GOVERNMENT REGULATIONS AND OPERATIONAL PERFORMAACE OF LOGISTICS FIRMS IN NAIROBI, KENYA

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DECLARATION

This project is my original work and has not been presented for a degree in any other university.

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I confirm that this research project was carried out by the candidate under my supervision as the supervisor.

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DEDICATION

To my wonderful family: Peter Muindi, Elizabeth Muindi, Anne Muindi, Moses Muindi, Will Ogutu and Abigail Ogutu.
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LIST OF ABBREVIATIONS

WTO - World Trade Organization

OECD - Organization for Economic Co-operation and Development

TOPRA - The Organization for Professionals in Regulatory Affairs

GLS - Global Logistics Systems

PVOC - Pre-Export Verification of Conformity

COC - Certificate of Conformity

KEBS - Kenya Bureau of Standards

KEPHIS - Kenya Plant Health Inspectorate Service

ISPM - International Sanitary and Phytosanitary Measure (ISPM)

UNESCAP - United Nations Economic and Social Commission for Asia and the Pacific

WCO - World Customs Organization

ASEAN - Association of Southeast Asian Nations

FDI - Foreign Direct Investment

KIFWA - Kenya International Freight and warehousing association
ABSTRACT

Constant changes in the regulatory environment in Kenya and need for compliance forces logistics firms to implement policies and practices in order to remain competitive. This study sought to answer what specific government restrictions affect logistics firms and their impact on the operational performance of the firm. The research objectives were: to investigate government regulations in logistics firms in Kenya, to determine the relationship between government regulations and operations performance of logistics firms and also to investigate challenges of government regulation in logistics firms. Survey research design was used with a sample was 75 logistics firms. Data was collected by administering questionnaires to heads of department in each logistics firm. Descriptive and regression analysis was performed on the data by generating the mean and standard deviation. The study established that high tariffs were the leading government regulations affecting logistics firms, followed by additional customs and documentation, complex clearing procedures, licenses and accreditations, requirements of membership in board associations, trade barriers and lastly, port congestion and exchange rates. The study concluded that there were numerous government regulations affecting logistics firms in Kenya. Tariffs and customs documentations had the greatest impact on logistics operations, followed by clearing procedures, licenses and accreditations and requirement for membership in associations. Most of the challenges of government regulations are information systems down times, import laws, staff training, port congestion and exchange rates. Th regression analysis showed that all these factors had a positive relationship to the operational performance of logistics firms in Nairobi, Kenya. The government and logistics firms should foster a collaborative relationship as partners rather than adversaries and should provide access to clear government policies and regulations and promote proper communication with customers. Government employees should be trained on customer service to be more responsive to the needs of the logistics industry. International regional agreements as well as boundary regulations and border policies should promote rather than constrain logistics operations.
CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Globalization has improved access of products for both suppliers and consumers at a large scale (Kolb, 2019). Logistics firms have grown substantially by providing dependable and quality movement of goods and services throughout the supply chain (Powel, 2001). Governments in all developing and majority of developed countries have in place measures to facilitate these trade services (WTO, 1999).

The success of a logistics firm can be measured through the ability of the firm to transport goods from country of origin to the destination in a dependable way at a competitive cost (Hollweg and Wong, 2009). Drastic changes in government regulations can impose a significant effect on an organization’s capability to get goods when and where they are needed (Jaguar Freight, 2020). Some of the government regulations that logistics firms may face include customs documentation, harmonized systems codes, local employment requirements, cargo handling and hours of operation (Hollweg, 2009).

Prater (2005) suggests that government regulations may affect operations management performance measures such as cost, dependability, speed, reliability, quality, customer service and service innovation. These delays and increased costs in the clearance process pose a challenge in meeting customer requirements. It is therefore important to identify these regulations and analyze how they affect their operational performance.

In Kenya, the logistics industry is a very competitive environment since firms compete by ensuring goods are delivered in good condition. Constant changes in the regulatory environment in Kenya and need for compliance forces logistics firms to implement policies and practices in order to remain competitive. The theories that explain this
study further are the institutional theory and the technological acceptance theory. The institutional theory explains three pressures that face the external environment of organizations. These include normative pressures, mimetic pressures and coercive pressures.

There is little evidence to show how these regulations have impacted the operational performance of the firms. The research objective was to show these government regulations and their relationship with the operations performance.

1.1.1 The Regulatory Environment

Regulation is an authoritative rule that has been set aside to achieve socio-economic objectives (OECD, 2010). Some of the government regulations that may affect logistics firms include tariffs, complex clearing procedures, licenses and accreditations, trade blocks, customs documentation, inspections, clearance, harmonized system codes and cargo handling (De Souza et al., 2007).

Siringoringo et al (2009) pointed out that a challenge faced by small companies is additional paperwork imposed on both local and foreign governments in order for trade. Their study emphasized that any discrepancies in paperwork would lead to lots of delays and therefore constituting to barriers in trading. In Kenya, logistics firms may be regulated on staff qualifications, memberships in associations, customs agent’s licenses, warehousing and clearing and forwarding (Watanuki, 2015). For example, it is mandatory for all clearing and forwarding agents to attain the East Africa Customs Freight Forwarding Practicing Certificate introduced in 2013 (Watanuki, 2015). This harmonization of regional regulations may improve the movement of goods within the region.
Some of the reasons for government regulations include; to reduce counterfeiting, protection of local companies from unfair foreign competition (Wright and De Hert, 2012), as a significant source of revenue for the government and to protect domestic health and safety from importation of controlled products (TOPRA). Regulations can also be for political reasons through sanctions (Scholz & Gray, 1990).

1.1.2 Operational performance

This is the firm’s ability to maximize utility and achieve set targets such as customer satisfaction with its limited resources in both the external and internal environment (Lusthaus & Adrien, 1998). According to Slack, Chambers and Johnson., (2010), there are five major goals of operational performance of a firm. These are quality, cost, speed, dependability and flexibility.

Quality is the degree to which a firm satisfies and exceed the requirements set by the customers (Slack et al., 2010). Technology advancement has greatly reduced time taken by service providers (Lavelle et al., 2001). Flexibility of a logistics company is its ability to easily change its processes whenever required by the customer (Mason et al., 2006). Innovators that react quickly and accordingly through technological solutions such as service supply networks, big data and statistical analysis, 3D printing, robotics and automation companies, are providing better service to their customers (Miller 2019).

1.1.3 Logistics firms in Kenya

Logistics services involves services such as transportation services, packaging, warehousing and clearing and forwarding (Kunaka, et al., 2013). Entry of new international players in the logistics industry such as DHL, FedEx, XPO Logistics,
United Parcel Service (UPS), TNT, Aramex and J.B. Hunt Transport has facilitated tremendous growth of this industry in Kenya.

