A COMPARATIVE STUDY OF KENYA AND UNITED ARAB EMIRATES EXPORT PROCESSING ZONES COMPETITIVENESS USING PORTER'S THEORY OF COMPETITIVE ADVANTAGE OF NATIONS

By

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DECLARATION

This research project is my original work and has not been presented for award of a degree in any other University.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

To my family: For their unconditional love, inspiration and untiring support.

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LIST OF ABBREVIATIONS

AGOA - African Growth and Opportunity Act

BBC - British Broadcasting Corporation

CNN - Cable Network News

EDP - Export Development Program

EPZA - Export Processing Zone Authority

EPZs - Export Processing Zones

FDI - Foreign Direct Investment

FOB - Free on Board

FZA - Free Zone Authority

GATT - General Agreement of Tariffs and Trade

GCI - Global Competitiveness Index

GDP - Gross Domestic Product

GNI - Gross national Income

ILO - International Labor Organization

JAFZA - Jebel Ali Free Zone

MTV - Music Television

R&D - Research and Development

SWOT - Strength, Weaknesses, Opportunities and Threats

UAE - United Arab Emirates

WEF - World Economic Federation

WTO - World Trade Organization

ABSTRACT

Export processing zones have increasingly been used by governments in developing countries as a policy tool for development. Both developed and developing and have turned to export processing zones in a bid to attract foreign direct investment and trade through export oriented growth. Experience has shown that export processing zones can be successful in earning foreign exchange, creating employment and in developing export competitiveness. While countries like China, Dominican Republic, United Arab Emirates and Singapore have succeeded in their zones, zones established in some developing countries have failed to attract substantial investment. In sub Saharan Africa, with the exception of Mauritius, countries like Botswana, Cameroon, Ghana, Kenya, Madagascar and Malawi are among those that have failed to attract substantial foreign direct investment through export processing zones. The objective of this research was to determine whether Porter's theory of Competitive Advantage of Nations can explain the difference in competitiveness between Kenya and United Arab Emirates export processing zones. Porter's theory states that nations can only create a sustainable competitive advantage if they acquire four broad attributes, which he called the determinants of competitive advantage, that create the environment in which local firms compete and in so doing create a competitive advantage. The four determinants are factor conditions, firm strategy, structure and rivalry, demand conditions, related and supporting industries and form the diamond of competitive advantage. Porter's theory predicts that a country with a more robust diamond will be more competitive.

The research, a comparative case study research design, examined the difference in competitiveness by analyzing each determinant separately. Each determinant was broken down into different categories. Each category within the determinant was further broken down into its constituent elements. As an example, one of the factor conditions categories was infrastructure. Infrastructure was further broken down into its constituent elements of road infrastructure, railroad infrastructure, port infrastructure and so on. Secondary data on the global ranking and score of competitiveness of each element was obtained from World Economic Forum Global competitiveness survey report for both Kenya and United Arab Emirates. These were then tabulated for each category of determinant and

competitiveness for the countries compared to determine which was more competitive. A summary table was then constructed for each determinant and by examining the number of categories a country was more competitive, an overall leader in each determinant was determined. Where there was an apparent tie, the actual element scores within categories were tallied to determine the country that was more competitive.

The research findings showed that United Arab Emirates was more competitive in all four determinants and had therefore a more robust diamond than Kenya, confirming the prediction of Porter's Theory of Competitive Advantage of the Nations. The research showed that Kenya had competitive weaknesses mainly in its institutions, infrastructure, health, knowledge resources in terms of secondary and tertiary enrollment and macroeconomic stability. Institutions had many categories such as property and intellectual rights, judicial independence and efficiency of legal framework, bureaucracy, business ethics, crime and corruption. The role of Kenya's government is to strengthen Kenya's diamond by addressing the subject areas. By so doing it will increase its global competitiveness, instill investor confidence and attract more foreign direct investment in Kenya export processing zones.

UAE has a more robust diamond than Kenya but it can enhance its competitiveness by addressing areas its areas of weakness which are health, knowledge resources in enrollment of primary, secondary and tertiary education, innovation and also address time required to start. Because of UAE financial strength, it does procure latest technology from advanced nations. UAE government must however work to develop its education system and areas of research if wants to improve its global competitiveness.

CHAPTER ONE

INTRODUCTION

1.1   Background to the Study

In the last few decades, the Export Processing Zones (EPZs) have increasingly been used by governments as a policy tool for development. In both developed and developing countries, Governments have turned to EPZs to attract foreign direct investment and trade through export oriented growth.   The International Labor Organization (ILO) defines EPZs as industrial zones with special incentives set up to attract foreign investors, in which imported materials undergo some degree of processing before being re-exported (ILO, 2003).   Modern EPZs have been around for about half a century, some of the first ones being started in Puerto Rico and Ireland (Shannon Free Zone set up in 1959). Growth in international trade and the apparent success of this concept, has led to a proliferation of EPZs across the globe. ILO statistics show that the number of EPZs grew from 79 in 25 countries in 1975 to 3500 in 130 countries in 2006 (Boyenge, 2007) .

The popularity of EPZs has been backed by global trends such as increasing emphasis on export oriented growth, increasing emphasis on Foreign Direct Investment, transfer of production of labor intensive industries from developed to developing countries, growing international division of labor and incidence of global production networks (Engman et al, 2007). Many developing countries have established EPZs to gain benefits such as attracting foreign direct investments, job creation, technology transfer, development of new non traditional export products and hence new export markets and other backward linkages that will contribute to the local economies. Host countries have offered incentives such as physical infrastructure, removal of government red tape and bureaucracy by offering one stop shop administrative services, duty exemptions, tax holidays, subsidies, relaxed regulatory requirements and export business support services to attract investors.

1.1.1   Competitive Advantage of Nations

In 1990, Porter published the results of an intensive research that studied 100 industries and 10 nations. Porter's work emanated from his belief that existing theories did not fully explain why nations achieve international success in a particular industry (Hill and Jain, 2006). Porter observed that traditional economic based theories such as the Heckscher-Ohlin, Theory of Comparative Advantage and other factor based theories have failed to satisfactorily explain why some nations have prospered post World War II era in comparison with others (Bennett, 2006). National competitiveness has to do with a nation's ability to design, produce, distribute, or service products within an international trading context while earning increasing returns on its resources (Ball et al, 2008). Porter felt that a nation's ability to achieve sustained competitive advantage within a particular industry may be explained by variables other than factors of production on which past traditional theories were based (Ball et al, 2008).

Porter argues that national prosperity is created and not inherited. It does not result from a country's natural endowments, its labor pool, its interest rates, or its currency value, as classical economics have suggested (Porter, 1990a). He notes that inputs such as labor, natural resources and financial capital have become less valuable in an increasingly global economy (Porter, 1990). Competitiveness is no longer the preserve of nations with favourable inheritance. Porter argues that prosperity depends on nation's ability to create a business environment, along with supporting institutions that enable it to productively use and upgrade its inputs (Porter, 1990). Porter goes on to say that prosperity is matter of nation's choice and that nations choose prosperity when they organize their policies laws and institutions based on productivity.

Porter put forward his theory of Competitive Advantage of Nations which states that nations can only create a sustainable competitive advantage if they acquire four broad attributes, which he called the determinants of competitive advantage, which create the environment in which local firms compete and in so doing create a competitive advantage. The first determinant was Factor conditions which relates to the appropriateness of the nations factors of production such as skilled labor, road and rail

infrastructure and its natural resources needed to compete in that industry. The second determinant was Demand Conditions which relates to the nature of home demand for industry's product or service. Porter noted that firms that can survive and flourish in highly competitive and demanding local markets are likely to gain competitive edge at an in international level. The third determinant was Related and supporting industries and concerns the presence or absence of supplier industries and related industries that are internationally competitive. Porter noted that having competitive related industries and suppliers provides a firm with a competitive edge in that its production inputs are already at a globally competitive level. Other accruing advantages are close working relationships, close proximity and timeliness of supplies, information flows and collaborative efforts. The fourth determinant was Firm, strategy, structure and rivalry and related to conditions in the nation that govern how companies are created , organized and managed, and the nature of their domestic rivalry (Porter, 1990).

Porter went on to say that while the determinants of national advantage shape the environment for competition in particular industries, pure chance and government played a part in influencing competitive advantage. He noted that chance events were important because they created discontinuities in the competitive arena that was able to nullify competitive advantages of previously established companies and by so doing creating opportunities that other nations firms could respond to and achieve their own competitive edge. Porter said that the role of government was quite major in setting the stage and that its real role in national competitive advantage is in influencing the four determinants (Porter, 1990). The influence of the government policies could impact the four determinants in either a positive or negative manner. The policies of government would include among others rules on business competition, regional development, industry subsidies, educational policies, capital market policies etc.

1.1.2   The Kenya Export Processing Zone

The Kenya Export Processing Zone (EPZ) programme was established by the government of Kenya through an Act of Parliament, The Export Processing Zone Act Cap 517 (EPZ Act Cap 517).   This Act provided for the establishment of Export

Processing Zones and the Export Processing Zones Authority (EPZA) whose purpose was to provide for the promotion and facilitation of export oriented investment and the development of enabling environment for such investment and for connected purposes. The Act defined the Export Processing Zone as a designated part of Kenya where any goods introduced are generally regarded in so far as import duties and taxes are concerned, as being outside the customs territory but are duly restricted by controlled access and where in the benefits provided under the Act apply (EPZ Act Cap 517). The programme was created in response to the limitations of import substitution strategy of industrialization which had caused the decline in industrial investment and output. Prior to 1990, the Kenya reform programme was focusing on reducing the anti export bias of the import substitution strategy. From mid 1970s to mid 1980s, Kenya experienced deterioration in export performance. Merchandise export as a percentage of the Gross Domestic Product (GDP) had fallen from 19.6% in 1970s to an all time low of 11.5% in 1987. The export performance was on the decline and job creation was weak. With the support of the World Bank, the Kenyan Government established the export development programme (EDP) in 1990 whose aim was to address infrastructural and institutional constraints to exports production and marketing. The Kenya EPZ programme was part and parcel of the export development programme.

The key objectives of the EPZA are defined in the Act were three. The first was the development of all aspects of the export processing zones with particular emphasis on provision of advice on the removal of impediments to, and creation of incentives for, export- oriented production in areas designated as export processing zones. The second objective was the regulation and administration of approved activities within the export processing zones, through implementation system in which the export processing zone enterprises are self regulatory to the maximum extent. The third objective was the protection of Government revenues and foreign currency earnings (EPZ Act Cap 517).

To enable EPZA carry out these objectives, the Act defined its powers, duties and functions and empowered it to formulate rules as may be required for the purpose of ensuring smooth operation of EPZs. Eligible activities to be carried out within an EPZ

are manufacturing activities, commercial activities and service activities. The Act however requires that if a firm in the EPZ is involved in both manufacturing and commercial activities involving goods manufactured outside, the two activities must be separated. Appendix 1 shows a list incentives offered by the Government of Kenya to EPZ enterprises under the EPZ Act.

EPZA Strategic plan 2004 to 2009 report indicates that there has been growth in the EPZ programme (EPZA 2004). EPZ reports show that in 1998 there were 18 companies in EPZ that generated 3945 jobs for Kenyans. By 2006, the number of firms had grown to 70 and had generated 36,677 jobs for Kenyans. The value of exports has also increased from KShs 1.8 billion in 1998 to KShs 22.8 billion in 2006. Over a nine year period from 1998, cumulative private investments has risen from KShs 5.7 billion to KShs 20 billion in 2006 with new investors coming from Sri Lanka, India, Taiwan, USA, Belgium, UK, China and South Africa, among others. Kenya EPZA reports also show that its contribution to the economy has also been growing with GDP contribution rising from 0.6% in 2001 to 2.18 in 2004. It is noted to have remained constant at 2% in 2005 and 2006.

1.1.3 Export Processing Zone in United Arab Emirates

United Arab Emirates (UAE) has been a trade and commercial meeting place for many centuries. Free zones in UAE were established with clear view of attracting foreign investment. The first Export Processing Zones was the founding of Jebel Ali Free Zone (JAFZA) in the emirate of Dubai. JAFZA was the brainchild of Dubai Government who had envisioned it as the ideal industrial, warehousing and distribution hub in the Middle East. His Highness Sheikh Rashid Bin Saeed Al Maktoum signed a decree establishing JAFZA in May 1980.. The free zone was built around Jebel Ali Port, the largest man-made port in the world and covers over 100 square kilometers. It commenced its operations in 1985. By then only standard-size offices units and warehouse units were constructed but by 1990 additional factory premises were built in anticipation of growing customer needs.

In the 21 years of free zone operation, UAE has been remarkably successful in attracting FDI. This has led to a proliferation of free zones within U.A.E. To date there are nearly 20 free zones established within UAE. It is also remarkable to note that nearly all foreign investment in UAE is around free zones operation, As an example, the growth of JAFZA has been phenomenal. From just 19 companies that started in 1985, the number of companies in JAFZA has grown 300 fold to about 6000 by 2006. It is worth noting that JAFZA has been able to attract the cream of global companies. Over 150 of the firms currently operating in JAFZA are Global Fortune 500 companies. JAFZA has also generated over 160,000 jobs since its inception. PricewaterHouseCoopers 2007 report on JAFZA indicates that JAFZA contributed AED 44, 024 million (KShs 792 billion), 26% of Dubai GDP and AED 45,407 million (KShs 816 billion), 6% of overall UAE GDP (PWC 2007).The development of JAFZA has supported economic diversification in Dubai and has been one of the main drivers of UAE's phenomenal growth. Free zones in United Arab Emirates are governed by an independent Free Zone Authority (FZA). FZA is responsible for issuance of free zone company operating licenses and helping companies set up their business operations within the free zone. The incentives offered by FZA to investors seeking to do business in UAE free zone are listed in Appendix 2

1.2   Research Problem

Both Kenya and UAE embarked on EPZ programmes in 1990 and 1985 respectively. However the growth trend in the two countries is markedly different. While UAE programme has been a resounding success, the Kenya EPZ performance has been marginal in comparison. UAE has succeeding in attracting huge FDI in comparison with Kenya. Appendix 3 shows that UAE EPZs have attracted US$ 8 billion worth of FDI compared to Kenya's US$ 258 038 674. In addition UAE has generated over 552,135 jobs and has 7000 investing companies, 150 of which are Global Fortune 500 companies. Kenya EPZ has generated 38,851 jobs and has 68 investing firms (Boyenge, 2007). EPZA Strategic Plan report cited one of Kenya EPZ weakness as its inability to generate sufficient revenue and continued dependency on the exchequer (EPZA, 2004).

This research seeks to determine the extent to which Porter's Theory of Competitive Advantage of Nations can explain the difference in competitiveness between Kenya and UAE EPZs in terms of the Diamond of Competitive Advantage. If this study is done, it will enable Kenya EPZ determine its weakness in terms of availing itself of the four dimensions of competitiveness and hence plan for corrective action. It is not known with any degree of certainty why EPZs have failed to take off in some countries (ILO, 2003). With the exception of Mauritius, (which has succeeded in receiving well diversified investment through set up of EPZ) many other developing countries such as Botswana, Cameroon, Ghana, Kenya and Madagascar have had very limited success in attracting FDI through EPZs (Basu and Srinivasan, 2002). This study will assist the other African countries, and any other EPZ programme experiencing similar challenges, identify how they can improve their competitiveness. This research will also assist countries seeking to introduce EPZ programme avoid pitfalls that can impact their competitiveness.

