SHORT NON-REFEREED PAPER

ESTIMATING THE FINANCIAL IMPACT OF THE HEALTH PROMOTION LEVY ON SUGARCANE GROWERS IN SOUTH AFRICA – A PRELIMINARY ANALYSIS

NICHOLSON RJ[1] AND KADWA M[1]

[1] South African Cane Growers' Association, 170 Flanders Drive, Mount Edgecombe, 4300, South Africa

Richard.Nicholson@sacanegrowers.co.za Muhammad.Kadwa@sacanegrowers.co.za

Abstract

From April 2018, the South Africa government implemented a tax, the Health Promotion Levy (HPL), on non-alcoholic Sugar-Sweetened Beverages (SSBs). The HPL resulted in the cost of sugar for SSB manufacturers rising above the threshold level and almost tripling instantly on 1 April 2018. Most SSB manufacturers swiftly reformulated their product mixes by substituting the sugar beyond the threshold, with artificial sweeteners. This resulted in a significantly sharp decrease in demand for local sugar in South Africa, which is the greatest source of the industry revenue. Preliminary data indicate that local sales to SSB manufacturers have been reduced by approximately 50%. Due to industry legislation, the equivalent of the decrease in sugar sales must currently be exported at considerably below-cost of production world prices. Therefore, the industry revenue has been significantly reduced. This paper aims to estimate the financial impact of the HPL, specifically on sugarcane growers in South Africa. The estimation is based on the final 2018/19 RV Price to growers, compared to a hypothetical RV Price, without the reduction in sales to the SSB sector. The annual average large-scale SA Cane Growers Cost Survey results for rain-fed and irrigated regions are analysed to demonstrate the negative impact of the HPL on the growers' returns. The earnings before interest, the management salaries, as well as the tax and depreciation are compared in the two scenarios. A further comprehensive study can be conducted on this topic; for example, on the reduced demand in other sectors because of the HPL, on the impact of further threshold changes, on expanding the levy to other sectors, and on different levy rates.

Keywords: Sugar tax, health promotion levy, sugarcane growers, economics, finance, alternative sweeteners

Introduction

As from April 2018, the South Africa government implemented a new levy, on non-alcoholic Sugar-Sweetened Beverages (SSBs), namely, the Health Promotion Levy (HPL) (SARS, 2018). When it was implemented, the HPL was based on sugar content, at a rate of R0.021 for each gram of sugar over a threshold of 4g/100ml (SARS, 2018). Whilst R0.021 may appear to be insignificant, at the time of implementation, it was about 200% of the retail price of sugar (Nel and Musingadi, 2019; Saxena *et al*., 2019; Stacey *et al*., 2019). Effectively, the cost of sugar over the threshold tripled almost instantly for SSB manufacturers on 1 April 2018! To avoid passing this excessive additional cost on to the consumers, most SSB manufacturers swiftly reformulated their product mixes by substituting the sugar beyond the threshold with artificial sweeteners (Bosire *et al*., 2020; Stacey *et al*., 2019). This resulted in a significantly sharp decrease in demand for local sugar in South Africa.

Historically, SSB manufacturers purchased over 500 000 tons of locally produced sugar (e.g. BFAP, 2019; Kadwa, 2019). Preliminary information, based on less than two years' data, indicates that sales have reduced in this sector by approximately 50%. Due to the South African industry legislation (SIA, 2000), the equivalent of the reduction in local sugar sales must now be exported. In general, the prices realized by sugar exports are considerably below the cost of production and they are sold at a loss. According to the Division of Proceeds (DoP) calculation (SIA, 2000), the industry revenue per ton of sugar has therefore been reduced.

This paper aims to estimate the financial impact of the HPL, specifically on sugarcane growers in South Africa, based on the preliminary 50% reduction in sugar sales to the SSB sector.

Methodology

The estimation is based on the final 2018/19 RV Price, which was R3574.41/ton RV, compared to a hypothetical RV Price without the reduction in sales to the SSB sector. Table 1 below displays a summary of this calculation. The Local Market Demand Estimate (LMDE) difference includes changes to the carry-over sugar tonnages, based on the industry formula. The additional industry revenue is estimated by using the actual 2018/19 weighted average local and export price differential. Industry costs are assumed to remain the same.

