

THE IMPACT OF EU GUARANTEED SUGAR PRICE REDUCTION ON MAURITIUS

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Abstract: In line with global frameworks, the EU unilaterally decided to reduce the price of its imported sugar, under the ACP-EU Agreement, by 36%. This decision eventually would affect the macro-economic situation of ACP countries at a micro level the effects would be on employment and export revenues. In this paper, we attempt to critically review the impact of such EU reform on the Mauritian sugar industry. Mauritius is expected to significantly lose revenues and employment and the restructuring plans already under way for the sugar industry may be seriously jeopardized. A CGE framework to estimate the impact of this policy on the Mauritian economy has been used.

1.Introduction: Mauritius has witnessed unprecedented socio-economic development during the last two decades with economic growth averaging six percent. This is the result of careful economic governance by successive administration supported by a sound financial infrastructure with a reputation for reliability, efficiency and probity. The export led growth strategy has significantly changed the economic structure of Mauritius with the manufacturing and service sectors now accounting for roughly two thirds of Mauritian GDP. Total foreign trade has more than doubled in the past ten years and so has the level of foreign exchange reserves. However, over the last 5 years, the Mauritian textile sector, which accounts for roughly 85% of total manufacturing, has been facing serious difficulties for reasons such as the emergence of highly competitive, efficient and highly productive competitors and more importantly due to increased labour costs. Furthermore, a lot of EPZ firms have had to close down operations following the appreciation of the local currency with respect to the Euro and the Dollar in 1999-2000. To make matters worse, on the 24th of November 2005, the EU announced an unprecedented thirty six percent reduction in its guaranteed prices for sugar imports from the ACP countries. The impact of such a decision on the Mauritian economy is expected to be far-reaching with losses in revenue approximating several million US dollars. McDonald (1996) estimated an income transfer of US\$ 75.3 million for Mauritius while Milner et al (2003) estimated an income transfer of US\$ 180.7 million. Furthermore, some 40,000 workers are expected to become redundant. Finally, while European farmers will get compensation running into the billions, farmers in the Caribbean, African and Pacific countries, who have enjoyed favorable access to the EU market for their sugar, will only get 40 million Euros for 2006. Whilst all parties, following the outcome of the Cotonou Agreement in 2000, expected such a reduction in prices, the suddenness of such a decision is quite baffling. In this light, the main objectives of the current paper are twofold: Firstly, to critically review the EU's decision and highlight the impact of such reductions on ACP countries, whilst laying emphasis on one of the major exporters of sugar to the EU, namely Mauritius and secondly, to estimate the welfare implications of such reductions using a CGE framework.

2.Background: The Sugar Protocol, is a legally binding intergovernmental agreement, set up in 1975 between the European Union (EU) and eighteen African, Caribbean and Pacific states (ACP) sugar producing countries had offered the ACP access to the EU market. This agreement, which was signed in 1975, guarantees access to the EU market for fixed quantities of ACP sugar at preferential prices over an indefinite period of time. As a consequence, any reform of the EU Sugar Regime must respect the rights and obligations enshrined in the Protocol. The Mauritian quota was the largest, about 38% of the total quota granted by the EEC/EU. Mauritius has chosen to engage into a profound restructuring of its sugar sector to turn it into a sugar cane industry. Accordingly, the Multi-Annual Adaptation Strategy Action Plan 2006-2015 (MAAS), which was prepared in consultation with all the stakeholders of the industry, defines the strategic orientations and key measures that need to be undertaken. In Dec 2007, an agreement reached between Government and the Mauritius Sugar Planters Association (MSPA) was reached. The MSPA are giving land, through the Empowerment Programme, to the government of an extent of some 2000 Arpents, which should enable this Government to facilitate the social acceptability of the economic reform. Also in this agreement the shares of planters and employees in the sugar cluster from 20% to 35%, which means that the workers, employees of the sugar industry, the planters will be shareholders of milling and all the value added products. The same share ratio will apply across all activities in the

value chain, refineries and distilleries. As provided for in the MAAS, the financing of 75% of the cost of factory closures according to the blueprint on centralisation and of 70% of Early Retirement Scheme (ERS) and Voluntary Retirement Scheme 2 (VRS2) costs will be met from the EU accompanying measures. To that effect, Government will commit to underwrite the bridging loan that the MSPA members will seek to obtain from commercial banks in order to finance the above costs to be met from the EU accompanying measures, pending the disbursement of these funds from the EU. Following the successful conclusion between Government and the MSPA, the government has been seeing to it that our best is being done to secure the EU grants worth of Euro 58 million in Financial Year 2007/2008, out of which Euro 36 million has already been secured.

