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A Case Study of the Performance of Export Processing Zones Garment Firms in Mauritius and Kenya in the Dawn of Agoa Phase IV

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A CASE STUDY OF THE PERFORMANCE OF EXPORT PROCESSING ZONES
GARMENT FIRMS IN MAURITIUS AND KENYA IN THE DAWN OF AGOA
PHASE IV

BY
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ABSTRACT

The African Growth and Opportunity Act (AGOA) was enacted on May 18, 2000. The purpose of AGOA was to bring about fair and equitable trade between the U.S. and Sub-Saharan African (SSA) countries through duty-free access to the U.S. market for various textile and apparel products. Kenya and Mauritius are two Sub-Saharan African countries that participate in AGOA and have experienced export growth in clothing and textiles under the EPZ program.

However, the usefulness of Export Processing Zones (EPZ) within a country has been a long debated subject. Critics argue that the costs of setting them up greatly outweigh the benefits. While Mauritius successfully implemented the EPZ program in the 1970’s and managed to maintain its position as a strong global clothing and textiles trade contender, Kenya has not been as successful. Although Kenya has experienced improved clothing and textile export performance since the inception of the EPZ program in the 1990’s, the country has not managed to secure its share of the global clothing and textile trade market.

The purpose of this research was to investigate whether the presence of Export Processing Zones in Kenya and Mauritius has been beneficial to each country’s industrial development, using AGOA as a catalyst. Results of this study presented as a case study indicate that while the presence of export processing zones was beneficial to industrial development for both countries, more needs to be done to maximize the benefits for Kenya in the advent of AGOA IV.
CHAPTER 1
INTRODUCTION

This section shall discuss the rationale for this study, the African Growth and Opportunity Act, Export Processing Zones, an overview of Kenya and Mauritius, the purpose of doing the study, objectives, limitations, assumptions, terms and definitions. The research question is also included in this section.

Rationale

The importance of Export Processing Zones within a country is debatable. Research reveals that EPZs present more costs than benefits to their host country. This is because EPZs are expensive to establish and the return on investment is relatively low (Jauch, 2002). While the presence of EPZs does create employment, there is very little job security and, in general, the skills learned are low-tech (Madani, 1999). Net exports are not as remarkable due to the high import content of products exported. Additionally, host countries incur forgone taxes and tariff revenues because the opportunity cost of public investment related to the zones might be high (Madani, 1999).

Kenya and Mauritius are two Sub-Saharan African countries that have experienced export growth in clothing and textiles under the EPZ program. Mauritius successfully implemented the EPZ program in the 1970’s and managed to maintain its position as a strong global clothing and textiles trade contender. Kenya has not been as successful. While the country has experienced improved clothing and textile export performance since the inception of the EPZ program in the 1990’s, the country has not managed to secure its share of the global clothing and textile trade market.

The purpose of this research was to investigate whether the presence of Export Processing Zones in Kenya and Mauritius has been beneficial to each country’s industrial development. The information provided by this case study may help the Kenyan government plan for AGOA IV.

**African Growth and Opportunity Act (AGOA)**

On May 18, 2000, the African Growth and Opportunity Act (AGOA) was passed into law in the United States. The purpose of AGOA was to bring about fair and equitable trade between the U.S. and Sub-Saharan African (SSA) countries by offering duty-free access to the U.S.
market for various textile and apparel products (Kim, Traore, & Warfield, 2006.) It was implemented in order to provide additional security for investors and traders in African countries by extending general-system-of-preferences (GSP) benefits for AGOA beneficiaries (USTR, 2007). General GSP includes only 4,600 items, the AGOA GSP includes over 6,400 items. These GSP provisions have been extended to Kenya and other eligible countries until September 30, 2015 (AGOA, 2007).

AGOA was intended to provide incentives for Sub-Saharan African countries to
(a) achieve political and economic reform and growth
(b) institutionalize a process for strengthening U.S. trade relations with the Sub-Saharan African countries
(c) establish the U.S. Sub Saharan African Trade and Economic forum to facilitate regular ministerial-level trade and investment policy discussions, and
(d) promote the use of technical assistance to strengthen economic reforms and development, including assistance to strengthen relations between U.S. firms and Sub-Saharan Africa (USTR, 2007).

September 2007 heralded the fourth phase of AGOA, or AGOA IV, mandating that African countries must make use of locally manufactured raw materials or source from other developing nations by September 2012, in order to continue to enjoy the duty-free manufacture and export of garments to the U.S. market.

In order to satisfy this market entry criterion, the Mauritian textile and clothing industry became vertically integrated (Mauritius Board of Investment, 2006). Vertical integration refers to the ability of a firm to engage in different aspects of production from producing the raw materials, manufacturing, transporting, marketing and retailing. The benefits of vertical integration include faster fabric delivery, lower raw material transport costs and increased rural incomes from cotton farming (Waithaka, 2007). Mauritius already has a flagship spinning mill which has set up state-of-the-art infrastructure in the country. Additionally, there are opportunities for spinners to set up mills for the production of both cotton and blended yarn and organic yarn (Mauritius Board of Investment, 2006). Thus, the effects of the implementation of the fourth phase of AGOA on the country could be negligible.

Unlike Mauritius, Kenya not only does not have a local fabric supply and is extremely reliant on imported fabrics, but is also more likely to be adversely affected by the AGOA IV
stipulations than Mauritius. This is because there is no guarantee that the major garment manufacturers who have already invested in Kenya will find reason to continue to do so if they are not assured of local fabric supply for production (KAM, 2006).

An Overview of Mauritius and Kenya

In 2006, textile and apparel products exported to the U.S from Sub-Saharan Africa accounted for US$1.3 billion (USTR, 2007).

The Mauritian textile and clothing sector is considered a vital pillar of the economy. It accounts for 7.3% of the gross domestic product (GDP), 70% of the export processing zone (EPZ) exports, 49% of the total domestic imports, and 12% of the total employment (Jeetah, 2007). Mauritius’ export performance has been strong and sustainable, especially in the highly competitive market for made-up garments (Ancharaz, 2003). It has consistently out-performed the export levels of other countries (Ancharaz, 2003). Moreover, the country’s EPZ experience was considered a success because the island achieved its primary goals of employment creation, export diversification, gross and net export increase, and attracting foreign direct investment (FDI) (Madani, 1999).

Although Mauritius established its EPZs in 1971, the country faced its fair share of challenges. These challenges included the accession of China into the World Trade Organization, the emergence of low-cost producing countries, particularly Asian, the erosion of the trade preferences and the expiry of the Multi Fibre Agreement (MFA) in January 2005 (Jeetah, 2007). All these conditions adversely affected the country’s export performance. Consequently, Mauritius experienced firm closures, loss of employment, contraction of exports and decline in growth (Jeetah, 2007). However, Mauritius was been able to overcome these challenges and regain its position as a strong global textile trade contender. During the first quarter of 2007, the enterprises formerly holding an EPZ certificate amounted to Rupees 8,154 million (US$263,457) (Central Statistics Office, 2007). While this was a 15.3% decrease over the previous quarter, it represented a 23% increase over the first quarter in 2006 (Central Statistics Office, 2007).

The textile sub-sector is the fourth largest sector of industry in Kenya, accounting for 11% of the manufacturing enterprises in the country (KAM, 2006). In 2004, the textile sub-sector contributed Kenya Shillings (Kshs) 619.12 million (US$7,807,313) about 2.9% of government revenue was collected from custom duties. It also employed the second highest number of workers in the country’s manufacturing sector, after food and beverages (KAM,
2006). Despite these facts, the overall growth of the Kenya’s textile industry has been hampered by several challenges. These include the elimination of quotas, shortage of skilled labour, inadequate innovation and availability of raw materials, competition from cheap imports, poor quality of cottonseeds, and exorbitant costs of production (EPZA, 2006). As of 2005, local textile manufacturers only supplied 45% of the Kenyan textile market requirements, while imported new and used clothes satisfied about 37% of local demand. Moreover, growth in demand for textile products in Kenya was estimated as 3.8% annually (EPZA, 2005). Hence, Kenya’s textile and apparel sector is an important tool in the country’s economic development.

**Research Question**

1) How have the Export Processing Zones in Kenya and Mauritius been beneficial to each country’s industrial development?

**Purpose Statement**

The purpose of this research was to explore the export processing zones in Kenya and Mauritius and discuss potential benefits to each country’s industrial development. The choice of countries was based on the fact that Mauritius successfully implemented the Export Processing Zones and resultantly emerged as a strong global clothing and textiles trade contender. While Kenya has experienced remarkable growth in the exports of clothing and textiles it does not have a stronghold in the global clothing and textiles trade market. This study aims to describe ways that Kenya can improve its clothing and textiles trade performance by using Mauritius as a model for EPZ development. The information found in this study can be used by Kenyan Policy makers to make recommendations to the Kenyan government supporting the Export Processing Zones in the country.

**Objectives**

The case study’s objectives were:

1) To discuss the challenges to the Export Processing Zones in Kenya and Mauritius in the dawn of AGOA Phase IV;

2) To examine how the presence of the Export Processing Zones in Kenya and Mauritius has been beneficial to the industrial development each country’s garment firms;

**Limitations**

The limitations of this study included the following:

1) An inability to obtain data on Kenyan EPZ garment firm performance before 1999.
2) An inability to obtain data on variables such as export sales for Mauritian EPZ garment firms.
3) An inability to obtain EPZ firm-level data for garments from Kenya and Mauritius.
4) Cultural differences in information sharing, as some respondents were not willing to complete the questionnaire.

**Assumptions**

1) The secondary data provided by the Statisticians from the Kenyan Export Processing Zones Authority and Mauritian Central Statistics Office was accurate and without bias.

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**Abbreviations and Terms**

**Table 1: Abbreviations and Terms**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>AGOA</td>
<td>Africa Growth and Opportunity Act</td>
<td>A program that seeks to increase economic development and expedite the integration of African economies into the world trading system. AGOA expands duty-free access for more than 6,400 products to U.S. markets. AGOA also provides a framework for U.S. technical assistance to build trade capacity and to expand business links (wikipedia.org).</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
<td>A preferential trading area with twenty member states that stretch from Libya to Zimbabwe. Formed in December 1994 (wikipedia.org).</td>
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**Table 1: Abbreviations and Terms (continued from page 5)**

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>EAC</td>
<td>East African Community</td>
<td>The regional intergovernmental organization comprising of the Republics of Kenya, Uganda and Tanzania to provide a unique framework for regional cooperation and integration. Established on 30th November 1999 (<a href="http://www.eac.int/lvdp/eac.htm">http://www.eac.int/lvdp/eac.htm</a>)</td>
</tr>
<tr>
<td>EEC</td>
<td>European Economic Community</td>
<td>Now known as the European Community, is one of the three pillar of the European Union that was created under the Maastricht Treaty in 1992. It is an international community designed to help the economy of Europe and prevent future war by integrating its members together (wikipedia.org).</td>
</tr>
<tr>
<td>EPZ</td>
<td>Export Processing Zones</td>
<td>Fenced-in industrial estates specializing in manufacturing products for export, in addition to offering firms free-trade conditions and a liberal regulatory environment (World Bank, 1992).</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
<td>Investment made to acquire lasting interest in enterprises operating outside of the economy of the investor (unctad.org)</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
<td>The total market value of all final goods and services produced within a country in a given period of time (usually a calendar year). It is also considered the sum of value added at every stage of production (the intermediate stages) of all final goods and services produced within a country in a given period of time (unctad.org).</td>
</tr>
<tr>
<td>GSP</td>
<td>Generalized-System-of-Preferences</td>
<td>A program designed to promote economic growth in the developing world, providing preferential duty-free entry for more than 4,650 products from 143 designated beneficiary countries and territories (ustr.gov).</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
<td>The tripartite UN agency that brings together governments, employers and workers of its member states in common action to promote decent work throughout the world (ilo.org).</td>
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<tr>
<td>Abbreviation</td>
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<tr>
<td>IPZ</td>
<td>Information Processing Zone</td>
<td>Export-oriented zones used interchangeably in different countries with Special Economic Zones and Export Processing Zones (Engman, Onodera &amp; Pinali, 2007).</td>
</tr>
<tr>
<td>MEPZ</td>
<td>Mauritian Export Processing Zone</td>
<td>Fenced-in industrial estates specializing in manufacturing products for export, in addition to offering firms free-trade conditions and a liberal regulatory environment (World Bank, 1992) found in Mauritius.</td>
</tr>
<tr>
<td>MFA</td>
<td>Multi-Fibre Agreement</td>
<td>Introduced in 1974 as a short-term measure intended to allow developed countries to adjust to imports from the developing world. Developing countries have a natural advantage in textile production because it is labour intensive and they have low labour costs (wikipedia.org).</td>
</tr>
<tr>
<td>MFN</td>
<td>Most Favoured Nation</td>
<td>A status awarded by one nation to another in international trade where the receiving nation will be granted all trade advantages, such as low tariffs that any third nation also receives. (wikipedia.org).</td>
</tr>
<tr>
<td>MUB</td>
<td>Manufacturing Under Bond</td>
<td>A scheme whereby materials used for the manufacture of goods for export will be imported duty free (Nash &amp; Foroutan, 1997).</td>
</tr>
<tr>
<td>Q.R.</td>
<td>Quantitative Restriction</td>
<td>A quota on the maximum amount of a particular commodity that can be imported into a country during a given time period (Encarta.com).</td>
</tr>
<tr>
<td>SACCO</td>
<td>Savings and Credit Co-operatives</td>
<td>An enterprise engaging in the provision of financial services to including poor and low-income people in many countries (developmentgateway.org).</td>
</tr>
<tr>
<td>SEZ</td>
<td>Special Economic Zone</td>
<td>Export-oriented zones used interchangeably in different countries with Information Processing Zones and Export Processing Zones (Engman, Onodera &amp; Pinali, 2007).</td>
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</table>
## Terms and Definitions

