# **BALRAMPUR CHINI MILLS LTD**

Key Maket Ratio	
Latest Date	28-Mar-18
Latest Price (Rs)	75.40
Previous Close (Rs)	81.25
1 Day Price Var%	-7.20
1 Year Price Var%	-48.29
52 Week High (Rs)	182.50
52 Week Low (Rs)	74.70
Beta	1.21
Face Value(Rs)	1.00
Industry PE	4.37
TTM Period	201703
TTM EPS(Rs)	25.23
TTM CEPS(Rs)	29.64
Price/TTM CEPS(x)	2.54
TTM PE (x)	2.99
Price/BV(x)	1.14
EV/TTM EBIDTA(x)	3.97
EV/TTM Sales(x)	1.03
Dividend Yield%	4.64
MCap/TTM Sales(x)	0.51
Latest Book Value (Rs)	66.39
Market Cap (Rs in Crores )	1772.11



The company was incorporated in 14th July,1975 and today is one of the largest integrated sugar manufacturing companies in India. The company holds 54% stake in its subsidiary Indo Gulf Industries Ltd. The company also holds 45% stake in its associate Visual Percept Solar Projects Private Limited. The company operates 10 plants all of them are located in Uttar Pradesh, India. Market cap of the company is approx Rs 1800 cr as on 28th march,2018.

Balrampur chini mills ltd is involved in manufacturing of sugar, distillery and co-generation.

## Sugar:

- Balrampur is among the largest Indian sugar producers with a cumulative crushing capacity of 76,500 tonnes of cane per day. The Company has 8 plants in Eastern Uttar Pradesh and two in Central Uttar Pradesh. The plants are located within a 200-kilometre radius, resulting in logistical efficiency and average recovery of 10.66% in 2016-17
- A sizeable production capacity allows the Company to generate economies-of-scale
- Strategically located plants ensure that the Company is able to access superior cane quality
- The Company provides farmers high yielding seeds, subsidised agro inputs, timely soil testing facility and disease prevention advice
- Stringent operational control and minimal chemical use have allowed Company's sugar produce to be rated as top quality
- Preventive maintenance has helped maintain high plant availability

## Distillery:

Balrampur's three distilleries at Balrampur, Babhnan and Mankapur produce industrial alcohol and ethanol, enjoying a cumulative capacity of 360 kilolitres per day. The Company converts a majority of the rectified spirit produced in the distillery into ethanol or directly produces ethanol from molasses, enabling the Company to service oil marketing companies. These contracts are backed by attractive realisations and steady offtake, helping the Company enhance revenue visibility, bottom line and steady y-o-y growth.

- The Company's capacity (360 kilolitres per day) translates into attractive economies of-scale
- The Company's firm contracts with OMCs ensure assured offtake and revenue visibility
- The proactive installation of incinerators empowers the environment-friendly distilleries to run up to 330 days instead of 270 by most

## Co-generation:

Balrampur enjoys a saleable cogeneration capacity of 163.2 megawatts; bagasse is the feedstock. The Company consumes nearly 32% of the power produced and exports the rest to the state electricity grid at predetermined tariff protected by a multi-year contract. This segment serves as the bottom-line protector, marked by

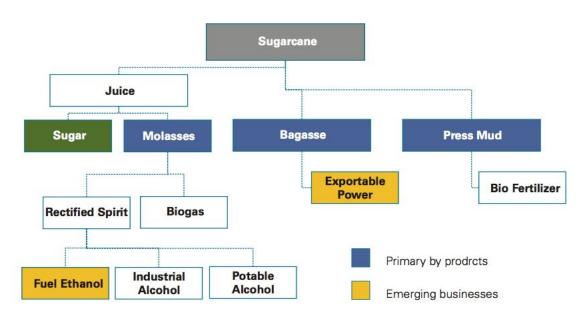
steady offtake and realisations. In 2016-17 the company generated 7,537.41 lac units of power.

- A saleable capacity of 163.2 megawatts helps the Company enhance economies of-scale
- Long-term power purchase agreement with the State Electricity Board provides long-term revenue visibility

### Competition:

Sugar is a commodity. Commodities companies derive their **moat** from cost advantages and being an industry leader as economics of scale works in their favor. The cost intensity of manufacturing means that the company must optimize the cane procurement and conversion cost to increase the **recovery rate**. However, we know that a leveraged balance sheet in a cyclical sector lends itself to a plethora of pain when the force of gravity imposes itself on the business. The manufacturing of sugar is both fixed and working capital intensive and only a select few are able to withstand the wild cyclical swings. Shishir Bajaj led Bajaj Hindustan is the industry leader with a crushing capacity of 136,000TCD and has been the torch bearer of the stress faced by companies across cycles. The market share lost by Bajaj hindustan could be captured by market challenger Balrampur chini mills which crushes 76500TCD.

