CREDIT SUISSE

India Sugar Sector

Research Analysts

Arya Sen
9122 6777 3807
arya.sen@credit-suisse.com

India Research Analyst Team

Nilesh Jasani
(Head of Research, Strategy)

Anand Agarwal
(Infrastructure & Cement, Property)

Vinod Chari
(Machinery, Utilities)

Govindarajan Chellappa
(Automobiles)

Venugopal Garre
(Media)

Prashant Gokhale
(Chemicals, Oil & Gas)

Sanjay Jain
(Banks)

Neelkanth Mishra
(Pharmaceuticals)

Sanjay Mookim
(Oil & Gas)

Amish Shah
(Construction)

Bhuvnesh Singh
(IT Services, Telecoms)

Aditya Singhania
(Banks)

Research assistants
Anubhav Aggarwal
R Harishankar
Swapnil Nadkar
Vikramaditya Narendra
Musaed Noorani
K Rajasa
Deepak Ramineedi
Arya Sen
R Srinivasan
Anand Swaminathan
Sunil Tirumalai

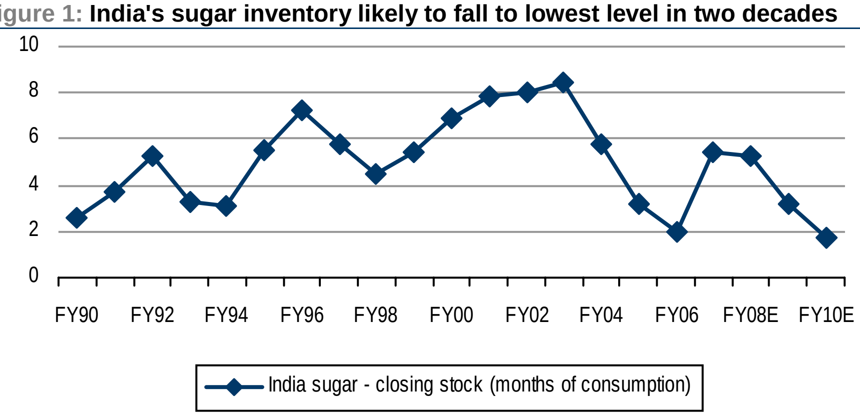
INITIATION

Play the price, mind the costs

India's sugar industry has gone through difficult times over the past two years. Looking ahead, however, we see a bright outlook in the form of a significant improvement in the demand-supply-stock situation. As a result, we expect sugar prices to rise by 20-25% in FY09E and further in FY10E. This should lead to a significant improvement in the prospects for the sector going forward.

- **FY09-10E: less sugar to sweeten the sugar story.** We expect sugar production to decline by more than 20% in FY09E and inventories to fall to below two months of consumption by FY10E.
- **Policy: cane price an overhang, sugar price less likely to be hurt.** Cane price continues to be an issue, particularly in Uttar Pradesh, where there is a lack of clarity on state advised prices (SAP) for FY07, 08 and 09.
- **Integration: contribution to rise.** The Indian sugar industry is increasingly shifting to a more integrated model. With a large pass-through to the bottom line, the impact on margins is likely to be significant.
- **Stock picks.** We initiate with an OUTPERFORM on Balrampur (target price Rs120). We remain cautious on Bajaj on account of a number of headwinds and initiate with a NEUTRAL rating (target price Rs199). We initiate with an OUTPERFORM on Shree Renuka (target price Rs165).

Figure 1: **India's sugar inventory likely to fall to lowest level in two decades**



Source: ISMA, Credit Suisse estimates

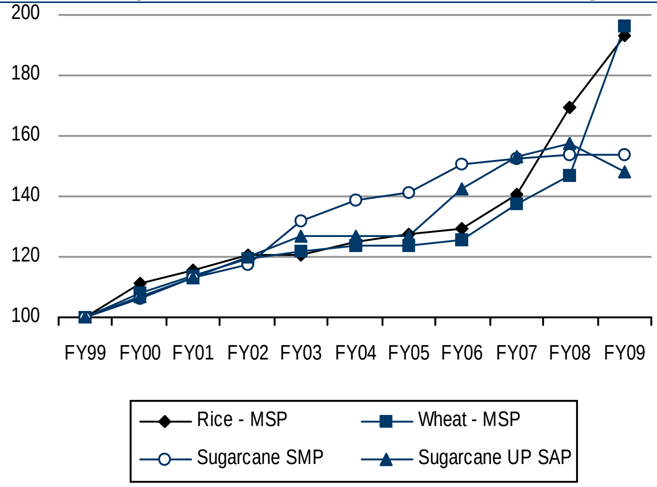
Figure 2: **Summary of coverage universe**

Company	BB code	Rating	Mkt cap. (US$ mn)	CMP (Rs)	TP (Rs)	Pot. up. (%)	EV/EBITDA (x) FY09E	EV/EBITDA (x) FY10E
Balrampur Chini	BRCM IN	O	570	93.8	119.6	27.5	8.4	5.4
Bajaj Hindusthan	BJH IN	N	619	184.1	199.5	8.4	11.6	7.0
Shree Renuka	SHRS IN	O	855	133.2	165.3	24.1	11.2	7.6

Note: O = OUTPERFORM, N= NEUTRAL; Source: Bloomberg, Credit Suisse estimates

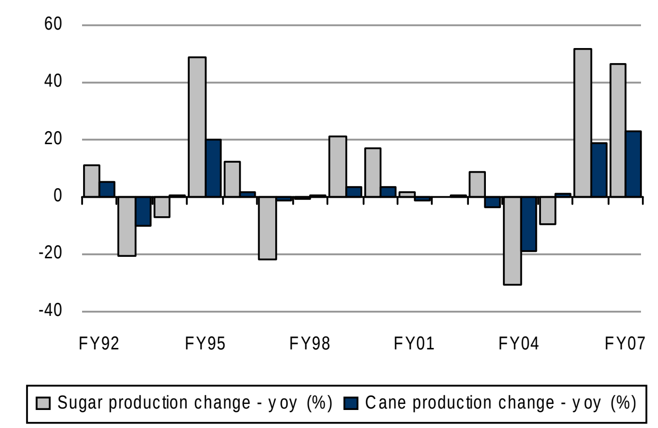
Focus charts

Figure 3: Rise in the prices of alternative crops, large arrears and poor weather led to 10-12% lower acreage



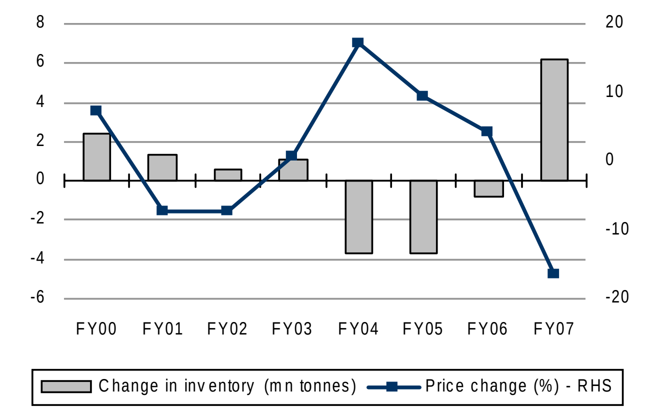
All prices indexed to 100 in FY99;
Source: Economic Survey, Crislnfac, Credit Suisse estimates

Figure 4: Sugar production is more volatile than cane production – sugar production to drop by more than 20%



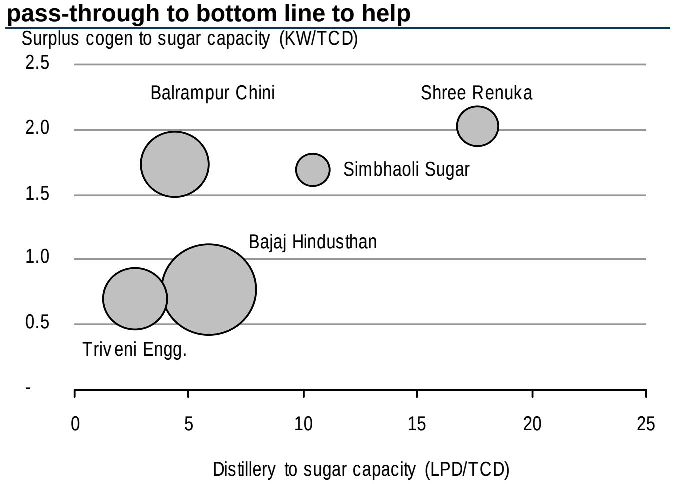
Source: ISMA, Credit Suisse estimates

Figure 5: Sugar prices show a strong correlation with change in inventory



Source: ISMA, Credit Suisse estimates

Figure 6: Contribution from integration set to rise – large pass-through to bottom line to help



Note: Size of bubble indicates crushing capacity;
Source: Company data, Credit Suisse estimates

Figure 7: Stock to use ratio of sugar likely to fall to lowest level in more than a decade

(mn tonnes)	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07P	FY08E	FY09E	FY10E
Production	18.2	18.5	18.5	20.1	14.0	12.7	19.3	28.3	26.0	20.1	20.9
YoY growth (%)	*17.1*	*1.6*	*-*	*8.6*	*(30.3)*	*(9.3)*	*52.0*	*46.6*	*(8.1)*	*(22.5)*	*3.9*
Domestic consumption	16.1	16.2	16.8	17.5	17.9	18.5	19.0	20.6	21.8	22.8	23.5
Exports	0.1	1.0	1.1	1.5	0.2	-	1.1	1.5	4.0	1.0	-
Imports	0.4	-	-	-	0.4	2.1	-	-	-	-	-
Opening stock	6.8	9.3	10.6	11.2	12.3	8.6	4.0	3.2	9.4	9.6	6.0
Addition/Deletion to stock	2.4	1.3	0.6	1.1	(3.7)	(3.7)	(0.8)	6.2	0.2	(3.6)	(2.5)
Closing stock	*9.3*	*10.6*	*11.2*	*12.3*	*8.6*	*4.9*	*3.2*	*9.4*	*9.6*	*6.0*	*3.5*
Stock-to-use ratio (%)	***57.6***	***65.4***	***66.6***	***70.2***	***48.0***	***26.4***	***16.8***	***45.6***	***44.2***	***26.3***	***14.7***
Closing stock (months)	***6.9***	***7.8***	***8.0***	***8.4***	***5.8***	***3.2***	***2.0***	***5.5***	***5.3***	***3.2***	***1.8***

Note: FY refers to sugar year from October to September;
Source: ISMA, Credit Suisse estimates

Play the price, mind the costs

FY09-10E: less sugar to sweeten sugar story

India's sugar industry has gone through difficult times over the past two years. Looking ahead, however, we see a bright outlook in the form of a significant improvement in the demand-supply-stock situation. We expect sugar production to decline by more than 20% in FY09E and inventories to fall to below two months of consumption by FY10E. The key drivers of this change are likely to be: 1) a shift in acreage away from cane to crops like wheat, paddy and oilseeds, where farm gate prices have witnessed historic rises over the past two years whereas cane prices have stagnated, leading to appreciable change in the relative economics of cultivation, 2) substantial arrears in cane payment in previous seasons, particularly in Uttar Pradesh, 3) poor rainfall so far in south India, leading to the diversion of land to less water-intensive crops, and 4) greater diversion of cane towards the unorganised sector. As a result, we expect sugar prices to rise 20-25% in FY09E and another 5-10% in FY10E. This should lead to a significant improvement in prospects for the sector.

Sugar price likely to rise by 20-25% in FY09 and another 5-10% in FY10 on the back of lower sugar production

Policy: cane price an overhang, sugar price less likely to be hurt

Policy risks have always been an overhang on the sector, with the key regulations related to cane procurement, cane price and sugar price. Cane price continues to be an issue, particularly in Uttar Pradesh where there is lack of clarity on SAP for FY07, FY08E and FY09E. Our key concerns with regard to cane prices are: 1) the high mandatory price of cane regardless of sugar price increases risks to earnings substantially and 2) the lack of visibility on SAP for FY09-10E with the possibility of higher-than-anticipated cane prices. That said, cane price could also be a trigger for the stocks in the near term – a favourable judgment in the Supreme Court with respect to the cane SAPs for FY07E and FY08E or a lower-than-expected SAP for FY09 could lead to substantial upside. Sugar prices are less likely to be hurt by regulations, in our view – strong domestic demand and rising international prices limit the risk to prices on account of policy interventions.

Court case verdicts, SAP for FY09 remains an overhang on the cane price – while the sugar price is likely to be less impacted

Integration: contribution to rise

Over the past few years, the Indian sugar industry has been increasingly shifting to a more integrated model, with the bigger players in particular investing heavily in setting up distillery and co-generation capacity. There are multiple drivers for this change: 1) a higher realisation per unit of cane crushed – distillery and power can add up to Rs6 per kg of sugar sold, 2) lower cyclicality, and 3) a likely spurt in ethanol demand in India with increased blending. We expect the contribution of distillery and cogeneration to continue rising for most players, as new capacity becomes operational. With a large pass-through to the bottom line, the impact on margins is likely to be significant – even as utilisations fall on account of lower cane availability. Lower cane availability is also likely to lead to a demand-supply mismatch for distillery products with an attendant impact on prices.

Integration can contribute up to Rs6 per kg of sugar sold with a large pass-through to the bottom line

Play the price, mind the costs

We expect the rise in sugar prices to drive earnings and stock prices in the sector. Uttar Pradesh-based mills are likely to be the biggest beneficiaries, as the sugar price in UP is not linked to the cane price. We initiate on Balrampur Chini with an OUTPERFORM and a target price of Rs120. We remain cautious on Bajaj Hindusthan, despite its high beta to sugar prices due to a number of headwinds. We initiate with a NEUTRAL and a target price of 199. Shree Renuka has relatively less to gain from rising sugar prices yet a unique business model and strong secular growth prospects make it an attractive long-term investment opportunity, in our view. We initiate with an OUTPERFORM and a target price of Rs165.

We like Balrampur Chini and Shree Renuka, but are cautious on Bajaj Hindusthan

Valuation summary

Figure 8: **Valuation matrix of our coverage universe**

		Mkt cap	CMP	TP	Pot.	EPS		P/E (x)		EV/EBITDA (x)	
Company	**BB code**	**(US$ mn)**	**(Rs)**	**(Rs)**	**upside (%)**	**FY09E**	**FY10E**	**FY09E**	**FY10E**	**FY09E**	**FY10E**
Balrampur Chini	BRCM IN	570	93.8	119.6	27.5	4.3	9.4	21.8	9.9	8.4	5.4
Bajaj Hindusthan	BJH IN	619	184.1	199.5	8.4	(0.4)	13.6	n/a	6.9	11.6	7.0
Shree Renuka Sugar	SHRS IN	855	133.2	165.3	24.1	6.9	9.6	13.6	9.8	11.2	7.6

Source: Company data, Credit Suisse estimates

		EBITDA margin (%)			PAT margin (%)			Sales growth (%)			EBITDA growth (%)		
Company	**BB code**	**FY08E**	**FY09E**	**FY10E**	**FY08E**	**FY09E**	**FY10E**	**FY08E**	**FY09E**	**FY10E**	**FY08E**	**FY09E**	**FY10E**
Balrampur Chini	BRCM IN	15.8	21.7	25.0	1.0	6.2	12.0	4.6	27.6	13.1	160.7	73.7	30.1
Bajaj Hindusthan	BJH IN	10.4	16.7	21.4	(6.6)	(0.2)	5.6	9.6	50.8	14.6	6.7	141.3	46.7
Shree Renuka Sugar	SHRS IN	15.9	17.6	19.1	7.4	8.1	8.8	157.5	26.8	28.2	186.7	40.2	38.7

Source: Company data, Credit Suisse estimates

		ROE (%)			BPS			P/B			Net D/E		
Company	**BB code**	**FY08E**	**FY09E**	**FY10E**	**FY08E**	**FY09E**	**FY10E**	**FY08E**	**FY09E**	**FY10E**	**FY08E**	**FY09E**	**FY10E**
Balrampur Chini	BRCM IN	2.7	9.8	18.2	39.7	43.7	52.0	2.4	2.1	1.8	1.4	0.9	0.3
Bajaj Hindusthan	BJH IN	(8.7)	(0.1)	14.1	92.3	91.4	105.7	2.0	2.0	1.7	2.8	2.4	1.6
Shree Renuka Sugar	SHRS IN	20.1	21.9	23.5	24.9	31.5	40.8	5.3	4.2	3.3	1.0	1.2	0.7

Source: Company data, Credit Suisse estimates

Table of contents

FY09-10E: less sugar to sweeten sugar story

The sugar industry in India has gone through extremely difficult times over the last 12 to 18 months. Yet as we look ahead, we see a light at the end of the tunnel in the form of a significant improvement in domestic demand-supply stock in FY09E and FY10E. We expect sugar production to decline by 20-25% in FY09E and inventories to fall to close to three months of consumption. The key drivers of this change are likely to be: 1) a shift in acreage away from cane to crops like wheat, paddy and oilseeds, where farm gate prices have witnessed a historic rise over the last two years whereas cane prices have stagnated, leading to appreciable change in the relative economics of cultivation, 2) substantial arrears in cane payment in previous seasons, particularly in Uttar Pradesh, 3) poor rainfall so far in south India, leading to the diversion of land to less-water intensive crops and 4) the greater diversion of cane towards the unorganised sector. As a result, we expect sugar prices to rise by 20-25% in FY09E and by another 5-10% in FY10E. This, in our view, should lead to a significant improvement in the sector's future prospects.

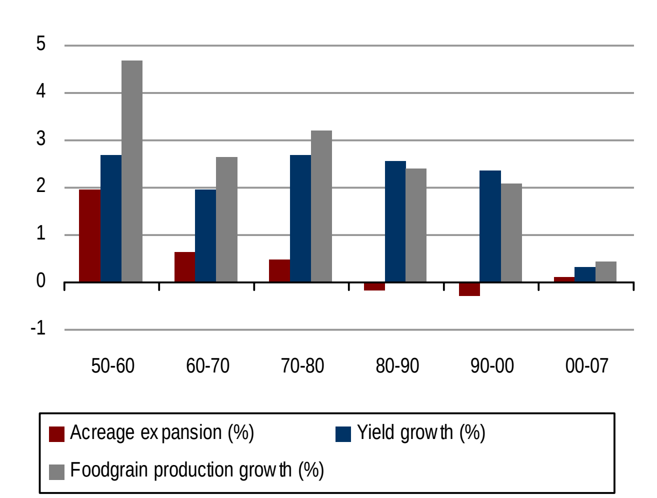
Sugar prices are likely to rise by 20-25% in FY09E and another 5-10% in FY10E on the back of lower sugar production

Historic rise in farm-gate prices of alternative crops to cane

Indian agriculture today stands at the onset of a new paradigm. After nearly two decades of bumper production of key foodgrains, such as rice and wheat through the 80s and better part of the 90s, consistent under-production over the past decade has caused the stocks of these crops to fall to multi-decade lows and threatened India's self-sufficiency in food. In fact, in FY07, the central stock of foodgrains fell below the minimum mandated buffer norm of 20 mn tonnes for the first time in several years. This necessitated the import of nearly 3 mn tonnes of wheat from global markets in 2007. It is believed the recent surge in international wheat prices was at least in part due to India turning into a net importer.

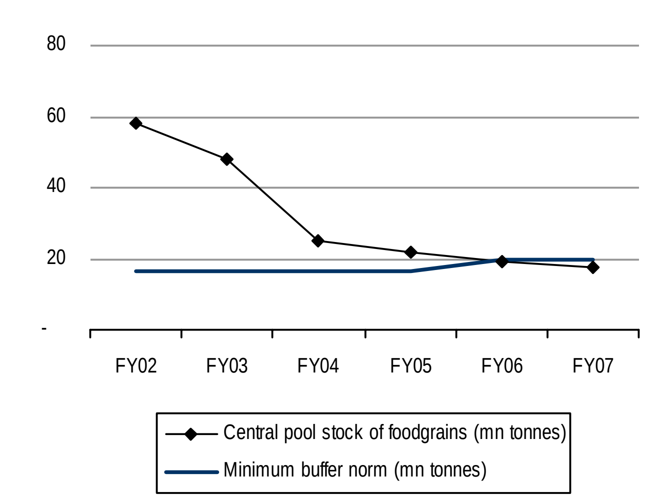
India's self-sufficiency in foodgrains is under threat with stocks falling to multi-decade lows

Figure 9: **Foodgrain production in India has stagnated over the past decade …**



Source: CMIE, Credit Suisse estimates

Figure 10: **… with central stocks falling below the minimum buffer, necessitating imports for the first time in decades**



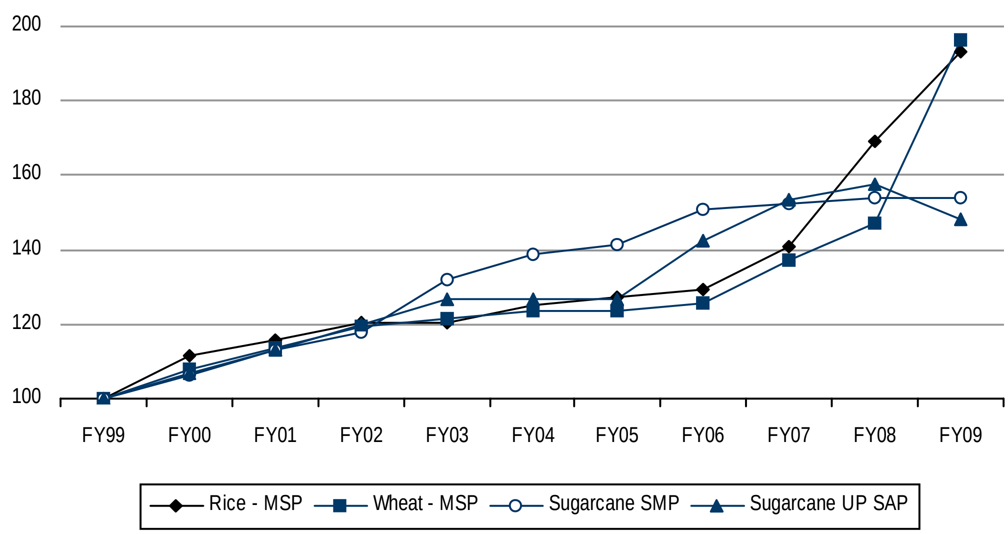
Source: Economic Survey 2006-07, Credit Suisse estimates

The problem is not limited to India either. Over the past year it has become increasingly evident that: 1) there is a structural demand-supply gap globally, as demand for grain for food, feed and fuel outpaces supply and 2) global trade in foodgrains is both thin and unreliable, with even the hint of a shortage causing exporting countries to impose export bans, as was the case with rice recently. As a result, the need for self-sufficiency in key crops has re-emerged as a priority in India (and elsewhere) with policymakers becoming increasingly aware that food availability, even at higher prices, can no longer be taken for granted.

The government's procurement of foodgrains fell to 17% in FY07, as market prices were higher

While stagnant production on account of under-investment and neglect by the government has been the major reason behind the fall in central stock of foodgrains, there is another factor which has also contributed. International and domestic free market prices of wheat and rice have increased at a far higher pace over the past two years than the rise in the government's procurement price of these items. This caused the government's share of procurement to fall from 21% of production in FY05 to less than 17% in FY07, as more farmers preferred to sell their produce to private traders for higher prices.

Figure 11: Farm gate prices of rice and wheat have seen historic rises, as the government aims at regaining self sufficiency whereas cane prices have stagnated or even declined



Note: All prices indexed to 100 in FY99; For UP SAP interim prices that have been paid out to farmers have been considered;

Source: Economic Survey, CrisInfac, Credit Suisse estimates

MSPs for wheat and paddy have been raised by 33% and 37% …

The messages have not gone unheeded. In a bid to increase the domestic production of foodgrains and bring prices more in line with international prices, the government has increased procurement prices – known as minimum support price (MSP – by a historic 33% YoY for wheat (from Rs750 per quintal to Rs1,000 per quintal for FY09) and by 37% for rice over a period of two years.

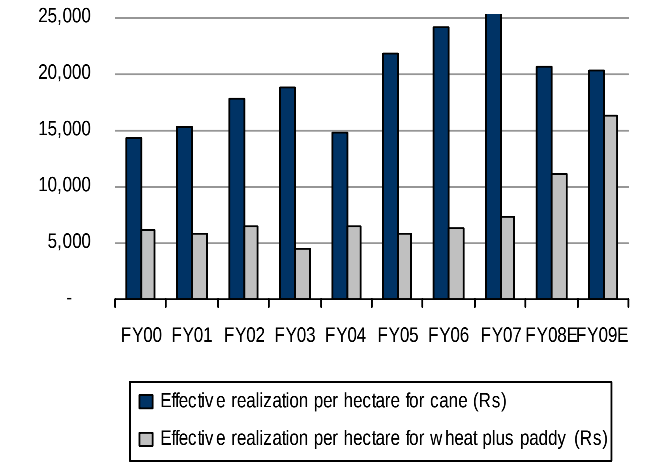
… the SMP for cane has been more or less constant in recent times, while the SAP in UP has effectively declined …

By contrast, sugarcane's statutory minimum price similar (SMP), which is similar to MSP for rice and wheat, has been kept constant at Rs81.2 per quintal (for 9% recovery) over the past three years. In Uttar Pradesh while the SAP (state advised price) for FY09E is yet to be declared, the SAP of Rs125 per quintal for both FY07E and FY08E is still being challenged in court. In the interim, mills have been instructed to pay Rs118 per quintal for FY07E. The Lucknow bench of the Allahabad High Court has recently upheld the SAP of Rs125 for FY08E but the difference over the interim price of Rs110 is yet to be paid.

… leading to significant changes in relative economics of cultivation between cane and other crops

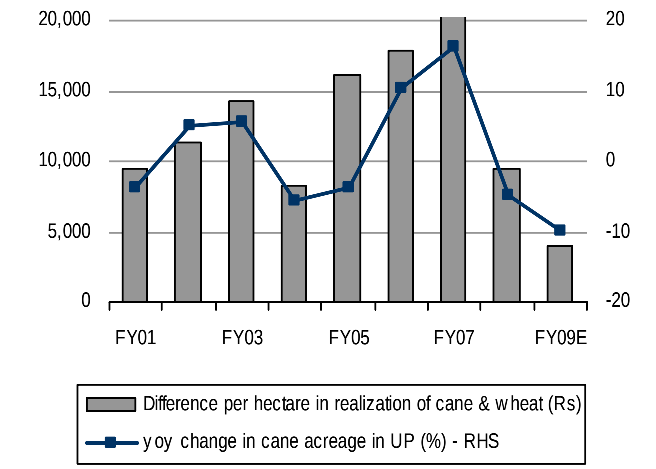
The phenomenal rise in farm-gate prices of rice and wheat on the one hand and the stagnation/decline in cane procurement prices on the other is fast changing the relative economics of cultivation between crops in India. Historically, sugarcane has been one of the most profitable crops for Indian farmers, but the relative difference in realisation per hectare between cane and wheat is fast diminishing. While in absolute terms, cane is still slightly more profitable, the dynamics can change depending on the choice of other crop (wheat being a four-month crop is usually combined with another crop – we have taken paddy as an illustration – while sugarcane is a 12-month crop and therefore occupies the land throughout the year) as well as the payment actually received for cane given the large arrears. A typical farmer with reasonable land holdings cultivates multiple crops and hence his decision on incremental land allocation towards different crops is likely to be guided more by relative change in expected realisations. While the rise in wheat and rice procurement prices is likely to affect the decision making of cane farmers across the country, the impact of this is likely to be most in Uttar Pradesh – one of the main sugarcane producing states in India – where wheat is the chief alternative crop to cane and where historically, cane acreage has reacted to changes in relative economics between the two crops.

Figure 12: **Changing relative economics of cultivation in Uttar Pradesh …**



Note: Wheat being a four-month crop is usually cultivated with another (rabi) crop, paddy here is illustrative; Assuming interim payments
Source: Credit Suisse estimates

Figure 13: **…can trigger a substantial shift in acreage, as the difference between cane and wheat falls to a low**

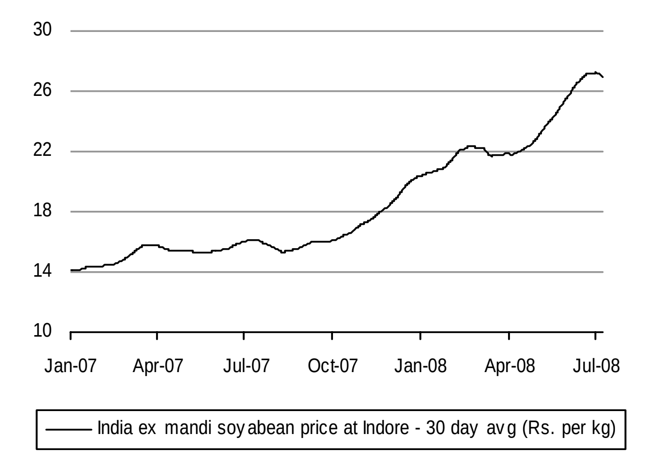


Source: ISMA, Credit Suisse estimates; Assuming interim payments

Prices of oilseeds have gone up by more than 50%

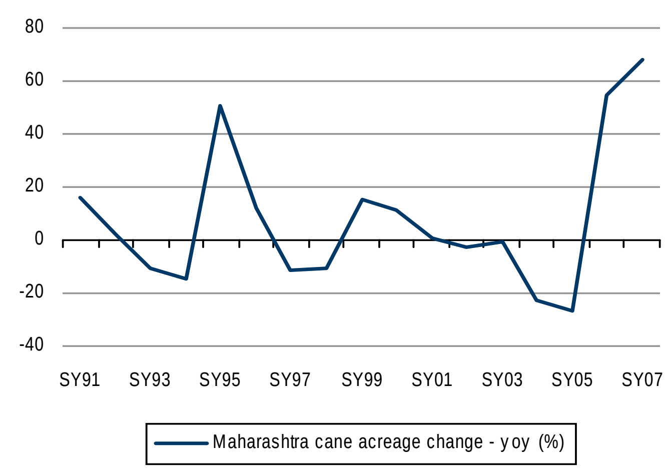
The threat to cane is not just from wheat and paddy. Prices of soybeans and other oilseeds have spiked over the past 12 months and are also likely to cause substantial shifts away from cane, particularly in Maharashtra, the other major cane producing state in India. Cane acreage in Maharashtra has historically been more volatile than in Uttar Pradesh having swung by -30% to 70% YoY over the past decade.

Figure 14: **Soybean prices have risen more than 60% YoY changing cultivation dynamics in Maharashtra**



Source: Bloomberg, Credit Suisse estimates

Figure 15: **…where cane acreage has historically been more volatile**



Note: SY denotes sugar year from October to September;
Source: Credit Suisse estimates

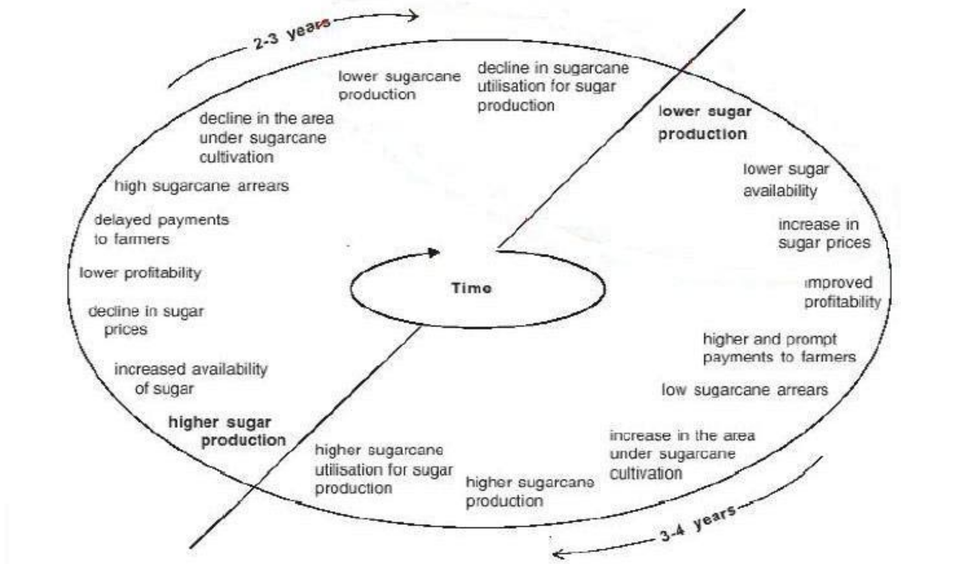
The usual suspect: Arrears to play an important part

In addition to the changing relative economics of cultivation, significant arrears and delays in payment for cane are also likely to substantially impact the farmer's decision making process. In a recently published report on regional agriculture titled *'Towards re-regulation',* we showed that the per-capita income of the agricultural population in the region is only 10% of the non-agricultural population. The proportion, if anything, is even more skewed in the case of India. Hence it is not just the economics of cultivation that matters to farmers but – equally importantly – the payment schedule. A delay in payments has far more severe implications for rural India than for urban India, as savings are nominal and the cost of borrowing can be substantially higher. Historically, arrears in payment have been the key reason behind a shift in acreage away from cane and the cyclicality in cane production, and we expect this cycle to be no different.