A study by Ogaye (2007) looked a factors influencing long term performance of EPZ-AGOA textile export firms within Nairobi. Another EPZ study by Wanyama (2003) analyzed factors affecting operations of firms in the export processing zone in Kenya. Hapisu (2003) studied the relationship between strategic planning and competitive advantage in the EPZ. Ndinya (2000) carried out an empirical evaluation of factors influencing investment in Kenya in EPZs. Kabengi (1986) studied the Kenya government export promotion looking at the Kenya export year 1984 program. This however will be the first research that studies the variance in competitiveness between Kenya and a country perceived to be an EPZ success UAE, within the context of Porter's theory of the diamond of national advantage. This study will examine how Kenya compares with UAE in the various dimensions of the diamond and seek to explain the variance in competitiveness between Kenya and UAE in light of Porter's theory.

1.3 Research Objectives

The research will seek to determine the extent to which Porter's theory of Competitive Advantage of Nations explains the difference in competitiveness between Kenya and United Arab Emirates export processing zones.

1.4 Importance of the Study

If this study is done, it will enable Kenya EPZ determine its weakness in terms of availing itself of the four dimensions of competitiveness and hence plan for appropriate corrective action. This study will assist the other countries, largely African countries, which like Kenya have had limited success with EPZ programme identify how they can improve their competitiveness. This research will also provide learning that will assist countries seeking to introduce EPZ programme avoid pitfalls that can impact their competitiveness.

CHAPTER TWO

LITERATURE REVIEW

2.1 Globalization

Globalization is a process of transformation of local or regional phenomena into global ones. Through globalization the people of the world are unified into a single society and function together in terms of economic, technological, socialcultural and political forces. Though globalization has many aspects, the most commonly used definition is in terms of the economic globalization aspect. Economic globalization refers to the shift towards a more integrated and interdependent world economy (Hill and Jain, 2006). Economic Globalization is define as "the tendency toward an international integration of goods, technology, information, labor, and capital, or the process of making this integration happen" (Ball et al, 2008 p 13) Economic globalization can further be examined in terms of globalization of markets and globalization of production.

Globalization of markets refers to the merging of historically distinct and separate national markets into one global market. This has been made possible by falling barrier to trade at an international level. Though different nations have different tastes and preferences, with the help of communication and advertising there is some convergence at a global level, creating a global market. Coca cola, Sony PlayStation videos games and McDonald's hamburgers are examples of this trend. However the most common global markets are in industrial goods and materials that have a universal need such as aluminium, oil, wheat, computer memory chips and components, commercial jet aircraft and markets for financial assets. Globalization of production refers to the sourcing of goods and services from locations around the globe in order to capitalize on national differences in terms of cost and quality of factors of production such as land energy labor and capital. An example is the Boeing 777 jet aircraft which has subcontracted supply of fuselage, doors and wings to eight Japanese companies, doors of nose landing gear to a Singapore company, manufacture of wing flaps to three Italian companies etc (Hill and Jain, 2006).

Global companies now produce global goods that are homogenous and standardized and can be used universally (Levitt, 1983). Competition in industries (manufacturing) and services has internationalized. Firms now compete with global strategies selling worldwide, sourcing their components and materials on a worldwide basis and locating activities in many countries in a bid to capitalize on low cost factors. Sourcing of raw materials, components, machinery are now done globally. Capital also flows internationally and even technology now trades on global markets, though with a lag effect (Porter, 1990)

2.1.1 Drivers of Globalization

While several factors have contributed to the globalization process the two factors that have been the major drivers are first, the decline in barriers to free flow of goods, services and capital and secondly technological change. Prior to World War II, many nations erected barriers to international trade and foreign direct investments in order to protect their domestic industries. This was achieved by imposing high tariffs on import of manufactured goods. This limited international trade is believed to have contributed to the Great Depression of the 1930s. Post World War II, the advanced industrial nations of the west created the General Agreement of Tariffs and Trade GATT, to lower trade barriers and to allow for free flow of goods ,services and capital between nations. In 2003 Uruguay GATT meeting more barriers to trade were removed and GATT extended to cover services as well as manufactured goods and protection of patents, trade marks and copyrights. World Trade Organization (WTO) was established to replace GATT, to police the international trading system. As a result of GATT average tariffs dropped from a 1950 average of above 15% among developing nations (France, Germany, Italy, Japan, Holland, Sweden, Britain and USA) to 3.9% by year 2000. In late 2001, WTO held another round of talks in Doha where the agenda included cutting tariffs on industrial goods, services and agricultural products. The WTO was to discuss removal of subsidies on agricultural products where average tariffs are still at 40% and rich nations issue subsidies of US$ 300 billion a year to support their farm sectors (Hill and Jain 2006). The world poorer nations have been lobbying for this reduction to gain access to the markets of the developed world.

Further to removal of trade barriers, many countries have also been gradually removing restrictions to foreign direct investment. The lowering of barriers to international trade has enabled firms to view the world as a single market and to base production at different locations around the world with an intention of driving down the production cost and increasing product quality. As a result, the world economies have become more intertwined and nations have become interdependent for important goods and services. Increased foreign direct investment has also played major role in the global economy (Hill and Jain, 2006).

Lowering of trade barriers sets the stage for globalization of markets and production, and advances in technology (especially in the fields of communication, information processing, and transportation) have catalyzed the process. "Telecommunication is creating a global audience. Transport is creating a global village" (WTO, 1996 p 2). The development of the microprocessor has enabled growth of high power, low cost computing which has vastly improved the amount of information that can be processed. Global communications development has resulted in satellite, optical fiber and wireless technologies and ushered the advent of internet and the World Wide Web. Low cost global communication networks such as World Wide Web have helped create electronic global market places and e-commerce and global media such as CNN, BBC, and MTV are helping to converge tastes and creating a global culture (Hill and Jain, 2006).

In terms of transportation the biggest impact has been made by the development of commercial jet aircrafts and superfreighters and the introduction of containerization. Commercial jets have reduced travel time to move goods from one place to another, with the effect of making every place on the globe feel much closer. Fresh flowers from Nairobi can be sold in Amsterdam in the same time that a truck takes to travel from Mombasa to Nairobi. Containerization has also helped revolutionize transportation by significantly lowering cost of shipping of goods over long distances through ease of handling and standardization.

2.1.2 Challenges of Globalization

In recent times the merits of globalization have become subjects of serious debate. Supporters of globalization argue that falling barriers to international trade and international investment stimulated economic growth, income of consumers and reduced poverty and helped in job creation (Ball et al, 2008). Opponents of Globalization argue that it favours rich nations and poor countries are at a disadvantage. Export led growth has failed to materialize in many poor nations. Their main source of export is agricultural goods which are unable to compete at the global market as the richer nations subsidize their own farmers. They claim that the gap between the rich and the poor has increased (Hill and Jain, 2006). Latin America and sub Saharan Africa are cited as examples. Opponents also argue that there is inadequate legislation of labor laws to protect workers. As a result of this, advanced nations move their production to less developed countries, they exploit people there as cheap labor. At the same time workers in the developed countries who have lost their jobs as the production is moved to less developed countries have to settle for lesser paying jobs. This is of main concern in wealthy nations such as UK and USA (Hill and Jain, 2006). Opponents of globalization also argue that advanced nations take advantage of lack of adequate environmental regulations in less developed countries and end up polluting the environment (Ball et al, 2008).

The globalization of markets and production and resultant growth in world trade and FDI has also had the effect of putting home markets under attack from foreign competition. Competitive pressure has increased in every industry. Global business challenge is now omnipresent. Its effects are felt in the domestic market in the forms of imported products, management contracts with foreign firms, contract manufacturing for foreign firms, licensing, franchises, assembling for foreign firms, presence of subsidiaries of foreign firms and internet competition.

2.2 Competitive Advantage

"A company has competitive advantage whenever it has an edge over its rivals in attracting customers and defending against competitive forces" (Thomson and Strickland, 2001 p 149). The main goal in business strategy is to achieve a sustainable competitive

advantage. Michael Porter, who has done a definitive work on creating and defending competitive advantage, identifies two basic types: cost leadership and differentiation. Porter argues that competitive advantage grows fundamentally out of the value a firm is able to create for its buyers. This may be in the form of prices lower than competitors' for equivalent benefits or the provision of unique benefits that more than offset the premium price being charged (Porter, 1985). A company has cost leadership competitive advantage when it is able to deliver the same benefits as competitors but at a lower cost. A company has differentiation competitive advantage when it delivers benefits that exceed those of competing products. Competitive advantage therefore enables a firm to create superior value for its customers and superior profits for itself.

2.2.1 Porter's Five Competitive Forces

Cost leadership and differentiation advantages emanate from the industry structure in that they describe the how the firm is positioned in its industry. This leads us to "Competitive Strategy" (Porter, 1980) where Porter describes the five competitive forces that determine an industry's profitability. In Competitive Strategy, Porter identified the five competitive forces in the industry as rivalry among existing firms, the threat of new entrants, threat of substitute products or services, bargaining power of suppliers and bargaining power of buyers. Porter argued that all five forces jointly determined the intensity of industry competition and profitability and the strongest force or forces, for any particular industry became key in strategy formulation for a firm participating in that industry (Porter, 1980).

Rivalry among existing competitors results in firms jockeying for positions using tactics such as price competition, advertising, new products, more customer service or provision of warranties. Rivalry is higher when there are numerous or equally balanced competitors, industry growth is slow, high fixed or storage costs, lack of differentiation, high switching costs, intermittent over capacity, competitors are diverse, high strategic states and exit barriers are high. On threat of new entrants, Porter argues that new entrants bring new capacity to the industry, desire to build market share and have substantial resources for investment. They have the ability to undercut incumbents hence reducing profitability. Threat to new entry is countered by barriers to entry and the

retaliatory action of existing competitors. Porters states the six major barriers to entry as large economics of scale, high product differentiation, high cost of capital requirements, high switching costs, lack of access to distribution channels, absolute cost advantages (from product technology, access to raw materials, location, learning curve) and government policy that can limit or even foreclose entry in some regulated industries.

On threat of substitute products or services, Porter argues that all firms are indirectly competing with companies that produce substitute products and that substitute products limit the potential returns of an industry by creating a ceiling on the prices a firm can charge. On bargaining power of buyers Porter says that buyers affect profitability by forcing down prices, demanding for higher quality or services and playing competitors against each other. Buyer will have strong bargaining power if they are concentrated or purchase large volumes relative to seller, if the purchased product is a major cost component to buyers, if the purchased product is standard or undifferentiated, if switching costs are low, if buyer profits are low, buyer ability to integrate backwards, if quality of product purchased in unimportant to buyer and if buyer has full information about demand, market and even supplier costs. On bargaining power of suppliers, Porter says that powerful suppliers can reduce profitability of an industry by raising prices or reducing quality of purchased goods and services. Suppliers will have strong bargaining power if they are few and more concentrated than the industry they sell to, they don't have to compete with substitute products, it the industry is unimportant to supplier, the supplier's product is a key input to the industry, the supplier's product is differentiated or has built in switching costs or if the supplier poses a credible threat of forward integration (Porter, 1980).

2.2.2 Porter's Generic Strategies

Porter contends that cost advantage and differentiation result from a firm's ability to cope with the five forces better than its rivals and that both competitive advantages combine with a firms activities leading to three generic strategies of cost leadership, differentiation and focus (Porter, 1990). Focus generic strategy has two variants, cost focus and differentiated focus. Porter went on to say that for a firm to attain competitive advantage,

it will have to make a choice about the competitive advantage it seeks to attain and the scope within which it wants to attain it as no firm can be all things to all people.

Under cost leadership, a firm sets out to be the lowest cost producer in the industry. The firm will have abroad scope and serve many industry segments. This strategy is usually used by large businesses that offer standard with relatively little differentiation. In a differentiation strategy, Porter explains that a firm will seek to attain uniqueness in its industry along some dimensions that are widely valued by its customers. The firm is able to be rewarded with a premium price if it achieves this differentiation. In the third generic strategy, Porter explains that the focuser selects a segment or group of segments in the industry and tailors its strategy to serving them only. Through dedication to the segment the focuser will work to attain competitive advantage in that area, even though it does not have overall competitive advantage. Focus strategy can be either cost focus where affirm seeks to a cost advantage in its target segment or differentiation focus where a firm seeks differentiation in its target segment. Porter also describes a firm that engages in each generic strategy as "stuck in the middle" and comments that such affirm possesses no competitive advantage and would usually end up a below average performer. Porter adds that a generic strategy would only lead to above average performance if it is sustainable against the competition. He notes that each generic strategy involves different risks and that sustainability would require barriers that make copying if their strategy difficult. Since imitation is never unachievable, firms must not stand still but must keep investing in order to keep ahead of competitors (Porter, 1985).

2.2.3 Competitive Advantage and Value Chain
Porter states that competitive advantage stems from the various activities a firm performs from the design stage to marketing and after sales support stage. Porter introduced the value chain as a systematic means of examining a firms activities and how they interact in order to establish sources of competitive advantage. The value chain breaks down the firm's activities into it strategically relevant activities in order to analyze cost behaviour and existing or potential sources of differentiation. These include the firm's primary activities (inbound logistics, operations, outbound logistics, marketing and sales and

service) and the firms support activities (firm structure, human resource management, technology development and procurement). Porter argues that the ultimate basis of differentiation is a firm knowing it product role in the buyers' value chain that determines the buyers' needs. Sustainable competitive advantage can only be gained by a firm's value chain and how it fits in the overall value system. (Porte, 1985)

2.3 Global Competitiveness

In the past few decades, the lowering of trade barriers and technological advancement have facilitated the globalization of markets and production shifting the world to a more integrated and interdependent economy. International trade and cross border investments have grown and countries across the globe are competing to attract international investment in order to stimulate their own economic growth. Over the last two centuries, leading world economists have put up theories of international trade attempt to answer why nations trade and hence to determine patterns of international investment. Mercantilism was the first theory of international trade, emerging in England in the mid 16th century. This theory postulated that it benefitted a country to maintain a trade surplus and to export more than it imported. In so doing, it would accumulate gold and silver and increase its national wealth and prestige (Hill and Jain, 2006).

In 1776, Adam Smith in his book The Wealth of the Nations, challenged the mercantilism assumption that trade was a zero sum game, arguing that countries had different abilities to produce goods efficiently. Adam Smith argued that nations benefitted most if they exported what they produced best and imported what they were not good at producing. A nation has absolute advantage when it can produce goods or services more efficiently than another. In effect the nation can produce a larger amount of a good or service for the same amount of inputs as can another country or it can produce the same amount of a good or service using fewer inputs than could another country (Ball et al, 2008). His theory of absolute advantage stated that countries should specialize in the production of goods for which they have absolute advantage and trade these with goods in which other countries had absolute advantage. Adam Smith argued that this way all countries benefitted. He was the first advocate of free trade.

In 1819, David Ricardo, in his book On the Principals of Political Economy and Taxation examined Adam Smith's theory by exploring whether a country which had absolute advantage in production of all goods could benefit from international trade. He conclude in his theory of comparative advantage that a country could specialize in the production of those goods that it was most efficient and buy goods which it produced less efficiently from other countries, regardless of whether it could produce those goods more efficiently than the country it imported from (Hill and Jain, 2006).

