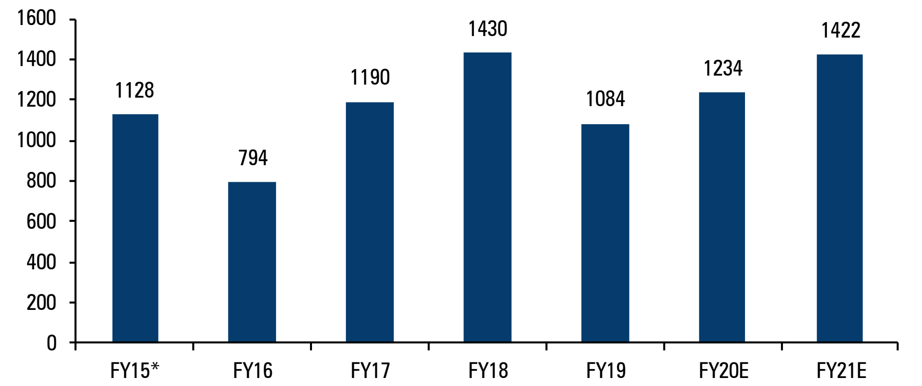
With the commissioning of 100 KLD distillery capacity in November and increase in ethanol prices, we believe the company to witness 5x jump in ethanol sales during FY19-21E

Exhibit 4: Ethanol Sales (₹ crore)



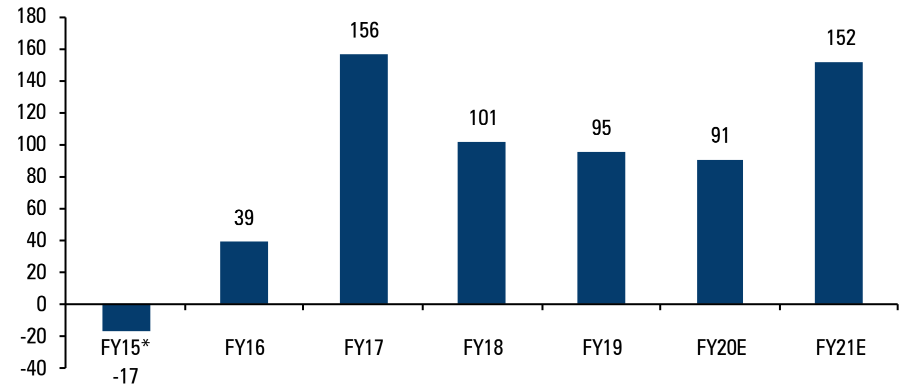
Source: Company, ICICI Direct Research

Exhibit 5: Net Sales (₹ crore)



Source: Company, ICICI Direct Research *Financial period of 18 months

Exhibit 6: Net Profit (₹ crore)

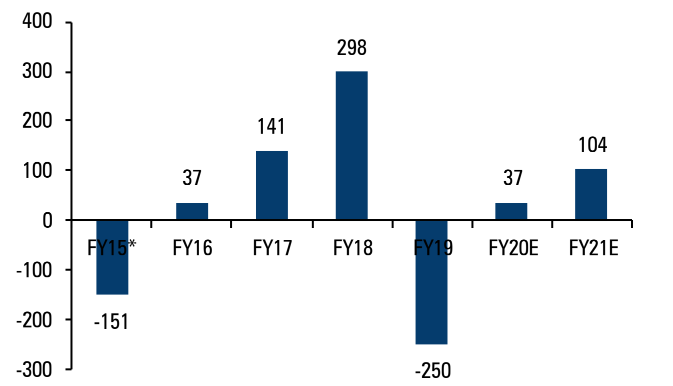


Source: ICICI Direct Research, Company *Financial period of 18 months

Strong balance sheet

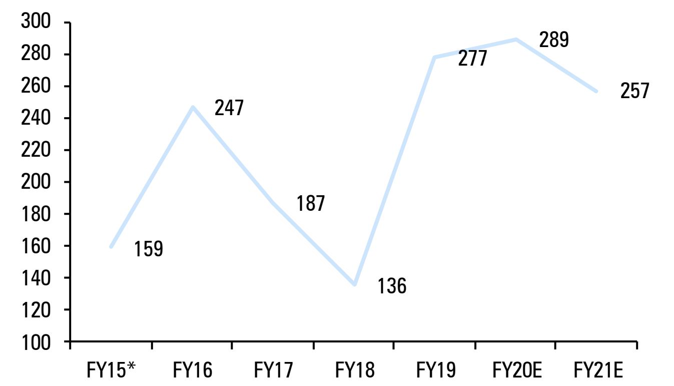
Dwarikesh sugar has availed concessional soft loan for the capacity expansion. However, it would be utilizing concessional loan mostly for the working capital requirement. Hence, cost of debt for Dwarikesh sugar has been less than 8%. Moreover, its average debt for the year has been ~₹300 crore. Though, most of the cash flows in FY19 has been converted in higher sugar inventories, we expect the company to generate ₹ 37 crore and ₹ 104 crore of cash flows from operations in FY20E & FY21E respectively.

Exhibit 7: Operating cash flows (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 8: Inventory turnover days



Source: Company, ICICI Direct Research

Financial Summary

Exhibit 9: Profit & Loss Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Total Operating Income	**1,190.4**	**1,429.9**	**1,084.1**	**1,234.4**	**1,421.8**
Growth (%)		20.1	-24.2	13.9	15.2
Raw Material Expenses	789.1	1,148.9	799.0	1,048.2	1,016.4
Employee Expenses	71.6	69.3	70.8	80.2	92.4
Administrative Expenses	4.3	4.9	4.8	5.4	6.4
Excise Duty	65.7	28.3	0.0	0.0	0.0
Other expenses	52.1	64.3	80.4	81.7	91.3
Total Operating Expenditure	917.0	1,287.5	955.1	1,062.6	1,182.7
EBITDA	**273.4**	**142.5**	**129.1**	**171.8**	**239.1**
Growth (%)		-47.9	-9.4	33.1	39.2
Depreciation	29.9	32.5	32.9	40.2	39.2
Interest	52.5	25.3	21.3	35.6	25.0
Other Income	14.6	17.5	36.1	21.7	21.9
PBT	190.9	84.7	74.8	96.0	174.9
Exceptional items	-3.2	0.0	0.0	0.0	0.0
Total Tax	52.6	0.7	15.8	0.0	0.0
PAT	**156.1**	**101.4**	**95.1**	**90.6**	**151.5**
Growth (%)		-35.0	-6.3	-4.7	67.3
EPS (₹)	8.3	5.4	5.1	4.8	8.0

Source: Company, ICICI Direct Research

Exhibit 10: Balance Sheet

	FY17	FY18	FY19	FY20E	FY21E
Liabilities					
Equity Capital	18.8	18.8	18.8	18.8	18.8
Reserve and Surplus	267.2	347.0	444.8	509.4	631.5
Total Shareholders funds	286.0	365.8	463.6	528.3	650.3
Total Debt	475.7	324.2	635.6	735.6	685.6
Long Term Provisions	14.9	15.6	17.5	15.5	13.5
Other Non-current Liabilities	0.9	0.0	8.1	8.1	8.1
Total Liabilities	**777.5**	**705.6**	**1,124.8**	**1,287.4**	**1,357.5**
Assets					
Gross Block	711.6	752.2	763.2	913.2	933.2
Less: Acc Depreciation	381.0	411.4	443.8	483.9	523.1
Net Block	330.6	340.8	319.4	429.2	410.0
Capital WIP	1.2	0.2	16.1	11.1	6.1
Intangible assets	0.1	0.0	0.0	0.0	0.0
Non Current Investments	0.3	0.3	0.3	0.3	0.3
Other non-current assets	17.2	51.8	79.6	29.4	27.4
Current Assets					
Inventory	609.9	531.2	824.0	977.2	1,001.2
Debtors	54.7	53.5	60.1	61.7	59.2
Cash	1.0	2.9	1.3	17.4	28.9
Loans & Advances	0.2	0.3	0.2	0.2	0.2
Other Current Assets	3.5	2.5	64.0	84.0	104.0
Current Liabilities					
Creditors	77.0	214.9	182.5	215.4	192.1
Provisions	2.9	2.6	2.9	2.9	2.9
Other CL	161.3	60.5	54.9	104.9	84.9
Net Current Assets	428.1	312.5	709.3	817.3	913.6
Total Assets	**777.5**	**705.6**	**1,124.8**	**1,287.4**	**1,357.5**

