



Growth and Development in the Sugar to Confectionery Value Chain

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1. Introduction

The member states of the Southern African Development Community (SADC) have placed industrial development at the core of the region's development integration approach. In pursuit of this important common objective, a series of studies is being undertaken with funding from the South African Department of Trade and Industry (the dti) to assess the regional competitiveness and opportunities in selected value chains. These studies build on previous related work undertaken on regional development and integration across various sectors.¹

This study looks at the sugar to confectionery value chain in Zambia and South Africa. Sugar confectionery products include sweets (hard boiled candy, lollipops, chews, chocolate etc.) while baked confectionery goods include sweet biscuits. This study does not assess other value chains, such as sugar-sweetened beverages and energy (biofuels), that use sugar and sugarcane as inputs.²

The research was undertaken on a collaborative basis by the Centre for Competition, Regulation and Economic Development (CCRED) and the Zambia Institute for Policy Analysis and Research (ZIPAR) to build a shared understanding of the opportunities and main bottlenecks found in the value chain. This lays a basis to inform concrete cross-country policy initiatives based on a shared understanding of industrial development challenges at a regional level.

The research is motivated by two key factors. First, both South Africa and Zambia are large net exporters of sugar, with Zambia being the lowest cost producer of sugar in the region (Ellis, Singh and Musonda, 2010) and amongst the lowest cost producers in the world. Yet, there is a large trade deficit in both these countries as well as in the SADC region in downstream sugar confectionery products which is a substantial category of processed food. Given the cost advantages, South Africa and Zambia are well placed to exploit opportunities from low cost sugar to develop relatively low-to-medium technology value added products in the sugar and baked confectionery industries. Despite low costs of production, Zambia and South Africa's domestic sugar price exceeds the world sugar price which results in relatively higher input costs for local producers in downstream confectionery markets (Chisanga et. al, 2014a and 2016). While this gap between domestic and world prices arguably exists in several countries given that the general world sugar price is distorted³, the high costs of input sugar in Zambia and South Africa results in significant imports of finished confectionery products from low cost sugar producing countries.

Second, the same firms that operate in South Africa also operate at two key stages of the sugar to confectionery value chain in Zambia, namely in the sugar production (until recently) and formal retail levels. The largest producer of sugar in Zambia, Zambia Sugar, was until recently a subsidiary of South African firm Illovo Sugar. It is now owned by Associated British Foods. Similarly, the largest retailers in Zambia, Shoprite and Pick and Pay, are also the two largest supermarket chains in South Africa with a large regional footprint. This has interesting

¹ This includes studies by CCRED, CSID, AIAS and UNZA on inputs to infrastructure in Mozambique (Baloyi and Zengeni, 2015), mining machinery in South Africa and Zambia (Fessehaie, 2015); soy value chain in South Africa, Zimbabwe and Zambia (Takala-Greenish et al., 2015). It also draws on lessons from UNU-Wider studies on regional integration and growth: supermarkets (Das Nair and Chisoro, 2015, 2016 and 2017); implications for local suppliers in Zambia (Ziba and Phiri); animal feed and poultry (Ncube, Roberts and Zengeni, 2016); mining policies (Fessehaie, 2015); regional transport (Paelo and Vilakazi, 2017).

² We note that the Sugar Tax in South Africa currently does not apply to the confectionery industry, but only to sugar-sweetened beverages. <http://www.gov.za/speeches/treasury-proposed-taxation-sugar-sweetened-beverages-8-jul-2016-0000>

³ Because sugar producers in large producing countries like Brazil and India are heavily subsidised by their governments and export surpluses over domestic demand at much lower prices.

implications for understanding the regional nature of the value chain and the role of these key firms in determining the structure and developments in the value chain both within each country and between South Africa and Zambia.

The role of retailers is particularly important in understanding the sugar to confectionery value chain as they play a key, and growing, role in local producers accessing final markets. From a national perspective, supermarkets are an important route to the domestic market, particularly to urban consumers, for local suppliers. But importantly, from a regional perspective, supermarket chains are an avenue to wider regional markets in SADC. Access to domestic and regional markets through retailers would provide an opportunity for suppliers to grow and reach the desired scale as well as to upgrade their capabilities to become competitive in regional and, potentially, in international markets.

The overarching objective of this study is to highlight the potential for mutually beneficial growth and development opportunities for both countries. The specific objectives of the study are as follows:

- To develop a shared understanding of the challenges impeding the expansion of industrial activities in South Africa and Zambia;
- To analyse the performance and competitiveness of the sugar to confectionery regional value chain and the potential for upgrading;
- To identify concrete plans at the sectoral level for mutually beneficial and collaborative industrialisation strategies for the sugar and confectionery value chains across the two countries.

Based on these objectives, the main research questions identified include:

- How is the production and distribution of the sugar to confectionery value chain organised in terms of inter-firm linkages, governance and regional logistics?
- What are the key determinants of competitiveness through the value chain, with reference to input costs, investment, quality, packaging, marketing, branding, and other requirements in the region?
- What are the key factors in regional confectionery producers supplying regional supermarket chains?
- What are the constraints to regional trade and investment, including the impact of transport costs and costs related to regulation and border controls?
- What levers of industrial policy are most effective in deepening and expanding linkages in South Africa and Zambia?

South Africa and Zambia are significant as far as regional industrialisation is concerned. On one hand, South Africa is largely deemed to be the 'gateway to the region', given its level of industrialisation, relatively sophisticated markets and proximity to the rest of the region. However, South Africa has recently seen structural shifts with sharp increases in contributions of the services industry to GDP while the manufacturing industry contribution to GDP and employment has significantly decreased over time. On the other hand, Zambia's export profile has remained largely dominated by metal commodities, primarily copper, that are susceptible to international commodity price shocks. Zambia's economy has also seen a shift towards the services industry, with the sectoral composition of the economy largely comprising services but without achieving the industrial development required for sustainable economic growth and employment creation. However, there has been significant export diversification into agro-processing more generally, although not in the sugar confectionery industry (Fessehaie et al., 2015b). As such, it is important to understand why there is value addition in some agro-

processing sectors and not in the sugar to confectionery value chain, where there are clear natural advantages in sugar production.

Both South Africa and Zambia are therefore faced with a challenge to increase their manufacturing base as employment and industrialisation are on their respective development agendas. Processed food is an important sector and one in which the region continues to run a substantial trade deficit. Agro-processing, specifically in the sugar to confectionery value chain, is an important area in which industrial development can be pursued in both countries if there is a better understanding of the linkages and the constraints faced.

Methodology and report structure

The research questions are evaluated under a global value chains framework, adapted for regional dynamics to understand opportunities and constraints to regional industrialisation. The study primarily uses qualitative data to map the value chain, to identify regional points of entry and to understand the critical success factors and constraints faced in accessing final markets.

Data from both primary and secondary sources are utilised. The dataset of primary information was obtained through in-depth interviews with key stakeholders throughout the value chain in both Zambia and South Africa, as well as from the annual reports of listed companies. The interviews were mainly conducted using detailed structured questionnaires during face-to-face interviews.

The target population comprised all (upstream) sugar millers, given that there are only a few players, selected (downstream) sweets and baked confectionery producers in South Africa and all confectionery producers in Zambia (given that there are also only a few players). In South Africa, in order to ensure adequate representation of confectionery producers, large, medium and small producers were targeted. Importers of sugar and confectionery products, wholesalers, traders, re-packers and retailers were also targeted. Interviews were further conducted with other key stakeholders such as the relevant industry associations, government departments and development and investment agencies. Not all the sugar millers and confectionery producers targeted were forthcoming for interviews. Overall, data was collated from 30 interviews of 29 players. This included five sugar millers, 12 confectionery producers in addition to data from the other targeted entities (see Appendix 1 for a list).

This information was further augmented by secondary data collected from sources such as United Nations Statistical databases Comtrade and Trade Map, Statistics South Africa, the Central Statistical Office of Zambia, SADC trade documents and past studies in the sector. The data from the various data sources were triangulated to ensure validity.

This report is structured as follows. Section 2 provides a literature review on value chains and Section 3 presents an overview on the role of retailers generally in food and agro-processing value chains. Section 4 descriptively maps the sugar to confectionery value chain in South Africa and Zambia, highlighting the key players at each level of the value chain. This section also evaluates trends in the trade of both sugar and sugar confectionery products in the region. Section 5 then assesses the dynamics within the value chain including the growth and performance of main players, the pricing of sugar as an input into confectionery production and the major constraints faced including accessing routes to market. Section 6 concludes and provides recommendations for mutually beneficial policy interventions for Zambia and South Africa.

2. Literature Review: Global value chains, regional value chains and agro-processing⁴

Global value chain (GVC) theory helps to explain how patterns of international trade and production have shaped prospects for development and increased competitiveness (Gereffi, 2014). GVC perspectives are often used to analyse international trade and production networks (Gereffi, 1999). Due to the increased globalisation of processes involved in the manufacturing of various products, it has become important to understand the inter-firm linkages found in these trade networks. These international trade networks are generally characterised by unequal distribution of economic rents (Gereffi et al. 2001). This necessitates analyses to understand where and how the distribution of these economic rents is determined, that is, an understanding of the locus of power in the trade network. A GVC framework allows for an understanding of how the distribution of rents can be changed for firms to receive more equitable shares of these rents through mechanisms such as upgrading.

GVC analysis brings out key questions around market power, the governance of chains and the dynamics of production networks, with governance being viewed as a central concept in the understanding of value chains (Gereffi et al., 2001). The governance structure of the commodity chain describes the “process by which particular players in the chain exert control over other participants and how these lead firms appropriate or distribute the value that is created along the chain” (Bair, 2009: 9). Another important building block in GVC analysis, especially in the realm of policy-making, is industrial upgrading (Gereffi et al., 2001). Upgrading “refers to several kinds of shifts that firms or groups of firms might undertake to improve their competitive position in global value chains” (Gereffi et al., 2001: 5). This involves the learning that organizations undertake to improve their position in the value chain (Gereffi, 1999).

Participation within the global economy, particularly through GVCs, has seen a number of countries benefit from economic growth. This is largely because the “trade, investment, and knowledge flows that underpin GVCs provide mechanisms for rapid learning, innovation, and industrial upgrading” (Gereffi, 2014). Thus, GVCs are able to provide firms in developing countries with access to greater competencies such as improved industry standards, efficiencies, and process knowledge.

However, achieving success and efficiency within global economies has been shown to be a difficult task. This is particularly because firms in developing countries seeking to participate in the global economy are subject to the usually stringent governance and control by the lead firms in a value chain. Moreover, the prospects for upgrading are largely dependent on the governance structures found in the GVC. The more stringent the governance and controls are, the less room there is for subordinate firms to upgrade.

It has thus been suggested that firms in developing countries should first seek insertion into *regional* value chains in order to gain the capabilities required to participate successfully in global value chains (Morris and Fessehaie, 2014; Farole, 2015). The consideration of regional value chains is particularly important because these chains may be more amenable to upgrading than GVCs as they are likely to be less tightly controlled than the latter (Keane, 2015). Issues such as harmonisation of standards or border controls may be easier to negotiate between countries that share borders than between those that do not. Thus,

⁴ This literature review is developed from Ncube et al. (2016).

understanding firm and state strategies in the formation of regional value chains is important to understand their operation and potential for regional industrialisation.

Until recently, there has been limited literature on regional value chains in Africa. Apart from the case studies on various African agricultural and mining commodities feeding into GVCs⁵, the GVC literature on African value chains either focused on the effect of Asian firms on African producers or on the demand patterns driven by BRICS countries (Brazil, Russia, India, China, and South Africa) (Keane, 2015). However, more recently, regional value chains studies have been carried out in various forms. These studies have either had a regional focus assessing the potential or existence of regional value chains (Farole, 2015 and Keane, 2015 in their assessment of the SACU region), or as case studies looking at specific value chains (e.g. Fessehaie, et al., 2015).

In the assessment of SACU and the possibility of developing regional value chains, Farole (2015) advocates for the development of regional value chains in SACU. Using the 'gateway' model, he suggests developing regional value chains specifically for these to be plugged into GVCs. The gateway model would involve the development of SACU regional value chains, led by SA lead firms, to plug into GVCs. However, this gateway approach is often found to be hampered by geographic remoteness, high transport costs, trade barriers and low levels of skilled labour (Farole, 2015). Also in an assessment of SACU, Keane (2015) looks at the firm-level characteristics of SACU firms participating in GVCs, finding evidence of a production network, particularly in the metals industry. However, while metals from other countries in the region end up in South Africa, they do not form part of South Africa's extra-regional metal-based exports.

Two key insights emerge from the limited research on regional value chain. First, most regional value chain studies are conducted with the view to develop regional value chains as preparation for entry into GVCs (Keane, 2015). For instance, Kaplinsky and Morris (2015) find that regional value chains can play an important role as a learning ground for African suppliers ultimately destined for global markets. This is because African markets generally have far less stringent standards and requirements than global markets (largely found in developed countries). As such, regional value chains are seen as a means to an end, not an end in themselves. However, it has also been suggested that for some countries plugging into regional value chains as an end in itself might be the most viable strategy for development as they may have very low domestic capabilities (Keane, 2015).

The second key insight is that, as highlighted by Farole (2015), regional value chains in southern Africa remain largely underdeveloped. This underdevelopment extends to the agro-processing sector where it is suggested that regional value chain development should be the greatest given the level of agricultural production in southern African countries (Farole, 2015). For example, in their analysis of the soya regional value chain in South Africa, Zambia and Zimbabwe, Fessehaie et al. (2015) found that there is very little interaction among the three countries. This is despite the fact that South Africa has the largest trade deficit of the three and Zambia has a trade surplus. Yet, South Africa does not import from Zambia and instead imports from deep sea sources. (Ncube et al., 2016). This is not consistent with a view of developing the SADC region.

Key challenges affecting the development of regional value chains, particularly in the agribusiness sector, include large asymmetries in scale between South Africa and the rest of the region, trade barriers including industry protection and a lack of harmonisation in standards and labelling (Farole, 2015). Also, for much of the southern African region there is inadequate

⁵ See for example Cramer (1999), Dolan and Humphrey (2000) and Gibbon (2003)

national and regional competition to stimulate technology upgrading and regional development (AFDB *et al.*, 2014).

The development of regional value chains depends on both structural and policy factors. Structural factors include the southern African region having difficulty in achieving scale and having large intra-regional imbalances. The SACU region is characterised by relatively small regional markets which make it difficult to take advantage of scale economies because production volumes are relatively low (Farole, 2015). Intra-regional imbalances, with South Africa dominating the SACU (and indeed the southern African) region and with industries favouring location in South Africa make it difficult to develop regional value chains (Farole, 2015). These scale considerations affect the competitiveness of the firms/countries in terms of both GVC and regional value chain integration.

Policy factors are also important for the formulation of regional value chains. This is especially the case in the context of regional communities and regional integration. Regional communities are seen as an avenue by which countries could improve their trade-competitiveness through upscaling in value chains. The upscaling can be facilitated by enacting regional policies which reduce or eliminate excessive protectionist trade measures, as well as increased tax incentives for attracting new technology (AFDB *et al.*, 2014). These policy measures are meant to boost trade within the regional community as the regional value chain is dependent on the free flow of goods and services within the region. As such, there must be both strong policies and strong alignments between national and regional institutions if countries in the regional community are to benefit from efficient regional value chains (AFDB *et al.*, 2014).

Regional integration has long been a goal for SADC countries. However, despite the regional integration agenda, national policies are often in opposition to the regional integration initiatives in SADC (Hartzenberg and Kalenga, 2015). Although countries have ostensibly implemented a number of trade liberalisation measures, they have also found ways to circumvent the effects of application of tariff liberalisation by implementing non-tariff barriers (NTBs), including in agriculture (Hartzenberg and Kalenga, 2015). Particularly for agro-processing, trade policies undermine the potential for the development of downstream activities (Farole, 2015).

The main NTBs found in agriculture among SADC countries are sanitary and phyto-sanitary measures (SPS), labelling requirements, periodic banning of imports and exports of what are unilaterally classified as 'sensitive' goods, and import and export licensing procedures (see also Hartzenberg and Kalenga, 2015). There is now a move away from trying to implement 'Eurozone-type regional integration' to trying to think of new ways to effectively address constraints faced by firms aiming to deepen economic linkages (Hartzenberg and Kalenga, 2015). As such, the concept of unlocking the development of regional value chains is directly affected by issues of trade cooperation between neighbours in the region. While complete regional integration may no longer be a viable means by which to encourage intra-regional trade, countries may still be able to foster trade cooperation among close neighbours to encourage the development of a regional value chain.

The positioning of regional value chains as a 'gateway' to entry into GVCs is certainly interesting in the context of economic development in Africa. The African continent is commonly cited as having the highest growth rates and growing markets, particularly for consumer goods including food. Moreover, while intra-African trade has grown by an average annual growth rate of 13.5% between 2000 and 2010 (AFDB *et al.*, 2014), Africa is still missing out on growth which was observed in more integrated and connected regions in other parts of

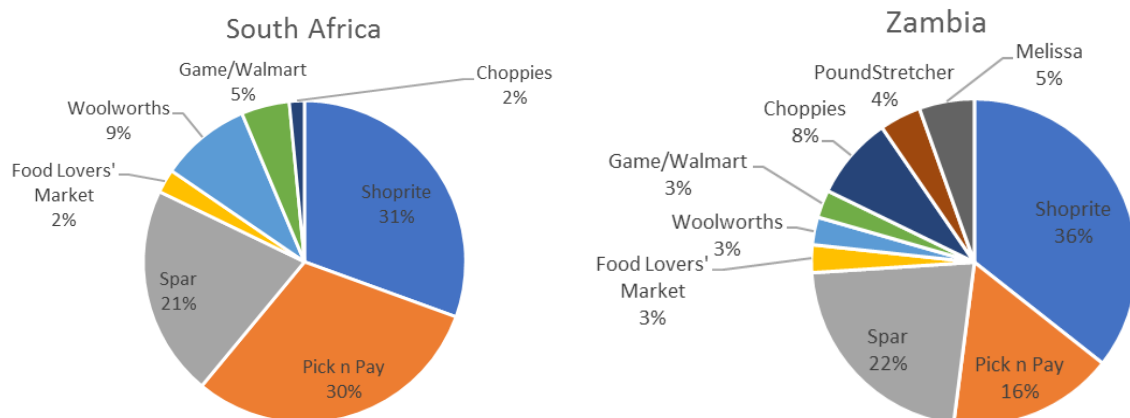
the world. As such, the development of regional value chains could be viewed as an end in itself, not only as a gateway to GVCs.

3. Overview of the role of retailers in the sugar to confectionery value chain

A key participant and the last link to end consumers in agro-processing value chains is the retailer. The rapid growth and spread of modern retailing in southern Africa is an important dynamic in regional value chains that look at food and household consumable products. Modern retailers, and supermarkets in particular, are becoming an increasingly important route to market for many consumer goods in southern Africa, providing opportunities for suppliers to participate in lucrative retail value chains both within and outside their home countries (Boselie et al, 2003; Reardon and Hopkins, 2006). The role of retailers in the sugar to confectionery value chains in South Africa and Zambia are therefore worth a close look at.

South Africa and Zambia have experienced strong growth in the number and spread of formal supermarket chains over the past two decades and this suggests that in the future, supermarkets can potentially be a key route to market for medium-sized sugar confectionery suppliers. This strong growth has largely been through the expansion of South African supermarket chains into the region (Figure 1). More recently however, there has been growth of regional supermarket chains (like Choppies) and international ones (like US' Walmart, UK's Pound Stretcher, Netherland's SPAR) in the SADC region. Increasing regional foreign direct investment and demand-side factors such as rapid urbanisation and rising income per capita have been attributed to this growth (Tschirley, 2010; Humphrey, 2007). Improved and modern infrastructure is also a key factor driving the expansion of supermarkets. The surge in construction of shopping malls in urban areas in southern Africa continues to provide retailers with the space to carry out their operations.

Figure 1: National market shares of formal supermarkets chains in Zambia and South Africa (based on no. of stores), 2017



Source: Annual reports and interviews. Note: Only chain supermarkets and their grocery stores are considered. Other offerings part of the group such as fast food or furniture outlets are not considered.

Globally, supermarkets are spreading beyond urban areas, moving from large cities to rural areas and villages, spanning a full range of income groups. This has raised concerns for independent retailers (that are individually owned and not part of a chain) that have been displaced by supermarket chains. The evidence is that in South Africa at least, the major supermarkets chains are indeed moving into townships and rural areas. However, there is also evidence that independent retailers have remained resilient and have re-emerged with

alternative business models in recent years in South Africa, accounting for around 40% of the total retail food market (see Chisoro and das Nair, 2015).

In South Africa, suppliers can access consumers either through the formal supermarket value chain, where products flow from supplier to distribution centre or directly through supermarkets to the end consumer. Alternatively, suppliers can sell via independent retailers who access their products through buying groups or wholesalers. Similarly, in Zambia suppliers can sell via traders, wholesalers, independent retailers or directly to chain supermarket stores (see Figure 2 below).

For sugar confectionery products in South Africa and Zambia, in particular, candy and sweets, alternative routes to market are currently important (see Section 5). Wholesalers, cash and carries and independent retailers which largely service lower income consumers through informal outlets like spaza shops, kantemba shops and similar informal outlets are the primary route to market for many medium-sized and new entrant confectionery producers.

Given the multinational nature of many supermarket chains in the region, supermarkets potentially open up a much larger regional market for suppliers to attain the necessary scale to become competitive in national, regional and even international markets. However, there are barriers to accessing these markets that are often created by the supermarkets themselves through their internal requirements. The procurement and sourcing strategies, as well as the private standards that large supermarkets impose, have a significant impact on supplier participation in the value chain and the development of their capabilities. Also affecting the development trajectory of suppliers is the impact of buyer power of supermarkets which skews the negotiation of trading terms in their favour. This has relevance for the development of the confectionery industry as it can negatively affect the participation and success of suppliers in the value chain. It is also important to bear in mind the dynamics in the alternative routes to market, such as independent retailers and wholesalers.

Large retailers, marketers and branded product manufacturers play a key role in buyer-driven value chains in coordinating decentralised production networks in many exporting countries (Humphrey and Schmitz, 2000). Buyer-driven value chains, such as those driven by retailers, are typically characterised by outsourced production, while the lead firms concentrate on branding, design and marketing functions (Gibbon and Ponte, 2005). Studies have shown that this type of governance has resulted in several unique institutional and organisational developments, such as global sourcing, specialty retailers and the growth of private labels/in-house brands (Gereffi, 2001).

Given that supermarkets are often the immediate interface or last link between products and consumers, they play a key role in what is offered to the final consumer (in terms of price, quality and other characteristics such as how products are packaged and presented). Large supermarket chains therefore can and do exercise considerable control over value chains and have a significant impact on suppliers of these products.

Past studies have shown that as a result of the spread of supermarkets, suppliers have had to invest in their capabilities to ensure that products sell off their shelves as fast as possible. These investments include branding (to build brand awareness and loyalty), advertising, sampling, point of sale material, packaging, merchandising and marketing. Even if supermarkets do not directly insist on these investments, local suppliers are often forced to

invest to remain competitive against imported products, to adhere to regulations or to meet customer needs.⁶

Supermarkets globally have moved away from spot purchases to adopting specialised procurement agents, dedicated (and not independent) wholesalers, or procuring directly from processors. This gives them direct influence over pricing, quantities, terms of payment, delivery and product quality. This also has the adverse effect for participants in the value chain of shrinking the supply base by using only preferred suppliers (see Altenburg et al, 2016) and bypassing traditional wholesale markets (Humphrey, 2007). Modern supermarkets globally are also moving towards using own centralised distribution centres (DCs) to supply stores in the chain and are shifting away from the traditional store-by-store procurement and supply practices (Reardon and Gulati, 2008). This has certainly been the case in South Africa with all the major supermarkets investing heavily in DCs (see Chisoro and das Nair, 2015). DCs in South Africa supply supermarkets in Zambia too. This has implications on suppliers - suppliers are often required to have the necessary scale to supply all outlets of the supermarket chain through DCs; suppliers sometimes have to pay notional transport costs when supplying to DCs (costs incurred as though they are delivering directly to the different stores); suppliers are sometimes forced to offer discounted rates or rebates for their products given the advantages of supplying to a single destination (for instance, pallet discounts) (das Nair and Chisoro, 2015, 2017).

Another factor that affects suppliers is the standards that supermarkets set. Large supermarkets globally are imposing escalating private quality and processing standards on suppliers (Humphrey 2005; Boselie, Henson and Weatherspoon, 2003). While escalating private standards are likely to be beneficial to consumers, and in instances, are demanded by consumers, they may present entry and expansion barriers to suppliers. When trying to understand constraints to industrialisation, it is important to understand how escalating private standards affect their participation. These private standards are over and above country-specific basic legal standards that suppliers have to adhere to. The capabilities of suppliers (particularly small-scale farmers, small food processors and producers of household consumable goods) to meet these standards and to reach the required scale to compete with imports are important for their sustainability. Adhering to standards has been particularly difficult for suppliers in developing countries as often the institutional, physical and financial infrastructure support systems are weak (including bar coding, packing houses, cold chains, shipping equipment, credit facilities, standards and certification processes etc.).