### Table 2: Terms and Definitions

<table>
<thead>
<tr>
<th>Term</th>
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<tr>
<td>Backward linkage</td>
<td>This occurs when technology is transferred from a multinational company buying an input to a domestic company selling the input. It can also occur when a multinational company inside the zone subcontracts some of its production to a domestic company outside the zone. For example, many of the garment producers in Mauritius upgraded their products and processes by increasing their operational scale through investing in Madagascar (Engman, Onodera &amp; Pinali, 2007).</td>
</tr>
<tr>
<td>Forward Linkage</td>
<td>This occurs when the transfer of technology is from a product supplier to the buyer (Engman, Onodera &amp; Pinali, 2007).</td>
</tr>
<tr>
<td>Quota</td>
<td>(global marketing definition): A trade term that denotes a specific numerical or value limit applied to a particular type of good either in the case of exports or imports of goods (Dictionary of Marketing Terms, 2007, as cited by the American Marketing Association).</td>
</tr>
<tr>
<td>Vertical Integration</td>
<td>The expansion of business by acquiring or developing businesses engaged in earlier or later stages of marketing a product. In forward vertical integration, manufacturers might acquire or develop wholesaling and retailing activities. In backward vertical integration, retailers might develop their own wholesaling or manufacturing capabilities (Dictionary of Marketing Terms, 2007, as cited by the American Marketing Association).</td>
</tr>
</tbody>
</table>
CHAPTER 2
REVIEW OF LITERATURE

This section begins with an overview of the Mauritian and Kenyan governments’ attempts to enhance exports within each country. The next section covers Export Processing Zones and their definition, their purpose and their differences. The last section discusses the challenges faced by EPZs in Mauritius and Kenya.

Commonwealth Post War Initiatives to Enhance Exports in Kenya and Mauritius

Mauritius adopted an official, liberal foreign direct investment (FDI) policy with the establishment of the EPZ in 1971 (Ancharaz, 2003). The Mauritian government sought to attract FDI in the zone by offering investors a wide range of fiscal incentives, such as duty-free imports of machinery, raw materials and other inputs, substantial tax holidays, subsidized power rates and factory space, free unlimited repatriation of profits and dividends, and access to credit on preferential terms (Ancharaz, 2003). These incentives, as well as the availability of relatively cheap semi-skilled labour and flexible labour laws, prompted a steady wave of investment into the country’s export sector. On the external front, both the preferential access of Mauritius’s clothing exports into the then European Economic Community (EEC) under the Lomé convention, and the unexploited potential to export to the U.S. were probably most instrumental in attracting foreign investors from Hong Kong who were limited by the MFA quota ceilings in their country (Ancharaz, 2003). Consequently, the textile and clothing industry played a pivotal role, contributing to the rapid structural transformation of the country into a vibrant economy (Mauritius Board of Investment, 2006).

In three decades, the Mauritian textile and clothing industry developed from a producer of basic garments to a vertically-integrated supplier of high value-added and design-led garments. This contributed to the economic development in Mauritius and acted as the main engine of economic growth by attracting FDI from several countries, creating new employment opportunities, and strengthening the economy’s manufacturing base (Mauritius Board of Investment, 2006). While the initial stimulus to the EPZ activity came from foreign investors, local participation quickly caught up with, and surpassed the degree of foreign equity in the zone. As of the year 2000, the domestic capital owned stock in the EPZ was estimated to be more than five times larger than the foreign-owned stock (Ancharaz, 2003). During 2005, the total
EPZ exports from Mauritius amounted to US$ 1 billion worth of apparel, garment, yarn and fabrics. This included 100 million t-shirts, 20 million pairs of trousers, 18 million woven shirts, 12 million pullovers (Mauritius Board of Investment, 2006). Revenue from these textiles and apparel product exports represented 71% of the country’s total EPZ exports (Mauritius Board of Investment, 2006). The country shows no signs of slowing down.

During the pre-war period, the British colonial government in Kenya viewed local social and economic development as crucial (Vaitsos, 1978). As a result, the economy and society revolved around the state’s initiatives to enhance and support the interests of people with influence (Vaitsos, 1978). Since the State had long controlled fiscal, monetary, trade and tariff policy matters, company formation, licenses, and exclusive privileges, it was able to grant companies exclusive rights over prime land, while assuring that local labour would be available to work on these estates (Leys, 1975; Zwanenberg, 1975; Lee, 1967). The State was also able to provide tariff protection and trade policies that would allow the processing of some agricultural commodities only for local consumption (Leys, 1975; Zwanenberg, 1975; Lee, 1967). Consequently, 78% of agricultural commodities went unprocessed to Britain and its empire (Swainson, 1978).

Between 1945 and 1963, local social transformations, as well as external developments and interventions, caused a significant shift in state policies. These shifts radically affected the structure of Kenya’s economy and its relations with foreign firms (Vaitsos, 1978). For example, after the Second World War Britain suffered severe material shortages. The British Economic Survey of 1948 recognized the following three policy options:

1. Increased dependence and foreign aid from the U.S.,
2. Severe unemployment in Britain if production plummeted to match available materials and foreign exchange and
3. The use of the colonies to supply materials for re-organizing British production (Vaitsos, 1978).

The political and ideological position of the post-war labour government was to reduce the domination of the British economy by the U.S.; this subsequently led to a tenfold increase in the Exchequer’s expenditures under the Colonial Development Acts to expand production in the colonies to supply Britain (Cowen, 1980 & Hailey, 1957). British trading firms also began production in Kenya; under the protection of high tariffs that were introduced by the trading
firms themselves (Vaitsos, 1978), the dynamics for import-substitution were set in place after 1945 (Midgley & Burns, 1969). This represented a radical departure from the pre-war policy. During that time the needs of the British industrial capital were best served by the extraction of raw materials from Kenya to the United Kingdom and the restriction of industrialization in the colonial territories (Swainson, 1978). This practice continued until Kenya’s independence.

After Kenya’s independence in 1964, the textile industry expanded dramatically, accounting for about 19% of the wage employment and 22% of workers in large firms (Coughlin, 1986). The textile industry was large and was the major focus of the government’s import substitution policy. In the 1970’s controls emphasizing the following were introduced: quantitative restrictions (QRs), high tariffs on competing imports, overvalued exchange rates, importation and licensing, domestic prices and wages (Ng’eno, Nyangito, Ikiara, Ronge & Nyamunga, 2003). By the second half of the 1970s an undersized Kenyan domestic market prevented further growth and caused a huge trade deficit (Ikiara & Ndung’u, 1999; Ronge & Nyangito, 2000). As a result, Kenya was forced to seek financial assistance from the World Bank and the International Monetary Fund. The conditions for the country’s assistance initiated the trade liberalization process, and replacement of import-substitution with export-led industrialisation policies (Ng’eno, Nyangito, Ikiara, Ronge & Nyamunga, 2003).

From 1988 forward, the Kenyan government pursued an export-led growth strategy (Republic of Kenya, 2003). This was a major shift from its previously favoured import-substitution policies (Republic of Kenya, 2003). In order to stimulate exports, the government implemented export promotion incentives such as the EPZ and Manufacturing-under-bond (MUB) schemes. The introduction of these forms of export compensation, especially with the advent of liberalization and globalisation, was intended to move the Kenyan economy towards a more open trade regime, with increased market access for her products and services in the global market (Republic of Kenya, 2003).

In 1990, the introduction of EPZ was instrumental in bringing about the remarkable increase of textile and apparel exports. Exports were valued at US$60 million in 1994, with about 62% of the earnings coming from the U.S. market alone (Mshomba, 2000). During this time, textile exports from Kenya to the U.S. increased from US$5 million in 1991, to US$37 million in 1994, accounting for an overall increase of 640% or an average increase of 61% per

**Export Processing Zones**

One method of increasing exports in transitional economies is the establishment of Export Processing Zones. Export Processing Zones are described as fenced-in industrial estates specializing in manufacturing products for export, in addition to offering firms free-trade conditions and a liberal regulatory environment (World Bank, 1992). The underlying concept of an EPZ (also known as an ‘enclave’) is that it is treated as a separate entity from the country’s customs authorities (Engman, Onodera and Pinali, 2007). Specifically, the EPZ is covered by a policy framework designed by the government that is distinct from what applies elsewhere, and has the intention of promoting certain policy objectives (Engman et al., 2007). The zone is often subject to an environment strictly controlled by customs to prevent smuggling into the domestic customs territory (Haywood, 2000). However, in order to attract Foreign Direct Investment (FDI), most of the rules and regulations governing the zones are similar to, or more liberal than those governing the general domestic economy (Engman et al., 2007).

The benefits from EPZs to a transitional economy are to provide foreign-exchange earning by promoting non-traditional exports, provide jobs to alleviate unemployment or under-employment problems in the host country and assist with income creation and attracting FDI (Madani, 1999). A common characteristic of EPZs is the provision of special incentives to attract foreign investment. These incentives include tax holidays, duty-free export and import, free repatriation of profits, and the provision of infrastructure and exemptions from labour laws (Jauch, 2002). As second-best approaches and special enclaves operating within a country, EPZs are expected to act as indicators of trade liberalization of the lack thereof (Tekere, 2000).

Essentially, the success of an EPZ in terms of increased growth of export, employment, technology transfer and downstream effects would signal the sudden increase desirability of the trade liberalisation program to cover the whole domestic economy. On the other hand, the unsuccessful EPZs could be interpreted as a sign of the reverse policy direction that is, not creating increased export growth, employment and technology transfer (Tekere, 2000).

EPZs are found all over the world in both developed and developing economies. They have become common policy instruments aimed at stimulating exports, manufacturing production, generating scarce foreign exchange resources, employment and economic growth.
(Tekere, 2000). The International Labour Office (ILO) reported that the number of EPZs has been increasing exponentially over the years from 79 zones in 25 countries in 1975, to some 3,500 zones in 130 countries in 2006 (Engman et al., 2007). Estimates from 2006 indicated that EPZs employed 66 million workers 26 million of whom worked in EPZs outside China (ILO, 2003).