Source: Company, ICICI Direct Research

Exhibit 11: Cash Flow Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Profit/Loss after Tax	208.7	102.2	110.9	90.6	151.5
Add: Depreciation	29.9	32.5	32.9	40.2	39.2
Add: Interest	52.5	25.3	21.3	0.0	0.0
(Inc)/dec in Current Assets	-57.0	78.3	-355.9	-174.8	-41.5
Inc/(dec) in Current Liabilities	-57.0	103.8	-35.3	80.9	-45.2
CF from operating activities	**141.0**	**298.2**	**-250.4**	**36.9**	**104.0**
(Inc)/dec in Investments	0.0	0.0	0.0	10.0	2.0
(Inc)/dec in Fixed Assets	-5.0	-41.2	-47.8	-145.0	-15.0
Others	0.0	0.5	3.9	40.9	0.0
CF from investing activities	**-5.0**	**-40.7**	**-43.9**	**-94.1**	**-13.0**
Issue/(Buy back) of Equity	59.4	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	-149.0	-190.5	313.4	100.0	-50.0
Dividend paid & dividend tax	0.0	-22.7	0.0	-22.7	-29.5
Inc/(dec) in Sec. premium	0.0	0.0	0.0	-3.3	0.0
Others	-50.2	-42.6	-21.1	0.0	0.0
CF from financing activities	**-139.8**	**-255.8**	**292.3**	**74.1**	**-79.5**
Net Cash flow	-3.7	1.7	-2.0	16.9	11.5
Opening Cash	4.5	0.7	2.5	0.5	17.4
Cash with bank	0.2	0.4	0.8	0.0	0.0
Closing Cash	**1.0**	**2.9**	**1.3**	**17.4**	**28.9**

Source: ICICI Direct Research, Company

Exhibit 12: Key Ratios

	FY17	FY18	FY19	FY20E	FY21E
Per share data (₹)					
EPS	8.3	5.4	5.1	4.8	8.0
Cash EPS	9.9	7.1	6.8	6.9	10.1
BV	15.2	19.4	24.6	28.1	34.5
DPS	0.0	1.2	0.0	1.2	1.6
Cash Per Share	20.2	0.2	23.6	25.7	27.8
Operating Ratios (%)					
EBITDA Margin	23.0	10.0	11.9	13.9	16.8
PBT / Net Sales	17.5	7.1	10.2	9.5	13.8
PAT Margin	12.9	7.1	8.8	7.3	10.7
Inventory days	187.0	135.6	277.4	289.0	257.0
Debtor days	16.8	13.6	20.2	18.3	15.2
Creditor days	23.6	54.8	61.4	63.7	49.3
Return Ratios (%)					
RoE	53.7	27.7	20.5	17.1	23.3
RoCE	33.2	15.9	11.8	11.9	16.3
Valuation Ratios (x)					
P/E	2.8	4.3	4.6	4.8	2.9
EV / EBITDA	3.3	5.2	8.0	6.5	4.4
EV / Net Sales	0.8	0.5	0.9	0.9	0.7
Market Cap / Sales	0.4	0.3	0.4	0.4	0.3
Price to Book Value	1.5	1.2	0.9	0.8	0.7
Solvency Ratios					
Debt/EBITDA	1.7	2.3	4.9	4.3	2.9
Debt / Equity	1.7	0.9	1.4	1.4	1.1
Current Ratio	4.8	2.4	4.7	4.0	4.8
Quick Ratio	0.4	0.2	0.6	0.5	0.7

Source: ICICI Direct Research, Company

Triveni Engineering (TRIENG)

CMP: ₹ 52 | Target: ₹ 70 (⬆ 35%) | Target Period: 12 months | BUY

August 27, 2019

Initiating Coverage

ICICI Securities – Retail Equity Research

New Distillery, steady engineering business to aid PAT

Triveni Engineering is third largest sugar company with more than 60,000 TCD of sugarcane crushing, 320 KLD of distillery and 103 MW of power capacities. Also, the company is present in manufacturing of high speed gear, gear boxes and waste water management. With the structural change in sugar sector, the company is likely to get benefited from increasing ethanol blending. Triveni has commissioned 160 KLD distillery capacity in April 2019. This would result in more than double revenues from distillery segment in FY20. We believe stable sugar earnings from sugar segment and increasing distillery revenue to perk up the earnings for the company.

Additional distillery capacity

The company has commissioned 160 KLD distillery capacities in April 2019, which is likely to result in additional 5 crore litre of ethanol volumes in FY20E. Considering, the government's decision to increase the B heavy ethanol prices from ₹ 47/ litre to ₹ 52/ litre along with the additional volumes from added capacities, we expect the company to witness significant growth in distillery revenues from ₹ 214 crore in FY19 to ₹ 502.8 crore in FY21E.

Government measures to eliminate cyclicity

Given introduction of MSP and monthly sale quota, the government is trying to align sugar prices with sugarcane prices. However, the bumper sugar production of 32-33 million tonnes in last two years is likely to increase sugar inventory to 14.7 million tonnes by 2019. The government has also taken measures in terms of export incentives to reduce the inventory from the country. In last one year, India has exported 3.5 million tonnes of sugar and the government would continue its export incentives policy to reduce the sugar inventories. Moreover, 2 million tonnes of sugar is likely to be sacrificed on account of diversion towards ethanol production from B heavy molasses in sugar season 2020. Also, expected decline in sugar production in Maharashtra & Karnataka would also help in bringing down sugar inventories. This would reduce the sugar inventory to 7-8 million tonnes in next two years

Valuation & Outlook

With stable sugar prices, growing engineering business and increasing distillery capacities, we expect company to witness a 26.3% CAGR growth in earnings to ₹ 345 crore. Moreover, higher sugarcane diversion towards B heavy ethanol would lead to liquidation of existing sugar inventory and generation of positive cash flow to the tune of ₹ 67 crore & ₹ 435 crore in FY20E & FY21E respectively. At current price, the stock discounts FY20E & FY21E earnings at 4.4x and 3.7x. We value the stock on sum of the part basis ascribing 5x PE to standalone one year forward earnings at ₹ 56 / share. We value the company's 21% stake in Triveni turbine at ₹ 14 per share after holding company discount of 50%. Hence, we initiate coverage on Triveni with a **BUY** rating and a target price of ₹ 70/share with upside of 35%.

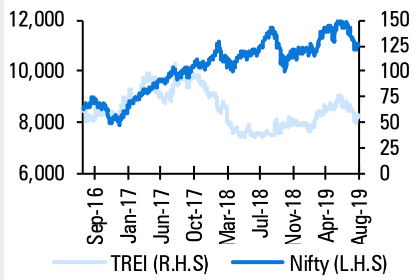
Stock Data

Particulars (₹ crore)	Amount
Market Capitalization	1,341.1
Total Debt (FY19)	1,608.9
Cash and Investments (FY19)	19.0
EV	2,931.0
52 week H/L (₹)	78 / 37
Equity capital	25.8
Face value (₹)	1.0

Key Highlights

- New 160 KLD distillery to double ethanol volumes from current ₹ 5 cr litres to 10 cr litres in FY20E
- New ₹ 800 crore O&M order in water business for 10 years would help stabilise margin in water segment
- We initiate coverage with BUY rating on the stock and target price of ₹ 70

Price Performance



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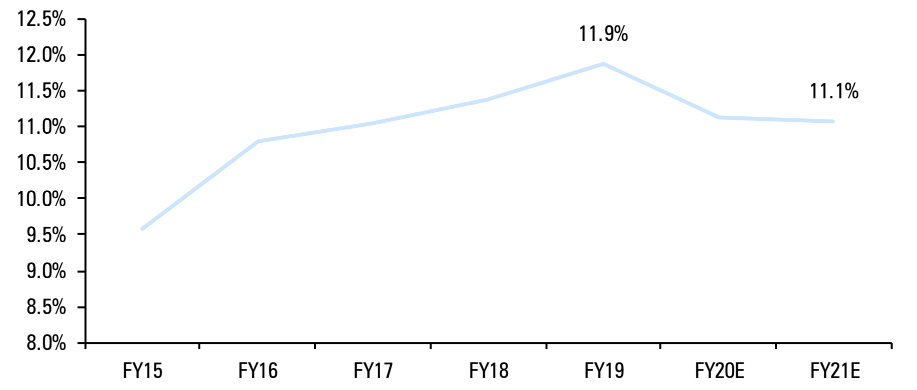
Key Financial Summary