In South Africa, the basic legal requirements/regulations with regards to food safety, bar coding, labelling and packaging requirements include the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No 54 of 1972); and the Health Act, 1977 (Act No 63 of 1977). These legislations deal with issues of hygiene at the point of production, general consumer protection and food safety. They also include the conditions under which food is stored, transported, maintained, and consumed. Other general accreditations include South African Bureau of Standards (SABS) accreditations. These are all relevant for the sugar to confectionery value chain.

Over and above these basic legal standards, supermarkets impose private standards on suppliers. Supermarkets in South Africa may require that suppliers meet the Hazard Analysis and Critical Control Points (HACCP) accreditation standards. Past research has shown that in some cases, supermarkets in South Africa require higher accreditation standards than

⁶ For a more detailed breakdown of types of investments made in different sectors, see das Nair and Chisoro (2016).

HACCP, such as Food Safety System Certification (FSSC 22000) which is an international accreditation. In other cases, suppliers are taking it upon themselves to get higher accreditations to gain a competitive edge over their rivals and to access international markets. Regardless of accreditation, it appears that retailers in South Africa typically send their own auditors to audit the supplier at the suppliers' cost. Estimates from suppliers are that HACCP can cost as much as R80,000 and FSSC 22000 can cost up to R200,000 per annum, with additional R100,000 annual fees for maintenance (das Nair and Chisoro, 2016).

In Zambia, while the HACCP accreditation is fully operational, it is costly and voluntary and is mostly only implemented by large suppliers that can meet these costs. The Zambian Bureau of Standards (ZABS) sets lower minimum domestic quality and food safety standards to accommodate majority of local firms struggling to compete with imports. However, this creates a gap between local standards and regional/international standards making it difficult for suppliers to access export markets.

Other standards, which may be either private or legal, include requirements on packaging, labelling or advertising. The cost of adhering to all these private standards and audits is borne entirely by the supplier making it increasingly costly to supply formal supermarket chains.

Independent retailers on the other hand often have lower, if any, private standards in addition to far less onerous requirements with regards to packaging, advertising, labelling etc. Independent retailers therefore provide an avenue through which new suppliers can start building scale. This certainly seems to be the case as evident in South Africa (discussed in Section 5).

However, the biggest concern with the growth and spread of supermarkets is the ability for dominant chains to abuse their buyer power. Over and above demanding higher standards from suppliers, supermarkets often impose a range of other costs on suppliers through their trading terms. This is reflective of their buyer power and affects the profitability of suppliers. Large supermarket chains in many cases control pricing in their trading terms by controlling elements such as listing/support fees, rebates, advertising and slotting allowances, promotion fees, payment period terms, settlement discounts and new store openings fees (Reardon and Gulati, 2008; das Nair and Chisoro, 2016). This unilateral control of trading terms is reflective of the buyer power of large supermarkets (OECD, 2015; Clarke et al., 2002; Davis and Reilly, 2009; Inderst and Valletti, 2011). A combination of increasing retail concentration and significant barriers to entry limits the choices that suppliers have in terms of the competing means of distributing their goods in many countries. The threat of being de-listed from large supermarkets' supplier bases may result in suppliers giving in to the demands of supermarkets (Dobson, 2015). In several countries, market inquiries or studies are initiated by competition authorities given concerns around buyer power (Kobel et al. 2015).

Another avenue through which supermarkets can increase their bargaining power against suppliers is through increasing their range of private label or house brand products. There has been growth in private label products in supermarket shelves in South Africa and Zambia recently. Many suppliers of branded products in South Africa also manufacture and sell private labels to supermarkets in both South Africa and Zambia (das Nair and Chisoro, 2016; Ziba and Phiri, 2017). Supplying house brands is a way in which suppliers can get their products on supermarket shelves. Suppliers can use this as a stepping stone to get onto supermarkets' preferred supplier lists especially for suppliers that have not yet built a brand name. However, house brands also confer some bargaining power to supermarkets over suppliers, putting pressure on suppliers of branded products and potentially resulting in their foreclosure. These concerns have been raised by suppliers of private label brands in South Africa and in other countries in the region, like Botswana, and include concerns that they were being 'forced' into

supplying private labels/house brands at lower margins than their own branded products and this was used as a tool to negotiate down prices for branded products.⁷

4. Mapping the sugar to confectionery value chain in South Africa and Zambia

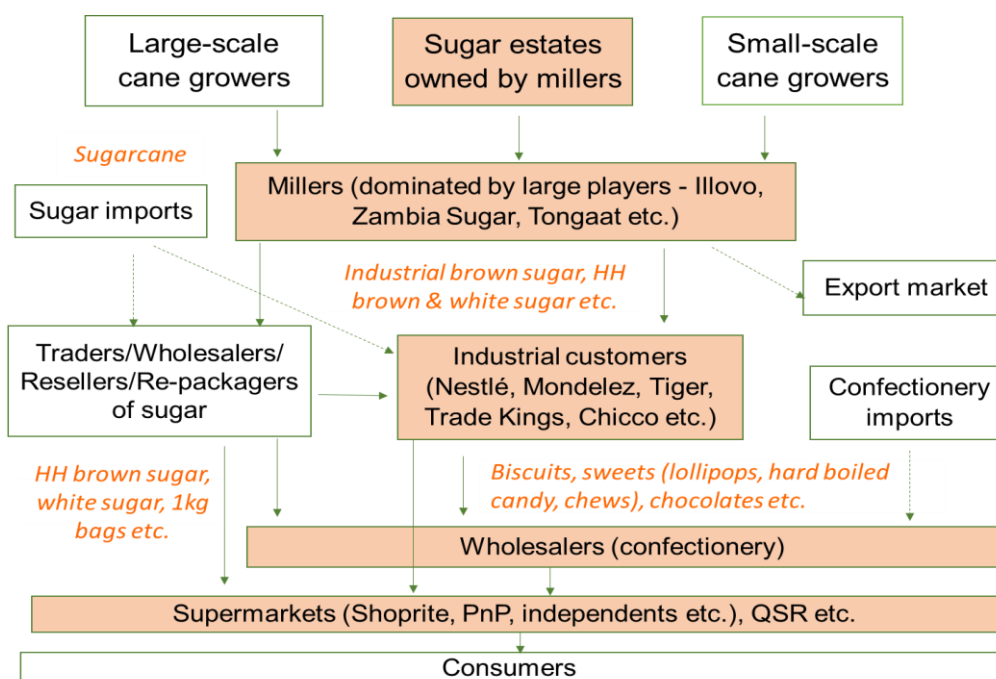
The figure below represents the sugar to confectionery value chains in South Africa and Zambia (Figure 2). The upstream level is the agricultural component, where sugarcane is grown. The next level involves the milling of sugarcane into sugar. This is followed by the downstream manufacture of confectionery producers who use sugar as a key input. In both countries, there is a degree of vertical integration between sugar growing and milling (discussed below). The sugarcane growing level is not focused on in detail in this study.

Generally, sugar from millers is of two grades: household grade (HH) or industrial grade. Industrial grade sugar is largely used by industrial customers to produce confectioneries, biscuits, cereals, and beverages among other products. Within this category, there is a better quality white refined sugar which is used in the beverage industry graded as ICUMSA⁸ 45 and a less refined, more fibrous, 'plantation white' grade which is used in the confectionery industry (graded ICUMSA 150, as purity is not as crucial for aesthetics in confectionery compared to the beverage industry). Industrial customers can also on-sell to retailers and other customers after re-packing (to restaurants, Quick Service Restaurants (QSR) etc.). While confectionery producers can use more refined ICUMSA 45 grade sugar to produce confectionery products, this obviously comes at a higher cost and is not strictly necessary. In South Africa, until very recently (2015/2016) ICUMSA 150 grade was not locally produced and confectionery producers either used beverage grade sugar or relied on imports (see Section 4.2.1 for a discussion around this). Household grade sugar on the other hand is sold from the millers directly to distributors, wholesalers and retailers. Both grades are also exported (from SA and Zambia).

⁷ The Competition Authority of Botswana for instance has undertaken an inquiry into the impact on suppliers, with preliminary findings revealing that supermarkets exert considerable buyer power over suppliers of house brands at the expense of margins in branded alternatives. There is a concern that branded products will be foreclosed from supermarket shelves in the long run. This concern is exacerbated by the fact that some large chains like Choppies are vertically integrating backwards into the production of supermarket products under house brands (das Nair and Chisoro, 2016).

⁸ ICUMSA - International Commission for Uniform Methods of Sugar Analysis

Figure 2: Sugar to confectionery value chain in Zambia and South Africa



Source: Authors' own

The rest of this section assesses each level of the value chain, focusing on the key players, production and trade in both countries.

4.1. Sugar production

The sugar industry in South Africa generates approximately R12 billion (USD806 million)⁹, and creates 79,000 direct jobs and 35,000 indirect jobs (SASA, 2016). There are approximately 22,500 registered sugarcane growers, with sugar being produced by 6 milling companies operating 14 sugar mills (SASA, 2015). Just over 21,000 of these sugarcane growers are small-scale growers (95% of the population of sugar growing establishments). However, 83% of the sugarcane produced in South Africa by volume is produced by large scale growers. The milling companies are also involved in upstream activities, albeit at a relatively small-scale, accounting for approximately 8% of the sugarcane grown in the country (SASA, 2015).

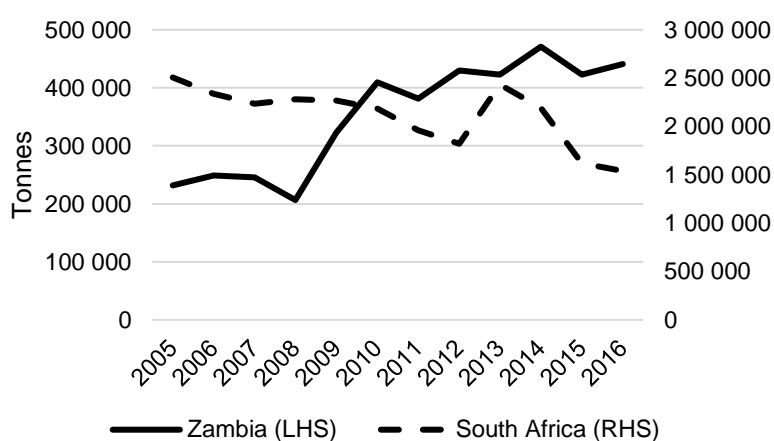
In contrast, the Zambian sugar industry is relatively smaller than that of South Africa in terms of revenue and employment. In terms of revenue, it generated over USD200 million in 2015. This is based on the revenue generated by Zambia Sugar, which accounts for approximately 90% of the sugar market in Zambia. The Zambian sugar industry employs approximately 10,000 people (based on the numbers of people employed at the sugar producers, including the seasonal agricultural workers) (Zambia Sugar, 2015; Sable Transport, 2016). Like South Africa, smallholders in Zambia supply a much lower proportion of sugarcane than largescale growers to millers. For Zambia Sugar for instance, smallholders supply only 10% of the 3.1million tonnes of sugarcane milled at their Nakambala Mill (Zambia Sugar, 2016).

Production volumes of sugar in South Africa have been relatively consistent, on average about 2.1 million tonnes between 2005 and 2016 (Figure 3). The drought reduced sugar production in South Africa to approximately 1.6 million tonnes in the 2015/16 season (SASA, 2016). In contrast, Zambia's production has increased over the years, particularly between 2008 and

⁹ This figure is based on revenue/ income generated through sugar sales in both SACU and world export markets.

2010 (Figure 3). The average production between 2010 and 2014 is almost double that of the period between 2005 and 2008. The reasons for this increase are as a result of significant investments which are explained in Section 5.1 below. However, Zambia’s production still lags far behind that of South Africa.

Figure 3: Sugar production (tonnes/annum) in Zambia and South Africa



Source: Compiled from SASA; FAOSTAT and CSO

4.1.1. Sugar producers – South Africa

Sugar in South Africa is produced by six millers with 14 sugar mills operating in the cane-growing regions of Mpumalanga and KwaZulu Natal. Illovo Sugar (Ltd), Tongaat Hulett Sugar (Ltd), and TSB Sugar (Ltd) are the largest milling companies. The other relatively smaller sugar producers are Gledhow Sugar Company (Ltd), UCL Company (Ltd) and Umfolozi Sugar Mill (Ltd) (SASA, 2015).

(i) Illovo Sugar (Ltd)

Illovo, which until recently was the majority shareholder of Zambia Sugar, operates four mills in South Africa, one of which is a refinery and three of which have packaging units. Illovo has three sugar cane growing estates and produces high-value downstream products such as speciality sugars and syrup. The group is a wholly-owned subsidiary of Associated British Foods plc (ABF).

(ii) Tongaat Hulett Sugar (Ltd)

Tongaat Hulett operates four sugar mills in South Africa, two of which have packaging plants. It also has a central refinery in Durban with its own packaging plant. Tongaat has five sugar estates outside of South Africa and various others in South Africa. The company also has an animal feed operation.

(iii) TSB Sugar (Ltd)

TSB was acquired by RCL Foods in 2014 and operates three sugar mills, two of which have refineries, a packaging plant, sugar estates, cane and sugar transport and an animal feed division.

(iv) Gledhow Sugar Company (Ltd)

Gledhow was founded in 2009 following the acquisition of the Gledhow Sugar Mill in KwaZulu Natal. It operates a single mill and is made up of a few key shareholders – cane growers (25.1%) Illovo (30%), a BEE partner (34.9%) and Sappi Ltd (10%).

(v) UCL Company (Ltd)

UCL currently operates only one sugar mill, manufacturing mainly brown sugar. The company has a number of mixed farms and also runs a trading division for the supply of requisite agricultural input materials. It also has a wattle extract mill.

(vi) Umfolozi Sugar Mill (Ltd)

Umfolozi Sugar Mill (USM), located in KwaZulu Natal has its origins back in 1916. It is a single, small independent mill owned by two shareholders comprised of Umfolozi mill growers and NCP Alcohols who have a 77% and 22% share respectively. The sugar mill specialises in the production of brown sugar.

Tongaat-Hulett, Illovo and TSB are the largest sellers of sugar to the SA industrial market (NAMC, 2013). This is important when considering alternative sources of sugar for industrial customers. The entire sugar producing industry is represented by the South African Sugar Association (SASA) which is made up of the Cane Growers' Association and the Millers' Association. Due to the low world market prices, the SA sugar industry exports approximately only 25% of its sugar production at prices which are much lower than the domestic prices (SASA, 2015).

(vii) Sugar intermediaries

There are a number of sugar traders/ distributors who act as intermediaries between millers and confectionery producers. Distributors include Sugar on Tap, Royal Rice, Lluvia Sugar, Foodcom and Makro, while the Akila Group and Dreyfus are involved in the trading of sugar in addition to other major agricultural commodities. It is generally very difficult for smaller confectionery producers to deal with the large millers directly and distributors are an important intermediary that allow smaller producers to purchase the required sugar in smaller quantities.

4.1.2. Sugar producers – Zambia

The current total of national raw sugar production of around 450,000 tonnes is produced primarily by 3 firms – Zambia Sugar, Kafue Sugar and Kalungwishi Estates. The largest by far is Zambia Sugar, with approximately 90% market share in sugar production in Zambia and who is the sole exporter.

(i) Zambia Sugar Ltd.

The Illovo Group held 75% of shares in Zambia Sugar prior to the sale to Associated British Foods (ABF). The company is listed on the Lusaka Stock Exchange with initially 82% of shares held by the Illovo group and the balance by institutional and private investors.¹⁰ But, in line with the threshold set by the Lusaka Stock Exchange, it sold down its shareholdings in 2014 (Zambia Sugar, 2015).

Zambia Sugar has sugarcane estates and a refinery at Nakambala Estate, Mazabuka, alongside the Kafue River (Zambia Development Agency, undated). In the 2015/16 season, Zambia Sugar had 1,970 permanent employees, with an additional 4,800 seasonal agricultural employees at the peak of the season (Zambia Sugar, 2016; Commentary for the year ended 31 March 2016).

¹⁰ <https://www.illovosugar.co.za/About-us/Zambia>

(ii) Kafue Sugar

Kafue Sugar is under the management of Consolidated Farming Ltd, a 100% subsidiary of Sable Transport Ltd (Sable Transport, 2016). Kafue Sugar entered the sugar industry in 2003/2004 as a family owned business and has an estate along the Kafue River 45km outside Lusaka. It produces brown sugar only mainly for the Zambian market. Kafue Sugar employs 1,500 people of which 300 are permanent (given the seasonality of growing and harvesting cane (Sable Transport, 2016).

(iii) Kasama Sugar Company (Kalungwishi Estates)

The smallest producer in Zambia, Kalungwishi Estates, (Kasama Sugar Company), had (according to reports in 2014) less than 1% market share. It is said to produce between 2500 and 2600 tonnes of sugar (Mulikelela, 2012). It has made an investment in its sugar plantation of USD8 million in the Northern Province of Zambia (Mulikelela, 2012).

(iv) Other sugar producers in Zambia

There are certain future investments that are likely to come on board soon. Shree Renuka is an Indian owned company which has promised to invest about USD200 million into a sugarcane plantation and factory to be located in Southern province of Zambia. The company has given the Zambian government an undertaking that it will create 6,000 new jobs in the rural Mazabuka area. The plant will be diversified, producing sugar, ethanol from sugarcane residuals as well as generating power. As we highlight later, these alternative uses for sugarcane are important for smaller millers.

Nava Bharat Ventures is another Indian company which has shown interest in setting up an integrated sugar estate in the Luena Farm Block of Kawambwa District. Negotiations with the Zambian government have concluded and Nava Bharat are expected to start operating in the second half of 2017. Once complete the Luena sugar project is expected to create 1,000 direct jobs and with an additional 10,000 indirect jobs through various outgrower schemes to supply sugarcane to the company.

As evident, the sugar milling level of the value chain is concentrated in both South Africa and Zambia. This has implications on the pricing of the sugar as well as on the relationship between sugar millers and their industrial customers.

(v) Superior Milling Limited

Just like in the case of the South Africa sugar industry, a number of distributors exist in Zambia's industry. These act as intermediaries between sugar producers/millers and confectionery producers as well as retailers. Superior Milling is one such player whose role in the sugar to confectionery value is becoming important as it provides supermarkets with an alternative to the dominant Zambia Sugar. The company is not a sugar producer but is currently Zambia's largest repackaging and rebranding agent of Kafue Sugar. Superior Milling employs just over 200 employees and has 25 depots spread across the country to enable easy access to supermarkets. The company has also invested heavily in its own transport fleet to help the distribution of its products. The company supplies 70 major supermarket stores which include all Shoprite stores, Pick n Pay. Games stores, Melissa and Choppies in addition to Cheers and Sana supermarkets.

Superior Milling has a three-way contract with Kafue Sugar and Shoprite. Shoprite sells this sugar at a [confidential] discount to Zambia Sugar's price. This promotes Kafue Sugar and also creates rivalry to Zambia Sugar so that Shoprite is not held to the demands of the dominant Zambia Sugar. In addition, Shoprite ensures favourable trading terms for Superior

Milling as part of a good and long-term working relationship which include not paying listing, promotional and advertising fees, as well as not having long payment periods. This is an example of how retailers can 'sponsor' rivalry at the upstream supplier level by developing the smaller rivals to dominant suppliers.

4.2. Trade of sugar

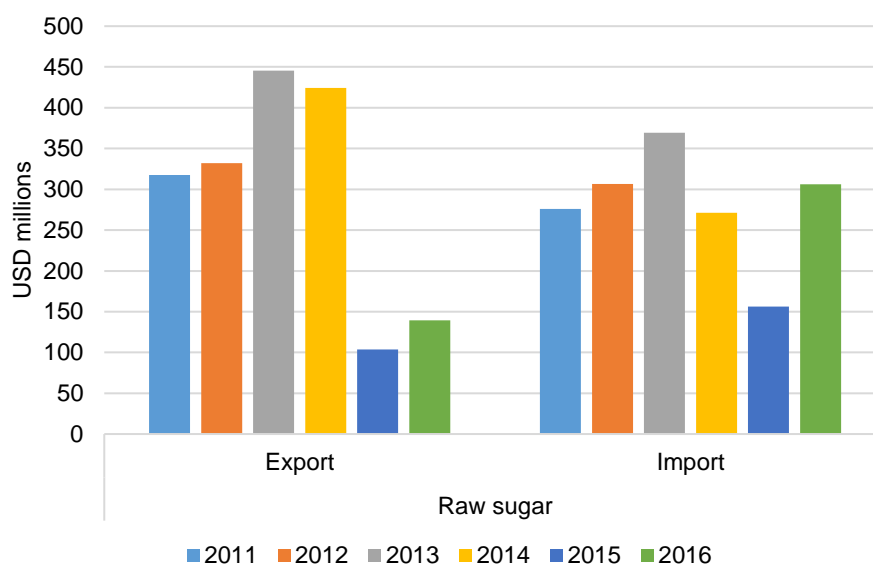
South Africa and Zambia are both net exporters of raw sugar products, as Figure 4 and Figure 5 show. South Africa has however imported significant amounts of sugar between 2011 and 2013, after which there was a decline before increasing again in 2016. Between 2013 and 2015, sugar imports into South Africa decreased by 51% (Figure 4). This is primarily because of the import tariff which kicked in around this time (see section 4.2.1 for an explanation of how this tariff works). Although data for 2017 is not yet available, interviews with industry players suggest that imports again started increasing particularly in January 2017 given the strengthening of the Rand.

Exports of raw sugar decreased between 2013 and 2015, with a steep decrease in 2015. Between 2014 and 2015, sugar exports decreased by USD320 million. Namibia, Mozambique and Botswana are key export markets for South African sugar, while Swaziland and Brazil are key sources for South Africa's sugar imports. This decrease in exports can be attributed to the drought and lower production given less investment in sugarcane growing by farmers. According to a miller, coupled with the drought, low levels of production are as a result of mothballed capacity given low returns to cane growing. Farmers are not investing sufficiently in cane growing and are not employing methods to get the best yields.¹¹ This was confirmed by another miller, who highlighted that farmers were not utilising appropriate levels of fertilisers.¹² Yet another miller further noted that small scale growers lack the capital to invest in planting, management and equipment and they do not have the collateral to borrow funds, affecting their yields. Exports however picked up (by 34%) in 2016.

¹¹ Interview with a miller, 23 January 2017

¹² Interview with a miller, 24 February 2017

Figure 4: Sugar trade, SA (USD millions)

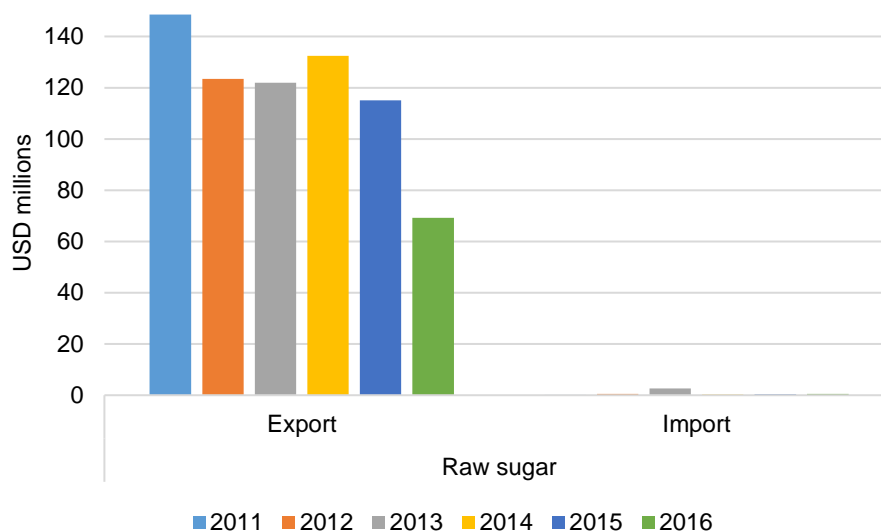


Source: Comtrade

The extent of Zambia’s net exports is a reflection of its position as a low-cost producer of sugar. The largest export destination was the DRC followed by Mauritius (although this sugar is actually destined for Europe, with importing company domiciled in Mauritius), Kenya and South Africa. The value of exports to South Africa increased significantly between 2011 and 2014 (approximately USD5 million in 2011 to USD25 million in 2015). The DRC is a very significant market for Zambian exports. This was also confirmed by the Zambia Development Agency (ZDA) who noted that Zambia Sugar exported around USD100 million of sugar to the DRC in 2015/2016.

DRC is the biggest export destination of Zambia’s Non-Traditional Exports (NTE), amounting to USD574.76 million in 2015 (although down from USD802.57 million in 2014) (Zambia Development Agency, Export Audit Report, 2015).