Different countries have adopted different names for their ‘EPZs’ or similar zones, and analysts have varying definitions of what constitutes an ‘EPZ’ (Engman et al., 2007). Kusago and Tzannatos (1998) presented a list of terms that have been used to refer to the EPZs. The terms included, ‘Industrial Free Zone’ and ‘Export Free Zone’ in Ireland, ‘Maquiladora’ in Mexico, ‘Duty Free Export Processing Zone’ and ‘Free Export Zone’ in the Republic of Korea, ‘Export Processing Zone’ in the Philippines, ‘Special Economic Zone’ in China, ‘Investment Promotion Zone’ in Sri Lanka, ‘Foreign Trade Zone’ in India and ‘Free Zone’ in the United Arab Emirates (Engman et al., 2007). Another frequent reference is ‘Free Trade Zones’ which dates back to the 19th century (Engman et al., 2007). The common denominators for EPZ definitions include references to ‘geographic or fenced-in areas’ and ‘free trade conditions’ to attract ‘export-oriented manufacturers,’ (Engman et al., 2007). The World Bank defines an EPZ as an industrial estate, usually a fenced-area of 10 to 300 hectares, specialising in manufacturing for export that offers firms free trade conditions and a liberal regulatory environment (1992). Other definitions of an EPZ include a territorial or economic enclave in which goods may be imported, stored, repacked, manufactured, and reshipped with a reduction in duties and/or minimal intervention by customs officials (McIntyre, Narula & Trevino, 1996). Another definition of EPZs is a fenced-in industrial estate specialising in manufacturing for exports that offers firms free trade conditions and a liberal regulatory environment (Madani, 1999). They are sometimes referred to as an industrial zone with special incentives to attract foreign investment (Engman et al., 2007). Overall, EPZs are an area where imported materials undergo some degree of value-added processing before being exported again (ILO, 2003).

In the International Labour Organization’s (ILO) typology of export-oriented zones, references to Special Economic Zones (SEZ), Free Zones, Free Trade Zones and EPZ/IPZs (Information Processing Zones) are often used interchangeably in different countries (Engman, et al., 2007). Engman, Onodera and Pinali, define an EPZ program as a government policy to promote exports of goods and/or services by offering a more competitive business environment.
through the provision of special incentives, including tariff exemptions to inputs that are created in a geographically defined area or through a specification process (2007). While Special Economic Zones in India fit this description, the ones in China do not, thus making the accurate comparison and compilation of EPZ country statistics difficult (Engman, et al., 2007). So, in order to facilitate a comparison between Kenya and Mauritius, export processing zones will be defined as fenced-in industrial estates specializing in manufacturing for export and offering firm’s free trade conditions and a liberal regulatory environment (World Bank, 1992).

The importance of export processing zones lies in the roles they play in the host country. Some developing countries attempted to use the EPZs as an impetus for industrialisation. For these countries, the EPZs offer a new economic opportunity that creates employment, and ultimately generates income for consumption (Engman et al., 2007). Since many poor countries have limited resources available for investing in productive capacity, EPZs may enable these countries to attract foreign capital in order to allow them to produce goods and services for foreign markets (Engman et al., 2007). While other developing countries might have access to capital, potential investors are not able to take full advantage of the investment incentives under the EPZ program due to regulatory restrictions trade barriers and inefficient administration (Engman et al., 2007). A strategy that is thought to stimulate economic activities in these areas is the relaxation of government intervention, and the offer of incentive packages for capital investment in export-oriented production (Engman et al., 2007). Engman, Onodera and Pinali believe that employing a policy whereby the resources and market incentives are focused within a specific zone might be less time-consuming to establish and would allow for the continued protection of the respective domestic economy (2007). That is, these EPZs would consume less political capital in the short term, and employ comprehensive reforms that are often linked to countrywide liberalisation (Engman et al., 2007).

Additionally, EPZs can play a more dynamic role in a country by spearheading economic reform. With careful design and management, they can serve as a stepping stone in an integrated move towards liberalization of a host country’s economy in response to changes in the national economic conditions (Engman et al., 2007). Moreover, an increase in imports often precedes an increase in exports, as there is a time lag before domestic industries can adjust to new tariff regimes and attracted Foreign Direct Investment provides a means by which governments can learn what needs to be changed in order to improve their business environments (Engman et al.,
EPZs are important because they support general market reform by demonstrating the effectiveness of market reforms such as vertical integration and efficient supply chain management.

**Export Processing Zone Theories**

EPZs have been used as a trade policy tool for approximately 30 years. They incorporate the neo-classical, cost-benefit and new growth theories (Madani, 1999). The neoclassical theory suggests that the EPZs have a negative welfare effect on a country and that the creation of zones will increase the inefficiency by distorting production away from the country’s comparative advantage (Hamada, 1974). It is based on Hecksher-Ohlin’s two goods-two factors-two country’s framework and bases its assessment on the Rybczynski effect. Assuming that a small country has a comparative advantage in labour intensive industries and protects its capital intensive sector, the EPZs are believe to reduce that country’s welfare, and the FDI that is generated in the EPZ implies that capital is imported while labour is withdrawn from the domestic sector to work on it (Hamada, 1974; Devereux & Chien, 1995; Beladi & Marjit, 1992). Therefore, if the production of the capital intensive good increases, while the labour intensive good decreases, this will ultimately distort the production from the country’s factor based comparative efficiency (Hamada, 1974; Devereux & Chien, 1995; Beladi & Marjit, 1992). Warr (1989) dismisses the neo-classical theory stating that the Hecksher-Ohlin model of production treats capital as internationally immobile, and thus fails to capture the international mobility of capital goods which is fundamental to the functioning of Export Processing Zones. He deduced that the main conclusion of the theory is that EPZs reduce the welfare of the countries involved, which he finds to be irrelevant for EPZs as they actually operate (Warr, 1989).

The Cost-benefit approach utilizes calculations of all the costs and benefits that are associated with the zones such as the discounting and calculation of net present values of streams of revenues, costs for the government, workers and society at large (Madani, 1999). While this is a painstaking process, it does provide opportunities to weigh the costs and benefits of establishing an EPZ within a country. However, the main drawback to this approach is the inadequate data for the cost-benefit calculations (Madani, 1999). Moreover, assumptions regarding rates of returns to capital, social discount rate, and social benefits might not be accurate as the costs are more readily observable than the benefits and the assumptions that are
made in order to estimate the latter might affect the outcome of the cost-benefit analysis (Madani, 1999).

The new growth theory is the more favoured of the three because it provides three key additions to the neo-classical analysis (Madani, 1999). Firstly, domestic firms do not have the ‘capacity to package’ technical, marketing and managerial expertise with the internal and external resources that are available to them; this is where FDI and the export processing zones themselves come in to cater to this ‘packaging.’ Secondly, domestic firms rarely have any access to international distribution channels whereas international and joint venture companies have this access, and can assist fledgling domestic exporters to obtain market entry. Lastly, without the inroads created by a connection with an established multinational corporation with expansive international dealings, entry into the international market would be next to impossible (Johansson, 1994).

Once all these elements are incorporated into the traditional analytical approach of the neoclassical model, Johansson argues that the EPZs can prove to be very beneficial to a country. This is because of their catalytic impacts and the spill-over effects, such as labour and management, on-the-job-training, learning by doing, copying, demonstration effects, and the catalyst factor as well as other zone activities, on the host economy (Madani, 1999). Moreover, it is believed that these spill-over effects impact the rate and the level of human capital in formation in their host countries (Johansson, 1994). The only criticism of the new growth theory thus far, has been that it has not yet made empirical inroads. Notwithstanding, Rhee & Belot (1990) and Rhee, Katterbauch & White (1990), have written about this foreign-domestic dynamic relationship and its positive impact on human capital formation (Madani, 1999).

In Kenya’s case, while the garment exports under the EPZ have been increasing over the years, yet more still needs to be accomplished in as far as the transfer of technical, marketing, and managerial expertise is concerned. This is because Kenya lacks a skilled local labour force, especially in the textiles sector, and thus relies heavily upon foreign labour from expatriates (KAM, 2006). Moreover, the high turnover rates in the textiles industry, including EPZ garment firms, make it difficult to ensure the transfer of technical, marketing and managerial expertise. Furthermore, there are no local training facilities in the country that currently meet international standards (KAM, 2006).
Technology transfer can be achieved through forward and backward linkages. Forward linkages occur when the transfer of technology is from a product supplier to the buyer, whereas backward linkages occur when technology is transferred from a multinational company buying input to a domestic company selling the input (Engman et al., 2007). It can also occur when a multinational company inside the zone subcontracts some of its production to a domestic company outside the zone. For example, many of the garment producers in Mauritius upgraded their products and processes by increasing their operational scale through investing in Madagascar (UNCTAD, 2007). As a result of outsourcing to Madagascar, Mauritius’ garment exports increased substantially from 37.4% in 2000, to 69.7% in 2005 (UNCTAD, 2007). It is evident from what has occurred with Mauritius that the development of backward linkages between export-oriented companies and the rest of the economy has the potential to bring about increased benefits for a host country.

Engman, Onodera and Pinali (2007) pointed out that the inadequacy of the technology transfer process might be due to the concentration of EPZs in low-skilled labour areas. However, Kusago and Tzannatos (1998) countered that argument using the example of the successful EPZs in Asia. They argued that there has been a general trend for the ratio of labour intensive EPZ industries to decline more significantly than their capital-intensive counterparts (Kusago & Tzannatos, 1998). This phenomenon would suggest a switch toward more capital-intensive manufacturing, which is characterized by the technological advances in manufacturing, and changes in the industry composition of EPZs as wage levels increase (Engman et al., 2007). In this context, knowledge spill-over and human resources development can occur more frequently as these industries are able to focus more on the delivery of increasingly higher value and greater knowledge intensive production (Engman et al., 2007).

In Kenya’s case, the technology that is currently used in the garment sector varies considerably. In the ginning and textiles industry, some of the mills require modernisation (KAM, 2006). In terms of human resources, labour productivity is 30% lower than the industry norm, which is caused by low technical skills, lack of in-house training activities, and the absence of local training institutions (Bedi, 2006). Moreover, a consistent waste monitoring system is non-existent. Estimates suggest that a one percent reduction in waste can lead to savings of about Kshs 80,000 ($1,109.55 US) a month (Bedi, 2006). In addition, there is no collection or analysis of operational data to identify recurrent technical and mechanical
problems, nor is there a consistent maintenance schedule in place (Bedi, 2006). Within the existing formal large-scale garment manufacturing sector establishments, which were established during the import-substitution era that ended in the early part of 1993, only a handful are fully integrated with spinning, fabrics and apparel manufacturing facilities (KAM, 2006).

The garment firms under the EPZ are not directly affected by the lack of fully integrated manufacturing facilities because they manufacture garments for international markets. As a result, they have to conform to international market requirements and standards, and not Kenyan ones. These international market requirements determine the competitiveness of the country’s finished garments (KAM, 2006). Kibua and Nzioki (2004) argue that since Kenya’s economic liberalization in the 1990s, and the removal of various duties and taxes on raw materials and capital goods, the enclave approach to industrial development might not be necessary. This is because the rationalization and zero-rating of the import duties placed exclusively on raw materials and capital goods, has also been extended to non-EPZ manufacturing enterprises which allows Kenya to gain access into international markets (Kibua & Nzioki, 2004). Kibua and Nzioki (2004) suggest that Kenyan firms may no longer need protection, and the huge subsidies on the EPZs can now be removed. The progressive liberalization of Kenya’s economy and the continued integration into the international market system lead Kibua and Nzioki to believe that the original template of the EPZ will not bring about the desired results and they recommend the complete overhaul of the EPZ programme in order to streamline it with the country’s current economic realities (2004).

The dismantling of the MFA in 2005 brought about an abrupt output reduction in the Mauritian EPZ manufacturing sub-sector. Resultantly, textile enterprises were either closed down, or were forced to adapt to the loss of the preferential treatment (OECD, 2007). In an attempt to offset these developments, the Mauritian government introduced several measures to improve the country’s competitiveness and intensify its diversification efforts (OECD, 2007). October 2006 brought about the dawning of a new era as Mauritius became a duty-free country with the liberalization of tariffs. The incentive regimes for the EPZ and non-EPZ enterprises were unified and all of the corporate taxes were set at 15% (OECD, 2007). These incentives will be phased out by 2009, and then a second phase of the programme will be implemented to address the high service costs (OECD, 2007). Despite these changes, the country appears to be fairing well. During the first quarter of 2007, the enterprises formerly holding an EPZ certificate
amounted to Rupees 8,154 million ($263,457US), although this was a 15.3% decrease over the previous quarter, it is a 23% increase from the first quarter in 2006 (Central Statistics Office, 2007).