Key Financials	FY17	FY18	FY19	FY20E	FY21E	CAGR (FY19-21E)
Total Operating Income	2824.6	3370.2	3151.7	3616.1	3909.6	11.4%
EBITDA	521.6	275.9	308.9	474.1	519.5	29.7%
EBITDA Margin %	18.5	8.2	9.8	13.1	13.3	
Net Profit	253.0	119.1	216.3	295.7	345.2	26.3%
EPS (₹)	9.81	4.62	8.39	11.93	13.92	
P/E	5.3	11.3	6.2	4.4	3.7	
RoNW %	38.7	12.6	19.0	21.3	21.8	
RoCE (%)	20.3	10.7	11.1	14.7	16.7	

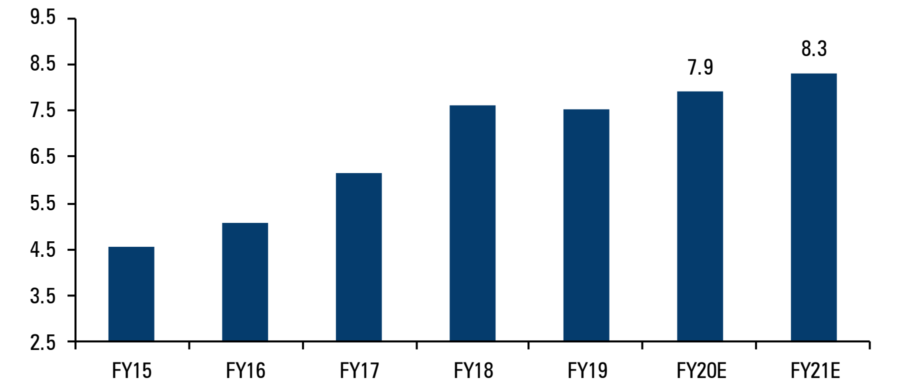
Exhibit 1: Sugar recovery rate (%)



Source: Company, ICICI Direct Research

Sugar recovery rate has improved significantly from 9.5% to 11.9%. We expect the company to divert 30% sugarcane towards B heavy ethanol, which would dip sugar recovery rate

Exhibit 2: Sugar Sales Volume (in lakh tonne)

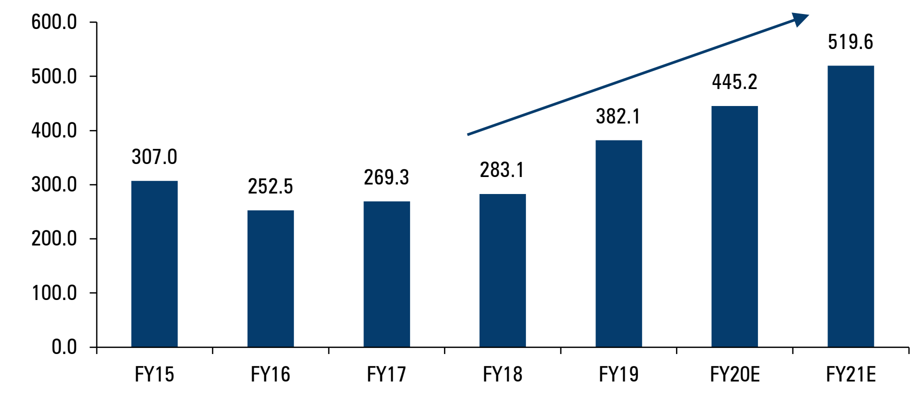


Source: ICICI Direct Research, Company

Engineering business to grow at steady pace

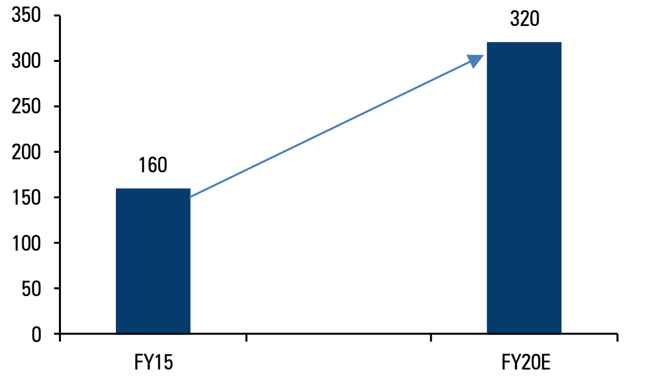
The company operates in design, manufacturing and marketing of customized gear and gear boxes catering to various industries. Order book in gear business has grown from ₹ 55 crore in FY17 to ₹ 176 crore in FY19E. This is a steady business for the company with more than 25% contribution margin. Further, order book of water business has grown from ₹ 600 crore in FY17 to ₹ 1380 crore in FY19. Water business received a large O&M order of ₹ 512 crore which would be executed over the next 10 years. The water segment has broken even in FY19 as faster execution of certain projects contributed to the topline. We expect steady 19.9% CAGR revenue growth from engineering business during FY19-21E.

Exhibit 3: Engineering Business revenue (₹ crore)



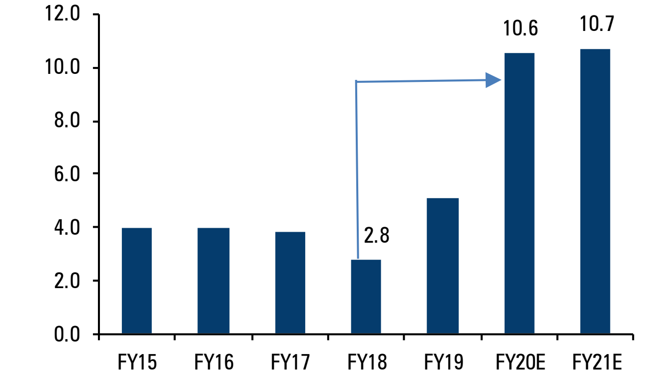
Source: Company, ICICI Direct Research

Exhibit 4: Distillery Capacity (KLD)



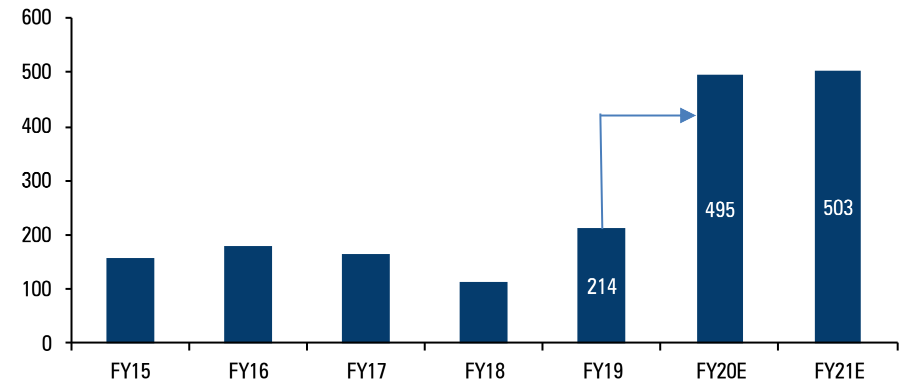
Source: Company, ICICI Direct Research

Exhibit 5: Ethanol Volumes (in crore litre)



