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Examining the Ability of Tanzanian Small and Medium Enterprises (SMEs) to Increase their Penetration into Export Markets

Beatrice K. Mkenda¹ and John Rand²

ABSTRACT

Tanzanian Small and Medium Enterprises (SMEs) face a number of hurdles that constrain their ability to increase their penetration into export markets. This finding emanates from analysing a sample of Tanzanian exporting SMEs from the World Bank's Enterprise Survey Data for 2013. The analysis shows that only a few among the sampled exporting SMEs had internationally recognized quality certificates, used technology licensed from a foreign-owned company, spent on research and development (R&D) in the previous three years; and many were unable to enter export markets within three years of being established, that is, they are not born-global firms. The paper argues that the SMEs' ability to penetrate into export markets faces three main constraints, namely, access to finance, electricity outages and numerous taxes. Thus, to enhance the SMEs' ability to increase their penetration into export markets, policies should focus on easing the examined constraints. Firstly, there is a need to have policies for assisting exporting SMEs to access credit for expanding their activities and increasing productivity. Secondly, is to ensure that exporting SMEs get the required electricity through industrial parks that get preferential treatment in terms of general infrastructure. Lastly, the government should consider streamlining the taxes levied on these enterprises that hamper their operations. The implementation of these policies as a package would enable the SMEs to contribute more to generating export revenues and creating employment.

Key words: Small and Medium Enterprises, Exports, Export Market Penetration, Tanzania

INTRODUCTION

The literature on growth and development has long indicated the positive contribution of exports to economic growth and development (Balassa, 1978, 1984; Ram, 1987)³. This contribution to growth accounts for the success stories of the South East Asian economies, which have chosen to pursue export-oriented strategies. Most of all, the South East Asian countries have industrialized at a much faster rate and attained a higher and successful level of industrialization than the Sub-Saharan African (SSA) countries (Kaplinsky & Morris, 2009; Hesse, 2008). To support this contention, studies on the composition of export baskets of the SSA countries and some East Asian countries have revealed a stark contrast; primary products still dominate the composition of export baskets of most SSA countries, whereas the Asian Tigers' export baskets contain products of a high technical level, predominantly manufactured ones (Anand et al., 2012); Thorbecke & Hao-Kai, 2015).

¹ Depatment of Economics, University of Dar es Salaam: bkmkenda@gmail.com

² Development Economics Research Group, Department of Economics, University of Copenhagen: john.rand@econ.ku.dk

³ These are classic pieces on the export-economic growth-nexus. These more recent selected studies on the same are insightful: Furuoka, 2018; Sayef & Mohamed, 2017; Pradeep Agrawal, 2015; Sanjuán-López, 2010; and Sharma & Dhakal, 1994.

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Tanzania's strategy for industrial growth focuses on creating strong Small and Medium Enterprises (SMEs) that can penetrate export markets and can establish strong linkages with large enterprises locally, as well as through a network of foreign firms or strategic partnerships. Additionally, Tanzania's SME Development Policy 2003 gives its overall objective as: "...to foster job creation and income generation through promoting the creation of new SMEs and improving the performance and competitiveness of the existing ones to increase their participation and contribution to the Tanzanian economy" (United Republic of Tanzania (URT), Ministry of Trade and Industry, 2002; p.13). This objective will contribute towards realizing the National Development Vision 2025, which aims at transforming the Tanzanian economy from a low productivity agricultural economy to a semi-industrialized one, among other aims (URT, 1999). The envisaged transformation of the economy relies on enhancing the productive activities. For the SMEs in particular, it means ensuring that as they grow, they are able to increasingly penetrate the export markets, especially in areas or activities that Tanzania has the comparative advantage. The ability to penetrate into export markets and increase that penetration over time calls for an export strategy for SMEs, which will promote both productivity and competitiveness.

Empirical evidence worldwide show invariably that SMEs contribute to creating jobs, increasing output, and generating export earnings; hence, they are critical for a country's growth and development. For example, in 2014 in the European Union (EU), SMEs that export outside the EU employed 6 million people and accounted for a third of total EU exports (Cernat et al., 2014). The importance of SMEs to growth and development has led some Latin American countries to successful establishment of consortia to facilitate SMEs' participation in export markets; for example, Argentina, Chile, Costa Rica, Mexico and Peru (Latin American and Caribbean Economic System (SELA), 2015). Other countries have devised intangible assets (knowledge, reputation, organizational culture and marketing skills) and export strategies (Antoldi et al., 2013). This study has addressed the following research questions: (i)*Are Tanzanian SMEs able to increase their penetration into export markets? (ii) To what extent are they "born global firms?" (iii) What obstacles debilitate against their ability to increase their penetration into export markets? (iv) What policies can enhance the ability of Tanzanian SMEs to increase their penetration into export markets?*

The choice of Tanzania rests on its renewed push for industrialization and job creation to absorb its growing youth population, and the central role that it plays in economic development and transformation. If Tanzanian SMEs succeed to penetrate international markets and increase their penetration over time, they will enable the country to take huge leaps forward in its industrialization quest as well as create the needed jobs for its youth. The policy implications of the study relate to obstacles facing the SMEs; hence, the suggested policies aim to facilitate the process of internationalization.

Using the World Bank's Enterprise Survey Data for 2013,⁴ the study found that most of the exporting SMEs did not have internationally recognized quality certificates, did not use technology licensed from a foreign-owned company, and had not spent money on research and development (R&D) in the previous three years. In addition, they were not part of a foreign company, neither were they born global firms. These features constrain their ability to increase their penetration in export markets. Furthermore, the results show that Tanzanian SMEs face various constraints in

⁴ World Bank (2014a). The data was collected between 2013 and 2014 by the World Bank, and is downloadable freely from http://www.enterprisesurveys.org.

their operations, especially access to finance, electricity outages and numerous tax rates, which stifle their efforts to increase penetration into export markets. The policy implications of the study point to targeted policies for small exporting firms. These firms need to access credit to be able to grow, so that eventually, they could increase their penetration into export markets. Secondly, the exporting SMEs need a stable supply of electricity, through industrial parks that get preferential treatment in terms of general infrastructure. Lastly, the government needs to consider streamlining the taxes that are constraining the SMEs' operations.

The paper is organized as follows: Section 2 gives an overview of the extent of Tanzania's export market penetration and performance. Section 3 discusses the literature on export market penetration. Section 4 presents the adopted empirical approach, discusses some findings regarding the exporting SMEs, their characteristics versus non-exporting ones and the obstacles they face towards increasing their penetration into export markets. Section 5 concludes the paper and draws some policy implications.

Overview of Tanzania's Export Performance and Export Market Penetration

The trend in Tanzania's exports mirrors the trend in global exports.⁵ The exports were rising between 2001 and 2008, after which they suffered a fall, like other countries globally, as a result of the global financial crisis. After recovering from the global crisis, exports fell again in 2013, then picked up before suffering a fall in 2016 (Figure 1A in the appendix). The trend depicts a correspondence across the years between Tanzania's exports and global exports with respect to the rise and fall in exports. This correspondence reflects the extent of integration of Tanzania's economy into the global economy and shows clearly the effects of the two global crises on Tanzania's exports. Notable, however, is the fall in Tanzania's exports after peaking in 2015, while global exports were rising after dipping in 2016.⁶

The variability of Tanzania's market share in the total global exports gives insights into Tanzania's export performance. Figure 1 shows a rising trend from 2001 to 2004 followed by stagnation until 2007, after which it continued to rise until 2010. The trend shows fluctuations between 2011 and 2016, with a sharp dip in 2013 and a sharp rise that peaked in 2015 and fell steadily thereafter.⁷ Figure 2 shows annual growth rate in the export share, with notable negative growth rates in 2013 and 2016. The fluctuation in Tanzania's market share in the total global exports shows that Tanzania has not succeeded to maintain its market share in the global export market. The solution to instability requires the exporting SMEs to increase their penetration into the global export market and non-exporting firms to enter the export market.

