Trade policy Briefing

No 17 · August 2007

Are natural advantages ever enough?

Mozambican sugar's uncertain future in a changing European policy environment

Gilberto Rafael Biacuana

The SAIIA Trade Policy Briefing Series is intended to elicit debate on critical issues relating to South Africa's overall trade strategy. The broad focus of the series is on the political economy of the international trading system and South Africa's strategic responses to it. This covers the full spectrum of our trade strategy, from the multilateral trading system, to strategic regional and bilateral partnerships, and particular issues within the trade agenda.

Anyone wishing to respond to or contribute articles should contact:
Peter Draper
Research Fellow
Development Through Trade
South African Institute of International Affairs (SAIIA)
Ph: +27 (0)11-339 2021 (General)
Cell: +27 (0)82 786 7983 (Preferred)
Fax: +27-(0)12-998 3491
Email: draperp@mweb.co.za

GILBERTO BIACUANA is a researcher with Genesis Analytics, an economics consulting firm based in Johannesburg, South Africa. He writes in his personal capacity. He can be contacted at gilbertob@genesis-analytics.com

The Development Through Trade project at SAIIA is funded by SIDA and AusAID.

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ISSN Number: 1729-5815

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Sugar is Mozambique's second largest agricultural export. In 2003 sugar comprised 2% of all Mozambican exports and about 20% of agricultural exports. The sugar industry also accounts for one-third of all value added in Mozambican agriculture, and employs more than 27,000 people. This makes it one of the largest employers in the country.[1] Importantly, the factories are located in rural areas, where there are limited employment opportunities. The industry also has important indirect impacts on the economy, as it is a key component in a long and complex value chain. Overall, sugar makes a crucial contribution to the national economy, given Mozambique's limited degree of industrialisation.

This trade policy brief examines the competitiveness of Mozambique's sugar industry using data from the period 1987–2004 and relatively simple analytical techniques. It also analyses internal and external policy developments that will create important opportunities and threats for Mozambican sugar producers in the near future. Significant here is the proposed reform of the sugar regime of the European Union (EU).

Industry dynamics

In the 1970s the sugar industry was Mozambique's largest agro-industrial sector. At its peak in 1972 it produced 325,000 tons of sugar, employed about 45,000 workers and stood third in total export revenues.[2] However, a combination of droughts in the late 1970s, an adverse policy environment under central planning, and the sabotage and destruction brought about by the civil war brought the industry to a near collapse.

Privatisation in the 1990s and the implementation of a variable import duty attracted about $350 million of foreign direct investment (FDI) from South African and Mauritian investors. Currently, sugar is produced in four rehabilitated sugar estates and refined in four sugar mills — two in Maputo Province (Maragra and Xinave) and two in Sofala Province (Mafambisse and Marromeu). Large, vertically integrated companies are responsible for most production, which is done mostly under irrigation conditions. Out-growers account for a minimal share of total output;[3] however, their share has been increasing in recent years.

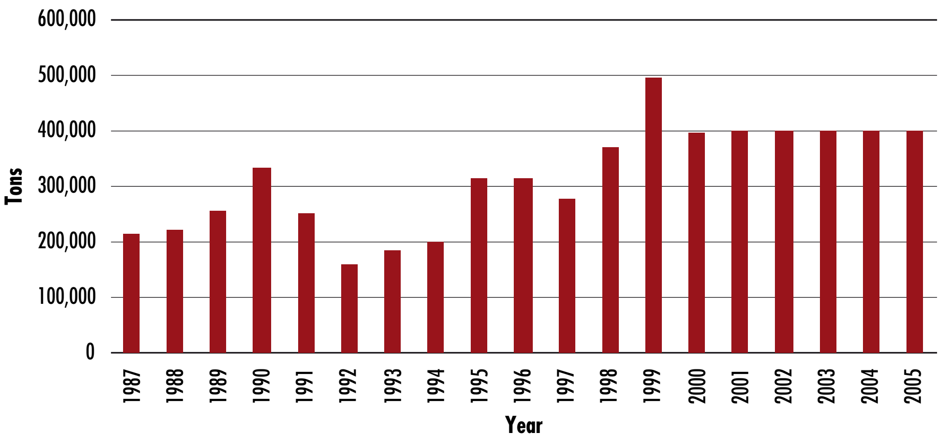
In 2006 the Mozambican sugar industry attracted new FDI. The sugar associations of South Africa, Mozambique, Swaziland and Zimbabwe became equal partners in a fourth silo at Maputo harbour's sugar terminal (costing $10.5 million).[4] Tongaat-Hulett, one of the major investors in the Mozambican sugar industry, also recently announced plans for a ZAR1.1 billion expansion in Mozambique.[5] The expansion includes building a 17.6 million litre ethanol plant at Xinavane, helping to grow and diversify Mozambique's sugar sector. The same company recently approved a ZAR1.3 billion expansion in its sugar milling and growing at Xinavane and Mafambisse mills ahead of the EU's plans to open its markets to least developed countries (LDCs) in 2009.[6] The expansion is expected to create a total of about 8,783 new jobs.