#### Value chain:



Source: KPMG report

The common yardsticks to measure sugar companies efficiency is the **recovery rate** which is nothing but kg's of sugar extracted per ton of cane crushing

Bajaj Hindustan	2017	2016	2015	2014*	2013*	2012	2011
Crushing TCD	136000	136000	136000	136000		136000	136000
Distillery Kl/day	800	800	800	800		800	800
Co generation MW	449	449	449	443		443	428
Crushing Days#	92	80	89	183		94	75
Recovery rate	10.17%	10.40%	9.40%	9.15%		9.14%	9.31%
Gross Margin	32%	27%	9%	12%		23%	28%
Dwarikesh							
Crushing TCD	21500	21500	21500		21500	21500	21500
Distillery Kl/day	30	30	30				
Co generation MW	86	86	86		86	86	86
Crushing Days#	132	98	194		113	110	88
Recovery rate	11.78%	11.74%	10.39%		9.81%	9.64%	9.47%
Gross Margin	35%	28%	21%		17%	26%	27%
Bannari Amman							
Crushing TCD	23700	23700	20100	19000	19000	19000	19000
Distillery Kl/day	127.5	127.5	127.5	127.5	127.5	127.5	127.5
Co generation MW	138.55	129.8	104.8	84.8	84.8	84.8	84.8
Crushing Days#	121	150	120	136	186	182	136
Recovery rate	9.10%	9.60%	9.72%	9.89%	10.19%	10.47%	10.18%
Gross Margin	44%	60%	71%	-21%	48%	64%	46%
Balrampur Chini							
Crushing TCD	76500	76500	79000	79000	76500	76500	76500
Distillery Kl/day	360	320	320	320	320	320	320
Co generation MW	266.35	247.05	251.55	251.55	226.55	228.6	179.85
Crushing Days#	104	97	102	98	106	111	91
Recovery rate	10.70%	11.10%	9.80%	9.80%	9.50%	9.50%	9.40%
Gross Margin	38%	28%	16%	22%	23%	23%	32%
Dhampur							
Crushing TCD	45500	45500	45500	45500	45500	39500	39500
Distillery Kl/day	300	300	300	300	300	270	270
Co generation MW	209	209	209	169	169	150	150
Crushing Days#	119	106	101	89	99	95	165
Recovery rate	10.94%	10.54%	9.51%	9.23%	9.24%	9.24%	11.90%
Gross Margin	34%	22%	21%	21%	31%	26%	23%

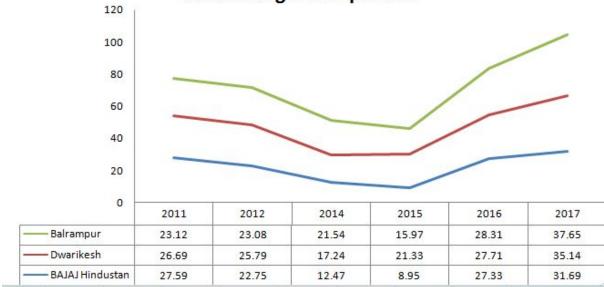
\* Data for 2013& 2014 fro two companies is not comparable due to change in financial year

# Crushing days are calculated by considering a 365 day year

Source: Investmentwaladost.blogspot.in

Now let us compare the gross margin of Balrampur, dwarikesh and Hindustan Bajaj to understand profitability that accrues to the sector. Incremental gross margins comes from sale of associated by products like power and ethanol for an integrated sugar manufacturing company since the marginal cost of production is significantly lower than the marginal increase in revenues.

