

CHAPTER EIGHT: CONCLUSIONS AND POLICY RECOMMENDATIONS

8.1 Introduction

The main objective of this thesis chapter is to provide overall study conclusions as well as policy recommendations based on the findings discussed in the preceding chapters. In particular, Section 8.2 will summarize the main conclusions from the major study findings, with Section 8.3 providing some policy recommendations. Section 8.4 will present the limitations of this thesis study while Section 8.5 will offer suggestions for further research in the same or related fields.

8.2 Overall conclusions

The main objectives of this thesis study were to analyze Botswana's exports from the diamond, textile, and meat and meat products sectors for the period 1999 to 2006. The objectives were three-fold. Firstly, the study examined the extent to which either intra-industry trade (IIT) or inter-industry trade (INT) dominate Botswana's sectoral exports. Secondly, the research investigated the determinants of the country's sectoral exports, with the third objective being the identification of destination markets with unrealized potential for the country's three sectoral exports. Two statistical methodologies were employed, the Grubel-Lloyd (G-L) index and panel data econometrics. The former technique was used to investigate the extent to which the sectoral exports were either IIT or INT driven (Chapter 5), while the latter methodology was employed to analyze the determinants of sectoral exports and also for identifying destination markets with untapped export potential (Chapters 6 and 7, respectively).

8.2.1 Conclusions from the IIT and INT analysis

The study employed the IIT-adjusted Grubel and Lloyd's (1975) index to investigate exports from Botswana's three sectors, namely, diamond, textile, and meat and meat

products for the period 1999 to 2006. Simulated results for the meat and meat products, and textile sectors show that export trade for these two sectors between Botswana and its major trading partners were INT driven for the period under study. This emanates from the relative abundance of meat and textile resources in Botswana compared to its trading partners.

On the other hand, Botswana's diamond trade with its major trading partners is found to be IIT driven, as evidenced by the simultaneous exports and imports of diamonds by Botswana to and from its trading partners. A further decomposition of IIT into either horizontal IIT (HIIT) or vertical IIT (VIIT) is also done. The simulated results show that HIIT, as opposed to VIIT, dominated Botswana's IIT for the period reviewed.

The study of both INT and IIT is important in that it provides a better platform for formulating policies which deal with trade adjustments caused by increased trade liberalization, especially given envisioned increase in trade between Botswana and a number of its trading partners following the country's participation in the SADC FTA, EPA FTA with the EU and at the multilateral WTO level. Overall, IIT is viewed as good given that simultaneous increases in exports and imports is likely to result in marginal, if any, shift of resources between sectors, while INT is considered as undesirable since it results in massive costs to the country and the sectors affected. That is, in the case of textile, and meat and meat products sectors, which are INT driven, increased imports of competing or similar goods will hurt these sectors, and may result in the closure of some companies in these sectors. This will result in the loss of employment and re-allocation of capital to other surviving sectors.

8.2.2 Conclusions from the analysis of determinants of exports

The chapter investigated the determinants of sectoral exports from Botswana for the period 1999 to 2006 and these estimations were done for the country's diamond, textile, and meat and meat products sectors. The following are the conclusions that emanated from the empirical evidence obtained on these three sectors.

- i. In all the three sectoral results, the respective sectoral GDPs for Botswana and the importing countries were positive and statistically significant determinants of Botswana's sectoral exports. This implies that growth in the GDP or economic activities in mining, manufacturing and agriculture enhanced Botswana's diamond, textiles, and meat and meat products, respectively.
- ii. With the exception of diamond exports, results from the sectoral gravity estimations indicate that distance retarded exports and this is expected from theory. The negative correlation implies that, as distance increase from Botswana to any trade partner, the country's export trade from both textiles and meat and meat products sectors declined.
- iii. Regional trade arrangements contributed positively to the country's exports in all the three sectors for the period under review. For instance, in the case of textiles, AGOA trade preferences in the form of duty-free-quota-free (DFQF) resulted in Botswana's textiles entering the USA market free since 2000 than was the case before the arrangement was initiated. This has increased exports of textiles.
- iv. The statistically significant positive signs on the IIT trade variable in the diamond gravity equation and INT variables in both textiles, and meat and meat products indicate that the product differential in the diamond sector; and factor endowments in the other two sectors promote sectoral exports.
- v. The relationship between exchange rate on one hand, and exports from the sectors on the other hand was found to be positive and statistically significant. This implies that currency devaluation leads to increase in exports across these three sectors.