In the Kenyan EPZ case, Kibua and Nzioki (2004) recommend the development of non-subsidized industrial parks, with all basic infrastructure and services. These industrial parks would be made available to both foreign and local investors at a cost. This would create a level playing field in order to encourage Kenyan and International firms to compete in both export and domestic markets (Kibua & Nzioki, 2004). Kibua and Nzioki further suggest that the Export Processing Zones Authority focus on development of industrial parks in Kenya’s major urban centres, and spread the subsidies, as a result of the fact that they are enjoyed by EPZs all over the country. They argue that an amendment of the EPZ act should reflect these proposed changes and transform the EPZA into an ‘Industrial Parks Development Authority,’ which would be required to create new policy platforms and concurrent production standards that would enable Kenyan exports to be competitive in international markets. This exercise would serve as a litmus test to determine if Kenya would be able to follow Mauritius’ example and become a duty free country.

**Challenges within the Export Processing Zones**

The challenges encountered in Kenyan EPZs have resulted in their reduced competitiveness in the textiles market, as well as a reduction in export and sales earnings capacity (EPZA, 2006). Some of the issues faced by the EPZs are frequent policy changes and operational procedures that are implemented without adequate consultation. Additional problems include high production and operation costs, severe market competition, sluggish pace of labour and employment law reforms, unavailable long term industrial loans to support the sector, long delays in handling of legal cases by commercial courts, slow pace of reviving the cotton industry and local fabric capacity, the extension of AGOA type preferences to some Asian countries, poor local participation within the Kenyan EPZ program, inadequate use of capacity building assistance, expiration of tax holidays, and extreme dependence on the U.S. market and apparel sector (EPZA, 2006).

The performance of the Kenyan EPZ garment sub-sector has been on a downward spiral since the phasing out of the textile quotas in 2005. Garments destined for the U.S. increased marginally in 2006 by 1.4% or Kshs 14,894 billion ($ 206,574,202US). However, highly
competitive markets and high costs of production, caused local employment to decline by 7.1% or by 31,813 people in 2005, resulting in firm closures and industry restructuring (EPZA, 2006). Despite enterprises investing in value-adding machinery that would improve washing capacity, enable sandblasting and embroidery et cetera, and investment increasing by 3.4% or Kshs 10,317 billion (US$ 143,092,926) exports from Kenya declined marginally by 1.9% or Kshs 273 million in 2006 (US$ 3,786,407) (EPZA, 2006).

**Global Textile and Apparel Supply Chain**

Vertical integration refers to the ability of a firm to engage in different stages of production from producing the raw materials, manufacturing, transporting, marketing and retailing. The benefits of vertical integration include faster fabric delivery, lower raw material transport costs, and increased rural incomes from cotton farming (Waithaka, 2007). This is important in any industry because it makes the management of the supply chain more efficient. However, this is of particular importance in the fashion industry because fashion changes can be viewed as planned obsolescence that is promoted by the fashion retailers with the intention of motivating consumers to buy new clothes continuously (Law, Zhang and Leung, 2004). Therefore, the supply chain must be able to keep up with the changes in the fashion trends.

In underdeveloped economies, most problems are prevalent in the distribution channels and getting goods from one place to another in a timely fashion (Zhang, Dickson & Lennon, 2002). These problems include long and inefficient distribution channels, limited working capital and managerial resources, insufficient channel communications, lack of vertical marketing systems, informal credit offered to retailers by suppliers and unsatisfactory channel performance (Saimee, 1993). In the retail-apparel-textile channel, timing is crucial. Any delay can have catastrophic results, causing businesses to lose millions of dollars.

Lean retailing is what Abernathy (1999), described as the revolution of retailing practices that would determine competitive outcomes in the retail-apparel-textile channels. This strategy has forced apparel producers to reorganize the way they handle their customers, distribution channels, forecast and plan production, as well as manage their supplier relations (Abernathy, 1999). Lean retailing works in concert with supply chain management, which is the planning and management of all business activities involved in fulfilling customer requests such as sourcing, procurement, operations, marketing, and logistics management (Stank, Davis & Fugate, 2005). Not only does supply chain management deal with the processes and functions within a
particular company, but it also includes the coordination and collaboration with other parties involved with bringing products to the market (Stank, Davis & Fugate, 2005). Coordination mechanisms within the supply chain enable different stakeholders to achieve equivalent profits within the coordinated channel (Bhattacharya, Guide & Wassenhove, 2006). So an efficient supply chain can lessen lead times, which is the total time required in the apparel production process from when fabrics are ordered to when finished products are ready for shipment (Abernathy, 1999). Lead times are a more comprehensive measure of a business unit’s ability to compete in a market that is increasingly dominated by lean retailing practices (Abernathy, 1999). In terms of supplier responsiveness, lead times refer to how long it takes for an apparel manufacturer to procure textiles, manufacture and deliver a typical product in its collection (Abernathy, 1999). The shorter the lead time, the better because it increases a firm’s ability to deliver products to the final consumers. Kenya has not managed to efficiently employ supply chain management or introduce vertical integration into the country’s export processing zones. Doing so might enable the country to have more of a competitive edge.

**Challenges to Vertical Integration**

Within the Common Market for Eastern and Southern Africa (COMESA), Kenya’s textile industrial base is one of the best developed after Egypt; it is estimated that if the sector utilized its full capacity, Kenya’s current employment would more than double (KAM, 2006). It is classified as a core-industry by the Kenyan government and revitalization is necessary in order for it to function at its optimal capacity level and encourage economic development in the country (EPZA, 2005). Moreover, cotton production and processing offers great potential for increased employment, poverty reduction, rural development and income generation in Kenya (EPZA, 2005). Kenya’s garment industry is supported by the cotton industry. Studies reveal that cotton ginning and the conversion of cotton to textiles are the weakest links in Kenya’s textiles value chain (Ministry of Trade and Industry, 2005/2006). While the annual potential for Kenyan cotton production is 140,000 bales, Kenya only produced 20,000 bales in 2005 (Omolo, 2006). This production level is insufficient for domestic market demand, let alone for export.

The Kenyan government recognizes the need to revive the country’s textile industry. Towards this end, the government has been promoting the formation of registered legal organizations by farmers. These organizations will spearhead the development of the cotton industry through increased production, establishment of cottage industries, and the formation of
rural Savings and Credit Co-operatives (SACCOs) for the purposes of accessing credit (Ministry of Trade and Industry, 2005/2006). Additionally, the government intends to improve the competitiveness of the textile and clothing industry, build capacity and competence within the industry, increase the productivity of cotton and overall output, and improve the country’s capacity to produce garments and fabrics (Republic of Kenya, 2003). The government acknowledges that the rehabilitation of the ginneries to adopt efficient modern technology is necessary, and it is in the process of doing so, as the machinery currently in use is out dated. Furthermore, the government has also resolved to avail seed money to farmers (Cotton Development Secretariat, 2007). The ginneries are a focal point in the cotton industry; their location, efficiency, capacity and organization is critical to growth and development within the sector (Omolo, 2006).

In recent years, the Mauritian economy has been hampered by several problems, including low economic growth, high unemployment, widening fiscal and external deficits, and excessive public debt (OECD, 2007). These problems have been aggravated by the impact of the ‘triple shock’ which was the European Union’s (EU) decision to reduce its guaranteed sugar import price; this is expected to cause a 36% decline in the price of sugar imported from Mauritius in the course of 2006 through 2009. Additionally, the end of the MFA in January 1, 2005 and the recent increase in international energy prices have also affected the country’s economic performance (OECD, 2007).

In an attempt to meet these challenges, the Mauritian government announced the introduction of forty bold reform measures into the 2006/2007 budget. These reforms were designed with the intention of making the economy more open and flexible, as well as providing new controls on public spending by overhauling the outdated tax and public spending systems (OECD, 2007). While the Finance Act of 2006 has already enacted most of these measures to law, the rest of the policies are in the process of being legislated (OECD, 2007).
CHAPTER 3
CONCEPTUAL FRAMEWORK

This study is guided by Michael Porter’s Diamond model for the Competitive Advantage of Nations.

![Diagram of Porter's Diamond Model for Competitive Advantage of Nations](www.valuebasedmanagement.net)

**Figure 1**: Michael Porter’s Diamond Model for Competitive Advantage for Nations

This model states that a country’s comparative advantage lies within its endowments such as land, labour, natural resources and size of its local population (Porter, 1990). Competitive advantage is a firm’s ability to transform inputs into goods and services at a maximum profit on a sustained basis, better than competitors whereas a comparative advantage resides in the factor endowments and created endowments of particular regions (Porter, 1990). Factor endowments include land, natural resources, labour, and the size of the local population. As such, a country
should be able to use these endowments to build upon its comparative advantage through the use of the following determinants: factor and demand conditions, related and supported industries and firm strategy, structure and rivalry (Porter, 1990). Production factors such as skilled labour and infrastructure are among the factor conditions that are necessary for creating competition within certain industries within a country (Recklies, 2001). These production factors can be built upon in order to create a greater comparative advantage for a respective country. Since each country has its own set of factor conditions, the country will develop the industries for which a particular set of factor conditions is best suited (Porter, 1990). Michael Porter’s Diamond model of Competitive advantage was selected because it suggests that an industry takes into account the four interlinked factors and activities with the support of the government and strives to employ them efficiently. If an industry is successful in doing this, it can be considered to be competitive. This model was used by Jin & Moon (2006) to explore the Korean textiles and apparel industry’s competitiveness in the global apparel market after losing its labour competitiveness. Jin & Moon (2006) found that using the four determinants, factor conditions, related and supporting industries and firm strategy, structure and rivalry enabled them to come up with future directions and solutions for the industry. Like Kenya, the Korean textiles and apparel industry has played an important role in the country’s economic development and Porter’s diamond model was used as a basis to develop and cultivate the competitive factors (Jin & Moon, 2006).

Demand conditions describe the state of local demand for the products and services that are produced in a respective country. Porter stated that demand conditions are characterized by the variety of consumers’ needs and wants, the scope and growth rate of the consumers, and the mechanisms that transmit domestic preferences to foreign markets (1990). Essentially, the domestic demand dictates whether or not a country will rely more heavily on export and foreign suppliers or its local suppliers (Recklies, 2001). The existence of related and supporting industries within a country contribute to its value chain. It is the spatial proximity of upstream or downstream industries, facilitating the exchange of information and promoting the continuous exchange of ideas and innovations (Porter, 1990). Porter believes that competitive supplying industries are able to reinforce innovation and internationalisation in industries at later stages in the value chain. Besides suppliers, related industries are important because they can use and coordinate particular activities in the value chain together or coordinate the activities that are concerned with complementary products like bread and butter. For example, the Italian shoe and
leather industry is not only successful in the production of shoes and leather, but also with related products and services such as leather working and design (Recklies, 2001). Lastly, firm strategy, structure, and rivalry are conditions that explain the establishment, organization, and management of a company, and as well as determine the characteristics of domestic competition. Governments can foster such advantages by ensuring high expectations of product performance, safety, or environmental standards, or through the encouragement of vertical integration between suppliers and buyers on a domestic scale (Porter, 1990). Since demand conditions have an impact on the pace and direction of a country’s innovation and development, it is imperative that domestic demand trends have a higher influence than foreign markets. Accordingly, a government can use these endowments to build upon its country’s factor conditions, create related and supporting industries, demand conditions and strategies as well as creating structure and rivalry (Porter, 1990).

Kenya has not been able to optimise its comparative advantage. The country is only utilizing 10.4% or 40,000 hectares of land for cultivation, leaving approximately 384,500 hectares of irrigated and rain-fed land available for cotton production (Bedi, 2006). Moreover, Kenya lacks local skilled workers, especially in the textiles sector, and relies upon foreign labour from expatriates (KAM, 2006). Additionally, there are no local training facilities in the country that currently meet international standards (KAM, 2006). The government’s role in the model is to encourage firms to raise their performance levels, stimulate early demand for products, and focus on specialized factor creation as well as the stimulation of rivalry by limiting direct cooperation and enforcing anti-trust regulations (Porter, 1990). The assumption of this model is that a country is able to create key factors of production such as skilled labour, capital and infrastructure (Porter, 1990). By creating these key factors of production, a country will be able to offer similar goods and services to what is offered by its competitors but these goods and services will be of better quality and at better prices. These specialized resources require heavy sustained investment that is more difficult to duplicate; if other firms cannot duplicate these factors easily, they become valuable and increase a country’s competitive advantage (Porter, 1990). The government’s role as a catalyst is necessary to facilitate the respective country’s competitive advantage.