Figure 5: Sugar trade, Zambia (USD millions)



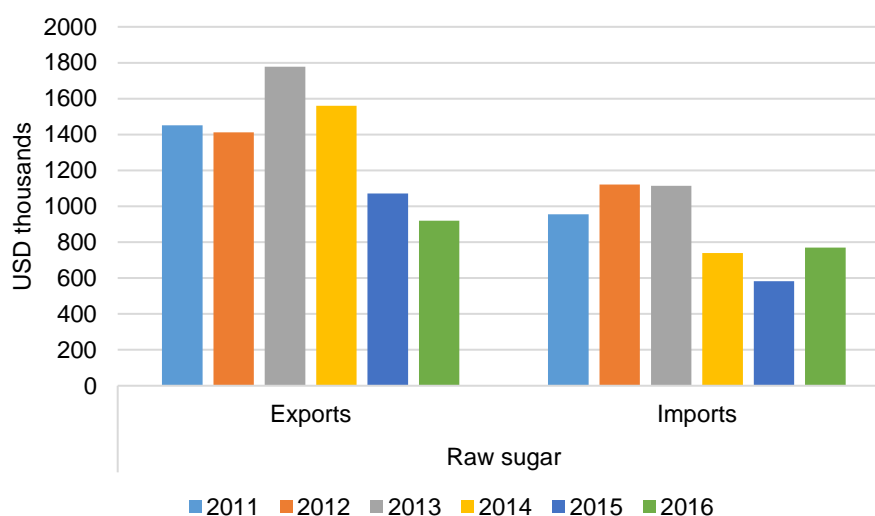
Source: Comtrade.

Note: Trade values for 2016 in USD millions for Zambia are mirror data. These are data for countries that have not reported their trade data to UN Comtrade database, which is then reconstructed on the basis of data reported by partner countries. Mirror data have a number of shortcomings: they do not cover trade with other non-reporting countries; they do not cover intra-African trade accurately, and the trans-shipment issue can hide the true origin of goods. Lastly, the number of reporting countries is different from one year to another.

Zambia has had almost no imports of sugar over the 6-year period considered (Figure 5 above). This is because the production levels of the three mainly players can more than meet local demand. Furthermore, the vitamin A fortification legislation which requires that all domestic and imported sugar meet the fortification requirement acts as an entry barrier for imports into the country. Because this legislation does not exist in other countries, it prevents sugar produced in other countries being imported into Zambia. This legislation is seen by some industry participants as an NTB on imported sugar from other countries (Kalinda and Chisanga, 2013). The ostensible reason for its introduction was in response to a vitamin A deficiency crisis in Zambia.

The SADC region as a whole is a net exporter of raw sugar (Figure 6). The region has recorded a consistent trade surplus over the 2011-2016 period. The past few growing seasons however have been impacted by a prolonged drought, reducing sugarcane yield (SADC Sugar Digest, 2017). Indeed, the figure below shows that SADC's total exports and imports of raw sugar have been on a downward trend since 2013, with the exception of a small increase in imports in 2016. Import tariffs in South Africa, the region's largest importer, have been increasing and this is likely to have contributed to the decrease in sugar imports in the region as a whole, in addition to the drought. The value of exports fell by USD711,164 (40%) between 2013 and 2015, while imports decreased by USD498,192 (43%) over the same period.

Figure 6: Sugar trade, SADC (USD thousands)

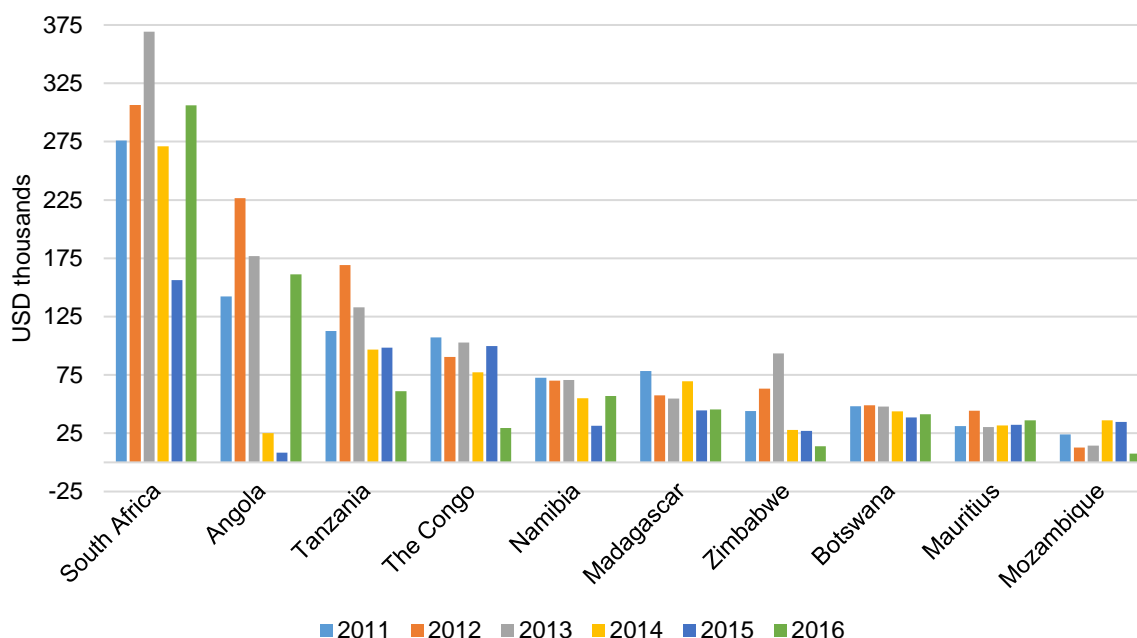


Source: Trademap

Note: SADC trade value for 2016 in USD thousands includes mirror data for Swaziland, Zambia, Malawi and Lesotho.

South Africa, Angola and Tanzania, on average, made up the bulk of the region's sugar imports between 2011 and 2016 (Figure 7).

Figure 7: Top 10 sugar importers, SADC (USD thousands)



Source: Trademap

SADC's top import markets for sugar, presented as a percentage of the total value of imports are shown in Table 1 below. While a bulk of South African imports are from Swaziland, a significant amount of sugar is imported from Brazil. Brazil and Thailand are key overseas markets from which several SADC countries import. Tanzania does not import from within the

region at all, with the majority of its sugar demand being met by the United Arab Emirates (UAE) and India.

Table 1: SADC's top import markets for sugar, %

	SADC			Africa (excl. SADC)			Rest of the world		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
South Africa (SA)	Swaziland (63)	Swaziland (45)	Swaziland (55)	-	-	-	Brazil (35)	Brazil (52)	Brazil (29)
Angola	SA (4)	SA (7)	SA (67)	-	-	-	Brazil (91)	Brazil (83)	Brazil (14)
Tanzania	-	-	-	-	-	Egypt (21)	UAE (19) Brazil (17)	UAE (45) Thailand (21)	India (35)
DRC	Zambia (47)	Zambia (48)	Zambia (63)	-	-	-	Brazil (37)	Brazil (26)	Guatemala (27)
Madagascar	-	-	-	-	-	-	Brazil (31) India (24)	Thailand (36) Brazil (32)	Brazil (37) Thailand (33)
Namibia¹³	SA (98)	SA (88)	-	-	-	-	USA (1)	Thailand (8)	-
Zimbabwe	SA (76) Malawi (18)	SA (87)	SA (49) Swaziland (28)	-	-	-	-	Switzerland (4)	-
Botswana	SA (100)	SA (100)	SA (65) Zimbabwe (32)	-	-	-	-	-	-
Mozambique	Zambia (40) SA (38)	SA (90)	SA (52) Swaziland (17)	-	-	-	-	Thailand (7)	-
Mauritius	-	-	-	-	-	-	Brazil (65) Thailand (27)	Thailand (56) Brazil (39)	Brazil (71) Thailand (24)

Source: Trademap

4.2.1 Trade agreements and protection in the sugar sector in the southern African region

The above import trends raise questions about why regional sugar producers such as those in Zambia and South Africa (and even Mauritius) do not meet the regional demand. Not only is there limited trade in sugar confectionery products in the region (sweet and baked confectionery, see Section 4.4 below), there is also limited trade in actual sugar in the region as the trade data above shows. These are questions that have previously been raised by a study undertaken by the African Competition Forum (Chisanga et al, 2016). This is despite there being regional agreements in place which are meant to encourage regional trade such as the SADC Sugar Cooperation Agreement which is incorporated into the SADC Trade Protocol (discussed below) and the COMESA FTA. However, it is precisely these and other regional and international agreements that appear to have a limiting effect on intra-regional trade, and that serve to protect incumbent millers within national markets as we discuss in this section.

The global sugar market is highly distorted with world prices for sugar often being referred to as 'a dumped' or highly subsidised price. Sugar is one of the most heavily subsidised products and the average price of sugar on the world market is consistently below the average cost of production of this sugar (Wood, 2013). This has resulted in imposing tariff and non-tariff barriers against the free importation of sugar to protect domestic industries in many sugar

¹³ No import data available for Namibia in 2015.

producing countries including South Africa.¹⁴ It has been noted that ‘as long as the world sugar market remains highly distorted, sugar will be a product requiring special dispensation within the framework of the Protocol on Trade so that no sugar industry within SADC will suffer injury’.¹⁵

Policy and Regulatory Framework in South Africa

The protection for the sugar industry in South Africa by the government comes in the form of:

- (i) tariff protection against low world sugar prices;
- (ii) the Sugar Cooperation Agreement between the members of the SADC;¹⁶
- (iii) provision for the establishment of equitable export obligations for millers and growers;
- (iv) other bilateral agreements; and
- (v) the Sugar Act and the Sugar Industry Agreement of 2000 (discussed in Section 5.3).

According to the SASA, the South African Government's support in these areas is endorsed in the Department of Trade and Industry and the South African Sugar Industry's Joint Strategy for the Optimal Development of the Sugar Industry within a South African Customs Union and SADC Context.¹⁷

(i) Tariff protection

Tariff protection on sugar imports into SACU member states kicks in when the long-term average world price of sugar (adjusted for distortions in global markets like subsidies and cheap loans) drops below a given dollar-based reference price.¹⁸ Global increases in the sugar price since 2009 meant that this tariff did not kick in until around 2014 when the reference price was raised by the South African International Trade Administration Commission (ITAC) by 58%. This meant that importers had to start paying tariffs for the first time in over 4 years in 2014.¹⁹ In January 2017, the reference price was USD 566/t.²⁰ The increase in the reference price was a result of heavy lobbying since 2008 of ITAC by SASA and the Swaziland Sugar Association (SSA). A concern with this type of tariff protection is that it only holds for a point in time. Changes in global production and exchange rate fluctuations in theory would require more frequent adjustments.

SASA argued that the local sugar industry was under threat from cheap imports. However, independent importers under the Association of Southern African Sugar Importers (ASASI)²¹ claimed that the imposition of the duty harmed the sector and only benefited the large SASA members. It argued that the tariff just served to protect and benefit the millers who continued to report robust profits.²² (this is consistent with an assessment of their financial results in Section 5.1). A similar sentiment was expressed in an interview with re-seller.²³ The argument by ASASI was that imports filled a critical gap in that they were mostly of ‘crystal’ sugar, a key

¹⁴ <http://www.tralac.org/files/2011/11/SADC-Trade-protocol-Annex-VII.pdf>

¹⁵ <http://www.tralac.org/files/2011/11/SADC-Trade-protocol-Annex-VII.pdf>

¹⁶ Annex VII of the SADC Protocol on Trade, titled ‘Concerning Trade in Sugar’

¹⁷ http://www.sasa.org.za/sugar_industry/MarketCompetitiveness.aspx

¹⁸ http://www.sasa.org.za/sugar_industry/MarketCompetitiveness.aspx; Wood, 2013;

¹⁹ <https://www.bloomberg.com/news/articles/2014-04-08/south-africa-sugar-fee-raise-means-first-import-duty-in-4-years>

²⁰ Interview with a miller, 23 January 2017

²¹ It is unclear if this association is still in existence.

²² <https://www.bloomberg.com/news/articles/2014-04-08/south-africa-sugar-fee-raise-means-first-import-duty-in-4-years> and <http://www.fastmoving.co.za/activities/sugar-tariff-proposal-raises-costs-for-sa-food-industry-4012>

²³ Interview with a re-seller, 10 October 2016

ingredient in confectionery and sweet processing, which was not produced locally in any case. This was confirmed in an interview with a miller,²⁴ who explained that the imported sugar was in fact ICUMSA 150 grade, which was not produced in South Africa at the time. However, this miller, in what appears to clearly be a response to the threat of imports of this grade of sugar, invested in a pilot project to start producing this grade locally in 2015/2016. [confidential] (see Section 5.1 for the respective investments in this mill).

(ii) The SADC Sugar Co-operation Agreement

According to a miller, the Sugar Co-operation Agreement is the most important and relevant for South Africa.²⁵ The main objectives of the SADC Sugar Co-operation Agreement are:

- To promote, within the region, production and consumption of sugar and sugar-containing products according to fair trading conditions and an orderly regional market in sugar for the survival of the sugar industries in all sugar producing member states, in anticipation of freer global trade; (own emphasis)
- To create a stable climate for investment, leading to growth and development of sugar industries in the member states;
- To improve the competitiveness of the sugar-producing member states in the world market;
- To facilitate the sharing of information, research and training with a view to improve the efficiency of growers, millers and refiners of sugar in member states;
- To facilitate the development of small and medium sugar enterprises; and
- To create stable market conditions in the member states so as to encourage the rehabilitation and development of all sugar industries with a view of facilitating direct foreign investment and the creation of employment opportunities.

This agreement therefore attempts to facilitate a more integrated regional market for sugar and a higher level of co-operation between member states, with the stated aim of improving the competitiveness of the region's sugar producers. The agreement allows for partial access of the SACU market for SADC surplus sugar producers.²⁶ This partial access is in the form of import quotas governed by a formula that allocates access based on the size of each country's surplus sugar production, and the level of market growth in SACU (see below for SA). The rationale is to offer non-SACU surplus producers (Malawi, Mauritius, Mozambique, Tanzania, Zambia and Zimbabwe) the chance to export some level of duty-free sugar to the region at higher prices than what they can get in global markets. In effect, the agreement limits the volume of sugar that SADC countries can send to South Africa duty free. Exports over this volume would attract duties.

This process is said to be managed by the Technical Committee on Sugar (TCS) made up of government and industry representatives (Wood, 2013). The TCS allegedly meets after the sugar producers meet in their own forum, the Sugar Producers Consultative Forum (SPCF) (Woods, 2013), although those interviewed did not confirm the existence of the SPCF.

²⁴ Interview with a miller, 23 January 2017

²⁵ Interview with a miller, 23 January 2017

²⁶ This partial access is evident on the ground. A sugar re-seller in SA indicated that it used to import sugar from Zambia in the early 2000's but Zambia Sugar in 2016 refused to supply them with sugar based on claims that it can be sold at a higher price in the European market, even though there are quality concerns with the sugar in Europe. Interview with a re-seller, 10 October 2016

According to a miller, there are current discussions around developing the agreement to prevent surplus regions from exporting at all into other surplus regions.

Despite the SADC Sugar Co-operation Agreement, and other agreements, it appears that sugar-containing products or downstream confectionery producers may not be benefiting from their stated objectives, although the promotion of such industries is also an explicit objective of the agreement. This is seen in the limited intra-regional trade in confectionery products (see section 4.4).

(iii) Local and Export Quotas and Equitable Export Obligations

South African sugar exports to world markets are priced substantially below the domestic sugar price. This pricing dynamic is apparently common in most surplus sugar producing countries. To distribute exposure to the world market equitably amongst growers and millers, a redistribution of proceeds is effected via SASA. The Sugar Act (1978) and the Sugar Industry Agreement (2000) provide regulatory support for this redistribution of proceeds.

SASA, under Chapter 7: South African Sugar Association and Disposal of Crop, allocates to each mill a quota for both the local and export markets. This quota is allocated for refined white sugar and brown sugar, and is done so in proportion with each mill's total saleable production of sugar. If mills sell more than their allocated quota on the local market (an 'over-performing' mill), then they are obliged to pay an amount for redistribution purposes calculated as the excess quantity sold by that mill during that quarter multiplied by the weighted average of the notional local market price less the financial levy imposed by SASA and less a manufacturing allowance determined according to rules laid down by SASA (see also Chisanga et al., 2016).

Export quotas are managed by Sasexcor - SA Sugar Export Corporation (Proprietary) Limited. It is noted in the Sugar Industry Agreement that there is no obligation on any mill, including a sugar beet mill, to export or provide for export that quantity of sugar that is represented by its export quota allocated. However, any export volumes, over and above the local sales quotas, have to go through Sasexcor. It appears therefore that the millers cannot export independently of Sasexcor. Further, exports have to be of bulk raw sugar unless if special permission is obtained from SASA. Sasexcor is then obliged to buy the full export quota from millers at prices determined by SASA.

According to a government department, export quotas are broadly determined on the basis of the previous year's production figures and estimated future production.²⁷ These appear to be, as noted above, determined and administered by the SADC Secretariat with industry participation through SASA in the TCS.

These quotas have the effect of controlling local volumes available (and hence local prices), as well as controlling what is available for export to the region.

(iv) Other Bilateral Agreements

As noted, sugar is treated as a sensitive product and is specified as a special dispensation at both bilateral and regional levels of trade (Maringwa 2009). There is an existing bilateral agreement on the importation of sugar between South Africa and Mauritius which prohibits sugar imports from Mauritius.²⁸ There are other bilateral agreements in the region.

Policy and Regulatory Framework in Zambia

²⁷ Interview with a government department, 10 February 2017

²⁸ Interview with a re-seller, 10 October 2016

In Zambia, there are stringent and bureaucratic import procedures and import permit requirements. There are also import duties for imports outside COMESA and SADC. In terms of exports, as evident in Figure 5, these are largely to countries outside the region, bolstered by preferential access to EU markets²⁹ (although this was phased out in 2015). The ACF study raises the question as to why Zambia would export to the EU at lower net returns (given considerable transport costs) than export to the region to cater for its demand (Chisanga et al., 2016). This is partly explained by the import restrictions under the Sugar Co-operation Agreement. The lead sugar millers essentially control sugar trade flows in the region and heavily lobby governments on aspects of protection as discussed above.

The regulations and strategies pertaining to the sugar sector include:

(i) Vitamin A Fortification legislation – The Zambian government through the Ministry of Health and with the help of the U.S Agency for International Development (USAID) enacted this piece of legislation. As noted, this legislation mandates that all sugar in Zambia that is meant for direct consumption has to be fortified with vitamin A supplements. This legislation was motivated by the need to enhance Vitamin A availability to Zambians. However, since this legislation is not universal, it makes Zambian sugar expensive compared to sugar coming from the region despite the low production costs. The legislation therefore acts as structural barrier to entry and in effect allows Zambia Sugar to maintain its quasi monopoly status by reducing competition from cheap imports (Serlemistos and Fuso, 2010). Furthermore, it is not clear why the legislation was not mandated on mealie meal, which is more widely consumed by all social groups of the Zambian.

Potential importers of sugar are also required to obtain import permits from government. However, the process is not transparent and this often leads into delays since the process has to be cleared by at least three ministries (Chisanga et al., 2016). The effect of these non-tariff barriers is evident in the negligible sugar imports as shown in Figure 5.

(ii) Zambia National Sugar Strategy (ZNSS) - Recognising the importance of the sugar industry, the Government formulated the Zambia National Sugar Strategy (ZNSS) in which the main objective is to adapt the sugar sector in response to European Union's sugar trade regime which came into effect in June 2006. The EU together with the World Trade Organisation (WTO) implemented reforms aimed at removing artificialities in the EU sugar market that reduced sugar production and that also slashed prices by 36% over a four-year period beginning 2006/07. Owing to the sugar reforms, Zambia Sugar as of 2016 saw exports to EU reduce from 22% to 14% as it continued to focus on African regional markets, both traditional and new markets. The reforms have impacted on the sugar regimes and resulted in prices in the EU converging into global prices.

The strategy is also seen as a tool to accelerate the expansion of the sugar production through out-grower schemes. It further aims to provide a clear objective for the industry, with implementation targets and mechanisms that are jointly agreed by government and its regulatory framework on one hand, and the various private sector interests on the other hand. The strategy is also expected to shift volumes of sugar away from the EU to regional markets since regional markets provide valuable alternatives.

Sugar exports have reduced drastically in relation to metal exports which have grown significantly since 2009. In 2005 sugar was regarded the most valuable agricultural export commodity exceeding both tobacco and cotton which have shown considerable growth since 2000, and of floriculture and horticulture that have shown significant declines since the first

²⁹ Often through Mauritius.

global financial shock of 2002. As a result, the ZNSS sees the sugar industry playing a crucial part in the Zambian economy with far reaching benefits through its multiplier effects and the value addition to assist agricultural and industrial diversification. In essence, this strategy focuses mainly on the expansion of sugar production which will be anchored on sugar export opportunities in the region. It is also hoped that the strategy will improve sugar exports in the region and internationally through streamlined transport infrastructure and a reduction in Zambia's high sugar exporting costs.

The strategy does not appear to speak to downstream sugar-containing industries at all. It is also not clear how this strategy speaks to the SADC Sugar Co-operation Agreement, if it does speak to it at all.

(iii) Zambia National Export Strategy (ZNES)- The ZNES is a document which outlines Zambia's strategic vision on how it intends to structurally transform and diversify its export base (generally) and enhance the export sector's competitiveness at both regional and multilateral level with a view to contribute to sustainable and inclusive social-economic development. It was developed by taking into account global, regional and national developments. The strategy identifies sugar and confectionery products (unlike the ZNSS) as key export commodities which could help the country attain export market diversification and increased value addition and enhanced contribution of non-traditional exports to export earnings. The strategy in focusing on the sugar industry is further informed by analysis of the sector's performance. The document identifies the Democratic Republic of Congo, South Africa, Namibia, Switzerland and Zimbabwe as the main export markets. The main aim of the Zambian government in the sugar sector is to increase investment and promote local producers with the view to increasing Zambian participation in the industry. The government also intends to increase product diversification at a regional level.

So, there are (at least) two strategies that directly target the same sector (the ZNSS and the ZNES), and it is not clear if the impact of one was considered in the formulation of the other.

(iv) National Agricultural Policy (NAP) – The document encompasses agricultural diversification which government hopes will help focus on various crops apart from maize. The policy also focuses on increasing production and productivity, noting the need for the country to take maximum advantages of the resources available to increase production. The policy document also includes the promotion of Zambian crops with an export orientation and how to protect local produce against imports.

(v) COMESA and SADC Frameworks – The Zambia sugar industry also relies on regional best practice as well as trade guidelines as stipulated in the COMESA and SADC frameworks (e.g. the SADC Sugar Cooperation Agreement as discussed earlier). These frameworks also prevent sugar trade imbalances within the region and guidelines which promote the production and consumption of sugar and sugar-containing products within the region.

(vi) Other policies – The country's National Development Plan provides some guidance on all sectors of the economy and how they can individually contribute to the country's sustained growth and socio-economic transformation. These five-year plans offer various policy guidance on how to improve the performance of sector specific objectives.

Summary

There are numerous agreements, policies and strategies in place in both countries to protect and grow the sugar industry as a whole. However, it needs to be questioned whether these

policies benefit downstream sugar confectionery industries or if they only protect sugar millers who wield considerable market power and are strong lobbyists. Further, there is a challenge of policy harmonisation both within countries and among SADC member countries given a complex matrix of national and regional policies.

4.3. Sugar confectionery production

In this subsection, we focus on the general trends in sugar confectionery (biscuits and sweets) production, and the key producers in South Africa and Zambia.

Key overall trends in sugar confectionery production in South Africa

The sugar confectionery industry in South Africa generated R5.6 billion (USD414 million) in 2016 up 6% from the previous year. The categories which generated the most revenue are pastilles, gums and jellies, followed by boiled sweets and toffees. However, while the revenue generated by pastilles, gums and jellies is the highest (and that generated by toffees, caramels and nougat is not much lower than that of boiled sweets), boiled sweets are a singular category, i.e. does not have a number of different types of sugar confectioneries combined into one category. As such, among singular categories, boiled sweets bring in the highest revenue. The growth in sugar confectionery sales value between 2011 and 2016 was 72%, while the compound annual growth rate (CAGR) was approximately 11%. The highest growth, in terms of CAGR is found among the toffees, caramels and nougat category where the overall CAGR was 15.1% for the period. In contrast, the growth for boiled sweets was much lower, with overall growth pegged at 42% and the CAGR at 7.3%.

The production volumes of sweets by category yield similar results with pastilles, gums and jellies yielding the highest production volumes in 2016, followed by boiled sweets (Table 2). This was not always the case as boiled sweets volumes used to be the highest. However, since 2012, the pastilles category has overtaken the boiled sweets category in production volumes. In fact, boiled sweets have seen a decline in volumes produced of approximately 5% between 2011 and 2016, while pastilles, gums and jellies have grown by 27% and toffees and caramels by an even higher 29%.

Table 2: Sales of sugar confectionery by category (volumes, thousand tonnes)

	2011	2012	2013	2014	2015	2016
Boiled Sweets	16.1	15.7	15.4	15.0	15.2	15.3
Liquorice	1.6	1.7	1.7	1.7	1.7	1.8
Lollipops	4.0	4.1	4.3	4.5	4.8	5.1
Medicated confectionery	0.8	0.8	0.8	0.8	0.9	0.9
Mints	0.4	0.4	0.4	0.4	0.4	0.4
Pastilles, gums, jellies and chews	17.2	18.0	19.0	20.0	21.0	21.8
Toffees, caramels, and nougat	6.8	7.1	7.5	8.0	8.5	8.8
Other	4.5	4.7	5.0	5.3	5.5	5.9
Total	51.4	52.5	54.1	55.7	58.0	60.0

Source: Euromonitor International (2016)

The growth in the pastilles, gums and jellies category could be explained by investments into that category. For instance, Tiger Consumer Brands opened a R160 million gums and jellies plant in Durban in 2014 (Euromonitor International, 2015a). It is also highlighted that while innovation is happening, this is not happening through the introduction of new brands, but rather through adding value into existing and strong brands. This is largely due to the large cash outlay which would be required to launch and promote a brand-new product (Euromonitor International, 2015a).