The geographical distribution of Tanzania's exports shows a distinct shift from dependence on the European Union (EU) to diversification to incorporate other markets. The proportion of Tanzania's exports to the EU market fell from over 57% in 2001 to about 14% in 2016, representing a 75% fall over the period (Figure 3). This fall is attributed to the emergence of other markets for Tanzania's exports. The rise of the Asian market was particularly significant. As shown in Figure 3, the Asian market accounted for about 26.7% of Tanzania's exports in 2001 and 37.4% in 2016.⁸

⁵ See Figure 1A in the appendix.

⁶ The fall in the value of Tanzania's exports could be attributed to the general fall in the output of cash crops over the same period, except that of cashew nuts, and a fall in global prices of some of the agricultural crops (see Bank of Tanzania, 2018; World Bank, 2020). ⁷ This mirrors the trend observed in Figure 1A of falling value of exports while global exports increased.

⁸ The data aggregates all Asian countries, however, note that in 2016, the biggest markets in Asia, in order of significance, were India, China, Vietnam and Japan.

Other markets with increased share in the total exports in the period 2001-2016 include the East African Community (EAC) (from 6.8% to 15.8%) and the Southern African Development Community (SADC) (from 3.8% to 17.6%) (ITC, 2017). With right policies, Tanzania can maintain a good share of these markets and can reclaim the lost markets. Therefore, examining how SMEs can increase their penetration into export markets and maintain it is important for understanding the required policy responses.

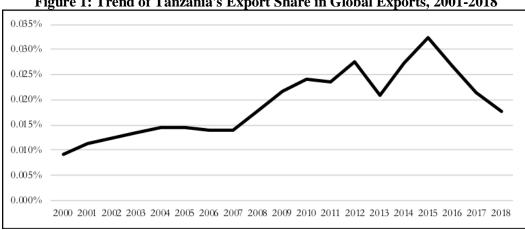


Figure 1: Trend of Tanzania's Export Share in Global Exports, 2001-2018

Source: World Bank (2020). World Integrated Trade Solution (WITS)

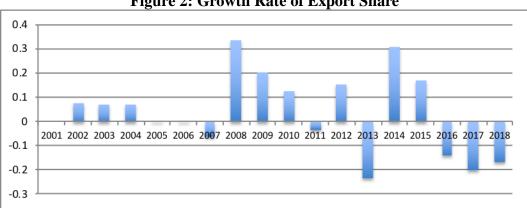


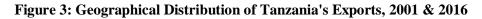
Figure 2: Growth Rate of Export Share

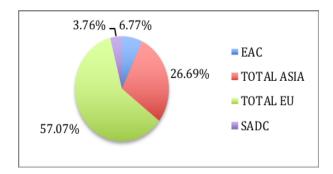
Source: International Trade Centre (ITC) (2019)

Using an aggregate market penetration index⁹, by product group for different periods between 2001 and 2015, three product groups show a reduction in their market shares, with the group with the highest market share being among those, which is 09 (coffee, tea, maté and spices) (Figure 4). In general, the market share of some product groups fluctuated, whereas it increased for other groups (see Table 1A in the Appendix). Notably, among the groups that increased their market share is group 24 (tobacco and manufactured tobacco substitutes), which had the highest increase in market share.

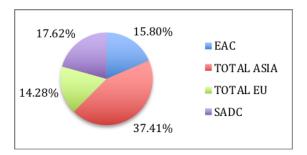
⁹ The index was calculated by averaging over the ratio of Tanzania's exports by product code over global exports by product code.

For some product groups that experienced a fall in their market share, Tanzania has a comparative advantage. A fall in their market share in the export market translates to a loss of export earnings and the attendant benefits from the comparative advantage that Tanzania has. Thus, Tanzania needs to increase the market shares of these groups, to keep reaping the benefits of exporting. For product groups for which the market share increased, it is imperative to maintain the shares or to increase them further. The paper analyses the possible causes for the discussed fall in the market shares, with a view to avoid them. This is the main contribution of the study.





Source: ITC (2017)



Source: ITC (2017)

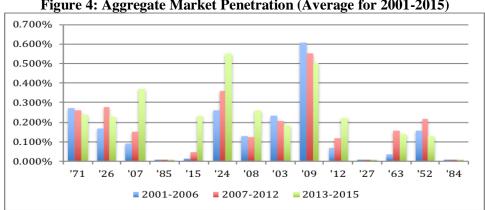


Figure 4: Aggregate Market Penetration (Average for 2001-2015)

Source: International Trade Centre (2017

Notes: Table A1 in the appendix gives the full names of the product codes.

LITERATURE REVIEW

The ability to enter exports market for SMEs signifies growth (Di Maria & Ganau, 2014). In this regard, the literature identifies characteristics of firms that determine their export behaviour. The key characteristics include size of the firm, productivity, managerial capabilities, innovation and technology (Barasa et al. 2016; The Economic and Social Research Institute, 2006). With regard to size, the findings show that larger firms tend to enter export market compared to smaller ones, owing to their higher productivity that allows them to afford the sunk costs involved in exporting. This self-selection hypothesis has been tested in various countries, for example Ethiopia (Siba & Gebreeyesus, 2017), Eurasia, Central, and Eastern Europe (Rehman, 2017). For small firms, entering export markets is difficult, except when they are part of export consortia (Di Maria & Ganau, 2014; Fabio et al., 2013).

SMEs face difficulties to penetrate and increase that penetration in international markets. The difficulties are greater for SMEs that do not have sufficient financial resources to cover sunk costs (Goedhuys & Sleuwaegen, 2016). As well, the exporting SMEs must comprehend the nature and extent of the foreign demand, and the competition they are likely to face. In turn, these factors, in combination, translate into a firm's strategy. Factors that may limit the capacity of firms to remain in business include poor understanding of consumer's needs, weak capacity for timely and irregular delivery and after-service and weak networking into international markets. Other factors may include a nation's export policies, comparative marketing costs and firm manager's attributes such as levels of skills or competencies (Kaplinsky & Morris, 2019; Abonyi, 2015). In general, because large firms have more resources, they are more capable of penetrating international markets than SMEs (Schmidt & Hansen, 2017). In addition, large firms tend to have international networks and foreign owners that facilitate them to break into international markets (Tanev, 2012; Olafsen & Cook, 2016).

Management studies that examine the determinants of exporting and the behaviour and performance of exporting firms have primarily identified management characteristics and attitudes, firm's characteristics, product, industry and export market variables as key factors in explaining export initiation and performance (Aaby & Slater, 1989; Rosson & Ford; 1982). The management characteristics and attitudes include the following: age of manager, gender of manager, work experience, education level and language proficiency. Younger managers are found to be generally more internationally minded and eager to penetrate export markets (Kotorri & Krasniqi, 2018). Results with regard to gender are generally mixed, with some studies finding female-owned exporting firms as being more productive, whereas others find female owned firms less likely to export (Orser et al., 2009; Marques, 2015). As for work experience, managers with export experience contribute more to the growth of export for firms whose key objective is to enter export market (Sala & Yalcin, 2012). Moreover, the more educated the managers are, the more likely they are to have better problem-solving capabilities, thereby, more likely to be associated with internationalization (see Kotorri & Krasniqi, 2018). Proficiency in foreign languages eases the negation hurdles faced in export markets (Fidrmuc & Fidrmuc, 2016; Chen, 2017; Alaoui & El Makrini, 2014).

