The Mauritian Sugar Industry

Industry Overview
Today’s sugar industry is not just about growing sugarcane and producing sugar, but also about generating energy for the island and increasingly more so about property/hospitality developments. Sugar, once the only Mauritian export, today represents less than 2% of GDP. Nonetheless, when coupled with electricity production, real-estate and hospitality, the “sugar” estates remain important players of the domestic landscape. An overbearing government paired with a protected market led to the industry’s decade long stagnation. Consequently, the industry was destined to suffer once EU trade preferences were removed. The latter (erosion of trade preferences) was triggered by a WTO ruling forcing Europe to reconsider its inefficient domestic sugar production, ex-colony quotas given and purchase price. The subsequent 36% plunge in prices meant the local industry would export raw sugar for less than the cost of production. This triggered the industry’s radical up-evolution from the manufacturer of an unfinished product to the exporter of a ready-for-consumption finished product.

The Sugar Reforms
In its latest round of reforms, 2010-2011 will be regarded as the turning point. 2011 will be the first time Mauritius will export only refined and special sugars having ironed out the kinks from last season’s bumpy start: delays in the commencement of refining and the lumping of sugar while in transit to Europe. This shift will lead to the following:
1. Currency balance of trade will shift even more towards the Euro
2. Reduced “preferentiality” in access and volatile sugar prices
3. Revised cultivation, harvesting, and milling methods to remain competitive

Need for Change
During the quarter century ended in 2005, European market sugar prices have been 2-3x that of world market prices resulting in both supply-chain and price distortions. The creation of the World Trade Organisation (WTO) in 1995 paved the way for settling trade disputes, and in its ruling, Europe was required to rationalise its sugar industry. In an expensive process, European countries paid off the inefficient sugar producers within their own borders to stop production which led to a supply deficit. In addition, quota attributions were revised and prices slashed by 36%

Industry Upshift
The Mauritian industry would not survive as an exporter of raw sugar; however, thanks to an excellent logistical support: short land-based journeys and quick turnaround times in a modern harbour; exporting refined and specialty ready-to-eat sugars would keep the industry afloat. Key salient points within the reforms master plan were:
1. Centralisation of raw sugar production with only two refineries
2. Regrouping small planters into collectives for more efficient cultivation and mechanized harvesting
3. Reducing land area under cultivation to settle at a production of about 500kt of sugar instead of ~650kt per annum.

New Terms
Previously, all of the raw sugar was shipped to Tate & Lyle for refining; today all of the refined sugar is sent to German food giant Südzucker to be used in industrial food production. Under the terms of the present agreement, some 400kt of sugar are to be sent to Südzucker at a guaranteed floor price in excess of €400/t; and with a sharing agreement for the bonus proceeds between the floor and actual selling price. For instance, this year the Mauritius Sugar Syndicate (MSS) estimates total sugar revenue reaching Rs8.1bn for about 390kt to be exported which suggest an average selling price of just above €530/t of which almost €385/t accrues to the local vendor net of taxes.

Sugar revenue repartition
Sugar revenue is distributed in a unique manner. The MSS – a single unifying body – negotiates the price and sells all of the locally produced sugar. A controversial tax, commonly referred to as the “Cess”, is imposed on the overall proceeds to finance sugar industry organs such as the MSS itself or the Mauritius Sugar Industry Research Institute (MSIRI); and also, to pay for sugar industry worker safety nets. The net amount is then attributed as function of sugar tonnage and value-added premiums at the outset. It is important to distinguish between the planter, the miller, and the refiner/specialty sugar maker as separate entities

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3 Best exemplified by the amalgamations of MDA with ENLL (ex-SAVA), and MOUNT with HFL
4 Placing sugar on supermarket shelves entail logistical hurdles.
5 Using the buying rate at Rs39 per €
6 Please consult the appendix for a detailed step-wise explanation
7 Part of the cess is used to pay for docker compensation (a job that has not existed in over three decades) amongst other things

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See Figure 1 below

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1 Previously raw sugar was exported to the UK
2 See Figure 1 below
The Planter
The planter is paid on 78% of the total sugar produced from his sugarcane (cane). As a protective measure, the accrued sugar from cane is calculated based on the higher of: the miller’s or the national mean extraction rate. ie, if a planter supplies 100t of cane from which 10t of sugar are produced, the planter is paid on 7.8t of sugar while the 2.2t of sugar are bartered to the miller for services rendered.

The Miller
The miller does not receive any cash for extracting juice from cane and converting it into sugar. The miller is paid in sugar. ie, he keeps 22% of all the sugar produced at his factory. Thus if a factory produces 100kt of sugar, the miller keeps 22kt while the other 78kt accrue to the planters.

The Refiner/Specialty sugar maker
The refiner/specialty sugar maker bills the MSS per ton of raw sugar converted into a higher value added product. ie, the refiner is not paid in kind but in monetary terms for services rendered.