Key overall trends in baked confectionery (biscuits) production in South Africa

Biscuit revenue has almost doubled between 2010 and 2015, with an increase of just over R2.5 billion to R4.8 billion (USD330 million). Biscuits are split between sweet and savoury biscuits, with the former making up over three-quarters of revenue in the biscuits segment. Of the sweet biscuits, the largest category by far is the plain biscuits category, which makes up just over 75% of the sweet biscuits category.

The overall growth in value between 2010 and 2015 for the entire biscuit category was 92%. Not only is the plain biscuits category the largest singular category, but it is also fastest growing both in terms of overall growth – 118% – but also in terms of CAGR – 16.9%. The general increase in revenues across all categories is largely due to the price increases in biscuits driven by the rising costs of raw materials such as wheat, sugar and butter (Euromonitor International, 2015b).

Similar trends to those in the revenue figures are found when assessing the various biscuit categories in terms of volumes. Sweet biscuits, particularly plain biscuits, make up the bulk of the biscuit volumes produced (Table 3). When looking at the growth figures, biscuit volumes have experienced overall growth of 88.1% between 2011 and 2016. Plain biscuits have the highest value and volume growth in 2015 due to the relative affordability of these products in relation to other biscuit categories (Euromonitor International, 2015b). The plain biscuits category had an overall volume growth of 100.4% and a CAGR of 14.9% between 2011 and 2016.

Table 3: Sales of biscuits by category (volumes, thousand tonnes)

	2011	2012	2013	2014	2015	2016
Savoury biscuits	6.3	6.6	6.8	12.2	6.9	6.9
Sweet biscuits	41.5	48.7	55.8	63.4	70.9	78.0
Total	47.8	55.3	62.6	75.6	77.8	84.9

Source: Euromonitor International (2016)

The main confectionery producers of these sweets and biscuits in SA are mapped out below and an analysis of their growth and performance is then provided in Section 5.

4.3.1 Main confectionery producers – South Africa

(i) Premier Foods (Pty) Ltd (Manhattan and Super C)

Premier is 91% owned by Brait (holding company) and entered the sugar confectionery market through the acquisition of existing brands (Manhattan and Super C). It acquired the Manhattan brand of Kraft Foods in 2013 which include gums, chews, jellies and marshmallows. Premier has a single plant located in Germiston with 310 employees and a production capacity of [confidential] tonnes and a current capacity utilisation averaging [confidential]. Gums and jellies make up [confidential] of the company's sales volume per product [confidential] of total sales are made up of exports mainly to the SADC region which it entered through the identification of agents and distributors.

(ii) Lodestone (Pty) Ltd (Candy Tops/Mister Sweets)

Lodestone brands was formed in 2015 following the acquisition of Candy Tops in 2010 of Mister Sweets in 2012. The two confectionery businesses were finally merged to form a single

operation in 2014. The company produces a number of confectionery production lines. The Mister Sweet brand includes toffees (the largest in terms of volume and value), gums and jellies, 'Rascals', marshmallows and panned sweets. Candy Tops primarily manufactures hardy candy and boiled sweets. The company employs 500 workers in their confectionery product lines, a decrease from 800 following the closure of their East London plant. Lodestone Brands has a production capacity of [confidential] tonnes a month.

(iii) Kraft Foods (Pty) Ltd - Mondelez International (Cadbury)

Mondelez International, which the Cadbury brand falls under, opened its first factory in South Africa in 1921. Cadbury was founded in 1824 and its products are marketed in 165 countries worldwide. In South Africa, the brand manufactures a range of chocolates, gum and candy.

(iv) Tiger Brands (Pty) Ltd (Beacon)

Tiger Brands was established in 1920 and is the largest sugar confectionery producer in terms of market share in South Africa. Tiger owns the Beacon brand which was established in 1931, through the acquisition of Durban Confectionery and Spice Works. There are a range of sugar confectionery products manufactured under the Beacon brand, including hard boiled candy, gum and jellies, toffees and fudge, liquorice and panned sweets. Well-known Beacon brands include Maynards, Jelly Tots, Fizzer and Fizz Pop.

(v) Trade Kings (Pty) Ltd

Trade Kings is a wholly Zambian-owned company that established its South African subsidiary in 2010. Prior to opening its South African plant, the company imported Zambian sugar confectionery products to South Africa. The company's expansion into South Africa has allowed for easier access into other African markets like Botswana and Namibia, through exports (which make up 13% of total production). This was a key motive for their expansion into South Africa- access to regional markets, although there were also concerns of high sugar prices as we discuss in the assessment section.

Trade Kings South Africa has a total workforce of 117. Its confectionery business produces lollipops (650 tonnes per month), and more recently, in April 2016, the company started manufacturing chews. The company's growth in revenue has however been static over recent years.

(vi) Aldor Africa (Pty) Ltd

Aldor Africa is a subsidiary of Aldor in Colombia, which established its South African plant in 2010. The company's main sugar confectionery products are hard candies and lollipops which make up 10% and 90% of sales volume, respectively.

Aldor Africa was built from the potential of exporting to the southern African region. The company sells directly to wholesalers and distributes within the region (Mozambique, Zambia, Botswana, Lesotho, and Swaziland). Spar and OK supermarkets in South Africa are supplied through distributors. With 350-400 employees, the company operates between 85-90% capacity utilisation on all their product lines.

(vii) National Brands Pty Ltd (Bakers)

National Brands/ AVI has an extensive brand portfolio under its stable. Its snack works division – which the Baker (previously Bauman & Co.) brand falls under was established in 1851. The bakers range includes a selection of biscuits like Provita, Cream Crackers and Kips.

(viii) Pioneer Foods (Bokomo)

Pioneer Foods sold off its biscuit portfolio (Bokomo) to National Brands in 2015 in order to focus on its core brands such as its fruit concentrates. According to it, the regional biscuit brand is very brand sensitive and the company was unable to compete with National Brands effectively. It had a market share of approximately [confidential] in its sugar confectionery business and 'exported' its products to the rest of Africa through Shoprite.

(ix) Nestlé (Pty) Ltd.

Nestlé was formally established in South Africa in 1916, with local production starting in 1927. Some of Nestlé's popular chocolate and confectionery brands include Smarties, Quality Street and Kitkat. Nestlé has a strong presence in South Africa with eight factories and three distribution centres.

(x) Broadway Sweets (Pty) Ltd.

Broadway Sweets (previously Broadway Snack Distributors) was established in 1984 as a snack distributor for Simba and other brands, and then an agent for Nestlé. In 1995, they began importing sweet products from Colombia (Yogueta and Pin Pop brands), Brazil and Thailand. Given the success of these brands, they then set up a local manufacturing plant in South Africa 2006 and began manufacturing their Stumbo Pops and Heartbeat brands in 2007. The company has 450 employees nationwide.

4.3.2 Main confectionery producers – Zambia

The sweet confectionery industry in Zambia is also dominated by a few players. However, like in South Africa, recent years have seen a number of firms get into production phase of the sugar and confectionery value chain. The following gives an outlook and background of the firms.

(i) Trade Kings (Pty) Ltd.

Trade Kings Limited is a large FMCG manufacturer in Zambia. It started in 1995 with just 20 employees, producing Boom Paste, a washing detergent. Today, it has just under 6,000 employees, and has expanded its product range to over 320. It now produces numerous branded soaps, detergents, sweets, lollipops and soya nuggets (soya mince). It wholly owns all its factories (which cover an area of approximately 20,000m²) (Trade Kings, 2015).

Trade Kings (Zambia) started producing sweets (Super Sweets) in 1998, gum in 2005 and lollipops in 2006. By 2013, Trade Kings Zambia was producing approximately 6500 tonnes of lollipops per annum (540 tonnes per month), 4,400 tonnes of sweets and hard boiled candy (360 tonnes per month), and 1,200 tonnes of bubble gum (100 tonnes per month). They expected then that there would be an increase in growth as they sought to expand their market share within the region (Trade Kings, 2015). The lollipops plant is fully automated while that for gums is semi-automated. It also has an in-house packaging plant where all the design, labelling and branding is done. Its regional markets include central, east and southern Africa. The company's marketing strategy is anchored around an aggressive advertising campaign through the print media, radio and television.

As highlighted above, Trade Kings Limited has a subsidiary, Trade Kings SA, which manufactures confectionery and sweets for the South African and regional markets. Both Trade Kings Zambia and Trade Kings SA have a lollipop and sweet plant each, with the

Zambian arm of the company also having a range of other plants (detergent powder, detergent liquid, detergent paste, nyama soya plant and soaps plant).

(ii) Chicco Quality Foods (Zayaan Investments Pty Ltd.)

Chicco Quality Foods was established in 2003 as a family business. The company trades as Zayaan Investments and is only second to Trade Kings in the production confectionery products in terms of volumes. The company's main products which are traded under the Chicco brand are biscuits, cakes, gums and lollipops. It employees just over 200 workers at its two main production plants in Lusaka.

(iii) Monginis Bakers (Pty) Ltd.

Monginis Bakers is a Zambian company, born out of a partnership business and was established in 2008. They started with the production of a small range of biscuits which has since grown. Mongini employs around 100 people.

(iv) Musa Biscuits (Pty) Ltd.

Musa Biscuits Limited was incorporated in 2000 as a family owned business. The company's main products are biscuits, lollipops and other selected sweet products and has a workforce of around 150 people.

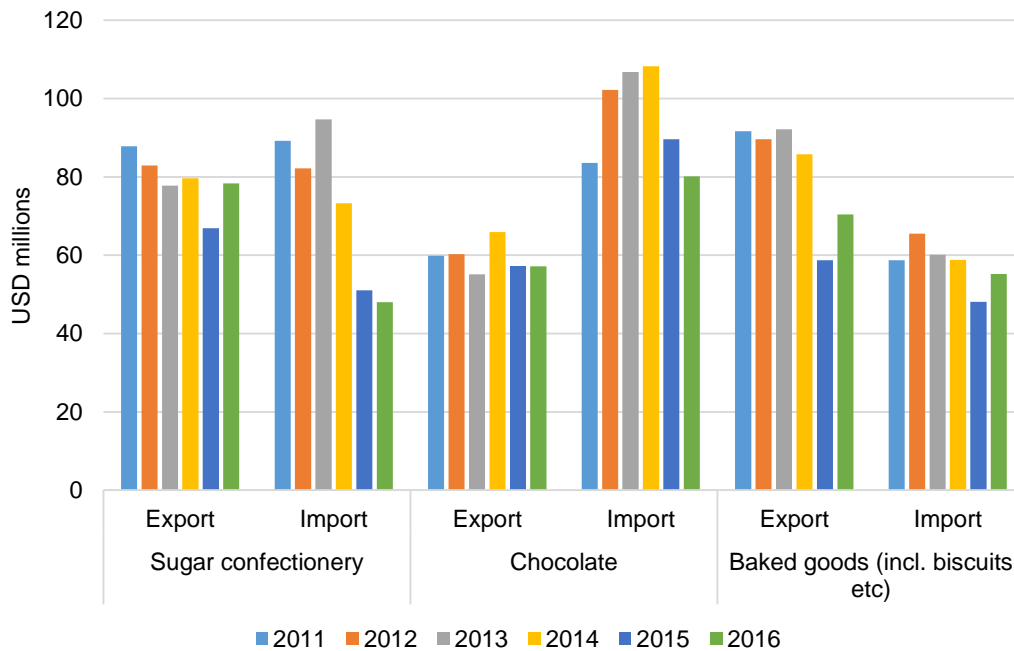
(v) Specialty Foods (Pty) Ltd.

Specialty Foods Zambia was established in 1966 as a subsidiary of a Zimbabwean firm Denton and Kennedy (Specialty Foods, 2016). It has since changed ownership and is now owned by a local Zambian, Chad Kaunda (Sutton and Langmead, 2013). Specialty Foods' factory is located in Kitwe, Copperbelt Province but has a sales depot and liaison office in Lusaka. Specialty Foods produces a range of products such as sweets, snacks, peanut products, baby foods, powders among others. Under their sweets range they produce boiled sweets and bubble gum. Specialty Foods employs 150 people.

4.4. Trade of sugar and baked confectioneries

Trade data for sugar and baked confectionery products indicate that South Africa has almost balanced trade in sugar confectionery, a trade deficit in chocolate, and a trade surplus in baked goods (Figure 8). Traded sugar confectionery products include sweet and chewing gum, while traded baked goods encompass bread and biscuits. When looking at the trade of baked goods for South Africa, the top 8 export destinations are all in southern Africa, with Namibia and Botswana making up just under 40% of all exports. Most of these exports are of sweet biscuits.

Figure 8: Sugar and baked confectionery trade, SA (USD millions)

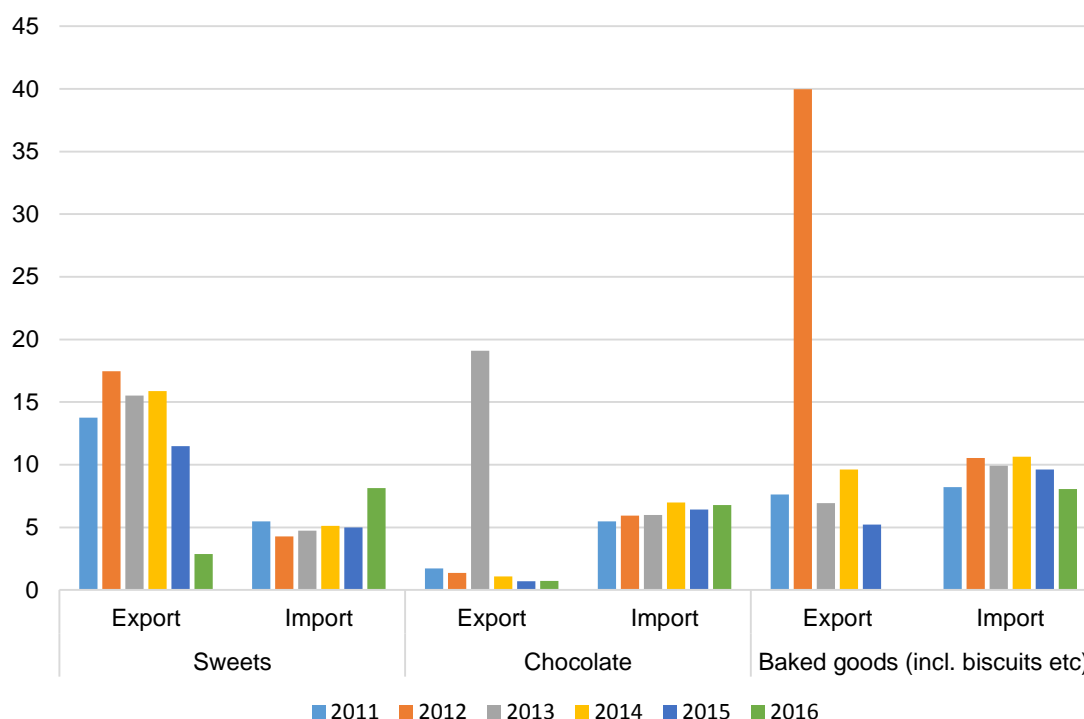


Source: Comtrade

South Africa's main import sources for sugar confectionery products are Switzerland and Swaziland as reflected in the extensive imports of chewing gum from Switzerland and extensive imports of both chewing gum and sweets from Swaziland which have been consistent between 2011 and 2015. As with the baked confectionery goods, South Africa's main destination for sugar confectionery exports is within the region, with SACU countries being the top destinations followed by other southern African countries.

On the other hand, Zambia's confectionery trade is at far lower levels than that of South Africa, although there are net exports of sugar confectionery (Figure 9). Zambia has been a net exporter of sugar confectionery products throughout the period 2011 to 2014. For baked goods, barring the outlier in 2012, Zambia is a net importer. It is unclear at this stage what the 2012 once-off spike in exports of baked goods and the 2013 once-off spike in chocolates are attributed to, or whether these are data errors.

Figure 9: Confectionery trade, Zambia (USD millions)



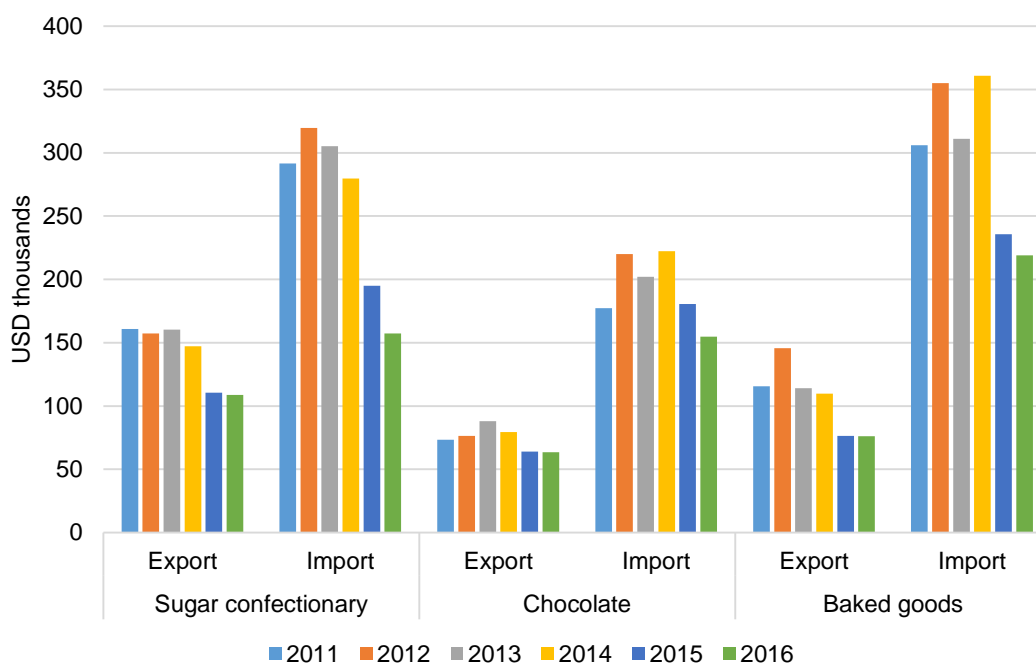
Source: Comtrade.

Note: Trade values for 2016 in USD millions for Zambia are mirror data.

In 2014, over 98% of Zambia's exports of sugar confectionery products were to Zimbabwe, DRC and Malawi, with Zimbabwe alone accounting for over 50% of these exports. This indicates strong demand for Zambian sugar confectionery products in the region.

The SADC region as a whole however is a net importer of confectionery goods (Figure 10). In 2016, the trade deficit was USD48 million (see Figure 10). Although this is a decrease from USD162 million in 2012, there is a potential opportunity for the region to replace deep sea imports, particularly those from China and Brazil (highlighted in Table 4), which have been key import markets for SADC, even relative to countries like Zambia (Table 4). On average between 2011 and 2016, top export markets for trade in sugar confectionery for the SADC region were South Africa, Namibia, the Congo, Angola and Botswana, further emphasising the existence of a large market for sugar confectionery products within the region. Exports to these countries have however decreased particularly between 2014 and 2015.

Figure 10: SADC sugar confectionery trade (USD thousands)



Source: Trademap

Note: SADC trade value for 2016 in USD thousands includes mirror data for The Congo, Namibia, Angola, Tanzania, Swaziland, Zambia, Malawi, Seychelles and Lesotho.

Table 4: SADC, top non-SADC import sources for sugar confectionery

Country	Average (USD) value (2011-2015)
South Africa	79,323,000
Swaziland	29,215,000
China	24,195,000
Brazil	18,029,000
Kenya	17,848,000
Botswana	13,322,000
Zambia	13,141,000

Source: Trademap

However, there are challenges which exist in trading of confectionery within the SADC region. High duties are an obstacle for trade in exports to Zimbabwe, Mozambique and Malawi, and despite SADC trade agreements, these countries have national protectionist measures in place. For instance, import duties on sweet products can be up to 40% in Zimbabwe. In addition, given indigenisation laws in Zimbabwe, confectionery producers exporting to the country are forced to hire local agents to sell their products, at an additional cost.³⁰

Summary

The trade patterns reveal that regional markets are very important for the sugar to confectionery value chain. While several policy discussions still point to low levels of intra-African trade, there have been some improvements in trade between these countries within the confectionery category. This further indicates that the firms exporting have the capabilities

³⁰ Interview with a confectionery producer in SA, 10 August 2016

to tap into regional markets, thus provide a stepping stone to further industrialisation and investments to replace deep-sea imports.

5. Assessment of the growth and development of sugar and confectionery producers

This section first assesses trends in the growth and performance of the key players in the sugar milling level of the value chain mainly from publicly available information sources. The aim is to better understand investments, profitability and strategies of sugar millers and to understand their growth over time.

Then we assess the growth and performance of sugar confectionery producers in both countries. This is done from the information gathered from in-depth interviews with sweet and baked confectionery producers in both countries and from public data sources. We further evaluate pricing behaviour of the large sugar millers, a complex issue given the protection that the industry receives in South Africa, and the monopoly status of Zambia Sugar in Zambia. This includes an assessment of the relationship between confectionery producers and suppliers of sugar, and the concerns raised by the downstream confectionery industry in this regard. Finally, we evaluate the challenges faced by producers in accessing routes to market, particularly supermarkets.

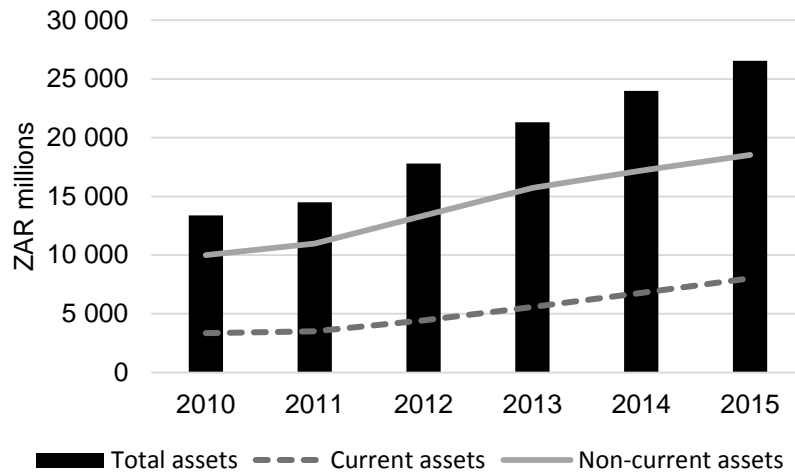
5.1 Growth and performance of the main sugar millers in South Africa and Zambia

5.1.1 Tongaat Hulett (SA)

Assets and investment trends

Given that operations in sugar milling requires investments in land, machinery and working capital, non-current assets are generally larger. Tongaat's total assets grew at a CAGR of 15% over the 2010-2015 period and nearly doubled from 2010 to 2015. Over this five-year period, non-current assets which largely comprises of land holdings in KwaZulu Natal (7,970 hectares) constituted 73% of total assets (Figure 11). Non-current assets grew on average by R14.2 billion (43%), major investments in this regard include expansion of the Xinavane sugar mill in Mozambique (2010), an investment of R120 million in downstream capacity (2015) and replacement capital investments. Current assets grew at a faster rate - on average by R5.2 billion (57%) over the 2010-2015 period. Tongaat's growth in non-current assets is an indication of the long-term growth and investment of the company.

Figure 11: Tongaat total assets, 2010-2015

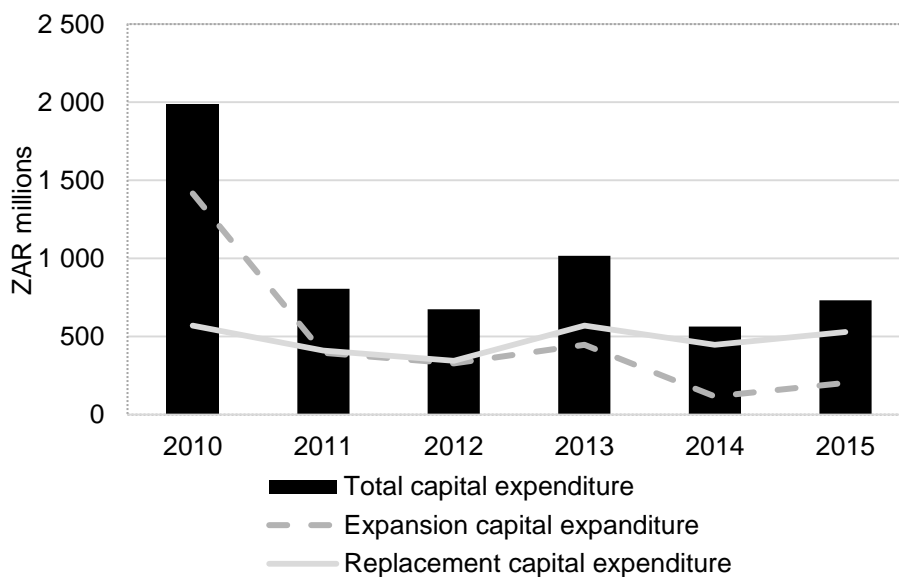


Source: Annual reports and INET BFA

Figure 12 below breaks down capital expenditure into expansion and replacement expenditure. Over the 5-year period under review Tongaat's capital expenditure has been decreasing on average by 18%. This was largely as a result of huge acquisitions that were made (R1.63 billion) in 2010 (Xinavane and Mafambise sugar processing plants in Mozambique) which are higher than the usual annual capital expenditure of around 600 million per year. If 2010 (an outlier year in terms of capital expenditure) is omitted from the analysis a higher CAGR of -2% can be observed.