The level of technological innovation influences the extent to which nations penetrate and increase their penetration in export markets. It is even possible to discern the extent of technological innovation in the export products of nations. For example, studies have shown that the Asian countries' exports over time have become more and more sophisticated technologically. This sophistication has led to the rapid growth of these countries and their dominance in export markets (Thorbecke & Hao-Kai, 2015; Anand et al., 2012), in contrast to most of Africa's exports that are in raw form, revealing the low level of innovation and technological advancement and explaining insignificant penetration in international markets. The exportation of products in raw form results in revenue loss due to low value addition (Africa Development Bank (AfDB), 2017; United Nations Conference on Trade and Development (UNCTAD), 2018). UNCTAD (2015) notes the contrast in sophistication:

"The level of sophistication is generally high for exports originating from developed countries, but varies widely with respect to developing countries' exports. It tends to be higher in East Asian countries, moderate in Latin America and South Asia, and relatively low in Africa. East Asian countries tend to export products that are generally more sophisticated than exports from countries with similar levels of gross domestic product (GDP), while the opposite is observed in many Latin American countries" (p.32).

Once SMEs are established, the ability to penetrate export markets may rely on the propensity to venture into exporting. In reference to this aspect, empirical studies have investigated what is termed *born global firms*. These are firms that are rapidly internationalized, with export market entry of *less than three years* from the time of being established, and with the majority of sales (out of the total turnover) emanating from foreign markets (Øystein & Servais, 2002); Wach, 2014). Alternatively, some researchers define born global firms by the percentage of sales from exports and how long the firms take to enter international markets. For example, it could be a firm with at least 25 percent of its total sales resulting from exporting and which has internationalized within a few years after its inception (Kuivalainen et al., 2007).

The decision to enter export markets as a born global firm depends on a firm's strategy (McDougall & Oviatt, 1996). Jantunen et al. (2008) analyse the significance of entrepreneurial capacity and pre-set international growth orientation and knowledge as prerequisites for becoming a successful born global. In support of these aspects, Kuivalainen et al. (2007) argue that a firm requires a different entrepreneurial mind set to become a born global firm, which however, is not sufficient for success. Thus, born global firms fall under two categories, depending on which strategies (concerning internationalization) that a firm decides to adopt. These two categories are: (i) local internationals and (ii) global internationals. "Local internationals" are firms exporting only to close and related markets, whereas "global internationals" operate in distant markets and multiple regions. Kuivalainen et al. (2007) posit that "global internationals" are larger firms, often established and driven by experienced entrepreneurs, whereas "local internationals" are smaller, less experienced innovators seeking new opportunities abroad.

In general, the participation in export markets of the SMEs in low-income countries (LICs) is lower than that of the SMEs in developed countries. The SMEs in developed countries are often at the forefront of export market penetration, and consequently creating jobs and generating export earnings. On the other hand, the contribution of SMEs in LICs to export earnings, jobs and ability to penetrate into export markets is limited. This difference is attributed to more severe constraints that the SMEs in LICs face that limit their penetration into export markets, contribution to employment creation and export earnings.¹⁰ For example, in a study of Zimbabwean SMEs, Muranda (2004) finds "inadequate experiential knowledge, inadequate technical skills, uncompetitive pricing, operational capacity, and an unsupportive business environment" (p.89) as factors constraining SMEs' growth and competitiveness, and hence participation in export markets. The Organization for Economic Cooperation and Development (OECD) (2010) found the following barriers as constraining the SMEs:

- 1) inadequate quantity of untrained personnel for internationalization;
- 2) shortage of working capital to finance exports;
- 3) limited information to locate/analyses of markets;
- 4) identifying foreign business opportunities;
- 5) lack of managerial time to deal with internationalization;
- 6) inability to contact potential overseas customers;
- 7) developing new products for foreign markets;
- 8) unfamiliar foreign business practices;
- 9) unfamiliar exporting procedures/paperwork; and
- 10) meeting export product quality/standards/ specifications" (p. 8).

In terms of strategies, emerging economies¹¹ often move from inward-oriented import substitution policies toward outward-oriented export-led growth strategies during transition (Kotler et al., 1997). With these strategies, the distributions of firm size in the respective countries is not an issue to consider. The outward-oriented strategies adopted by most firms in economies under transition¹² often follow the traditional models of internationalization and the international product life cycles. First, firms enter into foreign markets through exporting, and then with increased market knowledge, they escalate commitments and pursue the so-called investment-oriented entry models (Aulakh et al., 2000). Whereas export entry strategies apply across the entire distribution of the firm size, investment-oriented entry strategies are only for large firms to pursue. This self-selection process of strategies for export market penetration has influenced the focus of the study. Because the study is on small and medium enterprises (SMEs) in Tanzania, it analyses export market penetration through trade rather than through direct investments, mergers and acquisition.

This study examines key features of the Tanzanian exporting SMEs, and gauges their ability to increase their penetration into export markets, based on their use of quality international certificates, technology licensed from foreign-owned firms, spending on R&D, whether they are part of a foreign firm, and whether they are born global firms.

¹⁰ See OECD (2017) and Wang (2016) on similarity of constraints faced by SMEs and their contribution in LICs and in developed countries.

¹¹ Coined by Antoine W. Van Agtmaël in 1981, emerging economies are those economies that are in transition and growing fast, and are integrated into the global economy. Different institutes give the main characteristics of these economies as the following: (1) *Lower-Than-Average Per Capita Income* (propelling the economies to grow rapidly). (2) *Brisk Economic Growth* (with the growth rate of 4% or more in 2018). (3) *High Volatility* (mainly due to natural disasters, external price shocks, and domestic policy instability) (4) *Currency Swings* (susceptible to volatile currency swings, such as those involving the U.S. dollar). They are also vulnerable to commodities swings, such as those of oil or food, and (5) *Potential for Growth* (hampered by less developed capital markets (Amadeo, 2019)). Examples of emerging economies are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates (Amadeo, 2019; Sraders, 2018; Vercueil, 2016).

¹² These are economies transitioning from centrally planned ones to market economies (Svejnar, 2002), such as Albania, Bosnia and Herzegovina, Montenegro, and Serbia, to name just a few.

THE DATA AND ANALYTICAL APPROACH

The study examines the ability of Tanzanian SMEs to increase their penetration into export markets by analysing some key characteristics that these enterprises possess.¹³ To this end, the study uses the World Bank Enterprise Survey Data (World Bank, 2014a). The sectoral distribution of the SMEs (Table A2 in the Appendix) shows that out of 685 sampled SMEs¹⁴, 207 (30%) were exporters.¹⁵ For both exporters and non-exporters, more than 50% of the SMEs were in the manufacturing sector, with the retail sector constituting 16% in each category. For exporting firms, 52% were service providers, whereas the proportion of service providers was 31% of the non-exporters.