Sugar Prices
The price of sugar was unaffected by the financial crisis and recession of 2008-09. Climatic conditions which can lead to global surplus or shortages play a much bigger role. Drought in India & Australia and more recently cyclones hitting Australia’s gold coast have created a lasting global deficit which has driven sugar prices to record levels. In the Mauritian context, the price decline of the noughties was due to the massive 36% cut in European prices. Nevertheless, the weakening of the single currency in the aftermath of the global recession accentuated a “manque à gagner”.

Land Area under cultivation
The area of land under cultivation has been steadily declining since the mid-70s in-line with the country’s diversification strategy first into manufacturing, and second into services during the 90s. The European sugar reforms triggered the Illovo deal which paved the way for cheaper land conversion which in turn accelerated the rate decline.

Figure 2. Change in sugarcane plantations

Today just above 30% of the total area of Mauritius is under cultivation compared to just under 40% in 2005. This drop coincides with the boom in residential, commercial, and Integrated Resort property development; and/or parcelling off and the sale of land aka “Morcellement”; as well the cessation of sugar cultivation by several small planters. Decreasing areas of cultivated land is problematic in that factories and refineries are operating at sub-optimal capacity, and also because it leads to a thinner income.

The Small Planter conundrum
Under previous sugar industry reforms, sugar workers were encouraged to buy off land from estates to cultivate on their own. Today, small planters represent under 20% of all plantations. The sharp drop in sugar prices coupled with increasing costs of fertilizers, and harvesting issues have led to increasing land abandonment. Another contributing factor is the reality that the children of small planters are today educated working professionals or business owners for whom growing sugar is a hassle in exchange for a small annual return. Under the master plan, the goal was to regroup small planter plots into larger areas to make 20% efficiency gains with 20% less costs. Unfortunately, administrative lethargy and disputes amongst the small planters have led to a much slower pace of reform implementation which has exacerbated the problem.

Please note that the share of estate v/s planter canes spiked in 2005 due to the closure of several sugar factories and amalgamations.
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Labour Force
The sugar workforce has been in steady decline since the mid-80s – a time when the labour intensive textile industry poached workers away from the estates. The reduction was somewhat desired due to increasing mechanised harvesting. The sector is facing the same problem as most other sectors: shortage of skilled labour. Thus, the import of temporary labour during harvest season is now an option being considered.

Diversification Strategy
Following the erosion of the sugar protocols, sugar companies moved into new fields. This most obvious move was into property development (Residential, Commercial, Business Parks, and IRS/RES) given the vast areas owned by the estates. The second was to increase energy production from bagasse-only power generators to bagasse-coal generators able to produce additional on and off-season electricity; and the third and less obvious move has been into tourism either by way of tourist attractions or hotels.

Property
Sugar companies were the first to build Integrated Resort Schemes (IRS), ie designated gated communities where wealthy foreigners could purchase freehold property. Médine (MEDL) has Tamarina in the west, Deep River-Beau Champ (DRBC) Anahita in the south-east, and ENL Land (ENLL) Valriche in the south. ENLL is the midst of an ambitious project with the genesis of a new town at Bagatelle⁹ (on Mon Désert Alma (MDA) land) near Réduit. MEDL is engaged in morcellement and the building of a mall \& business park at Cascavelle near Flic-en-Flac.

Energy
Electricity generating sugar companies are referred to as Independent Power Producers (IPP). IPPs have produced over 60% of the Mauritian electricity requirement since 2008. This boost from under 50% to over 60% came about with the investment into new generation technology by groups like Omnicane (OMNI) and Harel Frères (HFL) which make a more efficient use of coal and bagasse.

Hospitality
Sugar estates have penetrated the tourism sector and operate attractions such as the Casela Adventure Park in the west (MEDL), L’Aventure du Sucre in the north (HFL), and St Aubin Distillery in the south. In addition, groups like Union Sugar¹⁰ (UNSE) own and operate 3-Star Le Preskil (Listed on DEM as SCT) resort near the airport, and MEDL inaugurated a boutique hotel within its Tamarina IRS late last year.

Main Domestic Players
The largest listed sugar groups by market capitalisation are: ENLL, HFL, MEDL, OMNI, DRBC, FUEL [Flicq Union Estates], UNSE, CSE [Constance La Gaïeté]. Their respective segments of operation have been summarised in the table below.

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Table 1. Sugar company operating segments

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⁹ A mall during Phase I and a residential complex in Phase II
¹⁰ Now under ownership of Compagnie de Beau Vallon Lté
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Market Share

*Share of accrued sugar as planter-miller*

We do not expect any of the companies to compete for market share, simply because the government decides which canes go to which factories.

Share of Electricity

Energy production is dominated by OMNI and HFL due to their more advanced equipment. If FUEL or DRBC are to become serious competitors, they too need to invest in new generators. This will become a competitive field and could even see the arrival of non-sugar players onto the scene. In the mean time, improved electricity export accords with the island’s sole electricity provider, the Central Electricity Board (CEB), will be the key to market share preservation.

