

Global sugar market setting

India has always been a major sugar producer, and has for most of the past been a swing importer/exporter in the market. It is the global sugar market's biggest swing factor – Figure 1 shows India's domestic surplus/deficit situation vs the global situation (Oct/Sep basis). There is a strong correlation ($R^2=0.63$) (Figure 2) – as is befitting a major swing factor in a commodity where trade is a limited portion of the global market (such as sugar). Surpluses and deficits in the global market drive price, and India's sugar balance drives the global balance. **The market focusses intently on India's balance, because it matters to the global trade situation.**

Global market Cost of Production

Long term average prices in commodity markets tend to reflect one of two related factors - the cost of production (COP) of efficient producers (in times where the market doesn't need additional new supply) or the cost of bringing new production into the market (when it is suffering structural undersupply). Efficient markets commonly bring in production from the most efficient supplier first. Thus, longer term average market prices tend to reflect the cost of efficient supplier(s) bringing new supply into the market. In the raw sugar market (Figure 3), the price average since Jan 2000 (almost 19 years) is 14.03 c/lb while the most recent 5 years since Nov 13 was 15.31 c/lb. Green Pool's estimates of COP for the efficient global raw sugar exporters (Brazil, Thailand, Australia) are between 14-18 c/lb over that 5 year period (more recently 14-16 c/lb), so for the market to average 15.31 c/lb supports the logic outlined above. **As such, the Indian sugar milling sector is not globally competitive and requires export subsidies to compete with the likes of Brazilian, Thai and Australian sugar exports.**

Cane Prices – a one way street

The most efficient global cane growers and sugar producers have market disciplines thrust upon them – that is, low prices force increased cost efficiency. Very few cane growers globally have the luxury of an ever-increasing cane price like India (see Figure 4) (note State Advised Prices are often higher than the FRP and are also increasing) and further support by way of assistance payments (paid via the mills) and further energy, water and fertiliser subsidies. In combination with favourable weather, the effect of these subsidies in 2017/18 and 2018/19 is significant cane and sugar production in excess of domestic sugar requirements. As a consequence, additional export subsidies were needed to incentivise mills to 'move' sugar externally, due to their high fixed costs, falling internal prices and low global prices. In doing so, globally efficient producers suffer because they are unable to consolidate their competitive position and they incur operating losses and threats to their viability.

India's fixed prices for cane are never fixed lower than the prior year and they are not orientated to either domestic price controls or variable export parity prices. Figure 4 shows that even after the 10.9% increase in the FRP in 17/18, which has resulted in a massive domestic surplus, India's government went ahead in July 2018 and locked in a further 3.5% rise for 18/19 (not by coincidence a National government election year in India). **It is the combination of high and increasing national and state determined cane price and other generous subsidies, together with increasing cane yields (and therefore efficiencies) and high reservoir levels coupled with increasing**