The industry subsequently benefited the economy through increased trade with international countries and the growth of the manufacturing industry which is part of the Big Four Agenda under Kenya Vision 2030. It has boosted other sectors such as agriculture, transport and textile industries. Local companies and SMEs can source cheap raw materials from nations such as USA, China and other African countries. The increasing growth of international trade in Kenya increases the demand for more logistics and courier firms.

1.2 Research problem

According to Langley (2016), regulations and compliance contribute to seventeen percent of the challenges in logistics companies. These regulations often differ from country to country (Cyrille and Shine, 1996). It is important to understand regulations of logistics firms and how to build and improve logistics competence (Watanuki, 2015). Government regulations have had various effects on logistics firms. Firstly, clearance procedures lead to delays in the delivery of customer’s goods. Complex licensing regulations may deter other service providers from the market (International Trade Centre, 2017). In a study by Siringoringo et al (2009), discrepancies during clearance would lead to lots of delays and therefore constituting to barriers in trading. Complicated customs procedures mostly result due to port congestion that affect the flow of goods (Grainger, 2012). Logistics firms therefore are forced to keep up with these regulations in order to survive long term.

Secondly is the paper work required by regulatory bodies (Kenya Shippers Council, 2008). Government agencies and other ministries such as ministry of transport, revenue
authorities, self-regulatory agencies, ministry of infrastructure and ministry of trade are responsible for regulating the logistics industry (Watanuki, 2015). Humanitarian organizations encounter problems from local authorities requiring documentation which may hinder flow of emergency services to where they are needed (UNCTAD, 2006). Such documents include import permits, Import Declaration Form (IDF), packing lists, commercial invoice and airway bill number (Kenya Revenue Authority).

Thirdly, high tariffs play a significant role in logistics firms. High taxes imposed on goods upon arrival result in customers to resort to bank loans to pay the tax. When unable to pay, the customers are forced to pay demurrage fees that eventually increases cost of the delivery of the goods. Some customers may also be unable to clear their goods leading to losses (Kenya Shippers Council, 2008). Customs authorities may also collect certain fees and levies on behalf of the government such as import declaration fees and petroleum development levy on petroleum products (Kenya Revenue Authority).

Salim (2012) study on oil marketing companies discovered that government regulations in Kenya have affected such companies’ supply chain management practices through price control, upfront payment of taxes, bond guarantee and open tender system. Waweru (2012) study concluded that government regulation is one of the challenges faced by international courier services. Kareko (2018) did a study on logistics management of Kenya Power, Nairobi and gathered that there is a relationship between logistics in the oil firms in Kenya and government policy. Nyatwongi (2015) study on the factors affecting performance of importing goods through Mombasa concluded that regulatory and policy framework affects such businesses.
The unstable regulatory environment today has resulted in creation of obstacles to the logistic performance subjected to timely delivery, reliability, customer satisfaction, and innovation. Logistics firms perform differently due to problems they face in adjusting to constant changes in the regulatory environment. The area of government regulations has not been given much attention in the previous studies and neither its impact highlighted in the previous literature which makes it important to explore this. The above studies by Salim, (2012) Waweru (2012) Kareko (2018). Nyatwongi (2015) did not show relationship between government regulations and operational performance of logistics firms. This study sought to find how government regulations are affecting the operations performance of logistics firms on aspects such as cost, flexibility, quality, speed and innovation. The study answered the relationship between government restrictions and operational performance of logistics firms and their challenges.

1.3 Research objectives

The research objectives were:

- To determine the government regulations in logistics firms in Nairobi, Kenya
- To establish the relationship between government regulations and operations performance of logistics firms in Kenya.
- To investigate the challenges of adjusting to government regulations in logistics firms.

1.4 Value of the study

This study is valuable to logistics firms in identifying and solving any challenges in order to ensure and improve customer satisfaction. These challenges may also be affecting importers and suppliers and be able to align their processes with government regulations. The study is also valuable to multinational corporations and the small and
medium enterprise (SME) in different sectors such as manufacturing, pharmaceuticals, telecommunication, textiles, transport and financial services.

The study is important to other researchers to identify further solutions that the government can undertake to improve processes relating to the logistics industry. The government will also be able to identify the effects of its regulation on operations performance of logistics firms and thus will be beneficial in coming up with new policies that would benefit all stakeholders.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discussed theories and further literature on government regulations and its relation to operational performance in logistics firms. This chapter also includes the conceptual framework.

2.2 Theoretical Foundation

This study focuses on two organizational theories. These are the Institutional Theory and the Technological Acceptance model.

2.2.1 Institutional theory

Institutions are defined as either formal or informal structures that have a high power on the behavior and activities in an industry (Constanze, 2011). The term institutions can be used in place of terms such as structures, government parastatals, public opinion, professions and interested parties (Scott, 1987).

The institutional theory highlights the significance of external pressures and their impact on the organizations (Scott, 1987). This implies that organizations operate in an environment surrounded by institutional regulations and social processes. Organizations are meant to conform to the institutionalized policies and practices (DiMaggio, 1988), Organization’s survival may be dependent on its conformity to government regulations. Some organizations conform to regulations that may not necessarily increase efficiency but gain more advantage through stability and social support (Meyer & Rowan, 1977).

Organizations may face three forms of institutional pressures. These include normative pressures, mimetic pressures and coercive pressures. Coercive pressures are influences bound by government laws and policies such as taxation. The higher the coercive
pressure, the quicker the organization adopts it (Tolbert and Zucker, 1983). Mimetic pressures are competition based since they influence how an organization reacts by copying other successful firm’s structures. However, the level of external pressures may differ among competitors (Delmas and Tofel, 2004). Firms are more likely to follow what the competition have implemented than adopt other practices (Palmer et al., 1993), Normative pressures are external influences imposed by what is considered normal in the industry such as a body of professionals (DiMaggio and Powel, 1988). This may increase legitimacy of the firm while also gaining competitive advantage (Colicchia et al., 2013). The coercive pressures in this theory include government policies and regulations imposed on logistics firms influence their performance compared to competitors. The argument is that if these regulations were not imposed, logistics performance would increase significantly.

2.2.2 Technology Acceptance Model

The Technology Acceptance Model (TAM) was founded by Davis (1989) where he describes user acceptance and usage of information technology. This was based on the Theory of Reasoned Action (TRA) that has been a backdrop for other research on explaining human behavior in many other subject areas. (Fishbein and Ajzein’s, 1975).

The TAM suggests that there are two specific beliefs in explaining a user’s behavior. These are Perceived Usefulness and Perceived Ease of Use. Perceived usefulness is the likelihood that the introduction of a new information system will improve the user’s work performance. Perceived Ease of Use is defined as the level of the user’s expectation for the system to be easy to use (Davis, 1989). In addition to these believes, there are other variables such as societal influences, user experience and risk (Lim 2000).
There is a difference in the effect of people’s behavior in a mandatory environment than in a voluntary environment (Venkatesh 2000). This environment contains external factors such as political, social, cultural factors that affect the user’s behavior (Davis 1989). This theory supports this study by observing the impact of external factors such as government regulations on the employees’ beliefs, intentions and attitudes. These external factors will significantly affect performance.