On average, Tongaat's investments in capital expenditure amounted to R963 million, per year, over the period under consideration. Of this total expenditure, half was expansion capital, and the remainder directed towards replacement capital.

Figure 12: Tongaat capital expenditure, 2010-2015



Source: Annual reports and INET BFA

Profitability trends

Tongaat's real turnover has been increasing at a CAGR of 2% between 2010 and 2015. However, Tongaat's gross profit margins have deteriorated over the five-year period from 38% to 17% in 2015 (Table 5). Net profit margins have also decreased over the period. A decline in profits between 2010 and 2011 were attributed by the company to extreme drought conditions in the South Africa operations, which led to a reduction in sugar crop and higher cost per tonne of sugar produced.³¹ Difficult market prices (low sugar prices) and weather conditions also contributed to lower profit margins in the 2015 financial year according to the company.³² However, these profitability indicators need to be looked at in the context of recent investments.

Table 5: Key profitability indicators, 2010-2015

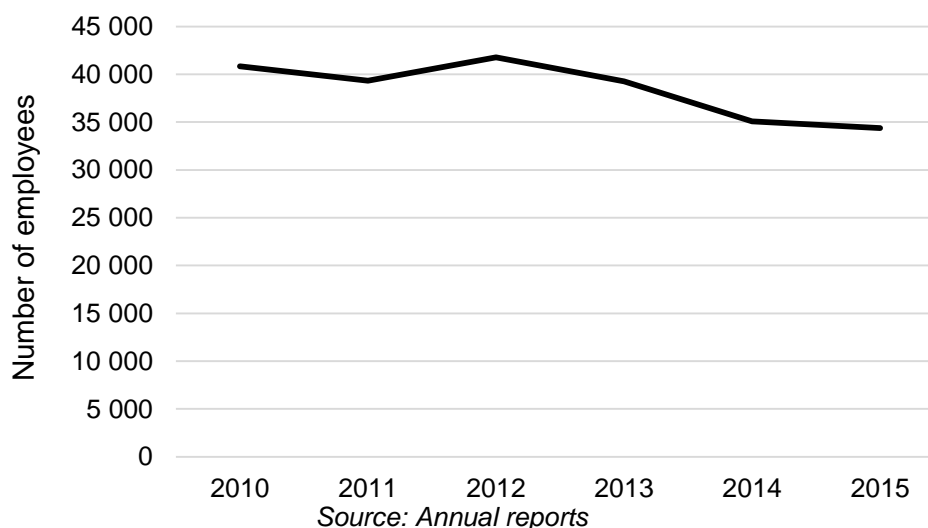
	2010	2011	2012	2013	2014	2015
Real turnover (ZAR '000)	12,526,434	10,233,615	12,081,000	13,649,573	14,171,326	13,843,188
Gross profit margin (%)	38	21	19	19	20	17
Net profit margin (%)	26.0	8.6	7.4	7.4	7.4	6.1
Return on Assets (%)	22.5	11.3	10.8	10.1	10.7	8.0
Return on Equity (%)	50.7	17.4	13.3	12.8	10.9	8.3

Source: Annual reports, INET BFA and Osiris databases

Employment trends

Employment figures have been on a downward trend since 2012, attributed to managed recruitment (Figure 13). The total workforce as at March 2015 was 34,363, a decrease of 702 workers from 2014, which was a reduction of 4,181 from the previous year.

Figure 13: Tongaat number of employees, 2010-2015



³¹ Tongaat annual report, 2011

³² Tongaat annual report, 2015

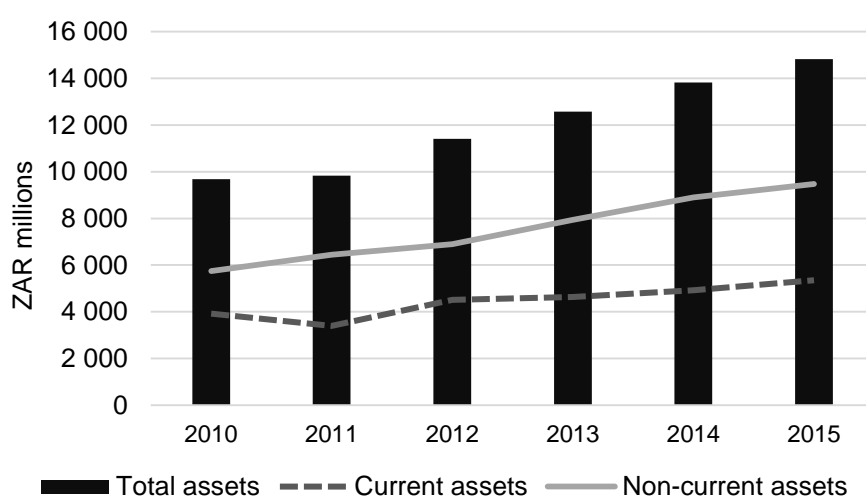
5.1.2 Illovo South Africa and Zambia Sugar (SA and Zambia)

Results for the past performance of Zambia Sugar are from Zambia Sugar and Illovo Sugar annual reports, and are discussed together below.

Investment trends

Illovo Group's total assets increased by 53% between 2010 and 2015, from R9.6 billion to 14.8 billion (Figure 14). This is in contrast to the 98% growth in total assets for Tongaat between 2010 and 2015, which asset base is nearly double that of Illovo's. Similar to Tongaat, the growth in total assets have driven by non-current assets (on average making up 63% of total assets) over the period. Current assets for all Illovo operations on the other hand have remained relatively constant over the period under review.

Figure 14: Illovo total assets, 2010-2015



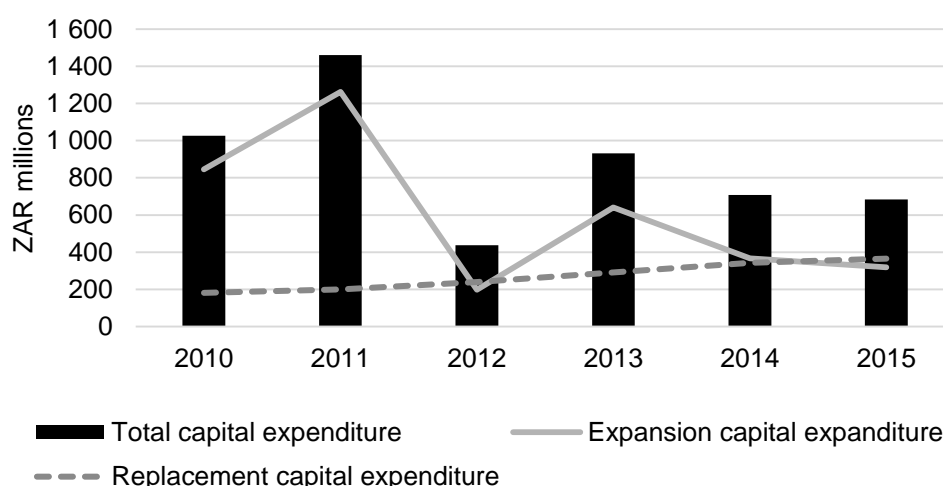
Source: Annual reports

Illovo's total capital expenditure in plant, property and equipment increased from R1 billion in 2010 to R1.4 billion in 2011, before decreasing to R437 million in 2012 (Figure 15). The capital expenditure recorded in 2011 was as a result of a substantial investment in expansion capital. Part of this was an expansion capital project of the Nakambala refinery in Zambia (discussed below) which significantly increased its sugar production capacity.³³ In addition to the investments in Nakambala, expansion capital projects were made in a packed sugar warehouse in Malawi, as well as an energy refining project at the Sezela mill in South Africa. Illovo allegedly also made a R300 million investment in a large warehouse in Pietermaritzburg, with 250,000 tonnes storage capacity which caters for a 3-month mill shut down in case of maintenance work. The miller is also self-sufficient in terms of electricity and water, and has four lanes for interlink trucks and a storage.³⁴

³³ Illovo annual report, 2011

³⁴ Interview with a sugar re-seller, 10 October 2016

Figure 15: Illovo's group capital expenditure, 2010-2015



Source: Annual reports and INET BFA

Profitability trends

Illovo's real turnover has grown over the period by 19%. On average real turnover increased by 3.6% per year. Turnover in 2015 was only marginally higher than that of the previous year. Like Tongaat, the growth in turnover has been accompanied by decreasing profit margins (Table 6). This again is allegedly a direct result of South Africa's drought conditions and challenging export markets, due to lower global sugar prices.³⁵ Return on assets have also been decreasing since 2013.

Table 6: Illovo key profitability indicators, 2010-2015

	2010	2011	2012	2013	2014	2015
Real turnover (ZAR '000)	9,525,197	8,570,719	9,173,200	10,568,756	11,893,688	11,368,038
Gross profit margin (%)	25	29	25	15	11	15
Net profit margin (%)	7.8	6.7	4.8	7.9	6.9	6.2
Return on Assets (%)	16.5	10.9	10.7	15.4	14.0	11.4
Return on Equity (%)	12.0	10.5	7.9	14.7	14.5	12.8

Source: Annual reports, INET BFA and Osiris

In terms of sugar production, South Africa produced a total of 586,000 tonnes in 2015 and Zambia 424, 000³⁶ of the group's 1,760 million tonnes in the same year. There was an increase of 4% sugar cane production from operations outside of South Africa, largely due to record production in Zambia. In the same financial year, there was a 4% decrease in the group's sugar production in South Africa due to the impact of drought conditions in South Africa. Operating margins for Illovo Group declined by 1.8% in 2015.

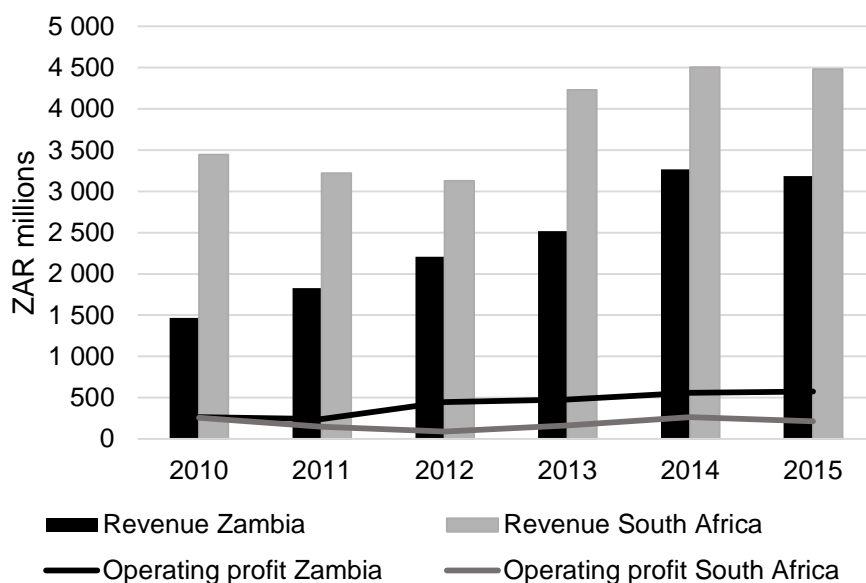
As evident in Figure 16, Zambia Sugar's revenue has grown steadily overtime, at a CAGR of 17%, whilst South Africa's revenue decreased slightly between 2010 and 2012, before increasing again in 2013. South Africa's revenue grew at a CAGR of 5% over the five-year period. In 2015, Zambia operations contributed 24% to Illovo Group's total revenue and South Africa accounted for 34%. Zambia however contributed 35% to the groups operating profit in 2015, while South Africa contributed 13%, highlighting the strong performance of Zambia

³⁵ Illovo annual report, 2015

³⁶ An increase from 393,000 tonnes in 2014

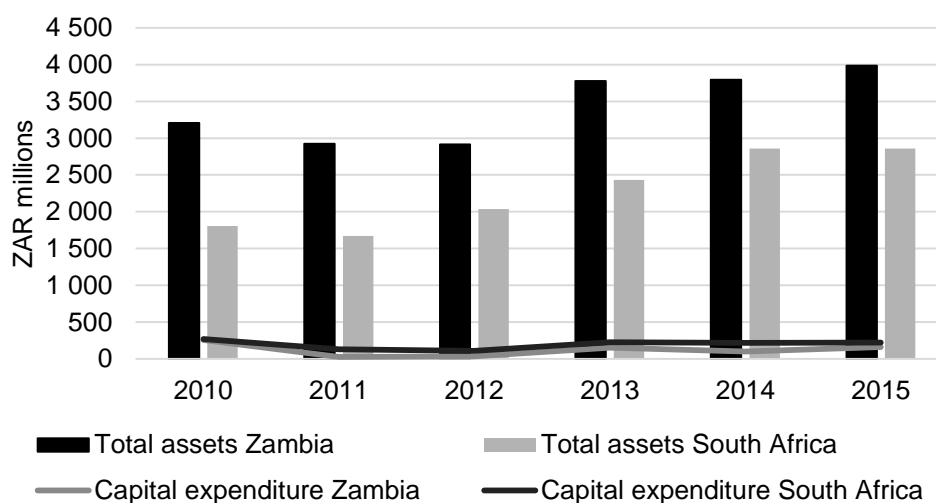
Sugar and importance of its operations for the group in terms of profitability. This is relevant for the allegations of excessive pricing of sugar by Zambia Sugar as discussed in Section 5.3.

Figure 16: Illovo South Africa and Zambia revenue and profits, 2010 - 2015



Source: Annual reports

Figure 17: Illovo South Africa and Zambia assets and capital expenditure, 2010 – 2015



Source: Annual reports

Over the period under review, Illovo’s total assets in Zambia exceeded those in South Africa by an average of R1.1 billion (Figure 17). Capital expenditure has decreased by a CAGR of 4% and 9% in South Africa and Zambia respectively. Zambia Sugar’s USD 90 million investment projects in the Nakambala sugar operation was completed in 2016. The construction of this modern refinery has the potential to increase sugar production capacity to 90,000 tonnes and increase annual sugar production capacity from 420,000 to 450,000

tonnes.³⁷ The key driver behind this investment was a strong historical and forecast of the domestic (refined) sugar sales growth.³⁸

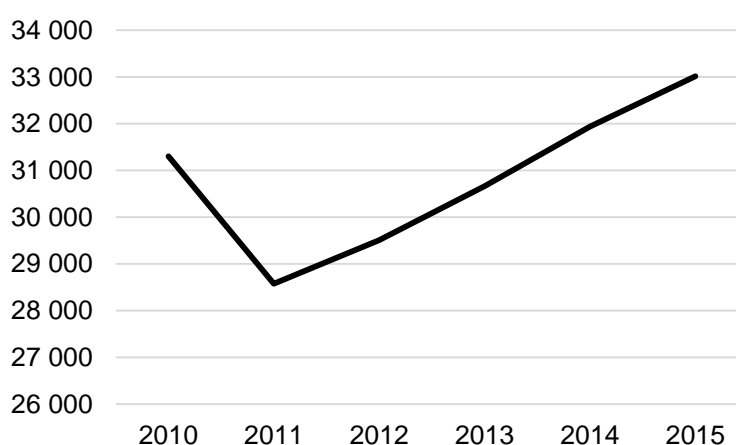
Zambia Sugar has also embarked on the construction of a network of dams, pipelines, pump stations, roads and power infrastructure to service the new areas of sugarcane development (Zambia Sugar, 2015; Annual report). Zambia Sugar now has a controlling stake in a cane-growing company known as Nanga Farms Plc (which is located adjacent to Zambia Sugar’s Nakambala Estate) which at the time was producing 350,000 tonnes of sugarcane. In 2015, Zambia Sugar launched the Product Alignment and Refinery Project which involves construction of “a modern, high-specification refinery to double refined sugar production to 100,000 tonnes and to establish 3 distinct raw sugar products” (Zambia Sugar, 2015; Annual report). This was commissioned in 2016.

In South Africa, Illovo also made a significant investment of R300 million into a self-sufficient central warehouse and distribution facility in 2015. The new warehouse will allow Illovo to extract additional supply-chain benefits and increase volumes and quality of specialty sugar.³⁹

Employment trends

The Illovo Group employed 33,014 workers in 2015, with seasonal workers constituting 60% of the total workforce. The most significant change in the number of employees was in 2010, which saw a decrease of 2,724 employees, although the number of permanent employees largely remained the same. Drought conditions in KwaZulu Natal during the 2010/11 season lead to a significant reduction in sugar cane supplies which led to a temporary shutdown of the Umzimkulu mill for the season, reducing the number of contract employees. Following that period, employee numbers increased steadily, between 2011 and 2015, by an average of 1,109 employees each year. The Lower Usuthu Small-holder irrigation Project (LUSIP) in Swaziland contributed to an increase in the group’s employment levels as seen in the sharp increase from 2011.⁴⁰ These trends are shown in Figure 18 below.

Figure 18: Number of employees, 2010 - 2015



Source: Osiris

³⁷ Agribusiness Zambia, 2016

³⁸ SADC Sugar Digest 2017

³⁹ Illovo annual report, 2015

⁴⁰ Illovo annual report, 2011

A note on alleged illicit financial flows

Although beyond the scope of this study, it would be remiss to not briefly raise concerns around illicit financial flow allegations when assessing the profitability of companies using publically available data from annual reports. This sub-section draws directly from Nicolaou-Manias & Yuchen Wu (2016):

“A 2011 study undertaken by ActionAid found that Zambia Sugar paid fees to sister companies in Ireland and Mauritius – tax haven countries – and that the Mauritius group had no staff. According to the report, \$2.1 million was paid in secondment fees, \$2.5 million in management fees and another \$3.4 million for unspecified charges. It further found that tax haven payments in terms of intra-group services between 2007 and 2012 amounted to \$54 million and that profits made on management fees by Illovo Sugar in Ireland amounted to 26%. More concerning is that the loans were made between the entities. The interest charged legally decreases the tax liability, which was levied at a rate of 17% and resulted in interest payments of \$29.4 million. The loan looks local, was denominated in Zambian kwacha, secured by Zambia Sugar’s assets and estate, and repaid via the Zambian Citibank in Lusaka. On paper, Citibank in London and Standard Bank in South Africa issued a \$70 million loan to Illovo Sugar Ireland, which then made an identical loan to sister company Zambia Sugar. With this loan structure in place, ABF admits that it circumvents paying the Zambian government a 10% withholding tax. In this instance, there was a clear loss of tax revenue as a result of ‘very prudent business practice.’”

These allegations, if accurate, affect the reporting of profitability figures in annual reports and therefore it is necessary to highlight such issues when conducting analyses on annual report data. The true levels of profit may be significantly understated in annual reports if there is such transfer of money through various payments to shelf companies.

5.1.3 TSB Sugar (SA)

TSB Sugar was acquired by RCL Foods on 1 January 2014, operating under the Selati Sugar brand catering more to the retail market for household sugar. Table 7 below shows TSB’s profitability trends since being acquired by RCL Foods. TSB sugar contributed 26% and 24% towards RCL Foods total revenue in 2015 and 2014 respectively. TSB’s higher earnings, represented by a 44.6% increase in EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation) in 2015 (Table 7), were due to lower sugar imports into South Africa, following the introduction of a sugar tariff in this financial year (RCL Foods annual report, 2015). 2014 margins were however negatively affected by high levels of sugar imports and industry-wide strikes.⁴¹

Table 7: TSB sugar profitability (ZAR ‘000)

	2014	2015
Turnover	2,482,100	6,134,351
EBITDA	349,300	505,100
Operating profit	79,541	284,088

Source: RCL Annual reports

Sugar production levels increased to 702,000 tonnes in 2015, from 598,382 tonnes in the previous year. Despite drought conditions, TSB Sugars’ irrigation protected it from the drought, keeping production levels unaffected. TSB has also realised some route to market benefits

⁴¹ This is based on TSB’s 6 month results in 2014.

from Vector (RCL's supply chain specialist division) merchandising TSB products nationally. The company is also undertaking some product innovations; introducing sweeteners and new confectionery and speciality sugar which is likely to increase its performance in coming years.

5.1.4 Kafue Sugar (Zambia)

Kafue Sugar entered the Zambia sugar industry in 2003 by embarking in sugar processing under the management of Consolidated Farming Limited, a 100% subsidiary of Sable Transport Limited. The company's market share has grown from 5% to around 10% in recent years as a result of investments into modern production techniques. The sugar plant currently employs approximately 1,500 people which include support staff. However, recent electricity shortages have negatively affected the crop yield as they depend on power to irrigate the crop. The company's production output can further be enhanced due to the amount of idle land on their plantation which remains unutilised. This is attributed by Kafue Sugar to lack of government support and the company's inability to attract further investments. Kafue Sugar also highlighted that the importation of Vitamin A to comply with the fortification requirements is expensive for it as it imports from Belgium.

As noted previously, Kafue Sugar has benefited from the contract in which it uses Superior Milling as the intermediary to supply the supermarket giant, Shoprite. Zambia Sugar being the dominant player in the market sells sugar at significantly higher prices in the domestic market and Kafue Sugar survived by undercutting Zambia Sugar to gain small increments in market share. The partnership with Shoprite and lower prices has enhanced the Kafue Sugar brand as it is now found in almost all recognised supermarkets in the country. However, this has also brought challenges as it is capacity constrained and sometimes runs out of production due to increasing demands. For instance, in early 2017, the company ran out of stock and was out of business for 3 months. The company is currently looking for an injection of investment to help increase its production capacity.

Management is also considering sugarcane out grower schemes to increase its production and has in fact started using out grower farmers. Aside from sugar production and milling, the company has also ventured in commercial farming of maize, soya beans, wheat and cattle farming. These activities are conducted farms within Lusaka and Sinda and cover a total of 18,400 hectares.

Kafue Sugar produces [confidential] tonnes per annum and holds about 9-10% of the Zambian market. It however has the capacity to double production.

5.1.5 Kalungwishi Sugar Estates (Kasama Sugar, Zambia)

Kasama Sugar only produces raw household sugar in brown and white form. Currently, the total production contribution to the national production averages around 1-2% which is about 2,500 to 3,000 tonnes. The sugar produced by Kasama sugar is fortified using the pre-mix which is bought from Zambia Sugar, its main competitor. Though other sugar producers like Kafue Sugar have complained about the fortification policy as acting as a NTB, Kasama Sugar is of the view that the fortification is not a barrier to entry, presumably because it does not import it like Kafue Sugar does.

Nonetheless, due to high production costs, the company finds it very difficult to maintain profitability. Given the dominant position of Zambia Sugar, it has to peg their prices 2% lower than Zambia Sugar's pricing. Transportation costs are another challenge which the company faces. The company is of the view that opening up market to imports would lower the high sugar prices in Zambia and that would attract more investments into the industry, even if it meant greater competition to it.

5.1.6 UCL (SA)

UCL produces [confidential] of raw brown sugar but has a production capacity of around [confidential] tpa if demand was more stable. Currently, two of its mills are not operational. It estimates that minimum efficient scale in the industry is 1.5million tonnes.

It would be able to re-invest in its operations (as would other small millers) if there were alternative options/revenue streams for sugar cane in South Africa or in the region, for instance, producing ethanol or electricity. Currently, the markets for these alternatives are very small or non-existent.

UCL highlights that without the two price increases imposed in 2016 by the mills (suggesting that this was a collective decision by the mills or that the small mills closely follow price increases of the large mills- see Section 5.3 on pricing), UCL as a small miller would have not survived (its wattle extract mill also assisted in keeping it afloat). It also highlighted significant concerns in accessing retail shelf space, which is discussed in Section 5.4.1.

5.1.7 Umfolozi Sugar Mills (SA)

Like the experience of other sugar mills following the drought, Umfolozi Sugar Mill (USM) has been faced with decreasing revenues. Revenue decreased by [confidential] due to the drought in the 2016/17 season. It has 270 employees and this figure has remained stable over the last five years.

The company normally has an annual cane crush capacity between [confidential] but due to drought conditions in 2016, crushing capacity was under [confidential] tonnes which severely affected the mill in terms of margins. The company has a sugar production capacity of [confidential] tpa, although this decreased to [confidential] t in 2017 following the drought.

Over the last three years, USM has continued to invest in operations and maintenance capital but not in expansion projects. This is due to the economic climate which has not been conducive for investment. The company also has co-generating capacity which it has not invested further into as a result of there being no market for their power, a similar sentiment as expressed by UCL. A lot of potential lies in the cogeneration in South Africa's sugar mills.