The contributory aspects for SMEs to increase their penetration into export markets include the following: the use of quality international certificates, the use of technology licensed from a foreign-owned firm, spending on research and development, whether they are part of a foreign, and whether they are born global firms. The use of panel data explores these aspects better, together with managerial, firm and external aspects. However, the panel for Tanzanian data has few observations¹⁶, which would render any regression estimation meaningless. As such, our analysis of what it takes to increase penetration in export markets for Tanzanian SMEs is limited to descriptive and qualitative analysis. First, the study examines what sets apart the exporting and non-exporting firms; and then it analyses the extent to which SMEs possess characteristics that would enable them to increase their penetration in export markets. Lastly, the study examines the obstacles that constrain the exporting firms' ability to increase their penetration into export markets.

Exporters versus Non-Exporters: What Sets them Apart?

To examine what sets apart exporters and non-exporters, the study considers various characteristics of the SMEs (both the exporters and non-exporters), which are summarized in Table A3 in the Appendix. Among the exporters, the percentage of SMEs that are older than 20 years is the highest, followed by those between 6 and 10 years. This lends support to empirical findings in the literature that exporting and age of a firm are positively related.¹⁷ For the non-exporting SMEs, the percentage is highest for those aged between 6 and 10 years, followed by those aged between 11 and 15 years.

Other identified differences are as follows: with regard to annual sales - no exporting SMEs got under TZS 1 million, and about 92% of them got more than TZS 10 million, compared to non-exporting SMEs; 1% of them get under TZS 1 million and about 86% of them get more than TZS 10 million in sales. As for employment, both exporting and non-exporting SMEs employed between 6 and 20 people (about 36% of them); for capital utilization, the percentage of exporting SMEs with capacity utilization higher than 75% was about 8% higher than non-exporting SMEs; gender of top manager – there was not much difference in the gender of the top manager between

¹³ From the theoretical perspective, the aspects to consider are the following: (i) managerial aspects – experience and level of education; (ii) firm aspects – strategies, international experience, age, and innovation; (iii) international experience – years exporting, resources, and contacts with foreign firms (see Love et al., 2016). These are usually examined with panel data if available. Our approach uses descriptive statistics and qualitative analysis.

¹⁴ This constitutes 15% of the estimated population of SMEs from the sample frames used (World Bank, 2014b).

¹⁵ We defined exporters as firms that had directly or indirectly exported.

¹⁶ Of the 180 firms interviewed for both years (2006 and 2013), only 19 were exporting firms. For such insufficient observations, panel data estimation cannot be undertaken.

¹⁷ For example, in the case of Germany, Wagner (2015) found older firms were more exporters, and exported more goods and to more export destinations. However, other studies have found a negative effect of age on export intensity (for example, Love et al., 2016).

exporting and non-exporting SMEs. For both sets of firms, about one seventh of the firms had females as top managers.

In the next sub-section, we examine the extent to which exporting SMEs possess characteristics that could enable them to increase their presence in export markets.

To What Extent do SMEs Possess Characteristics to Increase Penetration in Export Markets?

This section analyses the extent to which the exporting SMEs possess key characteristics for enabling them to increase their penetration into export markets. Emanating from the surveyed literature, in conjunction they constitute prerequisite factors for SMEs to increase their penetration into exports markets. The set of these characteristics comprises the following: possession of internationally recognized quality certifications, use of technology licensed from a foreign owned company, spending on R&D in past three years, being part of a foreign company and being born global (Table 2). The remaining part of this section elucidates these factors in the Tanzanian context.

Internationally recognized certificates¹⁸ help the exporting firms in developing countries to deal with information asymmetries related to production systems and challenges of quality of goods produced that often afflict them. They play a role of "globally decentralized institutions" (Goedhuys & Sleuwaegen, 2013, p. 88) and the code of conduct to adhere to international standards. Thus, the international certificates are a signal of good quality to consumers in export markets. By minimizing information asymmetries related to the quality of goods and management systems of firms, they contribute to preventing what ultimately could lead to market failure (Bangwayo-Skeete & Moore, 2015). In general, studies indicate that firms with internationally recognized certificates get benefits related to increasing their competitiveness and the probability to export, thereby raising their efficiency and sales performance (Bangwayo-Skeete & Moore, 2013).¹⁹

Table 2 shows that among Tanzanian exporting SMEs, only 22% (43 firms) had internationally recognized *quality* certificates. This relatively very small proportion reveals the extent of Tanzanian SMEs' inability to abide by the international standards in export markets; the norm is that those engaged in international markets should possess internationally recognized quality certificates. This low proportion implies that the prospects for Tanzanian exporting SMEs to increase their penetration into export markets is limited. Hence, more exporting SMEs need to possess internationally recognized quality certifications in order for them to not only reap firm benefits from export markets, but also to contribute to economic growth through increased export earnings.

¹⁸ In the literature, the certificates are referred to as ISO certificates (Bangwayo-Skeete & Moore, 2015; Goedhuys & Sleuwaegen, 2013).

¹⁹ This is especially the case for firms in developing countries with weak supporting institutions.

	Number	%
Possession of internationally recognized quality certifications ^a	43	21.6
Use of technology licensed from a foreign owned company ^b	16	15.5
Spending on R&D in past three years ^c	33	16.3
Part of a foreign company ^d	32	15.5
Born global ^e	33	15.9

Note:

a – among the exporting firms, 199 responded to the questions.

b – among the exporting firms, only 103 responded to the question.

c - among the exporting firms, 202 firms responded to the question.

d – among the exporting firms, 207 firms responded to the question.

e - Export age (Year the firm first exported directly or indirectly); and firms that started

exporting within 3 years of being established – 207 firms responded to the question.

Source: Authors' computation from World Bank (2014), Enterprise Survey Data.

Another way that SMEs can increase their penetration into export markets is the use of technology that is licenced from a foreign-owned company. When the exporting SMEs acquire and use licenses from foreign affiliates, it enables them to build their capabilities and hence making it easier to conform to international standards, remain competitive and meet the needs of consumers in the international markets. For Tanzania, where skills for undertaking innovation are scarce, such licences can be advantageous to the exporting SMEs. In the 2013 data set that this study used, approximately 16% of the firms (16 in number) used technology licenced from a foreign-owned company. This is a relatively small number for taking advantage of collaboration with international companies to use technology to produce goods that are of international standard. It is indicative of a low level of technology transfer among the exporting SMEs, which is one of the benefits that often accrue to firms by virtue of participating in the export markets.

Spending on R&D facilitates development of products that would keep up with the changing demand in the international market. Among the exporting SMEs in Tanzania, firms that had spent money on R&D in past three years constituted 16.3% (33 firms) of the sample (Table 2). This proportion also is relatively small, which calls for more SMEs to spend money on R&D to increase their penetration into export markets. Investment in R&D also means that firms are able to develop their technological capabilities, which would improve their products and enable the firms to compete globally and have a sustained growth (AfDB, 2017). At the national level, the SMEs' investment in R&D can contribute to the quest of spearheading Tanzania to a middle-income country status.

Local companies that are part of a foreign company often have a significant impact on participation in export markets (Cieślik & Michałek, 2018; Wignaraja, 2008). This results from the foreign partners availing them access to new foreign markets, distribution facilities, new products, managerial know how, and advanced production technology, which they normally would not have had access to if they were wholly locally owned. Other aspects by which local companies benefit from being part of a foreign company are the following: foreign partners are a source of information on export markets, are keen on getting higher returns on their investment, take on higher risk, and have more access to funds (Amornkitvikai et al., 2012; Toshihiro, 2017). In the Tanzanian sample of the exporting SMEs, approximately 16% of the firms were in partnership with foreign firms (32 of them). This small proportion indicates limited foreign investment in the SMEs, and the attendant low penetration into export markets.