Large arrears in cane payment in Uttar Pradesh – also likely to induce crop switching

Figure 16: Oft-shown chart on the arrears induced sugar cycle in Uttar Pradesh

Arrears have historically been the key reason behind sugar cycles in the state



Source: Bajaj Hindusthan corporate presentation

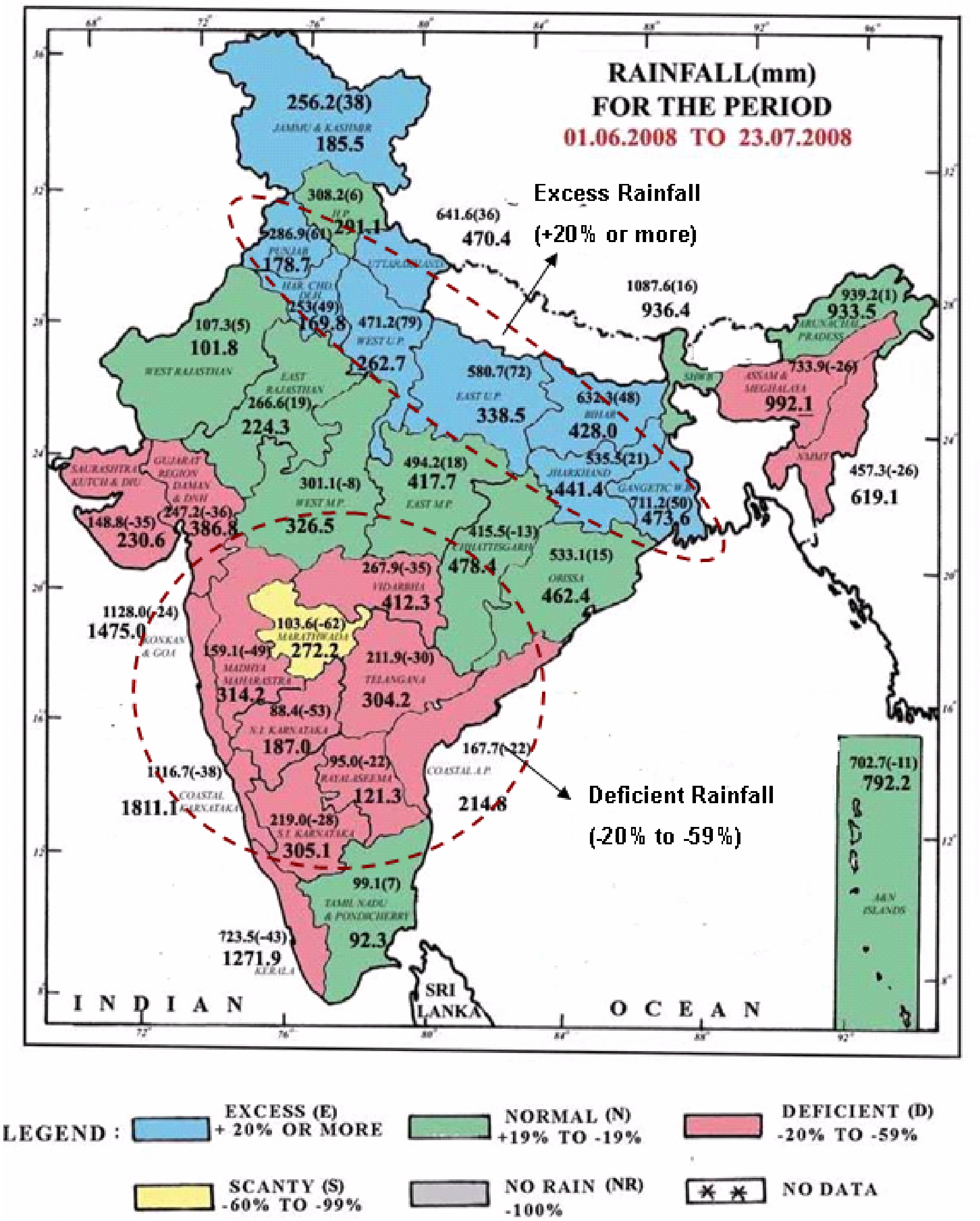
Weather check: where is the rain in southern India?

No discussion on agriculture is complete without a check on the weather, the eternal x-factor in agriculture. Weather is particularly important for sugarcane cultivation, as it is one of the most water-intensive crops. With irrigation penetration being quite low, monsoons play a critical role in determining the prospects for cane cultivation in India.

Sugarcane is one of the most water-intensive crops

While Uttar Pradesh and most of the other northern states have received good rainfall so far this year, the news on monsoons is far from encouraging for most of the Southern states. Rainfall has been "deficient" (between 20% and 59% below normal as per the definition of the Meteorological department) in most parts of Maharashtra, Karnataka and Andhra Pradesh, which together account for nearly half of India's sugar production.

Figure 17: **Rainfall in the south has been poor this year to date – and is likely to result in lower cane planting and lower yields**



Source: Indian Meteorological Department, Credit Suisse estimates

Rainfall has been deficient so far in large parts of Maharashtra, Karnataka and Andhra Pradesh – key cane producing states

Poor monsoons are likely to affect cane cultivation in two ways: 1) lower sowing, as farmers opt for less water-intensive crops – anecdotal evidence already suggests lower planting in Maharashtra and Karnataka and 2) lower yields on cane planted.

Sugar production fell by more than 60% in Maharashtra in the previous episode of drought

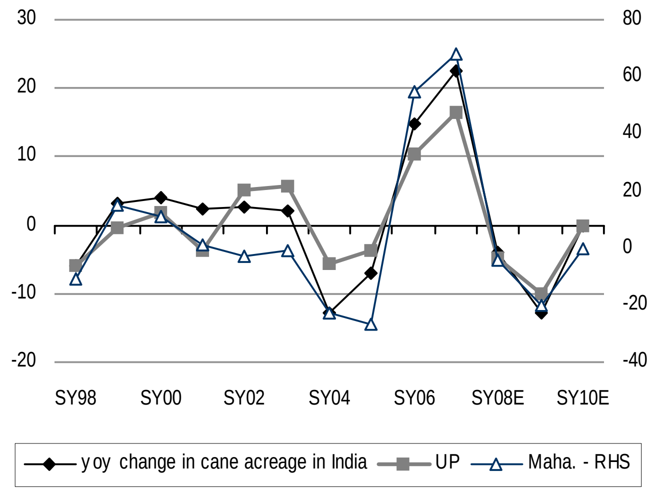
While it is difficult to quantify precisely the impact of poor rainfall on cane cultivation, it may be interesting to note that in the previous episode of drought in Maharashtra, sugar production in the state dropped from 6.2 mn tonnes in FY03E to 3.2 mn tonnes in FY04E and further to 2.2 mn tonnes the next year. Cane acreage dropped by more than 40%, while yields declined by close to 20%.

Cane acreage to drop by 10-12%

On account of the factors discussed above, we expect cane acreage to drop 10-12% at the pan-India level in FY09E. Acreage is likely to drop by 10% in Uttar Pradesh, the highest in recent history and 20% in Maharashtra. As cane is a multi-year crop (no sowing is necessary in the next season), we expect the acreage to remain at the same level in FY10E as well.

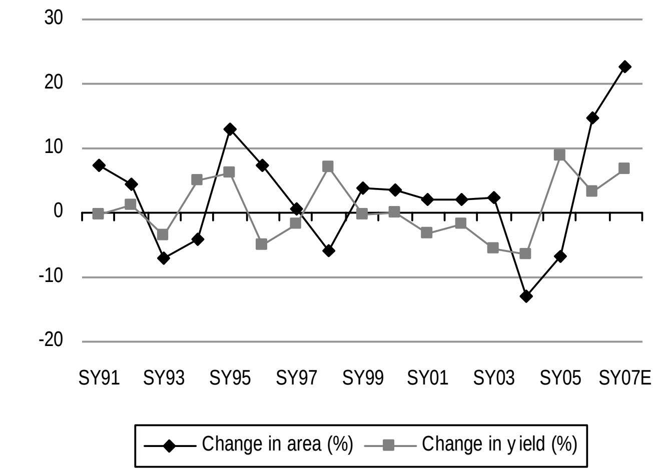
Sugarcane is a two-year crop – acreage is likely to fall in FY09E and remain there in FY10E

Figure 18: **We expect cane acreage to drop by 10-12% on average at the all-India level**



Note: SY denotes sugar year from October to September; Source: CMIE, Credit Suisse estimates

Figure 19: **Yield has historically been less volatile than area**



Note: SY denotes sugar year from October to September; Source: ISMA, Credit Suisse estimates

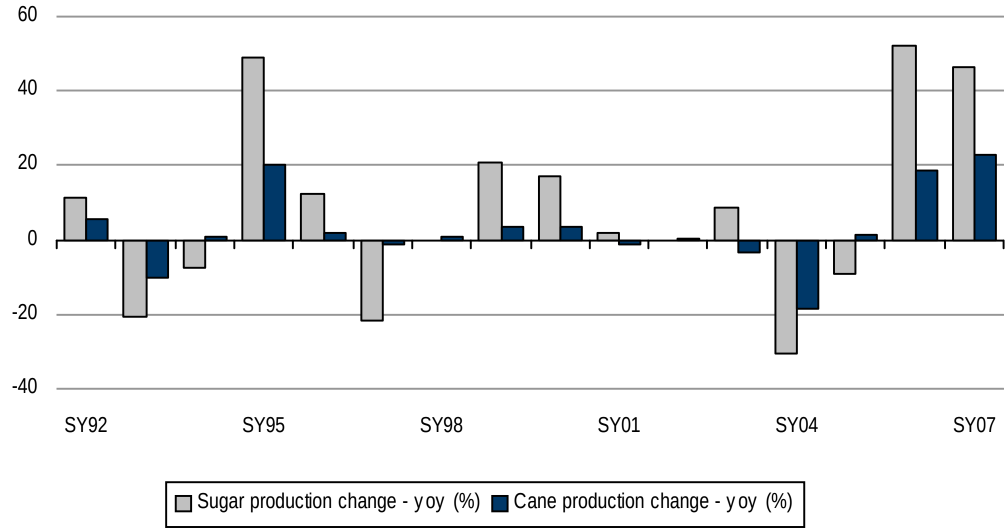
Sugarcane yield is typically less volatile than acreage. While in many years the change in acreage has been mirrored by the change in yield to a lesser extent (payment arrears which trigger a shift away from cane are also believed to cause lower fertiliser usage by farmers with resulting lower yield), given the low volatility of yield we have not factored in any fall in yield going forward. As a result, we expect cane production to decline by 10-12% at the all-India level in FY09E – the same as the expected fall in acreage.

Yield has historically been less volatile – we do not foresee a significant change in yield

Sugar production is more volatile than cane output

Historically, sugar production in India has been more volatile than cane production. As shown in the figure below, in years of falling cane production, sugar output falls by more and the converse is also true.

Figure 20: **Sugar production is more volatile than cane production …**



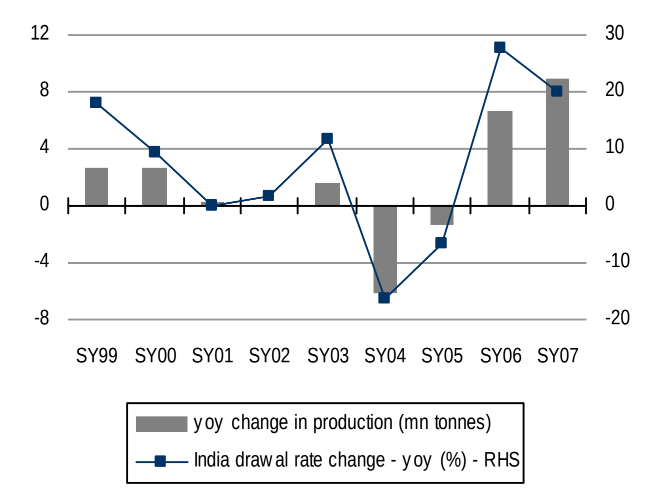
Note: SY denotes sugar year from October to September;
Source: ISMA, Credit Suisse estimates

Diversion of cane to sugar mills increases in years of surplus production …

Not all the cane produced lands up with the sugar mills. A significant portion (close to 30% on average) is diverted to the unorganised sector where alternative sweeteners like *gur* and *khandsari* are made, particularly in Uttar Pradesh. The unorganised sector, not being regulated like sugar mills, is not legally bound to crush all the cane that comes to it and pay SMP or SAP for it. This implies that cane price paid by them is linked to the end-product price – a lower price is offered to cane cultivators in years of lower sugar and gur prices. As a result, diversion of cane to the sugar mills (known as the drawal rate) rises significantly in such years. This has been the case in the past two sugar seasons when the drawal rate at the pan-India level rose from 52% in FY05 to 67% in FY06 and more than 80% in FY07 – the highest ever. With rising sugar (and gur) prices we expect the drawal rate to drop in FY09E.

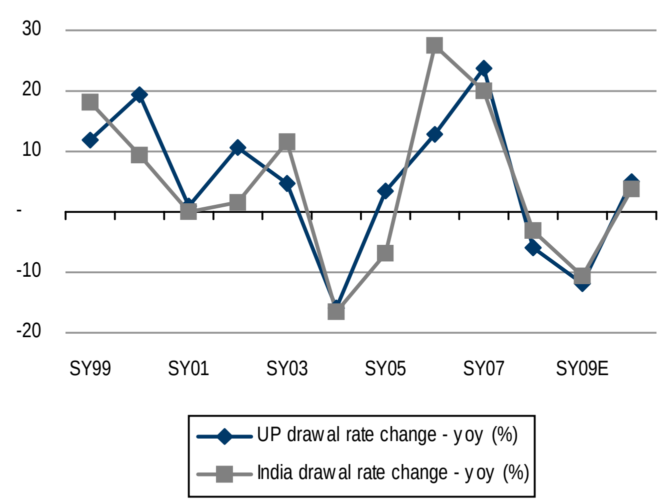
…as mills necessarily have to pay a minimum price unlike the unorganised sector

Figure 21: **…as competition for cane with the unorganised sector increases in years of cane shortage**



Note: Drawal rate is defined as the proportion of cane produced that is crushed by the mills;
Source: ISMA, Credit Suisse estimates

Figure 22: **We expect drawal rates to drop by 10% in FY09E, as cane production drops**



Note: SY denotes sugar year from October to September;
Source: ISMA, Credit Suisse estimates

However, there are two long-term trends in the sugar industry that also need to be kept in mind, while taking a view on drawal rate:

We expect drawal rates to drop back to slightly higher than the historical average

1) With rising income levels and changing consumption patterns, there has been a gradual shift away from gur and khandsari to sugar. This has manifested itself in a slow rise in the drawal rate in the long term – the five-year moving average has risen from about 50% a decade back to about 65% currently.

2) Over the past few years, the sugar industry has witnessed significant capacity expansion, particularly in Uttar Pradesh where investment was given heavy incentives by the government. This is also likely to lead to a rise in the drawal rate at the all-India level, as more farmers have the option of selling to a mill, which may not have been the case previously.

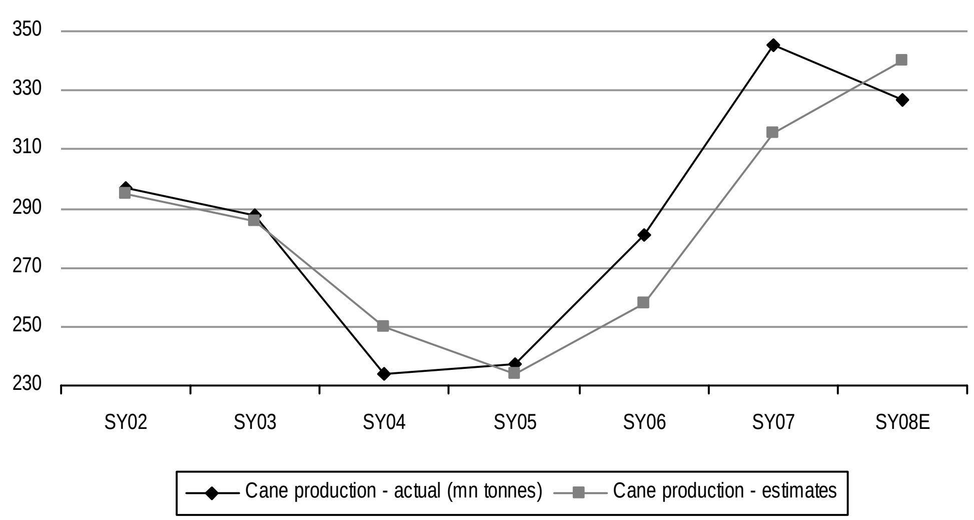
Overall, we expect drawal rates to be about 70% in FY09E and FY10E above the last five-year average, but below the peak of 80% in FY07.

Lesson from history: Sugar cycle reversals can be larger than estimates – and it works both ways!

Changes in cane and sugar production estimates tend to be understated, particularly around inflection points

The combination of a drop in cane acreage and drawal rate should bring down cane production by 12% and sugar production by 23-24% in FY09E by our estimates. This would mean cane production falling to ~290 mn tonnes and sugar production to 20 mn tonnes. While all estimates available so far predict a declining trend, there is less agreement on the extent of the fall. The second advance estimates provided in the FY09E budget expect FY08E cane production to cross 340 mn tonnes as opposed to our estimates of ~320 mn tonnes. Similarly, Indian Sugar Mills Association (ISMA) expects sugar production for FY09E to fall to 22 mn tonnes. A review of the history of estimates versus actual production provides some interesting insight though.

Figure 23: **Final production tends to overshoot or undershoot estimates, particularly around inflection points for cane …**



Note: Based on second advance estimates, as provided in the Economic Survey documents of the respective years; SY denotes sugar year from October to September
Source: Economic Survey, Credit Suisse estimates

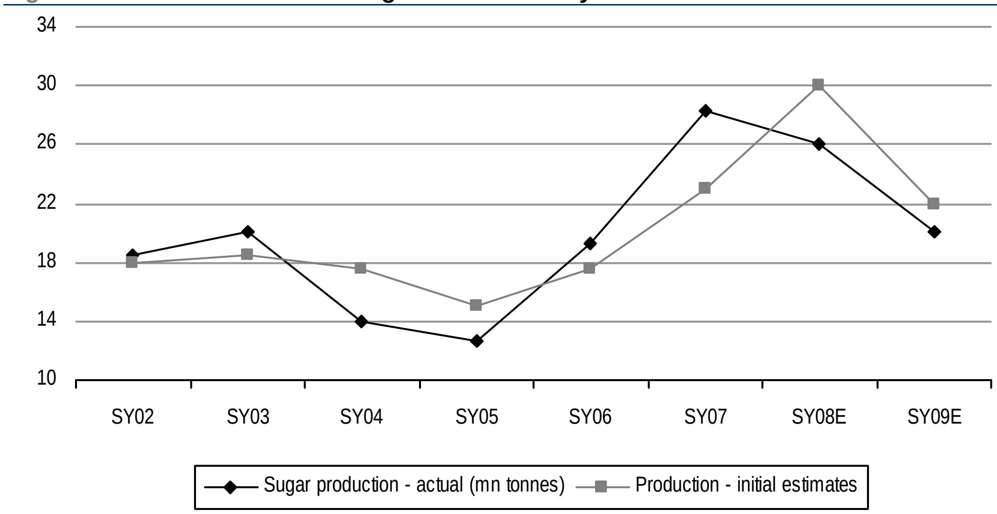
Historically, initial estimates of cane and sugar production tend to underestimate the actual change, both during up cycles as well as down cycles. The difference has been particularly stark around inflection points and in years of sharp changes. In addition, the trend is even more pronounced for sugar than for sugarcane.

(1) The different factors determining the final production of sugar, such as acreage, yield and drawal rate all move in the same direction. As a result, the increasing or falling trend tends to get compounded along the chain which is not always factored into estimates.

(2) Lack of visibility on both acreage and the drawal rate. Acreage estimates are typically based on anecdotal evidence regarding farmer's crop preferences for the year, while historical values are used in the case of drawal rates, as trends in drawal rates emerge only after harvesting starts. With little visibility, estimates tend to be on the conservative side.

Acreage, yield and drawal rate all move in the same direction compounding the effect of each other

Figure 24: **…and even more in sugar – a trend likely to continue**



Note: Based on estimates provided in annual report; SY08E and SY09E figures for actual production indicate our estimates for these years;
Source: Company data, Credit Suisse estimates

Consensus estimate for sugar production for FY09E is 22 mn tonnes versus our estimate of 20 mn tonnes

Demand – supply: Stocks could drop to nearly three months of consumption

In all, we expect sugar production to fall marginally to 26mn tonnes in FY08 and sharply to 20 mn tonnes in FY09E and FY10E. With consumption likely to keep growing steadily and net exports expected to fall to 1 mn tonnes (with risks to the downside) after a peak of 4 mn tonnes this year, a sharp production change could cause stocks to drop to close to three months of consumption by end-FY09E and to below two months of inventory in FY10E.

Sugar stock to use ratio to fall to nearly three months in FY09E and less than two months in FY10E

Figure 25: **We expect stocks to drop to nearly three months of consumption by end-FY09E and lower by end-FY10E**

(mn tonnes)	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07P	FY08E	FY09E	FY10E
Production	18.2	18.5	18.5	20.1	14.0	12.7	19.3	28.3	26.0	20.1	20.9
YoY growth (%)	*17.1*	*1.6*	*-*	*8.6*	*(30.3)*	*(9.3)*	*52.0*	*46.6*	*(8.1)*	*(22.5)*	*3.9*
Domestic consumption	16.1	16.2	16.8	17.5	17.9	18.5	19.0	20.6	21.8	22.8	23.5
Exports	0.1	1.0	1.1	1.5	0.2	-	1.1	1.5	4.0	1.0	-
Imports	0.4	-	-	-	0.4	2.1	-	-	-	-	-
Opening stock	6.8	9.3	10.6	11.2	12.3	8.6	4.0	3.2	9.4	9.6	6.0
Addition/deletion to stock	2.4	1.3	0.6	1.1	(3.7)	(3.7)	(0.8)	6.2	0.2	(3.6)	(2.5)
Closing stock	***9.3***	***10.6***	***11.2***	***12.3***	***8.6***	***4.9***	***3.2***	***9.4***	***9.6***	***6.0***	***3.5***
Stock-to-use ratio (%)	*57.6*	*65.4*	*66.6*	*70.2*	*48.0*	*26.4*	*16.8*	*45.6*	*44.2*	*26.3*	*14.7*
Closing stock (months)	***6.9***	***7.8***	***8.0***	***8.4***	***5.8***	***3.2***	***2.0***	***5.5***	***5.3***	***3.2***	***1.8***

Note: FY denotes sugar year from October to September;
Source: ISMA, Credit Suisse estimates

Industry sources suggest that closing inventory for FY07 could be lower than the ISMA figure due to higher consumption

The key to these estimates lie in our assumptions for cane acreage and the drawal rate both of which have historically been quite volatile. As a result, it is important to analyse the impact of potential deviations of the factors from our base assumptions. The table below summarises the effect of deviations in area and drawal rate assumptions on stock to use ratio. Even a 5% lower planting from our current estimates could take inventory levels close to three months of consumption – the accepted benchmark for a significant sugar shortage scenario. Anecdotal evidence so far suggests 5-10% lower planting in UP and 10-20% lower planting in South India in line with our estimates.

A 5% lower area from our estimates could take stock to below three months of consumption in FY09E …

Figure 26: **Sensitivity analysis to our assumptions for area and drawal rate for FY09E**

Stock to consumption ratio (months) in FY09E	Change in area assumption (%)				
Drawal rate (%)	**-10**	**-5**	**0**	**5**	**10**
65	1.4	1.9	2.4	2.9	3.4
68	1.8	**2.4**	**2.9**	3.4	3.9
70	2.1	**2.6**	**3.2**	3.7	4.2
72	2.4	2.9	3.5	4.0	4.6
75	2.8	3.4	3.9	4.5	5.1

Note: Bolded indicates base case range;

Source: Credit Suisse estimates

… and close to one month of consumption in FY10E

Figure 27: **Sensitivity analysis to our assumptions for area and drawal rate for FY10E**

Stock to consumption ratio (months) in FY10E	Change in area assumption (%)				
Drawal rate (%)	**-10**	**-5**	**0**	**5**	**10**
65	(0.3)	0.2	0.6	1.1	1.6
68	0.1	0.6	1.1	1.6	2.1
70	0.4	**0.9**	**1.4**	1.9	2.4
72	0.6	**1.1**	**1.7**	2.2	2.7
75	1.0	1.6	2.1	2.7	3.2

Source: Bolded indicates base case range;

Source: Credit Suisse estimates

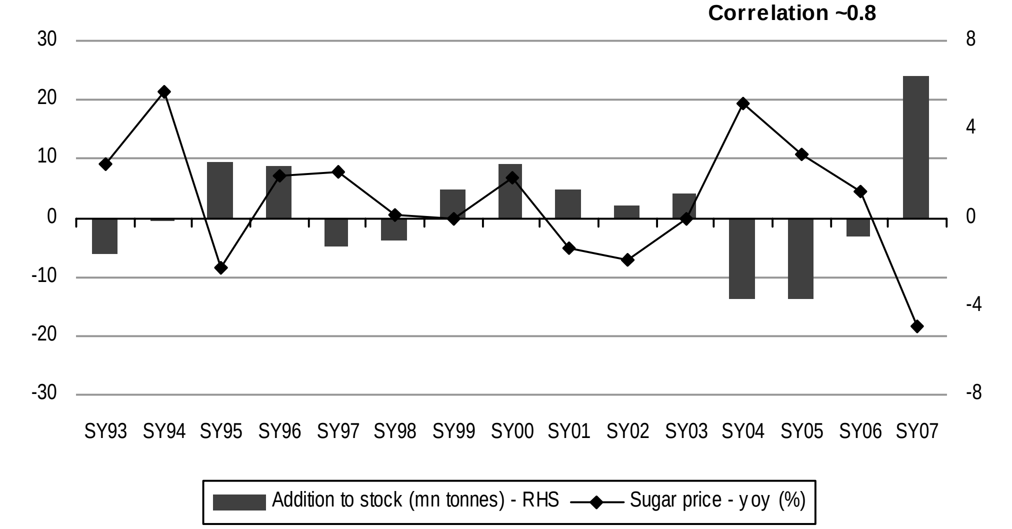
Prices to rise by 25% in FY09E and more in FY10E – early indications are positive

Prices set to rise by more than 30% over the next two years

Sugar prices have historically shown a very strong negative correlation to changes in inventory levels. In addition, price movements tend to be particularly sharp around inflection points of change in inventory. As shown in the figure below, years of significant stock depletion have witnessed a 20% rise in prices YoY in the past. Given, the historic about 20% fall in prices in FY07E, we believe that the price rise in the next up cycle is likely to be greater. As a result, we expect prices to rise by 25% by the end of FY09E and another 5-10% in FY10E.

Figure 28: **Sugar price movements show very strong correlation with change in inventory**

Sugar price is highly correlated to change in inventory

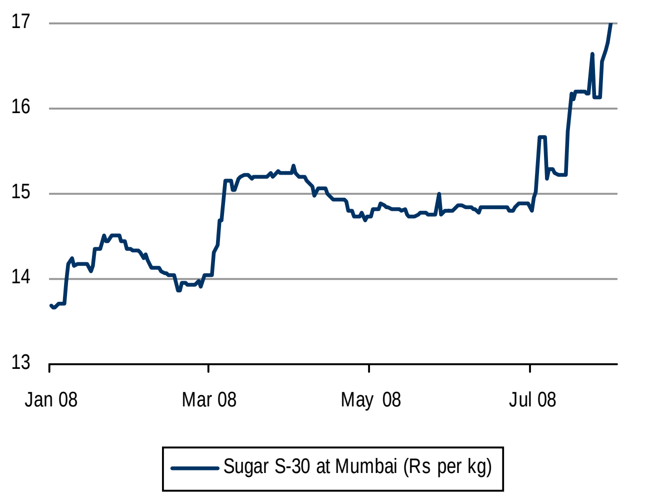


Source: CMIE, ISMA, Credit Suisse estimates

Early indications are positive. In anticipation of the deterioration in supply, sugar prices have moved up sharply over the past few weeks. Year to date, it is up more than 15%, indicating a steadily improving trend.

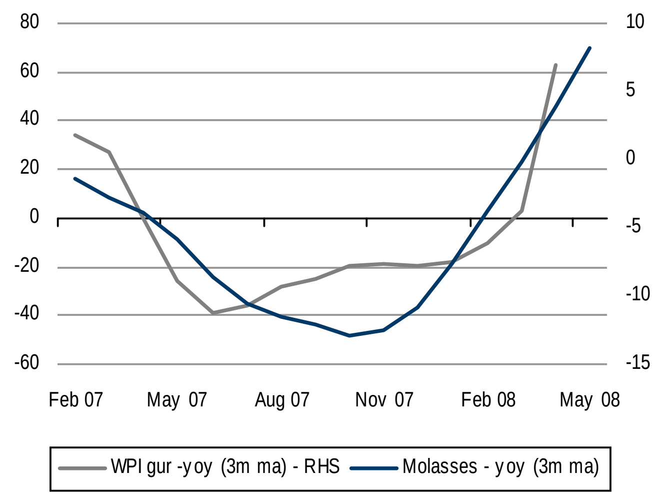
Prices of related products like gur and molasses which typically move in line with sugar are also rising sharply, another positive sign.

Figure 29: **Wholesale prices have moved up 10% over the last few weeks and more than 20% since the year's start**



Source: Bloomberg, Credit Suisse estimates

Figure 30: **Prices of related products like gur and molasses are also shooting up**



Source: CMIE, Credit Suisse estimates

Global prices likely to move up – an incremental positive

With the increasing diversion of cane towards ethanol in Brazil and lower production by India and a few other exporting nations, global prices of sugar are likely to move up over the next 12-18 months. While the domestic demand-supply is likely to be key, given India's marginal exports, higher international prices would be an incremental positive, particularly if the government cuts import duties to control prices.

International prices could move up by at least 10-15% going forward

International prices: Brazil is the key price-setter; prices likely to rise due to higher diversion of cane to ethanol

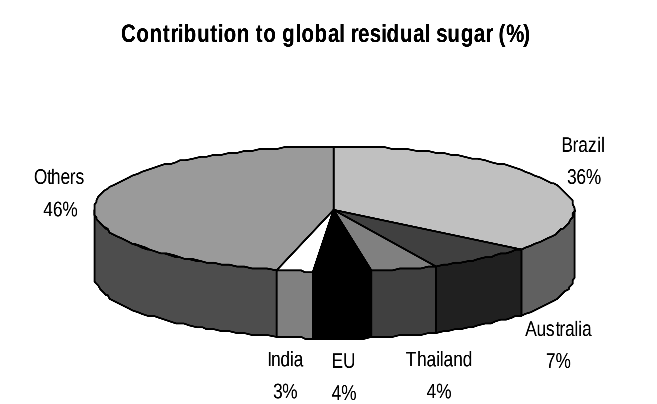
The global production of sugar in FY07 was about 167 mn tonnes. However, the traded market for sugar is much smaller in comparison at only about 55 to 60 mn tonnes a year. Sugar is a regulated commodity in most economies which ensures either no access for other countries or preferential access for a few (usually the least developed countries or LDCs). It is only this traded market for sugar or *'residual sugar'* market, as it is better known, that matters as far as international sugar prices are concerned.

Dynamics in the residual sugar market determine international prices

Brazil's contribution to the residual sugar market is more than a third, making it the key price-setter of international prices. The other major contributors to the residual sugar market are Australia and Thailand; however, their shares still pale in comparison to that of Brazil. India, despite having a production almost similar to that of Brazil, has very little tradable surplus and accounts for only 3% of the global trade in sugar. Thus, a change in the demand-supply situation in India has historically been overshadowed by trends in Brazil in the international sugar markets.