All this activity has meant an improvement in sugar cane production (Figure 1). From 1992 to 2000, the country managed steep annual increases in output, but since then, growth has remained flat. This reflects, primarily, the impacts of the 2000/01 floods, the worst in 50 years, and the stagnation in further investments during the post-2000 period.

Nevertheless, sugar export growth has remained strong (Figure 2). The period 2001–02 saw a slow recovery, but on average, between 2000 and 2004 Mozambique's sugar export volumes grew at 16.3%. This is significantly faster than the 0.049% recorded for total exports over the same period.[7] In 2006 sugar exports reached their highest level in 33 years, with the country's four producers exporting 175,837 tons and earning $67.3 million in revenue — a 78.5% increase in earnings compared with 2005.[8]

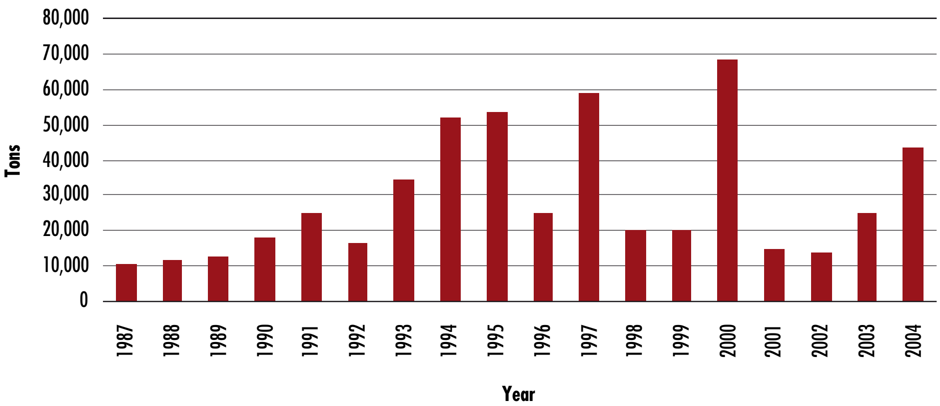
The single largest importer of Mozambican sugar between 2002 and 2004 was the EU (26% of all sugar exports), followed closely by the North American Free Trade Area (NAFTA) countries (the US, Canada and Mexico, accounting for 22%). Asia accounted for 5%, while the Southern African Development Community (SADC) countries imported just 1% of Mozambique's sugar exports, despite Mozambique being a full member of the SADC Trade Protocol. The SADC Sugar Protocol was set up in 2001 and excludes sugar from the general free trade area tariff offer until the conditions on the world market improve. Under article 4 of the protocol, SADC sugar producers that have a surplus after meeting their domestic and preferential trade agreements needs can export a quota into the Southern African Customs Union market at 0% duty. According to the protocol, as a result of distortions in sugar prices on the world market, SADC will not have free trade in sugar, but leaves a non-binding provision that targets 2012 for free trade. However, the trade liberalisation in 2012 will not have adverse effects on Mozambique's sugar industry, because currently SADC is not an important market for Mozambique's sugar. The rest of the world[9] imports the remainder — about 46% (see Figure 3).

Figure 1: Mozambique's sugar cane production, 1987–2005



Source: Author's calculations from UN Food and Agricultural Organisation Statistical Databases (FAOSTAT) 2006 data

Figure 2: Mozambique's sugar exports (HS 1701), 1987–2004



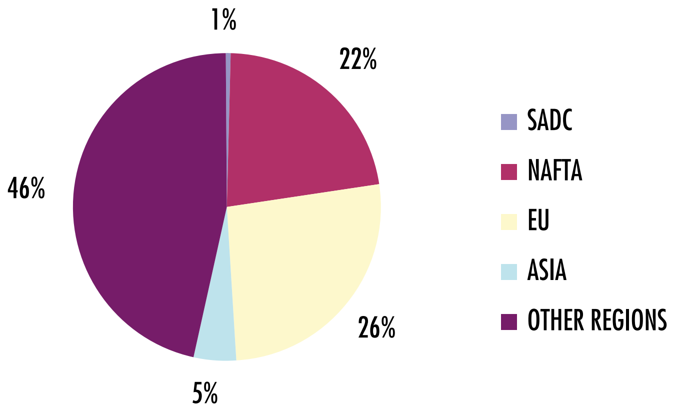
Source: Author's calculations from FAOSTAT data