Lastly, the study found that 33 SMEs, which constituted approximately 16% of the exporting firms, were born global firms. As per the definition of born global firms, these firms started exporting within 3 years of being established. This number of SMEs that have internationalized or penetrated export markets within three years of being established is still not significant, which imply in general, that the SMEs take a long time to enter export markets. This could be accounted to the costs involved in entering export markets and other obstacles, discussed in next sub-section.

What obstacles do Exporting SMEs face?

The characteristics in the previous sub-section point to limitations that the exporting SMEs exhibit that result in a low potential for increasing their penetrating into export markets. In this part, the study conjectures that the efforts of Tanzanian SMEs to increase their penetration into export markets stall due to the constraints they face in their operations. Entering export markets is difficult in the first place, and increasing that penetration over time is even more challenging. Thus, SMEs need help to achieve the objective of penetrating into export markets.

The exporting SMEs indicated the five biggest obstacles they faced as access to finance, supply of electricity, tax rates, customs and trade regulations, and access to land, in that descending order. The SMEs indicated that access to finance as top obstacle constituted 34% of the sampled firms, whereas electricity was the second biggest (28% of the SMEs). The third biggest obstacle was tax rates, where 10% of the SMEs indicated it as an obstacle.²⁰

The ability by the exporting SMEs to access funds from financial institutions is imperative for starting (for the start-up capital), expanding the working capital, running enterprises and funding R&D activities (UNCTAD, 2011), which for the exporting firms, ensures that they meet the required quality standards in export markets. Studies on other countries found similar results that access to finance constrains efforts of SMEs to expand their operations and become successful at exporting (Omar, 2008; Kumar, 2017). The study by Kumar (2017) investigated the biggest obstacles that managers of SMEs faced by region, and found that access to finance was the biggest obstacle for half of the regions in the study²¹, with Sub-Saharan Africa being among them. Compared to non-exporters, Kumar (2017) found that the likelihood to access finance is higher for exporters and for older firms. Thus, access to finance is still a major constraint to exporting firms that requires targeted intervention to enable them to grow and penetrate export markets. Assistance

²⁰ The government, under the Ministry of Industry, Trade and Investment (URT, 2018) initiated a comprehensive analysis of the regulatory framework, named the Blue Print, which among others, looked at ways to streamline regulatory hurdles that were hindering the business environment and stifling firms' contribution of the private sector to the productivity of the economy. According to the Blue Print, its main objective was to "propose reforms to improve Business Environment in Tanzania through reduction of the regulatory burdens and risks faced by businesses in complying with regulations" (p. xi). One of the hurdles, the multiple tax rates, is addressed in the Blue Print and recommendations have been put forward for streamlining them. Thus, going forward, tax rates as one of the biggest constraints faced by MSMEs would be dealt with, which will allow exporting SMEs to increase their penetration in export markets.

²¹ The following regions were in the study: East Asia & Pacific; Europe & Central Asia; Latin America & Caribbean: Middle East & North Africa; South Asia; and Sub-Saharan Africa. Half of them, namely, Sub-Saharan Africa, Latin America & Caribbean and East Asia had access to finance as the biggest obstacle they faced in their operations (Kumar, 2017).

to SMEs to access funds will enable the firms to expand their operations and to invest in innovation. Lessons from Malaysia and Singapore include the positive role of governments in terms of providing support to SMEs through various grants for start-ups and for research and development (UNCTAD, 2010).

	NUMBER	%
Access to finance	63	33.8
Electricity	58	31.0
Tax rates	20	10.7
Customs and trade regulations	9	4.8
Access to land	9	4.8
Total	187	100.0

Table 2: Top 5 Biggest Obstacles Facing Exporting SMEs

Note:

- Only 187 firms responded to this question.
- Other* includes: Business licensing and permits; Corruption; Crime, theft and disorder; Inadequately educated workforce; labour regulations; Practices of competitors in the informal sector; and Tax administration.

Source: Authors' computation from World Bank (2014), Enterprise Survey Data

The second obstacle, electricity, is infrastructure-related. Studies that focus on Sub-Saharan Africa recommend to policy makers to urgently deal with electricity hurdles in order to propel Africa's industrialization through establishing industrial parks (Zeng, 2016). For the exporting SMEs in the sample, 83% of them (166 firms) had experienced power outages in the previous financial year. Of these firms, approximately 60% of them (123 firms) had power outages lasting for more than 10 hours (see Table A4 in the appendix). Such power outages affect the SMEs' annual sales: 86% of the firms (178 firms) recorded²² more than 20% of losses in annual sales due to power outages.

The Tanzania data does not accommodate exploring further details how poor electricity supply affects the exporting SMEs, studies on other countries show firm level effects of power outages that give an indication of how these firms are affected. For example, a study on Uganda found that for firms without generators, power outages that lasted for 30 days affected investment rates, which fell to under 10%. For firms that installed generators, investment decreased due to firms using 25% of their total investment to fund alternative power (Ndulu et al., 2005). In another study on six African countries, Ndulu (2007) found significant output losses due to power outages²³. Furthermore, Ndulu's (2007) study found that large firms were more likely to own generators. Few SMEs could only acquire them very expensively, thereby bearing a disproportionate burden of a loss of output and high costs of installing generators.

Evidentially, poor electricity supply forces SMEs to incur extra costs to install generators to ensure that production takes place during power outages and it affects their competitiveness. A more

²² In SSA, Ethiopia has taken a lead in establishing industrial parks that have helped to attract foreign investment, given the provision of quality infrastructure (UNIDO, 2018).

²³ The following African countries studied include, with bracketed figures indicating the average output loss from power outages: Eritrea (>5%); Ethiopia (.>5%); Kenya (>9%); Nigeria (>3%); Uganda (>6%); and Zambia (>4%).

recent study finds that a lack of crucial infrastructure (power, water and transport services) is behind Africa's slow industrialization, which makes it to lag behind in terms of global competitiveness (AfDB, 2017).

CONCLUSION AND POLICY IMPLICATIONS

This paper has examined the performance of Tanzanian SMEs with regard to penetrating the export market. The requisite factors analysed include the ability to increase their penetration export markets; the extent to which they are born global firms; the obstacles that stand in the way of their ability to increase their penetration into export markets; and what policies can enhance their ability to increase their penetration into international markets. While SMEs in the developed world significantly contribute to exports, consequently contributing substantially to export earnings and job creation, it is at a limited scale for the Tanzanian SMEs. Nevertheless, the potential to improve their contribution gets support in various studies; hence, understanding what limits them to increase their penetration in exports markets is the required recipe for policies geared at enhancing their contribution.

Based on the World Bank Enterprise data for 2013 (World Bank, 2014), we found the following: first, in general among the sampled Tanzanian exporting SMEs, few had internationally recognized quality certificates, used technology licensed from a foreign owned company, spent on research and development in the previous three years, were part of a foreign firm, and were born global firms. These aspects are critical in entering exports markets, and if more firms possess them, the Tanzanian SMEs can increase their share in export markets. Increasing their penetration into export markets would benefit the whole economy in terms of higher export earnings and more jobs created for the Tanzanian youth. For the Tanzanian exporting SMEs, the fact that few of them possess these key characteristics indicates a limited ability to increase their penetration into exports markets, let alone increasing their share of in the global export markets.