2.3 Government regulations

Regulation is an authoritative rule that has been set aside to control how things are to be done (Howard, 2020). Regulations vary between countries (Dechezleprêtre and Sato, 2014). Logistics firms must comply with regulations from every country. The main goal of government regulation is to change behavior in order to achieve a desired outcome that will provide improvements in problematic conditions in the environment (OECD, 2010). Vidal and Goetschalckx (2000) study on the impact of unexpected uncertainties on Global Logistics Systems (GLS) points that it is nearly impossible to build a GLS due to differences in exchange rates, taxes, information and cash flows, trade barriers and government regulations. Regulations and policies have almost immediate effects once properly implemented by the intended targets (De Souza et al, 2007). According to Brainwaite & Makkai ,1991), businesses only comply with government regulations due to punitive measures that may be imposed on them. Businesses almost always operate through self-interest (Kagan & Axelrod, 2000). The motivation for businesses to either compliance or noncompliance to government regulations is heavily due to the threat of legal sanction (Granbois and Kagan, 2005). The government regulations discussed in this study are clearing procedures, documentation and tariffs. International Trade Centre (2017 discovered regulations in logistics take the form of customs procedures, barriers to investment, and labor regulations.
2.3.1 Clearing procedures

The customs services that are provided by logistics firms may include declaration, duties & taxes, agency services, permits and licensing. De Souza et al (2007) developed a regulatory-restrictiveness index and grouped them into: movement of people, customs, investment and regulations on ocean, air and road transport. They concluded that customs procedures are the most significant government regulation.

Customers find it difficult to predict customs charges and procedures. According to Ratnasingam (2003) it is important for a logistics firm to invest in a trustworthy and predictable customs administration which may eventually improve its performance. Employees must have vast knowledge of government regulations and access to improved technology systems in order to ensure compliance.

2.3.2 Customs documentation and paperwork

Customs documentation is one of the government regulations that may be enforced to logistics firms (Hollweg, 2009). These include the submission of import or export documents at the border of the respective country for further evaluation (Hollweg, 2009). These may be enforced through government agencies. They may include: Kenya Bureau of Standards (KEBS) who introduced the Pre-Export Verification of Conformity (PVOC) Program for exports to Kenya where the importer, before dispatch of goods, obtains a Certificate of Conformity (COC). Without this document, shipments may face massive penalties (KEBS, 2015). Another government agent may be The Kenya Plant Health Inspectorate Service (KEPHIS) who introduced a policy that all wooden packaging material such as crates imported into Kenya must have the International Sanitary and Phytosanitary Measure (ISPM) No. 15 requirements (Papyrakis and Tasciotti, 2017).
2.3.3 Tariffs

Tax burden increases the cost of doing business in any industry (OECD, 2011). The regulatory environment may increase costs and risks of a logistics firm through high tariffs and taxes. High taxes on foreign goods are imposed on foreigners to protect the country from unfair competition. They are also a significant source of revenue for the government (Wright and De Hert, 2012).

International trade led to the introduction of the Harmonized Commodity Description and Coding Systems (HS CODES). These codes reflect different tax on different products. It is important to understand these complex tax codes and each of their regulations (United Nations COMTRAD 2017). For increased operational performance, the tax system should be stable, clear and transparent (Boschmann, 2009).

2.4 Operations Performance of logistics firms

The rise in the global economy has accelerated the increase in demand for efficient delivery of products and services (World Bank, 2019). This growth in the service industry has been contributed to the increasing competitive environment (Stefenson, 2004). Most logistics firms compete in terms of reliable service, short lead times and flexibility (Sum and Teo, 1999). Operational performance is important for effective utilization of firm’s resources since it strives to reduce waste and cost (Neely, Gregory and Platts, 1995). In operations management, performance is measured in terms of reliability, cost, quality speed, dependability and speed (Slack et al, 2010). Stefenson (2004) suggested that competition in the logistics industry has evolved further to customer service, service innovation and information technology support.

In a bid to manage costs it is important to make informed decisions on high cost centers of the firm (Mangan, Lalwan and Butcher, 2008). Costs in logistics firms may be either
direct or indirect costs (Mangan et al., 2008). Direct costs involve compliance costs such as port management costs while indirect costs involve costs related to delays, cargo handling and opportunity costs. (Milner et al., 2005). Others include warehousing costs, cost of safe and effective transportation, handling and loading costs, cost of any additional packaging, cost of consolidation activities, cost of information integration and administration costs (UNESCAP, 1999). In addition, Abdallah (2004), emphasized other cost drivers such as service costs, human resources costs, inventory management systems and transport management systems. Stock and Lambert (2001) pointed out that the major goal in logistics service is to minimize the total costs.

Quality is dependent on whether the product or service was able to meet its desired expectations (Lynch & Cross, 1991). High quality logistics and infrastructure ensure timely delivery of shipments (Korinek and Sourdin, 2011). The challenges of service quality in logistics firms are changes in corporate culture and training of employees. Quality in a logistics firm is measured through the level customer satisfaction (Gourdin, 2001). This is done by value addition and on-time deliveries (Gourdin, 2001). Gibson et al., (1993) did a study on a customer’s selection of a logistics firm. They discovered that ability to meet service expectations was the most important variable in their decisions. Quality according to the customer includes prompt response to queries, delay notices and vast knowledge of customer’s needs by the employees (Chiu ,1996).

Only five percent of the total cycle time in a logistics process is spent on the goods while the rest of the time is time waiting for it to be worked on (Lynch & Cross, 1991). Speed ensures the firm delivers the products in a timely manner (Slack et al., 2010). A study by OECD (2011) suggested that increase in shipping time may lower the volume of imports into the country. Delays experienced may be as a result of congestion, lengthy clearing procedures and poor port infrastructure and may affect firms that
incorporate zero-hour deliveries (Korinek and Sourdin, 2011). However, customers may not be willing to pay for faster delivery. They demand faster delivery while expecting free delivery. Brooks (1990) pointed out that when the firm improves its transit time, this was found to be the most important aspect in gauging their competitiveness.

Flexibility requires the firm to be able to adjust conditions in times of customer’s unexpected circumstances (Slack et al., 2010). Moreover, flexibility measures the ability of the service provider to shorten agreed lead time in exigent circumstances (Stefenson (2004). Flexibility is important due to the ever-changing customers who expect faster delivery. Flexibility is the ability to provide solutions to any problems at the appropriate time and also depends on level of experience in the industry (Naim et al., 2006).