3. Impact on Mauritius: Sugar cane has been grown in Mauritius for nearly three centuries and retained its importance through the 1980's even though the country became more industrialized. Sugar cane is cultivated across the island over some 72 000 ha i.e. some 40% of the island's area and 80 % of its arable lands. The cane is grown by some 28 000 planters with holdings ranging from more than 4000 ha to less than 0.1 ha. The vast majority of these planters are small holders. In 2007, some 16 000 persons are directly employed in this sector compared to some 48 000 in 1990. In fact in 2007, 60 000 persons, one out of every three family in the rural areas, are directly or indirectly involved in the sugar industry. The average annual crop of 5.2 M tons of sugar cane are currently processed by 11 sugar factories, to produce some 575 000t of sugar. Of the 575 000t of sugar, exports to the EU and the US under preferential arrangements amount to some 540 000t, whereas some 8000 tons of special sugars are sold to 23 world market destinations at world market prices plus a premium.

As export processing zones were established and the tourism sector grew, sugar has remained an important foreign exchange earner and source of income for workers and small landowners (Deepchand, 2004). The bulk of the exports are under the Sugar Protocol, 507 000t, the Special Preferential Sugar Agreement (SPS), some 20 000t, while sales to the US under the Global Import Quota represent some 12 000t. As a member of the ACP group, Mauritius has been able to use the market-access preferences under the Lomé Agreements and the Cotonou Agreement to export its sugar to the EU. The sugar industry owes much of its success to the so-called Sugar Protocol attached to the Third Lomé Convention, under which Mauritius benefited from export quotas with the EC at preferential guaranteed prices. The EC quota of 507,000 metric tons has a guaranteed price, which has consistently been well above world market prices, yielding a "sugar dividend," estimated at US\$200 million per year. The sugar industry was given an additional boost in the mid-1980s with the Sugar Action Plan. The government reduced the sugar export duty, thereby providing a significant tax relief to producers, and lifted the ban on mill closures, thereby allowing the industry to take full advantage of significant economies of scale. Relying heavily on the income generated from such sugar exports, Mauritius has been transformed from a mono-crop to a relatively well-diversified economy. Once dependent on the sugar industry, which accounted for more than 50% of its export receipts during the 1970s, Mauritius has now expanded into textiles, clothing, tourism and offshore banking. By 1995, textiles accounted for more than 60% of exports, with sugar contributing only 23% and in 2006, receipts from sugar exports accounts for only 16 percent of total exports earnings. In 1990, the MEPZ created 11.9% of GDP at current basic price while sugar accounted for 8 percent. The importance of sugar industry as a share of GDP has been decreasing – from 8 per cent in 1990 to 2.4 percent in 2007. Nevertheless, despite the emergence of other non-primary sectors, the sugar industry still plays a pivotal role in the Mauritian economy both as a source of income and also as a generator of employment. Despite the significant restructuring of the industry with the centralization of milling processes and the establishment of the VRS for a significant number of employees, the importance of the sugar sector, both as an important employer and as a major source of exports, should not be underestimated.

36% Reduction in Prices of ACP Sugar Exports to the EU: Probable Impact on Mauritius

It is widely expected that the decision by the EU to reduce the prices of its sugar imports by 36% will have a very negative impact on the Mauritian Economy. One of the major mitigating elements is that Mauritius suffers from an acute problem of product and market concentration. Being a former British and French colony, Mauritius had over the years extensively used such close ties to benefit from preferential access to the EU markets which have led to an overdependence on these

markets for its exports. As a result, the potential negative impact of the reduction in sugar prices may be extremely significant.