Sector review and prospects

2010 in Review

The 2010-11 sugarcane season was underwhelming. Misfires with respect to delays in the commencement of refining and lumping of sugar while in transit were setbacks. A weakened EUR coupled with low sugar prices resulted in an average price of Rs13,500 per ton which is its lowest in almost a decade\(^{12}\). In addition, a decrease in sugarcane cultivation accentuated losses for most estates as production (including labour) costs remained high. The prevailing water deficiency has also hurt sugar yields as will be the case for the current 2011-12 season.

2011 Prospects

In our view, the worst is behind for the industry in terms of sugar pricing. At Rs13,500 per ton we believe it has bottomed. The MSS expects an 11% improvement in revenue per ton to about Rs15,000 this season. A reduction of the cess has made a positive contribution to pricing; however as a result of the drought, expect tonnage for 2011-12 has been revised down by 7% from 420kt to 390kt (2010-11 season: 452kt). Reduced sugar production will result in 4% drop in

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\(^{11}\) Please note that FUEL includes Mon Loisir’s (ML) sugar too

\(^{12}\) Lowest in several decades if prices are adjust for inflation
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global proceeds compared to the year before. A final unknown remains the strength of the EUR. Based on what appears to be a Bank of Mauritius (BoM) Rs41-42 targeted band\textsuperscript{13} for the EUR, we would have expected exchange rates to be similar to last year; however, due to the latest string of events in Europe which may lead to a technical Greek default, it appears probable that the EUR will remain under Rs40. For every one rupee drop on the EUR buying rate, we estimate a 2.5% decline in overall sugar revenue.

With respect to electricity generation, we expect demand to increase in a growing economy. Thus if IPPs remain a competitive provider, we see no reason why they should not receive increased income from a higher electricity production. Based on our energy demand projections, IPPs should collectively see an additional income in excess of Rs0.5bn should production increase by about 100 GWh (0.1 TWh) every year.

Further ahead
Looking beyond the short term, and excluding external factors like climatic conditions, price volatility, and currency exchange rates\textsuperscript{14}, key things to do to ensure growth are:

- Halt the haemorrhaging of land under cultivation
- Import raw then export either refined or specialty sugar
- Bio-fuel (ethanol) production

It is hoped that the improved sugar proceeds will encourage the small planters to resume cultivation or larger planters could buy out the smaller ones. As for the importation of raw sugar to re-export, there exist limitations when exporting to Europe, but it might be possible to secure a deal with a non-European food industrial. The final prospect is that of producing ethanol (a highly purified version of drinking alcohol) which can be mixed with octane and used as automobile fuel. Some estates have already set up most of the infrastructure; however, until a policy decision is not taken by the government, the project will remain in neutral.

Threats
- Climatic conditions hurting sugar yields
- Decreased land area under cultivation
- Sovereign debt default in Europe

Opportunities
- Sustained high world market sugar prices and value-added premiums
- Sugar refining
- Bio-fuel (Ethanol) production

Conclusions
Sugar estates will find that the 2011-12 sugar season will prove to be more difficult than 2010-11 because the drought has severely hurt yields and also because even less land is being used to grow sugarcane. Thus, despite this year’s higher average price of sugar of Rs15k/t compared to Rs13.5k last year, a much lower production of 390kt against 452kt in 2010-11 will result in 4% drop in net sugar proceeds. Climatic conditions, world market price volatility, and currency fluctuations are beyond the industry’s control although hedging on the latter two could stabilise revenue. Thus, the key variable is to ensure that more sugarcane is grown, and the implementation of the reforms under the Master Plan is accelerated such that the industry can settle at a new equilibrium and have lower costs. The bottomline is that sugar as an industry is not dead, but the best prospects for Mauritius lie in refining, and production of specialised sugars (fair trade and/or organic) as well as special sugars. On an even brighter note, ethanol production for use as a bio-fuel mixer for gasoline in cars and electricity generation, open-up new avenues for the Mauritian sugar industry.

\textsuperscript{13} Please consult the penultimate page of our weekly Investment Outlook
\textsuperscript{14} The latter two can be managed using sound hedging practices
Appendix

Estimating Sugar Income

Let’s assume AXYS enters the sugar business as AXYS Sugar Estates Ltd (ASEL). However, ASEL grows sugarcane under AXYS Cane Planting Ltd (ACPL), produces sugar under AXYS Sugar Mills Ltd (ASML), and refines sugar under AXYS Sugar Refining Ltd (ASRL).

ACPL harvests 1Mt of cane which it sends to ASML. ASML produces 100kt of raw sugar of which 78kt are attributable to ACPL.

ASML received 1Mt of cane from ACPL and another 1Mt of cane from other planters. The 2Mt of cane are crushed and processed to produce 200kt of raw sugar of which 44kt are attributable to ASML.

ASRL received 200kt of raw sugar from ASML and another 50kt of raw sugar from another miller. The 250kt of sugar is refined to produce refined ready-to-eat sugar which is packed in containers and shipped to Germany. ASRL charges a fee per ton of sugar refined.

ASEL’s total sugar related revenue as a group is then the sum of the incomes of ACPL, ASML and ASRL.

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