Innovation is an important factor to gain a competitive advantage and remaining relevant in the industry (Blundell et al., 1999). Information technology as a construct to innovation may improve operational performance in firms since system errors occur less frequently than human errors (Dewhurst et al., 1999). The introduction of such technology can significantly reduce the amount of paperwork required to process transactions and therefore, reduce costs (Korinek and Sourdin, 2011). Automation of customs procedures may reduce administrative costs and also opportunities for corruption Milner et al., 2005. Miller and Friesen (1984) suggested that innovation in a firm can be measured through the existence of a research and development department, regular introduction of new products and existence of significant changes in products and processes. Kearney (1991) suggested firms that provide after sale services increase level of customer satisfaction.
2.5 Government regulation and operational performance

Changes are inevitable in the uncertain business environment (Tiwari et al., 2015). These unexpected changes may affect the organization structure purely based on how the firm reacts (Cook et al., 1983). These types of regulations always vary from one country to the other (Cyrille and Shine, 1996). Regulations increase cost in implementation which may threaten the survival of the firm. These costs are often passed on to the final customer (Taylor et al., 2005).

Logistics performance have various indicators of success. These may include clearance, firm infrastructure, tracking tools, domestic freight costs and international timeliness (Arvis et al., 2007). Doove et al., (2001) study on regulations came up with a restrictiveness index used to categorize restriction. They include clearance, infrastructure investment, people movement, sea, air and road transport. These government regulations affect operations performance through price, dependability, quality and time (Hollweg & Wong 2009).

Government comes up with regulations and it is up to the firm to implement them (Grandbois and Kagan, 2005). The logistics industry faces external pressures from the government, the final customers and its competitors whose effects of increased costs and flexibility are always immediate (Haveman and Russo, 2001). According to Hartmann (2016) customers expect quick in addition to secure delivery. Furthermore, customers would want to track their goods in order to make informed decisions concerning their business processes (Woods, 2016).

Regulations governing the handling of foods, dangerous goods and pharmaceutical products demand for high investment in warehouse management systems (Vourinen et al., 2010). An unreliable supply chain forces customer to keep high inventories which
further increases costs. Jayani and Yan (2018) study suggest that service performance can be measured by how innovative the firm is in offering expanded services. They found that firms with a leading edge in innovation perform better than competitors. Regulations force the organization to reevaluate its needs and skills and identify risks and threats which may be critical to its survival.

2.6 Challenges of government regulations in logistics firms

Government regulations may pose challenges in the smooth running of logistics firms. These challenges may include port congestion, exchange rates and trade barriers (Hollweg, 2009). In order to operate, all businesses must follow all policies and legislation set aside by the government in addition to customer requirements (Cook et al., 1983).

Some of the other challenges that may impact the logistics firms may be in form of import laws, competitors and price fluctuations which create barriers in the running of the operations of the supply chain (Prater, 2005). Siringoringo et al (2009) pointed out that one of such challenges faced by companies is additional paperwork imposed on both local and foreign governments in order for trade. Logistics firms face delays due to inadequate warehouse systems, transport systems and unpredictable clearance times (Milner et al., 2005). The firm may be forced to change their structures and strategies in order to deal with any alterations in the regulatory environment (Haveman et al., 2001).

Despite the great challenges in adapting to government regulations, there are many opportunities for improvements. These may be through flexibility in organizational structure, proper communication with customers, access to clear government policies
and regulations, investment in technology and working with key industry players such as Kenya Bureau of Standards.

2.7 Empirical Review
Hollweg (2009) explored some of the government regulations that may affect logistics firms. They concluded that tariffs, complex clearing procedures, licenses and accreditations, trade blocks, customs documentation, inspections, clearance, harmonized system codes and cargo handling affect such firms. This study however was done concerned with the Association of Southeast Asian Nations (ASEAN) countries.

Salim (2012) examined oil marketing companies and how government regulations in Kenya have affected such companies’ supply chain management practices. He found out that they may be affected through price control, upfront payment of taxes, bond guarantee and open tender system. The study however was done on another industry since it focused on oil firms in Kenya. Waweru (2012) did a case study on challenges of courier firms and pointed out that government regulation affects such firms. He however did not measure how and to what extent government regulations affect the operations performance of logistics firms.

Kareko (2018) did a study on logistics management of Kenya Power, Nairobi and gathered that there is a relationship between logistics in the energy industry in Kenya and government policy. Although he proves there exists a relationship, the study had focused on the energy sector while this study focused on the logistics industry. This study focused on logistics firms in Nairobi, Kenya. Nyatwongi (2015) study on the factors that affect the performance of importing goods through Mombasa concluded that regulatory and policy framework affects such businesses. The study established the
relationship between regulations and performance but focused on Mombasa port. This study showed how and to what extent regulations affect logistics firms in Nairobi, Kenya.
2.8 Conceptual framework

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<td><strong>Government regulations</strong></td>
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<td>Trade barriers,</td>
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<td>Membership in board associations,</td>
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<td>Licenses and accreditations,</td>
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Figure 4. Conceptual framework

Source: Researcher (2021)
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter showed the research methodology and research design used in the study. It defined the methods for the collection, measurement and analysis of data. The purpose of research methodology is to give the structure of the research and to plan the sources and the information that the researcher will use to answer the research questions.

3.2 Research Design

The study used the descriptive survey design to determine the government regulations and operations performance in logistics firms in Kenya. A survey aims to obtain information that describes phenomena by asking respondents about their beliefs and values. Survey method was suitable for this study due to the large number of companies that will be studied. It is also quick and accurate (Zikmund, 2003). The study used a sample of logistics firms in Nairobi to prove government regulations affect their operations performance.

3.3 Population

The population is the environment that the study will take place (Kothari 2004). The population of the study was employees from selected logistics companies operating under the Kenya International Freight and warehousing association (KIFWA). These include both international and local firms based across the country (Kenya Business List Directory, 2017). There are 1121 logistics companies in Kenya mainly dominated in Mombasa and Nairobi where Mombasa has 267 firms, Nairobi has 742 logistics companies and together with other towns total it to 1112 logistics companies (Kenya Business List Directory, 2017).
3.4 Sample Design

Due to the large population, it would have been impossible to study the entire population at a short period therefore the researcher used a sample of 10% of the population. According to Mugenda and Mugenda (2003) 10% of the population can be used as a sample in a study. In this research project, a sample of 75 logistics companies operating in Nairobi was selected with key respondents being the head of operations and logistics of these logistics firms due to their knowledge in government regulations.

3.5 Data collection

The primary data was collected using questionnaires. The questionnaire guide was structured to contain close ended type of questions in relation to the objectives. The questionnaire contained two parts. Part one contained personal information and part two is divided into two sections. Section A relates to government regulations in logistics firms and section B relates to the relationship between government regulations and operational performance of logistics firms. The questionnaire was filled physically. The targeted respondents were the head of operations and logistics of these logistics firms due to their vast knowledge in government regulations.