We can see that Balrampur chini have the highest gross margin among the three:



**Gross Margin Comparison** 

#### Source: Investmentwaladost.blogspot.in

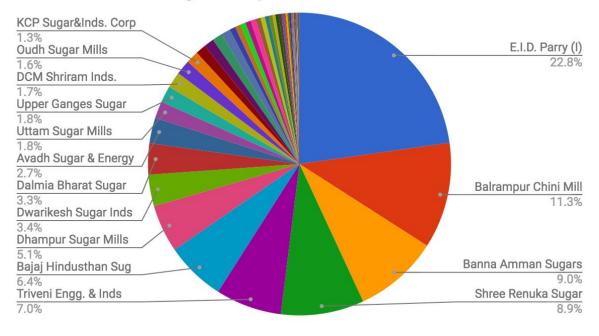
#### The contribution of the companies from sugar segment:

Contribution of Sugar(% of overall revenues)	2011	2012	2013	2014	2015	2016	2017
Balrampur	82.1	82.2	85.9	80.1	80.7	79.7	83.5
Dwarikesh	85.3	83.7	86.7		83.8	84.8	88.2
Bajaj Hindustan	91.1	78.0		74.9	80.1	81.1	76.1

Source: Investmentwaladost.blogspot.in

## Market share of individual companies:

# Market share of sugar companies on 18-3-18



### Major Risks involved:

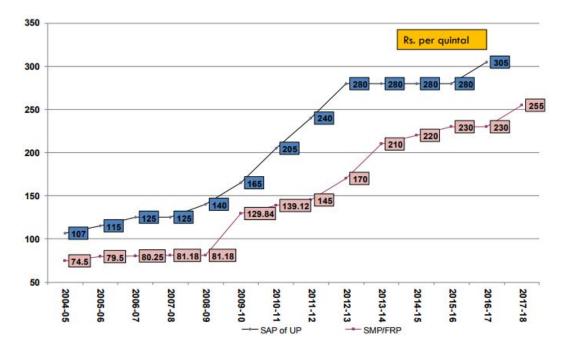
#### Govt regulations:

Sugar prices in India are partially monitored by the government policies. There are two areas which tighten the government's grip on sugar prices. The first being the **Fixed and Fair Remunerative Price (FRP)** set by the central government to protect farmers from monopoly of the sugar mill owners. According to this criteria, the government fixes a minimum statutory price for the sugarcane, which the sugar mills have to adhere to. In some cases the state government further increases the FRP taking into account current economic conditions of the farmers, and inflation in the state.

Though the policy is in place for the benefit of the farmers, the government uses it as a tool to gain political mileage. The second form of intervention is via Sugar levy quota and export quota. Under the sugar levy obligation, the mill owners need to sell certain percentage of the sugar produced to the government at a government fixed price which will be later sold by the government to the general public via Public Distribution System(PDS) at a wholesale price. This usually regulates the domestic market prices of sugar. Though it is in the interest of the general public, it hampers the sugar industries' profit during the deficit period, as the government releases the surplus sugar holdings from previous years into the market at wholesale prices, to control the price rise. Under the export quota, the mill owners need to export certain proportion (which will be fixed by government depending on domestic conditions) of their sugar produce. For the previous year the export quota set by government was 4 million tons. This is usually done to earn foreign exchange (in our country's interest), and to provide the sugar producers a global competitive rate. Govt. of India announced subsidy of INR 4.50 per quintal of sugarcane for 2015-16 which was linked to achieving 80% of export obligations.

The **Central Government** sets the **Fair Remunerative Price (FRP) each year**, which is the minimum price the sugar mill has to pay the farmer while procuring cane. On top of this sugar producing states set their very own **State Advised Price (SAP)** which many a times is much higher than FRP for reasons best known by the State Governments themselves

Let us have a look at how the mood of the government decides the pricing of sugarcane in the market...

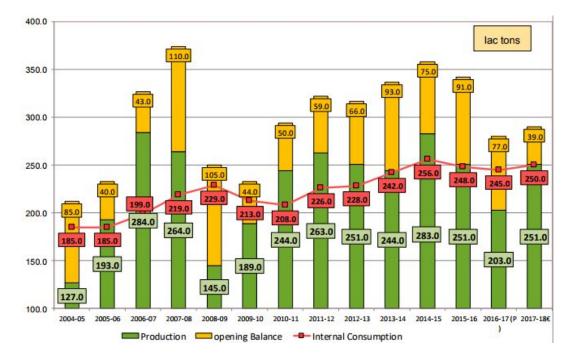


The blue line shows how SAP has moved over the years while the pink line shows the gap between SAP and FRP in Uttar Pradesh

Have a look at how the SAP more than doubled in 5 years during 2009-14. This was the period when Mayawati governed Uttar Pradesh as the Chief Minister while there was a Congress led government at the Centre