Source: Company, ICICI Direct Research

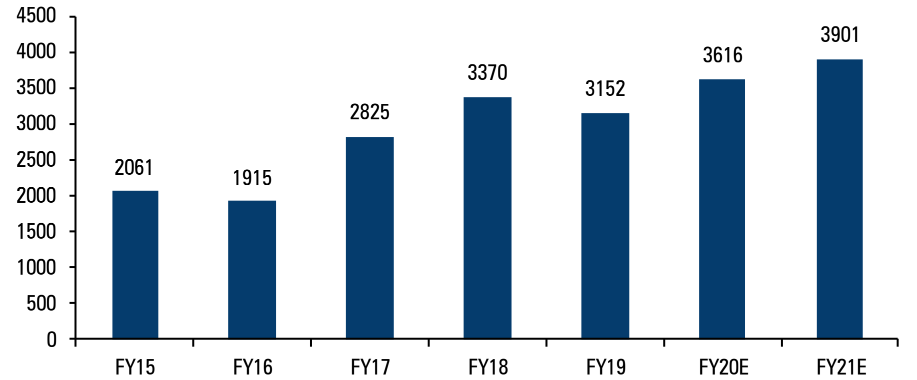
Exhibit 6: Ethanol sales (₹ crore)



Source: ICICI Direct Research, Company

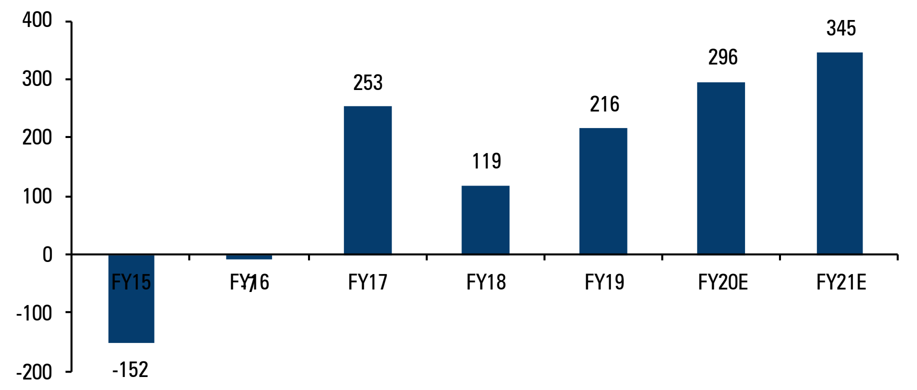
With the doubling of ethanol capacity from 160 KLD to 320 KLD and 10% increase in B heavy ethanol prices, the company to witness 130% jump in distillery sales in FY20E

Exhibit 7: Revenue Trend (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 8: Net Profit trend (₹ crore)

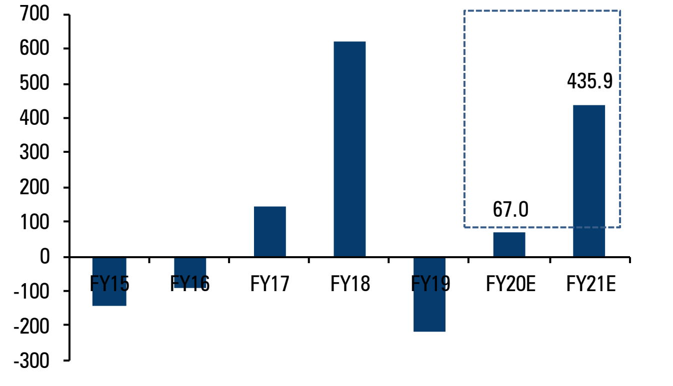


Source: ICICI Direct Research, Company

Higher B heavy ethanol production to aid operating cash flow

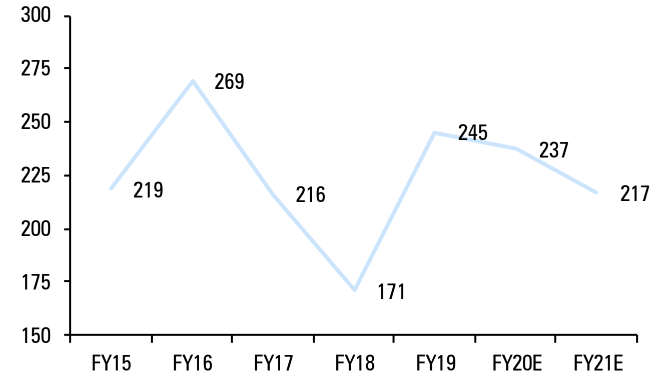
With the additional 160 KLD distillery, the distillery volumes are expected to jump up to 10 crore litres in FY20E. We expect the company would divert 30% sugarcane towards B heavy ethanol. This would reduce the sugar inventory with the company and hence generate ₹ 67 crore & 436 crore operating cash flows in FY20E & FY21E.

Exhibit 9: Cash flow from operations (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 10: Inventory Turnover days



Source: Company, ICICI Direct Research

Exhibit 11: Profit & Loss Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Total Operating Income	**2,824.6**	**3,370.2**	**3,151.7**	**3,616.1**	**3,909.6**
Growth (%)		19.3	-6.5	14.7	8.1
Raw Material Expenses	1,840.3	2,589.5	2,231.3	2,714.4	2,666.1
Employee Expenses	187.7	202.4	223.9	256.7	277.6
Administrative Expenses	51.7	51.3	0.0	72.3	62.6
Excise Duty	142.3	41.7	0.0	0.0	0.0
Marketing expenses	8.5	12.1	0.0	28.9	31.3
Other expenses	266.5	290.2	387.7	372.5	383.1
Total Operating Expenditure	2,303.0	3,094.3	2,842.9	3,142.0	3,390.0
EBITDA	**521.6**	**275.9**	**308.9**	**474.1**	**519.5**
Growth (%)		-47.1	12.0	53.5	9.6
Depreciation	57.2	55.4	57.0	69.0	65.8
Interest	126.6	85.3	68.0	86.8	71.9
Other Income	27.1	15.4	63.6	47.7	48.7
PBT	337.8	135.2	184.0	318.3	381.8
Exceptional items	85.5	0.0	0.0	0.0	0.0
Total Tax	49.2	49.7	51.5	91.5	107.6
PAT	**253.0**	**119.1**	**216.3**	**295.7**	**345.2**
Growth (%)		-52.9	81.5	36.7	16.7
EPS (₹)	9.8	4.6	8.4	11.9	13.9

Source: Company, ICICI Direct Research

Exhibit 12: Balance Sheet

	FY17	FY18	FY19	FY20E	FY21E
Liabilities					
Equity Capital	25.8	25.8	25.8	24.8	24.8
Reserve and Surplus	809.6	920.6	1,114.7	1,366.1	1,562.1
Total Shareholders funds	835.4	946.3	1,140.5	1,390.9	1,586.9
Total Debt	1,517.5	1,111.4	1,608.9	1,586.9	1,316.9
Long Term Provisions	38.6	39.7	43.2	41.2	39.2
Other Non-current Liabilities	26.2	43.1	61.9	62.9	63.9
Total Liabilities	**2,417.7**	**2,140.6**	**2,854.5**	**3,081.9**	**3,006.9**
Assets					
Gross Block	960.2	1,003.2	1,055.4	1,255.4	1,265.4
Less: Acc Depreciation	114.4	168.5	225.5	294.5	360.3
Net Block	845.8	834.6	829.9	960.9	905.1
Capital WIP	2.1	10.1	204.8	4.8	4.8
Intangible assets	0.8	0.4	0.5	0.5	0.5
Non Current Investments	120.3	128.0	124.4	124.4	129.4
Other non-current assets	45.8	71.0	70.0	70.0	70.0
Current Assets					
Inventory	1,674.8	1,579.2	2,118.7	2,350.5	2,324.0
Debtors	277.1	311.4	296.0	321.4	347.5
Cash	7.4	6.4	19.0	18.7	19.9
Loans & Advances	0.4	0.5	3.1	3.1	3.1
Other Current Assets	133.0	90.7	138.7	158.7	178.7
Current Liabilities					
Creditors	256.6	628.1	637.6	568.1	563.1
Provisions	13.3	19.3	32.3	32.3	32.3
Other CL	420.0	244.2	280.6	330.6	380.6
Net Current Assets	1,402.9	1,096.7	1,625.0	1,921.4	1,897.2
Total Assets	**2,417.7**	**2,140.6**	**2,854.5**	**3,081.9**	**3,006.9**