3.6 Data analysis

The data collected using questionnaire guide was analyzed by use of Statistical Package for Social Sciences (SPSS) clearly showing analysis of the information shared by respondents. The study used regression analysis to achieve objective one that is to measure the relationship between government regulations and operations performance of logistics firms in Nairobi, Kenya. The data was measured using descriptive analysis to achieve objective two that is to investigate challenges of government regulations in logistics firms. The data was presented in tables, pie charts and graphs for analysis.
Objective one achieved using a linear regression function given as;

\[ Y = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + e \]

\( Y \) = Operational performance

\( B_1 \) = Constant

\( X_1 \) = Clearing procedures

\( X_2 \) = Customs documentation and paperwork

\( X_3 \) = Tariffs

\( X_4 \) = Licenses and accreditations

\( X_5 \) = Membership in board associations

\( X_6 \) = Trade barriers

\( B_1, B_2, B_3, B_4, B_5, B_6 \) are coefficients

\( e \) = error term.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter analyzed the findings in response to the study objectives. The chapter begins with a descriptive analysis of the demographic profile of the respondents. This is followed with an analysis of government regulations in logistics firms in Kenya. The last section presents regression analysis of the relationship between government regulations and operations performance of logistics firms in Kenya.

4.2 Response Rate and tenure of respondents

This sub-section analyzes the response rate and tenure of departmental employees. A total of 75 questionnaires were administered with a total of 45 successfully participated in this study and data analyzed using statistical tool SPSS version 20.

4.2.1 Response Rate

A total of 75 questionnaires were distributed to the logistics and operations manager of each firm. Out of the targeted 75 logistic firms, a total of 45 successfully participated in this study. This translated to 60 percent response rate as shown in Figure 4.1. This response rate was considered adequate for analysis in line with Denscombe (2014) who recommended that 60% is a good response rate.
The study sought to establish how long respondents had worked for their respective logistic firms. Their distribution by tenure is shown in Table 4.1. The figure shows that 66.7% of the respondents had worked in their logistic firms for over 10 years, 24.4% of the respondents had worked with their company for 6-10 years, 6.7% of the respondents had served for 1-5 years and 2.2% of the respondents had been with their company for less than a year. Therefore, majority of the respondents had over 10 years of experience working in their logistics firm. This implies that the research participants potentially had adequate experience, exposure and industry knowledge required to respond to the study.

<table>
<thead>
<tr>
<th>For how long have you been a member of staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Valid</td>
</tr>
</tbody>
</table>
4.3 Government Regulations in Logistic Firms

This section contains an analysis of the extent of government regulations in logistics firms. Table 4.2 shows descriptive analysis of the extent various dimensions of government regulations affected their operations on a 5-point scale where 1= Strongly disagree; 2= Disagree; 3=Neutral; 4=Agree and 5=Strongly agree. The table shows the mean (M) and standard deviation (SD) scores.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariffs</td>
<td>45</td>
<td>4.49</td>
<td>.506</td>
</tr>
<tr>
<td>Customs and documentation</td>
<td>45</td>
<td>4.44</td>
<td>.503</td>
</tr>
<tr>
<td>Clearing procedures</td>
<td>45</td>
<td>4.40</td>
<td>.495</td>
</tr>
<tr>
<td>Licenses and accreditations</td>
<td>45</td>
<td>4.27</td>
<td>.539</td>
</tr>
<tr>
<td>Membership in board associations</td>
<td>45</td>
<td>4.27</td>
<td>.447</td>
</tr>
<tr>
<td>Trade barriers</td>
<td>45</td>
<td>4.42</td>
<td>.499</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1 Government regulations

Source: Research Data (2021)
4.3.1 Tariffs

Table 4.2 shows that a high mean (M=4.49, SD=0.506) was obtained with respect to the tariffs. This suggests that tariff costs affected logistic firms to a very large extent. De Souza et al., (2007) explored some of the government regulations that may affect logistics firms and concluded that tariffs were among the government regulations that affected logistics firms. This shows similarity with this study. However, the study focused on established logistics firms in ASEAN countries. High tariff represents direct costs to logistics firms which have potential adverse implications on the performance of logistics business. It is crucial for logistics firms to be trained on tax education to make proper decisions in serving their customers. For increased operational performance, the tax system should be stable, clear and transparent (Boschmann, 2009).

4.3.2 Customs documentation and paperwork

The table also shows that customs and documentations had a very high mean score (M=4.44, SD=0.503), implying that these forms of regulation had a very large effect on logistics business. This agrees with the observation by Siringoringo et al. (2009) that one of the challenges faced by logistics companies is additional paperwork and customs documentation. This study however focused on big and established international firms. This poses a challenge to both local and foreign logistics firms and negatively affecting their performance. These include import or export documents at the border of many countries (Hollweg, 2009). In Kenya, these may be enforced through government agencies such as KEBS and KEPHIS.

4.3.3 Clearing procedures

Similarly, a very high mean score was computed on a 5-point scale with regards to the extent to which clearing procedures affected logistics firms (M=4.40, SD=0.495), which means that clearing procedures affected logistics firms to a very large extent.
This finding agrees with the study by Grainger (2012) that complicated customs procedures mostly result due to port congestion that affect the flow of goods. This study however focused on trade facilitation within custom related procedures in Europe. The customs services that are provided by logistics firms may include declaration, duties & taxes, agency services, permits and licensing. It is important for a logistics firm to invest in a trustworthy and predictable customs administration which may eventually improve its performance (Ratnasingam, 2003).

4.3.4 Licenses and accreditations
A very high mean score was also obtained for licenses and accreditations (M=4.27, SD=0.539) meaning that they impacted logistics firms to a very large extent. This affirms institutional theory which categorizes licenses and accreditations among normative requirements that goes with the logistics business but which add to the cost of logistics business (Colicchia et al., 2013).

4.3.5 Membership in board associations
The mean score for membership in associations was relatively high (M=4.27, SD=0.447) suggesting that this factor affected logistics firms to a very large extent. This is consistent with Watanuki (2015) who identified memberships’ in associations as a requirement with a significant impact on logistics industry performance.

4.3.6 Trade barriers
A high mean score was computed for trade barriers on a 5-point scale (M=4.42, SD=0.499) which means that trade barriers had a large effect on logistics firms. This finding is consistent with the results of a study carried out by Waweru (2012) who did a case study on challenges of courier firms and pointed out that government regulation affects such firms. They cited the mandatory requirement for all clearing and forwarding agents
to attain the East Africa Customs Freight Forwarding Practicing Certificate introduced in 2013. These form trade barriers because import and export to countries outside East Africa are discouraged.

### 4.4 Operational Performance of Logistics Firms

This section analyzed operations performance of logistics firms on aspects such as cost, flexibility, quality, speed and innovation and presented in Table 4.3. The table shows the level of agreement on a 5-point scale where 1=strongly disagree; 2=disagree; 3=neutral; 4=agree, 5=strongly agree. The table shows the mean (M) and standard deviation (SD) scores.