Conclusion on the growth and performance of sugar mills

Large sugar millers in both countries have made significant investments in refining and storage capacity suggesting that they are benefiting from the protection offered nationally and in the region despite the drought, imports and other negative economic and global conditions. Although profitability measures have reduced in certain instances, the large millers remain resilient (and one needs to bear in mind the concerns around reporting of profits highlighted above). Large millers like Zambia Sugar continue to contribute strongly to group profits and concerns arise whether this is at the expense (or exploitative) of downstream industry (discussed in Section 5.3).

Small millers however are more vulnerable to external factors without tariff protection as they are in a less favourable position to compete with imported sugar in the absence of a tariff, given their lack of scale. It appears that small millers operate at the mercy of larger millers and survive with the tariff protection lobbied by the large millers. Given the effects of fluctuating global sugar prices and sugar imports, cogeneration and ethanol production in South Africa's sugar mills appear to be areas of potential which would allow vulnerable, small millers to divert into ethanol production as an additional revenue stream.

It is also clear that the large sugar mills contribute significantly to employment. This puts them in a strong bargaining position when it comes to lobbying for industry protection.

5.2 Growth and performance of confectionery producers

South Africa

According to a Euromonitor International report on the sector, the largest player in the production of sugar confectionery products in South Africa is Tiger Brands (Table 8), with the top 4 brands⁴² across the categories belonging to them.

We emphasise upfront however that these are not shares for defined antitrust markets as they include producers of private labels, who in our understanding, also include some of the main players listed in the table. Nonetheless, the information provides useful insights on developments in the sector.

Tiger Brands has maintained over a 45% share based on sales revenue since 2012. The second largest player in terms of sales revenue is Premier Foods with an 8.2% share, an increase of almost 10 percentage points since 2013. The company recently acquired the Manhattan brand from Kraft Foods SA in May 2013 (Euromonitor International, 2016). Kraft Foods has divested of its smaller SA brands such as Manhattan, Super C and Snacker and has chosen to focus on its global brands (Euromonitor International, 2015a). The third largest player is Candy Tops, and this is largely due to the company's strength in boiled sweets, toffees, caramels and nougat (Euromonitor International, 2015a). As noted previously, Loadstone brands was formed in 2015 following the acquisition of Candy Tops in 2010 of Mister Sweets in 2012. The two confectionery businesses were finally merged to form a single operation in 2014.

It is assumed that Euromonitor captures the sales of other, smaller players like Aldor and Broadway Sweets in the 'Others' category in Table 8 below.

Table 8: Sales of sugar confectionery by company and category (% shares, based on sales revenue)

Companies	2012	2013	2014	2015	2016
Tiger Brands Ltd	47.6	48.9	49.1	49.0	48.5
Premier Foods (Pty) Ltd.	-	7.3	7.6	7.8	8.2
Candy Tops (Pty) Ltd	8.8	7.1	7.3	7.5	7.5
Mister Sweet (Pty) Ltd	4.8	4.2	4.1	4.1	4.0
Lodestone Brands (Pty) Ltd			11.4	11.6	11.5
Mondelez International Inc	10.4	3.1	3.2	3.4	3.5
Trade Kings Ltd	0.6	1.0	1.0	1.1	1.1
Private labels	3.6	3.7	4.3	5	5.1
Others	24.1	24.7	23.4	22.1	13.9

Source: Euromonitor International (2016), adapted with interview information with a sugar confectionery producer

There are a few notable characteristics and developments in the confectionery production industry in South Africa. First, as seen earlier, it is mostly made up of large local and international multinational firms – Tiger Brands, Premier Foods and Mondelez International. Second, there has been significant new entry by three international players - Mondelez International, Trade Kings and Aldor. As previously mentioned, Trade Kings is a Zambian firm which entered the South African market in 2010 as an importer of sweets from Zambia. Trade

⁴² Brands include Beacon, Jelly Tots, Maynard's and Jelly Babies

Kings subsequently set up a production plant. While its market share is marginal in comparison to the other players, it has managed to quadruple its market share from 0.3% to 1.1% since entry in 2010. This is a clear indication of its capabilities. Aldor from Columbia has also set up a plant, which we discuss further below. There has also been some consolidation with the creation of Lodestone Brands in 2014 following the merger of two key producers.

A third feature of the sugar confectionery industry in South Africa is that there has been an increase in private label sales. The market share of private label brands has increased from 3.6% to 5.1%, an increase of 42% between 2012 and 2016. This has been attributed to leading retailers increasing their product ranges (Euromonitor International, 2016), a finding consistent with past studies in the supermarket sector (see das Nair and Chisoro, 2015, 2016 and 2016). This has significance for the relationship between suppliers and retailers. We discuss this in more detail in the section dealing with the role of retailers.

The largest player in biscuit sales in South Africa is AVI's National Brands which has consistently had just over 45% market share between 2011 and 2016 according to Euromonitor data (Table 9). Their Baker's biscuit brand has the highest market share at 22% (Euromonitor International, 2016). The second largest player is the Pioneer Foods group. There was however a decline in Pioneer Food's market share in 2015, and a further decline in 2016 from 6.3% to 4.2%. This is as a result of Pioneer selling off its biscuit brand. Foodcorp follows with a market share of around 6% between 2011 and 2014.⁴³ We note that we do not discuss Foodcorp in this report as they are not a producer of typical sweet biscuits, with their main focus being the iconic 'Ouma' rusks brand.

Table 9: Sales of sweet biscuits by company (% shares)

Companies	2012	2013	2014	2015	2016
National Brands Ltd	49.4	47.7	47.3	46.6	46.9
Pioneer Foods (Pty) Ltd	13.0	13.1	13.6	6.3	4.2
Foodcorp (Pty) Ltd	6.0	6.4	6.8	-	-
Pick 'n' Pay Retailers (Pty) Ltd	2.0	2.6	2.8	3.0	3.3
Woolworths Holdings Ltd (South Africa)	3.6	3.8	4.3	4.5	4.6
Spar Group Ltd	1.9	2.1	2.4	2.6	2.9
Shoprite Checkers (Pty) Ltd	1.4	1.6	1.9	2.3	2
Others	22.7	22.7	20.9	34.7	36.1

Source: Euromonitor International (2016)

Again, the Euromonitor data is not reflective of market shares for antitrust purposes, as it lists retailers who produce their own in-house private label biscuits. These are not necessarily effective rivals from an antitrust perspective to the main biscuit producers. Private labels in biscuits have experienced strong growth. In terms of private label sales in biscuits, all the main retailers are seeing their brands growing (Euromonitor International, 2016).

We conducted several in-depth interviews with players of different sizes in the market (including with small players that fall in the 'Other' category in the tables above). Key characteristics of these players is given in Table 10. Even though most of the processes are automated, the larger players have higher numbers of employees. Employees are still required not only at the mixing and packaging stages, but also for the packing and loading of the products into boxes and crates, as well as in the warehouses.⁴⁴

⁴³ 2015 and 2016 data for Foodcorp is not available in 2016 Euromonitor International reports

⁴⁴ Plant visit at a confectionary producer, 13 October 2016

Table 10: Sweets producers' key information, South Africa

	Producer A	Producer B	Producer C	Producer D	Producer E	Producer F	Producer G
Establishment	2010	2009/2010	1936	2003	1984 (2007)	1852	1999
Main products	Lollipops, Chews	Toffees Speckled eggs Gums and jellies Creamy toffees Panned sweets	Soft candy Hard candy	Lollipops Hard candy	Lollipops Hard candy	Mallows Gums Jellies Chews	Nougat Turkish delight Belgian chocolate
Employees	~120	~500	22	350 – 400	450	310	~110
Production Volumes	650 tonnes per month (lollipops)	1200 tonnes per month	~8 tonnes per month	-	~1300 tonnes per month	~4000 tonnes per month	-
Exports (%)	13%	~20-30%	~5%	10%	20%	6.5%	15%
Export markets	Botswana and Namibia	Botswana and Namibia	Mauritius and Namibia	Mozambique, Zambia, Namibia, Botswana, Lesotho, Swaziland	Zimbabwe, Botswana, Zambia, Swaziland	SADC	Saudi Arabia Australia United Kingdom

Source: Interviews

[Note: Some large confectionary producers declined our requests for interviews. The above information for public companies is not available from annual reports, given aggregation across business units when reporting]

According to a relatively large confectionary producer, there is considerable competition in the cheaper, hard candy market which are main products for most of the producers above. Cheap imports from South America, Spain and Zambia come in at prices that local suppliers cannot compete with. Gums and jellies from India and Turkey are also imported into South Africa at increasing rates.⁴⁵ The fact that this company sees imports from Zambia as effective competition is again a clear indicator that there are capabilities in sugar confectionery production in Zambia.

Prior to establishing production plants, three producers interviewed were importers of sweets and at times general snack products into South Africa. The reasons for switching to local production are varied and are described below.

For one producer, which previously exported sweets products from Zambia to South Africa, the decision to switch to production of sweets in South Africa was due to the lack of profitability of importing sweets from Zambia, which was exacerbated by the high cost of sugar in Zambia. High transport costs between South Africa and Zambia further impeded importation efforts.⁴⁶ For another producer in South Africa, the continued success of importation of lollipops from South America to South Africa between 2003 and 2010 prompted them to set up their own production plant which began production in 2011.⁴⁷ Sales have increased since the company entered the South African market, although margins have decreased as a result of increases in the cost of sugar, glucose and labour.⁴⁸ Another producer entered the sweets market through the acquisition of existing brands and product portfolios but with its own manufacturing capability.⁴⁹ One confectionary producer had long been an importer of various snack products

⁴⁵ Interview with a confectionary producer, 10 August 2016

⁴⁶ Interviews with a confectionary producer, 5 & 20 July 2016

⁴⁷ Interview with a confectionary producer, 6 October 2016

⁴⁸ Interview with a confectionary producer, 6 October 2016

⁴⁹ Written submission from a confectionary producer, 8 February 2017

since [confidential]. In 1995, they began importing sweets products from [confidential]. However, they lost this agency around [confidential]. The company started manufacturing their lollipop brand, in South Africa in 2007 with the plant being set up in 2006. Revenue has grown rapidly for the company, between 15 and 20% per year (except in 2016). The producer attributes its growth to heavy marketing through television shows and advertisements.

While the producers cited various reasons for their moving to local production, it is important to note that one overarching reason is that they want to use their South African production plants as a feeder for exports to the rest of the southern African region. The two producers also cited the potential to export from South Africa as a key reason for setting up production plants here. Trade Kings started production in South Africa because their headquarters are in Zambia which is a landlocked country and makes it more difficult to reach export markets and certain other African markets and exporting from Zambia directly was not as profitable.⁵⁰ High transportation costs from Zambia are a major constraint. The other producer supplies African markets from two different sources; the [confidential] operations supply North and West Africa while the South African operations supply southern and Central Africa.⁵¹ Exports are relatively important for the various producers spoken to, ranging between 5 and 30% of their sales, with the larger producers having higher proportions of exports in their sales. One producer exports R100 million worth of sales annually to Namibia, Angola and Botswana. The main export destinations are neighbouring countries or countries within the SADC region, highlighting the importance of the region for South African exports, and the importance of mutual benefit in this regard. For higher end, niche products however, exports are to deep-sea destinations. Another confectionary producer for instance mainly exports to Saudi Arabia, Australia and the UK and also recently opened an agency office in the USA.⁵²

The positive story is that medium-sized sweet confectionery producers are investing in South Africa. South Africa is seen as a gateway to the region and this has subsequently encouraged investment in the country. For instance, one producer has in recent months, invested in new products with different flavours. Another sweets manufacturer, Broadway Sweets, has also turned to locally producing a product it previously imported (of which it pays royalties to the owners of the Heartbeat brand, General Candy in Thailand). The company is also introducing other products called “Zip Pops” which has an innovative wrapper that is easier to open. The size of the lollipop is however smaller than its Stumbo Pops and this a direct result of the high sugar price according to this confectionary producer. The company is further launching a new concept (Stumbo Uniq) which combines two lollipop flavours. At the time of investing in its production plant, the company spent R10 million on one line and R200 000 on a boiler.

Larger confectionery producers have also invested in improving quality standards. One large producer invested is FSSC 22000 accredited, an accreditation which assists in supplying supermarkets (although not being a legal requirement). The confectionery producer has further invested R45 million in new machinery, and on replacement capital, as well as numerous upgrades to utilities. An additional R1 million was spent on various training initiatives [confidential]. They implemented [confidential] technologies to improve production processes and further efforts have been made in undertaking new functions in marketing and business intelligence. Niche players like [confidential] have run a number of proprietary innovations to increase productivity. They invested in new machinery which increases output

⁵⁰ Interviews with confectionary producers, 5 & 20 July 2016

⁵¹ Interview with a confectionary producer, 6 October 2016

⁵² Interview with a confectionary producer, 12 July 2016

and efficiency and added new line items and extensions and are constantly upgrading their packaging.⁵³

Another producer also indicated that it has an FSSC 22000 accreditation which allows it to export anywhere in the world. Only few producers in South Africa have this accreditation because it is onerous and expensive to get - including requiring high human capital cost to maintain. In addition, suppliers must be approved and accredited (with a laboratory certificate of analysis), regardless of the source of inputs before the sugar/sugar product is delivered to a supermarket.

Confectionery producers face a range of other barriers to expansion. These include high transport and distribution costs. Related to this was the difficulty in running double shifts given the lack of public transport in South Africa. The costs of advertising to build brand awareness (e.g. one producer spends R1mill/month on TV adverts, and below the line advertising costs a further R0.5mill a month); and high labour costs/inflexible labour in South Africa are also significant.

Other general concerns raised included imported sweets from Colombia, Brazil and Thailand not having to comply with local packaging regulations; crime in areas of production such as Crown Mines/Booyens area in Johannesburg; and a serious shortage of technical skills (especially maintenance fitters, instrumentation electricians and production managers. It takes 4-5 years to train artisans). Further problems experienced with exports into the region included smuggling and under-invoicing.

Producers also highlighted that dti funding was hard to access. A sugar re-seller, for instance, hired a consultant and incurred a lot of fees to apply for the dti's MCEP programme which was then put on hold indefinitely. One company invested in a new plant with the understanding that the dti would assist with funding only for funding to be pulled partway through the project.⁵⁴ One confectionery producer was however successful in getting a loan from the IDC in September 2013.⁵⁵

Zambia

The sweets and confectionery industry in Zambia has for a long time been dominated by imports from the sub-region and the deep sea. With the slowing of the manufacturing industry in the 80s and 90s, most firms which were producing sweets and confectionery products either relocated into other countries in the region or closed down due to high production costs which ensued after the collapse of the Zambian economy in the 80s. As a result, the gap created by these manufacturing firms which was left was filled up by imports which were mainly through regional supermarkets which had started expanding into Zambia. In addition, a good number of sweets and confectionery products found themselves on the market through direct imports by small Zambian firms that wanted to take advantage of the void. However, the last two decades have again seen the rise of local firms expanding in this sector predominantly led by Trade Kings, Chicco Biscuits, Musa Biscuits, Monginis Bakery and a few other small firms. As noted above, these firms are exhibiting strong capabilities and exporting to the region and several are 'retail ready' in terms of meeting supermarket standards.

Key information from interviews conducted in Zambia are noted in Table 11 below.

⁵³ Interview with a confectionary producer, 12 July 2016

⁵⁴ Interview with a confectionary producer, 12 July 2016

⁵⁵ Interview with a confectionary producer, 13 October 2016

Table 11: Summary of sweets and confectionery producers, Zambia

	Trade Kings	Chicco Quality Foods	Musa Biscuits	Monginis Bakers	Speciality Foods
Establishment	1995	2003	2000	2008	1966
Main products	Sweets, lollipops Gums Candies Biscuits	Biscuits Cakes Sweets Lollipops Gums	Sweets Lollipops Other sweet products	Biscuits Chocolates Chocolate spread	Boiled sweets Bubble gum
Employees	6000*	200	150	100	150
Major supermarkets supplied	Shoprite, Pick n Pay, Choppies, Food Lovers and Game Stores	Shoprite, Spar and Game Stores	Spar, Choppies, Melissa	Choppies	Shoprite Pick n Pay Soar

Source: Interviews

**This number includes other employees from other divisions such as soaps and detergents*

Trade Kings Zambia dominates the production of sweets and confectionery in Zambia with a wide product range of sweets, lollipops, gums and biscuits. Trade Kings diversified into the production of a variety of sweet products in 1998 with an initial production of 30 tons per month and has since grown to producing over 400 tons per month. The company has expanded its sweets and candies production in the region with new production plants in Zambia and South Africa, and more recently looking into Zimbabwe. During the same time, Trade Kings has grown its market share considerably in the region and penetrated new markets in sub-Saharan Africa such as Angola, Mozambique, the Congo DRC and the Great Lakes region.

In 2005 and 2006, Trade Kings started producing gums and lollipops respectively. By 2013 the production had grown by 1,200% due to increased demand from new markets which was mainly attributed to its growth strategy centred on new markets. As noted, the company is also looking into opening a new sweets production plant in Harare as a result of high sugar prices in Zambia so that it can access cheaper sugar in Zimbabwe where it is able to import sugar from Brazil at a third of the cost of sugar in Zambia. We return to the implications of this at the end of this section.

In addition to the production of sweets and lollipops, Trade Kings also runs Swiss Bake Limited, a company which specialises in the manufacture and production of a wide range of biscuits under brand names. Swiss Bake was established in 2011 and has since grown by adding a variety of product range and can now export its biscuits into more regional markets such as South Africa, Malawi, Congo DRC and Zimbabwe. The company has plans to grow through backward vertical integration which include setting up a wheat mill which will be producing biscuit flour so as to cut input costs.

Trade Kings' strategy is to be a cost-effective manufacturer in the region. The company also seeks to expand its distribution and market penetration in the region. Trade Kings is looking to expand through backward vertical integration which includes setting up a wheat mill as it looks to produce biscuit flour. It is also looking to expand its market share in the region (central, east and southern Africa) and to enter North and West African markets. Currently the company has established the export base for the Great Lakes region in Bujumbura where all its products are shipped from its production plants in Zambia, Zimbabwe and South Africa. In addition to these markets, Trade Kings' products have access to Australia, New Zealand, Dubai and Switzerland. Trade King's growth has been driven by the company's competitiveness which

has allowed it to access exports market and its ability to penetrate supermarket chain stores which stock the majority of its products.

Despite the limited data at industry level in Zambia in the sweets and confectionery industry, Trade King's competitiveness can be assessed through its performance and quality. Furthermore, the growing workforce of over 6,000 employees also speaks to how the company has evolved over the years and the company has positioned itself to grow further increase employment. However, the company continues to face challenges caused by the constant electricity supply power cuts which have affected almost everyone in the sugar to confectionery value chain and which contributes to the high costs of confectionery production in Zambia. It is for this reason that Trade Kings is investing in a power plant so that it can generate its own electricity.

The company further has an in-house packaging plant where all the design, labelling and branding is done and has heavily invested in regional and global quality standards such as HACCP (Food Safety) and ISO (quality). These standards have enabled the company to compete not only at a regional level but on a global scale too.

Chicco Quality Foods (the main brand of Zayaan Investments) is the second largest player in terms of revenue and employee numbers. With a workforce of just over 200 employees, the company roughly has a similar workforce strength as Musa Biscuits and Monginis. The company has two production plants located in Lusaka and from these plants it can meet the volumes demanded by supermarket chains such as Shoprite. The company's main route to market is through supermarket chain stores, but also supplier through wholesalers and traditional retailers. Chicco Foods gets all its sugar from Zambia Sugar and has cited concerns around lack of competition in the market from other small sugar producers in the country. It is also of the view that the quality of sugar from Zambia Sugar is better than that from Kafue Sugar or Kasama Sugar, forcing it to source primarily from Zambia Sugar. Sugar alone accounts for [confidential] of the total production costs and this makes the cost of production high resulting in expensive sweets and confectionery products in Zambia compared to prices in the region. Currently, the company exports its products to Malawi and the DRC. While the company has small exports to South Africa, most of these exports are at or close to costs due to high sugar prices compared to those in South Africa. The manufacturer has also invested heavily in modern machinery to compete and expand its market base.⁵⁶

Musa Biscuits, the third significant player, supplies most of its products to SPAR, Melissa, Choppies and a few emerging mid-tier supermarkets such as Sana and Cheers in addition to wholesalers and other traditional retailers. Like the companies discussed above, its key export markets are in the region and include Malawi, DRC and Botswana. For Musa biscuits, the cost of doing business in Zambia is generally high and this is a major challenge for the company.

The fourth player, Monginis Bakers, manufactures a small range of sweet, chocolate and biscuit products and only supplies one of the major supermarket chains in addition to wholesale and traditional retailers. Although it is 'retail ready', it has experienced difficulties in accessing supermarket shelves which we discuss under routes to market in Section 5.4.2. Monginis exports a small proportion of its products to the DRC, and like many firms, has electricity power challenges in addition to accessing supermarket chains for their products. Monginis has also launched new chocolate products and is looking into introducing other new products (wafers). The company lists the high fees for ZABS standards as an added cost which contributes to high cost of doing business in Zambia.⁵⁷

⁵⁶ Interview with a confectionary producer, 3 November 2016

⁵⁷ Interview with a confectionary producer, 3 November 2016

Another confectionary producer, Speciality Foods, on the other hand, produces products that are tested on site at every stage of production, at the University of Zambia (UNZA) and ZABS. It has a production capacity of about 500,000 cases of various products, having produced 300,000 cases in 2011 (Sutton and Langmead, 2013). It has limited exports to the DRC and manufactures to order for retailers such as Shoprite, Pick n Pay and SPAR and also supplies over 100 wholesalers across Zambia (Sutton and Langmead, 2013). It produces only to order to minimize inventory costs (Sutton and Langmead, 2013). Electricity shortages generally result in the company cutting its product range by a third. Furthermore, since the company is family owned, access to finance continues to be a challenge and it is now looking into partnering with investors as a way of attracting outside funding.

Other major challenges faced by these sweets and confectionery producers include the high transportation costs especially for those supplying the major supermarket chains as they have to arrange their own transport and deliver to all the branch network. Supermarkets like Shoprite have tried to mitigate this and as of 2017, Shoprite has partnered with transport firms and is able to amalgamate stock from different suppliers into their depots spread across the country where deliveries are coordinated. This works out cheaper for suppliers who can instead supply to the depot closest to them as opposed to a central distribution centre or directly to stores.

The influx of cheaper imports from India, China, South Africa and some European countries also generates growing competition for local producers. Particularly when imported by supermarket chains under their private label brands, this poses a threat to local upcoming firms as who find it difficult to compete against these imports.

Conclusion on the growth and performance of sugar confectionery producers

The above analyses show significant growth and development, particularly in the sweets segment of the market, in both countries. The biscuit segment does not reveal as much activity as the sweets segment. Despite positive signs of growths and significant levels of investments being made, several concerns were raised by small and medium confectionery producers in both countries. This includes the price of input sugar and the lack of alternative suppliers of sugar (in the case of Zambia). This is an important issue to tackle. The advantage that these countries have in sugar should afford the opportunity for downstream industry to be competitive. Trade Kings' relocation to Zimbabwe (and to an extent, South Africa), in search of cheaper sugar results in less manufacturing activity in Zambia and contributes to its deindustrialisation.

Other general concerns include lack of access to finance through commercial banks and government programmes (where in Zambia, interest rates can be up to 30 to 40%, and there are limited alternative sources of finance). Other concerns include high transport costs in Zambia, erratic and high electricity costs in both countries and difficulties dealing with supermarkets (discussed in 5.4).

5.3 Concerns around pricing of sugar and relationship with sugar suppliers

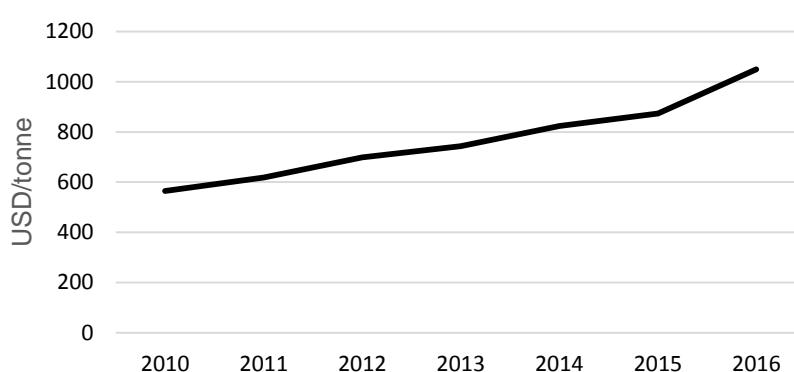
The pricing of white and brown sugar is a contentious issue in both South Africa and Zambia. In Zambia, the concerns around pricing stem from allegations of excessive pricing by the quasi-monopoly supplier of sugar – Zambia Sugar. This is discussed below. In South Africa, the concerns around pricing stem from the complex regulatory framework governed broadly by the Sugar Act in conjunction with the trade agreements discussed in Section 4.2.1.

The sugar millers and confectionery producers in both countries were not willing to provide pricing data for the sale of sugar to industrial customers. While retail price data is available for

1kg sugar in Zambia and South Africa from respective national statistics offices, this data cannot be accurately used to reflect the trends in wholesale prices to industrial users given variations in grades, discounts, rebates and mark-ups at the different levels of the value chain.