Source: Company, ICICI Direct Research

Exhibit 13: Cash Flow Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Profit/Loss after Tax	302.1	168.8	216.3	295.7	345.2
Add: Depreciation	57.2	55.4	57.0	69.0	65.8
Add: Interest	126.6	85.3	0.0	0.0	0.0
(Inc)/dec in Current Assets	-254.8	105.9	-574.7	-277.2	-19.7
Inc/(dec) in Current Liabilities	-141.9	-141.9	290.7	81.2	-20.6
CF from operating activities	**144.6**	**620.9**	**-220.2**	**67.0**	**435.3**
(Inc)/dec in Investments	-1.9	0.5	3.6	0.0	-5.0
(Inc)/dec in Fixed Assets	-40.9	-51.8	-247.1	0.0	-10.0
Others	3.9	10.5	-0.7	4.4	0.0
CF from investing activities	**-38.8**	**-40.9**	**-244.2**	**4.4**	**-15.0**
Issue/(Buy back) of Equity	-0.9	0.0	0.0	-1.0	0.0
Inc/(dec) in loan funds	25.0	-488.6	497.5	-22.0	-270.0
Dividend paid & dividend tax	0.0	-7.8	-21.7	-44.8	-149.2
Inc/(dec) in Sec. premium	0.0	0.0	-0.4	0.4	0.0
Others	-126.2	-86.6	0.0	0.0	0.0
CF from financing activities	**-102.1**	**-582.9**	**475.4**	**-67.3**	**-419.2**
Net Cash flow	3.7	-2.9	11.0	4.1	1.1
Opening Cash	2.9	6.6	3.7	14.6	18.7
Cash with bank	0.9	2.8	2.3	0.0	0.0
Closing Cash	**7.4**	**6.4**	**16.9**	**18.7**	**19.9**

Source: ICICI Direct Research, Company

Exhibit 14: Key Ratios

	FY17	FY18	FY19	FY20E	FY21E
Per share data (₹)					
EPS	9.8	4.6	8.4	11.9	13.9
Cash EPS	12.0	6.8	10.6	14.7	16.6
BV	32.4	36.7	44.2	56.1	64.0
DPS	0.0	0.3	0.8	1.8	6.0
Cash Per Share	4.4	0.2	8.7	11.9	14.5
Operating Ratios (%)					
EBITDA Margin	18.5	8.2	9.8	13.1	13.3
PBT / Net Sales	9.9	4.5	7.9	10.1	11.0
PAT Margin	11.4	3.5	6.9	8.2	8.8
Inventory days	216.4	171.0	245.4	237.3	217.0
Debtor days	35.8	33.7	34.3	32.4	32.4
Creditor days	33.2	68.0	73.8	57.3	52.6
Return Ratios (%)					
RoE	38.7	12.6	19.0	21.3	21.8
RoCE	20.3	10.7	11.1	14.7	16.7
Valuation Ratios (x)					
P/E	5.3	11.3	6.2	4.4	3.7
EV / EBITDA	5.4	8.6	9.3	6.0	4.9
EV / Net Sales	1.0	0.7	0.9	0.8	0.7
Market Cap / Sales	0.5	0.4	0.4	0.4	0.3
Price to Book Value	1.6	1.4	1.2	0.9	0.8
Solvency Ratios					
Debt/EBITDA	2.9	4.0	5.2	3.3	2.5
Debt / Equity	1.8	1.2	1.4	1.1	0.8
Current Ratio	4.7	2.7	3.1	3.5	3.4
Quick Ratio	0.9	0.6	0.5	0.6	0.6

Source: ICICI Direct Research, Company

Avadh Sugar (AVASUG)

CMP: ₹ 205 | Target: ₹ 280 (⬆ 37%) | Target Period: 12 months | BUY

August 27, 2019

Initiating Coverage

ICICI Securities – Retail Equity Research

Optimum utilisation of distillery to aid earnings

Avadh Sugar is UP sugar Company with sugar crushing capacity of 31200 tcd, distillery capacity of 200 KLD and co-generation capacity of 74 MW (salable power 50 MW). Avadh is expanding its distillery capacity by 50 KLD along with ZLD (Zero Liquid discharge). With this expansion, Avadh can sell 8 crore litre of ethanol to OMCs (Oil Marketing Companies). Given higher recovery rates due to new sugarcane variety and higher distillery volumes & prices, we expect earnings to grow at a CAGR of 12.3% in FY19-FY21E.

Sugar MSP, high recovery to stabiles the segment

Government's decision to introduce sugar MSP at ₹ 31 has stabilized the segment's earnings. Moreover, sugar recovery rate for Avadh has improved from 11.1% in FY17 to 11.8% in FY19. This has reduced raw material cost from ₹29.5 in FY17 to ₹28.7/kg despite increase in SAP prices of sugarcane in last two years. We expect Avadh to see further improvement in recovery rates in next two years, which would improve its gross margins in future.

Healthy growth in distillery income

Avadh Sugar is expanding its distillery capacity from current 200 KLD to 250 KLD. This would be commissioned in Q1FY21E. Further with expansion of ZLD, the company would be able to operate the distillery capacity in its existing plant from current 300 days to 330 days in SS 2020-21 in FY20E. We believe the company would divert 10% & 38% of its sugarcane towards the B heavy molasses in FY20E & FY21E respectively. The company can generate 7.7 crore litres of ethanol from its own molasses by diverting 38% of its sugarcane towards B heavy molasses. We believe at that level of diversion, it would fully utilise its distillery capacity. We expect distillery income to grow by 19.2% CAGR to ₹ 362 crore from FY19-21E.

Inventory reduction to positive cash flows

Though in FY19, sugar companies witnessed healthy earnings, positive cash flows have been converted into excess inventories. With lower sugar production in Maharashtra, higher exports and diversion towards B heavy molasses, Avadh would be able to reduce inventory. We expect Avadh to generate ₹257 crore & ₹ 444 crore of operating cash flow in FY20E & FY21E respectively, which would deleverage its balance sheet in next two years.

Valuation & Outlook

With stable earnings, elimination of cyclicity in sugar stocks is a possibility. At CMP, Avadh is trading at 0.7x its FY20E book value and 0.5x FY21E book value. Given large distillery capacity, Avadh can utilise excess molasses available from other sugar companies to increase revenues & earnings from distillery segment. However, to reduce its working capital debt, the company would require to divert higher sugarcane towards B heavy ethanol. We value it at 0.9x its FY20E book value per share for the target price of ₹ 280 per share. We assign a Buy rating on the stock.

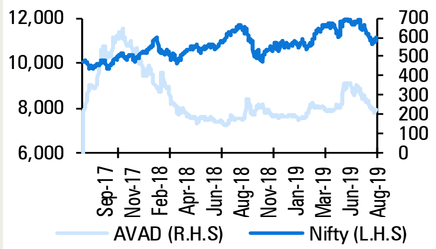
Stock Data

Particulars (₹ crore)	Amount
Market Capitalization	410.0
Total Debt (FY19)	1,432.0
Cash and Investments (FY19)	5.1
EV	1,836.9
52 week H/L (₹)	381 / 170
Equity capital	20.0
Face value (₹)	10.0

Key Highlights

- Higher recovery rate & setting up of ZLD boiler would increase its working capacity from 309 days to 330 days in SS 2020-21 resulting in strong growth in distillery segment
- Positive operating cash flow in FY21 to help in deleveraging its balance sheet
- Initiate Buy with a target price of ₹ 280 per share

Price Performance



*Avadh Sugar listing on 28th July 2017

Research Analyst

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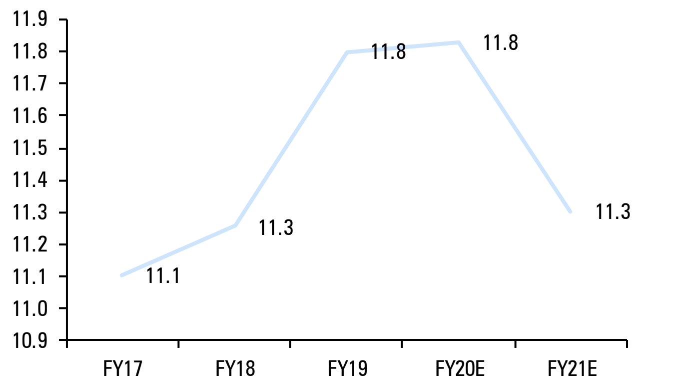
Key Financial Summary