Secondly, the study examined the constraints that the Tanzanian exporting SMEs face in their operations, which contribute to limiting their ability to increase their penetration into export markets. The top three constraints are access to finance, electricity outages and numerous taxes.²⁴ Finding ways to ameliorate them could enhance their presence in export markets. This led to the third matter: what was needed to enable SMEs to increase their penetration into export markets. Based on the top obstacles that firms in the sample indicated as constraining their operations, some policy implications emerge for dealing with these constraints.

First, access to finance is a critical factor that exporting firms rely on to invest in expanding their operations, R&D and in exploring export markets. Inability to access finance can thus prove to be a limiting constraint that can result in SMEs shying away from increasing their penetration in export markets. Research shows that arranging financing options for SMEs can have growth effects, and potentially contributes to growth in employment (Kumar, 2017). For the exporting firms, several studies point to a positive correlation between size of the firm and access to finance. Medium to larger firms easily accessed credit, while smaller firms face constraints in accessing credit. This finding point to the need to have policies that can target small exporting firms that need assistance in accessing credit to help them to grow and to eventually increase their penetration into export markets. Furthermore, studies have found that export firms that were already engaged

²⁴ These hurdles also affect non-exporting SMEs, but the analysis is limited to exporting SMEs.

in innovation and research on better products showed credit to have an impact on growth. A cautionary note therefore is that the policy to target firms must ensure that the firms have R&D strategies for expanding their share in export markets.

The second constraint relates to electricity outages, a problem that has greatly affected the Tanzanian industry (URT, Ministry of Industry and Trade, 2011). The problem of power outages speedy attention in order for industry to make the needed contribution to Tanzania's economic growth. A targeted way of ensuring that exporting SMEs get the required electricity is the establishment of industrial parks that would get preferential treatment in terms of infrastructure. The long-term benefits to the economy would be enormous, as higher exports would provide earnings that would improve other sectors of the economy through forward and backward linkages.

Lastly, heavy taxes may create some constraints on operations of SMEs, and hence limiting the SMEs' penetration in export markets. Although a report by the OECD (2005) indicated that as part of reforms to improve the business environment, the Tanzanian government was removing the nuisance taxes, these taxes were still an issue in 2013 when the Enterprise Survey was undertaken. This implies that the reforms did not go far enough. It is therefore important that the Ministry of Industry, Investment and Trade's Blue Print hastens its implementation of reviewing specific taxes that reduce the competitiveness of the exporting SMEs, thereby limiting them to increase their penetration into export markets. This would enable exporting SMEs to increase their contribution to overall growth of the economy and creation of employment.

REFERENCES

- Aaby, N. E. & Slater, S. F. (1989). Management influences on export performance: a review of the empirical literature 1978-1988. *International Marketing Review*, 6 (4), 7-26.
- Abonyi, G. (2015), Best Policy Practices for Internationalization of SMEs' Trade and Investment for ASEAN and East Asia. In Oum, S. P. Intarakumnerd, G. Abonyi and S. Kagami (eds.), Innovation, Technology Transfers, Finance, and Internationalization of SMEs' Trade and Investment, ERIA Research Project Report FY2013, No.14, (pp. 37-96). Jakarta.
- African Development Bank (AfDB). (2017). Industrialize Africa Strategies, Policies, Institutions, and Financing, Abidjan, Côte d'Ivoire: African Development Bank Group.
- Alaoui, A. & El Makrini, H. (2014). Small firms in a small country: International experience of managers and export performance. The 2014 WEI International Academic Conference Proceedings, Université Blaise Pascal/CRCGM/Clermont Ferrand/France.
- Ali F. D. (1987). Are exports an engine of growth? Another look at the evidence, *Applied Economics*, 19 (2), 277-283.
- Amadeo, K. (2019) Emerging Market Countries and Their Five Defining Characteristics. https://www.thebalance.com/what-are-emerging-markets-3305927; accessed March 2020.
- Amornkitvikai, Y., Harvie, C. & Charoenrat, T. (2012). Factors affecting the export participation and performance of Thai manufacturing small and medium sized Enterprises (SMEs). 57th International Council for Small Business World Conference. Wellington, New Zealand.
- Anand R., Mishra, S., & Spatafora, N. (2012). Structural Transformation and the Sophistication of Production. *IMF Working Paper WP/12/59*, Research Department.
- Antoldi F., Cerrato D., & Depperu D. (2013). SMEs export consortia and the development of intangible resources. Journal of Small Business and Enterprise Development, 20(3), 567-583.

- Aulakh, P. S., Rotate, M., & Teegen, H. (2000). Export strategies and performance of firms from emerging economies: Evidence from Brazil, Chile, and Mexico. Academy of Management Journal, 43(3), 342-361.
- Balassa, B. (1978). Exports and Economic Growth: Further Evidence. Journal of Development Economics, 5, 181-189.
- Balassa, B. (1985). Exports Policy Choices, and Economic Growth in Developing Countries after the 1973 Oil Shocks, Journal of Development Economics, 18, 23-35.
- Bangwayo-Skeete, P. F. & Moore, W. R. (2015). Entry into Export Markets and Quality Certifications: Evidence from Developing Countries. Applied Econometrics and International Development, 15(2), 17-34
- Bank of Tanzania. (2018). Economic Bulletin for the Quarter Ending December. Vol. L No. 4.
- Barasa, L., Kinyanjui, B., Knoben, J., Kimuyu, P., & Vermeulen, P. A. M. (2016). Export and Innovation in Sub-Saharan Africa. DFID Working Paper, Radboud University, Nijmegen.
- Bigsten, A. & Gebreeysus, M. (2009). Firm productivity and exports: evidence from Ethiopian manufacturing. Journal of Development Studies, 45(10), 1594–614.
- Bigsten, A., Collier, P., Dercon, S., Fafchamps, M., Gauthier, B., Gunning, J.W., Oduro, A., Oostendorp, R., Pattillo, C., Söderbom, M., Teal, F., & Zeufack, A. (2004). Do African Manufacturing Firms Learn from Exporting? The Journal of Development Studies, 40(3), 115-141, DOI: 10.1080/0022038042000213229.
- Blalock, G., & Gertler, P. J. (2004). Learning from exporting revisited in a less developed setting. Journal of Development Economics, 75(2), 397-416.
- Cernat, L., Norman-López, A., & Ana, D.T. (2014). SMEs are more important than you think! Challenges and opportunities for EU exporting SMEs. Trade, Issue 3, September.
- Chen, Y. (2017). Impacts of Managerial Characteristics on the Export Performance of Small and Medium-sized Firms: Review and Implications. In 3rd International Conference on Ecommerce and Contemporary Economic Development (ECED), ISBN: 978-1-60595-446-2.
- Cieślik, A. & Michałek . J. (2018). Firm-level determinants of direct and indirect exports: empirical evidence for C.E.E. and M.E.N.A. countries, Economic Research-Ekonomska Istraživanja, 31(1), 982-996.
- Clerides, S. K., Lach, S., & Tybout, J. R. (1998). Is learning by exporting important? Microdynamic evidence from Colombia, Mexico, and Morocco. The Quarterly Journal of Economics, 113(3), 903-947.
- Di Maria, E. & Ganau, R., (2014), "Driving a firm's export propensity and export intensity: the role of experience, innovation, and international marketing strategy", "Marco Fanno" Working Papers No. 175 Department of Economics and Management, University of Padova Eleonora, Paper presented at the 39th EIBA conference "Transnational firms, markets and institutions" 12th-14th December, 2013 Bremen.
- Fernandes., A. & Isgut, A. (2005), "Learning-by-doing, learning-by-exporting, and productivity: evidence from Colombia", Policy Research Working Paper Series, No. 3544, The World Bank.
- Fidrmuc, J. & Fidrmuc, J. (2016), Foreign languages and trade: evidence from a natural experiment, Empirical Economics, 50(1), 31-49.
- Goedhuys, M. & Sleuwaegen, L. (2013). The Impact of International Standards Certification on the Performance of Firms in Less Developed Countries. World Development, 47, 87–101.