In 1919, Swedish economist Eli Heckscher developed the factor intensities theory (also known as the Heckscher-Ohlin or factor endowment theory)   which was expanded by his student Bertil Ohlin in 1933. They argued that comparative advantage resulted from differences in national factor endowments of land, labor and capital. The different endowments give rise to different factor costs, the more abundant the factor, the lower the cost. The Heckscher- Ohlin theory predicts that countries will export those goods that use intensively the locally abundant factors and import goods that make intensive use of factors that are locally scarce (Ball et al, 2008). The goods that require a large amount of nation abundant factors hence less costly will have lower production costs and enable those goods to be sold for less in the international countries. The theory proposes that countries that possess relatively cheaper labor should specialize in the production and export of labor intensive products, while those that possess relatively cheaper capital should specialize in the production and export of capital-intensive products (Hill and Jain, 2006).

The Heckscher-Ohlin theory has been one of the most influential theoretical ideas in international economics and was generally accepted on the basis of casual empiricism but the first serious attempt to test it was made by Professor Wassily W. Leontief in 1954 using the input-output analysis. Leontief's study found that United States, one of the most capital intensive countries, was exporting relatively labor intensive products in exchange for relatively capital intensive products (Ball et al, 2008).This result came to be known as the Leontief Paradox.

Leontief paradox led scholars in the 1960s and 1970s to search for new explanations of the determinants of trade between countries. Stefan Linder, another Swedish economist, noted that the Heckscher Ohlin theory forecast on supply side and would explain trade in primary products. Linder's theory named the theory of overlapping demand or theory of overlapping product ranges postulated that customers' tastes are strongly affected by income levels, and therefore a nation's income per capita level determines the kind of goods it country residents would demand. Entrepreneurs produce goods to meet local demand these goods would reflect the country's level of income per capita. Good produced domestically would then be exported to countries with similar income levels and therefore demand. The Linder theory therefore predicts that international trade in manufactured goods will be greater between countries of similar per capita income than those with different level or per capita income (Ball et al, 2008).

Product life cycle hypothesis was formulated by Raymond Vernon in 1960s. Vernon postulated that technical innovations leading to new and profitable products require large quantities of capital and highly skilled labor. These factors of production are predominantly available in highly industrialized capital intensive countries. Vernon also argued that technical innovations represented in the product and in the methods used in its manufacture, go through three stages of maturization as the product becomes increasingly commercialized namely the new product stage, the maturing product stage and the standardized product stage. As the manufacturing process becomes more standardized and low skill labor intensive, the comparative advantage in its production and export shifts across countries (Hill and Jain, 2006).

Other theories that were developed include economics of scale and imperfect competition theory by Paul Krugman who along with others in 1980s developed a theory to explain how trade is altered when markets are not perfectly competitive and production of specific products possess economies of scale. Krugman studies both internal and external economies of scale and how each affects the pattern of international trade (Ball et al, 2008). In 1990, Porter published the results of an

intensive research that studied 100 industries and 10 nations. Porter's work emanated from his belief that existing theories did not fully explain why nations achieve international success in a particular industry. Porter came up with theory of national competitive advantage which argued that four broad attributes of nation shaped the local firm environment and that these attribute aid or obstructs the creation of competitive advantage. The four attributes which he called the diamond of competitive advantage were factor endowments, demand conditions, relating and supporting industries and firm strategy, structure and rivalry. Porter argued that firms were most likely to succeed in industry segments where the diamond was most favourable and that the diamond was mutually enforcing in that the effect of one attribute impacted the others. Porter also added that chance and government could also influence the national diamond significantly (Hill and Jain, 2006).

The World Economic Forum (WEF) has been studying competitiveness of nations for nearly three decades and has been producing annual Global Competitiveness reports since 1979. These have looked at the factors enabling national economies to achieve sustained economic growth and long term prosperity with a view to finding strategies to overcome impediments to improved competitiveness. WEF defines competitiveness as the set of institutions, policies and factors that determine the level of productivity of a country. WEF experience of studying competitiveness has shown that the determinants of competitiveness are many and complex, noting that no single theory in the past has been able to fully explain how nations gain prosperity. They have studied previous research and have also examined factors such as human capital (higher education and training), technological progress, macroeconomic stability, good governance, rule of law, transparent and well functioning institutions, lack of corruption, market orientation, demand conditions, market size etc many of which have strong theoretical support and even strong empirical support. They have noted that all these factors can be true at the same time and are not mutually exclusive as many econometric studies have indeed shown. In coming up with its own Global Competitiveness Index (GCI), WEF have captured the open endedness by providing a weighted average of the many different components, each of which reflect a reality of competitiveness. WEF have

grouped the components into 12 different pillars which they have named the 12 pillars of competitiveness. (Global competitiveness report, 2007).

The first pillar is institutions; these form the framework within which private individuals, firms and governments interact to generate income and wealth in the economy and have a strong bearing on competitiveness and growth. The importance of institutions includes Government policies which will reflect their attitudes towards markets and freedoms and efficiency of operations. Issues of corruption, overregulation, lack of transparency, independence of judiciary will impose extra costs in doing business and hinder economic development. The second pillar is infrastructure; having a highly quality infrastructure in terms of well developed transportation system (roads, railways, ports and air transport) and communication infrastructure network is critical for an efficient functioning of market and is an essential driver of competitiveness. Good infrastructure effectively reduces distance and integrates national, regional and global markets. Stable and ready availability of utilities such as water and electricity are vital to ensuring smooth business operations. Good telecommunication network allows for rapid and free flow of information which increases overall economic efficiency (Global competitiveness report, 2007).

The third pillar is macroeconomy; a stable macroeconomic environment while supports business in making quality decision reducing levels of uncertainty and hence increasing overall competitiveness of a country. High inflation, high interest rates etc create an unfavourable environment and harm the economy. The fourth pillar is health and primary education; a healthy workforce is essential to a country's competitiveness and productivity as sick workers are often absent and less efficient. The quantity and quality of basic education increases the efficiency of every individual worker making them more productive and more adaptive to new processes and techniques enabling the firm to get more technologically advanced and produce more value intensive products (Global competitiveness report, 2007).

The fifth pillar is higher education and training; this is essential for firms that want to move up the value chain beyond simple production processes and products. Vocational training and continuous on the job training is needed to constantly upgrade worker skills as the growing world economy requires well educated workers capable of rapidly adjusting to the ever changing business environment. The sixth pillar is goods market efficiency; an efficient goods market enables a country to produce the product and services that meet the supply and demand conditions and ensures that they will be effectively traded in the economy. Government should minimize impediments to business such as unreasonably high taxes, restrictive and discriminatory rules on foreign ownership and foreign direct investment as these impact it competitiveness. The seventh pillar is labor market efficiency which ensures that workers are allocated to their most efficient use in the economy with flexibility to shift them from one economic activity to another and provide with job incentives. The eighth pillar is financial market sophistication which allocates resources to their most productive use, making capital available for private sector investment from loans from banking sector, well regulated security exchanges and venture capital. The ninth pillar is technological readiness and measures the agility with which an economy adopts existing technologies to enhance productivity of its industries (Global competitiveness report, 2007).

The tenth pillar is market size. Large size of market encourages productivity due to economies of scale. In this era of globalization, international markets have become available to small countries earlier constrained by their borders. The eleventh pillar is business sophistication; this is necessary for higher efficiency in production of goods and services and is important for economies in the innovation-driven stage of development. The twelfth pillar is innovation. All other factors run into diminishing returns except innovation. Innovation requires investment in research and development, high quality scientific research and collaborative research between universities and industry and protection of intellectual property. The twelve pillars are interrelated and reinforce each other (Global competitiveness report, 2007).

2.4 Competitive Advantage of Nations

In 1990, Porter published the results of an intensive research that studied 100 industries and 10 nations. Porter's work emanated from his belief that existing theories did not fully explain why nations achieve international success in a particular industry (Hill and Jain, 2006).Porter put forward his theory of Competitive Advantage of Nations which states that nations can only create a sustainable competitive advantage if they acquire four broad attributes, which he called the determinants of competitive advantage. These create the environment in which local firms compete and in so doing create a competitive advantage. The four determinants; Factor conditions, Demand Conditions, Related and supporting industries and Firm strategy, structure and rivalry constitute what Porter called the Diamond of Competitive Advantage and create the context in which a nation's firms are born and compete. Porter argues that nations ultimately succeed in particular industries because the home environment is the most dynamic and most challenging and stimulates and urges firms to upgrade and broaden their advantage over time. Nations are most likely to succeed in industries or industry segments where the national diamond as a system is most favorable. The diamond is mutually reinforcing system; the effect of one determinant is contingent on the state of others (Porter, 1990).

2.4.1 Factor Conditions

Every nation is endowed with certain factors of production, labor, arable land, natural resources, capital and infrastructure, which form the key inputs in industry. Porter supports the Heckscher- Ohlin theory; a nation will exports goods which make intensive use of its most abundant factor as it will possess a competitive advantage on a production cost basis. However Porter argues that " factors most important to competitive advantage in most industries, especially the industries most important to productivity growth in advanced economies, are not inherited but are created within a nation, through processes that differ widely across nations and among industries" (Porter, 1990 p 74) . Porter argues that the stock of factors at any particular time is therefore less important than the rate at which they are created, upgraded and made more specialized to particular industries. Bennett on Porter adds that ironically the lack of factors can actually spur a country to a higher level of technological innovation (Bennett, 2006).

Porter groups factors into five categories. The first factor is human resources and entails quantity, skill and cost of personnel, working hours ,work ethic and into categories such as toolmakers, electrical engineers with PhDs, application programmers etc. The second factor is physical resources and entails the abundance, quality, accessibility, and cost of the nation's land, water, mineral, or timber deposits, hydroelectric power stations, climate, location and geographic size etc. The third factor is knowledge resources and includes the nation's stock of scientific, technical and market knowledge concerning goods and services. Knowledge resources are in universities, government research institutes, private research facilities, government statistical agencies, business and scientific literature, market research reports and databases etc. The fourth factor is capital resources and involves the amount of cost and capital available to finance industry such as unsecured debt, secured debt, bonds, equity and joint venture capital. The fifth factor is infrastructure and entails type, quality, and user cost of infrastructure available that impacts competition, including transportation system, communication system, mail and parcel delivery, funds transfer healthcare etc. Porter argues that nation's firm gains competitive advantage if they possess either low cost or uniquely high quality factors that are relevant and significant to competition in that specific industry. However, he adds that mere availability of factors is not enough to explain competitive success and that competitive advantage from the factors depends on how efficiently and effectively they are deployed (Porter, 1990).

Porter distinguishes basic factors from advanced factors. Basic factors include natural resources, climate, location, unskilled and semiskilled labor and debt capital. Advanced factors include modern digital communication infrastructure, highly educated personnel such as graduate engineers and computer scientists, and university research institutes in sophisticated disciplines. Porter notes that basic factors are passively inherited or their creation requires relatively modest or unsophisticated private and social investment. He argues that basic factors are losing relevance in competitive advantage either because of their diminishing necessity, their widening availability or ready access to them by Global firms through foreign activities or sourcing in international markets (Porter, 1990).This

makes the return available to basic factors low regardless of their location. Basic factors partly explain why firms may locate selected activities in different nations to take advantage of low factor costs existing there for example multinational corporations locate their operations whenever and wherever conditions are most favourable (Bennett, 2006). Porter notes that basic factors are still important in extractive or agriculturally based industries (such as timber and soy beans) and in those industries where technological and skill requirements are modest and technology is widely available. (Porter, 1990).

Porter argues that advanced factors are the most important for competitive advantage as they are needed to achieve higher-order competitive advantages such as differentiated products and proprietary production technology. Institutions required to create truly advanced factors do themselves require sophistication in resources and/ or technology. Advanced factors are more difficult to procure in global markets and occur at home base as they are part design and development of a firm's products and processes and it capacity to innovate. He also points out that a firm's advanced factors are built upon its basic factors and while basic factors by themselves are usually not a sustainable advantage by themselves, a sufficient quantity and quality of them is necessary to come up with related advanced factors (Porter, 1990).

Porter makes a second distinction between generalized and specialized factors. In generalized factors Porter includes the highway system, a supply of debt capital or a pool of well educated employees with collage education and notes that these can be deployed to a wide range of industries. Porter defines specialized factors as involving narrowly skilled personnel, infrastructure with specific properties, knowledge bases in particular fields and other factors with relevance to a limited range or even to just a single industry e.g. scientific institutes with expertise in optics, a port specialized in handling bulk chemicals etc. He notes that more advanced factors tend to be more specialized. Specialized factors provide more decisive and sustainable bases for competitive advantage than generalized factors, generalized factors support only basic types of advantage. Porter argues that specialized factors require more focused, and often riskier, private and social investment and that they mainly depend on already having a base of

generalized factors. They are therefore rarer and are normally located at a firm's home base. Sustainable competitive advantage requires firms in a nation's industry to possess factors that are both advanced and specialized. Porter also adds that factors are also dynamic and that as the state of knowledge, the state of science practice improve, advanced factors also upgrade. The same applies to specialization hence nations industry cannot afford to stay still as sustainability of advanced and specialized factors will requires continuous upgrading (Porter, 1990).

Porter makes yet another distinction between factors differentiating factors that are inherited such as natural resources or location and factors that are created. He states that advanced and specialized factors are most important in achieving higher order and more sustainable competitive advantage and that these are created. Porter cites public and private educational institutions, apprenticeship programs, government and private research institutes, ports authorities and community hospitals as factor creating mechanisms. He argues that possess unusually high quality institutional mechanisms for specialized factor creation will be more competitive. Porter also argues that competitive advantage can grow out of disadvantages in some factors; labor shortages, lack of domestic raw materials or harsh climate create need for solutions through innovation. In working to overcome these selective disadvantages firms will innovate in ways that play to local strength by using locally available infrastructure, materials or labor. The ability to upgrade around basic factor disadvantages enables the firms to upgrade by developing more sophisticated competitive advantages (Porter, 1990).Nations in the Caribbean are an example; they have succeeded in upgrading their communication systems to attract banking and other service companies that have little dependence on the basic factors of production (Ball et al, 2008).

2.4.2 Demand Conditions

Porter argues that the most important influence of home demand on competitive advantage is through the mix and character of home buyer needs as these shape how firms perceive, interpret, and respond to buyer needs. The home demand gives local firms a clearer picture of buyer needs than foreign rivals can have. Porter also says that nations

also gain advantage if home buyers pressure local firms to innovate faster and achieve more sophisticated competitive advantages compared to their foreign rivals. Porter states that the home market has a major impact on a firm's ability to perceive and interpret buyer needs because the firm will give its first attention to nearby needs which are most sensitive because of proximity and least expensive to understand. Pressure to improve products will be more acutely felt from buyers in the home market where there is cultural similarity and clearer communications. Porter adds that understanding buyer needs requires access to buyers, open communication with firm's technical team and management a good feel of buyer circumstances and this is easiest achieved with home buyers compared to foreign buyer who are far way from source of development. Porter distinguishes three characteristics of the composition of home demand that are particularly significant to achieving national competitive advantage. The first is segment structure of demand or the distribution of demand for particular varieties. Porter argues that nation's firm can gain competitive advantage in global segments that represent a large or highly visible share of home demand but that accounts for a less significant share in other nations. He cites Sweden's leadership in high voltage distribution equipment (HVDC) as an example. Porter also states that while a large segment at national level may gain advantages in reaping economies of scale, its most significant role is it captures the nation's attention and priorities because of its size. He adds that it is particularly valuable for a nation to have presence of large segments that require more sophisticated forms of competitive advantage as it becomes an opportunity for local firms to upgrade and make positions in such segments more sustainable (Porter, 1990).