<p>| N | Customers are able to predict taxes to be paid | 45 | 1.87 | .786 |
| N | There are increased costs implementing government regulations | 45 | 4.49 | .506 |
| N | Cost incurred are transferred to customers | 45 | 3.91 | .821 |
| N | All customers can pay taxes immediately | 45 | 2.20 | .757 |
| N | Clearance process take longer times than expected | 45 | 4.80 | .457 |
| N | Customers are aware and able to predict clearing process | 45 | 1.69 | .793 |
| N | The firm strives to reduce delivery time | 45 | 4.62 | .535 |
| N | Customers can predict delivery times | 45 | 4.58 | .723 |
| N | The firm properly handles customer complaints | 45 | 2.87 | .457 |</p>
<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is fast response in customer inquiries</td>
<td>45</td>
<td>2.98</td>
<td>.543</td>
</tr>
<tr>
<td>There is advance notice in shipment delays to customers</td>
<td>45</td>
<td>2.22</td>
<td>.795</td>
</tr>
<tr>
<td>There is little to no shipment returns</td>
<td>45</td>
<td>2.44</td>
<td>.867</td>
</tr>
<tr>
<td>There are regular changes in processes to accommodate customers' needs</td>
<td>45</td>
<td>4.11</td>
<td>.982</td>
</tr>
<tr>
<td>Employees work closely with the government</td>
<td>45</td>
<td>1.49</td>
<td>.895</td>
</tr>
<tr>
<td>Management is ready for the new ideas suggested by the customers and employees</td>
<td>45</td>
<td>4.22</td>
<td>.823</td>
</tr>
<tr>
<td>There is room for drastic changes in the regulatory environment</td>
<td>45</td>
<td>4.22</td>
<td>.560</td>
</tr>
<tr>
<td>There exists a research and development department</td>
<td>45</td>
<td>3.84</td>
<td>.673</td>
</tr>
<tr>
<td>The firm has invested in technology innovation</td>
<td>45</td>
<td>4.24</td>
<td>.529</td>
</tr>
<tr>
<td>There is constant training on new government regulations</td>
<td>45</td>
<td>1.58</td>
<td>.892</td>
</tr>
<tr>
<td>There is new introduction of value-added services</td>
<td>45</td>
<td>2.96</td>
<td>.706</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.2 Operational performance of Logistics Firms**

**Source: Research Data (2021)**

Table 4.3 shows that a high mean score was computed on a 5-point scale on the statement, “there are increased costs in implementing government regulations” (M=4.49, SD=0.506). This implies that majority of the respondents agreed that government regulations increased costs to logistics firms, which means that logistics
firms are adversely affected by increased costs. A moderately high mean score was realized on the statement; “cost incurred are transferred to customers” (M=3.91, SD=0.821). This translates to that most of the logistics firms transferred cost of government regulations to customers. This potentially made the logistics firms less competitive. As concerns whether all customers can pay taxes immediately, the mean score obtained was low (M=2.20, SD=0.757), which implies that some logistics firms could not pay taxes immediately. This potentially resulted in operational delays. This finding agrees with the observation by Ratnasingam (2003) that customers find difficult it to predict customs charges and procedures.

The opinion of respondents was sought concerning the effect of government regulations on time dimensions of logistics business. Table 4.3 shows that concerning whether clearance process take longer time than expected, a very high mean score was obtained on a 5-point scale (M=4.80, SD=0.457) meaning that respondents strongly agreed that there were delays in clearance process. This finding agrees with the observation by Lynch and Cross (1991) a large percentage of the total cycle time in a logistics process is spent waiting for goods to be cleared. As pertains whether the logistics firms strove to reduce delivery time, a very high mean score was realized (M=4.62, SD=0.535). This implies that delivery time was a significant factor with potential effect on the operations of logistics firms and a reduction of it would enhance performance of logistics firms. As pertains whether logistics firms can predict delivery times, a low mean score was computed (M=4.58, SD=0.723) suggesting that delivery times were unpredictable.

Table 4.3 also shows that a moderately low mean score was obtained for the statement; “The firm properly handles customer complaints”, (M=2.87, SD=0.457) suggesting that most of the respondents disagreed the firm properly handles customer complaints. The table shows that another moderately low mean score was computed for the statement,
“There is advance notice in shipment delays to customers” (M=2.22, SD=0.795) which means that respondents did not agree that there is advance notice in shipment delays to customers. Respondents were also asked whether there is little to no returns of goods to source countries. The table shows that a low mean score was obtained (M=2.44, SD=0.867), meaning that most of the respondents disagreed that government regulations resulted in little or no returns of goods to source countries. Table 4.3 shows that the mean score for the statement; “Management is ready for the new ideas suggested by the customers and employees” was high (M=4.22, SD=0.823). This means that there was flexibility in terms of receptiveness to the ideas put forth by logistics customers and employees. Concerning whether there is room for drastic changes in the regulatory environment, the mean score on a scale of 1 to 5 was high (M=4.22, SD=0.560). This means that government regulations allow room for change. Table 4.3 also shows that concerning whether logistics firm have invested in technology innovation, a high mean score was computed (M=4.24, SD=0.529). This means that a high percentage of respondents agreed that their firms invested in technology innovation. The finding agrees with the assertion by the International Trade Center (2017) that complex regulations require firms to have constant resources in order to remain competitive. It also agrees with the idea put forth by Korinek and Sourdin (2011) that the introduction of such technology can, for instance, significantly reduce the amount of paperwork required to process transactions and therefore, reduce costs. As concerns whether there exists a research and development department in the logistics firms, a moderately high mean score was obtained (M=3.84, SD=0.673), meaning that most of the logistics firms did have a research and development department. With respect to whether there was new introduction of value-added services the mean score was moderately low (M=2.96, SD=0.706), implying that most of the logistics firms did
not introduce new value-added services. In terms of whether there was constant training on new government regulations, the mean score was low (M=1.58, SD=0.892). This means that most of the logistics firms did not constantly train their staff on new government regulations. Employees need constant training in order for the firm to remain competitive (Boschmann, 2009).

4.5 The Effect of government regulations on Operational Performance

The study performed a regression test to explain the relationship between government regulations and operational performance of logistics firms in Nairobi. The results of the regression analysis are discussed below.

4.5.1 Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.706a</td>
<td>.498</td>
<td>.419</td>
<td>.320</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Trade barriers, Membership in board associations, Licenses and accreditations, Customs and documentation, Tariffs, Clearing procedures

Table 4.3 Model summary

Source: Research Data (2021)

The study aimed to find the relationship between government regulations and the operational performance of logistics firms in Nairobi. The predictors used include trade barriers, membership in board associations, tariffs, licenses and accreditations, customs and documentation and clearing procedures. The coefficient of correlation indicates existence of relationship (R=0.706) between government regulations and operational
performance of logistics firms. This relationship shown in the coefficient of determination (R-Squared) value from the study was 0.498 implying that 49.8% of variance in operational performance is explained by government regulations. The remaining variation of 50.2% can therefore be explained by other factors other than government regulations.