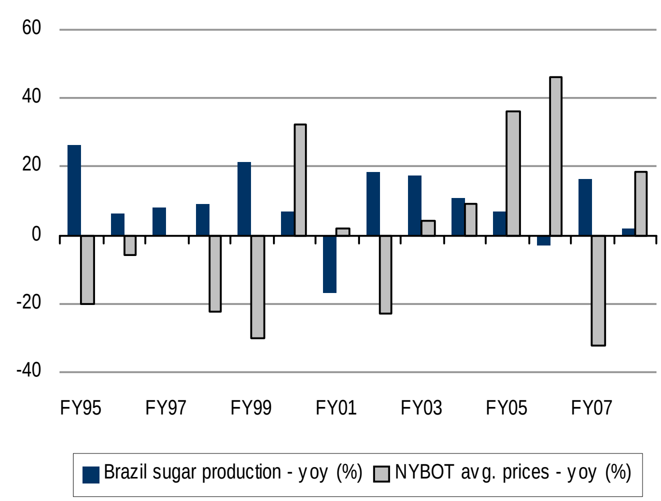
Brazil exports nearly two-thirds of its production and is the key price setter

Figure 31: **Brazil accounts for almost a third of the residual sugar market …**



Source: Bloomberg, Credit Suisse estimates

Figure 32: **…and is the key price-setter**



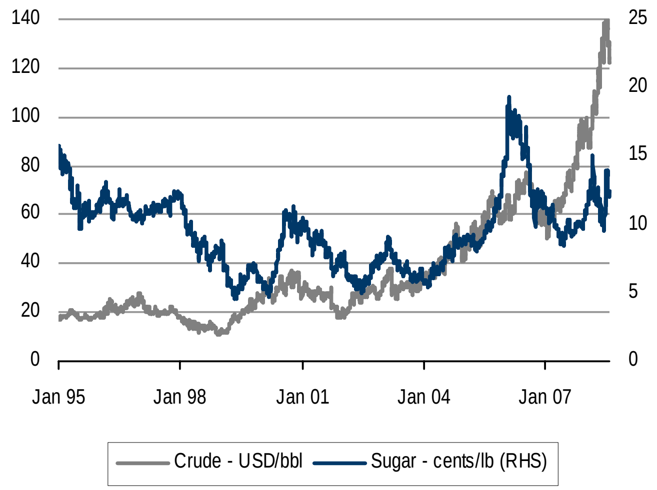
Source: Bloomberg, Credit Suisse estimates

Over the past decade or so, international prices of sugar have been closely tracking the trend in crude oil prices. With rising crude prices, an increasing proportion of Brazil's cane production is being diverted towards ethanol. Unlike in India, it is commercially viable to produce ethanol directly from cane in Brazil due to lower cane prices. Moreover, more than 80% of all new cars in Brazil are flexi-fuel cars which can run on a wide range of 0 to 85% ethanol blend. Higher ethanol production leads to less sugar and higher sugar prices. The proportion of cane being used for ethanol production is currently 50%. With crude unlikely to come below US$100 in the medium term, the demand for fuel ethanol in Brazil is set to be strong; as a result, diversion of cane to ethanol is expected to go up to 56-60% in FY08E and possibly even higher in FY09E.

The crude-sugar price link:

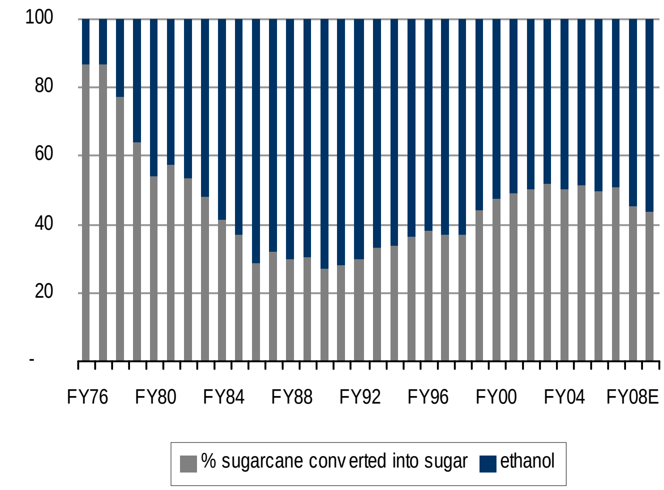
High crude price = greater diversion of cane to ethanol = lower sugar production = high sugar price

Figure 33: **Crude and global sugar prices have shown a strong correlation in this decade**



Source: Bloomberg, Credit Suisse estimates

Figure 34: **Greater diversion of cane towards ethanol by Brazil to put upward pressure on international prices**



Source: Credit Suisse estimates

While recent reports from Brazil's Cane Industry Association – UNICA – suggest that this is going to be another year of bumper cane production in Brazil with output rising by 10%, lower diversion towards sugar should lead to limited increments, if any, in sugar production. This, combined with lower production in India and some other exporting nations, is expected to drive up global prices over the next 12-18 months.

India: exports to fall sharply; imports viable only at high prices

Exports likely to fall to less than 1mn tonnes next year with the withdrawal of subsidies

This year exports of sugar from India are expected to be about 4mn tonnes, a historic high. We expect exports to fall next year, as substantially high exports have been made possible to a large extent by the generous export subsidies provided by the government to help reduce inventory and support the domestic sugar industry. While the central government has provided a subsidy of Rs1,350 per tonne to mills in coastal states and Rs1,450 to those in non-coastal states, the state governments of Maharashtra and Karnataka have offered an additional subsidy of Rs1,000 per tonne to mills in their respective states taking the total amount of subsidies to Rs 2,350 per tonne or US$60. The subsidy period has been extended to end-September. However, we do not expect subsidies to continue in FY09E. Without subsidies and with domestic prices likely moving up, exports are likely to become much less attractive for a number of the mills even in the coastal states; exports are already unviable for mills in non-coastal states like Uttar Pradesh even with subsidies. As a result, we expect exports to come down to 1 mn tonnes or less next year.

Figure 35: **Exports to become unattractive for most mills without subsidies**

(US$/tonne)	Maharashtra/Karnataka	Non-coastal states
Raw sugar		
Viable fob price with subsidies	270	400
Viable fob price w/o subsidies	330	460
Current int'l price	280	280
White sugar		
Viable fob price with subsidies	310	430
Viable fob price w/o subsidies	370	490
Current int'l price	360	360

Source: Credit Suisse estimates

Imports also unviable without drastic cut in duties

Currently, imports are also unviable due to the high import duties on sugar (60% import duty plus Rs850 per tonne countervailing duty). If supply falls drastically over the next couple of seasons, the government may relax these duties partly or fully which can make imports feasible. However, with international prices already rising, should India turn a net importer of sugar, prices are likely to rise appreciably from current levels and are unlikely to be much different from our expectations of domestic prices.

Figure 36: Imports are not viable unless import duties are cut drastically

Landed cost of sugar (Rs per kg)	Australia	Thailand
With CVD + import duty	27	25.5
With only CVD	26	24.5
With only import duty	23.5	20.5
With no CVD & no import duty	17.5	16.5

Note: Assuming current international raw sugar prices at US$280/tonne;

Source: Bloomberg, Credit Suisse estimates

Policy: cane price an overhang, sugar price less likely to be hurt

Policy risks have always been an overhang on the sector with the key regulations being those related to cane procurement, cane and sugar prices. Cane price continues to be an issue particularly in Uttar Pradesh where there is lack of clarity on SAP for FY07, FY08E and FY09E. Our key concerns with regards to cane prices are: 1) the high mandatory price of cane regardless of sugar prices increasing the risks to earnings substantially; 2) the lack of visibility on SAP for FY09-10E with the possibility of higher-than-anticipated cane prices. Though unlikely in our view, the cane price can also be a trigger for the stocks in the near term – a favourable judgment in the Supreme Court with respect to the cane SAPs for FY07E and FY08E or a lower-than-expected SAP for FY09E could lead to substantial upside. Sugar prices are less likely to be hurt by regulations – strong domestic demand and rising international prices limit the risk to prices on account of measures such as export bans and import duty cuts.

Cane price and not sugar price is the key policy risk in our view

History suggests policy-related risks …

The Indian sugar industry has historically been heavily regulated with restrictions on where one can set up mills, who one can buy cane from, at what price, how much sugar one can sell and even who one can sell to. The key regulations, in our view, are those related to procurement and prices (for both sugarcane and sugar).

- *Procurement.* No mill can be set within a radius of 15 km of an existing mill (called its “command area”). Conversely, a mill cannot refuse to crush any cane that comes from within its command area. Since cane needs to be crushed within 24 hours of harvesting, this effectively locks cane cultivators and mills to each other.

No mill can be set up close to an existing mill and all cane has to be crushed

- *Sugarcane prices*. The central government declares a SMP for cane. In addition, a few states like Uttar Pradesh, Punjab and Tamil Nadu announce an SAP which is typically higher than the SMP. In Uttar Pradesh in particular the SAP announced has been 30-50% higher than the SMP. With sugar prices declining through most of FY07 and mills making losses as a result, the high SAP has become a major issue. A number of mills have challenged the legality and rationale behind the high SAP and the decision of the court in these cases is currently pending. Ironically, the cane growers too have lost out in the process, as losses for the mills have been passed down in the form of large cane payment arrears.

In FY08E, the SAP in Uttar Pradesh was Rs125 per quintal versus an SMP of Rs81.2 per quintal for the rest of the country

- *Sugar prices.* Sugar prices are controlled in two ways: 1) the government declares a monthly release quota for the mills which controls the supply of sugar in the market and 2) mills necessarily have to sell 10% of the sugar through the levy route to the public distribution system at fixed prices. However, these measures are now far less relevant than was the case previously. Thus, sugar prices are largely market determined.

10% of sugar has to be sold to the government; the government decides how much sugar can be sold in the open market

In addition to these structural controls, the government has often intervened with ad-hoc measures aimed at controlling prices near term. The more significant of these have been related to trade where both direct (export bans) and indirect (subsidies, duty cuts/hikes) means have been adopted to control the domestic supply. Most notably in July 2006, the government, fearing the impact of high international prices on domestic prices, banned all sugar exports which effectively created a supply-glut situation and pushed the sector into a downcycle from which it is still recovering. Not only was the export ban lifted in January 2007, less than six months after it had been imposed, but the government even announced export-related subsidies in April – a clear indication of the fickle nature of policy-making in the sector.

The government also intervenes with direct and indirect measures to control prices

… high cane price remains an overhang …

SAP for FY09E is yet to be declared; those for FY07 and FY08E are sub judice

Cane price continues to be an overhang particularly in Uttar Pradesh where there is lack of clarity on prices for FY07, FY08E and FY09E. The SAP for FY09E is yet to be declared and is expected sometime before the start of the crushing season in October. The prices for FY07 and FY08E are sub judice (both are in the Supreme Court). Recently, the Lucknow bench of the Allahabad High Court upheld the SAP of Rs125 per quintal for FY08E (against the interim price of Rs110 per quintal). The order has been appealed in the SC and companies have continued to account for cane at Rs110 per quintal in their latest quarterly results. Accounting for cane at Rs125 per quintal is likely to result in significantly lower earnings (and potentially losses) in FY08E. It also raises the possibility of even higher cane prices in FY09E and FY10E.

We have assumed a cane SAP of Rs125 per quintal for FY08E as per the High Court's verdict and projected a Rs5 per quintal increment for the next two seasons. Our concerns with regards to cane prices are:

At a SAP of Rs125 per quintal, the break-even for sugar is at a realisation of Rs16-17 per kg

(3) A high mandatory price of cane is the key cost item – cane costs account for 70-80% of total costs – regardless of sugar price increasing the risks to earnings substantially. It implies a break-even realisation of Rs16 to Rs17 per kg net of excise at the EBITDA level for the sugar business in FY08E.

(4) Lack of visibility remains on SAP for FY09-10E – the increment could be higher than the Rs 5 per quintal factored into our models leading to even higher cane prices

(5) Most companies have accounted for and paid for cane at Rs110 per quintal for FY08E. The higher cane price would have implications for cash flows and book value with companies which are already highly leveraged being more at risk.

(6) We expect the sequence of appeals and counter-appeals in court to continue for future season SAPs as well making cane price uncertainty a persistent overhang on the sector.

Cane prices could be lower if the court judgment is favourable – an upside risk

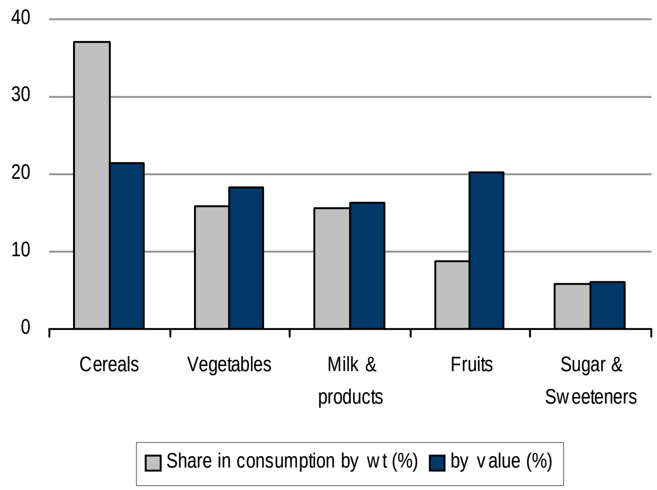
Though unlikely in our view, the cane price could also be a trigger for the stocks in the near term. A favourable verdict in the Supreme Court with respect to cane SAPs for FY07 and FY08 or a lower than expected SAP for FY09E could lead to substantial upside.

… but sugar prices less likely to be hurt by regulations

Weight of sugar in WPI is higher than that of rice and wheat combined!

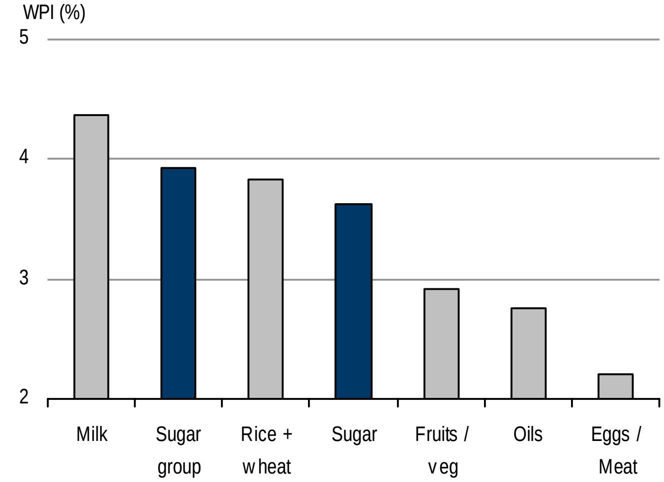
Sugar has historically been a part of the Essential Commodities Act and hence the government is duty-bound to regulate prices by controlling procurement, storage and trade. However, in reality sugar currently accounts for less than 1% of the household expenditure of even the lower quintile of the population and is thus far less critical than many of the other "essential commodities". Yet sugar prices have been more actively managed by the government than many other products. We believe that the main reason behind this is sugar's inordinately high weight in the Wholesale Price Index (WPI) – the key inflation indicator in India. Sugar's weight of 3.62 is almost as high as rice and wheat combined – the two key staples of India. Only milk among food items has a higher weight than sugar in the index.

Figure 37: **Sugar has one of the lowest shares in consumption both by weight as well as value …**



Note: Data is for 2001-03;
Source: FAO, Credit Suisse estimates

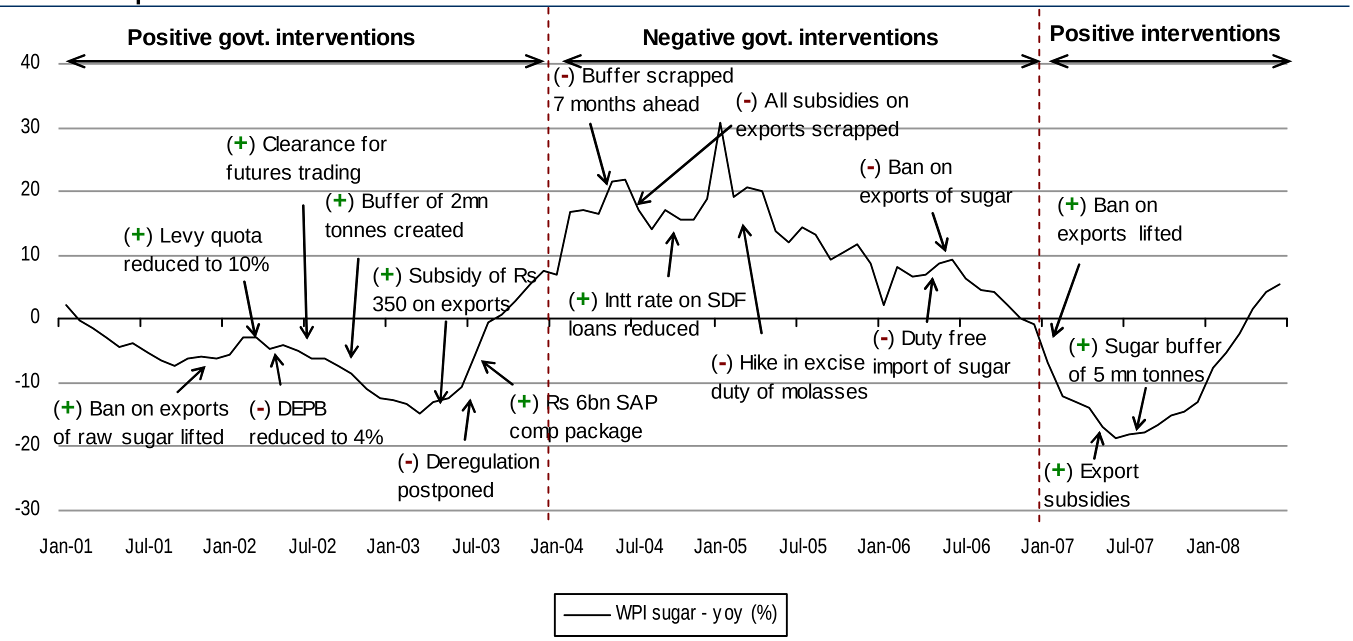
Figure 38: **… yet the weight of sugar in WPI is comparable to that of rice and wheat combined!**



Note: Sugar group includes sugar, gur and khandsari;
Source: CMIE, Credit Suisse estimates

As a result, over the past few years government policy-making towards sugar has been strongly influenced by the movements in the WPI sugar index. While there are reports of a possible re-allocation of weights within WPI with the Abhijit Sen Committee recommending a three-fold increase in the number of items in the WPI basket, we do not see this getting implemented in the next 12-18 months.

Figure 39: **Government interventions in the sector has historically been linked to domestic sugar prices with some lag – a trend we expect will continue**



Source: CRISINFAC, ISMA Press News, Credit Suisse estimates

However we do not expect sugar prices to be significantly impacted by regulations.

- As shown in the figure above, negative policy interventions like export bans start late into the up-cycle only after prices have risen appreciably. Sugar price, as indicated by the WPI, is still recovering from the lows of last year and most mills are yet to break-even. Many of the positive regulatory interventions introduced when prices were low, such as export subsidies and buffer stock subsidies, are still in place. It is likely that these will first be withdrawn over the next six to 12 months before the government considers more drastic measures such as export ban or removal of import duties.

- Moreover, we do not expect either export ban or import duties to impact our price estimates substantially. We estimate exports to be marginal going forward and the price rise is likely to driven mostly by the domestic shortage scenario. Moreover, we believe that the sharp decline in prices that marked the end of the previous down-cycle was sustainable due to a huge upswing in domestic supply from 19 to 28 mn tonnes even though the export ban may have been the trigger. On the other hand, given rising international prices, we do not expect imports prices to be much lower than domestic prices. India importing sugar would drive up prices even more.

Strong domestic demand and rising international prices limit the risk to prices on account of measures such as export ban and import duty cuts

De-control unlikely near term, in our view

The recent downturn in the industry and the resultant pains undergone by both the mills and the farmers have brought the issue of decontrol in general and that of linking cane and sugar prices in particular to the fore-front again. A little context is necessary here.

The sugar industry has been going through various stages of decontrol for more than a decade now. The key milestones so far have been the delicensing of the industry in 1998 (prior to this, sugar companies required licences to set up capacity or even expand existing capacity) and the gradual reduction in the levy sugar quota from 40% in 2000 to 10% currently. Two committees appointed by the government – 1) the Mahajan Committee in 1998 and 2) the Tuteja Committee in 2004 – made extensive recommendations in this regard. We summarise below the sequence of events that triggered this round of speculation on deregulation of the sector.

De-control has been contemplated several times in the past decade

- Sharad Pawar, the central agriculture minister, has submitted a proposal for a two-stage decontrol of the industry. In the first stage, he proposed de-control of sugar prices through measures, such as: 1) the removal of the 10% levy-sugar sales and 2) the removal of the monthly release order mechanism. In the second stage, the other regulations regarding cane reservation, command area for mills and SAP would be removed.
- On the other hand, the Prime Minister's Economic Advisory Committee (EAC) headed by C Rangarajan has recommended that the de-control take place in a single phase in stead of multiple phases, as suggested by the agriculture ministry
- Meanwhile, an expert group has been constituted to examine the issue of reforms in its entirety and is yet to submit its proposals.

Partial de-control is being considered with removal of the 10% levy on sugar sales and monthly release mechanism

We feel that de-control of the sector in the near term is unlikely.

(1) *Political situation at the centre: p*olitical uncertainty at the centre and existing political equations post the confidence vote are unlikely to be favourable for a de-control of the sector.

(2) *Inflation concerns:* inflation in double digits is one of the primary concerns of the government at the moment. With sugar's abnormally high weight in WPI, this may not be the best time for the government to push for a complete de-control

(3) *Poor track record of reforms in India:* the economic history of India is replete with examples of proposed reforms that have failed to get implemented. The government has been toying with the issue of sugar de-control itself ever since the Tuteja Committee made its recommendations in 2004. However, not much has been achieved in this regard over the years. As a case in point in June 2003 when sugar was in a similar stage of the cycle, a decision on deregulation was postponed to October 2005.

Current political situation makes de-control unlikely

Integration: contribution to rise

Over the past few years, the Indian sugar industry has increasingly been shifting to a more integrated model with the bigger players in particular investing heavily in setting up distillery and co-generation capacity. There are multiple drivers for this change: 1) a higher realization per unit of cane crushed – distillery and power can add up to Rs6 per kg of sugar sold, 2) lower cyclicality and 3) a likely spurt in ethanol demand in India with increased blending. We expect the contribution of distillery and cogeneration to continue rising for most players as new capacity becomes operational. With large pass through to the bottom line, the impact on margins is likely to be significant – even as utilisations fall on account of lower cane availability. Lower cane availability is also likely to lead to a demand-supply mis-match for distillery products with attendant impact on prices.

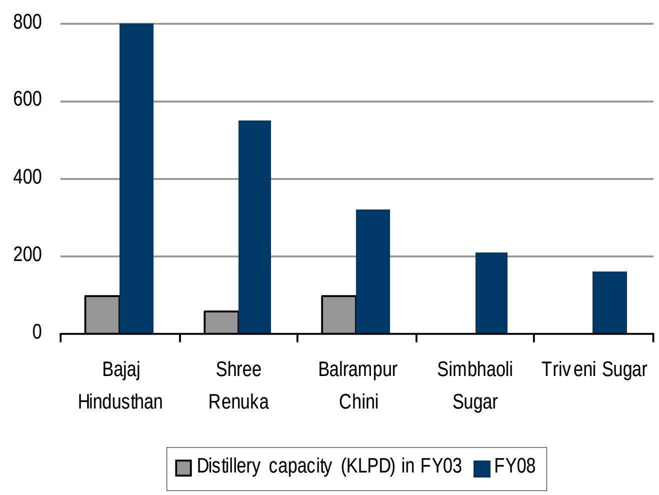
Integration can contribute up to Rs6 per kg of sugar sold with large pass through to the bottom line

Higher margins, lower cyclicality driving shift towards integration

Perhaps the biggest change in the domestic sugar industry over the last five years has been a shift towards a more integrated business model. We believe that this is a structural change with long-term implications for business cyclicality, growth and profitability. While an integrated model has been in existence for some time in sugar industries elsewhere in the world, the trends are likely to be different for India given differences in operating economics of the domestic industry and the unique regulatory framework within which it operates.

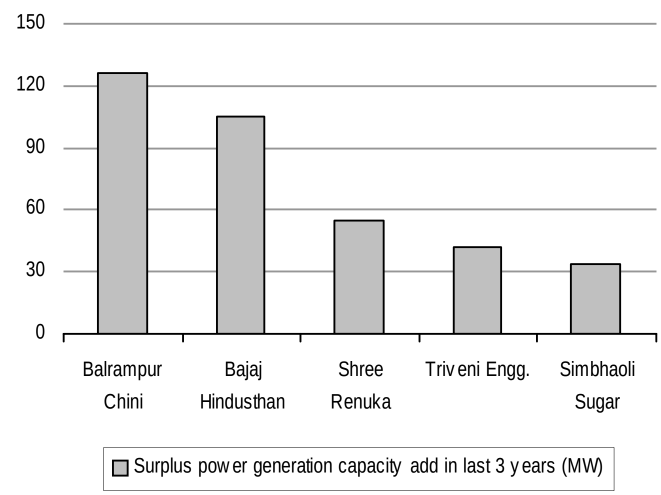
Shift towards integration, a long-term trend driven by: 1) higher margins, 2) lower cyclicality, and 3) rising ethanol and power demand

Figure 40: **There has been significant capacity addition to distillery all around**



Source: Company data, Credit Suisse estimates

Figure 41: **A number of sugar companies are now selling surplus power to the grid**

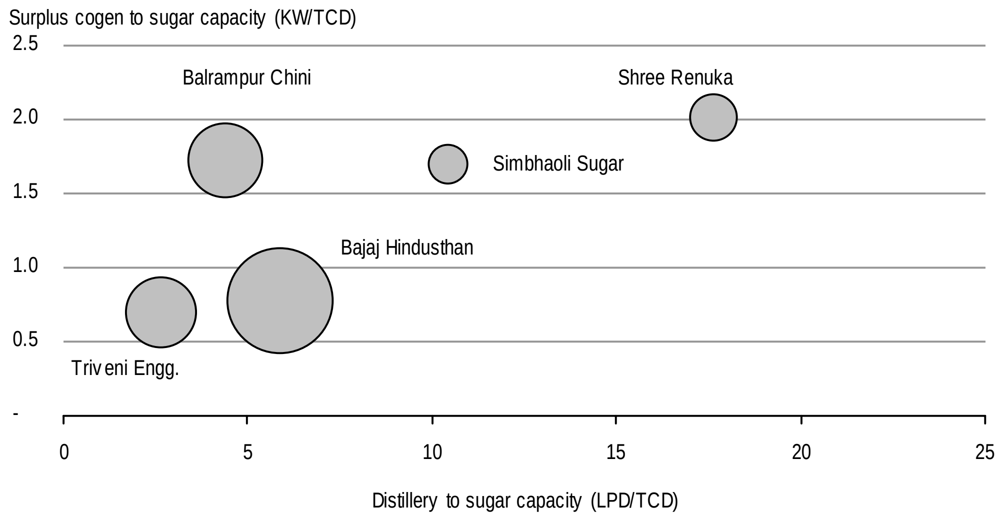


Source: Company data, Credit Suisse estimates

Distillery and cogeneration capacities have increased manifold across the industry over the last few years. This has led to a more diversified product base with lower contribution from the sugar segment for most. Yet there is still scope for capacity expansion in integrated products as most players continue to have a sub-optimal ratio of both distillery to sugar and cogeneration to crushing capacity.

Distillery and cogeneration capacities have increased manifold …

Figure 42: **There is scope for further integration for most major players**



Note: Size of bubble indicates crushing capacity in TCD;
Source: Company data, Credit Suisse estimates

… but scope for further integration exists

While there has been a brief pause in new capacity investment of late partly on account of funding issues and partly on account of lower cane availability, we expect the shift towards greater integration to continue in the longer term. There are many economic and strategic reasons that are driving this change.

(1) More gain per cane; significant contribution to margins

Ethanol and power can contribute up to Rs6 per kg of sugar sold with large pass through to margins

Producing distillery products and exporting power makes economic sense. As shown in the table below ethanol and power lead to substantially higher realisations than can be obtained by selling molasses and bagasse produced from the same amount of cane. Also, while the contribution to top line is low, integration can lead to significant margin improvement as the pass through to the bottom line is high.

Figure 43: **Alcohol and power provide higher net realization than molasses and bagasse**

Product	Gross realization per tonne of cane crushed (Rs)	Net realization (Rs)	Price assumption	Unit
Sugar	1,800	300	18	Rs per kg
Molasses	130	90	2,500	Rs per tonne
Fuel ethanol	270	130	21.5	Re per litre
Bagasse	100	70	300	Rs per tonne
Surplus power	300	150	3	Rs per KWhr

Source: Credit Suisse estimates

(2) Lower cyclicality

Integration helps reduce cyclicality in earnings

Sugar prices and therefore operating margins for these companies vary significantly across the cycle. Prices of molasses and bagasse the basic by-products are even more volatile and move in line with sugar prices. By comparison, prices of distillery products and power are far more stable. Fuel ethanol and power are sold through long-term contracts with pre-set prices. These can help lower the cyclicality of the business and improve margins in a down-cycle.

Figure 44: **Prices of ethanol and power show far less volatility**

Yoy change in prices (%)	FY06A	FY07	FY08E	FY09E	FY10E
Sugar	5.3	(21.5)	2.7	18.2	9.2
Molasses	(16.7)	(25.2)	20.5	25.0	7.6
Fuel ethanol	n/a	5.4	10.3	-	-
Other distillery products	(5.1)	11.7	2.0	15.0	5.0
Power	1.4	1.4	1.3	1.3	1.3

Source: Credit Suisse estimates

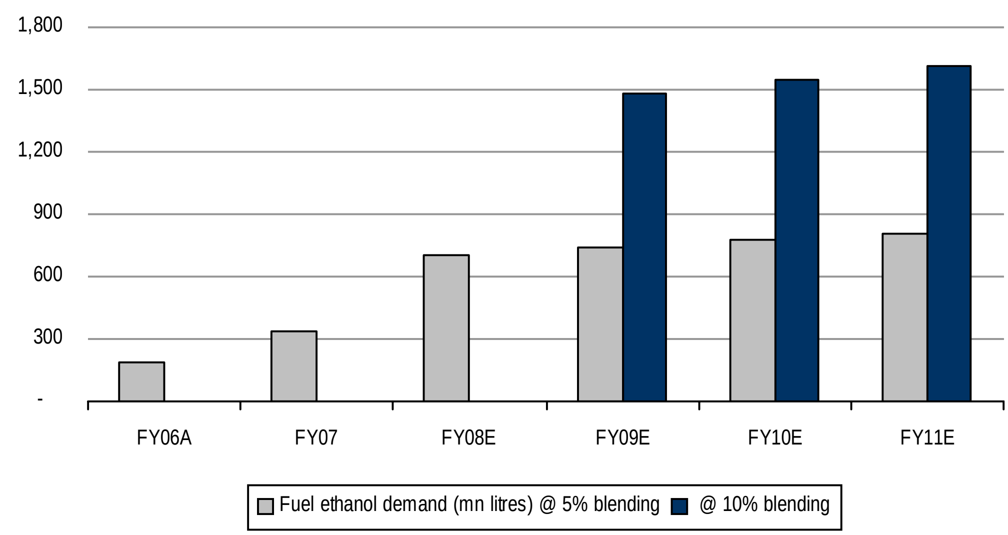
(3) Demand, prices for fuel ethanol, power set to rise

Higher realisation and cyclicality apart, the industry is now increasingly beginning to view the distillery and cogeneration segments as major growth opportunities.

Ethanol blending in India is on the rise – target is E10

With crude prices rising to historical highs and global oil reserves depleting rapidly use of ethanol from corn and sugarcane has caught the fancy of policy-makers the world over. In India too, the government has made blending of ethanol in petrol to the extent of 5% mandatory. This has been raised to 10% from beginning of October, 2008 though the implementation may take time. As a result, demand for ethanol is set to surge in the medium to long term with attendant impact on prices. Sugar companies with ready access to molasses, the key input, are best positioned to make use of this opportunity.

Figure 45: **Demand for fuel ethanol could rise materially from existing levels with implementation of 10% mandatory blending**



Note: FY denotes year from October to September;
Source: Credit Suisse estimates

Tremendous potential in cogeneration – merchant power prices on the rise

According to the Central Electricity Authority (CEA), India's power deficit is currently about 10% of demand and is set to rise. As a result the government has been exploring various options in order to bridge the demand-supply gap to the extent possible. In this context, export of surplus power from cogeneration has emerged as a major opportunity. To boost investment in cogeneration the government has been offering sops such as tax rebates and interest free loans. In addition, mills are now allowed to sell merchant power directly in stead of selling it to the State Electricity Boards (SEBs) – Shree Renuka Sugar has successfully made use of this regulation to sell power at significantly higher rates than the industry. As per industry estimates, the potential for bagasse based co-generation is close to 3,500 MW of which only a small proportion has been realized so far. Even for companies which are currently exporting excess power there is potential to sell more.