That the EU and NAFTA import such large shares is not surprising; they are both big markets in which Mozambique enjoys some preferential treatment. In the EU, Mozambique benefits from the Everything But Arms (EBA) initiative, which took effect in March 2001. Mozambique also exports sugar to the US through a quota regime under the Generalized System of Preferences at world prices.[10]

Assessing Mozambique's competitiveness in global sugar markets

There is no single widely accepted definition of 'competitiveness'. According to Bahta and Jooste,[11] the terms 'comparative advantage' and 'competitiveness' in economics are often confused or poorly understood. Comparative advantage is determined fundamentally by the natural state of things, but 'competitiveness' or 'competitive advantage' refers to those factors that can be altered (through policy) to promote a pre-existing natural advantage.[12] *Competitiveness* as used in this trade policy brief refers to the comparative performance of Mozambique's sugar sub-sector in the context

Figure 3: Mozambique's sugar exports (HS 1701) by region, 2000–04



Source: Author's calculations from TIPS data

of international trade.

Measuring a country's advantage or competitiveness is also contested terrain. Various measures of comparative advantage are available in the literature, including real effective exchange rates, wage–productivity relationships, structure of trade analyses and other composite indicators.[13]

This study makes use of a commonly applied measure: the revealed comparative advantage (RCA) approach, pioneered by Balassa.[14] In theory, it provides an index measure of changes in comparative advantage over time. However, it is not without its critics. According to Bender and Li,[15] it faces a measurement problem, as it is defined in terms of autarchic price relationships that are not observable. These authors further note that trade statistics reflect only post-trade situations. This is problematic, because the RCA approach necessarily assumes that the true pattern of comparative advantage can be observed from post-trade data, but due to a wide variety of distortions in global markets, we know this information cannot in fact be true. Finally, changes in RCA measures over time are still open to interpretation: are the changes being driven by improvements in factor endowments or by the pursuit of appropriate trade policies?

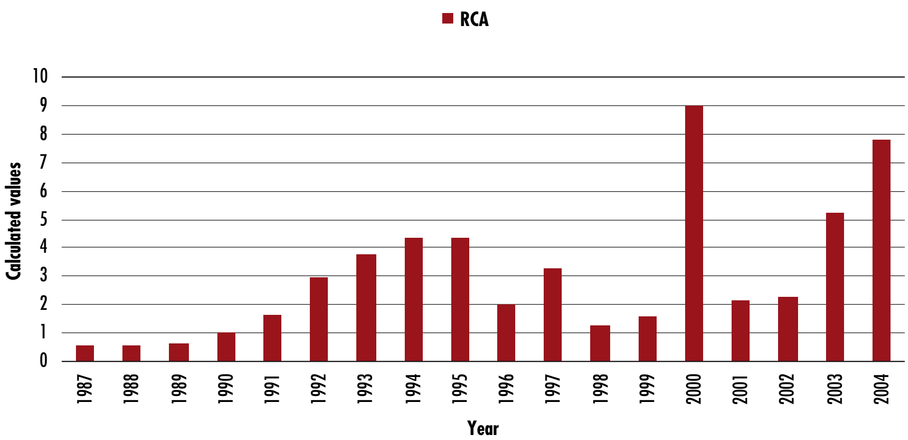
Despite these limitations, RCA measures can give some indication of changes in a country's comparative advantage over time. And, according to Cassim, Onyango and Van Seventer,[16] RCA measures can be used to deduce the impact of changes in trade policies on an industry, sector or sub-sector.

How does it work? The RCA index asks the following simple question: is sugar relatively more important to Mozambique's total exports than it is to overall world trade? If so, Mozambique is said to have a revealed comparative advantage in sugar. More formally, the RCA compares the share of a given sector (sugar) in a given country's (Mozambique's) total exports with sugar's share in total world exports. Index values greater than 1 signal that Mozambique has a revealed comparative advantage in sugar, while values less than 1 signal a comparative disadvantage.