8.2.3 Conclusions from unrealized export potential

This chapter presented the countries in which Botswana has unrealized trade potential in diamond, textile, and meat and meat products export sectors. The reported results

indicate that Israel and Switzerland are export destinations for which there is still untapped export potential for Botswana's diamond, and as such, the country should increase its diamond export to these countries. Countries such as Canada, Denmark, Ghana, Mozambique among others have unrealized export markets for textile products from Botswana, while Italy, Mauritius, Namibia and Norway are the export destination in which Botswana should increase its export of meat and meat products as these countries have untapped market potential for meat and meat products.

8.2.3.1 Possible causes of unrealized export trade potential

The existence of unrealized trade potential with a number of trade partners signifies that there might be some trade barriers still inhibiting export trade to some of these trade partners. The following are some of the possible trade barriers that Botswana's sectoral exports face in a number of countries.

i. Stringent rules of origin (RoO)

Although tariffs applied by most of Botswana's export partners have generally declined over the years, stringent rules of origin (RoO) continue to present challenges to the country's exports. For instance, in the case of textiles, whilst the USA's AGOA allows even for global cummulation under the "Special Rule" (Allen *et al.*, 2007); the EU only allows regional (SADC) and diagonal cummulation, thereby limiting the ability of Botswana's manufacturers to source textile inputs from potentially cheaper countries. Thus, these RoO have limited Botswana's exports to the EU, especially those from the textiles sector, resulting in the actual exports being less than the predicted or simulated exports.

ii. Non-tariff barriers (NTBs)

Most countries, especially from the developed world have over the years developed sophisticated NBTs which are arbitrary, difficult and costly to meet

especially for developing exporting countries. In the case of the EU, application of Sanitary and Phyto-sanitary Standards (SPS) measures whose main objectives are to safeguard damages to health, animal and plant life has become disguised trade barriers. SPS standards have affected agricultural exports including meat products not only of Botswana but also for most ACP countries. EU SPS measures requires that for any exporter to export to EU member states, he or she must be certified and for one to be certified he or she must meet some 'standards' set by EU bodies. In the case of meat products, SPS requires that the abattoirs must be certified; the animals to be slaughtered, e.g. cattle, should be traced to their origin, i.e. from which farm, area or region within any country they originated from. Meeting these requirements is costly and cumbersome and this has resulted in less meat products being exported to some developed trade partners, especially the EU.

iii. Animal diseases

FAO (2005) reports that Botswana's meat and meat export products have been limited due to a plethora of diseases, chief among them being the foot and mouth³⁰. With outbreak of the foot and mouth, all meat exports are abruptly brought to a halt until the health officials are fully satisfied that the disease has come under control or been eradicated. Owing to the lengthy procedure involved in arriving at the conclusion that the diseases has been brought under control, the country ended up exporting less than its potential meat products in the years where such disease has occurred.

iv. Unrecorded informal trade

Another possible cause of unrealized export trade potential is the fact that informal trade exports figures were not recorded. A case in point, as an

³⁰ Other listed diseases are (i) African swine fever, (ii) Avian Influenza, (iii) Bluetongue, (iv) Bovine spongiform encephalopathy (BSE), (v) Contagious bovine pleuropneumonia (CBPP), (vi) lumpy skin disease (vii) Newcastle diseases, (viii) Rinderpest, (ix) sheep and goat pox and (x) Rift valley fever

illustration, is the fact that more than 80% of Zimbabweans have been importing their groceries from their neighbouring countries including Botswana (South Africa, Zambia and Mozambique) for nearly a decade. Given that these imports were mostly done in small amounts or informally, i.e. groceries of around US\$150 per month per individual, both Botswana customs and Zimbabwean customs were not officially recording these ‘small figures’. However, if these small figures are aggregated, they run into millions of US dollars. Thus, the existence of untapped trade potential may be as a result of the fact that informal trade figures were not recorded, resulting in the actual recorded trade figures being less than the predicted potential figures.

v. Inadequate international marketing

Effective trade, especially with international consumers is underpinned by rigorous marketing of the products on offer. Botswana’s National Export Strategy (NES) (Republic of Botswana, 2008) alludes to the fact that the country’s exports have not been vigorously marketed at international fora. Whilst it may be difficult to single out the effect of marketing on a country’s exports, the fact remains that marketing contributes positively towards exports, especially given the continued growth in competition from other countries in most products offered on the international market by Botswana.

vi. Relatively low quality

Salm *et al.* (2004) points out the fact that relatively low quality, especially in the textiles sector has contributed towards reduced exports of Botswana’s products from this sector. In particular, the study noted that although the rules of origin (RoO) for yarn under the AGOA have been enhanced, the sector has not adequately taken advantage of that gesture by ensuring that it procures the better quality fabric required by regional garment manufacturers producing for the USA market. As a result, relatively low quality fabric has been used in

manufacturing resulting in relative low quality garments which faced fierce competition on the international market on quality terms.