In his study on the impact of full trade liberalization in relation to ACP sugar, Williams and Ruffer (2003) contended that Mauritian sugar would have been potentially competitive if the envisaged restructuring plan was conducted accordingly. Yet, with the expected loss in revenues following the sharp decreases in prices, whether such reforms will take place as planned, remains to be seen. On the other hand, Wohlgenant (1999) has argued that in a situation of partial liberalization, small island states stand to gain. Nevertheless, he also advanced that these small island states will lose in a situation of full liberalization. More interestingly, among the few studies which analysed the impact of a decrease of in sugar prices on middle-income sugar producers, Alexandraki and Lankes (2004) were adamant that Mauritius would be among the biggest loser if guaranteed sugar prices were to fall by 40%. The above findings are hardly surprising given that Mauritius' exports account for almost 25% of the EU's imported sugar. Mauritius' current production cost per pound of sugar is approximately 18 cents while the average world sugar price is around 12-13 cents. Furthermore, with the elimination of barriers to trade, Mauritius will have to compete against countries like Brazil and Australia whose costs of production are around 6-7 cents per pound of sugar. As a result, the Mauritian Authorities are urging for more gradual cuts and much larger compensation packages. They argue that the suddenness of such price cuts will have severe socio-economic consequences because of the lack of time to proceed further with and to complete the restructuring process of the local sugar industry. It was widely expected that, in view of the reforms undertaken within the sugar industry, the local cost of production per pound of sugar would have been brought down to 11 cts; which would have entailed that the Mauritian sugar would have been competitive. However, with the sudden reduction of prices and given the insufficient compensation packages proposed, doubts subsist as to whether the industry would be able to undertake such reforms.

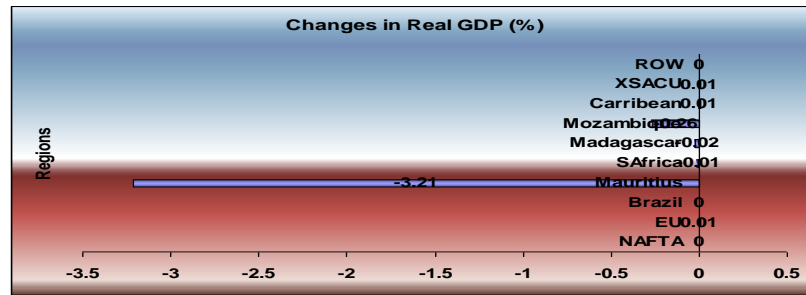
4. Estimating the welfare implications using a CGE framework: The model used for the analysis draws heavily from the standard GTAP comparative static model with the version 6.1 GTAP data base (Dimaranan and McDougall, 2005). Although the database allows for 92 regions and 57 sectors, for the purpose of this study, the authors have used a 8 commodity by 10 region aggregation. In disaggregating the commodities, the authors have kept sugar and cane & beet separated. Sugar is the manufactured product while cane and beet are the primary products from which sugar is manufactured. The authors have also kept some level of disaggregation for manufactured products. In disaggregating countries, the authors have singled out EU and NAFTA as these 2 regions are the main importers of ACP sugar. Also ACP has been slightly disaggregated so that the impact on different ACP countries following the present simulation can be considered.

The standard GTAP closure rules assume the following: i) All prices are flexible including the real exchange rate ii) All firms operate under conditions of perfect competition (zero (abnormal) profit); iii) Full employment of all resources and perfect factor mobility within regions iv) Investment expenditure is determined by savings rate; v) Tax rates are fixed. The different closures are very well discussed in Hertel and Tsigas (1997). For the purpose of this analysis, 3 of the standard closures have been modified to make the analysis more realistic. As such, the authors will explain the closures which depart from the standard closures. The first change relates to the fixing of the trade balance. Since the price of sugar in EU falls, this would possibly lead to a decrease in sugar exports revenue by ACP countries. Thus ACP countries will lack foreign exchange to fund its investment. By fixing the trade balance, the authors imply that savings will adjust in the economies to provide funds for investment. If the trade balance is not fixed, then it would imply that investment would have to be restricted. Allowing savings to change as a proportion of income does this. The second change relates to unemployment. The reality of ACP economies is that there is a pool of excess supply of unskilled labour. This pool of labour is available anytime when there is an increase in production. Therefore, the authors alter the closure of full employment level to more accurately reflect the labour market in the ACP countries and the rest of the world. This is done by fixing the real wage rate for unskilled labour and endogenising the supply of unskilled labour. In this way, the effect on unemployment within ACP of this simulation can be accounted for. The third change relates to the quantity of sugar that Mauritius can export to the world. Since the sugar sector is a very important sector for Mauritius both in terms of foreign exchange and in terms of employment, the authors believe that, even if sugar price falls, the quantity of sugar produced and

exported will be more or less the same in the near future. In the long run, probably the economy will divert away from sugar production. But currently, it is a highly concentrated economy with sugar, clothing and tourism being the main exports.