Figure 4 depicts the calculated RCA for Mozambique's sugar industry from 1986 to 2004.[17] The figure indicates that Mozambique had a revealed comparative disadvantage in 4 out of 18 years i.e. in the period 1987–90. This finding is not surprising, given that the country was involved in a civil war and most mills were not producing during these years. Figure 4 further indicates that Mozambique had a revealed comparative advantage from 1991 to 2004, i.e. in 14 out of 18 years since 1987. This suggests that the normalisation after the war ended had a positive effect, and that the reforms that the Government of Mozambique implemented under the structural adjustment programme in 1987 and the subsequent privatisation of the sugar mills had a positive effect on the sugar industry.

However, the revealed comparative advantage has not been stable through the period 1991–2004. There was a general weakening in the RCA between 1992 and 2000. This period coincides with three major natural disasters that affected the sugar industry in Mozambique, i.e. the droughts in 1992/3 and 1995/6, and the devastating floods in 2000. Since 2002, the RCA index has consistently strengthened, suggesting a strong recovery from these natural disasters. Does this suggest that the pricing policies introduced by the government in the early 1990s and further strengthened in 1997 and 2002 had a positive effect on the sugar industry? We turn to this question in the next section.

Figure 4: Revealed comparative advantage for Mozambican sugar, 1987–2004



Source: Xxxx xxxx xxxxxxx

The policy environment

The sugar industry was one of the key sectors that the Mozambican government identified for reconstruction after the civil war in 1992.[18] As a labour-intensive industry, sugar held — and still holds — the promise of creating thousands of new jobs, especially for the impoverished rural poor. Economically, redeveloping the sugar industry made sense: Mozambique has excellent growing conditions for sugar cane and abundant labour resources.[19] These two factors are the sources of Mozambique's comparative advantage, making it one of the cheapest producers of sugar in the world.[20]

However, the particular nature of the international sugar market meant that these factors alone would not be enough. The international price of sugar is distorted in two ways. The use of domestic and export subsidies by rich countries encourages overproduction, depressing world prices significantly. At the same time, these countries tend to apply tight restrictions on their imports of sugar and sugar products, greatly increasing the price in their domestic markets. The international market is, therefore, a 'surplus' market, with most countries protecting domestic producers and dumping their 'excess' production on the international market at extremely low prices.[21] This means two things: firstly, that the international price of sugar often falls below the price of production, even in the most efficient countries; and secondly, that most, if not all, sugar-producing countries will choose to intervene in some way to ensure that their producers receive a fair price.[22]

In order to ensure that the privatisation process was a success, the Government of Mozambique created a policy environment aimed at reducing uncertainty and protecting the domestic market from instability and unprofitably low world prices. The central element in this is a pricing policy, which imposes a flexible levy on the import price (when this price falls below an established historical world price). Prior to the implementation of the pricing policy, sugar imports faced a total charge of 12.5%, comprising a 7.5% tariff and a 5% sales tax. Given that domestic sales also paid the 5% sales tax, the effective rate of protection was only 7.5%.[23]

Since November 1997, when the policy came into effect, sugar importers have paid a variable levy, or surcharge, in addition to the tariff of 7.5%, and calculated based on the difference between established reference prices and the c.i.f.[24] import prices. Moreover, since April 2002, domestic sugar production has been exempt from value added tax (VAT).[25] The decision to temporarily exempt the sugar industry from VAT was taken in light of problems caused by informal sugar imports entering the country from neighbours without paying any duty, undercutting domestic market prices.[26]

The pricing policy has benefited national producers and has proven effective in attracting investments in the newly privatised sugar mills. Since the policy did not completely ban imports, it also guarded consumers against spiralling prices. It can be argued that the pricing policy for sugar in Mozambique creates a price ceiling by making sure that the domestic price of sugar is not above the import parity price of sugar.

Looking ahead: Consolidating progress and meeting new challenges

The data analysis confirms Mozambique's efficiency in sugar production. The sub-sector has showed a revealed comparative advantage in 14 out of the 18 years since 1987. Severe natural disasters have had predictably adverse affects on producers, but recovery appears strong and unlikely to end suddenly. Importantly, the government's pricing policy is playing an important role in this process. Taken together, the analysis supports the hypothesis that appropriate government policies can help promote trade and bring changes in competitive advantage.

Yet major threats remain. The biggest comes in the form of unilateral EU reform of its sugar sector.[27] The EU currently grants developing countries preferential, quota-restricted market access under three arrangements; the Sugar Protocol (SP), the Special Preferential Sugar (SPS) scheme and under the EBA initiative. Under the SP, 20 African, Caribbean and Pacific (ACP) countries and India enjoy duty-free import quotas of roughly 1.3 million tons of white sugar equivalents per year in total. Under the EBA, the EU grants 50 LDCs, including 6 ACP SP signatories,[28] duty- and quota-free access. Finally, the SPS arrangement, which is non-binding, allows further duty-free exports of raw sugar to cover specific needs of certain sugar refineries in the EU. Again, the main beneficiaries of this arrangement are ACP countries and India.