8.3 Policy recommendations

The findings of this research suggest that Botswana policy makers should consider the following respective policies.

8.3.1 Policy recommendations from IIT and INT analysis

As pointed out in Section 4.5, Botswana's engagements in trade liberalization will result in changes in trade, i.e. increase and/or decrease in exports, and increase and/or decrease imports. These changes in exports and imports will involve shifts in resources between sectors. Given that two of the three sectors analyzed, i.e. textile, and meat and meat products, are INT driven, any increase in imports of competing or similar goods especially from the developed countries will hurt these sectors, and may result in closure of some companies in these sectors. This possible sectoral negative impact stems from the fact that imports from developed countries will be of high quality, due to these countries having advanced and better production technologies, as well as being relatively cheaper, given that producers from developed countries have economies of scale, do mass production and for agricultural production, they are given both production and export subsidies by their governments. The increase in imports will thus result in loss of employment, due to structural changes brought about by increased competition emanating from trade liberalization, and re-allocation of capital to other surviving sectors. For labour, it may mean that those formally employed in the closing sectors will have to find jobs in other industries where their experiences may not match the job requirements and this may involve re-training, normally at a cost. At the same time, relocated capital, especially specialized machinery and equipment may end up being redundant.

Since some of these trade liberalization arrangements in which Botswana has (is) engaged itself are still to be implemented, e.g., the EPA with EU and WTO

liberalization arrangements, the country needs to formulate and implement policies to deal with these possible negative impacts of trade liberalization on the meat and meat products, and textile sectors. Possible defensive strategies would be product differentiation within the same sectors with more emphasis on value addition production. For instance, rather than concentrating on production and exportation of raw meat, the country can improve and value-add meat production in the form of caned meat. The same applies to the textiles, value addition can entail shift into production of shirts, t-shirts, jeans, as opposed to production and exportation of rolls of cloth or un-knitted garments.

Lack of proper structure and implementation of diversification and value-addition strategies may mean that, once imports increase due to trade liberalization, the INT driven sectors, i.e., the meat and meat products and textiles sectors, will experience structural unemployment and possible capital redundancy.

8.3.2 Policy recommendations from gravity trade models

The findings from gravity trade model estimations suggest the following policy recommendations for consideration by Botswana policy makers.

- i. Given that higher GDPs for importing partners promote Botswana's export trade, the country needs to continue its engagement especially with those partners with higher GDPs. This can be easily achieved if the country remains committed in such trade arrangements as the envisioned Economic Partnership Agreement (EPA) with the EU, and the AGOA trade arrangements with the USA. Continued engagement with high income countries can also be enhanced if the country implements the various agreed trade liberalizations promulgated by the WTO so that it can get reciprocal treatment and trade preferences from some of the high income and developed WTO members
- ii. The fact that distance retards exports especially in textiles, and meat and meat products means that the country should increase its trade as much as possible

with proximity countries. Botswana, besides being a full member of an already advanced and highly integrated Southern African Customs Union (SACU), should also move together with other member states of the Southern African Development Community (SADC) in their endeavour to move from the current Free Trade Area (FTA) to higher stages of regional integration such as Customs Union (CU), Common Market (CM), Monetary Union (MU) and Economic Union (EU). These higher stages of integration, especially with geographically close countries will also mean enlarged markets for Botswana's exports, among other benefits.

- iii. To continue increasing its exports, the country needs to remain in its current trade arrangements, ranging from bilateral, regional (for instance with SACU and SADC), inter-regional (with EU) and multilateral (at WTO level). The country can also consider entering into new preferential trade arrangements not only with the current rich countries, but also with emerging and fast growing economies such as China, India and Brazil, among others, as they provide huge future potential in terms of markets for Botswana's exports.