Contribution to rise with capacity addition; cane availability a concern

We expect the contribution from alcohol and power to rise for most players as new capacity becomes operational. With large pass-through to the bottom line, the impact on margins is likely to be significant.

Contribution from distillery and cogen set to rise with new capacity

However, utilisation is likely to fall due to lower cane availability as the amount of alcohol and power produced is directly proportional to cane crushed. We have factored in a 10-15% drop in utilisation, in line with our assumptions on cane sourcing.

Less cane = lower utilisation

- *Less cane = less by-products:* Since by-products are extracted from cane in a fixed ratio, less cane crushed automatically implies less of by-products as well.

Figure 46: By-products can be produced from cane only in fixed ratios

Products obtained from 1 tonne of cane	Amount	Remarks
Sugar (kg)	100	Recovery rate varies between 9% and 11%
Molasses (kg)	53	Recovery rate can go up to 6-7% depending on route adopted
Alcohol (litres)	13	Can be much higher if cane is directly converted to ethanol
Bagasse (kg)	300	Recovery rate varies between 27-33%
Surplus power (KWhr)	100	Can vary depending on boiler configuration

Source: Company data, Credit Suisse estimates

- *Sugar is sold from inventory at times of shortage, which is not the case with by-products:* Historically, in situations of under-production, more sugar is sold than is produced by running down inventory. As a result, sugar sales fall by less than the fall in sugar production. This is less the case with by-products as most companies do not have any appreciable inventory of distillery products, molasses or bagasse (of course in case of power, the question of storage does not arise!).

E10, direct ethanol manufacturing: unlikely near term

Of late, there has been considerable debate and discussion on implementation of E10 in India particularly with crude prices being where they are. The government has recently allowed direct manufacturing of ethanol from cane as well. We feel though that both E10 and direct ethanol manufacturing are unlikely in the near term.

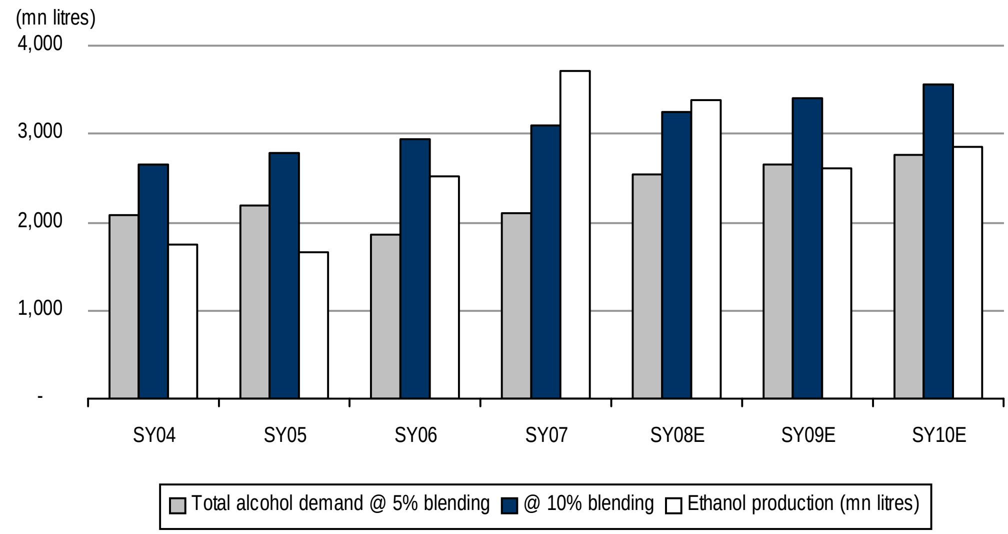
Molasses based alcohol is not just used for fuel ethanol in India. Nearly 80% of all potable alcohol is molasses based. There is considerable demand for various molasses based distillery products for industrial usage as well. Our analysis shows that even if all the cane crushed is converted into ethanol – which is extremely unlikely given that a large proportion of the molasses produced are wasted due to lack of access to distilleries – it will not be sufficient to meet the total demand for alcohol assuming 10% ethanol blending in petrol.

Lower cane availability is likely to delay E10 implementation in India as demand for alcohol outstrips supply …

We believe that the upside to this lies in the form of a potential rise in prices of distillery products. As a precursor, molasses prices are up 50% YTD and are expected to rise more over the next few months. We have factored in a 5-10% rise for distillery products. While prices of fuel ethanol have been locked in for a three year period at Rs21.5 per litre, we think there is potential for a rise in prices in future rounds of bidding here as well. We have not factored this into the model but see this is as a potential upside to our earnings estimates.

… prices could rise as a result

Figure 47: Lower cane availability is likely to delay implementation of E10



Note: Production estimates are assuming full conversion of sugar to ethanol;
Source: Company data, Credit Suisse estimates

Direct ethanol manufacturing from cane still not viable in India at current prices of cane and ethanol

Direct ethanol manufacturing from cane has also received a lot of attention of late as rising crude prices have intensified the search for viable alternatives in India and elsewhere. The government on its part has allowed the direct conversion of cane to ethanol fuelling further speculation on the matter. Comparisons are being drawn with Brazil where more than half the cane is used for manufacturing ethanol and where the ethanol blending programme has been highly successful. Yet the fact remains that cane prices in India are nearly double that in Brazil (due to lower yield, high minimum assured prices, no corporate farming etc.) which makes direct conversion to ethanol from cane economically unviable at current price levels. Also India's cane production is just enough to meet domestic sugar supply. Diversion of acreage for bio-fuel is likely to impact the acreage of cane for sugar and indeed all other crops – the implications of this for food self-sufficiency is unlikely to go down well with policy-makers. Hence, we do not see direct ethanol manufacturing from cane as a likely scenario in the near-term.

Stock pick: play the price, but mind the cost

We expect the rise in sugar prices to drive stock prices in the sector. Uttar Pradesh-based mills are likely to be the biggest beneficiaries as sugar price in UP is not linked to cane price leading to a greater impact of rising prices on earnings. We initiate on Balrampur Chini with an OUTPERFORM and a target price of Rs120. Bajaj Hindusthan has one of the highest betas to rising sugar prices – however, we remain cautious on the stock on account of a number of headwinds. We initiate with a NEUTRAL rating and a target price of 199. A favourable verdict on the pending cases relating to cane prices could provide upside to both the stocks. Shree Renuka has relatively less to gain from rising sugar prices – yet a unique business model and strong secular growth prospects make it an attractive long term investment opportunity in our view. We initiate with OUTPERFORM and a target price of Rs165.

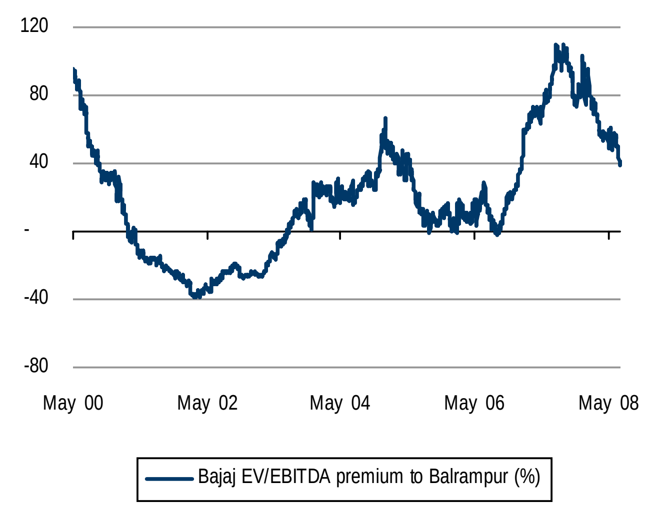
Balrampur is our top pick to play the sugar price theme; we like Shree Renuka as a long term play

Prefer Balrampur to Bajaj to play price story in high cane price environment

We expect the rise in sugar prices to drive stock prices in the sector. UP-based mills are likely to be the biggest beneficiaries as sugar price in UP is not linked to cane price leading to a greater impact of rising prices on earnings. We initiate on Balrampur Chini with an OUTPERFORM and a target price of Rs120.

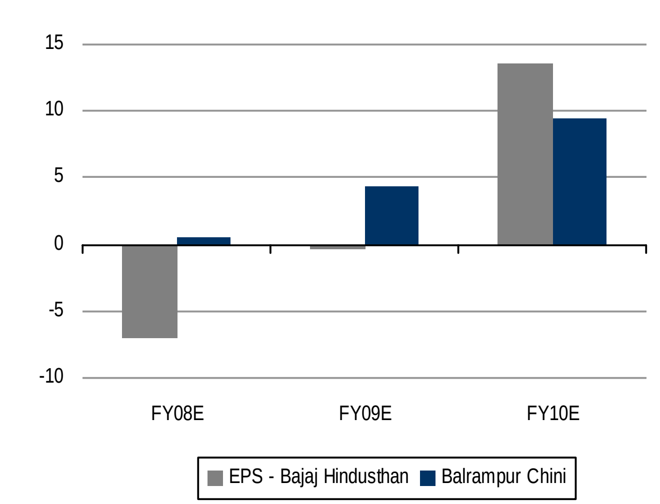
Initiate on Balrampur with OUTPERFORM and a target price of 120

Figure 48: **Bajaj has been trading at a significant premium to Balrampur**



Source: Company data, Credit Suisse estimates

Figure 49: **More stable earnings for Balrampur in high cane price environment**



Source: Company data, Credit Suisse estimates

While Bajaj has one of the highest betas to rising sugar prices on account of its high leverage and large contribution from sugar, we remain cautious on the stock on account of a number of headwinds: 1) cane price uncertainty given its relatively lower contribution from distillery and cogen, 2) high leverage and 3) execution risks due to large arrears and aggressive ramp-up through new subsidiaries. Bajaj currently trades at a significant premium to Balrampur, which we believe is unjustified as the benefits of higher beta to sugar prices are offset by higher operational risks. We initiate with a NEUTRAL rating and a target price of 199. A favourable verdict on the pending cases relating to cane prices could provide significant upside to the stock.

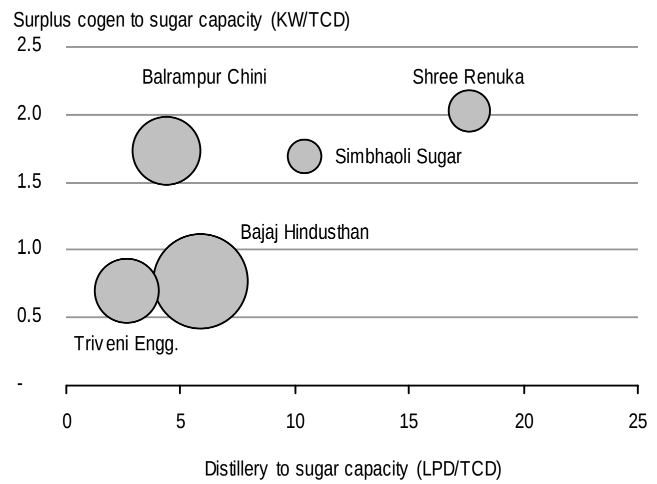
We remain cautious on Bajaj Hindusthan – initiate with NEUTRAL and target price of Rs199

Shree Renuka – a long-term play

Shree Renuka Sugar is reducing its dependence on the core sugar business with an increasing contribution to both revenues and margins coming from renewables, particularly ethanol. Moreover, even its sugar business is less cyclical due to its presence in sugar refining and on account of cane price in south India, where all its mills are located, being closely linked to sugar price. As a result, it has relatively less to gain from rising sugar price – yet a unique business model and strong secular growth prospects make it an attractive investment opportunity in our view. We initiate with OUTPERFORM and a target price of Rs165. New investments being planned could provide further upside to our target price.

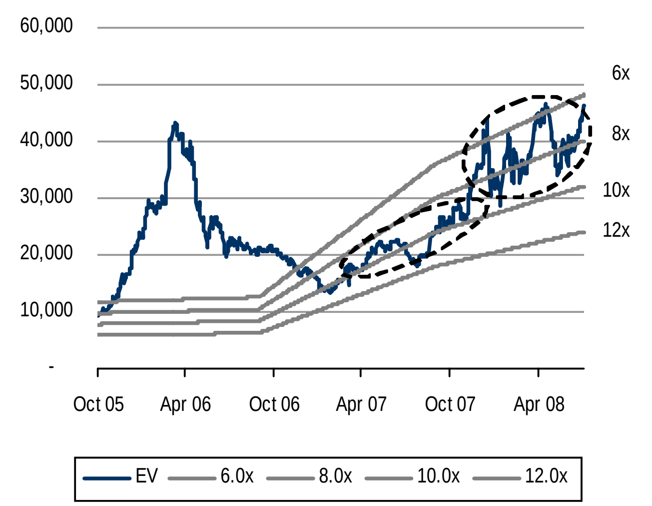
Initiate on Shree Renuka with OUTPERFORM and a target price of Rs165

Figure 50: By FY10 more than 40% of Shree Renuka's revenues will be from distillery and cogen



Source: Company data, Credit Suisse estimates

Figure 51: The stock has seen some re-rating of late



Source: Company data, Credit Suisse estimates

Asia Pacific / India
Agricultural Products & Agribusiness

Bajaj Hindusthan Ltd

(BJHN.BO / BJH IN)

Rating	NEUTRAL* [V]
Price (06 Aug 08, Rs)	182.95
Target price (Rs)	199.47[1]
Chg to TP (%)	9.0
Market cap. (Rs mn)	25,869.13 (US$ 615.93)
Enterprise value (Rs mn)	62,136
Number of shares (mn)	141.40
Free float (%)	54.00
52-week price range	390.45 - 121.10

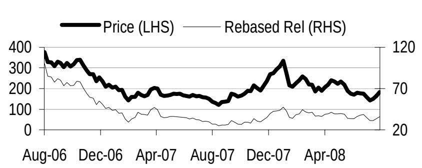
**Stock ratings are relative to the relevant country index.*
[1]Target price is for 12 months.
[V] = Stock considered volatile (see Disclosure Appendix).

Research Analysts
Arya Sen
9122 6777 3807
arya.sen@credit-suisse.com

Price rise may not be enough

- **Event:** We initiate coverage with a NEUTRAL rating and a target price of Rs199.
- **View:** The stock is very high beta to sugar prices on account of high leverage and a large proportion of revenues (close to 85% by FY10E) coming from the sugar segment. As a result, both revenue and margins are set to benefit substantially from an expected rise in sugar realisations of 20-25% in FY09E and another 10% in FY10E. On a consolidated basis, we estimate revenues to have a 30% CAGR over the next two years with the EBITDA margin expanding to 20% by FY10E. However, while Bajaj Hindusthan stands to gain the most from rising sugar prices, there are several headwinds that temper our optimism. We believe the key issues are: 1) uncertainty over cane prices, 2) high leverage 3) performance of new subsidiaries which contribute significantly to revenue and bottom-line growth, 4) cane sourcing on the back of large arrears in past seasons and 5) lower utilisations, due to larger plant size.
- **Catalyst:** We expect rising sugar prices to be a key catalyst for the stock. Favourable court case judgments on SAPs for FY07 and FY08E or a lower-than-expected SAP for FY09E could also lead to significant potential upside for Bajaj.
- **Valuation:** Our target price is based on a FY10E EV/EBITDA multiple of 7x (11.5x FY09 EV/EBITDA). Over the last couple of years, Bajaj has traded at a significant premium to the sector. We do not believe the premium is justified, as the benefits of higher beta to sugar prices are likely to be largely offset by higher operational risks. We do not expect Bajaj Hindusthan to report positive earnings even in FY09E despite the higher sugar realisation on account of 1) higher cane costs 2) lower utilisation, 3) higher depreciation costs and 4) higher interest costs, due to high leverage. We value Bajaj Eco-Tec on a sum of the parts (SOTP) basis at Rs18 per share based on 8x FY10E P/E.

Share price performance



The price relative chart measures performance against the BOMBAY SE 30 SHARE SENSITIVE index which closed at 15073.54 on 06/08/08
On 06/08/08 the spot exchange rate was Rs42.00/US$1

Performance	1M	3M	12M
Absolute (%)	4.6	-19.8	23.6
Relative (%)	-6.6	-7.6	22.2

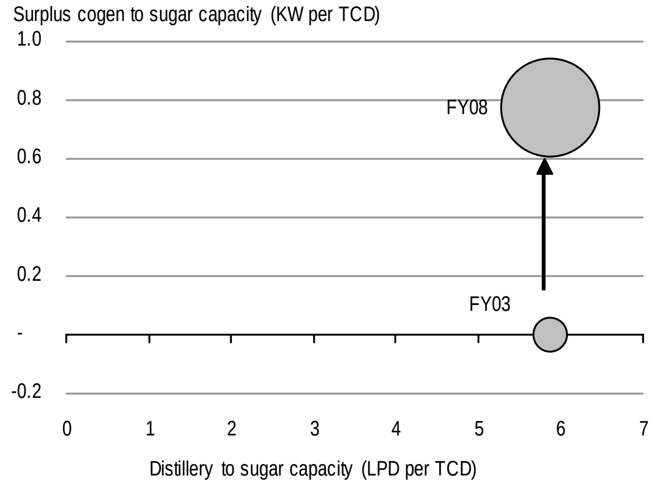
Financial and valuation metrics

Year	9/07A	9/08E	9/09E	9/10E
Revenue (Rs mn)	17,804.1	19,518.6	29,440.5	33,741.8
EBITDA (Rs mn)	1,910.3	2,037.8	4,917.3	7,212.9
EBIT (Rs mn)	299.4	-295.7	2,288.1	4,495.9
Net income (Rs mn)	-297.0	-1,345.5	-52.2	1,920.6
EPS (CS adj., Rs)	-2.10	-9.52	-0.37	13.58
Change from previous EPS (%)	n.a.			
Consensus EPS	n.a.	0	0	0
EPS growth (%)	—	—	—	—
P/E (x)	NM	NM	NM	13.5
Dividend yield (%)	0.33	0.33	0.33	0.33
EV/EBITDA (x)	31.0	30.5	11.6	7.0
P/B (x)	1.8	2.0	2.0	1.7
ROE (%)	0.2	-7.6	-0.4	12.9
Net debt/equity (%)	232.8	278.0	240.5	162.7

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

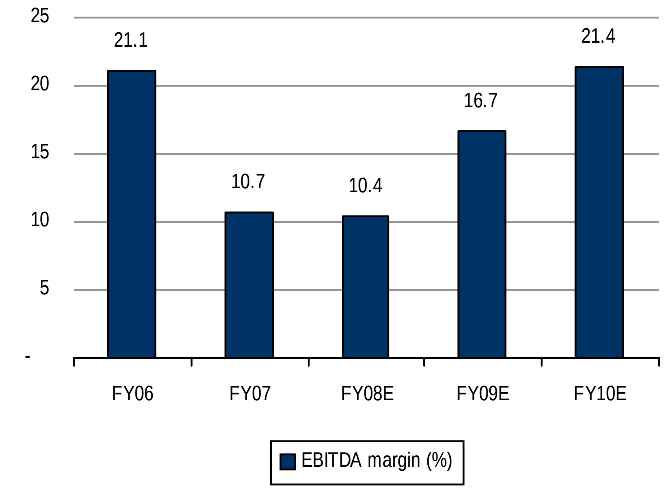
Focus charts

Figure 52: Bajaj – bigger and more integrated than before



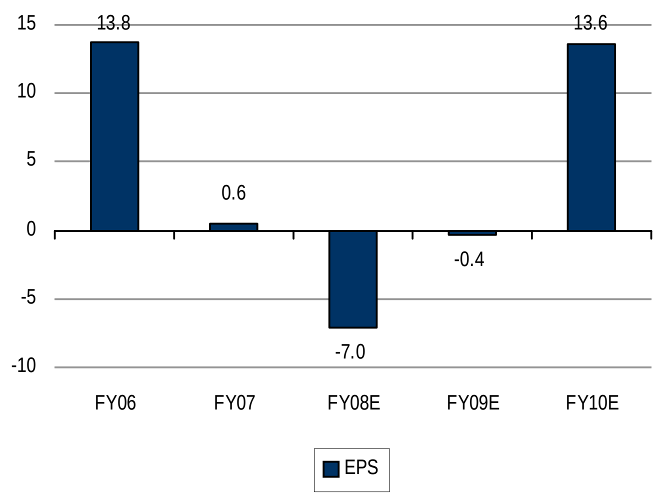
Size of the bubble indicates crushing capacity;
Source: Company data, Credit Suisse estimates

Figure 53: Margins to rise to more than 20%



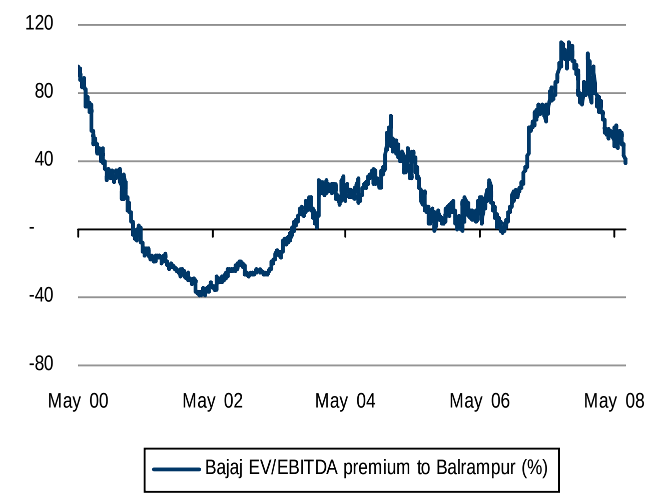
Source: Company data, Credit Suisse estimates

Figure 54: Bajaj may not turn EPS positive in FY09E due to higher interest and depreciation costs



Source: Company data, Credit Suisse estimates

Figure 55: Bajaj is trading at a substantial premium to Balrampur – we expect the divergence to reduce



Source: Company data, Credit Suisse estimates

Figure 56: Bajaj Hindusthan – key assumptions

Parameter	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realisation (Rs per kg)	17.6	13.6	14.7	18.2	20.0	20-25% rise in FY09E; 10% in FY10E
Cane cost (Rs per quintal)	129	101	138	143	148	Expect Rs5 per quintal rise in SAP going forward
Cane crushed (mn tonnes)	7.3	12.6	9.8	8.1	8.5	Drop of 18% in FY09E; rise of 5% in FY10E on low base
Effective days of crushing	138	141	102	84	89	In line with cane crushed
Recovery rate (%)	10.0	9.9	10.0	10.1	10.1	In line with historical
Distillery net realisation (Rs per litre)	18.7	19.5	20.1	23.2	25.0	15% rise in FY09E 7-8% in FY10E
Effective days of operation of distillery	202	273	189	162	162	Molasses availability will be an issue
Cogen realisation (Rs per unit)	n.a.	2.98	3.00	3.06	3.12	Sells to grid; six paise escalation per year
Effective days of operation of cogen	128	120	90	130	135	Bagasse availability less of an issue due to low installed base

Source: Company data, Credit Suisse estimates

Price rise may not be enough

Largest player, high beta to sugar up cycle …

After a massive expansion drive that saw crushing capacity increase 8x along with significant addition to distillery and cogen capacity, Bajaj Hindusthan is now the largest sugar manufacturer in India with nearly double the capacity of the next player. The stock is very high beta to sugar prices on account of high leverage and a large proportion of revenues (close to 85% by FY10E) coming from the sugar segment. As a result, both revenues and margins are set to benefit substantially from an expected rise in sugar realisation of 20-25% in FY09E and another 10% in FY10E. New capacity addition through its subsidiary Bajaj Hindusthan Sugar and Industries Ltd (BHSIL) (BJHS IN, Rs 39.6, NOT RATED) is also likely to contribute significantly to revenue growth. On a consolidated basis we estimate revenues to have a 30% CAGR over the next two years, with the EBITDA margin expanding to 20% by FY10E.

Bajaj has a high beta to sugar price on account of high leverage and large contribution from sugar

… but too many headwinds

While Bajaj Hindusthan stands to gain the most from rising sugar prices, there are several headwinds that temper our optimism: 1) Uncertainty over cane prices remains a major overhang, as the Bajaj's sensitivity to cane costs is high. SAP for FY09E is yet to be declared – high cane price can lead to significant margin erosion. 2) Bajaj is also likely to be adversely impacted by an unfavourable verdict on cane prices for FY07 due to the impact on book value given its existing high leverage (FY07 net D/E of 2.3x). 3) The company has added nearly a third of its capacity through BHSIL, a newly acquired subsidiary in Eastern UP – Bajaj's ability to turnaround and ramp up this unit poses significant execution risks, in our view; operational risks are also high for Bajaj Eco-Tec (not listed), another subsidiary through which it has entered into the completely new business segment of Particle Boards and Medium Density Fibre Boards. 4) Large arrears in FY07 could impact the sourcing of cane more than anticipated. 5) Finally, larger plant size is likely to lead to lower utilisation in this stage of the cycle when cane availability is constrained.

Headwinds, on account of cane price uncertainty, high leverage and execution risks, temper our optimism

Initiate with a NEUTRAL; target price of Rs199

We initiate coverage on Bajaj Hindusthan with a NEUTRAL rating and a target price of Rs199. Our target price is based on a FY10E EV/EBITDA multiple of 7x (FY09 EV/EBITDA of 11.5x). Over the past couple of years, Bajaj has been trading at a significant premium to most other sugar stocks, including Balrampur. We do not believe the premium is justified, as the benefits of higher beta to sugar prices are likely to be largely offset by higher operational risks. We do not expect Bajaj Hindusthan to report positive earnings, even in FY09E, despite the higher sugar realisations on account of: 1) higher cane costs, 2) lower utilisation, 3) higher depreciation costs after the massive capacity expansion and 4) higher interest costs, due to high leverage. On the other hand, favourable verdicts by the Supreme Court on the cane price cases or a lower-than-expected SAP for FY09 could reduce risks materially and provide significant potential upside. We would, however, choose to be cautious at this stage. Our target price implies a FY10E P/E of 13.4x. We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10. We value Bajaj Eco-Tec on an SOTP basis at Rs18 per share at 8x FY10 P/E.

Initiate with a NEUTRAL and target price of Rs199 – favourable cane price verdict could lead to potential upside

Risks

The key risks to the stock are: 1) uncertainty on cane prices, 2) sourcing of cane, 3) the performance of subsidiaries, 4) high leverage and 5) regulatory interventions particularly those aimed at controlling prices.

Largest player, high beta to sugar up-cycle …

After a massive expansion drive that saw crushing capacity increase 8x along with significant additions to distillery and cogen capacity, Bajaj Hindusthan is now the largest sugar manufacturer in India with nearly double the capacity of the next player. The stock is very high beta to sugar prices on account of high leverage and a large proportion of revenues (close to 85% by FY10E) coming from the sugar segment. As a result, both revenues and margins are set to benefit substantially from an expected rise in sugar realisation of 20-25% in FY09E and another 10% in FY10E. New capacity additions through its subsidiary Bajaj Hindusthan Sugar and Industries Limited (BHSIL) are also likely to contribute significantly to revenue growth. On a consolidated basis, we estimate revenue will have a 30% CAGR over the next two years with the EBITDA margin expanding to 20% by FY10E.

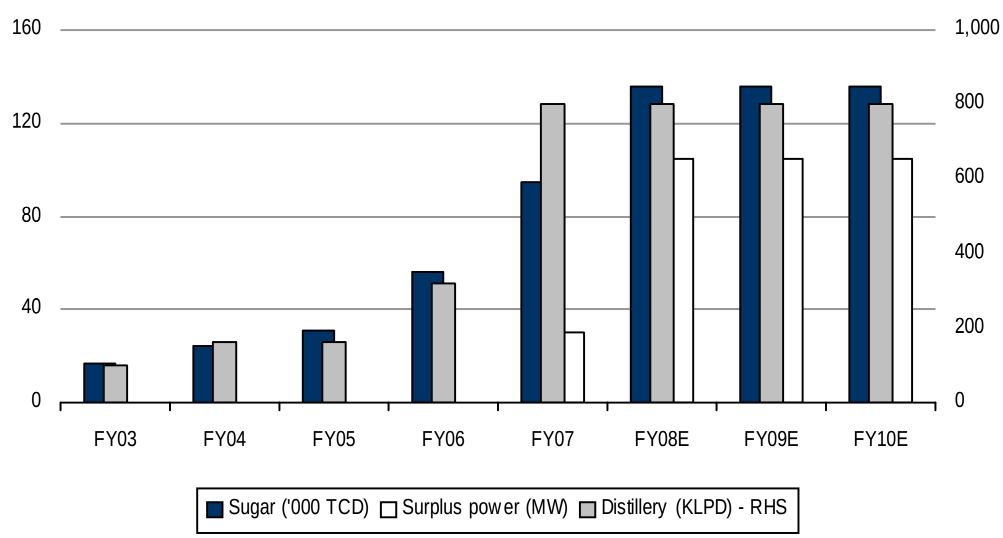
Bajaj has a high beta to sugar price on account of its high leverage and large contribution from sugar

Largest player in India post massive expansion drive

Bajaj Hindusthan is the largest sugar manufacturer in India with a capacity of 136,000 TCD that is nearly twice that of the next player. Since FY03, the company has increased crushing capacity 8x through a combination of acquisitions, expansions and greenfield projects. The company has also added significant capacity in the distillery (160 KLPD in FY03 to 800 KLPD currently) and cogeneration segments (105 MW of exportable capacity).

8x expansion in crushing capacity; distillery capacity at 800 KLPD; export power at 105 MW

Figure 57: Capacities of sugar, distillery and cogeneration have all increased manifold over the past five years



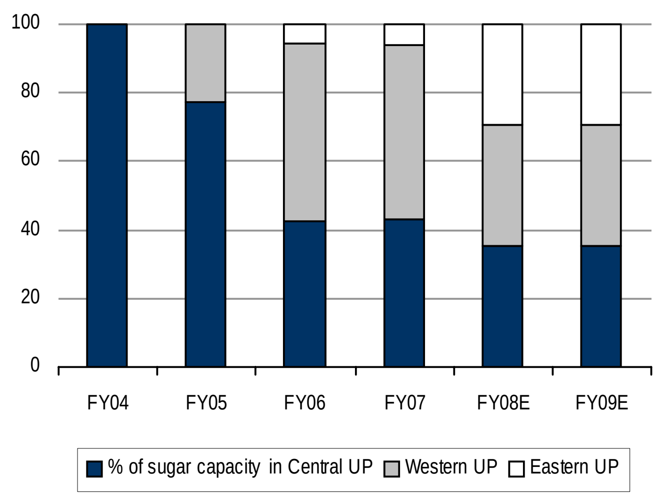
Note: Consolidated capacity;

Source: Company data, Credit Suisse estimates

This phenomenal expansion drive has been motivated by several factors: 1) A strategic decision to have larger plant capacity to derive greater benefits from economies of scale – Bajaj Hindusthan has an average plant size of ~10,000 TCD compared to ~8,000 TCD for Balrampur Chini and ~4,000 TCD for Shree Renuka Sugar. 2) Greater geographical diversification – a large part of the new capacity add has been in Western and Eastern UP whereas the company had mills only in Central UP five years ago. The mills in Eastern UP in particular should provide Bajaj with access to the eastern and north-eastern markets where realisations are usually higher. 3) A benign regulatory regime in Uttar Pradesh where the state government was offering significant sops through the UP Sugar Incentive

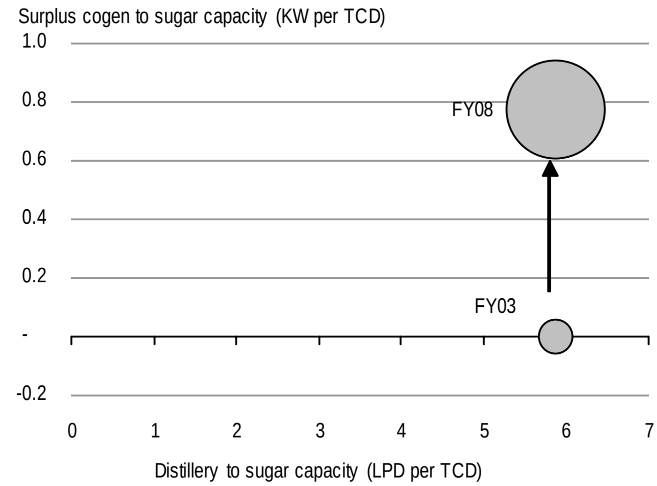
Capacity expansion has led to a more diversified product mix, larger plant size and presence in Eastern UP scheme for investment in the sector (the scheme has since been discontinued); 4) Attractive prospects for the sector and ready availability of funds. A large part of the investment decision and fund raising took place at the peak of the previous sugar cycle when prospects for the sector looked very bright and there was easy access to funds; and 5) The addition in distillery and cogeneration capacity should help extract more value from the cane crushed, leading to a more diversified product base and helping reduce cyclicality in the business.