However, we are able to calculate pricing points from revenue and volume data from annual reports of Zambia Sugar to provide a rough indication of the pricing trajectory in Zambia. We note that this is merely a rough indication given the lack of information in actual prices mentioned above. It was not possible to do the same exercise for the South African sugar mills as the annual reports for Illovo and Tongaat do not separate out local and export sales volumes consistently over the 2010-2014 period. As can be seen, prices have been rising steadily since 2010 in Zambia (Figure 19). We return to pricing concerns in Zambia in (ii) below.

Figure 19: Sugar pricing in Zambia, USD per tonne



Source: Zambia Sugar Annual Reports

Note: Zambia Sugar annual reports do not disaggregate local revenue per product category. This was estimated using the proportion of sugar and molasses sales to total sales, and applying this ratio to total revenue reported.

(i) Pricing in South Africa and relationship with suppliers

The different stakeholders interviewed provided their respective understanding of how pricing of sugar works in South Africa. The Sugar Act provides for setting of the sugarcane price, and not directly for the setting of the sugar price. While the Sugar Act of 1978 provides for the general structure and principles, and the general framework, it is the Sugar Industry Agreement that provides details on pricing mechanisms.

The cane price is jointly determined through the Division of Proceeds (DoP) formula. The DoP is essentially a pool of proceeds made up of the weighted average of revenues from local sales of white, brown and exported sugar. The reason for why the cane price is regulated is provided under the discussion on the Division of Proceeds (DoP) below.

The individual millers then set prices to industrial customers based on an average of industry costs including the cane price determined by the DoP (which makes up the biggest portion),⁵⁸ at their own discretion, allowing for rebates, discounts and different packaging formats for different customers (retail and big industrial customers).⁵⁹ The beverage industry tends to get

⁵⁸ Interview with a government department, 10 February 2017

⁵⁹ Interviews with sugar millers, 23 January 2017; and 24 February 2017.

the highest discounts.⁶⁰ The local price is typically around 5-8% above prices of imports.⁶¹ A small sugar miller also explains that the sugar price is not regulated, and that the cane price is regulated. The sugar price is however cost-based and related to the cane price.⁶²

The final sugar price to industrial users is therefore not legislated and, in theory, is open to competition. However, given a regulated cane price and a well understood framework, the regulatory mechanism appears to inadvertently enable the millers to collectively set the final selling price for sugar around a range. This is exacerbated by the provision in the Sugar Industry Agreement of 2000 which allows for a more direct mechanism for millers to coordinate around a focal point called the 'notional price' which feeds into the DoP calculations as follows.

According to the Sugar Industry Agreement, Chapter 6: Determination and Distribution of Proceeds and cane prices, the 'notional local market price'⁶³ refers to the notional price attributed to local market brown sugar, refined sugar and molasses, respectively, determined by SASA for the purpose of determining the gross proceeds from the sale of production. From time to time, SASA determines:

- separately for brown and refined sugar, respectively, the notional local market price of sugar to be sold on the local market by millers, ex-factory in bulk or packed in one ton bags or 25kg pockets; and
- for molasses, the notional market price of molasses to be sold on the local market by millers ex-factory and which will also represent the value of molasses utilised by millers.

The ACF study describes the notional price as being set given input from producers and growers. It also highlights that this is not the final price, and that mills individually decide their final selling price (Chisanga et al., 2016).

A miller refers to the notional price for sugar as determined by market forces. According to this miller, the price of sales to industrial customers is close to this notional price and is typically between R200/t above or below this price. The retail price is also around this notional price and is usually R500/t above this price (but allegedly does not go much below this price).⁶⁴ While millers are not obligated to price at this amount, it is clear that the prices fluctuate in a band around this. One sugar miller refers to this notional price as a 'transfer price' that goes into the DoP.

Although only determined 'from time to time' by SASA (it is not clear how frequently), this notional price clearly forms a benchmark or focal price around which the actual price in the market closely fluctuates and provides a floor price below which end prices to consumers will not fall.

The Division of Proceeds mechanism

As noted above, the Sugar Act allows for a system of allocation of revenue through the DoP. The workings of the DoP is stipulated in the Sugar Industry Agreement of 2000, Chapter 6: Determination and Distribution of Proceeds and cane prices. The DoP is essentially a pool of proceeds made up of the weighted average of revenues from local sales of white, brown and

⁶⁰ Interview with a government department, 10 February 2017

⁶¹ Interview with a government department, 10 February 2017

⁶² Interview with a sugar miller, 6 March 2017

⁶³ 'Local market' means the geographical area falling within the borders of the Republic of South Africa and the states of Swaziland, Namibia, Lesotho and Botswana.

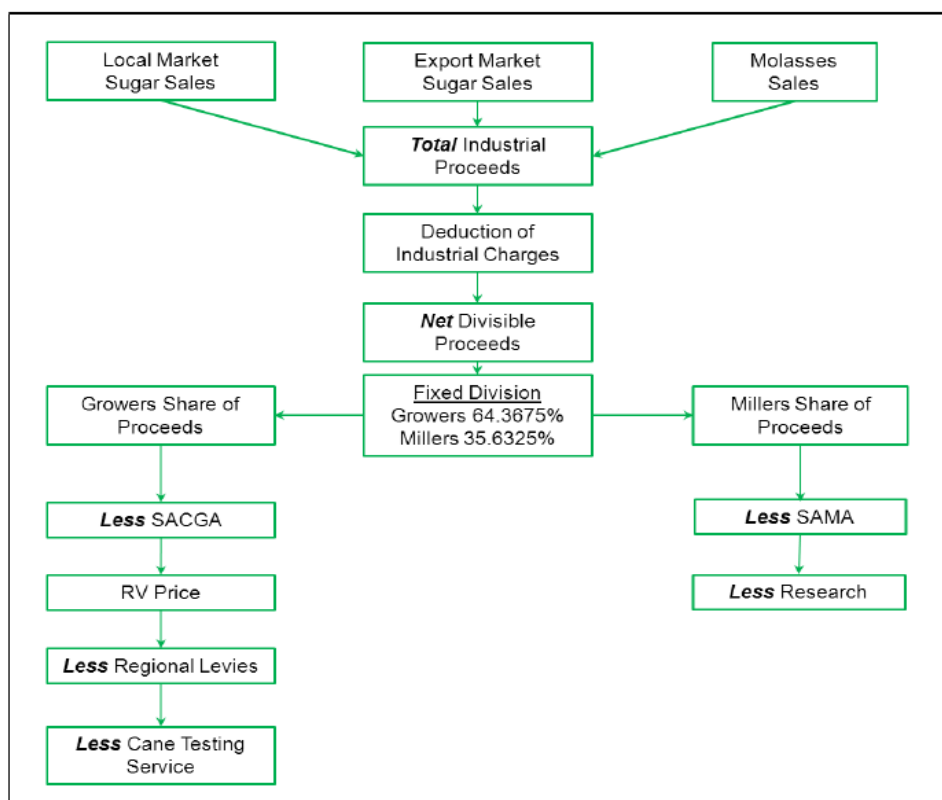
⁶⁴ Interview with a sugar miller, 24 February 2017

exported sugar. The weighted average is based on the tonnages of recoverable value (RV)⁶⁵ of growers and sales value of millers. These proceeds are pooled and shared between millers and growers in a predetermined (roughly 64:36) ratio split between growers and millers, with growers entitled to the 64%. The 64% is roughly representative of the costs of growing, milling and packaging cane.

A study on the sugar industry by Conningarth Economists sets out the 'pricing chain' formula as follows:

$$\begin{array}{r}
 \text{Farm Value} \\
 + \text{Milling Cost} \\
 + \text{Refining Cost} \\
 + \text{SASA Levy (Paid by the cane producers and millers in relation to DoP)} \\
 \hline
 = \text{Ex Refinery Bulk Cost} \\
 + \text{Warehousing/Handling} \\
 + \text{Marketing and Distribution} \\
 + \text{Packing Cost} \\
 + \text{Working Capital Costs} \\
 \hline
 = \text{Packed Cost at Point of Supply} \\
 - \text{discounts and rebates} \\
 \hline
 = \text{Millers Net Selling Price and eventually the retail price which is paid by the shopper}
 \end{array}$$

An illustration of the DoP mechanism is provided below:



Conningarth Economists, 2013

Notes: South African Cane Growers' Association (SACGA); South African Millers Association Limited (SAMA); RV (Recoverable Value Price)

⁶⁵ The determination of the Recoverable Value follows a complex process as determined by Chapter 5 of the Sugar Industry Agreement, 'Payment for cane'

The justification for the DoP method is to protect growers, who otherwise would be subject to very low global sugar prices forcing down the price of their cane. The global sugar price cannot be used because less than 30% of sugar produced globally is traded in export markets at very low prices. Majority of the sugar is sold into domestic markets at much higher prices. This 30% is deemed to not be a true reflection of a sustainable price as it is unlikely to cover all costs of production. The world market is essentially considered a 'dumped' market.

The funds for growers/farmers from the DoP allocation go through the Sugar Farmers' Association.⁶⁶

The operation of the DoP requires a considerable amount of information being exchanged through SASA. Each mill is required to provide the following information⁶⁷:

- estimated annual and actual monthly deliveries to the mill of cane and of the recoverable value of cane;
- estimated annual and actual monthly sugar and molasses production;
- total sugar production in respect of the year concerned which must be supported by a certificate of verification by the relative mill's independent auditor in a form acceptable to the South African Sugar Association.

In return, SASA prepares:

- final production schedules in respect of all cane supplied by growers to mills and the recoverable value thereof;
- final sugar and molasses production schedules in respect of each mill including sugar beet mills.

It is not clear what members receive back from SASA at this stage. Nonetheless, the combination of a price benchmark/focal point through the notional price and the exchange of information through the DoP process creates an environment conducive to coordinated pricing of sugar by the millers. The Sugar Act inadvertently facilitates such coordination.

In terms of local sugar price increases to industrial customers, ordinarily, there is an annual sugar price increase around February/March, which in 2016 was approximately between 12 and 14%.⁶⁸ This sugar price increase is imposed by SASA.⁶⁹ However, given the global shortage of sugar and the drought, there was a further price increase in June/July in 2016 which brought the total price increase for the entire year to approximately 30%.⁷⁰

Supply of sugar in South Africa and relationship with suppliers

The supply of sugar (and glucose, another key input) is either directly from millers or from traders/distributors who buy from millers and on-sell to manufacturers. In general, the proportion of sugar and glucose used in production depends on the type of sweets being produced. For hard candies sugar and glucose together account for between 80 and 90% of the ingredients. For products like Turkish Delight, the main ingredients are sugar and water.⁷¹ The main sources of sugar are the main sugar millers. However, given the relatively small

⁶⁶ Ibid

⁶⁷ Sugar Industry Agreement of 2000, Chapter 6: Determination and Distribution of Proceeds and cane prices.

⁶⁸ Interview with a sugar re-seller, 10 October 2016; Interview with a confectionary producer, 13 October 2016

⁶⁹ Interview with a re-seller, 10 October 2016

⁷⁰ Interview with a confectionary producer, 10 August 2016; Interview with a sugar re-seller, 10 October 2016; Interview with a confectionary producer, 6 October 2016

⁷¹ Interview with a confectionary producer, 3 October 2016

volumes sugar required by these producers, particularly the smaller producers such as Dicks Sweets and Aldor Africa, these producers procure their sugar requirements from sugar distributors.⁷² One producer indicated that it sources some of its sugar, although in small proportions, from sugar importers such as Royal Rice and Akila group.⁷³

Sugar distributors are able to procure much larger volumes of sugar than the average sweets producer can and thus at a much lower price and have been growing. For example, one sugar distributor, recently increased its sugar sales from between 15,000 and 25,000 tonnes to approximately 45,000 tonnes in 2015.⁷⁴ It is difficult and expensive for small sweets producers to deal directly with sugar millers because millers require minimum purchase of approximately 34 tonnes of sugar (approximately a truckload of sugar).⁷⁵ Customers of distributors include SMMEs who produce sweets, biscuits and ice cream who would typically only need approximately 2 tonnes of sugar per week. In addition to not having the capacity to acquire the minimum amount of sugar required by the millers, the smaller producers also would not have the storage space to keep the sugar. Moreover, given the cash flow requirements of a small business as well as infrastructure needed to move big loads, it makes sense to source smaller amounts from distributors for these producers.⁷⁶

There is only one supplier of glucose in South Africa – Tongaat Hulett. It is unclear at this stage why the other main millers do not produce or sell glucose. It also appears that Tongaat Hulett has been importing glucose, predominantly from China, in order to meet local demand.⁷⁷

Regarding negotiations on contractual agreements with suppliers, these are generally skewed towards the sugar mills as they have more leverage against the smaller producers. It is typically difficult to secure discounts. The payment terms are generally very strictly within 7 days⁷⁸, although some players such as [confidential] have been able to negotiate payment terms up to 15 days⁷⁹ or even a month, depending on the supplier.⁸⁰ Because of the little leverage producers have over sugar suppliers, some prefer to have agreements with more than one supplier to reduce their dependence on a single supplier, although there are only a few.⁸¹ For one sugar distributor, it has taken a year and a half to get a 1% discount from their sugar supplier. The miller has a set price according to them, leaving little room for negotiation but its prices were a lot more expensive than imported prices until the global price of sugar rose.⁸² One other producer interviewed has also faced difficulties in dealing directly with millers.⁸³

Large sweets and confectionery producers with more negotiating power and large offtake commitments however typically have fixed price annual contracts. Prior to selling off its confectionery business for example, one producer would negotiate sugar prices with sugar millers one year in advance.⁸⁴ Similarly, another producer enters into two-year contracts with its sugar suppliers and also agrees on delivery and payment terms. However, the company still emphasises that there is very little room or margins for negotiating the price of sugar as the South African sugar industry is seen as 'a regulated market.' One large sugar miller argues

⁷² Interview with a confectionary producer, 3 October 2016; Interview with a confectionary producer, 6 October 2016

⁷³ Interview with a confectionary producer, 13 October 2016

⁷⁴ Interview with a sugar re-seller, 10 October 2016

⁷⁵ Interview with a sugar re-seller, 10 October 2016

⁷⁶ Interview with a confectionary producer, 3 October 2016

⁷⁷ Interview with a confectionary producer, 12 July 2016

⁷⁸ Interview with a confectionary producer, 10 August 2016

⁷⁹ Interviews with a confectionary producer, 5 & 20 July 2016

⁸⁰ Interview with a confectionary producer, 6 October 2016

⁸¹ Interview with a confectionary producer, 6 October 2016

⁸² Interview with a sugar re-seller, 10 October 2016

⁸³ Interview with a confectionary producer, 12 July 2016

⁸⁴ Interview with a confectionary producer, 11 October 2016

that the price charged by millers to industrial customers is very close to the notional price (i.e. the transfer price that goes into the division of proceeds) and if lowered, millers would allegedly take a loss.⁸⁵

Other than price, the decision to import or source locally would typically be based on quality and food safety accreditation. Sweets producers have expressed concerns over the quality of imported sugar. Given lean margins, any cost increases caused by poor quality were problematic.

(ii) Pricing in Zambia and relationship with suppliers

Although Zambia is a low-cost producer of sugar (in LMC International rankings, see Chisanga et al., 2016), domestic sugar prices are high (CUTS, 2014) and rising (see Figure 19), and are above other African countries with higher costs as shown in the ACF study. Various reasons have been suggested including high internal marketing costs, the requirement to fortify sugar with Vitamin A creating barriers to cheaper imports and the exercise of market power by Zambia Sugar (Chisanga et al., 2014a). While country-specific factors such as high transport costs may affect prices in Zambia, the prevailing high domestic prices of sugar given the country's relatively low production cost signals potential competition concerns (Ellis et al., 2010).

Despite some market entry in the past two decades by two small millers, Zambia Sugar continues to dominate the production of sugar. The entry of Kafue and Kalungwishi sugar have not affected the dominance of Zambia Sugar given their much smaller sizes and quality and capacity constraints (even with the support to Kafue Sugar from Shoprite). This dominance is exacerbated by protection from outside competition by NTBs (Vit. A fortification and import permits through a bureaucratic and non-transparent system).

The interviews with confectionery producers highlight the extent of the concern around the pricing of sugar from Zambia Sugar. As previously noted, the high cost of sugar in Zambia led Trade Kings Zambia considering relocating some of their sweets production facilities to Zimbabwe where the cost of Brazilian imported sugar is said to be three times cheaper than the cost in Zambia. As a result, the company is able to produce its products in Zimbabwe at a lower cost and then ship the goods into Zambia for sale. The price of sugar in Zambia also contributed to the lack of profitability for Zambian products in South African motivating setting up the plant in South Africa, in addition to wanting better access to regional markets. Trade Kings is also of the view that the fortification requirement is a way to further protect the market in favour of Zambia Sugar.⁸⁶ Also as noted above, the high costs of sugar were also a concern to the other main confectionery producers in Zambia who highlighted the difficulty in negotiating with Zambia Sugar and the lack of profitability in selling to other countries in the region due to the high sugar price from Zambia Sugar. According to one producer, Zambia Sugar has high overhead costs and this is passed on to customers.

The high profitability of Zambia Sugar as shown in Section 5.1.2 further raises questions about whether its pricing is exploitative of downstream customers. Currently, sugar pricing is the subject of an investigation by the Competition and Consumer Protection Commission of Zambia (CCPC).

⁸⁵ Interview with a sugar miller, 23 January 2017

⁸⁶ They also cited Guatemala as the only other country to have adopted such a policy.

5.4 Routes to market and relationship with wholesalers and retailers

5.4.1 Routes to Market - South Africa

The distribution of sugar confectionery products in South Africa is largely through store-based retailing, with grocery retailers, mainly supermarkets followed by independent retailers being the main route to market for sugar confectionery products (Table 12 below). The distribution profile has not changed much between 2010 and 2015, with each channel maintaining similar shares during the period. It is important to note that independent small grocers, convenience stores and other grocery retailers are all, collectively, independent retailers. As such, when assessed collectively, they are a significant route to market.

Table 12: Distribution of sugar confectionery by type of retailer (% shares)

Outlets	2010	2011	2012	2013	2014	2015
Store-Based Retailing	98.60	98.60	98.70	98.60	98.60	98.50
(1) Grocery Retailers	83.70	83.70	83.30	83.20	83.10	82.60
<i>Supermarkets</i>	46.00	46.40	46.00	46.00	46.00	45.50
<i>Independent Small Grocers</i>	14.80	14.80	14.80	14.80	14.60	14.50
<i>Convenience Stores</i>	5.00	5.00	5.00	5.10	5.20	5.30
<i>Forecourt Retailers</i>	6.10	6.00	5.90	5.80	5.80	5.80
<i>Other grocery retailers</i>	11.8	11.5	11.6	11.5	11.5	11.5
(2) Non-Grocery Specialists	3.90	3.70	4.10	4.00	4.00	4.20
Mixed Retailers	11.00	11.20	11.30	11.50	11.50	11.80
Non-Store Retailing	1.40	1.40	1.40	1.40	1.40	1.50
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Euromonitor International (2015b)

In South Africa, the main sweets that are produced by small producers, are hard candy such as lollipops and hard boiled sweets. Hard candies are mainly sold to wholesalers who on-sell to the informal market either via independent retailers, spaza shops, or hawkers. This is the dominant route to market for small to medium-sized sweets producers in South Africa with only large producers accessing markets via formal supermarkets.

Estimates of prices of hard candies sold in large units range between R12 and R15 for 72 units.⁸⁷ Hard candies are generally cheaper given lower costs of production and given that they do not require more than the standard packaging to be sold in informal markets. The requirements to enter these markets generally are much lower than those required for entering the formal supermarket channel. Lollipops in particular are a very high sales volume product and is often the main production item of most of the small and medium-sized producers interviewed. The production volumes range between 650 tonnes and 1300 tonnes per month for most of the players. These markets are high volume low margin markets. The wholesale market has been a source of high growth for most of the sweets producers who sell almost 90% of their production through this route.

Some producers are constantly making efforts to penetrate the retail market. However, the requirements to get into the retail channel have generally been too onerous for small to medium sized producers. For example, these can include rebates (ranging between 12% to 20% on average off the price suppliers can get), stock and merchandising costs (4%), promotion fees (3%), returns given the perishable nature of some sweets (10%) and listing

⁸⁷ Estimates from interview with a confectionary producer, 6 October 2016

fees (which can be approximately R100,000 to R200,000⁸⁸ for a single stock keeping unit).⁸⁹ The average cost of a product launch for one producer can be between R1.4 – R1.6 million.⁹⁰ Another medium sized producer noted that listing/support/shelf space fees for lollipops could range from R250,000 to R300,000 for till positions for 6 months for inland supermarkets only. Other fees include various rebates such as advertising and promotional rebates. Long payment periods to suppliers also make it difficult for small suppliers, affecting their cash flow.⁹¹

Non-standardised private standards across supermarkets further make it difficult for suppliers to invest in equipment that can supply all supermarkets. One producer estimates that the costs of accreditations can be up to R2million, with R100,000 per annum to maintain. Two producers have nonetheless invested in HACCP (food safety) certification (and a further investment into ISO quality standards by one producer) knowing that this given them greater opportunity to enter the modern retail trade and to export.⁹² It was noted though that HACCP is not a legal requirement but a voluntary standard although supermarkets sometimes insist on suppliers having this certification.⁹³ It was further highlighted that imported sweets on supermarket shelves do not need to adhere to local packaging and labelling requirements, unlike local suppliers.

Larger confectionery producers also maintained that retail chains have onerous requirements including listing fees, strict clear bar coding and clean and undamaged pallet requirements.⁹⁴

One producer notes that it has two routes to market - modern trade (through retailers like SPAR and OK Franchises) and traditional trade (through wholesalers and cash and carry's) which make up 5% and 95% of sales respectively. Similarly, another producer supplies 90-95% of their sales to wholesalers for the informal market, while 5-10% goes through supermarkets. One sweets producer has resolved to supply SPAR stores as it is easier to get into them because the franchisees have more leeway regarding the manner in which they run their businesses, including the choice of products which they put on their shelves.⁹⁵ A very small producer, on the other hand, does not supply supermarkets at all. The company previously supplied supermarkets but found the requirements too cumbersome for a small business. The 60 to 90-day payment period was not sustainable and created a cash flow crunch.⁹⁶ Another company started small, supplying bakeries and confectionery stores, but managed to penetrate the 'upper' end of the market, supplying all major chain stores with their niche products, except Woolworths, and including Dischem, Clicks and Makro. The company's route to market is split evenly between supermarkets (50%) and other retailers and wholesalers (50%). Their proportion of sales to supermarkets has increased over the years because they have worked on building their brand which retailers are now more receptive of.

Larger players also tend to sell to both informal markets (through wholesalers) and formal markets (through supermarkets), although a larger proportion is increasingly sold through

⁸⁸ Interview with a confectionary producer, 13 October 2016

⁸⁹ Interview with a confectionary producer, 10 August 2016; Interview with a confectionary producer, 13 October 2016

⁹⁰ Interview with a confectionary producer, 10 August 2016

⁹¹ For one confectionary producer, over and above their 30-day payment term, some supermarkets now say deliveries made after the 23rd of the month are considered a 'next month delivery' and as a result, supermarkets extract an extra 30 days from producers.

⁹² Interview with a confectionary producer, 5 & 20 July 2016; Interview with a confectionary producer, 6 October 2016

⁹³ Interview with a confectionary producer, 13 October 2016

⁹⁴ Interview with a confectionary producer, 8 February 2017

⁹⁵ Interview with a confectionary producer, 13 October 2016

⁹⁶ Interview with a confectionary producer, 3 October 2016

retailers and far less through the wholesale route. These players also typically have a wider range of products than smaller players. For example, a relatively large producer has a wider range of products than the other smaller companies which were interviewed (see Table 10) and it has a roughly even split between the retail (formal) market and the wholesale (mainly informal) market. One of its key brands serves LSM 3-6 and is mainly sold to wholesale and Africa export markets (more commodity-type hard candy and boiled sweets), while another of its brands serves LSM 7-10 through retail supermarkets.⁹⁷ While revenues into the wholesale sector have decreased for the company, they have grown in retail. Although the wholesale market requirements are less onerous, the company chooses not to supply this market given high competition from cheap imports, as well as scale disadvantages. Another producer supplies large wholesalers (CBW and Makro) and does not sell to smaller customers, such as spaza shops, as these spaza shops make purchases from their main clients (wholesalers) with whom they do not want to compete.⁹⁸

Another large producer supplies 75% of its produce to retailers, 9% to wholesalers and 16% through other routes.⁹⁹ Its proportion of sales to supermarkets has increased over the last three years due to a range extension and innovation into new products. It places emphasis on the importance of innovation capabilities – product innovation, brand building and technical capability improvements, in growing sales through retailers. This has remained the responsibility of the manufacturer (with no support from supermarkets), with large manufacturers more easily able to build innovation capabilities.

As with the sweets, store-based retailing is the main route to market for biscuits in South Africa (Table 13). Supermarkets, independent small grocers and convenience stores represent the main routes to market under store-based retailers. The shares have not really changed, although there has been a slight decline in the sale of biscuits through grocery retailers – from 87% in 2010 to 85.5% in 2015 – as the proportion of biscuits sold through mixed retailers and non-store retailers has increased.