Key Financials	FY17	FY18	FY19	FY20E	FY21E	CAGR (FY19-21E)
Total Operating Income	1872.9	2335.8	2130.2	2499.8	2608.6	10.7%
EBITDA	427.8	268.9	291.4	305.7	286.8	-0.8%
EBITDA Margin %	22.8	11.5	13.7	12.2	11.0	
Net Profit	203.3	88.2	119.9	142.8	151.2	12.3%
EPS (₹)	101.66	44.08	59.94	71.39	75.62	
P/E	2.0	4.7	3.4	2.9	2.7	
RoNW %	64.9	22.5	23.6	22.8	19.0	
RoCE (%)	24.5	13.4	12.8	13.4	14.4	

Sugar recoveries to moderate as B heavy ethanol increases

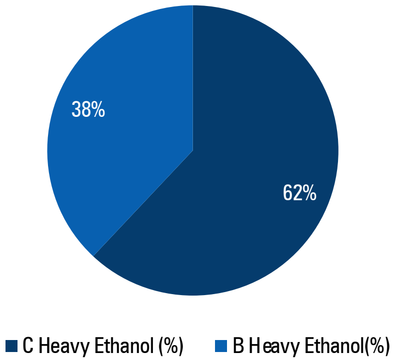
The company is expected to divert 38% of its sugarcane towards B heavy ethanol production. This would result in moderation in sugar recovery rate. However, we believe, the company is still holding very high sugar inventory & working capital debt. It would require to divert higher sugarcane towards B heavy ethanol to generate positive cash flows in FY20E itself.

Exhibit 1: Sugar Recovery rate (%)



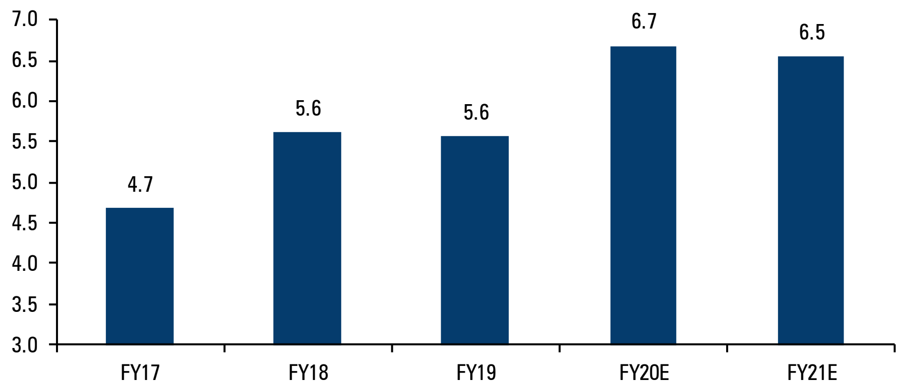
Source: Company, ICICI Direct Research

Exhibit 2: Contribution of B heavy & C heavy Ethanol (%)



Source: Company, ICICI Direct Research

Exhibit 3: Sugar volumes sold (in lakh tonne)

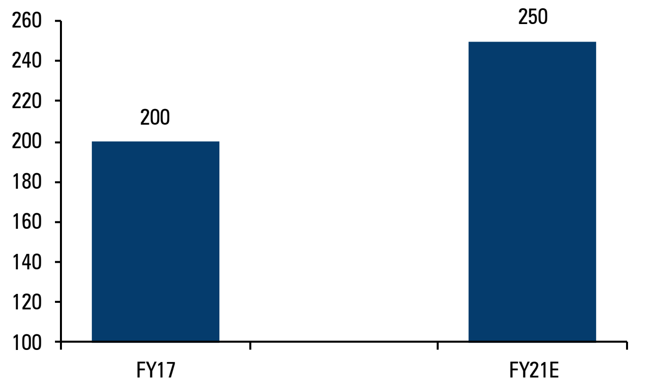


Source: Company, ICICI Direct Research

Monthly sale quota to stabilise volume, price

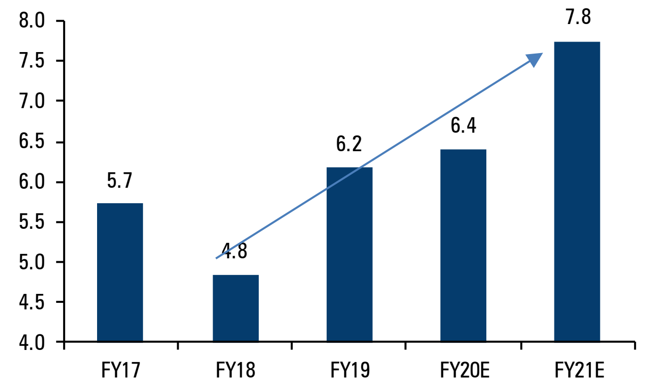
With the introduction of monthly sale quote & MSP, sugar sale volume for the company would be stable. Moreover, with the introduction of sugar MSPs at ₹ 31, sugar segment realisation for the company would be higher than cost of production. These government initiatives would safeguard company from loss in sugar segment. Moreover, higher by-product earnings would directly contribute to bottomline.

Exhibit 4: Distillery capacity (KLD)



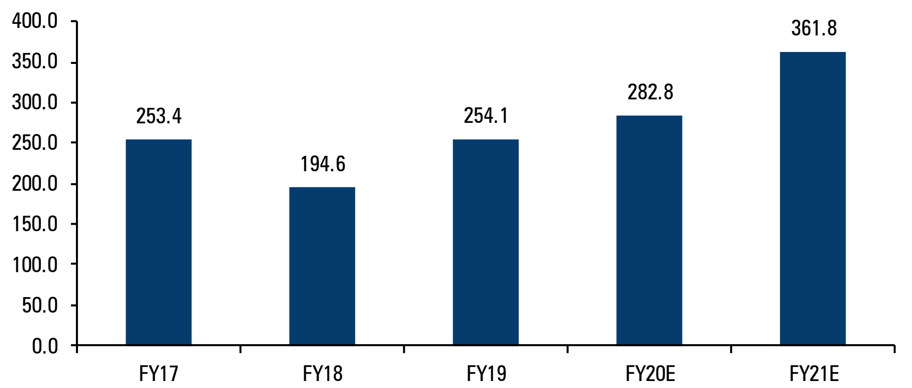
Source: Company, ICICI Direct Research

Exhibit 5: Distillery capacity (KLD)



Source: Company, ICICI Direct Research

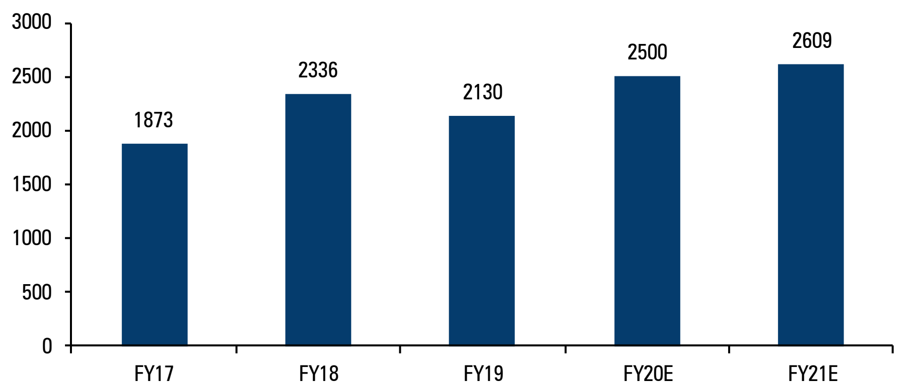
Exhibit 6: Ethanol Sales (₹ crore)



Source: Company, ICICI Direct Research

Though, company is only adding 50 KLD new distillery capacity. However, it is adding ZLD (Zero Liquid Discharge) boiler in its existing distillery plant, which would increase its working capital days from 309 to 330 days in SS 2020-21 in FY20E

Exhibit 7: Net Sales (₹ crore)