Figure 58: Bajaj Hindusthan is now a pan-UP player with a presence all over the state …



Source: Company data, Credit Suisse estimates

Figure 59: … and a more diversified product mix



Size of the bubble indicates crushing capacity;
Source: Company data, Credit Suisse estimates

High beta to sugar prices

Bajaj Hindusthan has one of the highest sensitivities to sugar prices in the industry – partly on account of its high leverage and partly due to a higher proportion of its revenues coming from the sugar segment. Currently, the sugar segment accounts for 80% of revenues – with rise in realisation and lower availability of cane for ethanol and power, we expect sugar revenues to contribute close to 85% over the next two seasons.

High leverage and more than 80% of revenues from sugar makes Bajaj a high beta stock to sugar prices

Figure 60: Sensitivity of FY09E EBITDA to cane cost/sugar realisation

FY09E EBITDA (Rs mn)	**Cane SAP (Rs per quintal)**				
Non-levy sugar gross realisation (Rs per kg)	**115**	**120**	**125**	**130**	**135**
17	3,224	2,761	2,297	1,834	1,371
18	4,345	3,882	3,419	2,955	2,492
19	5,467	5,003	**4,540**	**4,076**	3,613
20	6,588	6,124	**5,661**	**5,198**	4,734
21	7,709	7,245	6,782	6,319	5,855

Note: Actual cost of cane is higher than SAP by Rs15 per quintal due to transport charges, purchase tax, society commission; bold indicates base case;
Source: Company data, Credit Suisse estimates

Figure 61: **Sensitivity of FY10 EBITDA to cane cost/sugar realisation**

FY10E EBITDA (Rs mn)	Cane SAP(Rs per quintal)				
Non-levy sugar gross realisation (Rs per kg)	**120**	**125**	**130**	**135**	**140**
19	5,740	5,149	4,558	3,967	3,377
20	6,931	6,340	5,749	5,158	4,568
21	8,122	7,531	**6,940**	**6,349**	5,759
22	9,313	8,722	**8,131**	**7,540**	6,950
23	10,504	9,913	9,322	8,731	8,141

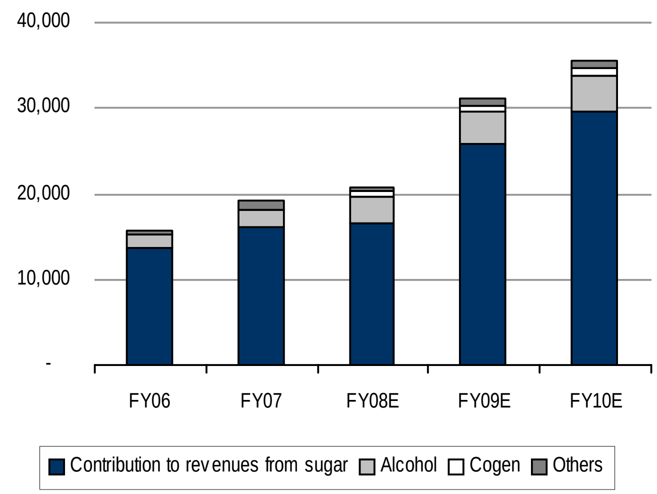
Note: Actual cost of cane is higher than SAP by Rs15 per quintal due to transport charge, purchase tax, society commission; bold indicates base case;

Source: Company data, Credit Suisse estimates

A Rs1 per kg higher realization on sugar can drive up EBITDA by 20-25% on a high base

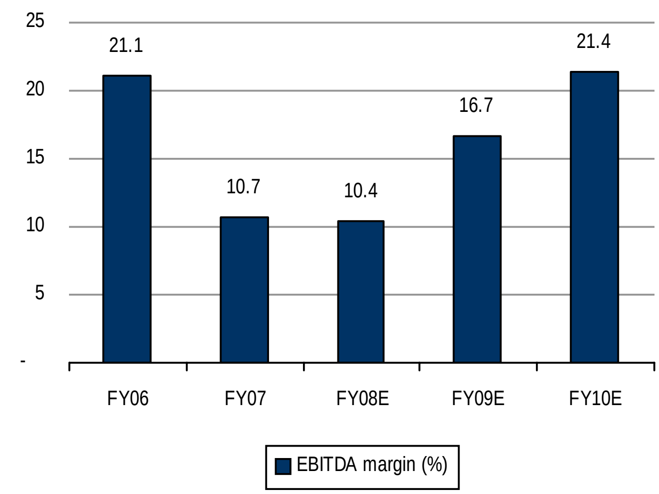
We expect the sugar business to drive both revenue growth and margin expansion. With the new capacity in BHSIL becoming fully operational in FY09E, we estimate consolidated revenues to increase at a 30% CAGR in the next two years. This is likely to be accompanied by significant margin expansion – we estimate the FY10E EBITDA margin to be ~20%.

Figure 62: **Revenue to increase significantly once BHSIL becomes fully operational**



Source: Company data, Credit Suisse estimates

Figure 63: **EBITDA margin to expand to more than 20% by FY10E**



Source: Company data, Credit Suisse estimates

We expect sugar realisations to rise by 20-25% in FY09E and by another 10% in FY10E. We believe a rise of this extent is justified given: 1) the sharp drop in cane production, 2) significantly higher cane costs; and 3) the low base of previous years. Our estimates for key variables such as cane price, realisations, cane sourcing and utilisation are provided below.

Sugar realisations estimated to rise 20-25% in FY09E and 10% in FY10E

Figure 64: **Bajaj Hindusthan – key assumptions**

Parameter	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realisation (Rs per kg)	17.6	13.6	14.7	18.2	20.0	20-25% rise in FY09E; 10% in FY10E
Cane cost (Rs per quintal)	129	101	138	143	148	Expect Rs 5 per quintal rise in SAP going forward
Cane crushed (mn tonnes)	7.3	12.6	9.8	8.1	8.5	Drop of 18% in FY09E; rise of 5% in FY10E on low base
Effective days of crushing	138	141	102	84	89	In line with cane crushed
Recovery rate (%)	10.0	9.9	10.0	10.1	10.1	In line with historical
Distillery net realisation (Rs per litre)	18.7	19.5	20.1	23.2	25.0	15% rise in FY09E; 7-8% in FY10E
Effective days of operation of distillery	202	273	189	162	162	Molasses availability will be an issue
Cogen realisation (Rs per unit)	n.a.	2.98	3.00	3.06	3.12	Sells to grid; 6 paise escalation per year
Effective days of operation of cogen	128	120	90	130	135	Bagasse availability less of an issue due to low installed base

Source: Company data, Credit Suisse estimates

… but too many headwinds

While Bajaj Hindusthan stands to gain the most from rising sugar prices, there are several headwinds that temper our optimism. 1) Uncertainty over cane prices remains a major overhang, as Bajaj's sensitivity to cane costs is very high. SAP for FY09E is yet to be declared – a high cane price could lead to significant margin erosion. 2) Bajaj is also likely to be adversely impacted by an unfavourable verdict on cane prices for FY07 due to the impact on book value, given its existing high leverage (FY07 net D/E of 2.3x). 3) The company has added nearly a third of its capacity through BHSIL, a newly acquired subsidiary in Eastern UP – Bajaj's ability to turn around and ramp up this unit poses significant execution risks, in our view; operational risks are also high for Bajaj Eco-Tec, another subsidiary through which it has entered into the completely new business segment of particle boards and medium density fibre boards. 4) Large arrears in FY07 could impact the sourcing of cane more than anticipated. 5) Finally, a larger plant size is likely to lead to lower utilisations in this stage of the cycle when cane availability is constrained.

Headwinds, on account of cane price uncertainty, high leverage, execution risks temper our optimism

Cane price uncertainty remains an overhang

Bajaj's earnings have very high sensitivity to sugar price/cane costs. Lack of visibility on cane prices – SAP for FY09E is yet to be declared – is the biggest concern, in our view. Currently, we have factored Rs125 per quintal for FY08E, as per the latest judgment of the Allahabad High Court and an increment of Rs 5 per quintal for the next two seasons. The impact of high cane prices on Bajaj is likely to be more, given its slightly lower contribution from distillery and cogeneration combined – Rs3.5 per kg of sugar sold – compared to Rs4.5 per kg of sugar sold for Balrampur. In addition, the judgments on cane prices for FY07 and FY08E have implications for Bajaj's balance sheet and leverage as discussed later.

Cane price for FY09E is yet to be declared – remains an overhang

Figure 65: **Bajaj Hindusthan – sugar likely to contribute 84% to revenues in FY10E**

Rs per kg of sugar sold	**FY05**	**FY06**	**FY07**	**FY08E**	**FY09E**	**FY10E**
Cane crushed (tonnes)	4.3	7.3	13.1	11.7	11.6	12.2
Sugar produced (tonnes)	0.44	0.73	1.29	1.17	1.17	1.24
Recovery rate (%)	10.2	10.0	9.8	9.9	10.1	10.1
Realisation per kg of sugar sold	19.5	21.2	17.2	19.7	23.2	25.1
Sugar	17.5	18.4	14.5	15.6	19.2	20.9
Alcohol	1.3	2.0	1.8	3.0	2.8	2.9
Power – surplus	-	-	0.0	0.5	0.6	0.6
Others	0.7	0.7	0.9	0.6	0.6	0.6
Excise per kg	1.0	1.1	1.2	1.3	1.3	1.3
Net realisation per kg	**18.5**	**20.1**	**16.0**	**18.4**	**21.9**	**23.8**
Cost per kg of sugar sold	**13.9**	**15.8**	**14.0**	**16.5**	**18.2**	**18.7**
Raw material cost	11.6	13.1	10.8	12.6	14.3	14.6
Total processing cost	2.3	2.7	3.2	3.9	4.0	4.1
EBITDA per kg	**4.6**	**4.3**	**2.0**	**1.9**	**3.7**	**5.1**

Source: Company data, Credit Suisse estimates

Distillery and cogen to contribute Rs3.5 per kg of sugar sold

On the other hand, a lower-than-expected cane price, though unlikely in our view, could provide substantial potential upside to our estimates.

High leverage – adverse cane price verdict could worsen the situation

High leverage could lead to significantly high interest costs – situation to worsen if court verdict for FY07 goes against

Bajaj also has extremely high debt on its books with a net debt-to-equity ratio of close to 2.3x. With internal accruals unlikely to be strong in FY08E, and potentially large losses on cane payments to be booked (Bajaj had accounted for cane at an SMP of Rs85 per quintal in FY07) depending on the court judgment on cane price, this poses substantial operational risks for the company.

Figure 66: **Leverage could rise substantially depending on verdict on cane price**

Net D/E	FY07	FY08E	FY09E	FY10E
Current net D/E	2.3	2.8	2.4	1.6
Net D/E if SY07 cane price is at Rs125 per quintal	3.5	4.4	3.8	2.4

Source: Company data, Credit Suisse estimates

Management intends to reduce leverage going forward by raising fresh equity. In this context, the board approved the issuance of up to 35 mn shares representing 25% of the existing equity base in December 2007. This is substantial and it remains to be seen at what price Bajaj is able to raise the money.

Will the subsidiaries deliver?

Significant capacity addition has been through BHSIL – execution to be key

Bajaj Hindusthan has added nearly a third of its capacity (40,000 TCD) through its subsidiary in Eastern UP – Bajaj Hindusthan Sugar & Industries Ltd. The majority of new capacity is greenfield and commissioned in FY08E. Any green-field capacity needs to be accompanied by cane area development which takes time. Also historically, BHSIL has been loss making and its operational performance has been far inferior to that of the parent company. A lot depends on how fast and to what extent Bajaj is able to ramp up operations in BHSIL and therefore presents significant execution risk in our view. Our estimates for BHSIL are provided below.

Figure 67: **Bajaj Hindusthan Sugar & Industries Limited – key assumptions**

Parameter	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realisation (Rs per kg)	18.1	14.4	14.8	18.3	20.1	Expect Eastern mills to lead to slightly higher realization
Cane cost (Rs per quintal)	n.a.	110	138	143	148	Expect Rs5 per quintal rise in SAP going forward
Cane crushed (mn tonnes)	n.a.	0.6	1.9	3.5	3.7	Expect to rise as full capacity becomes operational
Effective days of crushing	n.a.	102	115	110	116	In line with cane crushed
Recovery rate (%)	n.a.	8.7	9.5	10.0	10.2	Expect significant improvement going forward
Distillery realisation (Rs per litre)	n.a.	16.7	20.1	23.2	25.0	15% rise in FY09E; 7-8% in FY10E
Effective days of operation of distillery	n.a.	12	112	243	243	Expect to rise as full capacity becomes operational
Cogen realisation (Rs per unit)	n.a.	n.a.	3.00	3.06	3.12	Sells to grid; 6 paise escalation per year
Effective days of operation of cogen	n.a.	n.a.	20	160	165	Bagasse availability less of an issue due to low installed base

Source: Company data, Credit Suisse estimates

Bajaj Eco-Tec is a completely new business for the company

In addition, the company has also entered into the particle board and medium density fibre board business through another subsidiary Bajaj Eco-Tec. This is a completely different line of business where Bajaj has no previous experience and also poses substantial execution risks in the near term.

Figure 68: **Bajaj Eco-Tec estimates**

(Rs mn)	FY08E	FY09E	FY10E	FY11E	FY12E
Revenue	353	1,502	2,385	3,181	3,976
Utilisation (%)	5	20	30	40	50
EBITDA margin (%)	10	25	35	40	40
EBITDA	**35**	**375**	**835**	**1,272**	**1,590**
PAT	**n/a**	**99**	**315**	**630**	**787**

Source: Credit Suisse estimates

Large arrears could impact cane availability

Bajaj Hindusthan had one of the highest arrears in the industry in the previous season (FY07). This could impact cane sourcing over the next couple of seasons with an attendant impact on earnings and target price.

Cane sourcing could decline more than expected due to large arrears in the past – FY08 sourcing dropped 22%

Figure 69: **Sensitivity of EBITDA to cane sourcing**

Drop in FY09E cane sourcing (%)	**-5**	**-10**	**-15**	**-20**	**-25**
FY09 EBITDA	5,701	5,387	**5,074**	**4,754**	4,414
FY10 EBITDA	8,359	7,901	**7,442**	**6,981**	6,499
Drop in FY10 cane sourcing (%)	**-5**	**0**	**5**	**10**	**15**
FY10 EBITDA	6,679	**6,955**	**7,213**	7,465	7,716

Note: Does not include impact of cane sourcing on distillery and cogen sales which would lead to higher sensitivities; All EBITDA figures in Rs mn; bold indicates base case;
Source: Credit Suisse estimates

Large plant size = lower utilisation

After the massive capacity expansion drive, Bajaj has one of the highest average plant sizes in the industry of 10,000 TCD compared to Balrampur's 8,000 TCD and Shree Renuka's 4,000 TCD. At this stage of the cycle, when cane availability is an issue, larger plant size could to lower utilisation with an attendant impact on fixed costs and margins.

Bajaj's average plant size of 10,000 TCD is one of the highest in the industry – utilisation is likely to suffer

Initiate with NEUTRAL; target price of Rs199

We initiate coverage on Bajaj Hindusthan with a NEUTRAL rating and a target price of Rs199. Our TP is based on a FY10E EV/EBITDA multiple of 7x (FY09E EV/EBITDA of 11.5x). Over the past couple of years, Bajaj has been trading at a significant premium to most other sugar stocks, including Balrampur. We do not believe the premium is justified as the benefits of higher beta to sugar prices are likely to be largely offset by higher operational risks. We do not expect Bajaj Hindusthan to report positive earnings even in FY09E despite the higher sugar realisation on account of: 1) higher cane costs, 2) lower utilisation, 3) higher depreciation costs after the massive capacity expansion and 4) higher interest costs due to high leverage in a monetary tightening environment. On the other hand, favourable verdicts by the Supreme Court on the cane price cases or a lower-than-expected SAP for FY09E could reduce risks materially and provide significant potential upside. We would, however, choose to be cautious at this stage. The target price implies a FY10E P/E of 13.4x. We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10E. We value Bajaj Eco-Tec on an SOTP basis at Rs18 per share at 8x FY10 P/E.

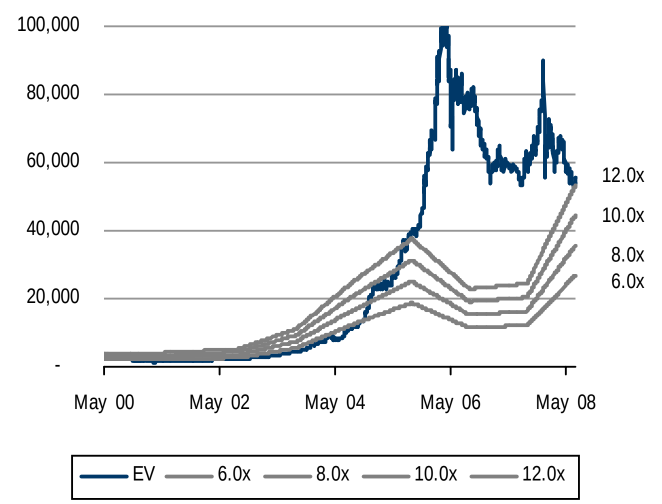
We remain cautious on the stock due to a number of headwinds

Valuation premium is not justified, in our view

Our target price is based on a FY10E EV/EBITDA multiple of 7x (11.5x FY10 EV/EBITDA). Over the past couple of years, Bajaj has been trading at a significant premium to most other sugar stocks including Balrampur. We do not believe this premium is justified, as the benefits of higher beta to sugar prices are likely to be largely offset by higher operational risks.

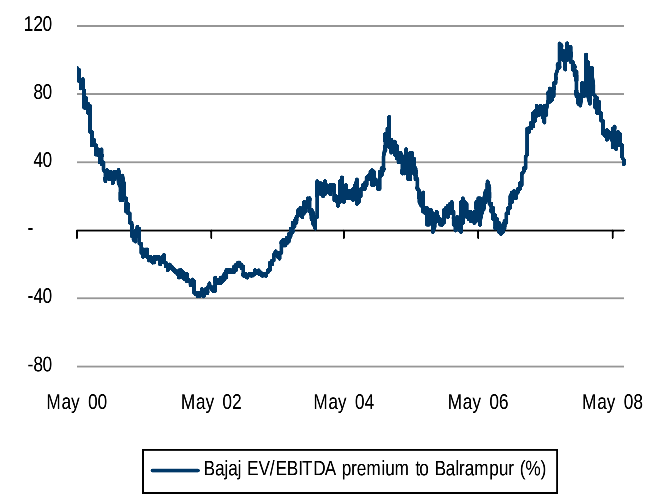
Valuation premium to Balrampur not justified, in our view

Figure 70: **Our TP implies a FY09E EV/EBITDA of 11.5x**



Source: Company data, Credit Suisse estimates

Figure 71: **Bajaj is trading at a substantial premium to Balrampur – we expect the divergence to reduce**



Source: Company data, Credit Suisse estimates

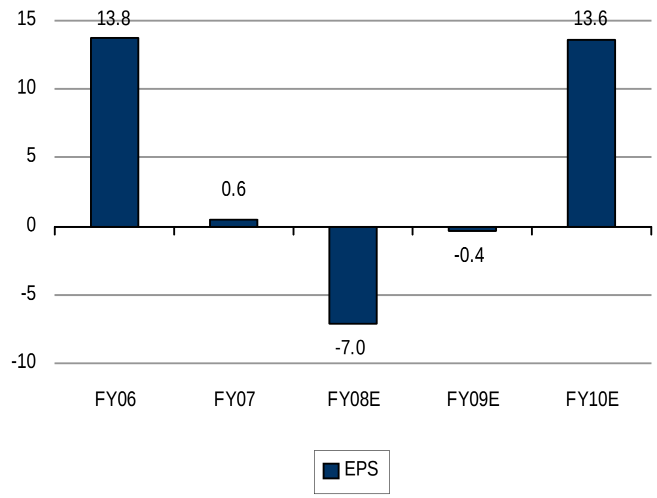
We do not expect Bajaj Hindusthan to report positive earnings, even in FY09, despite the higher sugar realisation on account of: 1) higher cane costs, 2) lower utilisation, 3) higher depreciation costs after the massive capacity expansion; and 4) higher interest costs due to high leverage in a monetary tightening environment. This could be a major negative for the stock.

FY09 earnings may be negative

We value Bajaj Eco-Tec on an SOTP basis at Rs18 per share based on 8x FY10 P/E.

Bajaj Eco-Tec to add Rs18 per share

Figure 72: **Bajaj may not turn EPS positive in FY09E**



Source: Company data, Credit Suisse estimates

Figure 73: **TP implies FY10E P/B of 1.7x**

Source: Company data, Credit Suisse estimates

Court case verdict could lead to upside or downside

- *Case for FY07 SAP:* Bajaj Hindusthan could be adversely impacted by a court verdict on SAP for FY07. Currently the company has accounted for cane cost in FY07 at Rs 85 per quintal (SMP). If the court decides on a higher cane price, it would have to book the difference as a loss which could lead to substantial book erosion with an attendant impact on net debt to equity.

Bajaj's net debt to equity could go up significantly if the SAP for FY07 is reinstated

Figure 74: **Leverage could rise substantially depending on verdict on cane price**

Net D/E	FY07	FY08E	FY09E	FY10E
Current net D/E	2.3	2.8	2.4	1.6
Net D/E if FY07 cane price is at Rs125 per quintal	3.5	4.4	3.8	2.4

Source: Company data, Credit Suisse estimates

- *Case for FY08 SAP:* Our projections have been done assuming a cane SAP at Rs125 per quintal as per the order of the Lucknow Bench of the Allahabad HC. In case the Supreme Court decides on a lower SAP (the interim order was for cane payment at Rs110 per quintal), there could be significant upside to our earnings estimate for FY08E. More importantly, it could pave the way for lower SAPs for FY09E and FY10E, though in the rising sugar price environment SAPs for FY09E and FY10E are unlikely to be much lower, in our view. We present the potential upside to EBITDA below.

Favourable verdict for FY08E could lead to 10-50% earnings upside for Bajaj in various years

Figure 75: **Favourable court verdict can lead to significant upside to earnings**

Assumptions	FY08E	FY09E	FY10E
Current assumptions for SAP (Rs/quintal)	125	130	135
Current EBITDA (Rs mn)	2,038	4,917	7,213
Potential SAP in case of favourable case verdict (Rs/quintal)	110	125	130
EBITDA (Rs mn)	2,980	5,912	7,922
Potential upside to earnings (%)	46.2	20.2	9.8

Source: Credit Suisse estimates

Risks

Uncertainty over cane prices

Uncertainty over cane price in Uttar Pradesh is a major risk and could provide substantial potential upside or downside to our estimates. The SAP for FY09E is yet to be declared. While the Allahabad High Court recently upheld the Rs125 per quintal cane price for FY08E, cases for both FY07 and FY08E are now with the Supreme Court.

Bajaj Hindusthan to be affected by cane price verdict for FY07 due to the impact on its book

Sourcing of cane

Cane availability determines revenue for all three segments of the business. This, in turn, depends on acreage in the command area of the mills as well as diversion to alternative sugar manufacturers. Sourcing of cane for individual mills can swing substantially from year to year and is thus a key source of risk to our estimates. Bajaj is particularly at risk in this regard given its large arrears in past seasons.

Large arrears pose a significant risk to cane sourcing

Performance of subsidiaries

Bajaj Hindusthan has added nearly a third of its capacity through its subsidiary BHSIL in Eastern UP. Bajaj's ability to ramp up the operations of the subsidiary plays a critical role in the near term and could provide surprises to our estimates.

Execution risks remain on account of a number of new subsidiaries

In addition, Bajaj Hindusthan has diversified into PBs and MDFs through Bajaj Eco-Tec, another subsidiary. This is a completely new business area for the company and therefore poses significant execution risks, in our view.

High leverage

Bajaj Hindusthan has substantial debt on its books. The company is now looking to make a significant equity placement (the board has approved new share issuance of up to 35 mn shares, which is 25% of the existing equity base) to bring down its leverage. Depending on the price at which these new shares are issued, there could be potential upside or downside to the stock price that is not currently factored into our model.

Large debt on balance sheet could lead to significantly high interest costs in a monetary tightening environment

Regulatory risks

Regulatory risks are common to the entire sugar sector. Bajaj is likely to be most impacted by regulatory interventions aimed at controlling sugar prices, given the high sensitivity of earnings to sugar realisations.

Financials

Figure 76: **Bajaj Hindusthan: P&L**

Year-end 30 Sep (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
Net sales	8,461	14,828	17,804	19,519	29,440	33,742
Raw material Expenses	5,314	9,746	12,049	13,385	19,162	20,760
Employee cost	297	585	1,423	1,353	1,582	1,645
Other expenses	749	1,364	2,421	2,743	3,779	4,124
EBITDA	**2,101**	**3,134**	**1,910**	**2,038**	**4,917**	**7,213**
Depreciation	351	759	1,611	2,333	2,629	2,717
EBIT	1,750	2,375	299	(296)	2,288	4,496
Interest costs	131	31	913	1,829	2,470	1,512
Other income	86	395	322	351	-	-
PBT	**1,705**	**2,740**	**(292)**	**(1,773)**	**(182)**	**2,984**
Tax	301	897	(202)	(633)	(163)	872
Minority interest	-	-	(115)	(146)	33	192
PAT	**1,404**	**1,842**	**25**	**(995)**	**(52)**	**1,921**
Adjusted PAT	1,318	1,447	(297)	(1,346)	(52)	1,921
Adjusted EPS – basic	13.72	10.82	(2.10)	(9.52)	(0.37)	13.58
Adjusted EPS – diluted	13.47	10.82	(2.10)	(9.52)	(0.37)	13.58

Source: Company data, Credit Suisse estimates

Figure 77: **Bajaj Hindusthan: Balance sheet**

Year-end 30 Sep (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
Share capital	116	141	141	141	141	141
Reserves	6,026	13,473	13,919	12,825	12,674	14,495
Minority interest	-	-	226	80	114	306
Shareholders' funds	6,142	13,615	14,287	13,047	12,929	14,942
Debt	5,100	15,412	35,934	38,941	33,765	26,984
Deferred tax liabilities	453	1,262	1,045	1,045	1,045	1,045
Total liabilities	**11,696**	**30,289**	**51,266**	**53,033**	**47,739**	**42,972**
Net fixed assets	10,797	25,457	40,846	41,642	39,262	36,795
Investments	51	1	1	1	1	1
Inventory	555	1,434	4,338	6,953	4,373	1,635
Sundry debtors	179	663	1,137	1,043	1,499	1,614
Cash & bank balances	58	2,311	2,674	2,674	2,674	2,674
Other current assets	1,030	4,438	12,400	7,825	7,825	7,825
Sundry creditors	514	1,931	6,895	3,892	4,683	4,361
Other current liabilities	461	2,084	3,234	3,212	3,212	3,212
Total assets	**11,696**	**30,289**	**51,266**	**53,033**	**47,739**	**42,972**

Source: Company data, Credit Suisse estimates

Figure 78: **Bajaj Hindusthan: Cash flow statement**

Year-end 30 Sep (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
PBT	1,705	2,740	(292)	(1,773)	(182)	2,984
Depreciation	351	759	1,611	2,333	2,629	2,717
Other non-cash adjustments	(2)	(222)	1,416	3,415	3,151	993
Changes in net working capital	1,742	1,799	(2,428)	1,418	7,833	9,513
Net cash flow from operations	**1,608**	**1,067**	**(2,624)**	**2,051**	**7,995**	**8,642**
Change in fixed assets	(6,917)	(15,726)	(17,004)	(3,130)	(250)	(250)
Change in investments	(50)	50	-	-	-	-
Misc.	20	(186)	520	602	519	353
Net cash flow from investments	**(6,947)**	**(15,862)**	**(16,485)**	**(2,528)**	**269**	**103**
Change in debt	1,879	10,312	20,522	3,007	(5,176)	(6,781)
Change in equity	3,671	7,341	310	-	-	-
Interest, dividend & others	(191)	(606)	(1,361)	(2,530)	(3,088)	(1,964)
Net cash flow from financing	**5,358**	**17,047**	**19,471**	**477**	**(8,264)**	**(8,745)**
Extraordinary items	-	-	-	-	-	-
Net change in cash	**19**	**2,253**	**363**	**0**	**0**	**-**
Year beginning cash	40	58	2,311	2,674	2,674	2,674
Year ending cash	58	2,311	2,674	2,674	2,674	2,674

Source: Company data, Credit Suisse estimates

Figure 79: **ROE Du-Pont**

Year-end 30 Sep	FY05	FY06	FY07	FY08E	FY09E	FY10E
ROE (%)	**22.9**	**13.5**	**(0.6)**	**(8.7)**	**(0.1)**	**14.1**
Operating margin (EBIT/sales)	20.7	16.0	1.7	(1.5)	7.8	13.3
Interest burden (PBT/EBIT)	97.4	115.4	(97.4)	599.8	(7.9)	66.4
Tax burden (PAT/PBT)	82.3	67.2	30.7	64.3	10.3	70.8
Asset turnover (sales/assets)	0.7	0.4	0.3	0.3	0.5	0.7
Gearing (assets/equity)	2.1	2.5	4.3	4.6	4.3	3.4

Source: Company data, Credit Suisse estimates

Figure 80: **Key ratios**

Year-end 30 Sep	FY05	FY06	FY07	FY08E	FY09E	FY10E
Growth (%)						
Sales growth	70.1	75.3	20.1	9.6	50.8	14.6
EBITDA growth	126.2	49.2	(39.1)	6.7	141.3	46.7
Adjusted PAT growth	203.3	9.8	(120.5)	353.0	n/a	n/a
EPS growth	175.6	(21.1)	(119.4)	353.0	n/a	n/a
Margins (%)						
EBITDA margin	24.8	21.1	10.7	10.4	16.7	21.4
PBT margin	19.9	17.4	(1.6)	(8.7)	(0.6)	8.8
Adjusted PAT margin	15.4	9.2	(1.6)	(6.6)	(0.2)	5.6
Key metrics						
EPS (Rs)	13.7	10.8	(2.1)	(9.5)	(0.4)	13.6
BVPS (Rs)	63.9	101.8	101.0	92.3	91.4	105.7
ROCE (%)	15.6	8.2	0.6	(0.6)	4.9	10.7
ROE (%)	22.9	13.5	(0.6)	(8.7)	(0.1)	14.1
Net debt to equity (x)	0.8	1.0	2.3	2.8	2.4	1.6

Source: Company data, Credit Suisse estimates

Asia Pacific / India
Agricultural Products & Agribusiness

Balrampur Chini Mills Ltd

(BACH.BO / BRCM IN)

Rating	OUTPERFORM* [V]
Price (06 Aug 08, Rs)	94.05
Target price (Rs)	119.55[1]
Chg to TP (%)	27.1
Market cap. (Rs mn)	24,029.78 (US$ 572.14)
Enterprise value (Rs mn)	38,819
Number of shares (mn)	255.50
Free float (%)	64.30
52-week price range	126.10 - 51.40

**Stock ratings are relative to the relevant country index.*
[1]Target price is for 12 months.
[V] = Stock considered volatile (see Disclosure Appendix).

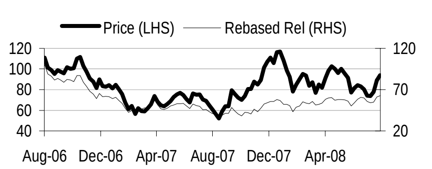
Research Analysts

Arya Sen
9122 6777 3807
arya.sen@credit-suisse.com

Sweetly positioned

- **Event:** We initiate coverage with an OUTPERFORM rating and a target price of Rs120
- **View:** With sugar prices set to rise by more than 20% in FY09 and further in FY10, Balrampur Chini, the second largest sugar manufacturer in India, appears sweetly positioned to gain from the up-cycle. Balrampur's operational risks are relatively low as it has expanded capacity less aggressively, is more integrated and has lower leverage. It is our top pick to play the sugar price theme in India. We expect the sugar segment to drive both top-line and bottom-line growth. Higher sugar prices should lead to top-line growing at 15% CAGR, with EBITDA margin expanding to 20% by FY09E and further to 25% by FY10E. Lack of visibility on cane prices is the biggest concern, in our view, given Balrampur's high sensitivity to cane cost/sugar price. However, Balrampur Chini is better placed to negotiate the impact of high cane costs than most other UP-based sugar manufacturers on account of a more integrated model – distillery and cogen are estimated to contribute Rs4.5 per kg of sugar sold by FY10.
- **Catalyst:** We expect rising sugar prices to be the biggest catalyst for the stock. In the near term, favourable court case judgments on SAPs for FY07 and FY08 or a lower than expected SAP for FY09 can lead to significant upside.
- **Valuation:** We value the stock at 7x FY10 EV/EBITDA (10.4x FY09 EV/EBITDA), which we believe is fair, given: 1) strong margin expansion, 2) lower operational risks and 3) lower cyclicality in earnings as compared to the past due to a more integrated business model. We expect Balrampur to turn EPS-positive earlier, possibly in FY08 itself. Thus, it is better positioned to gain from the price rise even in a high cane price environment, in our view. Key risks are: 1) cane price uncertainty, 2) sourcing of cane and 3) regulatory interventions, particularly those aimed at controlling sugar prices.