4.5.2 Analysis of variance

An analysis of variance (ANOVA) was further done to test the fitness of the regression model and shown in table 4.5.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.876</td>
<td>6</td>
<td>.646</td>
<td>6.292</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>3.902</td>
<td>38</td>
<td>.103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.778</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Operations performance

b. Predictors: (Constant), Trade barriers, Membership in board associations, Licenses and accreditations, Customs and documentation, Tariffs, Clearing procedures

**Table 4.4 Analysis of variance**

**Source: Research data (2021)**

The F-ratio of 6.292 and p-value of 0.000 is less than 0.05 showing that the regression model was suitable for the data that was used and furthermore suitable for predicting the operational performance of logistics firms due to government regulations such as
trade barriers, membership in board associations, tariffs, licenses and accreditations, customs and documentation and clearing procedures.

4.5.3 Regression coefficients

The results are as shown in Table 4.6.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>(P value) Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.393</td>
<td>.752</td>
<td>.522</td>
</tr>
<tr>
<td>Tariffs</td>
<td>.232</td>
<td>.105</td>
<td>.279</td>
</tr>
<tr>
<td>Custom</td>
<td>.277</td>
<td>.105</td>
<td>.331</td>
</tr>
<tr>
<td>documentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearing</td>
<td>.136</td>
<td>.123</td>
<td>.160</td>
</tr>
<tr>
<td>procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>licenses and</td>
<td>.095</td>
<td>.100</td>
<td>.826</td>
</tr>
<tr>
<td>accreditation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership</td>
<td>.097</td>
<td>.131</td>
<td>.104</td>
</tr>
<tr>
<td>in board</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>associations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>.174</td>
<td>.109</td>
<td>.206</td>
</tr>
<tr>
<td>barriers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Dependent Variable: Operations performance

Source: Researcher (2021)

Table 4. 5 Regression coefficients

The resulting regression equation is:

\[ Y = 0.393 + 0.232X_1 + 0.277X_2 + 0.136X_3 + 0.078X_4 + 0.097X_5 + 0.174X_6 + e \]

Where; \( Y \) – Operational performance (Dependent variable),

\( X_1 \)–\( X_5 \) – Independent variables;

\( X_1 \) – tariffs,

\( X_2 \) – customs documentation

\( X_3 \) – clearing procedures

\( X_4 \) = Licenses and accreditations

\( X_5 \) = Membership in board associations

\( X_6 \) = Trade barriers

\( B_0 \) – Constant term

\( B_1 \)–\( B_6 \) – Coefficients of regression

\( e \) – The error term.

This shows that the government regulations studied had a positive effect on the operational performance of logistics firms. According to the equation, with all the factors constant; trade barriers, membership in board associations, tariffs, licenses and
accreditations, customs and documentation and clearing procedures, the operational performance will be 0.393. This is further evidenced by the beta values of tariffs ($B_1=0.232$, p-value=0.033), customs and documentation ($B_2=0.277$, p-value=0.012), clearing procedures ($B_3=0.136$, p-value=0.275), Licenses and accreditations ($B_4=0.078$, p-value=0.414), Membership in board associations ($B_5=0.097$, p-value=0.462) and trade barriers ($B_6=0.174$, p-value=0.119). The data findings show that an increase in tariffs will lead to a 39.3% increase in operational performance; an increase in customs documentation will lead to a 23.2% increase in operational performance, an increase in clearing procedures will lead to a 27.7% increase in operational performance, an increase in Licenses and accreditations will lead to a 13.6% increase in operational performance, an increase in membership in board associations will lead to a 9.7% increase in operational performance and an increase in trade barriers will lead to a 17.4% increase in operational performance. Tariffs therefore contributed to the most to operational performance of logistics firms. However, the figures show that trade barriers, membership in board associations, licenses and accreditations and clearing procedures has no significant influence on the operational performance of logistics firms in Nairobi since their p-value is higher than 0.05. This means that tariffs and customs documentation and paperwork are suitable predictors of operational performance of logistics firms.

4.6 Challenges of government regulations in logistics firms

The second objective was to investigate the challenges of adjusting to government regulations in logistics firms. This section analyzes how government regulations create challenges in the day-to-day operations of logistics firms. The challenges of government regulations in logistics firms are presented in Table 4.7. The table shows the level of agreement with the statements on a 5-point scale where 1=strongly disagree;
2=disagree; 3=neutral; 4=agree, 5=strongly agree. The table shows the mean (M) and standard deviation (SD) scores.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff training</td>
<td>45</td>
<td>4.00</td>
<td>1.108</td>
</tr>
<tr>
<td>Port congestion</td>
<td>45</td>
<td>3.96</td>
<td>1.205</td>
</tr>
<tr>
<td>Exchange rates</td>
<td>45</td>
<td>3.98</td>
<td>1.033</td>
</tr>
<tr>
<td>Information systems downtimes</td>
<td>45</td>
<td>4.33</td>
<td>0.739</td>
</tr>
<tr>
<td>Import laws</td>
<td>45</td>
<td>4.22</td>
<td>0.823</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. 6 Challenges of government regulations in logistics firms

Source: Research Data (2021)

Table 4.3 shows that information systems down times attained the highest mean score (M=4.33, SD=0.739), followed by import laws (M=4.22, SD=0.823), Staff training (M=4.00, SD=1.108), port congestion (M=3.96, SD=1.205) and exchange rates (M=3.98, SD=1.033). Logistics firms face challenges such as inadequate warehouse and transport systems (Milner et al., 2005).

4.8 Chapter Summary

This chapter has presented the analysis and interpretation of the data. The results have shown that tariffs were the leading government regulations affecting logistics firms (M=4.49, SD=0.506), followed by customs documentation and paperwork (M=4.44, SD=0.503), clearing procedures (M=4.40, SD=0.495), trade barriers (M=4.42, SD=0.499), membership in board associations (M=4.27, SD=0.447 and lastly licenses and accreditations (M=0.427, SD=0.539). The challenges included information systems downtimes (M=4.33, SD=0.739), import laws (M=4.22, SD=0.823), staff training
(M=4.00, SD=1.108), port congestion (M=3.96, SD=1.205) and exchange rates (M=3.98, SD=1.033).

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This final chapter commences by providing a summary of the study. The chapter then draws relevant conclusions from the findings and discussions. Subsequently, it provides managerial as well as policy recommendations for improvement. Lastly, it proposes areas for further research.

5.2 Summary

This study aimed to show the impact of these government regulations on the operational performance of logistics firms. It sought to answer government regulations affecting logistics firms and their relationship with the operational performance of the firm and also some of the challenges of government regulations in logistics firms. The research objectives were: To determine the government regulations in logistics firms in Nairobi, to establish the relationship of government regulations and operations performance of logistics firms in Kenya and to investigate what are the challenges of adjusting to government regulations in logistics firms. Out of the targeted 75 logistic firms, a total of 45 successfully participated in this study. This translated to 60 percent response rate.