The second characteristic of home demand is sophisticated and demanding buyers. Porter argues that a nation's firms will gain competitive advantage if domestic buyers are among the world's most sophisticated and demanding buyers for the product or service. This is because such buyers provide an insight of most advanced buyer needs. Porter adds that proximity to such buyers, both physical and cultural, helps nation's firm perceive new needs and close contact in the development process and that when these buyers are companies, it creates an opportunity for collaboration in joint development work in ways that are difficult for foreign firms to match. He notes that buyers are

demanding where home product needs in an industry are especially stringent or challenging because of local circumstances and cites US companies Cummins, Caterpillar and Detroit Diesel excellence in large diesel truck engines and Japanese companies' rise in air-conditioning market as example (Porter, 1990). Hill and Jain support this and provide another example of Japan's sophisticated and knowledgeable camera buyers who helped stimulate the Japanese camera industry to improve product quality and to introduce new innovative models (Hill and Jain, 2006).

The third characteristic is anticipatory buyer needs. Porter argues that a nation's firms gain advantage if the home demand needs anticipate those of other nations and hence provide an early warning indicator of future buyer needs. This creates advantages not only in new product development but also in stimulating continuous upgrading of products over time and provide the firm with the ability to compete in emerging segments. Porter also states that stringent home needs also benefit national competitive advantage only if they anticipate needs elsewhere. In Japan buyers early concern about energy costs led Japanese firms to develop energy efficient products well in advance of the rest of the world (Porter, 1990).

2.4.2.1 Demand Size and Pattern of Growth

Porter argues that the size and pattern of growth of home demand can reinforce national advantage in an industry provided that its composition is sophisticated and anticipates international needs, not limiting itself to local needs. Porter examines five aspects of home demand. The first is size of home demand. Porter argues that home market size can be important to national competitive advantage in particular industries (or segments), especially hose with heavy R&D requirements, substantial economies of scale in production, large generational leaps in technology, or high levels of uncertainty. The large home demand helps local firms in justifying investment. Porter notes that large home demand is only advantage if it is for segments with international demand. The second aspect is number of independent buyers. Porter states that the presence of a number of independent buyers in a nation creates a better environment for innovation as each buyer's different needs expands the pool of market information and motivates

progress and dynamism. Independent buyers also stimulate entry and investment in the industry as risk of a dominant buyer is reduced.

The third aspect is rate of growth of home demand. Porter explains that the rate of growth of home demand can be as important an aspect as its absolute size. The rate of investment in an industry is mainly a function of its growth and leads a nation's firm to adopt new technologies faster, with less fear that existing investments will become redundant and to build bigger more efficient facilities being confident that they will be utilized. Early home demand is the fourth aspect. If early home demand anticipates buyer needs in other nations, it helps national firms move earlier than foreign firms to become established in an industry by building large scale facilities accumulating experience and product varieties. The fifth aspect is early saturation. Porter argues that a saturated home market creates intense pressure to push down prices, introduce new features, improve product performance, and provides incentives for buyers to replace old products with new versions. The rivalry caused by saturation forces cost cutting and weeds out the weakest firms. Only few but stronger, more innovative local rivals remain. Porter adds that home market saturation is particularly beneficial if it combined with rising growth in the foreign market (Porter 1990).

2.4.2.2 Internationalization of Local Demand

Porter argues that a third way in which home demand conditions contribute is through mechanisms by which a nation's local demand internationalizes and pulls a nation's products and services abroad. These are mainly two. The first is mobile and multinational local buyers. These create an advantage for nation's firm because they also sell to foreign buyers and having created a loyal customer base in foreign markets, create an opportunity of establishing an overseas presence to nation's firm. Porter states that a similar effect takes places when home buyers are multinationals with subsidiaries or operations in other nations. Porter adds that buyer preferences for homegrown supplies also provide suppliers a reason to move abroad and internationalize. The second mechanism is influences on foreign needs. Porter says that another way in which domestic demand conditions can translate to foreign sales is when domestic needs and desires get

transmitted or inculcated in foreign buyers. One way is through training and Porters cites the example that doctors trained in the US prefer to use US tools that they trained and are familiar with. Another way is by demonstration where buyers emulate the practice of those seen as world leaders. Porter explains that the leader's procedures and equipment are often reported in technical journals as well as spread by word of mouth. Porter also says that home demand is also transmitted via political alliances and historical ties. He notes that Britain benefitted greatly from their former colonies from 1880s to mid 1990s in that they embedded themselves to British legal system, products and technical standards and even preferences in purchasing.

2.4.3 Related and Supporting Industries

Having internationally competitive supplier industries within a nation creates competitive advantages to downstream industries in several ways. The first advantage is that it enables local firms to gain efficiency and cost advantages resulting from early and rapid access to cost effective inputs. The ongoing coordination between local suppliers and firms enables local firms to capitalize on this proximity in a way that would not be possible with foreign suppliers. The second and probably the most critical benefit is the process of innovation and upgrading that emerges from the close working relationship between world class local suppliers and the industry. Local firms gain access to new technology, information, ideas and insights from supplier. They are also able to influence supplier's technical effort and provide test sites for development work. The collaborative effort through research and development and joint problem solving, leads to efficient solutions and new innovations. Suppliers also spread the new innovations and solutions throughout the industry and hence accelerated development within the entire national industry. A nation's firms gains great benefit if the home based suppliers are themselves global competitors and face the challenges of global business that require them to continuously upgrade and innovate. It is not critical that a nation possess national advantage in all supplier industries in order to gain competitive advantage. Only inputs with significant effect on innovation are critical; the rest can be sourced from global market (Porter, 1990).

Having competitive industries that are related often facilitates establishment of new competitive industries. Porter defines related firms as those in which firms can coordinate or share activities in the value chain when competing or those which involves products that are complimentary for example computers and applications software. Sharing of technology can occur in technology development, manufacturing, distribution, marketing or service. This benefits to the related industries are in cost saving, production and innovation opportunities. "One consequence of this process is that successful industries within a country tend to be grouped into clusters of related industries. This was one of the most pervasive findings of Porter's study" (Hill and Jain, 2006 p 137). There are many cases where nations have become internationally competitive in related industries e.g. Japan in camera and copier industries and Sweden in automobiles and trucks and Germany in textile and apparel sector. Having internationally successful related industries has the same benefit as home based suppliers riding on proximity and cultural similarity and providing opportunities for free flow of information and technical advise leading to innovations. This helps a nation's industries gain competitive advantage over foreign firms (Porter, 1990).

2.4.4 Firm Strategy, Structure and Rivalry

This is the fourth broad determinant of national competitive advantage and is concerned with the manner in which firms are created, organized and managed as well as the nature of domestic rivalry. Porter states that different nations are characterized by different management ideologies which either promote or deter building of national competitive advantage. While he notes that no one managerial system is universally appropriate, he says that competitiveness in a specific industry results from convergence of the management practices and organizational modes practiced in the country and the sources of competitive advantage available in the industry (Porter,1990a). Porter cites predominance of engineers in top management at German and Japanese firms attributing these to the firms' emphasis on improving manufacturing processes and product design. He contrasts this with the US where there is a predominance of people with Finance background leading firms and links this with US firms' lack of attention in improving manufacturing processes and product design in the 1970s and 80s. He argues that

emphasis on financial performance has lead has lead to a corresponding overemphasis on maximizing short term financial returns. Consequently US has fallen behind in competitiveness as regards engineering based industries where manufacturing processes and product design issues are most important such as the automobile industry (Hill and Jain, 2006).

Porter argues that the difference in goals that companies and individuals in countries seek to achieve, are a reflection of the characteristics of national capital markets and the compensation practices for managers. Germany and Switzerland are examples of countries where banks form a major part of nation's shareholders, most shares being held for long term appreciation and rarely traded. This favours companies in mature industries such as engineering based and manufacturing firms where ongoing investment in R&D and new facilities is necessary but returns are only moderate. In contract US has a large pool of risk capital but widespread trading of public companies placing strong emphasis on quarterly and annual share price appreciation. Management compensation is tied to individual results with bonus incentives. This can explains why US does well in relatively new industries like software and biotechnology and new equity funded companies like specialty electronics and services but lags behind in mature industries (Porter, 1990a).

National prestige and priority affects the quality of human resource attracted to a particular industry and the motivation of individuals and shareholders. Porter notes that while outstanding talent is a scarce resource in any nation, a nation's success depends on the type of education its talented people choose, where they choose to work. When a nation designates an industry as national priority and/or a prestigious place to work, talented people flow into it and demonstrate unusual commitment and effort. Nations tend to be competitive in activities are admired or depended upon and where their nation's heroes emerge e.g. for Italy fashion and furnishings, for Switzerland banking and pharmaceuticals and for US finance, entertainment and sports industry. (Porter, 1990)

Porter's research found a strong association between vigorous domestic rivalry and the creation and persistence of competitive advantage in an industry. Vigorous domestic

rivalry has the effect of inducing firms to find ways of improving efficiency, become more innovative, improve quality, reduce costs and invest in upgrading advanced factors. This helps national firms to become better international competitors. While there are many examples, the role of domestic rivalry is very evident in Japan where domestic rivals strive to outdo each other. They have goals that stress market share, elaborate rankings that measure companies most popular with university graduates and compete on rate of new product and process development (Hill and Jain, 2006). Porter notes that in Japan there are usually double figures in the industries that Japan has global dominance and these examples; 112 companies competing in machine tools, 34 in semiconductors, 25 in audio equipment, 25 in audio equipment, 15 in cameras (Porter,1990).The stimulating effect of strong domestic competition is also attributed to the rise of Nokia of Finland to global preeminence in the market for cellular telephone equipment (Hill and Jain, 2006).Porter found domestic rivalry as arguably the most important factor among all the four determinants of the diamond because of the powerful stimulating effect it had on all the other determinants (Porter, 1990a).

Geographic concentration of rivals in a single city or region within a nation magnifies the power of domestic rivalry. The pattern is seen in many parts of the world; in Italy jewelry companies are located around Arezzo and Valenza towns, cutlery companies are in Solingen in West Germany and Seki in Japan, pharmaceutical companies are located in Basel in Switzerland etc. The localized rivalry is more intense and information flows are extremely fast. The dynamism of the industry sustains competition sustains advantage over other foreign rivals who do not have the same structure (Porter, 1990). Presence of domestic competitors also nullifies types of advantages that come from simply being in a particular nation such as factors costs, access to or preference in the home market etc. Competitors move beyond these basic factors and gain more sustainable advantages. The vigorous domestic competition also ultimately pressures local companies to venture into global markets seeking economies of scale, greater efficiency and higher profitability. The fierce local competition positions them well to succeed abroad (Porter, 1990a).

2.4.5　The Role of Chance

In studying the histories of most successful industries, Porter found that while the determinants of national advantage shape the environment for competing in particular industries, chance events also played a role. Porter defines chance events as occurrences that have little to do with the circumstances in a nation and that are often largely outside the power of firms and national government to influence. Some examples of chance events are acts of pure invention, major technological discontinuities (for example, biotechnology, microelectronics, discontinuities in input costs such as the oil shocks, significant shift in world financial markets or exchange rates, surges of world or regional demand, political decisions by foreign governments and wars. Chance events create discontinuities that allow shift in competitive position by nullify the advantages of previously established competitors and creating potential that a new nation's firm can capitalize on to achieve competitive advantage in response to new and different conditions. For example the advent of micro electronics enabled Japanese firms to gain position, neutralizing American and German dominance in electromechanically based industries. Also a surge in demand for ships enabled Korea to enter the ship building industry against Japan (Porter, 1990).

The determinants of national advantage are mutually reinforcing and are powerful system for sustaining advantage. However, a discontinuity alters the bases of advantage (e.g. input costs or exchange rates) and this can be to an extent that is sufficient for formation of a new specialized national diamond. Porter also points out that while chance events can allow shifts in competitive advantage in an industry, the nations with the most favourable diamond will be he most likely to convert chance into a competitive advantage (Porter, 1990).

2.4.6　The Role of Government

In Japan and Korea, Government policy is particularly associated with the success that these countries have enjoyed yet the role of government in national competitive advantage in not as a determinant in itself but as influence on the four determinants. The government can have either positive or negative influence on the determinants. Factor

conditions can be affected through subsidies, policy towards capital markets, policy towards education etc. Demand conditions can be affected through local product standards. Related and supporting industries can be affected by government control of advertising media or regulation of supporting services. Government policy through capital market regulations, tax policy and antitrust laws can influence firm strategy, structure and rivalry (Porter, 1990).

The government's proper role is to act as a catalyst and a challenger, stimulating and even pushing companies to raise their aspirations and move to higher levels of competitive performance by enforcing stricter product, safety and environmental standards. This pressures the local companies to improve quality of their products, upgrade their technology and provide product features that respond to consumers and social demands. The government therefore transmits and amplifies the forces of the diamond (Porter, 1990a). Government should create an environment that enables firms upgrade their competitive advantage by acquiring more advanced technology and going for more advanced segments in established industries. The government should stimulate early demand for advanced products and support the ability of a nation's firm to enter new industries (Porter, 1990).

The government must also focus on specialized factor creation. Provision of quality higher education and training is essential for economies that have intentions of moving up the value chain beyond simple production processes and products (Global competitiveness report, 2007). The government has critical responsibilities in areas of primary and secondary education systems, basic national infrastructure, and research in areas of national concern such as healthcare. While these basic factors do not produce competitive advantage, they are critical building blocks in generating advanced factors. Porter argues that mechanisms such as specialized apprenticeship programs, research efforts in universities connected with an industry, trade association activities, and private investments of companies eventually create factors that lead to competitive advantage (Porter, 1990a).

The government must also stimulate rivalry by limiting direct cooperation and enforcing antitrust regulations. Porter says that there is a growing global fad of cooperative research based on the belief that independent research by rivals is wasteful and duplicative. However he notes that Japanese companies dedicate their best scientists for their own firm's independent research and the cooperative research serves more to signal importance of emerging technical area and to stimulate proprietary company research. Rivalry among firms promotes upgrading and innovation. Porter also notes that a strong antitrust policy especially for horizontal mergers, alliances, and collusive behaviour is fundamental to innovation. Governments should disallow mergers, alliances and acquisitions that involve industry leaders as these kill competition and undermine creation of competitive advantage (Porter, 1990a).

2.5   Export Processing Zones

Export Processing Zones (EPZs) have increasingly been used by governments as a policy tool for development over the last four decades. Modern EPZs have been around for about half a century, some of the first ones being started in Puerto Rico and Ireland (Shannon Free Zone set up in 1959). They became widely used in Asia and Latin America in the 1970s and over the last two decades have grown in use in Africa and other transition economies. Governments have turned to EPZs to attract foreign direct investment and trade through export oriented growth (Engman et al, 2007). Growth in international trade and the apparent success of this concept, has led to a proliferation of EPZs across the globe. ILO statistics show that the number of EPZs grew from 79 in 25 countries in 1975 to 3500 in 130 countries in 2006 (Boyenge, 2007) .