Table 13: Distribution of biscuits by type of retailer

Outlets	2010	2011	2012	2013	2014	2015
Store-Based Retailing	99.80	99.80	99.70	99.50	99.30	99.00
(1) Grocery Retailers	87.10	87.10	87.00	86.50	86.10	85.50
<i>Supermarkets</i>	44.30	44.30	44.20	43.40	43.20	43.00
<i>Independent Small Grocers</i>	14.20	14.70	14.70	15.20	15.20	15.20
<i>Convenience Stores</i>	14.10	13.60	13.70	13.50	13.30	12.90
<i>Forecourt Retailers</i>	9.70	9.70	9.70	9.60	9.60	9.60
<i>Other Grocery Retailers</i>	4.8	4.8	4.7	4.8	4.8	4.8
(2) Non-Grocery Specialists	0.10	0.10	0.10	0.10	0.10	0.10
Mixed Retailers	12.50	12.50	12.60	12.90	13.10	13.40
Non-Store Retailing	0.20	0.20	0.30	0.50	0.70	1.00
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Euromonitor International (2015b)

Confined-label or house brands (where the retailer does not own the brand, unlike a private label) offer opportunities for local producers. However, while very few of the producers interviewed have engaged in this type of production, they state that this is mainly because the supermarkets are not loyal when it comes to these agreements. For example, it was reported

⁹⁷ Interview with a confectionary producer, 10 August 2016

⁹⁸ Interview with a confectionary producer, 13 October 2016

⁹⁹ Other routes include catering and independent distributors.

that supermarkets can unilaterally decide that they no longer want the product, or they can switch suppliers at short notice. As such supermarkets tend not to enter into long-term agreements where house brands are concerned.¹⁰⁰ Moreover, getting a contract for house brands in one year does not guarantee that the producer will get the contract in the following year.¹⁰¹ A confectionery producer for example, made an investment (in a continuous packer and moulds) of R2-5million to supply Shoprite with a product over Easter 2017 and argues that there is no guarantee that the retailer will continue purchasing the product beyond the Easter period.¹⁰² One confectionery producer has in the past produced house brands for Clicks and Pick n Pay, although on a small scale. Conditions around house brands include specific packaging, product design on packaging, and a specific number of products in a box. The company had complete open-book costing with retailers where they would show their cost structure and discuss each party's margin (i.e. producer and the retailer). The disadvantage to producers of house brands is that they carry the cost of the raw materials and production until the retailer pays for the product – there are no alternative sale options aside from the specific retailer.¹⁰³

Retailers like Pick n Pay import confined labels from the UK, using a Cape Town based bakery to repack the product, and do not offer local producers this opportunity. It appears that retailers like Shoprite and Clicks import a lot of their confined labels and house brand biscuits (although actual proportions are not known). One producer however concedes that they are not cost competitive with these imports. There are however still opportunities to get regional manufacturers to produce these instead.

It was not only confectionery producers in South Africa that expressed difficulty in getting products onto supermarket shelves. Even millers who want to sell sugar to retail customers struggle to sell through supermarkets. According to a large miller¹⁰⁴, only a very small proportion of their sales goes through retail, with majority going to industrial users such as confectionery and juice producers. The reasons for low supplies to supermarkets included the difficulty to negotiate with them and the need to establish a very strong brand to compete against well-known brands. A small miller indicated that they supply retailers with sugar through a marketing agent. They have been unable to supply retailers directly given the market power of retailers, and this includes the ability of retailers to extract margins at the expense of suppliers through trading terms.¹⁰⁵

From the perspective of one retailer¹⁰⁶, the brand of confectionery products is very important to drive sales. The well-known brands that are fast sellers in the confectionery industry in South Africa are (in order of popularity), Beacon (Tiger), Nestlé, Cadbury (Mondelēz) and Mister Sweets (Lodestone). Shelves are stocked based on the rate of sale of products. Merchandising is expensive and merchandisers in supermarkets are constantly trying to make sure that their products get prime shelf space and their product turnover is high.

However, the retailer is of the view that it is possible to enter this industry, especially in boiled sweets and wine gums, despite popular brands having greater sales. A franchise model is more conducive to entry as it allows for franchise owners to source from smaller, regional suppliers. The retailer notes that the margins made on a commodity product like sugar are a lot less than those made on health and beauty products (10% compared to at least 20%). It

¹⁰⁰ Interviews with a confectionary producer, 5 & 20 July 2016

¹⁰¹ Interview with a confectionary producer, 10 August 2016

¹⁰² Interview with a confectionary producer, 10 August 2016.

¹⁰³ Interview with a confectionary producer, 12 July 2016

¹⁰⁴ Interview with a miller, confidential

¹⁰⁵ Interview with a miller, confidential

¹⁰⁶ Interview with a retailer, 25 January 2017

admits that till positions are very expensive to rent, and that this space is very lucrative for retailers as they sell them to the 'highest bidder' (supplier). It is trying to change this by entering into national deals for till positions.

5.4.2 Routes to Market - Zambia

Retail channels in Zambia are also a growing route to market for most consumer products and thus provide confectionery suppliers an opportunity to participate in the supply chain. Aside from supermarkets and wholesale distribution networks, most small to medium suppliers use alternative routes to markets through independent groceries, convenience grocers and other retailers.

Among the challenges local suppliers face in integrating into the supermarket value chains is the level at which procurement decisions are made in Zambia. Store managers do not have the discretion in selecting local suppliers for corporate stores.¹⁰⁷ This is almost exclusively the decision of top management at head office, often located in South Africa. In contrast, supermarkets operating as franchises have more flexibility regarding decisions on suppliers. Therefore, like in South Africa, it is easier to start supplying chains like SPAR which operate several franchise shops in Zambia.

Furthermore, in addition to legal requirements stipulated by ZABS and other regulatory bodies, supermarkets impose additional private standards not mandated by law that domestic firms are expected to fulfil in order to be able to supply them. This calls upon the local firms to invest in modern machinery and new production techniques in order to access supermarket chains. In Zambia, other demands by supermarkets include: possession of barcodes for goods supplied for inventory and sales records purposes; allocation of a marketing budget for the promotion of the firm's goods; hire of merchandisers to man the firm's shelf space in the store; arrangement of firm's own transport logistics when supplying goods; and for some supermarkets, ability to supply a certain minimum number of stores in the country. These demands impose costs on local firms and they require capital injections to invest in these requirements.

Interviews with Zambian small-to-medium confectionery firms revealed that the most common reasons for not supplying was the long credit period imposed by supermarkets for payments of their products supplied. Most firms in the sugar to confectionery value chain face an average of 30 – 45 days waiting time for their payments after supplying their goods. This poses a cashflow challenge as their working capital is held up by the supermarket chains. The conditions of selling to wholesalers is often much less onerous.¹⁰⁸ The growing popularity of private labels, which are often imported, are also crowding out local suppliers.

6. Conclusions and policy recommendations

This report has evaluated the sugar to confectionery value chain in South Africa and Zambia, countries that have both a comparative and a competitive advantage in the production of sugar. To recap, the key research objectives were:

- To develop a shared understanding of the challenges impeding the expansion of industrial activities in South Africa and Zambia;
- To analyse the performance and competitiveness of the sugar to confectionery regional value chain and the potential for upgrading; and

¹⁰⁷ Interview with a retailer, 28 February 2017

¹⁰⁸ Interview with a confectionery producer, 3 November 2016

- To identify concrete plans at the sectoral level for mutually beneficial and collaborative industrialisation strategies for the sugar and confectionery value chains across the two countries.

Despite having a clear advantage in sugar production, Zambia, South Africa and the SADC region as a whole are net importers of sugar confectionery products (sweets and biscuits). There are opportunities to develop confectionery producers in the region to reduce the trade deficit and recent investments in both Zambia and South Africa highlight these opportunities. However, the research has revealed several challenges faced by confectionery producers in each country, particularly small to medium-sized producers. The research also revealed constraints to smaller millers. Therefore, we propose the following policy interventions to increase the levels of production and exports in the sugar confectionery sector in both countries.

A. Challenges faced in the upstream milling level and policy recommendations

While the focus is on stimulating development of value-added downstream confectionery industries, it is important to highlight that there are also challenges faced by players at the upstream level of the value chain – particularly the small millers. Small millers in both South Africa and Zambia highlighted that investments in the sector would be greater if there were alternative uses for sugar cane, such as in the co-generation of electricity or in ethanol production. Currently, the opportunities for these alternatives are very small. This leaves the small millers vulnerable to low and fluctuating world sugar prices. A regional initiative around these alternatives could be explored, although the implications on the sugar value chain of diversion of cane into these alternative uses would have to be carefully considered. The small millers producing household sugar also raised concerns around dealing with supermarkets which we conclude on below.

B. Challenges faced in the downstream confectionery level and policy recommendations

(i) Pricing of input sugar

While there are multiple challenges faced by downstream confectionery producers in both countries, a key concern especially for smaller confectionery producers is the price of input industrial sugar. While enjoying an advantage in sugar production, the price of sugar remains relatively high in both countries which makes it difficult for local confectionery producers to compete with finished imports of confectionery products.

The sugar milling level of the value chain in both South Africa and Zambia is highly concentrated, particularly in the production of industrial sugar. In Zambia, the sugar price is essentially set by monopoly player, Zambia Sugar. There is no regulation that governs the setting of the sugar price. However, regulation in place in terms of vitamin A fortification and onerous import permit requirements serve to maintain the dominant position of Zambia Sugar. The market power of Zambia Sugar is also apparent from the interviews conducted with downstream confectionery producers and their inability to negotiate prices and terms with Zambia Sugar. Of serious concern is the impact on downstream confectionery industry of uncompetitively priced input sugar. A clear example is the relocation of lead firms with capabilities to other countries outside Zambia to benefit from lower sugar prices as Trade Kings has done. This contributes to the deindustrialisation of countries like Zambia. Small millers in Zambia, such as Kasama and Kafue Sugar, struggle to access finance in order to modernise and expand their operations in order to become effective rivals to Zambia Sugar and to undercut their prices. This issue is discussed jointly with the lack of affordable finance for confectionery producers below. Currently, sugar pricing is the subject of an investigation

by the Competition and Consumer Protection Commission of Zambia (CCPC), and the outcomes of the investigation are awaited before any further recommendations are made.

Unlike in Zambia, there are three large millers and a few smaller ones in South Africa. In South Africa, the setting of the sugar price is more complex than in Zambia given the regulatory framework that sets the sugarcane price. The combined result of the regulation is that the sugar price downstream is in effect 'controlled'. The time-to-time setting of the 'notional local market price' for sugar for purposes of backwardly deriving the cane price through the Division of Proceeds mechanism creates a focal point for millers to coordinate prices around.

While the legislation offers protection to sugar millers and sugar cane growers, it appears that its impact on downstream industries in the region has never been evaluated. In addition, the overall impact of the numerous agreements and regulatory frameworks discussed in Section 4.2.1 that govern sugar traded within the SADC region (including the resultant impact on price) on the development and growth of downstream confectionery producers has not been considered.

It is therefore recommended that a cost-benefit analysis be undertaken to evaluate the overall impact of the legislation and regulations in the region throughout the value chain, including the downstream industry. This needs to be done to see if they collectively speak to a common goal for the region. While it is accepted that sugar cane growers and millers in the region are vulnerable to low world sugar prices that result from the heavy subsidies given to producers in countries like Brazil and India (and this is often the ostensible rationale for the significant protection afforded to the sugar industry by respective national governments) the combined impact of such protection on downstream industry needs to be assessed.

Governments tend to be extensively lobbied to protect growers and millers, mainly on the grounds of their large contributions to employment especially in rural areas. However, this might be at the expense of downstream value-added industries and can have the outcome of keeping the region an exporter of basic commodity sugar and a net importer of value-added confectionery products. Despite such regional agreements, countries continue to pursue national interests to protect their own industries. Tariffs, bans and non-tariff barriers in Zimbabwe for instance have reduced Zambian exports of confectioneries to Zimbabwe. Therefore, agreements like the SADC Sugar Co-operation Agreement need to be revisited to check if it really benefits the whole region and the full value chain, and if it contributes to SADC industrialisation.

(ii) Access to markets/routes to market

Another area for possible intervention is with respect to access to markets for confectionery producers. As shown, store-based retailing is an important route to market for producers of sweets and biscuits. Particularly for small and medium-sized producers, the large supermarket chains are currently not a sustainable route to market and majority of their sales are to wholesalers who on-sell to independent retailers. The research revealed several reasons for this, but the overarching, unanimous sentiment is that the large supermarket chains are very difficult to deal with. Given their considerable buyer power over small and medium sized producers, it is hard to negotiate favourable terms for producers. Supplying supermarkets comes at additional costs, some of which are reflective of the strong buyer power of supermarkets. These additional costs squeeze supplier margins and make them uncompetitive against imports. Certain markets in sugar confectionery (i.e. lollipops) are oversaturated locally through wholesalers and informal channels. But opportunities exist in others, such as marshmallows and jellies, and retailers are a key route to market for these.

Competition law is often a blunt instrument to deal directly with issues of buyer power, and such issues are typically dealt with through market inquiries. The Retail Inquiry by the Competition Commission of South Africa will be looking into issues of buyer power in South Africa. We recommend that one of the potential outcomes of this process, and one that the dti could support as part of its contributions to this inquiry, is a regional code of conduct which can be implemented in SADC. Such a code would govern the relationship between suppliers and supermarkets. Given that it is essentially the same supermarkets that operate in the region, a common code could be developed and adopted for SADC. This could be a voluntary or mandatory code of conduct. If mandatory, further considerations of which body would oversee and enforce this code would need to be had. In the United Kingdom, the Groceries Supply Code of Practice has been established, which stipulates that retailers are required to comply with the Groceries Market Investigation Order of the former Office of Fair Trading (now the Competition and Markets Authority).¹⁰⁹ In Ireland, there are plans to institute a mandatory Code of Conduct in the grocery sector, to be overseen by the Department of Jobs, Enterprise and Innovation. In Spain, a new act focusing on measures to improve the functioning of the food chain was promulgated in 2013 using a mixed model of regulation and self-regulation (through voluntary codes of conduct) to govern commercial relations between the agents in the food chain.

There is also intense competition from large, well-known multinational confectionery brands like Cadbury and Nestlé and from imports. In this regard, supermarkets can ensure, also through a code of conduct, that category management practices and trading terms with these large producers are not at the expense of the growth and development of smaller regional brands.

In some cases, supermarkets have been known to actively support rivalry in suppliers. Shoprite Zambia supporting a rival to the dominant Zambia Sugar, Kafue Sugar, through Superior Milling who repacks for Kafue Sugar as discussed is an interesting case in point. It is also to the supermarkets' benefit to have multiple suppliers of a product so that they are not solely reliant on a single/small number of supplier(s).

While a code of conduct could assist in reducing abuses in buyer power, it cannot ensure that suppliers with potential in the region can easily access supermarket shelves, especially that of South African supermarkets. A major concern is that South African supermarkets which operate in host countries in the region exclude local suppliers, instead opting to import products from South Africa. This stifles the growth and development of suppliers in the region. It has also created resentment towards South African retail FDI. Our research has shown that confectionery producers in Zambia show clear potential to sell to supermarkets in the region. Indeed, a few Zambian firms are already 'retail ready', and perhaps with some support in marketing, packaging and merchandising, these firms will be ready to supply regional supermarket chains. An agreement with South African supermarkets to 'open up' a jointly determined proportion of shelf space on sustainable terms to these producers in stores in the region would provide a much larger route to market for these suppliers. From a SADC perspective, this could reduce the trade deficit for confectionery products while stimulating industrial development in the region. This requires a mind-shift by supermarkets. While growing current sales is often a supermarket's primary objective, encouraging the growth of local suppliers, even if their products are not initially the fastest selling products in the category, has long-term benefits and positive spillovers even for the supermarket industry.

¹⁰⁹ This Code is enforced in the United Kingdom by an independent Groceries Code Adjudicator, set up specifically to oversee the relationship between supermarkets and their suppliers and housed within the Competition and Markets Authority.

A growing opportunity for confectionery suppliers to participate in supermarket chains is through producing confined labels, house brands or private labels for supermarkets, which currently are largely imported in both countries. Small and medium-sized confectionery producers can get their foot in the supermarket door by producing house brands initially. However, concerns around buyer power being exerted on suppliers of house brands at the expense of their branded product have been raised and these would need to be carefully considered. Again, a code of conduct covering negotiations of trading terms tailored for house brands can potentially alleviate some of these concerns.

(iii) Developing capabilities and capacity

From the supermarkets' perspective, smaller producers and producers in countries outside South Africa have limited capability and capacity to sustainably supply all stores in a chain. Given the importance of maintaining availability and consistency across stores, as well as the reputation of the chain, this is a valid concern.

Policy intervention in this regard requires commitment from both government and supermarket chains to build capacity of suppliers. For instance, a bilateral agreement could be reached between the South African and Zambian government to create a centre of excellence in Zambia to assist small to medium confectionery producers to develop their packaging, branding, marketing and merchandising capabilities. Supermarkets, with the assistance and possible matching of funding from government, could embark on targeted supplier development programmes to build these capabilities for small to medium-sized confectionery producers in both countries.

(iv) Harmonisation of standards in the region

A major stumbling block for non-South African producers in supplying supermarket chains with confectionery products in South Africa (and in other countries outside their home country) is the non-harmonisation of standards across the region. National standards such as South African Bureau of Standards (SABS) and the Zambia Bureau of Standards (ZABS) are not harmonised, and this means that South African supermarkets don't see Zambian products bearing a ZABS stamp as being of the same quality as products bearing the SABS stamp. As highlighted, there are problems faced by ZABS in terms of management and the costs and delays in obtaining standards. These costs, and the perception that ZABS and SABS are not on par, result in difficulties for Zambian confectionery producers to get their products on supermarket shelves in South Africa.

We propose a harmonisation of standards across the region. In Zambia, ZABS sets the barest international minimum standards to accommodate the profile of domestic firms in Zambia that cannot afford to meet higher standards. Therefore, ZABS needs to enhance the mandatory standards in order to bring them to par with regional and international standards. This can be done in a phased manner for different categories of supermarket products over time, focusing first on products in which non-South African producers are exhibiting capabilities and in which there is growing intra-regional trade. This will increase the competitiveness of Zambian products and ease entry into supermarkets regionally.

The East African Community (EAC) provides a good benchmark in this regard. It has harmonised standards across for six of the top 20 most traded products in the region, and is pushing for the harmonisation of the most traded products. A study done in 2013 to assess the impact of the harmonised standards of these six products (which included sugar confectionery, soaps and surface active agents, alcoholic beverages, steel and steel products, edible fats and oils, and fish and fish products), found that the harmonisation improved the competitiveness and market access of these products. Intra-EAC trade of the sampled

products increased from USD291.2 million in 2010 to USD 340.4 million in 2014 (an increase of 17%). The harmonisation has also significantly reduced standards-related delays at the borders (from 10 days to only 2-4 hours). There have been challenges however in the EAC process and this provides lessons for the SADC region. Challenges include the long time for finalisation and implementation of the process; inadequate time given to the private sector to adjust to implement these harmonised standards; and inadequate funding for the process.¹¹⁰

(v) Access to development finance

A key issue raised by the smaller sugar millers and small and medium-sized confectionery producers was access to finance for growth and development. In Zambia, the situation is particularly severe with commercial banks not being a viable source of finance for businesses. This is the case given the high interest rates of between 30 to 40% charged by these banks and the lack of backing/guarantees by insurance companies.

While the Zambian Development Agency (ZDA) has funding available for export promotion and enterprise development, the impact of the use of funds in the recent past has not been very positive.¹¹¹ The Industrial Development Corporation of Zambia (IDCZ) can also potentially provide development finance to the sugar value chain in Zambia. However, it is still relatively new (incorporated in 2014) and is yet to build a strong portfolio of investments and expertise. There is potential for the IDC of South Africa to collaborate with the IDCZ (and potentially the ZDA) to build capacity. This could mean collaborating in pooling resources and seeking of funds from potential investors for the sugar value chain.

(vi) Other general concerns

Several other concerns were raised in each country that require country-specific responses.

In Zambia, unscheduled electricity cuts have a major negative impact on the efficiency and costs of confectionery producers and their ability to run more shifts. The boilers and ovens run on electricity so the production line comes to a halt when there is a power cut and the entire batch of sweets or biscuits has to be discarded. One solution to this in the short run is relatively simple – a commitment by utility ZESCO to better inform industry of scheduled power cuts (and stick to the announced schedules) so that companies can adequately plan. Another temporary solution to this is to provide access to finance to producers to invest in generators. Presently, the cost of operating generators, especially the cost of diesel, is prohibitive for the smaller producers.

The other high costs of production are also of concern in Zambia. These include the cost of labour, fertilizer, transport costs and costs of property rentals. In the case of fertilizer, the CCPC has in the past uncovered cartel conduct in the industry. The reasons for continued high prices of fertilizer could perhaps be looked into as part of an impact assessment by the CCPC. The concerns around exorbitant rental rates in Zambia have been raised in many sectors, and we understand that the CCPC looked into this matter in 2012. Despite this, it appears that the problem continues. Another concern widely raised was the exchange rate fluctuation in Zambia. This is not an area in which we can provide any recommendations however.

In terms of barriers to exporting into the region, concerns were raised around the complexities and cumbersome nature of Rule 18 for VAT acquittals and high transport costs. Further, the

¹¹⁰ <https://www.trademarka.com/news/eac-states-urged-to-harmonise-standards-for-most-traded-goods/>, accessed on 31/03/17.

¹¹¹ Interview with the Zambia Development Agency, 28 February 2017

informality and security risks of the DRC market, to which Zambia exports large volumes to, has been raised as a concern to growing business. In this respect, Zambia has already taken steps forward in terms of bilateral memorandums of understanding between it and the DRC. Similar bilateral agreements have also been signed with Angola. Transport cost issues have been researched widely by CCRED and recommendations previously provided around border delays and control of access to loads by large brokers (Vilakazi and Paelo, 2017).

Another fundamental and overarching area of concern is the conflict between industrial policy and trade policy in Zambia. The import duty structure is such that input products have high import duties while finished products have relatively lower duties. This increases costs for the manufacturing sector who often rely on imported inputs. It is then faced with stiff competition from imported finished goods. The underlying tension arises because the import duties are a source of revenue for the government, but this has a negative impact on the development of the local industrial base and on downstream beneficiation.

In South Africa, specific issues include high crime levels in the Booyens area in Johannesburg where a number of small and medium producers are located. Increased police patrols or visible policing presence in these areas would assist in this regard, particularly during shift changes at the end of the day. The lack of public transport was also raised as an issue which not only limits the number of shifts they run but further introduces a level of inflexibility in their operations affecting the productivity and efficiency of manufacturers. As recommended in a previous CCRED study (CCRED, 2016), the unavailability of public transport requires the government or City to consider supporting the development of an uber-like ride sharing application that would allow employers or employees to aggregate demand for transport in order to improve the availability, reliability and flexibility of public transport.

The CCRED (2016) study also found that most manufacturers do not have access to information about existing government-led incentive programmes, other than the dti's Manufacturing Competitiveness Enhancement Programme (MCEP) (which some sugar confectionery producers have taken advantage of). Government must therefore package, communicate and disseminate information on local, provincial and national incentives or any other support offered to manufacturing firms in a simple and succinct manner (i.e. a single one point of contact to help firms navigate and access support available to them). This could be done online or through the establishment of a walk-in centre. However, given the scale of smaller manufacturing firms and their inability to invest sufficiently, they may need assistance with more basic issues, such as trade facilitation or public procurement, other than applications for government incentives. There is potential for new sustainable markets within the region and growth through exports. Supporting exports would require the development and implementation of a regional trade facilitation strategy (CCRED, 2016). Assistance from the dti in this regard could also be through giving confectionery producers greater exposure to confectionery trade shows (particularly those in Cologne and Dubai) and facilitating linkages with potential export markets. This is also important for brand building. Moreover, government can assist in mitigating some of the risks involved in dealing with African countries, for instance, assistance with putting insurance mechanisms in place.¹¹²

¹¹² Currently all sales are on a COD (cash on delivery) basis. This creates the problem of producers potentially incurring transport costs to return goods, if there is no cash available on delivery.

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Appendix 1: Key interview lists

South Africa

Sugar producers	Confectionery producers	Retailers	Wholesalers/Buying Groups	Government/industry associations
Illovo Sugar	Premier Foods	SPAR	Sugar on Tap	Department of Trade and Industry
UCL Company	Lodestone Brands			South African Sugar Association
Umfoloji Sugar Mills	Sally Williams			
	Aldor Africa			
	Trade Kings SA			
	Broadway Sweets			
	Dicks Sweets			
	Pioneer Foods			

Zambia

Sugar producers	Confectionery producers	Retailers	Traders/wholesalers	Government, development agencies and Industry associations
Kafue Sugar	Trade Kings	Shoprite (Zambia)	Superior Milling	Zambia Association of Manufacturers
Kasama Sugar	Musa Biscuits	Game	Wholesalers	Industrial Development Agency (IDC) Zambia
	Monginis Bakers			Zambia Development Agency
	Chicco Biscuits (Zayaan) Investments			Ministry of Commerce, Trade and Industry