The targeted respondents were the head of operations and logistics of these logistics firms due to their vast knowledge in government regulations. The study established that high tariffs (M=4.49) were the leading government regulations affecting logistics firms, followed by customs and documentation (M=4.44), clearing procedures(M=4.40),
licenses and accreditations (M=4.27), requirements of membership in board associations (M=4.27) and lastly trade barriers (M=4.42). In terms of challenges of government regulations in logistics firms, information systems down times, import laws, staff training, port congestion and exchange rates. The coefficient of correlation (R) value of R=0.706 indicates the existence of a positive relationship between government regulations and operational performance. This relationship shown in the coefficient of determination (R-Squared) value from the study was 0.498 implying that 49.8% of variance in operational performance is explained by government regulations. The remaining variation of 50.2% can therefore be explained by other factors other than government regulations.

5.3 Conclusion

The study concluded by showing there are numerous government regulations that affect logistics firms. These are tariffs, customs documentation and paperwork, clearing procedures, licenses and accreditations and lastly requirement for membership in associations. These affected costs of operation, caused delays and unpredictability of delivery time, affected customers’ planning and contributed to waste. Most of the challenges of government regulations are information systems down times, import laws, staff training, port congestion and exchange rates. The relationship between government regulations and operational performance of logistics firms in Kenya showed that all these factors had a positive relationship to the operational performance of logistics firms in Nairobi, Kenya. Drastic changes in government regulations impose a significant impact on the organization’s ability to get goods when and where they are needed. Due to the constant changes in the regulatory environment in Kenya, there is need for logistics firms to implement policies and practices in order to remain competitive.
5.4 Recommendations

The government and logistics firms should foster a collaborative relationship as partners rather than adversaries. Such partnerships should include working together with other industry players such as the Kenya Bureau of Standards. While at it, they should prioritize the streamlining processes throughout the logistics value chain. The government should especially rethink its domestic freight policies and rules. It should provide access to clear government policies and regulations and promote proper communication with customers. By extension, government employees should be trained on customer service to be more responsive to the needs of the logistics industry. International regional agreements as well as boundary regulations and border policies should promote rather than constrain logistics operations. Progressive policies already in place should be followed through with immediate and full implementation. Future reforms should target clearance and permits and taxes and tariffs in order to lower implementation costs to logistics firms. Logistics firms should also invest in advance technology and carry out periodic training of their employees to keep abreast with new regulations and policy changes.

5.5 Recommendations for Further Studies

The study makes recommendations for further research as follows:

i) The current study was limited in scope to logistics firms based in Nairobi. Therefore, a similar study could be conducted among logistics firms based in order regions of Kenya such as Mombasa and Kisumu for comparison purposes. This would help to establish whether government regulations affect logistics firm in the same manner and if there are regional differences in the way government regulations affect them.
ii) Although the study objectives have been achieved, the perspectives of government officials such as customs and port officials were not included in the study thus providing a one-sided view of the relationship between government regulations and operations performance of logistics firms in Kenya. Therefore, a future study should include all stakeholders in the logistics value chain in the sample to identify points of convergence and areas of conflict. This would go a long way in finding common grounds for policy reforms.

iii) A study that focuses on international regional agreements and their effect on logistics firms in Kenya should be conducted to establish the beneficial effects of such agreements on logistics firms in the country. Such a study could reveal which agreements actually add value to trade for Kenya and those that should be renegotiated.

5.6 Limitations of the study

The study was carried smoothly although some of the challenges were the timeframe available for carrying out the research which was seen as minimal and could have affected the respondents’ accuracy. Due to the nature of the work of the respondents, they had busy working schedules which made the take long in returning the questionnaires. Another limitation was the respondents’ reluctance to offer information citing their information is confidential but the researcher assured them of confidentiality. The researcher handled the limitations by emphasizing to them on the urgency and also confidentiality of the data in order to meet deadlines.
REFERENCES


Local sources say currently, go up to a month.


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APPENDIX 1: QUESTIONNAIRE

I am a student of Master of Business Administration (MBA) at the University of Nairobi. This research questionnaire is aimed at collecting data on the impact of government regulations on operational performance of logistics firms in Kenya. Your kind and objective responses will significantly contribute towards reducing this challenge.

Note: All responses are handled anonymously

PART 1: PERSONAL INFORMATION

For how long have you been a staff member of the firm?

- Less than one year
- 1-5 years
- 6-10 years
- more than 10 years

PART 2: GOVERNMENT REGULATIONS IN LOGISTICS FIRMS IN NAIROBI KENYA

On a scale of 1 to 5, where, 1= strongly disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= strongly. Tick which one applies.

SECTION A:

1. “Operations performance of logistics firms are affected by government regulations.” What is your level of agreement with the statement? Tick the appropriate answer.
   a) Strongly Disagree
b) Disagree □

c) Neutral □

d) Agree □

e) Strongly Agree □

2. To what extent do the following government regulations affect your firm?

<table>
<thead>
<tr>
<th>Regulations</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariffs</td>
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<td>Customs and documentation</td>
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<tr>
<td>Clearing procedures</td>
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<tr>
<td>Licenses and accreditations</td>
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<tr>
<td>Firm has to be a member in logistics board associations</td>
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<tr>
<td>Trade Barriers</td>
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</table>

3. Indicate the challenges of government regulations that may affect your firm.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tr>
<td>Staff training</td>
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<td>Port congestion</td>
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<td>Exchange rates</td>
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</table>
**SECTION B:**

1. To what extent do you agree or disagree with these statements concerning government regulations on the firm? Tick appropriate.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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</thead>
<tbody>
<tr>
<td>Customers are able to predict taxes to be paid</td>
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<td>There are increased costs in implementing government regulations</td>
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<td>Cost incurred is transferred to the customer</td>
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<td>All customers can pay taxes on time</td>
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<td>Clearance process take longer times than expected</td>
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<td>Statement</td>
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<tr>
<td>Customers are aware and are able to predict clearing procedures</td>
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<td>The firm strives to reduce delivery times</td>
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<td>Import &amp; Export permits increase delivery times for clearance</td>
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<tr>
<td>Customers can predict delivery times</td>
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<td>The firm properly handles customer complaints</td>
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<td>There is fast response in customer inquiries</td>
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<td>There is advance notice in shipment delays to customers</td>
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<td>There is little to no shipment returns</td>
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<td>There are regular changes in processes to accommodate customers’ needs</td>
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<td>Employees work closely with the government</td>
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<td>Statement</td>
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<td>There is room for drastic changes in the regulatory environment</td>
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<td>There exists a research and development department</td>
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<td>The firm has invested in technology innovation</td>
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<td>There is constant training on new government regulations</td>
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<td>There is new introduction of value-added services</td>
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**THE END**