The popularity of EPZs has been backed by global trends such as increasing emphasis on export oriented growth, increasing emphasis on Foreign Direct Investment, transfer of production of labor intensive industries from developed to developing countries, growing international division of labor and incidence of global production networks. Many developing countries have established EPZs to gain benefits such as attracting foreign direct investments, job creation, technology transfer, development of new non traditional export products (hence new export markets) and other backward linkages that will

contribute to the local economies (Engman et al, 2007). Host countries offer incentives such as physical infrastructure, removal of government red tape and bureaucracy by offering one stop shop administrative services, duty exemptions, tax holidays, subsidies, relaxed regulatory requirements and export business support services to attract investors.

The concept of a zone or an enclave is that it is covered by a policy framework designed by a government, which is different from rules/policies that apply elsewhere within that country (Engman et al, 2007). Modern zones come in many forms including free trade zones, special economic zones, bonded warehouses, free ports and maquiladoras (in-bond plants in Mexico). They have evolved from the initial assembly and simple processing activities and now include high tech and science zones, finance zones, logistics centres and even tourist resorts. They not only include enclave type zones but also single industry zones such as jewellery zone in Thailand and leather zone in Turkey, single commodity zones like coffee in Zimbabwe, single factory such as export oriented units in India, single company zones such as in Dominican Republic, zone status for any factory location such as in Mauritius and China and port cities of Hong Kong, China and Singapore which have special customs regimes for export processing and transshipment. The International Labor Organization (ILO) defines EPZs as industrial zones with special incentives set up to attract foreign investors, in which imported materials undergo some degree of processing before being re-exported (ILO,2003). Majority of the zones are public agencies but there is clear trend towards the private development of zones, mainly by foreign developers. Public zones normally have better infrastructure than those available domestically and private zones try to better this in order to attract higher quality investment.

A number of developing countries have tried using EPZs to kick-start industrialization. The resulting economic opportunities create employment which, in turn generate income for consumption. Most poor countries lack adequate resources for investment in productive capacity and try to attract foreign investment to produce goods and services for foreign markets. Other countries which have good access to capital but regulatory restrictions, trade barriers and inefficient administration put off potential investors. In

both cases, governments relax some of the regulations and offer incentive packages for capital investment in export oriented production in limited area in order to stimulate economic growth.

Traditional EPZs offer duty free imports of capital and intermediate goods, supply of cost effective labor and various tax incentives to export oriented manufacturers. Traditional EPZs are set up to attract export oriented light industry and to shield domestic industry from competition. Some countries have managed to adopt more forward policies and integrated EPZ into national economy and eventually used EPZs as a tool for national reform. Others yet, rather than focus on fiscal incentives such as tax breaks and tariff exemptions, have focused in providing internationally competitive business environment by improving transport infrastructure and logistical linkages, communication network, efficient customs operation, reliable utility services and efficient administration (Engman et al, 2007).

Incentives offered by host nations try to make up for host country's inherent inefficiencies. Under trade policy, there a number of common incentives offered to EPZ investors in alignment with World Trade Organization framework. The first incentive is enhanced physical infrastructure which includes enhanced transport and logistics networks, telecommunications networks and utility services. Some locations also offer production and office space, residential housing, schools and even recreation facilities. The second incentive is streamlined administrative services such as a one stop shop government services, fast truck customs services, simplified licensing procedures if required, dedicated legal framework and courts (Engman et al, 2007).

The third incentive are fiscal incentives such as duty drawbacks or exemptions from import duties on raw materials, intermediate inputs and capital goods used in the production of goods and supply of services, exemption from payment of sales tax on exported products or services as well as on goods and services domestically purchased and used in production, tax holidays, rebates or reduced tax rates on corporate income or profits often linked to export performance, indirect subsidies like special grants for

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education and training and direct subsidies like supply of water and electricity below local market rates. The fourth incentive is relaxed legal and regulatory requirements including foreign ownership, labor and environmental laws and regulations, foreign exchange regimes, and rules on the lease or purchase of land. The fifth incentive is export promotion services, including business advisory services, sales and marketing support, finance and export credit services (Engman et al, 2007).

2.5.1 Economic Perspective of EPZs

In the global arena companies that seek to improve their export oriented growth but do not have access to the necessary inputs at global prices are greatly disadvantaged. Most developing countries have very high import tariffs that become a barrier to development of none traditional industries normally based on locally available resource inputs. The high import tariffs also end up being a disincentive to local companies seeking to compete in the international market in non traditional industries. Government bureaucracy and red tape, common in most developing countries further contributes in making them unattractive to investors and hence they fail to attract FDI. EPZs programmes provide a policy framework to offer financial incentives, streamline business administration policies and procedures and liberalization of trade. Nations can do this by targeting a sub sector of the economy, defining specific zones or addressing a specific sector.

The fact that EPZ direct resources and market incentives only to a subsector of the economy makes them be viewed as suboptimal policy from an economic point of view. The incentives that are offered to investors to make up for local deficiencies become possible by taxing other parts of the economy. A more optimal option is improvement of business environment on a national basis through trade and investment liberalization, establishment of good infrastructure, rule of law and administrative simplification (Engman et al, 2007). However, where country wide reforms are difficult to implement, EPZs can be a useful tool to spur development (Watson, 2001).

Countries in East Asia, Central America and the Caribbean have been more successful in using EPZs as an instrument for economic development. With the exception of Mauritius, this success has not been replicated in Africa. There has been debate about the appropriateness of EPZs as a development option. However if a country is to develop integration of its economics into the global economics is not an option. While countries must choose what is most suitable for them, EPZs can still be a useful instrument to develop through greater integration with the global economy (Watson, 2001). A cost benefit analysis based on realistic expectations can help countries establish it most appropriate alternative. Prospective benefits of EPZ include export growth through product and market diversification, foreign direct investment, foreign exchange earnings, employment, technology transfers, information exchange with companies and government revenue. On the other side of the scale costs of EPZ include infrastructure investment, administrative costs (setting up of separate administrative arrangements), foregone tax revenues through tariffs, income tax and other taxes forgone, subsidies, social and economic costs such as potential loss of worker rights and protection provided in national law and regulations and possible degradation of the environment (Engman et al, 2007).

2.6   Export Processing Zones and Competitive Advantage

According to FDI theories, a firm may want to invest in another country for various reasons. All these reasons are ultimately linked to the need for a firm to increase profit and sales or protect these from being eroded by competitors. Firms may invest in other countries as seekers to secure of supply for either raw materials or natural resources for their production, to take advantage low cost of labor existing in other countries, to acquire technology and management knowhow and to seek growth beyond their domestic market, to follow their customers oversees. Firms may also move overseas as exploiters of imperfections, to take advantage of investment incentives offered by local governments, to take advantage of preferential trading arrangements established in those regions, to bypass tariff and other restrictions imposed by governments on foreign firms (Ball et al, 2008).   Firms also move overseas as internalizers protecting non transferrable

sources of competitive advantage such as proprietary information possessed by the firm and its people.

Trade and FDI are very closely linked. Historically FDI has followed foreign trade because of foreign trade being less costly and less risky. Many governments in developing countries have established EPZs in a bid to attract FDIs and hence kickstart development and export oriented growth. EPZs provide to foreign firms investment opportunities for securing supply of raw material or natural resources, locational advantages that provide logistical advantages and access to markets, government incentives linked to specific investment that enable foreign firms to take advantage of market imperfections and investment opportunities as a result of structural and economic reforms (Basu and Srinivasan, 2002).

Because of globalization, all EPZs are in competition to attract FDI. One countries gain is an opportunity lost by another. Countries that have developed open trade and investment policies attract foreign direct and build on their existing comparative advantages. Ability to attract investors is not only dependent on traditional determinants of FDI such as political and macroeconomic stability, availability of natural resources and a large and growing market but the globalizing environment has new determinants which are a favourable FDI regime and competitive factors of production. A favourable FDI environment means having a transparent and non discriminatory regulatory environment, effective competition policies and an efficient judiciary system (Pigato, 2001). Fiscal incentives such as low and stable taxes are important but cannot substitute for a lack of a healthy FDI environment. FDI promotion activities will only be successful if the basic FDI framework is in place (Pigato, 2001).

 Low transaction and business costs is a second new determinant of FDI. This concerns investment, labor and trade regulations, entry and exit rules, location and environment regulations and tax and legal systems. This is not only limited to the presence of these rules but the actual speed of implementation and how bureaucracy is dealt with. Presence of supplier network and clusters is a third new determinant. As countries have dynamic

local firms are able to attract better 'quality' FDI that can subcontract services and components of their production process to local firms. A fourth new determinant is support institutions' and technical services. Infrastructure facilities should include effective quality assurance and testing bodies, metrology and calibration services, contract research and technical extension helps for small and medium enterprises. Human capital is a fifth new determinant. A demand now exits for qualified human capital with diverse and modern skills that can cope with emerging market technologies. Labor markets also need to be flexible to include use of expatriate personnel. The sixth new determinant is low cost infrastructure in the form of efficient communications systems as well as transportation systems linkages within the country and with the outside world (Pigato, 2001).Traditional and new determinants of FDI seen above are the basis the basis of competitive advantage in EPZs and nations that have been successful in attracting FDI that exhibit majority of the these factors.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Case Study

This is a comparative case study research seeking to determine how Porter's theory of competitive advantage can explain the difference in competitiveness between Kenya and United Arab Emirates export processing zones. Porter's four broad dimensions that form the diamond of competitive advantage and shape the environment in which a nation's firm compete are factor conditions, demand conditions, related and supporting industries and firm strategy, structure and rivalry. Porter also notes that the government and chance play a role in competitive advantage of a nation (Porter, 1990). If Porter's theory holds true, the difference in competitiveness between the two export processing zones should be explained by difference in competitiveness in the dimensions of the diamond. United Arab Emirates export processing zone should have a more favorable diamond than Kenya export processing zone. The research therefore examined the difference in competitiveness along each of the dimensions of the diamond in United Arab Emirates and Kenya export processing zones.

3.2 Data Collection

Each determinant was broken down into different categories. Factor conditions determinant was broken down into physical resources, infrastructure, human resources, health resources, knowledge resources, administrative infrastructure, capital resources and technology resources categories. Firm strategy structure and rivalry determinant was broken down into local rules encouraging investment and productivity in goods market and local rules encouraging investment and productivity in financial market categories. Demand condition determinant was analyzed in terms of having demanding and sophisticated local buyers. Related and supporting industries determinant was broken into related and supporting industries and innovation categories. Each category within the determinant was further broken down into its constituent elements. For example infrastructure was further broken down into its constituent elements of road

infrastructure, railroad infrastructure, port infrastructure and so on. Secondary data on the global ranking and score of competitiveness of each element (e.g. road infrastructure) was obtained from World Economic Forum Global competitiveness survey report, for both Kenya and United Arab Emirates. Information about physical resources was obtained from CIA- World Factbook country data report.

3.3 Data Analysis

Data for each category of the four determinants was tabulated for both Kenya and United Arab Emirates and compared to determine which was more competitive. A summary table was then constructed listing all categories of each determinant and by examining the number of categories a country was more competitive, an overall leader in each determinant was determined. Where there was an apparent tie, the actual element scores within categories were tallied to determine the country that was more competitive.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRATATIONS

4.1 Introduction

Porter's theory of Competitive Advantage of Nations states that nations can only create a sustainable competitive advantage if they acquire four broad attributes, called the determinants of competitive advantage, that create the environment in which local firms compete and in so doing create a competitive advantage (Porter, 1990). The four determinants are factor conditions, firm strategy, structure and rivalry, demand conditions and related and supporting industries. Each determinant was analyzed by being broken down into different categories. Factor conditions determinant was broken down into physical resources, infrastructure, human resources, health resources, knowledge resources, administrative infrastructure, capital resources and technology resources categories. Firm strategy structure and rivalry determinant was broken down into local rules encouraging investment and productivity in goods market and local rules encouraging investment and productivity in financial market categories. Demand condition determinant was analyzed in terms of having demanding and sophisticated local buyers. Related and supporting industries determinant was broken into related and supporting industries and innovation categories.

Each category within the determinant was further broken down into its constituent elements in a tabular form. For example a tabular form of infrastructure consists of its constituent elements of road infrastructure, railroad infrastructure, port infrastructure and so on. Global Competitiveness index ranking, score and competitive categorization data for each element was obtained from World Economic Forum Global Competitiveness Index report (Global competitiveness report, 2008-2009) for both Kenya and United Arab Emirates. Tabulated data for each category of the four determinants was interpreted after each table to determine which country was more competitive. An overall summary table was then constructed listing all categories of each determinant and by examining the

number of categories a country was more competitive, an overall leader in each determinant was determined.

4.2 Factor Conditions

The following categories were tabulated and interpreted: physical resources, infrastructure, human resources, health resources, knowledge resources, administrative infrastructure, capital resources and technology resources.

Table 4.2a   Physical Resources

Physical Resources	Kenya	United Arab Emirates
Location	Eastern Africa, bordering the Indian Ocean, between Somalia and Tanzania	Middle East, bordering the Gulf of Oman and the Persian Gulf between Oman and Saudi Arabia
Size	total: 582,650 sq km land: 569,250 sq km water: 13,400 sq km	total: 83,600 sq km land: 83,600 sq km water: 0 sq km
Land Boundaries	total: 3,477 km border countries: Ethiopia 861km, Somalia 682km, Sudan 232 km, Tanzania 769km, Uganda 933km.	total: 867 km border countries: Oman 410km, Saudi Arabia 457km
Coastline	536 km	1,318 km
Maritime claims	territorial sea: 12nm exclusive economic zone: 200nm continental shelf: 200m depth or to the depth of exploration	territorial sea: 12 nm contiguous zone: 24 nm exclusive economic zone: 200 nm continental shelf: 200 nm or to the edge of the continental margin
Climate	Varies from tropical along coast to arid in interior	Desert; cooler in eastern mountains
Terrain	Low plains rise to central highland bisected by Great Rift Valley plateau in west	flat, barren coastal plain merging into rolling sand dunes of vast desert wasteland; mountains in east
Natural resources	Limestone, soda ash, salt, gemstones, fluorspar, zinc, diatomite, gypsum, wildlife, hydropower.	Petroleum, natural gas
Land use	arable land: 8.01% permanent crops: 0.97% others:91.02%	arable land: 0.77% permanent crops: 2.27% other: 96.96%
Irrigated land	1,030 sq km	760 sq km

1	Natural hazards	Recurring draught, flooding during rainy season	Frequent sand and dust storms
2	Environmental issues	Water pollution in urban area and industrial waste; water quality degradation from use of pesticide and fertilizers; deforestation; soil erosion; desertification; Lake Victoria water hyacinth	lack of natural freshwater resources compensated by desalination plants; desertification; beach pollution from oil spills
3	Geography note	Kenya highlands are one of most successful agricultural production zones in Africa; glaciers are found on Mount Kenya, Africa's second highest peak; unique physiography supports abundant and varied wildlife of scientific and economic value	strategic location along southern approaches to Strait of Hormuz, a vital transit point for world crude oil
4	Labor force	11.85 million	3.065 million

Source: CIA- The World Factbook

Table 4.2a above shows that Kenya's main physical resource is agriculture even though only 8% can be classified as arable land. Kenya it is not well endowed with natural mineral resources. Kenya has also a large population and labor force. Kenya total land mass is also quite large compared to UAE. Kenya has also a great location advantage on the central east cost of Africa, with the natural port of Mombasa acting as a gateway to land locked countries of Uganda, Rwanda, Burundi, Eastern Democratic Republic of Congo and Southern Sudan.