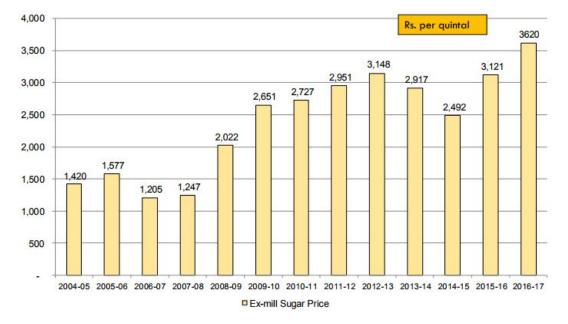
While the SAP decides the cost of procurement for the mills the final selling price depends upon various factors viz. **export quota, domestic demand, government controlled levy.** 

#### Let us understand each of these in detail...



#### **Domestic demand**

This is the demand supply situation in the domestic market. The supply depends not just on the production but also the opening stock for that year. The demand for sugar being a basic necessity remains constant and keeps inching up every year. Since demand is relatively inelastic pricing should remain more or less stable. However, the supply is very volatile, which means it is not the demand which is the problem but what moves supply.



Let's have a look at how ex mill sugar prices have moved over the last decade

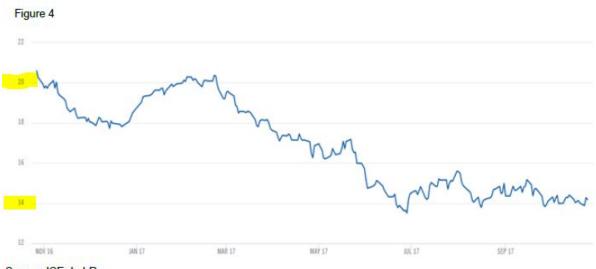
As we can see the current ex mill prices are the highest in over a decade. As we write ex mill prices for sugar trade in the same range as of FY17.

#### **Government controlled levy**

This regulation that the government used to impose on sugar companies was called the monthly release mechanism by which the Government controlled the quantity that Mills could 'release' into the open market. In addition to the release mechanism, sugar mills had to sell 10% of their produce to the Central government under the levy quota at subsidized rates.

## Exports/Imports

The government controls import and export of sugar in the country



Raw Sugar Futures Prices (March 2018 expiry)

Source: ICE, Ind-Ra

The prices of sugar have kept falling in the international markets over the last year. However, the government incased import duty to the already existing 40% by another 10% to stop cheap global sugar from flooding the Indian markets. Similarly when prices increase in global market sugar companies can only export on a pre fixed quota mechanism thus not allowing domestic pricing to be affected by global volatility

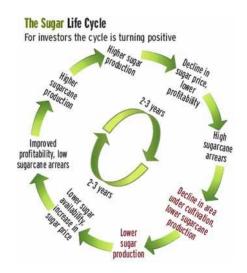
#### Business cyclicity:

Sugar industry is cyclical in nature. The sugar Industry generally follows a five year cycle. It usually has 2-3 years of surplus production (down cycle for the industry) followed by 1-2 years of deficit (up cycle). During the down cycle the sugar production is high, due to which the demand is low, resulting in low prices. This leads to lower profitability and in turn huge arrears by the sugar mills towards the farmers. This usually sustains for 2-3 years, until the mills are able to pay a part of the dues owed to the farmers.

Once the mills are unable to pay the dues, farmers start seeking alternate crops for sugarcane. This results in less farm area under sugarcane, thus decreasing the total sugarcane production. With low sugarcane production, demand increases and prices spike up. This results in higher profitability for the mill owners and timely payments of the arrears to the farmers. This cycle is known as up cycle.

This cycle usually lasts for 1-2 years. The first year of the up cycle doesn't see steep increase in sugar prices, but a small increase, due to availability of previous year's surplus stocks. These price changes are less noticeable. But in the second year the prices increase at a higher rate due to low production and low stocks. The price

changes are considerably high. With high prices and timely payments, farmers are again lured to grow sugarcane, which in turn increases area under sugarcane cultivation. Again the same cycle continues.



#### Cane unavailability:

During the time of drought, flood or low rainfall when cane acreage yields in low production of cane drops due to damages by natural calamities, sugarcane unavailability can result in a significant drop in recovery rates of sugar mills since benefit of economies of scale won't sustain.

#### Commodity risk:

Sugar is a commodity and the demand for consumption of sugar is gradually rising globally as well as in India, but supply is erratic in nature, which finally determines the price of sugar. Globally sugar prices are somewhere around Rs 20/kg and in India ex-factory prices are around Rs 32/kg, however importers have 100% import duty and exports are subsidized by the govt. So Indian sugar prices are insulated from global sugar prices fluctuations.