Figure 1

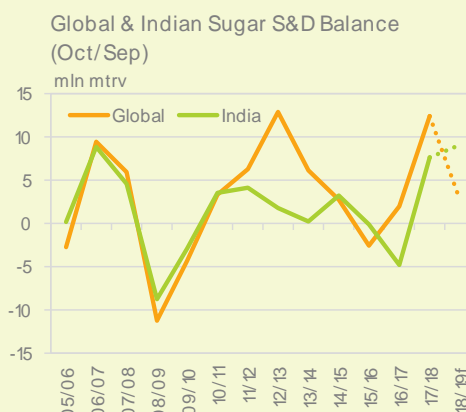


Figure 2

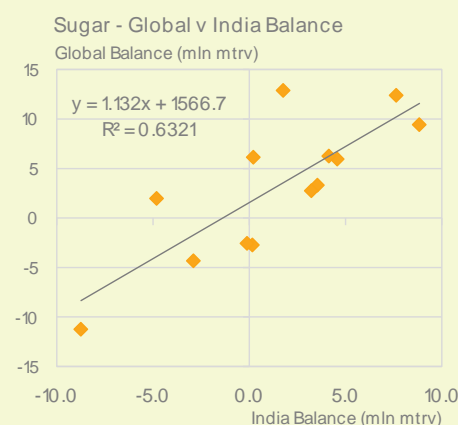


Figure 3

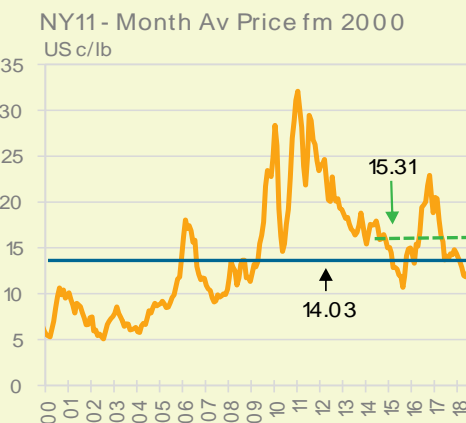
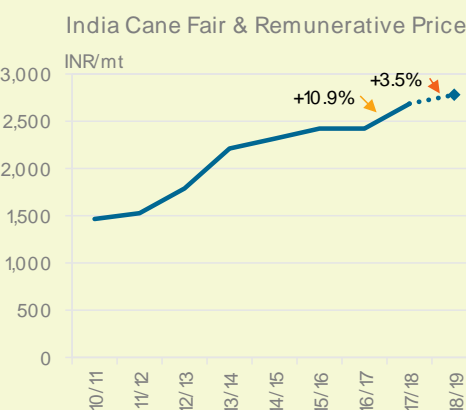


Figure 4



water efficiency (water storage) that looks set to result in ongoing surplus production.

Locking in surplus production?

The combination of rising remuneration for cane and other generous subsidies, together with improved cane varieties and yields, high reservoir levels and greater water efficiency threatens to lock India into an ongoing surplus cycle (Figure 5). Its only hope of escaping the mounting domestic stocks in the short term is to export this surplus production onto the global market. The Indian industry has spent the past 6-9 months imploring the Indian government to provide export subsidies for this purpose. The global market fell sharply in 2018 in response to this threat of large compulsory exports (see DFPD 1(4)/2018-S.P-1) under generous subsidies (see DFPD 1(14)/2018-S.P-1). These were set in place on 27 September 2018 and 5 October 2018 respectively. The market's reaction bears close examination.

NY11 raw sugar prices spent much of 2018 well below the "globally efficient" cost of production which Green Pool estimates currently at 14-16 c/lb. The market reacted sharply to global oversupply, due to higher production in other countries such as the EU and Thailand as well as India. However, its sharpest falls occurred following emerging evidence in Mar/Apr 2018 that the Indian crop would be much larger than expected, and stocks would increase sharply. The price continued to fall through mid-year as India received a "normal" but not "above normal" monsoon, ensuring a continuation of strong production in 2019. With subsidised exports occurring under the 17/18 export subsidy programme, and widely broadcast debate over further export subsidies and rising cane prices in 2018/19, the market fell to below 10 c/lb – some 40% below the bottom of the range of COP for globally efficient producers of 14-16 c/lb (Figure 6).

With the prospect of up to 7 mln mt of subsidised exports (2.0 mln from 17/18 crop and 5.0 mln mt from 18/19 crop), the market fell for a second time below 10 c/lb on the day the 18/19 subsidies were announced (27 Sept). Within a week, India's government realised that the 18/19 subsidy programme exceeded that of 17/18, making the former redundant, and the 17/18 version was cancelled. That reduced India's potential subsidised exports by 1.4 mln mt (only around 0.600 mln mt for 17/18 was done by end September). This relieved some of the gloom on global sugar markets, where price subsequently rose. **In short, the decision of the Indian government to support significant levels of compulsory exports had a real and perverse impact on the global market.**

Other factors in global sugar rally?