UAE factor conditions indicate that it is factor strengths are its large natural resources of petroleum and natural gas. UAE has also strength in its location along the southern approaches to Straight of Homuz. Dubai is a natural port and has been a trading and commercial centre in the region for several centuries. UAE factor disadvantages are its small land mass relative to Kenya, its desert climate making it largely unproductive for agriculture and its small population and labor force.

Table 4.2b Infrastructure

Infrastructure	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	United Arab Emirates GCI Rank out of 131 countries
Quality of overall infrastructure (underdeveloped to extensive and efficient)	88	2.9 on a scale of 1- 7 (mean score 3.8)	Competitive Disadvantage	11	6.0 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**
Quality of road infrastructure (underdeveloped to extensive and efficient)	95	2.8 on a scale of 1- 7 (mean score 3.8)	Competitive Disadvantage	9	6.1 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**
Quality of railroad infrastructure (underdeveloped to extensive and efficient)	68	2.3 on a scale of 1- 7 (mean score 3.0)	Competitive Disadvantage	65	2.5 on a scale of 1-7 (mean score 3.0)	Competitive Disadvantage
Quality of port infrastructure (underdeveloped to extensive and efficient)	83	3.5 on a scale of 1- 7 (mean score 4.1)	Competitive Disadvantage	8	6.1 on a scale of 1-7 (mean score 4.1)	**Competitive Advantage**
Quality of air transport infrastructure (underdeveloped to extensive and efficient)	68	4.7 on a scale of 1- 7 (mean score 4.7)	Competitive Disadvantage	4	6.6 on a scale of 1-7 (mean score 4.7)	**Competitive Advantage**
Available seat kilometers	56	212.5 million km per week	Competitive Disadvantage	14	2138.8 million km per week	**Competitive Advantage**
Quality of electricity supply (range from worse than other countries to meets the highest world standards)	94	3.7 on a scale of 1- 7 (mean score 4.6)	Competitive Disadvantage	17	6.4 on a scale of 1-7 (mean score 4.6)	**Competitive Advantage**
Telephone lines	121	0.8 lines per 100 population	Competitive Disadvantage	46	28.1 lines per 100 population	Competitive Disadvantage

Table 4.2b indicates that UAE has a superior infrastructure to Kenya with Competitive Advantages at the global level in six out of the eight infrastructure elements. Even in railroad infrastructure and telephone lines, though a competitive disadvantage to UAE at a global level, UAE is still ranked hire than Kenya in these elements. At the Global level UAE is therefore more competitive in infrastructure than Kenya.

Table 4.2c Human Resource Market

Human Resources market	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Cooperation in labor-employer relations (confrontational to cooperative)	85	4.3 on a scale of 1-7 (mean score 4.5)	Competitive Disadvantage	18	5.1 on a scale of 1-7 (mean score 4.5)	**Competitive Advantage**
Flexibility of wage determination (from central bargaining process to by each individual company)	70	5.1 on a scale of 1-7 (mean score 4.9)	Competitive Disadvantage	8	5.9 on a scale of 1-7 (mean score 4.5)	**Competitive Advantage**
Non wage labor costs	14	4% of worker salary	**Competitive Advantage**	46	13% of worker salary	Competitive Disadvantage
Rigidity of employment	27	21 on 0-100(worst scale)	**Competitive Advantage**	22	20 on 0-100(worst scale)	**Competitive Advantage**
Hiring and Firing practices (from impeded by regulations to flexibly determined by employers)	21	4.7 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**	17	4.7 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**
Firing costs	78	47 weeks of wages	Competitive Disadvantage	99	84 weeks of wages	Competitive Disadvantage
Pay and productivity (from not related to worker productivity to strongly related to worker productivity)	48	4.5 on a scale of 1-7 (mean score 4.2)	**Competitive Advantage**	20	4.9 on a scale of 1-7 (mean score 4.2)	**Competitive Advantage**
Reliance on	56	4.9 on a	Competitive	52	4.9 on a	Competitive

		scale of 1-7*[1] (mean score 4.6)	Disadvantage		scale of 1-7*[1] (mean score 4.6)	Disadvantage
professional management						
Brain Drain	82	3.0 on a scale of 1-7*[2] (mean score 3.5)	Competitive Disadvantage	2	5.8 on a scale of 1-7*[2] (mean score 3.5)	**Competitive Advantage**
Female participation in labor force	57	0.8% of male participation	Competitive Disadvantage	120	0.4% of male participation	Competitive Disadvantage

*[1] Senior management positions in country are (1= usually held by relatives or friends without regard to merit, 7= mostly held by professional managers chosen for their superior qualification)

*[2] Country talented people (1= normally leave to pursue opportunities in other countries, 7= almost always remain in the country)

Table 4.2c indicates that out of the ten human resource elements, UAE has competitive advantage at a global level in six elements while Kenya has a competitive advantage in four. Overall UAE is ranked higher thank Kenya in seven of the ten elements and is therefore more competitive at the global level than Kenya.

Table 4.2d Health

Health	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
1 Business impact of malaria (from extremely serious to not a problem)	116	4.3 on a scale of 1-7 (mean score 5.8)	Competitive Disadvantage	53	6.5 on a scale of 1-7 (mean score 5.8)	Competitive Disadvantage
2 Malaria incidence	107	387.6 per 100000 population	Competitive Disadvantage	89	41.6 per 100000 population	Competitive Disadvantage
3 Business impact of tuberculosis (from extremely serious to not a problem)	113	4.3 on a scale of 1-7 (mean score 5.6)	Competitive Disadvantage	50	6.2 on a scale of 1-7 (mean score 5.6)	Competitive Disadvantage
4 Tuberculosis incidence	124	384 per 100000 population	Competitive Disadvantage	34	16 per 100000 population	Competitive Disadvantage
5 Business Impact of HIV/AIDS (from extremely serious to not a problem)	120	3.5 on a scale of 1-7 (mean score 5.0)	Competitive Disadvantage	45	5.7 on a scale of 1-7 (mean score 5.0)	Competitive Disadvantage
6 HIV prevalence	125	6.1% of adults 15-41 years	Competitive Disadvantage	50	0.2% of adults 15-41 years	Competitive Disadvantage
7 Infant Mortality	115	78 per 1000 live births	Competitive Disadvantage	39	8 per 1000 live births	Competitive Disadvantage
8 Life expectancy	118	53 years	Competitive Disadvantage	29	78 years	**Competitive Advantage**

Table 4.2d indicates that at a global level neither Kenya nor UAE fair very well in this area. Only UAE has one competitive advantage and that is in life expectancy. UAE is also ranked higher than Kenya at a global level in all eight elements and is therefore more competitive at a global level than Kenya.

Table 4.2e Knowledge Resources

Knowledge Resources	Kenya GCI Rank out of 134 countries	Kenya hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates hard data	Unite Arab Emirates GCI categorization
1 Quality of primary education (from poor quality to best in the world)	67	3.7 on a scale of 1- 7 (mean score 3.8)	Competitive Disadvantage	39	4.5 on a scale of 1- 7 (mean score 3.8)	Competitive Disadvantage
2 Primary enrollment	116	75.5 net primary educatio n enrollme nt rate	Competitive Disadvantage	100	88 net primary education enrollment rate	Competitive Disadvantage
3 Education Expenditure	17	6.3% of GNI	**Competitive Advantage**	n/a	Not provided	n/a
4 Secondary enrollment	108	50.3 gross secondar y enrollme nt rate	Competitive Disadvantage	56	90 gross secondary enrollment rate	Competitive Disadvantage
5 Tertiary enrollment	126	2.7 gross tertiary enrollme nt rate	Competitive Disadvantage	79	23.2 gross tertiary enrollment rate	Competitive Disadvantage
6 Quality of education system (from does not meets the need to meets the need of a competitive economy)	33	4.4 on a scale of 1- 7 (mean score 3.7)	Competitive Disadvantage	38	4.3 on a scale of 1- 7 (mean score 3.8)	Competitive Disadvantage
Quality of math and science education (from	65	4.1 on a scale of 1- 7	Competitive Disadvantage	42	4.6 on a scale of 1- 7 (mean score	Competitive Disadvantage

#	Element						
	lags far behind other countries to best in the world)		(mean score 4.1)			4.1)	
8	Quality of management schools (from limited or poor quality to best in the world)	55	4.3 on a scale of 1- 7 (mean score 4.1)	Competitive Disadvantage	46	4.5 on a scale of 1- 7 (mean score 4.1)	Competitive Disadvantage
9	Internet access in schools (from very limited to extensive)	114	2.2 on a scale of 1- 7 (mean score 3.6)	Competitive Disadvantage	27	5.0 on a scale of 1- 7 (mean score 3.6)	**Competitive Advantage**
10	Local availability of research and training services (from not available to available from world class local institutions)	36	4.5 on a scale of 1- 7 (mean score 4.0)	**Competitive Advantage**	44	4.4 on a scale of 1- 7 (mean score 4.0)	Competitive Disadvantage
11	Extent of staff training (from little investment to heavy investment in training and employee development)	47	4.2 on a scale of 1- 7 (mean score 4.0)	**Competitive Advantage**	37	4.5 on a scale of 1- 7 (mean score 4.0)	Competitive Disadvantage

Table 4.2e indicates that at a global level Kenya has three competitive advantages compared to UAE's one for the 11 elements of knowledge resources. UAE however is still ranked higher than Kenya in eight of the eleven elements. Global competitiveness Index rates an element as either a competitive advantage or disadvantage depending on a country's overall ranking. The UAE has an overall rating of 31 while Kenya is rated at 93. UAE therefore still has an overall global competitiveness over Kenya in this area though Kenya has a very strong showing in this area.

Table 4.2f Administrative Infrastructure (Institutions)

Administrative Infrastructure (Institutions)	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	United Arab Emirates GCI categorization
Property rights (from poorly defined ,not protected by law to clearly defined, well protected by law)	81	4.2 on a scale of 1-7 (mean score 4.7)	Competitive Disadvantage	43	5.4 on a scale of 1-7 (mean score 4.7)	Competitive Disadvantage
Intellectual property protection (from weak and not enforced to strong and enforced)	92	3.1 on a scale of 1-7 (mean score 3.8)	Competitive Disadvantage	24	5.2 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**
Diversion of public funds (from common to never occurs)	96	3.0 on a scale of 1-7 (mean score 3.8)	Competitive Disadvantage	19	5.5 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**
Public trust of politicians (from very low to very high)	96	3.1 on a scale of 1-7 (mean score 3.0)	Competitive Disadvantage	8	5.6 on a scale of 1-7 (mean score 3.0)	**Competitive Advantage**
Judicial Independence (from not independent-heavily influenced to entirely independent)	105	3.0 on a scale of 1-7 (mean score 4.1)	Competitive Disadvantage	33	5.2 on a scale of 1-7 (mean score 4.1)	Competitive Disadvantage
Favoritism in decisions of government officials (from favor connected firms and individuals to neutral)	115	2.4 on a scale of 1-7 (mean score 3.3)	Competitive Disadvantage	16	4.8 on a scale of 1-7 (mean score 3.3)	**Competitive Advantage**
Wastefulness of government spending (from wasteful to efficiently provides necessary goods and services not provided by market)	42	3.8 on a scale of 1-7 (mean score 3.5)	**Competitive Advantage**	4	5.3 on a scale of 1-7 (mean score 3.5)	**Competitive Advantage**
Burden of Government	60	3.3 on a	Competitive	5	4.7 on a	**Competitive**

regulation (from burdensome to not burdensome)		scale of 1-7 (mean score 3.3)	Disadvantage		scale of 1-7 (mean score 3.3)	**Advantage**
Efficiency of legal framework (from inefficient and subject to manipulation to efficient and follows clear, neutral process)	84	3.2 on a scale of 1-7 (mean score 3.8)	Competitive Disadvantage	26	4.9 on a scale of 1-7 (mean score 3.8)	**Competitive Advantage**
Transparency of government policymaking (from never informs firms of policy changes to always informs firms of policy changes)	68	4.1 on a scale of 1-7 (mean score 4.2)	Competitive Disadvantage	17	5.1 on a scale of 1-7 (mean score 4.2)	**Competitive Advantage**
Business cost of terrorism (from imposes significant business costs to does not impose significant business costs)	129	4.0 on a scale of 1-7 (mean score 5.6)	Competitive Disadvantage	54	5.9 on a scale of 1-7 (mean score 5.6)	Competitive Disadvantage
Business cost of crime and violence (from imposes significant business costs to does not impose significant business costs)	126	2.9 on a scale of 1-7 (mean score 4.7)	Competitive Disadvantage	16	6.1 on a scale of 1-7 (mean score 4.7)	**Competitive Advantage**
Organized crime (from imposes significant business costs to does not impose significant business costs)	118	4.0 on a scale of 1-7 (mean score 5.2)	Competitive Disadvantage	23	6.3 on a scale of 1-7 (mean score 5.2)	**Competitive Advantage**
Reliability of police services (from cannot be relied upon to can be relied upon to enforce law and order)	88	3.8 on a scale of 1-7 (mean score 4.3)	Competitive Disadvantage	8	6.3 on a scale of 1-7 (mean score 4.3)	**Competitive Advantage**
Ethical behavior of firms (from among the worst to among the best in the world)	65	4.1 on a scale of 1-7 (mean score 4.3)	Competitive Disadvantage	18	5.5 on a scale of 1-7 (mean score 4.3)	**Competitive Advantage**
Strength of auditing and reporting standards (from extremely weak to extremely strong, best in the world)	76	4.5 on a scale of 1-7 (mean score 4.7)	Competitive Disadvantage	43	5.2 on a scale of 1-7 (mean score 4.7)	Competitive Disadvantage
Efficacy of corporate boards (from management	60	4.8 on a scale of 1-	Competitive Disadvantage	58	4.8 on a scale of 1-	Competitive Disadvantage

		7 (mean score 4.7)			7 (mean score 4.7)	
has little accountability to investors and boards exert strong supervision of management decision)						
Protection of minority shareholders' interests (from not protected by law to protected by law and actively enforced)	71	4.5 on a scale of 1-7 (mean score 4.6)	Competitive Disadvantage	48	4.9 on a scale of 1-7 (mean score 4.6)	Competitive Disadvantage

Table 4.2f shows that UAE has global competitive advantage in twelve of the eighteen elements while Kenya has only one competitive advantage at the global level. UAE is ranked higher than Kenya in all eighteen elements and is therefore more competitive at the global level than Kenya in this category.

Table 4.2g Capital Resources

Capital Resources	Kenya GCI Rank out of 134 countries	Kenya hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates hard data	Unite Arab Emirates GCI categorization
Government surplus/deficit	83	-1.7% of GDP deficit	Competitive Disadvantage	3	28.8% of GDP surplus	**Competitive Advantage**
National savings rate	94	16.7% of GDP	Competitive Disadvantage	14	40.4% of GDP	**Competitive Advantage**
Inflation	115	9.8% per annum in consumer price index	Competitive Disadvantage	123	11% per annum in consumer price index	Competitive Disadvantage
Interest rate spread	103	8.2%	Competitive Disadvantage	16	2.5%	**Competitive Advantage**
Government gross debt	72	40.5% of GDP	Competitive Disadvantage	14	10.9% of GDP	**Competitive Advantage**

Table 4.2g shows that UAE has competitive advantage at a global level in four of the five elements while Kenya has none. UAE is therefore more competitive at a global level than Kenya in this category.