Unfortunately, the Kenyan government has not made substantial progress in this area as the main incentives, subsidies, which are offered to the EPZs, have not been extended to the rest
of the non-EPZ companies (Kibua & Nzioki, 2004). Furthermore, equipment in garment enterprises outside the EPZ is outdated and in dire need of modernization (KAM, 2006).

According to Porter’s Diamond model, Kenya’s competitive advantage lies in the factor endowments that the country has not been able to use efficiently: land and labour. Kenya has a large labour force that can be trained to work on the cotton production and 384,500 hectares of available land for cultivation.

**Analytical Framework**

Michael Porter’s Diamond Model postulates that if an industry that takes into account the four interlinked factors and activities (firm strategy, structure and rivalry, demand conditions, related and supporting industries and factor conditions), with the support of the government and strives to employ them efficiently, it is likely to register increased performance over time and be considered competitive (Porter, 1990). For this study, performance of the garment firms in the export processing zones in Kenya and Mauritius will be measured by the following variables; total employment, EPZ garment firm exports, investment, total wages, total imports, total sales and total EPZ exports (outside the garment firms). A change in the trend of these variables may provide useful information relating to the competitiveness of the industry in each country. For example, if for every dollar invested in labour in Kenya, there was an output of ten units of production, and in Mauritius there were 15 units of production, it could be assumed that Mauritius is more productive than Kenya.
CHAPTER 4
METHODOLOGY

Case study methods were used in this research study because the purpose of the research was to investigate whether export processing zones in Kenya and Mauritius were beneficial to each country’s industrial development. There was a limited amount of secondary data available, thus requiring an investigation of documents prepared by the Kenyan and Mauritian government and Export Processing Zones authorities.

**Qualitative versus Quantitative Research**

Qualitative research is carried out to investigate specific research questions that are generally broad, and seeks a range of evidence which has to be abstracted and collated to get the best possible answers (Gillham, 2000). Whereas, quantitative research involves counting and measuring, making use of either descriptive or inferential statistics (Gillham, 2000). Descriptive statistics uses averages (means) which describe data, while inferential statistics enables one to draw potential meaningful and significant inferences from quantitative data (Gillham, 2000).

Qualitative research methods are generally descriptive and inferential. Although some researchers do not consider qualitative research methods to be as statistically significant as quantitative methods the use of descriptions and inferences are required for scientific research (Gillham, 2000). This is because statistical results have to be described and interpreted as the facts are not always self-explanatory. Qualitative research methods focus primarily on the kind of evidence that will facilitate an understanding of what has occurred. Gillham (2000) stated that the greatest strength of quantitative research is that can illuminate issues and turn up viable explanations and essentially search for a meaning, as is the case with all research. Gillham (2000) also emphasizes that case study research is not exclusively concerned with qualitative methods as all evidence is pulled into the case study researcher’s data collection. The basic way of presenting a case study report is a narrative following the logic and chronology of an investigation and the reasoning behind it (Gillham, 2000). The criticism behind case study research is that it is nothing more than a good story, because case study researchers are recreating the context and sequence of evidence in a way that enables a reader to understand what is being recounted (Gillham, 2000). However, if the story is well told, with evidence
presented for the direction and development of the narrative, it can be a compelling read (Gillham, 2000).

**Benefits of Qualitative Research**

According to Gillham (2000), the thorough description of a topic can have a greater impact on any other form of a research report in that the potency is reflected in the subject of the investigative journalism or judicial inquiries. Not all case studies are revelatory in nature; some provide insight into a topic and create room for subsequent studies. In general, qualitative research enables researchers to do the following:

1. Carry out an investigation where other methods such as experiments are not practical or ethically justifiable.
2. Investigate situations where little is known about a given subject.
3. Explore complexities that are beyond the scope of more controlled approaches.
4. To ‘get under the skin’ of a group or organization to find out what goes on—an informal reality that can only be perceived from the inside.
5. To view a case from the inside out in order to see it from the perspective of those involved.
6. To carry out research about the processes leading to the results rather than the significance of the results.

This study aimed to investigate the challenges and experiences of the Export Processing Zones in both Mauritius and Kenya in order to investigate the contribution to each country’s industrial development. Qualitative research methods were selected due to the fact that there was insufficient data available for a quantitative research study. There were records of Kenyan EPZ garment firm performance prior to 1999 and because Mauritius phased out its EPZ program in 2006, the data analysis stopped in 2005. Additionally, the cultural differences in information sharing in Kenya prevented the collection of statistically significant data, as some respondents were not willing to complete the questionnaire. This led to the discarding of the questionnaires that were filled out.

**Purpose**

The purpose of this research was to

(a) discuss the challenges to the Export Processing Zones in Mauritius and Kenya in the dawn of AGOA Phase IV
(b) explore whether the presence of export processing zones in Mauritius and Kenya are beneficial to each country’s industrial development
(c) compare the performance of EPZ garment firms in Kenya and Mauritius.

The choice of countries was based on the fact that Mauritius successfully implemented the Export Processing Zones and resultantly emerged as a strong global clothing and textiles trade contender.

While Kenya has experienced growth in the exports of clothing and textiles it does not have a stronghold in the global clothing and textiles trade market. This comparative study aims to examine ways that Kenya can improve its clothing and textiles trade performance by using Mauritius as a model.

**Design**

This case study research was conducted using secondary data obtained from the Kenyan Export Processing Zones Authority and the Mauritius Central Statistics Office. It used basic descriptive computations of labour productivity, productivity, EPZ garment export share, growth in investment, labour, wages, productivity and labour productivity.

**Research Process**

The research process began by reviewing existing literature on measuring competitiveness of a country, and establishing what was already known, what was unknown and what needs to be done to get new evidence to test an existing theory (Gillham, 2000). There was extant literature on Export Processing Zones. After reading numerous articles and papers, it became apparent that an appropriate measure of competitiveness would be the Export Processing Zone, because its successful implementation in a country could bring about increased employment and foreign earnings.

Michael Porter’s Diamond Model for the Competitive Advantage of Nations (1990) was selected as the most suitable conceptual and analytical framework over his Theory of competitive advantage (1985), because it included government intervention. Governments are able to use a country’s natural endowments and build upon the factor conditions, create related and supporting industries, demand conditions, and strategies in addition to creating structure and rivalry.

Once the factors of competitive advantage were identified, it was necessary to define competitiveness. By employing Porter’s Diamond model (1990), the four interlinked factors for
defining competitiveness were: firm strategy, structure and rivalry, demand conditions, related and supporting industries, and factor conditions. The efficient employment of all these factors in addition to the support of the government should enable an industry to experience increased performance and eventually be considered competitive.

The use of the Export Processing Zones as a measure of competitiveness was determined because of employment creation and increased foreign investment. From this point, Dr. John Akoten from the Institute of Policy Analysis and Research in Nairobi provided the variables that would best measure competitiveness of the industry in Kenya and Mauritius. The variables are summarized in Table 3.

**Table 3: Variables and Definitions**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Productivity</td>
<td>Amount produced by employees given the amount invested into EPZ firms</td>
</tr>
<tr>
<td>Labour Productivity</td>
<td>Amount produced by employees relative to their wages</td>
</tr>
<tr>
<td>EPZ Garment Export Share</td>
<td>Ratio of EPZ garment exports to EPZ non-garment exports</td>
</tr>
<tr>
<td>Growth in Investment</td>
<td>Changes in investment over the years</td>
</tr>
<tr>
<td>Growth in Labour</td>
<td>Changes in the number of employees working in the EPZ garment firms over the years</td>
</tr>
<tr>
<td>Growth in Wages</td>
<td>Changes in amount employees were paid over the years</td>
</tr>
<tr>
<td>Growth in Productivity</td>
<td>Changes in the output relative to the input</td>
</tr>
<tr>
<td>Labour Productivity</td>
<td>Changes in productivity relative to employees salaries</td>
</tr>
</tbody>
</table>
A questionnaire was developed to reflect these variables. It was comprised of 32 questions that were both open and close ended (See Appendix 1). The sample was purposively selected and the questionnaires were initially sent via email to the managers of the EPZ firms in Athi River, in order to give them a chance to look over the questionnaire. Then an appointment was made in order to meet with them and discuss the questionnaire. Due to the poor response rate, out of a sample of eight EPZ garment firm managers selected, only three replied. Since the sample size was too small to be considered statistically significant and the surveys were not filled out in their entirety, they were discarded.

The biggest challenge with data collection in Kenya was that respondents were not willing to disclose information pertaining to business operations and accounting.

**Variables, Data Collection Procedures and Data Analysis**

Time-series data on the key variables from 1999-2005 obtained from Statisticians from the Mauritius Central Statistics Office and the Kenyan Export Processing Zones Authority was examined. This time period was selected because there was no data available on the variables prior to 1999 in Kenya. Additionally, the time period stops at 2005 because on October 1, 2006, Mauritius integrated its EPZ and non-EPZ schemes. This integration meant that both schemes would enjoy the same incentives regardless of whether they were exporting and not, except that there was a flexible labour provision for the exporting companies. The flexible labour provision is now referred to as ‘companies manufacturing for export.’ With this in mind, the comparison of the two countries was made during the years that the EPZs were operational under the EPZ title, in order to determine if any differences existed.

The variables that were examined in the study were total employment, EPZ garment firm exports, total investment, total wages, total imports, total sales, and total EPZ exports (outside the garment firms). Performance variables such as labour productivity (output-labour ratio), productivity (output-investment ratio), percentage of EPZ garment exports to overall EPZ exports, and the percentage of EPZ exports were constructed, and their trend over time was evaluated.

The rationale behind using the total employment and wages was to determine each country’s export performance level, given the number of employees working and how much they were being paid during the 1999 to 2005 time span. The use of total imports and total exports determined how much each country was importing into the country compared to what they were
exporting, in order to determine whether there was a surplus or a deficit. The assumption is that a
country is better off if it exports more than it imports. Total investment was used to determine
how much each country was contributing to their final output in terms of machinery. It could be
assumed that the more modern machinery that is in existence, the more efficiently the country
can produce the apparel. Total Sales was used to determine how much of the country’s EPZ
apparel products were being consumed by the local market or if everything that was produced
was exported. Lastly, total EPZ exports outside the garment sector was used to determine the
proportion of EPZ garment exports to overall EPZ exports.

The comparison between Mauritius and Kenya helped establish which country
experienced superior performance under the Export Processing Zones and whether or not there
was an improvement in each country’s export performance. The results will be presented in the
form of figures and described as it relates to AGOA. The time frame covered was before and
during the implementation of AGOA.


CHAPTER 5
FINDINGS AND DISCUSSION
INTRODUCTION

The variables that were measured in this section were productivity, labour productivity, and EPZ garment export share, growth in productivity, labour productivity, investment, labour and wages. These variables were analyzed and the time frame observed was 1999 to 2005.

Productivity

Productivity in Mauritius was more impressive than it was in Kenya. In 1999, for every dollar invested, there was an $8.85 return on investment, whereas Kenya had a $2.82 return on investment in the same year. In 2000, Mauritius experienced productivity growth from 1999 to 2000 ($8.85 to $9.35); there was an 83 cent decrease in 2001 to $8.52. Kenya’s productivity decreased substantially to $1.92, and further down to $1.14 in 2001. The introduction of AGOA could be attributed to the increase in both countries from 2001 to 2002 ($8.52 to $9.78 in Mauritius respectively and from $1.14 to $1.18 in Kenya.). But in 2003, productivity in Mauritius increased to $10.40 while Kenya’s productivity dropped back to $1.14. In 2004, the productivity dropped to $5.73 in Mauritius but Kenya experienced a sharp increase as the return on investment was up 90 cents from 2003 to stand at $2.04. 2005 saw decreases for both countries. In Mauritius the productivity dropped to $4.66 and in Kenya, productivity plummeted to $1.47. These decreases can be attributed to the expiration of the Multi-fibre Agreement in 2005. On average, Mauritius’s productivity was $8.00 while Kenya’s productivity from 1999 to 2005 was $1.67.