- Goedhuys, M. & Sleuwaegen, L. (2016). International standards certification, institutional voids and exports from developing country firms, International Business Review. 25(61), 1344-1355.
- Hesse, H. (2008). Export Diversification and Economic Growth. Commission on Growth and Development Working Paper; No. 21. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/28040
- International Trade Centre (ITC) (2017), https://www.trademap.org/Index.aspx; accessed: August 2017.
- International Trade Centre (ITC) (2019), https://www.trademap.org/Index.aspx; accessed: December 2019.
- Jantunen, A., Nummela, N., Puumalainen, K., & Saarenketo, S. (2008). Strategic orientations of born globals—Do they really matter? Journal of World Business, 4(2), 158-170.
- Kaplinsky, R. & Morris M. (2009). The Asian Drivers and SSA: Is There a Future for Export-Oriented African Industrialisation? The World Economy, 32(11), 1638-1655.
- Kaplinsky, R. & Morris, M. (2019). Trade and Industrialisation in Africa: SMEs, Manufacturing and Cluster Dynamics. Journal of African Trade, 6(1-2), 47–59
- Kotler, P., Jatusripitak, S., & Maesincee, S. (1997). The Marketing of Nations: A Strategic Approach to Building National Wealth. New York: Free Press.
- Kotorri, M. & Krasniqi B. A. (2018). Managerial Characteristics and Export Performance Empirical Evidence from Kosovo. South East European Journal of Economics and Business, 13(2), 32-48.
- Kuivalainen, O., Sundqvist, S., & Servais, P. (2007). Firms' degree of born-globalness, international entrepreneurial orientation and export performance. Journal of World Business, 42(3), 253-267.
- Kumar, R. (2017). Targeted Financing for SME's and Employment Effects: What Do We Know and What Could de Done Differently? Jobs Working Paper Issue No. 3, World Bank Group, Washington DC.
- Latin American and Caribbean Economic System (SELA). (2015). Export Consortiums: A strategic instrument for SMEs international insertion. Regional Meeting on Export Consortiums Mexico City, Mexico, SP/RRCE/ DT No. 2-15.
- Love J. H., Roper, S. & Zhou Y. (2016). Experience, age and exporting performance in UK SMEs. International Business Review, 25, 806–819.
- Marques, H. (2015). Does the Gender of Top Managers and Owners Matter for Firm Exports? Feminist Economics, 21(4), 89-117.
- Martins, P. S., & Yang, Y. (2009). The impact of exporting on firm productivity: a meta-analysis of the learning-by exporting hypothesis. Review of World Economics, 145(3), 431-445. https://doi.org/10.1007/s10290-009-0021-6.
- McDougall, P. P., & Oviatt, B. M. (1996). New venture internationalization, strategic change, and performance: A follow-up study. Journal of business venturing, 11(1), 23-40.
- Md Reza, S., Hongzhong, F., Mohamued, E. A., Ismai, I H. Md & Islam, M. A. (2019). Effects of export and technology on economic growth: Selected emerging Asian economies. Economic Research-Ekonomska Istraživanja, 32(1), 2515-2531.
- Muranda, Z. (2004). Relationships Between Firm Characteristics and Export Constraints in SME Exporters. Zambezia, XXX(i), 89-107.

- Ndulu, B. J. (2007). Challenges of African Growth: Opportunities, Constraints, and Strategic Directions. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/6656
- Ndulu, B., L. Kritzinger-Van, N. & Reinikka R. (2005). Infrastructure, Regional Integration and Growth in Sub-Saharan Africa. In Africa in the World Economy: The National, Regional and International Challenges, Fondad, The Hague, December 2005, www.fondad.org.
- Olafsen, E. & Cook, P. (2016). Growth Entrepreneurship in Developing Countries: A Preliminary Literature Review (English). InfoDev. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/587331562049723102/Growth-Entrepreneurship-in-Developing-Countries-A-Preliminary-Literature-Review.
- Omar, M. S. (2008). Financial Constraints and Structural Characteristics of Small and Medium Sized Enterprises (SMEs): The Case of Tanzania. Corporate Finance Master Thesis submitted to the School of Economics and Management, Lund University, Sweden.
- Organization for Economic Cooperation and Development (OECD). (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy. Meeting of the OECD Council at Ministerial Level, Paris, 7-8 June
- Organization for Economic Cooperation and Development (OECD). (2010). Removing Barriers to SME Access to International Markets. Paper prepared for a conference organised jointly by OECD and APEC, 30th Small and Medium Enterprises Working Group Meeting Hong Kong, China.
- Organization for Economic Cooperation and Development (OECD). (2005). Tanzania: Africa Economic Outlook, 2004/2005.
- Orser, B., Spence, M., Riding, A., & Carrington, C. A. (2010). Gender and Export Propensity, Entrepreneurship Theory and Practice, 34(5), 933-958.
- Osano, H. M. (2019). Global expansion of SMEs: role of global market strategy for Kenyan SMEs. Journal of Innovation and Entrepreneurship, 8(13), 1-31.
- Øystein, M. & Servais P. (2002). Born Global or Gradual Global? Examining the Export Behavior of Small and Medium-Sized Enterprises. Journal of International Marketing, 10(3), 49-72.
- Ram, R. (1987). Exports and Economic Growth in Developing Countries: Evidence from Time-Series and Cross-Section Data. Economic Development and Cultural Change, 36(1), 51-72.
- Rehman, N. U. (2017). Self-selection and learning-by-exporting hypotheses: micro-level evidence. Eurasian Economic Review, 7(1), 133-160.
- Rhee, Y. W., Ross-Larson, B., Pursell, G., & Edge, K. S. C. (1984). Managing the Entry into World Markets. Baltimore: The Johns Hopkins University Press.
- Rosson, P. J., & Ford, I. D. (1982). Manufacturer-overseas distributor relations and export performance. Journal of International Business Studies, 13(2), 57-72.
- Sala, D. & Yalcin, E., (2012). Export Experience of Managers and the Internationalization of Firms. Discussion Papers on Business and Economics No. 18/2012. Department of Business and Economics Faculty of Social Sciences, University of Southern Denmark.
- Salomon, R. M., & Shaver, J. M. (2005). Learning by exporting: new insights from examining firm innovation. Journal of Economics & Management Strategy, 14(2), 431-460.
- Schmidt, A. & Hansen M.W. (2017). A Survey of 210 Food Processing Firms from Tanzania, Kenya and Zambia. Special CBDS Working Paper Series, Working Paper No. 1.
- Siba, E. & Gebreeyesus, M. (2017). Learning to export and learning from exporting: The case of Ethiopian manufacturing. Journal of African Economies, 26(1), 1–23.