Share price performance



The price relative chart measures performance against the BOMBAY SE 30 SHARE SENSITIVE index which closed at 15073.54 on 06/08/08
On 06/08/08 the spot exchange rate was Rs42.00/US$1

Performance	1M	3M	12M
Absolute (%)	17.0	-3.8	49.9
Relative (%)	4.4	10.9	48.2

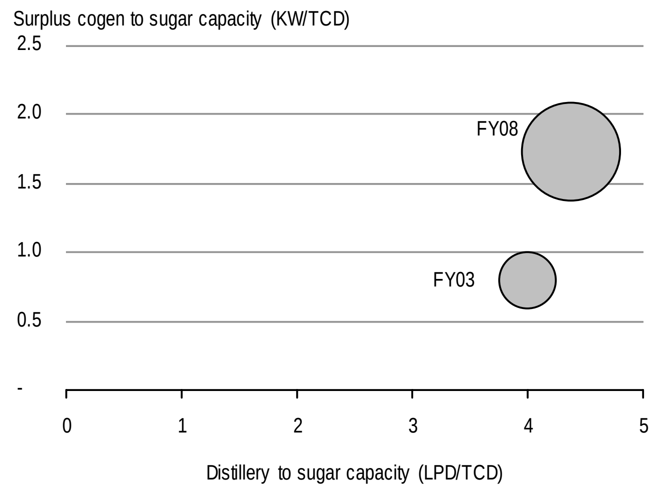
Financial and valuation metrics

Year	9/07A	9/08E	9/09E	9/10E
Revenue (Rs mn)	13,917.1	14,561.7	18,576.4	21,003.3
EBITDA (Rs mn)	892.8	2,327.3	4,041.8	5,259.3
EBIT (Rs mn)	90.6	1,108.7	2,589.5	3,793.2
Net income (Rs mn)	-518.2	140.8	1,152.6	2,526.3
EPS (CS adj., Rs)	-2.09	0.53	4.30	9.44
Change from previous EPS (%)	n.a.			
Consensus EPS	n.a.	0	0	0
EPS growth (%)	n.a.	n.a.	718.7	119.2
P/E (x)	NM	178.9	21.8	10.0
Dividend yield (%)	—	—	0.5	1.1
EV/EBITDA (x)	41.1	16.7	8.4	5.4
P/B (x)	2.7	2.4	2.2	1.8
ROE (%)	-4.8	2.7	9.8	18.2
Net debt/equity (%)	146.9	140.6	86.1	30.5

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

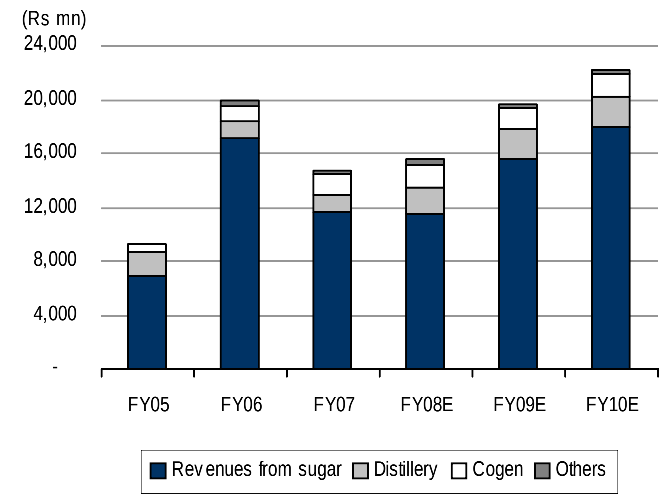
Focus charts

Figure 81: Moving to a larger more integrated model



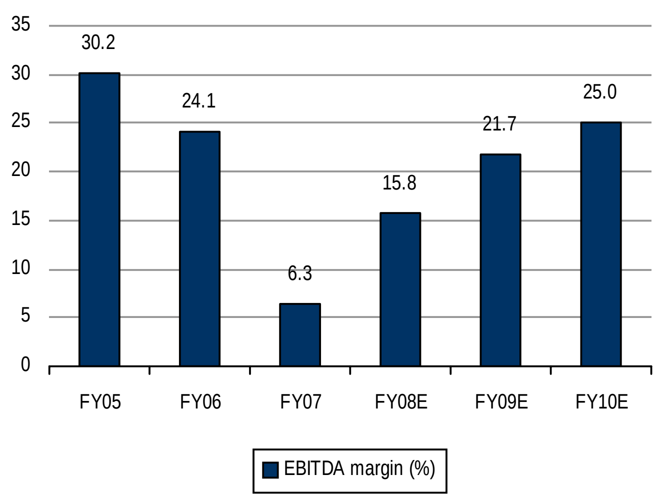
Size of the bubble indicates crushing capacity; Source: Company data, Credit Suisse estimates

Figure 82: Sugar up-cycle to drive revenue growth …



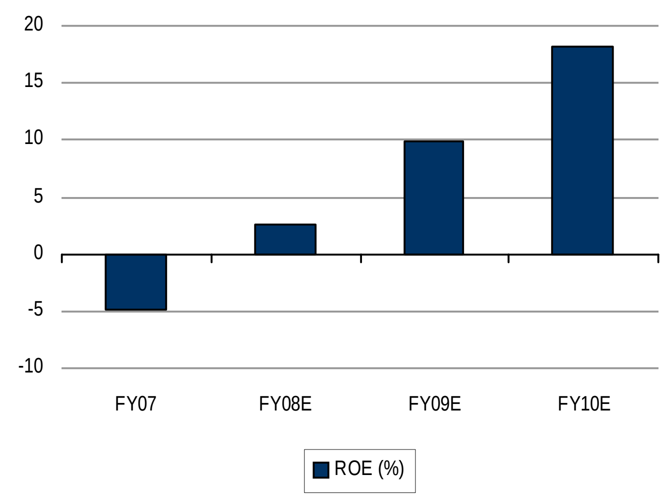
Note: FY06 was for a period of 18 months; Source: Company data, Credit Suisse estimates

Figure 83: … and margin expansion



Source: Company data, Credit Suisse estimates

Figure 84: ROE set to rise significantly



Source: Company data, Credit Suisse estimates

Figure 85: Balrampur Chini – key assumptions

Parameter	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realization (Rs per kg)	17.6	14.5	14.8	18.3	20.1	20-25% rise in FY09; 10% in FY10
Cane cost (Rs per quintal)	128	136	138	143	148	Expect Rs 5 per quintal rise in SAP going forward
Cane crushed (mn tonnes)	6.2	9.2	8.1	6.6	7.0	Drop of 18% in FY09; rise of 5% in FY10
Effective days of crushing	131	162	110	91	96	In line with cane crushed
Recovery rate (%)	10.4	9.9	10.2	10.2	10.2	In line with historical
Distillery realization (Rs per litre)	17.2	16.6	19.1	23.1	25.2	Expect prices of industrial and potable alcohol to rise going forward
Effective days of operation of distillery	261	325	270	252	252	Molasses availability an issue but less than peers due to high inventory, lower distillery capacity
Cogen realization (Rs per unit)	2.89	2.94	3.03	3.09	3.15	Sells mostly to grid; 6 paise escalation per year
Effective days of operation of cogen	204	247	192	176	172	Expect to drop with lower availability of bagasse

Source: Company data, Credit Suisse estimates

Sweetly positioned

With sugar prices set to rise by more than 20% in FY09 and further in FY10, Balrampur Chini, the second largest sugar manufacturer in India, appears well positioned to gain from the up-cycle. Balrampur's operational risks are relatively low as it has expanded capacity less aggressively, is more integrated and has lower leverage. It is our top pick to play the sugar price theme in India.

Our top pick to play the sugar price theme in India

Capacity in place; lower operational risks

In line with the sugar industry in Uttar Pradesh, Balrampur Chini too has expanded capacity across different segments over the last five years. Crushing capacity has increased 3x to 73,000TCD; distillery capacity has been expanded from 100KLPD to 320 KLPD; while its surplus cogeneration capacity of 126MW is the highest in the industry.

Large capacity in place – Balrampur has the highest surplus cogen capacities in the industry

With most of the new capacity already in place, the focus is now likely to shift to execution, where we believe Balrampur is better positioned compared to Bajaj, the other large UP-based sugar manufacturer with a very similar business model. In terms of operational risks, Balrampur is likely to benefit from: 1) lower payment arrears, 2) less aggressive capacity addition, lower plant size, earlier ramp-up, 3) greater integration and 4) lower leverage. We expect these to translate into better cane availability, higher utilisation, greater realisation per tonne of cane crushed and lower interest costs.

Operational risks are relatively lower

Sugar to drive top-line growth, margin expansion

Balrampur Chini is set to benefit enormously from the sugar up-cycle. We expect the sugar segment to drive both top-line and bottom-line growth. Higher sugar prices should lead to top-line growing at 15% CAGR, with EBITDA margins expanding to 21% by FY09 and further to 25% by FY10. While days of operation for sugar and cogeneration are set to fall by 15-20% on account of lower availability of cane, higher realisation in all three businesses is likely to more than offset the impact of lower utilization.

EBITDA margins to expand to 25% by FY10E from 6% in FY07 driven mainly by sugar business

Given Balrampur's high sensitivity to sugar price/cane costs, lack of visibility on cane prices is the biggest concern, in our view. However, Balrampur Chini is better placed to negotiate the impact of high cane costs than most other UP based sugar manufacturers on account of a more integrated model – distillery and cogen are estimated to contribute Rs4.5 per kg of sugar sold by FY10.

Higher integration will protect against cane price risks

Initiate with OUTPERFORM; target price of Rs120

We initiate coverage on Balrampur Chini with an OUTPERFORM rating and a target price of Rs120. Our target price is based on a FY10E EV/EBITDA multiple of 7x (10.4x FY09 EV/EBITDA), which we believe is fair, given: 1) strong margin expansion – EBITDA margins are set to expand from 6% to 25% over the next three years, 2) lower operational risks and 3) lower cyclicality in earnings compared to the past due to a more integrated business model. We expect Balrampur to turn EPS-positive earlier, possibly in FY08 itself even at the higher cane price, and show strong EPS growth over the next two fiscals – thus it is better positioned to gain from the price rise even in a high cane price environment, in our view. The target price implies a FY10E P/E of 12.7x. We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10.

Lower operational risks, strong earnings from FY09 onwards make us bullish on the stock

Risks

The key risks to our estimates and target price are on account of: 1) cane price uncertainty 2) cane availability and 3) adverse regulatory intervention, particularly those aimed at controlling prices.

Cane price, sourcing are the key risks

Capacity in place, lower operational risks

In line with the sugar industry in Uttar Pradesh, Balrampur Chini too has expanded capacity manifold across different segments over the last five years. Crushing capacity has increased 3x to 73,000TCD; distillery capacity has been expanded from 100KLPD to 320 KLPD; while its surplus cogeneration capacity of 126 MW is one of the highest in the country. With most of the new capacity already in place, the focus is now likely to shift to execution, where we believe Balrampur is better positioned compared to Bajaj, the other large UP-based sugar manufacturer with a very similar business model. In terms of operational risks, Balrampur is likely to benefit from: 1) lower payment arrears, 2) less aggressive capacity addition, lower plant size and earlier ramp-up, 3) greater integration and 4) lower leverage. We expect these to translate into better cane availability, higher utilisation, greater realisation per tonne of cane crushed and lower interest costs.

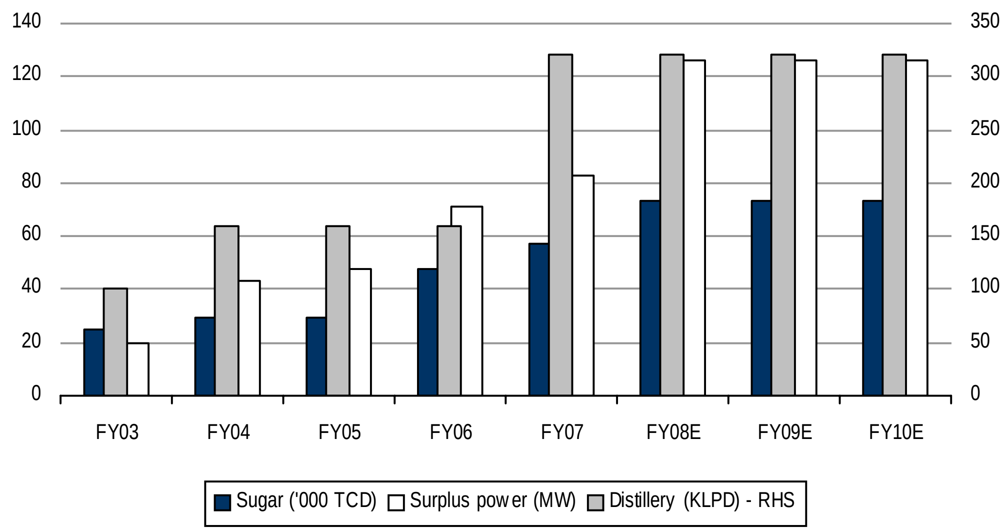
Capacity has expanded significantly over the last five years but operational risks are not too high

Capacity in place …

Balrampur Chini, like many other UP-based mills, has also expanded capacity manifold over the last few years. Cane crushing capacity at 73,000 TCD is 3x that in FY03; distillery capacity has been increased from 100 KLPD to 320 KLPD and surplus co-generation capacity at 12 6MW is one of the highest in the country.

Surplus power capacity the highest in the industry

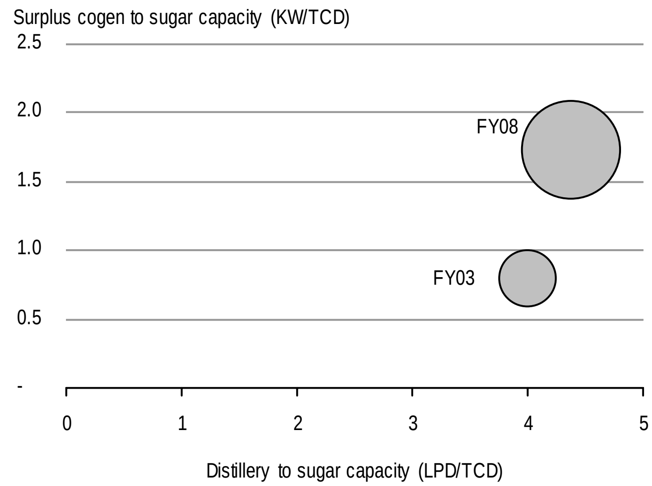
Figure 86: **Crushing and distillery capacity expanded by 2x and cogeneration capacity by more than 5x**



Source: Company data, Credit Suisse estimates

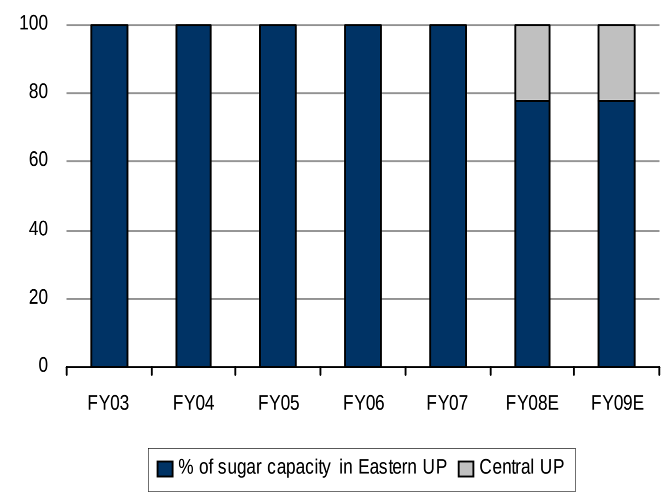
The capacity expansion has helped Balrampur move to a more integrated business model, which should lead to higher margins and greater earnings stability. The company has also diversified geographically with a significant proportion of the new capacity being based out of central UP outside its traditional base of eastern UP.

Figure 87: **Moving to a larger, more integrated model …**



Size of the bubble indicates crushing capacity;
Source: Company data, Credit Suisse estimates

Figure 88: **…and expanding footprint outside eastern UP**



Source: Company data, Credit Suisse estimates

… focus now on execution: risks are lower

With most of the new capacity already in place, the focus is now likely to shift to execution, where we believe Balrampur is better positioned compared to Bajaj on several counts.

Arrears in the last season were relatively lower for Balrampur

- *Lower cane arrears:* Balrampur has lower arrears compared to many of its peers in Uttar Pradesh. In fact, in FY07, it paid out the SAP of Rs125 per quintal to many farmers compared to the Supreme Court's interim order of Rs118 per quintal. This should give Balrampur Chini an advantage in sourcing cane from its command area.

Balrampur has increased crushing capacity 3x – not too aggressive by industry standards

- *Less aggressive capacity addition, earlier ramp-up, lower plant size:* 1) Balrampur has ramped up crushing capacity far less aggressively compared to Bajaj – its capacity has increased 3x compared to Bajaj's 8x in the same period. 2) Also, Balrampur has ramped up capacity earlier with 80% of existing capacity becoming operational by end-FY06 – greenfield capacity needs to be accompanied by cane area development which takes time and reduces mill utilisation in the initial years. 3) Lastly, Balrampur's average plant size of 8,000 TCD is lower than Bajaj's 10,000 TCD, which should also lead to better utilisation, particularly in years of cane shortage.
- *Greater integration:* Balrampur has a more integrated model compared to Bajaj Hindusthan which leads to higher realization per tonne of cane crushed. This puts Balrampur in a better position to negotiate the impact of higher cane costs.
- *Lower leverage:* Balrampur with a net D/E of 1.5 has substantially lower leverage than Bajaj whose debt to equity is at 2.3.

Figure 89: **Balrampur vs Bajaj**

	FY08E	FY09E	FY10E	Remarks
Cane sourcing - YoY change				
Balrampur Chini	(12.7)	(17.5)	5.0	Cane sourcing likely to be less affected due to lower arrears
Bajaj Hindusthan	(22.0)	(17.5)	5.0	Risks to the downside for Bajaj
Contribution from distillery and cogen per kg of sugar sold				
Balrampur Chini	4.9	4.6	4.6	Higher contribution lowers effective cane cost
Bajaj Hindusthan	3.5	3.4	3.5	Margins lower due to lower integration
Net debt to equity				
Balrampur Chini	1.4	0.9	0.3	Will not be affected by adverse court verdict
Bajaj Hindusthan	2.8	2.4	1.6	Can be higher if SY07 SAP verdict is unfavorable

Source: Company data, Credit Suisse estimates

Sugar to drive top-line growth, margin expansion

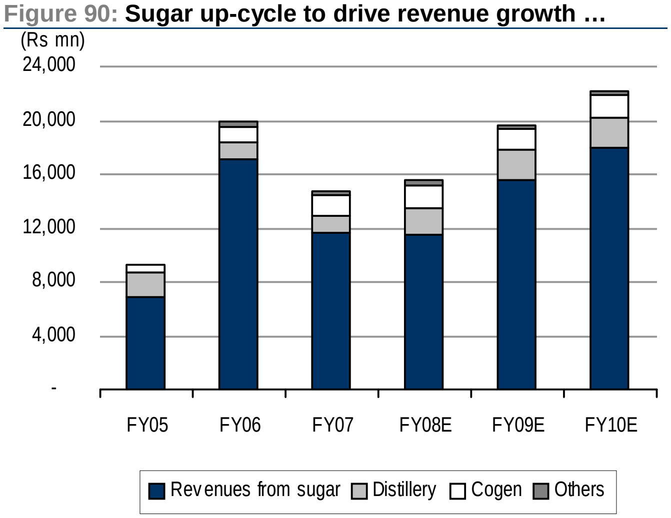
Balrampur Chini is set to benefit enormously from the sugar up-cycle. We expect the sugar segment to drive both top-line and bottom-line growth. Higher sugar prices should lead to top line growing at 15-20% YoY, with EBITDA margin expanding to 21% by FY09 and further to 25% by FY10. While days of operation for sugar and cogeneration are set to fall by 15-20% on account of lower availability of cane, higher realisation in all three businesses is likely to more than offset the impact of lower utilization. Given Balrampur's high sensitivity to sugar price/cane costs, lack of visibility on cane prices is the biggest concern in our view. However, Balrampur Chini is better placed to negotiate the impact of high cane costs than most other UP based sugar manufacturers on account of a more integrated model – distillery and cogen are estimated to contribute Rs4.5 per kg of sugar sold by FY10.

EBITDA margin to expand to 21% in FY09 and 25% in FY10, driven largely by higher sugar prices

Gaining from the up-cycle: sugar to drive both top-line and bottom-line growth

Balrampur Chini, being the second largest UP-based sugar manufacturer, is set to benefit enormously from the sugar up-cycle. We expect the sugar segment to drive both top-line and bottom-line growth. Higher sugar prices should lead to top line growing at 15-20% YoY, with EBITDA margin expanding to 20% by FY09E and further to 23% by FY10E.

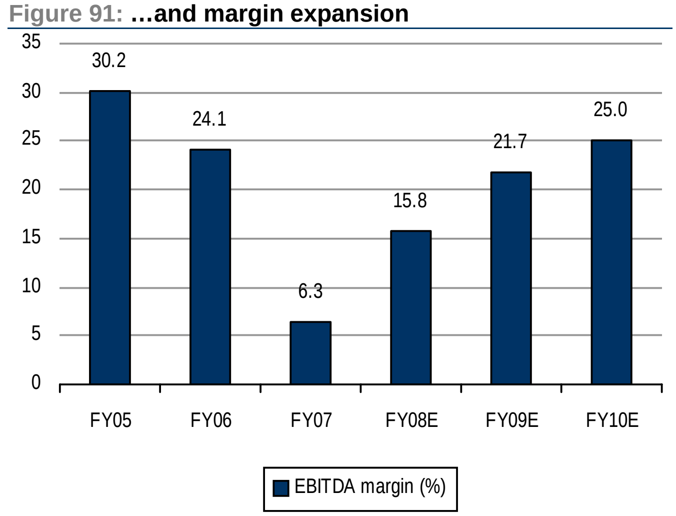
Figure 90: **Sugar up-cycle to drive revenue growth …**



Note: FY06 was for a period of 18 months;

Source: Company data, Credit Suisse estimates

Figure 91: **…and margin expansion**



Source: Company data, Credit Suisse estimates

We expect sugar realisation to rise by close to 25% in FY09 from the low base of FY08 and by another 10% in FY10. Realisation on distillery sales is also set to rise, with higher realisation in industrial and potable alcohol, where prices have been rising rapidly and increasing sale of fuel ethanol. Sale of power is mostly to the grid through long-term contracts, which allow for a slight escalation in prices each year in line with costs.

Sugar realization estimated to rise more than 20% in FY09 and 10% in FY10

With lower cane acreage, we estimate cane available for crushing to drop by 15% in FY09, slightly better than the state average of 20%. This is likely to cause a fall in utilization in the sugar and cogeneration – days of operation is expected to fall less in the distillery segment as 1) new capacity at Mankapur becomes fully operational and 2) Balrampur has surplus molasses given its relatively lower proportion of distillery capacity. Overall, we expect higher realisation across all three segments to more than offset the impact of the lower utilisation on margins.

Lower utilisation to be more than offset by higher realisations across segments

Figure 92: **Balrampur Chini – key assumptions**

Parameter	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realization (Rs per kg)	17.6	14.5	14.8	18.3	20.1	20-25% rise in FY09; 10% in FY10
Cane cost (Rs per quintal)	128	136	138	143	148	Expect Rs 5 per quintal rise in SAP going forward
Cane crushed (mn tonnes)	6.2	9.2	8.1	6.6	7.0	Drop of 18% in FY09; rise of 5% in FY10
Effective days of crushing	131	162	110	91	96	In line with cane crushed
Recovery rate (%)	10.4	9.9	10.2	10.2	10.2	In line with historical
Distillery realization (Rs per litre)	17.2	16.6	19.1	23.1	25.2	Expect prices of industrial and potable alcohol to rise going forward
Effective days of operation of distillery	261	325	270	252	252	Molasses availability an issue but less than peers due to high inventory, lower distillery capacity
Cogen realization (Rs per unit)	2.89	2.94	3.03	3.09	3.15	Sells mostly to grid; 6 paise escalation per year
Effective days of operation of cogen	204	247	192	176	172	Expect to drop with lower availability of bagasse

Source: Company data, Credit Suisse estimates

Cane price uncertainty a concern; integration will help

Balrampur's profits have very high sensitivity to sugar price/cane costs. As a result, lack of visibility on cane prices – SAP for FY09 is yet to be declared - is the biggest concern in our view. Currently, we have factored Rs125 per quintal for FY08 as per the latest judgment of the Allahabad High Court and an increment of Rs5 per quintal for the next two seasons, but cane prices could turn out to be higher.

Higher cane prices a concern …

On the other hand, a lower-than-expected cane price, though unlikely in our view, could provide substantial upside to our estimates.

EBITDA can change by 30-40%, depending on assumptions of cane price and sugar realisation …

Figure 93: **Sensitivity of FY09E EBITDA to cane cost/sugar realisation**

FY09 EBITDA (Rs mn)	Cane SAP (Rs per quintal)				
Non-levy sugar gross realization (Rs per kg)	**115**	**120**	**125**	**130**	**135**
17	2,901	2,667	2,434	2,200	1,967
18	3,570	3,337	3,103	2,870	2,636
19	4,240	4,007	**3,773**	**3,540**	3,306
20	4,910	4,676	**4,443**	**4,209**	3,976
21	5,579	5,346	5,112	4,879	4,645

Note: actual cost of cane is higher than SAP by Rs15 per quintal due to transport charge, purchase tax, society commission; bolded indicates base case;
Source: Company data, Credit Suisse estimates

Figure 94: **Sensitivity of FY10 EBITDA to cane cost/sugar realisation**

FY10 EBITDA (Rs mn)	Cane SAP(Rs per quintal)				
Non-levy sugar gross realization (Rs per kg)	**120**	**125**	**130**	**135**	**140**
19	4,321	3,995	3,669	3,343	3,017
20	5,024	4,698	4,372	4,046	3,720
21	5,727	5,401	**5,075**	**4,749**	4,424
22	6,430	6,104	**5,779**	**5,453**	5,127
23	7,133	6,808	6,482	6,156	5,830

Note: Actual cost of cane is higher than SAP by Rs15 per quintal due to transport charge, purchase tax, society commission; bolded indicates base case;
Source: Company data, Credit Suisse estimates

However, Balrampur Chini is better placed to negotiate the impact of high cane costs than most other UP-based sugar manufacturers on account of a more integrated model. Greater integration – distillery and cogen are likely to contribute ~Rs4.5 per kg of sugar sold by FY10 – should lower the effective cost of cane and shield the impact of higher cane prices on margins.

… but integration will help – distillery and cogen to contribute Rs4.5 per kg of sugar sold

Figure 95: **Contribution of distillery and cogen of Rs4.5 per kg of sugar sold will help cushion impact of higher cane prices better**

Rs per kg of sugar sold	FY05	FY06	FY07	FY08E	FY09E	FY10E
Cane crushed (mn tonnes)	3.9	6.2	9.2	8.1	6.6	7.0
Sugar produced (mn tonnes)	0.39	0.64	0.91	0.82	0.68	0.71
Recovery rate (%)	10.1	10.4	9.9	10.2	10.2	10.2
Sugar sold (mn tonnes)	0.41	0.93	0.75	0.74	0.81	0.85
Sugar	16.6	18.5	15.4	15.7	19.2	21.0
Alcohol	4.6	1.4	1.8	2.6	2.6	2.7
Power - surplus	1.2	1.1	1.9	2.4	2.0	1.9
Others	0.2	0.5	0.5	0.5	0.3	0.3
Excise per kg	2.8	1.0	1.1	1.3	1.3	1.3
Net realization per kg	**19.7**	**20.5**	**18.5**	**19.8**	**22.8**	**24.6**
Cost per kg of sugar sold	**13.9**	**15.5**	**17.3**	**16.6**	**17.9**	**18.4**
Raw material cost	10.6	13.2	14.2	13.3	14.2	14.6
Total processing cost	3.3	2.3	3.1	3.3	3.7	3.8
EBITDA per kg	**5.8**	**5.0**	**1.2**	**3.2**	**5.0**	**6.2**

Source: Company data, Credit Suisse estimates

EBITDA to rise to Rs6 per kg of sugar sold by FY10 from Rs1.2 in FY07 with rising sugar realisation

Favourable court case verdict for FY08 SAP can lead to upside

Balrampur will not be impacted by FY07 SAP verdict

- *Case for FY07 SAP:* Balrampur will not be impacted by the verdict of the case for SAP for FY07. The company has currently accounted for cane for FY07 at Rs125 per quintal. As a result, it will not be impacted by if the cane price is retained at Rs125 per quintal. On the other hand, if the court decides on a lower cane price the difference is unlikely to be recovered from the farmers and will most likely be booked as bad debt.

Favourable verdict for FY08 can lead to 10-30% earnings upside for Balrampur in various years

- *Case for FY08 SAP:* Our projections have been done assuming cane SAP at Rs125 per quintal as per the order of the Lucknow Bench of the Allahabad HC. In case, the Supreme Court decide on a lower SAP (interim order was for cane payment at Rs110 per quintal), there can be significant upside to our earnings estimate for FY08. More importantly, it could pave the way for lower SAPs for FY09 and FY10, though in the rising sugar price environment SAPs for FY09 and FY10 are unlikely to be much lower in our view. We present the potential upside to EBITDA below.

Figure 96: **Favourable court verdict can lead to significant upside to earnings**

Assumptions	FY08E	FY09E	FY10E
Current assumptions for SAP (Rs/quintal)	125	130	135
Current EBITDA (Rs mn)	2,327	4,042	5,259
Potential SAP in case of favourable case verdict (Rs/quintal)	110	125	130
EBITDA (Rs mn)	3,021	4,790	5,684
Potential upside to earnings (%)	29.8	18.5	8.1

Source: Company data, Credit Suisse estimates

Initiate with OUTPERFORM; target price Rs120

We initiate coverage on Balrampur Chini with an OUTPERFORM rating and a target price of Rs120. Our target price is based on a FY10E EV/EBITDA multiple of 7x (10.4x FY09 EV/EBITDA), which we believe is fair, given 1) strong margin expansion – EBITDA margins are set to expand from 6 to 25% over the next three years, 2) lower operational risks and 3) lower cyclicality in earnings compared to the past due to a more integrated business model. We expect Balrampur to turn EPS positive earlier, possibly in FY08 itself even at the higher cane price, and show strong EPS growth over the next two fiscals – thus it is better positioned to gain from the price rise even in a high cane price environment in our view. The target price implies a FY10E P/E of 12.7x. We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10.

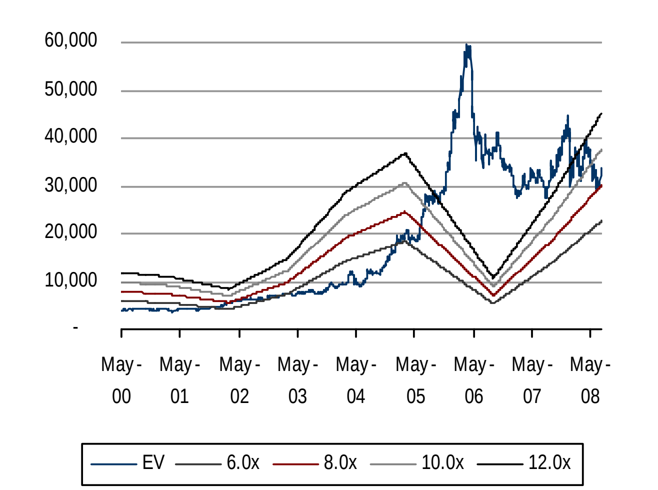
We value Balrampur at 7x FY10E EV/EBITDA

Valuing at 7x FY10E EV/EBITDA

We value Balrampur Chini at 7x FY10E EV/EBITDA (10.4x FY09E EV/EBITDA) to derive a target price of Rs120. We believe the multiple is fair, given: 1) strong margin expansion and EBITDA growth – EBITDA margins are set to expand from 6% to 25% over the next three years, 2) lower operational risks and 3) lower cyclicality in earnings compared to the past due to a more integrated business model. The target price implies a FY10E P/B of 2.3x and P/E of 12.7x.