It could be deduced that despite the new machinery that was invested in the Kenyan EPZ garment firms, lack of technological skills to operate the machinery could be undermining the country’s productivity levels. Frequently in the assembly line, each person is only trained to perform one task and therefore becomes adept at that one task such as cutting fabric or sewing. Consequently, they do not know how to perform other tasks in the rest of the assembly line.
**Figure 2:** Productivity in Mauritius and Kenya from 1999 to 2005

**Labour Productivity**

Mauritius was less productive than Kenya but more consistent during the same time period. In 1999, for every dollar invested on labour, there was a 3.74 unit return on investment, which decreased marginally to 3.72 units in 2000, and further decreased by 3.53 units in 2001, to 3.38 units in 2002 and 3.22 units in 2003. In 2004, there was a slight increase but in 2005 the return on investment plummeted to 2.68 units. Overall, labour productivity in Kenya has been on a downward spiral. In 1999, for every dollar invested in labour there were 10.93 units of output but in 2000, the return on investment dropped drastically to 6.34 units. In 2001, it increased to 6.68 units; the increase could be attributed to the introduction of AGOA. However, in 2002, the labour productivity decreased from 5.95 units to 5.45 units in 2003. Then in 2004, the return on investment increased sharply to 6.50 units and finally dropped in 2005 to 6.05 units. This could be because of high labour costs in Kenya. On average, the labour cost per person per month in
Kenya is about Kshs 7,200 (US$95) compared to Kshs 2,520 (US$33) in Madagascar, Kshs 3,240 (US$42) in India, and Kshs 2,880 (US$ 38) in Bangladesh (EPZA, 2006). It can be deduced that Kenya is overpaying their workers and the return on investment is rather low. The EPZA recommends that the government’s wage increases should be based on productivity and sector-based rather than the annual increase after a short wage revision period, as this might neutralize the high labour costs (2006). On average, for the given time period, Kenya has been performing much better than Mauritius as far as labour productivity was concerned. Kenya’s average productivity from 1999 to 2005 was seven units of production whereas Mauritius’s average was only three units of production. This could also be attributed to the high labour costs in Mauritius that caused the country to outsource their manufacturing base to Madagascar. From 2000 to 2001, Kenya saw a 0.34 unit increase in output (6.34 to 6.68 units) while Mauritius experienced a 0.19 decrease in output during the same year (3.72 to 3.53 units). AGOA was introduced in 2001 but it appears that its impact on Mauritius was negative. Both countries were affected by the expiration of the Multi-fibre agreement as the labour productivity decreased in Kenya and Mauritius by 0.45 and 0.55 units of production respectively.
Due to limitations in data collection, the Mauritius data did not represent the country’s EPZ export share as it was reported by Jauch (2007). The data provided by the Mauritius Central Statistics Office indicated that everything that the country exported was sold, so when computing the Mauritian EPZ garment exports the share was much smaller in relation to overall EPZ non-garment exports. According to the data provided, Mauritius’ average EPZ garment export share was 2.71% between 1999 and 2002, the EPZ garment export share in Mauritius declined from 3.13% to 3.02% to 2.61% and to 2.58% respectively. It rose in 2003 to 2.75% and declined again in 2004 to 2.63%, and again in 2005 to end the year at 2.25%.

On average, the Kenyan EPZ garment exports account for 73% of the country’s EPZ exports. In 1999 the EPZ garment share represented 65.53% of the total EPZ exports, this figure decreased by 2.26% in 2000 to 63.27% but increased substantially in 2001 by 8.75% and by
11.64% in 2002 to stand at 72.02% and 83.66% respectively. From 2003 to 2005, the garment export share was on a downward spiral decreasing from 80.24% to 76.26% to round off the year at 73.31%. Kenya’s global destination of EPZ apparel exports in 2005 is as follows, 66.9% (Kshs15,322 billion or US$202,795,351) of all exports were consigned to the U.S., of which 97.2% (Kshs 14,894 billion or US$206,574,202) comprised garment product exports (EPZA, 2006). In the same year, Europe accounted for 18.3% (Kshs 4,161 billion or US$55,073,192), the East African Community (EAC) accounted for 3.9% (Kshs 883 million or US$11,687,005), COMESA accounted for 4.1% (Kshs 929 million or US$12,295,841), the rest of Africa accounted for 1.5% (Kshs 347 million; US$4,592,741), and the rest of the world accounted for 0.5% (Kshs 110 million; US$1,455,912).

In 2004, 74.2% (Kshs 14,874 billion or US$206,574,202) were exported to the U.S., of which 98.7% (Kshs 14,688 billion or US$185,515,446) comprised of garment exports (EPZA, 2006). Europe accounted for 12.4% (Kshs 2,476 billion US$31,272,892) of the export market, the EAC accounted for 4.6% (Kshs 916 million or US$11,569,454) in 2004, COMESA 1.2% (Kshs 203 million or US$2,563,973), the rest of Africa accounted for 2.5% (Kshs 493 million or US$6,226,791), and the rest of the world accounted for 1% (Kshs 203 million or US$2,563,973) (EPZA, 2006).

The incentives offered to Kenya as well as other AGOA eligible countries include no import duties and the extension of GSP preferences until September 30, 2015, which allows for the export of over 6,400 items to the U.S. Subsequently, these factors have contributed in making the U.S. Kenya’s premier choice for EPZ garment export.
Figure 4: EPZ Garment Export Share in Mauritius and Kenya

Growth in Investment

Mauritius’s average growth in investment between 1999 and 2005 was 8.66%. Between 1999 and 2000 there was negative growth of 3.02%. This increased to 3.29% from 2000 to 2001. 2001 to 2002 saw extreme negative growth of 16.50% which improved to negative 3.41% from 2002 to 2003. There was exponential growth to 76.87% from 2003 to 2004 and another drastic negative drop of 5.26% in 2005. The major changes from 2000 to 2001 in Kenya and Mauritius can be attributed to the introduction of AGOA, although increase in Mauritius (3.29%) was marginal compared to Kenya 204.49%. The expiration of the MFA is reflected in Mauritius’s figures, negative 5.26% for 2005. Since the Mauritian EPZ garment firms have been in existence since 1971, it is possible the minimal and negative growth trends witnessed were because the country didn’t invest in any new machinery or equipment.
Kenya’s average growth in investment between 1999 and 2005 was 66.22%. Between 1999 and 2000, there was 57.7% growth and this increased exponentially from 2000 to 2001 by 204.09%. This is most likely because of the introduction of AGOA and the installation of new equipment and machinery at the EPZ garment firms. Between 2001 and 2002 it decreased to 83.29% and during 2002 to 2003 there was a 37.54% decrease. 2003 to 2004 saw a negative growth trend of negative 15.28% and finally from 2004 to 2005 there was an increase of 21.76%. It can be deduced that in the years of negative and low growth in investment, the garment firms did not invest in new machinery.

**Figure 5:** Growth in Investment in Mauritius and Kenya
Growth in Labour

Mauritius had an average growth trend in investment between 1999 and 2005 of negative 6.86. Between 1999 and 2000 there was negative growth of 2.07%. This decreased further to negative 4.23 from 2000 to 2001 but increased to negative 0.15% from 2001 to 2002. It then plummeted to negative 13.22% from 2002 to 2003 and decreased again to negative 15.14 from 2003 to 2004 before it increased to negative 6.38% from 2004 to 2005. These changes could be attributed to the fact that Mauritius moved its production base to Madagascar in an attempt to reduce the high labour costs.

Kenya’s average growth in labour between 1999 and 2005 was 48.70%. Between 1999 and 2000, there was 27.96% growth and this increased exponentially from 2000 to 2001 by 115.67%. This can be attributed to the man-power hired to work in the firms because of the implementation of AGOA. Between 2001 and 2002, it decreased slightly to 110.70% and during 2002 to 2003 there was a drastic decrease of 66.96% (43.74%). 2003 to 2004 and 2004 to 2005 saw drastic decreases; negative 4.77% and finally negative 1.10%.

As previously mentioned, the monthly labour cost per person in Kenya is about three times greater than it is in Madagascar. Thus, it would be beneficial for the Kenyan government to base the annual wage increases on employment sector and employee productivity, as the Export Processing Zones Authority recommended.
Figure 6: Growth in Labour

Growth in Wages

There was negative average growth in Mauritius of negative 0.01. From 1999 to 2000, the growth was 2.9% and it decreases to negative 0.9 from 2000 to 2001. From 2001 to 2002, the wages increased to 0.18% and jumped to 7.71% from 2002 to 2003 but dropped again from 2003 to 2004 to negative 2.57%. Finally, from 2004 to 2005, the growth dropped to negative 7.41%.

The average growth in Kenya’s EPZ garment firm wages was 57.49%. There was an 85.02% growth from 1999 to 2000. However, this decreased by 13.29% to stand at 71.73% from 2000 to 2001. There was a remarkable increase of 41.06% from 2001 to 2002 and then a dramatic decrease from 2002 to 2003 of negative 58.85%. There was a downward trend from 2003 to 2004 and from 2004 to 2005 of 27.74% and negative 5.77% respectively.
Growth in Productivity

Mauritius had a negative average growth trend in productivity of negative 15%. From 1999 to 2000 there was a 5.32% increase but this dropped to negative 9.78% from 2000 to 2001. From 2001 to 2002 it increased by 12.95% but dropped to 5.9% from 2002 to 2003. There was a dramatic decrease from 2003 to 2004 of negative 81.47% which improved to negative 22.93% from 2004 to 2005. This could be attributed to the lack of updated machinery and perhaps the outsourcing of the country’s manufacturing base to Madagascar. There was a negative average growth trend in Kenya’s productivity of negative 3.53% between 1999 and 2005. From 1999 to 2000, it was negative 32.01%, and it decreased further to negative 40.48% from 2000 to 2001. From 2001 to 2002, it increased to 3.4% but then dropped to negative 3.24% from 2002 to 2003. There was a remarkable increase from 2003 to 2004 as the growth in productivity was 79.15% but from 2004 to 2005 the growth decreased tremendously to
negative 28%. This could be attributed to the lack of technological skill in operating the machinery and equipment or perhaps decreasing numbers of employees due to turnover.

![Growth in Productivity](image)

**Figure 8:** Growth in Productivity

**Growth in Labour Productivity**

Mauritius had an average growth of negative 5.88% during the same time period. From 1999 to 2000 there was a negative 0.46% change, which further decreased to negative 5.32% and then improved to negative 4.44% but decreased again to negative 4.93% from 2000 to 2001 and 2001 to 2002 and 2002 to 2003 respectively. From 2003 to 2004 there was a positive increase of 0.03% but from 2004 to 2005 there was a huge decrease of negative 20.14%. Kenya’s labour
productivity had an average of negative 7.28% from 1999 to 2005. From 1999 to 2000, there was a decrease of 42.05% but this improved to 5.4% from 2000 to 2001. However, from 2001 to 2002, it decreased to negative 10.93% and improved to negative 8.39% from 2002 to 2003. There was a remarkable increase from 2003 to 2004 of 19.28% but then there was another huge drop from 2004 to 2005 of negative 6.96%.

It can be assumed that the changes in labour productivity were due to decreasing labour force and wage increases or decreases. There also may have been fewer employees to work in the garment firms during that time period.

Figure 9: Growth in Labour Productivity
Summary

The results of the study answer the research question and reveal that there is a positive relationship between the Export Processing Zones and the industrial development in Mauritius and Kenya. In terms of productivity, the overall average for Mauritius was 8 units compared to only 1.67 units for Kenya, showing that although as a whole Kenya did show some improvement in productivity between 2003 and 2004, there is still a lot of room for improvement. However, in as far as labour productivity was concerned, Mauritius was only at three units whereas, Kenya was at seven units. This supports the fact that Mauritius’ labour costs are too high, and resultantly, the country has shifted its manufacturing base to Madagascar.