Table 4.2h Technology

Technology	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Availability of latest technologies	84	4.2 out of 7 (Mean score 4.7)	Competitive Disadvantage	17	6.1 out of 7 (Mean score 4.7)	**Competitive Advantage**
Firm-level technology absorption	66	4.7 out of 7 (Mean score 4.8)	Competitive Disadvantage	14	5.9 out of 7 (Mean score 4.8)	**Competitive Advantage**
Laws relating to ICT	81	3.4 out of 7 (Mean score 3.9)	Competitive Disadvantage	22	5.1 out of 7 (Mean score 3.9)	**Competitive Advantage**
FDI and technology transfer	35	5.2 out of 7 (Mean score 4.8)	**Competitive Advantage**	15	5.5 out of 7 (Mean score 4.8)	**Competitive Advantage**
Mobile telephone subscribers	111	20.9 per 100 population	Competitive Disadvantage	8	118.5 per 100 population	**Competitive Advantage**
Internet users	94	7.9 per 100 population	Competitive Disadvantage	37	36.7 per 100 population	Competitive Disadvantage
Personal computers	110	1.4 per 100 population	Competitive Disadvantage	33	30.1 per 100 population	Competitive Disadvantage
Broadband internet subscribers	106	0.1 per 100 population	Competitive Disadvantage	43	5.2 per 100 population	Competitive Disadvantage

Table 4.2h shows that UAE has competitive advantage at a global level in five of the eight elements while Kenya has competitive advantage at a global level in only one. UAE is also ranked higher than Kenya in all eight elements and is therefore more competitive at a global level than Kenya in this category.

4.3 Firm Strategy, Structure and Rivalry

The following categories were tabulated and interpreted: local rules encouraging investment and productivity- goods market, local rules encouraging investment and productivity- financial market.

Table 4.3a Local Rules Encouraging Investment and Productivity- Goods Market

Local rules encouraging investment and productivity-goods market	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Intensity of local competition (from limited to intense)	71	4.9 on a scale of 1- 7 (mean score 4.9)	Competitive Disadvantage	28	5.6 on a scale of 1- 7 (mean score 4.9)	**Competitive Advantage**
Extent of market dominance (from dominated by few firms to spread among many)	77	3.6 on a scale of 1- 7 (mean score 3.9)	Competitive Disadvantage	31	4.6 on a scale of 1- 7 (mean score 3.9)	Competitive Disadvantage
Effectiveness of anti-monopoly policy	62	3.9 on a scale of 1-7*[1] (mean score 4.0)	Competitive Disadvantage	51	4.1 on a scale of 1-7*[1] (mean score 4.0)	Competitive Disadvantage
Extent and effect of taxation	111	2.8 on a scale of 1-7*[2] (mean score 3.6)	Competitive Disadvantage	1	6.2 on a scale of 1-7*[2] (mean score 3.6)	**Competitive Advantage**
Total tax rate	91	50.9*[3]	Competitive Disadvantage	1	14.4*[3]	**Competitive Advantage**
Number of procedures required to start a business	103	12	Competitive Disadvantage	91	11	Competitive Disadvantage
Time required to start a business	99	44 days	Competitive Disadvantage	111	62 days	Competitive Disadvantage
Agricultural policy costs (from burdensome to balancing interest of tax payers, producers and consumers)	28	4.4 on a scale of 1- 7 (mean score 4.0)	**Competitive Advantage**	9	5.0 on a scale of 1- 7 (mean score 4.0)	**Competitive Advantage**
Prevalence of trade	120	3.7 on a	Competitive	11	5.8 on a	**Competitive**

arriers		scale of 1-7[4] (mean score 4.7)	Disadvantage		scale of 1-7[4] (mean score 4.7)	**Advantage**
rade weighted tariff ate	80	Average rate of duty per imported value unit is 7.6	Competitive Disadvantage	58	Average rate of duty per imported value unit is 4.8	Competitive Disadvantage
revalence of foreign wnership (from rare nd limited to revalent and ncouraged)	57	5.4 on a scale of 1- 7 (mean score 5.1)	Competitive Disadvantage	79	5.0 on a scale of 1- 7 (mean score 5.1)	Competitive Disadvantage
usiness impact of ules on FDI (from iscouraging to ncouraging)	79	5.0 on a scale of 1- 7 (mean score 5.0)	Competitive Disadvantage	49	5.4 on a scale of 1- 7 (mean score 5.0)	Competitive Disadvantage
Burden of customs rocedures(from low and umbersome to rapid nd efficient)	100	3.1 on a scale of 1- 7 (mean score 3.9)	Competitive Disadvantage	6	5.6 on a scale of 1- 7 (mean score 3.9)	**Competitive Advantage**

*[1] Antimonopoly policy in country ranges from 1= lax and ineffective to 7= effective and promotes competition

*[2] Level of taxes in country ranges from 1= significantly limits the incentives to work or invest to 7= has little impact on the incentives to work and invest

*[3] This variable is a combination of profit tax (% of profits), labor tax and contribution (% of profits), and other taxes (% of profits)

*[4] ranges from 1= strongly agree that tariff and non tariff barriers significantly reduce the ability of imported goods to compete in the domestic market to 7=strongly disagree

Table 4.3a shows that UAE has competitive advantage at a global level in six of the thirteen elements while Kenya has competitive advantage at a global level in only one. UAE is also ranked higher than Kenya in eleven of the thirteen elements and is therefore more competitive at a global level than Kenya in this category.

Table 4.3b Local Rules Encouraging Investment and Productivity- Financial Market

Local rules encouraging investment and productivity- financial market	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Financial market sophistication (poor to excellent)	64	4.3 on a scale of 1-7 (mean score 4.3)	Competitive Disadvantage	32	5.4 on a scale of 1- 7 (mean score 4.3)	Competitive Disadvantage
Financing through local equity market (impossible to very easy)	25	5.1 on a scale of 1-7 (mean score 4.2)	**Competitive Advantage**	23	5.2 on a scale of 1- 7 (mean score 4.2)	**Competitive Advantage**
Ease of access to loans (impossible to very easy)	36	4.1 on a scale of 1-7 (mean score 3.4)	**Competitive Advantage**	7	4.9 on a scale of 1- 7 (mean score 3.4)	**Competitive Advantage**
Venture capital availability (impossible to very easy)	61	3.1 on a scale of 1-7 (mean score 3.2)	Competitive Disadvantage	17	4.3 on a scale of 1- 7 (mean score 3.2)	**Competitive Advantage**
Restriction on capital flows (highly restricted to not restricted by law)	81	4.4 on a scale of 1-7 (mean score 4.7)	Competitive Disadvantage	14	6.0 on a scale of 1- 7 (mean score 4.7)	**Competitive Advantage**
Strength of investor protection	67	5.0 on a scale of 0-10 (best scale)	Competitive Disadvantage	86	4.3 on a scale of 0-10 (best scale)	Competitive Disadvantage
Soundness of banks (from insolvent to generally healthy)	64	5.7 on a scale of 1-7 (mean score 5.6)	Competitive Disadvantage	31	6.2 on a scale of 1- 7 (mean score 5.6)	Competitive Disadvantage
Regulation of securities exchange	92	4.1 on a scale of 1-7*[1] (mean score 4.6)	Competitive Disadvantage	56	4.9 on a scale of 1- 7*[1] (mean score 4.6)	Competitive Disadvantage
Strength of legal rights index	8	8.0 on a scale of 0-10 (best scale)	**Competitive Advantage**	93	3.0 on a scale of 0-10 (best scale)	Competitive Disadvantage

Table 4.3b shows that UAE has competitive advantage at a global level in four of the nine elements while Kenya has competitive advantage at a global level in three elements. UAE is also ranked higher than Kenya in seven of the nine elements and is therefore more competitive at a global level than Kenya in this category.

4.4 Demand Conditions

Demand conditions had one category, demanding and sophisticated local buyers, which was tabulated and analyzed.

Table 4.4 Demanding and Sophisticated Local Buyers

Demanding and sophisticated local buyers	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Domestic market Size	69	3.3 on a scale of 1-7*[1]	Competitive Disadvantage	55	3.8 on a scale of 1-7*[1]	Competitive Disadvantage
Foreign market size	90	3.7 on a scale of 1-7*[2]	Competitive Disadvantage	32	5.2 on a scale of 1-7*[2]	Competitive Disadvantage
Degree of customer orientation	33	5.1 on a scale of 1-7 (quality of customer treatment)	**Competitive Advantage**	29	5.2 on a scale of 1-7 (quality of customer treatment)	**Competitive Advantage**
Buyer sophistication	96	3.1 on a scale of 1-7*[3]	Competitive Disadvantage	34	4.3 on a scale of 1-7*[3]	Competitive Disadvantage

*[1] Sum of gross domestic product plus value of imports of goods and services, minus value of exports of goods and services, normalized on a 1-7 (best) scale

*[2] Value of exports of goods and services, normalized on a 1-7 (best) scale

*[3] Level of buyer decision based on sophistication instead of price

Table 4.4 shows that UAE has competitive advantage at a global level in one of the four elements while Kenya also has competitive advantage at a global level in one of the four

elements. UAE is also ranked higher than Kenya in all four elements and is therefore more competitive at a global level than Kenya in this category.

4.5 Related and Supporting Industries

Related and supporting industries had two categories which were tabulated and analyzed: status of related and supporting industries, innovation.

Table 4.5a Status of Related and Supporting Industries

Related and supporting industries	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Local supplier quantity	34	5.2 on a scale of 1-7 (mean score 4.7)	**Competitive Advantage**	31	5.2 on a scale of 1- 7 (mean score 4.7)	Competitive Disadvantage
Local supplier quality	66	4.6 on a scale of 1-7 (mean score 4.6)	Competitive Disadvantage	34	5.2 on a scale of 1- 7 (mean score 4.6)	Competitive Disadvantage
State of cluster development	47	3.8 on a scale of 1-7 (mean score 3.6)	**Competitive Advantage**	21	4.6 on a scale of 1- 7 (mean score 3.6)	**Competitive Advantage**
Nature of competitive advantage	65	3.5 on a scale of 1-7*[1] (mean score 3.7)	Competitive Disadvantage	35	4.0 on a scale of 1- 7*[1] (mean score 3.7)	Competitive Disadvantage
Value chain breadth	69	3.6 on a scale of 1-7*[2] (mean score 3.8)	Competitive Disadvantage	41	4.1 on a scale of 1- 7*[2] (mean score 3.8)	Competitive Disadvantage
Control of international distribution	56	4.2 on a scale of 1-7*[3] (mean score 4.1)	Competitive Disadvantage	38	4.5 on a scale of 1- 7*[3] (mean score 4.1)	Competitive Disadvantage
Production process sophistication	101	2.9 on a scale of 1-7*[4] (mean	Competitive Disadvantage	35	4.4 on a scale of 1- 7*[4] (mean score	Competitive Disadvantage

		score 3.8)			3.8)	
tent of arketing egree of phistication)	71	4.4 on a scale of 1-7 (mean score 4.4)	Competitive Disadvantage	21	5.4 on a scale of 1- 7 (mean score 4.4)	**Competitive Advantage**
illingness to legate authority evel of legation low to gh)	56	4.2 on a scale of 1-7 (mean score 4.1)	Competitive Disadvantage	41	4.5 on a scale of 1- 7 (mean score 4.1)	Competitive Disadvantage

*[1]   Competitiveness of country in local market ranges from 1= low cost or local natural resources to 7=unique products and processes

*[2]   Exporting companies in country ranges from 1= primarily involved in individual steps of the value chain to 7= present across the entire value chain

*[3]   International distribution and marketing from country ranges from 1=take place through foreign companies to 7= are owned and controlled by local companies

*[4]   Production processes in country range from 1= labor intensive methods or previous generations of process technology to 7= the world's best and most efficient process technology

Table 4.5a shows that UAE has competitive advantage at a global level in two of the nine elements while Kenya also has competitive advantage at a global level in two out of the nine elements. UAE is however ranked higher than Kenya in nine elements and is therefore more competitive at a global level than Kenya in this category.

Table 4.5b Innovation

Innovation	Kenya GCI Rank out of 134 countries	Kenya score or hard data	Kenya GCI categorization	United Arab Emirates GCI Rank out of 134 countries	United Arab Emirates score or hard data	Unite Arab Emirates GCI categorization
Capacity for innovation	44	3.5 out of 7 (mean score 3.4)	**Competitive Advantage**	74	3.0 out of 7 (mean score 3.4)	Competitive Disadvantage
Quality of scientific research institutions	32	4.7 out of 7 (mean score 4.0)	**Competitive Advantage**	74	3.7 out of 7 (mean score 4.0)	Competitive Disadvantage
Company spending on R&D	37	3.7 out of 7 (mean score 3.4)	**Competitive Advantage**	50	3.4 out of 7 (mean score 3.4)	Competitive Disadvantage
University-Industry research collaboration	40	3.7 out of 7 (mean score 3.4)	**Competitive Advantage**	58	3.4 out of 7 (mean score 3.4)	Competitive Disadvantage
Government procurement of advanced tech products	56	3.7 out of 7 (mean score 3.6)	Competitive Disadvantage	11	4.5 out of 7 (mean score 3.6)	**Competitive Advantage**
Availability of scientists and engineers	42	4.6 out of 7 (mean score 4.2)	**Competitive Advantage**	75	4.1 out of 7 (mean score 4.2)	Competitive Disadvantage
Utility patents	83	0 patents in 2007 per million population	Competitive Disadvantage	88	0 patents in 2007 per million population	Competitive Disadvantage

Table 4.5b shows that Kenya has competitive advantage at a global level in five of the seven elements while UAE has competitive advantage at a global level in only one element. Kenya is also ranked higher than UAE in six of the seven elements and is therefore more competitive at a global level than UAE in this category.

4.6 Overall Summary of Findings

Results of each category were tabulated under respective determinant to determine the country with overall competitiveness in each determinant.

Table 4.6 Overall Summary of Findings

Determinant of diamond	Determinant category	Country with category competitiveness within determinant	Country with overall Competitiveness in determinant
Factor conditions	1) Infrastructure	UAE	UAE
	2) Human resource market	UAE	
	3) Health	UAE	
	4) Knowledge Resources	UAE	
	5) Administrative Infrastructure	UAE	
	6)Capital Resources	UAE	
	7)Technology	UAE	
Firm strategy, structure and rivalry	1) Local rules encouraging investment and productivity-goods market	UAE	UAE
	2) Local rules encouraging investment and productivity- financial market	UAE	
Demand conditions	1) Demanding and sophisticated local buyers	UAE	UAE
Related and supporting industries	1) Related and supporting industries	UAE	UAE
	2) Innovation	Kenya	

Table 4.6 above shows that UAE is clearly more competitive at the global level in factor conditions, firm strategy, structure and rivalry and in demand condition determinants. In

related and supporting industries there is an apparent tie looking at the determinant categories but this has been resolved by tallying and averaging the scores for the overall determinant which gives UAE the edge with an average score of 5.1 to Kenya's 5.0. UAE is therefore more competitive at the global level though this is very close indeed.