Policy Experiment and Results The simulation run for the present analysis is one that would lead to a price fall of sugar imported in the EU by 36%. Since price is endogenous in the GTAP model, making it exogenous through swaps would create unnecessary rents to inflate the result figures. As such, the authors have simulated a fall in tariff of sugar imports in the EU. A tariff cut on sugar in the EU by 38% leads to a fall in sugar price in the EU by 36% without creating any rents.

Figure 1: Changes in Real GDP (%)



Source: Model Estimates

The real GDP changes suggest that this policy change would affect the EU, the Carribean and the rest of SACU. However, the largest loser is Mauritius (-3.21 % of GDP). This result clearly shows the importance of sugar exports to the EU for the Mauritian economy.

Table1: Welfare Decomposition (\$US millions)

WELFARE	Allocative Efficiency	Endowment Effect	Terms of Trade Effect	Capital Goods Effect	welfare (\$USm)
NAFTA	-0.91	0	-7.06	7.96	-0.01
EU	1024.26	0	-203.12	-0.64	820.51
Brazil	0.8	0	0.12	0.05	0.97
Mauritius	-84.74	-59.79	101.77	-2.4	-45.16
SAfrica	-2.52	-5.1	-14.28	2.02	-19.88
Madagascar	0.34	-1.06	-1.87	0	-2.59
Mozambique	-3.62	-5.62	-6.68	-0.55	-16.46
Carribean	13.55	15.26	39.68	9.41	77.91
XSACU	0.74	0.54	12.61	-0.46	13.44
ROW	18.65	0	78.82	-15.4	82.06
Total	966.55	-55.76	0	0	910.79

The estimated welfare changes are shown in table 1 using equivalent variations. The last column (Welfare) shows the overall impact for each country or Group of countries as defined. Global welfare increased by \$US 910.79 million. It is clear that Mauritius experiences the highest decrease in welfare (-\$US 45.2 million) while the EU experience the highest gains (\$US 820.5 million). The welfare decrease for Mauritius is mainly attributed to allocative efficiency (-\$US 84.7 million) and endowment effects (-\$US 59.7 million) which were partially offset by the terms of trade effect (\$US 101.7 million). The fall in allocative efficiency is in turn mainly attributed to negative allocative effect on other sugar (-\$US 74.2 million) and other manufactures (-\$US 4.9 million). The negative contribution of import tax (MTAX) to allocative efficiency effect for Mauritius is \$US 104.4million out of which negative \$US 32.7 million is from EU and negative \$US 47.7 million is

from South Africa. All the African countries in this model seem to be losing in terms of welfare with the exception of the rest of SACU. However, the Caribbean countries would derive some benefits.

5. Conclusion: On the 24th of November 2005, the EU unilaterally decided to reduce the price of its imported sugar by 36%. The main argument brought forward by the EU is that such changes were deemed necessary to bring the EU's sugar rules in line with global frameworks. The reforms will come into effect as of July 2006. However, the resulting impact of such a decision on ACP countries is far-reaching. The knock on effects of this sudden reform, which hardly bear contemplating, are expected to include: macro-economic instability, the closure of countless sugar factories, the undermining of modernization efforts already underway within the sugar industry and a dramatic and alarming loss in employment and export revenues. The reaction from ACP countries is not surprisingly one of dismay. They argue that what is being proposed is at odds with not only the binding commitments enshrined in the Sugar Protocol and the Cotonou Agreement, but also with the principles that underpin EU development policy and the general objectives of the Doha Development Round of the WTO. Furthermore, there is the argument that the decision by the EU to reduce its sugar price is directly related to the WTO ruling that as much as half of its sugar exports are illegal and that it contravened Article I of the GATT. An attempt has also been made to critically review the impact of such EU reform on the Mauritian sugar industry. There is a general consensus that the Mauritian sugar industry will largely suffer from such decreases in sugar prices. Significant losses in revenues and employment are expected. Nevertheless, what is even more serious is the fact that the 36% decrease may seriously jeopardize the restructuring plans already under way for the sugar industry. Whilst it is generally accepted that reforms within the sugar protocol had to take place in line with the requirements of the GATT, the sudden nature of such changes is expected to cause serious problems for ACP countries, with Mauritius being one of the major losers. In this respect, the authors have estimated the welfare implications of such reductions for various countries using a CGE framework. The simulation shows that Mauritius is by far the biggest loser with a loss in GDP of 3.21% and a welfare loss of \$US 45.2 million.

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