This case study looked at the variables productivity, labour productivity, EPZ garment export share, growth in investment, labour, wages, and productivity and labour productivity as a measure of competitiveness within the export processing zones. A positive growth trend in the following variables would indicate that export processing zones do have an impact on each country’s industrial development. Moreover, the use of Michael Porter’s Diamond Model proposes that an industry that takes into account the four interlinked factors and activities with the support of the government and strives to employ them efficiently, is likely to register increased performance over time. In other words, such an industry is considered competitive. Performance in this study is measured by variables such as employment and export ratio. A change in the trend of these variables would provide useful information relating to the competitiveness of each of the country’s industries under AGOA.

Overall, Mauritius’s EPZ garment export share was 2.71%, compared to Kenya’s 73%, indicating the decentralization of the Mauritian garment export manufacturing sector. It must be noted that there were difficulties in data collection, and exports were used as a proxy for sales for both countries. Kenya had superior performance to Mauritius in growth in investment ($66.22 return on investment to $8.66), labour (48.7% to negative 6.86%), wages (57.49% to negative 0.01%), and labour (negative 3.53% to negative 15%). The introduction of AGOA in 2000 could explain Kenya’s huge increase in investment in 2001. Moreover, the country’s export processing zones are relatively new compared to those in Mauritius which could explain why the country experienced greater growth in investment, labour, wages and labour during the 1999 to 2005 time span.
In as far as growth in labour productivity was concerned; Mauritius had superior performance to Kenya (negative 5.88% to negative 7.28%). Despite shifting their manufacturing base to Madagascar, the country was still very productive in output.
Summary

The purpose of this study was to investigate whether Export Processing Zones in Kenya and Mauritius have been beneficial to each country’s industrial development. This study has revealed that the EPZs have been beneficial to both countries. Although there have been mixed feelings regarding the necessity of the export processing zones within a country, their establishment was intended to increasing foreign exchange earnings and stimulate production of non-traditional exports such as electronics and automobiles (Engman et al., 2007). This is due to the duty free incentives provided, as well as a liberal regulatory environment for export. EPZs have also been located in disadvantaged regions or cities in order to tackle unemployment. With time, some countries have benefited from the significant dynamic effects that foreign investment can bring (Engman et al., 2007). Mauritius had impressive export performance under the EPZ program. During the first quarter of 2007, the enterprises formerly holding an EPZ certificate amounted to Rupees 8,154 million (US$263,457). Although this was a 15.3% decrease over the previous quarter, it is a 23% increase from the first quarter in 2006 (Central Statistics Office, 2007). In the Kenya’s EPZ garment sector, exports under AGOA have been increasing considerably. The EPZ program maintained the momentum that began with the advent of AGOA, with most indicators revealing an upward trend for 2006 (EPZA, 2006). This positive growth trend was attributed to the average attainment of set targets for the year, which were at 92% compared to 81% in 2005 (EPZA, 2006). Technology transfers and demonstration effects can act as catalysts for domestic entrepreneurs, and some of the more successful EPZs have managed to integrate the zones in the national economy, which may explain the success of the EPZs (Cling and Letilly, 2001; Madani, 1999).

Kenya’s competitive advantage lies in the fact that it has a large labour force as well as 384,500 hectares of land that can be cultivated for cotton production (Bedi, 2006). Both these factors are part of the natural endowments that Porter’s model proposes a country should efficiently maximize in order to create a comparative advantage.
Discussion

While Kenya and Mauritius have had their fair share of difficulties, the results of the study reveal that the presence of the export processing zones within each country has been beneficial, especially in as far as providing access to global markets and improving export performance. However, each country’s performance has fluctuated considerably during the 1999 to 2005 time span. Externally, these fluctuations can be attributed to the introduction of AGOA in 2000, the aftermath of September 11th in 2001 and the expiration of the Multi-fibre Agreement in 2004. Internally, each country has also had its fair share of setbacks. Kenya’s export processing zones are constantly being hampered by frequent policy changes and operational procedures without adequate consultation, high production and operation costs, cut-throat market competition, slow pace of labour, and employment reform laws (EPZA, 2006). They are also hampered by the unavailability of long term industrial loans to the exporting sector, undue delays at the ports of entry due to government red tape, sluggish pace of the cotton industry revival and establishment of a local fabric supply, extension of AGOA type preference to some Asian countries, poor local participation within the EPZ ownership, lack of capacity building assistance, expiration of tax holiday as well as the dependency on the U.S. market and apparel sector (EPZA, 2006).

Mauritius also has experienced its fair share of problems; high labour costs and declining productivity caused the country to move its manufacturing base to Madagascar. However, several big textiles companies in Madagascar closed down, following the country’s 2001 presidential elections and all the political instability that ensued (OECD, 2003). Resultantly, there were 742 job losses by the first quarter of 2002, so during that time the fate of Mauritius’s clothing and textile industry lay in the balances, depending on Madagascar’s political situation (OECD, 2003). This was reflected in the results, as the country’s labour productivity and growth in labour was on a downward spiral from 2001 through 2005. According to Michael Porter’s Diamond model (1990), production factors such as skilled labour and infrastructure are among the necessary factor conditions for creating competition within certain industries. By outsourcing its production base to Madagascar, Mauritius is building upon its comparative advantage that resides in the factor endowments and created endowments.
Recommendations

Despite the improvement to the Kenyan textiles and apparel industry under AGOA, the absolute benefit of having EPZs within a country is still being determined. Critics argue that although the presence of the EPZs initially creates a significant number of jobs within a country, these newly created jobs are often of poor quality and not cost-effective, as EPZ countries incur two types of costs. The first is the direct cost of establishing EPZ infrastructure and subsidized services. The second is the indirect cost in the form of foregone government revenue and national income resulting from tax exemption and import and export duties et cetera (Jauch, 2002). Furthermore, it is believed that more jobs could have been created if the respective country invested the money used to set up EPZs in job creation in the small-scale manufacturing sector or other large job creating programs in the broader economy (Nel, 1994). In Kenya’s case, it is recommended that the EPZ program’s strategies be revisited in order to re-align them with the country’s current economic realities (Kibua & Nzioki, 2004). This is imperative because the EPZs have not been achieving the goals for which they were originally established.

Notwithstanding, Mauritius has become a paragon of hope for the rest of the African EPZs. The Mauritian EPZ sector has been growing since its inception in 1971. This is manifested by its increasing export share in the country’s total exports, which rose from 25% in 1978 to over 65% in 1998 (Tekere, 2000). Over the years, the share of value-added proportion from the Mauritian EPZs has been increasing. It reached over 50% in 1999 and accounted for 13% of the country’s GDP (Tekere, 2000). Moreover, the diversification of the Mauritian EPZ program has been attributed as one of the most important economic benefits to the Mauritian economy.

At the country’s independence in 1968, it had a sugar cane monoculture economy, with a chronic dependency on the sugar market (Baissac, 2003). Since 1985, the Mauritian Export Processing Zone (MEPZ) exports overtook sugar as the prime source of exports, foreign exchange earnings, and employment. This exemplified the gradual diversification of the Mauritian economy (Baissac, 2003). Additionally, the country has a substantial manufacturing sector outside the EPZ, which accounts for 12% of GDP and generates 50,000 jobs (OECD, 2003). This non-EPZ sector includes soap, sodas, flour, candles and shoe processing industries (OECD, 2003). It is believed that the increase in the country’s export of manufactured products played a critical role in reducing Mauritius’s vulnerability to price fluctuations in the global market that are often associated with primary commodity exports (Tekere, 2000). As
aforementioned, the initial growth under the Mauritian EPZ program was largely due to foreign investment; was estimated that 60% of all EPZ investments in the country are locally owned (Tekere, 2000).

It has been questioned whether or not the Mauritian EPZ program success story can be replicated with the same amount of success. Based on the findings in the discussion, it is necessary to investigate whether the presence of the EPZs in Kenya can actually give the country a fighting chance in the global textiles market. This is crucial because the foreign ownership of the Kenya’s EPZ enterprises accounts for 53.5% as compared to Kenyan ownership of 16.9% and joint venture ownership of 29.6% (EPZA, 2006). This study investigated the export performance of the Kenyan and Mauritian EPZ garment firms. It sought to identify challenges posed by the introduction of AGOA IV and determine the effectiveness of the export processing zones in the industrialization process of both countries.

While Kenya has realized noteworthy garment export performance over the years through the EPZ program and under AGOA, more needs to be understood about how to continue the trend and how it can help the country gain a stronger position as a global clothing and textile trade contender. Kibua and Nzioki (2004) have argued that Kenya waited too long to adopt the EPZ program, and with the implementation of the fourth phase of AGOA, it is apparent that the country cannot afford to wait too much longer before it changes its strategy again. Additionally, the Kenyan government should continue to take remedial measures towards the EPZ program and expedite the processing of rehabilitating the country’s cotton industry. The government should consider purchasing the foreign owned EPZs in order to keep the wealth within the country or at least have a larger share of local ownership. Kenyan ownership of the EPZ firms is currently at a meagre 16.9% whereas foreign ownership and joint-venture ownership account for 53.5% and 29.6% respectively.

Mauritius has managed to reinvent itself and devise new ways of meeting the challenging circumstances that are presented on both global and domestic levels. The country successfully implemented the EPZ strategy in the 1970s and appears to be fairing well without it. A subsequent study needs to be done to quantitatively determine how the country is doing without the EPZ program. Nevertheless, the country has introduced 40 bold reform measures into the 2006/2007 budget. These reforms are believed to make the economy more flexible and open. While it remains to be seen how AGOA IV will impact the country, Mauritius has been taking
pre-emptive measures and it is possible that the effects will be negligible. Kenya should definitely follow Mauritius’s lead by taking a more proactive approach.

Another problem that could be hampering the effectiveness of the Export Processing Zones in Kenya is the cultural differences stemming from the large percentage of foreign ownership (53.5%), compared to 16.9% of Kenyan ownership. According to Litrico (2006), in addition to facing numerous challenges, which run the gamut from hiring practices to community relations, international business managers also have cultural differences to contend with. Additionally, the cultural gap between a host country and international management can be very wide, especially in emerging markets (Litrico, 2006). The success of these international firms is contingent upon bridging these cultural gaps. The challenge for international businesses is compounded by the fact that foreign managers have their own views on how efficiency can and should be attained, and often view the local culture as an impediment to their organization’s progress (Stephens and Greer, 1995). Since the ultimate goal is to reduce turnover, make workers more reliable and develop local leadership; remedial action calls for a mixture of paternalism and regimentation (Bird, 2004). Litrico believes that an approach of this nature might be appropriate because it exploits existing traditional patterns (2006). It must be noted that this approach was used in Mexico; a country that is often believed to have had a long tradition of paternalism and authoritarianism (Stephens and Greer, 1995). Although Kenya is similar to Mexico in its history of paternalism and authoritarianism, a pilot study would have to be conducted to determine if this approach would work as well.

**Limitations to Current Study**

1) The inability to obtain data on Kenyan EPZ garment firm performance before 1999 does not give a broad picture of the country’s situation with the Export Processing Zones.

2) The inability to obtain data on variables such as export sales, for Mauritian EPZ garment firms led to the use of exports as a proxy for sales. This might not paint an accurate picture of the country’s situation as the assumption that everything exported is sold.

3) The inability to obtain EPZ garment firm level data from Kenya and Mauritius. This prevents a deeper analysis of the effectiveness of the export processing zones in both countries.

4) The inability to collect sufficient data due to the reluctance of respondents to fill out questionnaires. According to Fafchamps (2004), personal acquaintance in business is an
integral part of the information gathering process and mutual trust cannot be developed without it. The time constraints of the research process in Kenya, might have prevented further interaction with the EPZ garment firm managers to a level that they might have felt more comfortable sharing the information. Moreover, Fafchamps (2004) stated that in Kenya, one-third of case study firms pay business visits and take an occasional lunch or tea with their suppliers or staff. Moreover, half of Kenyan firm owners met with their suppliers personally, either occasionally or frequently-on average, every five months (Fafchamps, 2004). While Fafchamps (2004) was analyzing information sharing between businesses and suppliers, it can be deduced that the unsuccessful data collection in this case study was due to the unfamiliarity and lack of trust from between the EPZ garment firm managers and researcher. An additional problem with data collection could have been due to the fact that the stakeholders do not see data collection process as a priority, or they do not have enough time to fill it out (Hurrell, 2007).