Currently the sugar production estimates are marginally greater than sugar consumption estimates, majority of the demand comes from industries, bakeries, confectioneries and food and beverages.

#### Management quality:

The company has been consistently buying assets like land and plant machinery for expansion over the period of last 10 years and is currently operating 10 plants in Uttar Pradesh where the Bijnor soil is best quality soil for sugarcane crops and also results in lower logistics cost. In financial year 2017, the management has generated ROE of 38% and ROCE of 19% which justifies their purchases of fixed assets over the period of last 10 years.

Management has been good allocators of capital and has done acquisitions at low valuations for plant expansion, they have been consistently investing north of 15% incremental cash over the period of last 10 years.

The management has integrated 8 out of 10 plants where by-products of sugar, molasses and bagasse, are used to make ethanol and power, which are high margins business recently for the company.

### Valuation:

#### Profit and loss statement for last 8 years

Narration	Sep-09	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Trailing	Best Case	Worst Case
Sales	1,700.04	2,976.57	2,309.55	3,274.84	2,664.94	2,986.98	2,756.66	3,460.13	4,163.11	4,343.12	3,810.70
Expenses	1,252.20	2,458.35	2,071.32	2,854.97	2,450.90	2,860.49	2,518.80	2,590.54	3,438.43	3,587.10	3,340.68
<b>Operating Profit</b>	447.84	518.22	238.23	419.87	214.04	126.49	237.86	869.59	724.68	756.01	470.02
Other Income	17.67	24.03	27.74	42.80	25.94	15.04	46.48	24.94	22.15	-	-
Depreciation	107.94	168.11	110.78	108.26	109.45	115.60	110.11	104.94	97.07	97.07	97.07
Interest	108.29	148.64	147.41	143.87	117.84	102.09	66.55	55.43	59.38	59.38	59.38
Profit before tax	249.28	225.50	7.78	210.55	12.67	-76.16	107.69	734.15	590.38	599.56	313.57
Тах	22.77	61.09	1.15	48.53	9.03	-18.43	7.44	141.86	126.18	21%	21%
Net profit	226.51	164.41	6.63	162.03	3.64	-57.73	100.26	592.29	464.20	471.42	246.55
EPS	8.82	6.42	0.27	6.63	0.15	-2.36	4.09	25.20	19.75	20.06	10.49
Price to earning	7.63	11.73	205.11	7.30	380.65	-20.85	25.95	6.22	4.40	12.19	4.40
Price	67.35	75.27	55.66	48.42	56.59	49.14	106.20	156.71	86.90	244.47	46.16
RATIOS:											
Dividend Payout	34.01%	11.26%	0.00%	30.15%	0.00%	0.00%	0.00%	14.48%			
OPM	26.34%	17.41%	10.31%	12.82%	8.03%	4.23%	8.63%	25.13%	17.41%		

#### Source: Aceanalyser.com

Company's last 8 years sales growth is 10.7% and maintains avg last 8 years OPM more than 13%.

#### Balance sheet for last 8 years

Narration	Sep-09	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17
Equity Share Capital	25.68	25.63	24.43	24.43	24.48	24.49	24.50	23.50
Reserves	1,149.40	1,272.16	1,193.50	1,298.44	1,193.84	1,104.78	1,207.02	1,517.75
Borrowings	972.03	2,006.69	1,984.48	1,759.83	1,524.00	1,674.51	1,661.04	1,782.28
Other Liabilities	519.39	565.86	1,064.36	1,200.34	1,442.50	1,125.95	904.89	783.15
Total	2,666.50	3,870.34	4,266.77	4,283.04	4,184.82	3,929.73	3,797.45	4,106.68
Net Block	1,770.10	1,709.93	1,612.48	1,521.13	1,522.37	1,375.17	1,338.58	1,412.30
Capital Work in Progress	6.65	6.09	0.43	5.11	0.30	7.56	86.47	6.13
Investments	126.57	3.61	44.25	43.23	40.87	40.87	47.83	45.02
Other Assets	763.18	2,150.71	2,609.61	2,713.57	2,621.28	2,506.13	2,324.57	2,643.23
Total	2,666.50	3,870.34	4,266.77	4,283.04	4,184.82	3,929.73	3,797.45	4,106.68
Working Capital	243.79	1,584.85	1,545.25	1,513.23	1,178.78	1,380.18	1,419.68	1,860.08
Debtors	17.10	89.88	146.96	181.38	64.06	158.61	198.63	162.67
Inventory	343.43	1,491.31	1,997.79	1,886.57	2,092.29	1,669.25	1,864.89	2,313.63
Debtor Days	3.67	11.02	23.23	20.22	8.77	19.38	26.30	17.16
Inventory Turnover	4.95	2.00	1.16	1.74	1.27	1.79	1.48	1.50
Return on Equity	19%	13%	1%	12%	0%	-5%	8%	38%
Return on Capital Emp	16%	9%	4%	9%	4%	1%	4%	19%