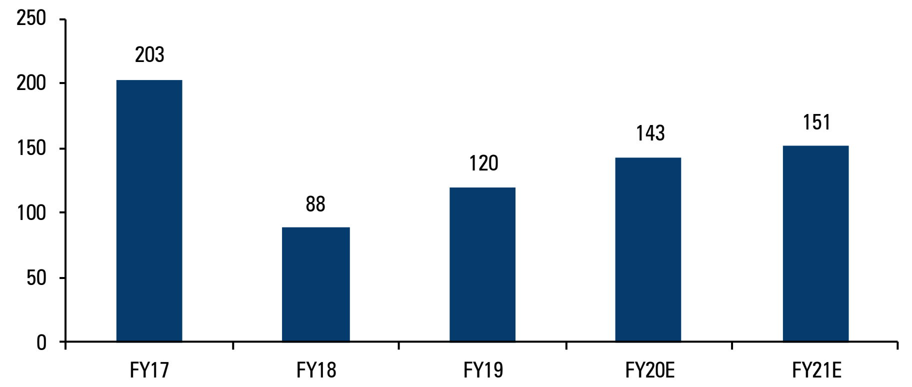


Source: Company, ICICI Direct Research

Strong earnings growth

We estimated sugar realisation at ₹ 32 / kg for FY20E & ₹ 33 / kg for FY21E for the company (higher than MSP of ₹ 31 /kg). Moreover, with the higher utilisation of distillery capacity & further expansion of distillery capacity by 50 KLD, we expect the company to witness 12.3% CAGR in earnings. Though, cash flow from operations have remained negative due to higher sugar inventory in the system, we believe increasing proportion of B heavy ethanol production would help the company to liquidate excess inventories and generate positive operating cash flows. We expect it to generate ₹444 crore of CFO in FY21E.

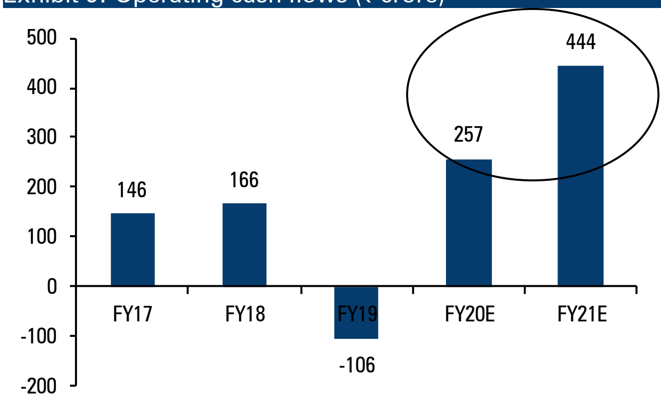
Exhibit 8: Net profit (₹ crore)



Source: Company, ICICI Direct Research

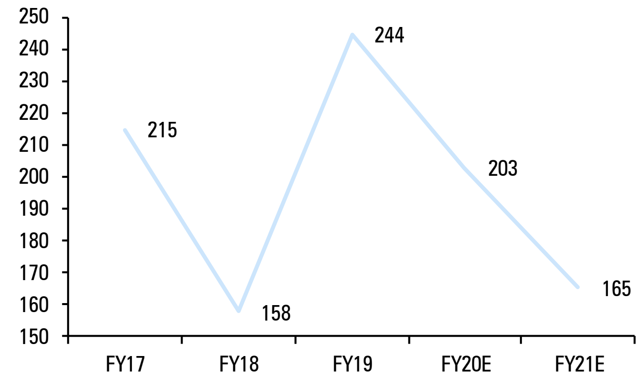
Net profit to grow at a CAGR of 12.3% during FY19-21E mainly on account of stable sugar prices and better utilisation of distillery capacities

Exhibit 9: Operating cash flows (₹ crore)



Source: ICICI Direct Research, Company

Exhibit 10: Inventory Turnover days



Source: ICICI Direct Research, Company

Financial Summary

Exhibit 11: Profit & Loss Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Total Operating Income	**1,872.9**	**2,335.8**	**2,130.2**	**2,499.8**	**2,608.6**
Growth (%)		24.7	-8.8	17.4	4.4
Raw Material Expenses	1,229.2	1,805.0	1,527.5	1,887.9	1,828.1
Employee Expenses	77.2	78.2	85.1	90.0	96.5
Administrative Expenses	8.0	12.8	14.6	0.0	0.0
Excise Duty	103.6	32.6	0.0	0.0	0.0
Other expenses	130.6	170.9	211.6	180.0	185.2
Total Operating Expenditure	1,445.0	2,066.9	1,838.7	2,194.1	2,321.8
EBITDA	**427.8**	**268.9**	**291.4**	**305.7**	**286.8**
Growth (%)		-37.2	8.4	4.9	-6.2
Depreciation	45.9	44.5	43.7	45.8	44.1
Interest	137.8	114.3	96.9	78.0	49.9
Other Income	2.4	4.1	3.5	3.6	3.7
PBT	244.1	110.1	150.8	181.9	192.7
Exceptional items	0.0	0.0	0.0	0.0	0.0
Total Tax	43.2	26.1	34.5	0.0	0.0
PAT	**203.3**	**88.2**	**119.9**	**142.8**	**151.2**
Growth (%)		-56.6	36.0	19.1	5.9
EPS (₹)	101.7	44.1	59.9	71.4	75.6

Source: Company, ICICI Direct Research

Exhibit 12: Balance Sheet

	FY17	FY18	FY19	FY20E	FY21E
Liabilities					
Equity Capital	10.0	10.0	10.0	20.0	20.0
Reserve and Surplus	303.5	381.0	498.5	606.4	777.0
Total Shareholders funds	313.5	391.0	508.5	626.4	797.0
Total Debt	1,254.5	1,281.7	1,432.0	1,312.0	892.0
Long Term Provisions	3.4	2.6	1.8	1.8	1.8
Other Non-current Liabilities	1.1	1.0	20.9	20.9	20.9
Total Liabilities	**1,572.4**	**1,676.2**	**1,963.2**	**1,961.1**	**1,711.7**
Assets					
Gross Block	1,031.9	1,071.3	1,106.0	1,206.0	1,226.0
Less: Acc Depreciation	44.5	88.5	132.1	177.9	222.0
Net Block	987.4	982.8	973.9	1,028.1	1,004.0
Capital WIP	1.4	9.7	4.4	4.4	4.4
Intangible assets	0.2	0.3	0.5	0.5	0.5
Non Current Investments	21.0	12.7	12.3	12.3	12.3
Other non-current assets	3.2	6.3	5.6	5.6	5.6
Current Assets					
Inventory	1,102.6	1,008.7	1,426.6	1,388.8	1,181.1
Debtors	65.5	82.8	126.4	87.9	84.4
Cash	31.2	5.3	5.1	17.2	40.1
Loans & Advances	0.4	1.2	1.2	1.2	1.2
Other Current Assets	31.7	10.9	52.7	52.7	52.7
Current Liabilities					
Creditors	216.9	335.5	475.2	417.3	404.3
Provisions	5.0	6.6	6.8	6.8	6.8
Other CL	450.1	102.4	163.5	213.5	263.5
Net Current Assets	559.3	664.4	966.6	910.3	685.1
Total Assets	**1,572.4**	**1,676.2**	**1,963.2**	**1,961.1**	**1,711.7**

Source: Company, ICICI Direct Research

Exhibit 13: Cash Flow Statement

(Year-end March)	FY17	FY18	FY19	FY20E	FY21E
Profit/Loss after Tax	246.6	114.2	154.4	142.8	151.2
Add: Depreciation	46.0	44.5	43.7	45.8	44.1
Add: Interest	137.8	114.3	96.9	0.0	0.0
(Inc)/dec in Current Assets	-160.3	97.3	-503.3	76.4	211.1
Inc/(dec) in Current Liabilities	-123.0	-128.2	130.6	-8.0	37.1
CF from operating activities	**145.7**	**165.8**	**-105.5**	**257.0**	**443.5**
(Inc)/dec in Investments	0.4	0.6	1.1	0.0	0.0
(Inc)/dec in Fixed Assets	-19.0	-48.6	-30.7	-100.0	-20.0
Others	0.1	0.4	0.3	2.0	0.0
CF from investing activities	**-18.4**	**-47.6**	**-29.4**	**-98.0**	**-20.0**
Issue/(Buy back) of Equity	0.0	-17.0	-24.4	10.0	0.0
Inc/(dec) in loan funds	22.8	36.1	255.8	-120.0	-420.0
Dividend paid & dividend tax	0.0	-38.4	-8.5	-2.4	-0.6
Inc/(dec) in Sec. premium	0.0	0.0	0.0	-32.5	20.0
Others	-122.7	-125.1	-88.7	0.0	0.0
CF from financing activities	**-99.8**	**-144.4**	**134.2**	**-144.9**	**-400.6**
Net Cash flow	27.4	-26.1	-0.8	14.1	22.9
Opening Cash	2.6	30.0	3.9	3.1	17.2
Cash with bank	1.3	1.4	2.0	0.0	0.0
Closing Cash	**31.2**	**5.3**	**5.1**	**17.2**	**40.1**