Weather and price are the main drivers of commodity markets, and these two factors also interact with each other. With a massive 17/18 surplus, low sugar prices in 2018 pushed Brazilian millers to apply a "lowest loss" strategy by making hydrous ethanol rather than VHP (Very High Pol) raw sugar (Figure 7). Weather reduced the 18/19 EU crop, and weather also intervened in CS Brazil to allow millers to produce even less sugar than they had planned (instead they produced more ethanol). With 18/19 surplus forecasts dropping, and some analysts even projecting forward to a 19/20 deficit in global sugar, the funds and speculators reversed their heavy short (sold) position over the month of October 2018 to be neutral or slightly long (bought) by early November (Figure 8). Thus the market's small relief that India would not export 7.0 mln mt (instead only 5.60 mln mt) needs to be seen in a wider context of market events.

Figure 5

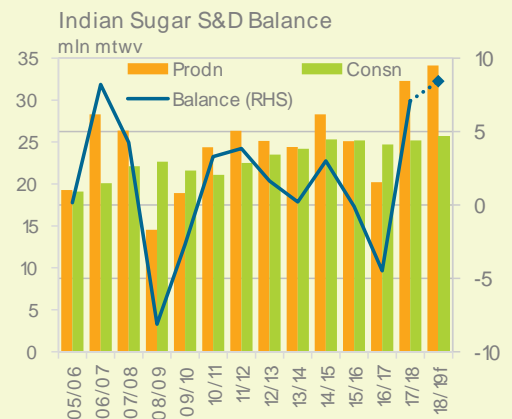


Figure 6



Figure 7

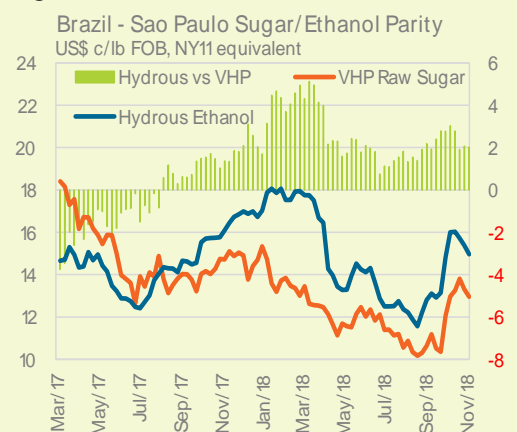
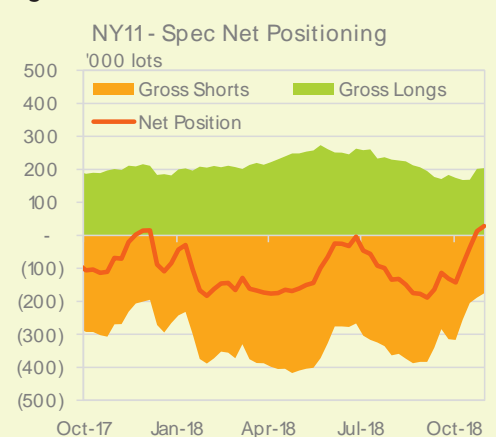


Figure 8



Brazil adopts “least loss” strategy

For most of 2018, both sugar and ethanol remuneration were below the cost of production for most Brazilian producers. However, higher oil prices and a willingness of Petrobras to more closely follow import parity pricing for gasoline allowed some additional cane to be switched from sugar to ethanol production as millers adopted a “least-loss” strategy in the face of very low global sugar prices. As per Table 1, this resulted in Brazilian millers sharply cutting the sugar mix from 46.5% to 35.4% (our forecast of 18/19 output), and taking sugar output down from 36.1 mln mt last year to 26.6 mln mt in 18/19. Objectively, CS Brazil alone reduced its sugar output by over 9.0 million tonnes as India’s surplus production and exports hit the sugar market.