All of these preferential schemes have come under fire in recent years, since they reserve markets for some developing countries, to the detriment of other, more efficient developing country exporters such as Brazil and Thailand.

In 2003 Brazil, Australia and Thailand took the European Commission (EC) to the world trade organisation (WTO) Dispute Settlement Body to settle whether the EU exports of subsidised sugar violated the WTO agreement on agriculture.[29] In April 2005 the WTO ruled that a large proportion of the EU's sugar exports were in violation of obligations assumed under the existing WTO agreements.

The core elements of the EU's revised reform package are a decision to abolish the differential quota system and to reduce the price of sugar inside the EU by 36% over four years.[30] This price cut will result in 'preference erosion' for Mozambique and all other countries that currently enjoy preferential access. The question for Mozambique is how its sugar industry will fare in a more competitive European market.

Studies done so far indicate that some developing countries are certain to profit from the reform of the EU sugar regime. The benefits will accrue through increases in world prices; as the EC protects its sugar farmers less, so they are able to produce and export less to world markets. Developing countries will also benefit from reduced competition in non-EU markets. However, stronger, more competitive developing country exporters will enjoy a larger share of the spoils than their less competitive counterparts.

Further, the welfare impacts of the reforms for individual countries will differ substantially, depending on their sugar trade balance, their EU preference status, their own trade policies, and their production structures and costs.[31]

According to Chaplin and Mathews, the impact of EU sugar reform on EBA countries differs from that on ACP countries due to the recent and still incomplete introduction of EBA.[32] They further argue that in the case of ACP countries, problems arise because preferential access has removed the incentive to improve productivity. The argument that the lion's share of benefits of these reforms will accrue to efficient producers such as Brazil and Australia is therefore noteworthy.

Mozambique's sugar exports do not yet enjoy a significantly large quota into the EU market under the EBA initiative. But the quota limits under the EBA initiative are to be increased yearly by 15% until 2009, when unrestricted access will be granted to LDCs such as Mozambique. Yet even with this, Malzbender argues that LDCs will still experience some income losses, since the prices will be lower than under the current EBA price system.[33]

Nevertheless, Mozambique is currently a net exporter of sugar, and with new investments under way, the output of the sugar industry is expected to increase. New investments are also expected in ethanol plants, which will diversify the sugar industry in Mozambique. Moreover, Mozambique is a low-cost producer of sugar with a targeted cost of 8.5 US cents per pound,[34] which compares favourably with Brazil — the most efficient producer of sugar in the world. These factors can be expected to limit the negative impacts of the EU sugar reform process on the sugar industry in Mozambique. However, the Mozambican government could be doing much more to ensure that any negative impacts are mitigated more fully. For example, high transportation and other logistical costs increase costs across the industry. The current rehabilitation of the road infrastructure and the recent announcement of the proposed rehabilitation of the port of Beira[35] are therefore welcome developments.

But only time will tell whether or not enough can be done to ensure that Mozambique continues to raise its profile as an internationally important sugar exporter.

Endnotes

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24 Cost insurance and freight.

25 Locke A, op. cit., p.61.

26 The principal source of such sugar is Zimbabwe, where sugar can be purchased at a rate of $50–80 on the black market, against the official rate of $400–600 per ton under Mozambique's pricing policy (USAID, op. cit.).

27 Given the importance of the US market to Mozambique's sugar exports, US sugar policy is also critical. The US government protects and supports US sugar cane/beet farmers. Preferential loans, supply restrictions of sugar that can be sold domestically and the restriction of imports are the main tools used to keep domestic sugar prices above the world market price. Consumers and food manufacturing firms pay higher prices than they would under a liberalised sugar regime. They lobby for liberalisation, but the small group of sugar cane/beet growers remain favoured by the government. For whatever reason, the US sugar programme has received less criticism than the EU's. As a result, there has been no effort by the US government to propose changes in its sugar

policy. The US Department of Agriculture's 2007 Farm Bill proposal suggests that US sugar policy will remain largely unchanged. As such, this briefing focuses on expected changes in the EU only. Needless to say, however, if the US removed or significantly reformed its support programmes for US farmers, Mozambique and many other developing country exporters would benefit enormously.

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