#### Source: Aceanalyser.com

Margins are derived from distillery and co-generation segment which resulted in high ROE (38%) and ROCE(19%) in financial year 2017. In the current financial year, the company may see depreciated margin since ISMA(Indian Sugar Manufacturing Association) recently released production figures of 29 million tons against estimation of 26 million tons, which resulted in decrease in sugar ex factory prices from Rs 32/kg to Rs 28.5/ kg, and the production cost of sugar manufacturing for Balrampur chini is Rs Rs 31.3 for the last year.

Cash flow statement for last 8 years

Narration	Sep-09	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17
Cash from Operating Activity	641.77	-618.69	195.03	555.35	462.35	-76.28	147.02	346.34
Cash from Investing Activity	-23.14	-126.10	-55.40	-7.61	-63.10	-23.02	-146.62	-115.24
Cash from Financing Activity	-498.71	744.82	-283.35	-370.55	-446.92	37.77	-72.41	-232.72
Net Cash Flow	119.92	0.03	-143.72	177.19	-47.67	-61.53	-72.01	-1.62

Source: Aceanalyser.com

The company is consistently investing in new plants and also simultaneously clearing its debt, and has net long term debt to equity ratio of 0.09. However, the company have short term debt of approx Rs 1500 cr which is borrowed at attractive interest rate of 6.75% due to good credit rating and prior debt writing down on regular basis.

#### **Peer Comparison**

Peer Group Comparison (Consolida	ted) Peerset Selection				(Rs. in Crores )
Company Name	Bajaj Hindusthan Sug	Balrampur Chini Mill	Dalmia Bharat Sugar	Dhampur Sugar Mills	Triveni Engg. & Inds
Year_End	201703	201703	201703	201703	201703
Net Sales	4399.30	3460.13	1686.00	2583.67	2824.55
PBIDT	947.54	894.10	386.30	537.46	548.68
PAT	-91.98	591.49	182.18	237.68	230.28
Adj. EPS(Rs)	0.07	25.20	22.66	36.03	9.05
PBIDTM%	20.45	24.56	21.90	19.79	18.49
PATM%	0.16	16.27	10.40	9.12	7.87
ROCE%	7.37	25.40	18.57	20.93	17.32
ROE%	0.19	42.73	30.62	45.25	35.22
TTM Ratios	28-Mar-2018	28-Mar-2018	28-Mar-2018	28-Mar-2018	28-Mar-2018
Latest EPS(Rs)	-0.81	25.23	22.51	44.43	10.92
Latest CEPS(Rs)	1.33	29.64	29.38	52.90	12.62
Price/TTM CEPS(x)	6.62	2.54	2.19	2.58	3.24
TTM PE (x)	0.00	2.99	2.86	3.08	3.74
Price/BV(x)	0.29	1.14	0.75	1.14	1.01
EV/TTM EBIDTA(x)	8.36	3.97	4.40	4.87	4.79
EV/TTM Sales(x)	1.80	1.03	1.01	0.86	0.77
Dividend Yield%	0.00	4.64	3.11	4.39	0.00
MCap/TTM Sales(x)	0.23	0.51	0.31	0.28	0.29
Latest Book Value (Rs)	30.60	66.39	85.38	119.92	40.52

Source: Aceanalyser.com

## Outlook:

The company is currently undervalued since sugar industry is at an inflection point where deregulations of government will play an important role in sugar realizations for the millers. Emerging businesses like distillery and co-generation are delivering substantially high margins which result in good overall operating margin for the integrated sugar companies. Balrampur's revenue mix with 83% from sugar and rest from distillery and co-generation has a room for optimization and going forward only 75-80% revenue would come from sugar and rest from ethanol and power business which also results in hedging during downturn sugar cycle. The company is in accumulation range in the price band Rs 72-82.