CHAPTER FIVE

SUMMARY, DISCUSSIONS AND CONCLUSIONS

5.1 Summary, Discussions and Conclusions

The objective of this research was to determine the extent to which Porter's theory of Competitive Advantage of Nations explains the difference in competitiveness between Kenya and United Arab Emirates export processing zones. Appendix 3 shows that UAE export processing zone have been more successful attracting large amounts of foreign direct investment and over 7000 investing companies compared to Kenya's 68 investing companies. Porter's theory of Competitive Advantage of Nations states that nations can only create a sustainable competitive advantage if they acquire four broad attributes, which create the environment in which local firms compete and in so doing create a competitive advantage. The four attributes (factor conditions, firm strategy, structure and rivalry, demand conditions and related and supporting industries) which he called the determinants of competitive advantage form the diamond of competitive advantage. Porter argued that prosperity depended on a nation's ability to create a business environment, along with supporting institutions that enable it to productively use and upgrade its inputs (Porter,1990). UAE has a sustained competitiveness in the export processing zones compared to Kenya. Porter's theory predicts that UAE should therefore have a more robust diamond in comparison to Kenya. The research compared the four determinants for both Kenya and United Arab Emirates to test if indeed UAE has a more robust diamond and therefore explain the difference in competitiveness of the two export processing zones.

The research data first looked at the physical resources with which each country is endowed. Kenya's economy is mainly dependent on agriculture even though only 15% of Kenya's total land area has sufficient fertility and rain fall to be farmed, and only 8% can be classified as arable land (see appendix 4). Kenya's industries draw their competitive advantage mainly from the basic factors of production mainly arable land and abundant cheap labor. Basic factors are not a source of sustainable competitive advantage because

of their widening availability as Global firms have ready access to them through foreign activities or sourcing in international markets. Kenya's agriculture is mainly rain dependent and revenues to agricultural products/ cash crops such as tea and coffee are sensitive to world economic cycles and exchange rates which drive demand and relative prices. UAE factor conditions indicate that it is factor strengths are its large natural resources of petroleum and natural gas. The UAE economy is heavily dependent on oil and natural gas whose revenues have enabled the government to finance infrastructure for the non- oil economy (see appendix 4). Oil revenues account for more than 60% of total UAE income. The UAE government has capitalized on its location to establish free zones because of its wide access to markets. UAE factor disadvantages are its small land mass relative to Kenya, its desert climate making it largely unproductive for agriculture and its small population. It has however used its oil resource strength well to develop the economy and move UAE to the innovation driven stage of development. UAE has allowed labor immigration that has provided professional expertise and cheap labor and to develop the economy. 80% of the population is made up of immigrant workers.

Data on the elements of the first determinant, factor conditions indicate that Kenya has an inferior infrastructure compared to UAE. EPZA SWOT analysis confirms this by listing improvement of port facilities of sea and air as an opportunity for improvement (EPZA Strategic Plan, 2004-2009). High quality infrastructure is essential in driving competitiveness as it reduces transportation costs. On the human resource market, Kenya's main weaknesses are brain drain, poor labor relations, individual wage determination issues and lack of professional management. This is confirmed by frequent labor strikes at Kenya EPZ. EPZA SWOT analysis also indicates lack of readily skilled manpower for specific industries as a weakness (EPZA Strategic Plan, 2004-2009). It is worth noting that while Kenya has a high proportion of women employed in EPZs, majority of them are in low skill low paid, low prospect jobs. Health is also a major weakness area especially for Kenya. A healthy workforce is vital to competitiveness and productivity. Sick workers do not produce to their full potential, are less productive and this translate to significant business costs. In knowledge resources Kenya is rated quite close to UAE and this is an area of improvement for UAE as country with such rich

resources can afford to have far superior knowledge resources. Kenya has a strong showing and is ranked higher than UAE at a global level in local availability of research and training services. The level of education, skills, training and specialization available is important in developing competitiveness.

Administrative infrastructure element is about institutions. UAE is far superior in terms of institutions compared to Kenya. The data analysis indicates that Kenya is weak in property rights, management of public funds, untrustworthy politicians, lack of judicial independence, favoritism in decisions of government officials, lack of transparency in government policy making, business cost of terrorism and crime, unreliable police services. These weaknesses are also highlighted in Kenya EPZ reports (EPZA, 2005) and EPZA SWOT analysis (EPZA Strategic Plan, 2004-2009). Transparency International corruption index ranks Kenya 150 out of 179 compared to UAE which is ranked 34 out of 179 (Transparency International, 2007). The issues above substantially increase the cost of doing business and destroy investor confidence. This concern is a problem not only for Kenya but for many other developing countries. Developing countries, especially African countries dominate the bottom quarter of Transparency international rankings. Doing Kenya is ranked 82 out of 181 economies in ease of doing business compared to UAE which is ranked 46 (Doing Business, 2009). Porter says that the role of government is to support and strengthen the diamond of competitive advantage and to challenge industries to upgrade and innovate (Porter, 1990). The Kenya government must focus on building strong institutions if it is to succeed in attracting investors and significantly reducing the cost of doing business.

On capital resources element reflects macroeconomic stability, UAE is more competitive than Kenya and this can be explained by its rich petroleum and natural gas resources. Macroeconomic stability by having low inflation rates and low interest are important factors in investor decisions and governments like Kenya need to manage this aspect to improve their competitiveness. On Technology element UAE is more competitive than Kenya and ranks highly in having the latest technologies, firm level technology absorption and FDI and technology transfer. While one may argue that this is so because

UAE has resources to afford, it is worth noting that UAE government intentionally target having latest available technologies.

On firm strategy, structure and rivalry, research data shows that UAE has competitive advantages on local rules encouraging investment and productivity in the goods market. UAE is ranked first in the world in low total tax rate and low extent and effect of taxation. These are reflected in the UAE EPZ incentives on appendix 2. UAE is also ranked 11th globally in prevalence of trade barriers and 6th globally in rapid and efficient customs procedures. Intensity of local competition is also quite high in the UAE. Both prevalence of trade barriers and cumbersome customs procedures are noted as weaknesses and challenges facing Kenya EPZ (EPZA Strategic Plan, 2004-2009). In terms of rules encouraging investment and productivity in the financial market, UAE has superior financing through local equity market, ease of access to loans, venture capital availability and less restriction on capital flows. Availability of loans to EPZ companies as a major challenge facing the Kenya EPZ (EPZA Strategic Plan, 2004-2009).

On demand conditions, research data shows that UAE is more competitive as it has more sophisticated buyers, a higher degree of market size and larger foreign market size. On related and supporting industries, research data shows that even though UAE has a slight overall edge than Kenya, both counties are weak in this attribute of the diamond and need improvement. Notable areas are that UAE has superior cluster development local supplier quantity and marketing sophistication compared to Kenya. Kenya however is more innovative than UAE according to research data. Kenya has more innovative capacity, higher quality of scientific research institutions, higher level of university and industry collaboration, Kenyan company's spend more on research and development and Kenya has a higher availability of scientists and engineers. This is commendable for a country still at the developing stage. The role of both Kenya and UAE governments is to address the identified weaknesses in the determinants in order to increase their competitiveness.

Research finding have shown that UAE is more competitive than Kenya in all four determinants of competitive advantage and has therefore a more robust diamond than

Kenya. This shows that Porter's theory explains the difference in competitiveness between Kenya and United Arab emirates export processing zones. This finding is further supported by the fact that EPZ annual reports (EPZA, 2005) and strategic planning reports (EPZA Strategic Plan, 2004-2009) indicate the same weaknesses and challenges in the Kenya EPZ as noted above.

5.2 Limitations of the Study

This study has limited itself to explaining the difference in competitiveness between Kenya and United Arab Emirates export processing zones using Porter's theory of Competitive Advantage. It may be possible to explain the difference in competitiveness by other theories. This study also limits itself to identification of the areas of weakness which need to be addressed in order to increase global competitiveness. This study has also used surveys and data collected by World Economic Forum in its Global Competitive report (Global Competitiveness Report, 2008-2009), International Labor Organization, Transparency International, World Bank and other international public organizations.

5.3 Suggestions for Further Research

One can argue that United Arab Emirates is rich country with huge petroleum and natural gas resources and can therefore afford to develop an export processing zone that can attract foreign direct investment. It can afford to finance infrastructure development, acquire latest technology, provide cheap energy and give large tax holidays much easier than developing countries. To some extent, this is true. International labor organization reports have also indicated that export processing zones have not really taken off in developing countries especially in Africa (ILO, 2003). Yet many developing countries are still adopting export processing zones as a policy tool for development. A research needs to be done to establish whether export processing zones are really the right policy development tool for developing countries who by offering large tax incentives not only forego this income but put a greater tax burden on their local industries. Particularly for Kenya, the government has invested heavily in putting up the export processing zone infrastructure, yet the Kenya Export Processing Zone Authority continues to depend on

government exchequer to meet its budget deficit. A research can be done on the cost benefit analysis of the Kenya export processing zone. Does the substantial government investment justify the social and economic benefits?

5.4 Implications for Policy and Practice

A major part of success in export processing zones is dependent on attracting foreign direct investment. Countries must therefore build a climate that is conducive to attracting foreign direct investment. A favorable foreign direct investment environment must have transparent, non discriminatory regulatory environment, effective competition policies, efficient judicial system, low transaction and business cost, supplier network and clusters, support institutions and technical services, human capital and low cost infrastructure (Pigato, 2001) The research has shown that Kenya has competitive weaknesses mainly in its institutions, infrastructure, health, knowledge resources (enrollment in secondary and tertiary education) and macroeconomics stability. Institutions cover a wide area and include property and intellectual property rights, judicial independence and efficiency of legal framework, bureaucracy, business ethics, crime and corruption. These weaknesses are also common in many other developing countries, especially in Africa, who have also invested in export processing zones. These weaknesses also add to the overall cost of doing business making such destinations unattractive. Kenya government should act to strengthen its institutions, improve on the flagging road and rail infrastructure, address healthcare, address secondary and tertiary enrollment and stabilize the macroeconomics. This is also applicable to developing countries facing similar export processing zone challenges and to those wishing to implement such a program.

UAE has a more robust diamond than Kenya but it can enhance its competitiveness by addressing areas of health, knowledge resources in enrollment of primary, secondary and tertiary education, innovation and also address time required to start. Because of UAE financial strength, it does procure latest technology from advanced nations. UAE government must however work to develop its education system and areas of research if wants to improve its global competitiveness.

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APPENDICES

Appendix 1

EPZ Incentives Kenya

- perpetual customs duties and Value Added Tax (VAT) exemption on raw materials, machinery, office equipment and supplies and other business inputs for use n the eligible business in the EPZ

- exemption from payment of income tax as specified in the Income Tax Act for the first 10 years and income tax rate limited to 25% for the next 10 years . This exemption does not apply for commercial activities of an EPZ not directly related to manufacturing activity

- exemption from the payments of withholding tax on dividends and other payments made to none residents for the period when the EPZ enterprise is exempt from income tax payment (i.e. 10 years)

- exemption from stamp duty on the execution of any instruments relating to the business activities of an EPZ

- exemption from quotas or other restriction prohibitions on import or export trade with the exception of trade in firearms, military equipment or illegal goods

- exemption from exchange controls on payments for receipt of export processing exports, payments for raw materials, machinery, equipment and services, capital transactions (except on capital funds raised from Kenya residents subject to exchange control Act)

- exemption from rent or tenancy controls

- 100% investment deduction over 20 years on initial investment

Appendix 2
EPZ Incentives UAE

- 100% foreign ownership; unlike in none – free zones, JAFZA allows investors to operate as a wholly owned entity.
- 0% corporate tax for a period of 50 years. This concession is renewable.
- Unrestricted repatriation of capital and profits
- 0% import or re-export duties
- 0% personal income tax
- No currency restrictions
- No restriction of hiring foreign employees
- Construction on leased land can be mortgaged can be mortgaged to any bank of financing company.
- Abundant energy which has made production operations cost effective.

Appendix 3: ILO Database on Export Processing Zones

		Kenya	UAE
1	Number of EPZs	43(EPZ)	16 (EPZ)
2	Other type of zones	11 industrial parks	
3	Total employees (2005-06)	38,851	552,135
4	% of female employees	60%	Not reported
5	Investment (million US$)	258,038,674	8 billion
6	Main investing countries	US, UK, Hong Kong, India, Sri Lanka	UAE, France, US, UK, China, Netherlands, others
7	Number of firms	68	7000
	Main sectors	Apparel/garments, manufacturing, pharmaceuticals, processing of tea	ICT, media, computer, training, marketing, tourism, services
8	Zone exports (million US$)	277	5 billion
9	Main markets	UK,UAE,US, Japan, South Africa, Germany, Uganda, Tanzania, Pakistan	Sweden, Denmark, US, UK, France, Netherlands
10	Zone exports as % of total export	86.9%	35%

Source: ILO database on export processing zones (Revised)

Appendix 4: Additional Country Data

Country aspect	Kenya	UAE
Population and growth rate	37,953,840	4,621,399
Population growth rate	2.758%	3.833%
Religion	Protestant 45%, Roman Catholic 33%, Muslim 10%, indigenous belief 10%, other 2%	Muslim 96%, Shia 16%, other includes Christian, Hindu 4%
Literacy	Total population :85.1% Male: 90.6% Female: 79.7%	Total Population: 77.9% Male: 76.1% Female: 81.7%
Education expenditure	6.9%of GDP	1.35 of GDP
Government type	Republic	Federation with specified powers delegated to the UAE federal government, other powers reserved to member emirates.
Legal system	Based on Kenyan statutory law, Kenyan and English common law, tribal law and Islamic law	Based on a dual system of Sharia and civil courts; has not accepted compulsory ICJ jurisdiction.
GDP	US$ 29.3 billion	US$192.6 billion
GDP composition by sector	Agriculture:23.8% Industry: 16.7% Services: 59.5%	Agriculture: 1.8% Industry: 60.6% Services: 37.6%
Labor force by occupation	Agriculture: 75% Industry and services: 25%	Agriculture: 7% Industry: 15% Services: 78%
Unemployment rate	40%	2.4%
Population below poverty line	50%	19.5%
Inflation rate	9.7%	14%
Agriculture products	Tea, coffee, corn, wheat, sugarcane, fruit, vegetables, dairy products, beef, pork, poultry, eggs.	Dates, vegetables, watermelon, poultry, eggs, dairy products, fish
Industries	Small – scale consumer goods, agricultural products, horticulture, oil reefing, aluminum, steel, lead, cement, commercial ship repair, tourism.	Petroleum and petrochemicals, fishing, aluminum, cement, fertilizers, commercial ship repair, construction materials, some boats building, handicraft, textiles
Electricity	Production: 5.502 billion kWh Consumption: 4.464 billion kWh Import: 28 million kWh	Production: 57.06 billion kWh Consumption: 52.62 kWh Imports & Exports: 0 kWh
Oil production	0 bbl/day	2.51 million bbl/day
Oil- proved reserves	0 bbl	97.8 billion bbl

	Natural gas production	0 cu m	45.07 billion cu m
	Exports	$4.127 billion f.o.b	2.54 million bbl/day
	Export commodities	Tea, horticultural products, coffee, petroleum products, fish, cement.	Crude oil 45%, Natural gas, re-exports, dried fish, dates
	Import	$8.54 billion f.o.b	US$116.6 billion f.o.b
	Import commodities	Machinery and transportation equipment, petroleum products, motor vehicle, iron and steel, resins and plastics.	Machinery and transport equipments, chemicals, food

Source: CIA- The World Factbook