8.3.3 Policy recommendations to utilize unrealized trade potentials

The ultimate objective of investigating whether a country has unrealized export potential with its trading partners is to help the country to initiate relevant trade and promotional policies, among others, so as to try and export more to those destination countries with untapped markets. This section therefore presents some of the policy options that Botswana can consider so as to try and expand its sectoral exports to relevant export destination partners which have unexhausted markets for the country's sectoral exports. In the presence of existing export potential, the following are some of the policy recommendations:

1. Analyze export barriers

Botswana policy analysts need to do an investigation of the factors that hinder the country's sectoral export to countries with untapped export potential. Such

an investigation will help to identify hindrances to the export of sectoral products to these countries. With that information policy makers will be in a better position to design relevant policies to capitalize on those unrealized export markets and export more.

2. *Increase export promotion activities*

Effective trade, especially with international consumers is underpinned by rigorous marketing of the products on offer. Botswana's National Export Strategy (NES) (Republic of Botswana, 2008) alludes to the fact that the country's exports have not been vigorously marketed at international fora. The country should therefore increase trade promotional activities of its foreign services and consulates, especially in countries where there is untapped export potential. These consulate offices abroad can provide more information on how one can import from Botswana as well as what products can be imported. If possible, the country can put new consulate offices in a trade partner country where there were no such services before. Setting up of new consulate services which also provides trade information, among other services, may encourage imports from Botswana. According to Rose (2005), *ceteris paribus*, "each additional consulate placed abroad is associated with a rise of bilateral exports of between 6% and 10%".

3. *Negotiate for better trade preferences*

Given that the Botswana is still in the process of negotiating a number of free trade arrangements, for instance with EU countries and also with WTO member countries, the country can try to ensure that it gets the most in terms of liberal trade preferences and better market access for its sectoral exports especially with countries from these two groups with which it has untapped sectoral trade potential.

4. *Seek technical assistance to meet NTBs*

The country needs to work closely and in collaboration with its developed trade partners, especially in the EU, with the aim of getting technical assistance in meeting some of the SPS and RoO requirements. Meeting and satisfaction of these measures will positively enhance the country's sectoral exports to its EU trade partners, hence exhausting any currently existing untapped potential within these markets.

5. *Enhance diseases monitoring mechanisms*

The success of Botswana's meat and meat products, among other agricultural products, is underpinned by the country's ability to eradicate perennial diseases such as the foot and mouth. Whilst the country is highly endowed with a larger head of cattle, failure to control diseases means the country will not be able to maximize its exports from this sector. Thus, the country should consider enhancing disease monitoring mechanisms to ensure that should there be an outbreak of any animal disease; the country will be able to swiftly put it under control or totally eradicate it.

6. *Improve product quality*

It is important to note that importers, and hence consumers, do not simply consider price when importing any product, but also consider other issues, among them being the quality of the product. Most importers, especially from the developed world are particular on the quality of the products they purchase and they generally prefer products of high quality. Thus, Botswana's manufacturers can enhance the possibility of increasing its sectoral exports, especially those from the textiles sector if they use high quality yarn and fabric in their manufacturing processes.

8.4 Limitations of the study

Although the main objectives of the research thesis were achieved, the following limitation can however be noted. The use of the gravity model in predicting and analyzing potential export destinations is premised on the assumption that there will be no structural break in the future. It follows that should a structural break occur, for instance in the form of new innovations which results in other countries becoming cheaper competitors to the country's exports, discoveries of say large diamond reserves in another country, an import ban on products from Botswana, by importing countries, and establishment of import substitution industries in particular export destination countries will render the use of gravity model's ability to predict export destination potential off the trajectory. In such cases, simulated export potential destinations from the gravity model will be misleading.

8.5 Suggestions for future research

Future research on this topic could focus on the following outstanding issues.

- Options to reduce the negative costs associated with resource shifts emanating from increased trade especially in the INT driven sectors of textile, and meat and meat products should be considered. This dimension is important given the possibility of unemployment and redundancy of capital.
- Detailed destination-specific export promotion and strategies to increase sectoral exports to various countries. Rather than having a "one-size-fit-all" export promotion and strategy, there is need to have these promotions and strategies tailor-made to respective destination country markets.
- A critical analysis of the possible factors at destination-country level which might be hindering sectoral exports from Botswana. Instead of assuming import tariffs levied on sectoral products from Botswana into various major export markets as the main export trade barrier, there is need to explore the



exact hindrances existing in each major export destination country for these three sectoral exports.