CS Brazil’s harvest runs from April to November 2018, with a likely inter-harvest period from December 2018 to April 2019. Its reaction to the very low prices in 2018 have an element of forecasting to them – despite little or no hedging capability in ethanol, millers looked forward and decided their prospects of selling sugar profitably in the current circumstances in the global market were poor, and so made ethanol instead. This is a commercial gamble, but one that appears to have been forced on them by poor returning sugar prices through the majority of the 2018/19 cane harvest (Figure 9).

Market outlook given India exports

The enormous commercial advantage to the Indian sugar industry from the most recent export subsidies (5 October 2018) is shown in Figure 10. On a free-on-board, West Coast India (FOB WCI) basis, the orange line shows the raw sugar export price Indian millers would need to achieve parity with domestic sales. Alternatively, the dotted red line shows the FOB raw sugar export price that would incentivise the Indian millers to export with the benefit of the 5 October subsidies. **At prices currently at 12.9 c/lb, and with an incentive price below 12 c/lb, there is clearly an incentive with the subsidies to export.** This will continue to weigh on the global sugar market through to the current end of the export programme in September 2019. India’s government also commonly extends such deadlines.

While the NY11 market reached as high as 14.01 c/lb (settlement basis) on 24 October 2018, it has since fallen back to 12.84 c/lb by 8 November. White sugar has fared worse – and the pressure on white sugar is largely attributed to sizeable quantities of Indian white sugar being offered for sale from December 2018 onwards.

A further, and bigger risk to the market, and to the efficient global producers is that, having endured 12-18 months of very low world prices for their own exports, that India’s exports will act as a ceiling on any market rallies (as we have possibly seen in early November 2018). Not only is up to 5.0 mln tonnes of sugar being heavily subsidised by India’s government and taxpayers, but there is more available should the market seek to rise in the next year or so. As Figure 11 shows, India’s stocks at end September 2019 are projected to be as high as 15 mln mt, whereas required domestic stocks are less than 5.0 mln mt. That means, should the market rise unexpectedly to 16-18 c/lb over the next 1 to 2 years, Indian millers will likely sell more in order to relieve their stockholding costs. **This reduces the likelihood of the globally efficient millers getting back towards long term average COPs.**

Table 1

CS Brazil	16/17	17/18	18/19f
Cane (mln mt)	607	596	568
Recovery (kg/mt)	133.0	136.6	138.7
Sugar (mln mt)	35.63	36.06	26.60
% to Sugar	46.3%	46.5%	35.4%
Ethanol (bln L)	25.65	26.10	30.66
Hydrous	15.00	15.70	21.66
Anhydrous	10.66	10.40	9.00

Figure 9

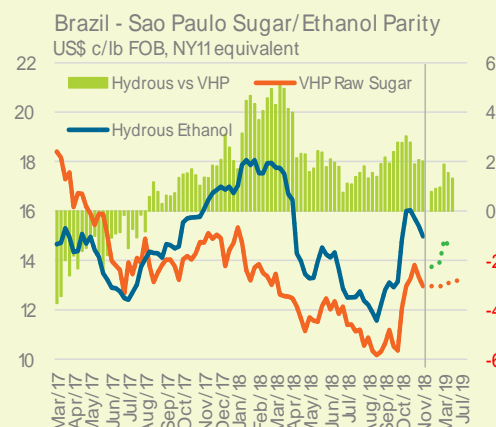


Figure 10

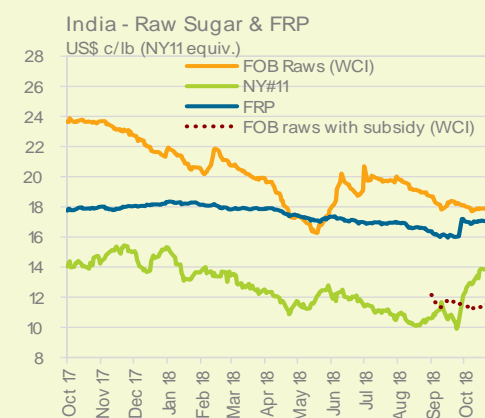


Figure 11