Table 1. Estimating the HPL impact on the RV Price: 2018-19

	2018/19 Final RV Price	
	Actual	**Hypothetical**
RV (t)	2404397	2404397
Saleable Sugar (ts)	2183821	2183821
Local market sales (ts)	1227709	1477709
LMDE (ts), including carry-over changes	1140989	1442970
LMDE Difference (ts)		301981
Export Availability (ts)	1042832	740851
Additional Industry Revenue		R1 373 753 846
Growers' DoP Share of Proceeds		R883 498 190
RV Price Change		R367.45
2018/19 Final RV Price	**R3 574.41**	**R3 941.86**

The average large-scale growers' annual SA Cane Growers Cost Survey results for rain-fed and irrigated regions are analysed to demonstrate the negative impact of the HPL on the their returns. Large-scale commercial farm economics were analysed by using survey data from SA Cane Growers' Association (SACGA, 2019). Only actual data for the 2017 season were available, and the data for the 2018 season were estimated by using indices from the Crops and Markets Reports released by the Department of Agriculture, Forestry and Fisheries (DAFF, 2019). The survey elicited cost and income data from a sample of large-scale growers from the 14 Mill Supply Areas (MSAs) in SA. The average cost and income statistics reported in this study were determined by weighting the MSA values by the deliveries of large-scale growers in each MSA.

The Earnings Before Interest, management salaries, Tax and Depreciation (EBITD) are compared in the two price scenarios.

Results and Conclusions

The hypothetical estimated price, namely R3941.86, is a 10% improvement, compared to the actual price achieved during the 2018/19 season. The hypothetical price would have been beneficial to the growers, as displayed in Table 2. Rain-fed growers would have been better off by R45.21 per ton cane, and irrigated growers would have experienced an increase in revenue of R49.05 per ton cane. The reduced demand of sugar in the local market had a substantial impact on growers and their returns. As shown in Table 2, the R45.21 per ton effect for the rain-fed growers would have pushed the EBITD into positive territory. Unfortunately, these growers experienced a loss for the 2018/19 season. The irrigated growers were better off as they were already in positive territory, but the R49.05 per ton in the hypothetical scenario would have been welcome after years of drought and the low water supply before the 2018/19 season.

Table 2. Earnings before Interest, Management Salaries, Tax and Depreciation for the Actual 2018/19 RV Price compared to the Hypothetical Price

	Rain-fed		Irrigated	
2018/19 Season	**Actual**	**Hypothetical**	**Actual**	**Hypothetical**
Gross Income (R/t)	439.24	484.45	477.18	526.24
Total Operating Costs (R/t)	467.14	467.14	372.41	372.41
EBITD (R/t)	-27.90	17.31	104.77	153.83
Positive Difference in EBITD (R/t)		45.21		49.05

The reduction in the LMDE, due to the implementation of the HPL, therefore had a significant effect on the price. The drop in price then caused the average rain-fed grower to incur a substantial loss in the 2018 season. A loss of this magnitude has a detrimental effect on the financial sustainability of growers who deliver most of the sugarcane in the industry. Considering that farm staff and wages make up 30% of the total costs of sugarcane production, a substantial loss for growers, due to policy decisions, puts employment on sugarcane farms in rural areas at risk (SACGA 2019).

A comprehensive study on this topic can be researched further; for example, the reduced demand in other sectors, because of the HPL, as well as the impact of further threshold changes, expanding the levy to other sectors, and different levy rates.

References

BFAP (2019). BFAP baseline agricultural outlook: 2019-2028. Bureau for Food and Agricultural Policy, Pretoria, South Africa, pp 58-60.

Bosire EB, Stacey B, Mukoma G, Tugendhaft A, Hofman K and Norris SA (2020). Attitudes and perceptions among urban South Africans towards sugar-sweetened beverages and taxation. *Public Health Nutrition* 23(2): 374-383.

DAFF (2019). Crops and Markets: 2nd Quarter 2019, Volume 100, No. 980, Directorate of Agricultural Statistics, Department of Agriculture, Forestry and Fisheries. ISBN 978-186871-464-3. Available online: www.daff.gov.za

Kadwa M (2019). Financial tipping point for sugarcane growers in South Africa. *South African Sugar Journal* 14-17: April – June 2019.

Nel M and Musingadi K (2019). Sugar tax leaves a bitter taste for the beverage sector – sugar tax update. *South African Food Review* 46(6): 32.

SACGA (2019). Annual Large-scale Grower Cost Survey 2016/17. Internal publication of the South African Cane Growers' Association. Mount Edgecombe, South Africa.

SARS (2018). The Health Promotion Levy on Sugary Beverages - External Policy. South African Revenue Services, Pretoria, South Africa.

Saxena A, Stacey N, Puech PDR, Mudara C, Hofman K and Verguet S (2019). The distributional impact of taxing sugar-sweetened beverages: findings from an extended cost-effectiveness analysis in South Africa. *BMJ Global Health* 4: e001317.

SIA (2000). South African Sugar Industry Agreement, Department of Trade and Industry, Pretoria, South Africa.

Stacey M, Mudara C, Wen NG, Walbeek C, Hofman K and Edoka I (2019). Sugar-based beverage taxes and beverage prices: Evidence from South Africa's Health Promotion Levy. *Social Science and Medicine* 238: 112465.