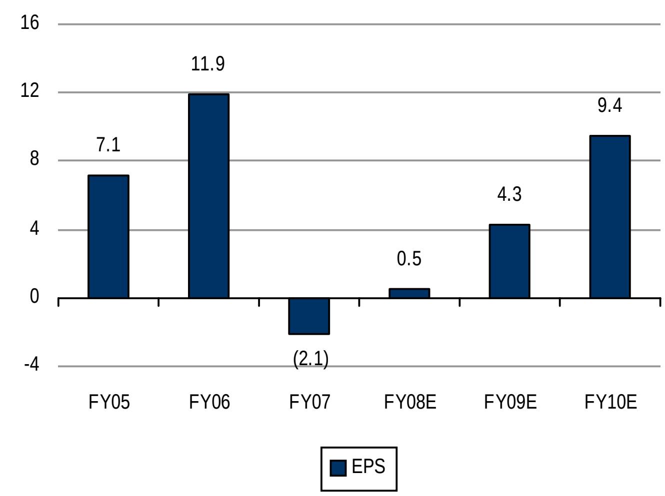
Strong margin expansion; lower operational risks; lower cyclicality in earnings justifies our multiple

Figure 97: **Our TP implies a FY09 EV/EBITDA of 10.4x**



Source: Bloomberg, Credit Suisse estimates

Figure 98: **We expect Balrampur to turn EPS positive in FY08 even in the high cane price environment**



Source: Bloomberg, Credit Suisse estimates

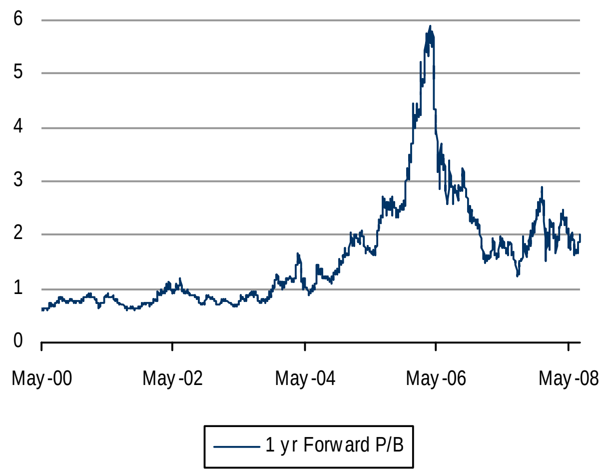
Balrampur to turn EPS-positive earlier

We expect Balrampur to turn EPS-positive earlier on account of higher integration, lower leverage and lower depreciation expense having expanded capacity less aggressively. We estimate a marginally positive EPS in FY08E itself even at the higher cane price. EPS is set to grow strongly over the next two fiscals. Thus, it is better positioned to gain from the price rise even in a high cane price environment, in our view.

We expect marginally positive EPS in FY08 itself even at the higher cane price

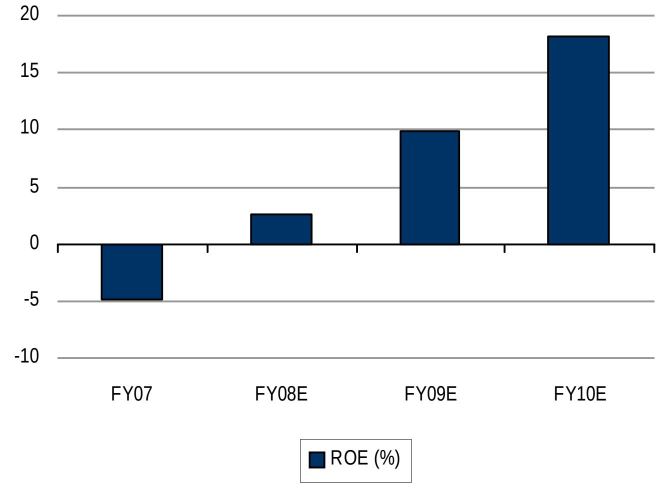
We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10.

Figure 99: **Implied FY10E P/B of 2.3x**



Source: Bloomberg, Credit Suisse estimates

Figure 100: **ROE is set to rise significantly**



Source: Company data, Credit Suisse estimates

Risks

Uncertainty over cane prices

As discussed, uncertainty over cane price in Uttar Pradesh is a major risk and can provide substantial upside or downside to our estimates. The SAP for FY09 is yet to be declared. While the Allahabad High Court recently upheld the Rs125 per quintal cane price for FY08, cases for both FY07 and FY08 are now with the Supreme Court.

Cane price uncertainty remains an overhang

Sourcing of cane

Cane availability determines revenues for all three segments of the business. This, in turn, depends on acreage in the command area of the mills as well as diversion to alternate sugar manufacturers. Sourcing of cane for individual mills can swing substantially from year to year and is thus a key source of risk to our estimates.

Sourcing of cane will be key in years of shortage

Regulatory risks

Regulatory risks are common to the entire sugar sector. Balrampur Chini is likely to be most impacted by regulatory interventions aimed at controlling sugar prices, given the high sensitivity to sugar realisations to its earnings.

Financials

Figure 101: **Balrampur Chini: P&L**

(Rs mn)	03/05	09/06	09/07	09/08E	09/09E	09/10E
Net sales	8,133	18,984	13,917	14,562	18,576	21,003
Raw material Expenses	4,365	12,217	10,674	9,779	11,525	12,483
Employee cost	350	666	753	803	843	885
Other expenses	1,019	1,502	1,598	1,652	2,167	2,376
EBITDA	**2,400**	**4,599**	**893**	**2,327**	**4,042**	**5,259**
Depreciation	373	671	802	1,219	1,452	1,466
EBIT	2,027	3,928	91	1,109	2,589	3,793
Interest costs	197	349	631	889	1,112	554
Other income	(192)	70	187	140	-	-
PBT	**1,639**	**3,649**	**(353)**	**360**	**1,478**	**3,239**
Tax	389	733	65	79	325	713
PAT	**1,251**	**2,916**	**(418)**	**281**	**1,153**	**2,526**
Adjusted PAT	1,447	2,853	(518)	141	1,153	2,526
Adjusted EPS - basic	7.12	11.93	(2.09)	0.53	4.30	9.44
Adjusted EPS - diluted	7.12	11.93	(2.09)	0.53	4.30	9.44

Source: Company data, Credit Suisse estimates

Figure 102: **Balrampur Chini: balance sheet**

(Rs mn)	03/05	09/06	09/07	09/08E	09/09E	09/10E
Share capital	232	248	248	266	268	268
Reserves	4,688	8,810	8,394	10,279	11,437	13,650
Shareholder's funds	4,920	9,058	8,642	10,545	11,705	13,918
Debt	3,864	5,474	12,862	14,989	10,246	4,416
Deferred tax liabilities	1,017	1,193	1,232	1,232	1,232	1,232
Total liabilities	**9,801**	**15,725**	**22,736**	**26,766**	**23,183**	**19,567**
Net fixed assets	5,532	13,319	19,200	21,237	20,034	18,818
Investments	453	2	34	34	34	34
Inventory	4,670	1,983	4,330	5,637	3,699	1,565
Sundry debtors	305	557	462	468	592	667
Cash & Bank balances	177	157	165	165	165	165
Other current assets	723	2,077	2,431	2,032	1,532	1,032
Sundry creditors	1,342	1,691	3,223	2,143	2,210	2,052
Other current liabilities	716	680	664	664	664	664
Total assets	**9,801**	**15,725**	**22,736**	**26,767**	**23,183**	**19,567**

Source: Company data, Credit Suisse estimates

Figure 103: **Balrampur Chini: cash flow statement**

(Rs mn)	03/05	09/06	09/07	09/08E	09/09E	09/10E
PBT	1,862	3,649	(353)	360	1,478	3,239
Depreciation	373	671	802	1,219	1,452	1,466
Other non-cash adjustments	(109)	(124)	854	810	787	(158)
Changes in net working capital	(336)	1,382	(1,039)	(1,994)	2,381	2,400
Net cash flow from operations	**1,789**	**5,577**	**265**	**394**	**6,098**	**6,947**
Change in fixed assets	(441)	(8,436)	(6,687)	(3,255)	(250)	(250)
Change in investments	(443)	451	(32)	-	-	-
Misc.	(25)	(24)	50	12	12	9
Net cash flow from investments	**(909)**	**(8,010)**	**(6,669)**	**(3,244)**	**(238)**	**(241)**
Change in debt	(1,474)	1,610	7,388	2,127	(4,743)	(5,829)
Change in equity	1,704	2,154	-	1,623	164	-
Interest, dividend & others	(390)	(1,351)	(975)	(900)	(1,281)	(877)
Net cash flow from financing	**(160)**	**2,413**	**6,412**	**2,850**	**(5,860)**	**(6,706)**
Extraordinary items	(610)	-	-	-	-	-
Net change in cash	**110**	**(20)**	**8**	**-**	**0**	**0**
Year beginning cash	66	177	157	165	165	165
Year ending cash	177	157	165	165	165	165

Source: Company data, Credit Suisse estimates

Figure 104: **ROE Du-Pont**

(Rs mn)	03/05	09/06	09/07	09/08E	09/09E	09/10E
ROE (%)	**25.4**	**32.2**	**(4.8)**	**2.7**	**9.8**	**18.2**
Operating margin (EBIT/Sales)	24.9	20.7	0.7	7.6	13.9	18.1
Interest burden (PBT/EBIT)	80.8	92.9	(390.0)	32.5	57.1	85.4
Tax burden (PAT/PBT)	76.3	79.9	118.3	78.0	78.0	78.0
Asset Turnover (Sales/Assets)	0.7	1.1	0.5	0.5	0.7	0.9
Gearing (Assets/Equity)	2.4	2.0	3.1	2.8	2.2	1.6

Source: Company data, Credit Suisse estimates

Figure 105: **Key ratios**

(Rs mn)	03/05	09/06	09/07	09/08E	09/09E	09/10E
Growth						
Sales growth (%)	16.3	133.4	(26.7)	4.6	27.6	13.1
EBITDA growth (%)	94.2	91.6	(80.6)	160.7	73.7	30.1
Adjusted PAT growth (%)	162.3	97.2	(118.2)	(127.2)	718.7	119.2
EPS growth (%)	147.4	67.5	(117.5)	(125.4)	712.9	119.2
Margins						
EBITDA margin (%)	30.2	24.1	6.3	15.8	21.7	25.0
PBT margin (%)	20.6	19.2	(2.5)	2.4	7.9	15.4
Adjusted PAT margin (%)	18.2	15.0	(3.7)	1.0	6.2	12.0
Key metrics						
EPS	7.1	11.9	(2.1)	0.5	4.3	9.4
DPS	1.8	3.6	-	-	0.5	1.0
BVPS	24.2	37.9	34.8	39.7	43.7	52.0
ROCE (%)	23.1	27.0	0.4	4.3	11.8	20.7
ROE (%)	25.4	32.2	(4.8)	2.7	9.8	18.2
Net debt to equity (x)	0.7	0.6	1.5	1.4	0.9	0.3

Source: Company data, Credit Suisse estimates

Asia Pacific / India
Agricultural Products & Agribusiness

Shree Renuka Sugars Limited

(SRES.BO / SHRS IN)

Rating	**OUTPERFORM* [V]**
Price (06 Aug 08, Rs)	135.80
Target price (Rs)	165.30[1]
Chg to TP (%)	21.7
Market cap. (Rs mn)	36,666.00 (US$ 873.00)
Enterprise value (Rs mn)	43,283
Number of shares (mn)	270.00
Free float (%)	59.00
52-week price range	137.50 - 46.25

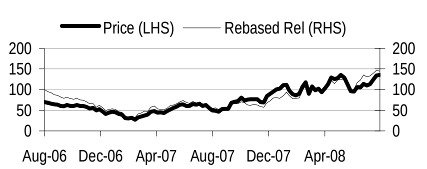
**Stock ratings are relative to the relevant country index.*
[1]Target price is for 12 months.
[V] = Stock considered volatile (see Disclosure Appendix).

Research Analysts
Arya Sen
9122 6777 3807
arya.sen@credit-suisse.com

It's not about the cycle

- **Event:** We initiate coverage with an OUTPERFORM rating and a target price of Rs165.
- **View:** Shree Renuka Sugar is reducing its dependence on the core sugar business, with an increasing contribution to both revenues and margins coming from renewables, particularly ethanol. Moreover, even its sugar business is less cyclical due to its presence in sugar refining and on account of cane price in south India, where all its mills are located, being closely linked to sugar price. As a result, it has relatively less to gain from rising sugar price – yet a unique business model and strong secular growth prospects make it an attractive investment opportunity, in our view. We expect Shree Renuka to see significant margin expansion and more stable earnings as the company becomes one of the most integrated sugar manufacturers with more than 40% of revenues and an even higher proportion of profits coming from the distillery and cogeneration segments. Non-trading revenues are estimated to grow 50% CAGR from FY07 to FY10E, while overall EBITDA margin is expected to expand by ~450 bp to 19% by FY10.
- **Catalyst:** The key catalysts for the stock are likely to be the successful implementation of all new and planned capacity as well as rise in prices of sugar, distillery products and power. Inorganic growth through new investments could also lead to upside.
- **Valuation:** Our target price is based on a FY10 EV/EBITDA multiple of 9x (13x FY09 EV/EBITDA). We believe that Shree Renuka deserves a higher multiple than the other sugar companies on account of: 1) more stable earnings, 2) better growth prospects and 3) differentiated business model. Of late, the stock has seen some re-rating. Also we value the two key subsidiaries KBK Chemicals and Shree Renuka Commodities DMCC on SOTP basis at Rs5 per share (10x FY10E P/E) and Rs6.8 per share (4x FY10E P/E), respectively. Key risks are: 1) delays in capacity expansion and 2) raw material availability

Share price performance



The price relative chart measures performance against the BOMBAY SE 30 SHARE SENSITIVE index which closed at 15073.54 on 06/08/08
On 06/08/08 the spot exchange rate was Rs42.00/US$1

Performance	1M	3M	12M
Absolute (%)	19.4	9.7	146.8
Relative (%)	6.6	26.5	144.0

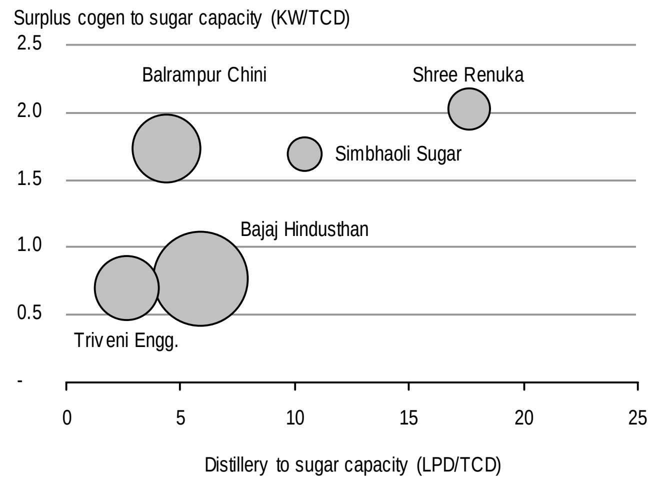
Financial and valuation metrics

Year	9/07A	9/08E	9/09E	9/10E
Revenue (Rs mn)	7,323.7	18,856.1	23,907.1	30,646.7
EBITDA (Rs mn)	1,047.0	3,002.2	4,210.3	5,838.9
EBIT (Rs mn)	797.9	2,574.5	3,408.6	4,829.8
Net income (Rs mn)	442.8	1,404.8	1,949.2	2,704.8
EPS (CS adj., Rs)	2.00	4.98	6.90	9.58
Change from previous EPS (%)	n.a.			
Consensus EPS	n.a.	0	0	0
EPS growth (%)	-10.7	148.5	38.8	38.8
P/E (x)	67.8	27.3	19.7	14.2
Dividend yield (%)	0.26	0.18	0.18	0.18
EV/EBITDA (x)	40.7	14.4	11.2	7.6
P/B (x)	9.7	5.5	4.3	3.3
ROE (%)	16.2	20.1	21.9	23.5
Net debt/equity (%)	183.6	101.8	121.7	73.2

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

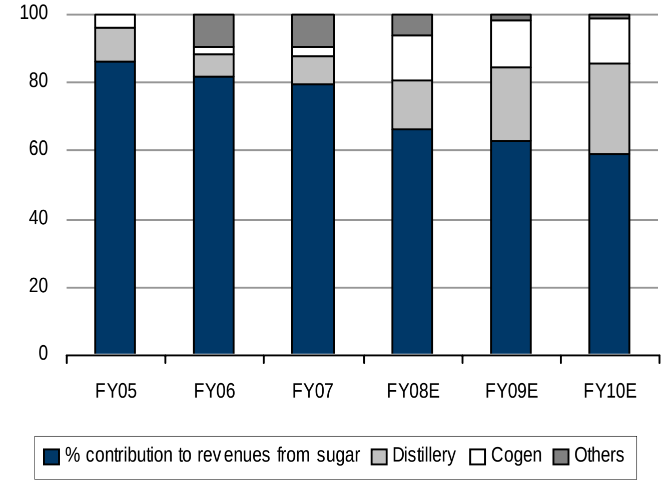
Focus charts

Figure 106: Shree Renuka is one of the most integrated sugar manufacturers



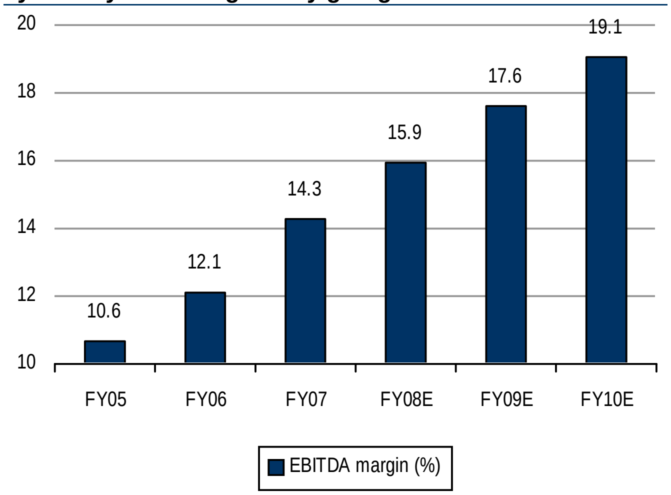
Size of the bubble indicates crushing capacity;
Source: Company data, Credit Suisse estimates

Figure 107: Cogen and distillery to contribute to more than 40% of revenues by FY10E



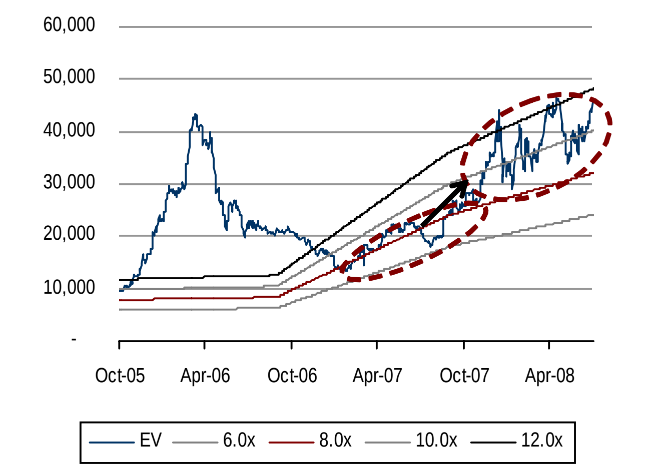
Source: Company data, Credit Suisse estimates

Figure 108: EBITDA margin to expand by ~450 bps; lower cyclicality in earnings likely going forward



Source: Company data, Credit Suisse estimates

Figure 109: The stock has been seeing some re-rating of late



Source: Company data, Credit Suisse estimates

Figure 110: Shree Renuka – key assumptions

	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realisation (Rs per kg)	15.9	14.0	13.4	16.6	18.3	20-25% rise in FY09, 10% in FY10
Cane cost (Rs per quintal)	152	110	110	130	145	Rising in line with sugar prices
Cane crushed (mn tonnes)	1.8	2.7	4.5	4.3	4.9	Lower cane crushing per TCD partly offset by higher capacity
Recovery rate (%)	11.3	10.8	11.4	11.4	11.4	Recovery rates assumed constant going forward
Cane crushed per TCD (tonnes)	206	183	173	147	141	Cane crushed per TCD to drop less than average due to good relationship with farmers - farmers are shareholders
Refinery margins (Rs per kg)	3.6	4.5	3.2	3.5	3.5	Expect refinery margins to expand slightly next year on sugar shortage globally
Distillery realization (Rs per litre)	23.1	21.1	21.9	23.0	25.3	Expected to rise 5% in FY09 an 10% in FY10; existing contracts with OMCs may limit upside in FY09
Cogen realization (Rs per unit)	3.84	3.95	6.10	7.10	7.60	Power rise with rising demand-supply gap
Trading margins (%)	18.7	3.1	3.2	4.0	4.0	Expect trading margins to be in the 3-4% range

Source: Company data, Credit Suisse estimates

It's not about the cycle

Shree Renuka is reducing its dependence on the core sugar business with an increasing contribution to both revenues and margins coming from renewables, particularly ethanol. Moreover, even its sugar business is less cyclical due to its presence in sugar refining and on account of cane price in south India, where all its mills are located, being closely linked to sugar price. As a result, it has relatively less to gain from rising sugar price – yet a unique business model and strong secular growth prospects make it an attractive investment opportunity in our view. We initiate with an OUTPERFORM and target price of Rs165.

Reducing dependence on cyclical sugar business – nearly 70% of revenues to be non-cyclical by FY10

Playing it differently

Shree Renuka's unique business model differentiates it from most other Indian sugar manufacturers in many ways. 1) Mills are located in the southern states of Maharashtra and Karnataka where cane prices are linked to sugar realisations. 2) The company is adding substantial capacity in distillery and cogeneration which is likely to make it one of the most integrated sugar manufacturers in the country. 3) In the sugar business, presence in refining and trading segments in addition to cane crushing help reduce cyclicality of earnings. 4) Shree Renuka operates on both leased and owned models for its sugar mills. Leasing does not require up-front capital expenditure and releases funds for investment elsewhere. In addition, the management has competence in taking over sick co-operative mills and turning them around which reduces both capex spend and lead time. 5) Finally, the company is increasingly positioning itself as one of the leading bio-fuel players in the country by expanding both organically and inorganically its ethanol and distillery businesses. We expect Shree Renuka's unique business model to lead to more stable earnings, margin expansion and strong growth going forward.

Unique business model to lead to stable earnings, margin expansion and strong growth

Rising renewables, rising margin

Shree Renuka is likely to see both strong revenue growth (50% CAGR) and margin expansion (~450 bp EBITDA) over the next few years. Revenue growth is expected in all three businesses with contribution from renewables (distillery and cogen) in particular increasing manifold from a low base. This should reduce dependence on sugar – by FY10, contribution from sugar is expected to decline to less than 60% (of which a part will come from the refinery segment) with remaining coming from distillery (26%) and cogen (14%). The shift to a more integrated model together with higher realizations in all three segments should lead to margin expansion– we estimate EBITDA margin to rise to c19% from existing 14.3%.

Non-trading revenues to grow at 50% CAGR from FY07 to FY10; EBITDA margin to expand to 19%

Initiate with OUTPERFORM, target price of Rs165

We initiate coverage on Shree Renuka Sugar with an OUTPERFORM rating and a Target Price of Rs165. Our target price is based on a FY10E EV/EBITDA multiple of 9x (13x FY09E EV/EBITDA). We believe that Shree Renuka deserves a higher multiple than the other sugar companies on account of: 1) more stable earnings, 2) strong growth prospects both in existing businesses and through a number of new investments being planned which are not currently factored into our model and 3) differentiated business model. Of late, the stock has been seeing some re-rating. We value the two key subsidiaries KBK Chemicals and Shree Renuka Commodities DMCC on SOTP basis at Rs5 per share (10x FY10 P/E) and Rs 6.8 per share (5x FY10 P/E) respectively.

More stable earnings, strong growth prospects deserve premium valuation

Risks

The key risks to our estimates and target price are on account of: 1) delays in capacity expansion, 2) raw material availability/prices, 3) slow implementation of ethanol blending programme and 4) adverse regulatory intervention, particularly related to exports

Execution will be the key

Playing it differently

Shree Renuka's unique business model to lead to margin expansion, more stable earnings and strong growth

Shree Renuka's business model differentiates it from most other Indian sugar manufacturers in many ways. 1) Mills are located in the southern states of Maharashtra and Karnataka where cane prices are linked to sugar realizations. 2) The company is adding substantial capacity in distillery and cogeneration which is likely to make it one of the most integrated sugar manufacturers in the country leading to higher, more stable margins going forward. 3) In the sugar business, presence in refining and trading segments in addition to cane crushing help reduce cyclicality of earnings. 4) Shree Renuka operates on both leased and owned models for its sugar mills. Leasing does not require up-front capital expenditure and releases funds for investment elsewhere. In addition the management has competence in taking over sick co-operative mills and turning them around which reduces both capex spend and lead time. 5) Finally, the company is increasingly positioning itself as one of the leading bio-fuel players in the country by expanding both organically and inorganically its ethanol business. We expect Shree Renuka's unique business model to lead to more stable earnings, margin expansion and strong growth going forward.

Mills in south implies lower margin volatility

Cane prices in south are linked to sugar realisations, making the sugar business less cyclical than in UP

All of Shree Renuka's mills are based out of the two south Indian states of Maharashtra and Karnataka. Unlike in Uttar Pradesh (where both Bajaj Hindusthan and Balrampur Chini have their mills) there is no SAP in either of these states. The minimum price that mills need to pay farmers is therefore only the central government declared SMP which is substantially lower than the SAP valid for Uttar Pradesh (Rs81.2 per quintal for 9% recovery in FY08 versus Rs 125 per quintal SAP for UP in FY08). As a result, cane prices in these states are far more linked to sugar prices – in an up-cycle cane prices go up along with (but not necessarily in line with) sugar prices whereas in a down-cycle cane prices come down significantly being capped at the low SMP value. With cane prices accounting for a significant proportion of costs (~60-70%), this implies that margins for Shree Renuka is relatively less volatile across cycles.

Lower effective cost of cane in south, but sugar prices are also lower

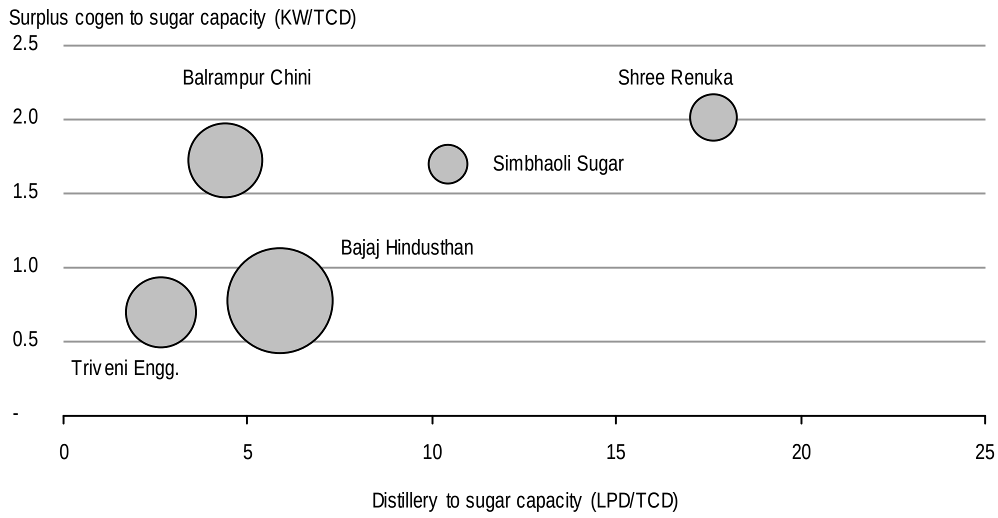
The economics of sugar industry is also different in the south. Recovery rates are higher, duration of crushing is longer and the alternate sweetener industry is far less active leading to less competition for cane and higher drawal rates – however, these advantages are offset by greater swings in cane acreage and lower realizations in sugar.

Integration – in a league of its own

The most integrated of Indian sugar manufacturers

Shree Renuka has embarked upon a massive capacity expansion phase in its renewables segment. Distillery capacity is set to rise by 7x from 150 KLPD in FY07 to 1200 KLPD by FY10; similarly export power capacity is also set to rise manifold to 70MW. This will make Shree Renuka one of the most integrated sugar manufacturers in India. As Figure 109 shows, both distillery and cogen capacities as a proportion of cane crushing capacity will be significantly higher than the rest of the industry.

Figure 111: Shree Renuka is far more integrated than most major sugar manufacturers



Size of the bubble indicates crushing capacity; As per capacity in FY08;
Source: Company data, Credit Suisse estimates

A more integrated model is expected to provide Shree Renuka with the twin advantages of: 1) higher value per tonne of cane crushed and 2) low variability in margins.

Margins for Shree Renuka are more stable than for Bajaj & Balrampur

Figure 112: Integration helps reduce Shree Renuka's margin volatility

EBITDA margin (%)	FY04	FY05	FY06	FY07	FY08E	FY09E	FY10E
SHRS	14.2	10.6	12.1	14.3	15.9	17.6	19.1
BJH	18.7	24.8	21.1	10.7	10.4	16.7	21.4
BRCM	17.5	30.2	24.1	6.3	15.8	21.7	25.0

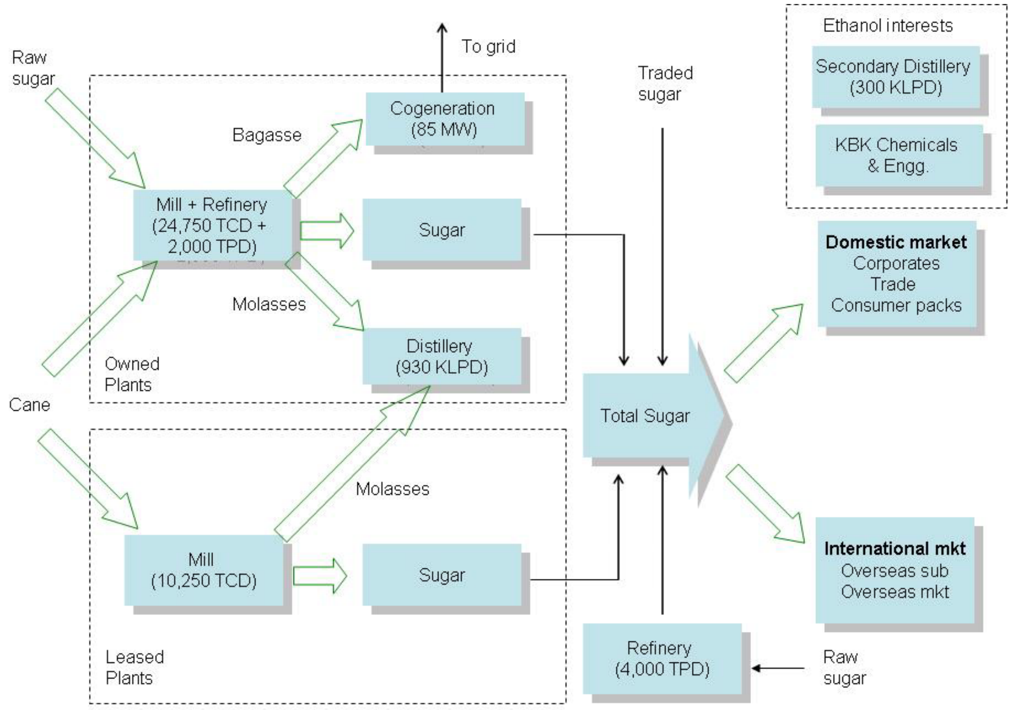
Source: Company data, Credit Suisse estimates

A unique business model even in sugar

Shree Renuka has increased refining capacity to 4,000 TPD

- *Refining:* Shree Renuka has one of the highest sugar refinery capacities in India of 4,000 TPD, including an export-oriented refinery in Haldia of 2,000 TPD. The company plans to run the refineries partly on their own sugar and partly from imported sugar. In the second model, Shree Renuka's profits will be on account of refinery margins. Historically, refinery margins have been less volatile than crushed sugar margins. Moreover, refineries will reduce dependence on own cane and help protect the top line even when cane sourced is lower.

Figure 113: **Shree Renuka's business interest in sugar is diversified across crushing, refinery and trading**



Note: Post all expansion plans;
Source: Company data, Credit Suisse estimates

Shree Renuka is diversified even in its sugar business with presence in refining and trading in addition to crushing

- *Trading:* Shree Renuka also engages actively in trading both in the domestic market as well as in the international market through its subsidiary Shree Renuka in Dubai.
- *Owned and leased mills:* Shree Renuka works on both owned and leased capacity models. Of the 29,000 TCD capacity, more than a third (10,250 TCD) is leased. The leasing model reduces the lead time required to set up new capacity and releases funds for investment elsewhere.
- *Turn-around of sick mills:* Shree Renuka also works on a model of buying or leasing sick cooperative mills and turning these around. This has dual advantages: 1) lower capital expenditure and 2) reduced lead time than in the case of green-field expansion as less time and effort is required in developing the cane area around the mill.