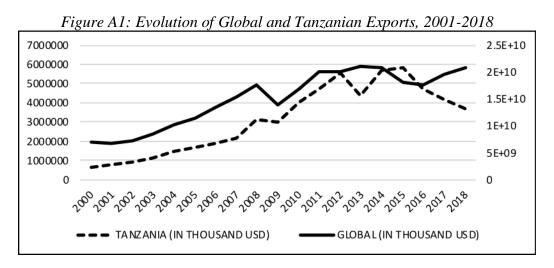
- Sraders, A. (2018). What are Emerging Markets? Characteristics and List. The Street, https://www.thestreet.com/markets/emerging-markets/what-are-emerging-markets-14819803; accessed March 2020.
- Svejnar, J. (2002). Transition Economies: Performance and Challenges. *Journal of Economic Perspectives*, 16(1), 3-28.
- Tanev, S. (2012). Global from the Start: The Characteristics of Born-Global Firms in the Technology Sector. *Technology Innovation Management Review*, March, 5-8.
- Thorbecke, W. & Hao-Kai P. (2015). The sophistication of East Asian exports, *Journal of the Asia Pacific Economy*, 20(4), 658-678, DOI: 10.1080/13547860.2015.1045328.
- Toshihiro, O., Wagner A., & Kazuo Y. (2017). Does Foreign Ownership Explain Company Export and Innovation Decisions? Evidence from Japan. RIETI Discussion Paper Series 17-E-099.
- United Nations Conference on Trade and Development (UNCTAD). (2018). Exports Diversification and Employment in Africa. Geneva: UNCTAD.
- United Nations Conference on Trade and Development^[1]_{SEP} (UNCTAD). (2010). Best Practices in Investment for Development: Case Studies in FDI: How to Integrate FDI in the Skills Development Process: Lessons from Canada and Singapore. Geneva: UNCTAD.
- United Nations Conference on Trade and Development (UNCTAD). (2015). Key Statistics and Trends in International Trade 2014. Geneva: UNCTAD.
- United Nations Industrial Development Organization (UNIDO). (2019). Industrial park development in Ethiopia Case study report. Department of Policy, Research and Statistics. Inclusive and Sustainable Industrial Development Working Paper Series, WP 21/2018.
- United Republic of Tanzania (URT). Ministry of Industry and Trade. (2011). Integrated Industrial Development Strategy 2025. Dar es Salaam.
- United Republic of Tanzania (URT). Ministry of Industry and Trade. (2002). Small and Medium Enterprise Development Policy 2003. Dar es Salaam.
- United Republic of Tanzania (URT). Ministry of Industry, Trade and Investment. (2018). Blueprint For Regulatory Reforms To Improve The Business Environment, Dodoma.
- United Republic of Tanzania (URT). Planning Commission. (1999). The Tanzania Development Vision 2025. Dar es Salaam.
- Vercueil J. (2016). Emerging Economies. Genealogy, Evolutions and Vulnerabilities. http://www.osservatorio-economie-emergenti-torino.it/news/125-economie-emergentiemerging- economies-04.html; accessed March 2020.
- Wach, K. (2014). Familiness and Born Globals: Rapid Internationalisation among Polish Family Firms. Journal of Intercultural Management, 6(3), 177–186.
- Wagner, J. (2012). Exports, R&D and Productivity: A test of the Bustos-model with German enterprise data. Economics Bulletin, 32(3), 1942-1948.
- Wagner, J., (2015) A Note on Firm Age and the Margins of Exports: First Evidence from Germany, *The International Trade Journal*, 29:2, 93-102.
- Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries? An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, 16 (3), 167-176.
- Welch, C., Welch, D., & Hewerdine, L. (2008). Gender and Export Behaviour: Evidence from Women-Owned Enterprises. *Journal of Business Ethics*, 83(1), 113-126.
- Wignaraja, G. (2008). Foreign Direct Investment, Innovation, and Exports: Firm-Level Evidence from People's Republic of China, Thailand, and Philippines. ADB Economics Working Paper Series No. 134, November.

- World Bank. (1997). World Development Report: The State in a Changing World. New York: Oxford University Press.
- World Bank. (2014a). Tanzania Enterprise Survey (ES) 2013. Ref. TZA_2013_ES_v01_M. Dataset downloaded from: http://www.enterprisesurveys.org; on June 22, 2017.

World Bank. (2014b). Tanzania 2013 Implementation Report. Washington DC.

- World Bank. (2020). Commodity Price Data (The Pink Sheet). https://www.worldbank.org/en/research/commodity-markets; accessed on May 13, 2020.
- World Bank. (2020). World Integrated Trade Solution (WITS). https://wits.worldbank.org/CountryProfile/en/Compare/country/TZA/indicator/XPRT-TRD-VL/partner/WLD/product/Total/region/WLD/show/data#; accessed on May 13, 2020.
- Zeng, D. Z. (2016). Special economic zones: Lessons from the global experience. PEDL Synthesis Paper Series.

APPENDIX



Source: World Bank (2020). World Integrated Trade Solution (WITS).

Table A1: Full Names of the Product Codes

	Natural or cultured pearls, precious or semi-precious stones, precious
'71	metals, metals clad
'26	Ores, slag and ash
'07	Edible vegetables and certain roots and tubers
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television
'15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal
'24	Tobacco and manufactured tobacco substitutes
'08	Edible fruit and nuts; peel of citrus fruit or melons
'03	Fish and crustaceans, molluscs and other aquatic invertebrates
'09	Coffee, tea, maté and spices
'12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal
'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral

'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags
'52	Cotton
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof

Source: Authors' calculation from ITC data, ITC (2017).

	Exporters		Non-Exporters		Total	
	#	%	#	%	#	%
Manufacturing	106	51.2	292	52.6	360	52.6
Retail	29	14.0	89	16.0	105	15.3
Other Services	72	34.8	174	31.4	220	32.1
Total	207	100.0	555	100.0	685	100

Table A2: Distribution of Exporting SMEs by Sector

Source: Authors' calculation from Enterprise Survey Data, World Bank (2014).

Table A3: Characteristics of SMEs

Variable	Exporte	Exporters		Non-Exporters		
Age (in years)						
	Number	%	Number	%		
<=5	33	15.9	60	10.8		
6-10	57	27.5	161	29.0		
11-15	34	16.4	140	25.2		
16-20	28	13.5	79	14.2		
>20	55	26.6	115	20.7		
TOTAL	207		555			
Annual sales (TZS million)						
	Number	%	Number	%		

			-		
<1	0	0	4	0.7	
1-5	10	4.8	28	5.1	
6-10	10	4.8	46	8.3	
>10	187	90.3	477	86.0	
TOTAL	207	100.0	555	100.0	
Employees	1		I		
	Number	%	Number	%	
<=5	36	17.4	121	21.8	
6-20	78	37.7	283	51	
21-100	42	20.3	100	18	
>100	51	24.6	51	9.2	
TOTAL	207	100	555	100	
Capacity Utilization	n (%)				
<=25	3	1.5	7	1.3	
26-50	2	0.9	13	2.3	
51-75	3	1.5	30	5.4	
>75	199	96.1	505	91.0	
TOTAL	207	100.0	555	100.0	
Gender of top manager					
Female	34	16.7	72	13.0	
Male	169	83.3	481	87.0	
TOTAL	203	100.0	553	100.0	
			1		

Source: Authors' computation from World Bank (2014), Enterprise Survey Data.

	Number	%			
Firms that experienced power outages in the last financial year ^a					
	166	83			
How long outages last (in hours)					
<1	0	0			
1-5	49	23.7			
6-10	35	16.9			
>10	123	59.4			
TOTAL	207	100.0			
Loss due to power outages as percentage of annual sales					
<10	27	13.0			
11-20	2	1.0			
>20	178	86.0			
TOTAL	207	100.0			

Table A4: Electricity Outages and their Effects on Exporting SMEs'

Source: Authors' calculation from Enterprise Survey Data, World Bank (2014).