Source: ICICI Direct Research, Company

Exhibit 14: Key Ratios

	FY17	FY18	FY19	FY20E	FY21E
Per share data (₹)					
EPS	101.7	44.1	59.9	71.4	75.6
Cash EPS	124.6	66.3	81.8	94.3	97.7
BV	156.8	195.5	254.3	313.2	398.5
DPS	0.0	1.2	0.6	1.2	0.3
Cash Per Share	22.3	2.7	66.0	88.9	111.0
Operating Ratios (%)					
EBITDA Margin	22.8	11.5	13.7	12.2	11.0
PBT / Net Sales	13.2	4.9	7.2	7.4	7.5
PAT Margin	10.9	3.8	5.6	5.7	5.8
Inventory days	214.9	157.6	244.5	202.8	165.3
Debtor days	12.8	12.9	21.7	12.8	11.8
Creditor days	42.3	52.4	81.4	60.9	56.6
Return Ratios (%)					
RoE	64.9	22.5	23.6	22.8	19.0
RoCE	24.5	13.4	12.8	13.4	14.4
Valuation Ratios (x)					
P/E	2.0	4.7	3.4	2.9	2.7
EV / EBITDA	3.8	6.2	6.3	5.6	4.4
EV / Net Sales	0.9	0.7	0.9	0.7	0.5
Market Cap / Sales	0.2	0.2	0.2	0.2	0.2
Price to Book Value	1.3	1.0	0.8	0.7	0.5
Solvency Ratios					
Debt/EBITDA	2.9	4.8	4.9	4.3	3.1
Debt / Equity	4.0	3.3	2.8	2.1	1.1
Current Ratio	3.4	3.1	3.2	3.0	2.4
Quick Ratio	0.3	0.3	0.4	0.3	0.3

Source: ICICI Direct Research, Company

Comparative analysis of operational parameters

Exhibit 23: Comparative analysis of operational parameter (FY21E)

	Balrampur	Dhampur	Triveni	Dwarikesh	Avadh	Dalmia
Sugarcane Crushed						
C heavy (%)	50%	40%	60%	65%	62%	30%
B heavy (%)	50%	60%	40%	35%	38%	70%
C heavy (in cr kg)	498	256	433	194	318	140
B heavy (in cr kg)	498	384	289	105	195	328
Total Sugarcane Crushed	**996**	**640**	**722**	**299**	**513**	**468**
C Molasses average recovery (%)	11.9%	11.7%	11.8%	12.2%	12.0%	12.3%
B Molasses average recovery (%)	10.2%	10.2%	10.1%	10.7%	10.3%	10.6%
Average Recovery (%)	11.0%	10.8%	11.1%	11.6%	11.3%	11.1%
Total Sugar Produced (cr kg)	**109.6**	**69.1**	**79.9**	**34.7**	**58.0**	**52.0**
Sugar Sold (in cr kg)	117.6	72.8	83.0	35.0	65.4	58.5
Sugar Price (₹ per kg)	33.0	33.0	33.0	33.0	33.0	33.0
Ethanol Realisation (₹ per kg)	47.7	48.6	46.9	46.4	46.7	49.5
Total Ethanol Produced (in cr kg)	**16.4**	**11.3**	**11.1**	**4.4**	**7.8**	**8.8**
Ethanol Sold (in crore litre)	**17.2**	**13.4**	**10.7**	**4.6**	**7.8**	**7.9**
Power Units sold	62.7	45.0	19.5	19.9	19.2	33.6
Price per unit (₹ per units)	3.2	3.3	3.2	3.2	3.1	3.8

Source: Company, ICICI Direct Research

Comparative analysis of per kg revenue & cost

Exhibit 24: Per kg revenue & cost comparison of UP based sugar companies (FY21E)

	Balrampur	Dhampur	Triveni	Dwarikesh	Avadh	Dalmia
Sugar sales (Rs per kg of sugar)	33.0	33.9	33.0	33.0	33.0	33.0
Ethanol sales (Rs per kg of sugar)	7.0	9.0	6.1	5.7	5.5	6.7
Co-generation sales (Rs per kg of sugar)	1.7	2.0	0.0	1.8	0.9	2.2
Others (Rs per kg of sugar)	0.3	4.0	7.9	0.1	0.4	0.3
Total Sales (Rs per kg)	**42.0**	**48.9**	**47.0**	**40.6**	**39.9**	**42.2**
SugarCane Cost (Rs per kg of sugar)	28.4	30.8	32.3	29.0	27.7	28.3
Inventory (Rs per kg of sugar)	1.8	1.2	0.4	-0.7	3.2	3.2
Employee (Rs per kg of sugar)	2.3	2.2	3.3	2.6	1.5	2.3
Purchase of sugar (Rs per kg of sugar)	0.0	4.0	0.4	0.0	0.2	0.0
Other Exp (Rs per kg of sugar)	2.7	3.6	4.4	2.8	2.8	4.1
Total Expenditure (Rs per kg of sugar)	**35.2**	**41.8**	**40.8**	**33.8**	**35.5**	**37.9**
EBITDA per kg	**6.7**	**7.1**	**6.1**	**6.8**	**4.4**	**4.3**
Interest cost (Rs per kg)	0.4	1.1	0.9	0.7	0.8	0.6
Depreciation Provisioning (Rs per kg)	0.9	1.0	0.8	1.1	0.7	1.0
PBT Per Kg	5.7	5.2	4.5	5.6	3.0	3.7
Tax per kg	1.3	1.2	1.3	1.3	0.7	0.8
PAT per kg	**4.4**	**4.0**	**3.2**	**4.3**	**2.3**	**2.8**

Source: Company, ICICI Direct Research

Sugar companies valuation matrix

Sector / Company	CMP (₹)	TP (₹)	Rating	M Cap (₹ Cr)	EPS (₹) FY19	EPS (₹) FY20E	EPS (₹) FY21E	P/E (x) FY19	P/E (x) FY20E	P/E (x) FY21E	EV/EBITDA (x) FY19	EV/EBITDA (x) FY20E	EV/EBITDA (x) FY21E	P/B FY19	P/B FY20E	P/B FY21E	RoCE (%) FY19	RoCE (%) FY20E	RoCE (%) FY21E
Avadh Sugar (AVASUG)	205	280	Buy	410	59.94	71.39	75.62	3.4	2.9	2.7	6.3	5.6	4.4	0.8	0.7	0.5	12.8	13.4	14.4
Balrampur Chini (BALCHI)	123	165	Buy	3,005	25.2	21.4	23.4	4.9	5.7	5.3	6.4	5.4	4.6	1.3	1.1	1.0	16.3	17.3	18.9
Dhampur Sugar (DHASUG)	142	200	Buy	944	37.8	42.21	44.22	3.8	3.4	3.2	5.5	4.9	4.2	0.8	0.6	0.5	13.7	14.3	15.0
Dwarikesh sugar (DWASUG)	23	30	Buy	433	5.1	4.8	8.0	4.6	4.8	2.9	8.0	6.5	4.4	0.9	0.8	0.7	11.8	11.9	16.3
Triveni Engineering (TRIENG)	52	70	Buy	1,341	8.4	11.9	13.9	6.2	4.4	3.7	9.3	6.0	4.9	1.2	0.9	0.8	11.1	14.7	16.7
Dalmia Bharat Sugar (DALSUG	73	100	Buy	591	21.6	18.3	20.3	3.4	4.0	3.6	5.7	5.7	4.4	0.4	0.4	0.3	9.8	9.0	10.1

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