Management has expertise in buying or leasing sick mills and turning them around

Figure 114: **Acquisition of sick mills can be at substantial discount to replacement cost through green-field route**

Ratnaprabha Sugar Mills	Capacity	Cost per unit (Rs mn)	Cost (Rs mn)
Crushing	1,250 TCD	0.3	375
Distillery	30 KLPD	4.5	135
Total replacement cost			**510**
Cost of acquisition			240
Repair/additional capex			60
Total cost of acquisition			**300**

Source: Company data, Credit Suisse estimates

Recent acquisition of Ratnaprabha sugar mills was at significant discount to replacement cost

Bio-fuels growing in importance

The last leg of Shree Renuka's unique business model is its growing focus on ethanol as it attempts to position itself as a major bio-fuel player in India. The company is expanding its operations in this segment through both organic and inorganic routes – investments in this segment are likely to be close to 5,000 mn by FY10.

Figure 115: Investments in bio-fuels segment of up to Rs5,000 mn

Activity	Comment	Investment (Rs mn)
Integrated distillery capacity	From 60 KLPD in FY06 to 900 KLPD by FY10	2,750
Dhanuka Petrochem refinery	Acquired 100 KLPD secondary distillery & expanding capacity to 300 KLPD	60
KBK Chemicals	Acquired majority stake in EPC company specializing in distilleries	400
Shree Renuka Bio-Fuels Holdings	Floated subsidiary in Sharjah International Free Zone for overseas investments	n/a
Overseas acquisition	Planning overseas acquisition in bio-fuel space of up to Rs 1500mn	1,500

Source: Company data, Credit Suisse estimates

Shree Renuka is one of the best positioned to benefit from the bio-fuels opportunity in India

In the long term, the bio-fuels segment is likely to be a major growth driver for the company once E10 blending becomes fully operational and ethanol is manufactured directly from cane. We believe that Shree Renuka could be the best positioned to benefit from the higher off-take of fuel ethanol in India. In fact, Shree Renuka has the highest market share till date in orders already awarded by Oil marketing companies for delivery of fuel ethanol.

Rising renewables, rising margin

Shree Renuka is likely to see both strong revenue growth (50% CAGR) and margin expansion (~450 bp EBITDA) over the next few years. Revenue growth is expected in all three businesses with contribution from renewables (distillery and cogen) in particular increasing manifold from a low base. This should reduce dependence on sugar and change the product mix of the company appreciably – by FY10 contribution from sugar is expected to decline to less than 60% with the remaining coming from distillery (26%) and cogen (14%). The shift to a more integrated model together with higher realisations in all three segments should lead to margin expansion as well – we estimate EBITDA margin to rise to c19% from the existing 14.3%. Our key concerns are on account of 1> delays in capacity expansion 2> availability of raw material – both cane and molasses and 3> higher input prices. In addition, new investments could provide further upside and are not currently factored into our model.

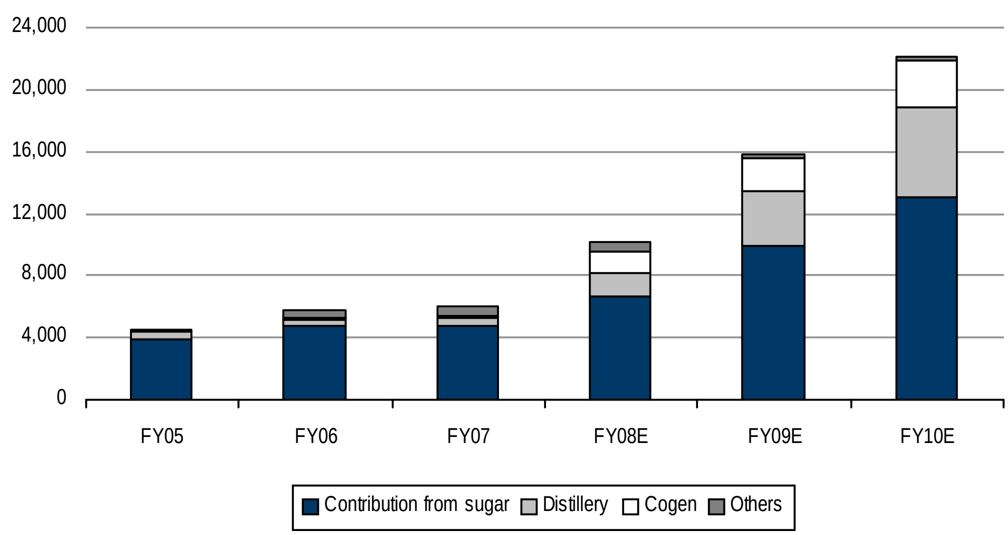
Non-trading revenue to increase 3x from FY07 to FY10; margin to expand by 450 bp

Revenue growth across segments; rise of the renewables

Shree Renuka is set to expand its top line substantially over the next two to three years (45% cagr from FY07 to FY10) with strong growth expected in all three business segments. Distillery and cogen revenues in particular are set to rise manifold from a low base on the back of significant capacity expansion.

Revenue contribution to increase from all three segments

Figure 116: **Non-trading revenues are expected to grow at 45% CAGR**



Note: figures in Rs mn; Includes only non-trading revenues;

Source: Company data, Credit Suisse estimates

The growth in renewables should reduce Shree Renuka's dependence on sugar appreciably – by FY10 contribution from sugar business will decline to less than 60%, of which a substantial portion will be from sugar refining where margins are not cyclical, with the remaining coming from distillery (26%) and cogen (14%).

Sugar to contribute less than 60% by FY10 with even less coming from sugar crushing

Figure 117: **Changing revenue mix – rise of the renewables**

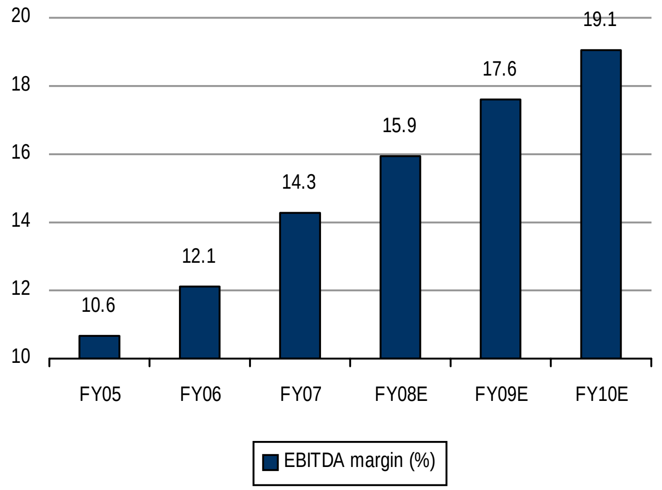
% contribution to non-trading revenues	FY05	FY06	FY07	FY08E	FY09E	FY10E
Sugar	86.0	82.0	79.6	66.1	63.2	58.9
Distillery	10.4	6.2	8.3	14.6	21.5	26.5
Cogen	3.6	2.6	2.5	13.1	13.6	13.5
Others	-	9.2	9.5	6.2	1.7	1.1

Source: Company data, Credit Suisse estimates

Greater integration, higher realisations to expand EBITDA margin by 450 bp

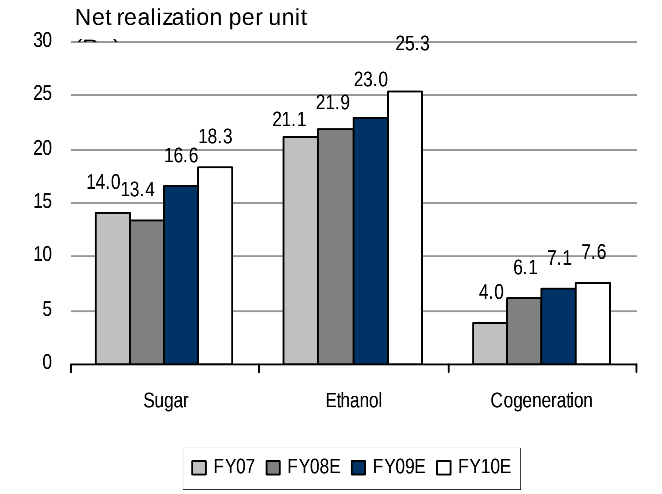
We expect EBITDA margin to rise by 450 bp to c19% by FY10. 1) Greater integration and therefore higher value add from cane is likely to lead to better margins. 2) In addition, realisations are expected to rise in all three segments.

Figure 118: **Rising EBITDA margin on account of higher integration …**



Source: Company data, Credit Suisse estimates

Figure 119: **… and higher realisations across segments**



Source: Company data, Credit Suisse estimates

The change in product mix is expected to change the economics of the business substantially and lead to stable high margins going forward. We present below both a snapshot of the changing business economics as well as our key assumptions.

Shree Renuka has a net realization of Rs30 per kg of sugar sold and an EBITDA of Rs7.8 per kg ex trading

Figure 120: **Shree Renuka – changing business economics**

Rs per kg of sugar sold	**FY05**	**FY06**	**FY07**	**FY08E**	**FY09E**	**FY10E**
Cane crushed (mn tonnes)	0.9	1.8	2.7	4.5	4.3	4.9
Sugar produced (mn tonnes)	0.1	0.2	0.3	0.5	0.5	0.6
Recovery rate (%)	10.6	11.3	10.8	11.4	11.4	11.4
Sugar sold (mn tonnes)	0.2	0.3	0.3	0.5	0.6	0.7
Sugar realization	16.3	17.0	15.0	14.4	17.3	18.8
Distillery	2.0	1.3	1.6	3.2	5.9	8.5
Power - surplus	0.7	0.5	0.5	2.9	3.7	4.3
Others	-	1.9	1.8	1.4	0.5	0.4
Excise	1.4	1.2	0.9	1.5	1.5	1.8
Net realization	**17.6**	**19.5**	**17.9**	**20.4**	**25.8**	**30.1**
Total cost	**16.2**	**17.5**	**14.8**	**14.5**	**19.1**	**22.2**
Raw material cost	13.9	13.7	11.0	9.6	13.6	16.1
Total processing cost	2.4	3.8	3.8	4.9	5.6	6.2
Trading realization	13.3	21.5	14.0	14.4	17.3	18.8
Purchasing cost	11.8	18.1	13.6	14.0	16.6	18.1
EBITDA per kg	**2.3**	**3.5**	**3.3**	**6.5**	**7.3**	**8.4**

Source: Company data, Credit Suisse estimates

Figure 121: **Shree Renuka – key assumptions**

	FY06	FY07	FY08E	FY09E	FY10E	Remarks
Net sugar realization (Rs per kg)	15.9	14.0	13.4	16.6	18.3	20-25% rise in FY09, 10% in FY10
Cane cost (Rs per quintal)	152	110	110	130	145	Rising in line with sugar prices
Cane crushed (mn tonnes)	1.8	2.7	4.5	4.3	4.9	Lower cane crushing per TCD partly offset by higher capacity
Recovery rate (%)	11.3	10.8	11.4	11.4	11.4	Recovery rates assumed constant going forward
Cane crushed per TCD (tonnes)	206	183	173	147	141	Cane crushed per TCD to drop less than average due to good relationship with farmers - farmers are shareholders
Refinery margins (Rs per kg)	3.6	4.5	3.2	3.5	3.5	Expect refinery margins to expand slightly next year on sugar shortage globally
Distillery realization (Rs per litre)	23.1	21.1	21.9	23.0	25.3	Expected to rise 5% in FY09 an 10% in FY10, existing contracts with OMCs may limit upside in FY09
Cogen realization (Rs per unit)	3.84	3.95	6.10	7.10	7.60	Merchant power realization to rise with rising demand-supply gap
Trading margins (%)	18.7	3.1	3.2	4.0	4.0	Expect trading margins to be in the 3-4% range

Source: Company data, Credit Suisse estimates

Delays in expansion, raw material sourcing, higher raw material prices are concerns

- *Delays in capacity expansion:* Shree Renuka is expanding capacity rapidly with plans of expanding crushing capacity by 6,000 TCD, refinery capacity by 2,000 TPD, cogen capacity by 15MW and distillery capacity by 650 KLPD (integrated plus standalone). Delay in capacity expansion is the biggest risk in our view.

Pending expansion implies execution risks

- *Sourcing of raw material:* With acreage in Maharashtra set to drop by more than 20% - on account of crop switching and poor monsoons, sourcing of cane could become a major issue for Shree Renuka. Currently, we have factored in a 15% drop in cane sourcing for the company in FY09 and FY10 which could be even lower. In addition, with large distillery capacity and lower sourcing of cane, availability of molasses could also be a problem leading to lower utilization.

Sourcing of cane and molasses could be an issue

- *Raw material prices:* Cane prices could be higher than estimates leading to a fall in profits. We provide below the sensitivity of EBITDA to cane and sugar price estimates. Similarly molasses prices could also surprise on the upside.

Figure 122: **Sensitivity of FY09 EBITDA to cane cost/sugar realisation**

FY09 EBITDA (Rs mn)	**Cane cost (Rs per quintal)**				
Non-levy sugar gross realization (Rs per kg)	**125**	**130**	**135**	**140**	**145**
15	3,267	3,084	2,900	2,717	2,534
16	3,664	3,481	3,298	3,115	2,931
17	4,062	**3,878**	**3,695**	3,512	3,329
18	4,459	**4,276**	**4,093**	3,909	3,726
19	4,856	4,673	4,490	4,307	4,123

Source: Company data, Credit Suisse estimates

Shree Renuka is relatively less exposed to the cycle – deviation of sugar and cane price from our assumptions can change EBITDA by 10-12%

Figure 123: **Sensitivity of FY10 EBITDA to cane cost/sugar realization**

FY10 EBITDA (Rs mn)	**Cane cost (Rs per quintal)**				
Non-levy sugar gross realisation (Rs per kg)	**140**	**145**	**150**	**155**	**160**
18	5,250	5,015	4,779	4,544	4,309
19	5,709	**5,473**	**5,238**	5,003	4,767
20	6,167	**5,932**	**5,697**	5,461	5,226
21	6,626	6,391	6,155	5,920	5,685
22	7,085	6,849	6,614	6,379	6,143

Source: Company data, Credit Suisse estimates

New investments could lead to further upside

Shree Renuka is looking to make substantial investments in both overseas and domestic markets. The company is also planning to raise up to Rs11,000mn in equity to finance the capacity expansions and new investments. If made at a reasonable price such an acquisition could be value accretive and provide more upside to the stock which is not currently factored into our assumptions.

The company is planning to raise up to Rs11,000 mn for expansions and new acquisitions

Initiate with OUTPERFORM; target price of Rs165

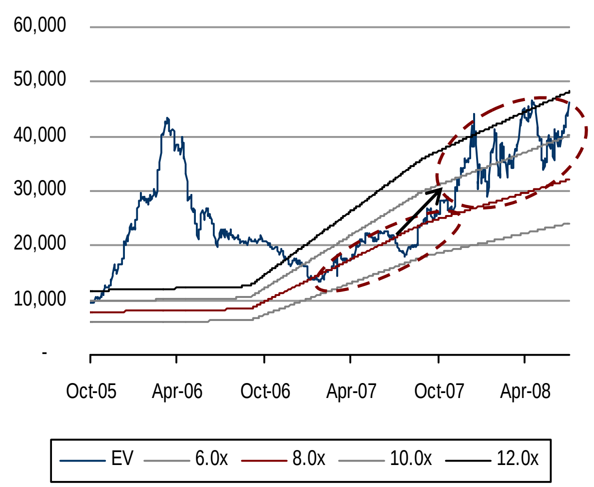
We initiate coverage on Shree Renuka Sugar with an OUTPERFORM rating and a target price of Rs165. Our target price is based on a FY10 EV/EBITDA multiple of 9x (13x FY09 EV/EBITDA). We believe that Shree Renuka deserves a higher multiple than the other sugar companies on account of: 1) more stable earnings, 2) strong growth prospects both in existing businesses and through a number of new investments being planned which are not currently factored into our model and 3) differentiated business model. Of late, the stock has been seeing some re-rating. Also we value the two key subsidiaries KBK Chemicals and Shree Renuka Commodities DMCC on SOTP basis at Rs5 per share (10x FY10 P/E) and Rs 6.8 per share (4x FY10 P/E), respectively. We prefer EV/EBITDA over DCF given the lack of visibility in earnings over the medium term due to the possibility of significant investments across different business segments.

The stock has been seeing some re-rating of late – we value it at 9x FY10E EV/EBITDA

Valuing at higher multiple, on account of more stable earnings, strong growth prospects

We value Shree Renuka at 9x FY10E EV/EBITDA (13x FY10 EV/EBITDA) to arrive at our target price of Rs165. This implies 16x FY10 EPS.

Figure 124: **The stock has seen some re-rating of late**



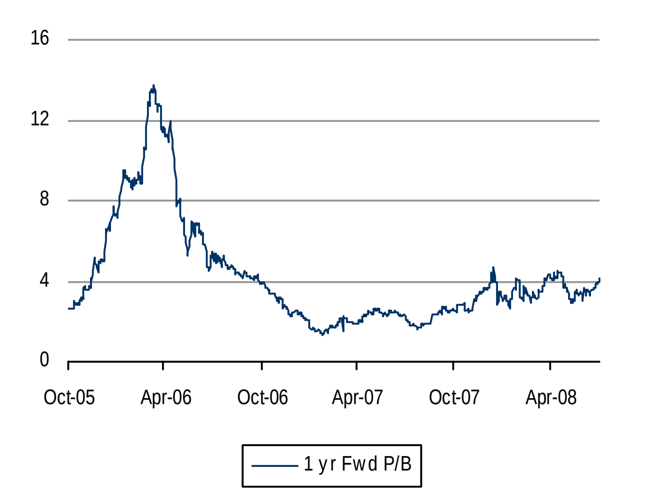
Source: Bloomberg, Credit Suisse estimates

Figure 125: **Our target price implies a FY10E P/E of 16x**

Source: Bloomberg, Credit Suisse estimates

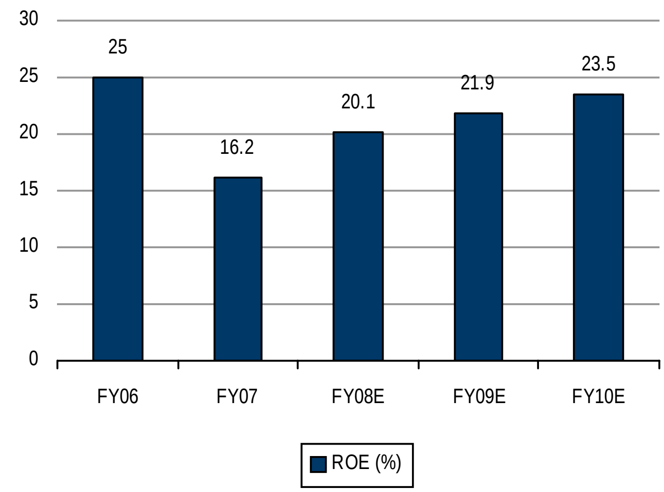
We believe these multiples are fair given the expected expansion in margins, less cyclical business model and strong growth prospects through both organic and inorganic routes. All these factors have led to a re-rating of the stock in recent times as shown in the figure below.

Figure 126: Our target price implies FY10E P/B of 3.8x



Source: Company data, Credit Suisse estimates

Figure 127: ROE set to be above 20%



Source: Company data, Credit Suisse estimates

Subsidiaries to add Rs12 per share

We value the two main subsidiaries KBK Chemicals (EPC for setting up distilleries) and Shree Renuka Commodities DMCC (sugar trading in international markets) on a SOTP basis. We value KBK Chemicals at Rs5 per share (10x FY10 P/E) and Shree Renuka Commodities DMCC at Rs6.8 per share (4x FY10 P/E).

We prefer EV/EBITDA over DCF given the lack of visibility in earnings over the medium term due to the possibility of significant investments across different business segments.

Risks

Delays in capacity expansion

Delays in capacity expansion is a key risk in our view

Shree Renuka is still in the process of expanding capacity, particularly in the distillery segment. Delay in capacity expansion plans poses risks to our earnings projections.

Raw material availability

Lower cane and molasses availability is a concern

With shift in acreage to other crops and poor rainfall so far in both Maharashtra and Karnataka, sourcing of cane could suffer and may be below our estimates. For its distillery operation Shree Renuka depends on external sources for molasses. Availability of molasses could also be an issue if cane acreage falls. As a result, prices of raw materials could be higher than our estimates.

Slow implementation of ethanol blending

While ethanol blending of up to 10% is set to become mandatory from October, 2008 actual off-take of ethanol for blending is still below 5% as OMCs have been slow in implementing the ethanol blending programme.

Regulatory risks

Regulatory risks are common to the entire sugar sector. Withdrawal of export subsidies and other export related regulations in particular could impact Shree Renuka adversely as a significant portion of its revenues is from exports.

Financials

Figure 128: **Shree Renuka: P&L statement**

Year-end Sep-30 (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
Net sales	6,392	8,016	7,324	18,856	23,907	30,647
Raw material Expenses	3,356	3,836	3,494	4,482	7,826	11,123
Cost of traded goods	1,786	2,161	1,589	9,100	8,644	9,418
Employee cost	82	122	238	341	363	445
Other expenses	488	926	956	1,931	2,864	3,822
EBITDA	**681**	**971**	**1,047**	**3,002**	**4,210**	**5,839**
Depreciation	80	88	249	428	802	1,009
EBIT	601	883	798	2,574	3,409	4,830
Net interest costs	118	174	119	647	787	1,192
Other income	7	30	101	8	-	-
PBT	**490**	**739**	**780**	**1,935**	**2,622**	**3,638**
Tax	83	183	236	522	672	933
PAT	**407**	**556**	**544**	**1,413**	**1,949**	**2,705**
Adjusted PAT	400	526	443	1,405	1,949	2,705
Adjusted EPS - basic	2.3	2.2	2.0	5.0	6.9	9.6
Adjusted EPS - diluted	2.3	2.2	2.0	5.0	6.9	9.6

Source: Company data, Credit Suisse estimates

Figure 129: **Shree Renuka: Balance sheet**

Year-end Sep-30 (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
Share capital	200	238	311	282	282	282
Reserves	437	1,986	3,047	6,749	8,616	11,238
Shareholder's funds	637	2,224	3,357	7,032	8,898	11,520
Debt	863	3,711	6,470	7,461	11,140	8,743
Deferred tax liabilities	40	57	202	202	202	202
Total liabilities	**1,540**	**5,993**	**10,029**	**14,695**	**20,240**	**20,465**
Net fixed assets	1,131	4,506	7,700	11,577	17,452	18,061
Investments	6	6	168	538	538	538
Inventory	1,123	1,122	1,002	1,719	1,339	900
Sundry debtors	198	539	387	1,071	1,358	1,748
Cash & Bank balances	627	172	307	307	307	307
Other current assets	238	883	1,678	1,334	1,334	1,334
Sundry creditors	1,380	272	478	1,116	1,354	1,688
Other current liabilities	403	964	734	734	734	734
Total assets	**1,540**	**5,993**	**10,029**	**14,695**	**20,240**	**20,465**

Source: Company data, Credit Suisse estimates

Figure 130: **Shree Renuka: Cash flow statement**

Year-end Sep-30 (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
PBT	490	739	780	1,935	2,622	3,638
Depreciation	80	88	249	428	802	1,009
Other non-cash adjustments	140	27	154	146	115	258
Changes in net working capital	16	(1,422)	(644)	(440)	330	384
Net cash flow from operations	**727**	**(569)**	**538**	**2,069**	**3,868**	**5,290**
Change in fixed assets	(256)	(3,463)	(3,448)	(4,304)	(6,677)	(1,618)
Change in investments	(5)	(0)	(162)	(370)	-	-
Misc.	25	(40)	28	32	34	34
Net cash flow from investments	**(237)**	**(3,503)**	**(3,582)**	**(4,642)**	**(6,643)**	**(1,584)**
Change in debt	(41)	2,849	2,759	991	3,679	(2,397)
Change in equity	44	1,010	688	2,344	-	-
Interest, dividend & others	(188)	(242)	(268)	(762)	(903)	(1,308)
Net cash flow from financing	**(185)**	**3,617**	**3,179**	**2,573**	**2,775**	**(3,705)**
Extraordinary items	-	-	-	-	-	-
Net change in cash	**305**	**(455)**	**135**	**-**	**(0)**	**-**
Year beginning cash	322	627	172	307	307	307
Year ending cash	627	172	307	307	307	307

Source: Company data, Credit Suisse estimates

Figure 131: **Shree Renuka: ROE Du-Pont**

Year-end Sep-30 (Rs mn)	FY05	FY06	FY07	FY08E	FY09E	FY10E
ROE (%)	**63.9**	**25.0**	**16.2**	**20.1**	**21.9**	**23.5**
Operating margin (EBIT/Sales)	9.4	11.0	10.9	13.7	14.3	15.8
Interest burden (PBT/EBIT)	81.6	83.6	97.7	75.2	76.9	75.3
Tax burden (PAT/PBT)	83.1	75.2	69.8	73.0	74.4	74.3
Asset Turnover (Sales/Assets)	1.9	1.1	0.7	1.1	1.1	1.3
Gearing (Assets/Equity)	5.2	3.2	3.3	2.4	2.5	2.0

Source: Company data, Credit Suisse estimates

Figure 132: **Shree Renuka: Key ratios**

Key ratios	FY05	FY06	FY07	FY08E	FY09E	FY10E
Growth						
Sales growth (%)	182.7	25.4	(8.6)	157.5	26.8	28.2
Non-trading sales growth (%)	184.3	24.4	4.3	66.5	57.6	39.8
EBITDA growth (%)	111.4	42.7	7.8	186.7	40.2	38.7
Adjusted PAT growth (%)	246.8	31.5	(15.9)	217.2	38.8	38.8
EPS growth (%)	174.5	(4.1)	(10.7)	148.5	38.8	38.8
Margins						
EBITDA margin (%)	10.6	12.1	14.3	15.9	17.6	19.1
PBT margin (%)	7.6	9.2	10.5	10.2	11.0	11.9
Adjusted PAT margin (%)	6.2	6.5	6.0	7.4	8.1	8.8
Key metrics						
EPS	2.3	2.2	2.0	5.0	6.9	9.6
DPS	0.3	0.2	0.4	0.3	0.3	0.3
BVPS	3.7	9.5	14.1	24.9	31.5	40.8
ROCE (%)	40.1	14.9	8.1	17.8	17.0	23.8
ROE (%)	63.9	25.0	16.2	20.1	21.9	23.5
Net debt to equity (x)	0.4	1.6	1.8	1.0	1.2	0.7

Source: Company data, Credit Suisse estimates

Companies Mentioned *(Price as of 06 Aug 08)*
Bajaj Hindusthan Limited (BJHN.BO, Rs182.95, NEUTRAL, TP Rs199)
Bajaj Hindusthan Sugar & Industries Limited (BJHS IN, Rs39.6, NOT RATED)
Balrampur Chini Mills Ltd (BACH.BO, Rs94.05, OUTPERFORM, TP Rs120)
Shree Renuka Sugars Limited (SRES.BO, Rs135.80, OUTPERFORM, TP Rs165)
Simbhaoli Sugar (SBSM IN, Rs46.95, NOT RATED)
Triveni Engg. (TRE IN, Rs111.45, NOT RATED)

Disclosure Appendix

Important Global Disclosures

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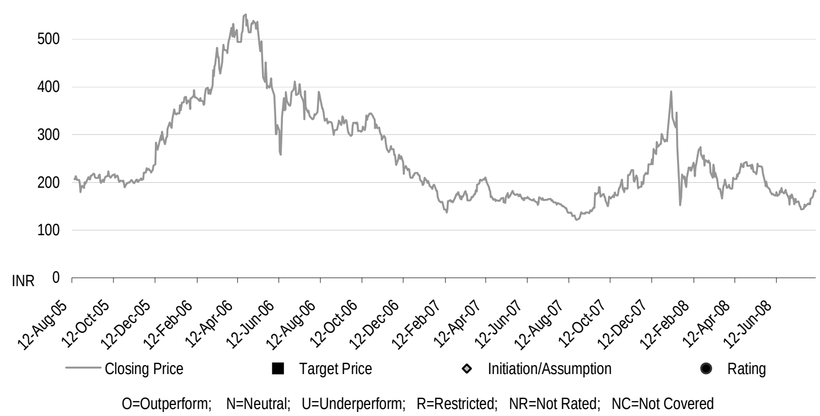
See the Companies Mentioned section for full company names.

3-Year Price, Target Price and Rating Change History Chart for BJHN.BO

BJHN.BO Date	Closing Price	Target Price	Rating	Initiation/ Assumption

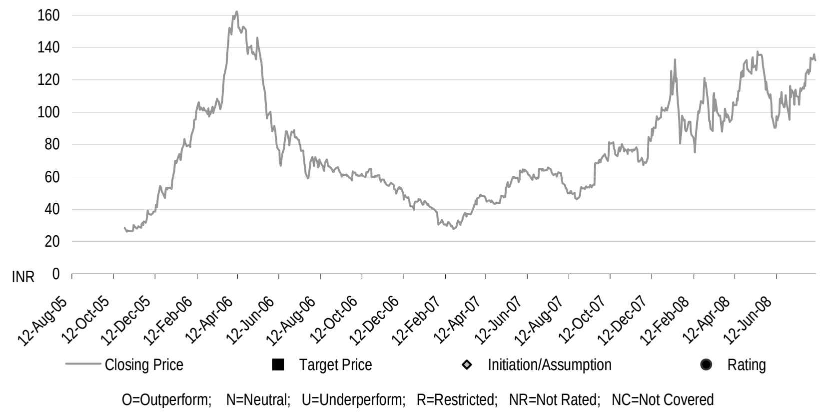


3-Year Price, Target Price and Rating Change History Chart for BACH.BO

BACH.BO Date	Closing Price	Target Price	Rating	Initiation/ Assumption

3-Year Price, Target Price and Rating Change History Chart for SRES.BO

SRES.BO Date	Closing Price	Target Price	Rating	Initiation/ Assumption



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Price Target: (12 months) for (BJHN.BO)
Method: Bajaj Hindusthan. BJH IN. Target price of Rs 199. We have valued the company at FY10 EV/EBITDA of 7x (FY09 EV/EBITDA of 11.5x). The target price implies a FY10E P/E of 13.4x. We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10E. We value Bajaj Eco-Tec on SOTP basis at Rs18 per share at 8x FY10 P/E.
Risks: Bajaj Hindusthan. BJH IN. Target price of Rs 199. Risks to target price of Rs199 are on account of 1> sugar price could be below estimates 2> cane price uncertainty 3> sourcing of cane could be below estimates 4> high leverage 5> execution risks on account of performance of new subsidiaries 6> regulatory risks, particularly those aimed at controlling prices
Price Target: (12 months) for (BACH.BO)
Method: Balrampur Chini Mills. BRCM IN. Target price of Rs 120. We have valued the company at 7x FY10 EV/EBITDA (10.4x FY09 EV/EBITDA). The target price implies a FY10E P/E of 12.7x. We prefer EV/EBITDA over DCF due to the cyclical nature of the business and therefore lack of visibility in earnings beyond FY10.
Risks: Balrampur Chini Mills. BRCM IN. Risks to target price of RS120 are on account of 1> sugar price could be below estimates 2> cane price uncertainty 3> sourcing of cane may be below estimates 4> regulatory interventions, particularly those aimed at controlling prices
Price Target: (12 months) for (SRES.BO)
Method: Shree Renuka Sugars Ltd. SHRS IN. Target price of Rs 165. Our target price is based on a FY10 EV/EBITDA multiple of 9x (13x FY09 EV/EBITDA). We believe that Shree Renuka deserves a higher multiple than the other sugar companies on account of: 1) more stable earnings 2) strong growth prospects both in existing businesses and through a number of new investments being planned which are not currently factored into our model and 3) differentiated business model. Also we value the two key subsidiaries KBK Chemicals and Shree Renuka Commodities DMCC on SOTP basis at Rs5 per share (10x FY10 P/E) and Rs 6.8 per share (4x FY10 P/E), respectively. We prefer EV/EBITDA over DCF given the lack of visibility in earnings over the medium term due to the possibility of significant investments across different business segments.
Risks: Shree Renuka Sugars Ltd. SHRS IN. Target price of Rs 165. Risks to target price of Rs165 are on account of 1> delays in capacity expansion 2> Raw material availability/prices for both sugarcane and molasses 3> regulatory risks particularly those aimed at controlling exports 4> delays in ethanol blending programme

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CREDIT SUISSE (Hong Kong) Limited
Asia/Pacific: +852 2101-6000