**Recommendations for Future Study**

To carry out a similar study using EPZ garment firm level data in order to get a more definitive picture of the impact of the export processing zones under AGOA.

To determine if Kenya has explored the added-value of growing cotton organically.

To work in collaboration with a stakeholder who is familiar with the EPZ garment firm managers, in order to facilitate information sharing.

**Conclusion**

Despite the improvement to the Kenyan textiles and apparel industry under AGOA, the absolute benefit of having EPZs within a country is still being determined. Critics argue that although the presence of the EPZs initially creates a significant number of jobs within a country, these newly created jobs are often of poor quality and not cost-effective, as EPZ countries incur two types of costs. The first is the direct cost of establishing EPZ infrastructure and subsidized services. The second is the indirect cost in the form of foregone government revenue and national income resulting from tax exemption and import and export duties et cetera (Jauch, 2002). Furthermore, it is believed that more jobs could have been created if the respective country invested the money used to set up EPZs in job creation in the small-scale manufacturing sector or other large job creating programs in the broader economy (Nel, 1994). In Kenya’s case, it is recommended that the EPZ program’s strategies be revisited in order to re-align them with
the country’s current economic realities (Kibua & Nzioki, 2004). This is imperative because the EPZs have not been achieving the goals for which they were originally established.

Notwithstanding, Mauritius has become a paragon of hope for the rest of the African EPZs. The Mauritian EPZ sector has been growing since its inception in 1971. This is manifested by its increasing export share in the country’s total exports, which rose from 25% in 1978 to over 65% in 1998 (Tekere, 2000). Over the years, the share of value-added proportion from the Mauritian EPZs has been increasing. It reached over 50% in 1999 and accounted for 13% of the country’s GDP (Tekere, 2000). Moreover, the diversification of the Mauritian EPZ program has been attributed as one of the most important economic benefits to the Mauritian economy. At the country’s independence in 1968, it had a sugar cane monoculture economy, with a chronic dependency on the sugar market (Baissac, 2003). Since 1985, the Mauritian Export Processing Zone (MEPZ) exports overtook sugar as the prime source of exports, foreign exchange earnings, and employment. This exemplified the gradual diversification of the Mauritian economy (Baissac, 2003). Additionally, the country has a substantial manufacturing sector outside the EPZ, which accounts for 12% of GDP and generates 50,000 jobs (OECD, 2003). This non-EPZ sector includes soap, sodas, flour, candles and shoe processing industries (OECD, 2003). It is believed that the increase in the country’s export of manufactured products played a critical role in reducing Mauritius’s vulnerability to price fluctuations in the global market. The export of manufactured products is often associated with primary commodity exports (Tekere, 2000). As aforementioned, the initial growth under the Mauritian EPZ program was largely due to foreign investment, it was estimated that 60% of all EPZ investments in the country are locally owned (Tekere, 2000).

Although the goals of this study were accomplished, and it has been determined that export processing zones within Kenya and Mauritius have been beneficial to each country’s industrial development, it has been questioned whether or not the Mauritian EPZ program success story can be replicated with the same amount of success. It is apparent from this study is that Mauritius performed well when the EPZs were in existence and even after they have been phased out. Part of their success was due to the large local ownership of EPZ firms. The initial growth under the Mauritian EPZ program was largely due to foreign investment, and it was estimated that 60% of all EPZ investments in the country are locally owned (Tekere, 2000).
So, increasing local ownership of the Kenyan EPZ firms is a necessary step. As the foreign ownership of the Kenya’s EPZ enterprises accounts for 53.5% as compared to Kenyan ownership of 16.9% and joint venture ownership of 29.6% (EPZA, 2006). The next step for Kenya is to follow Kibua’s and Nzioki’s suggestion to revisit the EPZ strategy in order to streamline it with Kenya’s current economic situation. Although following Mauritius’s lead and creating a country-wide duty-free zone might not be feasible in the foreseeable future, with the implementation of AGOA phase IV it is imperative that Kenya take some sort of remedial action, otherwise the country will no longer be eligible for AGOA type preferences by September 2012.
The purpose of this questionnaire is to find out about the manufacture and export of apparel in Kenya. Kenya has great potential for increased apparel export and trade. However, existing barriers to the country’s competitiveness in the global textiles market must be properly identified in order to bring about the revival of the textiles industry, and encourage increased global export and trade. The results of this study will be used to make recommendations to the Kenyan government and policy makers in order to make garment manufacture and export more lucrative and productive. The information collected is completely risk-free and its confidentiality will be maintained to the maximum extent allowable by law. Please check the box that best describes your feelings about the statements using the codes provided, where applicable.

**APPENDIX**

**SURVEY INSTRUMENT**

**QUESTIONNAIRE**

The purpose of this questionnaire is to find out about the manufacture and export of apparel in Kenya.

Kenya has great potential for increased apparel export and trade. However, existing barriers to the country’s competitiveness in the global textiles market must be properly identified in order to bring about the revival of the textiles industry, and encourage increased global export and trade. The results of this study will be used to make recommendations to the Kenyan government and policy makers in order to make garment manufacture and export more lucrative and productive. The information collected is completely risk-free and its confidentiality will be maintained to the maximum extent allowable by law. Please check the box that best describes your feelings about the statements using the codes provided, where applicable.

**GARMENT MANUFACTURING QUESTIONNAIRE**

**Company Information**

1. Name of your company

2. Telephone number

3. Location of your company (physical)

4. What year was your company established in Kenya?

5. Did your company relocate from another country? □ Yes □ No

6. If yes, what is the name of that country?

7. Type of company? □ EPZ □ Non EPZ

8. If you operated within the EPZ, what incentives do you get from the government?

9. What are your company’s major export products?

**Management Experience and Training**

10. Did you have any work experience in a similar field prior to joining your company? □ Yes □ No

11. If yes, for how long?

12. Have you received any technical training relating to the garment industry? □ Yes □ No

13. If yes, for how long?

14. If yes, who paid for the training? □ Self □ Employer □ Other

**Ownership and Financial Information**

15. How does your company finance its garment manufacturing activities? (Please check all that apply)

□ State Banks+ GOK credit programs □ Private Banks □ NGO’S □ Foreign Investors

□ Personal savings □ Other (Please specify)
16. Referring to question 15, please indicate how much of your company’s financial requirements come from the following (in percentage)

- □ State Banks/GOK credit programs
- □ Private Banks
- □ NGO’S
- □ Foreign Investors
- □ Personal savings
- □ Other (Please specify)

17. What is your company’s ownership structure?

- □ Publicly owned
- □ Privately owned
- □ Joint venture
- □ Foreign venture (country name)
- □ Other (Please specify)

Export, Production and Costs

18. Please fill in the table the (total) value and percentage of your exports to the following countries.

<table>
<thead>
<tr>
<th>Destination</th>
<th>2000 (value)</th>
<th>%</th>
<th>2003 (value)</th>
<th>%</th>
<th>2006 (value)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>COMESA</td>
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<tr>
<td>EAC</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. If your company does not export 100% of your output, where do you sell the remainder?

20. Please fill in the following table about your company’s material procurement (in percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Materials</th>
<th>% Locally Made</th>
<th>% Imported</th>
<th>Major Countries</th>
<th>Major Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. Please fill in the following table about investment, production, costs and employees for each year.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2003</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of capital investment (Kshs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Revenue (Kshs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment to subcontractors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Salaries/Wages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average age of Employees (select from: [a:18-24; b:25-31; c:32-40; d:41-50; e:51-60; f:over 60])</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. If your company subcontracts, what is the size of the firm that is sub-contracted to do a particular task?

- □ Micro
- □ Small
- □ Medium
- □ Large
23. What percentage of your employees fell into the following education levels in the years listed below?

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>2000</th>
<th>2003</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than secondary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary school degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical (Certificate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college (Diploma)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some graduate courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Employee Training**

24. Does your company offer the employees any internal training or capacity building workshops? □ Yes □ No

25. If yes, how often are these training sessions held? __________________________

26. If yes, what proportion of these employees are in apparel production? __________________________

27. Please list your company’s three greatest challenges in the production and export of garments (in descending order) 1.__________________________2.__________________________3.__________________________

**Demographics**

28. Your Designation ____________________________

29. Gender: □ Male □ Female

30. Age_________

31. What is your race or ethnic origin? ____________________________________________

32. What is your highest level of education? □ Less than secondary school □ Secondary School degree □ Technical degree □ Some College □ Bachelor’s degree □ Some graduate courses □ Graduate degree

Thank you for taking time to respond to this questionnaire. Please feel free to contact Dr. John Akoten, Real Sector Research Fellow at the Institute of Policy Analysis and Research: akoten@ipar.or.ke, 020-251179, or Francis Rotich, Statistics Officer at Export Processing Zones Authority: frotich@epzakenya.com, 045-26421-6, if you have any questions or concerns.
REFERENCES


Heineman.


BIOGRAPHICAL SKETCH

Education:
Florida State University: Tallahassee, Florida
   Master’s of Science degree in Merchandising   April 2008

Florida State University: Tallahassee, Florida
   Bachelor’s of Science Degree in Merchandising   December 2005

Seminole Community College: Sanford, Florida
   Associates in Science in Interior Design
   Associates in Arts Degrees   December 2003

Loreto Convent Valley Road: Nairobi, Kenya
   Kenya Certificate of Secondary Education   December 1999

Professional Experience and Internships:
Florida State University: Tallahassee, Florida   August 2006 - December 2007
   Teaching Assistant: Visual Design in Clothing and Textiles
   Assisted students with the comprehension of Visual Design principles and elements
   Assisting Instructor with exam proctoring, grading and attendance

   Teaching Assistant: Quantitative Merchandise Management
   Assisted students with comprehension of Quantitative merchandise analysis
   Assisted Instructor with Data entry, grading and attendance
   Formulated and administered tests to evaluate mathematical proficiency

   Intern
   Conducted Interviews
   Verified facts
   Reviewed Policy Journals
Stone Scholarship House: Tallahassee, Florida  
*Head Resident*  
May 2006 - January 2008

Overseeing House Affairs  
Planning house budget  
Enforcing house rules and foundation policies

FSU Service Corps: Tallahassee, Florida  
*Special Relations Chair*  
August 2006 - April 2007

Researching community service events for Service Corps to participate in on campus  
Organizing co-sponsorship of community service events between the Service Corps and various student organizations on campus  
Assisting Director and Assistant Director with event planning

WWD - Accessories: New York, New York  
*Intern*  
October 2005 - December 2005

Accompanied market editor on market appointments  
Assisted with fashion shoots  
Researched fashion trends

America Reads: Tallahassee, Florida  
*Assistant Coordinator*  
August 2004 - May 2005

Acted as a liaison between Coordinator, School site administration and mentors  
Assembled “mentor packets” to assist mentors in the assessment of students’ reading and writing skills and comprehension  
Performed administrative office duties  
Assisted Coordinator and Director with event planning

Norwegian Red Cross: Nairobi, Kenya  
*Volunteer Office Assistant*  
January 2000- February 2001
Assisted in formulating tests and exercises for Somali refugees to evaluate English proficiency
Edited written work and assisted refugees with English grammatical comprehension
Assembled personal care packages for Somali refugees
Performed administrative office duties; coordinating flight and hotel reservations, hosting delegates, recording and typing meeting notes and operating switchboards

Service:
America Reads: August 2004 - Date
Boy and Girls Club: May 2005 - Date
2nd Harvest Food Bank: February 2006 - August 2006
Leon County Humane Society: February 2006 - August 2006
Project L.O.V.E.: August 2005 - December 2005
FSU Service Corps: August 2006 - April 2007

Recognition:
Hortense Glenn Honor society: 2007 - Present
Golden Key Honor Society: 2006 - Present
Kappa Omicron Nu Honor Society - Pi Chapter: 2005 - Present
The National Dean’s List: 2004 - Present
Florida State University Dean’s List: 2004 - Present

Professional Conferences and Publications:
Co-authored a paper with fellow graduate students entitled, “Loyalty Strategies: How do Apparel E-tailers Use them on their Websites?” This paper was presented at the 2007 European Association for Education and Research in Commercial Distribution (EAERCD) conference in Bonn, Germany in June.

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